

Service Manual

DVD Home Theater Sound System

Model No. **SA-PTX60EB**
SA-PTX60EG
SA-PTX60EF
SA-PTX60EE



Remote
Control



Product Color: (K)...Black Type

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 $1M\Omega$ and $5.2M\Omega$.

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 $1.5k\Omega$, 10 watts resistor, in parallel with a $0.15\mu F$ 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.

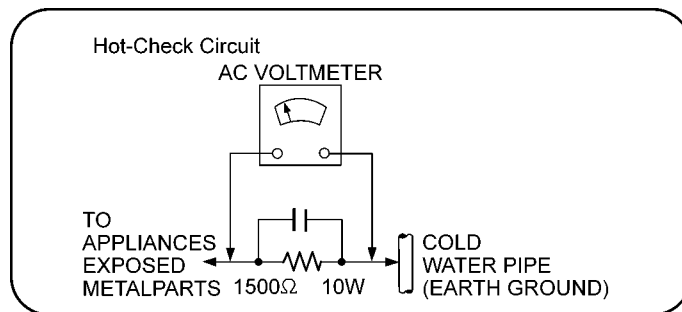


Figure 1

1.2. Before Repair and Adjustment

Disconnect AC power to discharge unit AC Capacitors as such (C5700, C5701, C5702, C5704, C5705) through a 10Ω , 10 W resistor to ground.

Caution:

DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices. After repairs are completed, restore power gradually using a variac, to avoid overcurrent. Current consumption at AC 230 V, 50 Hz in NO SIGNAL mode volume minimal should be ~ 900 mA (For EE/EF/EG only). Current consumption at AC 240 V, 50 Hz in NO SIGNAL mode volume minimal should be ~ 900 mA (For EB only).

1.2.1. Caution for fuse replacement

CAUTION:

- i) Replace with the same type fuse:
(Manufacturer: LITTELFUSE, INC, Type: 218, F1, T3.15AL, 250V)
- ii) Replace with the same type fuse:
(Manufacturer: LITTELFUSE, INC, Type: 392, F2, T1.6A, 250V)

1.3. 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.

1.4. Safety Parts Information

Safety Parts List:

There are special components used in this equipment which are important for safety.

These parts are marked by () in the Schematic Diagrams & Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

Safety	Ref. No.	Part No.	Part Name & Description	Remarks
	51	RFKHAPTX60EF	REAR CABINET ASS'Y	EB/EF/EG
	51	RFKHAPTX60EE	REAR CABINET ASS'Y	EE
	59	RD-DDTX006-V	TRAVERSE UNIT	(RTL)
	79	REXX0766	BLACK WIRE (SMPS-AC);TL2	
	80	REXX0768	RED WIRE (SMPS-AC);TL1	
	A2	K2CQ2CA00007	AC CORD	EE/EF/EG
	A2	K2CZ3YY00005	AC CORD	EB
	A3	RQTX0300-D	O/I BOOK (Ge/Sp/It)	EG
	A3	RQTX0301-H	O/I BOOK (Du/Sw/Da)	EG
	A3	RQTX0302-E	O/I BOOK (Fr)	EF/EG
	A3	RQTX0303-B	O/I BOOK (En)	EB
	A3	RQTX0304-R	O/I BOOK (Ru/Ur)	EE
	A3	RQTX1002-Z	O/I BOOK (En/Cz/Po)	EG
	PCB4	REPX0745B	SMPS P.C.B	(RTL)
	DZ5701	ERZV10V511CS	ZNR	
	L5701	ELF15N030A	LINE FILTER	
	L5702	ELF21N010A	LINE FILTER	
	T2900	G4D1A0000117	SWITCHING TRANSFORMER	
	T5701	ETS42BM1F6AC	MAIN TRANSFORMER	
	T5751	ETS19AB2A6AG	SUB TRANSFORMER	
	PC5702	B3PBA0000402	PHOTO COUPLER	
	PC5720	B3PBA0000402	PHOTO COUPLER	
	PC5799	B3PBA0000402	PHOTO COUPLER	
	RY701	K6B1AEA00003	RELAY	
	F1	K5D312BLA015	FUSE	
	F2	K5G162B00016	FUSE	
	FP2901	K5H1022A0011	PROTECTOR	
	TH5702	D4CAA5R10001	THERMISTOR	
	P5701	K2AA2B000017	AC INLET	
	C5700	F1BAF2220023	2200pF	
	C5701	ECQU2A104MLC	0.1uF	
	C5702	ECQU2A104MLC	0.1uF	
	C5704	F1BAF2220023	2200pF	
	C5705	F1BAF101A013	100pF	

1.5. Caution for AC Cord (For EB only)

For your safety, please read the following text carefully.
This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5-ampere fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.
Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local dealer.

CAUTION!

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as stated below.

If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral, Brown: Live.

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL  OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF—KEEP DRY.

Before use

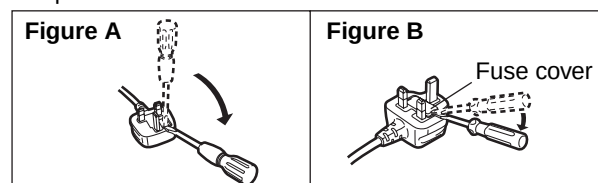
Remove the connector cover.

How to replace the fuse

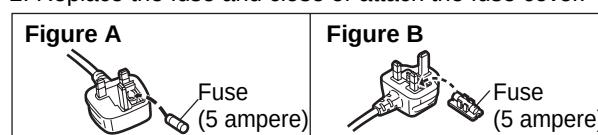
The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.

Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.



2. Replace the fuse and close or attach the fuse cover.



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:

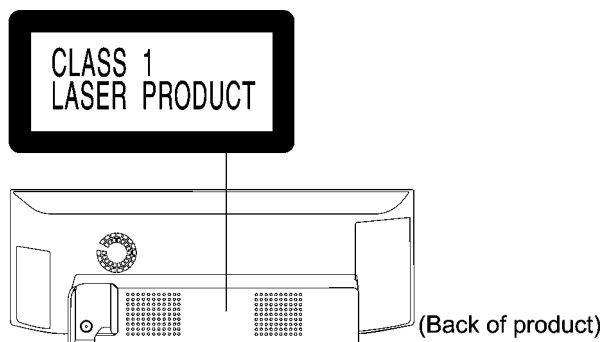
This product utilizes a laser diode with the unit turned "on", invisible laser radiation is emitted from the pickup lens.

Wavelength: 655 nm (DVD)/785 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.



CAUTION	- LASER RADIATION WHEN OPEN DO NOT STARE INTO BEAM	FDA 21 CFR / Class II
CAUTION	- CLASS 1M VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS. IEC 60825-1:2014 Class 1M	
WARNING	- KLASSE 1M SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRÄKTA EJ STRÅLLEN DIREKT MED OPTISKA INSTRUMENT	
FORSIGTIG	- SYNLIG OG USYNLIG LASERSTRÅLNING KLASSE 1M. IKKE LØGET ER REKTE UDEN AT BRUGE OPTISKE INSTRUMENTER	
VARO!	- AVATTRESSA OLET ALTIINNA LUKKAN YHÄNKYVÄÄ JA YÄNKÄRÄTÖNTÄ LASERSÄTELYÄ. ÄLÄ KATSO OPTISELLA LAITTEELLA SUORAAN SATEESEEN.	
VORSICHT	- SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG KLASSE 1M. WEIN ABDECKUNG GEÖFFNET. NICHT DIREKT MIT OPTISCHEN INSTRUMENTEN BETRACHTEN.	
ATTENTION	- RAYONNEMENT LASER VISIBLE ET INVISIBLE. CLASSE 1M. EN CAS D'OUVERTURE NE PAS REGARDER DIRECTEMENT À L'AIDE D'INSTRUMENTS D'OPTIQUE	
注意	- ここを開くと可視及び不可視レーザー光が出ます。 ビームを覗いたり、触れたりしないでください。	
注意	- 打开时有可见及不可见激光辐射。避免光眼照射。	GB7241.1-2001(BB 类) ROLXS0075

(Inside of product)

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%

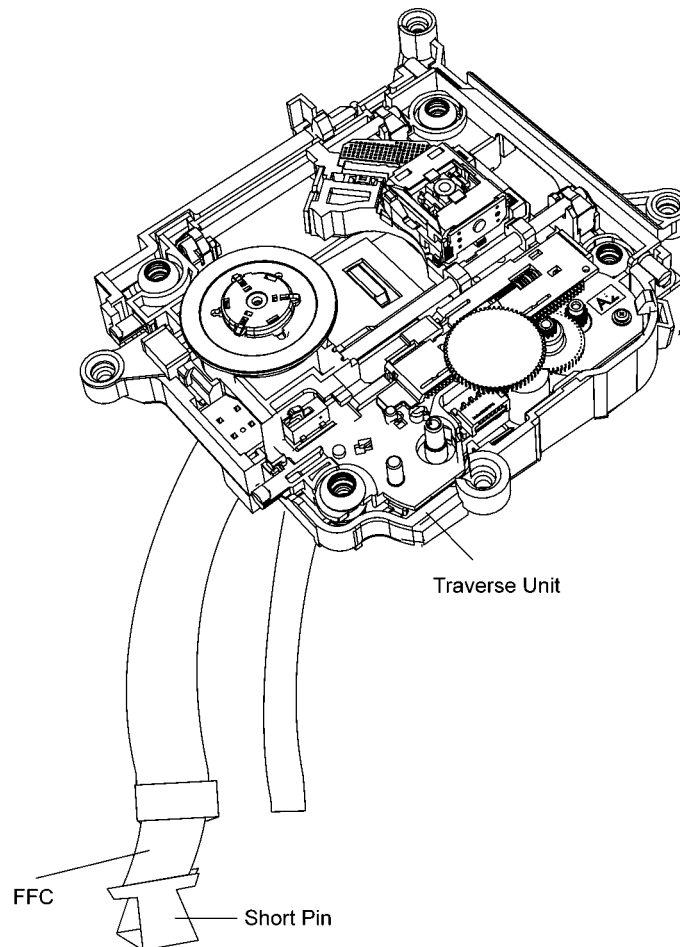
2.4. Handling Precautions for Traverse Unit

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.

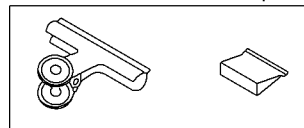
2.4.1. Cautions to Be Taken in Handling the Optical Pickup Unit

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.



Clip or Short Pin

Figure 1

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.

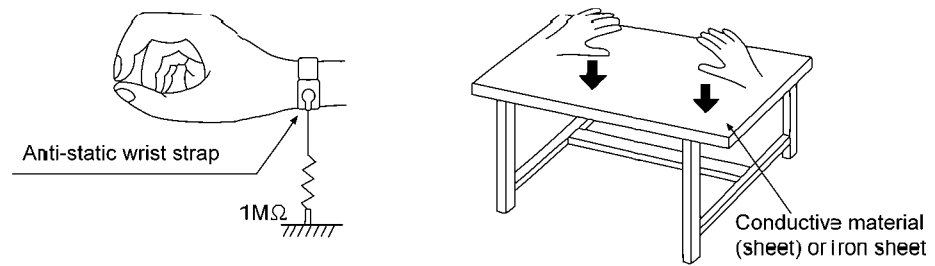


Figure 2

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 the original service manual.

- **Micro-processor & EEPROM IC:**

- 1) The following components are assembled part (with download firmware).
 - Micro-processor IC, IC2001 (PTX60: RFKWMPTX60EG)
 - EEPROM IC, IC2003 (PTX60: RFKWEPTX60EG)

- **Speaker system**

- 1) For information, please refer to original service manual as follow:-
 - a) SB-HFX60EG-K (Order No. PSG0907002CE)
 - b) SB-HWX60EG-K (Order No. PSG0907002CE)

4 Specifications

Main unit SA-PTX60EB/EG/EF/EE

●GENERAL

Power supply: AC 220V to 240V, 50 Hz
Power consumption: This unit 70 W
Power consumption in standby mode: approx. 0.2 W

Dimensions (W×H×D): 500 mm×201 mm×114 mm
Mass: This unit 2.879 kg
Operating temperature range: 0 °C to +35 °C
Operating humidity range: 35 % to 80 % RH (no condensation)

●AMPLIFIER SECTION

RMS Output Power:

Front Ch: 100 W per channel (6 Ω), 1 kHz, 10 % THD
 Subwoofer Ch: 60 W per channel (6 Ω), 100 Hz, 10 % THD
 Total RMS power output: 260 W

DIN Output Power:

Front Ch: 85 W per channel (6 Ω), 1 kHz, 1 % THD
 Subwoofer Ch: 55 W per channel (6 Ω), 100 Hz, 1 % THD
 Total DIN power output: 225 W

●FM TUNER, TERMINALS SECTION

Preset Memory: FM 30 stations

Frequency Modulation (FM):

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

Digital audio input:

Optical digital input: Optical terminal
 Sampling frequency: 32 kHz, 44.1 kHz, 48 kHz

Phone jack:

Terminal: Stereo, 3.5 mm jack

USB Port:

USB standard: USB 2.0 full speed
 Media file format support: MP3 (*.mp3)

WMA (*.wma)
 JPEG (*.jpg) (*.jpeg)
 DivX (*.divx) (*.avi)
 MPEG4 (*.asf)

USB device file system: FAT12, FAT16, FAT32

USB Port power: Max. 500 mA

Bit rate: Up to 4 Mbps (DivX)

●DISC SECTION

Discs played (8 cm or 12 cm):

- (1) DVD (DVD-Video, DivX^{*5,6})
- (2) DVD-RAM (DVD-VR, MP3^{*2,5}, JPEG^{*4,5}, MPEG4^{*5,7}, DivX^{*5,6})
- (3) DVD-R (DVD-Video, DVD-VR, MP3^{*2,5}, JPEG^{*4,5}, MPEG4^{*5,7}, DivX^{*5,6})
- (4) DVD-R DL (DVD-Video, DVD-VR, DivX^{*5,6})
- (5) DVD-RW (DVD-Video, DVD-VR, MP3^{*2,5}, JPEG^{*4,5}, MPEG4^{*5,7}, DivX^{*5,6})
- (6) +R/+RW (Video)
- (7) +R DL (Video)
- (8) CD, CD-R/RW (CD-DA, Video CD, SVCD^{*1}, MP3^{*2,5}, WMA^{*3,5}, JPEG^{*4,5}, MPEG4^{*5,7}, DivX^{*5,6})

*1 Conforming to IEC62107

*2 MPEG-1 Layer 3, MPEG-2 Layer 3

*3 Windows Media Audio Ver.9.0 L3

Not compatible with Multiple Bit Rate (MBR)

*4 Exif Ver 2.1 JPEG Baseline files

Picture resolution: between 160X120 and 6144X4096 pixels (Sub sampling is 4:0:0, 4:2:0, 4:2:2 or 4:4:4). Extremely long and narrow pictures may not be displayed.

*5 The total combined maximum number of recognizable audio, picture and video contents and groups: 4000 audio, picture and video contents and 255 groups. (Excluding Root folder)

*6 Plays DivX[®] video.

*7 MPEG4 data recorded with Panasonic SD multi cameras or DVD video recorders

Conforming to SD VIDEO specifications (ASF standard)/MPEG4 (Simple Profile) video system/G.726 audio system

*8 Rating with Low-cut filter equipped Amplifier.

Pick up:

Wavelength (DVD/CD) 655/785 nm
 Laser power (DVD/CD) CLASS 1/CLASS 1M

Audio output (Disc):

Number of channels 2.1 ch (FL, FR, SW)

●VIDEO SECTION

Video system: PAL625/50, PAL525/60, NTSC

Composite video output

Output level: 1 Vp-p (75 Ω)
 Terminal: Pin jack (1 system)

HDMI AV output

Terminal: 19-pin type A connector

HDAVI Control:

This unit supports "HDAVI Control 4" function.

Note:

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

Solder:

This model uses lead free solder (PbF).

System	SC-PTX60EG-K	SC-PTX60EB-K
Main unit	SA-PTX60EG-K	SA-PTX60EB-K
Front speakers	SB-HFX60EG-K ^{*1}	SB-HFX60EG-K ^{*1}
Subwoofer	SB-HWX60EG-K ^{*1}	SB-HWX60EG-K ^{*1}

System	SC-PTX60EF-K	SC-PTX60EE-K
Main unit	SA-PTX60EF-K	SA-PTX60EE-K
Front speakers	SB-HFX60EG-K ^{*1}	SB-HFX60EG-K ^{*1}
Subwoofer	SB-HWX60EG-K ^{*1}	SB-HWX60EG-K ^{*1}

Refer to their respective original service manuals for *1

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U.S. Patent Nos. 6,836,549; 6,381,747; 7,050,698; 6,516,132; and 5,583,936.

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Plays DivX® video
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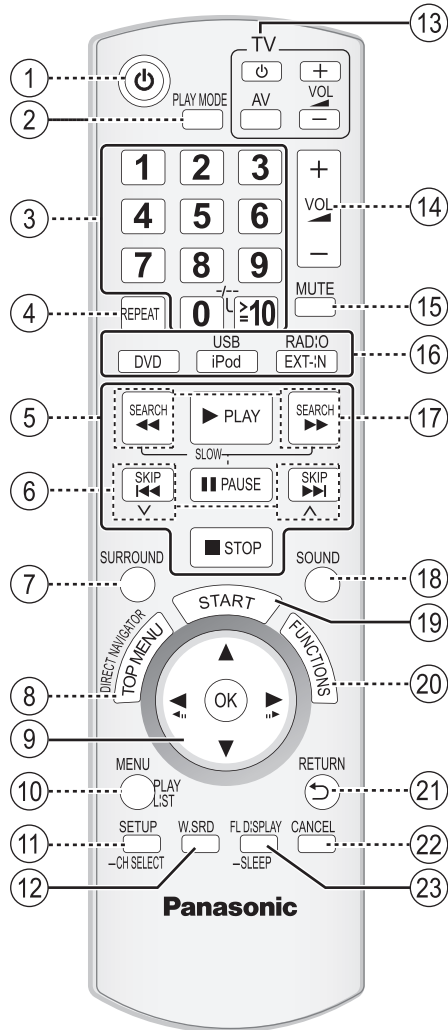
"Made for iPod" means that an electronic accessory has been designed to connect specifically to iPod and has been certified by the developer to meet Apple performance standards.

Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.

iPod is a trademark of Apple Inc., registered in the U.S. and other countries.

5 Location of Controls and Components

5.1. Remote Control Key Button Operations



- ① Turn this unit on/off
- ② Select the play mode
- ③ Select channels and title numbers etc. / Enter numbers
- ④ Set the repeat mode
- ⑤ Basic operations for play
- ⑥ Select preset radio stations
- ⑦ Select surround sound effects
- ⑧ Show a disc top menu or program list
- ⑨ Select or confirm menu items / Frame-by-frame

- ⑩ Show a disc menu or play list

- ⑪ Show setup menu

Adjust the balance of the front speakers

1 Press and hold [—CH SELECT] to select the speaker.

Each time you press and hold the button:

L→R

2 (While “L” or “R” is selected)

Press [◀, ▶].

- ⑫ Turn Whisper-mode Surround on/off

TV operations

Aim the remote control at the Panasonic TV and press the button.

[⏻]: Turn the TV on/off

[AV]: Change the TV's video input mode

[+, −]: Adjust the TV volume

This may not work properly with some models.

- ⑬ Adjust the volume of this unit

Mute the sound

- “MUTE” flashes on this unit's display while the function is on.

- To cancel, press the button again or adjust the volume.

- Muting is cancelled when you switch the unit to standby.

Source select

[DVD]: Select disc as the source

[USB], [iPod]: Select USB or iPod as the source

[RADIO], [EXT-IN]: Select FM tuner or external audio as the source

FM → AUX* → D-IN*

* “(TV)” will appear beside “AUX” or “D-IN”, indicating the TV audio setting for VIERA Link “HDAVI Control”

- ⑭ Select radio stations manually

- ⑮ Select sound mode

- ⑯ Show START menu

- ⑰ Show on-screen menu / Display RDS text data

- ⑱ Return to previous screen

- ⑲ Cancel

- ⑳ Switch information on this unit's display

Set the Sleep timer

Press and hold [—SLEEP].

While the time is shown on this unit's display, press

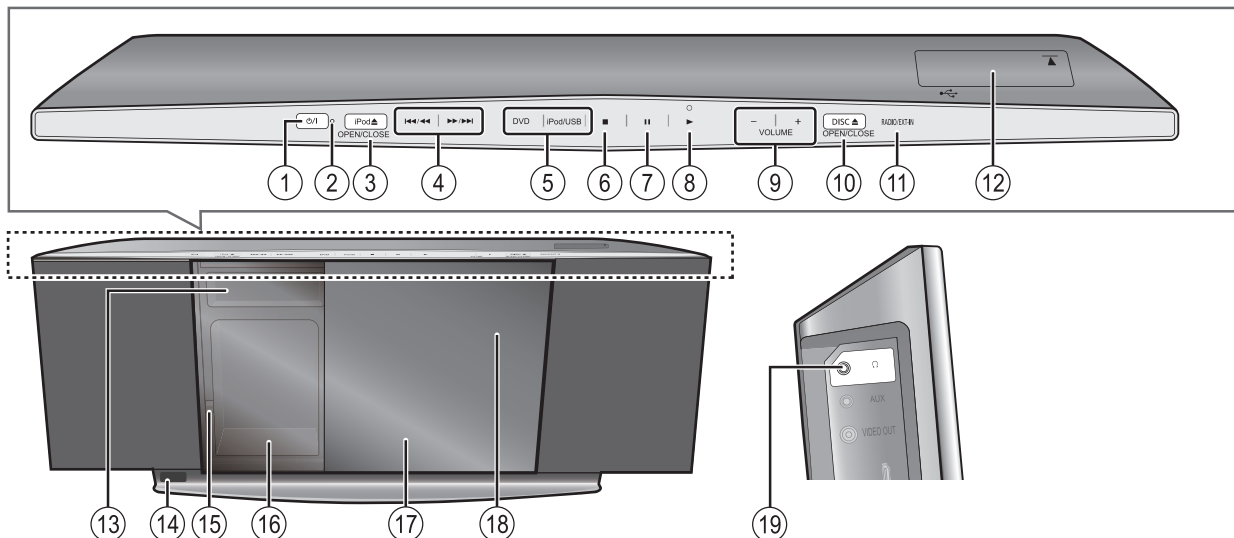
[—SLEEP] repeatedly.

SLEEP 30 → SLEEP 60 → SLEEP 90 → SLEEP 120

↑ OFF (Cancel) ↓

- To confirm the remaining time, press and hold the button again.

5.2. Main Unit Key Button Operations



① **Standby/on switch (⏻/⏻)**

Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.

② **Status indicator**

This indicator lights up when the unit is turned on and goes out in standby mode.

③ **Open or close the iPod side sliding door (⇒ below)**

④ **Skip or slow-search play / Select the radio stations**

⑤ **Select the source**

[DVD]: DVD/CD

[iPod/USB]: IPOD↔USB

⑥ **Stop playing / Select the tuning mode / Adjust the FM reception condition**

⑦ **Pause**

⑧ **Play discs / Memorize the receiving radio stations**

⑨ **Adjust the volume of this unit**

⑩ **Open or close the disc side sliding door (⇒ below)**

⑪ **Select the source**

[RADIO/EXT-IN]: FM→AUX*→D-IN*

* “(TV)” will appear beside “AUX” or “D-IN”, indicating the TV audio setting for VIERA Link “HDAVI Control”.

⑫ **USB port**

⑬ **Display**

⑭ **Remote control signal sensor**

⑮ **iPod docking switch lever**

⑯ **Connect iPod**

⑰ **Disc tray (⇒ below)**

⑱ **Sliding door**

⑲ **Connect headphones (not included)**

Headphone plug type: Ø3.5 mm stereo mini plug

● Reduce the volume before connecting.

● Audio is automatically switched to 2-channel stereo.

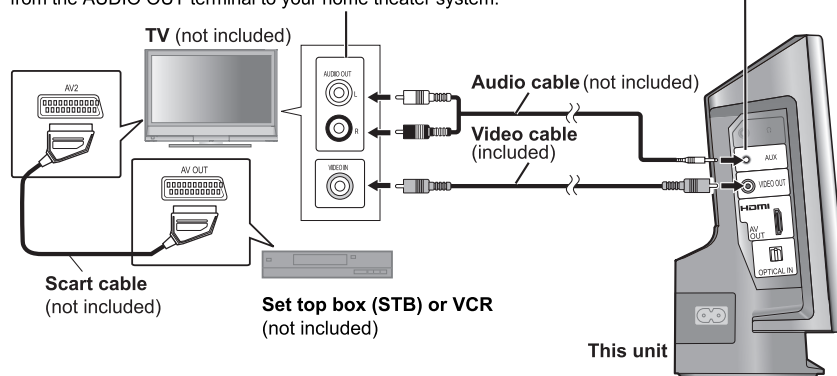
● To prevent hearing damage, avoid listening for prolonged periods of time.

Excessive sound pressure from earphones and headphones can cause hearing loss.

5.3. Audio and video connections

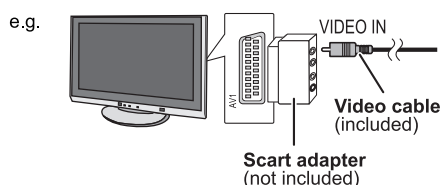
Refer to the operating instructions for the TV, cable or satellite STB, or VCR for the settings necessary to output its audio from the AUDIO OUT terminal to your home theater system.

You can enjoy the audio from your TV, cable or satellite STB, or your VCR through this home theater system by connecting to the AUX terminal. Select "AUX" as the source



Note

If the TV does not have a VIDEO IN terminal, connect using a Scart adapter (Scart—VIDEO IN).



Other video connection

TV terminal	Cable required (not included)	This unit terminal	Features
Note If there is more than one HDMI terminal, refer to the operating instructions for the TV to determine which terminal to connect to.	HDMI cable Note - Non-HDMI-compliant cables cannot be utilized. - Please use High Speed HDMI Cables that have the HDMI logo (as shown on the cover). It is recommended that you use Panasonic's HDMI cable. Recommended part number: RP-CDHG15 (1.5 m), RP-CDHG30 (3.0 m), RP-CDHG50 (5.0 m), etc.	HDMI	This connection provides the best picture quality. - Set "VIDEO PRIORITY" to "ON" - Set "VIDEO FORMAT" in Menu 4 (HDMI) VIERA Link "HDAVI Control" If your Panasonic TV is VIERA Link compatible, you can operate your TV synchronising with home theater operations or vice versa - Make the extra audio connection by connecting to the AUX terminal when you use VIERA Link "HDAVI Control" function.

Note

- Do not make the video connections through the VCR.**
Due to copy guard protection, the picture may not be displayed properly.
- Only one video connection is required. Choose one of the video connections above depending on your TV.

Other audio connection

TV or external equipment terminal	Cable required (not included)	This unit terminal	Features
	Optical digital audio cable Do not bend sharply when connecting.	OPTICAL IN	This is the preferred connection for optimum sound and surround sound. This unit can decode the surround signals received from your TV, cable or satellite STB. Refer to the operating instructions for the TV, cable or satellite STB for the settings necessary to output its audio from the digital audio output to your home theater system. Only Dolby Digital and PCM can be played with this connection. After making this connection, make settings to suit the type of audio from your digital equipment

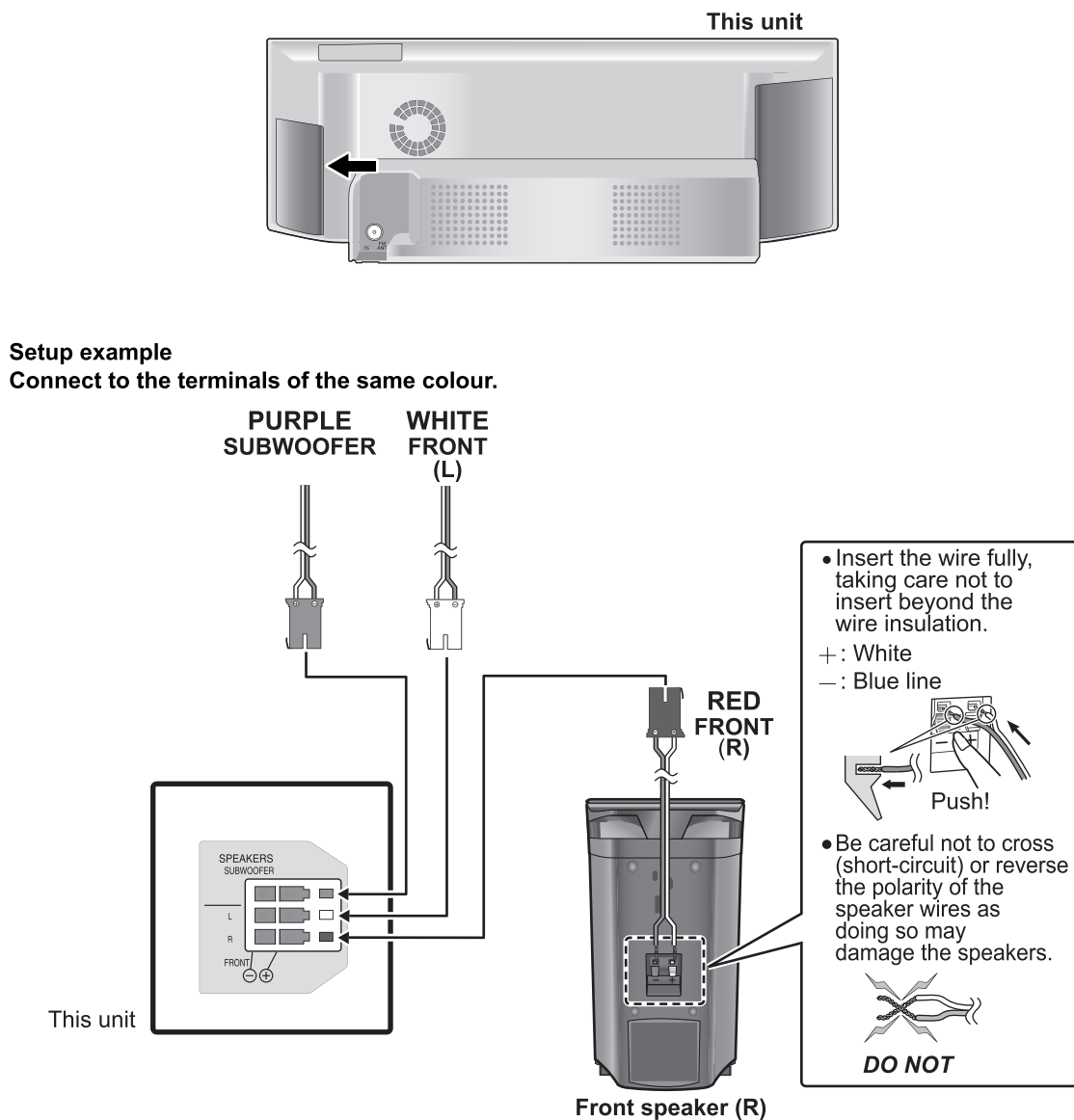
Note

If you have various sound sources (such as Blu-ray player, DVD recorder, VCR, etc.), connect them to the available inputs on the TV and the TV output should then be connected to the AUX or OPTICAL IN terminal of this unit.

5.4. Speaker Connections

Turn off all equipment before connection and read the appropriate operating instructions.

Do not connect the AC mains lead until all other connections are completed.



5.5. Disc Information

5.5.1. Discs Playability

Commercial discs

Disc	Logo	Indicated in these instructions by	Remarks
DVD-Video		DVD-V	High quality movie and music discs
Video CD		VCD	Music discs with video Including SVCD (Conforming to IEC62107)
CD		CD	Music discs

Recorded discs (○: Playable, —: Not playable)

Disc	Logo	Recorded on a DVD video recorder, etc.		Recorded on a personal computer, etc.					Finalizing ^{*6}
		DVD-VR ^{*2}	DVD-V ^{*4}	WMA	MP3	JPEG	MPEG4	DivX	
DVD-RAM		○	—	—	○	○	○	○	Not necessary
DVD-R/RW		○	○	—	○	○	○	○	Necessary
DVD-R DL		○ ^{*3}	○	—	—	—	—	○	Necessary
+ R/+RW	—	—	(○) ^{*5}	—	—	—	—	—	Necessary
+ R DL	—	—	(○) ^{*5}	—	—	—	—	—	Necessary
CD-R/RW ^{*1}	—	—	—	○	○	○	○	○	Necessary ^{*7}

● It may not be possible to play all the above-mentioned discs in some cases due to the type of disc, the condition of the recording, the recording method, or how the files were created (⇒ 31, Tips for making data discs).

^{*1} This unit can play CD-R/RW recorded with CD-DA or Video CD format.

^{*2} Discs recorded on DVD recorders or DVD video cameras, etc. using Version 1.1 of the Video Recording Format (a unified video recording standard).

^{*3} Discs recorded on DVD recorders or DVD video cameras using Version 1.2 of the Video Recording Format (a unified video recording standard).

^{*4} Discs recorded on DVD recorders or DVD video cameras using DVD-Video Format.

^{*5} Recorded using a format different from DVD-Video Format, therefore some functions cannot be used.

^{*6} A process that allows play on compatible equipment. To play a disc that is indicated as "Necessary", the disc must first be finalized on the device it was recorded on.

^{*7} Closing the session will also work.

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.

Discs that cannot be played

Blu-ray, HD DVD, AVCHD discs, DVD-RW version 1.0, DVD-Audio, DVD-ROM, CD-ROM, CDV, CD-G, SACD, Photo CD, DVD-RAM that cannot be removed from their cartridge, 2.6 GB and 5.2 GB DVD-RAM, and "Chaoji VCD" available on the market including CVD, DVCD and SVCD that do not conform to IEC62107.

Video systems

- This unit can play PAL and NTSC, but your TV must match the system used on the disc.
- PAL discs cannot be correctly viewed on an NTSC TV.
- This unit can convert NTSC signals to PAL 60 for viewing on a PAL TV (⇒ 25, "NTSC DISC OUT" in VIDEO menu).

Disc handling precautions

- Handle discs by the edges to avoid inadvertent scratches or fingerprints on the disc.
- Do not attach labels or stickers to discs. This may cause disc warping, rendering it unusable.
- Do not write on the label side with a ball-point pen or other writing instrument.
- Do not use record cleaning sprays, benzine, thinner, liquids which prevent static electricity, or any other solvent.
- Do not use scratch-proof protectors or covers.
- Do not use the following discs:
 - Discs with exposed adhesive from removed stickers or labels (rented discs, etc.).
 - Discs that are badly warped or cracked.
 - Irregularly shaped discs, such as heart shapes.

To clean discs

Wipe with a damp cloth and then wipe dry.



5.5.2. File Extension Type Support (WMA/MP3/JPEG/MPEG4/DivX)

Format	Disc	Extension	Reference
WMA	CD-R/RW	“.WMA” “.wma”	● Compatible compression rate: between 48 kbps and 320 kbps ● You cannot play WMA files that are copy-protected. ● This unit does not support Multiple Bit Rate (MBR: an encoding process for audio content that produces an audio file encoded at several different bit rates).
MP3	DVD-RAM DVD-R/ RW CD-R/RW	“.MP3” “.mp3”	● This unit does not support ID3 tags. ● Sampling frequency and compression rate: –DVD-RAM, DVD-R/RW: 11.02, 12, 22.05, 24 kHz (8 to 160 kbps), 44.1 and 48 kHz (32 to 320 kbps) –CD-R/RW: 8, 11.02, 12, 16, 22.05, 24 kHz (8 to 160 kbps), 32, 44.1 and 48 kHz (32 to 320 kbps)
JPEG	DVD-RAM DVD-R/ RW CD-R/RW	“.JPG” “.jpg” “.JPEG” “.jpeg”	● JPEG files taken on a digital camera that conform to DCF Standard (Design rule for Camera File system) Version 1.0 are displayed. –Files that have been altered, edited or saved with computer picture editing software may not be displayed. ● This unit cannot display moving pictures, MOTION JPEG and other such formats, still pictures other than JPEG (e.g. TIFF), or play pictures with attached audio.
MPEG4	DVD-RAM DVD-R/ RW CD-R/RW	“.ASF” “.asf”	● You can play MPEG4 data [conforming to SD VIDEO specifications (ASF standard)/MPEG4 (Simple Profile) video system/G.726 audio system] recorded with Panasonic SD multi cameras or DVD recorders with this unit. ● The recording date may differ from that of the actual date.
DivX	DVD-RAM DVD-R/ RW CD-R/RW	“.DIVX” “.divx” “.AVI” “.avi”	● Plays all versions of DivX® video (including DivX®6) [DivX video system/MP3, Dolby Digital or MPEG audio system] with standard playback of DivX® media files. Functions added with DivX Ultra are not supported. ● DivX files greater than 2 GB or have no index may not be played properly on this unit. ● This unit supports all resolutions up to maximum of 720 × 480 (NTSC)/ 720 × 576 (PAL). ● You can select up to 8 types of audio and subtitles on this unit.

- There may be differences in the display order on the menu screen and computer screen.
- This unit cannot play files recorded using packet write.

DVD-RAM

- Discs must conform to UDF 2.0.

DVD-R/RW

- Discs must conform to UDF bridge (UDF 1.02/ISO9660).
- This unit does not support multi-session. Only the default session is played.

CD-R/RW

- Discs must conform to ISO9660 level 1 or 2 (except for extended formats).
- This unit supports multi-session but if there are many sessions it takes more time for play to start. Keep the number of sessions to a minimum to avoid this.

5.5.3. DivX Information

ABOUT DIVX VIDEO-ON-DEMAND:

This DivX® Certified device must be registered in order to play DivX Video-on-Demand (VOD) content.

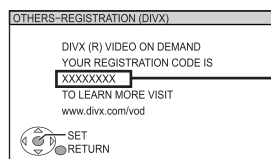
First generate the DivX VOD registration code for your device and submit it during the registration process.

[Important: DivX VOD content is protected by a DivX DRM (Digital Rights Management) system that restricts playback to registered DivX Certified devices. If you try to play DivX VOD content not authorized for your device, the message "AUTHORIZATION ERROR" will be displayed and your content will not play.]

Learn more at www.divx.com/vod.

Display the unit's registration code

(⇒ 27, "REGISTRATION" in OTHERS menu)



8 alphanumeric characters

- We recommend that you make a note of this code for future reference.
- After playing DivX VOD content for the first time, another registration code is then displayed in "REGISTRATION (DIVX)". Do not use this registration code to purchase DivX VOD content. If you use this code to purchase DivX VOD content, and then play the content on this unit, you will no longer be able to play any content that you purchased using the previous code.

Regarding DivX content that can only be played a set number of times

Some DivX VOD content can only be played a set number of times. When you play this content, the remaining number of plays is displayed.

You cannot play this content when the number of remaining plays is zero. ("RENTAL EXPIRED" is displayed.)

When playing this content

- The number of remaining plays is reduced by one if
 - you press [⏏] or [SETUP].
 - you press [■] STOP.
 - you press [◀◀, ▶▶] SKIP or [◀◀, ▶▶] SEARCH etc. and arrive at another content.

Resume function (⇒ 15, Stop) does not work.

Displaying DivX subtitles text

You can display subtitles text recorded onto the DivX video disc on this unit.

Depending on the methods used to create the file, the following functions may not work, or the subtitles may not be displayed correctly.

- 1 During play, select "SUBTITLE" in Menu 1.
- 2 Press [▲, ▼] to select "TEXT ON" and press [OK].
 - DivX video files that do not display "TEXT ON" do not contain subtitles text. Subtitles text cannot be displayed.
 - If the subtitles text are not displayed correctly, try changing the language settings (⇒ below).

Subtitles text language settings

[Only when "LANGUAGE" in DISPLAY menu is set to "ENGLISH"]

- 1 During play, press [SETUP].
- 2 Press [▲, ▼] to select "DISC" and press [OK].
- 3 Press [▲, ▼] to select "SUBTITLE TEXT" and press [OK].
- 4 Press [▲, ▼] to select "LATIN1", "LATIN2" (factory setting), "CYRILLIC" or "TURKISH" and press [OK].
 - To exit the screen, press [SETUP].

Types of subtitles text file that can be displayed

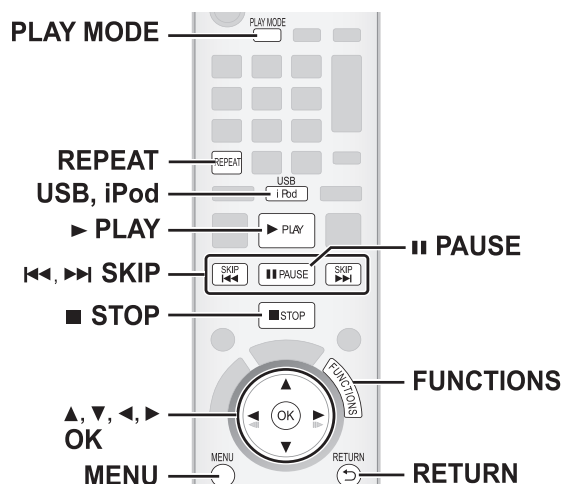
Subtitles text that satisfy the following conditions can be displayed on this unit.

- File format: MicroDVD, SubRip, or TMLayer
- File extension: ".SRT", ".srt", ".SUB", ".sub", ".TXT", or ".txt"
- File name: No more than 44 characters excluding the file extension
- The DivX video file and subtitles text file are inside the same folder, and the file names are the same except for the file extensions.
- If there are more than one subtitles text files inside the same folder, they are displayed in the following order of priority: ".srt", ".sub", ".txt".

Note

- If the file name of the DivX video file is not displayed correctly on the menu screen (the file name is displayed as "※"), or the file size exceeds 256KB, the subtitles text may not be displayed correctly.
- The subtitles text cannot be displayed during menu display or when operations such as search are being performed.

5.6. Using the iPod



You can play an external device through your home theater system.

Using the iPod

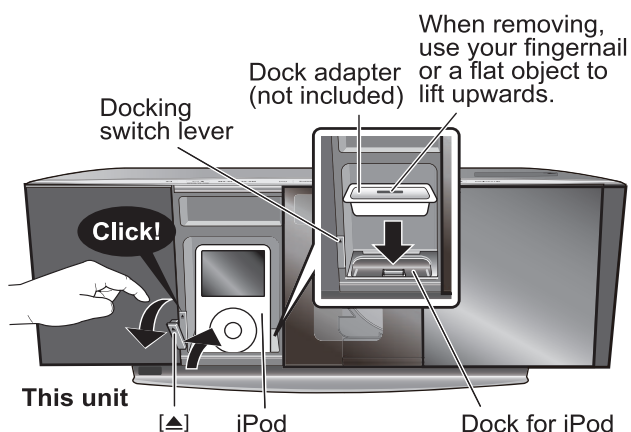
You can enjoy iPod music through this unit's speakers or view iPod videos/photos on the TV.

Preparation

- To view photos/videos from the iPod
 - Ensure the video connection to the VIDEO OUT terminal on this unit.
 - Operate the iPod menu to make the appropriate photo/video output settings for your TV. (Refer to operating instructions for your iPod.)
- To display the picture, turn on the TV and select the appropriate video input mode.
- Before connecting/disconnecting the iPod, turn this unit off or reduce the volume of this unit to its minimum.

Connecting the iPod (not included)

- 1 Press [iPod ▲ OPEN/CLOSE] to open the sliding door.
- 2 Press [▲] to unlock the Dock for iPod and pull the docking switch lever to tilt the Dock for iPod.
 - Hold the docking switch lever when connecting/disconnecting the iPod.
- 3 Connect the iPod firmly.
- 4 Gently push the docking switch lever back into place.
 - Recharging starts when the Dock for iPod is locked back into place.
- 5 Press [iPod ▲ OPEN/CLOSE] to close the sliding door.
 - To enjoy photos, leave the sliding door open and gently operate the iPod's controls.



Removing the iPod

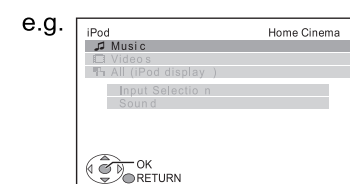
- 1 Stop the playback of the iPod.
- 2 Press [iPod ▲ OPEN/CLOSE] to open the sliding door.
- 3 Press [▲] to unlock the Dock for iPod and pull the docking switch lever to tilt the Dock for iPod.
- 4 Pull the iPod straight out at the same angle as the tilt of the Dock for iPod.
- 5 Push the docking switch lever back into place.

Note

- Attach the dock adapter which should be supplied with your iPod to the dock for the stable use of the iPod. If you need an adapter, consult your iPod dealer.
- During disc playback the sliding door will not open when [iPod ▲ OPEN/CLOSE] is pressed.
 - If [iPod ▲ OPEN/CLOSE] is pressed twice, disc playback will stop and the sliding door will open.
- Keep your fingers away from the sliding door when it is moving to avoid minor injuries.
- **While an iPod is connected**
 - Do not push or pull your iPod back and forth with great force.

	Select "IPOD". The iPod automatically switches to this unit's display mode. Music menu appears on the TV. e.g.
	Select the menu. Each time you press the button: Music menu → Video menu iPod menu (iPod LCD) ←

When using the START menu in "IPOD" mode



Music: Shows the music menu.

Videos: Shows the video menu.

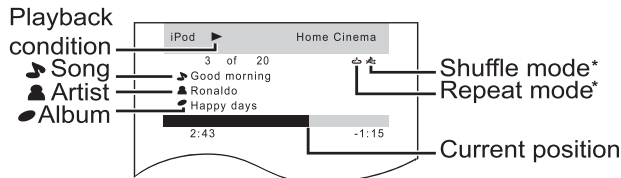
All (iPod display): Switches to iPod menu.

Enjoying music/videos

1 	Select music or video menu on the TV.
2 	Select an item. ● Press [◀, ▶] to skip page by page. ● To return to the previous screen, press [RETURN].

(Continued on next page)

Play starts from the selected song or video.
e.g. music playback screen



* These icons will only appear for music mode.

- : Song shuffle : Repeat 1 song
 : Album shuffle : Repeat all

Basic controls (For music and videos only)

Button	Function
[▶ PLAY]	Play
[■ STOP], [⏸ PAUSE]	Pause
[⏮], [⏭] SKIP	Skip
(press and hold) [⏮], [⏭] SKIP	Search

Other methods of playback

Shuffle mode (For music playback only)

Press [PLAY MODE] several times.

SONGS, ALBUMS, OFF

Repeat mode

Press [REPEAT] several times.

During the music/video playback: ONE, ALL, OFF

Enjoying photos

1



Select the iPod menu.

2

Play a slideshow on your iPod.

You can use the remote control to operate the iPod menu.

[▼, ▲]: To navigate menu items.

[OK]: To go to the next menu.

[RETURN]: To return to the previous menu.

The remote control operation may vary between iPod models.

About recharging the battery

- iPod will start recharging regardless of whether this unit is on or off.
- "IPOD ✖" will be shown on this unit's display during iPod charging in this unit standby mode.
- Check iPod to see if the battery is fully recharged. If you are not using iPod for an extended period of time after recharging has completed, disconnect it from this unit, as the battery will be depleted naturally. (Once fully recharged, additional recharging will not occur.)
- The cooling fan may operate while the iPod battery is being charged.

Compatible iPod

- iPod touch 2nd generation (8GB, 16GB, 32GB)
- iPod nano 4th generation (video) (8GB, 16GB)
- iPod classic (120GB)
- iPod touch 1st generation (8GB, 16GB, 32GB)
- iPod nano 3rd generation (video) (4GB, 8GB)
- iPod classic (80GB, 160GB)
- iPod nano 2nd generation (aluminum) (2GB, 4GB, 8GB)
- iPod 5th generation (video) (60GB, 80GB)
- iPod 5th generation (video) (30GB)
- iPod nano 1st generation (1GB, 2GB, 4GB)
- iPod 4th generation (color display) (40GB, 60GB)
- iPod 4th generation (color display) (20GB, 30GB)
- iPod 4th generation (40GB)

- iPod 4th generation (20GB)

- iPod mini (4GB, 6GB)

Compatibility depends on the software version of your iPod.

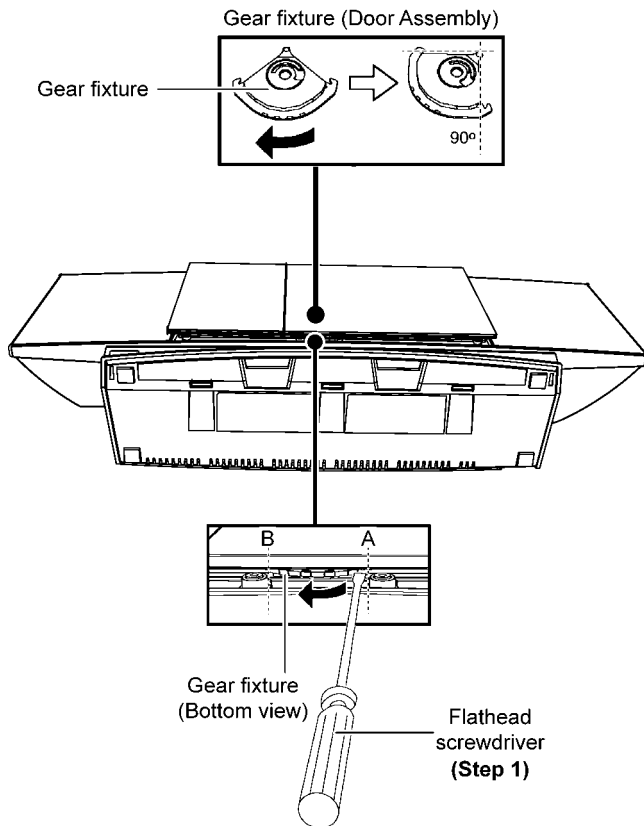
To use the iPod touch features

- ① Press the Home button on the iPod touch.
- ② Select the iPod touch features on the touch screen to operate.

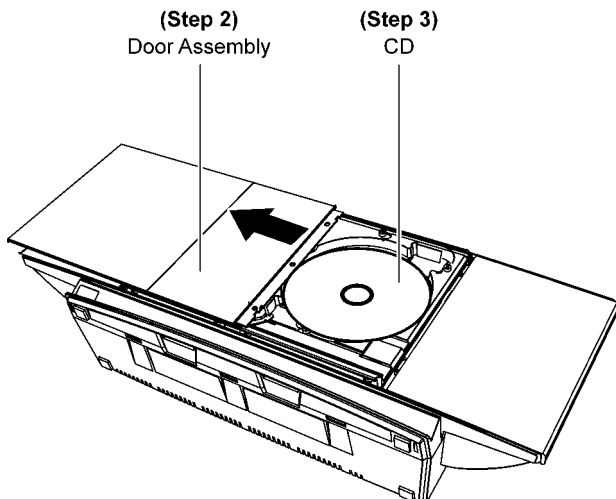
6 Operating Instructions

6.1. Door Assembly Unit Jam

6.1.1. Removing the CD



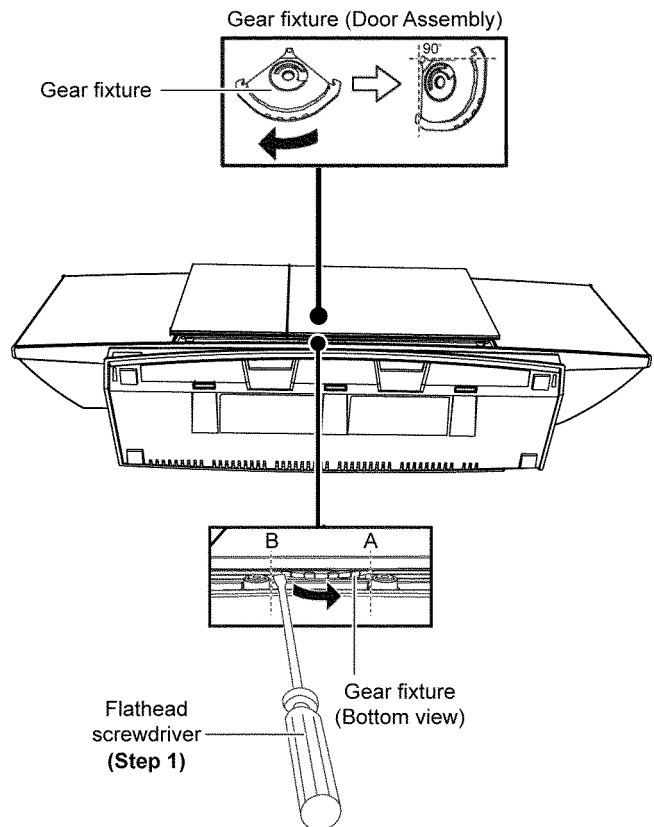
Step 1 Insert a flathead screwdriver into the hole behind the Door Assembly and push the gear fixture from point A to B.



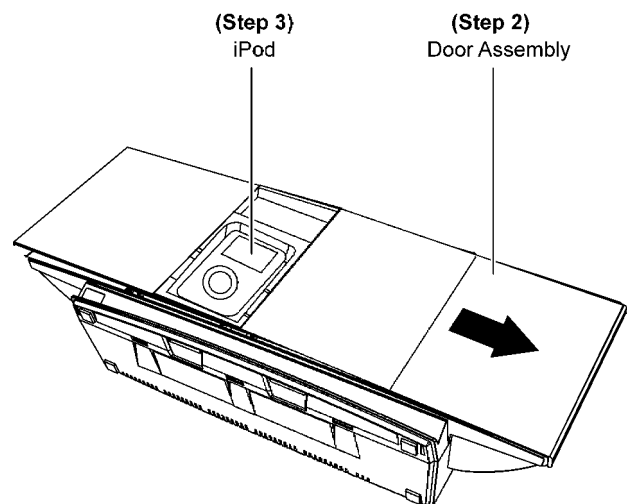
Step 2 Push the Door Assembly as arrow shown until the CD is fully in sight.

Step 3 Remove the CD.

6.1.2. Removing the iPod



Step 1 Insert a flathead screwdriver into the hole behind the Door Assembly and push the gear fixture from point B to A.



Step 2 Push the Door Assembly as arrow shown until the iPod is fully in sight.

Step 3 Remove the iPod.

7 Self-Diagnosis and Special Mode Setting

7.1. Service Mode Summary Table

The service modes can be activated by pressing various button combination on the main unit and remote control unit.

Below is the summary for the various modes for checking:

In order to enter the service mode, press [⏮] RETURN button on remote control.

Main unit buttons	Remote control unit buttons	Application	Note
[STOP]	[0]	Error code check.	(Refer to the section "7.2.1. Service Mode Table 1" for more information.)
	[5]	Jitter checking.	
	[PAUSE]	Initial setting of laser drive current.	
	[FUNCTIONS]	DVD laser drive current check.	(Refer to the section "7.2.2. Service Mode Table 2" for more information.)
	[3]	CD laser drive current check.	
	[6]	Region display and mode.	
	[SOUND]	CPPM/CRM keys check.	(Refer to the section "7.2.3. Service Mode Table 3" for more information.)
	[7]	Micro-processor firmware version check.	
	[≥10]	Initialization of the player (factory setting is restored). Used after replacement of Micro-processor (DV5 LSI) IC, FLASH ROM IC (IC8651), EEPROM IC (IC8611) and DVD Module P.C.B.	
	[OK]	DVD Module P.C.B. reset.	(Refer to the section "7.2.4. Service Mode Table 4" for more information.)
	[8]	DVD Module P.C.B. firmware version check.	
	[▲]	Timer 1 check.	
	[▼]	Timer 1 reset.	
	[▶]	Timer 2 check.	
	[◀]	Timer 2 reset.	

Note:

An error code will be canceled if a power supply is turned OFF.

*1: CPPM is the copy guard function beforehand written in the disk for protection of copyrights.

*2: CEC is the consumer electronic control used for high-level user control of HDMI-connected devices.

*3: HDCP is the specification developed to control digital audio & video contents transmission for DVI or HDMI connections.

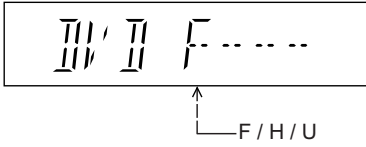
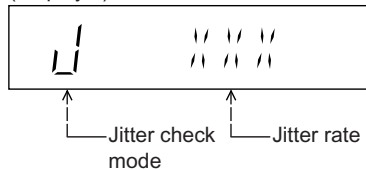
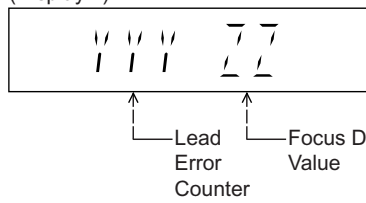
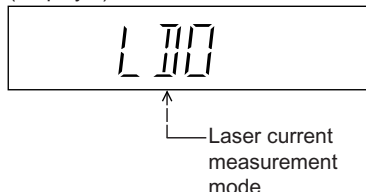
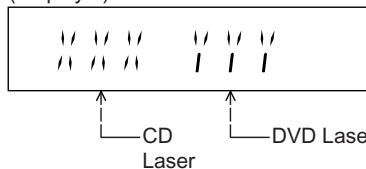
7.2. Service Mode Table

By pressing various button combinations on the main unit and remote control unit, you can activate the various service modes for checking.

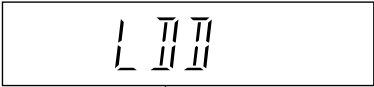
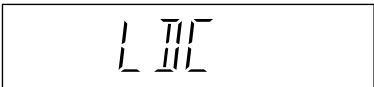
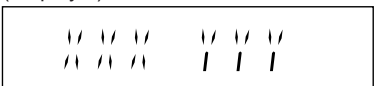
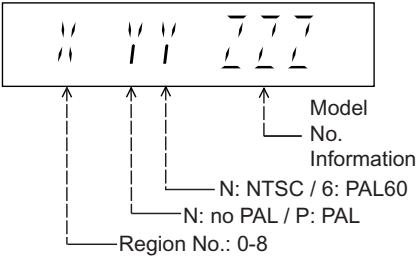
Special Note:

- Due to the limitations of the no. characters that can be shown on the FL Display, the "FL Display" button on the remote control unit can be used to show the two display pages. (Display 1 / Display 2).
- Refer to Section 5.1 for the section on "Remote Control Key Buttons Operations".

7.2.1. Service Mode Table 1

Item		FL Display	Key Operation
Mode Name	Description		Front Key
Error code check	Error code check The latest error code stored in the EEPROM IC is displayed. Note: Refer to "Section 8.3 DVD Self Diagnostic Function-Error Code" for more detailed information on the error codes.	 Error code (play_err) is expressed in the following convention. Error code = 0 x DAXX is expressed: → DVDnn U12 Error code = 0 x DBXX is expressed: → DVDnn H12 Error code = 0 x DXXX is expressed: → DVDnn F123 Error code = 0 x 0000 is expressed: → DVDnn F--- * "xx" denotes the error code	In STOP (no disc) mode, press [STOP] button on the main unit, and [0] button on the remote control unit. *With pointing of cursor up and down on display. Cancelled automatically 5 seconds later. To exit, press [POWER] button on main unit or remote control.
Jitter check	Jitter check. Jitter rate is measured and displayed. Measurement is repeatedly done in the cycle of one second. Read error counter starts from zero upon mode setting. When target block data failed to be read out, the counter advances by one increment. When the failure is caused by minor error, it may be corrected when retried to enable successful reading. In this case, the counter advances by one. When the error persists even after retry, the counter may jump by two or more. FL Display sequence: Display 1→2.	(Display 1)  Jitter rate is shown in decimal notation to one place of decimal. Focus drive value is shown in hexadecimal notation. (Display 2) 	In STOP mode, press [STOP] button on the main unit, and [5] button on the remote control unit. Press [POWER] or [STOP] button to exit. Press [FL Display] on remote control unit for next page (FL Display).
Initial setting of laser drive current	Initial setting of laser drive current. Initial current value for the DVD laser and CD laser is separately saved in the EEPROM IC. FL Display sequence: Display 1→2.	(Display 1)  The value denotes the current in decimal notation. (Display 2)  The above example shows the initial current is XXXmA and YYYmA for CD laser and DVD laser respectively when the laser is switched on.	In STOP (no disc) mode, press [STOP] button on the main unit, and [PAUSE] button on the remote control unit. Cancelled automatically 5 seconds later. Press [FL Display] on remote control unit for next page (FL Display) on values of laser drive current.

7.2.2. Service Mode Table 2

Item		FL Display	Key Operation
Mode Name	Description		Front Key
DVD laser drive current measurement	DVD laser drive current measurement. DVD laser drive current is measured and the result is displayed together with the initial value stored in the EEPROM IC. After the measurement, DVD laser emission is kept on. It is turned off when POWER key is switched off. FL Display sequence: Display 1→2.	(Display 1)  The value denotes the current in decimal notation. (Display 2)  The above example shows the initial current is XXXmA and the measured value is YYYmA.	In STOP (no disc) mode, press [STOP] button on the main unit, and [FUNCTIONS] button on the remote control unit. Cancelled automatically 5 seconds later. Press [FL Display] on remote control unit for next page (FL Display) on values of dvd drive current.
CD laser drive current measurement	CD laser drive current measurement. CD laser drive current is measured and the result is displayed together with the initial value stored in the EEPROM IC. After the measurement, CD laser emission is kept on. It is turned off when POWER key is switched off. FL Display sequence: Display 1→2.	(Display 1)  The value denotes the current in decimal notation. (Display 2)  The above example shows the initial current is XXXmA and the measured value is YYYmA.	In STOP (no disc) mode, press [STOP] button on the main unit, and [3] button on the remote control unit. Cancelled automatically 5 seconds later. Press [FL Display] on remote control unit for next page. (FL Display)
Region display	Region code display, TV broadcasting system & the model no. information. Note: Refer to Figure 6.1 for "Video Design Information".		In STOP (no disc) mode, press [STOP] button on the main unit, and [6] button on the remote control unit. Cancelled automatically 5 seconds later.
CPPM/CRM Keys Check	CPPM/CRM refers to the Content Protection for Recordable Media and Pre-Recorded Media. It displays the existence of the keys as "1" or "0". OK: Existing of keys. NG: Non existing of keys.		In STOP (no disc) mode, press [STOP] button on the main unit, and [SOUND] button on the remote control unit. Cancelled automatically 5 seconds later.

Model Series	Country Region	Region Code	TV Broadcasting System	Product			
				Signal System (Default)	Region Display (Default)	OSD Default	OSD Menu Language
P, PC, PX	USA, Canada, PX	1	NTSC	NTSC (*A)	1PN	English	English, Spanish, Canadian, French
(S)	Japan	2	NTSC	NTSC (*A)	2PN	Japanese	Japanese, English
EP	Europe	2	PAL	PAL (*C)	2P6	English	English, French, German, Spanish, Polish, Russian, Czech, Hungarian
EB, EG	Europe	2	PAL	PAL (*C)	2P6	English	English, French, German, Italian, Spanish, Polish, Swedish, Dutch
GC, GS, GX	Middle East, Kuwait	2	PAL	PAL (*C)	2P6	English	English, French, German, Spanish, Polish, Russian, Czech, Hungarian
GA, GD, GT	Hong Kong, South East Asia, Korea, Taiwan	3	PAL NTSC	NTSC (*B)	3PN	English	English, Traditional Chinese
GN	New Zealand, Australia	4	PAL	PAL (*C)	4P6	English	English, French, German, Italian, Spanish, Polish, Swedish, Dutch
PN, PH, PU, PR	Central/South/Latin America	4	NTSC	NTSC (*D)	4PN	English	English, Spanish, French, Brazilian Portuguese
EE	CIS	5	SECAM	PAL (*C)	5P6	English	English, French, German, Spanish, Polish, Russian, Czech, Hungarian
GK	China	6	PAL	NTSC (*B)	6PN	English	English, Simplified Chinese

NTSC (*A)

Source	Output
Screen Saver	NTSC
NTSC disc	NTSC
PAL disc	PAL (DVD-V)
	NTSC (DVD-A/VCD)

NTSC (*B)

Source	Output
Screen Saver	NTSC
NTSC disc	NTSC (default)
	PAL60
PAL disc	PAL

PAL (*C)

Source	Output
Screen Saver	PAL
NTSC disc	PAL60 (default)
	NTSC
PAL disc	PAL

NTSC (*D)

Source	Output
Screen Saver	NTSC
NTSC disc	NTSC
PAL disc	NTSC

Explanation of Display

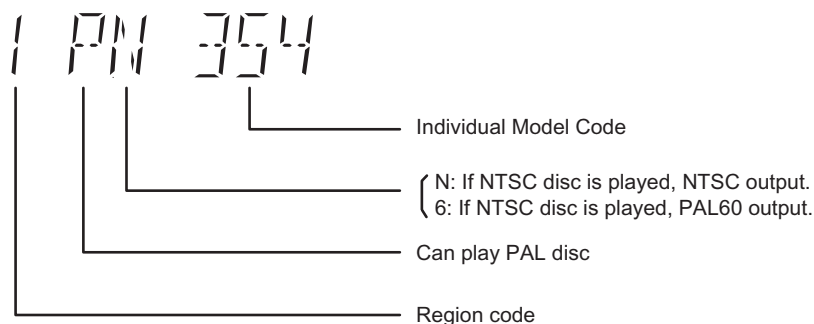
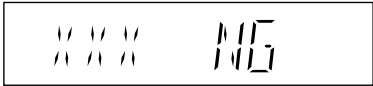
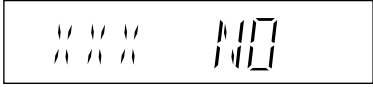
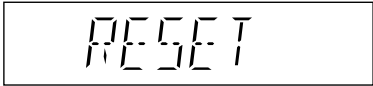
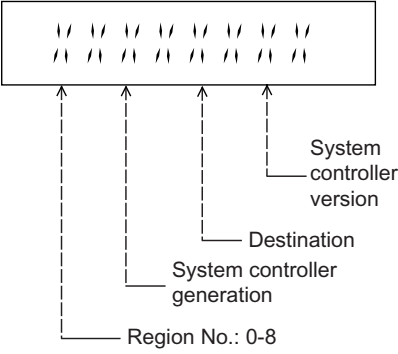


Figure 6.1 Video Design Information

7.2.3. Service Mode Table 3

Item		FL Display	Key Operation
Model Name	Description		Front Key
Micro-processor firmware version display & EEPROM checksum display.	Micro-processor firmware version display & EEPROM checksum display. EEPROM checksum is only available due to existence of EEPROM IC. Note: Condition 1/2/3 shows the state of EEPROM IC. FL Display sequence: Display 1→2→3.	(Display 1)  (Condition 1)  If the version of the EEPROM does not match, [NG] is displayed. (Condition 2)  (a) If there is NO EEPROM header string OR (b) If there is no EEPROM (no data is received by Micro-processor), [NO] is displayed.	In STOP (no disc) mode, press [STOP] button on the main unit, and [7] button on the remote control unit. Cancelled automatically 5 seconds later. Press [FL Display] button on remote control unit for next page. (FL Display)
Initialization	Initialization. User settings are cancelled and player is initialized to factory setting. It is necessary when after replacement of Micro-processor (DV5 LSI) IC, FLASH ROM IC (IC8651), EEPROM IC (IC8611) & DVD Module P.C.B.		In STOP (no disc) mode, press [STOP] button on the main unit, and [≥10] button on the remote control unit. Cancelled automatically 5 seconds later.
DVD Module P.C.B. Reset	To reset DVD Module P.C.B. This process is used when the DVD Module P.C.B. or FLASH ROM IC is replaced with a new one.		While in initialization mode, press & hold [STOP] button on the main unit for 3 seconds, follow by [OK] button on the remote control unit. Cancelled automatically 5 seconds later.

7.2.4. Service Mode Table 4

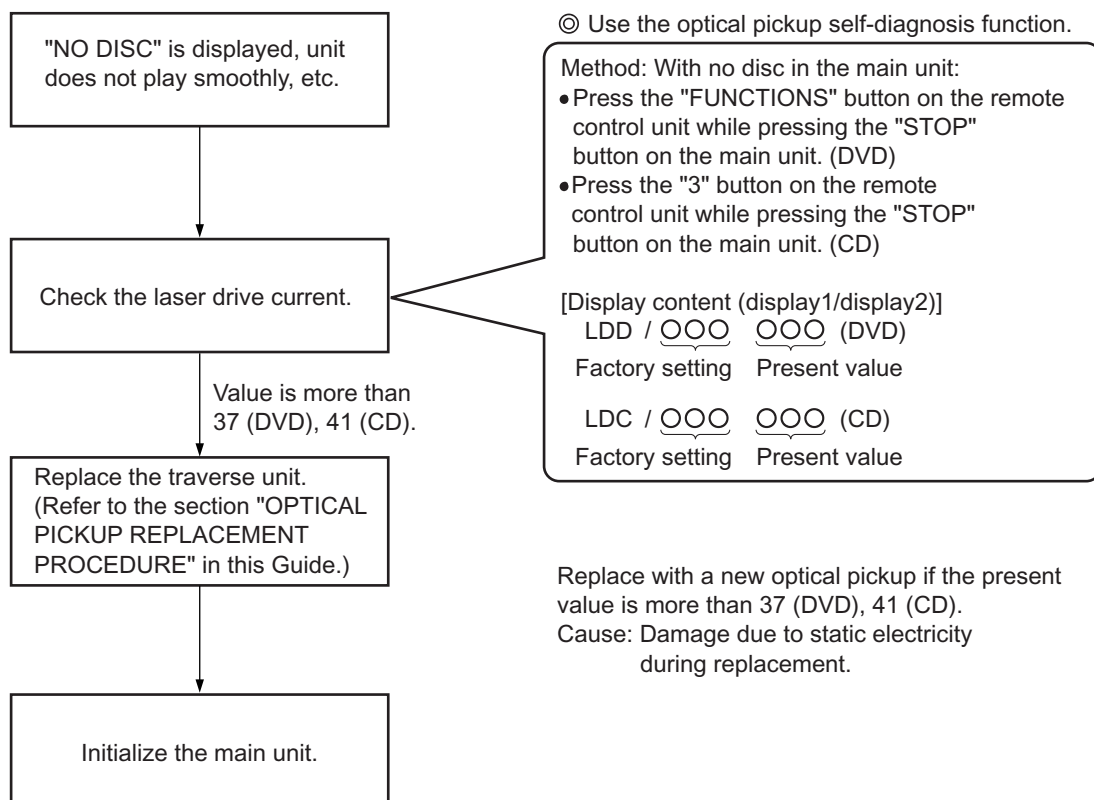
Item		FL Display	Key Operation
Mode Name	Description		Front Key
DVD Module P.C.B. firmware version display	DVD Module P.C.B. firmware version is displayed on the FL Display. The firmware version can be updated using recovery disc. Note: It is necessary to check for firmware version before carrying out the version up using the disc.		In STOP (no disc) mode, press [STOP] button on the main unit, and [8] button on the remote control unit. Cancelled automatically 5 seconds later.
Timer 1 check	Timer 1 check Laser operation timer is measured separately for DVD laser and CD laser. FL Display sequence: Display 1→2.	(Display 1)  Shown to the above is DVD laser usage time, and to the below is CD laser usage time. Time is shown in 5 digits of decimal notation in a unit of 10 hours. "00000" will follow "99999". (DVD laser) (Display 2)  Time is shown in 6 digits of decimal notation in a unit of 10 hours. "000000" will follow "999999". (CD laser)	In STOP (no disc) mode, press [STOP] button on the main unit, and [▲] button on the remote control unit. Cancelled automatically 3 seconds later. Press [FL Display] button for next page of FL Display.
Timer 1 reset	Timer 1 reset Laser operation timer of both DVD laser and CD laser is reset all at once.	 Time is shown in 5 digits of decimal notation in a unit of 10 hours. It will clear to "00000" upon reset.	While displaying Timer 1 data, press [STOP] button on the main unit, and [▼] button on the remote control unit. Cancelled automatically 5 seconds later
Timer 2 check	Timer 2 check Spindle motor operation timer	 Time is shown in 5 digits of decimal notation in a unit of 1 hour. "00000" will follow "99999".	In STOP (no disc) mode, press [STOP] button on the main unit, and [▶] button on the remote control unit. Cancelled automatically 5 seconds later.
Timer 2 reset	Timer 2 reset Spindle motor operation timer	 Time is shown in 5 digits of decimal notation in a unit of 1 hour. It will be cleared to "00000" upon activating this.	While displaying Timer 2 data, press [STOP] button on the main unit, and [◀] button on the remote control unit. Cancelled automatically 5 seconds later.

7.2.5. Optical Pickup Self-Diagnosis

The optical pickup self-diagnosis function and tilt adjustment check function have been included in this unit. When repairing, use the following procedure for effective self-diagnosis and tilt adjustment. Be sure to use the self-diagnosis function before replacing the optical pickup when "NO DISC" is displayed. As a guideline, you should replace the optical pickup when the value of the laser drive current is more than the specified value.

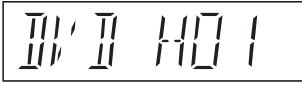
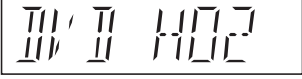
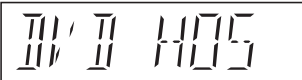
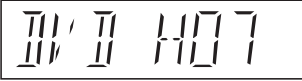
Note:

Press the power button to turn on the power, and check the value within three minutes before the unit warms up. (Otherwise, the result will be incorrect.)

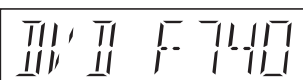
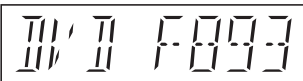
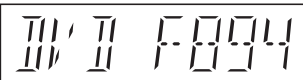
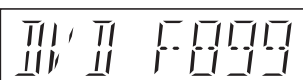


7.3. DVD Self Diagnostic Function-Error Code

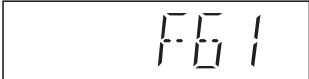
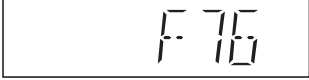
7.3.1. Mechanism Error Code Table

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
H01	Tray loading error	The tray opening and closing is abnormal. CLOSE and OPEN of the tray cannot be carried out properly. Loading motor error, DV5 LSI IC (IC8001) error.		Press [■STOP] on main unit for next error. (OPEN time: OPEN → CLOSE →OPEN → H01 at CLOSE: CLOSE → OPEN → CLOSE H01)
H02	Spindle servo error	The spindle servo/motor is abnormal. The FG pulse is abnormal. CLV servo error.		Press [■STOP] on main unit for next error.
H03	Traverse servo error	The traverse is abnormal. (Traverse servo, DV5 LSI IC (IC8001), TRV motor error.)		Press [■STOP] on main unit for next error.
H04	Tracking servo error	Tracking coil NG (OPU unit abnormal), DV5 LSI IC (IC8001) error.		Press [■STOP] on main unit for next error.
H05	Seek time out error	It is not possible to access the disc. TOC cannot read. Abnormal disc etc. Pickup abnormal or disk is dirty. (TRV motor error, DV5 LSI IC (IC8001) error.)		Press [■STOP] on main unit for next error.
H07	Driver IC thermal shut down	The spindle motor is abnormal. (short between brushes)		Press [■STOP] on main unit for next error.
U11	Focus servo error	Focus coil, FE signal error. Disc may be dirty.		Press [■STOP] on main unit for next error. (Unfinalized DVD-R is likely to become U11.)

7.3.2. DVD Module Error Code Table

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
U702	HDMI/DVI I2C communication error	The communication error of I2C when connecting it with HDMI/DVI. For instance, when EDID information to which information on the TV set side has been described cannot be read, it is generated.		Press [■STOP] on main unit for next error.
U703	HDMI/DVI attestation error	When attestation (HDCP) with the TV side fails when connecting it with HDMI/DVI, it is generated.		Press [■STOP] on main unit for next error.
U704	HDMI/DVI SRM Riborcerar	It is generated at the equipment to which the TV set is Riborced when connecting it with HDMI/DVI.		Press [■STOP] on main unit for next error.
U705	HDMI/DVI SRM disk falsification check error	It is generated at the time of it is time when illegal the SRM data of the reproducing disk (verify error), when connecting it with HDMI/DVI.		Press [■STOP] on main unit for next error.
F740	HDMI device key	I2C error when writing HDMI Key device into transmitter.		Press [■STOP] on main unit for next error.
F893	FLASH ROM IC data falsification error	Firmware error, DV5.0 LSI IC (IC8651) error.		Press [■STOP] on main unit for next error.
F894	EEPROM IC abnormality error	When failing in the access to EEPROM IC located in the DVD Module P.C.B. (IC8611).		Press [■STOP] on main unit for next error.
F895	Language area abnormal	Firmware version agreement check for factory preset setting failure prevention.		Press [■STOP] on main unit for next error.
F897	Initialization error	Incomplete initialization after writing of new firmware (Factory preset setting failure prevention)		Press [■STOP] on main unit for next error.
F899	The communication specification disagreement between micro-processor	Unsuitable combination of number of system com and panel com used. (Firmware)		Press [■STOP] on main unit for next error.

7.3.3. Power Supply & Digital Amplifier Error Code Table

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
F61	The abnormalities in an output or power supply circuit of POWER AMP	In normal operation, when DCDET2 goes to "L" (Low) (Not during POWER OFF condition), F61 appears on FLDisplay for 1 second and PCONT goes to "L" (Low). This is due to speaker output has DC voltage or fan is not working.		Press [■ STOP] on main unit for next error.
F76	Abnormality in the output voltage of stabilized power supply	In normal operation when DCDET1 is detected "L" (Low) for two consecutive times, F76 is displayed on FL for 1 second and after that PCONT will be turned to "L" (Low). This is due to any of the DC voltages (+9V, +7V, -7V, +5V, +5.3V etc.) not available. Request to add iPod fan details as it also causes F76 error. Please refer to spec "Additional iPod operation (Follow HC3) V0.5.doc"		Press [■ STOP] on main unit for next error.

7.3.4. USB Error Code Table

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
F650	USB device: Devices other than mass storage	Devices other than the mass storage class are connected.		Press [■ STOP] on main unit for next error.
F651	USB device: Non-Full Speed Device	The device that the transfer rate did not correspond to Full Speed was connected.		Press [■ STOP] on main unit for next error.
F652	USB device: Interface NG	The device in the interface (subclass) outside correspondence was connected. (correspondence interface) 001b: Reduced Block Commands (RBC) 010b: SFF-8020i. MMC-2 (ATAPI) 110b: SCSI transparent command set.		Press [■ STOP] on main unit for next error.
F655	USB device: Overcurrent detection	The overcurrent of 500mA or more was detected in VDD USB, and the USB device driver function was intercepted. (To intercept the current.)		Press [■ STOP] on main unit for next error.
—	USB is drawing too much power.	When the USB system detects a USB device that is taking too much current, it will display an "Over current Error" OSD/Screen. At this state the USB backend/system will not be usable temporarily, the corresponding "U**" error code will be send to Opecon, and "USB Overcurrent Error" displayed on the FL.	USB OVERCURRENT ERROR (scrolling)	Switch to DVD/CD mode, remove USB and turn off the unit.

7.3.5. iPod Error Code Table

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
—	Over current occurs in power supply for iPod charging	In normal operation when IPOD_OC is detected L (Low) for two consecutive times) the message will display on FL once and power supply to iPod shall be cut. This error shall be displayed as "IPOD OC" when checking occurred error messages during self diagnostic.	IPOD OVER CURRENT ERROR (scrolling)	Switch to DVD/CD mode, remove iPod and turn off the unit. This is later follow by turning on the unit.

7.4. Sales Demonstration Lock Function

This function prevents discs from being lost when the unit is used for sales demonstrations by disabling the disc eject function. "LOCKED" is displayed on the unit, and ordinary operation is disabled.

7.4.1. Setting

- **Prohibiting removal of disc**

1. Select the DVD function.
2. At POWER ON condition, press and hold down the  button and the power button on the main unit for at least three seconds. (The message, "LOCKED" appears when the function is activated.)

Note:

OPEN/CLOSE  button is invalid and the main unit displays "LOCKED" while the lock function mode is entered.

- **Prohibiting operation of selector and disc**

1. Select the DVD function.
2. At POWER ON condition, press and hold down the  button and the power button on the main unit for at least three seconds. (The message, "LOCKED" appears when the function is activated.)

Note:

The following buttons are invalid and the main unit displays "LOCKED" while the lock function mode is entered.

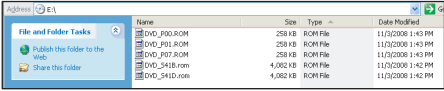
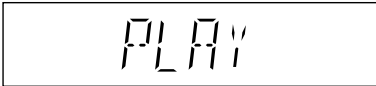
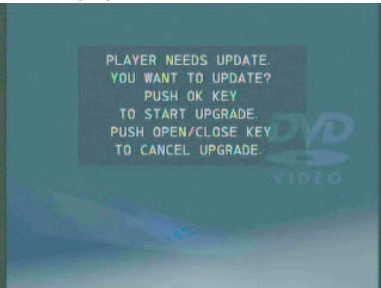
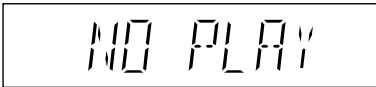
Main unit	iPod  , OPEN/CLOSE,  /  /  /  , DVD, iPod/USB,  ,  ,  , Disc  , OPEN/CLOSE
Remote controller unit	iPod/USB, RADIO/EXT-IN, NUMERIC KEYS 0~9, ≥ 10 ,  ,  ,  ,  ,  ,  , RETURN, FUNCTIONS, FL DISPLAY/SLEEP, MUTING

7.4.2. Cancellation

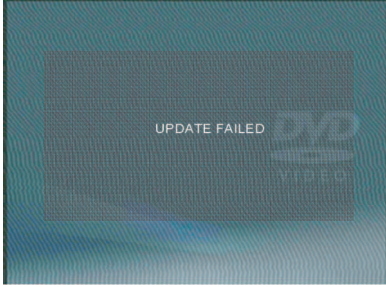
The lock can be cancelled by the same procedure as used in setting. ("UNLOCKED" is displayed on cancellation. Disconnecting the power cable from power outlet does not cancel the lock.)

7.5. Firmware Version-Up Information

7.5.1. Process Flow (1/2)

Item		FL/ GUI Display	Remarks
Process	Description		
1	Collect ROM Files (Copy files into CD-R/RW) There are 2 files: A) Syscon ROM file type: - DVD_S41B.ROM (Sample) - DVD_S41D.ROM (Sample) (supports chinese fonts OSD display) B) Opecon ROM file type: - DVD_P03.ROM	Display 1: 	User can put both files into the same root directory. DVD MODEL will choose the right ROM files to update its firmware.
2	Load disc into unit (To update rate) Load the disc into the set. - Press [OK] in remote controller to start updating process after the following signal appear: → FL Display 1: "PLAY" . → GUI Display 1 : PLAYER NEED UPDATE. YOU WANT TO UPDATE? PUSH OK KEY TO STAY UPGRADE. PUSH OPEN/CLOSE KEY TO CANCEL UPGRADE.	FL Display 1:  GUI Display 1: 	Press [OPEN/CLOSE] in remote controller to CANCEL update.
2-1	Check Correct ROM file type ROM files doesn't fit to the product type. - If the ROM files doesn't fit for the product type, then CD update "STOP" and display as below: → FL Display 2: "NO PLAY" . → GUI Display 2 : THIS TYPE OF DISC CANNOT BE PLAYED. PLEASE INSERT A DIFFERENT DISC.	FL Display 2:  GUI Display 2: 	Update stop (Wrong ROM Type)
2-2	Check ROM version type Update not Necessary - If the ROM files has the same (latest) version or an older version than the product: → FL Display 3: "NO NEED" . → GUI Display 3: THIS PLAYER DOES NOT REQUIRE THE UPDATE	FL Display 3:  GUI Display 3: 	Update stop (product has the latest firmware)

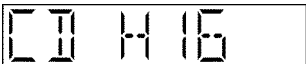
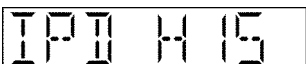
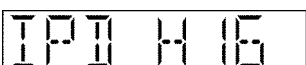
7.5.2. Process Flow (2/2)

Item		FL/ GUI Display	Remarks
Process	Description		
3	Update software (Opecon)	1. Update Failed - If Opecon software update fail: ➔ <i>FL Display 3</i>: "FAIL" . ➔ <i>GUI Display 3</i>: "UPDATE FAIL"	FL Display 4:  GUI Display 4:  Update stop. The theater set can't work, and can't be recovered by CD update again.
		2. Update Completed - If Opecon software update completes successfully: ➔ <i>FL Display 3</i>: "GOOD" . ➔ <i>GUI Display 3</i>: COMPLETED PLEASE EJECT THE DISC	FL Display 5:  GUI Display 5:  The theater set will reboot automatically.

7.6. Error Code Table

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

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

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
CDH15	CD Open Abnormal	During operation POS_SW_R On fail to be detected with 3 sec. Error No. shall be clear by force or during cold start.		For CD Mechanism Unit Press [■] on main unit for next error.
CDH16	CD Closing Abnormal	During operation POS_SW_CEN On fail to be detected with 3 sec. Error No. shall be clear by force or during cold start.		For CD Mechanism Unit Press [■] on main unit for next error.
IPDH15	iPod Open Abnormal	During operation POS_SW_L On fail to be detected with 3 sec. Error No. shall be clear by force or during cold start.		For iPod Press [■] on main unit for next error.
IPDH16	iPod Closing Abnormal	During operation POS_SW_CEN On fail to be detected with 3 sec. Error No. shall be clear by force or during cold start.		For iPod Press [■] on main unit for next error.

8 Troubleshooting Guide

8.1. Basic Troubleshooting Guide for Traverse Unit (DVD Module P.C.B.)

Problems	Checking Points	Checking components
1) Distorted picture or abnormal sound is heard during the initialization	a) Check SDRAM address, data bus, CLK and other control signals waveform	IC8051
	b) Check video signals (Y,C)	LB8301, R8321, R8323, LB8302, R8325, R8327
	c) Check audio DAC circuitry * Compare the above with OK condition DVD Module P.C.B	IC8421 (Pin 9 to 11 & 17 to 22) LB8425, LB8426, LB8427, LB8428, LB8429, LB8431 *Check for solder short and/or component missing/damaged
2) No TOC/Long TOC	a) Check motor driver circuitry (+5V)	IC8251 Pin 8, 21
	b) Check laser drive circuitry (Voltages & current)	Q8551, Q8552 (For DVD), Q8561, Q8562 (For CD)
	c) Check LSI IC connection to motor drive circuitry * Compare the above with OK condition DVD Module P.C.B.	IC8001 Pin 66, 67 IC8251 Pin 15 to 16 * Check for solder short and/or component missing/damaged
3) Disc not spinning 4) Traverse not moving 5) Traverse and spindle abnormal movement	a) Check connection from DVD Module to Traverse unit	FP8251
	b) Check motor driver circuitry on the voltages and control signals * Compare the above with OK condition DVD Module P.C.B.	IC8251 * Check for solder short and/or component damaged
6) Cannot read the disc but spindle motor is spinning - Cannot read CD/DVD	a) Check laser drive circuitry (voltages and current) - Check CD Laser Drive - Check DVD Laser Drive * Check voltages and LD current and compare with OK condition DVD Module P.C.B.	Q8551, Q8552, LB8551 (For DVD Laser Drive current) Q8561, Q8562, LB8561 (For CD Laser Drive current)
7) Block Noise during play	a) Check SDRAM address and data bus signal	IC8051
8) Jitter out of specification	a) Check LD current b) Check OPU (Change to other unit and confirmed operating condition)	OPU Unit (Traverse unit), FPC connection (FP8531 & FP8251)

8.2. Basic Troubleshooting Guide for HDMI AV output

Problems	Checking Points	Checking components
1) TV does not have any display. Set FL display shows U702/U703	1) Check setting of the set in Setup Menu whether the HDMI Video output is turned ON	* This year HDMI always ON. No need check Setup Menu. If no resolution selection GUI, then only check SETUP.
	2) +5V Supply to the TV	IC3952 (Pin 4)
	3) HDMI Connector Solderability condition	P3901
	4) HDMI Output TDMS signal lines (IC3901) - Data (TX0P/M => 14, 16) - Data (TX1P/M => 18, 20) - Data (TX2P/M => Pin 22, 24) - Clock (TXCP/TXCM => Pin 10, 12)	L3905 L3904 L3903 L3906
	5) HDMI Transmitter communication lines to TV - Data, SDA (Pin 120, IC3901) - Clock, SCL (Pin 121, IC3901)	LB3905, R3905, Q3902, R3904 LB3904, R3907, Q3903, R3906
	6) HDMI Transmitter communication from LSI (IC8001) (I2C_SCL/I2C_SDA signals)	RX3901
	7) Local Port Slave Address setting resistor at Pin 99 of HDMI Transmitter LSI IC (IC3901) for LPSA signal	R3921
	8) HDMI Transmitter LSI IC (IC3901) +3.3V Supply	LB3901, LB3902, IC3901 (Pin 9, 13, 17, 21, 25, 124)
	9) HDMI Transmitter LSI IC (IC3901) +1.2V Supply	IC3901 (Pin 5, 26, 42, 47, 55, 75, 85, 102, 109, 116, 123), LB3908, IC8151 (Pin 4), LB8001, IC8001 (Pin 20, 44, 83, 158, 187, 211)
	10) HDMI Up-Con +3.3V Supply	LB3901
	11) HDMI Pixel Clock Output from Up-Con to HDMI Transmitter (VCLK)	LB8901
	12) Up-Con IC I2C Data and Clock Line	RX3901

Problems	Checking Points	Checking components
1) TV does not have any display. Set FL display shows U702/U703	13) Hot-Plug Signal	LB3906, R3902, R3903, Q3901, D3901
	14) TDMS Output swing amplitude control resistor	R3901
	15) Host Interface External Input Clock from LSI (IC8001) to Up-Con IC (IC3901) - OSC27M	LB8702
	16) Video Data Lines from LSI (IC8001) to Up-Con (IC3901)	RX3707, RX3708, IC3901 (Pin 92 to 95, Pin 87 to 90)
2) When switching the video output mode from 480P to 720p/1080i, TV display becomes blank	1) Supply for Up-Con (IC3901) - Pin 9,124 2) GND for Up-Con - Pin 7,125 3) Check for capacitor short to GND	LB3902 C3902, C3928, C3925
3) Color Problem. TV Screen is White/Blue/Purple	1) Check digital video data line from LSI(IC8001) to Up-Converter (IC3901), VOUT0-VOUT7.	RX3707, RX3708
4) HDMI got no audio output	1) Audio data lines 2) Check setting of the set in Setup Menu whether the HDMI Audio output is turned On	R8402, RX8402 * Check for solder short and/or component missing/damaged as well as signal condition.

9 Service Fixture & Tools

9.1. Service Tools and Equipment

Prepare service tools before process service position.

Service Tools		Qty	Remark
Main P.C.B. (CN2007) to FL P.C.B. (P6001)	RFKZPTX60EG1 (17P FFC)	1	
Main P.C.B. (CN2001) to DVD Module P.C.B. (FP8101)	RFKZPTX60EG2 (50P FFC)	1	
Main P.C.B. (CN7001) to SMPS P.C.B. (CN5802)	REXX0759 (11P wire)	1	
Main P.C.B. (CN2002) to Tuner P.C.B.	REXX0758 (10P wire)	1	
SMPS P.C.B. (H5801) to D-Amp P.C.B. (CN5502)	REXX0683 (8P wire)	1	

10 Disassembly and Assembly Instructions

“ATTENTION SERVICER”

Be careful when disassembling and servicing.

Some chassis components may have sharp edges.

Special Note:

1. This section describes the disassembly procedures for all the major printed circuit boards and main components.
2. 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.)
3. For assembly after operation checks or replacement, reverse the respective procedures.
Special reassembly procedures are described only when required.
4. Do take note of the locators on each printed circuit board during reassembling procedures.
5. The Switching Regulator IC may have high temperature after prolonged use.
6. Use caution when removing the rear cabinet and avoid touching heat sinks located in the unit.

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

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

- Disassembly of Door Assembly
- Disassembly of Left & Right Ornament
- Disassembly of Rear Cabinet
- Disassembly of Top Ornament Assembly
- Disassembly of Power Button and Volume Button Assembly
- Disassembly of Rear Shield
- Disassembly of Fan Sub Assembly
- Disassembly of SMPS Sub Block
- Disassembly of Tuner Pack
- Disassembly of SMPS and AC Inlet 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 Main P.C.B.
- Disassembly of Switching Regulator IC (IC2903)
- Disassembly of SD USB Wireless Assembly
- Disassembly of Wireless Adapter P.C.B.
- Disassembly of USB P.C.B.
- Disassembly of D-Amp P.C.B.
- Replacement of Audio Amplifier Driver IC (IC5001)
- Disassembly of DVD Module P.C.B.
- Disassembly of Left Chassis Unit
- Disassembly of Traverse Unit
- Disassembly of Motor P.C.B.
- Disassembly of Door Switch P.C.B.
- Disassembly of FL P.C.B.
- Disassembly of Mechanism Switch P.C.B.
- Disassembly of iPod Fan P.C.B.
- Disassembly of iPod Fan
- Disassembly of iPod Switch P.C.B.
- Disassembly of iPod Docking Tub Assembly
- Disassembly of iPod P.C.B.
- Disassembly of IR P.C.B.

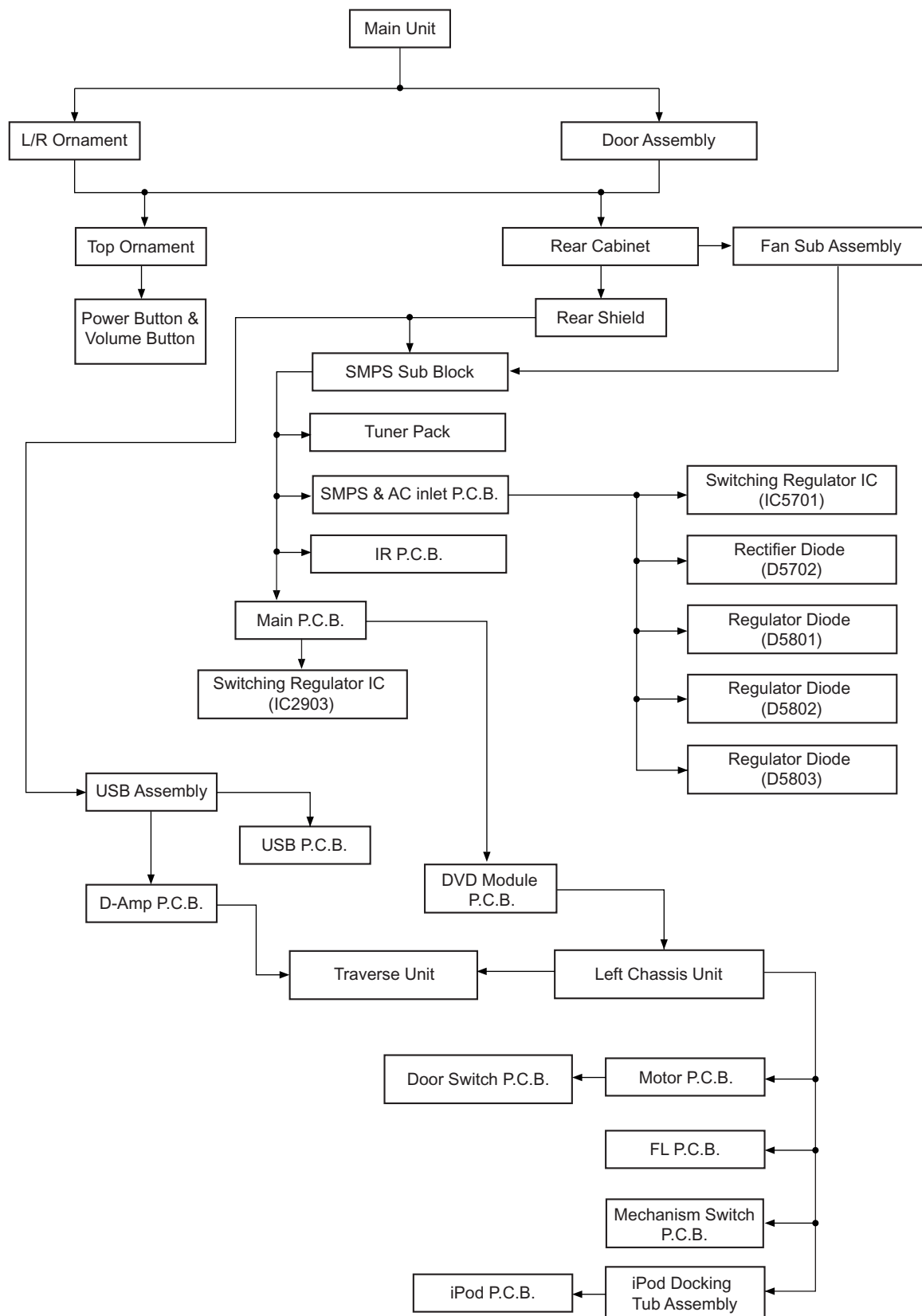
CAUTION NOTE:

Please use original screw and at correct locations.

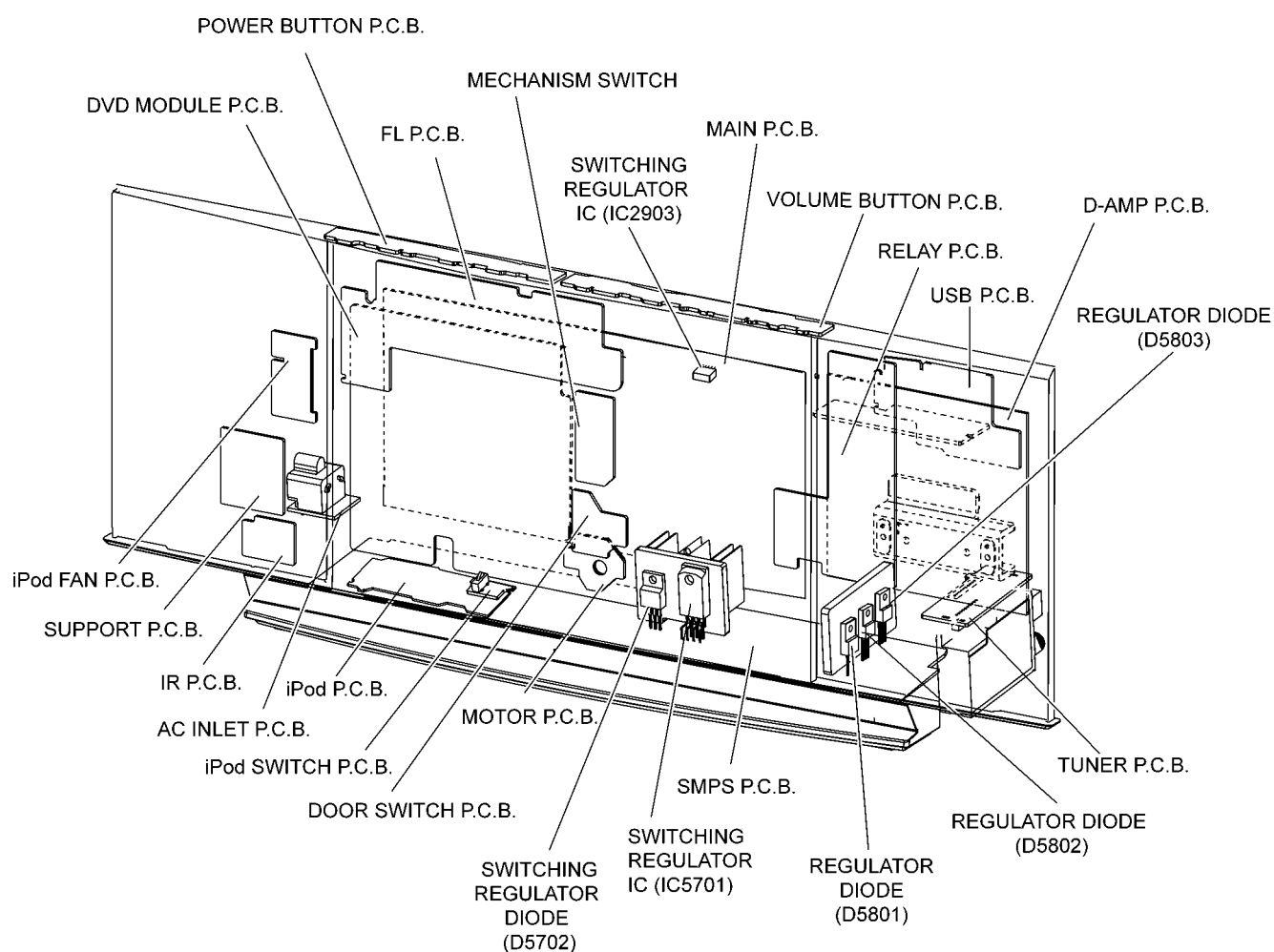
Below shown is part no. of different screw types used:

- | | |
|-----------------------|----------------------|
| a :RHD26046 | g :RHD30119-K |
| b :XSN3+4FJK | h :XTB2+6GFJK |
| c :XTB3+10JFJK | i :RHD14136 |
| d :RHD30111-31 | j :XTB3+10JFJ |
| e :RHD26043-1 | k :RHD26056 |
| f :RHD30090-1 | |

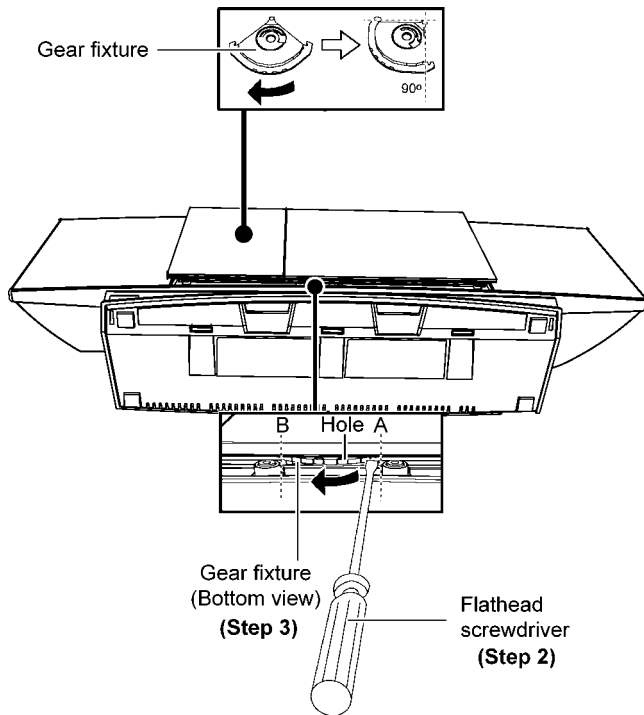
10.1. Disassembly Flow Chart



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



10.3. Disassembly of Door Assembly

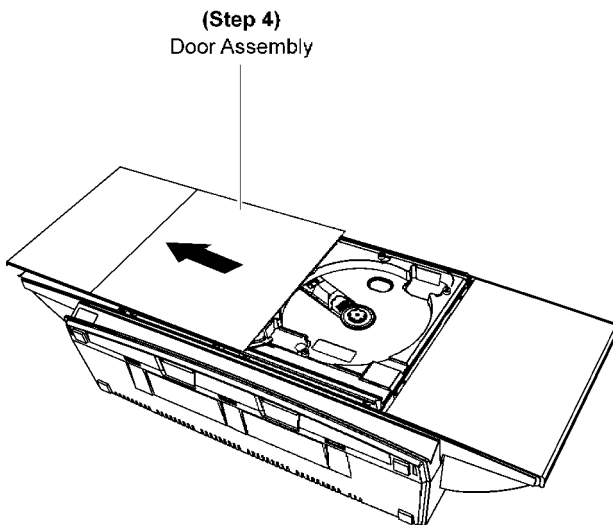


Step 1 Upset the main unit as diagram shown.

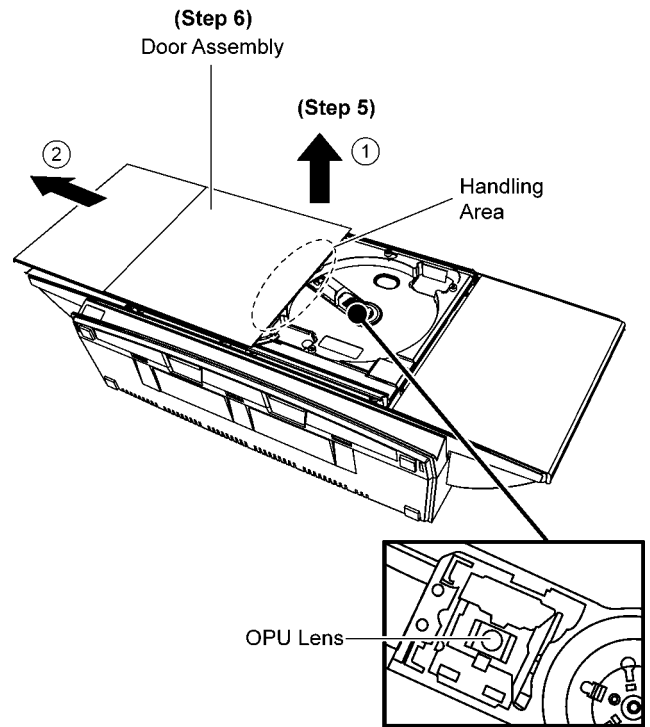
Step 2 Insert a flathead screw driver into the hole behind the Door Assembly.

Step 3 Push the gear fixture from point A to B.

Note: The gear fixture will be disengage after pushing.



Step 4 Gently push the Door Assembly until it is fully extended.



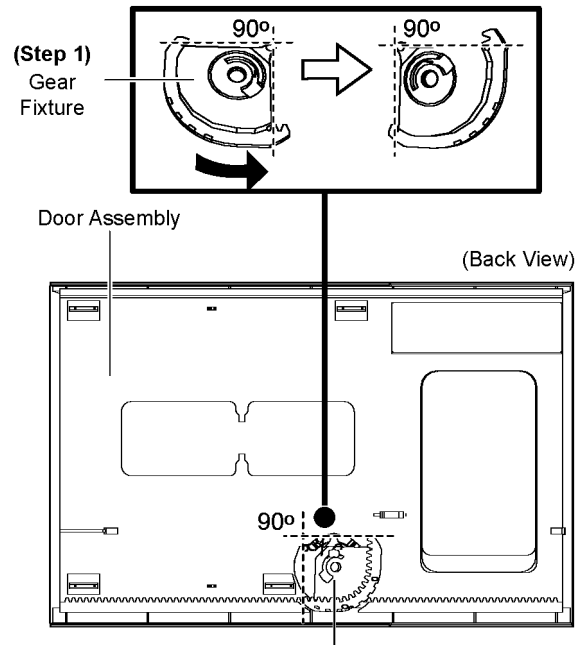
Step 5 Lift up the Door Assembly (handling area) slightly as arrow (1) shown.

Step 6 Push the Door Assembly as arrow (2) shown.

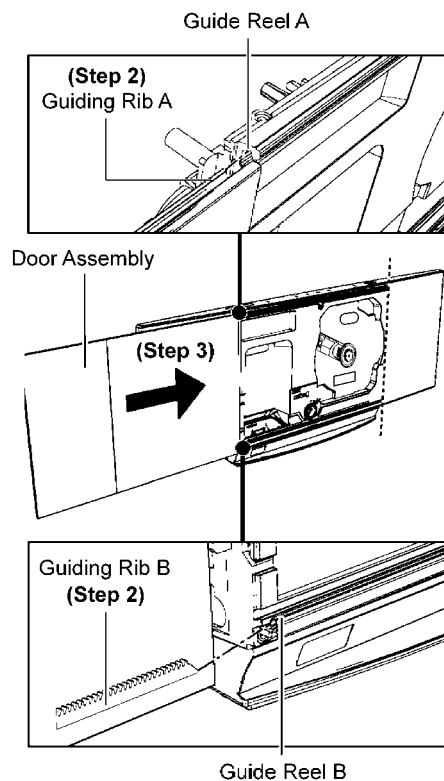
Step 7 Remove the Door Assembly.

Caution: During assembling/ disassembling, avoid touching the surface of OPU lens.

• Assembly of Door Assembly.



Step 1 Turn the gear fixture as diagram shown.



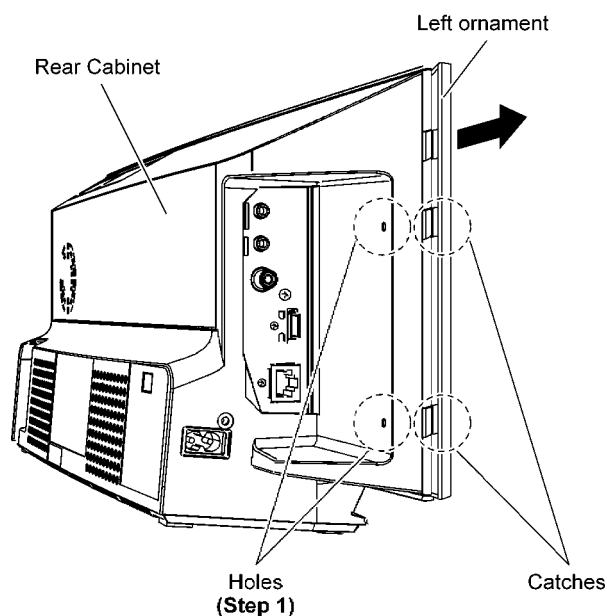
Step 2 Align the Door Assembly with the (upper & lower rib), guide reel (A & B) on the front panel.

Step 3 Gently push the Door Assembly until it is fully closed.

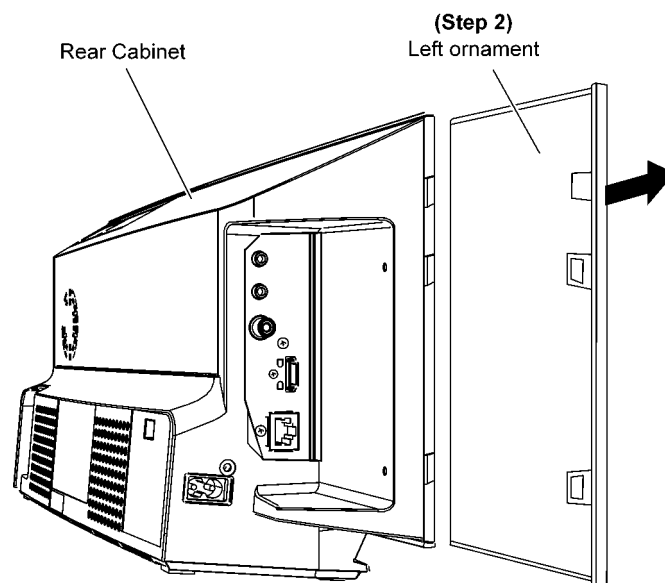
Caution: Avoid using strong force, ensure the Door Assembly move smoothly. Repeat steps if there is problem in the assembling.

10.4. Disassembly of Left Ornament & Right Ornament

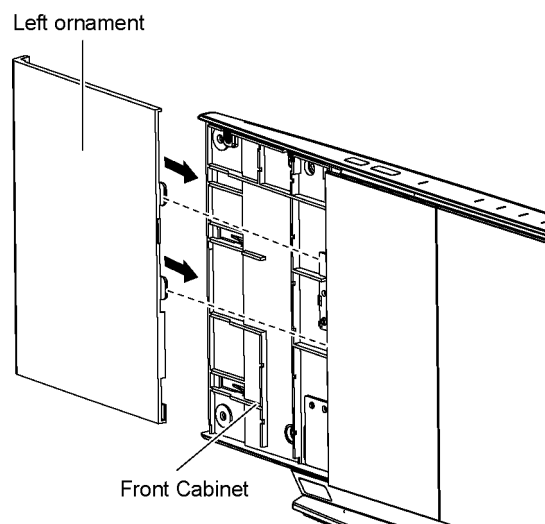
• Disassembly of Left Ornament.



Step 1 Insert a pin into the holes to release the catches.

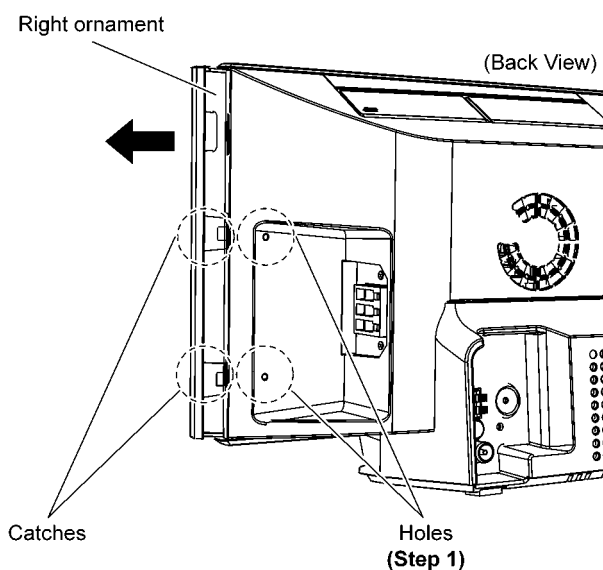


Step 2 Slide to remove the Left Ornament.

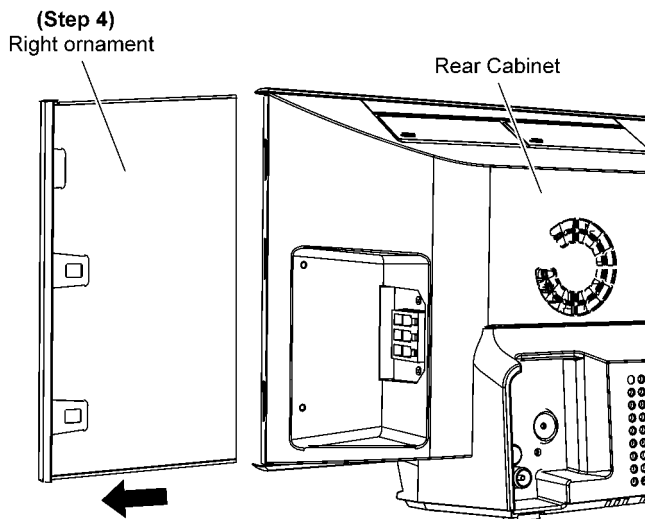


Caution: During assembling, ensure the Left Ornament is attached properly.

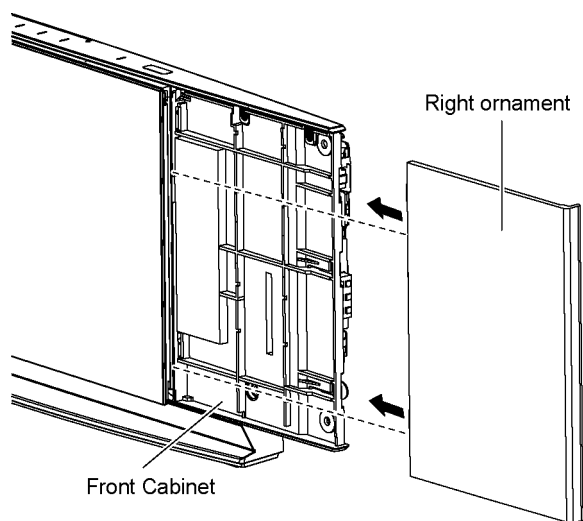
• Disassembly of Right Ornament.



Step 3 Insert a pin into the holes to release catches.



Step 4 Slide to remove the Right Ornament.

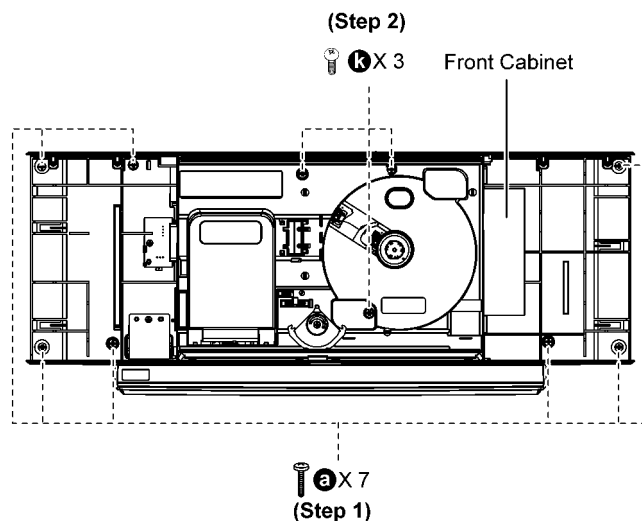


Caution: During assembling, ensure the Right Ornament is attached properly.

10.5. Replacement of Rear Cabinet

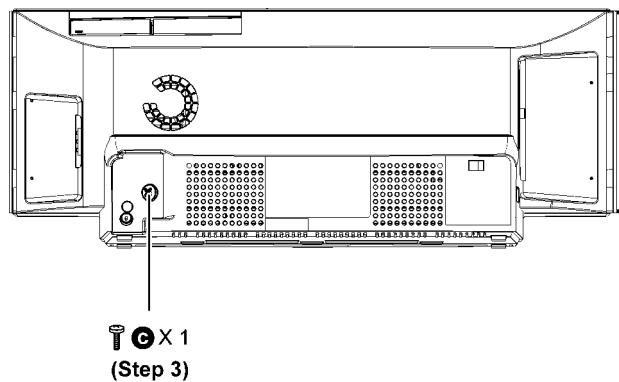
- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.

10.5.1. Disassembly of Rear Cabinet

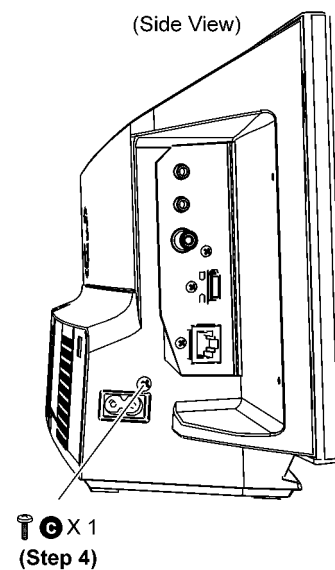


Step 1 Remove 7 screws.

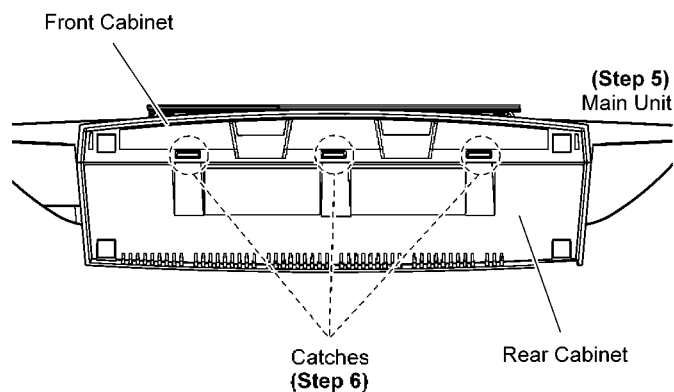
Step 2 Remove 3 screws.



Step 3 Remove 1 screw.



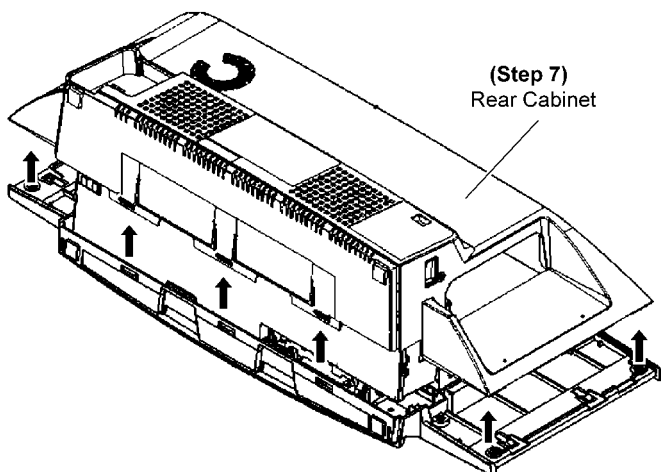
Step 4 Remove 1 screw at the side of rear cabinet.



Step 5 Upset the main unit.

Step 6 Push downward to release 3 catches at the bottom of rear cabinet.

Caution: During assembling, ensure it is fully caught during assembling.



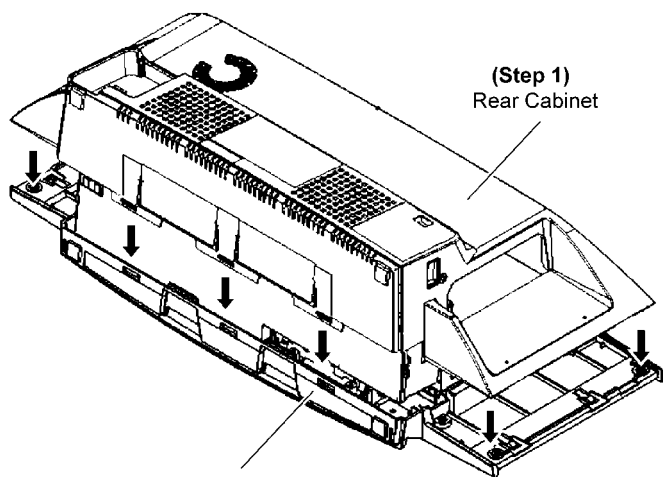
(Step 7)
Rear Cabinet

Step 7 Lift up to remove rear cabinet.

Caution: During assembling, ensure that rear cabinet assembly is properly fixed and fully caught onto front cabinet.

10.5.2. Assembly of Rear Cabinet

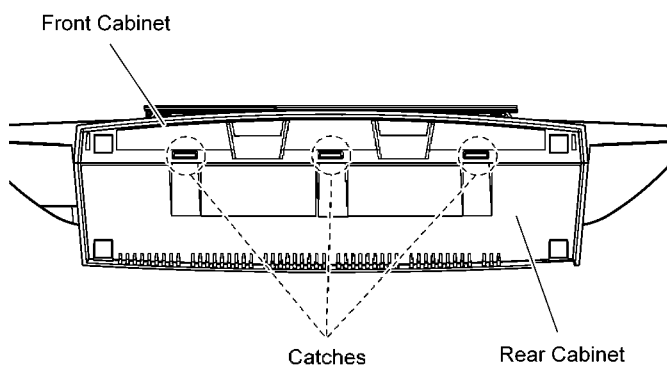
- Follow the (Step 1) to (Step 7) of Item 10.5.1



(Step 1)
Rear Cabinet

Front Cabinet

Step 1 Fix the Rear Cabinet onto the front cabinet.

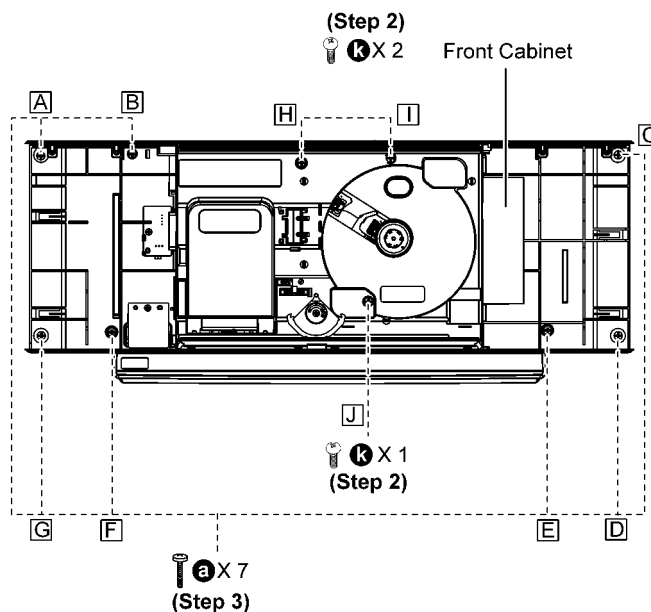


Front Cabinet

Catches

Rear Cabinet

Caution: During assembling, ensure it is fully caught onto the front cabinet.



(Step 2)
Front Cabinet

(Step 3)
a X 7

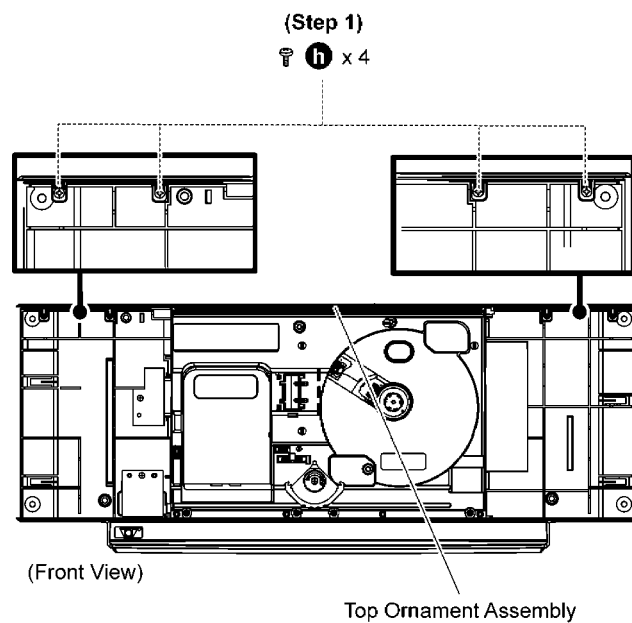
Step 2 Mount 3 screws onto the front cabinet.

Step 3 Mount 7 screws onto the front cabinet.

Caution: Please follow screwing sequence (A to J) to mount the screws onto front cabinet.

10.6. Disassembly of Top Ornament Assembly

- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1

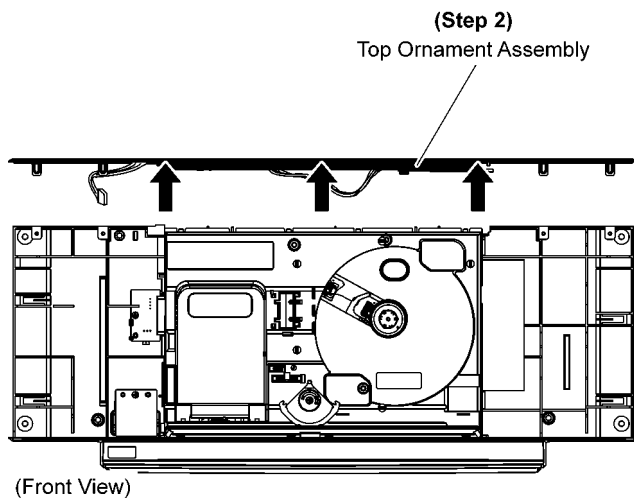


(Step 1)
h X 4

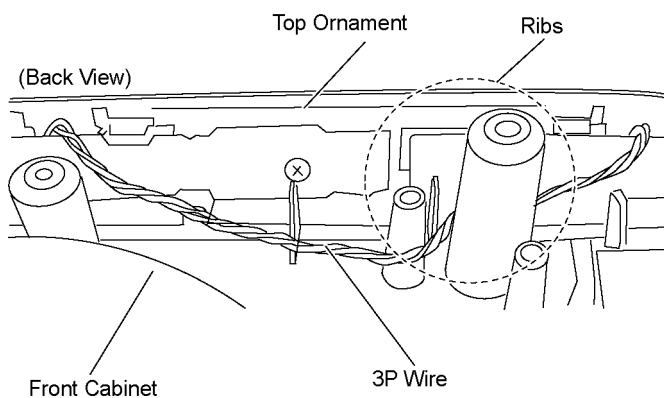
(Front View)

Top Ornament Assembly

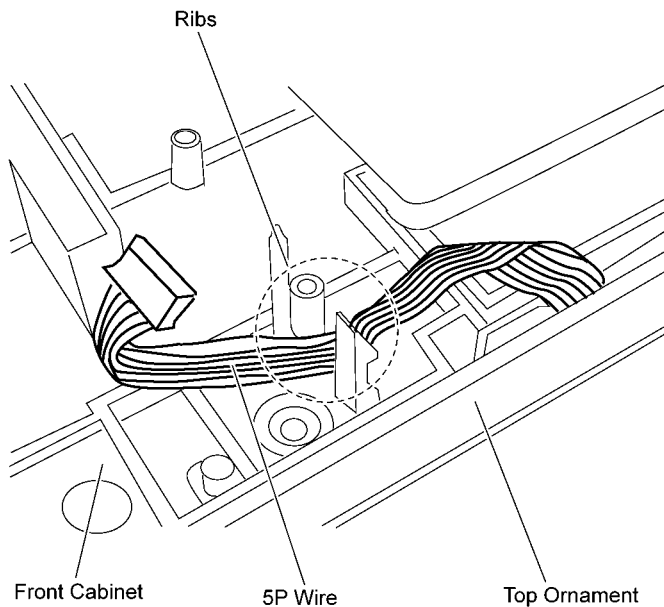
Step 1 Remove 4 screws at Top Ornament Assembly.



Step 2 Lift up Top Ornament Assembly.



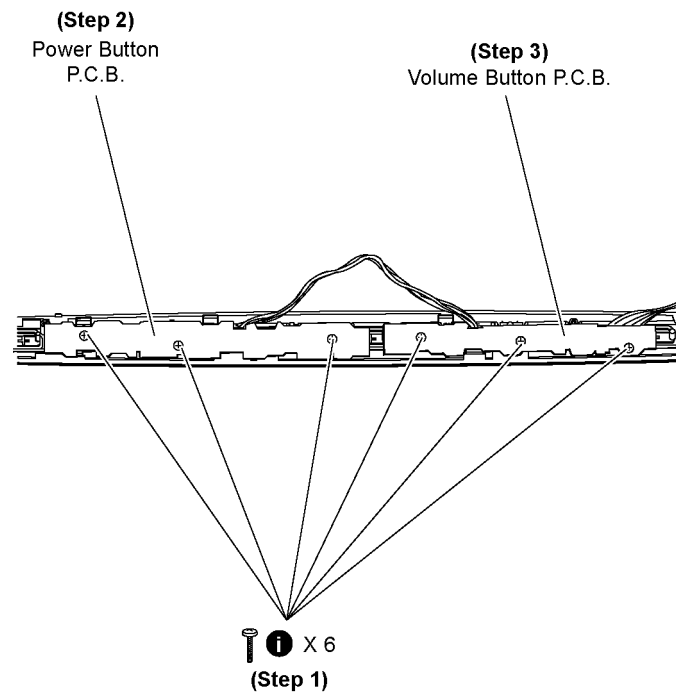
Caution: During assembling, ensure that 2P wire is dressed between the ribs properly.



Caution: During assembling, ensure that 4P wire is dressed between the ribs properly.

10.7. Disassembly of Power Button and Volume Button P.C.B.

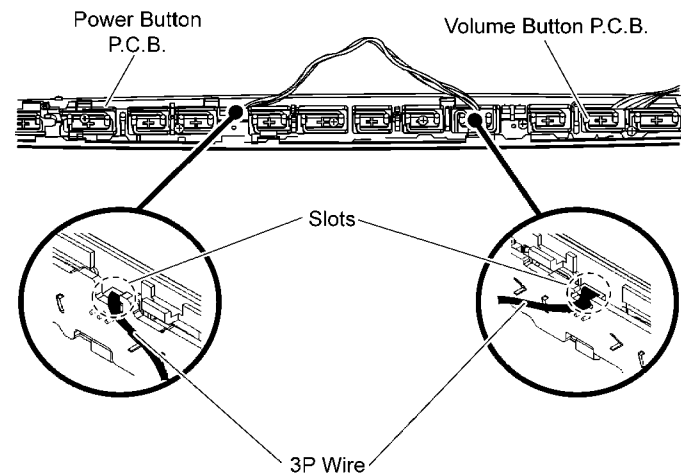
- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 8) of Item 10.4.
- Follow the (Step 1) to (Step 2) of Item 10.6.



Step 1 Remove 6 screws.

Step 2 Remove Power Button P.C.B..

Step 3 Remove Volume Button P.C.B..

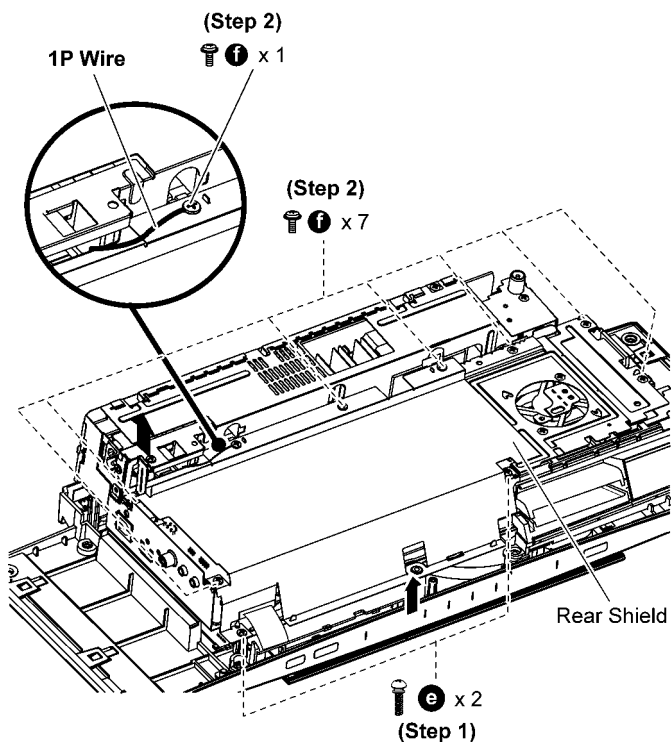


Caution: During assembling, ensure that 3P wire is properly dressed into the slots.

10.8. Replacement of Rear Shield

10.8.1. Disassembly of Rear Shield

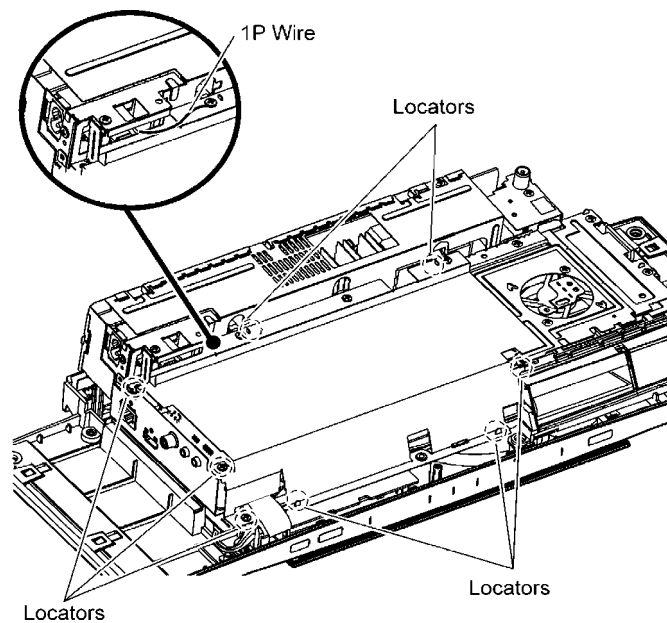
- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.



Step 1 Remove 2 screws (with washer).

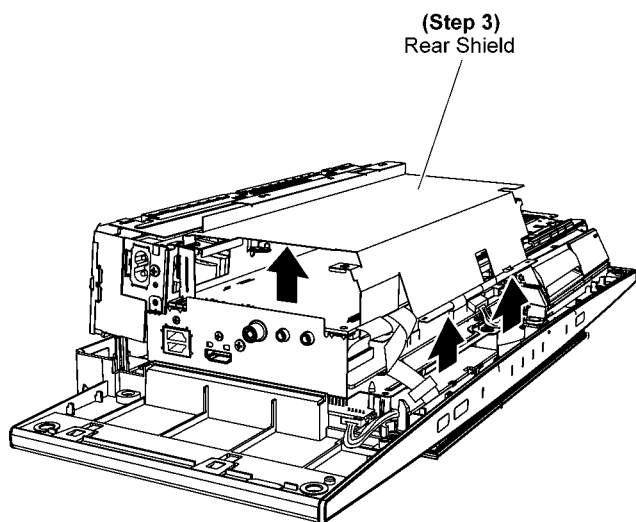
Step 2 Remove 8 screws.

Caution: During assembling, ensure that 1P wire is screwed on rear shield properly.

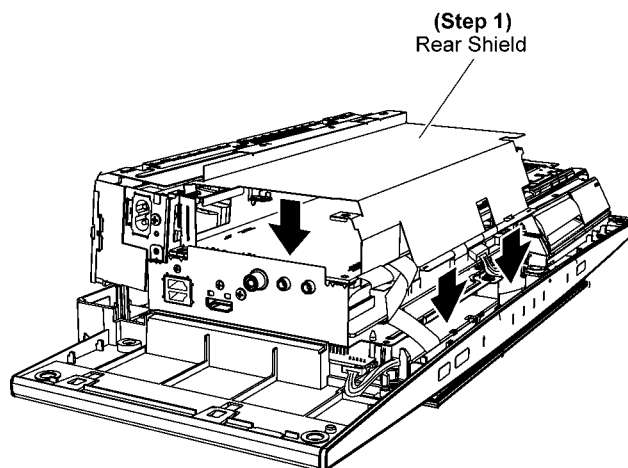


Caution: During assembling, ensure that rear shield is seated properly at the locators.

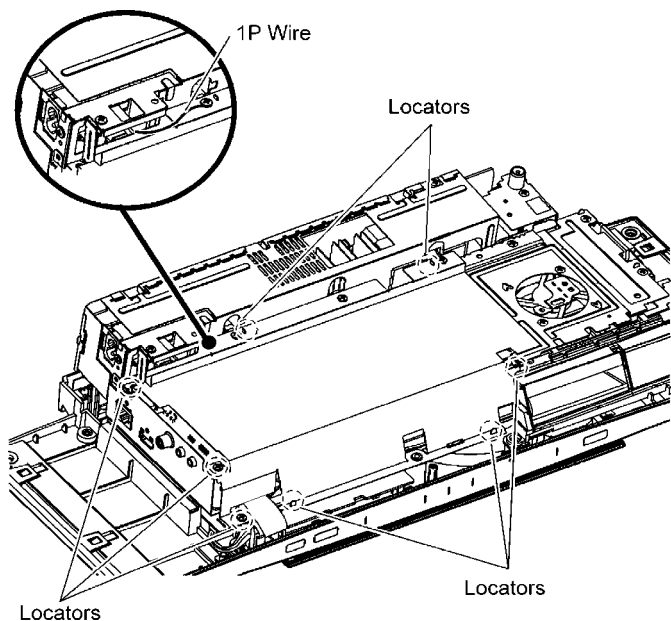
10.8.2. Assembly of Rear Shield



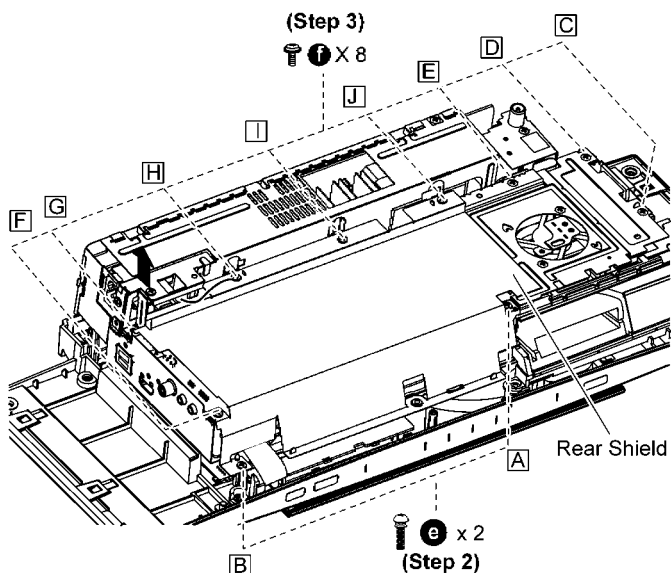
Step 3 Remove rear shield.



Step 1 Fix the rear shield as diagram shown.



Caution: During assembling, ensure that rear shield is seated properly at the locators.
Caution: During assembling, ensure that 1P wire is screwed on rear shield properly.



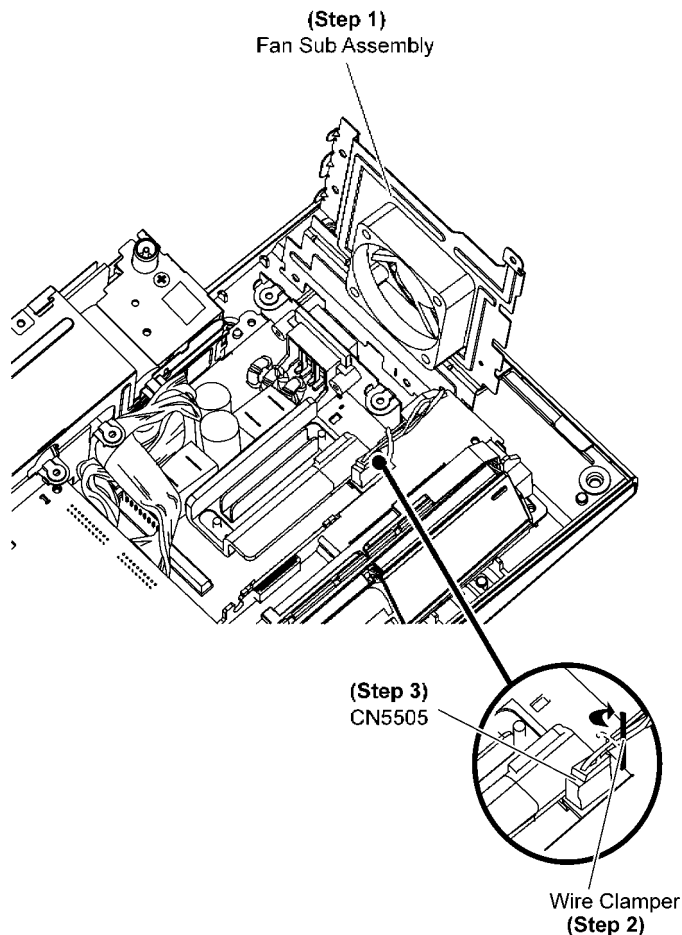
Step 2 Mount 2 screws onto rear shield.

Step 3 Mount 8 screws onto rear shield.

Caution: Please follow screwing sequence (A to J) to mount the screws onto rear shield.

10.9. Disassembly of Fan Sub Assembly

- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.

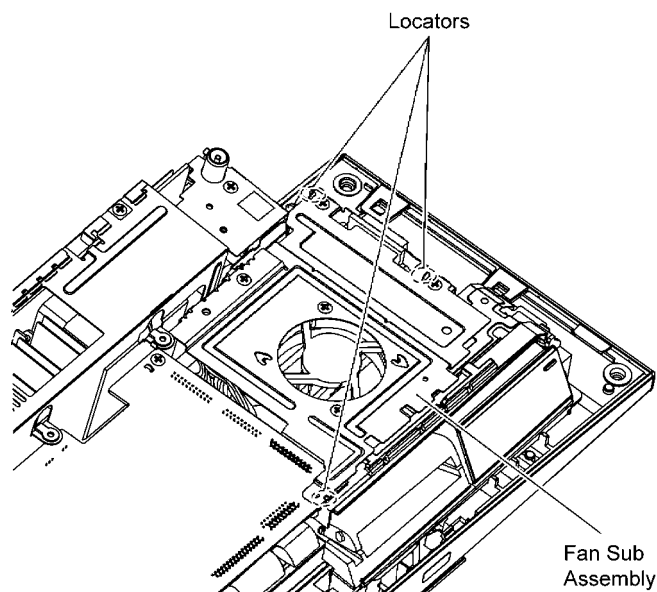


Step 1 Lift up Fan Sub Assembly.

Step 2 Twist the wire clammer.

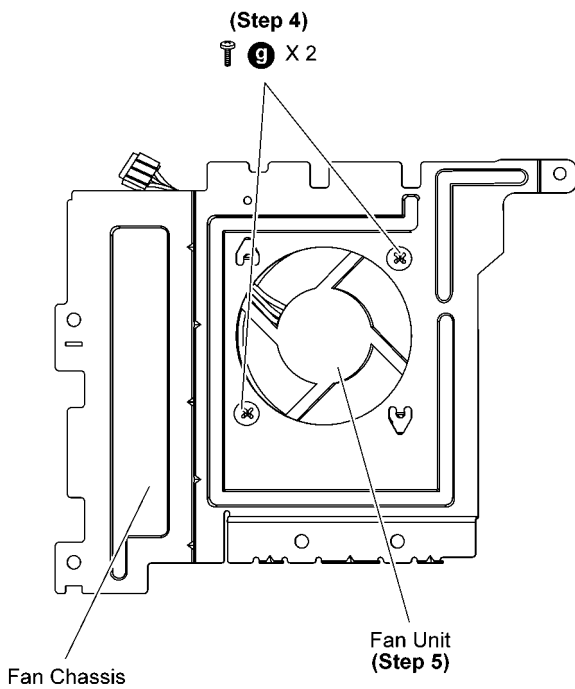
Step 3 Detach 3P cable at the connector (CN5505) on D-Amp P.C.B..

Step 4 Remove Fan Sub Assembly.



Caution: During assembling, ensure that Fan Sub Assembly is seated properly at the locators.

• Disassembly of Fan Unit

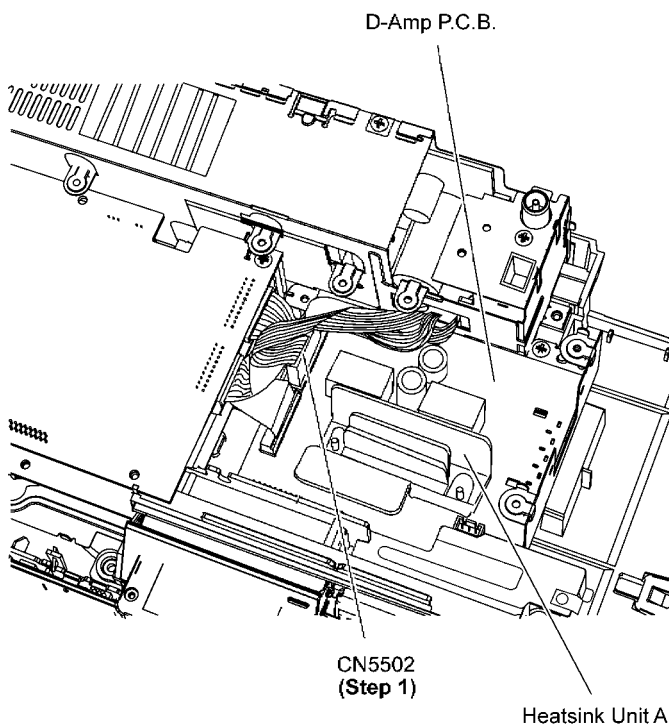


Step 4 Remove 2 screws.

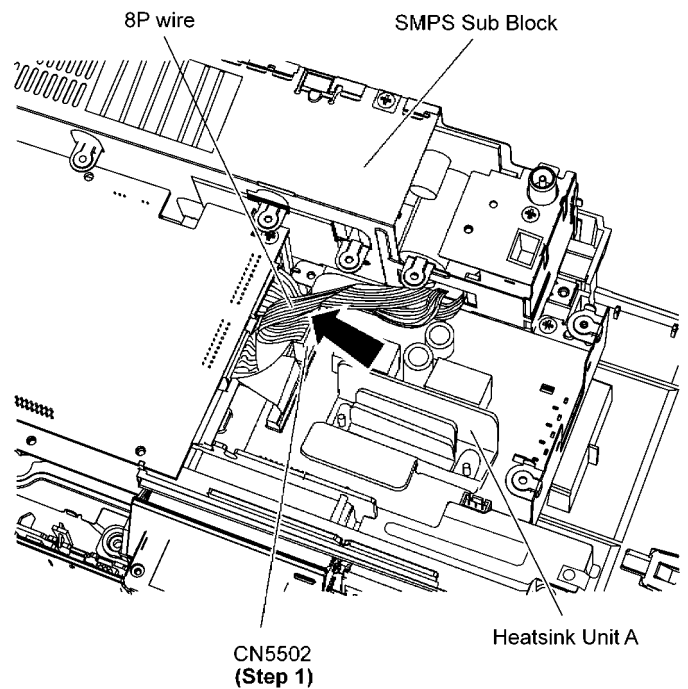
Step 5 Remove Fan Unit.

10.10. Disassembly of SMPS Sub Block

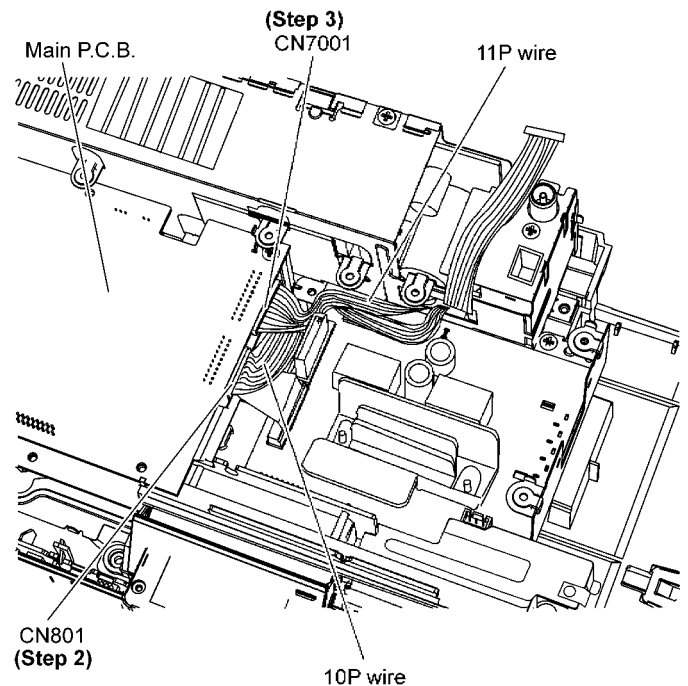
- Follow the (Step 1) to (Step 6) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.



Step 1 Detach 8P wire at the connector (CN5502) on Main P.C.B..

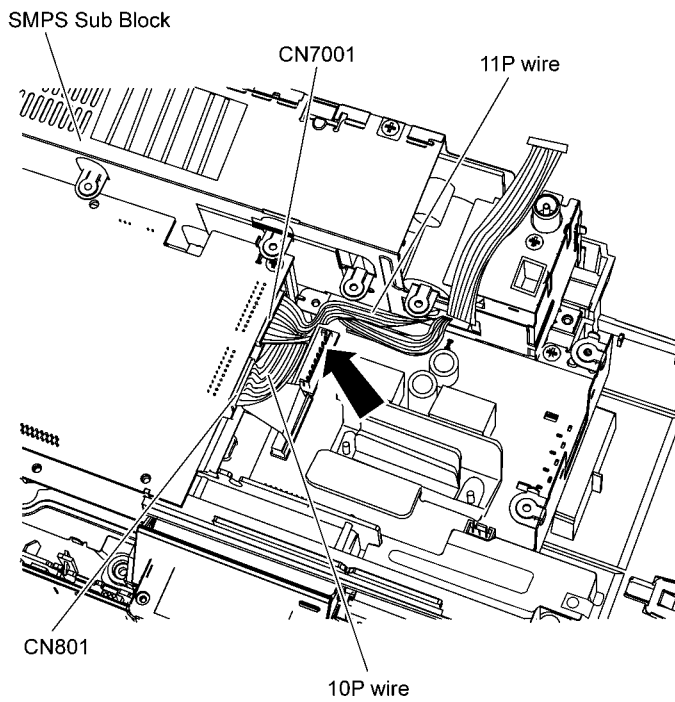


Caution: During assembling, press in 8P wire toward SMPS Sub Block to be away from heatsink unit A as arrow shown. Ensure that 8P wire is connected correctly onto the connector (CN5502).

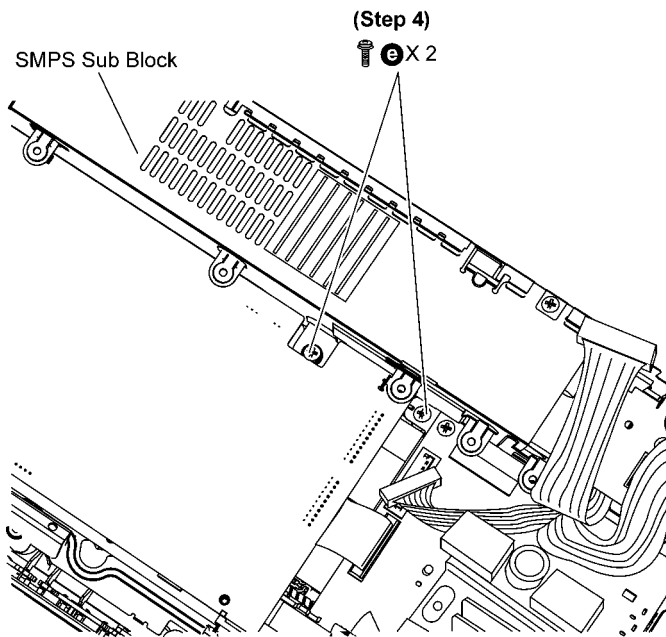


Step 2 Detach 10P wire at the connector (CN801) on Main P.C.B..

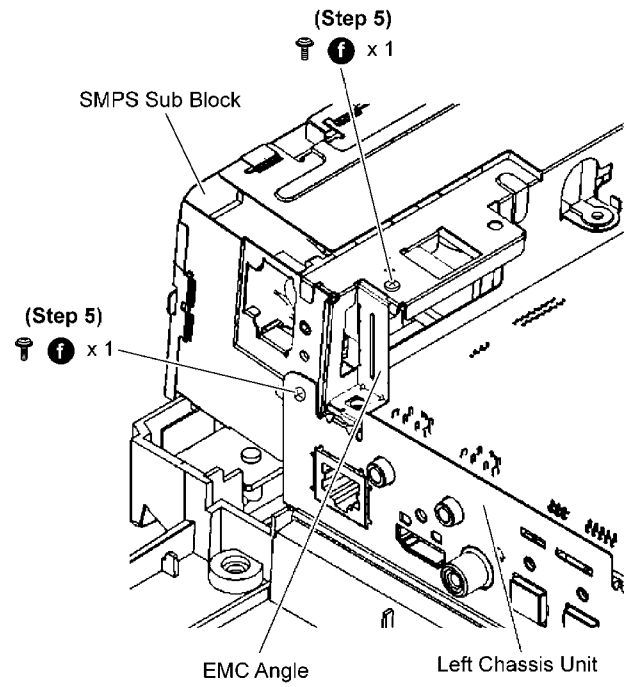
Step 3 Detach 11P wire at the connector (CN7001) on Main P.C.B..



Caution: During assembling, press in 10P wire & 11P wire toward SMPS Sub Block to be away from heatsink unit A as arrow shown. Ensure that 10P wire is connected to the connector (CN801); 11P wire is connected to the connector (CN7001) properly.

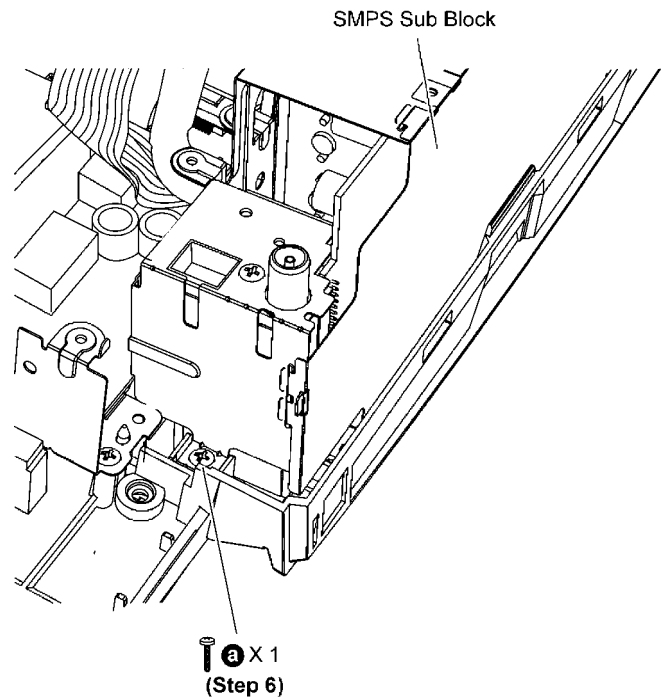


Step 4 Remove 2 screws at SMPS Sub Block.

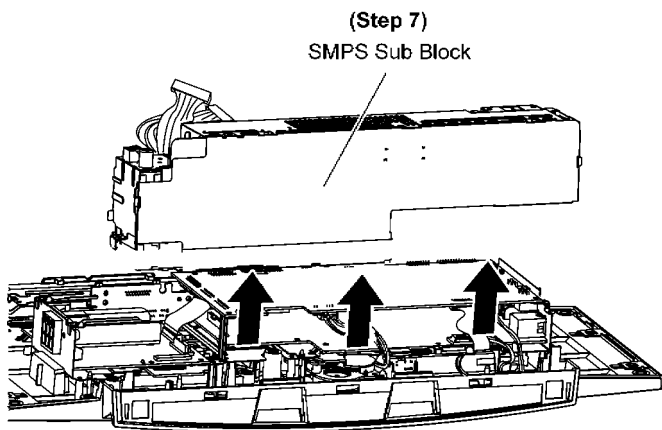


Step 5 Remove 2 screws at SMPS Sub Block.

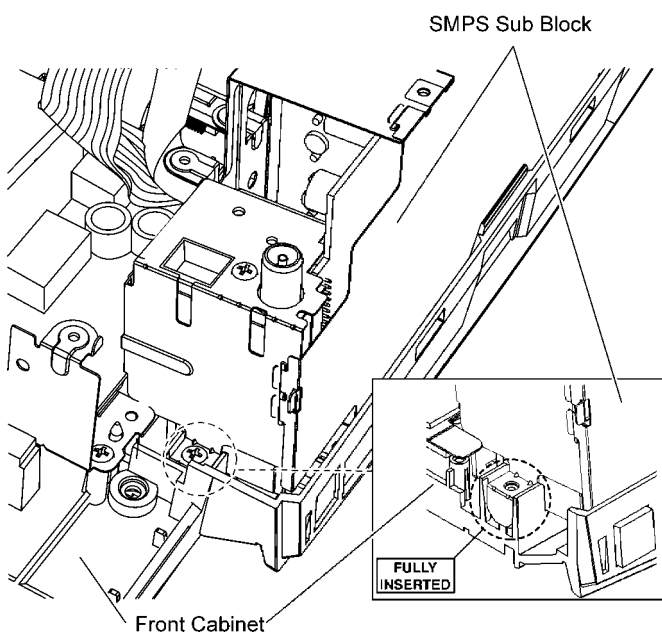
Caution: Keep the EMC Angle in safe place. Avoid denting it, place it back during assembling.



Step 6 Remove 1 screw at SMPS Sub Block.



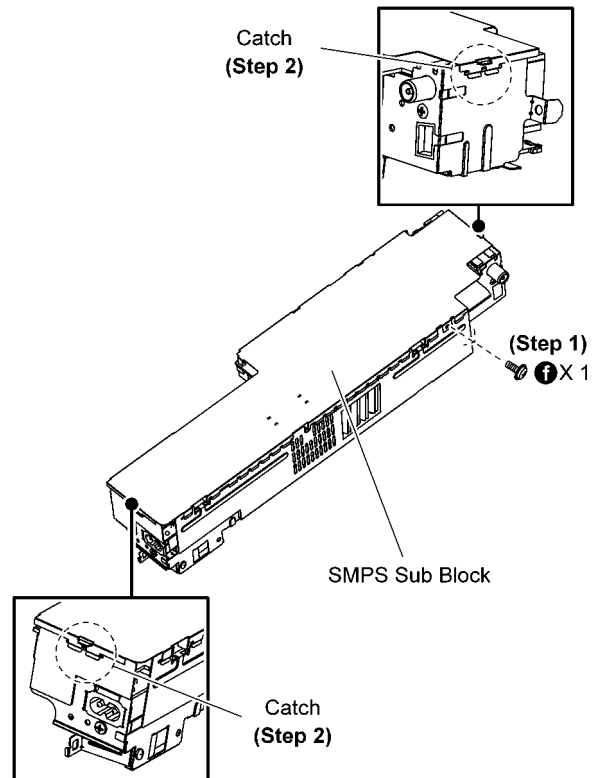
Step 7 Lift up to remove SMPS Sub Block.



Caution: During assembling, ensure that SMPS Sub Block is fully located and inserted onto front cabinet.

10.11. Disassembly of Tuner Pack

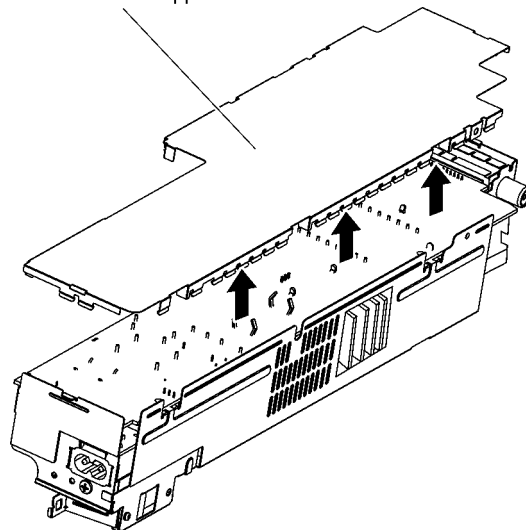
- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 3) of Item 10.9.
- Follow the (Step 1) to (Step 7) of Item 10.10.



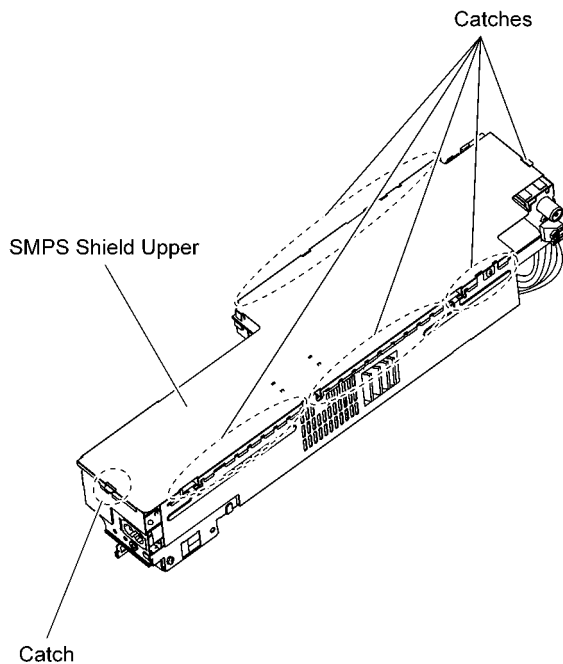
Step 1 Remove 1 screws.

Step 2 Release catches at both side of SMPS Sub Block.

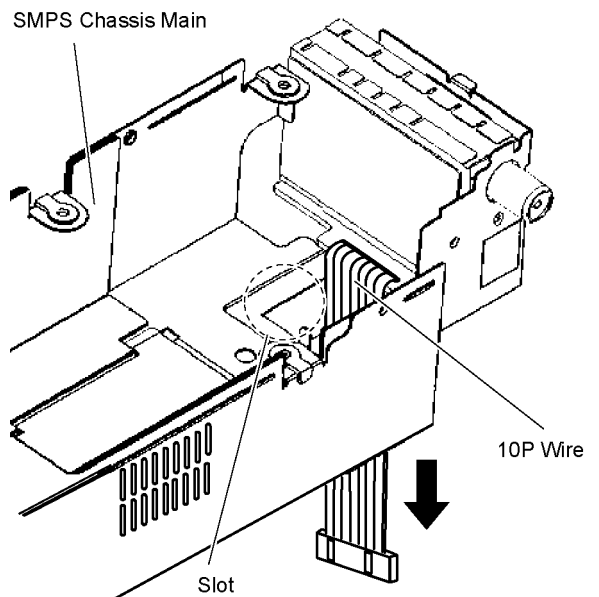
(Step 3)
SMPS Shield Upper



Step 3 Remove SMPS Shield Upper.



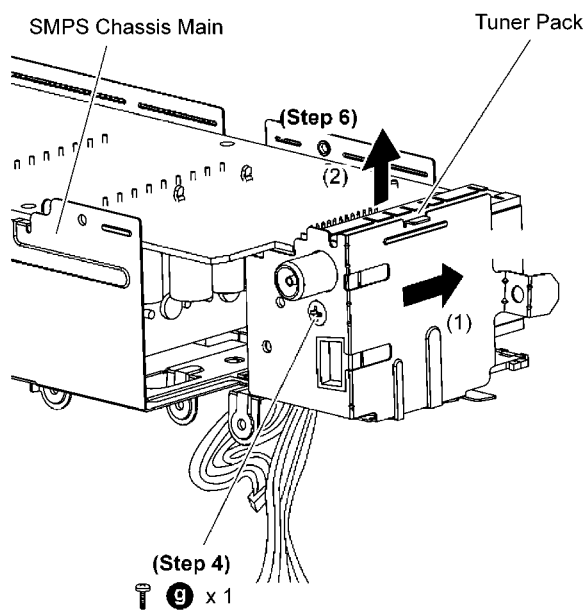
Caution: During assembling, ensure that SMPS Shield Upper is fully caught.



Caution: During assembling, ensure that 10P wire is dressed through the slot properly.

10.12. Disassembly of SMPS and AC Inlet P.C.B.

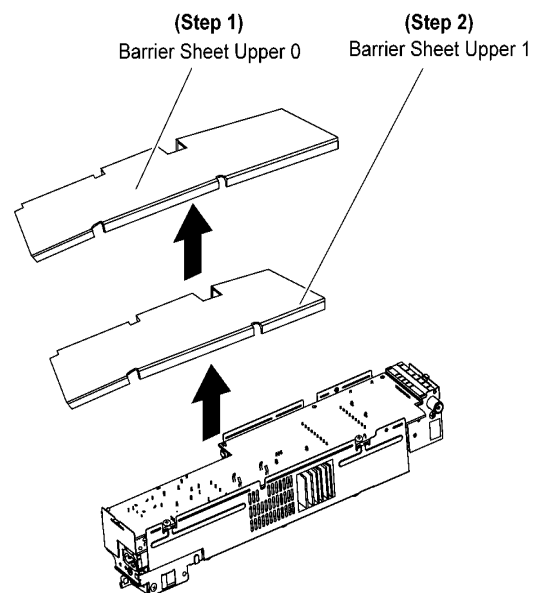
- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.
- Follow the (Step 1) to (Step 7) of Item 10.10.
- Follow the (Step 1) to (Step 3) of Item 10.11.



Step 4 Remove 1 screw.

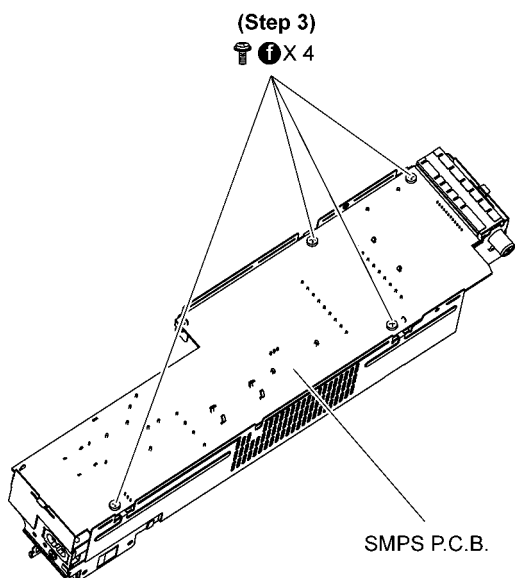
Step 5 Detach Tuner Pack gently in the direction of arrow (1).

Step 6 Lift up Tuner Pack in the direction of arrow (2).

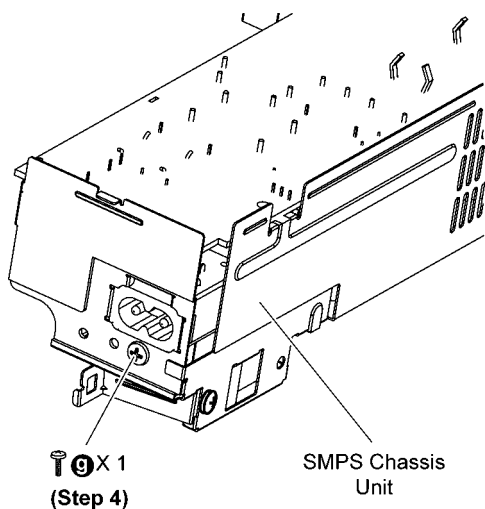


Step 1 Lift up Barrier Sheet Upper 0.

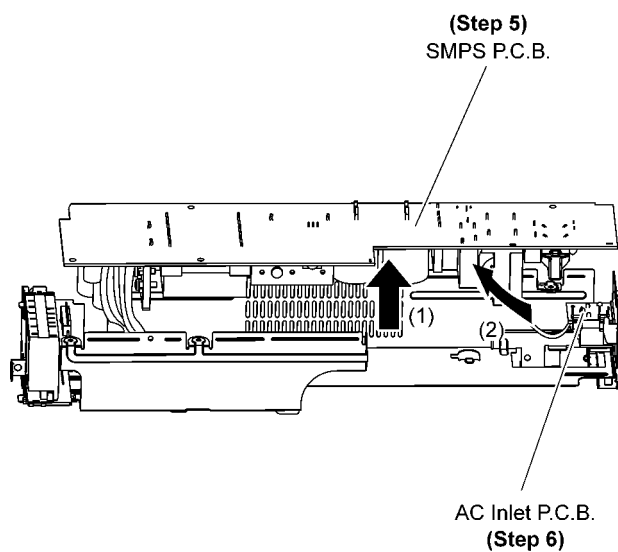
Step 2 Lift up Barrier Sheet Upper 1.



Step 3 Remove 4 screws on SMPS P.C.B..

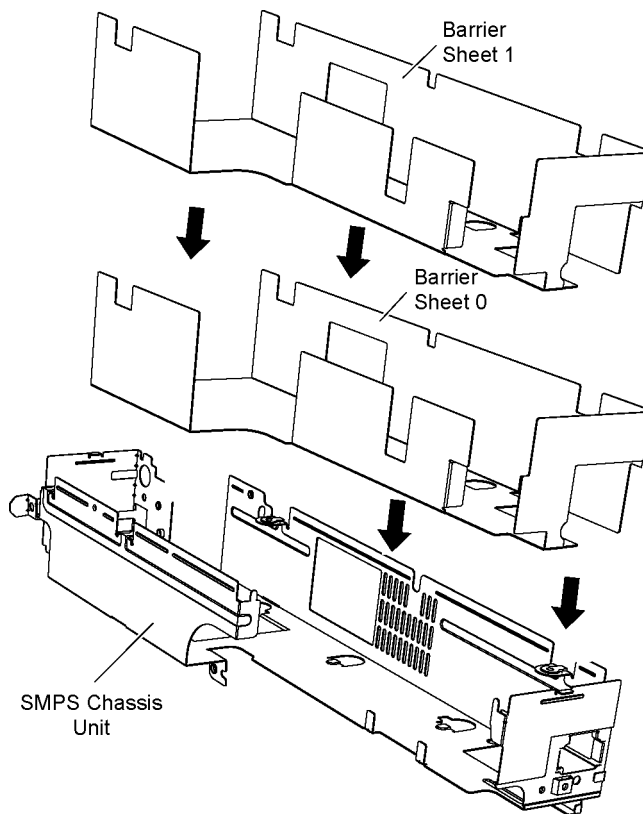


Step 4 Remove 1 screw.

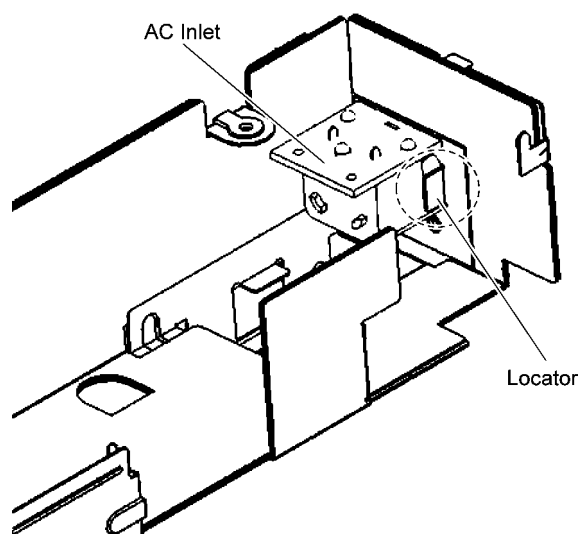


Step 5 Lift up SMPS P.C.B. in the direction of arrow (1).

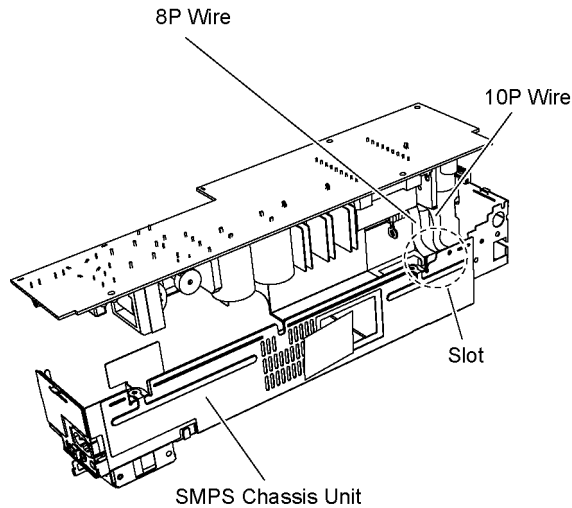
Step 6 Lift up AC Inlet P.C.B. in the direction of arrow (2).



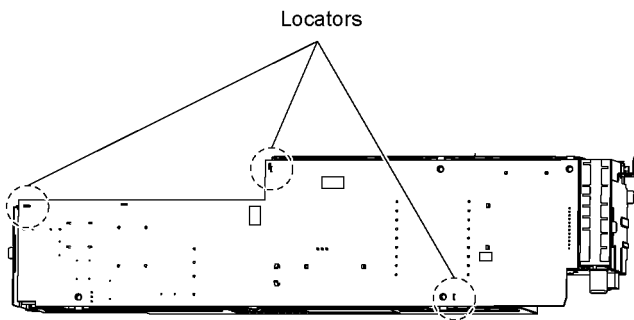
Caution: Before assembling of SMPS P.C.B., ensure that Barrier Sheet Upper 0/1 is properly inserted onto SMPS Chassis Unit.



Caution: During assembling, ensure that AC Inlet is seated properly at the locator.



Caution: During assembling, ensure that 11P & 8P wires are dressed through the SMPS Chassis Unit's slot properly.

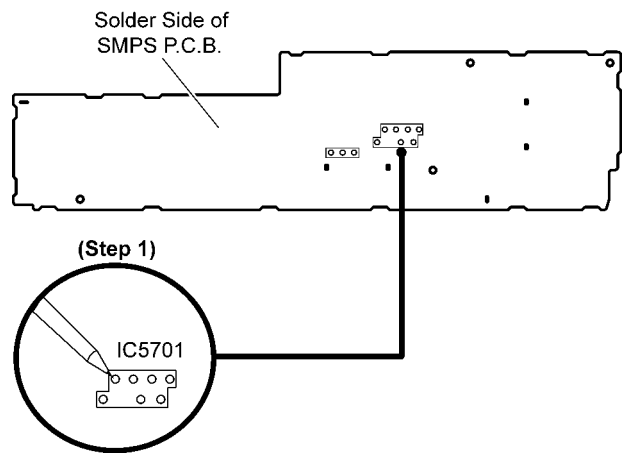


Caution: During assembling, ensure that SMPS P.C.B. is seated properly at the locators.

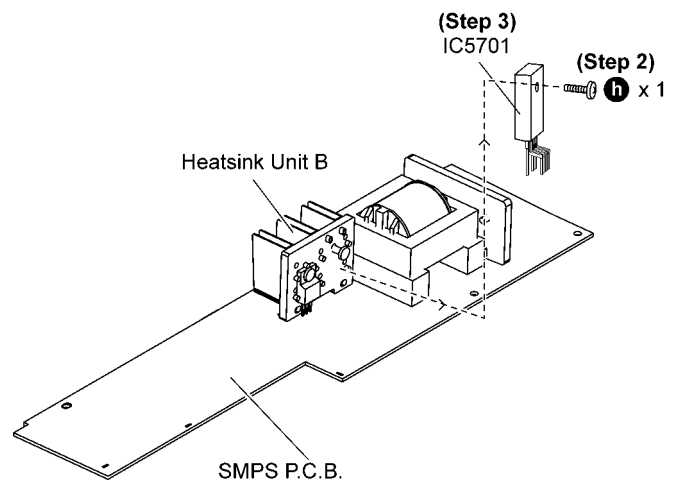
10.13. Replacement of Switching Regulator IC (IC5701)

10.13.1. Disassembly of Switching Regulator IC (IC5701)

- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.
- Follow the (Step 1) to (Step 7) of Item 10.10.
- Follow the (Step 1) to (Step 3) of Item 10.11.
- Follow the (Step 1) to (Step 6) of Item 10.12.



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



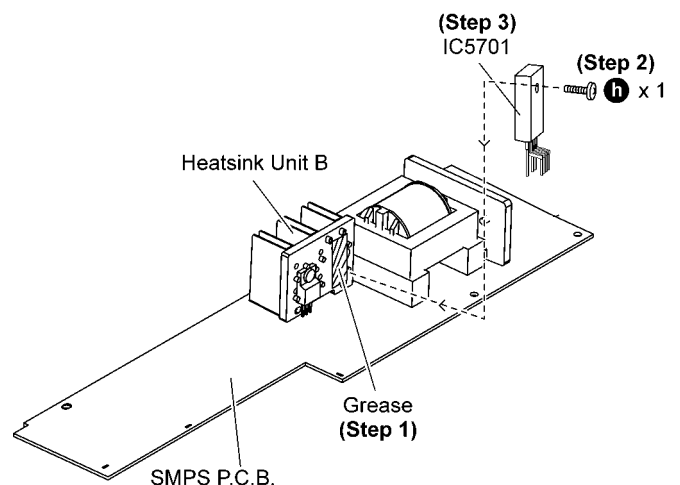
Step 2 Remove 1 screw from the switching regulator IC (IC5701).

Step 3 Remove the switching regulator IC (IC5701).

Caution: Handle the SMPS P.C.B with care due to its high temperature after prolonged use. Touching it may lead to injuries.

Note: Refer to the diagrams of SMPS P.C.B. (Item 17.7.) for location of the part.

10.13.2. Assembly of Switching Regulator IC (IC5701)

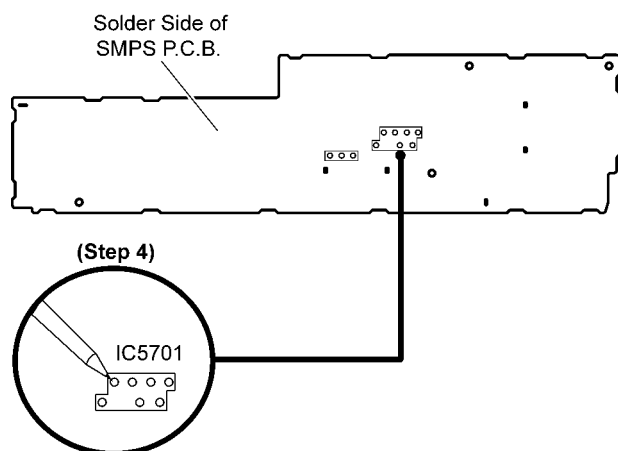


Step 1 Apply grease to the heatsink unit B.

Step 2 Mount the switching regulator IC (IC5701) on to SMPS P.C.B.

Step 3 Fix and 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.



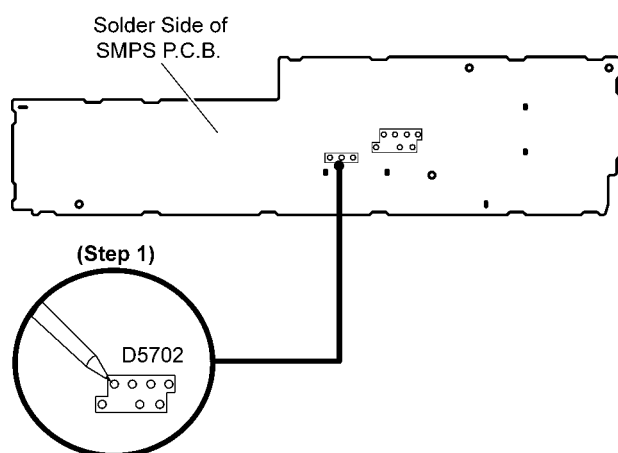
Step 4 Solder pins of the switching regulator IC (IC5701) on the solder side of SMPS P.C.B.

Caution: Ensure pins of the switching regulator IC (IC5701) are properly seated and soldered on SMPS P.C.B.

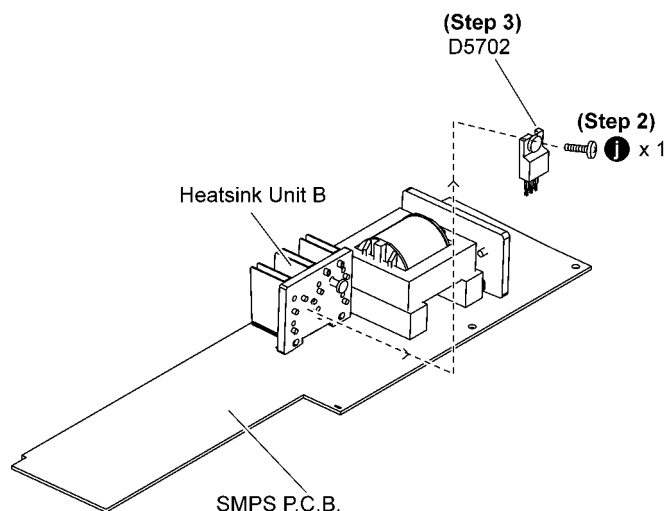
10.14. Replacement of Rectifier Diode (D5702)

10.14.1. Disassembly of Rectifier Diode (D5702)

- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.
- Follow the (Step 1) to (Step 7) of Item 10.10.
- Follow the (Step 1) to (Step 3) of Item 10.11.
- Follow the (Step 1) to (Step 6) of Item 10.12.



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



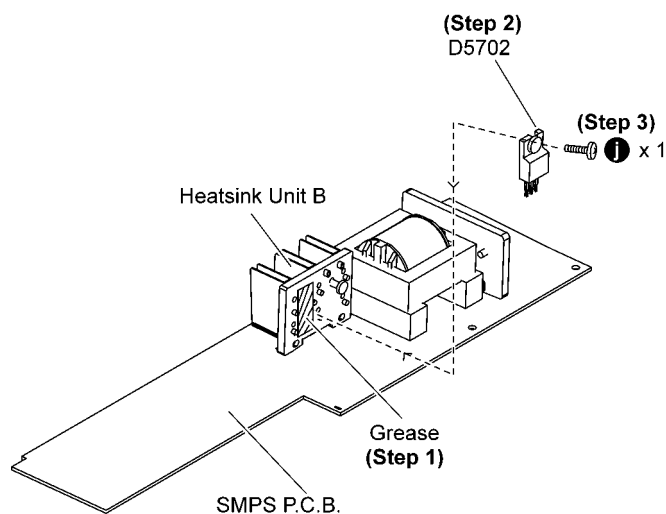
Step 2 Remove 1 screw from the rectifier diode. (D5702).

Step 3 Remove the rectifier diode (D5702).

Caution: Handle the SMPS P.C.B with care due to its high temperature after prolonged use. Touching it may lead to injuries.

Note: Refer to the diagrams of SMPS P.C.B. (Item 17.7) for location of the electrical components.

10.14.2. Assembly of Rectifier Diode (D5702)



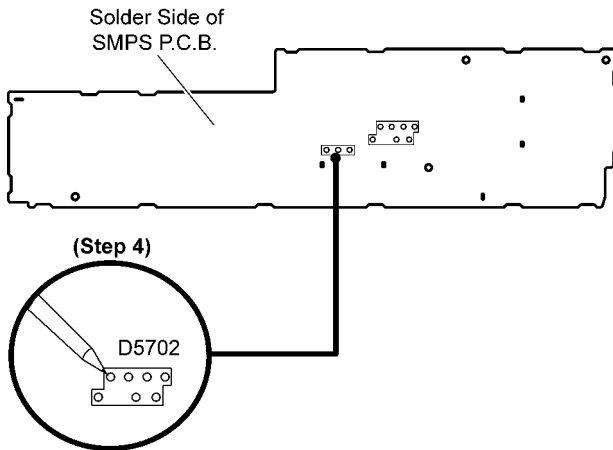
Step 1 Apply grease to the heatsink unit B.

Step 2 Mount the Rectifier Diode (D5702) to SMPS P.C.B..

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

Step 2 Fix and screw the Rectifier Diode (D5702) to heatsink unit B.

Caution: Ensure the rectifier diode (D5702) is tightly screwed to the heatsink unit B.

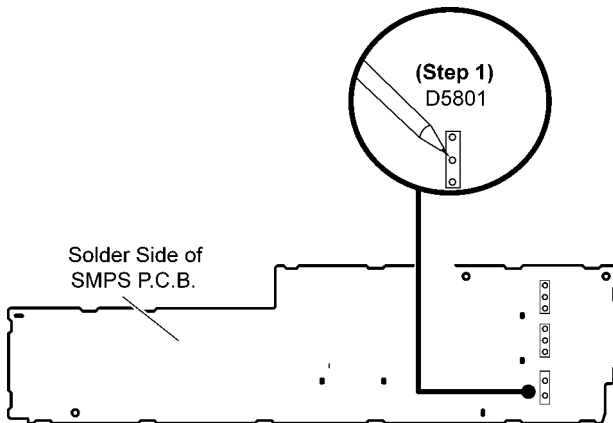


Step 4 Solder pins of the rectifier diode (D5702) on the solder side of SMPS P.C.B.

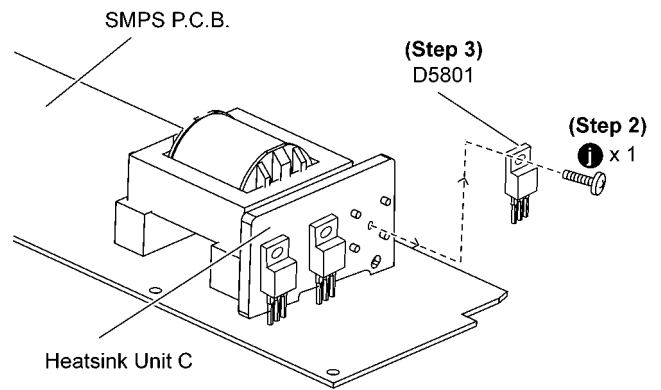
10.15. Replacement of Regulator Diode (D5801)

10.15.1. Disassembly of Regulator Diode (D5801)

- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.
- Follow the (Step 1) to (Step 7) of Item 10.10.
- Follow the (Step 1) to (Step 3) of Item 10.11.
- Follow the (Step 1) to (Step 6) of Item 10.12.



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



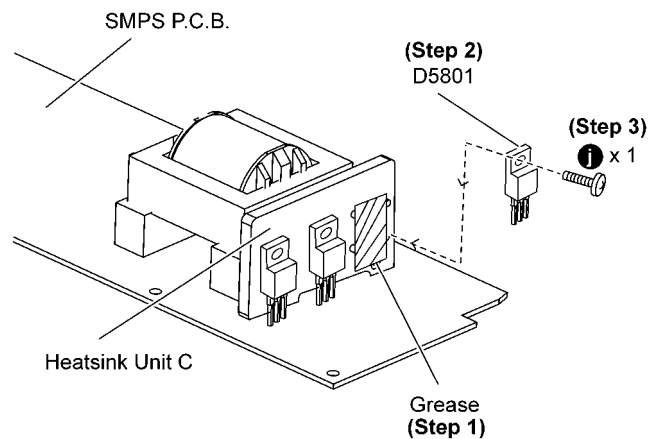
Step 2 Remove 1 screw from the regulator diode (D5801).

Step 3 Remove the regulator diode (D5801) from the SMPS P.C.B.

Caution: Handle the SMPS P.C.B with care due to its high temperature after prolonged use. Touching it may lead to injuries.

Note: Refer to the diagrams of SMPS P.C.B. (Item 17.7) for location of the electrical components.

10.15.2. Assembly of Regulator Diode (D5801)

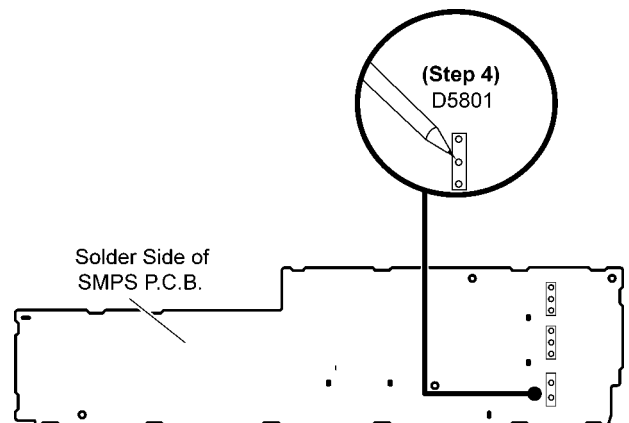


Step 1 Apply grease to the heatsink unit C.

Step 2 Mount the regulator diode (D5801) on to SMPS P.C.B.

Step 3 Fix and screw the regulator diode (D5801) to the heat-sink unit C.

Caution: Ensure the regulator diode (D5801) is tightly screwed to the heatsink unit C.



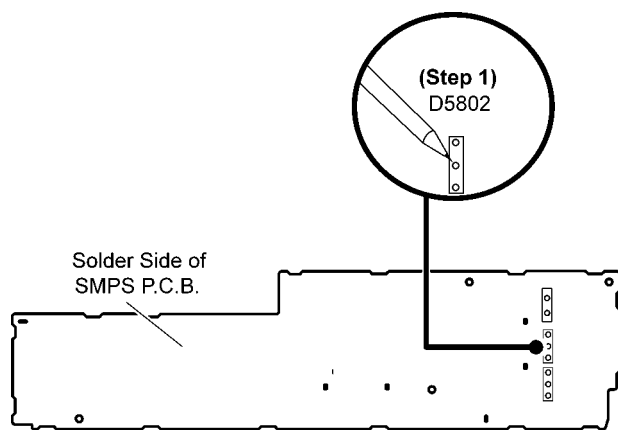
Step 4 Solder pins of the regulator diode (D5801) on the solder side of SMPS P.C.B.

Caution: Ensure pins of the regulator diode (D5801) are properly seated and soldered on SMPS P.C.B.

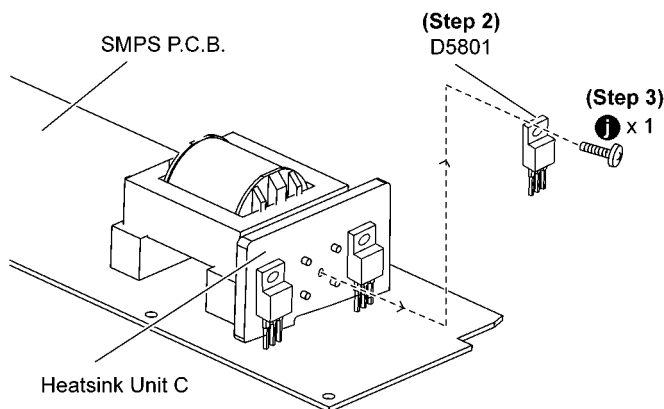
10.16. Replacement of Regulator Diode (D5802)

10.16.1. Disassembly of Regulator Diode (D5802)

- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.
- Follow the (Step 1) to (Step 7) of Item 10.10.
- Follow the (Step 1) to (Step 3) of Item 10.11.
- Follow the (Step 1) to (Step 6) of Item 10.12.



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



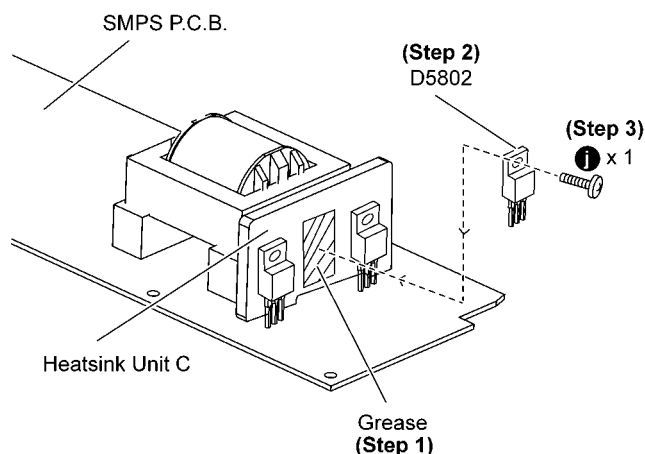
Step 2 Remove 1 screw from the regulator diode (D5802).

Step 3 Remove the regulator diode (D5802) from the SMPS P.C.B.

Caution: Handle the SMPS P.C.B with care due to its high temperature after prolonged use. Touching it may lead to injuries.

Note: Refer to the diagrams of SMPS P.C.B. (Item 17.7) for location of the electrical components.

10.16.2. Assembly of Regulator Diode (D5802)

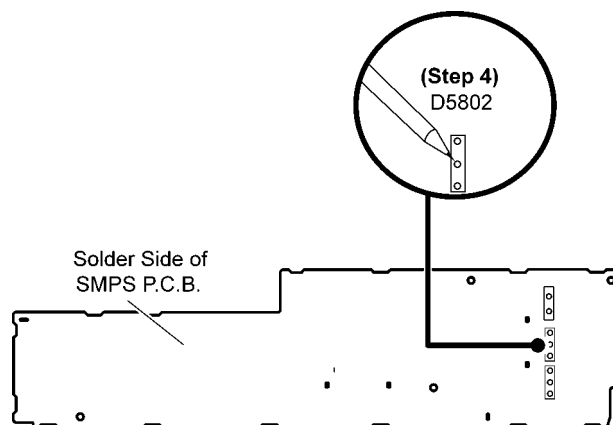


Step 1 Apply grease to the heatsink unit C.

Step 2 Mount the regulator diode (D5802) on to SMPS P.C.B.

Step 3 Fix and screw the regulator diode (D5802) to the heat-sink unit C.

Caution: Ensure the regulator diode (D5802) is tightly screwed to the heatsink unit C.



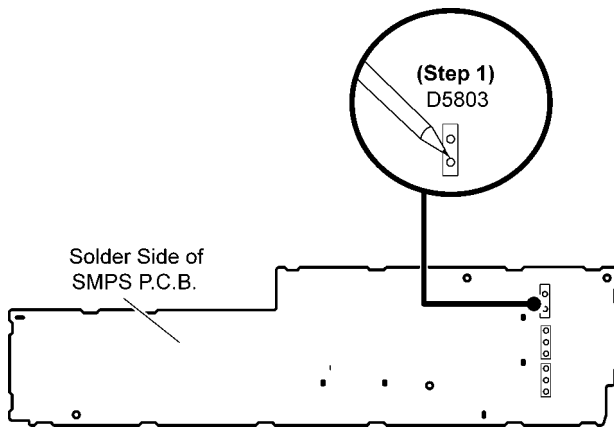
Step 4 Solder pins of the regulator diode (D5802) on the solder side of SMPS P.C.B.

Caution: Ensure pins of the regulator diode (D5802) are properly seated and soldered on SMPS P.C.B.

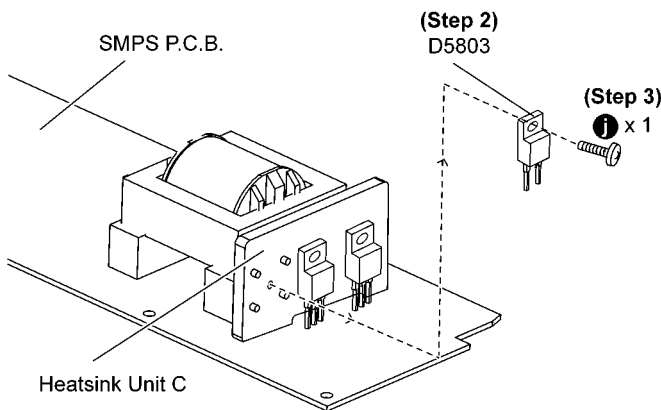
10.17. Replacement of Regulator Diode (D5803)

10.17.1. Disassembly of Regulator Diode (D5803)

- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.
- Follow the (Step 1) to (Step 7) of Item 10.10.
- Follow the (Step 1) to (Step 3) of Item 10.11.
- Follow the (Step 1) to (Step 6) of Item 10.12.



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



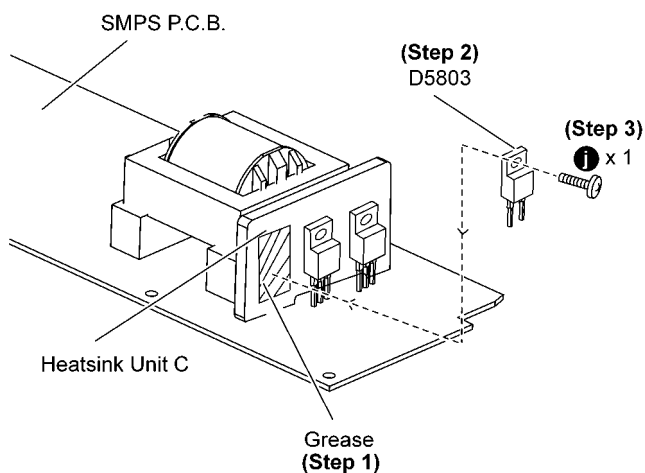
Step 2 Remove 1 screw from the regulator diode (D5803).

Step 3 Remove the regulator diode (D5803) from the SMPS P.C.B.

Caution: Handle the SMPS P.C.B with care due to its high temperature after prolonged use. Touching it may lead to injuries.

Note: Refer to the diagrams of SMPS P.C.B. (Item 17.7) for location of the electrical components.

10.17.2. Assembly of Regulator Diode (D5803)

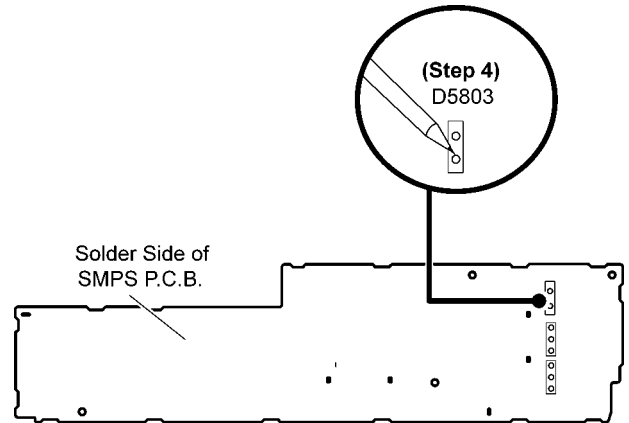


Step 1 Apply grease to the heatsink unit C.

Step 2 Mount the regulator diode (D5803) on to SMPS P.C.B.

Step 3 Fix and screw the regulator diode (D5803) to the heat-sink unit C.

Caution: Ensure the regulator diode (D5803) is tightly screwed to the heatsink unit C.

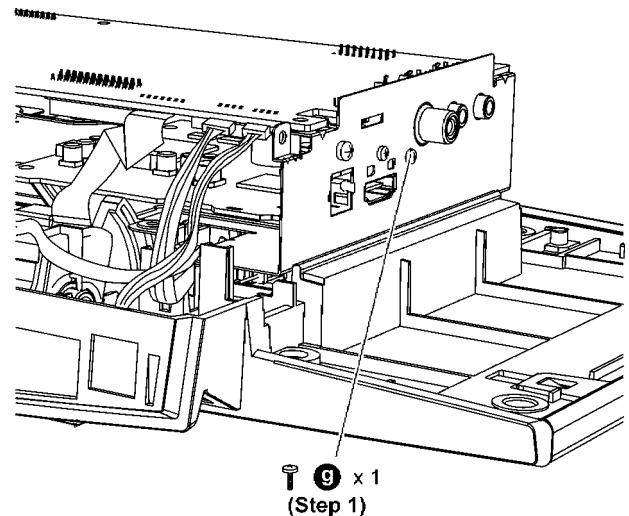


Step 4 Solder pins of the regulator diode (D5803) on the solder side of SMPS P.C.B.

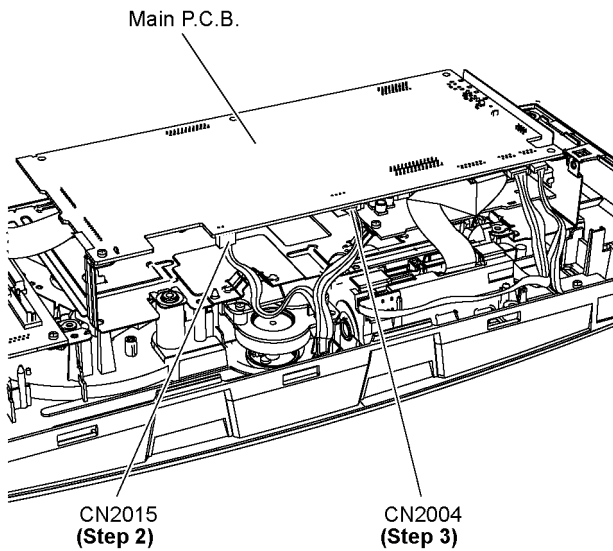
Caution: Ensure pins of the regulator diode (D5803) are properly seated and soldered on SMPS P.C.B.

10.18. Disassembly of Main P.C.B.

- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.
- Follow the (Step 1) to (Step 7) of Item 10.10.

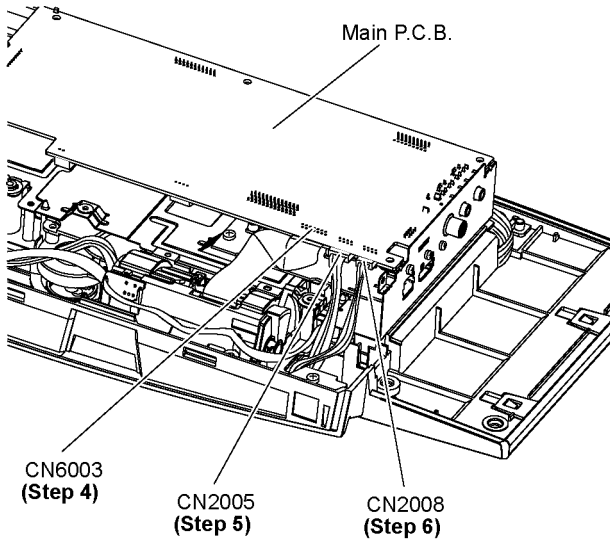


Step 1 Remove 1 screw.



Step 2 Detach 2P wire at the connector (CN2015) on Main P.C.B..

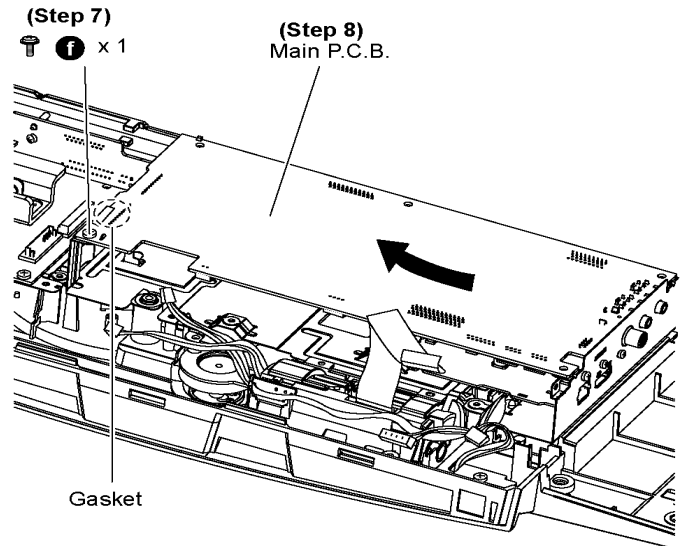
Step 3 Detach 4P wire at the connector (CN2004) on Main P.C.B..



Step 4 Detach 14P FFC at the connector (CN6003) on Main P.C.B..

Step 5 Detach 4P wire at the connector (CN2005) on Main P.C.B..

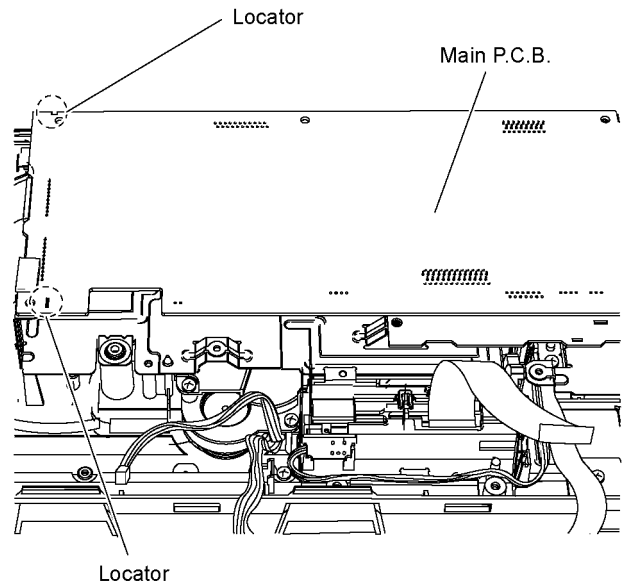
Step 6 Detach 3P wire at the connector (CN2008) on Main P.C.B..



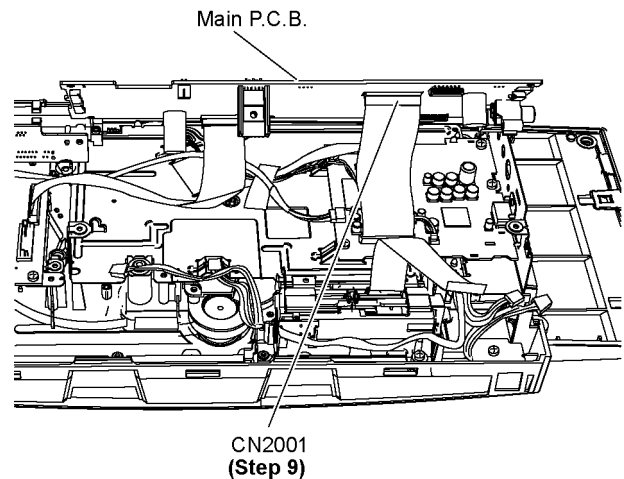
Step 7 Remove 1 screw on Main P.C.B..

Step 8 Gently remove Main P.C.B. in the direction of arrow shown.

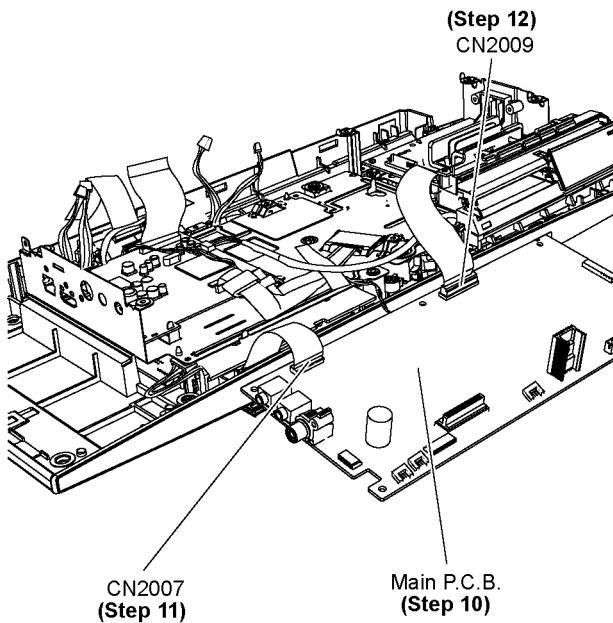
Caution: Replace the Main P.C.B. Gasket if it is broken.



Caution: During assembling, ensure that Main P.C.B. is seated properly at the locator.



Step 9 Detach 50P FFC at the connector (CN2001) on Main P.C.B..



Step 10 Flip the Main P.C.B. according to diagram shown.

Step 11 Detach 17P FFC at the connector (CN2007) on Main P.C.B..

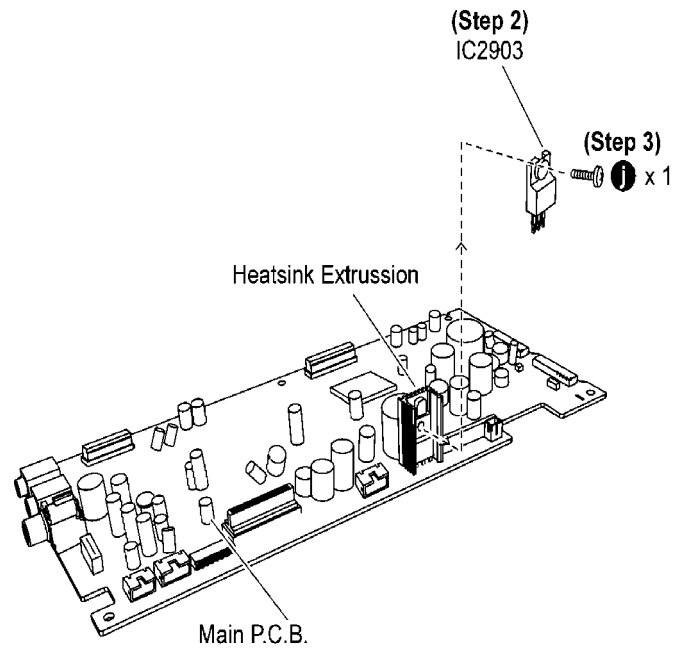
Step 12 Detach 22P FFC at the connector (CN2009) on Main P.C.B..

Step 15 Remove Main P.C.B..

10.19. Replacement of Switching Regulator IC (IC2903)

- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.
- Follow the (Step 1) to (Step 7) of Item 10.10.
- Follow the (Step 1) to (Step 15) of Item 10.18.

10.19.1. Disassembly of Switching Regulator IC (IC2903)



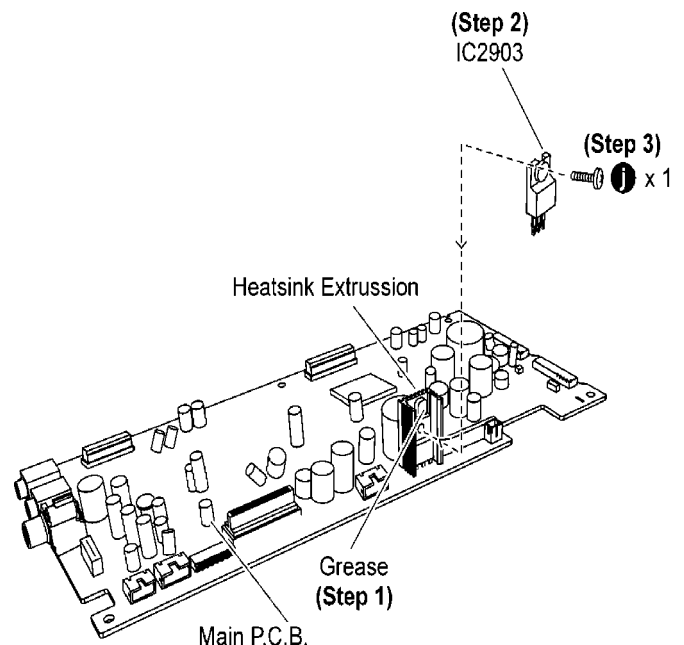
Step 1 Desolder pins of the Switching Regulator IC (IC2903) on the solder side of SMPS P.C.B.

Step 2 Remove 1 screw from the Switching Regulator IC (IC2903).

Step 3 Remove the Switching Regulator IC (IC2903) from the SMPS P.C.B.

Note: Refer to the diagrams of Main P.C.B. (Item 17.X) for location of the electrical components.

10.19.2. Assembly of IC (IC2903)



Step 1 Apply grease to the heatsink extrusion.

Step 2 Mount the Switching Regulator IC (IC2903) on to SMPS P.C.B.

Step 3 Fix and screw the Switching Regulator IC (IC2903) to the heatsink extrusion.

Caution: Ensure the Switching Regulator IC (IC2903) is tightly screwed to the heatsink extrusion.

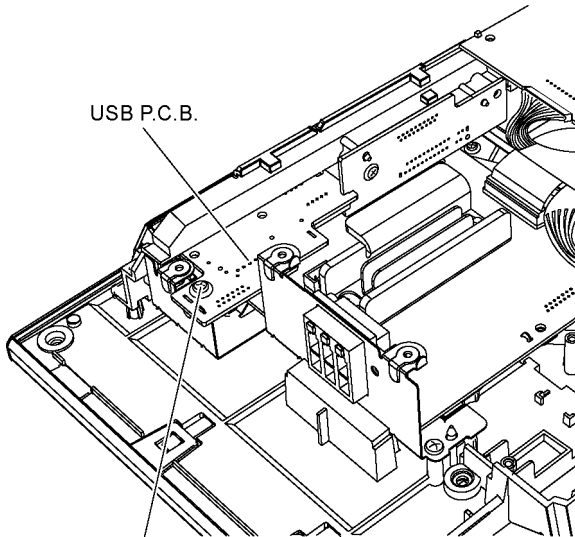
Step 4 Solder pins of the Switching Regulator IC (IC2903) on

the solder side of SMPS P.C.B.

Caution: Ensure pins of the Switching Regulator IC (IC2903) are properly seated and soldered on Main P.C.B.

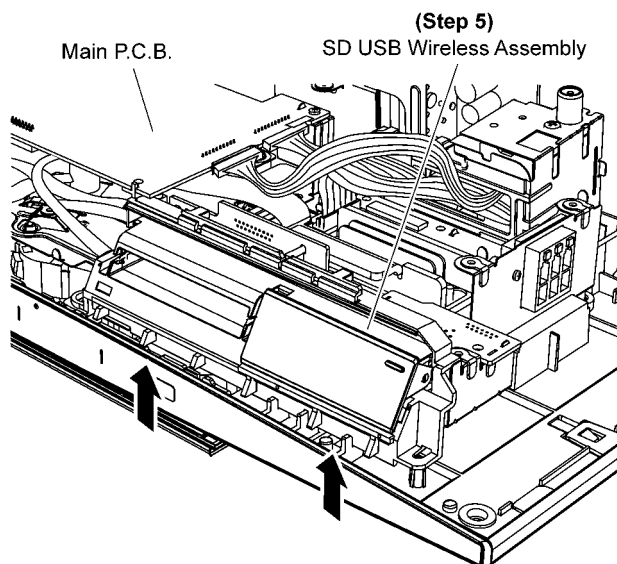
10.20. Disassembly of SD USB Wireless Assembly

- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.



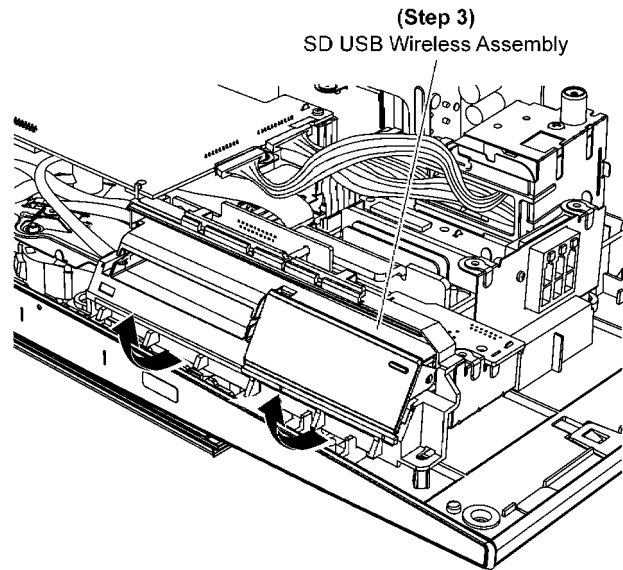
1 x 1
(Step 4)

Step 1 Remove 1 screw.

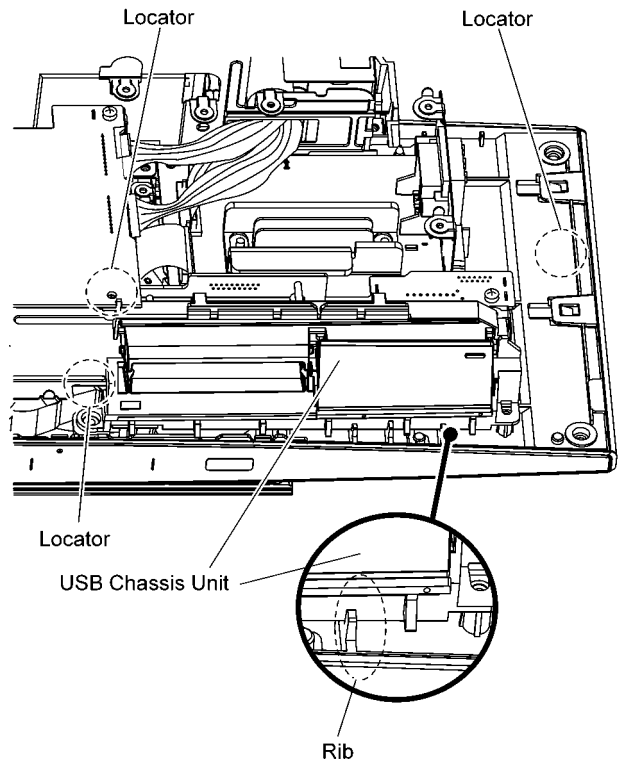


Step 2 Gently lift up SD USB Wireless Assembly.

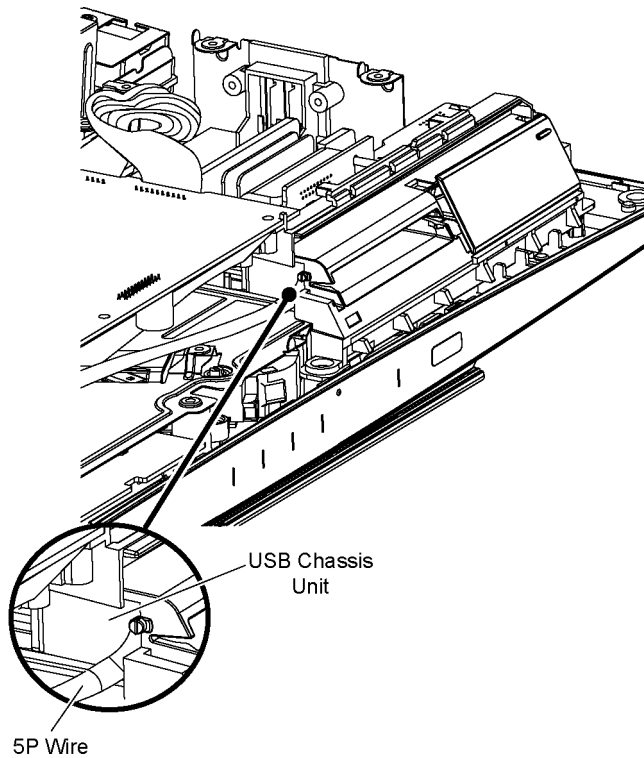
Caution: Do not exert strong force when lift up the SD USB Wireless Assembly. It may cause the damages to Main P.C.B..



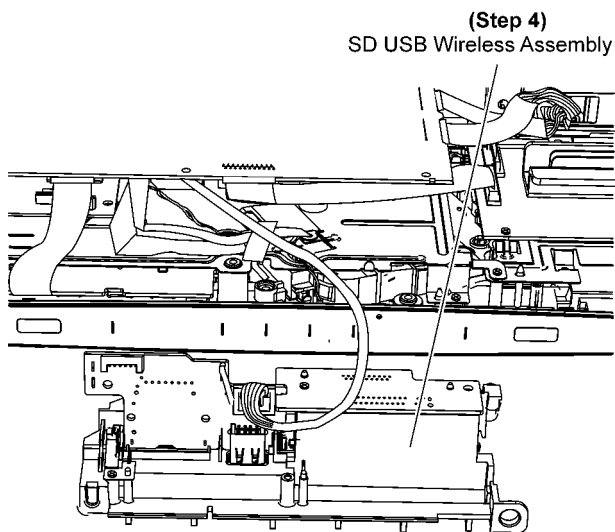
Step 3 Remove SD USB Wireless Assembly as arrow shown.



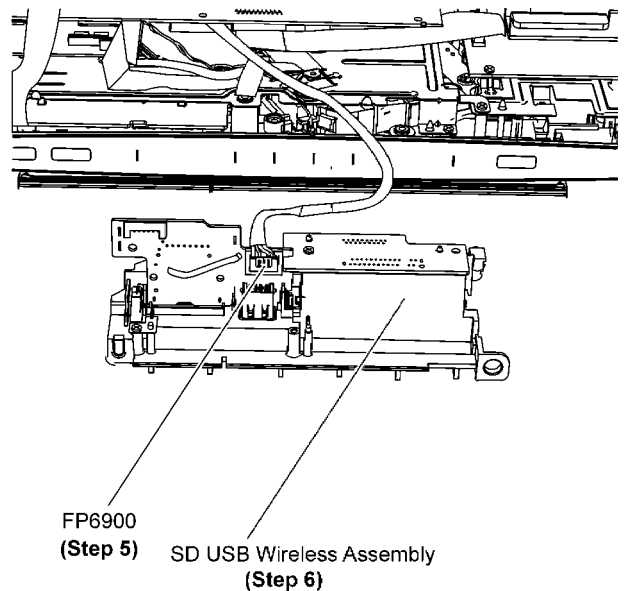
Caution: During assembling, ensure that SD USB Wireless Assembly is seated properly onto the locators and rib.



Caution: During assembling, ensure that the 5P wire is dressed under the locator of SD USB Wireless Assembly properly.



Step 4 Flip the USB Chassis Unit as diagram shown.

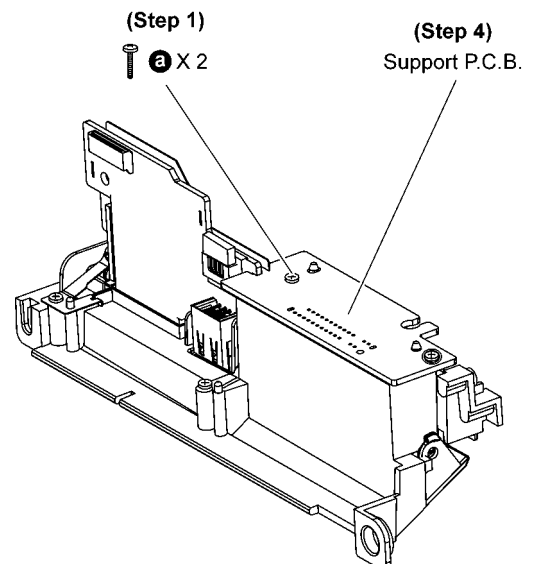


Step 5 Detach 5P wire at the connector (FP6900) on USB P.C.B..

Step 6 Remove USB Chassis Unit.

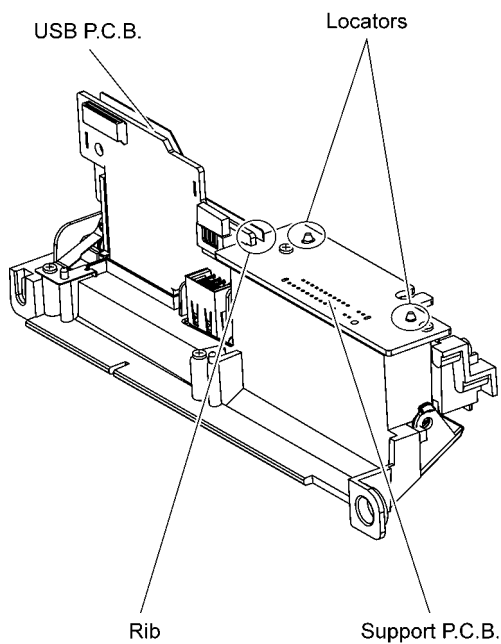
10.21. Disassembly of USB P.C.B.

- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.
- Follow the (Step 1) to (Step 9) of Item 10.20.
- **Disassembly of support P.C.B..**

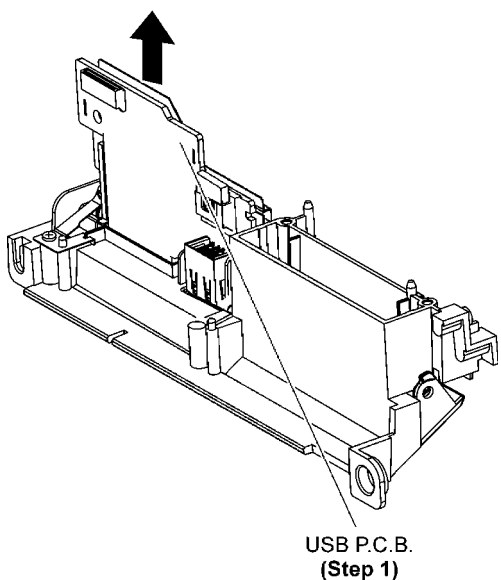


Step 1 Remove 2 screws.

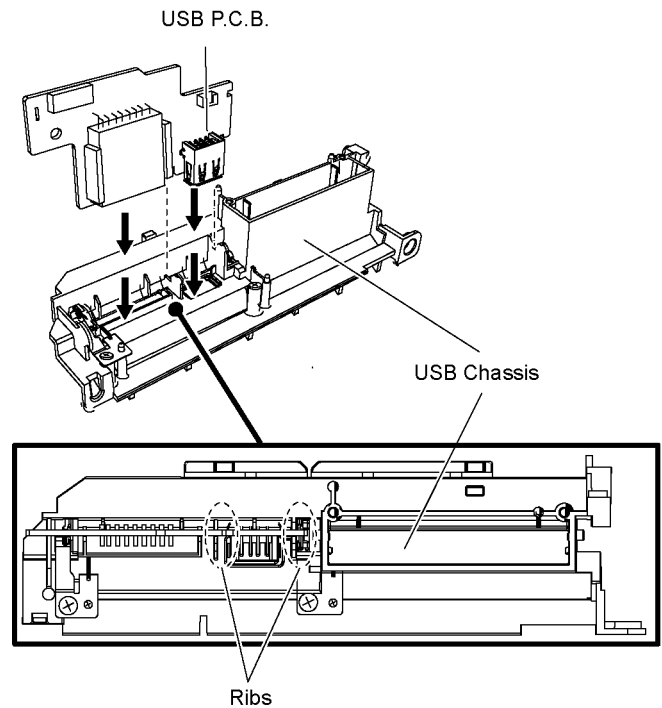
Step 4 Remove Support P.C.B..



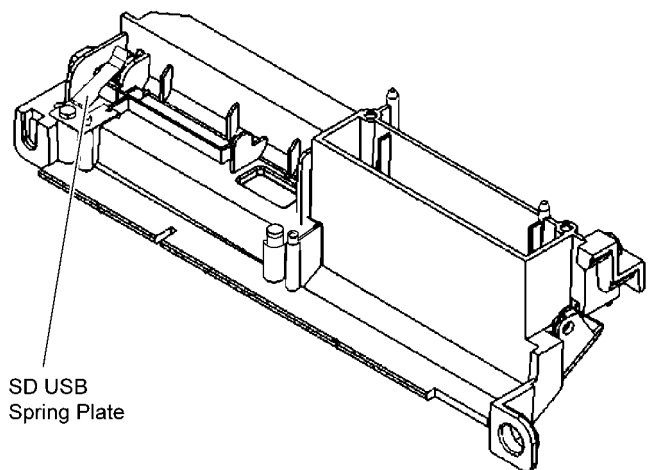
Caution: During assembling, ensure that Support P.C.B. is tilted and inserted into USB P.C.B. and seated properly at the locators.



Step 1 Remove USB P.C.B..



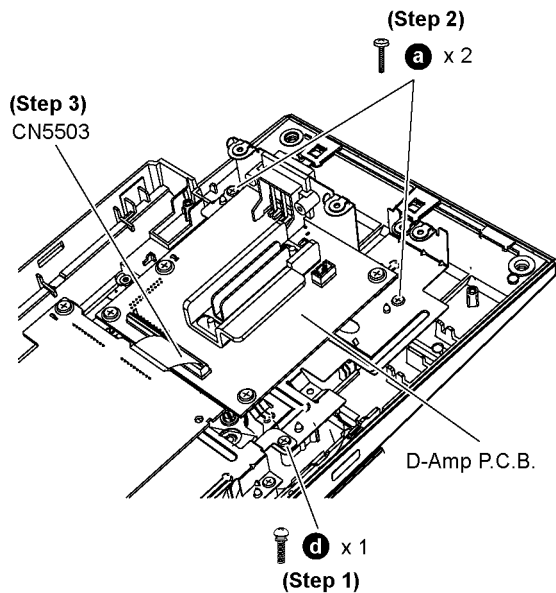
Caution: During assembling, ensure that USB P.C.B. is seated properly onto the USB Chassis.



Caution: During assembling, ensure that SD USB Spring plate is in good condition. Replace it if broken.

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

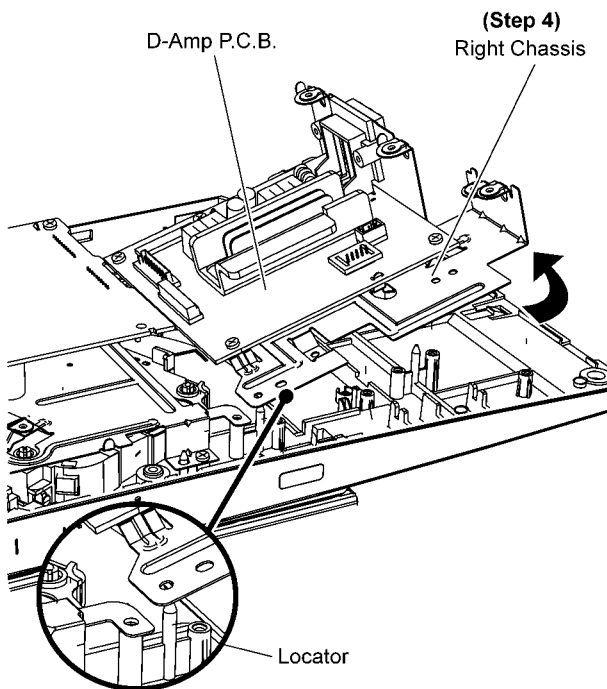
- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.
- Follow the (Step 1) to (Step 6) of Item 10.20.



Step 1 Remove 1 screw.

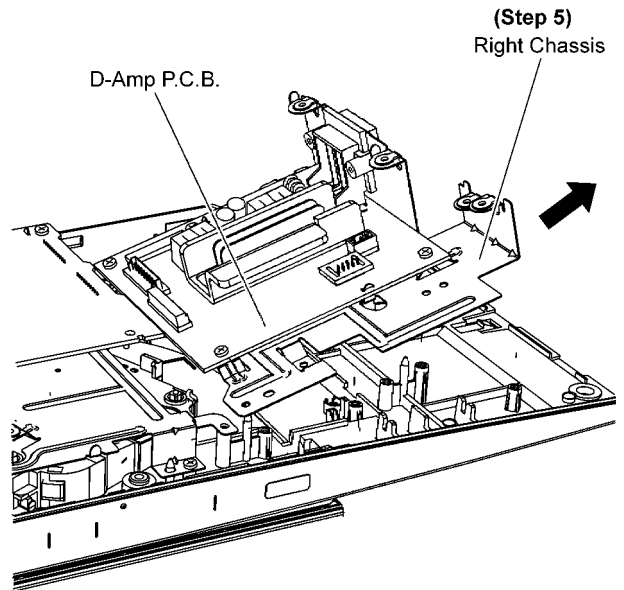
Step 2 Remove 2 screws.

Step 3 Detach 22P FFC at the connector (CN5503) on D-Amp P.C.B..

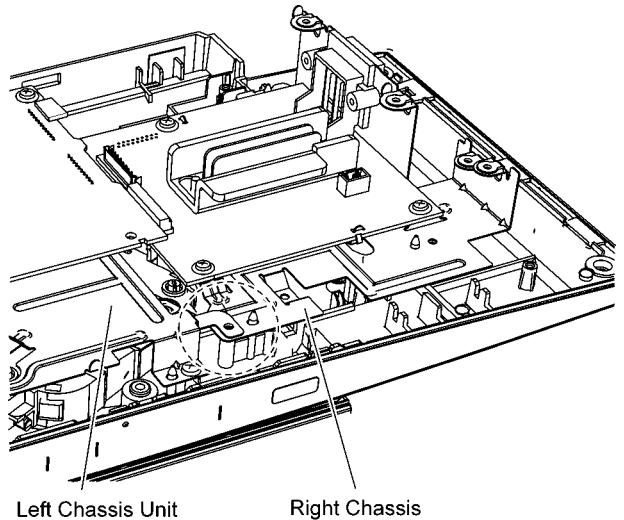


Step 4 Lift up Right Chassis (with D-Amp P.C.B.) about 45° Degree (together with D-Amp P.C.B.).

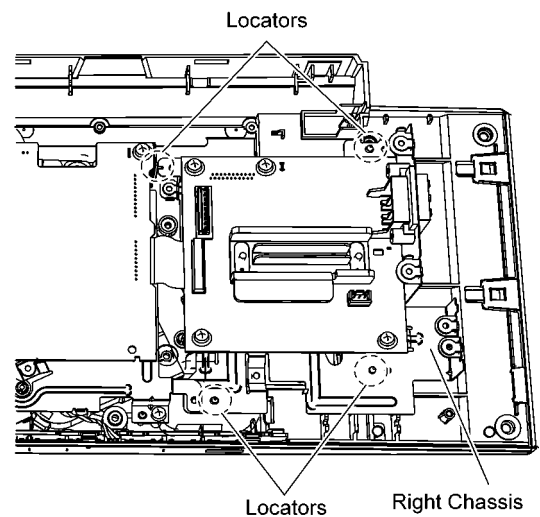
Caution: During lifting up the Right Chassis, ensure that it is released from the locator completely.



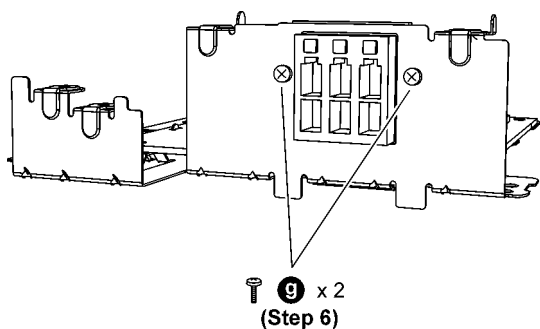
Step 5 Remove the Right Chassis (together with D-Amp P.C.B.).



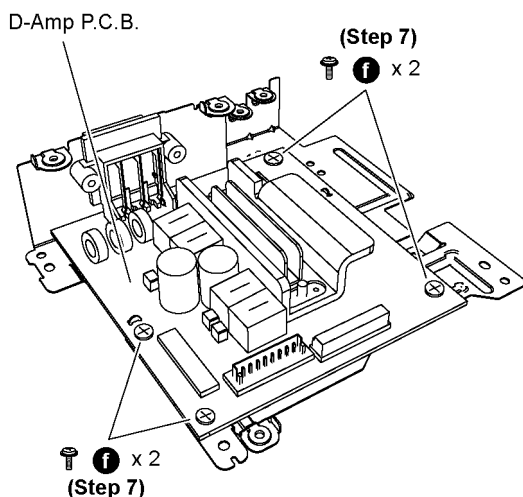
Caution: During assembling, ensure that Right Chassis is seated below the Left Chassis Unit (Circle area).



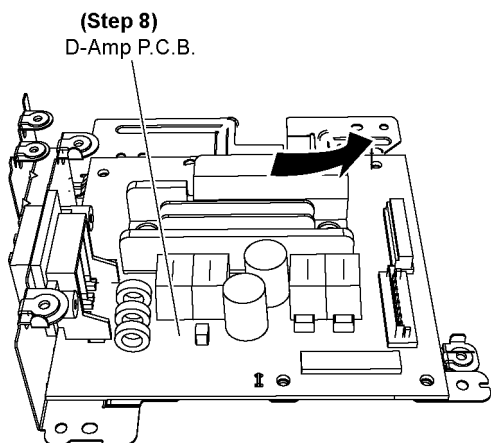
Caution: During assembling, ensure that Right Chassis is seated properly at the locators.



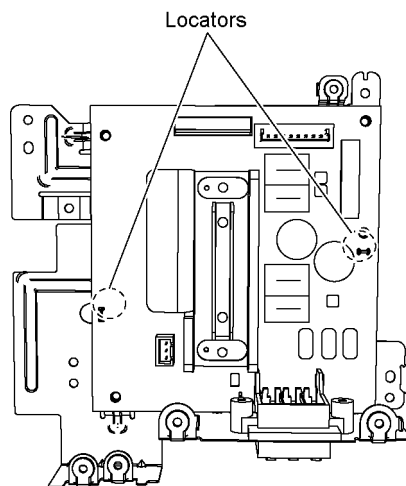
Step 6 Remove 2 screws.



Step 7 Remove 4 screws on D-Amp P.C.B..



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

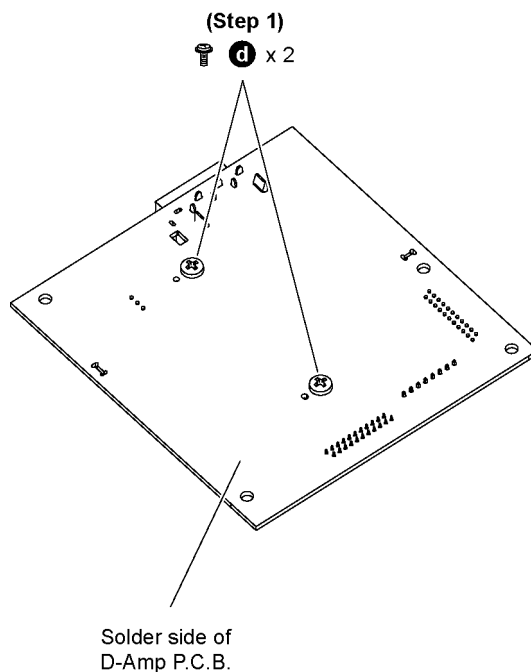


Caution: During assembling, ensure that D-Amp P.C.B. is seated properly at the locators.

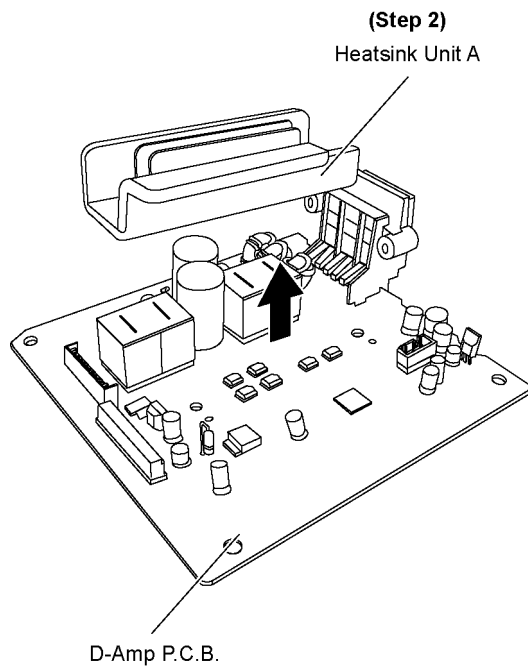
10.23. Replacement of Audio Amplifier Driver IC (IC5001)

- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.
- Follow the (Step 1) to (Step 9) of Item 10.19.
- Follow the (Step 1) to (Step 8) of Item 10.21.

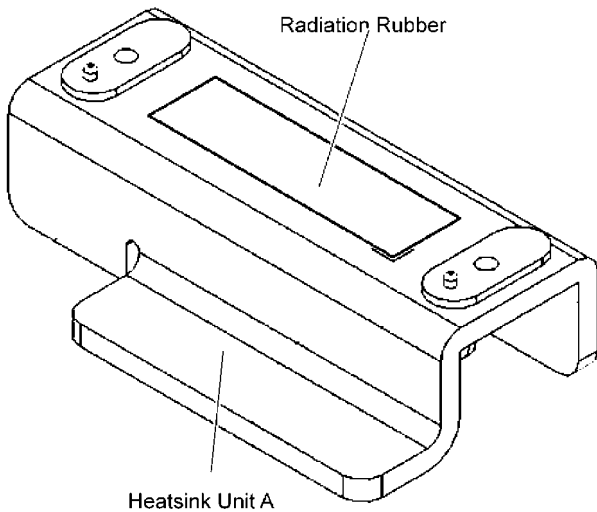
10.23.1. Disassembly of Audio Amplifier Driver IC (IC5001)



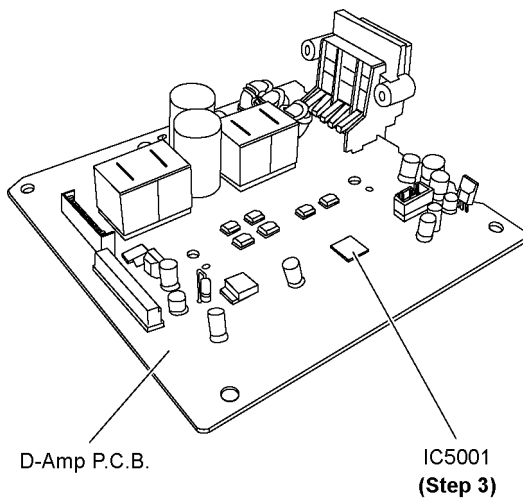
Step 1 Remove 2 screws on solder side of D-Amp P.C.B..



Step 2 Lift up heatsink unit A.



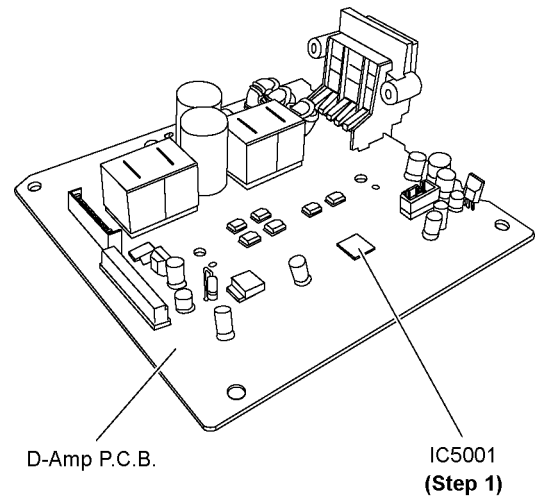
Caution: During assembling, ensure that radiation rubber is in good condition, replace it if broken.



Step 3 Desolder pins of Audio Amplifier Driver IC (IC5001) on D-Amp P.C.B..

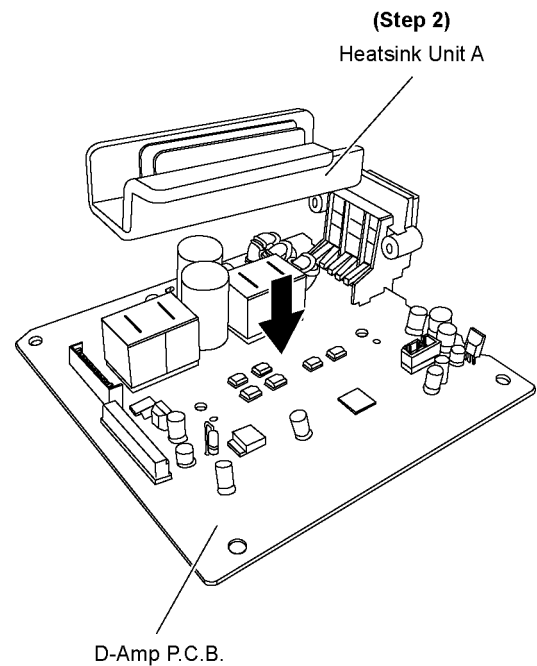
Step 4 Remove Audio Amplifier Driver IC (IC5001).

10.23.2. Assembly of Audio Amplifier Driver IC (IC5001)

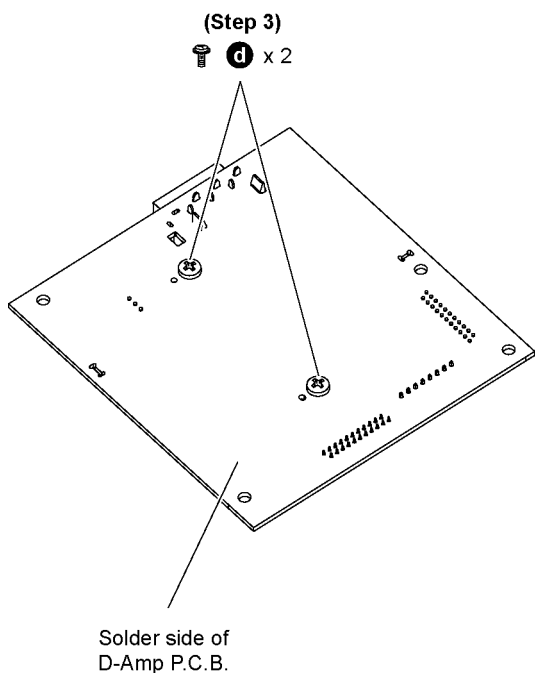


Step 1 Mount the Audio Amplifier Driver IC (IC5001) onto D-Amp P.C.B..

Caution: During assembling, ensure that the pins of Audio Amplifier Driver IC (IC5001) is positioned correctly on D-Amp P.C.B..



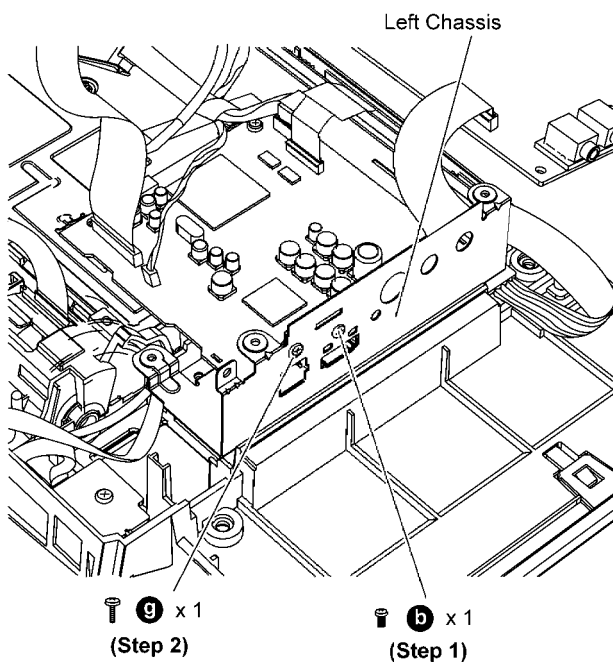
Step 2 Install heatsink unit A onto D-Amp P.C.B..



Step 3 Screw 2 screws on the solder side of D-Amp P.C.B..

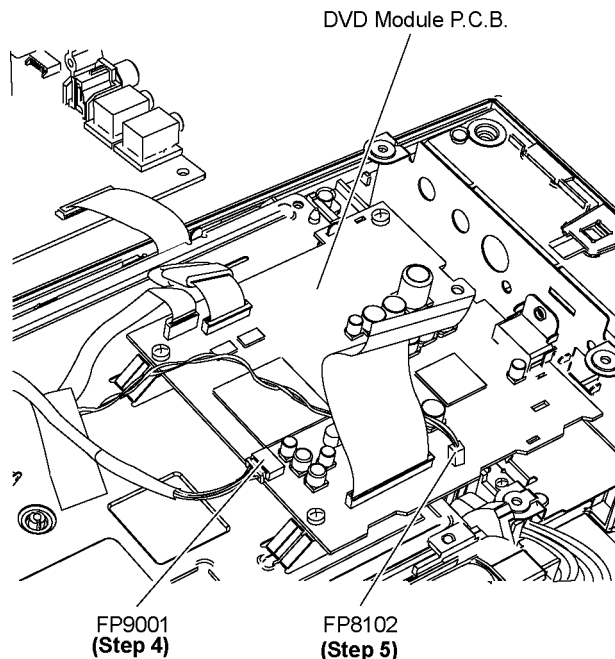
10.24. Disassembly of DVD Module P.C.B.

- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.
- Follow the (Step 1) to (Step 7) of Item 10.10.
- Follow the (Step 1) to (Step 10) of Item 10.20.
- Follow the (Step 1) to (Step 10) of Item 10.18.



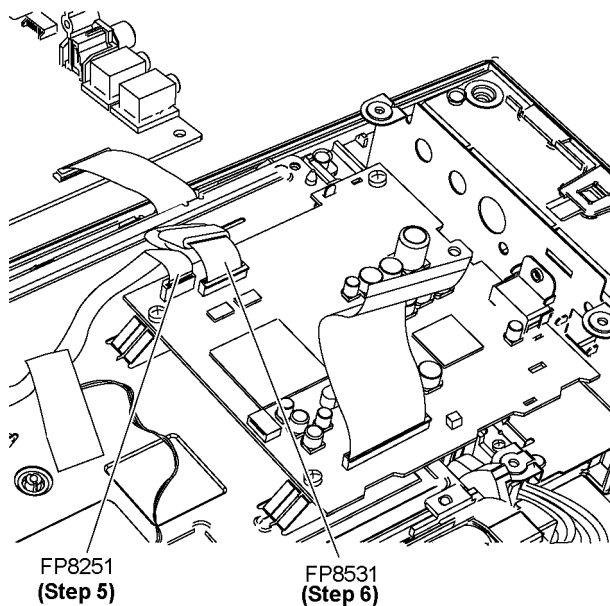
Step 1 Remove 1 screw.

Step 2 Remove 1 screw.



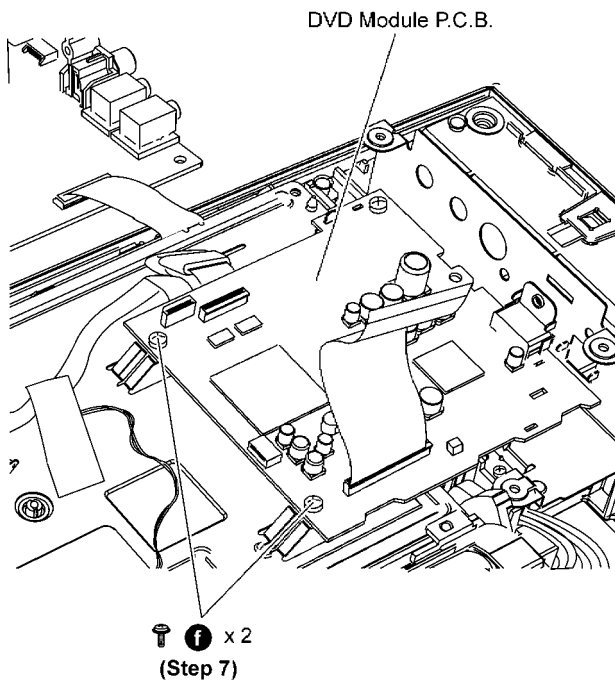
Step 3 Detach 2P wire at the connector (FP8102) on DVD Module P.C.B..

Step 4 Detach 5P wire at the connector (FP9001) on DVD Module P.C.B..

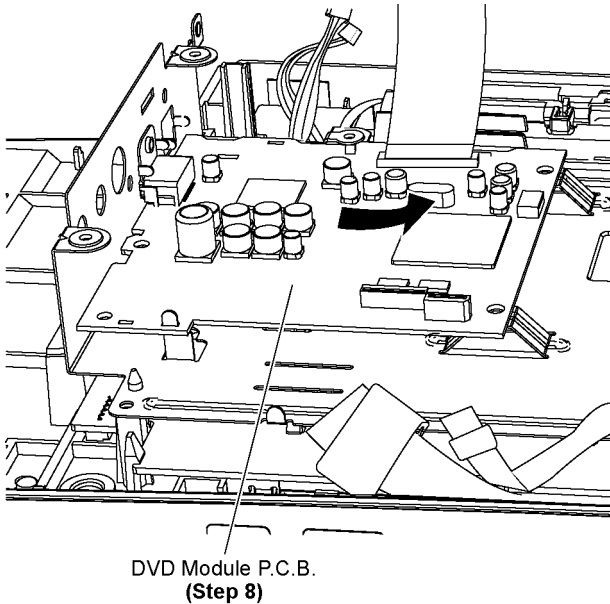


Step 5 Detach 7P wire at the connector (FP8251) on DVD Module P.C.B..

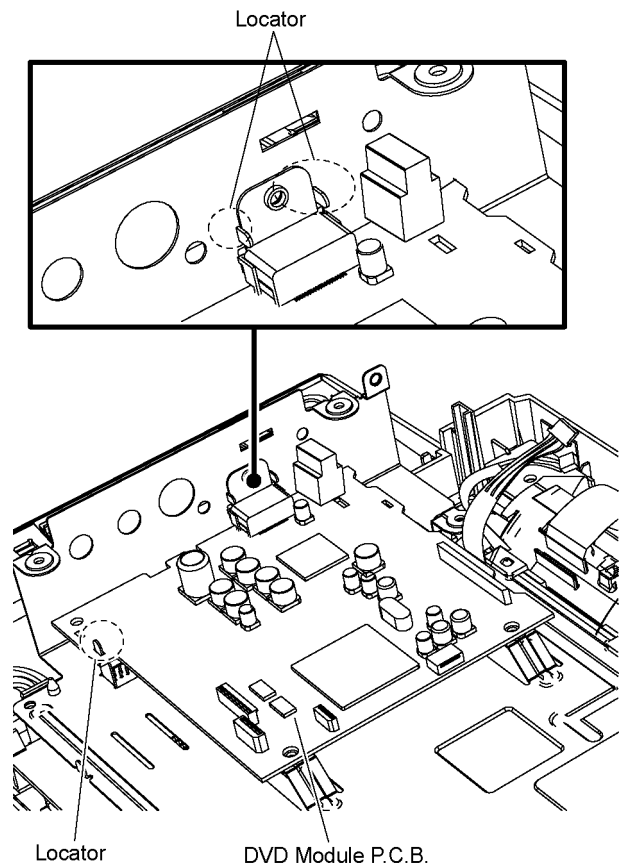
Step 6 Detach 26P wire at the connector (FP8531) on DVD Module P.C.B..



Step 7 Remove 2 screws on DVD Module P.C.B..



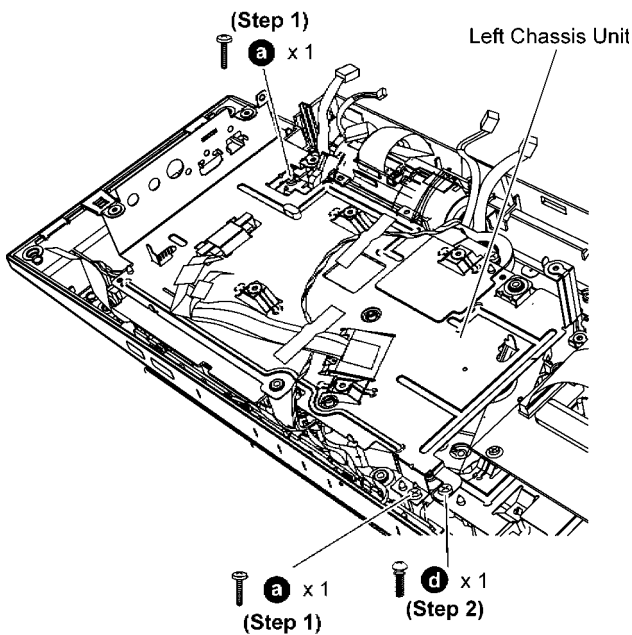
Step 8 Remove DVD Module P.C.B..



Caution: During assembling, ensure that DVD Module P.C.B. is seated properly at the locator.

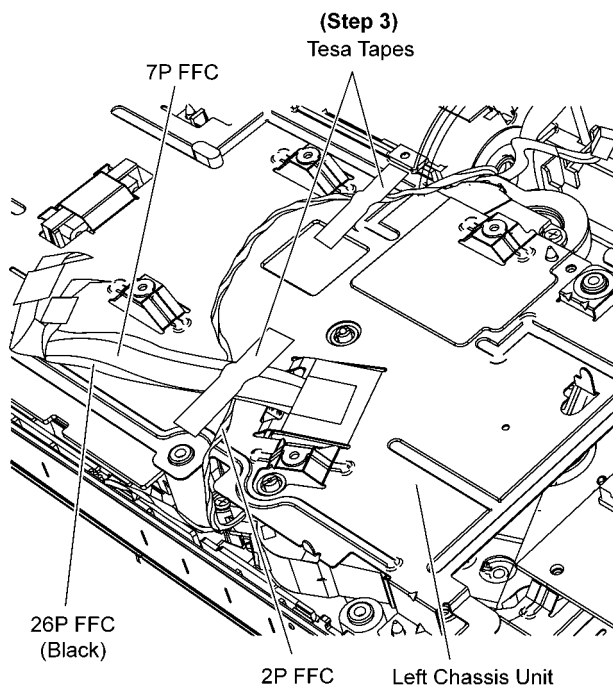
10.25. Disassembly of Left Chassis Unit

- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.
- Follow the (Step 1) to (Step 7) of Item 10.10.
- Follow the (Step 1) to (Step 10) of Item 10.18.
- Follow the (Step 1) to (Step 10) of Item 10.20.
- Follow the (Step 1) to (Step 8) of Item 10.24.



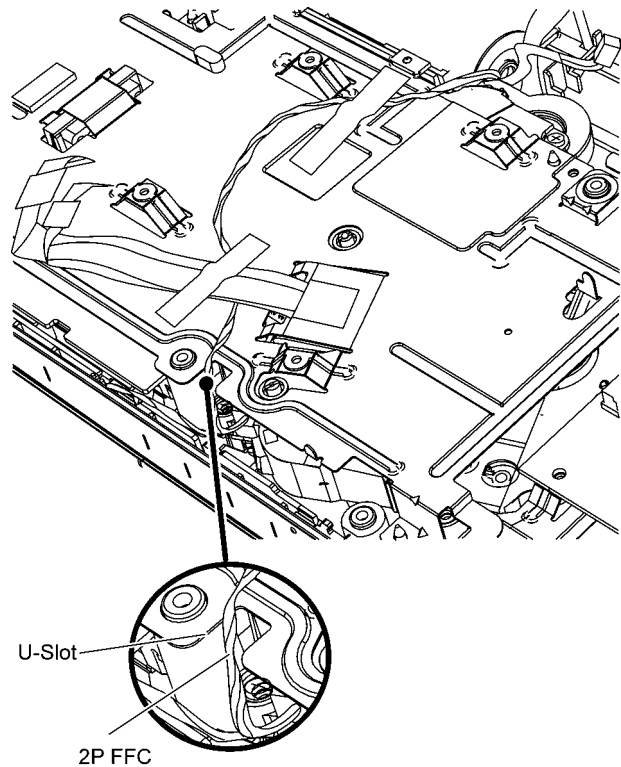
Step 1 Remove 2 screws.

Step 2 Remove 1 screw.

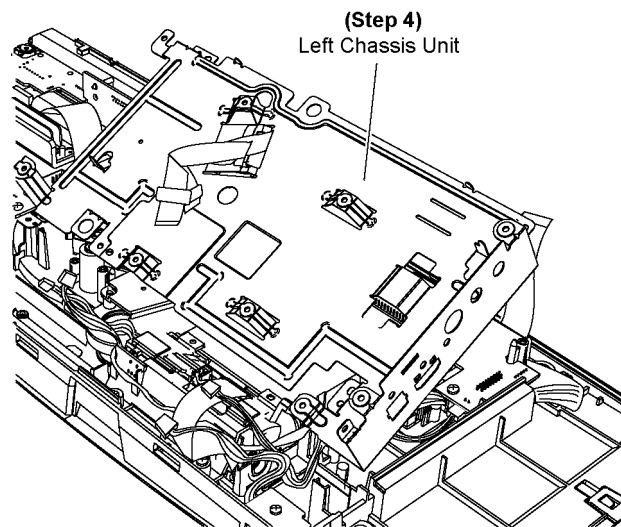


Step 3 Lift up the tesa tapes to release 7P FFC, 26P FFC (Black) and 2P wire.

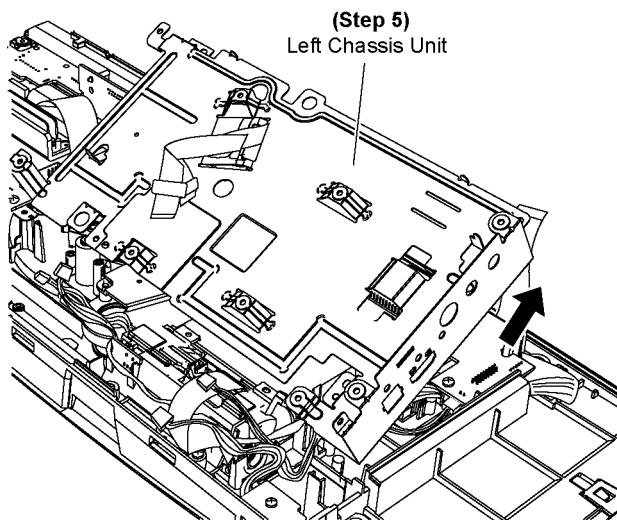
Caution: During assembling, replace with new tesa tapes if it is torn.



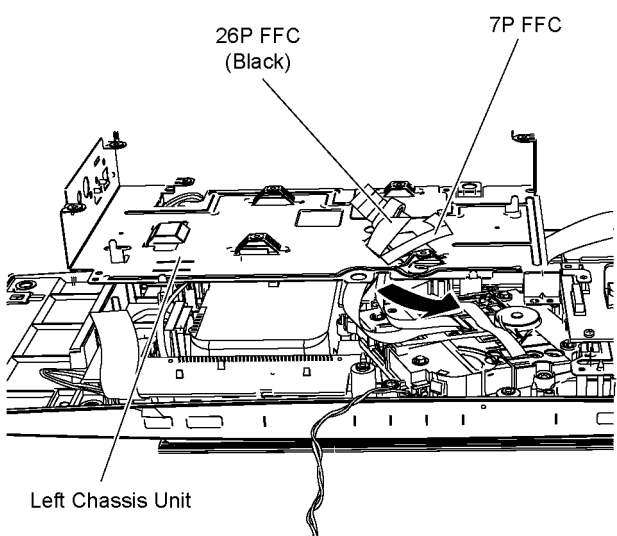
Caution: During assembling, ensure that 2P wire is dressed into the U-Slot properly.



Step 4 Lift up Left Chassis Unit and align it about 45° degree as diagram shown.



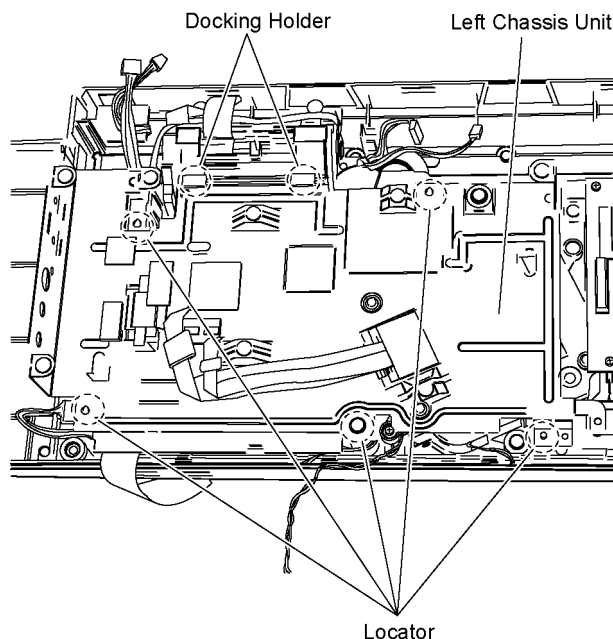
Step 5 Gently remove Left Chassis Unit as arrow shown.



Step 6 Release 7P FFC and 26P FFC (Black) from Left Chassis Unit carefully as arrow shown.

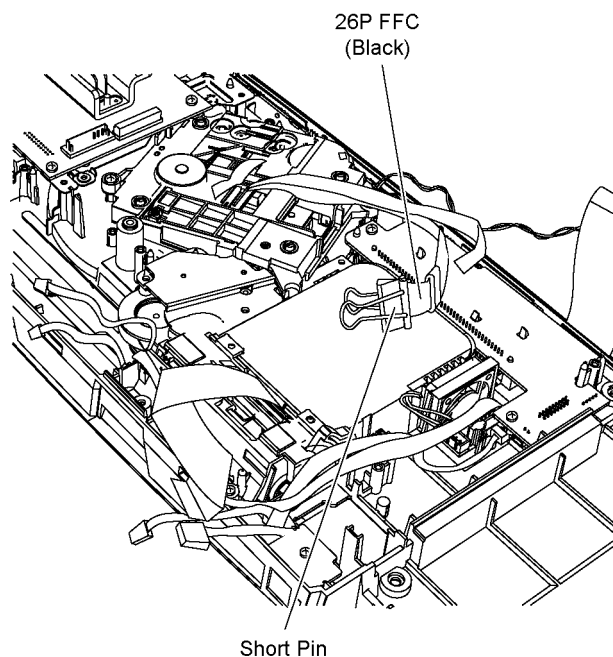
Step 7 Remove Left Chassis Unit.

Caution: During disassembling/assembling, do not cause any damages to the 7P FFC and 26P FFC.



Caution: During assembly, ensure that Left Chassis Unit is seated properly at the locator.

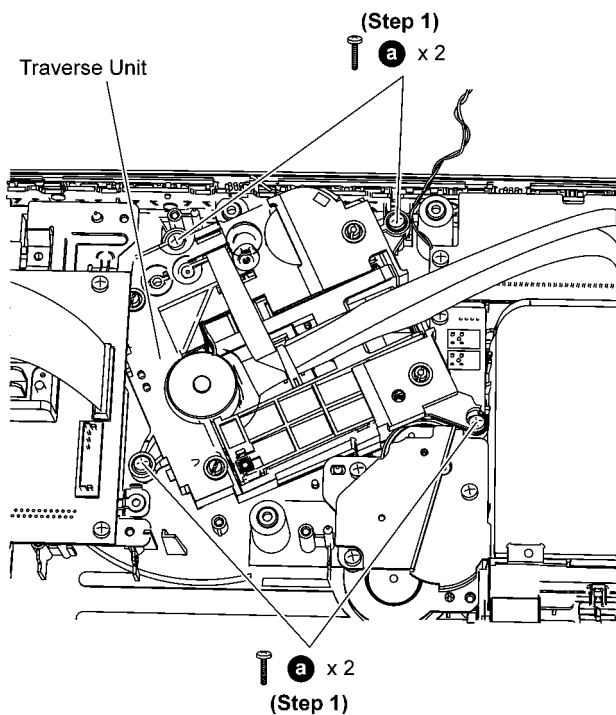
Caution: During assembly, ensure that Left Chassis Unit is inserted under the Docking Holder properly.



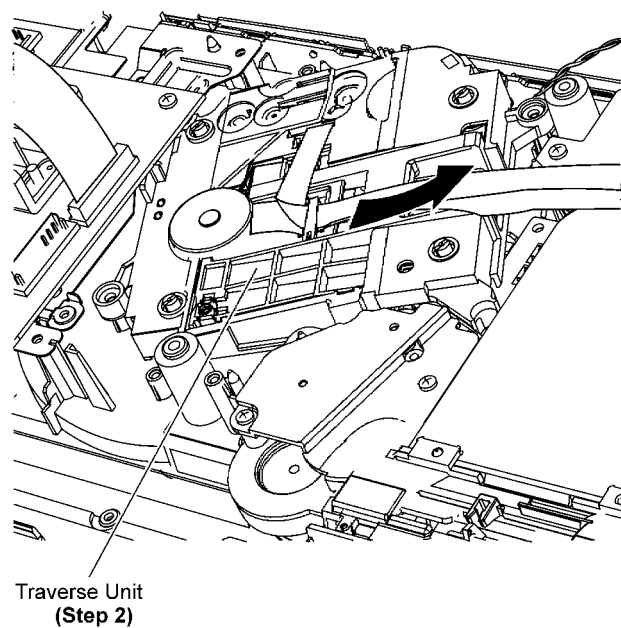
Caution: Use a short pin to clip at the 26P FFC after removing the Left Chassis Unit.

10.26. Disassembly of Traverse Unit

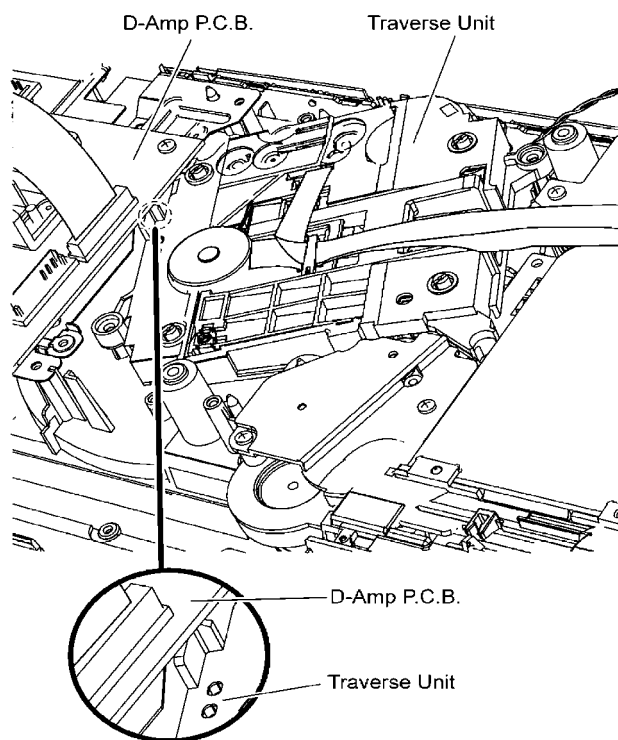
- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.
- Follow the (Step 1) to (Step 7) of Item 10.10.
- Follow the (Step 1) to (Step 10) of Item 10.18.
- Follow the (Step 1) to (Step 10) of Item 10.20.
- Follow the (Step 1) to (Step 8) of Item 10.24.
- Follow the (Step 1) to (Step 7) of Item 10.25.



Step 1 Remove 4 screw at Traverse Unit.



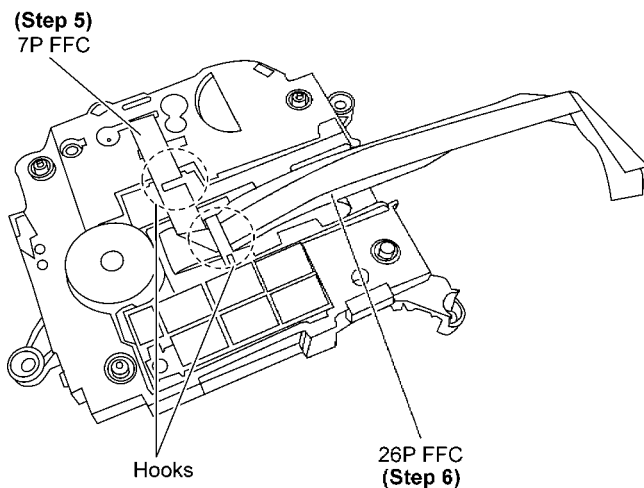
Step 2 Lift up to remove Traverse Unit.



Caution: During disassembling/assembling, remove Traverse Unit carefully; Avoid causing damages to the D-Amp P.C.B. (Circle Area).

Step 3 Upside down the Traverse Unit.

Step 4 Depress to remove 4 fix pins.

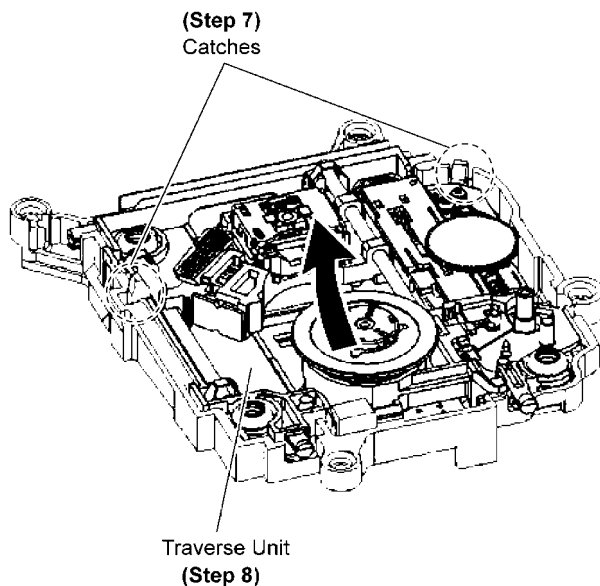


Step 5 Release 7P FFC from the hook.

Caution: During assembling, ensure that 7P FFC is dressed into the hook properly.

Step 6 Release 26P FFC from the hook.

Caution: During assembling, ensure that 26P FFC is dressed into the hook properly.



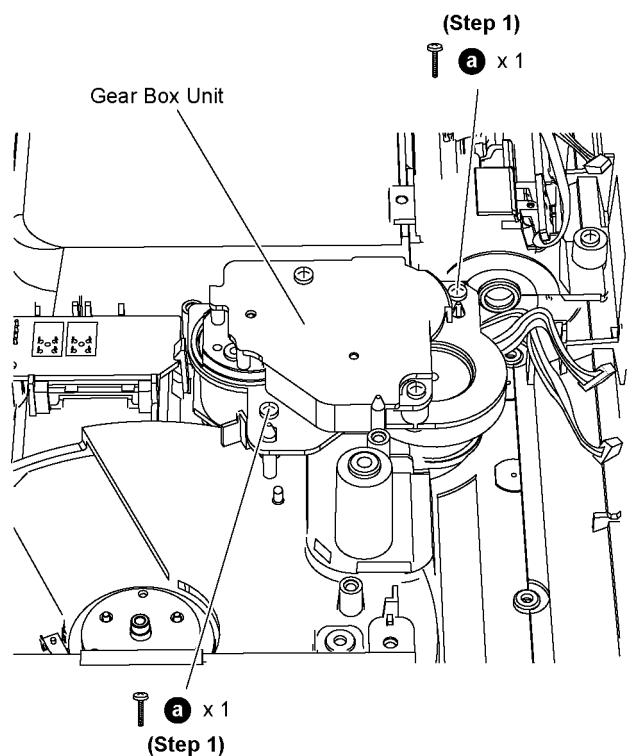
Step 7 Release 2 catches.

Caution: During assembling, ensure that Traverse Unit is fully caught.

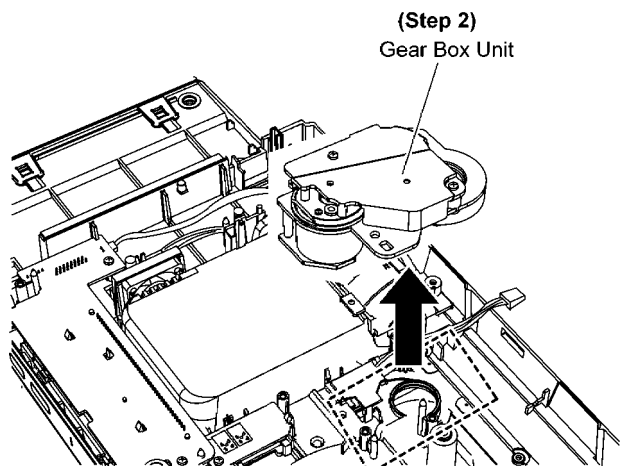
Step 8 Remove Traverse Unit.

10.27. Disassembly of Motor P.C.B.

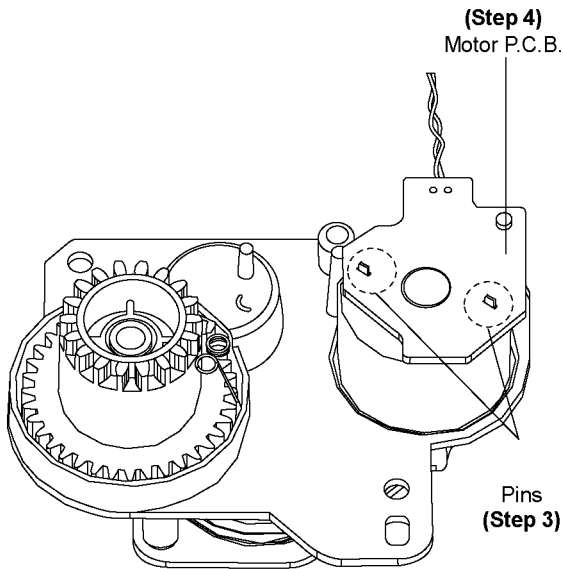
- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.
- Follow the (Step 1) to (Step 7) of Item 10.10.
- Follow the (Step 1) to (Step 8) of Item 10.18.
- Follow the (Step 1) to (Step 12) of Item 10.19.
- Follow the (Step 1) to (Step 17) of Item 10.24.
- Follow the (Step 1) to (Step 3) of Item 10.25.



Step 1 Remove 2 screws at Gear Box Unit.

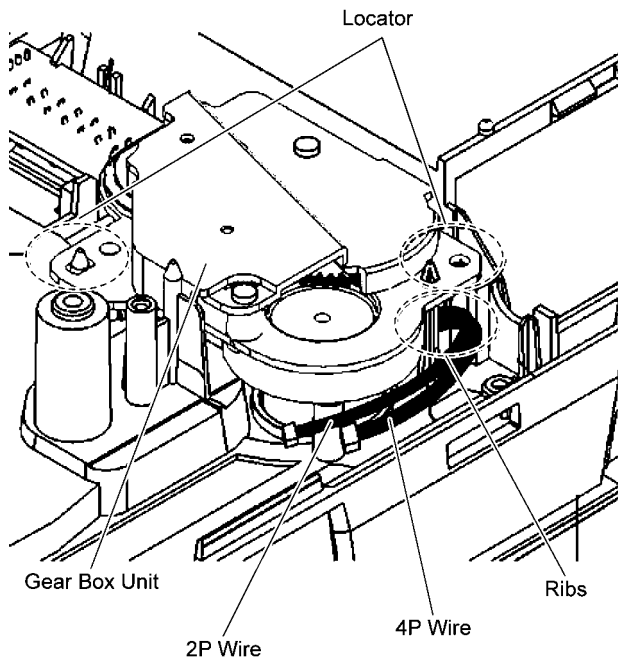


Step 2 Remove Gear Box Unit.



Step 3 Desolder pins of Motor P.C.B..

Step 4 Remove Motor P.C.B..



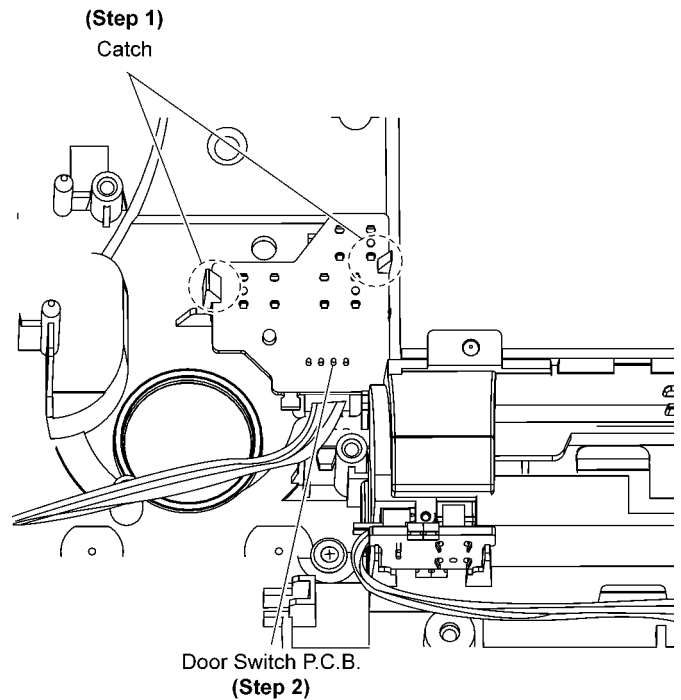
Caution: During assembling, ensure that Gear Box Unit is seated properly at the locator.

Caution: During assembling, ensure that 4P and 2P wires are dressed between ribs of front cabinet.

10.28. Disassembly of Door Switch P.C.B.

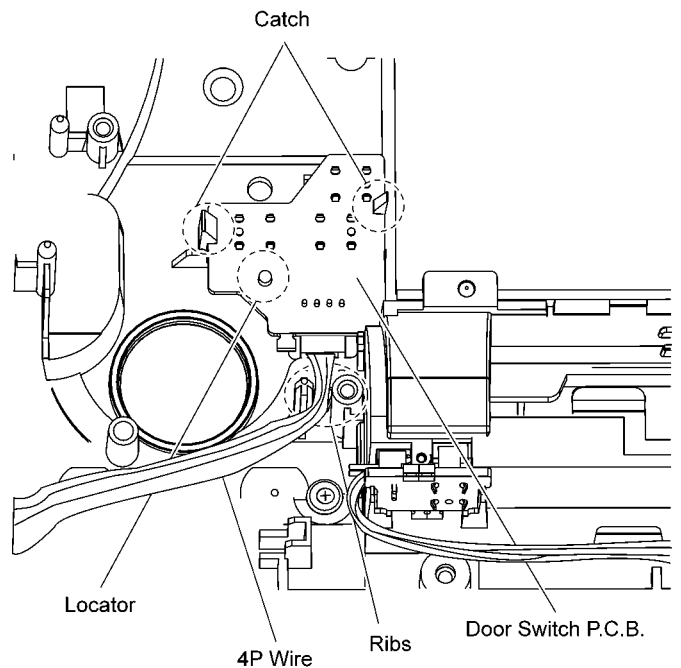
- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.
- Follow the (Step 1) to (Step 7) of Item 10.10.
- Follow the (Step 1) to (Step 10) of Item 10.18.
- Follow the (Step 1) to (Step 10) of Item 10.20.
- Follow the (Step 1) to (Step 8) of Item 10.24.
- Follow the (Step 1) to (Step 7) of Item 10.25.

- Follow the (Step 1) to (Step 2) of Item 10.26.



Step 1 Release 2 catches on Door Switch P.C.B..

Step 2 Remove Door Switch P.C.B..

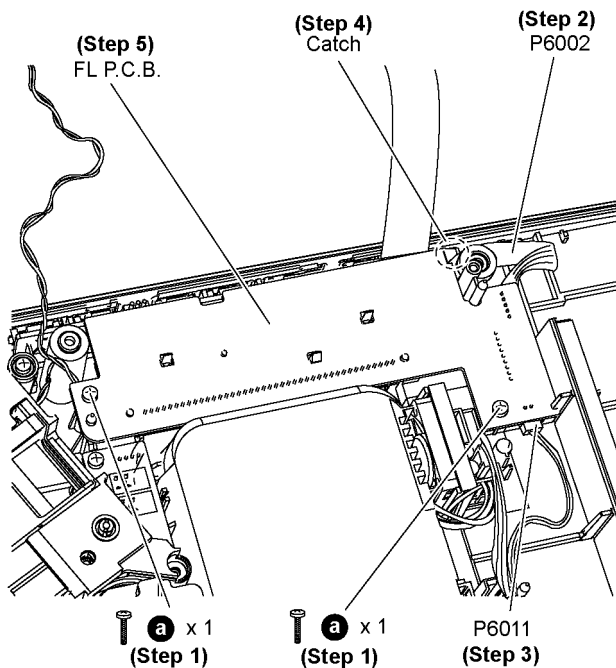


Caution: During assembling, ensure that Door Switch P.C.B. is fully caught and 4 wire is dressed between the ribs as diagram shown.

10.29. Disassembly of FL P.C.B.

- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.
- Follow the (Step 1) to (Step 7) of Item 10.10.
- Follow the (Step 1) to (Step 10) of Item 10.18.
- Follow the (Step 1) to (Step 10) of Item 10.20.
- Follow the (Step 1) to (Step 8) of Item 10.24.

- Follow the (Step 1) to (Step 7) of Item 10.25.



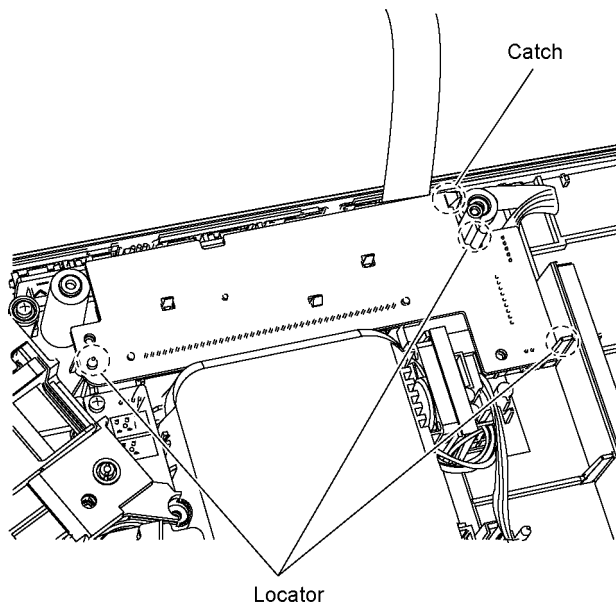
Step 1 Remove 2 screws FL P.C.B..

Step 2 Detach 5P wire at the connector (P6002) on FL P.C.B..

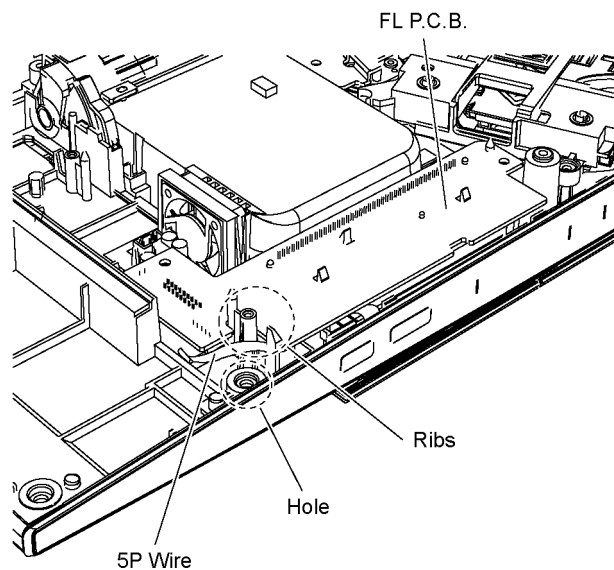
Step 3 Detach 2P wire at the connector (P6011) on FL P.C.B..

Step 4 Release the catch on FL P.C.B..

Step 5 Remove FL P.C.B..



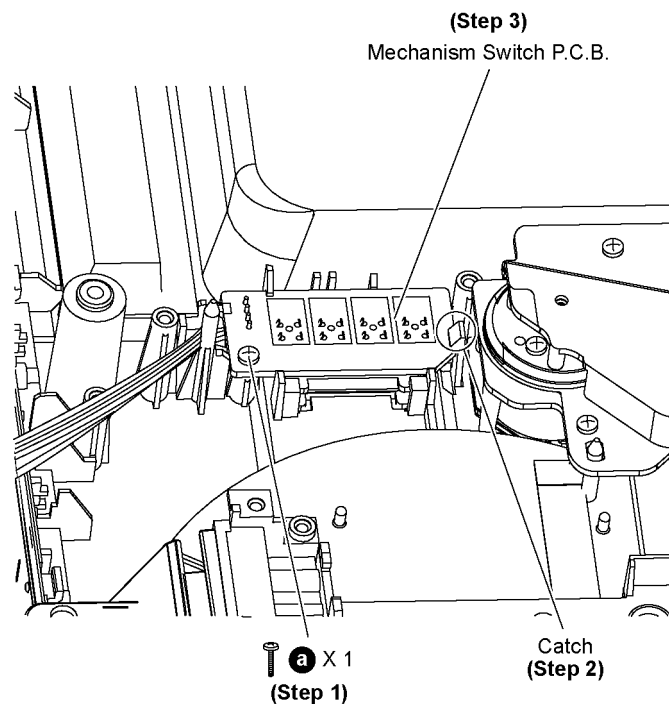
Caution 1: During assembling, ensure that FL P.C.B. is seated properly at the locator & fully caught.



Caution 2: During assembling, ensure that 5P wire is dressed between ribs & avoid covering the hole.

10.30. Disassembly of Mechanism Switch P.C.B.

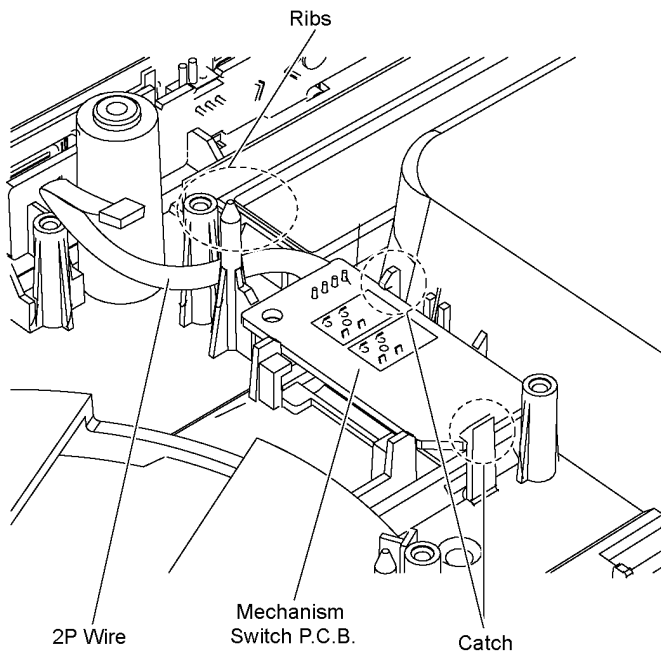
- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.
- Follow the (Step 1) to (Step 7) of Item 10.10.
- Follow the (Step 1) to (Step 10) of Item 10.18.
- Follow the (Step 1) to (Step 10) of Item 10.20.
- Follow the (Step 1) to (Step 8) of Item 10.24.
- Follow the (Step 1) to (Step 7) of Item 10.25.
- Follow the (Step 1) to (Step 2) of Item 10.26.
- Follow the (Step 1) to (Step 5) of Item 10.29.



Step 1 Remove 1 screw on Mechanism Switch P.C.B..

Step 2 Release the catch on the Mechanism Switch P.C.B..

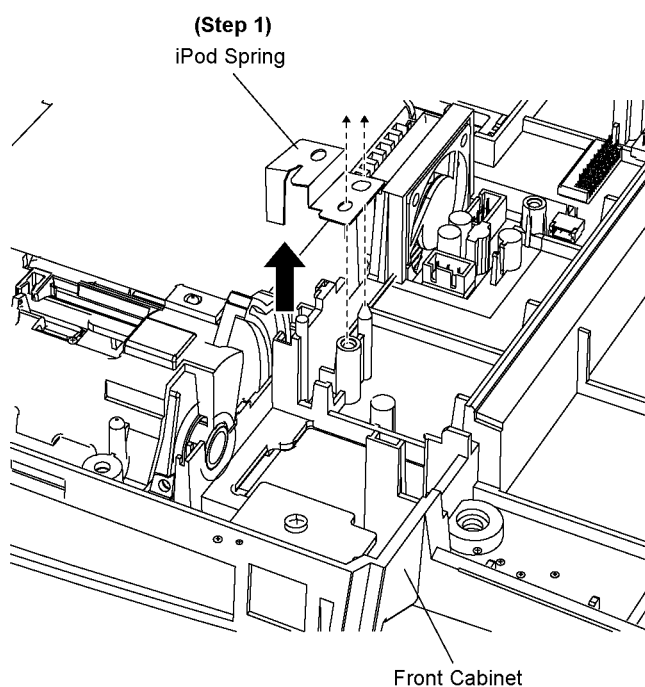
Step 3 Remove Mechanism Switch P.C.B..



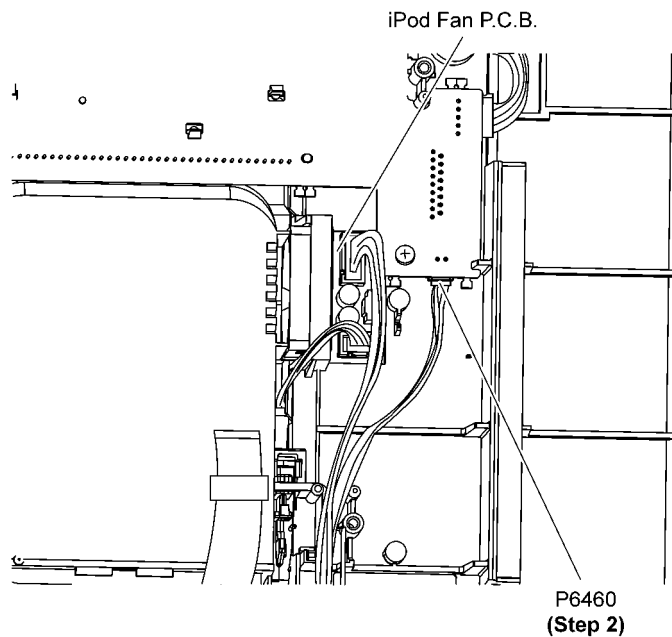
Caution: During assembling, ensure that Mechanism Switch P.C.B. is fully caught and 2P wire is well dressed between 2 ribs.

10.31. Disassembly of iPod Fan P.C.B.

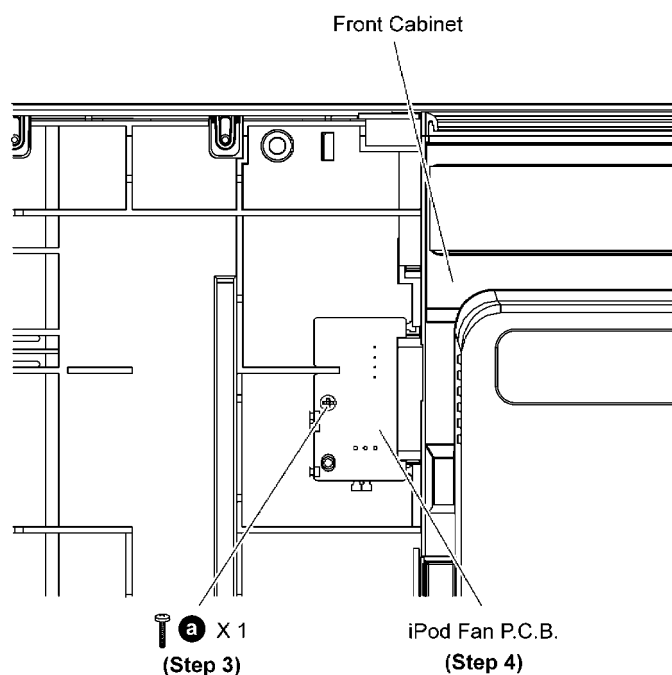
- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.
- Follow the (Step 1) to (Step 7) of Item 10.10.
- Follow the (Step 1) to (Step 10) of Item 10.18.
- Follow the (Step 1) to (Step 10) of Item 10.20.
- Follow the (Step 1) to (Step 8) of Item 10.24.
- Follow the (Step 1) to (Step 7) of Item 10.25.



Step 1 Remove iPod Spring.

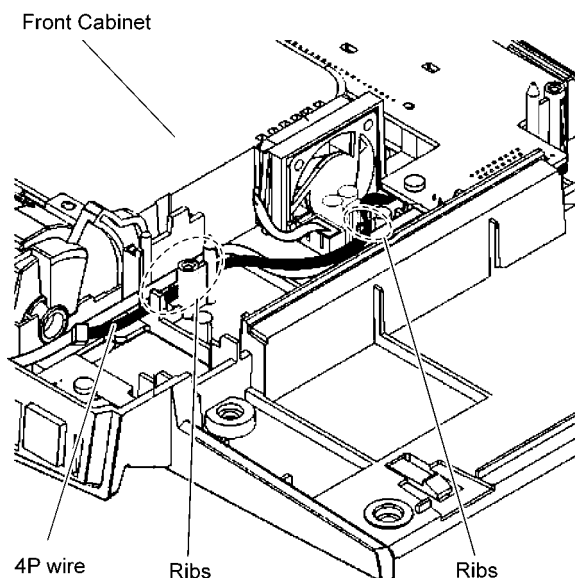


Step 2 Detach 3P wire at the connector (P6460) on iPod Fan P.C.B..



Step 3 Remove 1 screw on iPod Fan P.C.B..

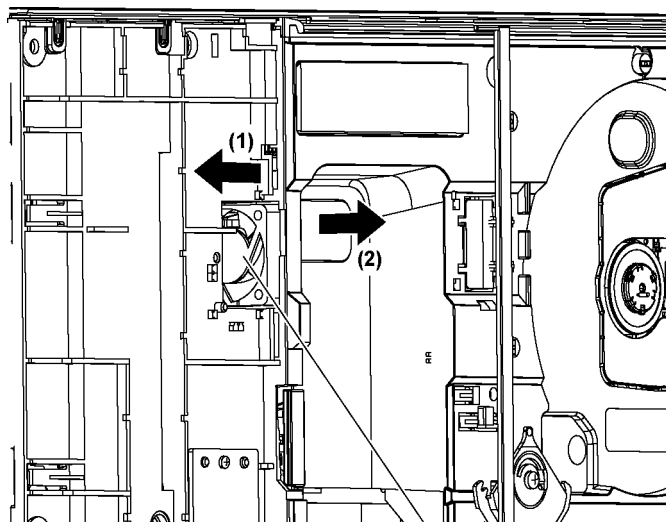
Step 4 Remove iPod Fan P.C.B..



Caution: During assembling, ensure that 4P wire is dressed between ribs of front cabinet.

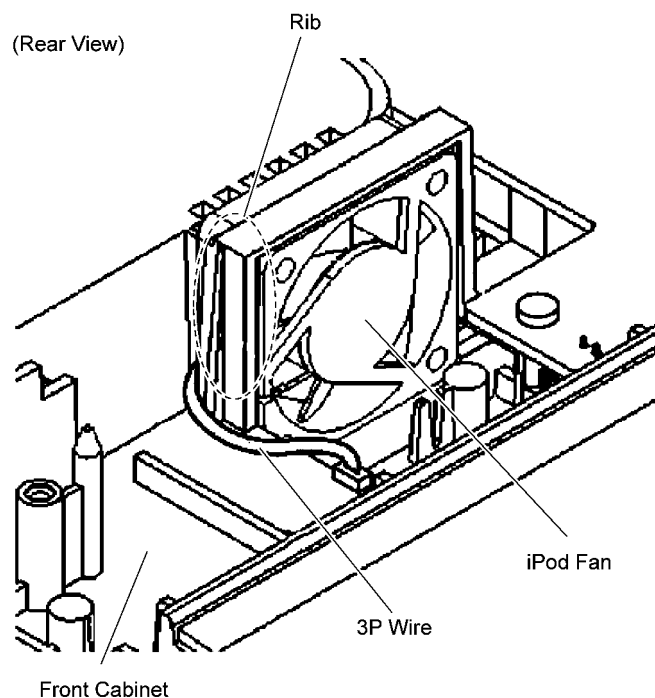
10.32. Disassembly of iPod Fan

- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.
- Follow the (Step 1) to (Step 7) of Item 10.10.
- Follow the (Step 1) to (Step 10) of Item 10.18.
- Follow the (Step 1) to (Step 10) of Item 10.20.
- Follow the (Step 1) to (Step 8) of Item 10.24.
- Follow the (Step 1) to (Step 7) of Item 10.25.
- Follow the (Step 1) to (Step 3) of Item 10.31.



iPod Fan
(Step 1)

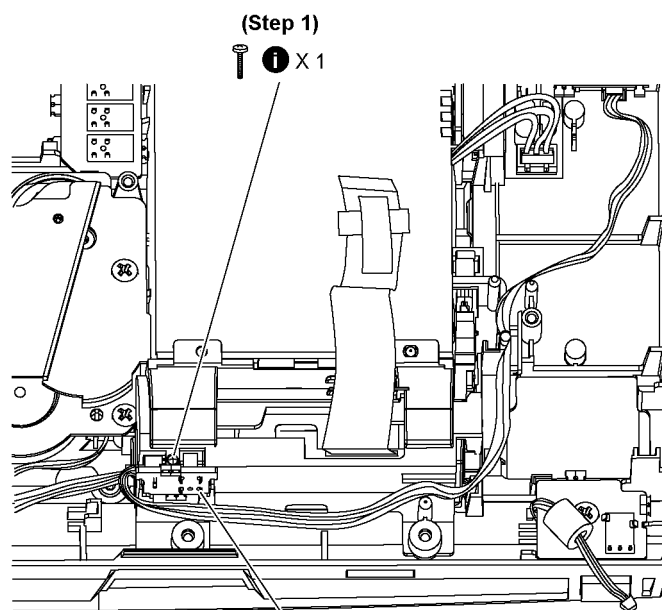
Step 1 Remove iPod Fan in the direction of arrow (1) and (2) shown.



Caution: During assembling, ensure that 3P wire of iPod fan is dressed behind ribs of front cabinet.

10.33. Disassembly of iPod Switch P.C.B.

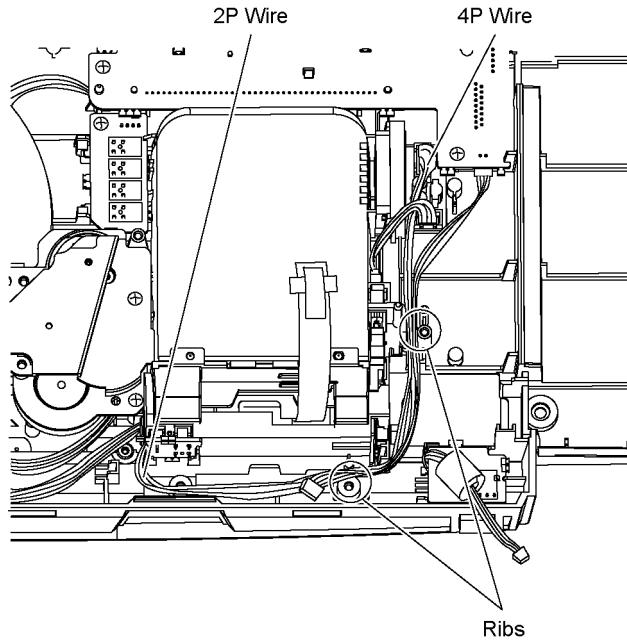
- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.
- Follow the (Step 1) to (Step 7) of Item 10.10.
- Follow the (Step 1) to (Step 10) of Item 10.18.
- Follow the (Step 1) to (Step 10) of Item 10.20.
- Follow the (Step 1) to (Step 8) of Item 10.24.
- Follow the (Step 1) to (Step 7) of Item 10.25.
- Follow the (Step 3) of item 10.29.



iPod Switch P.C.B.
(Step 2)

Step 1 Remove 1 screw on iPod Switch P.C.B..

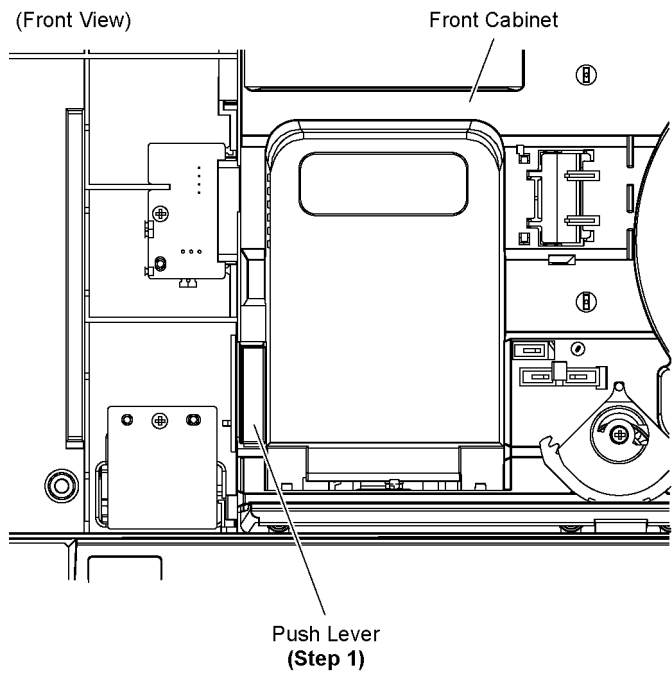
Step 2 Remove iPod Switch P.C.B..



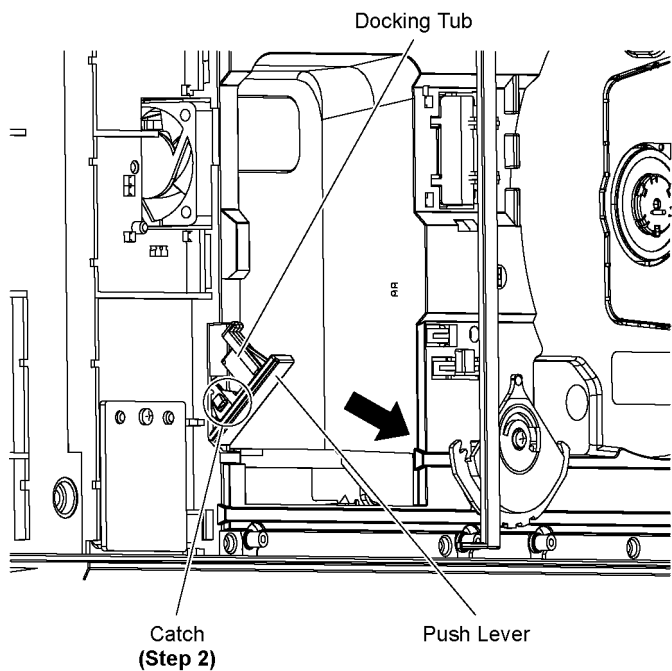
Caution: During assembling, ensure that 2P wire are dressed between the ribs of front cabinet.

10.34. Disassembly of iPod Docking Tub Assembly

- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.
- Follow the (Step 1) to (Step 7) of Item 10.10.
- Follow the (Step 1) to (Step 10) of Item 10.18.
- Follow the (Step 1) to (Step 10) of Item 10.20.
- Follow the (Step 1) to (Step 8) of Item 10.24.
- Follow the (Step 1) to (Step 7) of Item 10.25.
- Follow the (Step 3) of item 10.29.

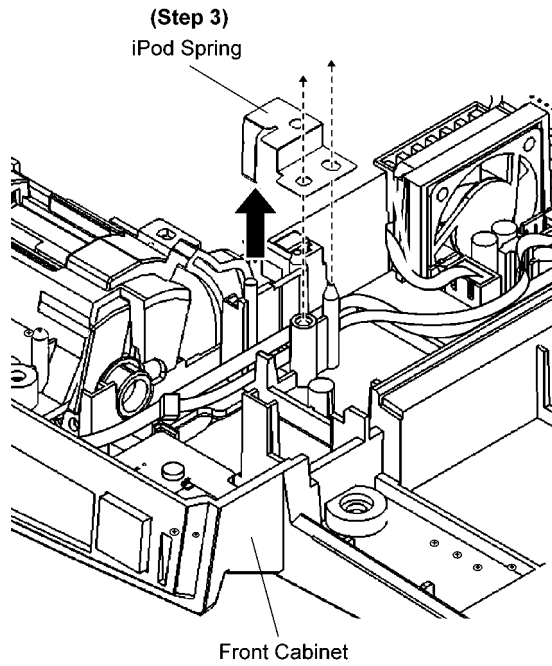


Step 1 Press the push lever to release it.

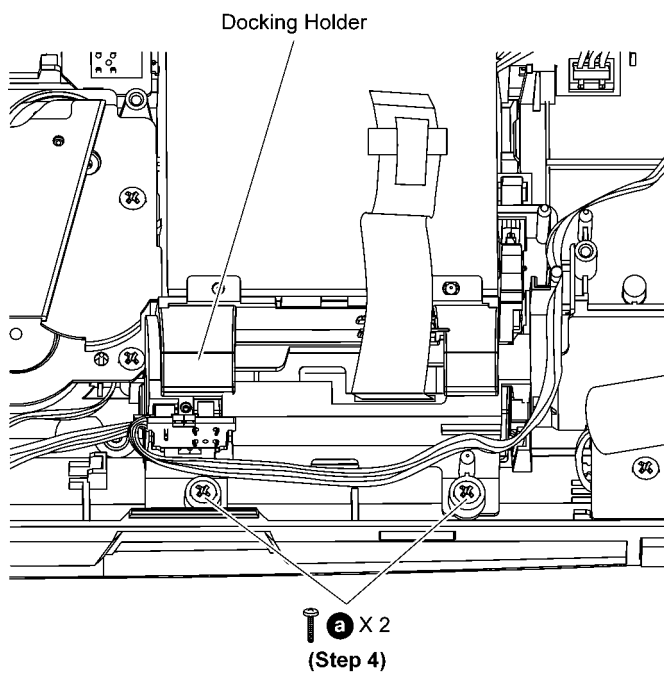


Step 2 Release catch to remove push lever.

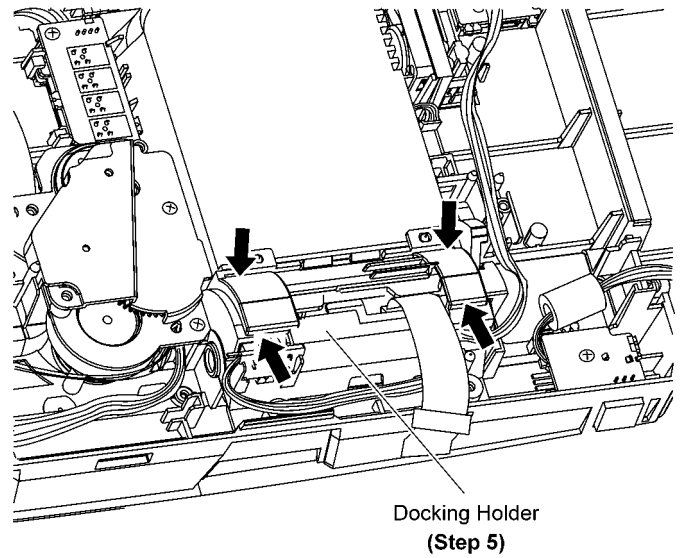
Caution: Apply gentle force during disassembling.



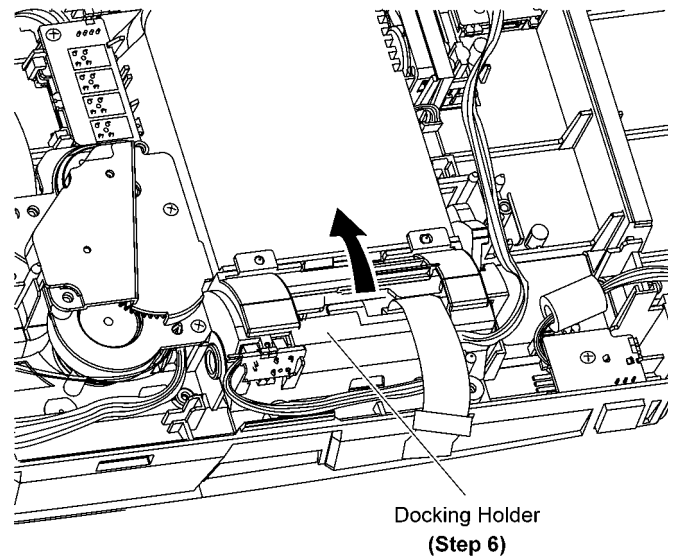
Step 3 Remove iPod Spring.
Caution: Keep the iPod Spring in safe place, avoid denting it. Place it back during assembling.



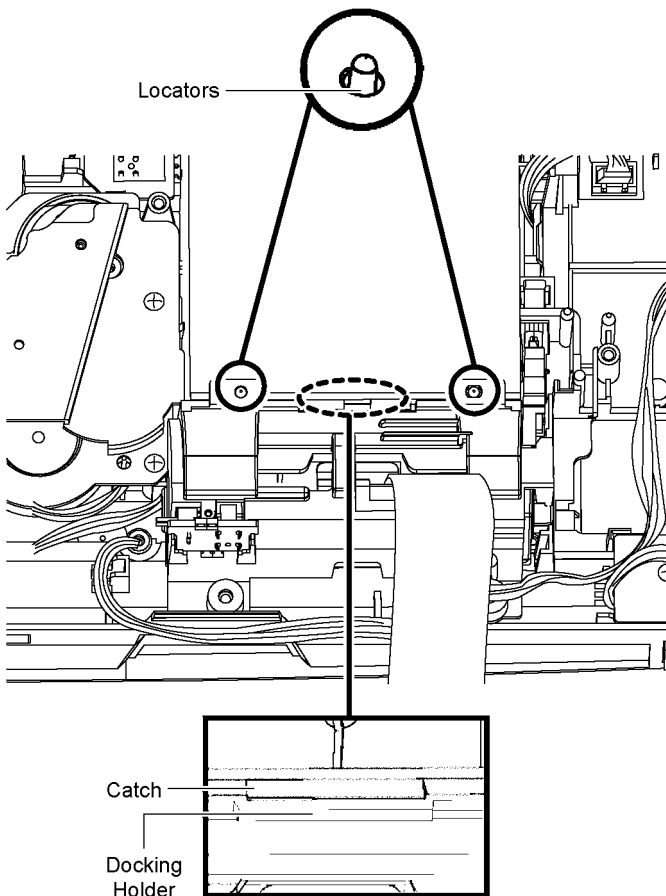
Step 4 Remove 2 screws.



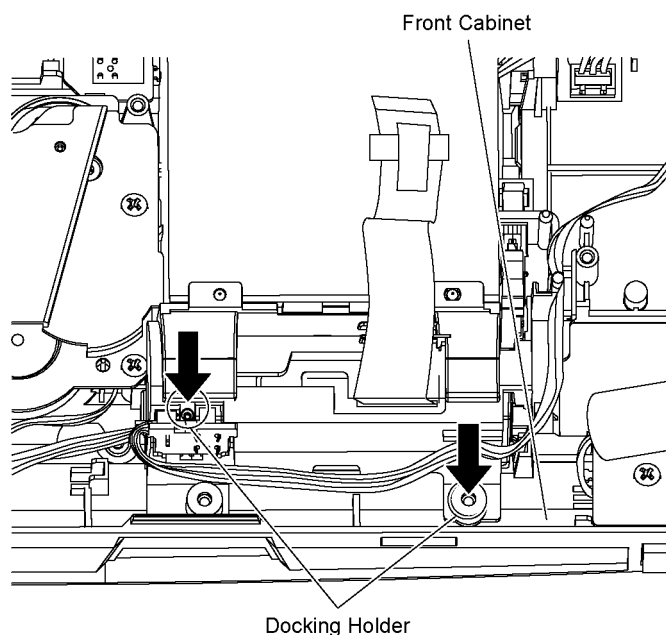
Step 5 Press and hold the docking holder with gentle force as arrow shown.



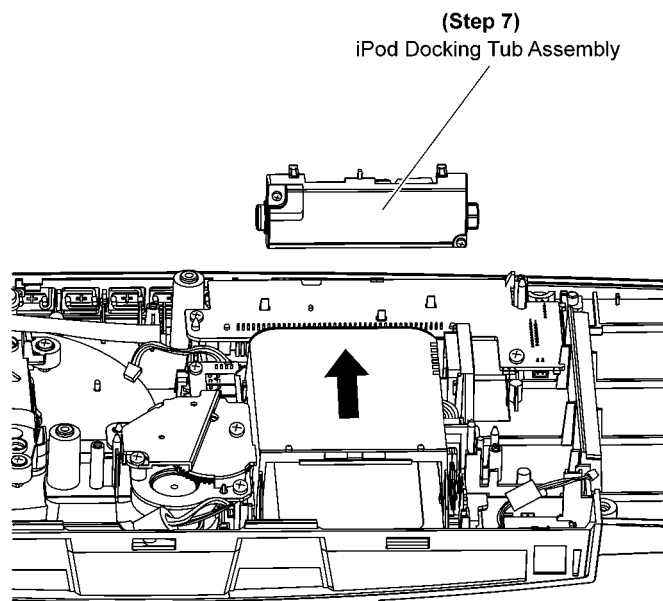
Step 6 Remove the docking holder.



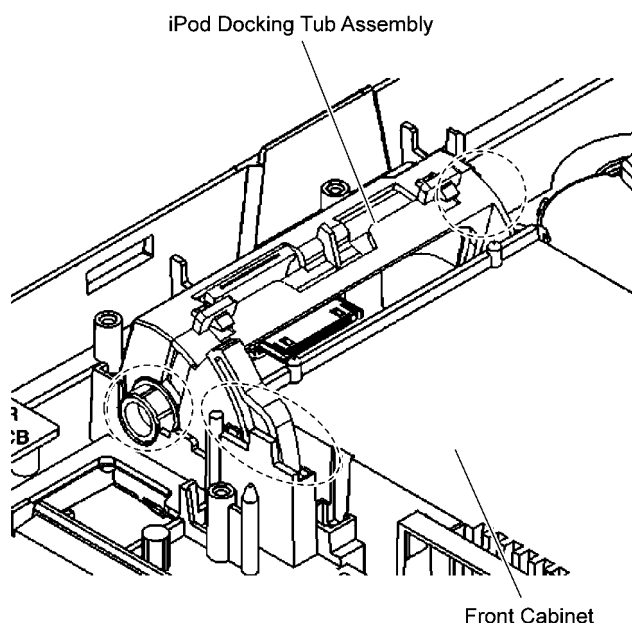
Caution 1: During assembling of the docking holder, place the docking holder underneath the catch and use the 2 locators as guide to ensure that the docking holder is properly located.



Caution 2: Ensure that the docking holder is seated properly on front cabinet.



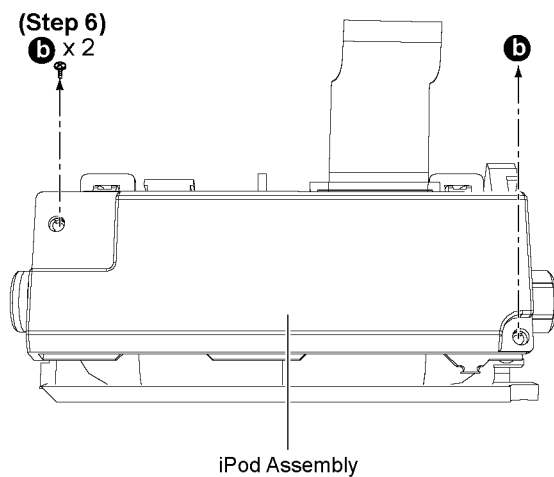
Step 7 Remove iPod Docking Tub Assembly.



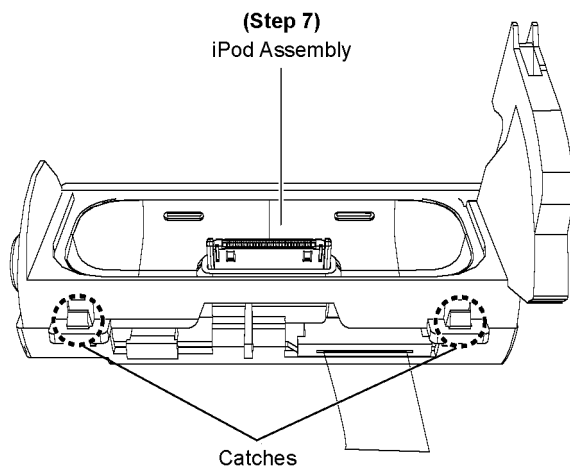
Caution: During assembling, ensure that iPod Docking Tube Assembly is seated onto front cabinet properly.

10.35. Disassembly of iPod P.C.B.

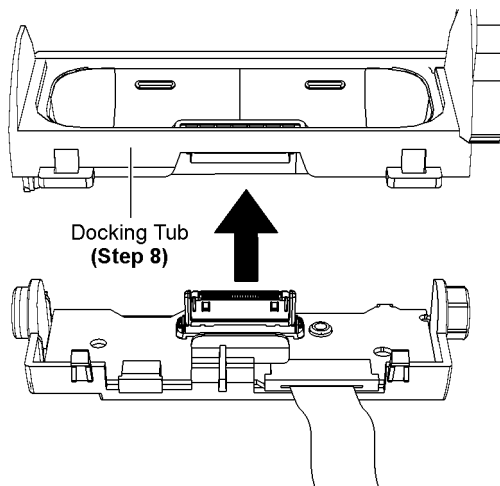
- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1.
- Follow the (Step 1) to (Step 3) of Item 10.8.1.
- Follow the (Step 1) to (Step 4) of Item 10.9.
- Follow the (Step 1) to (Step 7) of Item 10.10.
- Follow the (Step 1) to (Step 10) of Item 10.18.
- Follow the (Step 1) to (Step 10) of Item 10.20.
- Follow the (Step 1) to (Step 8) of Item 10.24.
- Follow the (Step 1) to (Step 7) of Item 10.25.
- Follow the (Step 3) of Item 10.29.
- Follow the (Step 1) to (Step 7) of Item 10.34.



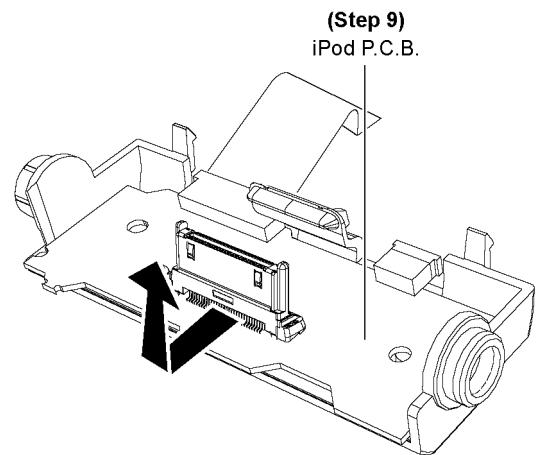
Step 1 Remove 2 screws.



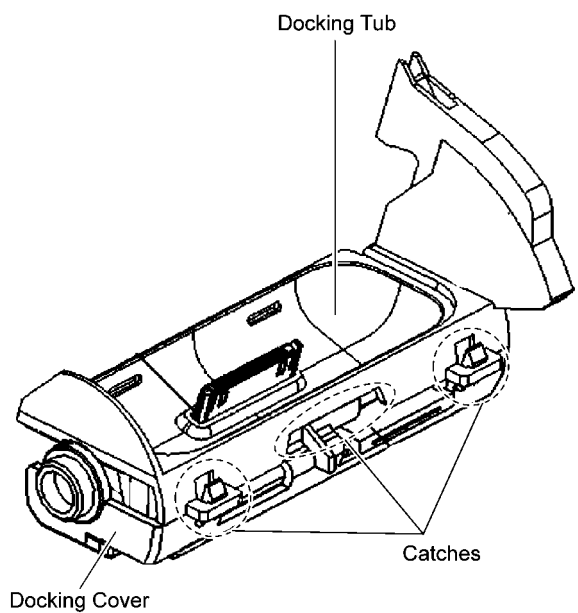
Step 2 Release the 2 catches on iPod Assembly.



Step 3 Remove the docking tub.



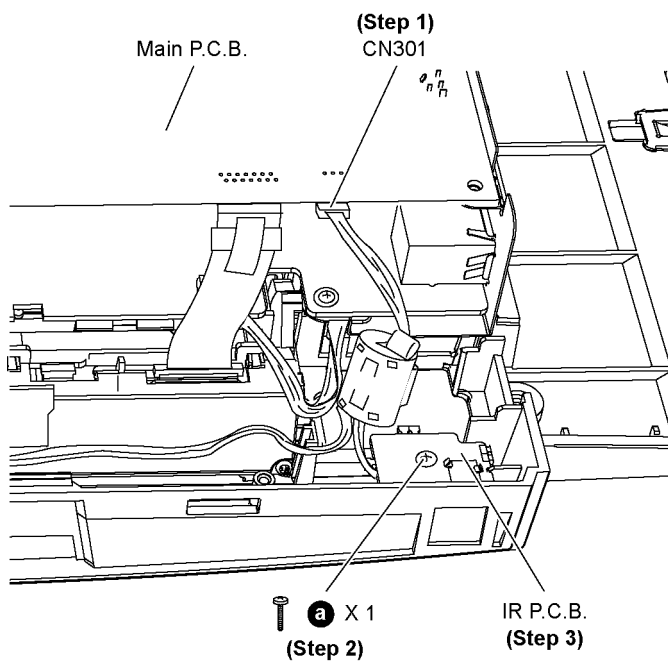
Step 9 Remove the iPod P.C.B. as arrow shown.



Caution: During assembling, ensure that Docking Tub is fully caught onto Docking Cover.

10.36. Disassembly of IR P.C.B.

- Follow the (Step 1) to (Step 7) of Item 10.3.
- Follow the (Step 1) to (Step 4) of Item 10.4.
- Follow the (Step 1) to (Step 7) of Item 10.5.1
- Follow the (Step 1) to (Step 3) of Item 10.8.1
- Follow the (Step 1) to (Step 4) of Item 10.9.
- Follow the (Step 1) to (Step 7) of Item 10.10.



Step 1 Detach 3P wire at the connector (CN301) on Main P.C.B..

Step 2 Remove 1 screw.

Step 3 Remove IR P.C.B..

11 Service Position

Note: For description of the disassembly procedure, see the section 10.

11.1. Checking & repairing of Main P.C.B.

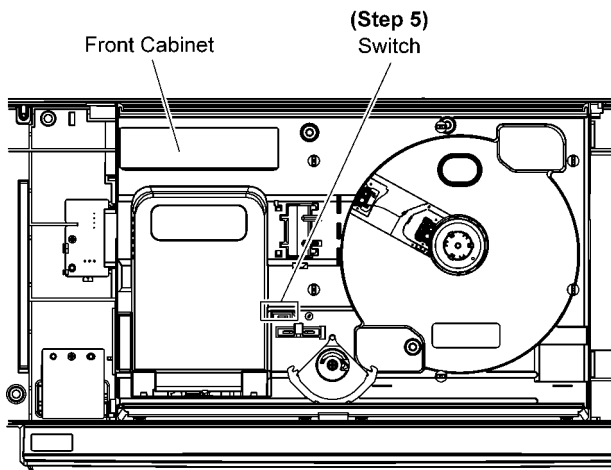
Step 1 Remove Door Assembly.

Step 2 Remove Left & Right Ornament.

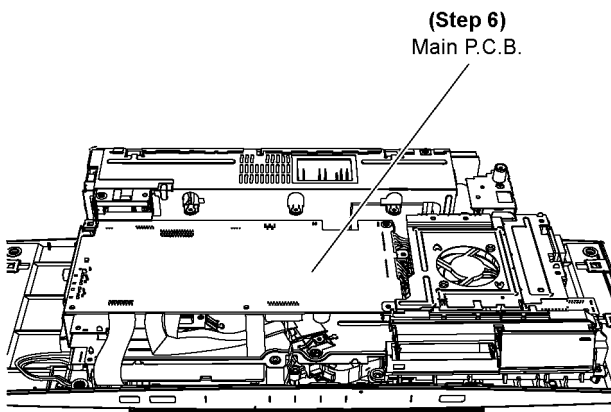
Step 3 Remove Rear Cabinet.

Step 4 Remove Rear Shield.

• Checking & repairing Side A of Main P.C.B.

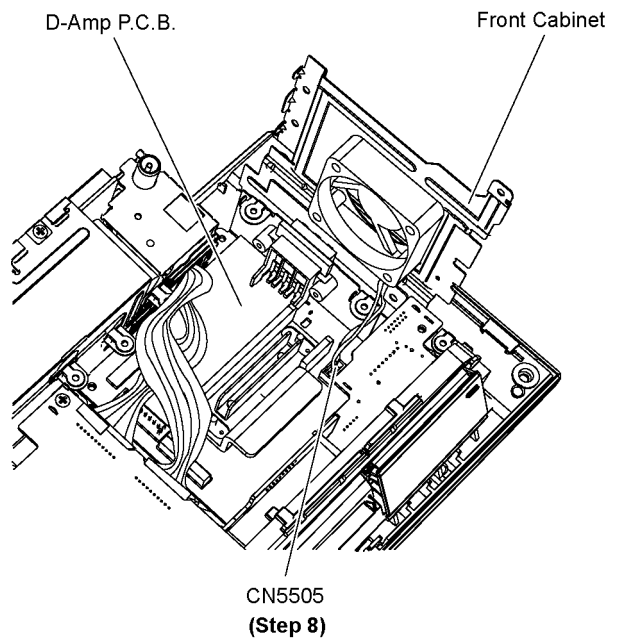


Step 5 Use a tape to keep switch depressed.



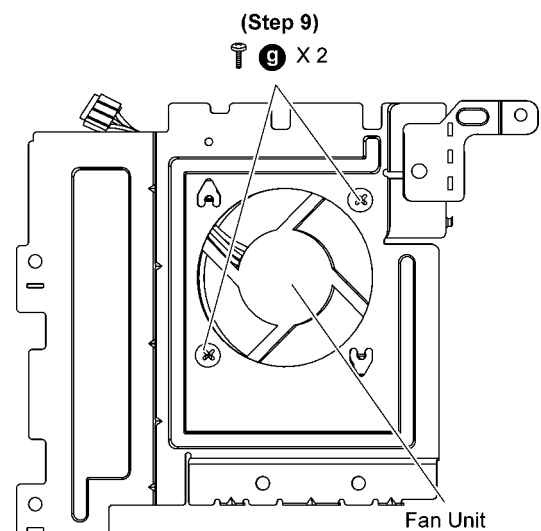
Step 6 Proceed to check and repair Side A of Main P.C.B..

• Checking & repairing Side B of Main P.C.B.

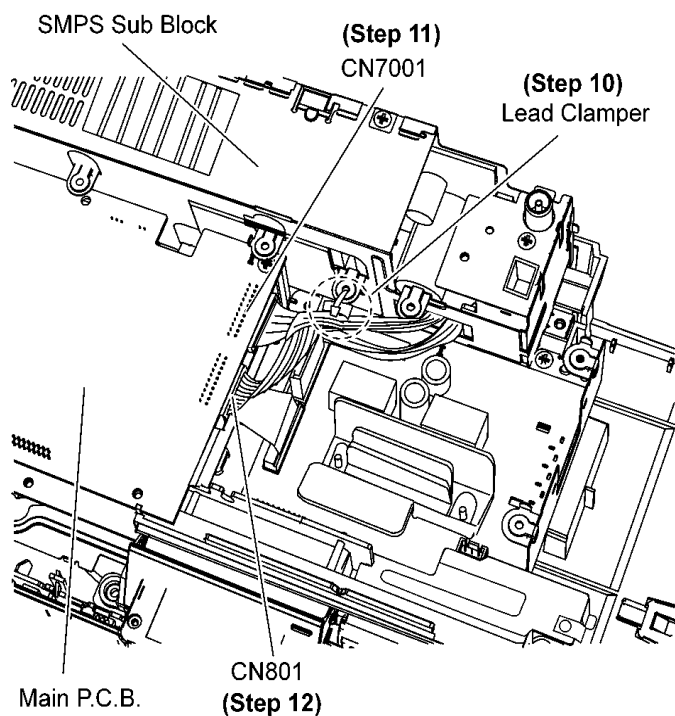


Step 7 Lift up Fan Sub Assembly.

Step 8 Detach 3P wire at the connector (CN5505) on D-Amp P.C.B..



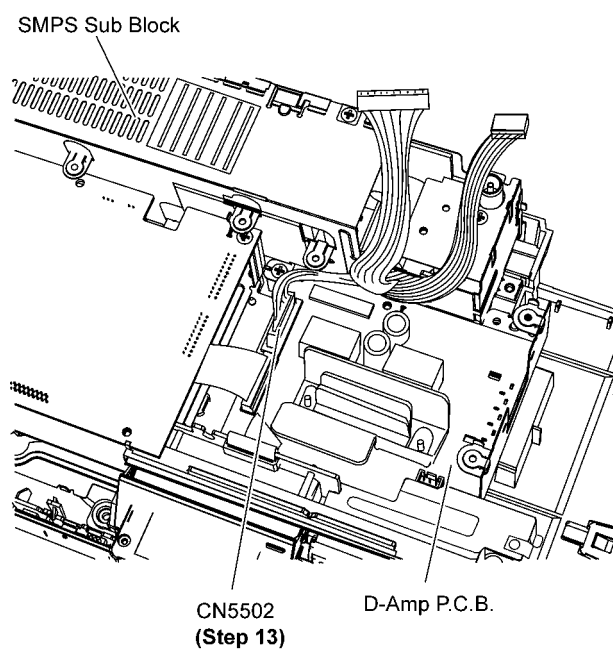
Step 9 Remove 2 screws to remove Fan Unit.



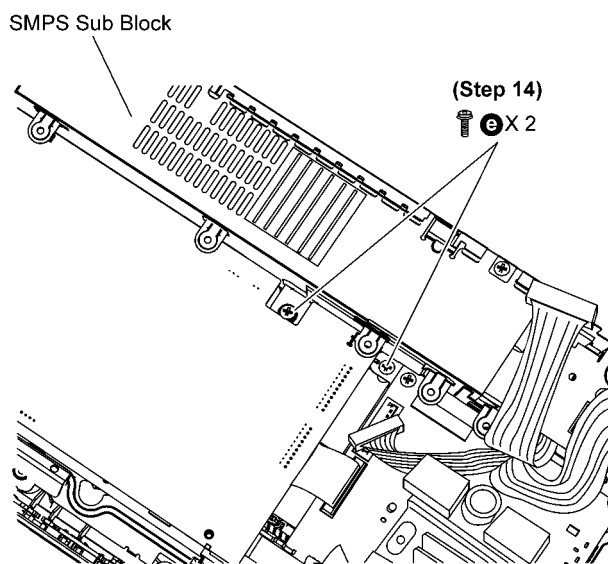
Step 10 Cut the Lead Clamper.

Step 11 Detach 11P FFC at the connector (CN7001) on Main P.C.B..

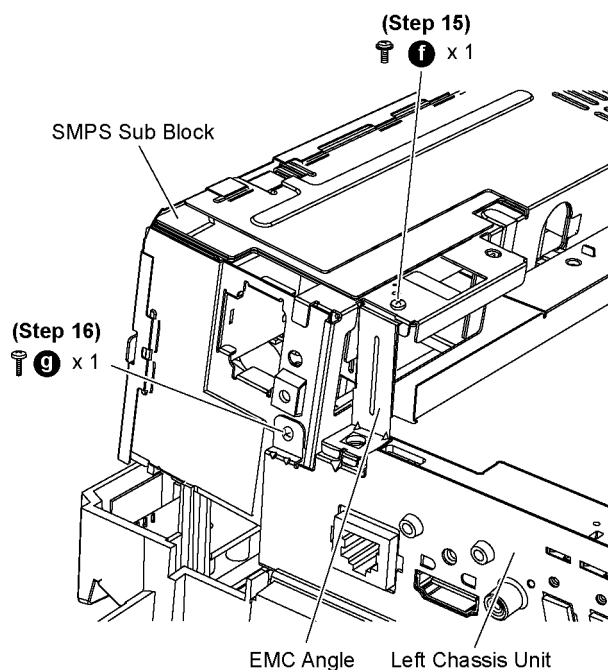
Step 12 Detach 10P FFC at the connector (CN801) on Main P.C.B..



Step 13 Detach 8P FFC at the connector (CN5502) on Main P.C.B..

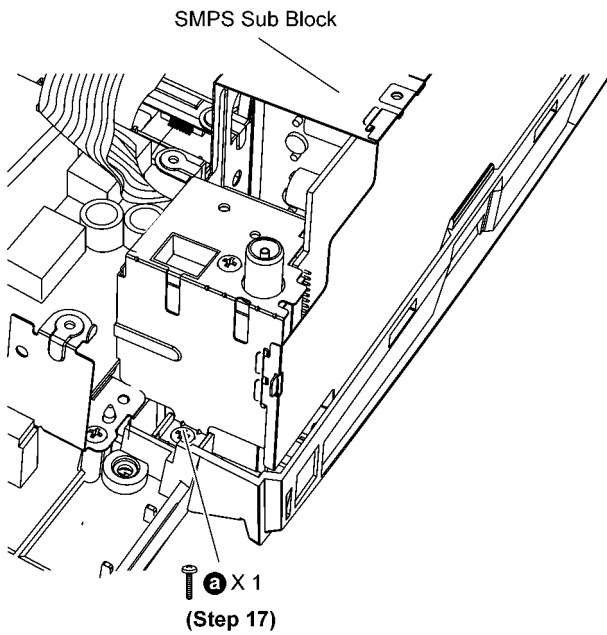


Step 14 Remove 2 screws.

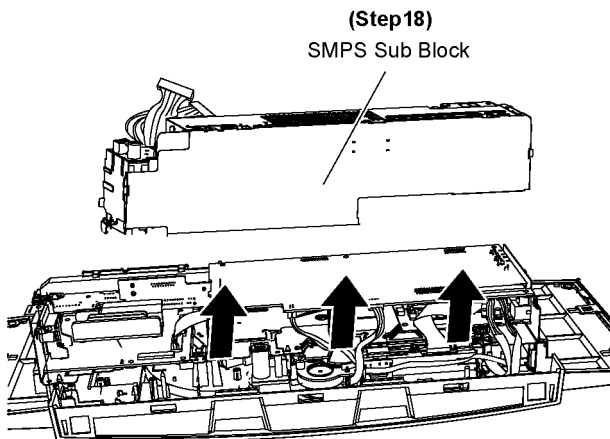


Step 15 Remove 1 screw.

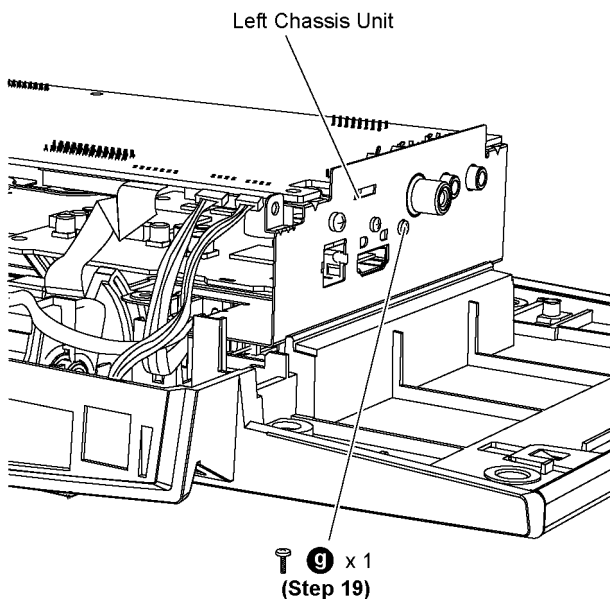
Step 16 Remove 1 screw.



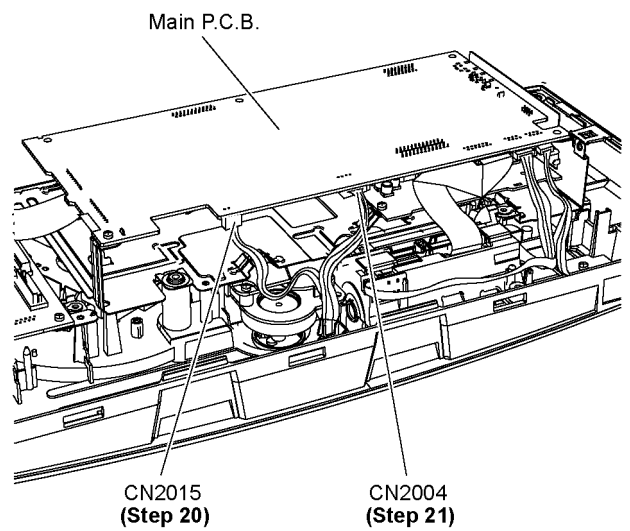
Step 17 Remove 1 screw.



Step 18 Lift up SMPS Sub Block.

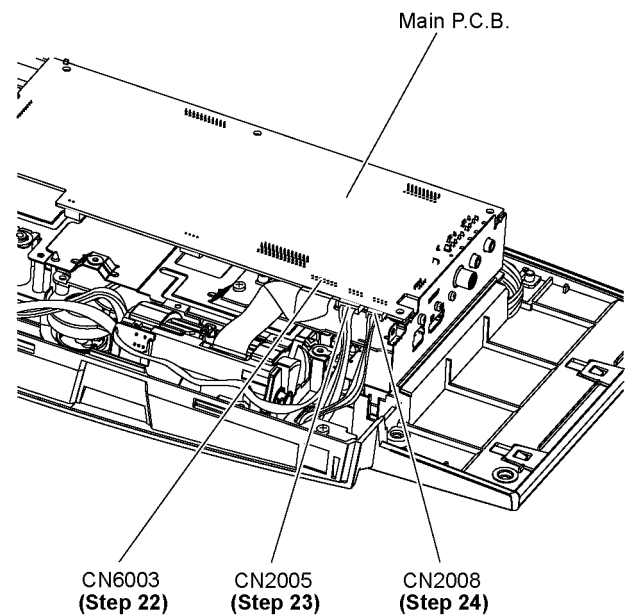


Step 19 Remove 1 screw at Left Chassis.



Step 20 Detach 2P wire at the connector (CN2015) on Main P.C.B..

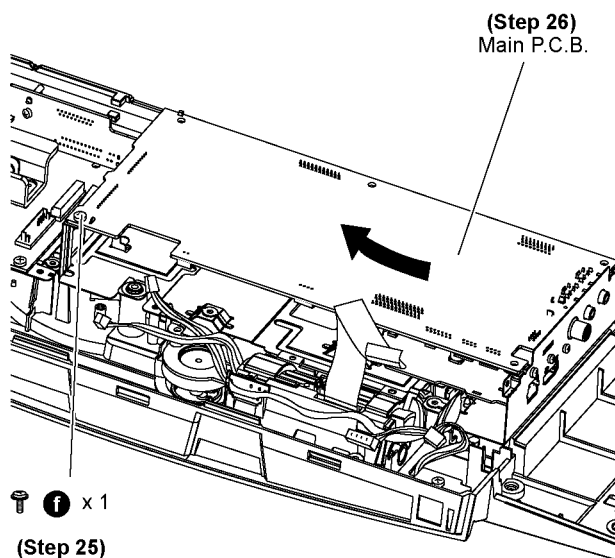
Step 21 Detach 4P wire at the connector (CN2004) on Main P.C.B..



Step 22 Detach 14P FFC at the connector (CN6003) on Main P.C.B..

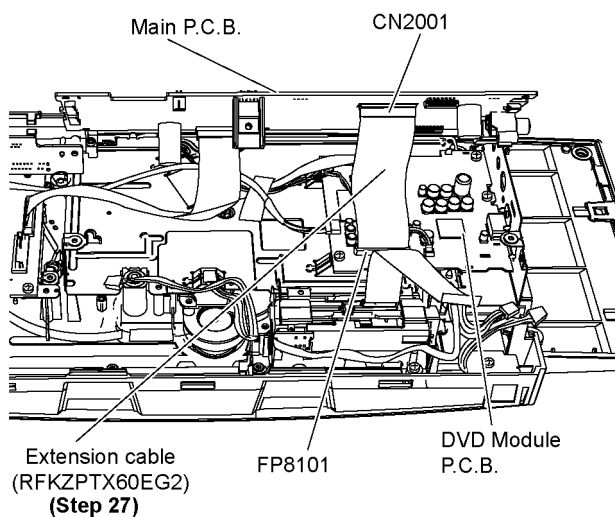
Step 23 Detach 4P wire at the connector (CN2005) on Main P.C.B..

Step 24 Detach 3P wire at the connector (CN2008) on Main P.C.B..

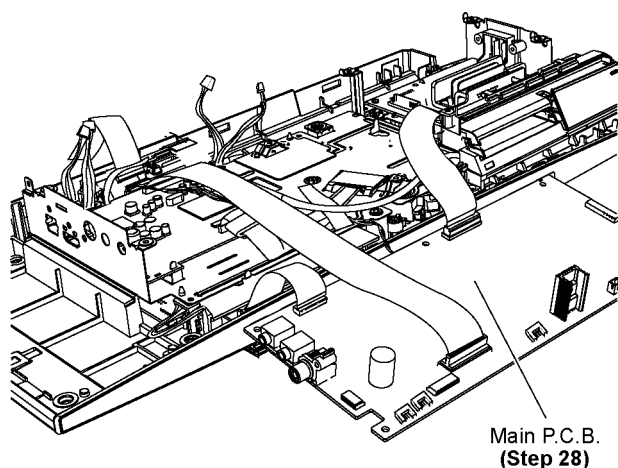


Step 25 Remove 1 screw on Main P.C.B..

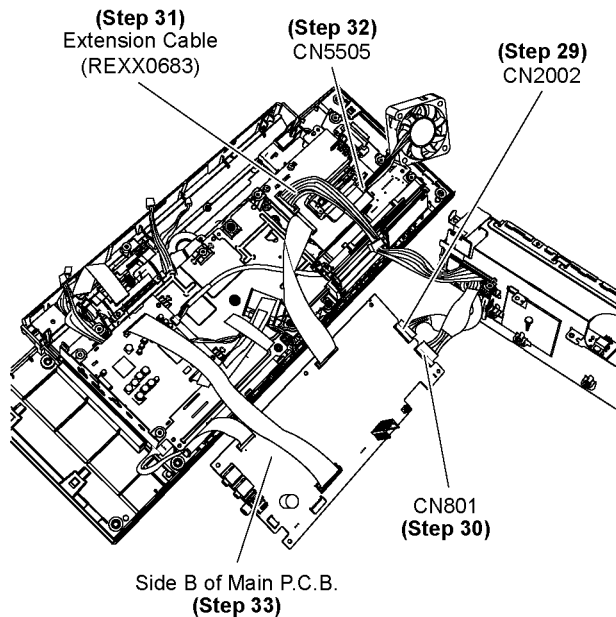
Step 26 Gently remove Main P.C.B. as arrow shown.



Step 27 Attach original cable with extension cable (RFKZPTX60EG2)(50P FFC from CN2001 to FP8101).



Step 28 Flip the Main P.C.B. as diagram shown.



Step 29 Connect 10P wire to connector (CN2002) on Main P.C.B..

Step 30 Connect 11P wire to connector (CN801) on Main P.C.B..

Step 31 Attach original cable with extension cable (REXX0683) (8P cable from H5801 to CN5502).

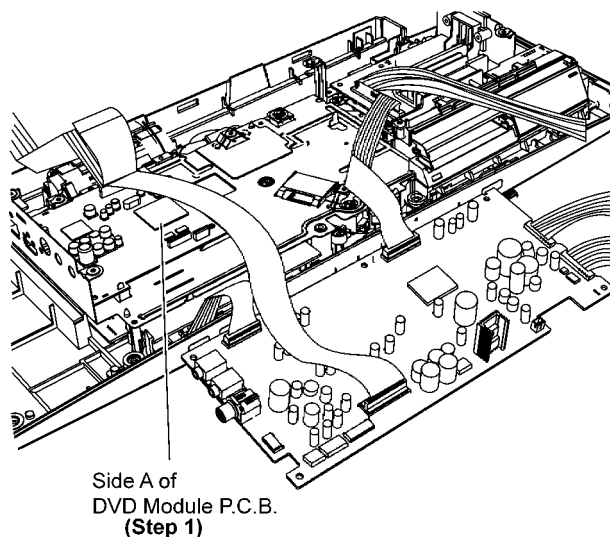
Step 32 Connect Fan Unit to connector (CN5505) on D-Amp P.C.B..

Step 33 Proceed to check and repair Side B of Main P.C.B..

11.2. Checking & repairing of DVD Module P.C.B.

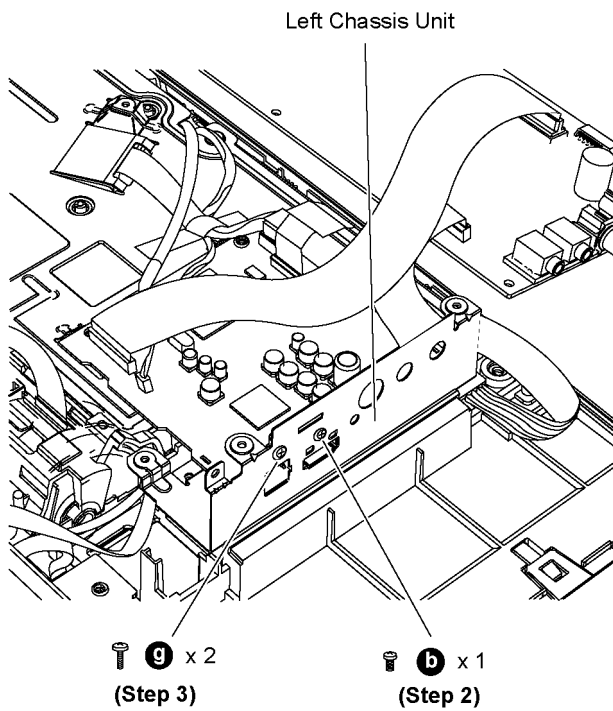
- Follow the (Step 1) to (Step 26) of Item 11.1.

- Checking & repairing Side B of DVD Module P.C.B.



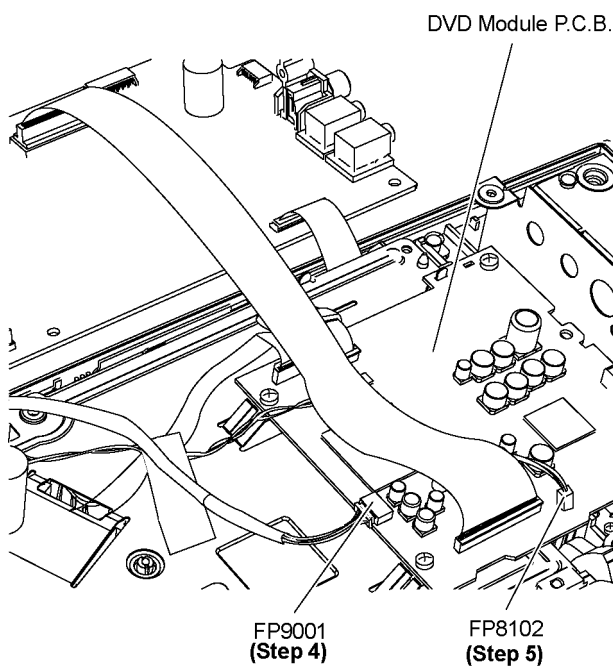
Step 1 Proceed to check and repair Side B of DVD Module P.C.B..

- Checking & repairing Side A of DVD Module P.C.B.



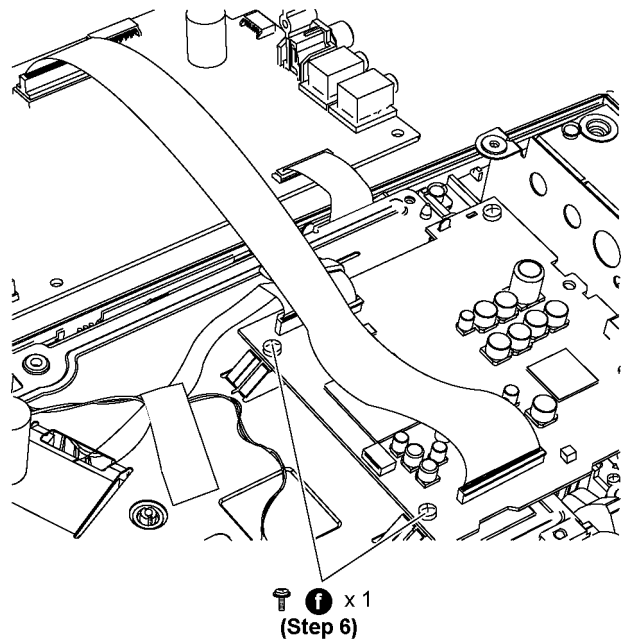
Step 2 Remove 1 screw.

Step 3 Remove 1 screw.

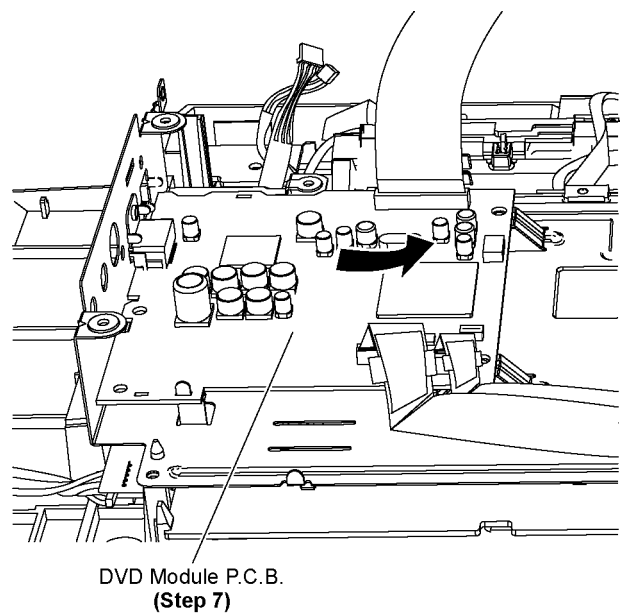


Step 4 Detach 2P wire at the connector (FP8102) on DVD Module P.C.B..

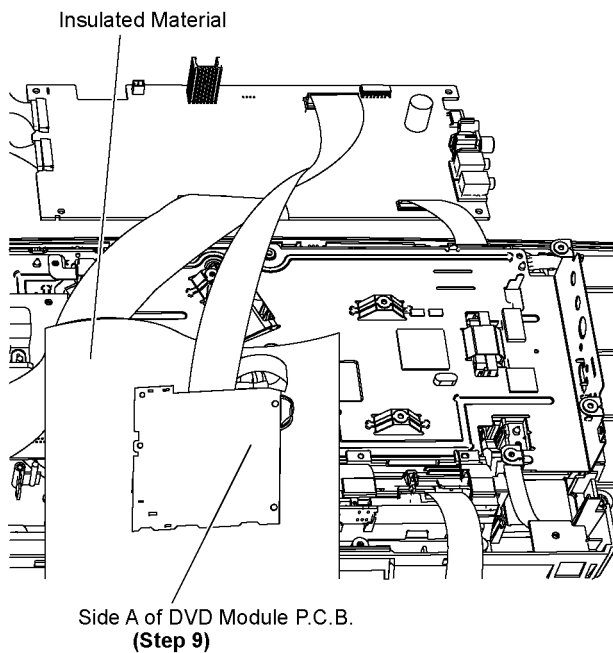
Step 5 Detach 5P wire at the connector (FP9001) on DVD Module P.C.B..



Step 6 Remove 2 screws on DVD Module P.C.B..



Step 7 Remove DVD Module P.C.B..



Step 8 Flip the DVD Module P.C.B. as diagram shown.

Caution: Insulated material is required to insulate DVD Module P.C.B. from other parts.

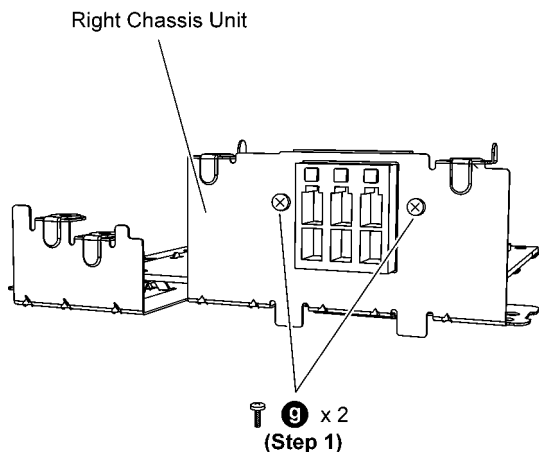
Step 9 Proceed to check and repair Side A of DVD Module P.C.B..

11.3. Checking & repairing of D-Amp P.C.B.

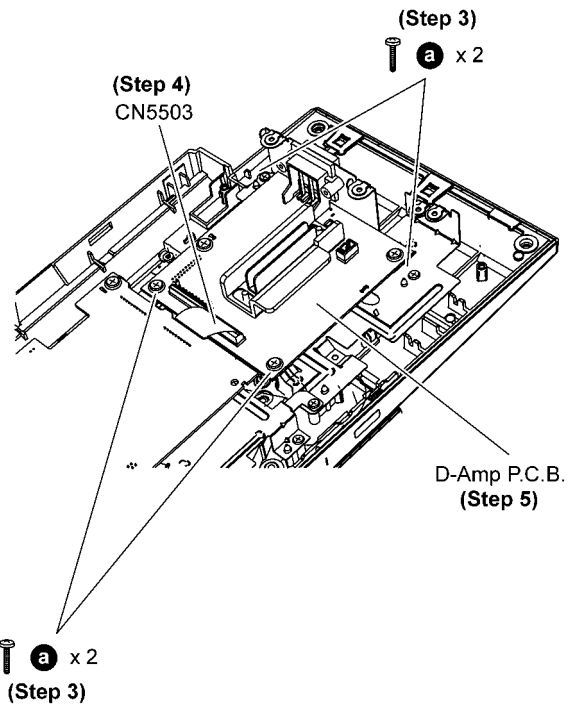
- Follow the (Step 1) to (Step 18) of Item 11.1.

- Checking & repairing Side B of D-Amp P.C.B.

Step 1 Remove USB Chassis Unit.



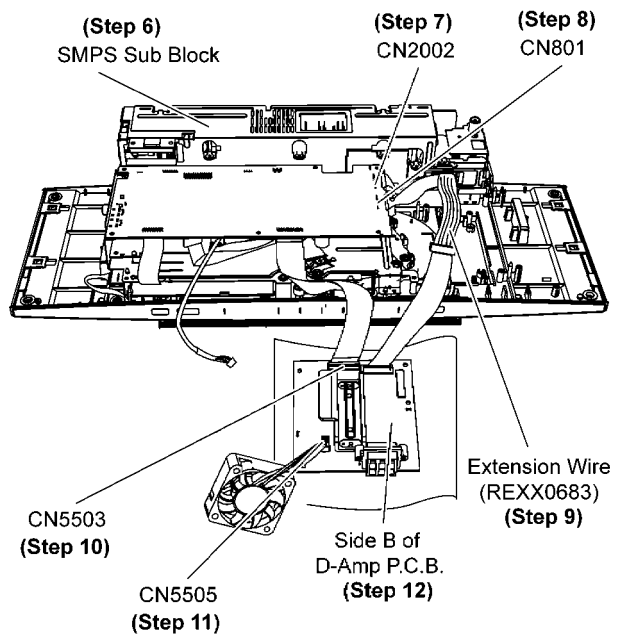
Step 2 Remove 2 screws.



Step 3 Remove 4 screw.

Step 4 Detach 22P FFC at the connector (CN5503) on D-Amp P.C.B..

Step 5 Lift up D-Amp P.C.B..



Step 6 Position SMPS Sub Block onto the Front Cabinet.

Step 7 Connect 10P wire to the connector (CN2002) on Main P.C.B..

Step 8 Connect 11P wire to the connector (CN801) on Main P.C.B..

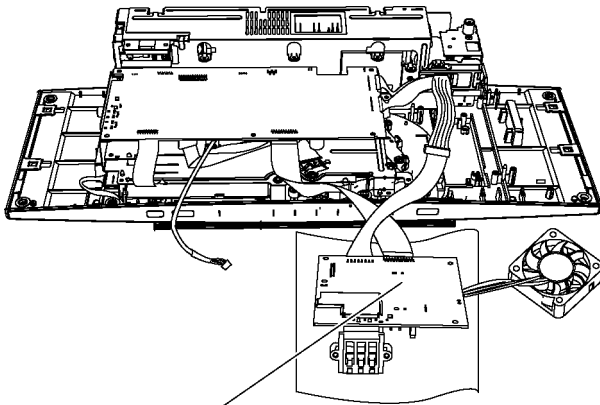
Step 9 Attach original cable with extension cable (REXX0683)(8P wire from H5801 to CN5502).

Step 10 Connect 22P FFC to the connector (CN5503) on D-Amp P.C.B..

Step 11 Connect Fan Unit to the connector (CN5505) on D-Amp P.C.B..

Step 12 Proceed to check and repair Side B of D-Amp P.C.B..

- Checking & repairing Side A of D-Amp P.C.B.



Side A of D-Amp P.C.B.
(Step 18)

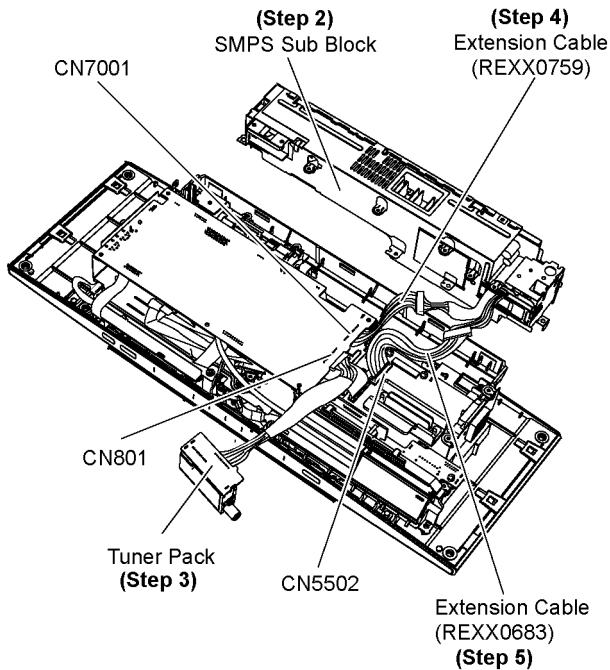
Step 13 Flip the D-Amp P.C.B..

Step 14 Proceed to check and repair Side A of D-Amp P.C.B..

11.4. Checking & repairing of SMPS P.C.B.

- Follow the (Step 1) to (Step 18) of Item 11.1.

Step 1 Remove Tuner Pack.



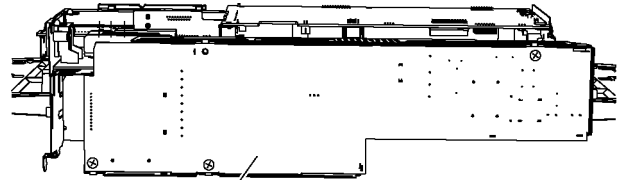
Step 2 Position SMPS Sub Block according to diagram shown.

Step 3 Connect Tuner Pack to connector (CN801) on Main P.C.B..

Step 4 Attach original cable with extension cable (REXX0759) (11P cable from CN5802 to CN7001).

Step 5 Attach original cable with extension cable (REXX0683) (8P cable from H5801 to CN5502).

Caution: During checking and repairing, ensure that the extension cables are connected properly.



SMPS P.C.B.
(Step 6)

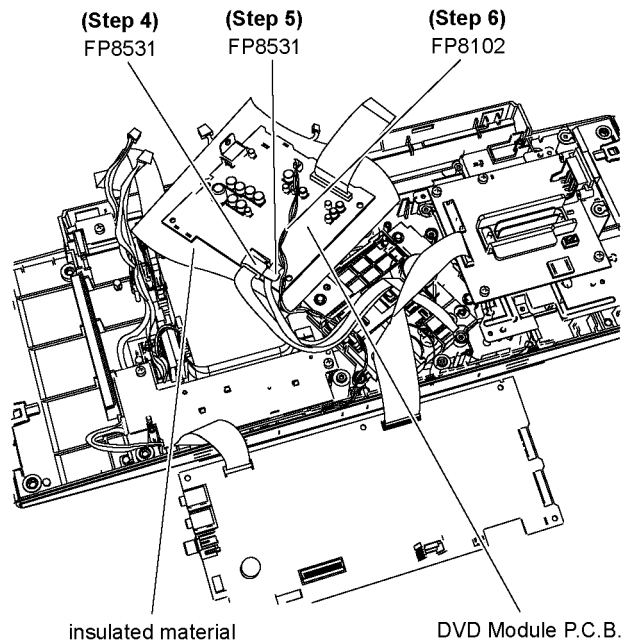
Step 6 Proceed to check and repair SMPS P.C.B..

11.5. Checking & repairing of FL P.C.B.

- Follow the (Step 1) to (Step 27) of Item 11.1.
- Follow the (Step 29) to (Step 33) of Item 11.1.

Step 1 Remove DVD Module P.C.B..

Step 2 Remove Left Chassis P.C.B..



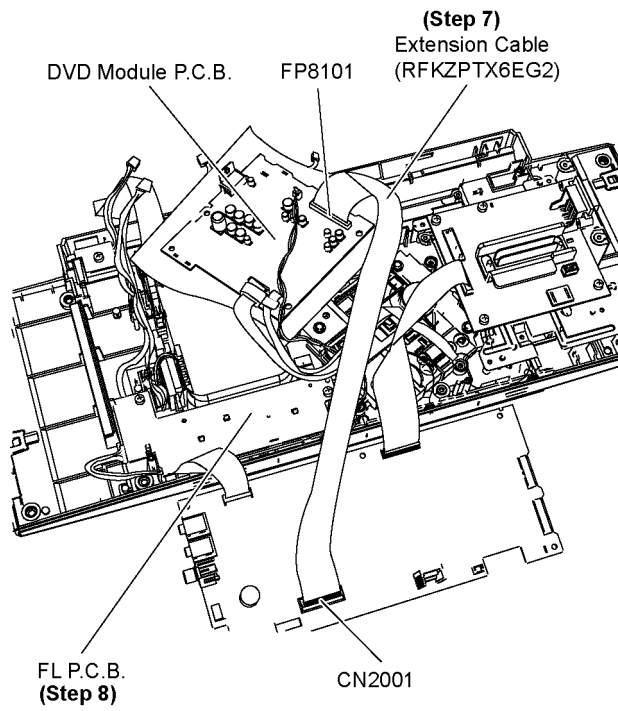
Step 3 Position DVD Module P.C.B. according to diagram shown.

Caution: Insulated material is required to insulate DVD Module P.C.B. from other parts.

Step 4 Connect 26P FFC to connector (FP8531) on DVD Module P.C.B..

Step 5 Connect 7P FFC to connector (FP8251) on DVD Module P.C.B..

Step 6 Connect 2P FFC to connector (FP8102) on DVD Module P.C.B..



Step 7 Attach original cable with extension cable (RFKZPTX60EG1)(50P cable from CN2001 to FP8101).

Step 8 Proceed to check and repair FL P.C.B..

12 Voltage & Waveform Chart

Note:

- Indication Voltage Values are in standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard.
Therefore, there may exist some errors in voltage values, depending on the internal impedance of the DC circuit tester.
- Circuit voltage and waveform described herein shall be regarded as reference information when probing defect point because it may differ from actual measuring value due to difference of Measuring instrument and its measuring condition and product itself.

12.1. DVD Module P.C.B. (1/4)

REF NO.	IC3901																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	0	0	0	1.2	1.4	0.1	2.8	3.3	0.1	0.1	0.1	3.3	0.1	0.1	0.1	3.4	0.1	0.1	0.1
REF NO.	IC3901																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	3.4	0.1	0.1	0.1	3.4	1.3	0.1	3.4	0	0	0	0	1.7	3.4	0.9	0.1	0.1	0.9	0.1	3.4
REF NO.	IC3901																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	1.7	1.3	1.7	0.1	1.7	0.1	1.3	0.1	0.1	0.1	0.1	3.3	0.1	0.1	1.3	0.1	0.1	0.1	0.1	0.1
REF NO.	IC3901																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	0.1	0.1	0.1	0	0	0.1	0.1	0.1	0.1	3.4	0.1	0.1	0.1	0.1	1.3	0.1	0.1	0.1	0.1	0.1
REF NO.	IC3901																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	0.1	0.1	0.1	3.4	1.3	0.1	1.7	0.1	0.2	0.7	0.1	0.7	0.6	0.3	0.8	0.1	0.1	0.1	0.1	3.4
REF NO.	IC3901																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
CD PLAY	0.1	1.3	0.1	0.1	0.1	3.4	3.4	3.4	1.3	0.1	1.8	0.1	3.3	3.3	3.3	1.3	1.7	0.1	0.1	3.4
REF NO.	IC3901																			
MODE	121	122	123	124	125	126	127	128												
CD PLAY	3.4	0.1	1.3	3.4	0.1	1.4	0	0												
REF NO.	IC3952																			
MODE	1	2	3	4	5															
CD PLAY	8.5	0.1	1.4	5.1	8.9															
REF NO.	IC8001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0.1	0.1	0.1	3.4	0.1	3.4	0.1	0.1	1.7	0.1	0.2	0.7	0.7	0.6	0.1	3.4	0.4	0.8	0.1	1.3
REF NO.	IC8001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	1.5	1.3	2.0	1.7	2.5	2.6	2.6	1.8	0.9	1.1	3.4	0.1	3.4	2.4	1.3	1.3	1.8	2.6	2.6	1.4
REF NO.	IC8001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	1.9	2.7	0.1	1.3	0.1	3.3	3.3	3.4	3.4	1.7	0.1	3.4	1.9	2.8	3.0	3.4	3.4	3.4	0.6	3.4
REF NO.	IC8001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	1.6	0.1	0.1	0.9	3.4	2.0	1.7	0.1	3.4	3.1	0.1	3.4	3.4	0.1	0.3	0.1	3.4	3.4	3.4	3.4

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12.2. DVD Module P.C.B. (2/4)

REF NO.	IC8001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	0.1	0.1	1.3	3.4	0.9	2.4	0.1	1.9	0.1	0.5	1.8	3.4	1.4	1.4	1.9	1.9	1.7	1.7	1.7	1.7
REF NO.	IC8001																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
CD PLAY	0	0	0.3	0.1	0.3	2.1	3.3	0.1	2.3	1.7	2.5	2.5	2.5	2.5	2.5	2.5	2.4	2.4	2.4	2.4
REF NO.	IC8001																			
MODE	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
CD PLAY	1.9	2.0	1.7	1.7	0.1	1.7	1.8	3.4	0.9	0.9	0.4	3.4	2.4	1.0	1.0	2.4	0	0.4	0.9	0
REF NO.	IC8001																			
MODE	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
CD PLAY	3.4	3.4	0	0.1	0.1	0.1	3.4	1.6	1.7	1.7	0.9	1.7	0.1	3.4	1.5	1.6	1.5	1.3	2.9	3.1
REF NO.	IC8001																			
MODE	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
CD PLAY	2.9	2.8	3.1	2.8	0.1	3.4	2.8	3.1	3.1	2.9	2.9	3.2	0.1	3.4	2.8	3.1	3.1	2.8	2.7	2.7
REF NO.	IC8001																			
MODE	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200
CD PLAY	3.3	0.1	1.5	3.4	1.6	0.1	1.3	3.3	3.3	3.2	3.6	0.1	1.9	0.1	0.1	3.4	1.6	0.1	0.1	1.6
REF NO.	IC8001																			
MODE	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216				
CD PLAY	0.1	1.7	0.3	0.1	3.4	1.7	0.3	1.5	1.9	0.1	1.3	2.5	2.9	2.8	3.4	0				
REF NO.	IC8051																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	3.4	3.2	3.4	3.2	3.2	3.2	3.1	3.4	3.2	3.2	0.1	3.2	0.1	3.0	3.4	3.3	3.3	3.3	3.3	1.9
REF NO.	IC8051																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	1.6	0.1	0.2	0.5	0.6	1.5	3.4	0.1	0	1.9	1.7	1.6	0.1	0.1	0.1	0.1	3.4	1.6	2.9	0
REF NO.	IC8051																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54						
CD PLAY	0.1	3.2	3.4	3.2	3.2	0.1	3.2	3.2	3.4	3.2	3.1	0.1	3.1	0.1						
REF NO.	IC8111																			
MODE	1	2	3	4	5	6	7													
CD PLAY	5.1	1.9	5.1	0.1	1.0	3.4	1.3													
REF NO.	IC8251																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	1.7	1.7	1.7	2.3	2.3	2.2	0.1	5.1	3.4	0.1	2.4	2.8	2.5	2.7	4.2	4.3	5.4	3.1	0.1	3.4

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12.3. DVD Module P.C.B. (3/4)

REF NO.	IC8251																			
MODE	21	22	23	24	25	26	27	28												
CD PLAY	8.9	8.8	1.8	1.7	1.7	1.7	3.4	3.4												
REF NO.	IC8421																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	1.7	1.7	0.9	1.7	3.1	3.4	3.4	3.4	0.9	0.1	0.1	5.2	5.2	5.2	0	0	2.6	2.6	2.6	2.6
REF NO.	IC8421																			
MODE	21	22	23	24	25	26	27	28	29	30										
CD PLAY	2.6	2.6	0	2.6	2.6	2.6	0	5.2	5.2	5.2										
REF NO.	IC8422																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
CD PLAY	2.6	2.6	0	2.6	0	5.2	5.2	0	1.4	1.7	1.6	1.7	3.4	0	5.2	0				
REF NO.	IC8601																			
MODE	1	2	3	4																
CD PLAY	3.1	1.3	0.1	0.1																
REF NO.	IC8606																			
MODE	1	2	3	4	5															
CD PLAY	3.1	3.4	0.1	0.1	0															
REF NO.	IC8611																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0.1	0.1	0.1	0.1	3.3	3.3	0.1	3.4												
REF NO.	IC8651																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	1.3	2.0	1.8	2.5	2.6	2.6	1.8	0.9	1.1	0.1	3.4	3.1	3.4	3.4	1.5	3.4	1.3	1.3	1.9	2.6
REF NO.	IC8651																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	2.6	1.4	1.9	2.7	2.6	2.9	0.1	2.8	2.5	1.3	2.0	1.7	2.5	2.6	2.6	1.8	3.4	0.9	1.6	1.8
REF NO.	IC8651																			
MODE	41	42	43	44	45	46	47	48												
CD PLAY	2.6	2.5	1.3	1.9	2.7	0.1	3.4	1.5												
REF NO.	IC8691																			
MODE	1	2	3	4	5															
CD PLAY	3.0	3.0	0.1	4.6	0.1															
REF NO.	IC8695																			
MODE	1	2	3	4	5															
CD PLAY	0.1	2.8	2.8	5.2	4.3															

SA-PTX60EB/EE/EF/EG DVD MODULE P.C.B.

12.4. DVD Module P.C.B. (4/4)

REF NO.	IC8701																			
MODE	1	2	3	4	5															
CD PLAY	0	1.6	0.1	1.8	3.4															
REF NO.	IC8901																			
MODE	1	2	3	4	5															
CD PLAY	3.1	3.4	0	3.4	3.4															
REF NO.	IC9001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	2.5	2.7	1.9	1.3	2.5	2.5	1.5	1.3	0.1	2.8	1.3	1.8	2.6	2.6	1.4	1.8	2.7	2.6	3.4
REF NO.	IC9002																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0.1	0.9	1.8	2.6	2.6	2.5	1.7	2.0	1.3	0.1	2.9	1.3	2.0	1.8	2.5	2.6	2.5	1.8	0.9	3.2
REF NO.	IC9003																			
MODE	1	2	3	4	5	6														
CD PLAY	1.6	0.1	1.7	1.7	3.4	1.7														
REF NO.	IC9005																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0.1	5.2	5.2	0.1	3.4	2.4	1.7	1.7												
REF NO.	Q3901				Q3902				Q3903				Q3941				Q3942			
MODE	E	C	B		S	D	G		S	D	G		E	C	B		E	C	B	
CD PLAY	0.1	4.3	-1.3		3.4	5.1	3.4		3.4	5.1	3.4		3.2	4.0	3.2		0.1	3.7	0	
REF NO.	Q3943				Q8321				Q8325				Q8331				Q8335			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	3.6	5.1	4.1		1.0	0	0.4		1.5	0	0.9		1.1	0	0.4		1.5	0	0.9	
REF NO.	Q8341				Q8551				Q8552				Q8561				Q8562			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	1.5	0	0.9		0.1	5.1	0.1		5.1	0.1	5.1		1.6	3.7	2.2		4.3	1.9	3.7	
REF NO.	Q8563				Q8564				Q8565				QR8420				QR8566			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0.1	0.3	0.1		0.1	0.1	3.3		0.1	0.1	0.7		0	4.4	0.1		3.3	0	5.1	
REF NO.	QR9030																			
MODE	E	C	B																	
CD PLAY	3.4	0.1	3.4																	

SA-PTX60EB/EE/EF/EG DVD MODULE P.C.B.

12.5. Main P.C.B. (1/4)

REF NO.	IC2001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	-0.1	4.9	4.9	-0.1	2.5	4.0	1.9	-0.1	-0.1	-0.1	-0.1	4.8	2.5	-0.1	0	4.9	4.9	5.0	3.1	-0.1
STANDBY	-0.1	4.9	4.9	-0.1	2.5	4.0	1.9	-0.1	-0.1	-0.1	-0.1	4.8	2.5	-0.1	0	4.9	4.9	5.0	3.1	-0.1
REF NO.	IC2001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	-0.1	-0.1	-0.1	4.8	4.9	4.9	4.9	4.6	4.2	1.7	-0.1	5.3	4.9	-0.1	4.9	-0.1	4.9	4.9	4.9	4.9
STANDBY	-0.1	-0.1	-0.1	4.8	4.9	4.9	4.9	4.6	4.3	1.7	-0.1	5.3	4.9	4.8	4.9	-0.1	4.9	4.9	4.9	4.9
REF NO.	IC2001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	-0.1	4.9	4.9	-0.1	4.9	4.9	4.9	4.9	-0.1	4.9	-0.1	4.9	-0.1	-0.1	-0.1	-0.1	4.9	4.9	-0.1	-0.1
STANDBY	-0.1	4.9	4.9	-0.1	4.9	4.9	4.9	4.9	-0.1	4.9	-0.1	4.9	-0.1	-0.1	4.9	-0.1	4.9	4.9	-0.1	5.3
REF NO.	IC2001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	-0.1	4.9	-0.1	-0.1	-0.1	-0.1	4.9	-0.1	-0.1	4.9	-0.1	-0.1	-0.1	5.4	2.5	-0.1	-0.1	-0.1	-0.1	5.3
STANDBY	-0.1	4.9	-0.1	-0.1	4.8	-0.1	4.9	4.9	-0.1	4.9	-0.1	-0.1	-0.1	5.4	2.5	-0.1	-0.1	-0.1	-0.1	5.3
REF NO.	IC2001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	4.9	-0.1	5.3	-0.1	2.5	-0.1	-0.1	-0.1	0.3	0.3	3.0	1.2	-0.3	1.0	4.9	-0.1	4.9	4.9	4.9	-0.1
STANDBY	4.9	-0.1	5.3	-0.1	2.6	-0.1	-0.1	-0.1	0.3	0.3	3.0	1.2	-0.3	1.0	4.9	-0.1	4.9	4.9	4.9	-0.1
REF NO.	IC2002																			
MODE	1	2	3	4	5															
CD PLAY	5.3	0	4.9	0	3.3															
STANDBY	5.3	0	4.9	0	3.3															
REF NO.	IC2003																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0	0	0	0	0	0.9	0	5.0												
STANDBY	0	0	0	0	0	0.8	0	5.0												
REF NO.	IC2101																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	0	0	0	0	0	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
REF NO.	IC2101																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0	6.1	0	0	-6.0	0	0	0	0	0	0	-5.9	0	0	5.7	5.7	0	0	-5.7	0
STANDBY	0	6.1	0	0	-6.0	0	0	0	0	0	0	-5.9	0	0	5.7	5.7	0	0	-5.7	0
REF NO.	IC2101																			
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	2.4	0	0	0	6.0	0	6.0	0	0	0	-0.1
STANDBY	0	0	0	0	0	0	0	0	0	2.4	0	0	0	6.0	0	6.0	0	0	0	-0.1

SA-PTX60EB/EE/EF/EG MAIN P.C.B.

12.6. Main P.C.B. (2/4)

REF NO.	IC2101																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	0	5.0	0	5.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STANDBY	0	5.0	0	5.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

REF NO.	IC2101																			
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	-6.5	6.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.1	6.1
STANDBY	0	0	-6.5	6.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.1	6.1

REF NO.	IC2102																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0	0	0	-6.5	0	0	0	6.8												
STANDBY	0	0	0	-6.5	0	0	0	6.8												

REF NO.	IC2601																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0	0	0	-5.5	0	0	0	6.7												
STANDBY	0	0	0	-5.5	0	0	0	6.7												

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	5.2	0	0	2.3	5.1	0	0	1.5	2.3	0	0.7	0	0.7	0	0.7	5.2	3.0	2.7	0	2.7
STANDBY	5.2	0	0	2.3	5.1	0	0	1.5	2.3	0	0.7	0	0.7	0	0.7	5.2	3.0	2.8	0	2.8

REF NO.	IC2801																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32								
CD PLAY	2.6	0	1.2	1.2	0	1.7	1.2	0	1.3	1.6	0	2.4								
STANDBY	2.7	0	1.3	1.4	0	1.4	1.2	0	1.4	1.5	0	2.4								

REF NO.	IC2900																			
MODE	1	2	3	4	5															
CD PLAY	17.8	9.0	0	1.0	2.8															
STANDBY	17.8	9.0	0	1.0	2.8															

REF NO.	IC2903																			
MODE	1	2	3	4	5															
CD PLAY	17.6	5.4	0	1.0	2.9															
STANDBY	17.6	5.4	0	1.0	2.9															

REF NO.	IC2904																			
MODE	1	2	3	4	5	6	7	8	9											
CD PLAY	0	0	0	0	0	5.9	0.5	0	0.5											
STANDBY	0	0	0	0	0	5.9	0.5	0	0.4											

REF NO.	IC2905																			
MODE	1	2	3	4	5															
CD PLAY	17.8	8.5	0	1.0	2.8															
STANDBY	17.8	8.5	0	1.0	2.8															

SA-PTX60EB/EE/EF/EG MAIN P.C.B.

12.7. Main P.C.B. (3/4)

REF NO.	IC6101																					
MODE	1	2	3	4	5	6	7	8														
CD PLAY	3.4	3.4	3.4	0	3.4	3.4	3.4	6.8														
STANDBY	3.4	3.4	3.4	0	3.4	3.4	3.4	6.8														
REF NO.	IC6601																					
MODE	1	2	3	4	5																	
CD PLAY	2.2	0	5.2	2.8	2.8																	
STANDBY	2.2	0	5.2	2.8	2.8																	
REF NO.	IC6602																					
MODE	1	2	3	4	5																	
CD PLAY	5.6	0	0	5.4	0																	
STANDBY	5.6	0	0	5.4	0																	
REF NO.	Q1702			Q1703			Q1704			Q2002			Q2003									
MODE	S	D	G		E	C	B		S	D	G		E	C	B		E	C	B			
CD PLAY	3.3	4.9	3.3		0	-0.1	4.8		3.3	4.9	3.3		3.8	5.4	4.5		0	4.9	0			
STANDBY	3.3	4.9	3.3		0	0	4.8		3.3	4.9	3.3		3.8	5.4	4.5		0	4.9	0			
REF NO.	Q2006			Q2007			Q2030			Q2096												
MODE	E	C	B		E	C	B		E	C	B		1	2	3	4	5	6				
CD PLAY	0	0	4.4		0	5.4	0		3.6	4.9	3.3		0	0	0	0	0.6	5.5				
STANDBY	0	5.3	0		0	5.4	0		3.6	4.9	3.3		0	0	0	0	0.6	5.5				
REF NO.	Q2101						Q2102						Q2203									
MODE	1	2	3	4	5	6		1	2	3	4	5	6		E	C	B					
CD PLAY	0	-4.4	0	0	-4.4	0		0	-4.4	0	0	-4.4	0		0	-4.4	0					
STANDBY	0	-4.4	0	0	0.7	0		0	0.7	0	0	0.7	0		1.4	1.4	0					
REF NO.	Q2801			Q2900			Q2901			Q2902			Q2903									
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B			
CD PLAY	0	2.4	-0.5		0	8.7	1.0		-6.5	-9.0	-7.2		0	-7.2	-0.6		6.8	9.0	7.5			
STANDBY	0	2.4	-0.5		0	8.7	1.0		-6.5	-8.5	-7.2		0	-7.2	-0.6		6.8	9.0	7.5			
REF NO.	Q2904			Q2909			Q2919			Q2923			Q2924									
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B			
CD PLAY	5.9	9.0	6.2		0	5.0	-0.4		0	5.0	0		0	0	1.9		0	5.0	0			
STANDBY	5.9	9.0	6.2		0	5.0	-0.4		0	5.0	0		0	0	1.9		0	5.0	0			
REF NO.	Q2925			Q2926			Q2927			Q2928			Q2929									
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B			
CD PLAY	0	5.3	0		5.3	-1.0	5.3		5.3	-0.6	4.9		5.0	-4.9	5.0		5.0	5.0	4.3			
STANDBY	0	5.3	0		5.3	-1.0	5.3		5.3	-0.6	4.9		5.0	-4.9	4.9		5.0	5.0	4.3			
REF NO.	Q2930																					
MODE	E	C	B																			
CD PLAY	0	0	4.9																			
STANDBY	0	0	4.9																			
SA-PTX60EB/EE/EF/EG MAIN P.C.B.																						

SA-PTX60EB/EE/EF/EG MAIN P.C.B.

12.8. Main P.C.B. (4/4)

REF NO.	IC2004																	
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
CD PLAY	1.5	2.2	2.7	2.7	5.1	0	0	2.7	0	0	0	5.1	1.9	2.5	0	2.6		
STANDBY	1.5	2.2	2.7	2.7	5.1	0	0	2.7	0	0	0	5.1	1.8	2.5	0	2.6		

SA-PTX60EB/EF/EG ONLY MAIN P.C.B.

12.9. FL P.C.B.

REF NO.	IC6001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	3.3	0	0	0	1.9	1.1	0	0	3.3	0.7	1.1	0	3.3	-25.5	-23.3	-23.3	-25.5	-16.3	-18.7	-14
STANDBY	3.3	0	0	0	1.9	1.1	0	0	3.3	0.7	1.1	0	3.3	-25.6	-23.3	-23.3	-25.6	-16.3	-18.7	-14

REF NO.	IC6001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	-25.6	-25.6	-25.6	-23.4	-21	-25.5	-25.6	-25.6	-16.3	-26.4	-14.2	-16.5	23.6	-23.5	-23.5	-23.5	-23.5	-23.5	-23.5	-23.5
STANDBY	-25.7	-25.7	-25.7	-23.4	-21	-25.6	-25.7	-25.7	-16.4	-26.5	-14.2	-16.5	23.7	-23.6	-23.6	-23.6	-23.6	-23.6	-23.6	-23.6

REF NO.	IC6001																			
MODE	41	42	43	44																
CD PLAY	-23.5	-23.5	-3.3	0																
STANDBY	-23.6	-23.6	-3.3	0																

SA-PTX60EB/EE/EF/EG FL P.C.B.

12.10. D-Amp P.C.B.

REF NO.	IC5003																			
MODE	1	2	3	4	5															
CD PLAY	-31.7	-36.8	-35.0	-31.7	-31.6															
STANDBY	-31.7	-36.8	-35.0	-31.7	-31.6															

REF NO.	IC5009																			
MODE	1	2	3																	
CD PLAY	0	7.1	5.0																	
STANDBY	0	7.1	5.0																	

REF NO.	Q5001							Q5002							Q5006					
MODE	1	2	3	4	5	6		1	2	3	4	5	6		E	C	B			
CD PLAY	0	-4.8	0	0	-4.8	0		0	-4.8	0	0	0	0		0	3.2	0			
STANDBY	0	0.6	0	0	0.6	0		0	0.6	0	0	0.6	0		0	3.2	0			

REF NO.	Q5007				Q5008				Q5009				Q5012				Q5013			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0	0	0.7		6.9	12.9	7.6		0	3.8	0.2		0	3.2	0		0	3.2	0	
STANDBY	0	0	0.7		6.9	12.9	7.6		0	3.8	0.2		0	3.2	0		0	3.2	0	

REF NO.	Q5014				Q5015				Q5016				Q5017							
MODE	E	C	B		E	C	B		E	C	B		E	C	B					
CD PLAY	-5.0	-7.1	-5.7		0	-5.7	-0.6		-5.0	4.9	-5.0		-17.8	-1.8	-17.3					
STANDBY	-5.0	-7.1	-5.7		0	-5.7	-0.6		-5.0	4.9	-5.0		-17.8	-1.8	-17.3					

REF NO.	Q5101							Q5102							Q5201					
MODE	1	2	3	4	5	6		1	2	3	4	5	6		1	2	3	4	5	6
CD PLAY	28.2	28.2	28.2	28.2	28.2	28.2		-7.0	-7.0	-7.0	-7.0	-7.0	-7.0		28.2	28.2	28.2	28.2	28.2	28.2
STANDBY	28.2	28.2	28.2	28.2	28.2	28.2		-7.0	-7.0	-7.0	-7.0	-7.0	-7.0		28.2	28.2	28.2	28.2	28.2	28.2

REF NO.	Q5202							Q5301							Q5302					
MODE	1	2	3	4	5	6		1	2	3	4	5	6		1	2	3	4	5	6
CD PLAY	-7.0	-7.0	-7.0	-7.0	-7.0	-7.0		28.2	28.2	28.2	28.2	28.2	28.2		-7.0	-7.0	-7.0	-7.0	-7.0	-7.0
STANDBY	-7.0	-7.0	-7.0	-7.0	-7.0	-7.0		28.2	28.2	28.2	28.2	28.2	28.2		-7.0	-7.0	-7.0	-7.0	-7.0	-7.0

REF NO.	QR5000				QR5001				QR5003				QR5005				QR5071			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0	5.0	0		0	5.0	0		5.0	4.8	5.0		0	3.2	0		0	3.2	-1.4	
STANDBY	0	0	2.8		0	0	2.8		5.0	5.0	0		0	3.2	0		0	3.2	-1.4	

SA-PTX60EB/EE/EF/EG D-AMP P.C.B.

12.11. iPod Fan P.C.B.

REF NO. MODE	Q6451				Q6452														
	E	C	B		E	C	B												
CD PLAY	0	0	0.9		0	2.1	2.5												
STANDBY	0	0	0.9		0	2.1	2.5												

SA-PTX60EB/EE/EF/EG iPod FAN P.C.B.

12.12. Power Button P.C.B.

REF NO.	Q6501																	
MODE	E	C	B															
CD PLAY	0	0.1	2.8															
STANDBY	0	0.1	2.8															

SA-PTX60EB/EE/EF/EG POWER BUTTON P.C.B.

12.13. SMPS P.C.B.

REF NO.	IC5701																	
MODE	1	2	3	4	5	6	7											
CD PLAY	10.2	-6.4	-6.4	-4.4	-6.5	-6.4	-6.4											
STANDBY	10.2	-6.4	-6.5	-4.4	-6.5	-6.3	-6.4											

REF NO.	IC5799																	
MODE	1	2	3	4	5	6	7	8										
CD PLAY	-8.6	0	-9.0	-8.1	7.4	0	-9.3	-9.3										
STANDBY	-8.6	0	-9.0	-8.0	-7.3	0	-9.2	-9.3										

REF NO.	IC5801																	
MODE	1	2	3															
CD PLAY	-2.1	-33.6	-37															
STANDBY	-2.1	-33.6	-37															

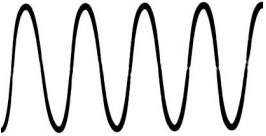
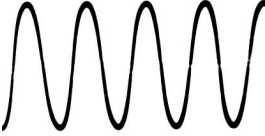
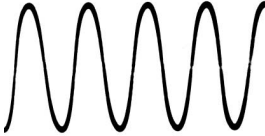
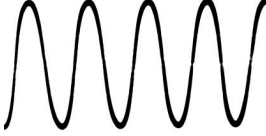
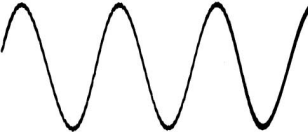
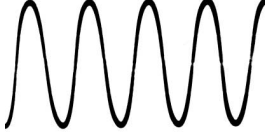
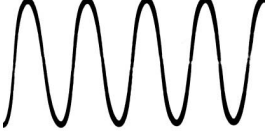
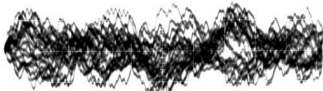
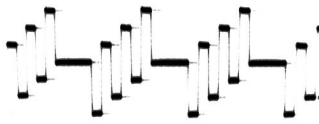
REF NO.	IC5899																	
MODE	1	2	3															
CD PLAY	4.1	2.5	0															
STANDBY	4.1	2.5	0															

REF NO.	Q5720				Q5861				Q5862				Q5863				Q5898		
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B
CD PLAY	-6.2	-5.7	-6.3		0	-27.7	0		0	3.3	0		-28.2	-27.5	-27.9		0	2.1	0.4
STANDBY	-6.2	-5.7	-6.3		0	-27.7	0		0	3.3	0		-28.2	-27.5	-27.9		0	2.1	0.4

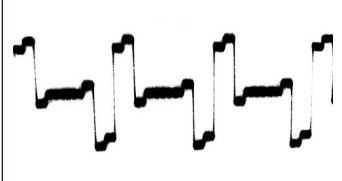
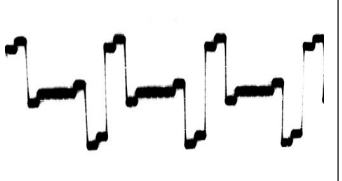
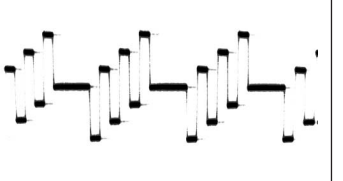
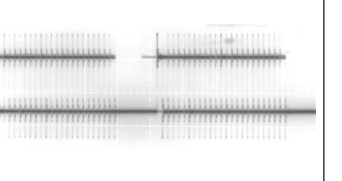
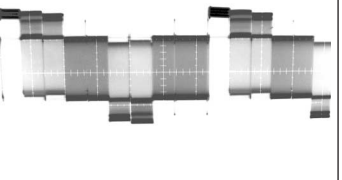
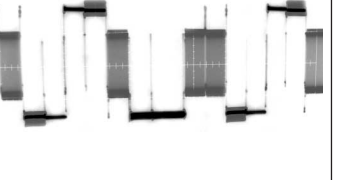
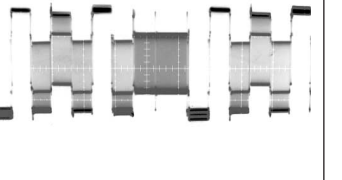
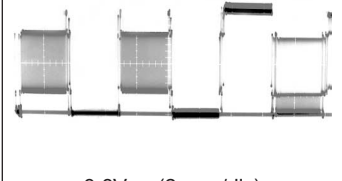
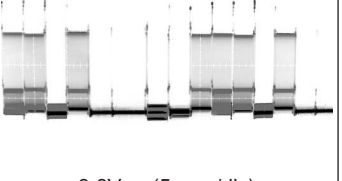
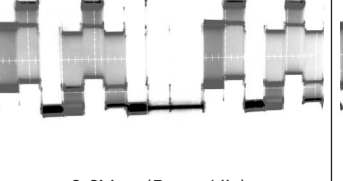
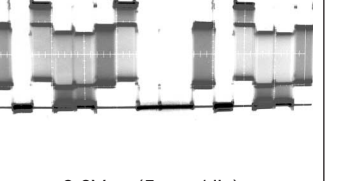
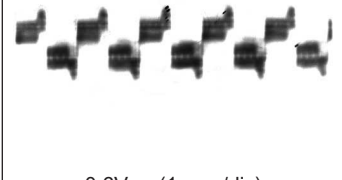
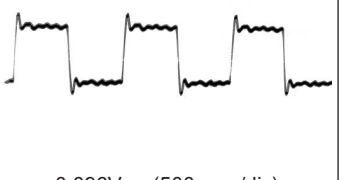
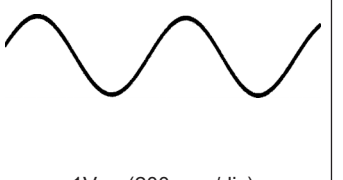
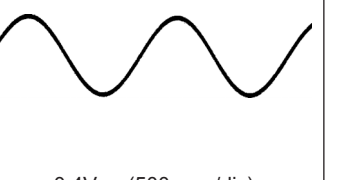
REF NO.	Q5899				QR5801														
MODE	E	C	B		E	C	B												
CD PLAY	0	0.1	0.8		0	2.4	-0.5												
STANDBY	0	0.1	0.8		0	2.4	-0.5												

SA-PTX60EB/EE/EF/EG SMPS P.C.B.

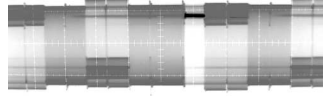
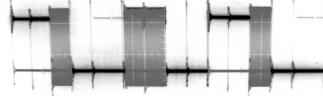
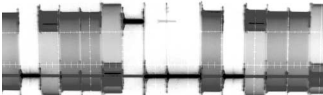
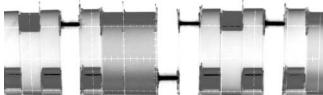
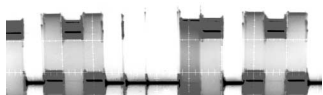
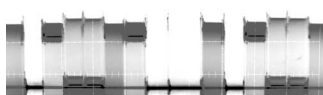
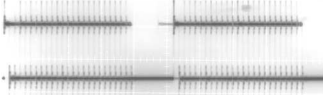
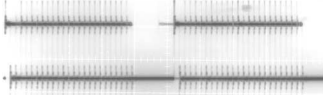
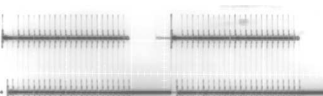
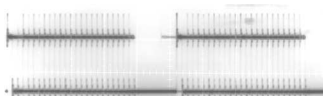
12.14. Waveform Table (1/4)

WF No. IC2001-13 (PLAY)  5Vp-p(50nsec/div)	WF No. IC2101-14 (PLAY)  0.32Vp-p(1msec/div)	WF No. IC2101-15,16,17 (PLAY)  1.08Vp-p(1msec/div)	WF No. IC2101-18 (PLAY)  1.12Vp-p(1msec/div)
WF No. IC2101-19 (PLAY)  0.34Vp-p(2msec/div)	WF No. IC2101-27,30,41 (PLAY)  0.8Vp-p(1msec/div)	WF No. IC2101-44 (PLAY)  10.8Vp-p(5msec/div)	WF No. IC2101-77 (PLAY)  0.8Vp-p(2msec/div)
WF No. IC2101-78,79 (PLAY)  1.6Vp-p(200usec/div)	WF No. IC2101-80 (PLAY)  1.8Vp-p(200usec/div)	WF No. IC2101-81,82 (PLAY)  2.8Vp-p(200usec/div)	WF No. IC2101-91,92 (PLAY)  1.5Vp-p(500usec/div)
WF No. IC2101-95 (PLAY)  2.8Vp-p(200usec/div)	WF No. IC2101-96 (PLAY)  0.4Vp-p(200usec/div)	WF No. IC2101-99 (PLAY)  6.8Vp-p(200usec/div)	WF No. IC2101-100 (PLAY)  1Vp-p(200usec/div)
WF No. IC2801-4 (PLAY)  0.7Vp-p(20usec/div)	WF No. IC2801-8 (PLAY)  1.1Vp-p(20usec/div)	WF No. IC2801-11 (PLAY)  1.05Vp-p(20usec/div)	WF No. IC2801-13 (PLAY)  0.48Vp-p(50usec/div)

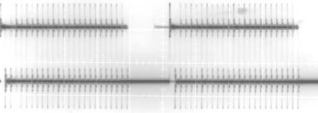
12.15. Waveform Table (2/4)

WF No. IC2801-15 (PLAY)  0.46Vp-p(50µsec/div)	WF No. IC2801-18 (PLAY)  0.95Vp-p(50µsec/div)	WF No. IC2801-21 (PLAY)  0.9Vp-p(50µsec/div)	WF No. IC2801-24 (PLAY)  2.1Vp-p(50µsec/div)
WF No. IC2801-27 (PLAY)  2.2Vp-p(50µsec/div)	WF No. IC2801-30 (PLAY)  2.1Vp-p(50µsec/div)	WF No. IC2801-32 (PLAY)  1.25Vp-p(20µsec/div)	WF No. IC3901-35,36,37,38 (PLAY)  4.8Vp-p(2µsec/div)
WF No. IC3901-43 (PLAY)  4.4Vp-p(500nsec/div)	WF No. IC3901-87 (PLAY)  3.6Vp-p(5µsec/div)	WF No. IC3901-88,89 (PLAY)  3.8Vp-p(5µsec/div)	WF No. IC3901-90 (PLAY)  3.6Vp-p(5µsec/div)
WF No. IC3901-92 (PLAY)  3.6Vp-p(2µsec/div)	WF No. IC3901-93 (PLAY)  3.6Vp-p(5µsec/div)	WF No. IC3901-94 (PLAY)  3.8Vp-p(5µsec/div)	WF No. IC3901-95 (PLAY)  3.8Vp-p(5µsec/div)
WF No. IC5001-9 (PLAY)  0.6Vp-p(1µsec/div)	WF No. IC5001-25,28 (PLAY)  0.096Vp-p(500nsec/div)	WF No. IC5001-38,40 (PLAY)  1Vp-p(200µsec/div)	WF No. IC5001-39 (PLAY)  0.4Vp-p(500nsec/div)

12.16. Waveform Table (3/4)

WF No. IC5001-44 (PLAY)  1.2Vp-p(500nsec/div)	WF No. IC6001-5 (PLAY)  1.5Vp-p(1usec/div)	WF No. IC8001-9 (PLAY)  6.4Vp-p(5usec/div)	WF No. IC8001-10 (PLAY)  6.4Vp-p(5usec/div)
WF No. IC8001-11 (PLAY)  6Vp-p(5usec/div)	WF No. IC8001-12 (PLAY)  6Vp-p(5usec/div)	WF No. IC8001-13 (PLAY)  6.4Vp-p(5usec/div)	WF No. IC8001-14 (PLAY)  6.4Vp-p(5usec/div)
WF No. IC8001-17 (PLAY)  6Vp-p(5usec/div)	WF No. IC8001-18 (PLAY)  6.4Vp-p(5usec/div)	WF No. IC8001-59 (PLAY)  2.4Vp-p(2usec/div)	WF No. IC8001-62,63,64 (PLAY)  5.6Vp-p(2usec/div)
WF No. IC8001-129 (PLAY)  0.72Vp-p(20usec/div)	WF No. IC8001-130 (PLAY)  0.72Vp-p(20usec/div)	WF No. IC8001-131 (PLAY)  0.42Vp-p(20usec/div)	WF No. IC8001-138 (PLAY)  1.05Vp-p(20usec/div)
WF No. IC8001-139 (PLAY)  0.9Vp-p(20usec/div)	WF No. IC8001-151 (PLAY)  6Vp-p(2usec/div)	WF No. IC8001-152 (PLAY)  6.4Vp-p(500nsec/div)	WF No. IC8421-3,9,10,11 (PLAY)  4.8Vp-p(2usec/div)

12.17. Waveform Table (4/4)

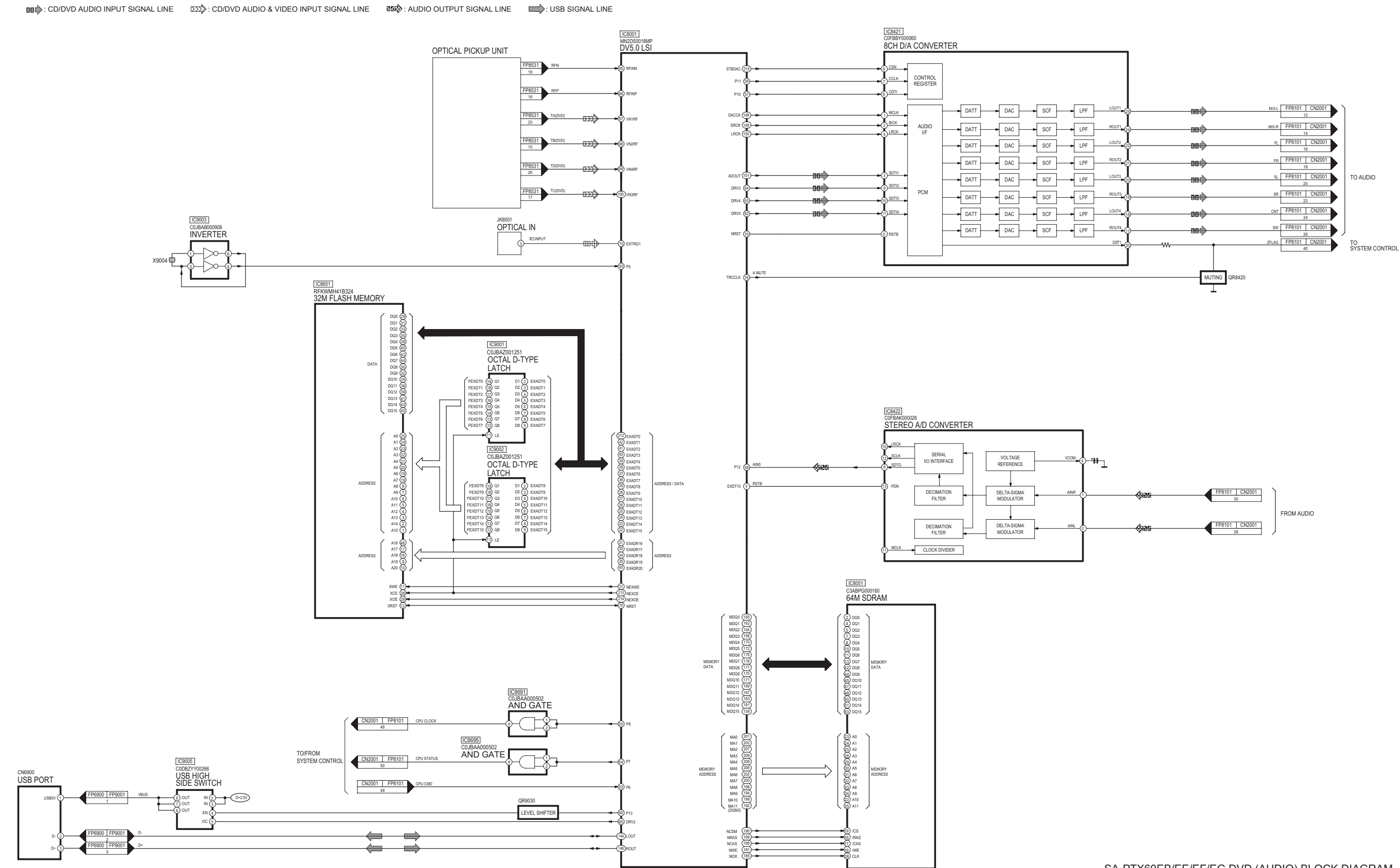
WF No. IC8421-17 (PLAY)  0.092Vp-p(2msec/div)	WF No. IC8421-18,19,20,21,22 (PLAY)  0.76Vp-p(500usec/div)	WF No. IC8421-24 (PLAY)  2.3Vp-p(500usec/div)	WF No. IC8421-25 (PLAY)  0.24Vp-p(500usec/div)
WF No. IC8422-1 (PLAY)  1.5Vp-p(500usec/div)	WF No. IC8422-2 (PLAY)  0.15Vp-p(500usec/div)	WF No. IC8422-9 (PLAY)  7.6Vp-p(2usec/div)	

13 Illustration of ICs, Transistor and Diode

 RFKWEPTX60EG (8p) C0ABBB000230 (8p) C0DBZYY00266 (8p) C0ABBB000189 (8p) C3EBGC000056 (8p) C0FBAK000026 (16p) C1BB00001008 (16p)		 C0JBAB000908 (6p) C0FBBY000060 (30p) C9ZB00000461 (32p) C3FBNY000036 (48p) C3ABPG000160 (54p)		 MN2DS0018MP (216p) MN864702A (128p) C0HBB0000057 (44p) RFKWX0746A (48p)	
 MFI341S2161	 C1AB00002735 (100p) RFKWMPTX60EG (100p)	 C0GBG0000048 (28P)	 C0CBCDC00063	 MIP2F20MSSCF	 C0EBA0000039
 C0EBE0000456 C0DBZYY00311	 C0CBCBC00140 C0JBAA000501 C0JBAA000502 C0JBAB000907 C0ABZA000080 C0ZBZ0001675	 C5HACY000003 (7p)	 C0DABFC00002 (3p) C0DAEMZ00001 (3p)	 C0CBADD00010	 B1BBCF000006
 C0DBFZG00001	 C0DAAYG00001 (5p) C0DAAHY00001 (5p)	 C0GAE0000007	 B1HBECA00004	 B1BABK000001 B1BAAJ000003	 2SC3940ARA
 B1BACD000018	 2SB0621AHA	 B1ADCE000012 B1CFGC000004 B1GBCFGN0018 B1GDCFNN0032 B1GDCFJJ0008 B1ABGC000005 B1GDCFGA0018 B1GDCFJJ0002 B1GDCFJJ0047			
 B1ABCF000176 B1ADCE000012 B1ADCF000001 B1ADGB000008 B1GBCFJJ0051 B1GBCFLL0037 B1GBCFJJ0007		 2SB1218ARL 2SD0601AHL 2SD1819AOL UNR221400L UNR91A5JOL UNR521100L			
 B1GBCFJA0017	 B1ABCF000020	 B1CFHA000002	 B0EDKT000009	 B1HBDA00001	 B0FBAR000041
 B1CBRK000001	 B3AAA0000803	 B0EAMM000057 B0HAMP000094 B0JAME000029 B0JAME000114		 B0HBSM000054	 B0HFRJ000012
 B0AZ0000052	 B0HBSM000043	 B0BC010A0007 B0BC035A0007 B0BC6R100010 B0BC2R4A0006 B0BC5R000009		 MAZ8200GML MAZ8240GHL MAZ8120GML	 MA2J1110GL MA2J7280GL MAZ8075GML MAZ8051GML MAZ8062GML MAZ8220GML MAZ8110GML MAZ8068GML MAZ8300GML
 MA2YF8000L	 B0ACCK000005	 B0HCMM000019 B0JCPD000025			

14 Block Diagram

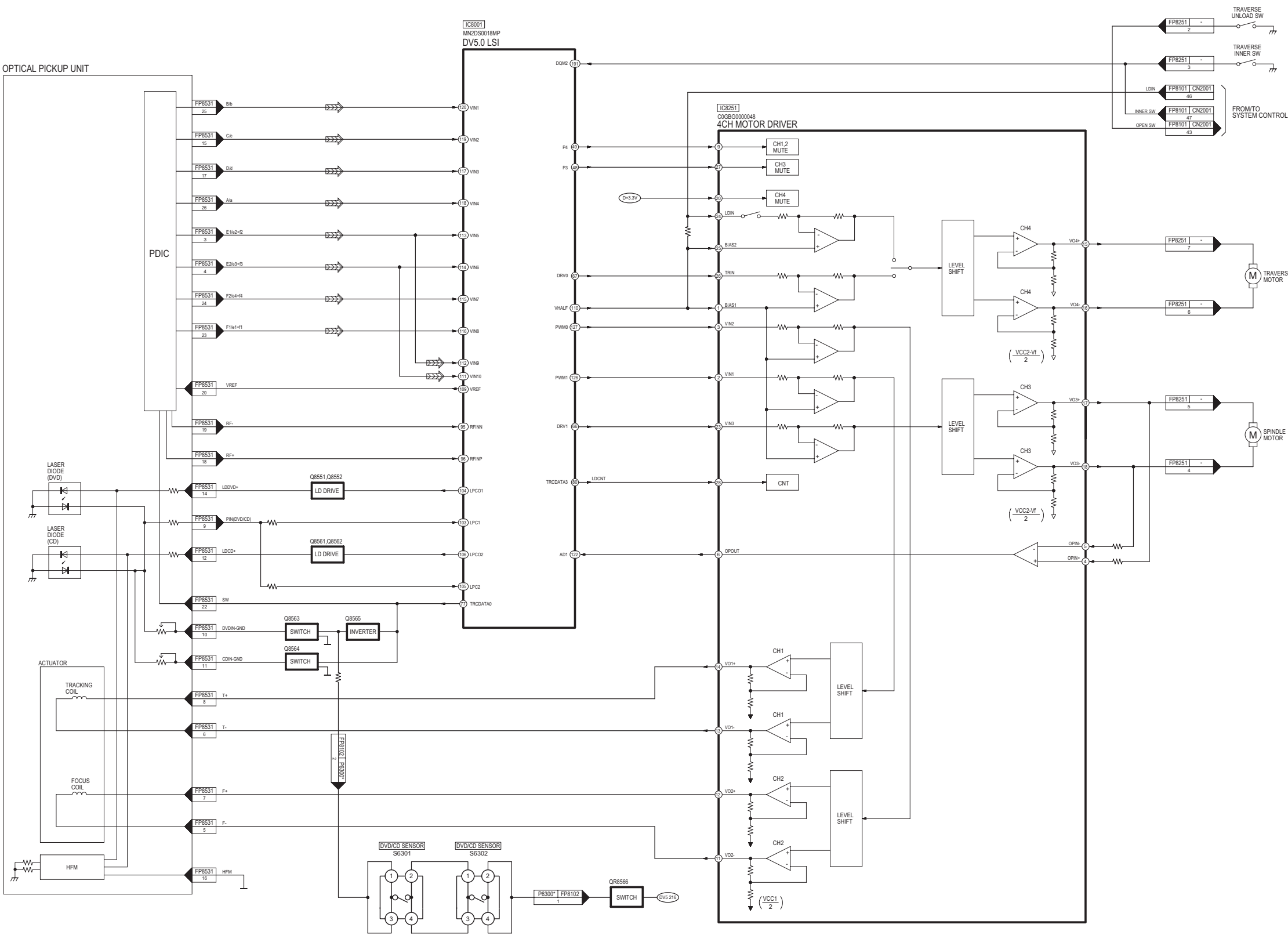
14.1. DVD (Audio)



SA-PTX60EB/EE/EF/EG DVD (AUDIO) BLOCK DIAGRAM

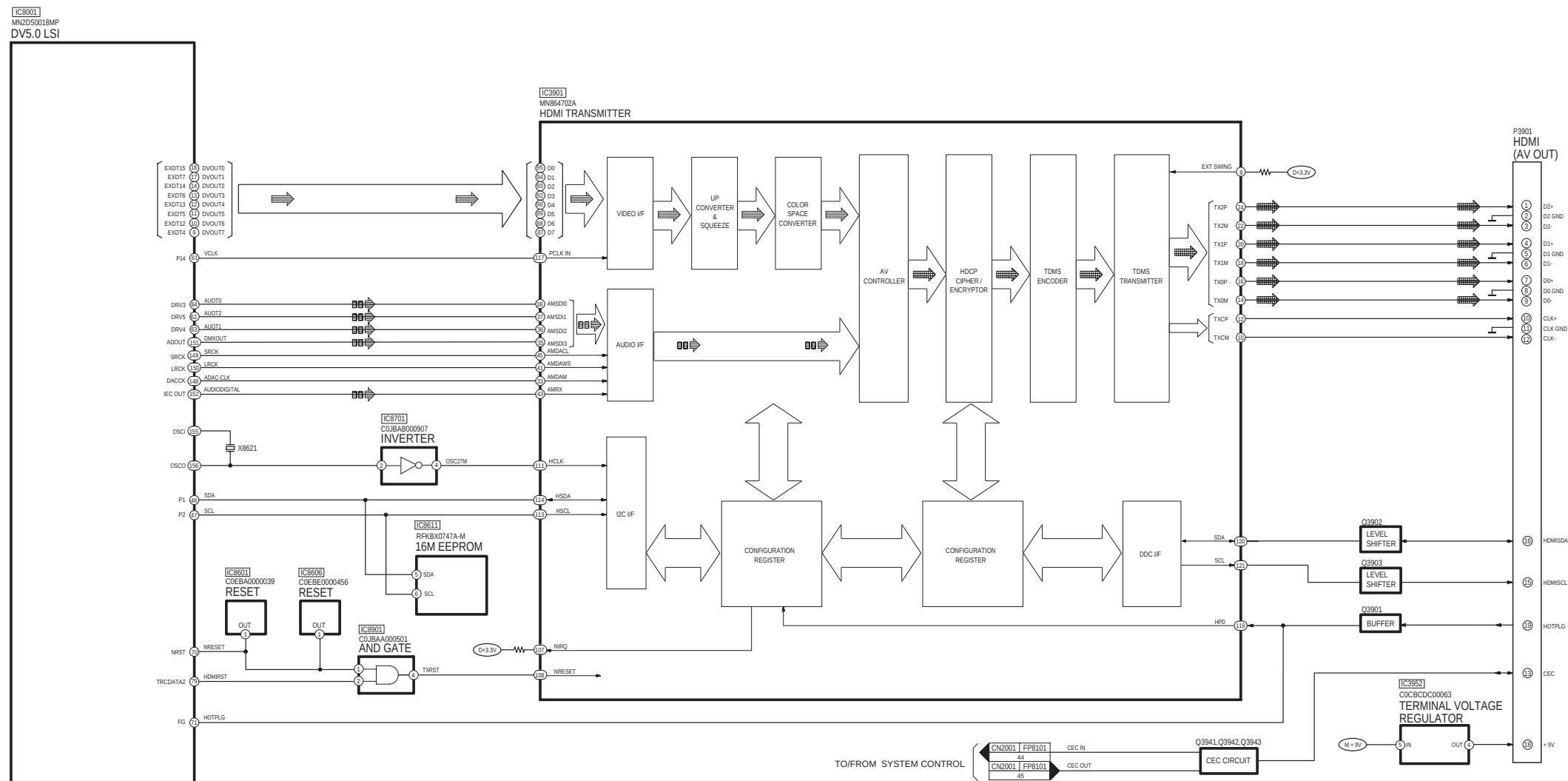
14.2. DVD (Servo)

 : CD/DVD AUDIO & VIDEO INPUT SIGNAL LINE

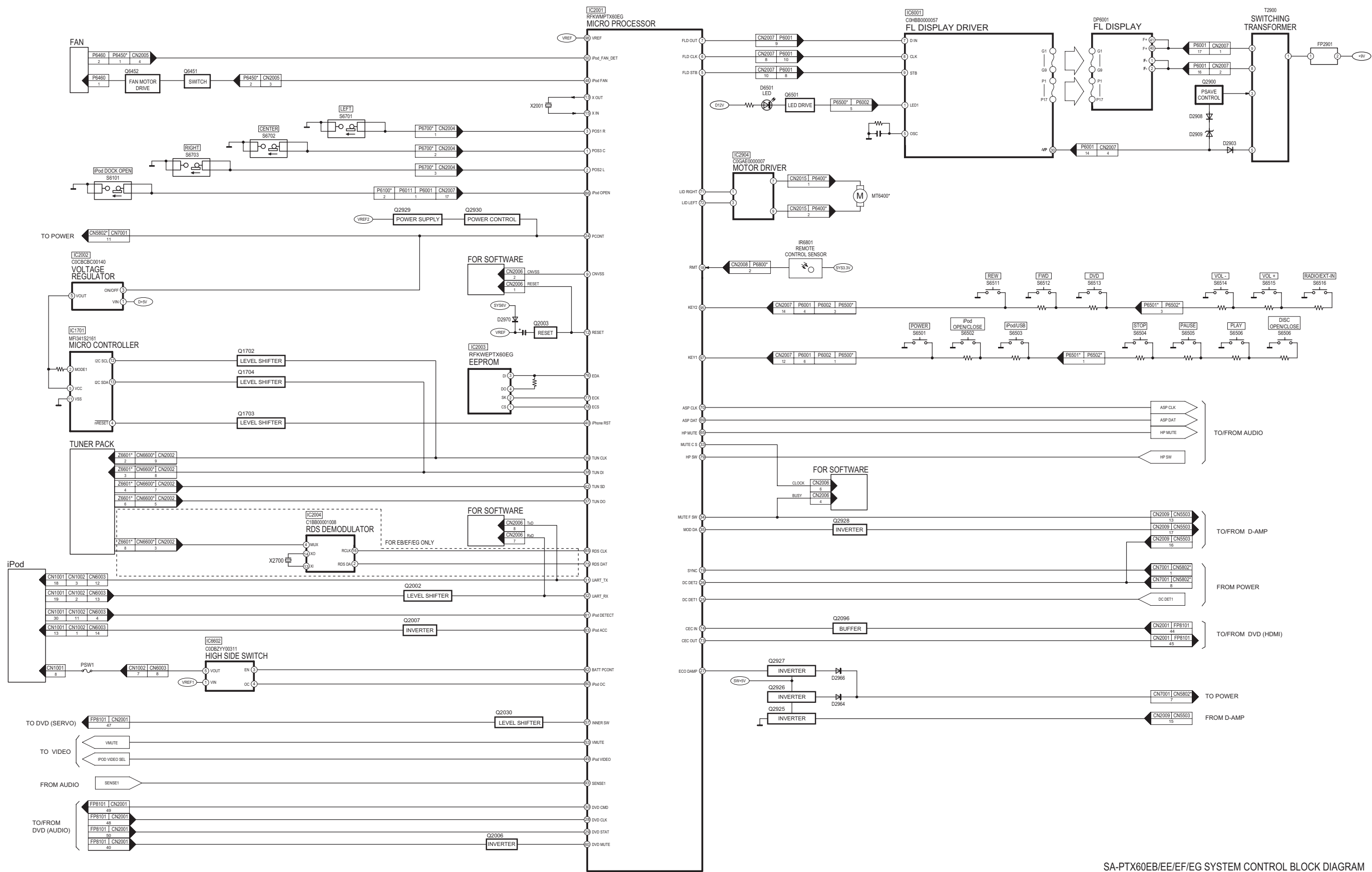


SA-PTX60EB/EE/EF/EG DVD (SERVO) BLOCK DIAGRAM

14.3. DVD (HDMI)

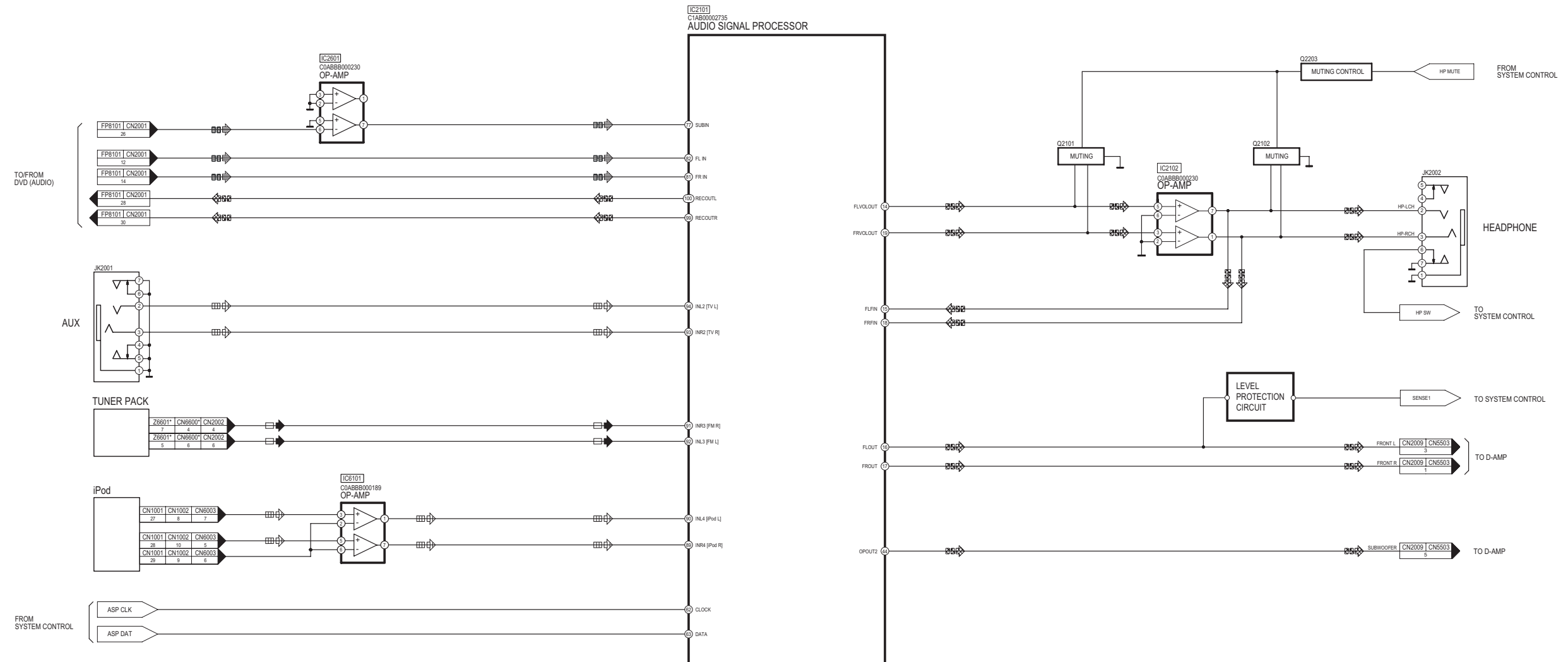


14.4. System Control



SA-PTX60EB/EE/EF/EG SYSTEM CONTROL BLOCK DIAGRAM

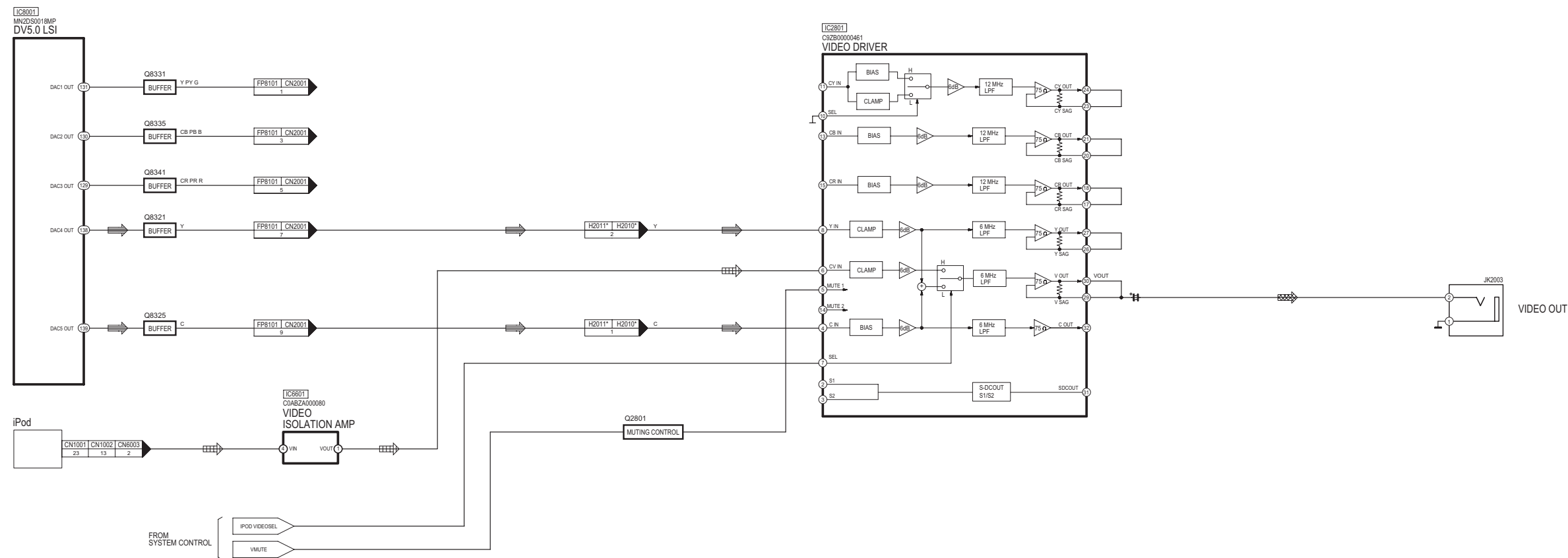
14.5. Audio



SA-PTX60EB/EE/EF/EG AUDIO BLOCK DIAGRAM

14.6. Video

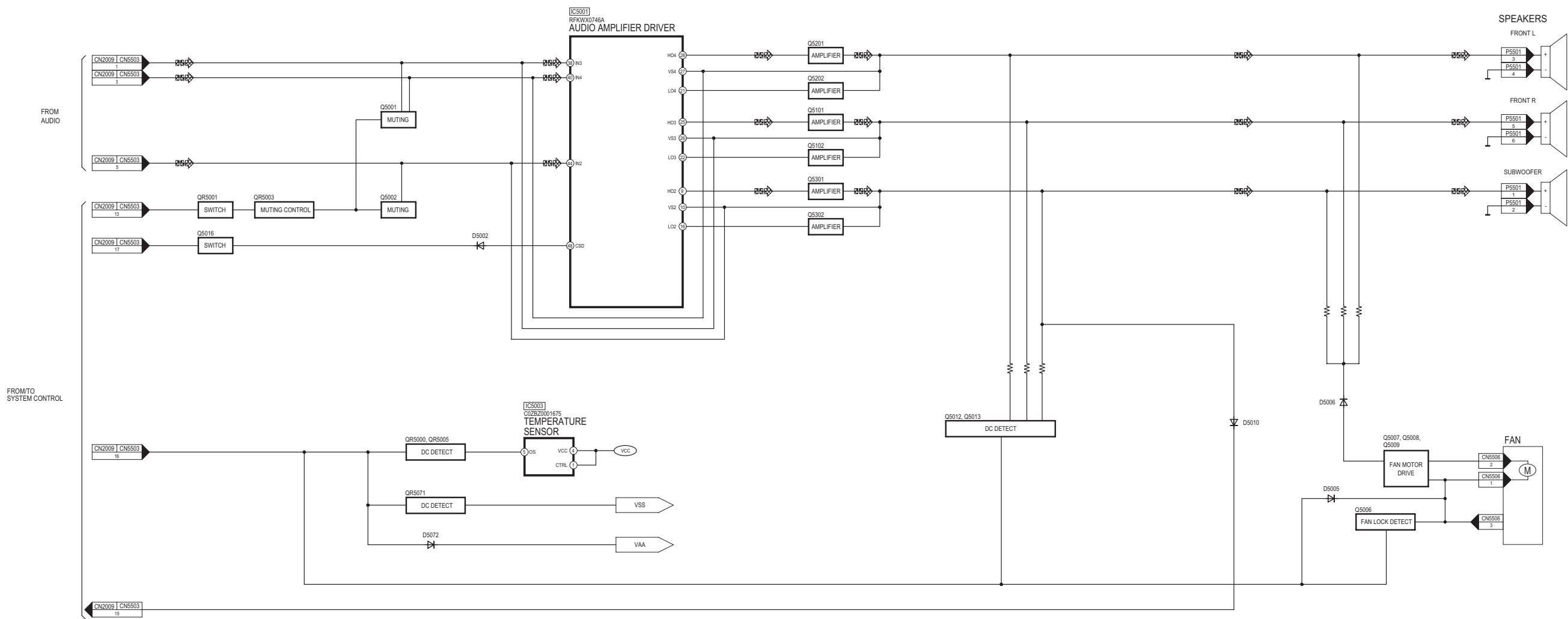
➡ : CD/DVD VIDEO INPUT SIGNAL LINE ⏏ : iPod VIDEO INPUT SIGNAL LINE ⏏ : VIDEO OUTPUT SIGNAL LINE



SA-PTX60EB/EE/EF/EG VIDEO BLOCK DIAGRAM

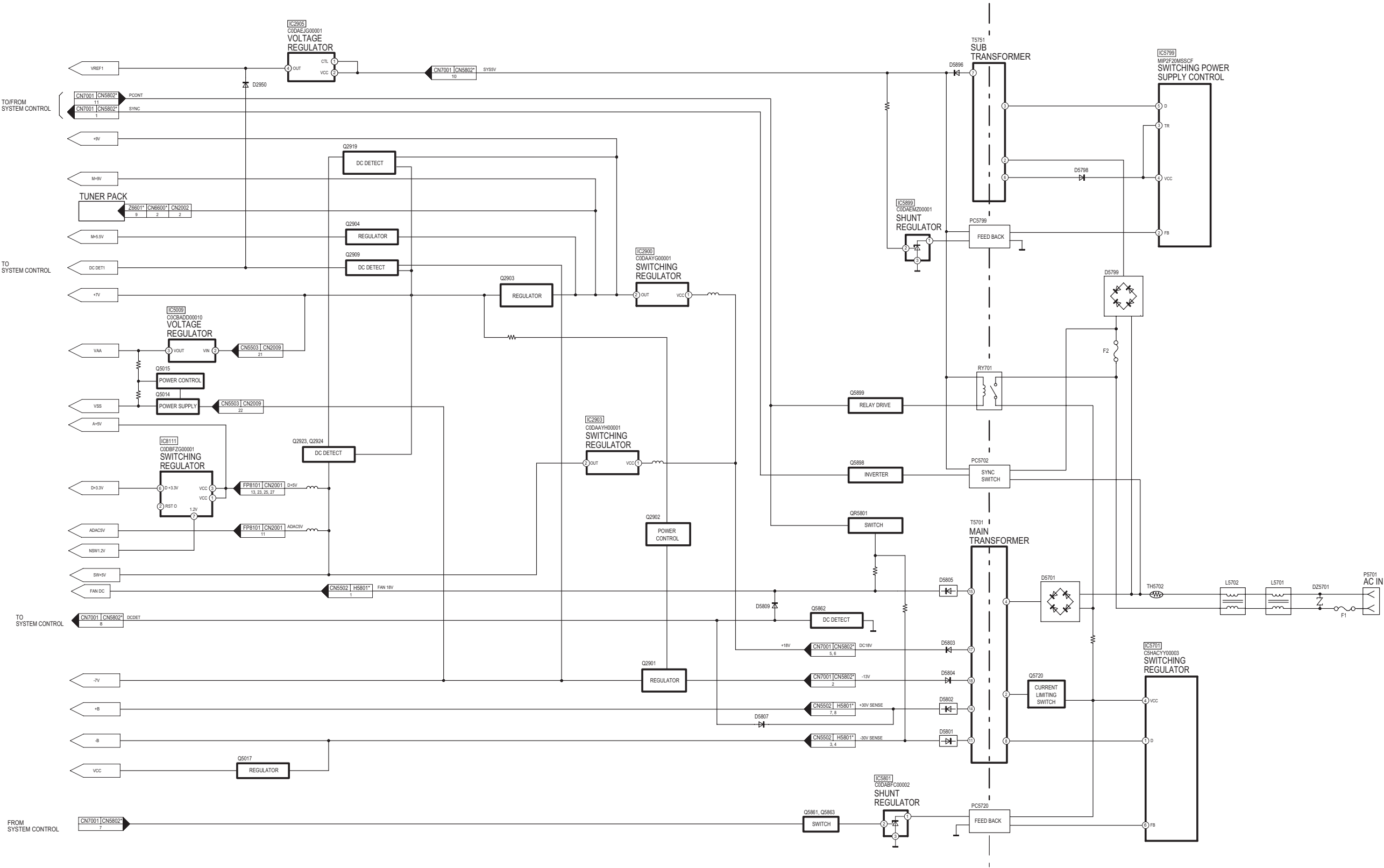
14.7. D-Amp

 : AUDIO OUTPUT SIGNAL LINE



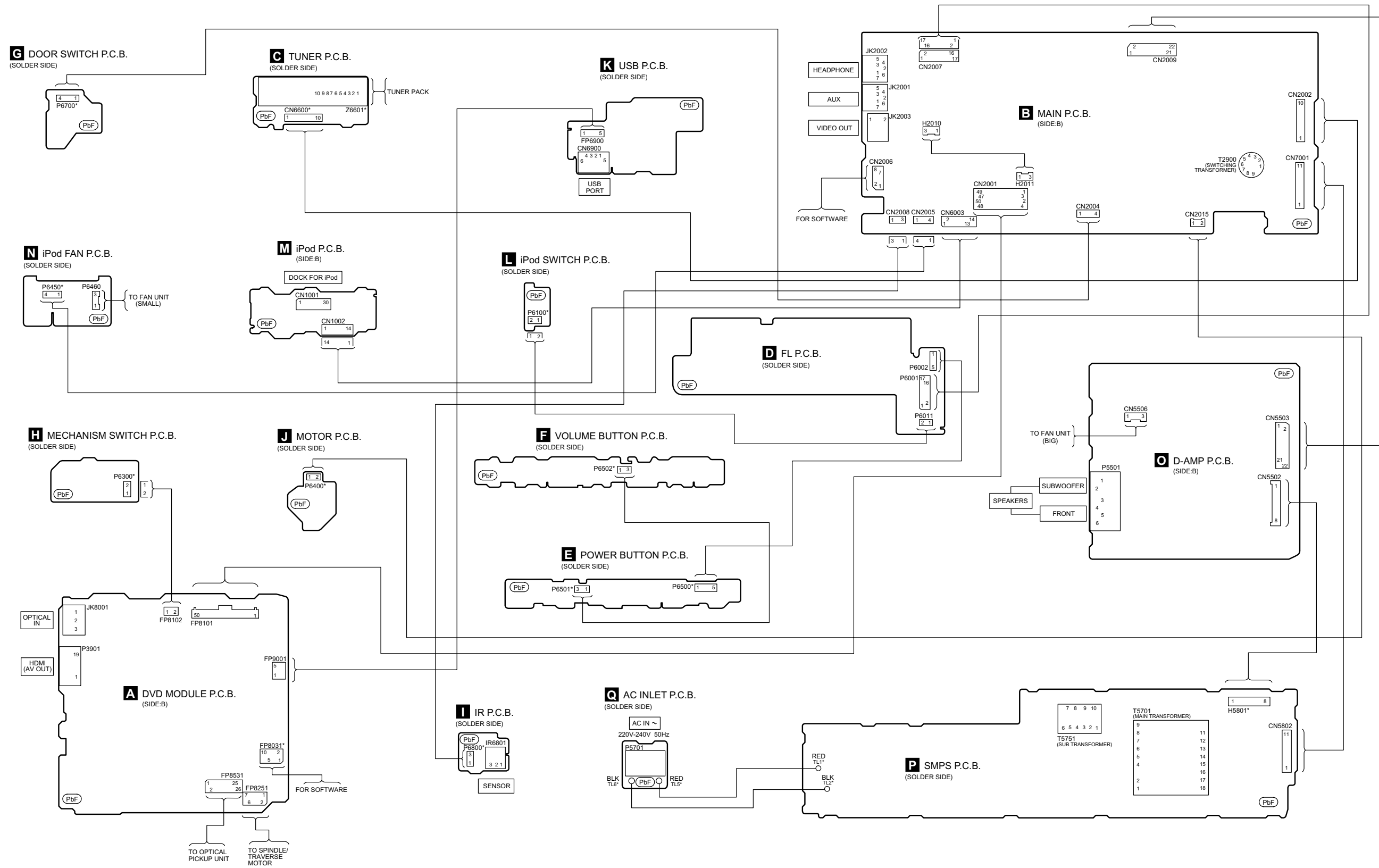
SA-PTX60EB/EE/EF/EG D-AMP BLOCK DIAGRAM

14.8. Power



SA-PTX60EB/EE/EF/EG POWER BLOCK DIAGRAM

15 Wiring Diagram



NOTE: " * " REF IS FOR INDICATION ONLY.

SA-PTX60EB/EE/EF/EG WIRING CONNECTION

16 Schematic Diagram Notes

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

Notes:

S6101:	iPod Dock Open switch.
S6301/S6302:	DVD/CD Sensor Switch.
S6501:	Power switch (⏻/⏻).
S6502:	iPod Open/Close switch (⏻).
S6503:	iPod/USB switch.
S6504:	Stop switch (■).
S6505:	Pause switch (⏸).
S6506:	Play switch (▶).
S6507:	Disc Open/Close switch (⏻).
S6511:	REW switch (◀◀/◀◀).
S6512:	FWD switch (▶▶/▶▶).
S6513:	DVD switch.
S6514:	VOL - switch (⏮).
S6515:	VOL + switch (⏭).
S6516:	Radio/Ext-in switch.
S6701:	Left switch.
S6702:	Center switch.
S6703:	Right switch.

- 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, C5702, C5704, C5705

• Resistor

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

• Capacitor

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

• Coil

Unit of inductance is H, unless otherwise noted.

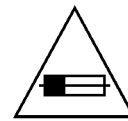
• *

Ref. is for indication only.

- Voltage and signal line

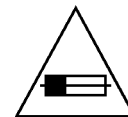
—	:+B signal line
—	:-B signal line
⏻	:CD/DVD Audio input signal line
⏻	:iPod/AUX/Optical Audio input signal line
▶	:CD/DVD Video input signal line
▶	:iPod Video input signal line
⏻▶	:CD/DVD Audio & Video input signal line
⏻	:Audio output signal line
▶	:Video output signal line
⏻▶	:Audio & Video output signal line
⏻	:FM signal Line
⏻	:USB signal line

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE F1 T3.15AL 250V FUSE



RISK OF FIRE-REPLACE FUSE AS MARKED.

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE F2 T1.6AL 250V FUSE



RISK OF FIRE-REPLACE FUSE AS MARKED.

FUSE CAUTION



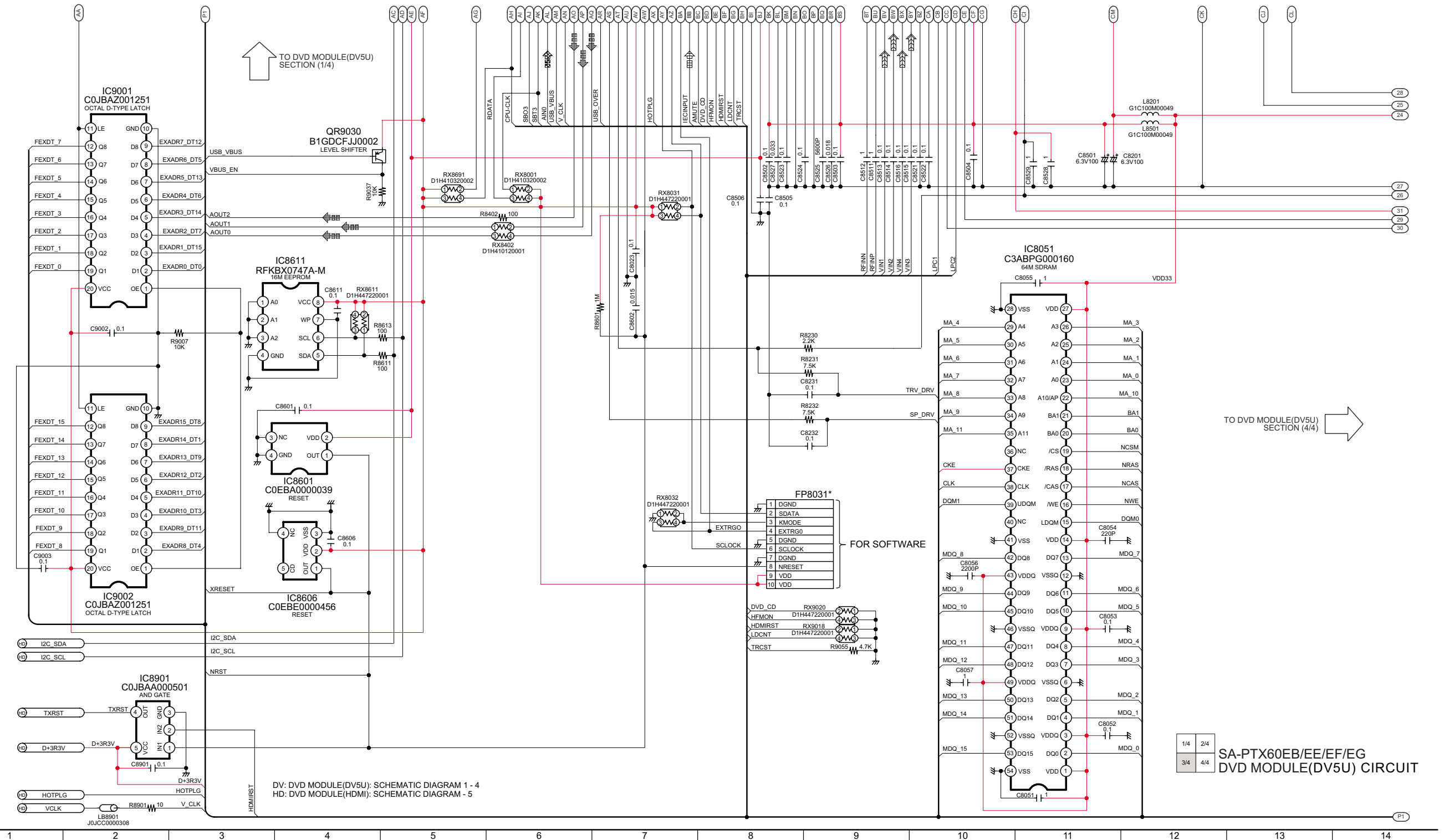
These symbols located near the fuse indicates that the fuse used is a fast operating type. For continued protection against fire hazard, replace with the same type fuse. For fuse rating, refer to the marking adjacent to the symbol.



SCHEMATIC DIAGRAM - 3

A DVD MODULE(DV5U) CIRCUIT

— : +B SIGNAL LINE
 : CD/DVD AUDIO INPUT SIGNAL LINE
 : CD/DVD VIDEO INPUT SIGNAL LINE
 : AUDIO OUTPUT SIGNAL LINE
 : OPTICAL AUDIO INPUT SIGNAL LINE
 : CD/DVD AUDIO & VIDEO INPUT SIGNAL LINE



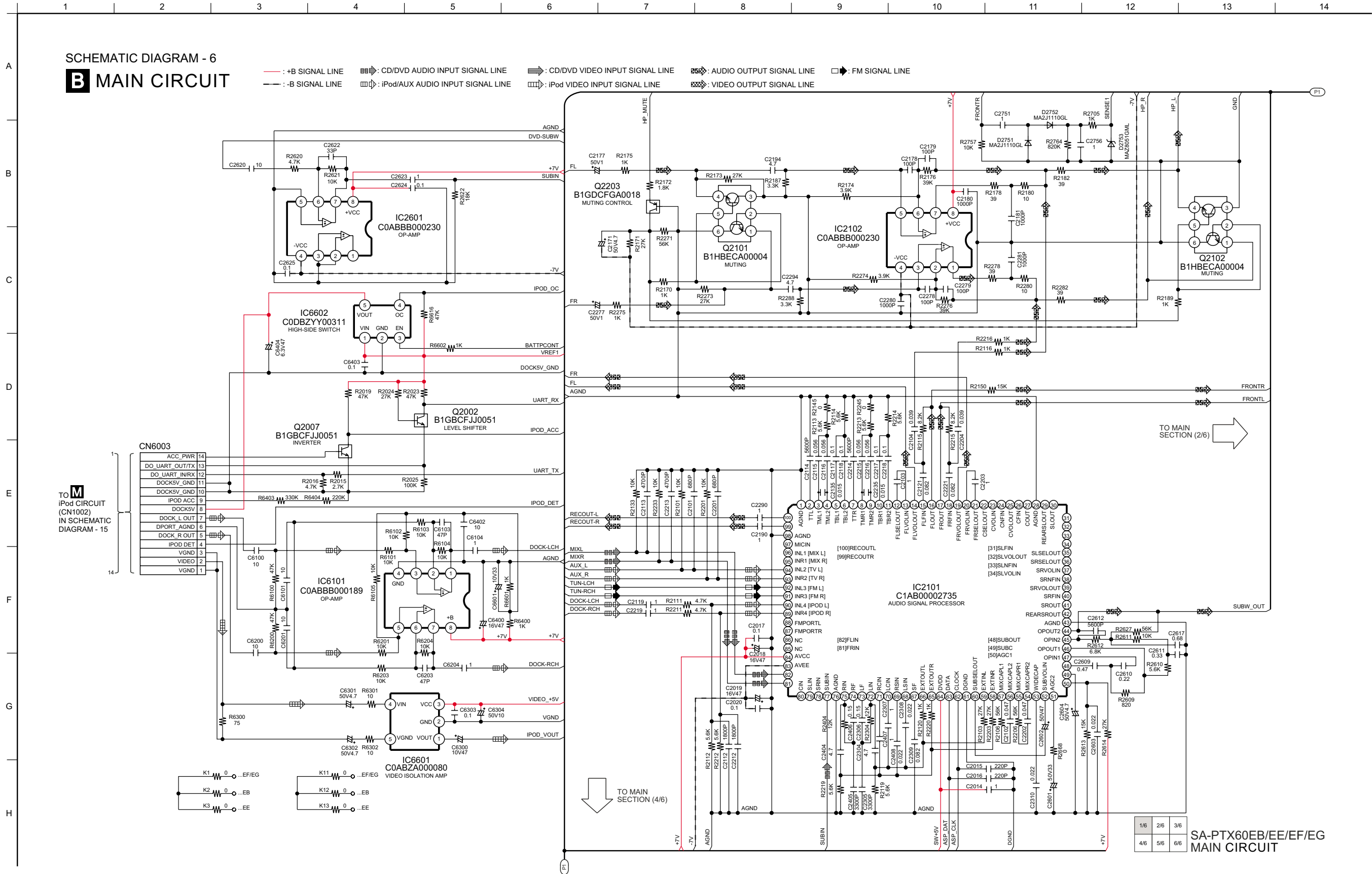
A DVD MODULE(DV5U) CIRCUIT



A DVD MODULE(HDMI) CIRCUIT

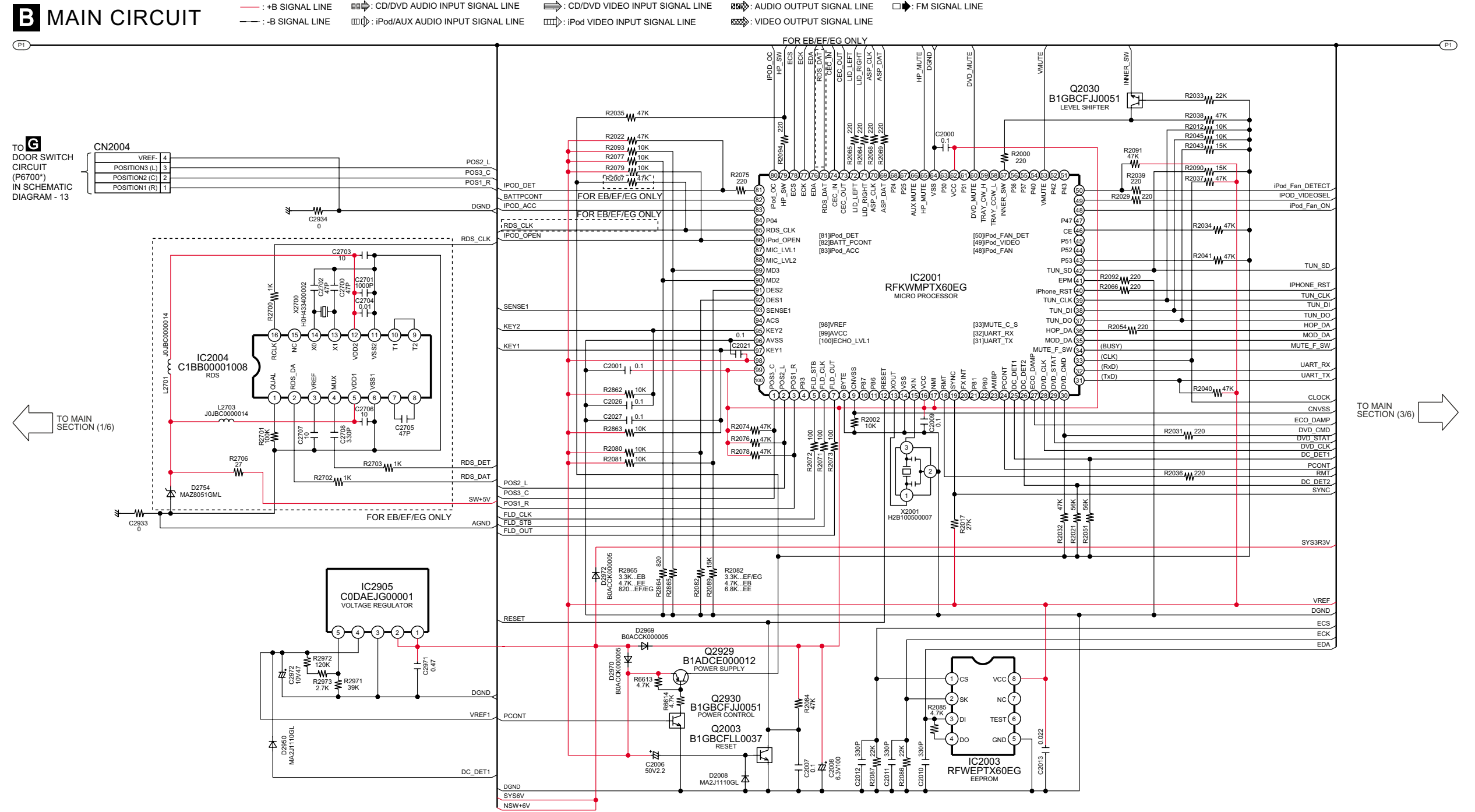


17.2. Main Circuit



SCHEMATIC DIAGRAM - 7

B MAIN CIRCUIT

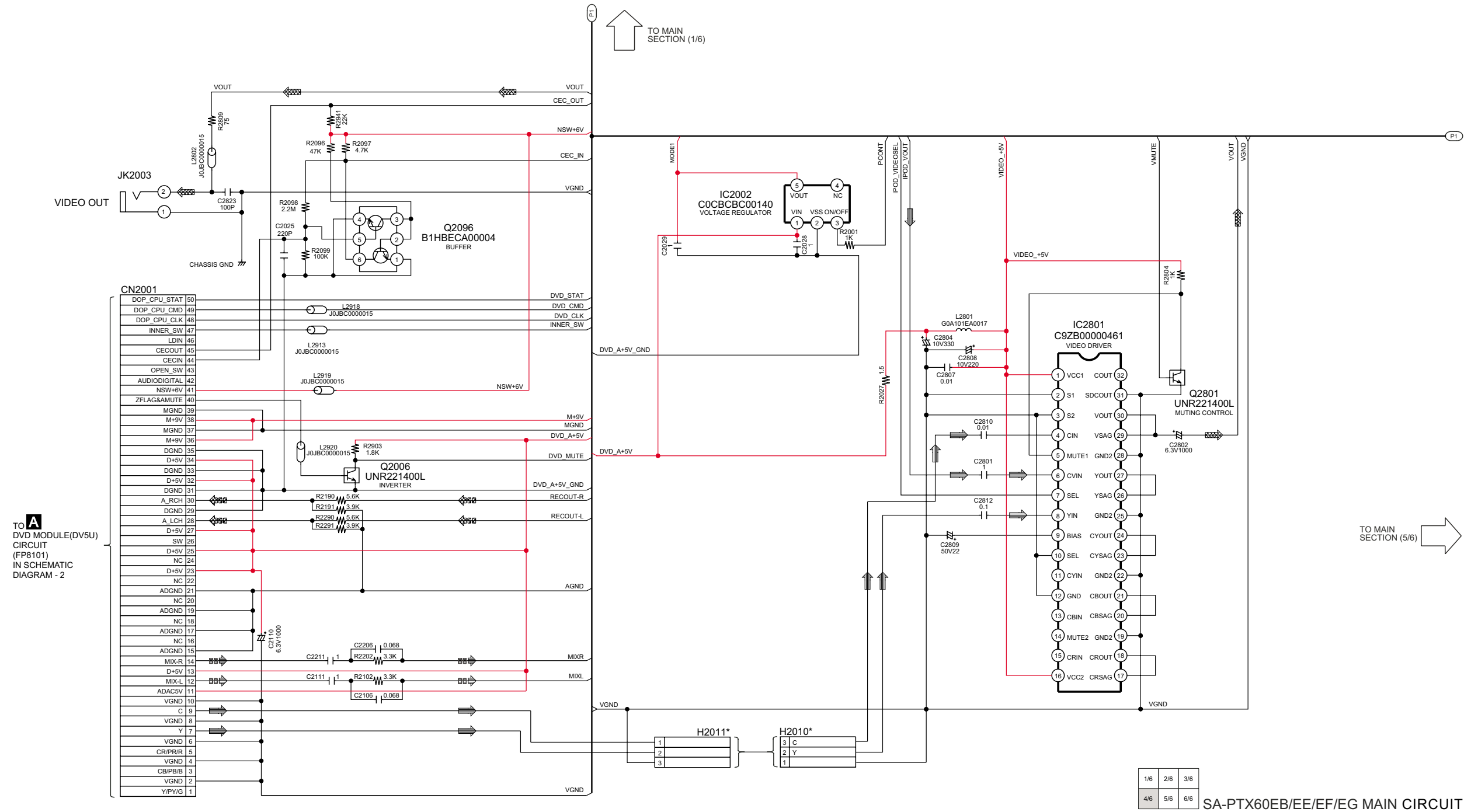


B MAIN CIRCUIT

SCHEMATIC DIAGRAM - 9

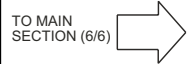
B MAIN CIRCUIT

— : +B SIGNAL LINE : CD/DVD AUDIO INPUT SIGNAL LINE : CD/DVD VIDEO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE : FM SIGNAL LINE
— : -B SIGNAL LINE : iPod/AUX AUDIO INPUT SIGNAL LINE : iPod VIDEO INPUT SIGNAL LINE : VIDEO OUTPUT SIGNAL LINE



B MAIN CIRCUIT

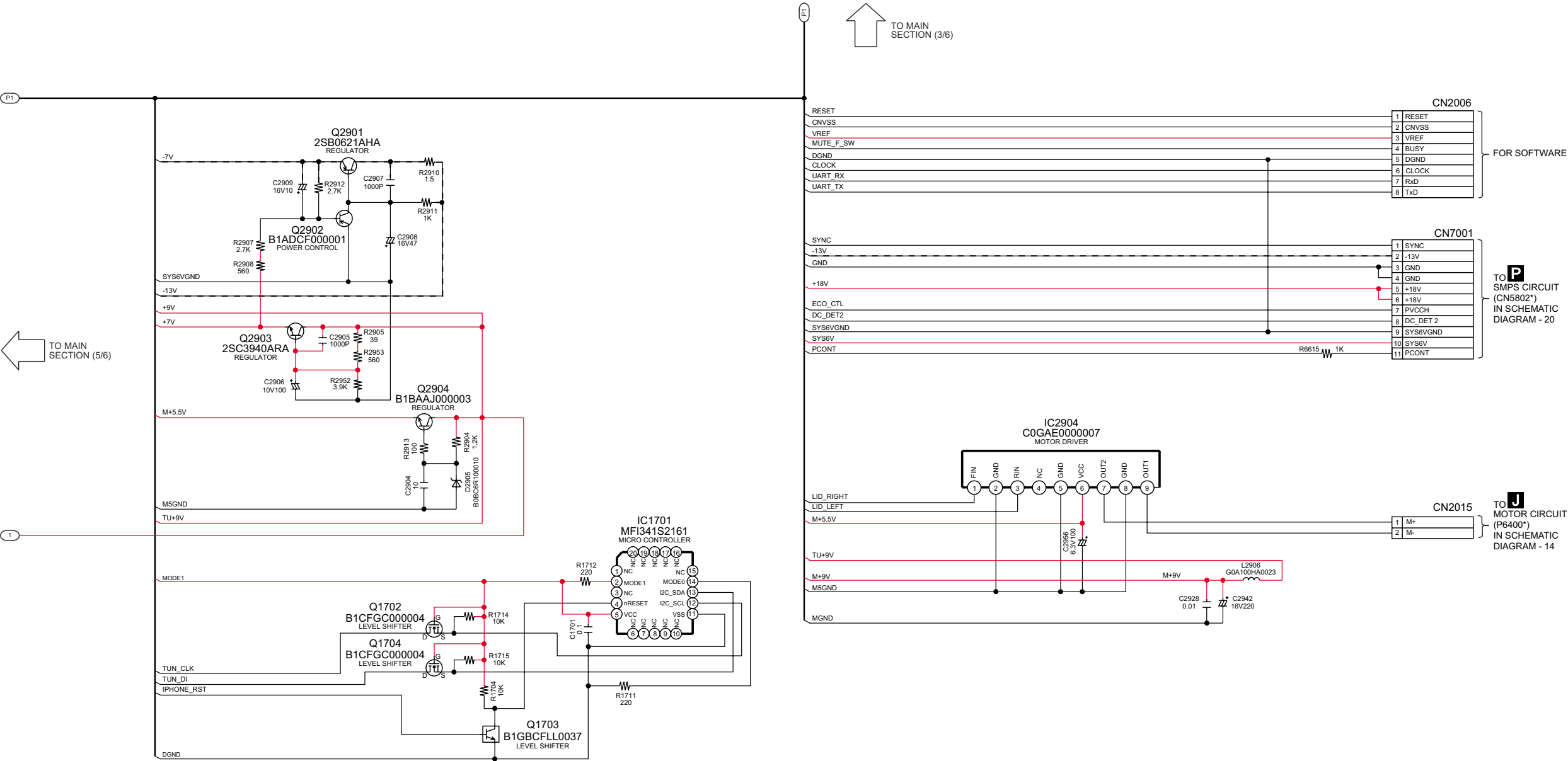
— : +B SIGNAL LINE
— : -B SIGNAL LINE

6 SA-PTX60EB/EE/EF/EG MAIN CIRCUIT

SCHEMATIC DIAGRAM - 11

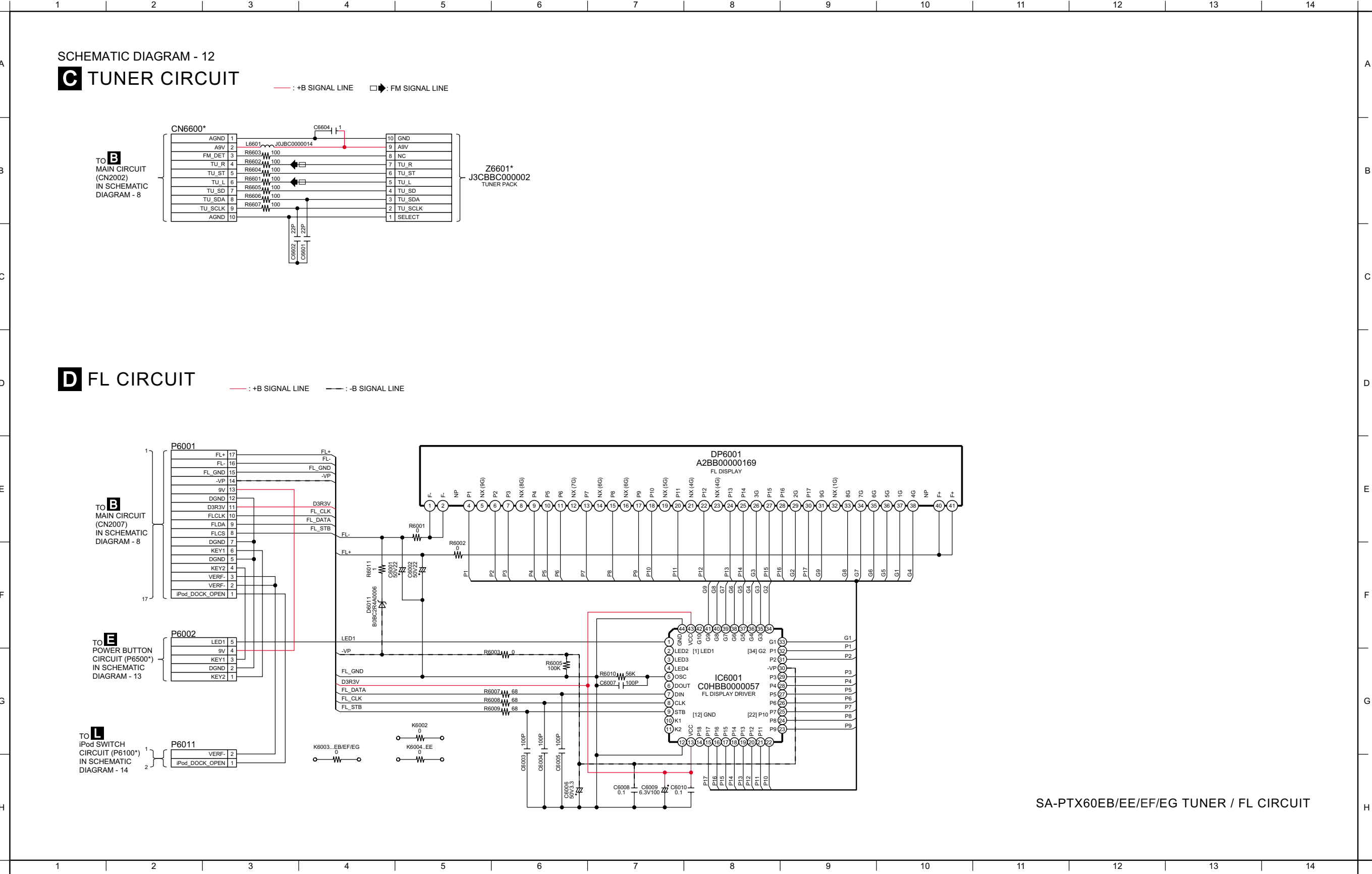
B MAIN CIRCUIT

— : +B SIGNAL LINE : CD/DVD AUDIO INPUT SIGNAL LINE : CD/DVD VIDEO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE : FM SIGNAL LINE
— : -B SIGNAL LINE : iPod/AUX AUDIO INPUT SIGNAL LINE : iPod VIDEO INPUT SIGNAL LINE : VIDEO OUTPUT SIGNAL LINE



1/6 2/6 3/6
4/6 5/6 6/6 SA-PTX60EB/EE/EF/EG MAIN CIRCUIT

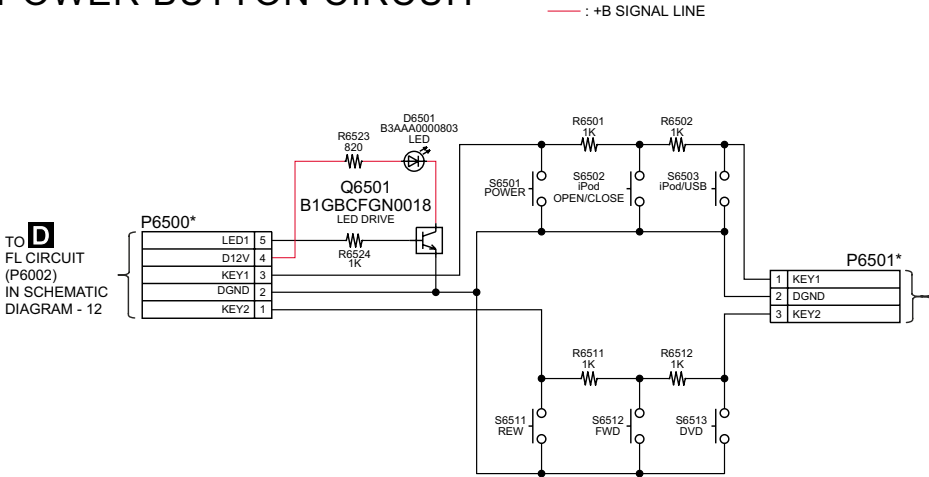
17.3. Tuner & FL Circuit



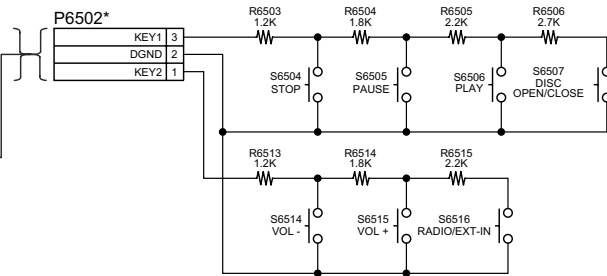
17.4. Power Button, Volume Button, Door Switch & Mechanism Switch Circuit

SCHEMATIC DIAGRAM - 13

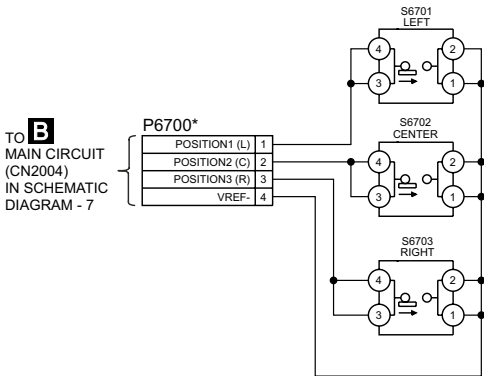
E POWER BUTTON CIRCUIT



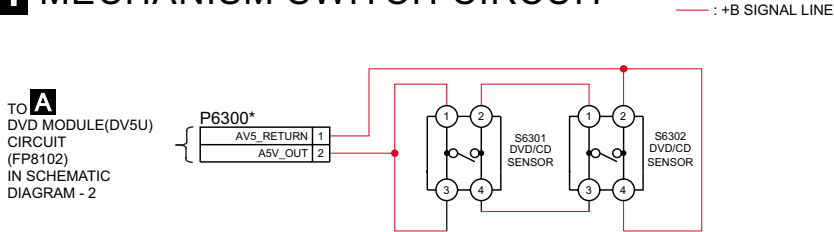
F VOLUME BUTTON CIRCUIT



G DOOR SWITCH CIRCUIT



H MECHANISM SWITCH CIRCUIT

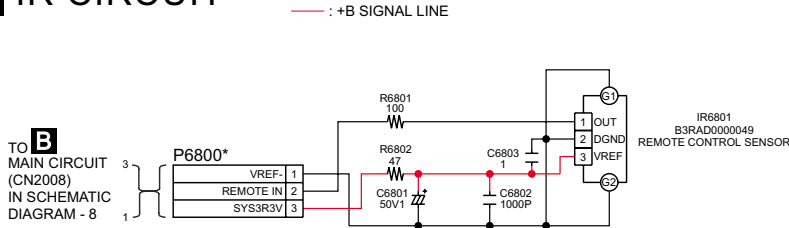


SA-PTX60EB/EE/EF/EG POWER BUTTON / VOLUME BUTTON / DOOR SWITCH / MECHANISM SWITCH CIRCUIT

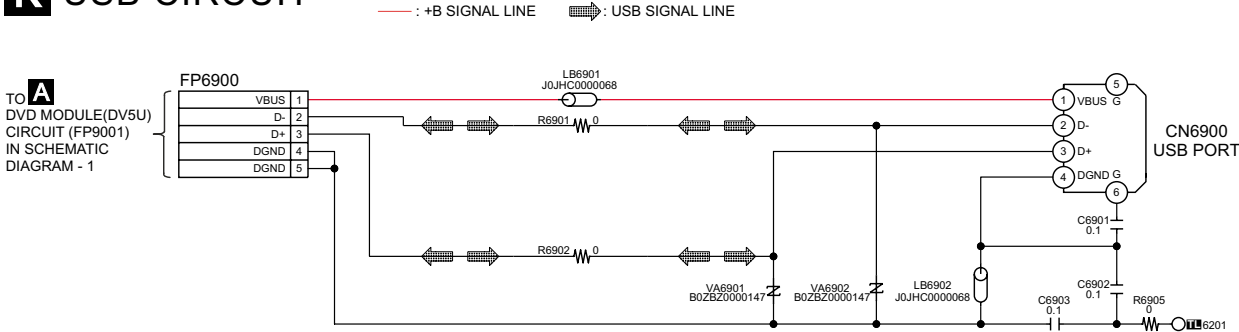
17.5. IR, Motor, USB & iPod Switch Circuit

SCHEMATIC DIAGRAM - 14

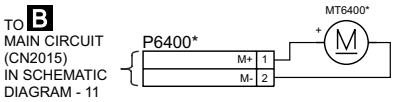
I IR CIRCUIT



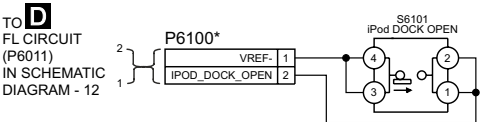
K USB CIRCUIT



J MOTOR CIRCUIT



L iPod SWITCH CIRCUIT

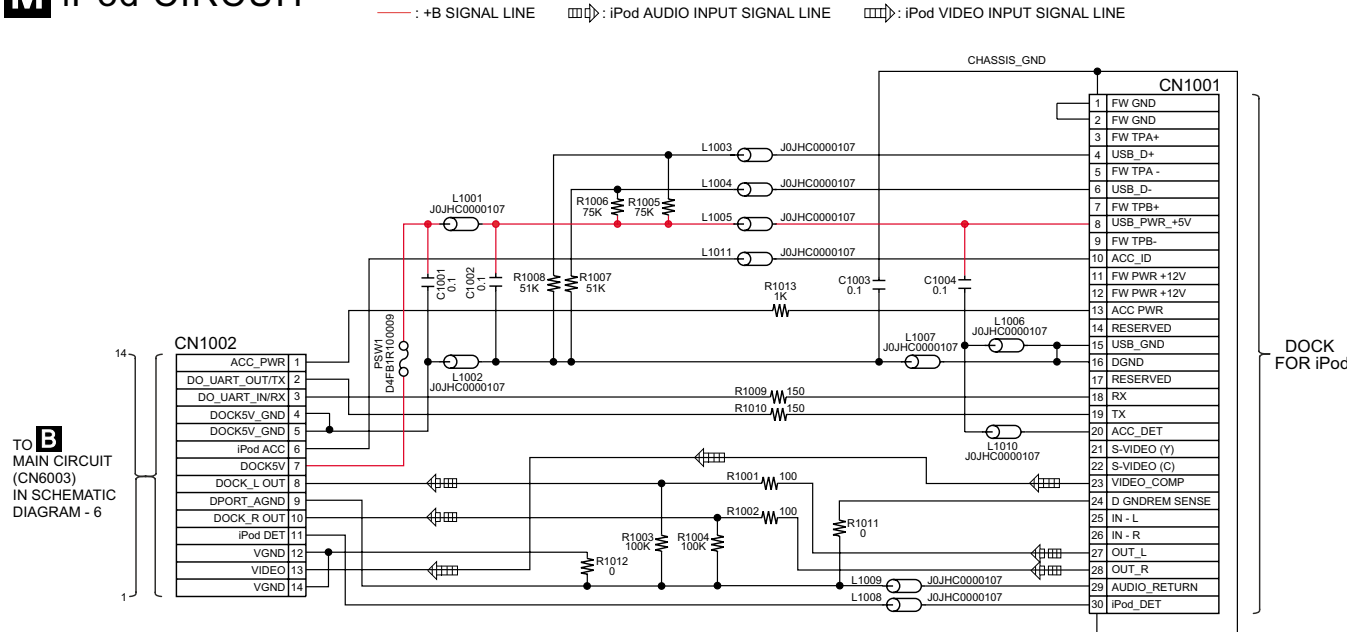


SA-PTX60EB/EE/EF/EG IR / MOTOR / USB / iPod SWITCH CIRCUIT

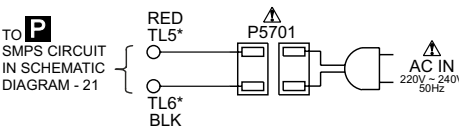
17.6. iPod, iPod Fan & AC Inlet Circuit

SCHEMATIC DIAGRAM - 15

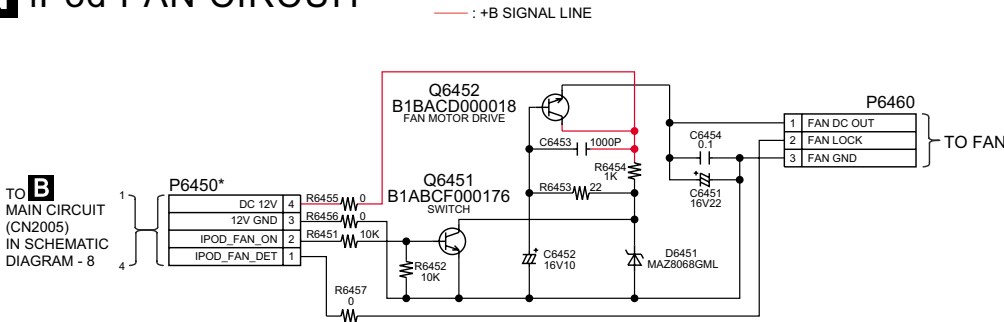
M iPod CIRCUIT



Q AC INLET CIRCUIT

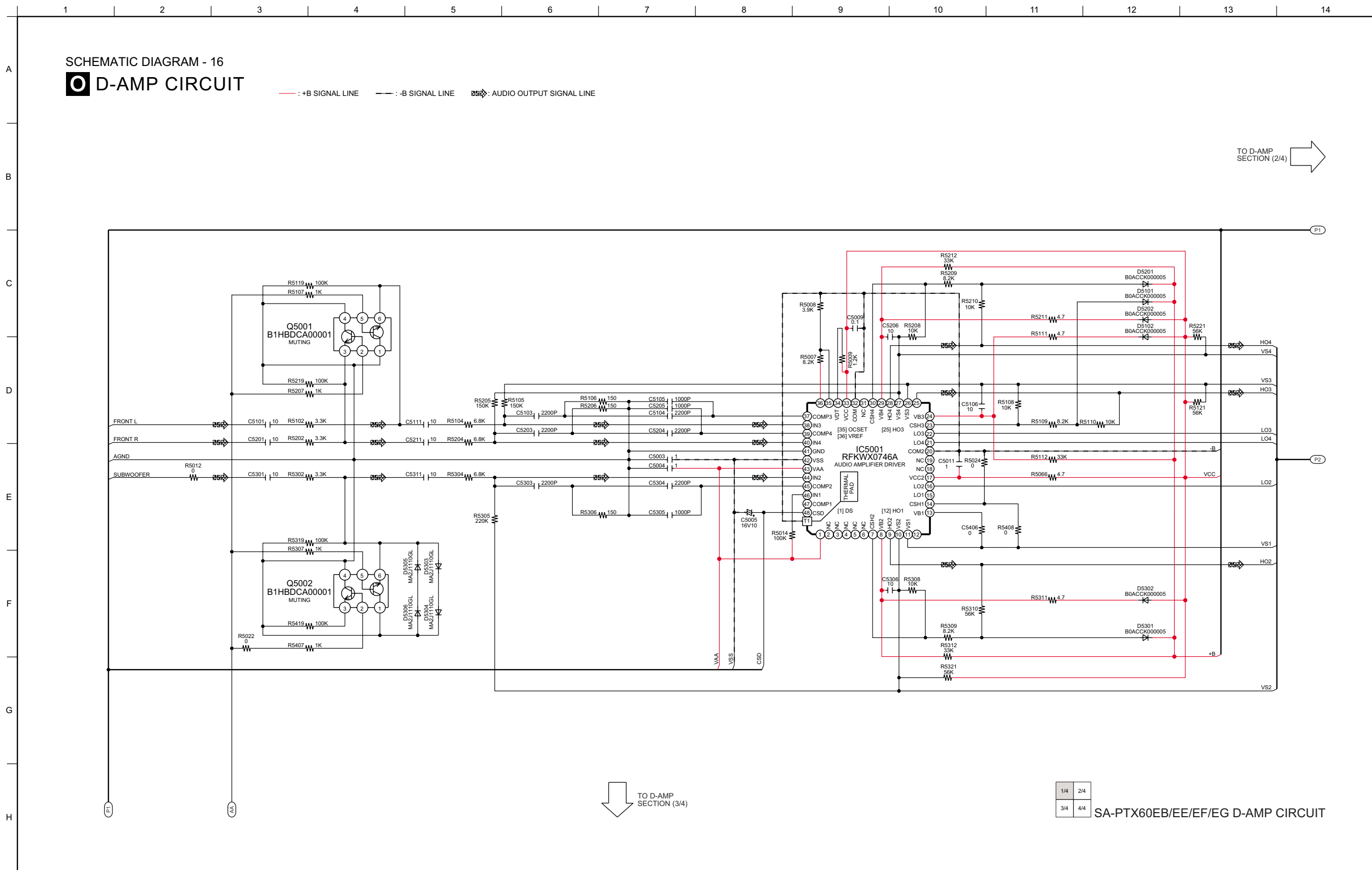


N iPod FAN CIRCUIT



SA-PTX60EB/EE/EF/EG iPod / iPod FAN / AC INLET CIRCUIT

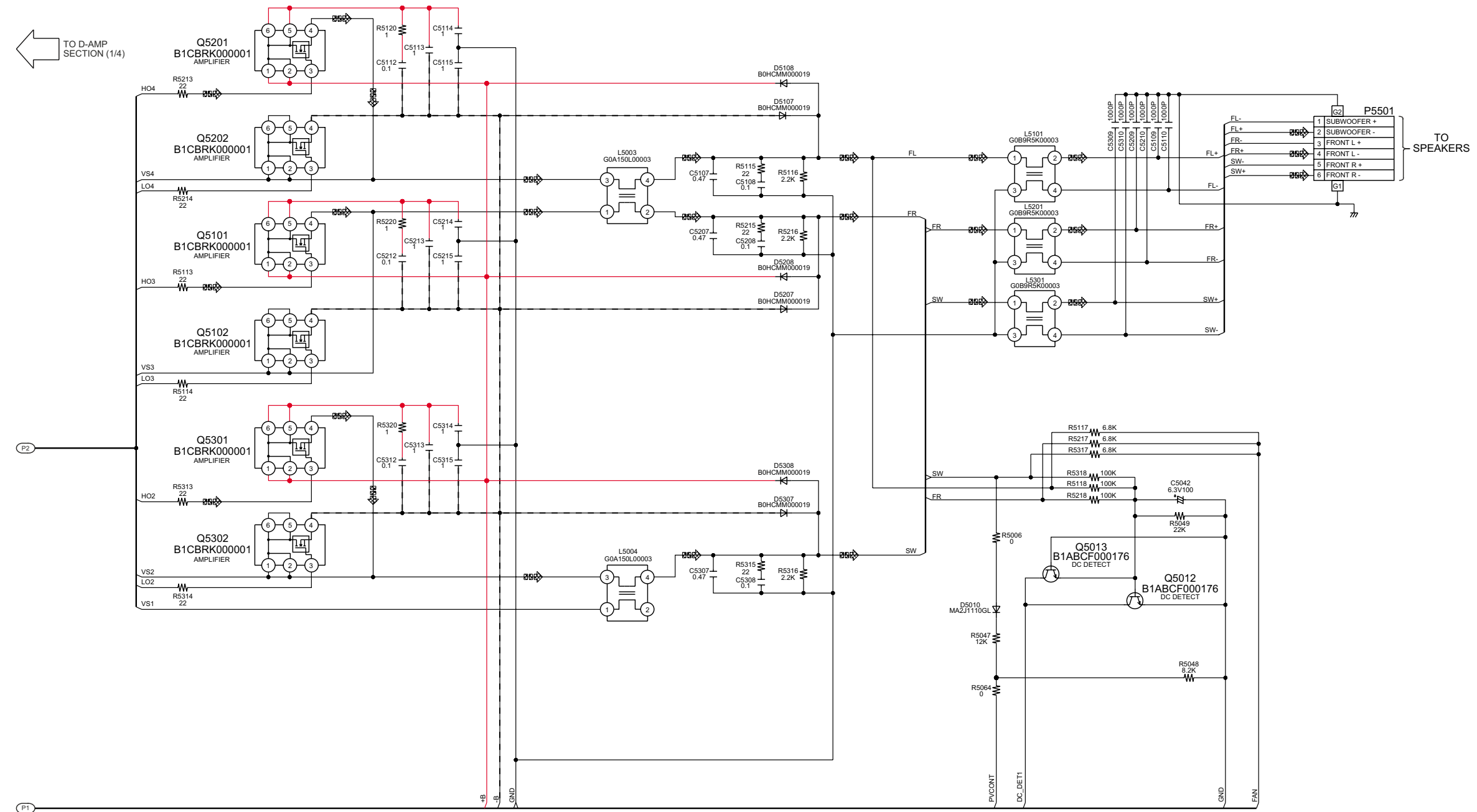
17.7. D-Amp Circuit



SCHEMATIC DIAGRAM - 17

D-AMP CIRCUIT

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



TO D-AMP
SECTION (4/4)

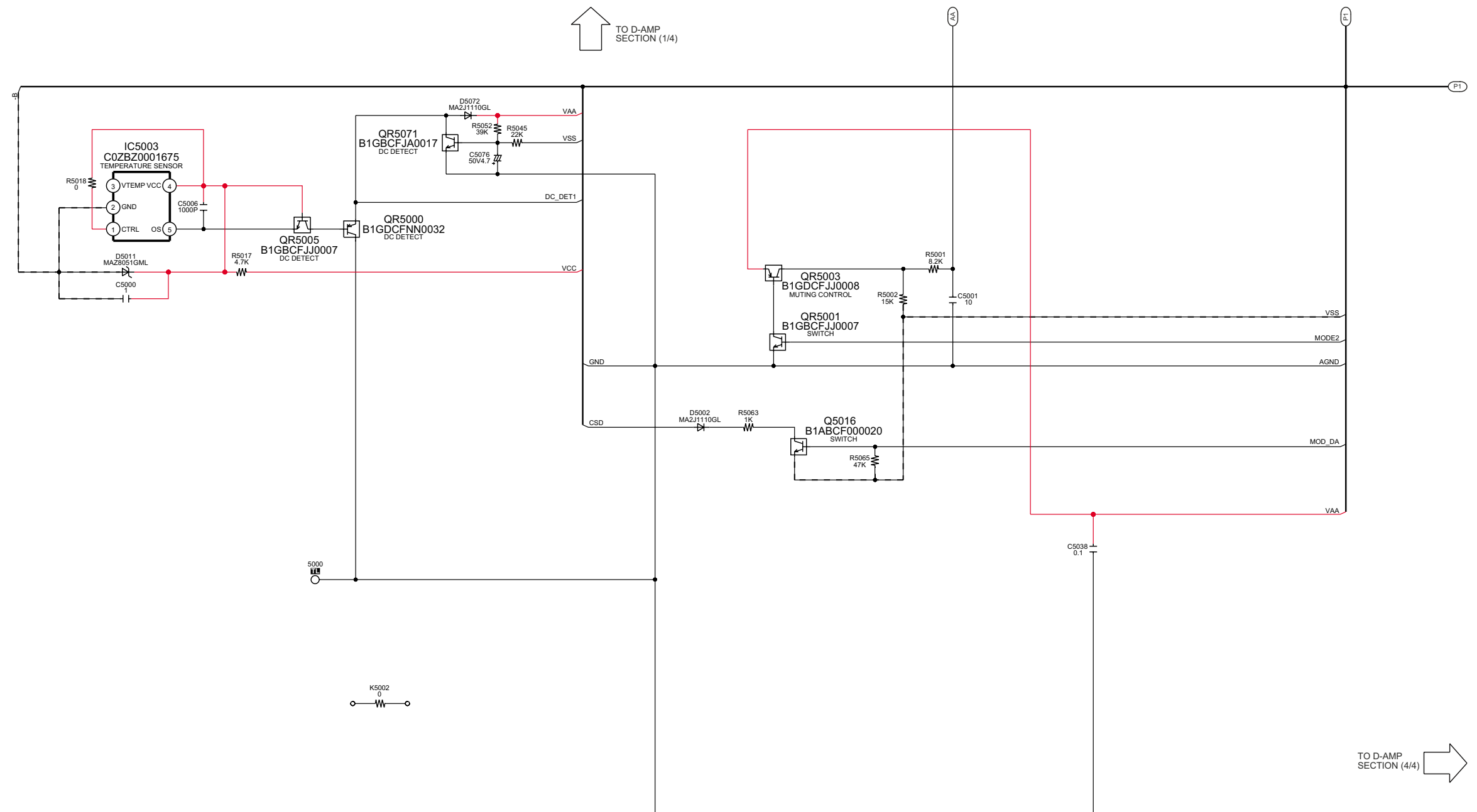
1/4	2/4
3/4	4/4

SA-PTX60EB/EE/EF/EG D-AMP CIRCUIT

SCHEMATIC DIAGRAM - 18

D-AMP CIRCUIT

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



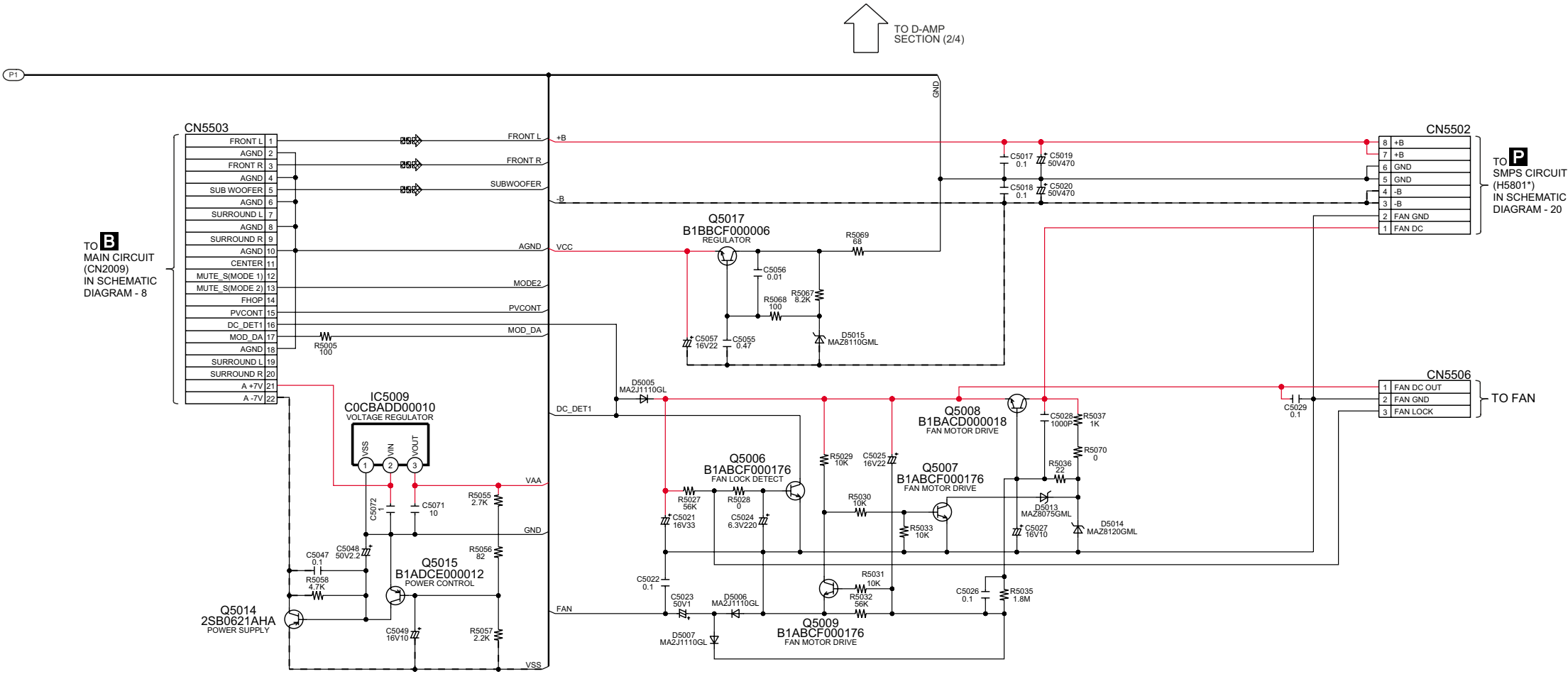
↑ TO D-AMP SECTION (1/4)

TO D-AMP SECTION (4/4) →

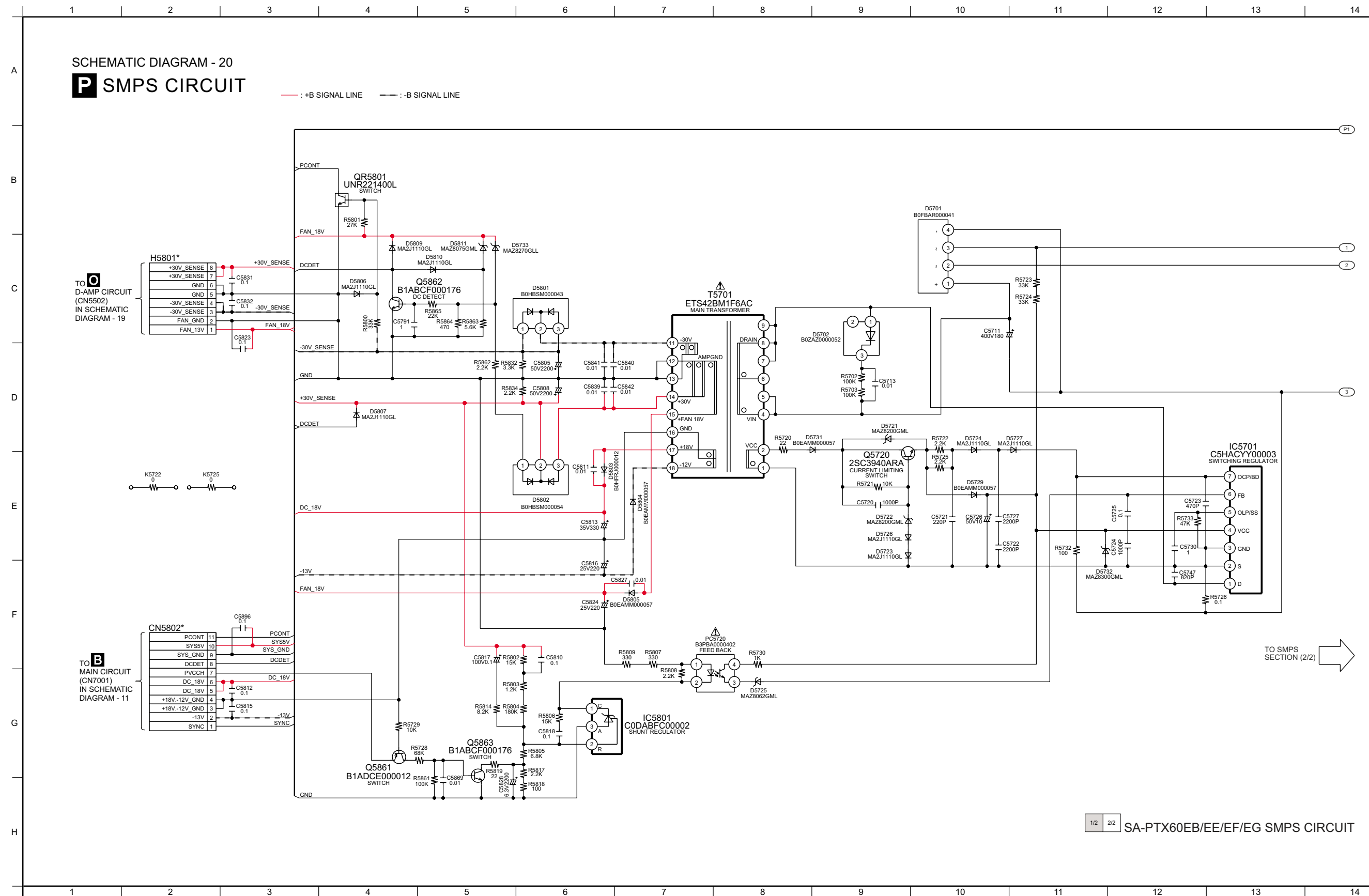
SCHEMATIC DIAGRAM - 19

D-AMP CIRCUIT

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



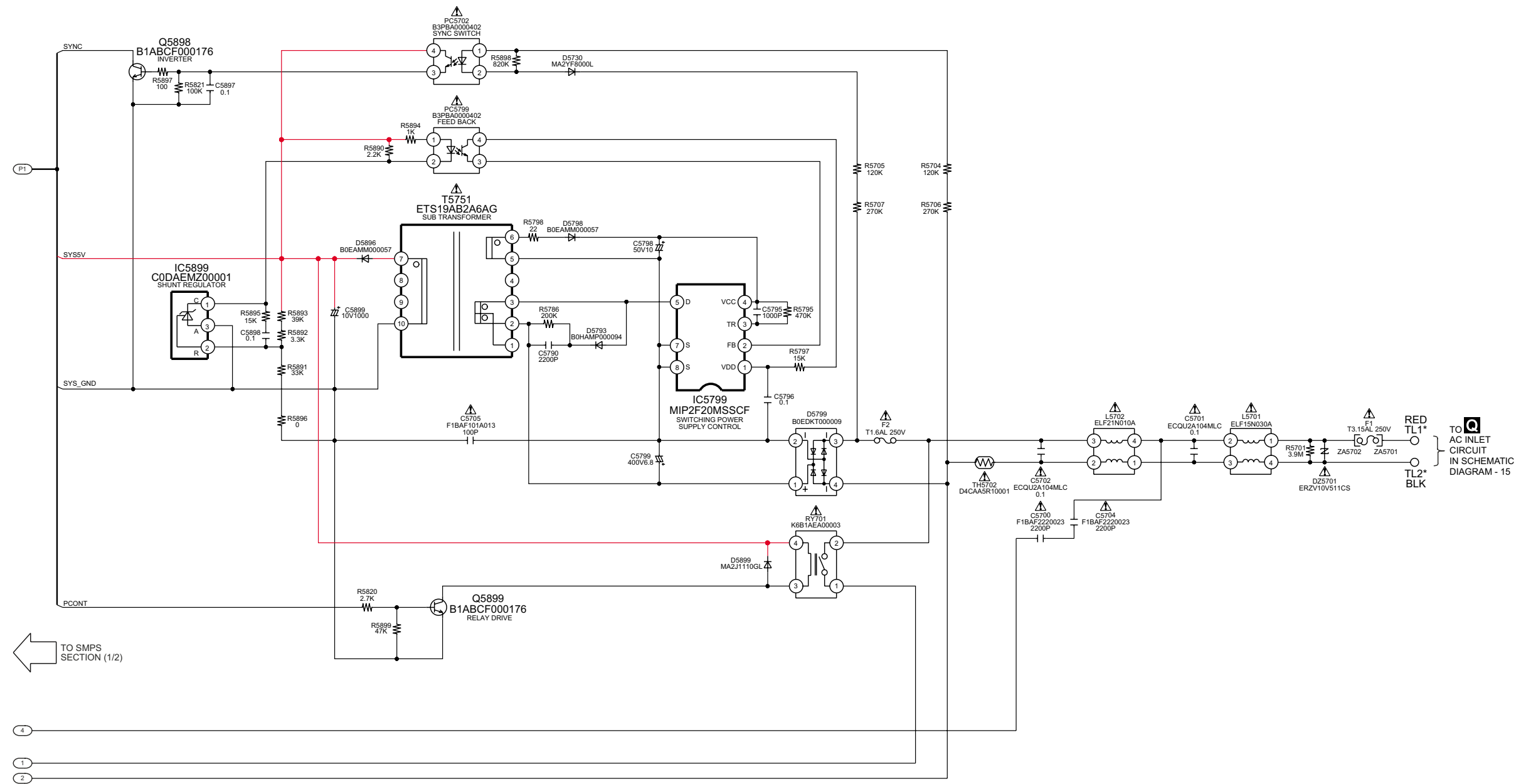
17.8. SMPS Circuit



SCHEMATIC DIAGRAM - 21

P SMPS CIRCUIT

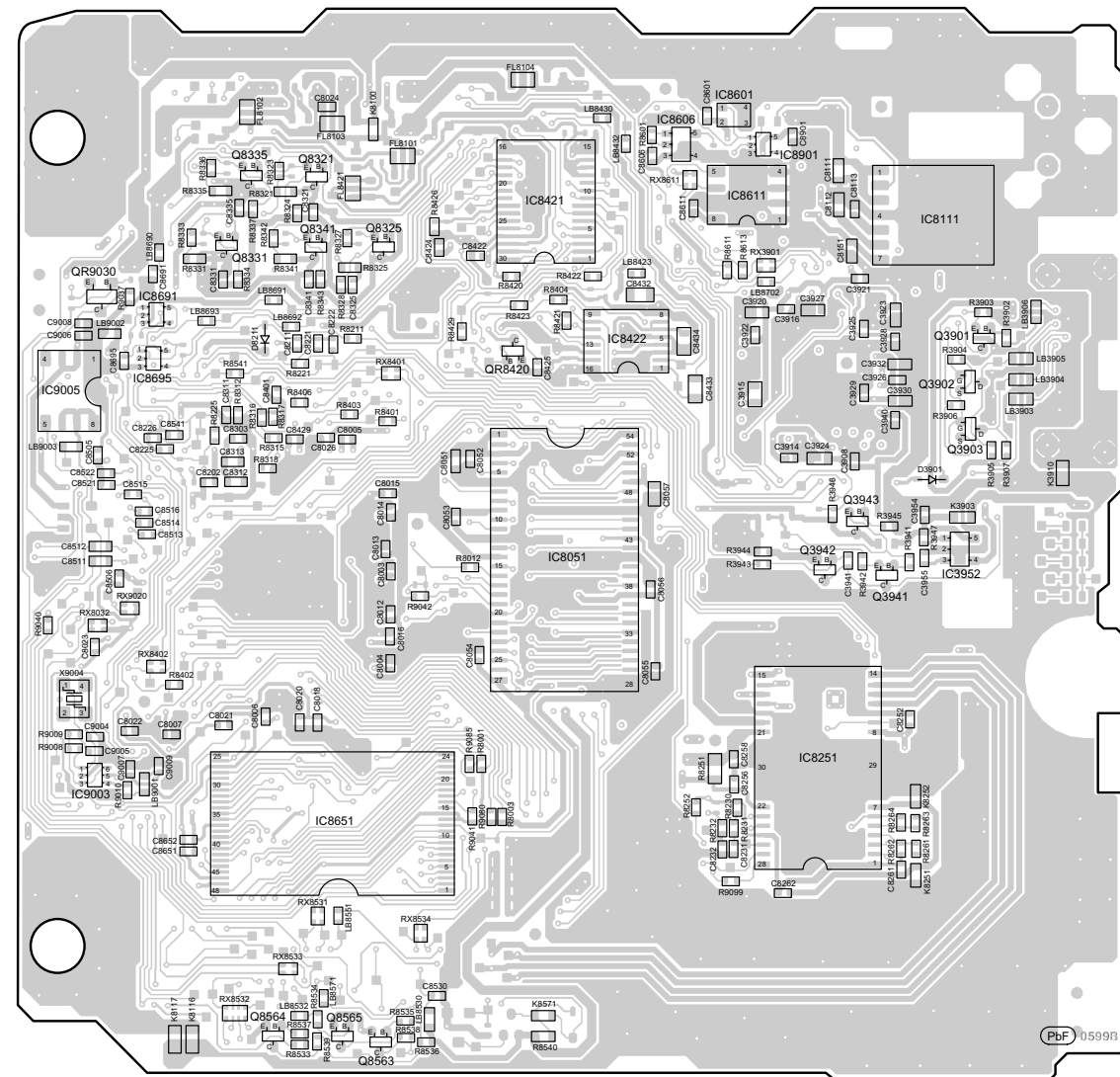
— : +B SIGNAL LINE — : -B SIGNAL LINE



1/2 2/2 SA-PTX60EB/EE/EF/EG SMPS CIRCUIT

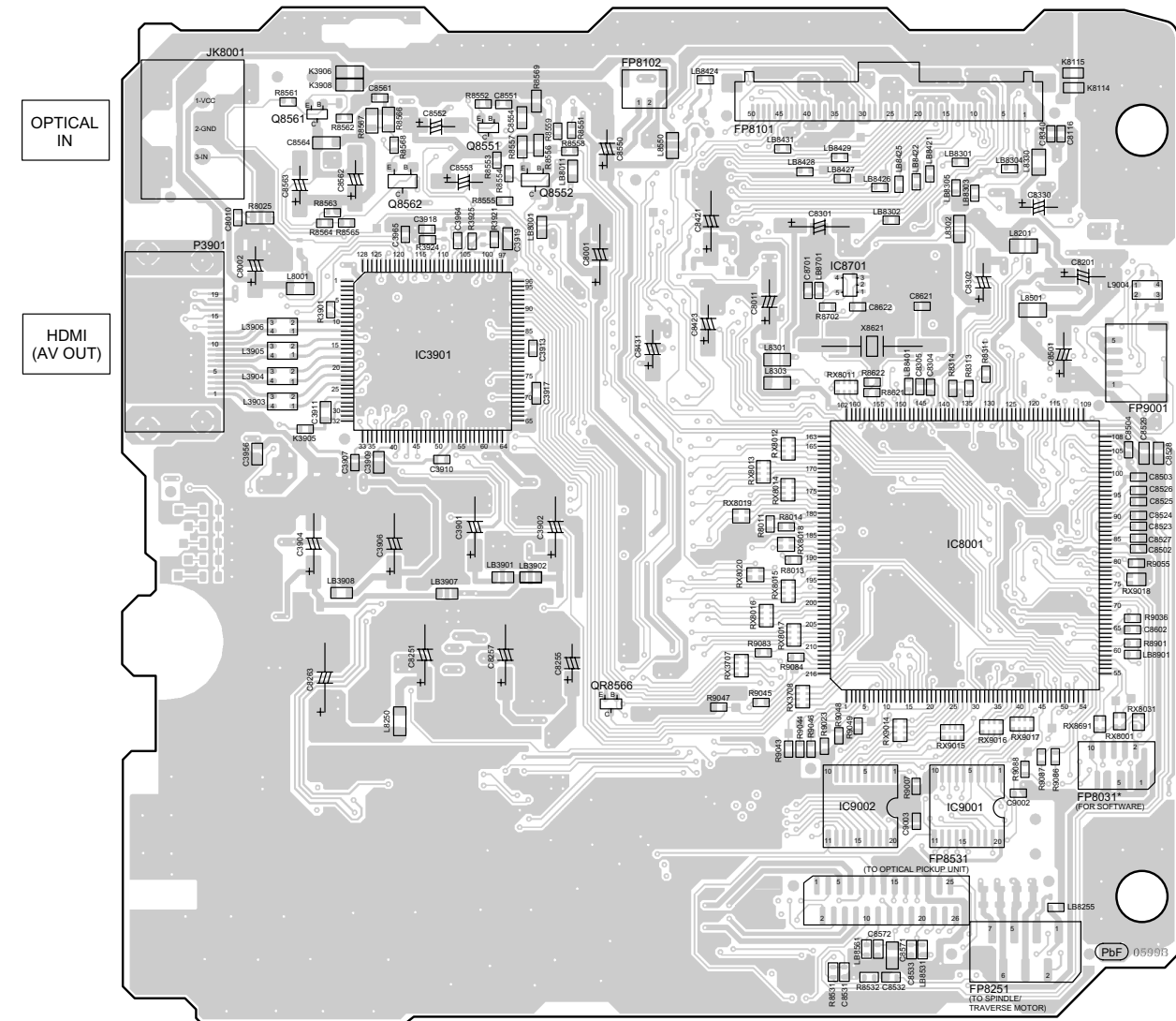
18.1. DVD Module P.C.B.

A DVD MODULE P.C.B. (RFKBX0747A-M)



(SIDE A)

NOTE: " * " REF IS FOR INDICATION ONLY.



(SIDE B)

SA-PTX60EB/EE/EF/EG
DVD MODULE P.C.B.

H

G

F

E

D

C

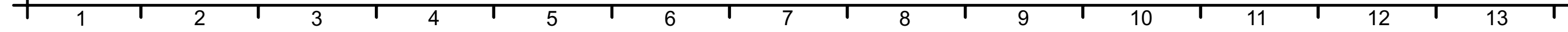
R

A



MAIN P.C.B.

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

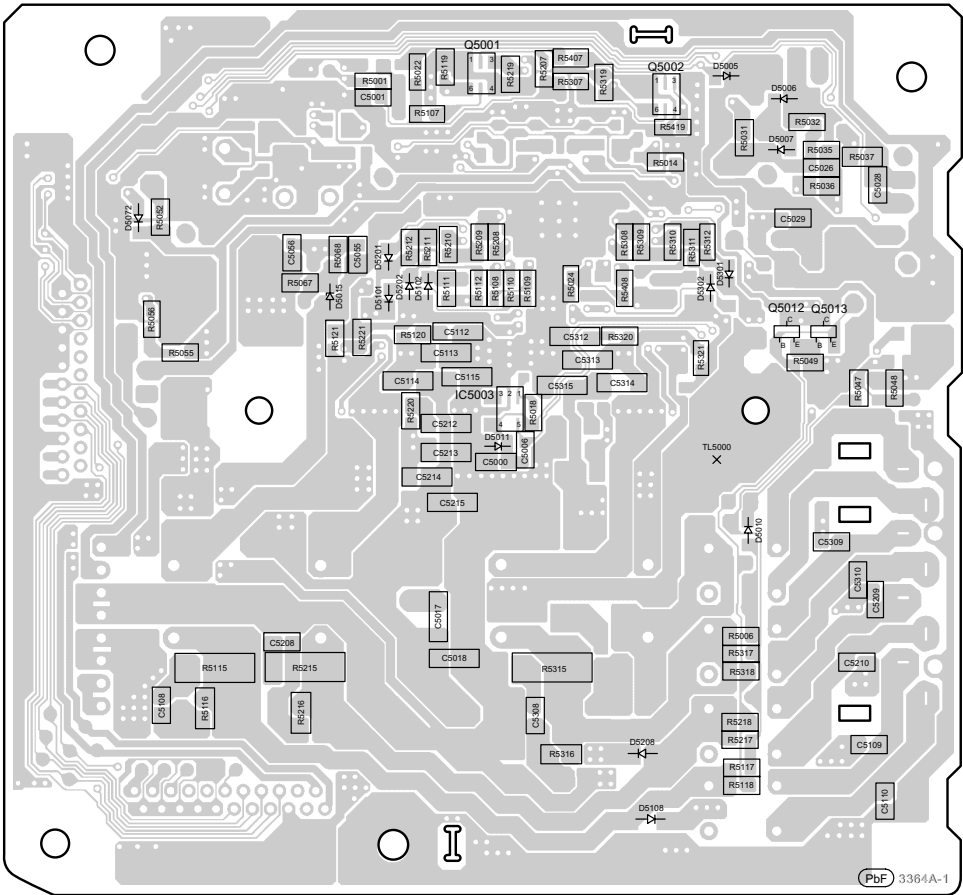


NOTE: " * " REF IS FOR INDICATION ONLY.

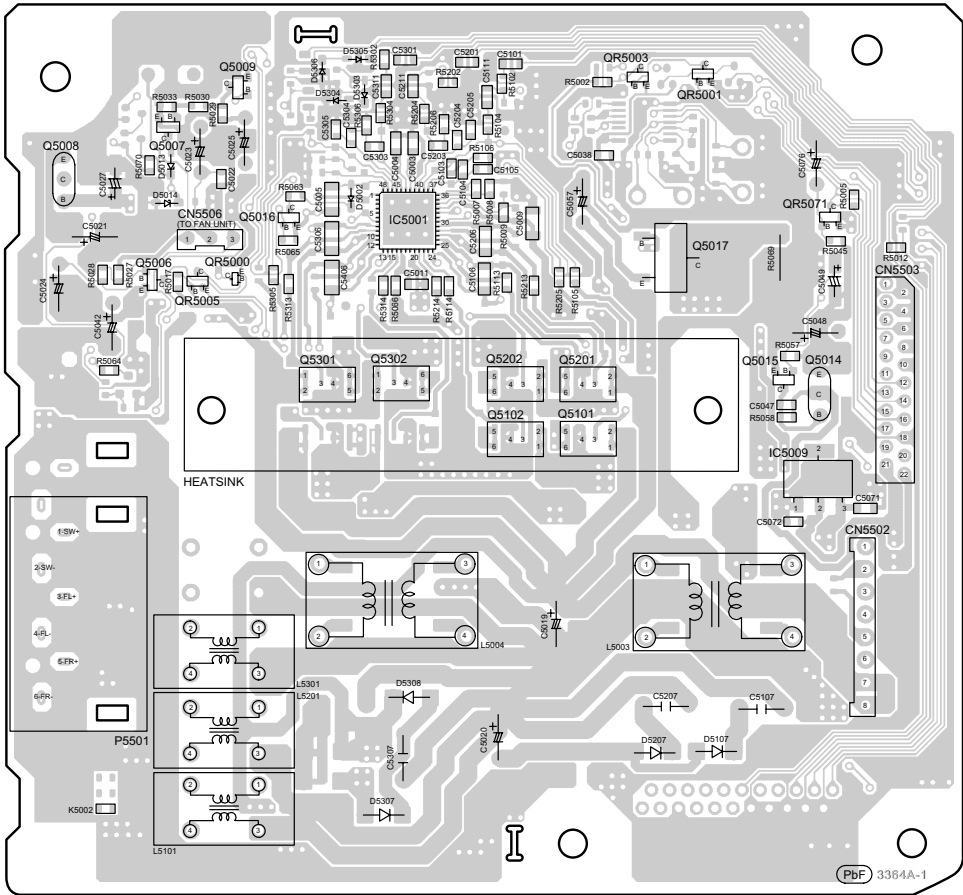
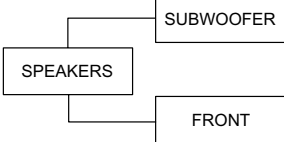
146

18.5. D-Amp P.C.B.

 D-AMP P.C.B. (RFK BX0746A)



(SIDE A)



(SIDE B)

A vertical scale with labels A, B, C, D, E, F, G, and H from bottom to top. Each label is aligned with a horizontal tick mark on a vertical line.

SA-PTX60EB/EE/EF/EG
SMPS / AC INLET / iPod FAN P.C.B.

19 Terminal Function of ICs

19.1. IC2001 (RFKWMPTX60EG): IC MICRO PROCESSOR

Pin No.	Terminal Name	I/O	Function
1	POS3_C	I	Position Detect Center
2	POS2_L	I	Position Detect Left
3	POS1_R	I	Position Detect Right
4	P93	-	No Connection
5	FLD_STB	O	FL Display Strobe Signal
6	FLD_CLK	O	FL Display Clock Signal
7	FLD_OUT	O	FL Display Data Out Signal
8	BYTE	I	External data bus width select input
9	CNVSS	I	Micon Programming-Processor / Single Chip Mode
10	P87	-	No Connection
11	P86	-	No Connection
12	RESET	I	Microp Reset Signal
13	XOUT	-	Clock In
14	VSS	-	GND
15	XIN	-	Clock Out
16	VCC	-	+5V
17	NMI	I	Non Maskable Interrupt
18	RMT	I	Remote Control Signal
19	SYNC	I	AC Sync Signal
20	FX_INT	-	No Connection
21	F81	-	No Connection
22	F80	-	No Connection
23	AMBP	-	No Connection
24	PCONT	O	System Power Control
25	DC_DET1	I	Power Supply Failure Detection (F76)
26	DC_DET2	I	D-Amp and Fan Failure Detection (F61)
27	ECO_DAMP	O	D-AMP Low-High Power Supply for Eco Operation
28	DVD_CLK	I	DVD Clock
29	DVD_STAT	I	DVD Status
30	DVD_CMD	O	DVD Command
31	UART_TX	O	iPod UART Transmitter Data
32	UART_RX	I	iPod UART Receiver Data
33	MUTE_C_S	O	Mute Signal for Center and Surround Speakers
34	MUTE_F_SW	O	Mute Signal for Front and Subwoofer Speakers
35	MOD_DA	O	Digital Amp to Stand by / Operate Control Signal
36	HOP_DA	O	Beatproof (Frequency Hoping)
37	TUN_DO	I	Tuner Stereo Detect
38	TUN_DI	O	I2C Data for Tuner
39	TUN_CLK	O	I2C Clock for Tuner
40	iPhone_RST	O	iPhone Reset Signal
41	EPM	-	For downloading purpose
42	TUN_SD	I	Station Detection of Tuner
43	P53	-	No Connection
44	P52	-	No Connection
45	P51	-	No Connection
46	CE	-	No Connection
47	P47	-	No Connection
48	IPOD_FAN	O	Chip enable for iPod fan on/off control
49	IPOD_VIDEO	O	Composite Output Selection Signal

Pin No.	Terminal Name	I/O	Function
50	IPOD_FAN_DET	I	iPod Fan Detect
51	P43	-	No Connection
52	P42	-	No Connection
53	VMUTE	O	Video Mute Control
54	P40	-	No Connection
55	P37	-	No Connection
56	P36	-	No Connection
57	INNER_SW	-	Inner switch for CR14 changer
58	TRAY_CCW_L	O	Tray Close Signal
59	TRAY_CW_H	O	Tray Open Signal
60	DVD_MUTE	I	DVD Mute Signal
61	P31	-	No Connection
62	VCC	-	5V
63	P30	-	No Connection
64	VSS	-	Ground
65	HP_MUTE	O	Headphone Mute Control
66	AUX MUTE	-	No Connection
67	P25	-	No Connection
68	P24	-	No Connection
69	ASP_DAT	O	ASP Audio Signal
70	ASP_CLK	O	ASP Clock Signal
71	LID_RIGHT	-	No Connection
72	LID_LEFT	-	No Connection
73	CEC_OUT	O	CEC Out Data
74	CEC_IN	I	CEC In Data
75	RDS_DAT	I	RDS Data
76	EDA	O	EEPROM IC Data Signal
77	ECK	O	EEPROM IC Clock Signal
78	ECS	O	EEPROM IC Chip Select
79	HP-SW	I	Headphone Detect
80	iPod_OC	I	Ipod Overcurrent Protection
81	iPod_DET	I	iPod Insertion Detection
82	BATT_PCONT	O	iPod Charging Power Control
83	iPod_ACC	I	iPod Authorisation IC
84	P04	-	Not in use
85	RDS_CLK	-	Not in use
86	iPod_OPEN	I	Not in use
87	MIC_LVL1	-	No Connection
88	MIC_LVL2	-	No Connection
89	MD3	I	DVD Panel Code Digit 3
90	MD2	I	DVD Panel Code Digit 2
91	DES2	I	Model Selector
92	DES1	I	Series Selector
93	SENSE1	I	Digital Amp Protection Input Signal
94	ACS	-	No Connection
95	KEY2	I	Key Input 2
96	AVSS	-	GND
97	KEY1	I	Key Input 1
98	VREF	-	Voltage Reference +5V
99	AVCC	-	+5V
100	ECHO_LVL1	O	Echo Level Control 1

19.2. IC6001 (C0HBB0000057): IC FL Driver

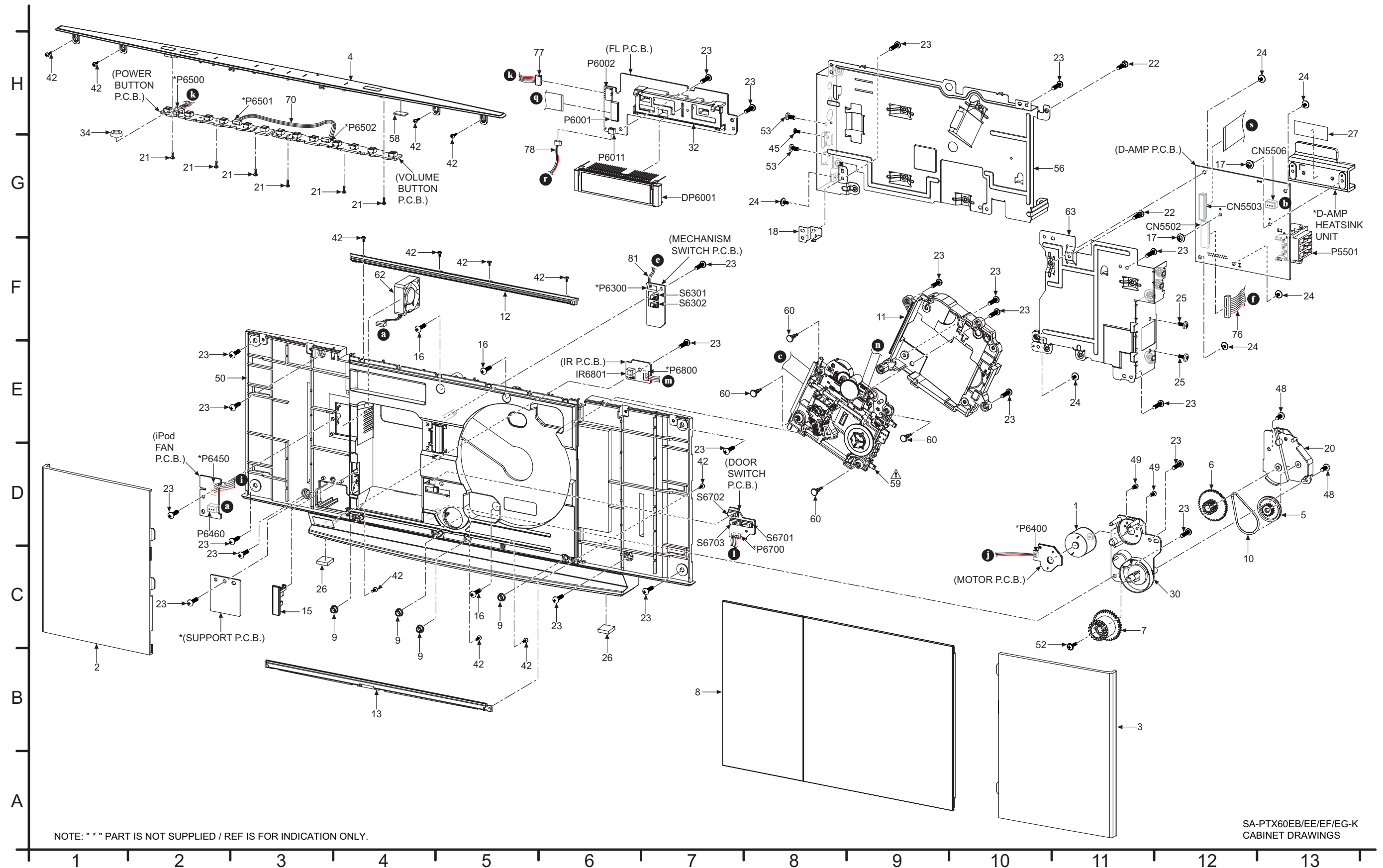
Pin No.	Terminal Name	I/O	Function
1	NC	O	No Connection
2	NC	-	No Connection
3	NC	-	No Connection
4	NC	-	No Connection
5	OSC	I	Oscillator Input
6	NC	-	No Connection
7	DIN	I	Data Input

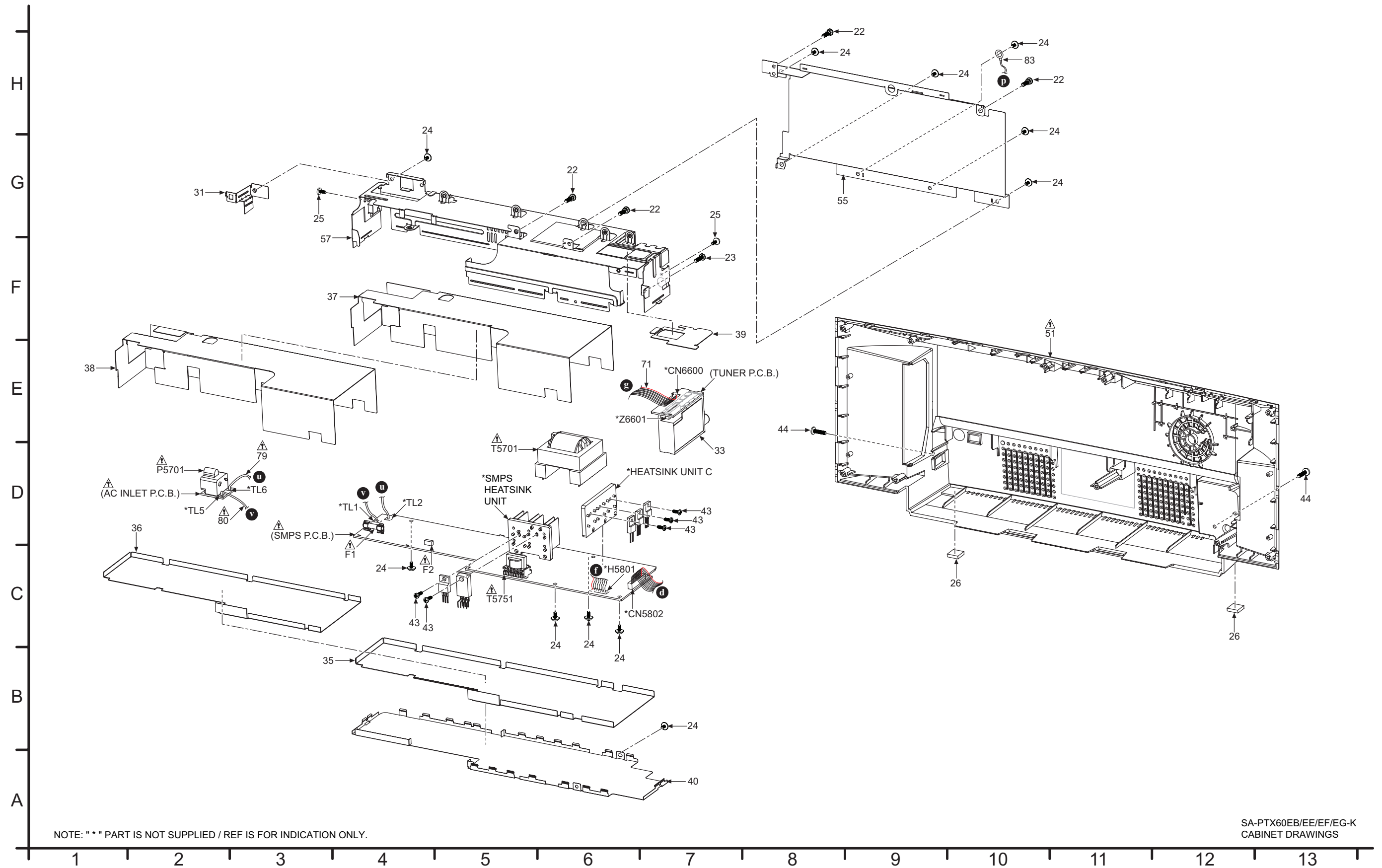
Pin No.	Terminal Name	I/O	Function
8	CLK	I	Clock Input
9	STB	I	Serial Interface Strobe
10	NC	-	No Connection
11	NC	-	No Connection
12	GND	-	GND
13	VCC	-	Power Supply (+5V)
14	P18	O	Segment Output 18
15	P17	O	Segment Output 17
16	P16	O	Segment Output 16
17	P15	O	Segment Output 15
18	P14	O	Segment Output 14
19	P13	O	Segment Output 13
20	P12	O	Segment Output 12
21	P11	O	Segment Output 11
22	P10	O	Segment Output 10
23	P9	O	Segment Output 9
24	P8	O	Segment Output 8
25	P7	O	Segment Output 7
26	P6	O	Segment Output 6
27	P5	O	Segment Output 5
28	P4	O	Segment Output 4
29	P3	O	Segment Output 3
30	-VP	-	Voltage Supply
31	P2	O	Segment Output 2
32	P1	O	Segment Output 1
33	G1	O	Grid Segment Output 1
34	G2	O	Grid Segment Output 2
35	G3	O	Grid Segment Output 3
36	G4	O	Grid Segment Output 4
37	G5	O	Grid Segment Output 5
38	G6	O	Grid Segment Output 6
39	G7	O	Grid Segment Output 7
40	G8	O	Grid Segment Output 8
41	G9	O	Grid Segment Output 9
42	G10	O	Grid Segment Output 10
43	VCC	-	Voltage Supply (+5V)
44	GND	-	GND

20 Exploded View and Replacement Parts List

20.1. Exploded View and Mechanical Replacement Part List

20.1.1. Cabinet Parts Location





20.1.2. Grease

H

G

F

E

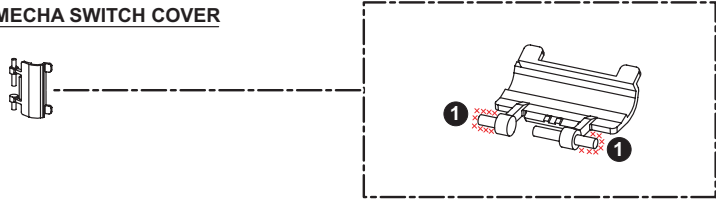
D

C

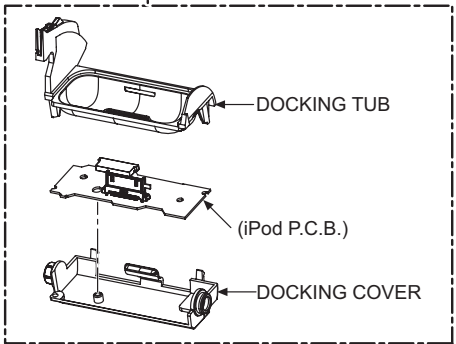
B

A

MECHA SWITCH COVER

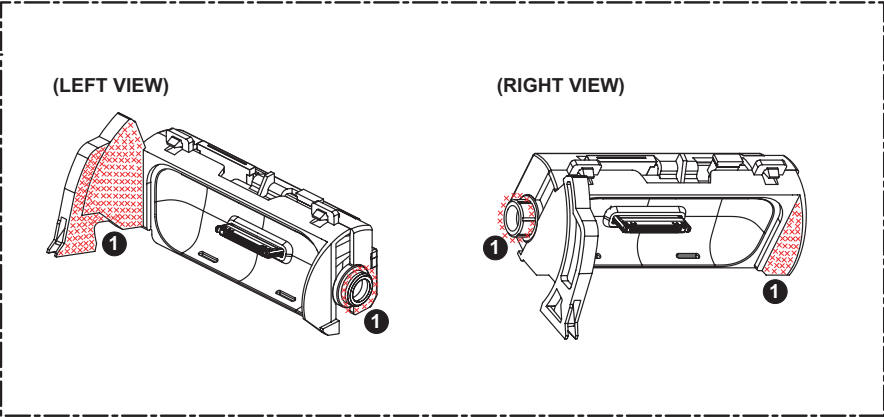


iPod TUB ASSEMBLY



(LEFT VIEW)

(RIGHT VIEW)



GEAR BOX ASSEMBLY

GEAR BASE

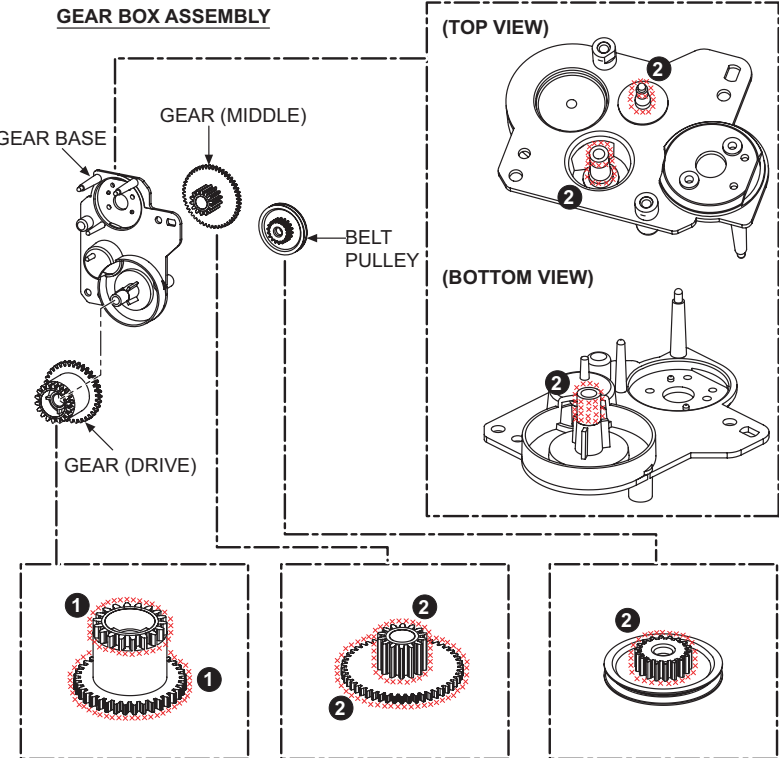
GEAR (MIDDLE)

GEAR (DRIVE)

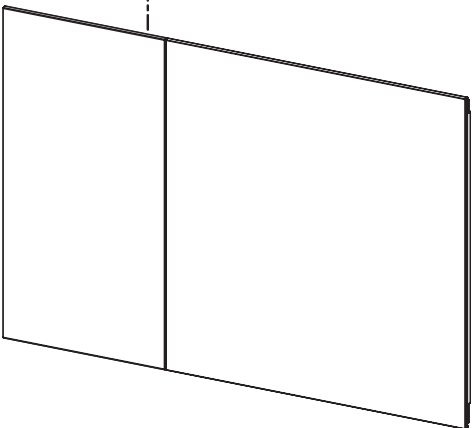
BELT PULLEY

(TOP VIEW)

(BOTTOM VIEW)

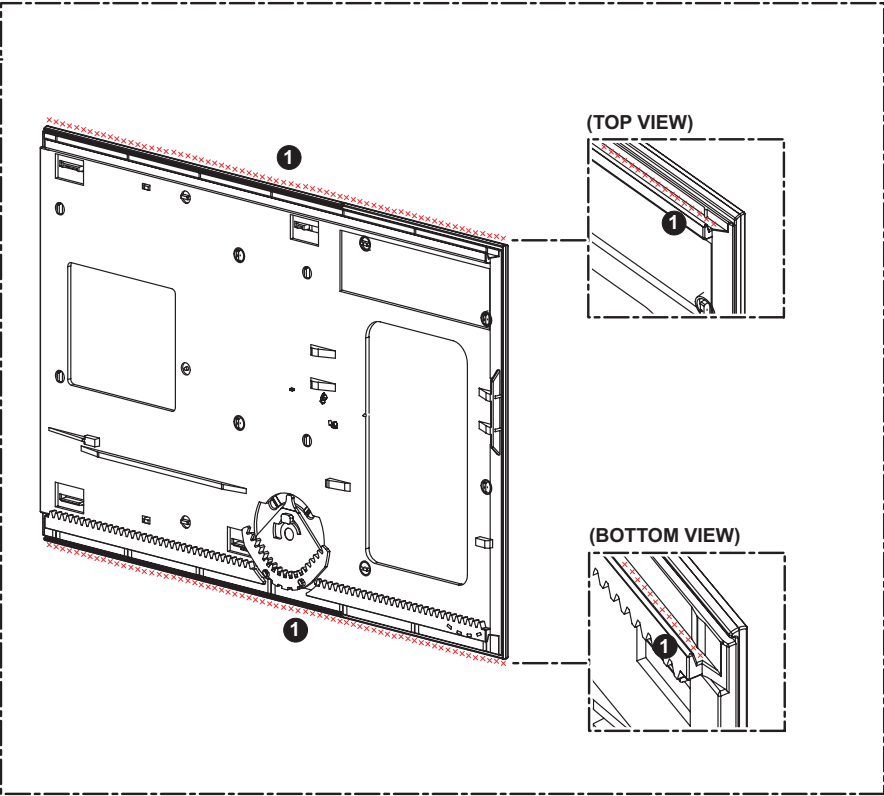


DOOR ASSEMBLY



(TOP VIEW)

(BOTTOM VIEW)



NOTE:
WHEN CHANGING LOADING MECHANISM PARTS,
APPLY SPECIFIED GREASE TO AREAS MARKED "xxx" AS SHOWN.

LABEL	DESCRIPTION	PART NUMBER
1	DRY SURF	RZGGA6063E
2	GREASE	RZGGG6AG

1

2

3

4

5

6

7

8

9

10

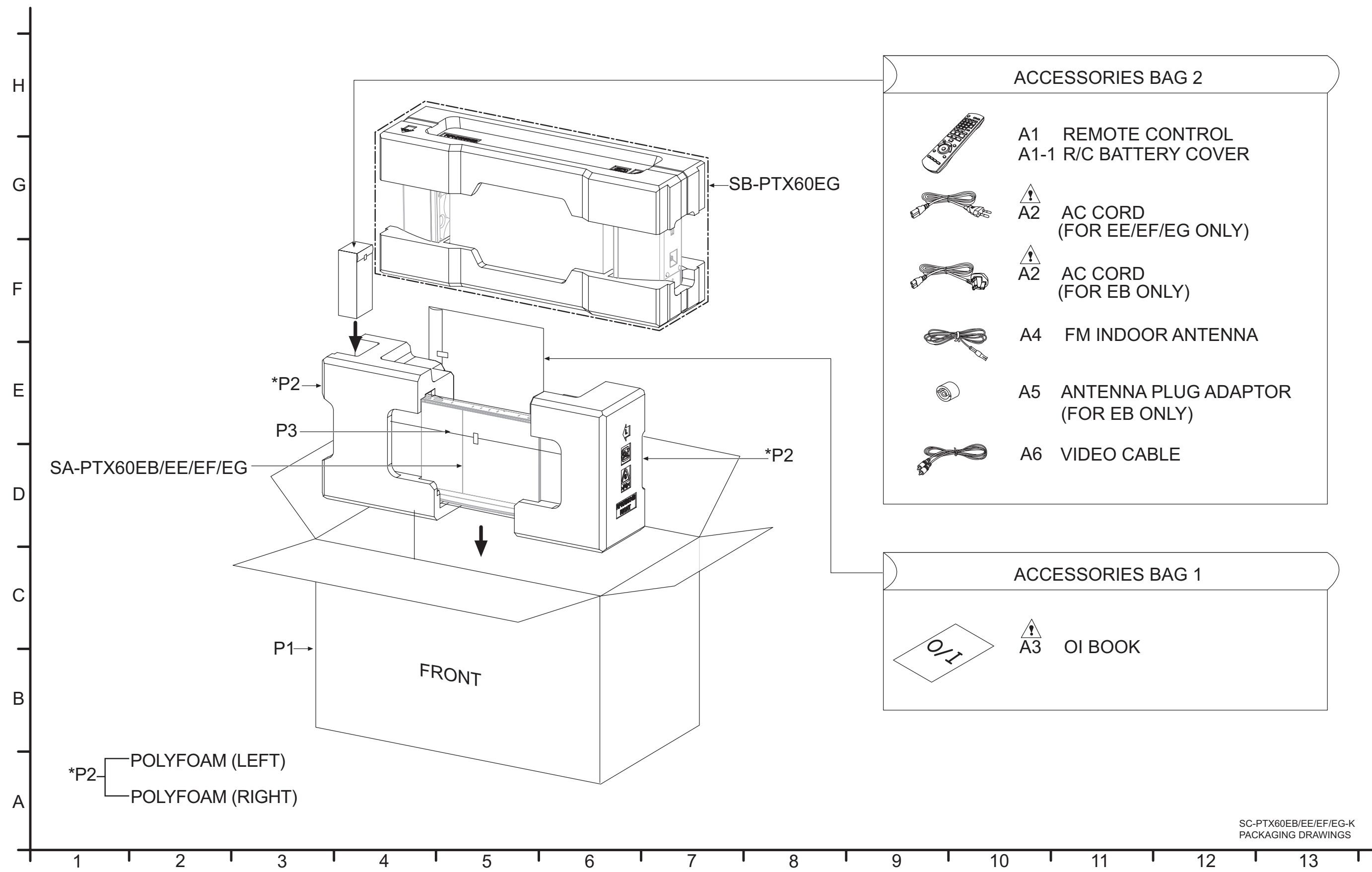
11

12

13

SA-BTX60EB/EE/EF/EG-K
GREASE DRAWINGS

20.1.3. Packaging



20.1.4. Mechanical Replacement Part List

Important Safety Notice

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

RTL (Retention Time Limited)

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

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

Note:

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

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

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			CABINET AND CHASSIS		
	1	RXQ1690	MOTOR UNIT	1	
	2	RYQX1002-K	LEFT ORNAMENT UNIT	1	
	3	RYQX1003-K	RIGHT ORNAMENT UNIT	1	
	4	RFXNAPT60EB	TOP ORNAMENT ASS'Y	1	
	5	RDG0546	BELT PULLEY	1	
	6	RDGX0050	MIDDLE GEAR	1	
	7	RDGX0051	DRIVE GEAR	1	
	8	RYPX0436-K	DOOR ASSY	1	
	9	RDPV0001	LID ROLLER	4	
	10	RDVX0001	BELT	1	
	11	RMKX0163-K	DVD MECHA CHASSIS	1	
	12	RGPX0379-K3	GUIDER REEL A	1	
	13	RGPX0380-K2	GUIDER REEL B	1	
	14	RGPX0383-K4	DOCKING TUB	1	
	15	RGV0379-K1	PUSH LEVER KNOB	1	
	16	RHD26056	SCREW	3	
	17	RHD30111-31	SCREW	2	
	18	RMC0780	IPOD SPRING PLATE	1	
	19	RMKX0158-K3	DOCKING HOLDER	1	
	20	RMKX0159-1	GEAR FIXTURE	1	
	21	RHD14136	SCREW	7	
	22	RHD26043-1	SCREW	6	
	23	RHD26046	SCREW	30	
	24	RHD30090-1	SCREW	24	
	25	RHD30119-K	SCREW	6	
	26	RKAX0028-K	LEG CUSHION	4	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	27	RMG0786-H	RADIATION RUBBER	1	
	28	RMK0740	FAN CHASSIS	1	
	29	RMKX0157-K2	DOCKING COVER	1	
	30	RMKX0160-1	GEAR BASE	1	
	31	RMN0934	EMC ANGLE	1	
	32	RMNX0260	FL HOLDER	1	
	33	J3CBBB000002	TUNER PACK	1	EE
	33	J3CBBC000002	TUNER PACK	1	EB/EF/EG
	34	RMQX0381-1	PANEL CUSHION	1	
	35	RMZ1022	BARRIER SHEET UPPER 0	1	
	36	RMZ1023	BARRIER SHEET UPPER 1	1	
	37	RMZ1024	BARRIER SHEET BOTTOM 0	1	
	38	RMZ1025-1	BARRIER SHEET BOTTOM 1	1	
	39	RMZ1032-2	TUNER COVER SHEET	1	
	40	RSC0891-1	SMPS SHIELD UPPER	1	
	41	RYPX0435-K	USB CHASSIS UNIT	1	
	41-1	RMC0776	SD USB SPRING PLATE	1	
	42	XTB2+6GFJK	SCREW	14	
	43	XTB3+10JFJ	SCREW	5	
	44	XTB3+10JFJK	SCREW	2	
	45	XSN3+4FJK	SCREW	1	
	46	J0KD00000140	FERRITE CORE	1	
	47	J0KD00000141	FERRITE CORE	1	
	48	XTB3+8JFJ	SCREW	3	
	49	XSN2+4FJ	SCREW	2	
	50	RFXGAPT60EG	FRONT PANEL ASS'Y	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
⚠	51	RFKHAPT60EF	REAR CABINET ASS'Y	1	EB/EF/EG
⚠	51	RFKHAPT60EE	REAR CABINET ASS'Y	1	EE
	52	XTW3+16TFJK	SCREW	2	
	53	XTN3+8JFJK	SCREW	1	
	54	RMX0191	HEATSINK EXTRUSION	1	
	55	RXQX0114-1	REAR SHIELD ASS'Y	1	
	56	RXQX0112-1	LEFT CHASSIS ASS'Y	1	
	57	RXQX0115-1	SMPS BOTTOM SHIELD ASS'Y	1	
	58	RMX0302	DAMPER RUBBER	1	
⚠	59	RD-DDTX006-V	TRAVERSE UNIT	1	(RTL)
	60	RMS0789	FIXED PIN	4	
	61	L6FAJCC0007	FAN MOTOR	1	
	62	L6FAGA9G0001	FAN MOTOR	1	
	63	RMK0742-1	RIGHT CHASSIS	1	
	64	REEX1007	7P FFC (DT92-DVD)	1	
	65	REEX1013	14P FFC (MAIN-iPod)	1	
	66	REEX1014	22P WIRE (D-AMP-MAIN)	1	
	67	REEX1015	17P FFC (MAIN-FL)	1	
	68	REEX1027	50P FFC (MAIN-DVD)	1	
	69	REXX0754	5P WIRE (DVD-USB)	1	
	70	REXX0755	3P WIRE (PWR BUTT-VOL-BUTT); P6501-2	1	
	71	REXX0758	10P FFC (TUNNER-MAIN); CN6600	1	
	72	REXX0759	11P WIRE (SMPS-MAIN)	1	
	73	REXX0760	2P WIRE (MOTOR-MAIN); P6400	1	
	74	REXX0761	4P WIRE (DOOR SW-MAIN); P6700	1	
	75	REXX0762	3P FFC (IR-MAIN)	1	
	76	REXX0763	8P WIRE (SMPS-D-AMP)	1	
	77	REXX0764	5P WIRE (FL-TACT); P6500	1	
	78	REXX0765	2P WIRE (FL-iPod SW); P6100	1	
⚠	79	REXX0766	BLACK WIRE (SMPS-AC); TL2	1	
⚠	80	REXX0768	RED WIRE (SMPS-AC); TL1	1	
	81	REXX0769	2P WIRE (MECH SW-DVD)	1	
	82	REXX0775	4P WIRE (iPod FAN-MAIN); P6450	1	
	83	REXX0781	GROUND WIRE (iPod-REAR SHIELD)	1	
	84	REXX1001	3P WIRE (MAIN-MAIN)	1	
			PACKING MATERIALS		
	P1	RPGX2188	PACKING CASE	1	EG
	P1	RPGX2189	PACKING CASE	1	EB
	P1	RPGX2190	PACKING CASE	1	EE
	P1	RPGX2250	PACKING CASE	1	EF
	P2	RPNX0634	POLYFOAM	1	
	P3	RPFX0058-1J	MIRAMAT	1	
			ACCESSORIES		
	A1	N2QAYB000361	REMOTE CONTROL	1	
	A1-1	RKK-PT470EBK	R/C BATTERY COVER	1	
⚠	A2	K2CQ2CA00007	AC CORD	1	EE/EF/EG

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
⚠	A2	K2CZ3YY00005	AC CORD	1	EB
⚠	A3	RQTX0300-D	O/I BOOK (Ge/Sp/It)	1	EG
⚠	A3	RQTX0301-H	O/I BOOK (Du/Sw/Da)	1	EG
⚠	A3	RQTX0302-E	O/I BOOK (Fr)	1	EF/EG
⚠	A3	RQTX0303-B	O/I BOOK (En)	1	EB
⚠	A3	RQTX0304-R	O/I BOOK (Ru/Ur)	1	EE
⚠	A3	RQTX1002-Z	O/I BOOK (En/Cz/Po)	1	EG
	A4	RSAX0002	FM INDOOR ANTENNA	1	
	A5	K1YZ02000013	DIN ADAPTOR	1	EB
	A6	K2KA2BA00001	VIDEO CABLE	1	

20.2. 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		
	PCB1	REPX0631A	IPOD PCB	1	(RTL)
	PCB2	REPX0730A	MAIN P.C.B	1	(RTL) EF/EG
		REPX0730B	MAIN P.C.B	1	(RTL) EB
		REPX0730C	MAIN P.C.B	1	(RTL) EE
	PCB3	REPX0744B	PANEL P.C.B	1	(RTL) EB/EF/EG
		REPX0744C	PANEL P.C.B	1	(RTL) EE
Δ	PCB4	REPX0745B	SMPS P.C.B	1	(RTL)
	PCB5	RFBX0746A	D-AMP P.C.B	1	(RTL)
	PCB6	RFBX0747A-M	DVD MODULE P.C.B	1	(RTL)
			INTEGRATED CIRCUITS		
	IC1701	MFI34182161	IC	1	
	IC2001	RFKWMPX60EG	IC	1	
	IC2002	C0CBCBC00140	IC	1	
	IC2003	RFKWEPTX60EG	IC	1	
	IC2004	C1BB00001008	IC	1	EB/EF/EG
	IC2101	C1AB00002735	IC	1	
	IC2102	C0ABBB000230	IC	1	
	IC2601	C0ABBB000230	IC	1	
	IC2801	C9ZB00000461	IC	1	
	IC2900	C0DAAYG00001	IC	1	
	IC2903	C0DAAYH00001	IC	1	
	IC2904	C0GAE0000007	IC	1	
	IC2905	C0DAEJG00001	IC	1	
	IC3901	MN864702A	IC	1	
	IC3952	C0CBCDC00063	IC	1	
	IC5001	RFBX0746A	IC	1	
	IC5003	C0ZBZ0001675	IC	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	IC5009	C0CBADD00010	IC	1	
	IC5701	C5HACY000003	IC	1	
	IC5799	MIP2F20MSSCF	IC	1	
	IC5801	C0DABFC00002	IC	1	
	IC5899	C0DAEMZ00001	IC	1	
	IC6001	C0HBB0000057	IC	1	
	IC6101	C0ABBB000189	IC	1	
	IC6601	C0ABZA000080	IC	1	
	IC6602	C0DBZYY00311	IC	1	
	IC8001	MN2DS0018MP	IC	1	
	IC8051	C3ABPG000160	IC	1	
	IC8111	C0DBFZG00001	IC	1	
	IC8251	C0GBG0000048	IC	1	
	IC8421	C0FBY0000060	IC	1	
	IC8422	C0FBAK000026	IC	1	
	IC8601	C0EBA0000039	IC	1	
	IC8606	C0EBE0000456	IC	1	
	IC8611	RFBX0747A-M	IC	1	(RTL)
	IC8651	RFKWMH41B324	IC	1	[SPG]
	IC8691	C0JBAA000502	IC	1	
	IC8695	C0JBAA000502	IC	1	
	IC8701	C0JBAB000907	IC	1	
	IC8901	C0JBAA000501	IC	1	
	IC9001	C0JBAZ001251	IC	1	
	IC9002	C0JBAZ001251	IC	1	
	IC9003	C0JBAB000908	IC	1	
	IC9005	C0DBZYY00266	IC	1	
			TRANSISTORS		
	Q1702	B1CFG0000004	TRANSISTOR	1	
	Q1703	B1GBCFL0037	TRANSISTOR	1	
	Q1704	B1CFG0000004	TRANSISTOR	1	
	Q2002	B1GBCFJJ0051	TRANSISTOR	1	
	Q2003	B1GBCFL0037	TRANSISTOR	1	
	Q2006	UNR221400L	TRANSISTOR	1	
	Q2007	B1GBCFJJ0051	TRANSISTOR	1	
	Q2030	B1GBCFJJ0051	TRANSISTOR	1	
	Q2096	B1HBECA00004	TRANSISTOR	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	Q2101	B1HBECA00004	TRANSISTOR	1	
	Q2102	B1HBECA00004	TRANSISTOR	1	
	Q2203	B1GDCFGA00018	TRANSISTOR	1	
	Q2801	UNR221400L	TRANSISTOR	1	
	Q2900	B1BARK000001	TRANSISTOR	1	
	Q2901	2SB0621AHA	TRANSISTOR	1	
	Q2902	B1ADCF000001	TRANSISTOR	1	
	Q2903	2SC3940ARA	TRANSISTOR	1	
	Q2904	B1BAAJ000003	TRANSISTOR	1	
	Q2909	B1ABCF000176	TRANSISTOR	1	
	Q2919	B1GBCFJJ0051	TRANSISTOR	1	
	Q2923	B1GBCFJJ0051	TRANSISTOR	1	
	Q2924	B1GBCFJJ0051	TRANSISTOR	1	
	Q2925	B1ABGC000005	TRANSISTOR	1	
	Q2926	B1GDCFJJ0047	TRANSISTOR	1	
	Q2927	B1GDCFJJ0047	TRANSISTOR	1	
	Q2928	B1GDCFJJ0047	TRANSISTOR	1	
	Q2929	B1ADCE000012	TRANSISTOR	1	
	Q2930	B1GBCFJJ0051	TRANSISTOR	1	
	Q3901	2SD1819A0L	TRANSISTOR	1	
	Q3902	B1CFHA000002	TRANSISTOR	1	
	Q3903	B1CFHA000002	TRANSISTOR	1	
	Q3941	2SD1819A0L	TRANSISTOR	1	
	Q3942	2SD1819A0L	TRANSISTOR	1	
	Q3943	2SD1819A0L	TRANSISTOR	1	
	Q5001	B1HBDCA00001	TRANSISTOR	1	
	Q5002	B1HBDCA00001	TRANSISTOR	1	
	Q5006	B1ABCF000176	TRANSISTOR	1	
	Q5007	B1ABCF000176	TRANSISTOR	1	
	Q5008	B1BACD000018	TRANSISTOR	1	
	Q5009	B1ABCF000176	TRANSISTOR	1	
	Q5012	B1ABCF000176	TRANSISTOR	1	
	Q5013	B1ABCF000176	TRANSISTOR	1	
	Q5014	2SB0621AHA	TRANSISTOR	1	
	Q5015	B1ADCE000012	TRANSISTOR	1	
	Q5016	B1ABCF000020	TRANSISTOR	1	
	Q5017	B1BBCF000006	TRANSISTOR	1	
	Q5101	B1CBRK000001	TRANSISTOR	1	
	Q5102	B1CBRK000001	TRANSISTOR	1	
	Q5201	B1CBRK000001	TRANSISTOR	1	
	Q5202	B1CBRK000001	TRANSISTOR	1	
	Q5301	B1CBRK000001	TRANSISTOR	1	
	Q5302	B1CBRK000001	TRANSISTOR	1	
	Q5720	2SC3940ARA	TRANSISTOR	1	
	Q5861	B1ADCE000012	TRANSISTOR	1	
	Q5862	B1ABCF000176	TRANSISTOR	1	
	Q5863	B1ABCF000176	TRANSISTOR	1	
	Q5898	B1ABCF000176	TRANSISTOR	1	
	Q5899	B1ABCF000176	TRANSISTOR	1	
	Q6451	B1ABCF000176	TRANSISTOR	1	
	Q6452	B1BACD000018	TRANSISTOR	1	
	Q6501	B1GBCFGN0018	TRANSISTOR	1	
	Q8321	2SB1218ARL	TRANSISTOR	1	
	Q8325	2SB1218ARL	TRANSISTOR	1	
	Q8331	2SB1218ARL	TRANSISTOR	1	
	Q8335	2SB1218ARL	TRANSISTOR	1	
	Q8341	2SB1218ARL	TRANSISTOR	1	
	Q8551	2SD1819A0L	TRANSISTOR	1	
	Q8552	B1ADGB000008	TRANSISTOR	1	
	Q8561	2SD1819A0L	TRANSISTOR	1	
	Q8562	B1ADGB000008	TRANSISTOR	1	
	Q8563	B1CFHA000002	TRANSISTOR	1	
	Q8564	B1CFHA000002	TRANSISTOR	1	
	Q8565	2SD1819A0L	TRANSISTOR	1	
	QR5000	B1GDCFNN0032	TRANSISTOR	1	
	QR5001	B1GBCFJJ0007	TRANSISTOR	1	
	QR5003	B1GDCFJJ0008	TRANSISTOR	1	
	QR5005	B1GBCFJJ0007	TRANSISTOR	1	
	QR5071	B1GBCFJA0017	TRANSISTOR	1	
	QR5801	UNR221400L	TRANSISTOR	1	
	QR8420	UNR521100L	TRANSISTOR	1	
	QR8566	UNR91A5J0L	TRANSISTOR	1	
	QR9030	B1GDCFJJ0002	TRANSISTOR	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			DIODES		
	D2008	MA2J1110GL	DIODE	1	
	D2751	MA2J1110GL	DIODE	1	
	D2752	MA2J1110GL	DIODE	1	
	D2753	MAZ8051GML	DIODE	1	
	D2754	MAZ8051GML	DIODE	1	EB/EF/EG
	D2901	B0BC035A0007	DIODE	1	
	D2903	B0EAMM000057	DIODE	1	
	D2904	B0JCPD000025	DIODE	1	
	D2905	B0BC6R100010	DIODE	1	
	D2906	B0JAME000029	DIODE	1	
	D2908	B0EAMM000057	DIODE	1	
	D2909	MAZ8240GHL	DIODE	1	
	D2913	B0JCPD000025	DIODE	1	
	D2915	MA2J1110GL	DIODE	1	
	D2942	MAZ8075GML	DIODE	1	
	D2943	MA2J1110GL	DIODE	1	
	D2944	MA2J1110GL	DIODE	1	
	D2945	MA2J1110GL	DIODE	1	
	D2946	MAZ8075GML	DIODE	1	
	D2947	MAZ8110GML	DIODE	1	
	D2948	MAZ8075GML	DIODE	1	
	D2949	MAZ8051GML	DIODE	1	
	D2950	MA2J1110GL	DIODE	1	
	D2951	B0BC010A0007	DIODE	1	
	D2952	B0BC010A0007	DIODE	1	
	D2964	MA2J1110GL	DIODE	1	
	D2966	MA2J1110GL	DIODE	1	
	D2969	B0ACCK000005	DIODE	1	
	D2970	B0ACCK000005	DIODE	1	
	D2972	B0ACCK000005	DIODE	1	
	D3901	MA2J7280GL	DIODE	1	
	D5002	MA2J1110GL	DIODE	1	
	D5005	MA2J1110GL	DIODE	1	
	D5006	MA2J1110GL	DIODE	1	
	D5007	MA2J1110GL	DIODE	1	
	D5010	MA2J1110GL	DIODE	1	
	D5011	MAZ8051GML	DIODE	1	
	D5013	MAZ8075GML	DIODE	1	
	D5014	MAZ8120GML	DIODE	1	
	D5015	MAZ8110GML	DIODE	1	
	D5072	MA2J1110GL	DIODE	1	
	D5101	B0ACCK000005	DIODE	1	
	D5102	B0ACCK000005	DIODE	1	
	D5107	B0HCMM000019	DIODE	1	
	D5108	B0HCMM000019	DIODE	1	
	D5201	B0ACCK000005	DIODE	1	
	D5202	B0ACCK000005	DIODE	1	
	D5207	B0HCMM000019	DIODE	1	
	D5208	B0HCMM000019	DIODE	1	
	D5301	B0ACCK000005	DIODE	1	
	D5302	B0ACCK000005	DIODE	1	
	D5303	MA2J1110GL	DIODE	1	
	D5304	MA2J1110GL	DIODE	1	
	D5305	MA2J1110GL	DIODE	1	
	D5306	MA2J1110GL	DIODE	1	
	D5307	B0HCMM000019	DIODE	1	
	D5308	B0HCMM000019	DIODE	1	
	D5701	B0FBAR000041	DIODE	1	
	D5702	B0ZAZ0000052	DIODE	1	
	D5721	MAZ8200GML	DIODE	1	
	D5722	MAZ8200GML	DIODE	1	
	D5723	MA2J1110GL	DIODE	1	
	D5724	MA2J1110GL	DIODE	1	
	D5725	MAZ8062GML	DIODE	1	
	D5726	MA2J1110GL	DIODE	1	
	D5727	MA2J1110GL	DIODE	1	
	D5729	B0EAMM000057	DIODE	1	
	D5730	MA2YF8000L	DIODE	1	
	D5731	B0EAMM000057	DIODE	1	
	D5732	MAZ8300GML	DIODE	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	D5733	MAZ8270GLL	DIODE	1	
	D5793	B0HAMP000094	DIODE	1	
	D5798	B0EAMM000057	DIODE	1	
	D5799	B0EDKT000009	DIODE	1	
	D5801	B0HBSM000043	DIODE	1	
	D5802	B0HBSM000054	DIODE	1	
	D5803	B0HFRJ000012	DIODE	1	
	D5804	B0EAMM000057	DIODE	1	
	D5805	B0EAMM000057	DIODE	1	
	D5806	MA2J1110GL	DIODE	1	
	D5807	MA2J1110GL	DIODE	1	
	D5809	MA2J1110GL	DIODE	1	
	D5810	MA2J1110GL	DIODE	1	
	D5811	MAZ8075GML	DIODE	1	
	D5896	B0EAMM000057	DIODE	1	
	D5899	MA2J1110GL	DIODE	1	
	D6011	B0BC2R4A0006	DIODE	1	
	D6451	MAZ8068GML	DIODE	1	
	D6501	B3AAA0000803	DIODE	1	
	D8211	MA2J1110GL	DIODE	1	
⚠	DZ5701	ERZV10V511CS	ZNR	1	
			VARISTORS		
	VA6901	B0ZBZ0000147	VARISTOR	1	
	VA6902	B0ZBZ0000147	VARISTOR	1	
			SWITCHES		
	S6101	K0L1BA000078	SW iPod DOCK OPEN	1	
	S6301	K0L1BA000007	SW DVD/CD SENSOR	1	
	S6302	K0L1BA000007	SW DVD/CD SENSOR	1	
	S6501	EVQ11G04M	SW POWER	1	
	S6502	EVQ11G04M	SW iPod OPEN/CLOSE	1	
	S6503	EVQ11G04M	SW iPod/USB	1	
	S6504	EVQ11G04M	SW STOP	1	
	S6505	EVQ11G04M	SW PAUSE	1	
	S6506	EVQ11G04M	SW PLAY	1	
	S6507	EVQ11G04M	SW DISC OPEN/CLOSE	1	
	S6511	EVQ11G04M	SW REW	1	
	S6512	EVQ11G04M	SW FWD	1	
	S6513	EVQ11G04M	SW DVD	1	
	S6514	EVQ11G04M	SW VOL-	1	
	S6515	EVQ11G04M	SW VOL+	1	
	S6516	EVQ11G04M	SW RADIO/EXT-IN	1	
	S6701	K0L1BA000078	SW LEFT	1	
	S6702	K0L1BA000078	SW CENTER	1	
	S6703	K0L1BA000078	SW RIGHT	1	
	PSW1	D4FB1R100009	SW	1	
			CONNECTORS		
	CN1001	MFI514S0117	30P CONNECTOR	1	
	CN1002	K1MN14BA0141	14P CONNECTOR	1	
	CN2001	K1MY50AA0029	50P CONNECTOR	1	
	CN2002	K1KA10BA0062	10P CONNECTOR	1	
	CN2004	K1KA04BA0061	4P CONNECTOR	1	
	CN2005	K1KA04BA0061	4P CONNECTOR	1	
	CN2006	K1MN08B00013	8P CONNECTOR	1	
	CN2007	K1MN17AA0004	17P CONNECTOR	1	
	CN2008	K1KA03BA0061	3P CONNECTOR	1	
	CN2009	K1MN22AA0004	22P CONNECTOR	1	
	CN2015	K1KA02AA0193	2P CONNECTOR	1	
	CN5502	K1KA08AA0180	8P CONNECTOR	1	
	CN5503	K1MN22AA0004	22P CONNECTOR	1	
	CN5506	K1KA03AA0301	3P CONNECTOR	1	
	CN6003	K1MN14BA0004	14P CONNECTOR	1	
	CN6900	K1FY104B0011	4P CONNECTOR (USB)	1	
	CN7001	K1KA11BA0062	11P CONNECTOR	1	
	FP6900	K1KA05BA0061	5P CONNECTOR	1	
	FP8101	K1MN50AA0082	20P CONNECTOR	1	
	FP8102	K1KA02AA0051	2P CONNECTOR	1	
	FP8251	K1MN07AA0076	7P CONNECTOR	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	FP8531	K1MY26AA0021	26P CONNECTOR	1	
	FP9001	K1KA05BA0014	5P CONNECTOR	1	
	P3901	K1FY119E0002	CONNECTOR	1	
	P5501	K4AL06B00005	JK SPEAKER	1	
	P6001	K1MN17BA0005	17P CONNECTOR	1	
	P6002	K1KA05BA0061	5P CONNECTOR	1	
	P6011	K1KA02BA0061	2P CONNECTOR	1	
	P6460	K1KA03AA0193	3P CONNECTOR	1	
			COILS AND INDUCTORS		
	L1001	J0JHC00000107	INDUCTOR	1	
	L1002	J0JHC00000107	INDUCTOR	1	
	L1003	J0JHC00000107	INDUCTOR	1	
	L1004	J0JHC00000107	INDUCTOR	1	
	L1005	J0JHC00000107	INDUCTOR	1	
	L1006	J0JHC00000107	INDUCTOR	1	
	L1007	J0JHC00000107	INDUCTOR	1	
	L1008	J0JHC00000107	INDUCTOR	1	
	L1009	J0JHC00000107	INDUCTOR	1	
	L1010	J0JHC00000107	INDUCTOR	1	
	L1011	J0JHC00000107	INDUCTOR	1	
	L2101	J0JBC00000014	INDUCTOR	1	
	L2201	J0JBC00000014	INDUCTOR	1	
	L2202	J0JBC00000014	INDUCTOR	1	
	L2701	J0JBC00000014	INDUCTOR	1	EB/EF/EG
	L2703	J0JBC00000014	INDUCTOR	1	EB/EF/EG
	L2801	G0A101EA0017	CHOKE COIL	1	
	L2802	J0JBC00000015	INDUCTOR	1	
	L2901	G0A220GA0026	CHOKE COIL	1	
	L2902	G0A101ZA0028	CHOKE COIL	1	
	L2903	G0A101ZA0028	CHOKE COIL	1	
	L2906	G0A100HA0023	CHOKE COIL	1	
	L2907	G0A220GA0002	CHOKE COIL	1	
	L2910	G0C390JA0055	INDUCTOR	1	
	L2911	G0A200D00002	CHOKE COIL	1	
	L2912	G0A220GA0002	CHOKE COIL	1	
	L2913	J0JBC00000015	INDUCTOR	1	
	L2914	J0JBC00000041	INDUCTOR	1	
	L2915	J0JBC00000041	INDUCTOR	1	
	L2916	J0JBC00000041	INDUCTOR	1	
	L2917	G0C390JA0055	INDUCTOR	1	
	L2918	J0JBC00000015	INDUCTOR	1	
	L2919	J0JBC00000015	INDUCTOR	1	
	L2920	J0JBC00000015	INDUCTOR	1	
	L3903	G1BYYC000026	COMMON MODE EMI FILTER	1	
	L3904	G1BYYC000026	COMMON MODE EMI FILTER	1	
	L3905	G1BYYC000026	COMMON MODE EMI FILTER	1	
	L3906	G1BYYC000026	COMMON MODE EMI FILTER	1	
	L5003	G0A150L00003	CHOKE COIL	1	
	L5004	G0A150L00003	CHOKE COIL	1	
	L5101	G0B9R5K00003	LINE FILTER	1	
	L5201	G0B9R5K00003	LINE FILTER	1	
	L5301	G0B9R5K00003	LINE FILTER	1	
⚠	L5701	ELF15N030A	LINE FILTER	1	
⚠	L5702	ELF21N010A	LINE FILTER	1	
	L6601	J0JBC00000014	INDUCTOR	1	
	L8001	G1C100M00049	INDUCTOR	1	
	L8201	G1C100M00049	INDUCTOR	1	
	L8301	G1C100M00049	INDUCTOR	1	
	L8302	G1C100M00049	INDUCTOR	1	
	L8303	G1C100M00049	INDUCTOR	1	
	L8330	G1C100M00049	INDUCTOR	1	
	L8501	G1C100M00049	INDUCTOR	1	
	L8550	G1C100M00049	INDUCTOR	1	
	L9004	G1BYYC000026	COMMON MODE EMI FILTER	1	
	LB804	J0JBC00000041	INDUCTOR	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	LB805	J0JBC0000041	INDUCTOR	1	
	LB806	J0JBC0000014	INDUCTOR	1	
	LB807	J0JBC0000014	INDUCTOR	1	
	LB808	J0JBC0000014	INDUCTOR	1	
	LB809	J0JBC0000014	INDUCTOR	1	
	LB810	J0JBC0000014	INDUCTOR	1	
	LB811	J0JBC0000014	INDUCTOR	1	
	LB812	J0JBC0000014	INDUCTOR	1	
	LB813	J0JBC0000014	INDUCTOR	1	
	LB814	J0JBC0000014	INDUCTOR	1	
	LB815	J0JBC0000014	INDUCTOR	1	
	LB816	J0JBC0000014	INDUCTOR	1	
	LB817	J0JBC0000014	INDUCTOR	1	
	LB818	J0JBC0000014	INDUCTOR	1	
	LB819	J0JBC0000014	INDUCTOR	1	
	LB3901	J0JHC0000045	INDUCTOR	1	
	LB3902	J0JHC0000045	INDUCTOR	1	
	LB3903	J0JCC0000042	INDUCTOR	1	
	LB3904	J0JCC0000042	INDUCTOR	1	
	LB3905	J0JCC0000042	INDUCTOR	1	
	LB3906	J0JCC0000042	INDUCTOR	1	
	LB3907	J0JHC0000045	INDUCTOR	1	
	LB3908	J0JHC0000045	INDUCTOR	1	
	LB6901	J0JHC0000068	INDUCTOR	1	
	LB6902	J0JHC0000068	INDUCTOR	1	
	LB8001	J0JHC0000045	INDUCTOR	1	
	LB8011	J0JHC0000045	INDUCTOR	1	
	LB8401	J0JCC0000308	INDUCTOR	1	
	LB8530	J0JHC0000045	INDUCTOR	1	
	LB8532	J0JDC0000045	INDUCTOR	1	
	LB8551	J0JDC0000045	INDUCTOR	1	
	LB8561	J0JDC0000045	INDUCTOR	1	
	LB8571	J0JDC0000045	INDUCTOR	1	
	LB8701	J0JCC0000308	INDUCTOR	1	
	LB8702	J0JCC0000308	INDUCTOR	1	
	LB8901	J0JCC0000308	INDUCTOR	1	
	LB9001	J0JCC0000042	INDUCTOR	1	
	LB9002	J0JHC0000117	INDUCTOR	1	
	LB9003	J0JHC0000117	INDUCTOR	1	
			TRANSFORMERS		
⚠	T2900	G4D1A0000117	SWITCHING TRANS- FORMER	1	
⚠	T5701	ETS42BM1F6AC	MAIN TRANSFORMER	1	
⚠	T5751	ETS19AB2A6AG	SUB TRANSFORMER	1	
			COMPONENT COMBI- NATION		
	IR6801	B3RAD0000049	REMOTE SENSOR	1	
			PHOTO COUPLERS		
⚠	PC5702	B3PBA0000402	PHOTO COUPLER	1	
⚠	PC5720	B3PBA0000402	PHOTO COUPLER	1	
⚠	PC5799	B3PBA0000402	PHOTO COUPLER	1	
			OSCILLATORS		
	X2001	H2B100500007	CRYSTAL OSCILLA- TOR	1	
	X2700	H0H433400002	CRYSTAL OSCILLA- TOR	1	EB/EF/ EG
	X8621	H0J270500131	CRYSTAL OSCILLA- TOR	1	
	X9004	H1A4805B0027	CRYSTAL OSCILLA- TOR	1	
			FL DISPLAY		
	DP6001	A2BB00000169	LCD DISPLAY	1	
			RELAY		
⚠	RY701	K6B1AEA00003	RELAY	1	
			FUSES		
⚠	F1	K5D312BLA015	FUSE	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
⚠	F2	K5G162B00016	FUSE	1	
			FUSE HOLDERS		
	ZA5701	K3GE1ZZ00001	FUSE HOLDER	1	
	ZA5702	K3GE1ZZ00001	FUSE HOLDER	1	
			FUSE PROTECTORS		
⚠	FP2901	K5H1022A0011	PROTECTOR	1	
			THERMISTOR		
⚠	TH5702	D4CAA5R10001	THERMISTOR	1	
			JACKS		
	JK2001	K2HC1YYB0033	JK HEADPHONE	1	
	JK2002	K2HC1YYB0033	JK HEADPHONE	1	
	JK2003	K2HA1YYB0022	JK	1	
	JK8001	B3RAB0000056	REMOTE CONTROL SENSOR	1	
⚠	P5701	K2AA2B000017	AC INLET	1	
			CHIP JUMPERS		
	K1	D0GBR00JA008	0 1/16W	1	EF/EG
	K2	D0GBR00JA008	0 1/16W	1	EB
	K3	D0GBR00JA008	0 1/16W	1	EE
	K11	D0GBR00JA008	0 1/16W	1	EF/EG
	K12	D0GBR00JA008	0 1/16W	1	EB
	K13	D0GBR00JA008	0 1/16W	1	EE
	K3903	D0GBR00JA008	0 1/16W	1	
	K3905	ERJ2GE0R00X	0 1/16W	1	
	K3906	D0GBR00JA008	0 1/16W	1	
	K3908	D0GBR00JA008	0 1/16W	1	
	K5002	D0GBR00JA008	0 1/16W	1	
	K5722	D0GDR00JA017	0 1/10W	1	
	K5725	D0GDR00JA017	0 1/10W	1	
	K6002	D0GBR00JA008	0 1/16W	1	
	K6003	D0GBR00JA008	0 1/16W	1	EB/EF/ EG
	K6004	D0GBR00JA008	0 1/16W	1	EE
	K7112	D0GDR00JA017	0 1/10W	1	
	K8100	D0GBR00JA008	0 1/16W	1	
	K8114	D0GBR00JA008	0 1/16W	1	
	K8115	D0GBR00JA008	0 1/16W	1	
	K8116	D0GBR00JA008	0 1/16W	1	
	K8117	D0GBR00JA008	0 1/16W	1	
	K8251	D0GBR00JA008	0 1/16W	1	
	K8252	D0GBR00JA008	0 1/16W	1	
	K8571	D0GBR00JA008	0 1/16W	1	
	L2102	D0GDR00JA017	0 1/10W	1	
	LB250	D0GBR00JA008	0 1/16W	1	
	LB8255	ERJ2GE0R00X	0 1/16W	1	
	LB8301	ERJ2GE0R00X	0 1/16W	1	
	LB8302	ERJ2GE0R00X	0 1/16W	1	
	LB8303	ERJ2GE0R00X	0 1/16W	1	
	LB8304	ERJ2GE0R00X	0 1/16W	1	
	LB8305	ERJ2GE0R00X	0 1/16W	1	
	LB8421	ERJ2GE0R00X	0 1/16W	1	
	LB8422	ERJ2GE0R00X	0 1/16W	1	
	LB8423	ERJ2GE0R00X	0 1/16W	1	
	LB8424	ERJ2GE0R00X	0 1/16W	1	
	LB8425	ERJ2GE0R00X	0 1/16W	1	
	LB8426	ERJ2GE0R00X	0 1/16W	1	
	LB8427	ERJ2GE0R00X	0 1/16W	1	
	LB8428	ERJ2GE0R00X	0 1/16W	1	
	LB8429	ERJ2GE0R00X	0 1/16W	1	
	LB8430	ERJ2GE0R00X	0 1/16W	1	
	LB8431	ERJ2GE0R00X	0 1/16W	1	
	LB8432	ERJ2GE0R00X	0 1/16W	1	
	LB8531	ERJ2GE0R00X	0 1/16W	1	
	LB8690	ERJ2GE0R00X	0 1/16W	1	
	W102	D0GBR00JA008	0 1/16W	1	
	W301	D0GBR00JA008	0 1/16W	1	
	W302	D0GBR00JA008	0 1/16W	1	
	W400	ERJ8GEY0R00V	0 1/4W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			RESISTORS		
	LB8691	D0GA101JA023	100 1/16W	1	
	LB8692	D0GA101JA023	100 1/16W	1	
	LB8693	D0GA101JA023	100 1/16W	1	
	R1001	D0GB101JA008	100 1/16W	1	
	R1002	D0GB101JA008	100 1/16W	1	
	R1003	D0GB104JA008	100K 1/16W	1	
	R1004	D0GB104JA008	100K 1/16W	1	
	R1005	ERJ3GEYF753V	75K 1/10W	1	
	R1006	ERJ3GEYF753V	75K 1/10W	1	
	R1007	ERJ3GEYF513V	51K 1/10W	1	
	R1008	ERJ3GEYF513V	51K 1/10W	1	
	R1009	D0GB151JA008	150 1/16W	1	
	R1010	D0GB151JA008	150 1/16W	1	
	R1011	D0GBR00JA008	0 1/16W	1	
	R1012	D0GBR00JA008	0 1/16W	1	
	R1013	D0GB102JA008	1K 1/16W	1	
	R1704	D0GB103JA008	10K 1/16W	1	
	R1711	D0GB221JA007	220 1/10W	1	
	R1712	D0GB221JA007	220 1/10W	1	
	R1714	D0GB103JA008	10K 1/16W	1	
	R1715	D0GB103JA008	10K 1/16W	1	
	R2000	D0GB221JA007	220 1/10W	1	
	R2001	D0GB102JA008	1K 1/16W	1	
	R2002	D0GB103JA008	10K 1/16W	1	
	R2007	D0GB473JA008	47K 1/16W	1	EB/EF/EG
	R2012	D0GB103JA008	10K 1/16W	1	
	R2015	D0GB272JA008	2.7K 1/16W	1	
	R2016	D0GB472JA008	4.7K 1/16W	1	
	R2017	D0GB273JA008	27K 1/16W	1	
	R2019	D0GB473JA008	47K 1/16W	1	
	R2021	D0GB563JA008	56K 1/16W	1	
	R2022	D0GB473JA008	47K 1/16W	1	
	R2023	D0GB473JA008	47K 1/16W	1	
	R2024	D0GB273JA008	27K 1/16W	1	
	R2025	D0GB104JA008	100K 1/16W	1	
	R2027	D0GB1R5JA040	1.5 1/16W	1	
	R2028	D0GBR00JA008	0 1/16W	1	
	R2029	D0GB221JA007	220 1/10W	1	
	R2031	D0GB221JA007	220 1/10W	1	
	R2032	D0GB473JA008	47K 1/16W	1	
	R2033	D0GB223JA008	22K 1/16W	1	
	R2034	D0GB473JA008	47K 1/16W	1	
	R2035	D0GB473JA008	47K 1/16W	1	
	R2036	D0GB221JA007	220 1/10W	1	
	R2037	D0GB473JA008	47K 1/16W	1	
	R2038	D0GB473JA008	47K 1/16W	1	
	R2039	D0GB221JA007	220 1/10W	1	
	R2040	D0GB473JA008	47K 1/16W	1	
	R2041	D0GB473JA008	47K 1/16W	1	
	R2043	D0GB153JA008	15K 1/16W	1	
	R2045	D0GB103JA008	10K 1/16W	1	
	R2051	D0GB563JA017	56K 1/10W	1	
	R2054	ERJ6GEYJ221V	220 1/8W	1	
	R2064	D0GB221JA007	220 1/10W	1	
	R2065	D0GB221JA007	220 1/10W	1	
	R2066	D0GB221JA007	220 1/10W	1	
	R2068	D0GB221JA007	220 1/10W	1	
	R2069	D0GB221JA007	220 1/10W	1	
	R2071	D0GB101JA008	100 1/16W	1	
	R2072	D0GB101JA008	100 1/16W	1	
	R2073	D0GB101JA008	100 1/16W	1	
	R2074	D0GB473JA008	47K 1/16W	1	
	R2075	D0GB221JA007	220 1/10W	1	
	R2076	D0GB473JA008	47K 1/16W	1	
	R2077	D0GB103JA008	10K 1/16W	1	
	R2078	D0GB473JA008	47K 1/16W	1	
	R2079	D0GB103JA008	10K 1/16W	1	
	R2080	D0GB103JA008	10K 1/16W	1	
	R2081	D0GB103JA008	10K 1/16W	1	
	R2082	D0GB332JA008	3.3K 1/16W	1	EF/EG

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R2082	D0GB472JA008	4.7K 1/16W	1	EB
	R2082	D0GB682JA008	6.8K 1/16W	1	EE
	R2084	D0GB473JA008	47K 1/16W	1	
	R2085	D0GB472JA008	4.7K 1/16W	1	
	R2086	D0GB223JA008	22K 1/16W	1	
	R2087	D0GB223JA008	22K 1/16W	1	
	R2089	D0GB153JA008	15K 1/16W	1	
	R2090	D0GB153JA008	15K 1/16W	1	
	R2091	D0GB473JA008	47K 1/16W	1	
	R2092	D0GB221JA007	220 1/10W	1	
	R2093	D0GB103JA008	10K 1/16W	1	
	R2094	D0GB221JA007	220 1/10W	1	
	R2096	D0GB473JA008	47K 1/16W	1	
	R2097	D0GB472JA008	4.7K 1/16W	1	
	R2098	D0GB225JA008	2.2M 1/16W	1	
	R2099	D0GB104JA008	100K 1/16W	1	
	R2101	D0GB103JA008	10K 1/16W	1	
	R2102	D0GB332JA008	3.3K 1/16W	1	
	R2103	D0GB273JA008	27K 1/16W	1	
	R2105	D0GB103JA008	10K 1/16W	1	
	R2106	D0GB563JA008	56K 1/16W	1	
	R2111	D0GB472JA008	4.7K 1/16W	1	
	R2112	D0GB562JA008	5.6K 1/16W	1	
	R2113	D0GB562JA008	5.6K 1/16W	1	
	R2114	D0GB562JA008	5.6K 1/16W	1	
	R2115	D0GB822JA008	8.2K 1/16W	1	
	R2116	D0GB102JA008	1K 1/16W	1	
	R2119	D0GB562JA008	5.6K 1/16W	1	
	R2120	D0GB102JA008	1K 1/16W	1	
	R2133	D0GB103JA008	10K 1/16W	1	
	R2145	D0GBR00JA008	0 1/16W	1	
	R2150	D0GB153JA008	15K 1/16W	1	
	R2160	D0GB102JA008	1K 1/16W	1	
	R2161	D0GB473JA008	47K 1/16W	1	
	R2170	D0GB102JA008	1K 1/16W	1	
	R2171	D0GB273JA008	27K 1/16W	1	
	R2172	D0GB182JA008	1.8K 1/16W	1	
	R2173	D0GB273JA008	27K 1/16W	1	
	R2174	D0GB392JA008	3.9K 1/16W	1	
	R2175	D0GB102JA008	1K 1/16W	1	
	R2176	D0GB393JA008	39K 1/16W	1	
	R2178	D0GB390JA017	39 1/10W	1	
	R2180	D0GB100JA017	10 1/10W	1	
	R2182	D0GB390JA017	39 1/10W	1	
	R2183	D0GB102JA008	1K 1/16W	1	
	R2184	D0GB222JA008	2.2K 1/16W	1	
	R2187	D0GB332JA008	3.3K 1/16W	1	
	R2189	D0GB102JA008	1K 1/16W	1	
	R2190	D0GB562JA008	5.6K 1/16W	1	
	R2191	D0GB392JA008	3.9K 1/16W	1	
	R2201	D0GB103JA008	10K 1/16W	1	
	R2202	D0GB332JA008	3.3K 1/16W	1	
	R2203	D0GB273JA008	27K 1/16W	1	
	R2205	D0GB103JA008	10K 1/16W	1	
	R2206	D0GB563JA008	56K 1/16W	1	
	R2211	D0GB472JA008	4.7K 1/16W	1	
	R2212	D0GB562JA008	5.6K 1/16W	1	
	R2213	D0GB562JA008	5.6K 1/16W	1	
	R2214	D0GB562JA008	5.6K 1/16W	1	
	R2215	D0GB822JA008	8.2K 1/16W	1	
	R2216	D0GB102JA008	1K 1/16W	1	
	R2219	D0GB562JA008	5.6K 1/16W	1	
	R2220	D0GB102JA008	1K 1/16W	1	
	R2233	D0GB103JA008	10K 1/16W	1	
	R2245	D0GBR00JA008	0 1/16W	1	
	R2260	D0GB102JA008	1K 1/16W	1	
	R2261	D0GB473JA008	47K 1/16W	1	
	R2271	D0GB563JA008	56K 1/16W	1	
	R2273	D0GB273JA008	27K 1/16W	1	
	R2274	D0GB392JA008	3.9K 1/16W	1	
	R2275	D0GB102JA008	1K 1/16W	1	
	R2276	D0GB393JA008	39K 1/16W	1	
	R2278	D0GB390JA017	39 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R2280	D0GD100JA017	10 1/10W	1	
	R2282	D0GD390JA017	39 1/10W	1	
	R2283	D0GB102JA008	1K 1/16W	1	
	R2284	D0GB222JA008	2.2K 1/16W	1	
	R2288	D0GB332JA008	3.3K 1/16W	1	
	R2290	D0GB562JA008	5.6K 1/16W	1	
	R2291	D0GB392JA008	3.9K 1/16W	1	
	R2304	D0GB123JA008	12K 1/16W	1	
	R2404	D0GB123JA008	12K 1/16W	1	
	R2609	D0GB821JA008	820 1/16W	1	
	R2610	D0GB562JA008	5.6K 1/16W	1	
	R2611	D0GB103JA008	10K 1/16W	1	
	R2612	D0GB682JA008	6.8K 1/16W	1	
	R2613	D0GB153JA008	15K 1/16W	1	
	R2614	D0GB273JA008	27K 1/16W	1	
	R2617	D0GB392JA008	3.9K 1/16W	1	
	R2620	D0GB472JA008	4.7K 1/16W	1	
	R2621	D0GB103JA008	10K 1/16W	1	
	R2622	D0GB183JA008	18K 1/16W	1	
	R2626	D0GB152JA008	1.5K 1/16W	1	
	R2627	D0GB563JA008	56K 1/16W	1	
	R2668	D0GBR00JA008	0 1/16W	1	
	R2700	D0GB102JA008	1K 1/16W	1	EB/EF/EG
	R2701	D0GB104JA008	100K 1/16W	1	EB/EF/EG
	R2702	D0GB102JA008	1K 1/16W	1	EB/EF/EG
	R2703	D0GB102JA008	1K 1/16W	1	EB/EF/EG
	R2705	D0GB102JA008	1K 1/16W	1	
	R2706	ERJ3GEYJ270V	27 1/10W	1	EB/EF/EG
	R2757	D0GB103JA008	10K 1/16W	1	
	R2764	D0GB824JA008	820K 1/16W	1	
	R2804	D0GB102JA008	1K 1/16W	1	
	R2809	D0GB750JA008	75 1/16W	1	
	R2862	D0GB103JA008	10K 1/16W	1	
	R2863	D0GB103JA008	10K 1/16W	1	
	R2864	D0GB821JA008	820 1/16W	1	
	R2865	D0GB332JA008	3.3K 1/16W	1	EB
	R2865	D0GB472JA008	4.7K 1/16W	1	EE
	R2865	D0GB821JA008	820 1/16W	1	EF/EG
	R2900	D0GB472JA008	4.7K 1/16W	1	
	R2902	D0GB470JA008	47 1/16W	1	
	R2903	D0GB182JA008	1.8K 1/16W	1	
	R2904	D0GB122JA008	1.2K 1/16W	1	
	R2905	D0GB390JA008	39 1/16W	1	
	R2906	ERJ3RBD682V	6.8K 1/16W	1	
	R2907	D0GB272JA008	2.7K 1/16W	1	
	R2908	D0GB561JA008	560 1/16W	1	
	R2909	D0GB393JA008	39K 1/16W	1	
	R2910	D0GB1R5JA040	1.5 1/16W	1	
	R2911	D0GB102JA008	1K 1/16W	1	
	R2912	D0GB272JA008	2.7K 1/16W	1	
	R2913	D0GB101JA008	100 1/16W	1	
	R2914	D0GB473JA008	47K 1/16W	1	
	R2919	D0GB102JA008	1K 1/16W	1	
	R2920	D0GB392JA008	3.9K 1/16W	1	
	R2921	D0GB391JA008	390 1/16W	1	
	R2922	D0HB102ZA002	1K 1/16W	1	
	R2923	ERJ3RBD122V	1.2K 1/16W	1	
	R2930	D0GB105JA008	1M 1/16W	1	
	R2935	D0GB105JA008	1M 1/16W	1	
	R2937	D0GB393JA008	39K 1/16W	1	
	R2938	D0GB333JA008	33K 1/16W	1	
	R2941	D0GB223JA008	22K 1/16W	1	
	R2952	D0GB392JA008	3.9K 1/16W	1	
	R2953	D0GB561JA008	560 1/16W	1	
	R2971	ERJ3RBD393V	39K 1/16W	1	
	R2972	ERJ3RED124V	120K 1/16W	1	
	R2973	ERJ3RBD272V	2.7K 1/16W	1	
	R3901	ERJ2GEJ511X	510 1/16W	1	
	R3902	D0GA103JA023	10K 1/16W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R3903	D0GA103JA023	10K 1/16W	1	
	R3904	D0GA472JA023	4.7K 1/16W	1	
	R3905	ERJ2GEJ202X	2.0K 1/16W	1	
	R3906	D0GA472JA023	4.7K 1/16W	1	
	R3907	D0GA222JA023	2.2K 1/16W	1	
	R3921	ERJ2GE0R00X	0 1/16W	1	
	R3924	ERJ2GE0R00X	0 1/16W	1	
	R3925	D0GA103JA023	10K 1/16W	1	
	R3941	D0GA273JA023	27K 1/16W	1	
	R3942	ERJ2GEJ224X	220K 1/16W	1	
	R3943	D0GA104JA023	100K 1/16W	1	
	R3944	D0GA221JA023	220 1/16W	1	
	R3945	D0GA103JA023	10K 1/16W	1	
	R3946	ERJ2GEJ272X	2.7K 1/16W	1	
	R3947	D0GA103JA023	10K 1/16W	1	
	R5001	D0GB822JA008	8.2K 1/16W	1	
	R5002	D0GB153JA008	15K 1/16W	1	
	R5005	D0GB101JA008	100 1/16W	1	
	R5006	D0GBR00JA008	0 1/16W	1	
	R5007	D0GB822JA008	8.2K 1/16W	1	
	R5008	D0GB392JA008	3.9K 1/16W	1	
	R5009	D0GB122JA008	1.2K 1/16W	1	
	R5012	D0GBR00JA008	0 1/16W	1	
	R5014	D0GB104JA008	100K 1/16W	1	
	R5017	D0GB472JA008	4.7K 1/16W	1	
	R5018	D0GBR00JA008	0 1/16W	1	
	R5022	D0GBR00JA008	0 1/16W	1	
	R5024	D0GBR00JA008	0 1/16W	1	
	R5027	D0GB563JA008	56K 1/16W	1	
	R5028	D0GBR00JA008	0 1/16W	1	
	R5029	D0GB103JA008	10K 1/16W	1	
	R5030	D0GB103JA008	10K 1/16W	1	
	R5031	D0GB103JA008	10K 1/16W	1	
	R5032	D0GB563JA008	56K 1/16W	1	
	R5033	D0GB103JA008	10K 1/16W	1	
	R5035	ERJ3GEYJ185V	1.8M 1/10W	1	
	R5036	D0GB220JA008	22 1/16W	1	
	R5037	D0GD102JA017	1K 1/10W	1	
	R5045	D0GB223JA008	22K 1/16W	1	
	R5047	D0GB123JA008	12K 1/16W	1	
	R5048	D0GB822JA008	8.2K 1/16W	1	
	R5049	D0GB223JA008	22K 1/16W	1	
	R5052	D0GB393JA008	39K 1/16W	1	
	R5055	D0GB272JA008	2.7K 1/16W	1	
	R5056	D0GB820JA008	82 1/16W	1	
	R5057	D0GB222JA008	2.2K 1/16W	1	
	R5058	D0GB472JA008	4.7K 1/16W	1	
	R5063	D0GB102JA008	1K 1/16W	1	
	R5064	D0GBR00JA008	0 1/16W	1	
	R5065	D0GB473JA008	47K 1/16W	1	
	R5066	D0GB4R7JA008	4.7 1/16W	1	
	R5067	D0GB822JA008	8.2K 1/16W	1	
	R5068	D0GB101JA008	100 1/16W	1	
	R5069	D0AF680JA039	68 1/2W	1	
	R5070	D0GBR00JA008	0 1/16W	1	
	R5102	D0GB332JA008	3.3K 1/16W	1	
	R5104	D0GB682JA008	6.8K 1/16W	1	
	R5105	D0GB154JA008	150K 1/16W	1	
	R5106	D0GB151JA008	150 1/16W	1	
	R5107	D0GB102JA008	1K 1/16W	1	
	R5108	D0GB103JA008	10K 1/16W	1	
	R5109	D0GB822JA008	8.2K 1/16W	1	
	R5110	D0GB103JA008	10K 1/16W	1	
	R5111	D0GB4R7JA008	4.7 1/16W	1	
	R5112	D0GB333JA008	33K 1/16W	1	
	R5113	D0GB220JA008	22 1/16W	1	
	R5114	D0GB220JA008	22 1/16W	1	
	R5115	D0GZ220JA012	22 1W	1	
	R5116	D0GD222JA017	2.2K 1/10W	1	
	R5117	D0GB682JA008	6.8K 1/16W	1	
	R5118	D0GB104JA008	100K 1/16W	1	
	R5119	D0GB104JA008	100K 1/16W	1	
	R5120	D0GB1R0JA008	1.0 1/16W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R5121	D0GB563JA008	56K 1/16W	1	
	R5202	D0GB332JA008	3.3K 1/16W	1	
	R5204	D0GB682JA008	6.8K 1/16W	1	
	R5205	D0GB154JA008	150K 1/16W	1	
	R5206	D0GB151JA008	150 1/16W	1	
	R5207	D0GB102JA008	1K 1/16W	1	
	R5208	D0GB103JA008	10K 1/16W	1	
	R5209	D0GB822JA008	8.2K 1/16W	1	
	R5210	D0GB103JA008	10K 1/16W	1	
	R5211	D0GB4R7JA008	4.7 1/16W	1	
	R5212	D0GB333JA008	33K 1/16W	1	
	R5213	D0GB220JA008	22 1/16W	1	
	R5214	D0GB220JA008	22 1/16W	1	
	R5215	D0GZ220JA012	22 1W	1	
	R5216	D0GD222JA017	2.2K 1/10W	1	
	R5217	D0GB682JA008	6.8K 1/16W	1	
	R5218	D0GB104JA008	100K 1/16W	1	
	R5219	D0GB104JA008	100K 1/16W	1	
	R5220	D0GB1R0JA008	1.0 1/16W	1	
	R5221	D0GB563JA008	56K 1/16W	1	
	R5302	D0GB332JA008	3.3K 1/16W	1	
	R5304	D0GB682JA008	6.8K 1/16W	1	
	R5305	D0GB224JA008	220K 1/16W	1	
	R5306	D0GB151JA008	150 1/16W	1	
	R5307	D0GB102JA008	1K 1/16W	1	
	R5308	D0GB103JA008	10K 1/16W	1	
	R5309	D0GB822JA008	8.2K 1/16W	1	
	R5310	D0GB563JA008	56K 1/16W	1	
	R5311	D0GB4R7JA008	4.7 1/16W	1	
	R5312	D0GB333JA008	33K 1/16W	1	
	R5313	D0GB220JA008	22 1/16W	1	
	R5314	D0GB220JA008	22 1/16W	1	
	R5315	D0GZ220JA012	22 1W	1	
	R5316	D0GD222JA017	2.2K 1/10W	1	
	R5317	D0GB682JA008	6.8K 1/16W	1	
	R5318	D0GB104JA008	100K 1/16W	1	
	R5319	D0GB104JA008	100K 1/16W	1	
	R5320	D0GB1R0JA008	1.0 1/16W	1	
	R5321	D0GB563JA008	56K 1/16W	1	
	R5407	D0GB102JA008	1K 1/16W	1	
	R5408	D0GBR00JA008	0 1/16W	1	
	R5419	D0GB104JA008	100K 1/16W	1	
	R5701	ERDS1TJ395B	3.9M 1/2W	1	
	R5702	ERJ1TYJ104U	100K 1W	1	
	R5703	ERJ1TYJ104U	100K 1W	1	
	R5704	ERJ8GEYJ124V	120K 1/4W	1	
	R5705	ERJ8GEYJ124V	120K 1/4W	1	
	R5706	ERJ8GEYJ274V	270K 1/4W	1	
	R5707	ERJ8GEYJ274V	270K 1/4W	1	
	R5720	D0GD220JA017	22 1/10W	1	
	R5721	D0GD103JA017	10K 1/10W	1	
	R5722	D0GB222JA008	2.2K 1/16W	1	
	R5723	ERJ1TYJ333U	33K 1W	1	
	R5724	ERJ1TYJ333U	33K 1W	1	
	R5725	D0GB222JA008	2.2K 1/16W	1	
	R5726	ERX2SZJR10P	0.1 2W	1	
	R5728	D0GB683JA008	68K 1/16W	1	
	R5729	D0GB103JA008	10K 1/16W	1	
	R5730	D0GB102JA008	1K 1/16W	1	
	R5732	D0GB101JA008	100 1/16W	1	
	R5733	D0GB473JA008	47K 1/16W	1	
	R5786	ERJ1TYJ204U	200K 1W	1	
	R5795	ERJ6GEYJ474V	470K 1/8W	1	
	R5797	D0GB153JA008	15K 1/16W	1	
	R5798	D0GB220JA008	22 1/16W	1	
	R5800	D0GB333JA008	33K 1/16W	1	
	R5801	ERJ6GEYJ273V	27K 1/8W	1	
	R5802	ERJ3RBD153V	15K 1/16W	1	
	R5803	D0GD122JA017	1.2K 1/10W	1	
	R5804	ERJ6RED184V	180K 1/10W	1	
	R5805	ERJ3RBD682V	6.8K 1/16W	1	
	R5806	D0GB153JA008	15K 1/16W	1	
	R5807	ERJ6GEYJ331V	330 1/8W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R5808	D0GD222JA017	2.2K 1/10W	1	
	R5809	ERJ6GEYJ331V	330 1/8W	1	
	R5814	D0GB822JA008	8.2K 1/16W	1	
	R5817	ERJ3RBD222V	2.2K 1/16W	1	
	R5818	D0GB101JA008	100 1/16W	1	
	R5819	D0GB220JA008	22 1/16W	1	
	R5820	ERJ6GEYJ272V	2.7K 1/8W	1	
	R5821	D0GB104JA008	100K 1/16W	1	
	R5832	ERJ1TYJ332U	3.3K 1W	1	
	R5834	ERJ1TYJ222U	2.2K 1W	1	
	R5861	D0GB104JA008	100K 1/16W	1	
	R5862	D0GD222JA017	2.2K 1/10W	1	
	R5863	D0GD562JA017	5.6K 1/10W	1	
	R5864	ERJ3GEYJ471V	470 1/10W	1	
	R5865	D0GB223JA008	22K 1/16W	1	
	R5890	D0GB222JA008	2.2K 1/16W	1	
	R5891	ERJ3RBD333V	33K 1/16W	1	
	R5892	ERJ3RBD332V	3.3K 1/16W	1	
	R5893	ERJ3RBD393V	39K 1/16W	1	
	R5894	D0GB102JA008	1K 1/16W	1	
	R5895	D0GB153JA008	15K 1/16W	1	
	R5896	D0GBR00JA008	0 1/16W	1	
	R5897	D0GB101JA008	100 1/16W	1	
	R5898	ERJ6GEYJ824V	820K 1/8W	1	
	R5899	ERJ6GEYJ473V	47K 1/8W	1	
	R6001	ERJ8GEYR00V	0 1/4W	1	
	R6002	ERJ8GEYR00V	0 1/4W	1	
	R6003	D0GBR00JA008	0 1/16W	1	
	R6005	D0GB104JA008	100K 1/16W	1	
	R6007	D0GB680JA008	68 1/16W	1	
	R6008	D0GB680JA008	68 1/16W	1	
	R6009	D0GB680JA008	68 1/16W	1	
	R6010	D0GB563JA008	56K 1/16W	1	
	R6011	D0GB1R0JA008	1.0 1/16W	1	
	R6100	D0GB473JA008	47K 1/16W	1	
	R6101	D0GB103JA008	10K 1/16W	1	
	R6102	D0GB103JA008	10K 1/16W	1	
	R6103	D0GB103JA008	10K 1/16W	1	
	R6104	D0GB103JA008	10K 1/16W	1	
	R6105	D0GB103JA008	10K 1/16W	1	
	R6200	D0GB473JA008	47K 1/16W	1	
	R6201	D0GB103JA008	10K 1/16W	1	
	R6203	D0GB103JA008	10K 1/16W	1	
	R6204	D0GB103JA008	10K 1/16W	1	
	R6300	D0GB750JA008	75 1/16W	1	
	R6301	D0GB100JA008	10 1/16W	1	
	R6302	D0GB100JA008	10 1/16W	1	
	R6400	D0GB102JA008	1K 1/16W	1	
	R6403	ERJ3GEYF334V	330K 1/10W	1	
	R6404	ERJ3GEYF224V	220K 1/10W	1	
	R6451	D0GB103JA008	10K 1/16W	1	
	R6452	D0GB103JA008	10K 1/16W	1	
	R6453	D0GB220JA008	22 1/16W	1	
	R6454	D0GD102JA017	1K 1/10W	1	
	R6455	D0GBR00JA008	0 1/16W	1	
	R6456	D0GBR00JA008	0 1/16W	1	
	R6457	D0GBR00JA008	0 1/16W	1	
	R6501	D0GB102JA008	1K 1/16W	1	
	R6502	D0GB102JA008	1K 1/16W	1	
	R6503	D0GB122JA008	1.2K 1/16W	1	
	R6504	D0GB182JA008	1.8K 1/16W	1	
	R6505	D0GB222JA008	2.2K 1/16W	1	
	R6506	D0GB272JA008	2.7K 1/16W	1	
	R6511	D0GB102JA008	1K 1/16W	1	
	R6512	D0GB102JA008	1K 1/16W	1	
	R6513	D0GB122JA008	1.2K 1/16W	1	
	R6514	D0GB182JA008	1.8K 1/16W	1	
	R6515	D0GB222JA008	2.2K 1/16W	1	
	R6523	ERJ8GEYJ821V	820 1/4W	1	
	R6524	D0GB102JA008	1K 1/16W	1	
	R6601	D0GB101JA008	100 1/16W	1	
	R6601	D0GB102JA008	1K 1/16W	1	
	R6602	D0GB101JA008	100 1/16W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R6602	D0GB102JA008	1K 1/16W	1	
	R6603	D0GB101JA008	100 1/16W	1	
	R6603	D0GB561JA008	560 1/16W	1	
	R6604	D0GB101JA008	100 1/16W	1	
	R6604	D0GB473JA008	47K 1/16W	1	
	R6605	D0GB101JA008	100 1/16W	1	
	R6605	D0GB473JA008	47K 1/16W	1	
	R6606	D0GB101JA008	100 1/16W	1	
	R6606	D0GB183JA008	18K 1/16W	1	
	R6607	D0GB101JA008	100 1/16W	1	
	R6613	D0GB472JA008	4.7K 1/16W	1	
	R6614	D0GB472JA008	4.7K 1/16W	1	
	R6615	D0GB102JA008	1K 1/16W	1	
	R6616	D0GB473JA008	47K 1/16W	1	
	R6801	D0GB101JA008	100 1/16W	1	
	R6802	D0GB470JA008	47 1/16W	1	
	R6901	D0GBR00JA008	0 1/16W	1	
	R6902	D0GBR00JA008	0 1/16W	1	
	R6905	D0GBR00JA008	0 1/16W	1	
	R8001	D0GA103JA023	10K 1/16W	1	
	R8003	D0GA103JA023	10K 1/16W	1	
	R8011	D0GA220JA023	22 1/16W	1	
	R8012	D0GA220JA023	22 1/16W	1	
	R8013	D0GA220JA023	22 1/16W	1	
	R8014	ERJ2GE0R00X	0 1/16W	1	
	R8025	D0GBR00JA008	0 1/16W	1	
	R8211	D0GA103JA023	10K 1/16W	1	
	R8221	D0GA822JA023	8.2K 1/16W	1	
	R8225	D0GA822JA023	8.2K 1/16W	1	
	R8230	D0GA222JA023	2.2K 1/16W	1	
	R8231	D0GA752JA023	7.5K 1/16W	1	
	R8232	D0GA752JA023	7.5K 1/16W	1	
	R8251	D0GD6R8JA017	6.8 1/10W	1	
	R8252	D0GA103JA023	10K 1/16W	1	
	R8261	D0GA823JA023	82K 1/16W	1	
	R8262	D0GA153JA023	15K 1/16W	1	
	R8263	D0GA823JA023	82K 1/16W	1	
	R8264	D0GA153JA023	15K 1/16W	1	
	R8311	ERJ2RHD242X	2.4K 1/16W	1	
	R8312	ERJ2RHD102X	1K 1/16W	1	
	R8313	ERJ2RHD153X	15K 1/16W	1	
	R8314	ERJ2RHD153X	15K 1/16W	1	
	R8315	ERJ2RKD240X	24 1/16W	1	
	R8316	ERJ2RKD240X	24 1/16W	1	
	R8317	D0GA153JA023	15K 1/16W	1	
	R8318	D0GA153JA023	15K 1/16W	1	
	R8321	ERJ3RBD201V	200 1/16W	1	
	R8323	D0GA330JA023	33 1/16W	1	
	R8324	D0GA102JA023	1K 1/16W	1	
	R8325	ERJ3RBD201V	200 1/16W	1	
	R8327	D0GA330JA023	33 1/16W	1	
	R8328	D0GA102JA023	1K 1/16W	1	
	R8331	ERJ3RBD201V	200 1/16W	1	
	R8333	D0GA330JA023	33 1/16W	1	
	R8334	D0GA102JA023	1K 1/16W	1	
	R8335	ERJ3RBD201V	200 1/16W	1	
	R8336	D0GA330JA023	33 1/16W	1	
	R8337	D0GA102JA023	1K 1/16W	1	
	R8341	ERJ3RBD201V	200 1/16W	1	
	R8342	D0GA330JA023	33 1/16W	1	
	R8343	D0GA102JA023	1K 1/16W	1	
	R8401	D0GA101JA023	100 1/16W	1	
	R8402	D0GA101JA023	100 1/16W	1	
	R8403	D0GA101JA023	100 1/16W	1	
	R8404	D0GA101JA023	100 1/16W	1	
	R8406	ERJ2GEJ100X	10 1/16W	1	
	R8420	D0GA222JA023	2.2K 1/16W	1	
	R8421	ERJ2GEJ100X	10 1/16W	1	
	R8422	ERJ2GE0R00X	0 1/16W	1	
	R8423	ERJ2GE0R00X	0 1/16W	1	
	R8426	ERJ2GE0R00X	0 1/16W	1	
	R8429	ERJ2GE0R00X	0 1/16W	1	
	R8531	D0GA152JA023	1.5K 1/16W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R8532	D0GA222JA023	2.2K 1/16W	1	
	R8533	ERJ2GE0R00X	0 1/16W	1	
	R8534	D0GA103JA023	10K 1/16W	1	
	R8535	D0GA104JA023	100K 1/16W	1	
	R8536	D0GA103JA023	10K 1/16W	1	
	R8537	ERJ2GE0R00X	0 1/16W	1	
	R8538	ERJ2GE0R00X	0 1/16W	1	
	R8539	ERJ2GE0R00X	0 1/16W	1	
	R8540	D0GBR00JA008	0 1/16W	1	
	R8541	D0GA153JA023	15K 1/16W	1	
	R8551	ERJ2GE0R00X	0 1/16W	1	
	R8552	D0GA102JA023	1K 1/16W	1	
	R8553	D0GA102JA023	1K 1/16W	1	
	R8554	ERJ2GEJ680X	68 1/16W	1	
	R8555	D0GA2R2JA023	2.2 1/16W	1	
	R8556	D0GB560JA008	56 1/16W	1	
	R8557	D0GB510JA008	51 1/16W	1	
	R8558	D0GA473JA023	47K 1/16W	1	
	R8559	D0GA153JA023	15K 1/16W	1	
	R8561	ERJ2GE0R00X	0 1/16W	1	
	R8562	D0GA102JA023	1K 1/16W	1	
	R8563	D0GA102JA023	1K 1/16W	1	
	R8564	D0GA220JA023	22 1/16W	1	
	R8565	D0GA2R2JA023	2.2 1/16W	1	
	R8566	D0GB560JA008	56 1/16W	1	
	R8567	D0GB510JA008	51 1/16W	1	
	R8568	D0GA473JA023	47K 1/16W	1	
	R8569	D0GA103JA023	10K 1/16W	1	
	R8601	D0GA105JA023	1M 1/16W	1	
	R8611	D0GA101JA023	100 1/16W	1	
	R8613	D0GA101JA023	100 1/16W	1	
	R8621	D0GA105JA023	1M 1/16W	1	
	R8622	ERJ2RHD102X	1K 1/16W	1	
	R8702	ERJ2GEJ100X	10 1/16W	1	
	R8901	ERJ2GEJ100X	10 1/16W	1	
	R9007	D0GA103JA023	10K 1/16W	1	
	R9008	D0GA105JA023	1M 1/16W	1	
	R9009	D0GA102JA023	1K 1/16W	1	
	R9010	ERJ2GEJ100X	10 1/16W	1	
	R9023	D0GA103JA023	10K 1/16W	1	
	R9036	D0GA103JA023	10K 1/16W	1	
	R9037	D0GA103JA023	10K 1/16W	1	
	R9040	D0GA103JA023	10K 1/16W	1	
	R9041	D0GA103JA023	10K 1/16W	1	
	R9042	D0GA103JA023	10K 1/16W	1	
	R9043	D0GA103JA023	10K 1/16W	1	
	R9044	D0GA103JA023	10K 1/16W	1	
	R9045	D0GA103JA023	10K 1/16W	1	
	R9046	D0GA103JA023	10K 1/16W	1	
	R9047	D0GA103JA023	10K 1/16W	1	
	R9048	D0GA103JA023	10K 1/16W	1	
	R9049	D0GA103JA023	10K 1/16W	1	
	R9055	D0GA472JA023	4.7K 1/16W	1	
	R9080	D0GA103JA023	10K 1/16W	1	
	R9083	D0GA470JA023	47 1/16W	1	
	R9084	D0GA470JA023	47 1/16W	1	
	R9085	D0GA470JA023	47 1/16W	1	
	R9086	D0GA470JA023	47 1/16W	1	
	R9087	D0GA470JA023	47 1/16W	1	
	R9088	D0GA470JA023	47 1/16W	1	
	R9099	ERJ2GE0R00X	0 1/16W	1	
	RX3707	D1H84714A043	RESISTOR NETWORK	1	
	RX3708	D1H84714A043	RESISTOR NETWORK	1	
	RX3901	D1H410120001	RESISTOR NETWORK	1	
	RX8001	D1H410320002	RESISTOR NETWORK	1	
	RX8011	D1H88204A043	RESISTOR NETWORK	1	
	RX8012	D1H88204A043	RESISTOR NETWORK	1	
	RX8013	D1H88204A043	RESISTOR NETWORK	1	
	RX8014	D1H88204A043	RESISTOR NETWORK	1	
	RX8015	D1H88204A043	RESISTOR NETWORK	1	
	RX8016	D1H88204A043	RESISTOR NETWORK	1	
	RX8017	D1H88204A043	RESISTOR NETWORK	1	
	RX8018	D1H422020001	RESISTOR NETWORK	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	RX8019	D1H422020001	RESISTOR NETWORK	1	
	RX8020	D1H422020001	RESISTOR NETWORK	1	
	RX8031	D1H447220001	RESISTOR NETWORK	1	
	RX8032	D1H447220001	RESISTOR NETWORK	1	
	RX8401	D1H410120001	RESISTOR NETWORK	1	
	RX8402	D1H410120001	RESISTOR NETWORK	1	
	RX8531	D1H456020001	RESISTOR NETWORK	1	
	RX8532	D1H85604A043	RESISTOR NETWORK	1	
	RX8533	D1H456020001	RESISTOR NETWORK	1	
	RX8534	D1H456020001	RESISTOR NETWORK	1	
	RX8611	D1H447220001	RESISTOR NETWORK	1	
	RX8691	D1H410320002	RESISTOR NETWORK	1	
	RX9014	D1H85604A043	RESISTOR NETWORK	1	
	RX9015	D1H85604A043	RESISTOR NETWORK	1	
	RX9016	D1H85604A043	RESISTOR NETWORK	1	
	RX9017	D1H85604A043	RESISTOR NETWORK	1	
	RX9018	D1H447220001	RESISTOR NETWORK	1	
	RX9020	D1H447220001	RESISTOR NETWORK	1	
			CAPACITORS		
	C1001	F1H1H104A013	0.1uF 50V	1	
	C1002	F1H1H104A013	0.1uF 50V	1	
	C1003	F1H1H104A013	0.1uF 50V	1	
	C1004	F1H1H104A013	0.1uF 50V	1	
	C1701	F1H1H104A013	0.1uF 50V	1	
	C2000	F1H1H104A013	0.1uF 50V	1	
	C2001	F1J1H104A459	0.1uF 50V	1	
	C2006	ECALHM2R2B	2.2uF 50V	1	
	C2007	F1H1H104A013	0.1uF 50V	1	
	C2008	F2A0J101A181	100uF 6.3V	1	
	C2009	F1H1H104A013	0.1uF 50V	1	
	C2010	F1H1H331A013	330pF 50V	1	
	C2011	F1H1H331A013	330pF 50V	1	
	C2012	F1H1H331A013	330pF 50V	1	
	C2013	F1H1H223A219	0.022uF 50V	1	
	C2014	F1H1C105A097	1uF 16V	1	
	C2015	ECJ1VB1H221K	220pF 50V	1	
	C2016	ECJ1VB1H221K	220pF 50V	1	
	C2017	F1H1C104A042	0.1uF 16V	1	
	C2018	F2A1C470A234	47uF 16V	1	
	C2019	F2A1C470A234	47uF 16V	1	
	C2020	F1H1H104A013	0.1uF 50V	1	
	C2021	F1H1H104A013	0.1uF 50V	1	
	C2025	ECJ1VB1H221K	220pF 50V	1	
	C2026	F1H1H104A013	0.1uF 50V	1	
	C2027	F1H1H104A013	0.1uF 50V	1	
	C2028	F1H1C105A097	1uF 16V	1	
	C2029	F1H1C105A097	1uF 16V	1	
	C2101	ECJ1VB1H681K	680pF 50V	1	
	C2102	F1H1C473A088	0.047uF 16V	1	
	C2103	F1H1C105A097	1uF 16V	1	
	C2104	ECJ1VB1H393K	0.039uF 50V	1	
	C2105	F1H1H221A792	220pF 50V	1	
	C2106	F1H1C683A087	0.068uF 16V	1	
	C2110	F2A0J102A016	1000uF 6.3V	1	
	C2111	F1H1C105A097	1uF 16V	1	
	C2112	F1H1H182A219	1800pF 50V	1	
	C2113	F1H1H472A219	4700pF 50V	1	
	C2114	F1H1H562A219	5600pF 50V	1	
	C2115	F1H1C563A055	0.056uF 16V	1	
	C2116	F1H1C563A055	0.056uF 16V	1	
	C2117	F1H1H104A013	0.1uF 50V	1	
	C2118	F1H1H104A013	0.1uF 50V	1	
	C2119	F1H1C105A097	1uF 16V	1	
	C2121	ECJ1VB1C823K	0.082uF 16V	1	
	C2130	F1H1H472A219	4700pF 50V	1	
	C2131	F1H1H562A219	5600pF 50V	1	
	C2135	F1H1H153A219	0.015uF 50V	1	
	C2162	F1H1H152A219	1500pF 50V	1	
	C2169	F1H1H103A219	0.01uF 50V	1	
	C2171	F2A1H4R7A234	4.7uF 50V	1	
	C2177	F2A1H1R0A213	1.0uF 50V	1	
	C2178	F1H1H101A230	100pF 50V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C2179	F1H1H101A230	100pF 50V	1	
	C2180	F1H1H102A219	1000pF 50V	1	
	C2181	F1H1H102A219	1000pF 50V	1	
	C2182	F1H1H473A783	0.047uF 50V	1	
	C2190	F1H1C105A097	1uF 16V	1	
	C2194	F1J0J4750004	4.7uF 6.3V	1	
	C2201	ECJ1VB1H681K	680pF 50V	1	
	C2202	F1H1C473A088	0.047uF 16V	1	
	C2203	F1H1C105A097	1uF 16V	1	
	C2204	ECJ1VB1H393K	0.039uF 50V	1	
	C2205	F1H1H221A792	220pF 50V	1	
	C2206	F1H1C683A087	0.068uF 16V	1	
	C2211	F1H1C105A097	1uF 16V	1	
	C2212	F1H1H182A219	1800pF 50V	1	
	C2213	F1H1H472A219	4700pF 50V	1	
	C2214	F1H1H562A219	5600pF 50V	1	
	C2215	F1H1C563A055	0.056uF 16V	1	
	C2216	F1H1C563A055	0.056uF 16V	1	
	C2217	F1H1H104A013	0.1uF 50V	1	
	C2218	F1H1H104A013	0.1uF 50V	1	
	C2219	F1H1C105A097	1uF 16V	1	
	C2221	ECJ1VB1C823K	0.082uF 16V	1	
	C2230	F1H1H472A219	4700pF 50V	1	
	C2231	F1H1H562A219	5600pF 50V	1	
	C2235	F1H1H153A219	0.015uF 50V	1	
	C2262	F1H1H152A219	1500pF 50V	1	
	C2277	F2A1H1R0A213	1.0uF 50V	1	
	C2278	F1H1H101A230	100pF 50V	1	
	C2279	F1H1H101A230	100pF 50V	1	
	C2280	F1H1H102A219	1000pF 50V	1	
	C2281	F1H1H102A219	1000pF 50V	1	
	C2282	F1H1H473A783	0.047uF 50V	1	
	C2290	F1H1C105A097	1uF 16V	1	
	C2294	F1J0J4750004	4.7uF 6.3V	1	
	C2304	F1J0J4750004	4.7uF 6.3V	1	
	C2305	F1H1H332A013	3300pF 50V	1	
	C2306	F1H1A154A037	0.15uF 10V	1	
	C2307	F1H1C105A097	1uF 16V	1	
	C2308	F1H1H223A219	0.022uF 50V	1	
	C2309	ECJ1VB1C823K	0.082uF 16V	1	
	C2310	F1H1H223A219	0.022uF 50V	1	
	C2404	F1J0J4750004	4.7uF 6.3V	1	
	C2405	F1H1H332A013	3300pF 50V	1	
	C2406	F1H1A154A037	0.15uF 10V	1	
	C2407	F1H1C105A097	1uF 16V	1	
	C2408	F1H1H223A219	0.022uF 50V	1	
	C2601	F2A1H330A182	33uF 50V	1	
	C2602	F2A1H4R7A234	4.7uF 50V	1	
	C2603	F1H1H223A219	0.022uF 50V	1	
	C2604	ECALHM4R7B	4.7uF 50V	1	
	C2609	ECJ1VB1C474K	0.47uF 16V	1	
	C2610	F1H1A224A007	0.22uF 10V	1	
	C2611	ECJ1VB1A334K	0.33uF 10V	1	
	C2612	F1H1H562A219	5600pF 50V	1	
	C2617	ECJ1VB1A684K	0.68uF 10V	1	
	C2620	F1J0J106A020	10uF 6.3V	1	
	C2622	F1H1H330A230	33pF 50V	1	
	C2623	F1H1C105A097	1uF 16V	1	
	C2624	F1H1H104A013	0.1uF 50V	1	
	C2625	F1H1H104A013	0.1uF 50V	1	
	C2700	F1H1H470A004	47pF 50V	1	EB/EF/EG
	C2701	F1H1H102A219	1000pF 50V	1	EB/EF/EG
	C2702	F1H1H470A004	47pF 50V	1	EB/EF/EG
	C2703	F1J0J106A020	10uF 6.3V	1	EB/EF/EG
	C2704	F1H1H103A219	0.01uF 50V	1	EB/EF/EG
	C2705	F1H1H470A004	47pF 50V	1	EB/EF/EG
	C2706	F1J0J106A020	10uF 6.3V	1	EB/EF/EG

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C2707	F1J0J106A020	10uF 6.3V	1	EB/EF/EG
	C2708	F1H1H331A013	330pF 50V	1	EB/EF/EG
	C2751	F1H1C105A097	1uF 16V	1	
	C2756	F1H1C105A097	1uF 16V	1	
	C2801	F1H1C105A097	1uF 16V	1	
	C2802	F2A0J102A016	1000uF 6.3V	1	
	C2804	ECA1AM331B	330uF 10V	1	
	C2807	F1H1H103A219	0.01uF 50V	1	
	C2808	F2A1A2210063	220uF 10V	1	
	C2809	F2A1H220A182	22uF 50V	1	
	C2810	F1H1H103A219	0.01uF 50V	1	
	C2812	F1H1H104A013	0.1uF 50V	1	
	C2823	F1H1H101A230	100pF 50V	1	
	C2900	ECA1CM330B	33uF 16V	1	
	C2902	F1H1H562A219	5600pF 50V	1	
	C2903	F2A1V330A379	33uF 35V	1	
	C2904	F1J1A106A043	10uF 10V	1	
	C2905	F1H1H102A219	1000pF 50V	1	
	C2906	F2A1A101A206	100uF 10V	1	
	C2907	F1H1H102A219	1000pF 50V	1	
	C2908	F2A1C470A234	47uF 16V	1	
	C2909	F2A1C100A234	10uF 16V	1	
	C2910	F1H1C105A097	1uF 16V	1	
	C2911	F2A0J102A551	1000uF 6.3V	1	
	C2912	F2A1C101A155	100uF 16V	1	
	C2913	F1H1C105A097	1uF 16V	1	
	C2917	F2A0J101A181	100uF 6.3V	1	
	C2922	EEUFC0J821B	820uF 6.3V	1	
	C2923	F2A1E2210045	220uF 25V	1	
	C2924	F1H1H102A219	1000pF 50V	1	
	C2927	F1H1H103A219	0.01uF 50V	1	
	C2928	F1H1H103A219	0.01uF 50V	1	
	C2929	F1H1H103A219	0.01uF 50V	1	
	C2930	EEUFM1A681B	680uF 10V	1	
	C2931	ECJ1VB1C474K	0.47uF 16V	1	
	C2932	ECJ1VB1C474K	0.47uF 16V	1	
	C2933	D0GBR00JA008	0 1/16W	1	
	C2934	D0GBR00JA008	0 1/16W	1	
	C2937	F1H1H104A013	0.1uF 50V	1	
	C2938	F1H1H104A013	0.1uF 50V	1	
	C2939	F1H1H103A219	0.01uF 50V	1	
	C2942	F2A1C221A019	220uF 16V	1	
	C2949	F1H1H104A013	0.1uF 50V	1	
	C2951	F2A1C101A208	100uF 16V	1	
	C2955	F2A1E2210045	220uF 25V	1	
	C2956	F2A0J101A245	100uF 6.3V	1	
	C2971	ECJ2YB1C474K	0.47uF 16V	1	
	C2972	F2A1A470A159	47uF 10V	1	
	C3901	EEE0GA331WP	330uF 4V	1	
	C3902	EEE0GA331WP	330uF 4V	1	
	C3904	EEE0GA331WP	330uF 4V	1	
	C3906	EEE0GA331WP	330uF 4V	1	
	C3907	F1G1A1040006	0.1uF 10V	1	
	C3908	F1G1A1040006	0.1uF 10V	1	
	C3909	F1H0J1050013	1uF 6.3V	1	
	C3910	F1G1A1040006	0.1uF 10V	1	
	C3911	F1H0J1050013	1uF 6.3V	1	
	C3913	F1G1A1040006	0.1uF 10V	1	
	C3914	F1G1A1040006	0.1uF 10V	1	
	C3915	F1H0J1050013	1uF 6.3V	1	
	C3916	F1G1A1040006	0.1uF 10V	1	
	C3917	F1H0J1050013	1uF 6.3V	1	
	C3918	F1G1A1040006	0.1uF 10V	1	
	C3919	F1H0J1050013	1uF 6.3V	1	
	C3920	F1H0J1050013	1uF 6.3V	1	
	C3921	F1G1A1040006	0.1uF 10V	1	
	C3922	F1G1A1040006	0.1uF 10V	1	
	C3923	F1H0J1050013	1uF 6.3V	1	
	C3924	F1H0J1050013	1uF 6.3V	1	
	C3925	F1G1A1040006	0.1uF 10V	1	
	C3926	F1G1A1040006	0.1uF 10V	1	
	C3927	F1H0J1050013	1uF 6.3V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C3928	F1G1A1040006	0.1uF 10V	1	
	C3929	F1G1A1040006	0.1uF 10V	1	
	C3930	F1H0J1050013	1uF 6.3V	1	
	C3932	F1H0J1050013	1uF 6.3V	1	
	C3940	F1G1A1040006	0.1uF 10V	1	
	C3941	F1G1H221A444	220pF 50V	1	
	C3954	F1G1C104A083	0.1uF 16V	1	
	C3955	F1G1C1030007	0.01uF 16V	1	
	C3956	F1H0J1050013	1uF 6.3V	1	
	C3964	F1G1A1040006	0.1uF 10V	1	
	C3965	F1G1H100A565	10pF 50V	1	
	C5000	ECJ2FB1E105K	1uF 25V	1	
	C5001	F1J1A106A043	10uF 10V	1	
	C5003	ECJ2FB1E105K	1uF 25V	1	
	C5004	ECJ2FB1E105K	1uF 25V	1	
	C5005	F1K1C1060001	10uF 16V	1	
	C5006	F1H1H102A219	1000pF 50V	1	
	C5009	F1K2A1040007	0.1uF 100V	1	
	C5011	ECJ2FB1E105K	1uF 25V	1	
	C5017	ECJ3VB1H104K	0.1uF 50V	1	
	C5018	ECJ3VB1H104K	0.1uF 50V	1	
	C5019	F2A1H4710068	470uF 50V	1	
	C5020	F2A1H4710068	470uF 50V	1	
	C5021	F2A1C330A234	33uF 16V	1	
	C5022	F1H1H104A013	0.1uF 50V	1	
	C5023	ECA1HAK010XB	1uF 50V	1	
	C5024	F2A0J221A245	220uF 6.3V	1	
	C5025	F2A1C220A234	22uF 16V	1	
	C5026	F1H1H104A013	0.1uF 50V	1	
	C5027	EEE1CA100SR	10uF 16V	1	
	C5028	F1H1H102A219	1000pF 50V	1	
	C5029	F1H1C104A042	0.1uF 16V	1	
	C5038	F1H1C104A042	0.1uF 16V	1	
	C5042	F2A0J101A245	100uF 6.3V	1	
	C5047	F1H1C104A042	0.1uF 16V	1	
	C5048	F2A1H2R2A234	2.2uF 50V	1	
	C5049	EEE1CA100SR	10uF 16V	1	
	C5055	ECJ2YB1C474K	0.47uF 16V	1	
	C5056	F1H1H103A219	0.01uF 50V	1	
	C5057	F2A1C220A234	22uF 16V	1	
	C5071	F1J0J106A020	10uF 6.3V	1	
	C5072	F1H1C105A097	1uF 16V	1	
	C5076	F2A1H4R7A234	4.7uF 50V	1	
	C5101	F1J0J106A020	10uF 6.3V	1	
	C5103	F1H1H222A219	2200pF 50V	1	
	C5104	F1H1H222A219	2200pF 50V	1	
	C5105	F1H1H102A219	1000pF 50V	1	
	C5106	F1K1C1060001	10uF 16V	1	
	C5107	ECQV1H474JL3	0.47uF 50V	1	
	C5108	F1H1H104A013	0.1uF 50V	1	
	C5109	F1H1H102A219	1000pF 50V	1	
	C5110	F1H1H102A219	1000pF 50V	1	
	C5111	F1J0J106A020	10uF 6.3V	1	
	C5112	F1K2A1040007	0.1uF 100V	1	
	C5113	F1K2A105A006	1uF 100V	1	
	C5114	F1K1H105A149	1uF 50V	1	
	C5115	F1K1H105A149	1uF 50V	1	
	C5201	F1J0J106A020	10uF 6.3V	1	
	C5203	F1H1H222A219	2200pF 50V	1	
	C5204	F1H1H222A219	2200pF 50V	1	
	C5205	F1H1H102A219	1000pF 50V	1	
	C5206	F1K1C1060001	10uF 16V	1	
	C5207	ECQV1H474JL3	0.47uF 50V	1	
	C5208	F1H1H104A013	0.1uF 50V	1	
	C5209	F1H1H102A219	1000pF 50V	1	
	C5210	F1H1H102A219	1000pF 50V	1	
	C5211	F1J0J106A020	10uF 6.3V	1	
	C5212	F1K2A1040007	0.1uF 100V	1	
	C5213	F1K2A105A006	1uF 100V	1	
	C5214	F1K1H105A149	1uF 50V	1	
	C5215	F1K1H105A149	1uF 50V	1	
	C5301	F1J0J106A020	10uF 6.3V	1	
	C5303	F1H1H222A219	2200pF 50V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C5304	F1H1H222A219	2200pF 50V	1	
	C5305	F1H1H102A219	1000pF 50V	1	
	C5306	F1K1C1060001	10uF 16V	1	
	C5307	ECQV1H474JL3	0.47uF 50V	1	
	C5308	F1H1H104A013	0.1uF 50V	1	
	C5309	F1H1H102A219	1000pF 50V	1	
	C5310	F1H1H102A219	1000pF 50V	1	
	C5311	F1J0J106A020	10uF 6.3V	1	
	C5312	F1K2A1040007	0.1uF 100V	1	
	C5313	F1K2A105A006	1uF 100V	1	
	C5314	F1K1H105A149	1uF 50V	1	
	C5315	F1K1H105A149	1uF 50V	1	
	C5406	ERJ8GEY0R00V	0 1/4W	1	
⚠	C5700	F1BAF2220023	2200pF	1	
⚠	C5701	ECQU2A104MLC	0.1uF	1	
⚠	C5702	ECQU2A104MLC	0.1uF	1	
⚠	C5704	F1BAF2220023	2200pF	1	
⚠	C5705	F1BAF101A013	100pF	1	
	C5711	F2A2G1810002	180uF 400V	1	
	C5713	F0C2J1030005	0.01uF 630V	1	
	C5720	F1H1H102A219	1000pF 50V	1	
	C5721	ECJ1VB1H221K	220pF 50V	1	
	C5722	F1H1H222A219	2200pF 50V	1	
	C5723	F1H1H471A219	470pF 50V	1	
	C5724	F1H1H102A219	1000pF 50V	1	
	C5725	F1H1H104A013	0.1uF 50V	1	
	C5726	F2A1H100A454	10uF 50V	1	
	C5727	F1H1H222A219	2200pF 50V	1	
	C5730	F1H1E105A116	1uF 25V	1	
	C5747	ECKE3D821KBP	820pF 2000V	1	
	C5790	F1K2J2220002	2200pF 630V	1	
	C5791	F1H1E105A116	1uF 25V	1	
	C5795	F1H1H102A219	1000pF 50V	1	
	C5796	F1H1H104A013	0.1uF 50V	1	
	C5798	F2A1H100A454	10uF 50V	1	
	C5799	F2B2G6R80001	6.8uF 400V	1	
	C5805	F2A1H2220038	2200uF 50V	1	
	C5808	F2A1H2220038	2200uF 50V	1	
	C5810	F1H1H104A013	0.1uF 50V	1	
	C5811	F1J2E1030004	0.01uF 250V	1	
	C5812	F1H1H104A013	0.1uF 50V	1	
	C5813	F2A1V3310040	330uF 35V	1	
	C5815	F1H1H104A013	0.1uF 50V	1	
	C5816	F2A1E2210050	220uF 25V	1	
	C5817	F2A2AR100001	0.10uF 100V	1	
	C5818	F1H1H104A013	0.1uF 50V	1	
	C5823	F1H1H104A013	0.1uF 50V	1	
	C5824	F2A1E2210050	220uF 25V	1	
	C5827	F1J2E1030004	0.01uF 250V	1	
	C5828	F2A0J222A248	2200uF 6.3V	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	F1H1H103A219	0.01uF 50V	1	
	C5896	F1H1H104A013	0.1uF 50V	1	
	C5897	F1H1H104A013	0.1uF 50V	1	
	C5898	F1H1H104A013	0.1uF 50V	1	
	C5899	F2A1A1020056	1000uF 10V	1	
	C6001	F2A1H220A182	22uF 50V	1	
	C6002	F2A1H220A182	22uF 50V	1	
	C6003	F1H1H101A230	100pF 50V	1	
	C6004	F1H1H101A230	100pF 50V	1	
	C6005	F1H1H101A230	100pF 50V	1	
	C6006	F2A1H3R3A234	3.3uF 50V	1	
	C6007	F1H1H101A230	100pF 50V	1	
	C6008	F1H1H104A013	0.1uF 50V	1	
	C6009	F2A0J101A245	100uF 6.3V	1	
	C6010	F1H1H104A013	0.1uF 50V	1	
	C6100	F1J0J106A020	10uF 6.3V	1	
	C6101	F1J0J106A020	10uF 6.3V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C6103	F1H1H470A004	47pF 50V	1	
	C6104	F1H0J1050013	1uF 6.3V	1	
	C6200	F1J0J106A020	10uF 6.3V	1	
	C6201	F1J0J106A020	10uF 6.3V	1	
	C6203	F1H1H470A004	47pF 50V	1	
	C6204	F1H0J1050013	1uF 6.3V	1	
	C6300	F2A1A470A185	47uF 10V	1	
	C6301	F2A1H4R7A234	4.7uF 50V	1	
	C6302	F2A1H4R7A234	4.7uF 50V	1	
	C6303	F1H1H104A013	0.1uF 50V	1	
	C6304	F2A1H100A182	10uF 50V	1	
	C6400	F2A1C470A180	47uF 16V	1	
	C6402	F1J0J106A014	10uF 6.3V	1	
	C6403	F1H1H104A013	0.1uF 50V	1	
	C6404	F2A0J470A167	47uF 6.3V	1	
	C6451	F2A1C220A234	22uF 16V	1	
	C6452	F2A1C100A234	10uF 16V	1	
	C6453	F1H1H102A219	1000pF 50V	1	
	C6454	F1H1C104A042	0.1uF 16V	1	
	C6601	ECJ1VCLH220K	22pF 50V	1	
	C6601	F2A1A330A010	33uF 10V	1	
	C6602	ECJ1VCLH220K	22pF 50V	1	
	C6604	F1H1C105A097	1uF 16V	1	
	C6801	ECA1HAK010XB	1uF 50V	1	
	C6802	F1H1H102A219	1000pF 50V	1	
	C6803	F1H1C105A097	1uF 16V	1	
	C6901	F1H1H104A013	0.1uF 50V	1	
	C6902	F1H1H104A013	0.1uF 50V	1	
	C6903	F1H1H104A013	0.1uF 50V	1	
	C8001	EEE0GA331WP	330uF 4V	1	
	C8002	F2G0J330A031	33uF 6.3V	1	
	C8003	F1G1C104A083	0.1uF 16V	1	
	C8004	F1G1C104A083	0.1uF 16V	1	
	C8005	F1G1C104A083	0.1uF 16V	1	
	C8006	F1G1C104A083	0.1uF 16V	1	
	C8007	F1G1C104A083	0.1uF 16V	1	
	C8010	F1G1H221A444	220pF 50V	1	
	C8011	F2G0J101A031	100uF 6.3V	1	
	C8012	F1G1C104A083	0.1uF 16V	1	
	C8013	F1G1C104A083	0.1uF 16V	1	
	C8014	F1G1C104A083	0.1uF 16V	1	
	C8015	F1G1C104A083	0.1uF 16V	1	
	C8016	F1G1C104A083	0.1uF 16V	1	
	C8018	F1G1C104A083	0.1uF 16V	1	
	C8020	F1G1C104A083	0.1uF 16V	1	
	C8021	F1G1C104A083	0.1uF 16V	1	
	C8022	F1G1C104A083	0.1uF 16V	1	
	C8023	F1G1C104A083	0.1uF 16V	1	
	C8024	F1G1C104A083	0.1uF 16V	1	
	C8026	F1G1C104A083	0.1uF 16V	1	
	C8051	F1H0J1050013	1uF 6.3V	1	
	C8052	F1G1A1040006	0.1uF 10V	1	
	C8053	F1G1C104A083	0.1uF 16V	1	
	C8054	F1G1H221A444	220pF 50V	1	
	C8055	F1H0J1050013	1uF 6.3V	1	
	C8056	F1G1E2220001	2200pF 25V	1	
	C8057	F1H0J1050013	1uF 6.3V	1	
	C8111	F1J1A106A043	10uF 10V	1	
	C8112	F1H0J1050013	1uF 6.3V	1	
	C8113	F1G1C153A039	0.015uF 16V	1	
	C8116	F1G1C1030007	0.01uF 16V	1	
	C8151	F1H0J4750005	4.7uF 6.3V	1	
	C8201	F2G0J101A031	100uF 6.3V	1	
	C8202	F1G1A1040006	0.1uF 10V	1	
	C8211	F1G1E1220001	1200pF 25V	1	
	C8221	F1G1E1020001	1000pF 25V	1	
	C8222	F1G1E8210002	820pF 25V	1	
	C8225	F1G1E1020001	1000pF 25V	1	
	C8226	F1G1E1020001	1000pF 25V	1	
	C8231	F1G1A1040006	0.1uF 10V	1	
	C8232	F1G1A1040006	0.1uF 10V	1	
	C8251	F2G0J221A031	220uF 6.3V	1	
	C8252	F1G1C104A083	0.1uF 16V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C8255	F2G1C220A037	22uF 16V	1	
	C8256	F1G1C104A083	0.1uF 16V	1	
	C8257	F2G1C470A076	47uF 16V	1	
	C8258	F1G1C104A083	0.1uF 16V	1	
	C8261	F1G1C104A083	0.1uF 16V	1	
	C8262	F1G1C104A083	0.1uF 16V	1	
	C8263	F2G0J1020022	1000uF 6.3V	1	
	C8301	F2G0J221A031	220uF 6.3V	1	
	C8302	F2G0J330A031	33uF 6.3V	1	
	C8303	F1G1A1040006	0.1uF 10V	1	
	C8304	F1G1A1040006	0.1uF 10V	1	
	C8305	F1G1A1040006	0.1uF 10V	1	
	C8311	F1G1A1040006	0.1uF 10V	1	
	C8312	F1H0J1050013	1uF 6.3V	1	
	C8313	F1H0J1050013	1uF 6.3V	1	
	C8321	F1G1A1040006	0.1uF 10V	1	
	C8325	F1G1A1040006	0.1uF 10V	1	
	C8330	F2G0J470A031	47uF 6.3V	1	
	C8331	F1G1A1040006	0.1uF 10V	1	
	C8335	F1G1A1040006	0.1uF 10V	1	
	C8340	F1G1C1030007	0.01uF 16V	1	
	C8341	F1G1A1040006	0.1uF 10V	1	
	C8401	F1G1H150A565	15pF 50V	1	
	C8421	F2G0J221A031	220uF 6.3V	1	
	C8422	F1G1C104A083	0.1uF 16V	1	
	C8423	F2G0J330A031	33uF 6.3V	1	
	C8424	F1G1C104A083	0.1uF 16V	1	
	C8425	F1G1H150A565	15pF 50V	1	
	C8429	F1G1C104A083	0.1uF 16V	1	
	C8431	F2G1C100A072	10uF 16V	1	
	C8432	F1J1A106A043	10uF 10V	1	
	C8433	F1J1A106A043	10uF 10V	1	
	C8434	F1H1C104A042	0.1uF 16V	1	
	C8501	F2G0J101A031	100uF 6.3V	1	
	C8502	F1G1C104A083	0.1uF 16V	1	
	C8503	F1G1C104A083	0.1uF 16V	1	
	C8504	F1G1C104A083	0.1uF 16V	1	
	C8505	F1G1C104A083	0.1uF 16V	1	
	C8506	F1G1C104A083	0.1uF 16V	1	
	C8511	F1H0J1050013	1uF 6.3V	1	
	C8512	F1H0J1050013	1uF 6.3V	1	
	C8513	F1G1A1040006	0.1uF 10V	1	
	C8514	F1G1A1040006	0.1uF 10V	1	
	C8515	F1G1A1040006	0.1uF 10V	1	
	C8516	F1G1A1040006	0.1uF 10V	1	
	C8521	F1G1A1040006	0.1uF 10V	1	
	C8522	F1G1A1040006	0.1uF 10V	1	
	C8523	F1G1C104A083	0.1uF 16V	1	
	C8524	F1G1C104A083	0.1uF 16V	1	
	C8525	F1G1C562A039	5600pF 16V	1	
	C8526	F1G1C183A039	0.018uF 16V	1	
	C8527	F1G1A333A013	0.033uF 10V	1	
	C8528	F1H0J1050013	1uF 6.3V	1	
	C8529	F1H0J1050013	1uF 6.3V	1	
	C8530	F1G1C104A083	0.1uF 16V	1	
	C8531	F1G1H101A566	100pF 50V	1	
	C8532	F1G1H221A444	220pF 50V	1	
	C8533	F1G1C104A083	0.1uF 16V	1	
	C8541	F1G1E4720002	4700pF 25V	1	
	C8550	F2G0J330A031	33uF 6.3V	1	
	C8551	F1G1C104A083	0.1uF 16V	1	
	C8552	F2G1C100A072	10uF 16V	1	
	C8553	F2G0J470A031	47uF 6.3V	1	
	C8554	F1H0J1050013	1uF 6.3V	1	
	C8561	F1G1C104A083	0.1uF 16V	1	
	C8562	F2G1C100A072	10uF 16V	1	
	C8563	F2G0J470A031	47uF 6.3V	1	
	C8564	F1H0J1050013	1uF 6.3V	1	
	C8571	F1J1A106A043	10uF 10V	1	
	C8572	F1G1C104A083	0.1uF 16V	1	
	C8601	F1G1C104A083	0.1uF 16V	1	
	C8602	F1G1C153A039	0.015uF 16V	1	
	C8606	F1G1C104A083	0.1uF 16V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C8611	F1G1C104A083	0.1uF 16V	1	
	C8621	F1G1H100A565	10pF 50V	1	
	C8622	F1G1H100A565	10pF 50V	1	
	C8651	F1G1C104A083	0.1uF 16V	1	
	C8652	F1G1C104A083	0.1uF 16V	1	
	C8691	F1G1C104A083	0.1uF 16V	1	
	C8695	F1G1C104A083	0.1uF 16V	1	
	C8701	F1G1A1040006	0.1uF 10V	1	
	C8901	F1G1C104A083	0.1uF 16V	1	
	C9002	F1G1C104A083	0.1uF 16V	1	
	C9003	F1G1C104A083	0.1uF 16V	1	
	C9004	F1G1H100A565	10pF 50V	1	
	C9005	F1G1H120A565	12pF 50V	1	
	C9006	F1G1A1040006	0.1uF 10V	1	
	C9007	F1G1C104A083	0.1uF 16V	1	
	C9008	F1G1H221A444	220pF 50V	1	
	C9009	F1G1H100A565	10pF 50V	1	
	FL8101	F1H0J1050018	1uF 6.3V	1	
	FL8102	F1H0J1050018	1uF 6.3V	1	
	FL8103	F1H0J1050018	1uF 6.3V	1	
	FL8104	F1J1E1040022	0.1uF 25V	1	
	FL8421	F1H0J1050018	1uF 6.3V	1	
	K3910	F1H1C104A042	0.1uF 16V	1	

