

STR-DH590/DH790

SERVICE MANUAL

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Note:

Make sure that the your PC used for repair is not infected with a computer virus before using it.

STR-DH590/DH790

SERVICE MANUAL

US Model



Photo: STR-DH590

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 6 ohm loads, both channels driven, from 20 Hz – 20,000 Hz; rated 90 watts per channel minimum RMS power at stereo mode, with no more than 0.09% total harmonic distortion from 250 milliwatts to rated output.

Amplifier section¹⁾

Speaker impedance use
6 ohms – 16 ohms

Minimum RMS Output Power
(6 ohms, 20 Hz – 20 kHz, THD 0.09%)
90 W + 90 W

Stereo Mode Output Power
(6 ohms, 1 kHz, THD 0.9%)
105 W + 105 W

Surround Mode Output Power²⁾
(6 ohms, 1 kHz, THD 0.9%)
145 W per channel

¹⁾ Measured under the following conditions:

Power requirements
120 V AC, 60 Hz
(DH590)

²⁾ Reference power output for front, center, and surround speakers. Depending on the sound field settings and the source, there may be no sound output.
(DH790)

²⁾ Reference power output for front, center, surround, and surround back speakers. Depending on the sound field settings and the source, there may be no sound output.

Frequency response

Analog
10 Hz – 100 kHz, +0.5/–2 dB (with sound field and equalizer bypassed)

Input

Analog

Sensitivity: 500 mV/50 kilohms
S/N³⁾: 105 dB (A⁴⁾, 500 mV⁵⁾)

Digital (Coaxial)

Impedance: 75 ohms
S/N: 100 dB (A⁴⁾, 20 kHz LPF)
Digital (Optical)
S/N: 100 dB (A⁴⁾, 20 kHz LPF)

Output (Analog)

SUBWOOFER

Voltage: 2 V/1 kilohm

Equalizer

Gain Levels
±10 dB, 1 dB step

³⁾ INPUT SHORT (with sound field and equalizer bypassed)

⁴⁾ Weighted network

⁵⁾ Input level

FM tuner section

Tuning range
87.5 MHz – 108.0 MHz (100 kHz step)

Antenna (aerial)

FM wire antenna (aerial)

Antenna (aerial) terminals

75 ohms, unbalanced

HDMI Video

Resolution

- 480p/60 Hz
- 576p/50 Hz
- 720p/60 Hz, 50 Hz, 30 Hz, 24 Hz
- 1080i/60 Hz, 50 Hz
- 1080p/60 Hz, 50 Hz, 30 Hz, 25 Hz, 24 Hz
- 4K/60 Hz, 50 Hz, 30 Hz, 25 Hz, 24 Hz

Support (DH590)

HDCP 2.2, HDR (HDR10, Hybrid Log-Gamma, Dolby Vision), 3D, Deep Color (Deep Colour), ITU-R BT.2020, ARC

Support (DH790)

HDCP 2.2, HDR (HDR10, Hybrid Log-Gamma, Dolby Vision), 3D, Deep Color (Deep Colour), ITU-R BT.2020, eARC/ARC

Power supply section

POWER SUPPLY port
DC 5 V 1 A (Max.)

BLUETOOTH section

Communication system

BLUETOOTH Specification version 4.2

Output

BLUETOOTH Specification Power Class 1

Maximum communication range

Line of sight approx. 30 m (98.4 feet)¹⁾

Frequency band

2.4 GHz band

Modulation method

FHSS (Freq Hopping Spread Spectrum)

Compatible BLUETOOTH profiles²⁾

A2DP 1.2 (Advanced Audio Distribution Profile)
AVRCP 1.6 (Audio Video Remote Control Profile)

Supported Codecs³⁾

SBC⁴⁾, AAC

Transmission range (A2DP)

20 Hz – 20,000 Hz (Sampling frequency 44.1 kHz)

¹⁾ The actual range will vary depending on factors such as obstacles between devices, magnetic fields around a microwave oven, static electricity, cordless phone, reception sensitivity, antenna's performance, operating system, software application, etc.

²⁾ BLUETOOTH standard profiles indicate the purpose of BLUETOOTH communication between devices.

³⁾ Codec: Audio signal compression and conversion format

⁴⁾ Subband Codec

General

Power requirements

120 V AC, 60 Hz

Power consumption

200 W

Standby mode: 0.3 W

(When "CTRL.HDMI" is set to "CTRL OFF", "STBY.THRU" is set to "OFF", and "BT STBY" is set to "STBY OFF".)

BLUETOOTH Standby mode (all wireless network ports are activated): 0.5 W

(When "BT STBY" is set to "STBY ON", "CTRL.HDMI" is set to "CTRL OFF", and "STBY.THRU" is set to "OFF".)

Dimensions (width/height/depth) (Approx.)

430 mm × 133 mm × 297 mm (17 in × 5 1/4 in × 11 3/4 in) including projecting parts and controls

Mass (Approx.)

7.1 kg (15 lb 11 oz) (DH590)
7.4 kg (16 lb 6 oz) (DH790)

Supplied Items

- Receiver (1)
- Remote control (1)
- R03 (size AAA) batteries (2)
- FM wire antenna (aerial) (1)
- Calibration microphone (1)
- Startup Guide (1)
- Operating Instructions (1)

Design and specifications are subject to change without notice.

MULTI CHANNEL AV RECEIVER

On Copyrights

(DH590)

This receiver incorporates Dolby¹⁾ Digital and Pro Logic Surround and the DTS²⁾ Digital Surround System.

¹⁾ Manufactured under license from Dolby Laboratories. Dolby, Dolby Audio, Dolby Vision, Pro Logic, and the double-D symbol are trademarks of Dolby Laboratories.

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(DH790)

This receiver incorporates Dolby¹⁾ Digital Surround and the DTS²⁾ Digital Surround System.

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SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check:

Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage.

Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes.). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers’ instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

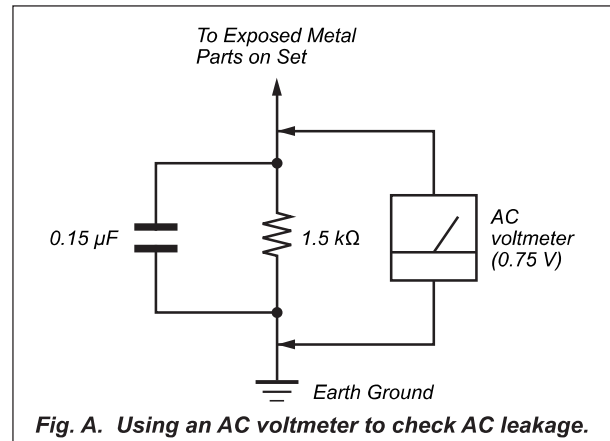


Fig. A. Using an AC voltmeter to check AC leakage.

SAFETY-RELATED COMPONENT WARNING!

COMPONENTS IDENTIFIED BY MARK $\triangle$ OR DOTTED LINE WITH MARK $\triangle$ IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION.

REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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SECTION 1 SERVICING NOTES

The **SERVICING NOTES** contains important information for servicing. Be sure to read this section before repairing the unit.

UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.

(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.
Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
Soldering irons using a temperature regulator should be set to about 350 °C.
Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

NOTE OF REPLACING THE FUSE

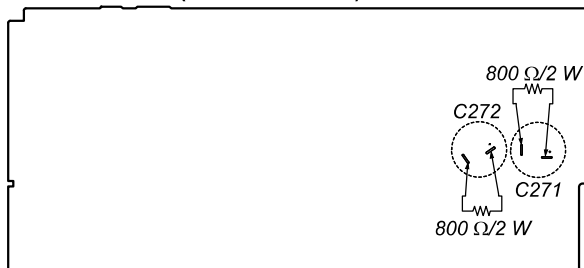
The fuse is or could be in the neutral. When a fuse is being replaced, the main plug shall be disconnected from the AC outlet to prevent electric shock.

DISCHARGE PROCESSING

Before checking the operation of the boards for the electric shock prevention, perform the discharge processing by connecting the resistor at both ends of capacitor with referring to the figure below.

Note: Be sure to use a resistor of 800 Ω or higher for discharge.

– MAIN Board (Conductor Side) –

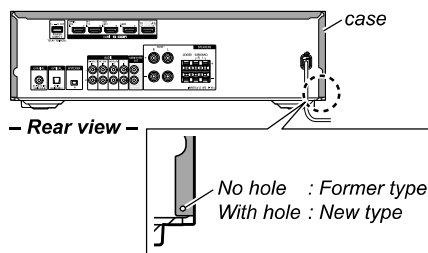


ABOUT THE FORMER/NEW TYPES OF THE CASE

The case has been changed in the midway of production.

If you need to distinguish the Former/New types of the case, refer to the figure below.

When replacing the case with a new part, there is no problem using either the Former type or the New type.



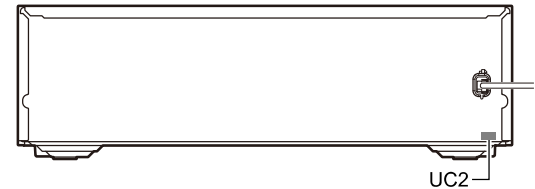
MODEL IDENTIFICATION

When checking the destination, check that “UC2” is indicated at the lower right on the rear side.

When “UC2” is indicated, it is STR-DH590 or STR-DH790 for US.

When “UC2” is not indicated, it is STR-DH590 or STR-DH790 other than US.

– Rear view –



STR-DH590/DH790**ERROR MESSAGES****"PROTECT" appears on the display panel.**

The receiver will automatically turn off after a few seconds. Check the followings:
Unplug the AC power cord (mains lead) and let the receiver cool down for 30 minutes while performing the following troubleshooting:

- Disconnect all of the speakers and subwoofer.
- Check that the speaker wires are tightly twisted on both ends.
- Check that the receiver is not covered and ventilation holes are not blocked.
- Check that the nominal impedance of the connected speakers fall within the impedance range indicated on the rear panel of the receiver.
- Connect the front speaker first, plug in the AC power cord (mains lead) and turn on the receiver. Increase the volume level and operate the receiver for at least 30 minutes until it completely warms up. Then, connect each additional speaker one by one and test each additional speaker until you detect which speaker is causing the protection error.

After checking the above items and fixing any problems, plug in the AC power cord (mains lead) and turn on the receiver.

"USB FAIL" appears on the display panel.

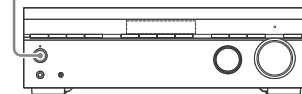
An over-current from the POWER SUPPLY port was detected. Turn off the receiver, disconnect the USB device, and then turn on the receiver again.

REVERTING TO THE FACTORY DEFAULT SETTINGS

You can clear all memorized settings and restore the receiver to the factory default settings by the following procedure.
Be sure to use the buttons on the receiver to perform this operation.

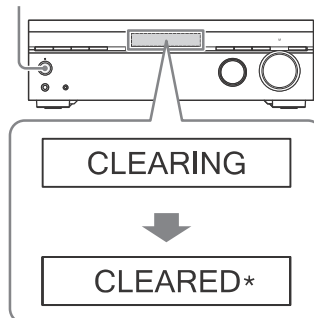
1 Press (power) to turn off the receiver.

 (power)

**2 Press and hold (power) for 5 seconds.**

"CLEARING" appears on the display panel during initialization. When initialization is complete, "CLEARED*" appears on the display panel.

 (power)

**Note**

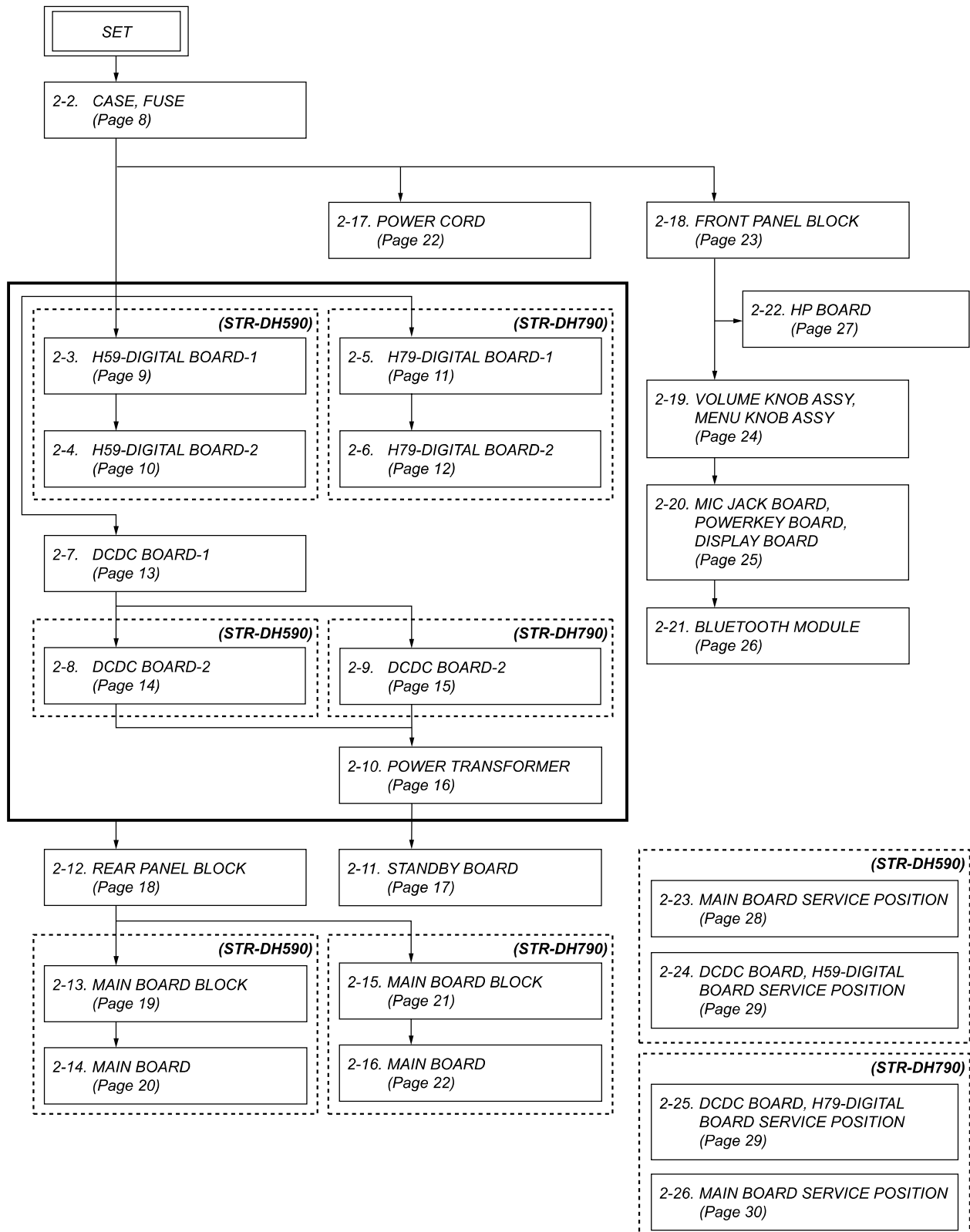
It takes a few seconds for the memory to be cleared completely. Do not turn the receiver off until "CLEARED*" appears on the display panel.

SECTION 2 DISASSEMBLY

- This set can be disassembled in the order shown below.

2-1. DISASSEMBLY FLOW

Note: The part surrounded by the dotted frame is disassembled differently between STR-DH590 and STR-DH790.
The part that there is no instruction is a common disassembly.

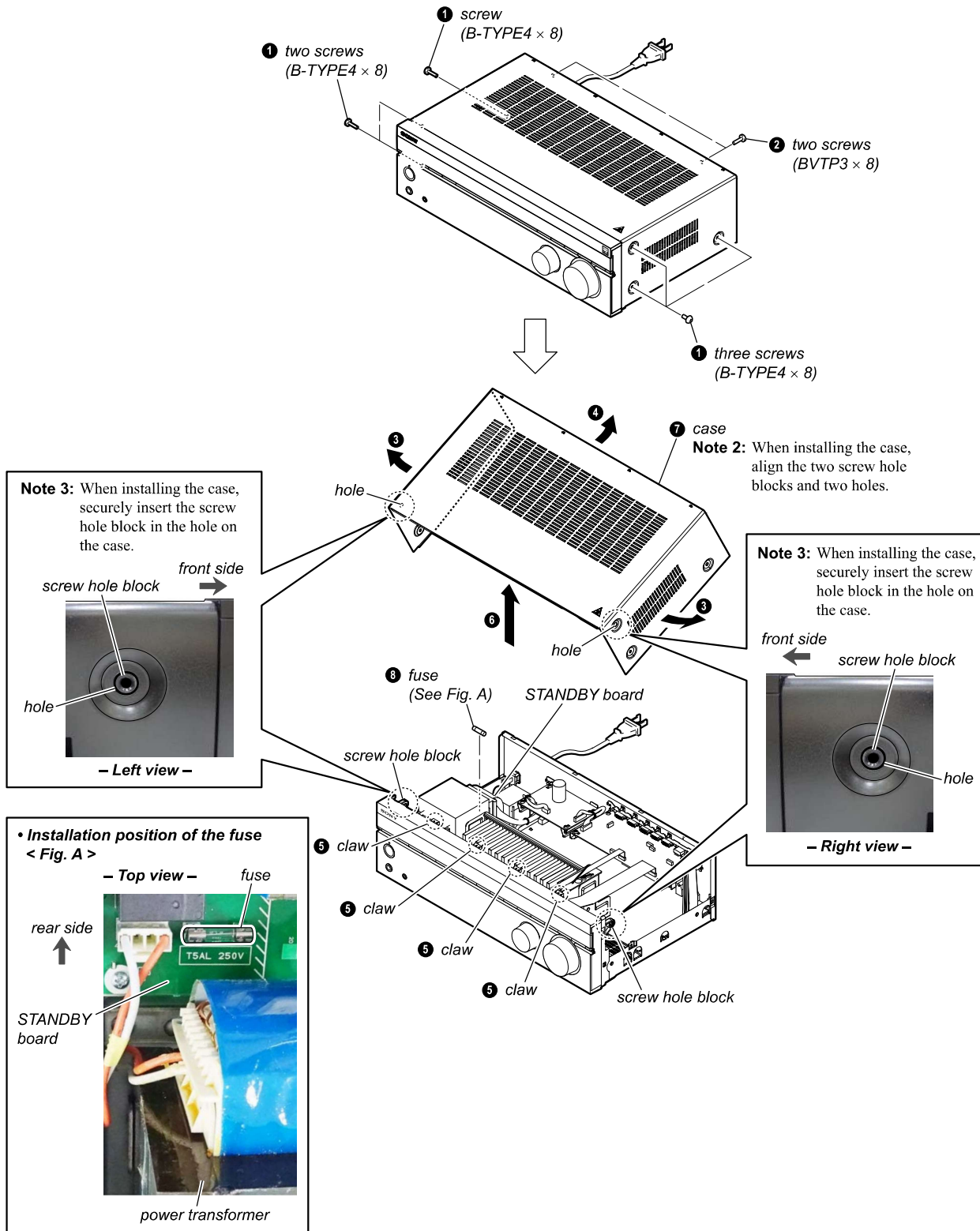


STR-DH590/DH790

Note: Follow the disassembly procedure in the numerical order given.

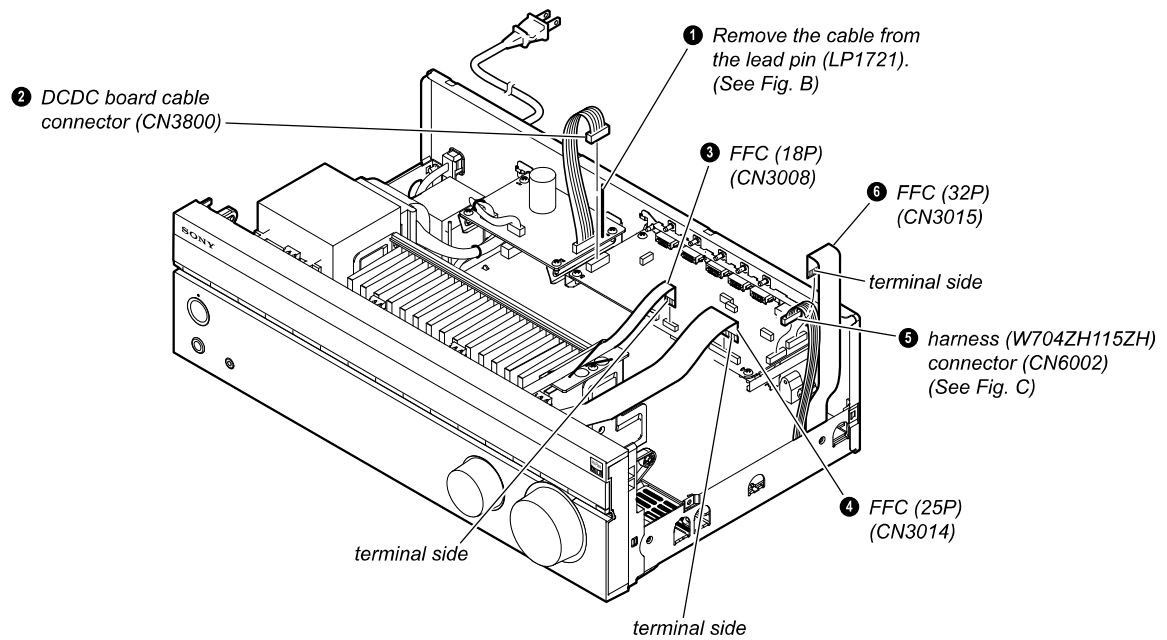
2-2. CASE, FUSE (STR-DH590/DH790)

Note 1: This illustration shows STR-DH590.
STR-DH790 can be disassembled using the same procedure as STR-DH590.



2-3. H59-DIGITAL BOARD-1 (STR-DH590)

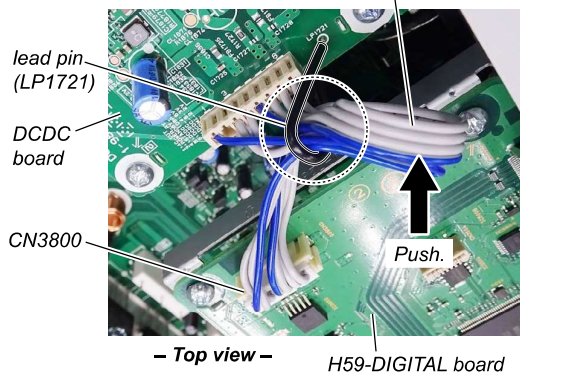
- Continued on 2-4 (page 10).



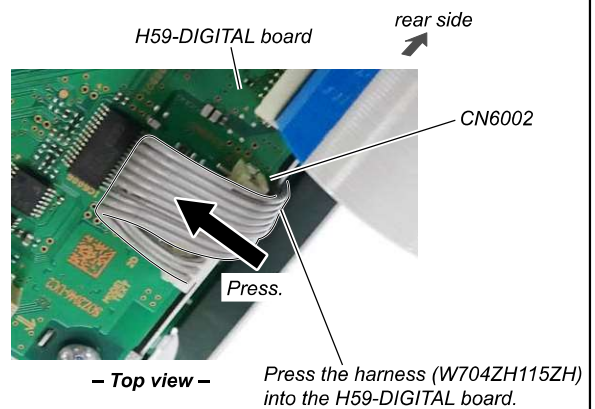
• Wire setting

< Fig. B >

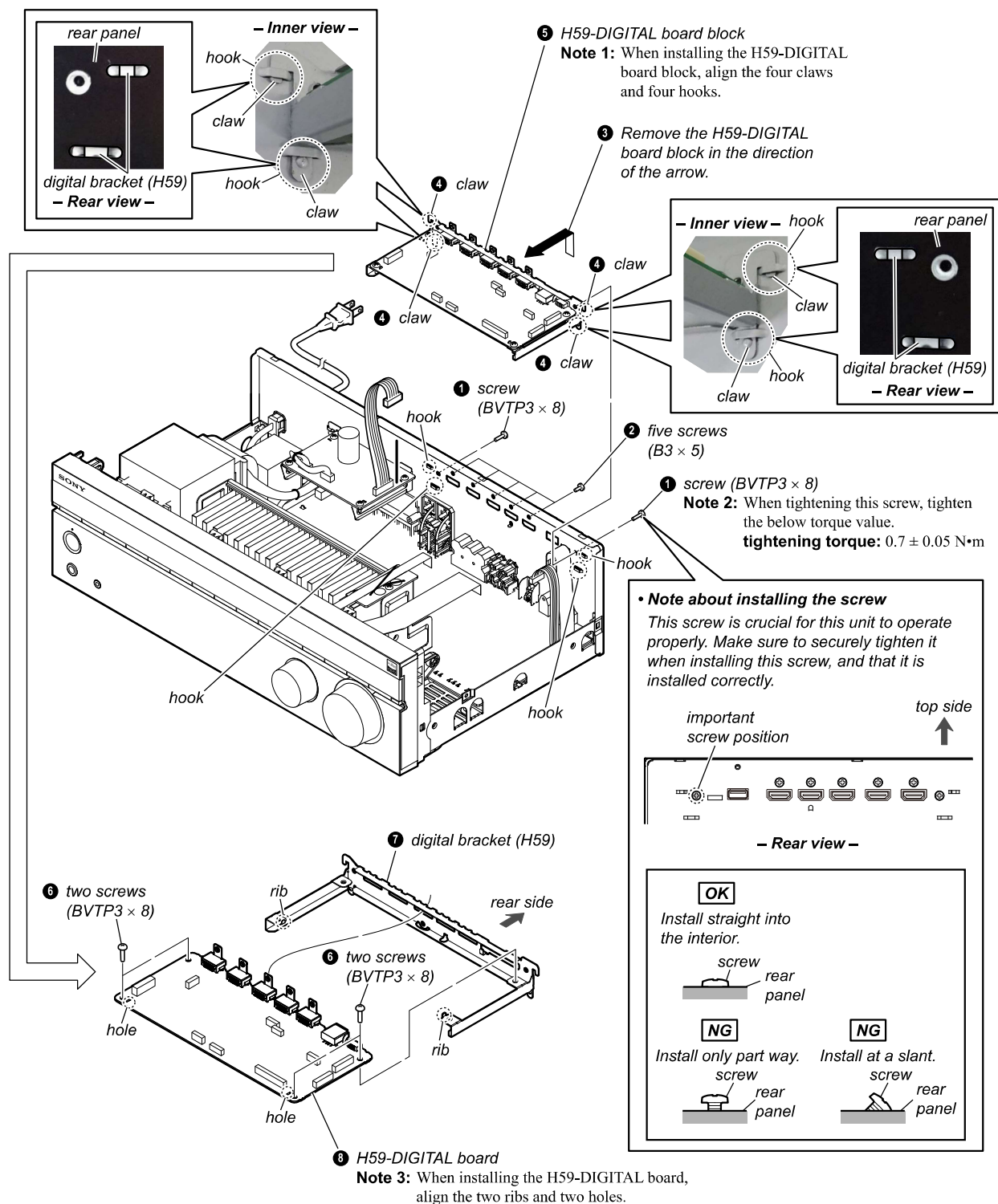
Push the DCDC board cable in between the DCDC board and H59-DIGITAL board.



< Fig. C >

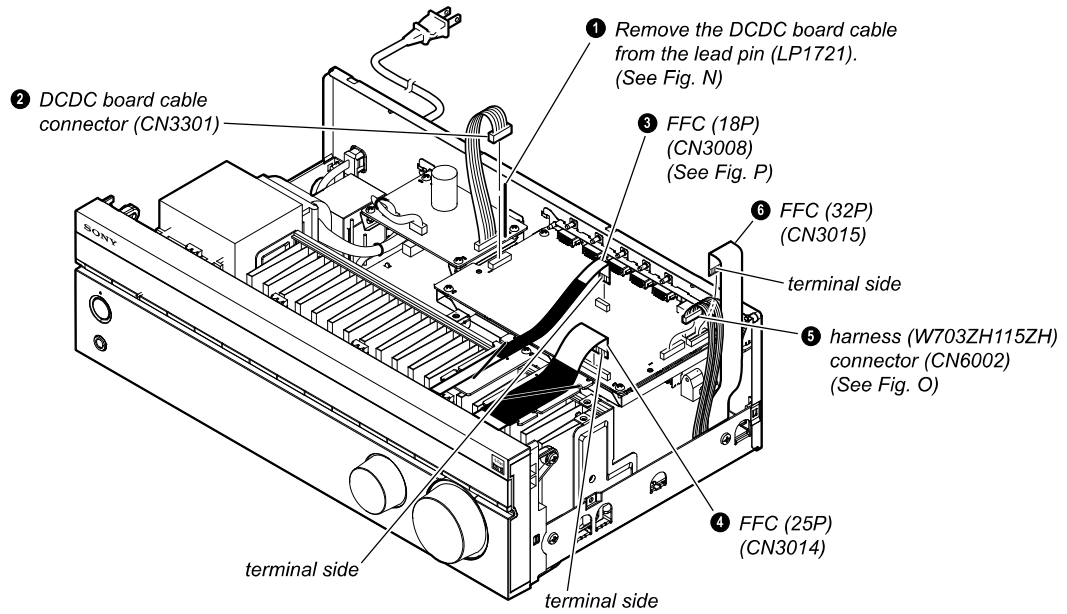


2-4. H59-DIGITAL BOARD-2 (STR-DH590)



2-5. H79-DIGITAL BOARD-1 (STR-DH790)

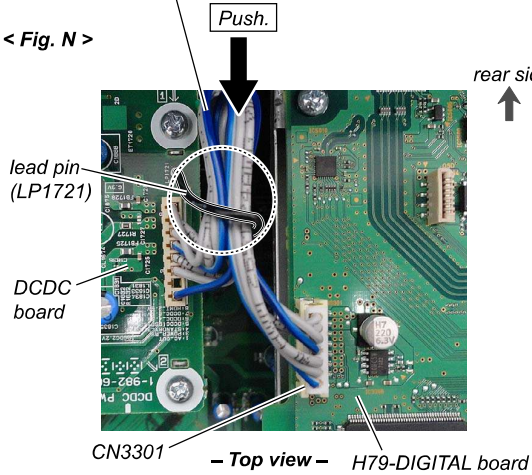
- Continued on 2-6 (page 12).



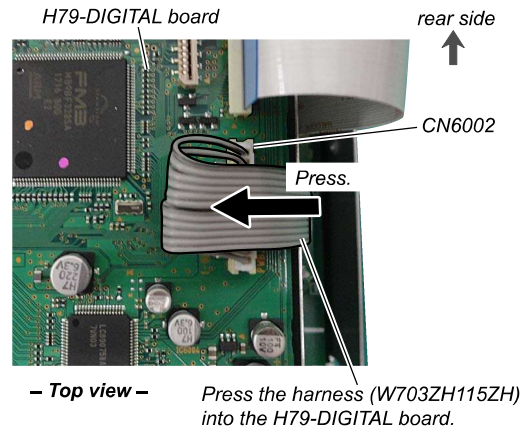
• Wire setting

Push the DCDC board cable in between the DCDC board and H79-DIGITAL board.

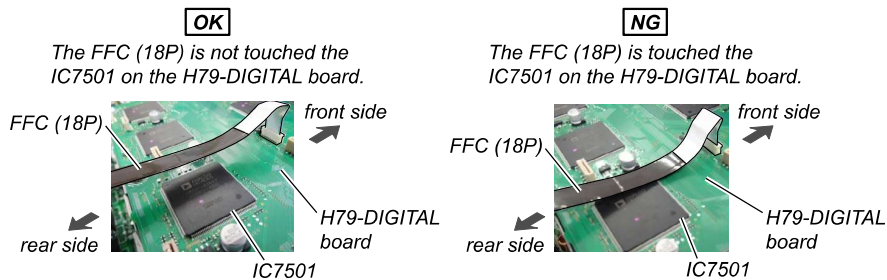
< Fig. N >



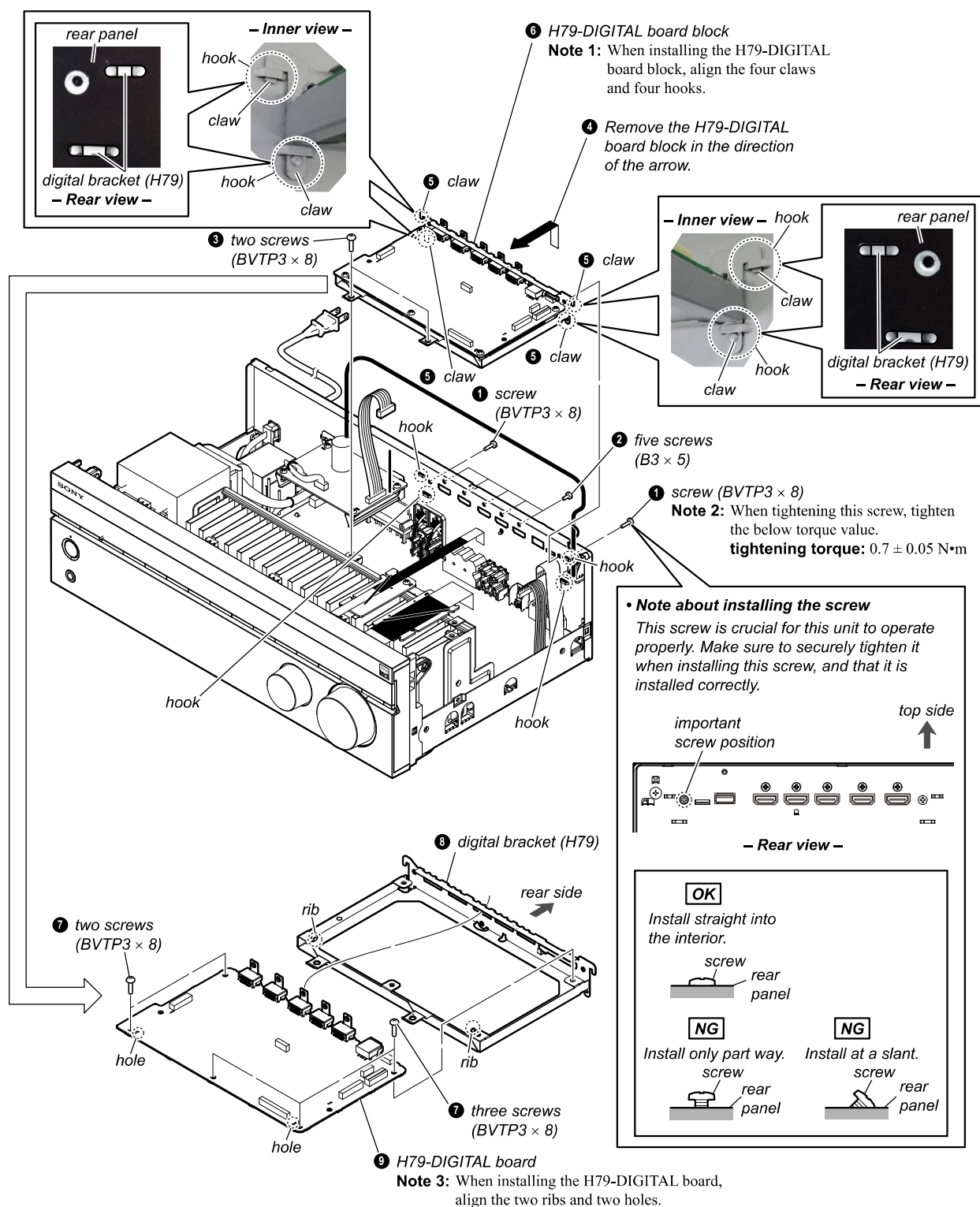
< Fig. O >



< Fig. P >



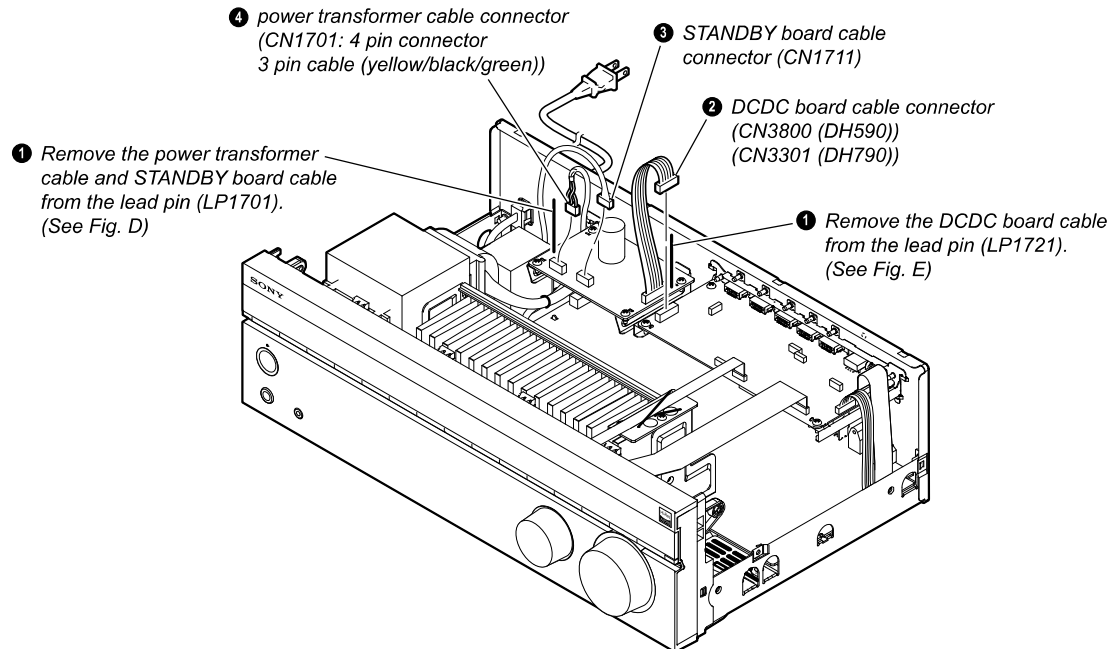
2-6. H79-DIGITAL BOARD-2 (STR-DH790)



2-7. DCDC BOARD-1 (STR-DH590/DH790)

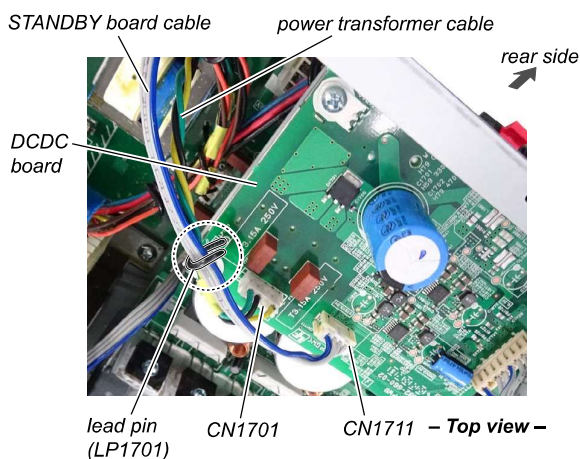
- Continued on 2-8 (page 14) (STR-DH590).
Continued on 2-9 (page 15) (STR-DH790).

Note 1: This illustration shows STR-DH590.
STR-DH790 can be disassembled using the same procedure as STR-DH590.



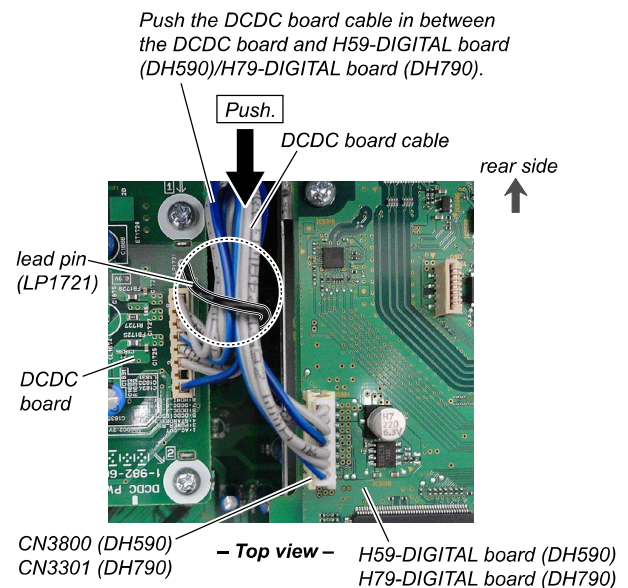
• Wire setting

< Fig. D >



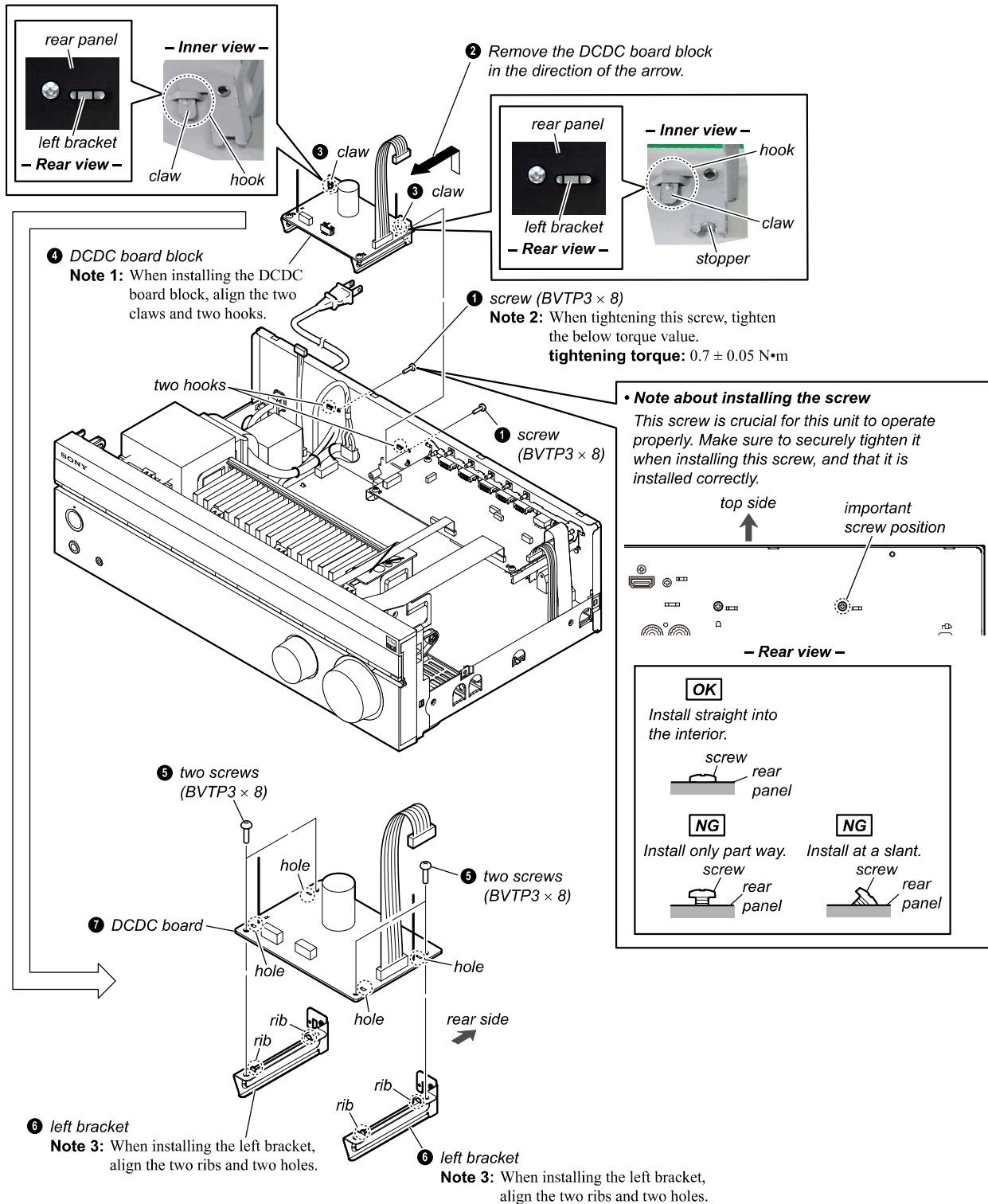
< Fig. E >

Note 2: This figure is STR-DH790.

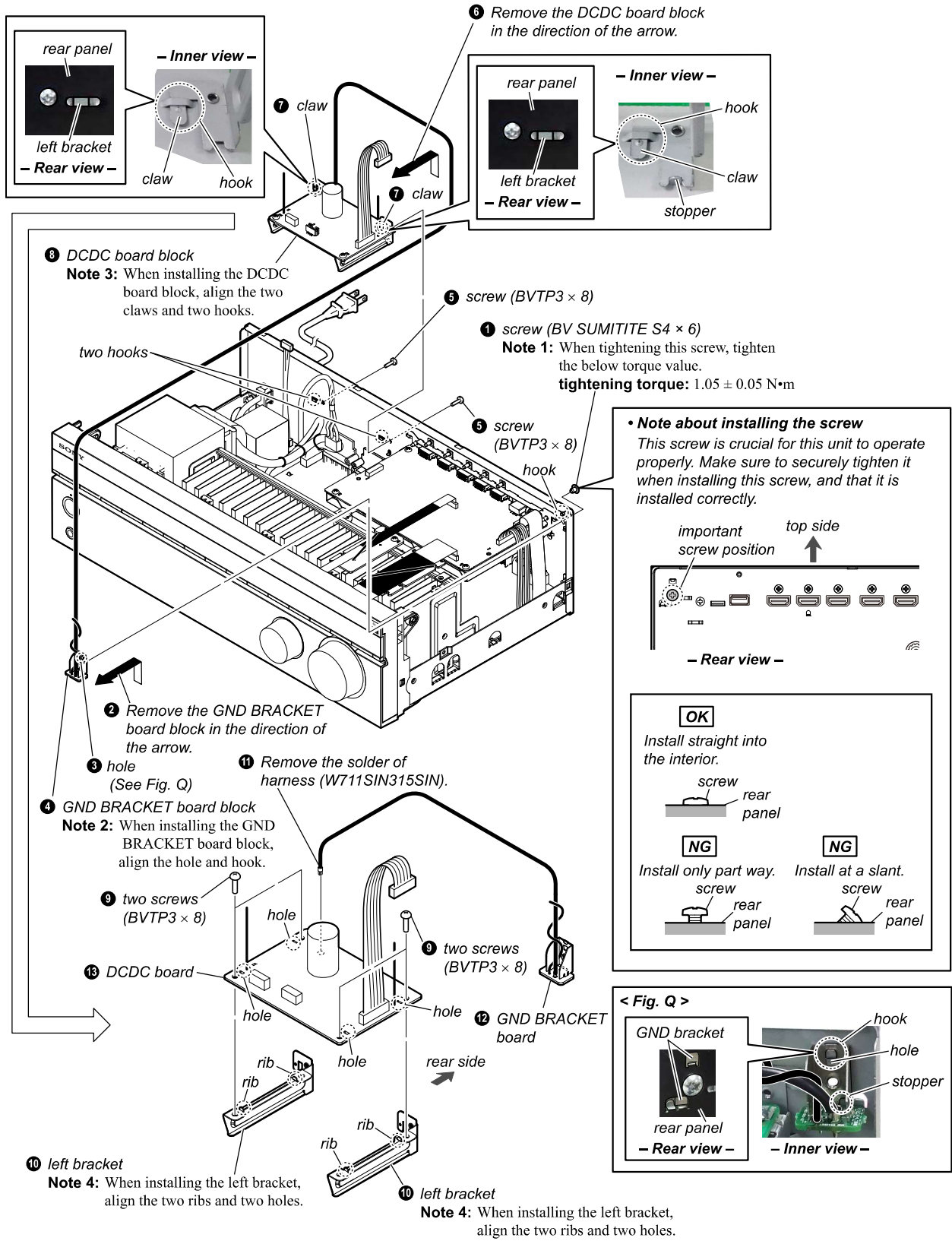


STR-DH590/DH790

2-8. DCDC BOARD-2 (STR-DH590)



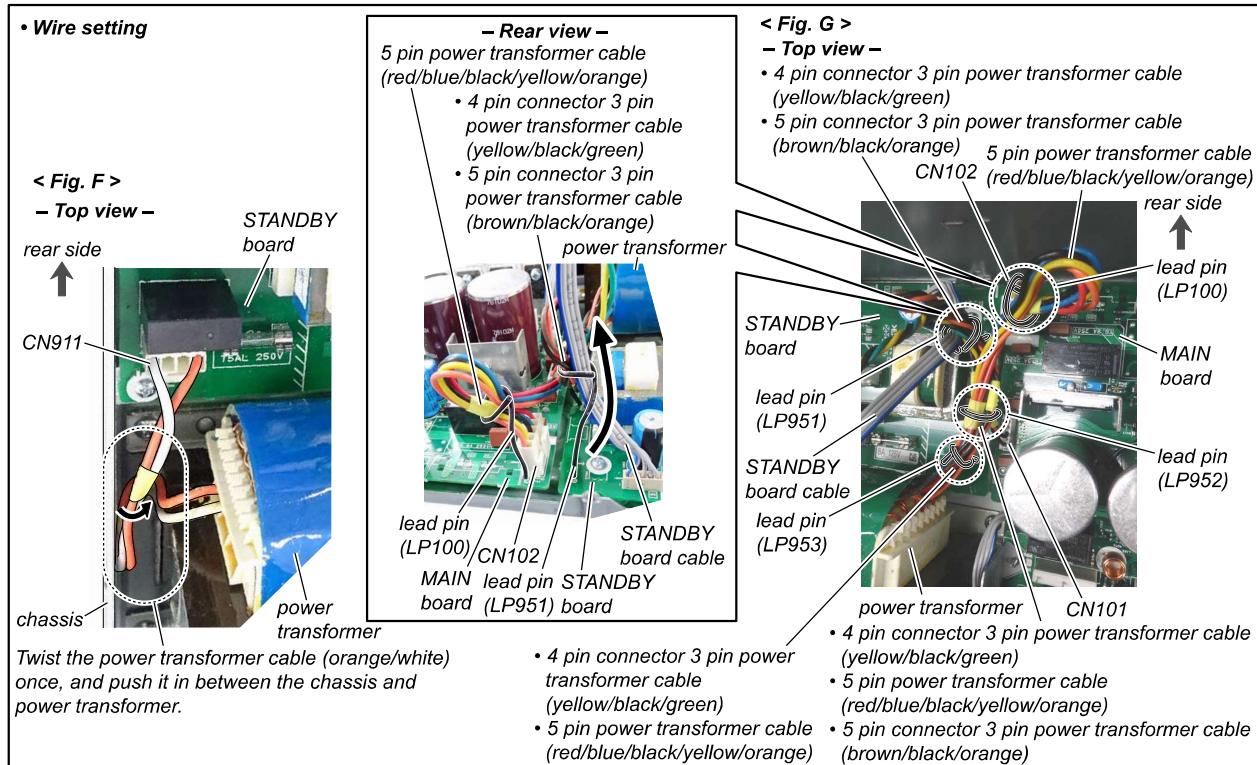
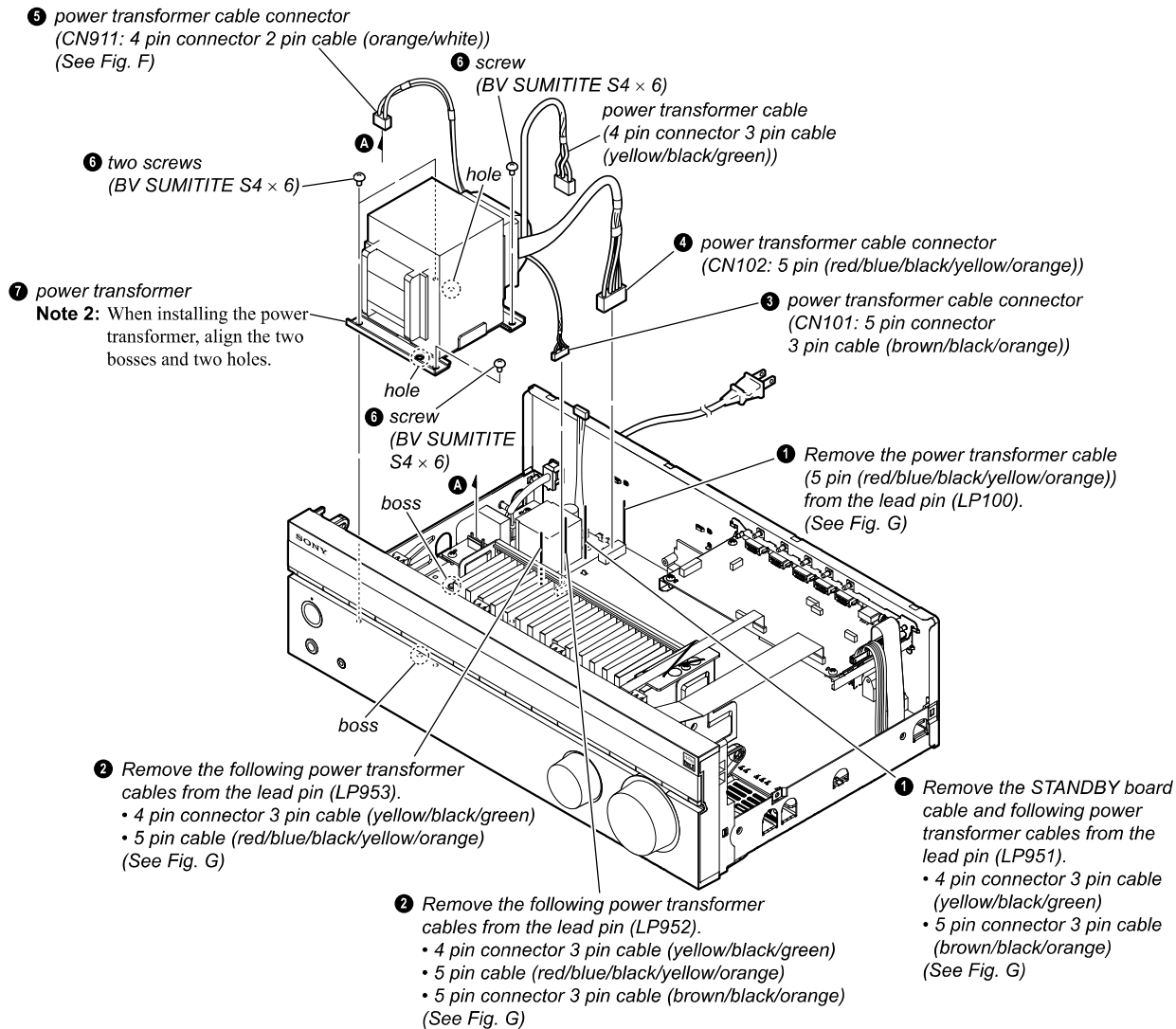
2-9. DCDC BOARD-2 (STR-DH790)



STR-DH590/DH790**2-10. POWER TRANSFORMER (STR-DH590/DH790)**

Note 1: This illustration shows STR-DH590.

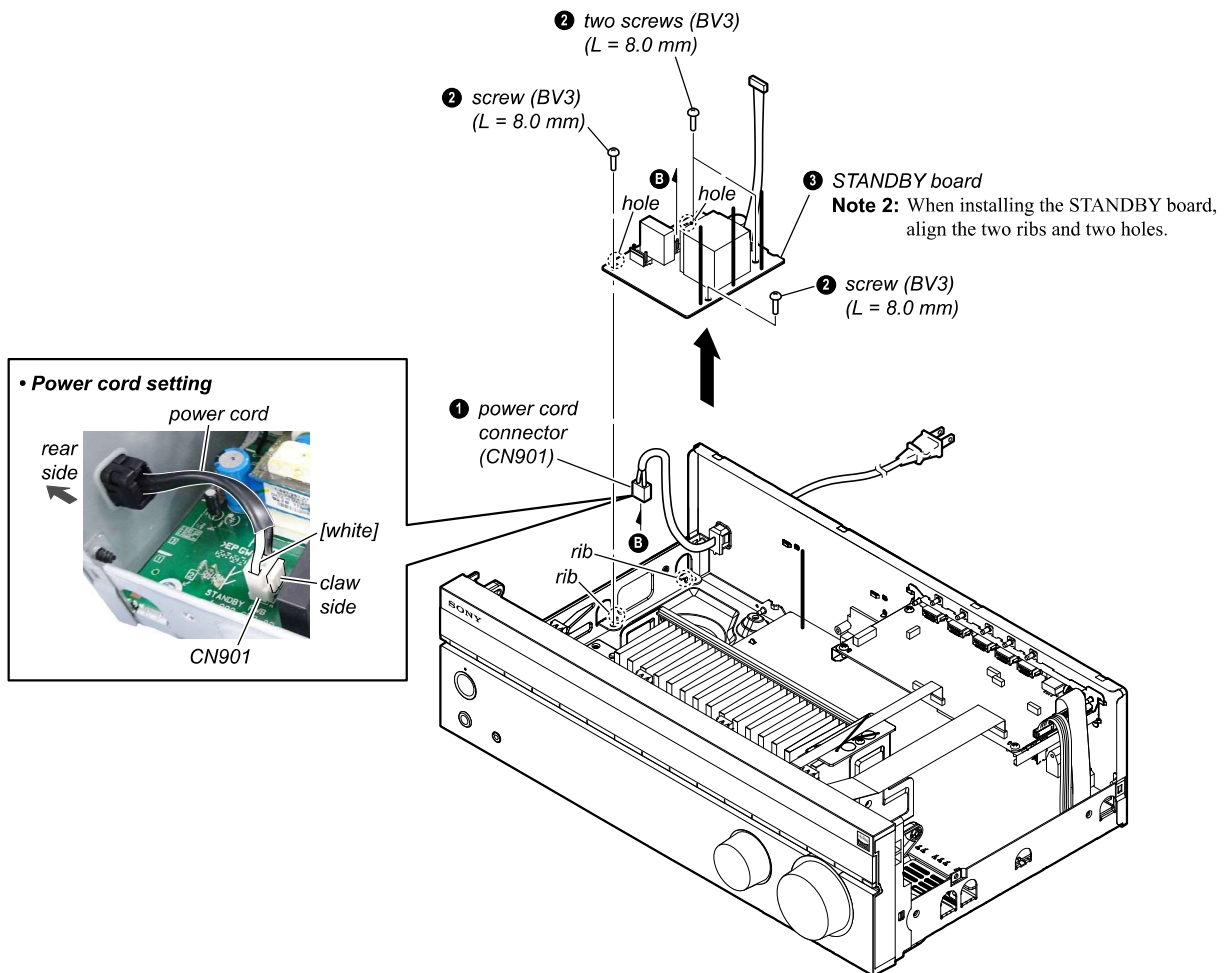
STR-DH790 can be disassembled using the same procedure as STR-DH590.



2-11. STANDBY BOARD (STR-DH590/DH790)

Note 1: This illustration shows STR-DH590.

STR-DH790 can be disassembled using the same procedure as STR-DH590.

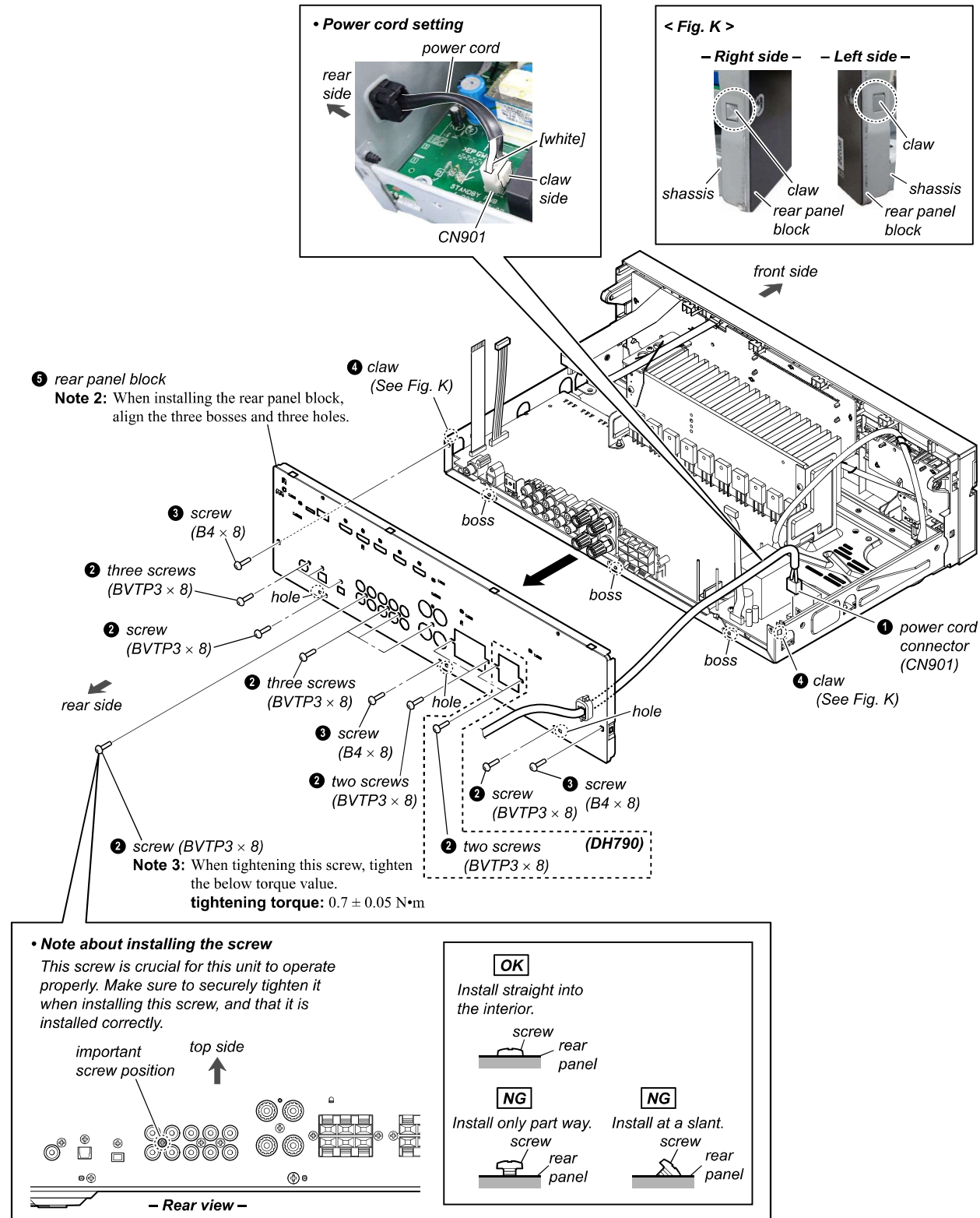


STR-DH590/DH790

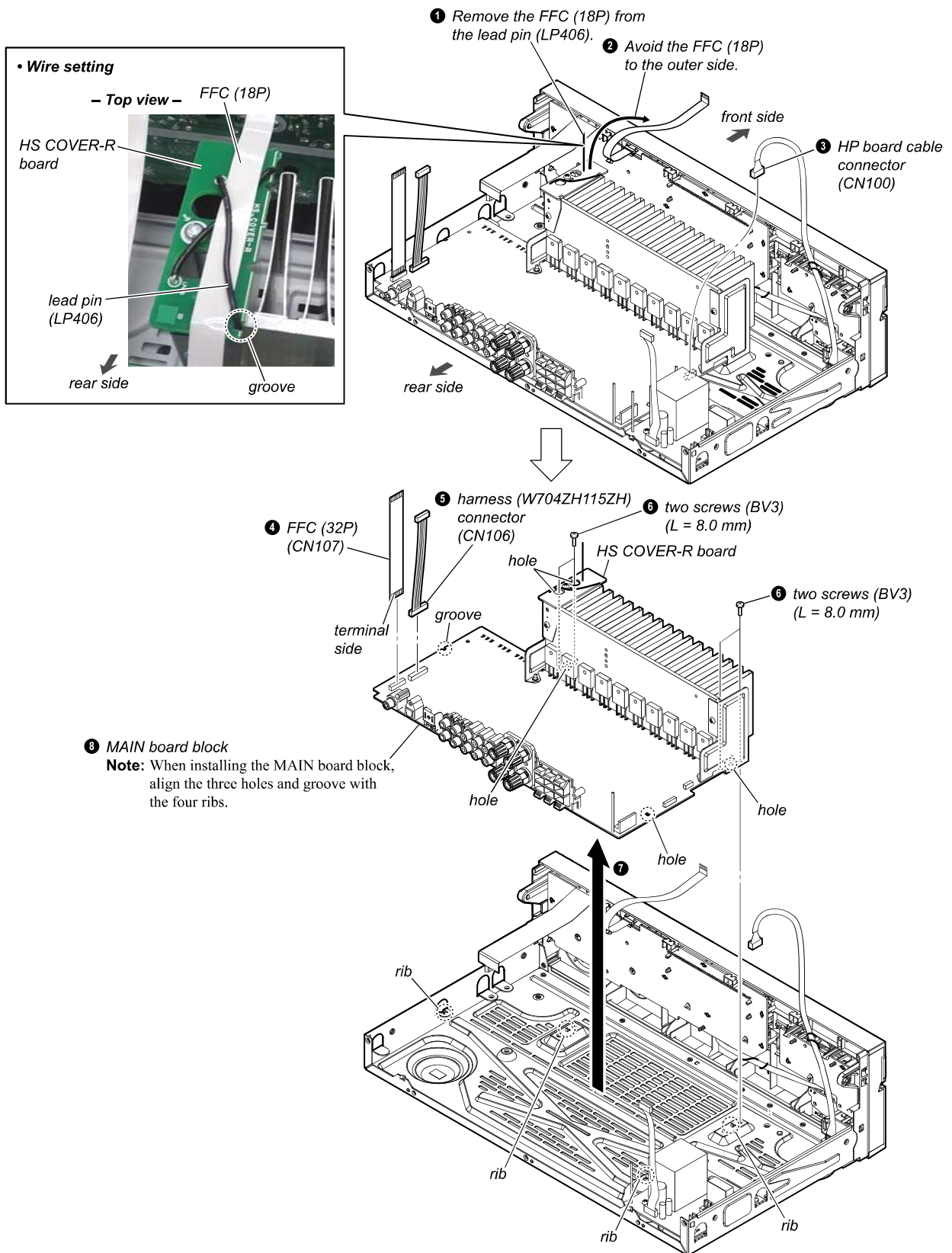
2-12. REAR PANEL BLOCK (STR-DH590/DH790)

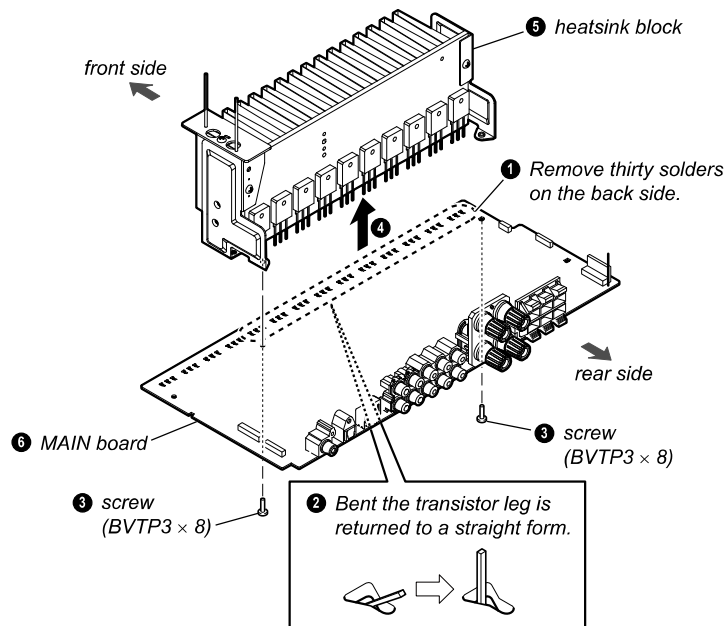
Note 1: This illustration shows STR-DH590.

STR-DH790 can be disassembled using the same procedure as STR-DH590.
(Since the terminal part of the rear panel block has a terminal dedicated to STR-DH790, the shape of STR-DH790 is added and expressed)

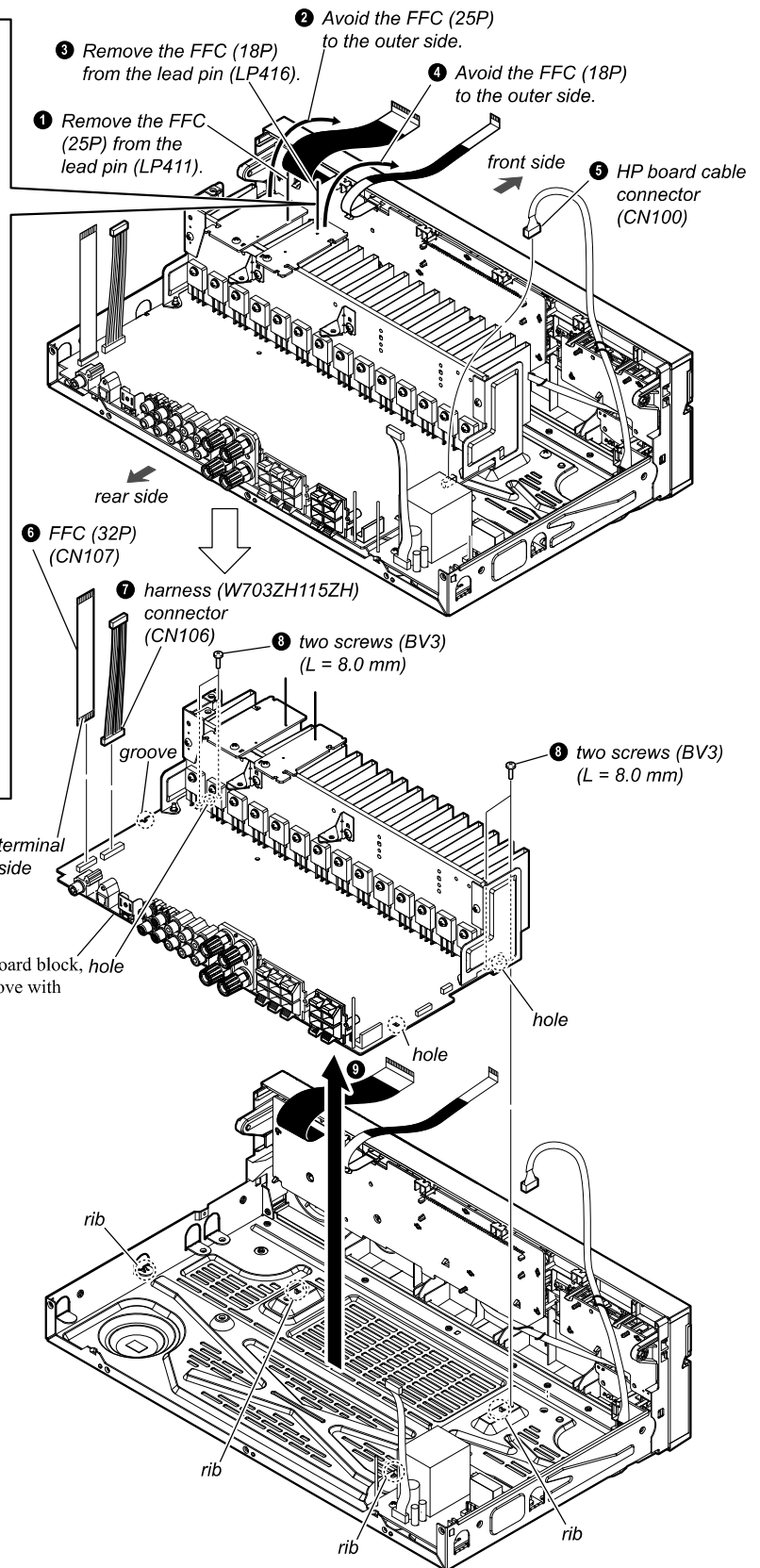
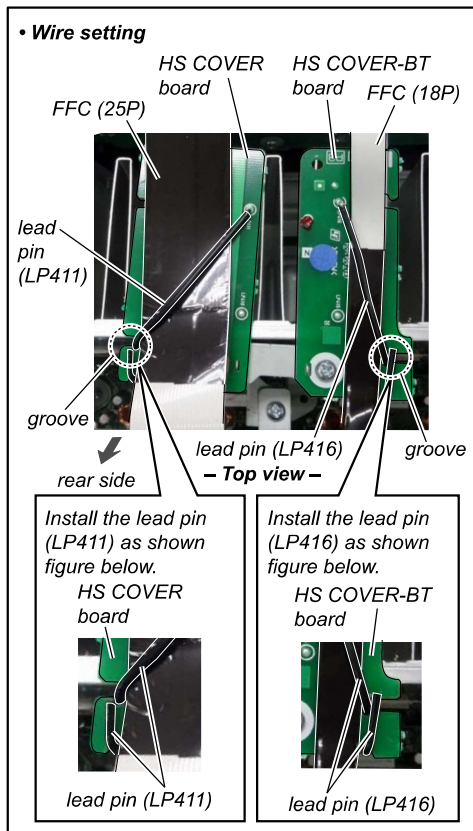


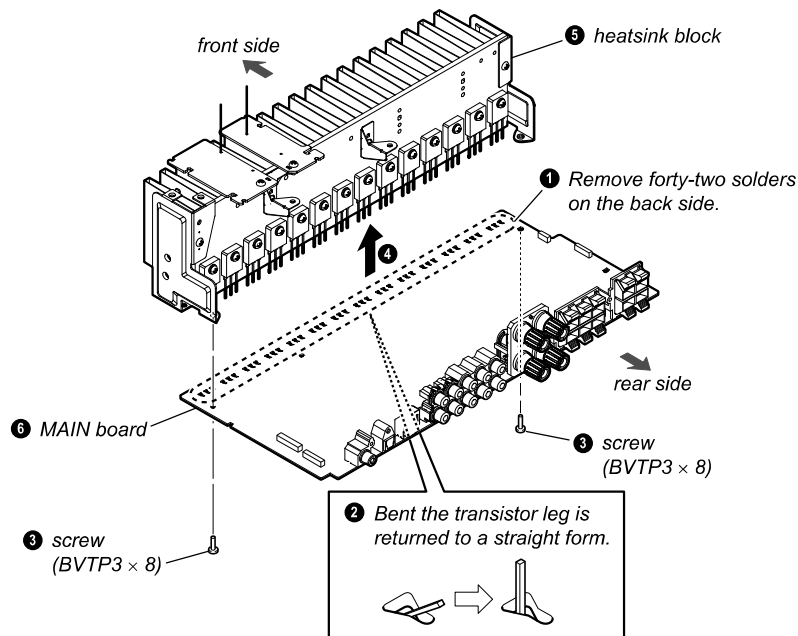
2-13. MAIN BOARD BLOCK (STR-DH590)



STR-DH590/DH790**2-14. MAIN BOARD (STR-DH590)**

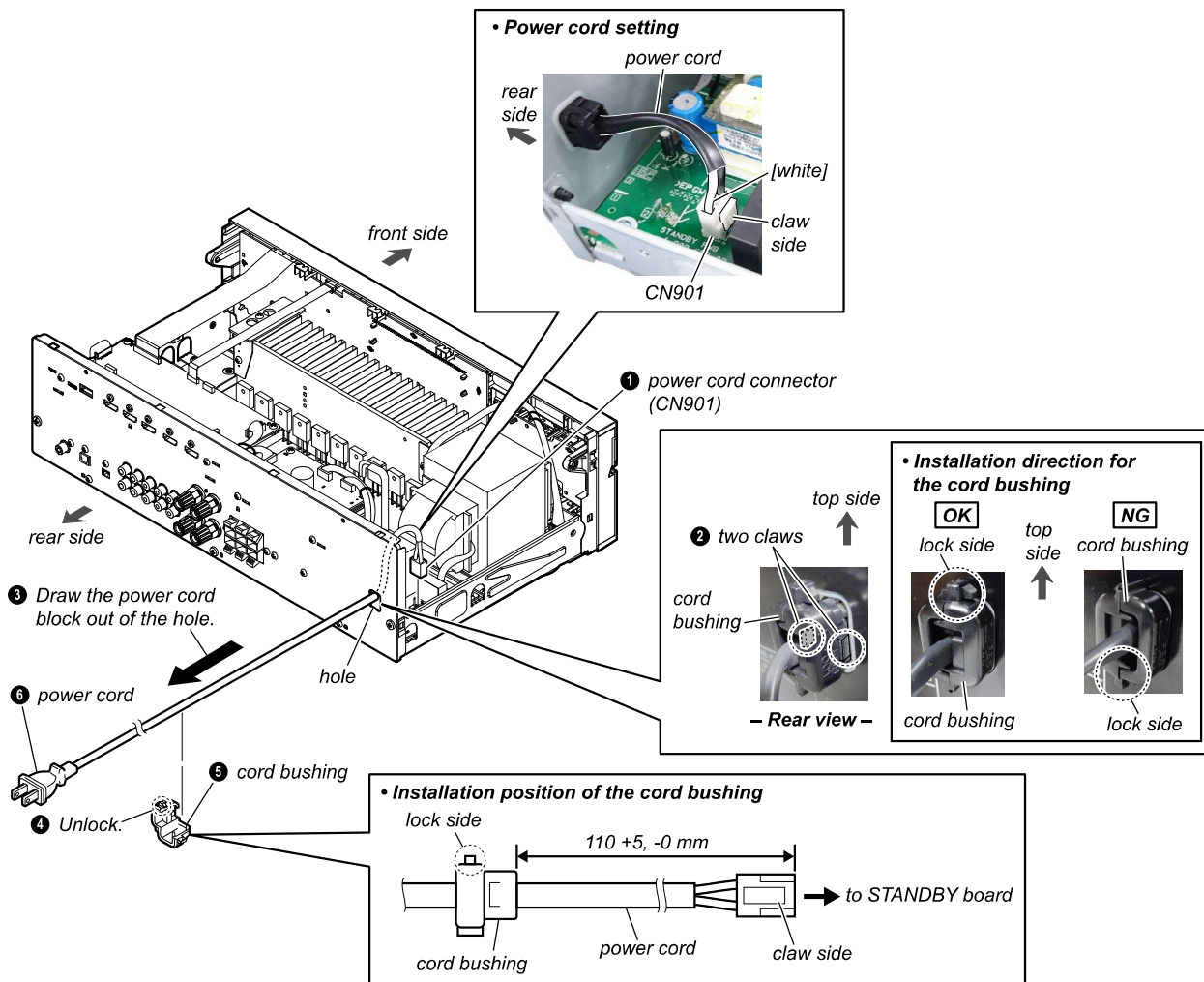
2-15. MAIN BOARD BLOCK (STR-DH790)



STR-DH590/DH790**2-16. MAIN BOARD (STR-DH790)****2-17. POWER CORD (STR-DH590/DH790)**

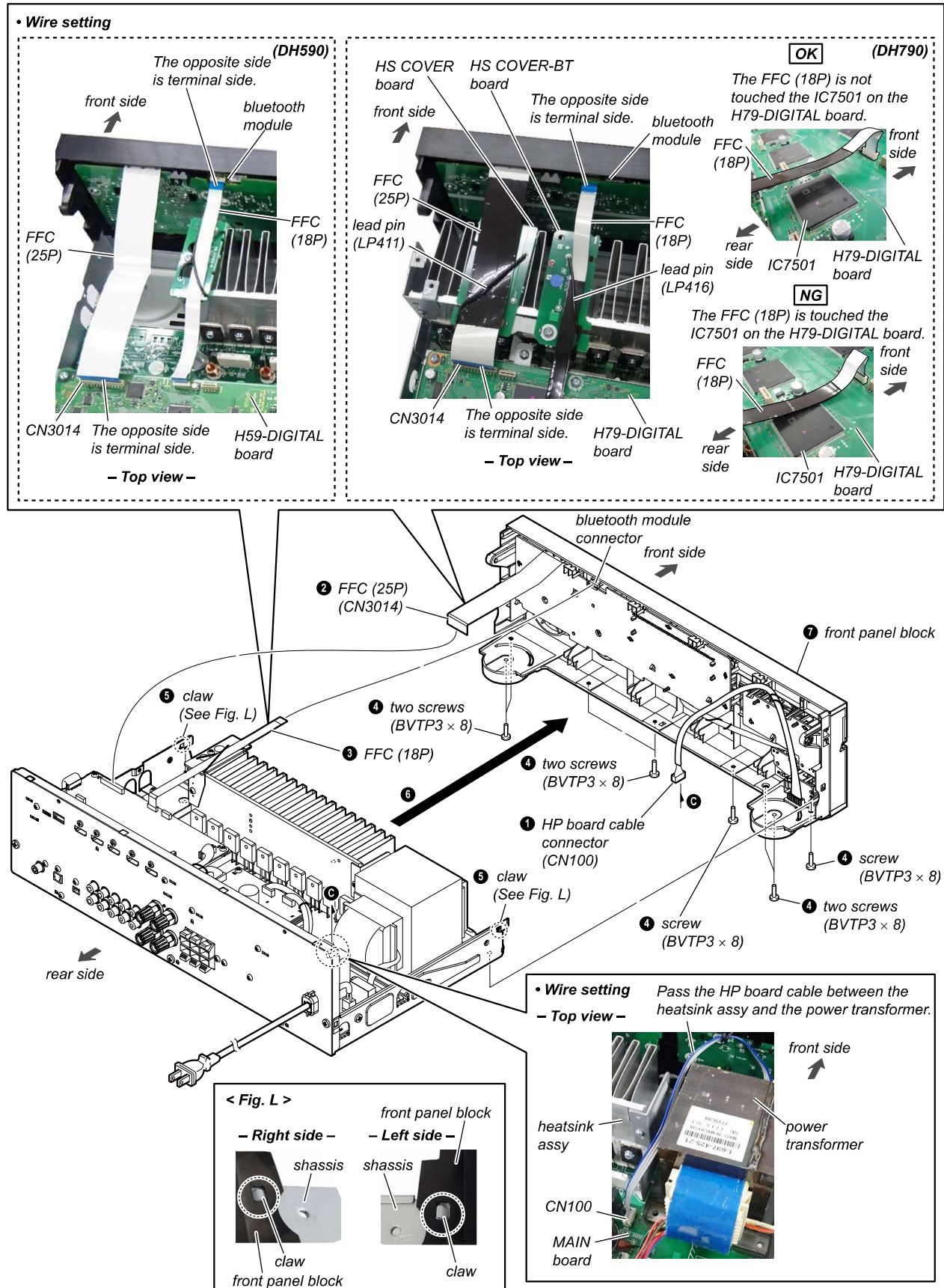
Note: This illustration shows STR-DH590.

STR-DH790 can be disassembled using the same procedure as STR-DH590.



2-18. FRONT PANEL BLOCK (STR-DH590/DH790)

Note: This illustration shows STR-DH590.
STR-DH790 can be disassembled using the same procedure as STR-DH590.



STR-DH590/DH790

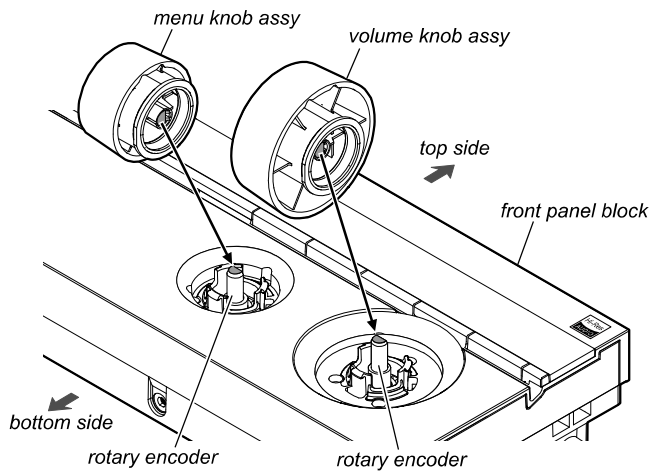
2-19. VOLUME KNOB ASSY, MENU KNOB ASSY (STR-DH590/DH790)

Note 1: This illustration shows STR-DH590.
STR-DH790 can be disassembled using the same procedure as STR-DH590.

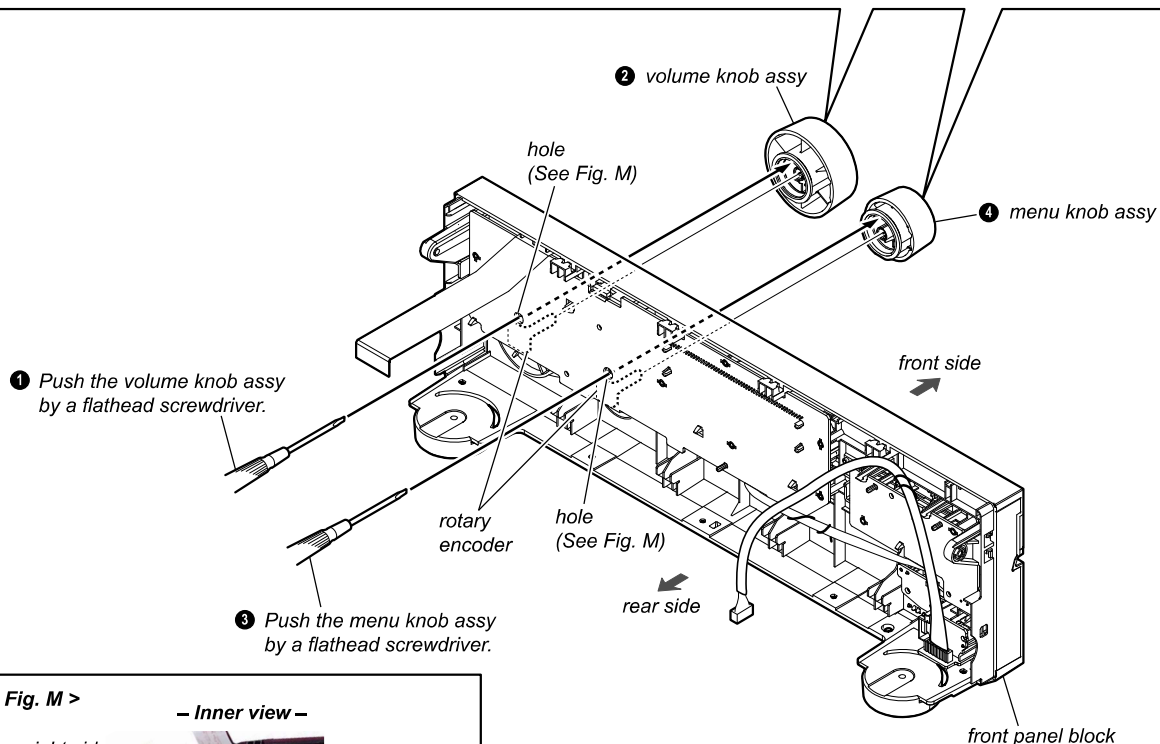
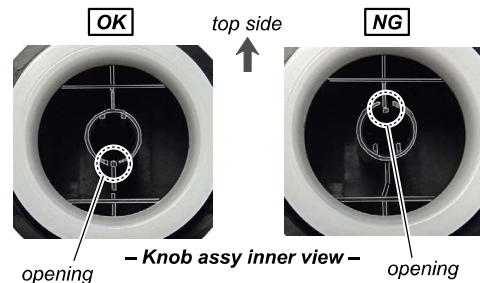
Note 2: The menu knob assy can be removed even without removing the volume knob assy.

• **How to install the volume knob assy or menu knob assy**

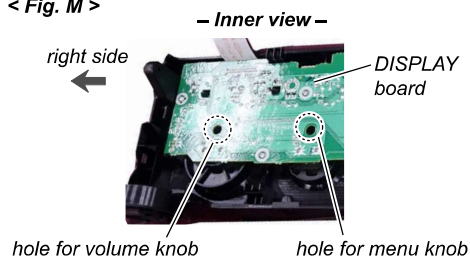
When installing the volume knob assy or menu knob assy to the rotary encoder, align the D-shaped tip of the rotary encoder and the D-shaped notch at the inner side of the volume knob assy or menu knob assy.

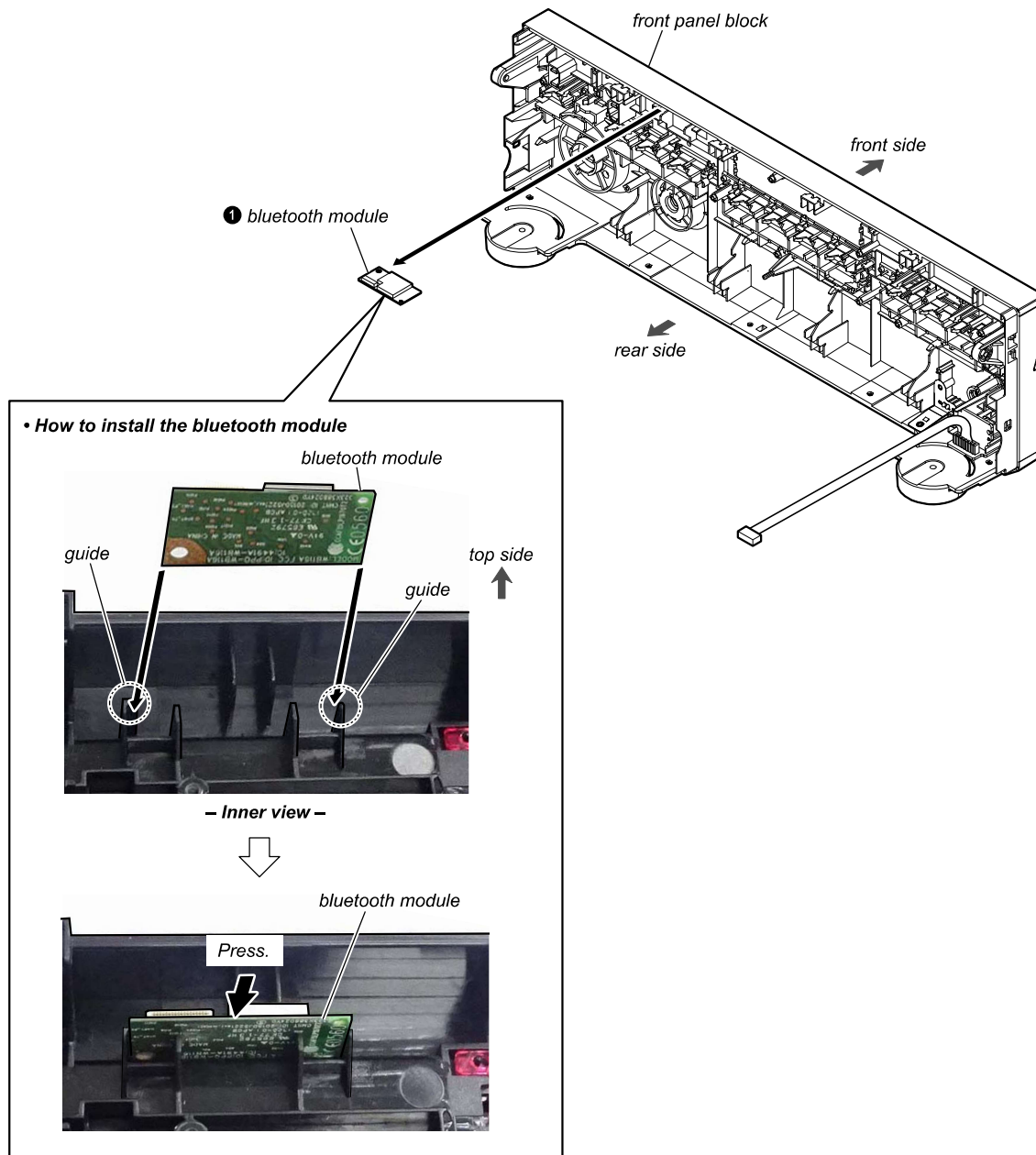


• **Installation direction for the knob assy**



< Fig. M >



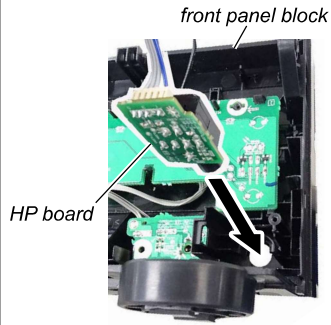
STR-DH590/DH790**2-21. BLUETOOTH MODULE (STR-DH590/DH790)**

2-22. HP BOARD (STR-DH590/DH790)

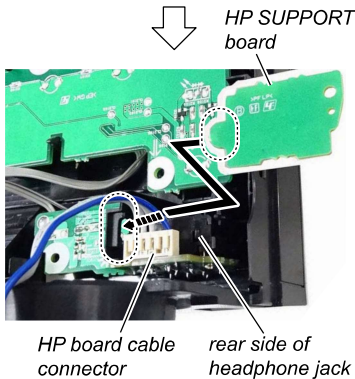
Note 1: This illustration shows STR-DH590.
STR-DH790 can be disassembled using the same procedure as STR-DH590.

• How to install the HP board and HP SUPPORT board

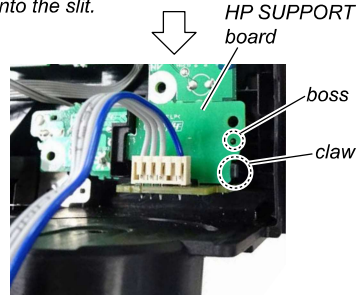
Attach in order from ① to ③.



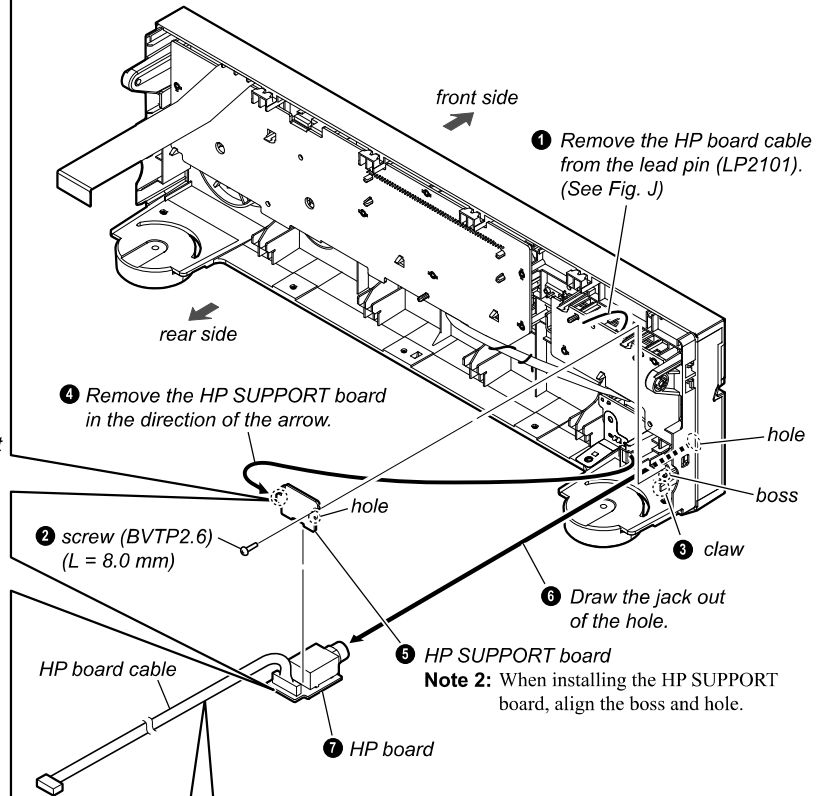
- ① Insert the jack on the HP board into the hole for the PHONES terminal of the front panel block, and install the HP board.



- ② Insert the HP SUPPORT board between the rear side of the headphone jack and the HP board cable connector, and insert the protrusion of the HP SUPPORT board into the slit.



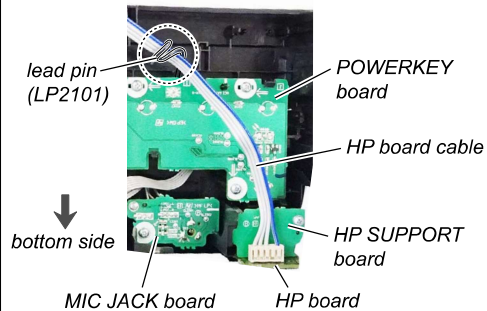
- ③ Align the hole of the HP SUPPORT board with the boss on the front panel block and install it, and then hook the claw to lock the HP SUPPORT board.



• Wire setting

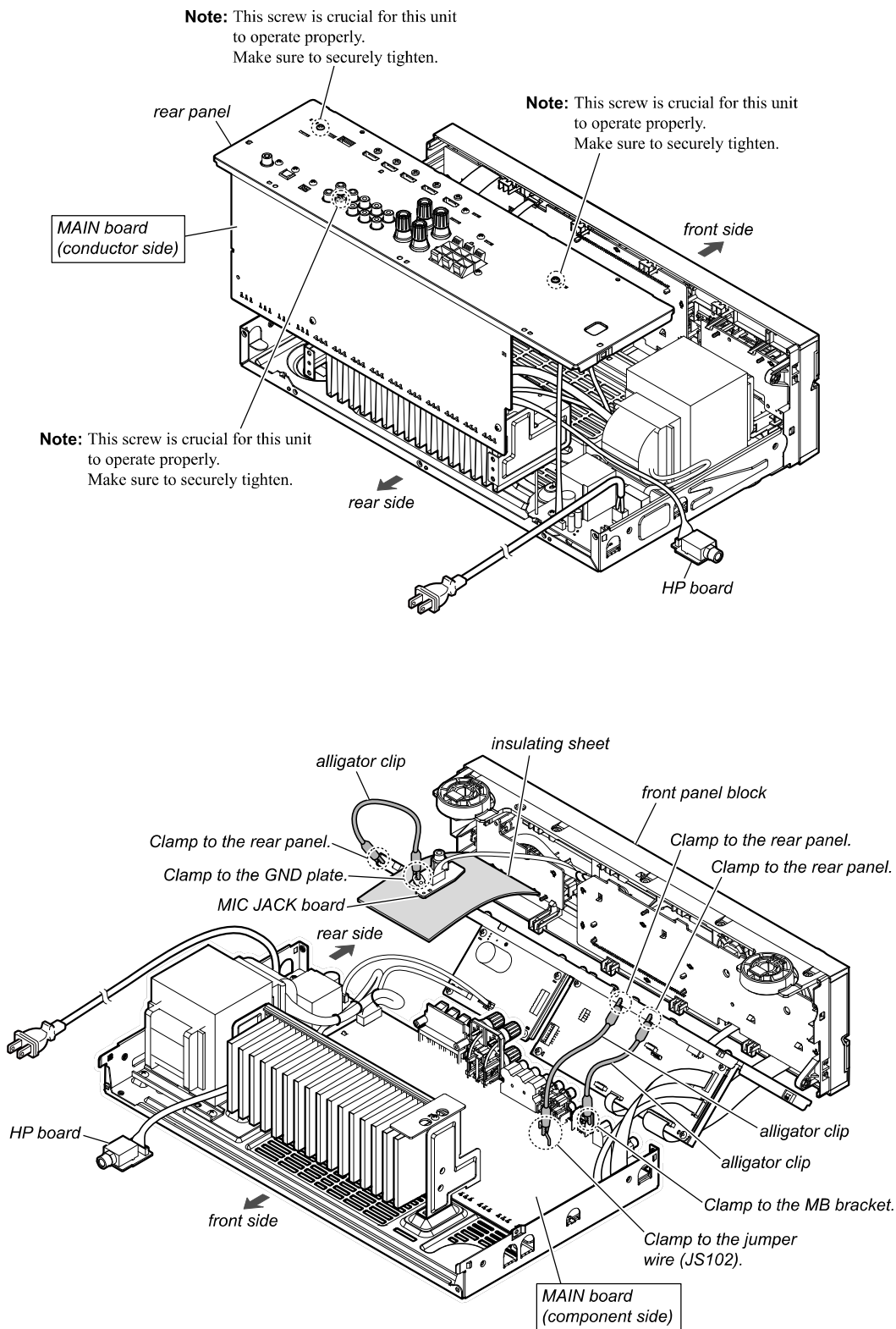
< Fig. J >

– Inner view –

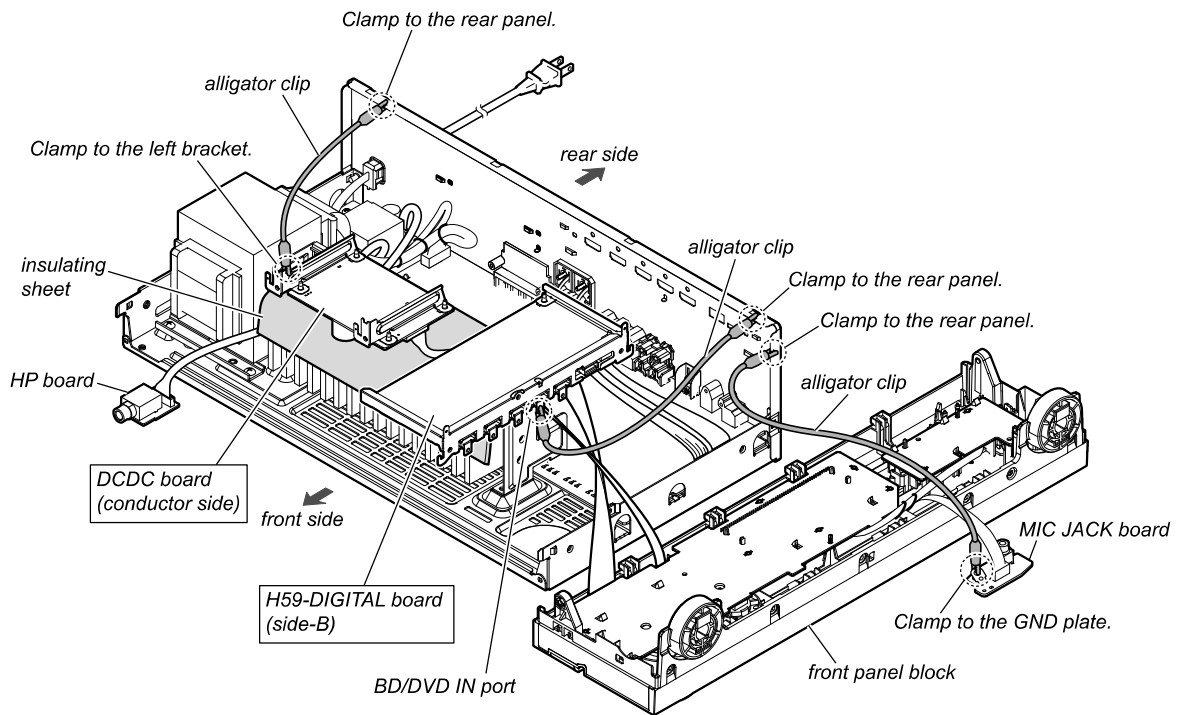


STR-DH590/DH790

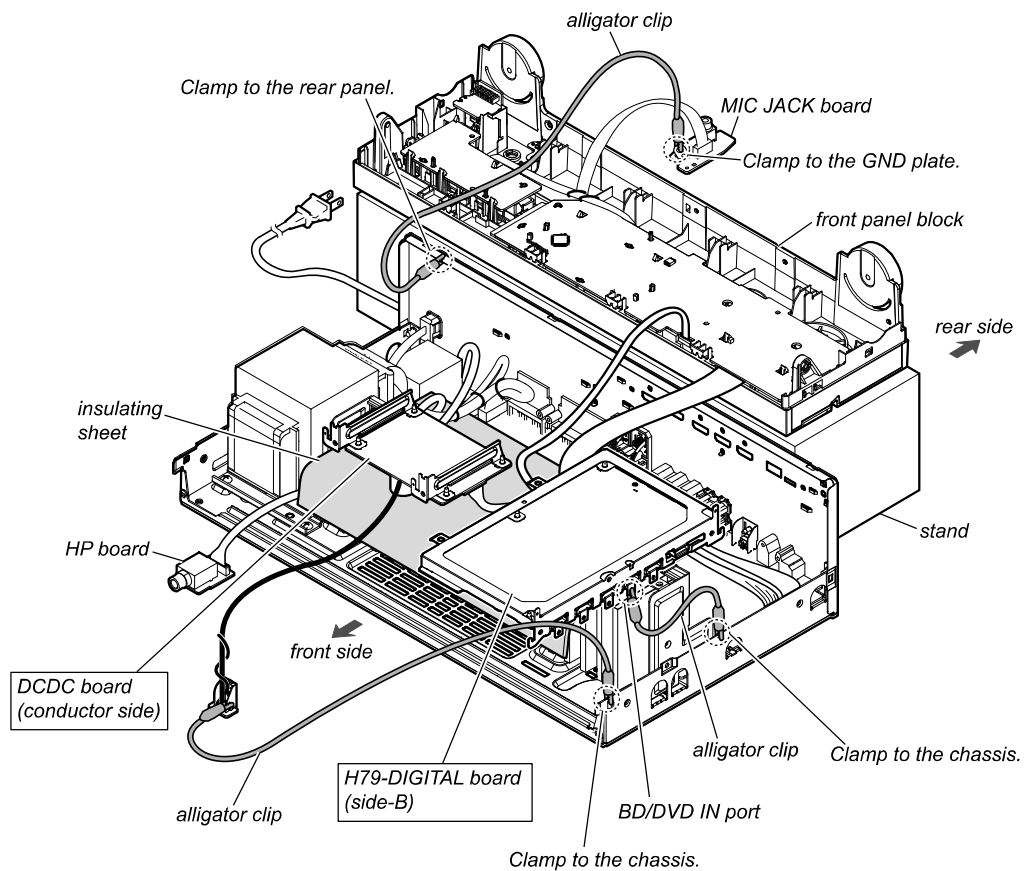
2-23. MAIN BOARD SERVICE POSITION (STR-DH590)



2-24. DCDC BOARD, H59-DIGITAL BOARD SERVICE POSITION (STR-DH590)

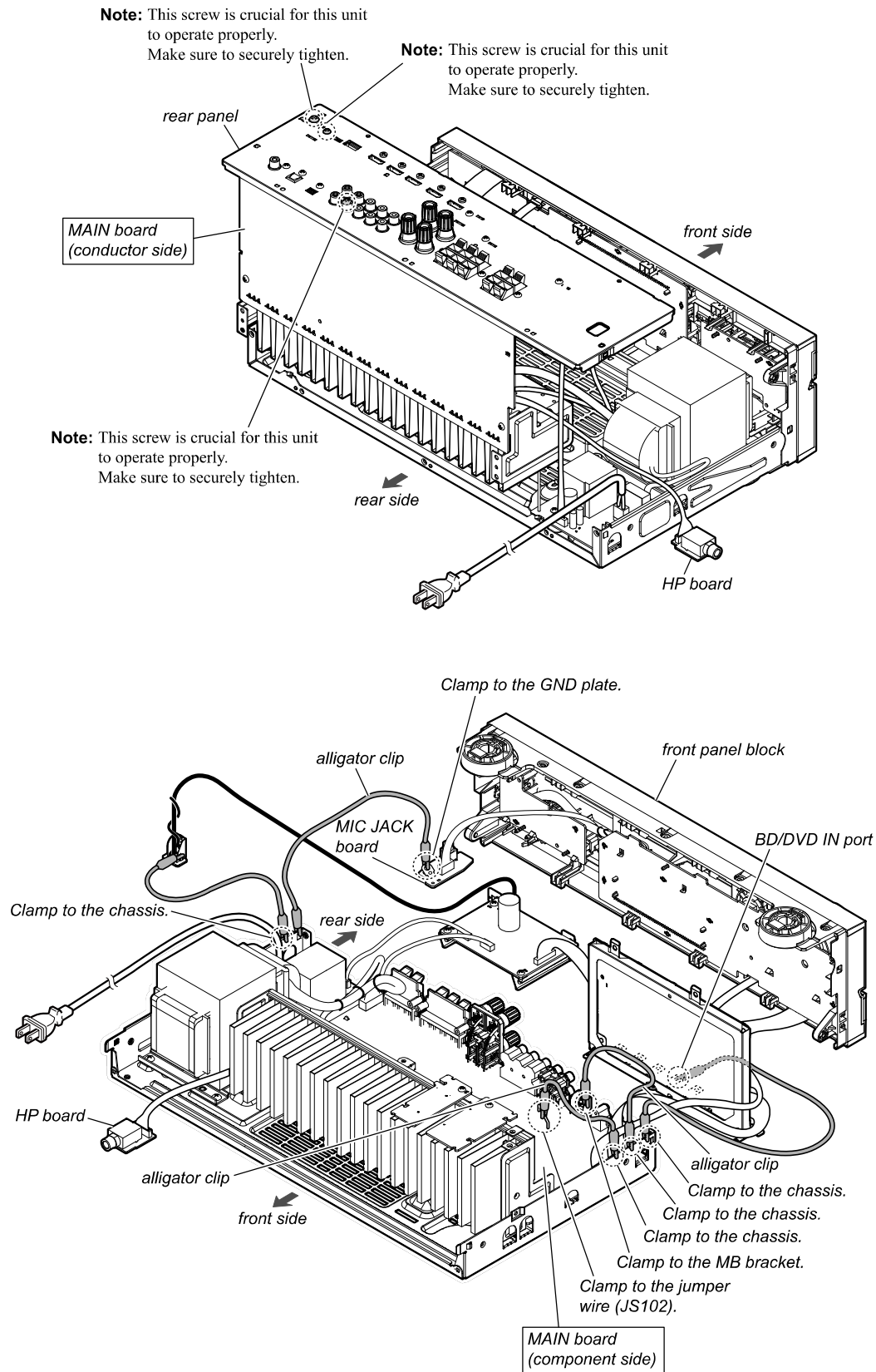


2-25. DCDC BOARD, H79-DIGITAL BOARD SERVICE POSITION (STR-DH790)



STR-DH590/DH790

2-26. MAIN BOARD SERVICE POSITION (STR-DH790)



SECTION 3
EXPLODED VIEWS

Note:

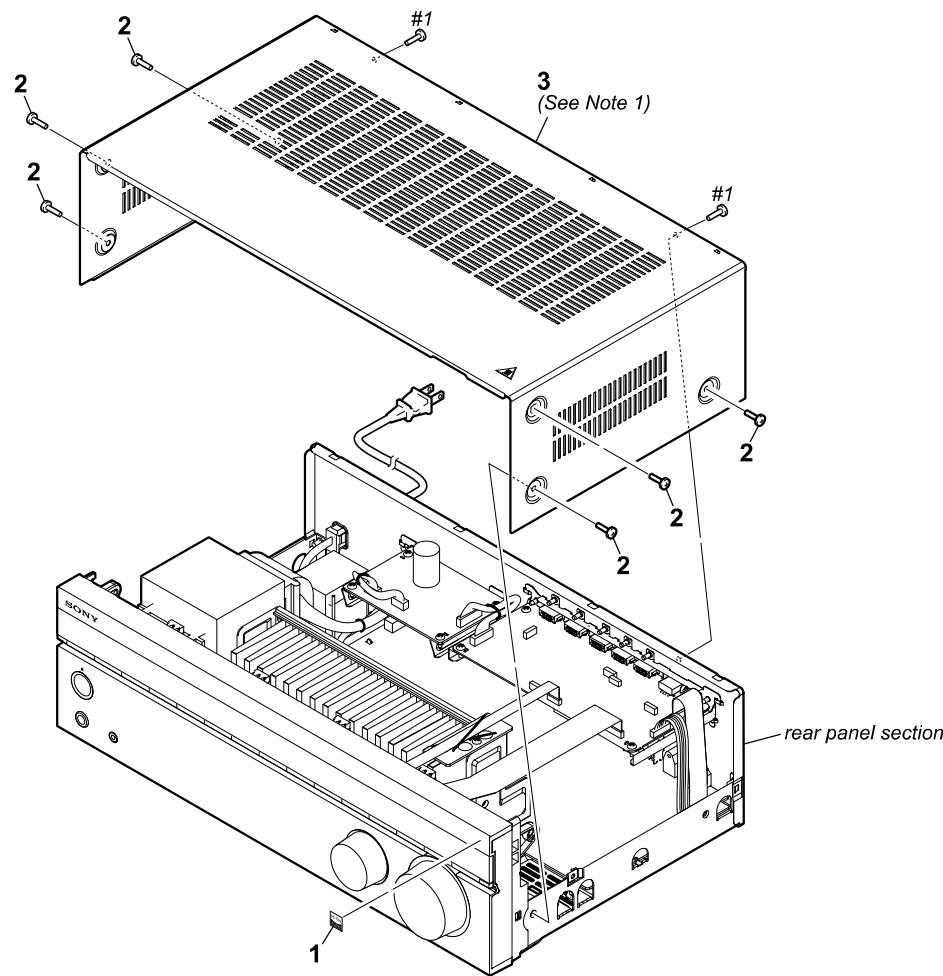
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Color Indication of Appearance Parts Example:
KNOB, BALANCE (WHITE) . . . (RED)
↑ ↑
Parts Color Cabinet's Color

The components identified by mark $\triangle$ or dotted line with mark $\triangle$ are critical for safety.
Replace only with part number specified.

The components identified by mark $\square$ contain confidential information.
Strictly follow the instructions whenever the components are repaired and/or replaced.

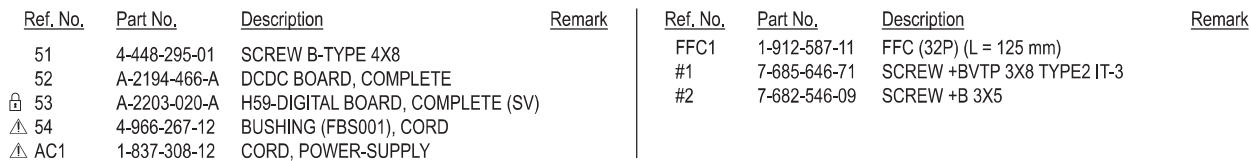
3-1. CASE SECTION (STR-DH590/DH790)

Note 2: The illustration on this page shows STR-DH590.

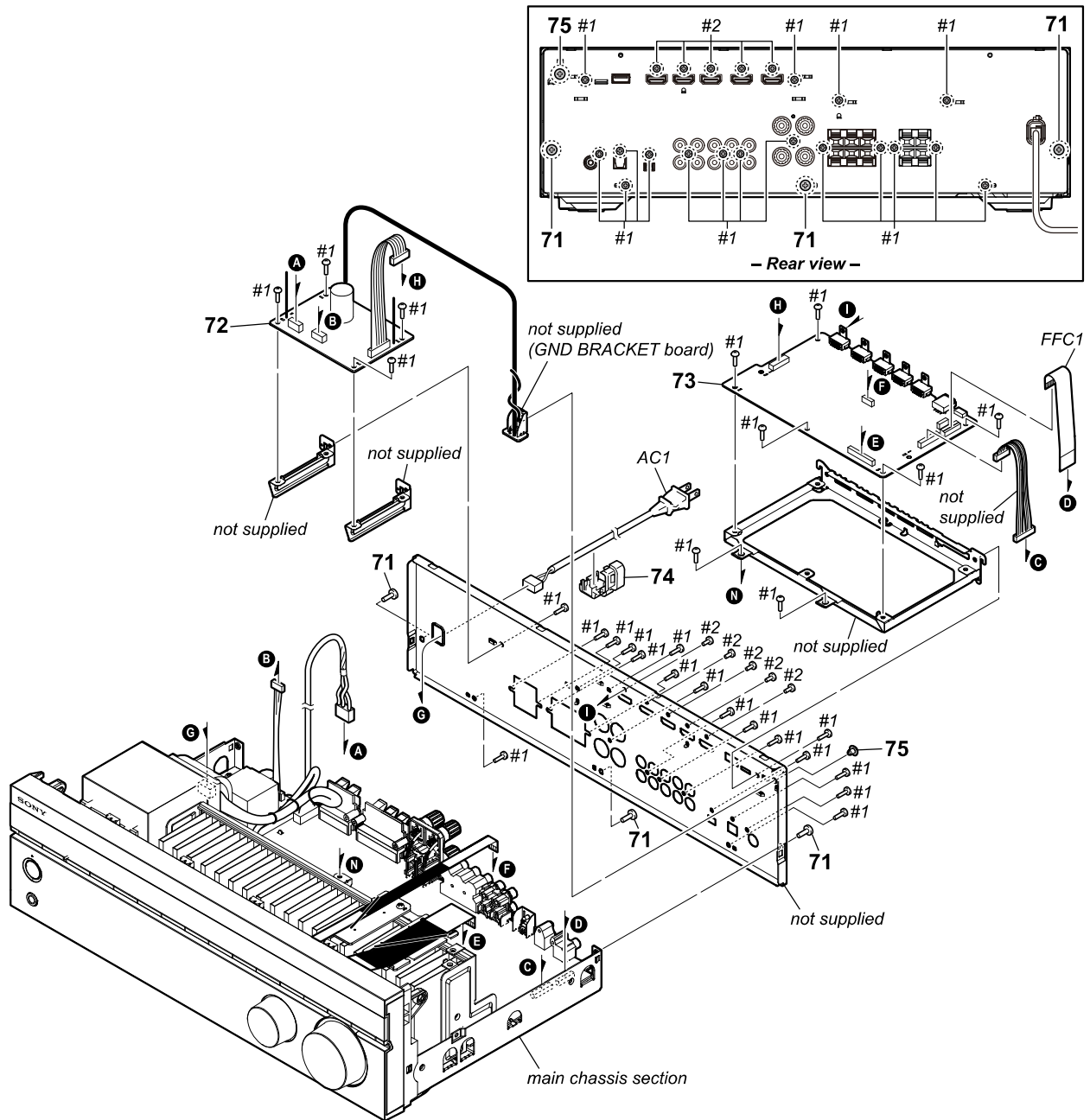


Note 1: The case (Ref. No. 3) has been changed in the midway of production.
When replacing the case with a new part, there is no problem using either the Former type or the New type.
If you need to distinguish the Former/New types of the case, Refer to "ABOUT THE FORMER/NEW TYPES OF THE CASE" on page 5.

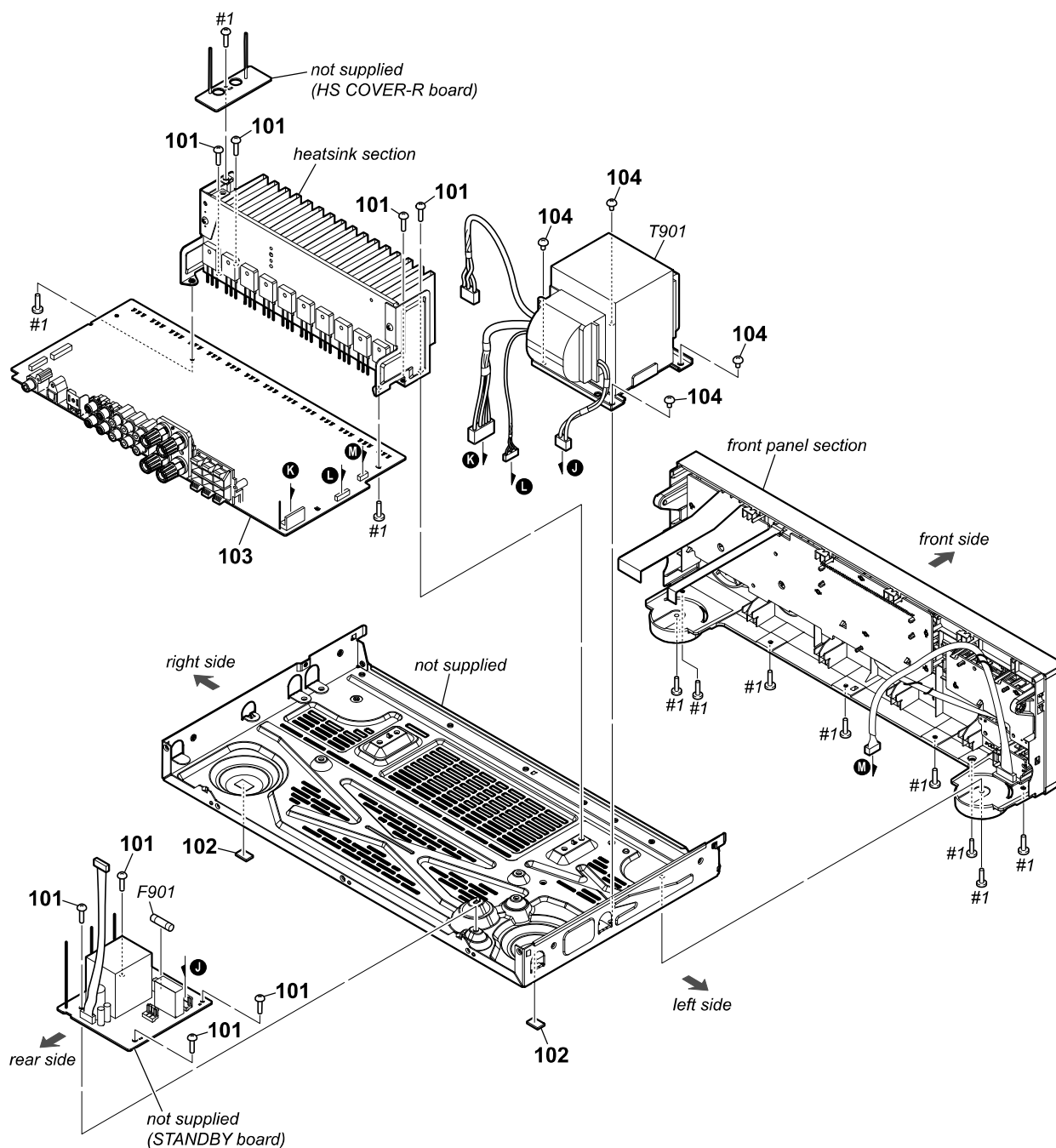
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-477-465-21	HI-RES LABEL		3	4-726-361-31	CASE (New type: With hole) (See Note 1)	
2	4-448-295-01	SCREW B-TYPE 4X8		#1	7-685-646-71	SCREW +BVTP 3X8 TYPE2 IT-3	
3	4-726-361-11	CASE (Former type: No hole) (See Note 1)					



3-3. REAR PANEL SECTION (STR-DH790)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
71	4-448-295-01	SCREW B-TYPE 4X8		△ AC1	1-837-308-12	CORD, POWER-SUPPLY	
72	A-2194-488-A	DCDC BOARD, COMPLETE		FFC1	1-912-587-11	FFC (32P) (L = 125 mm)	
73	A-2203-026-A	H79-DIGITAL BOARD, COMPLETE (SV)		#1	7-685-646-71	SCREW +BVTP 3X8 TYPE2 IT-3	
△ 74	4-966-267-12	BUSHING (FBS001), CORD		#2	7-682-546-09	SCREW +B 3X5	
75	4-249-675-02	+BV SUMITITE S 4X6 ROUND					

STR-DH590/DH790**3-4. MAIN CHASSIS SECTION (STR-DH590)**

Ref. No.	Part No.	Description
101	3-077-331-01	+BV3 (3-CR) (L = 8.0 mm)
102	4-977-358-01	CUSHION
103	A-2194-465-A	MAIN BOARD, COMPLETE
104	4-249-675-02	+BV SUMITITE S 4X6 ROUND

Ref. No.	Part No.	Description
△ F901	1-532-505-33	FUSE (T 5 AL/250 V)
△ T901	1-697-425-21	POWER TRANSFORMER
#1	7-685-646-71	SCREW +BVTP 3X8 TYPE2 IT-3

Remark

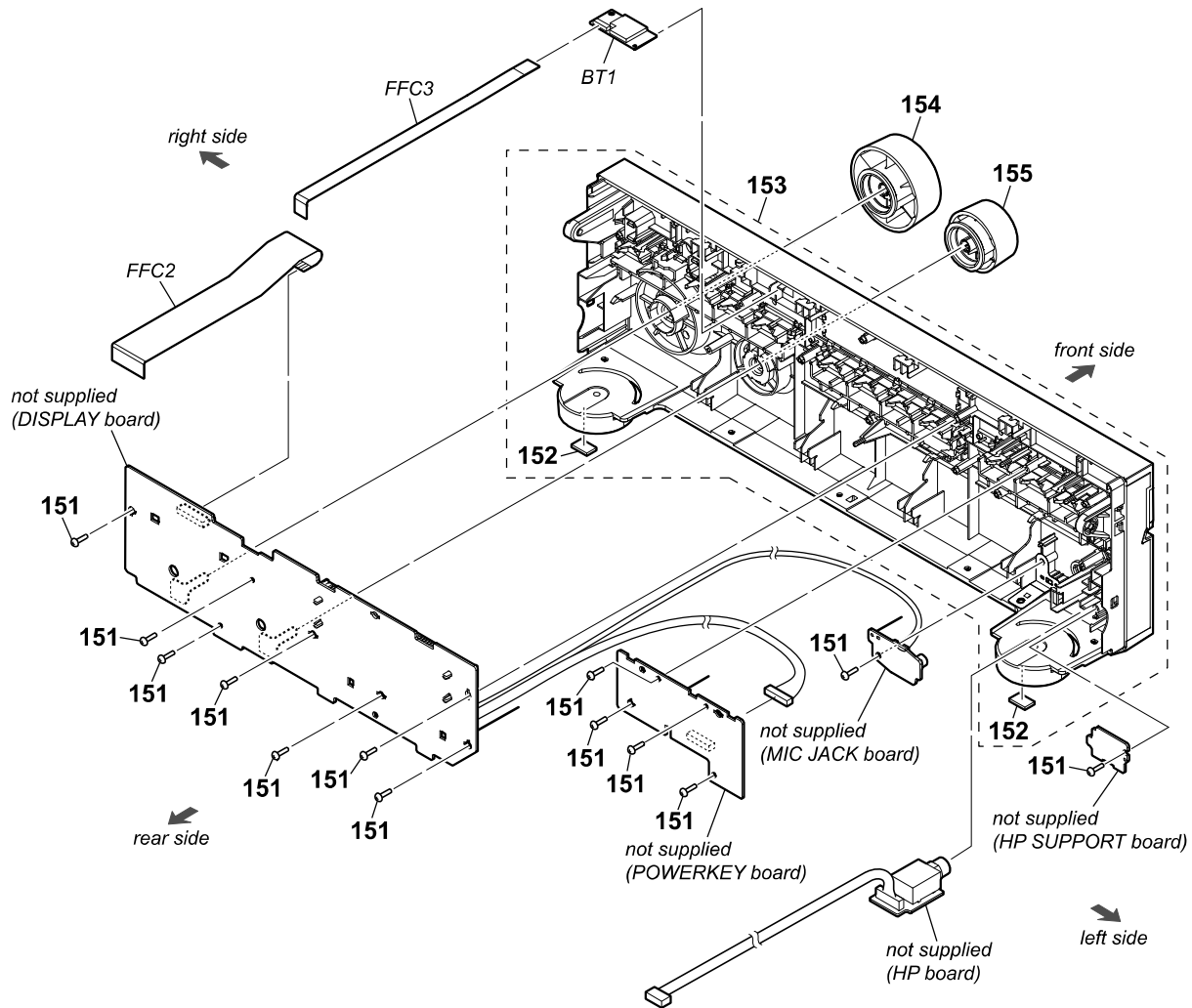
This exploded view diagram illustrates the assembly of the front panel. The components and their assembly points are as follows:

- Top Cover Boards:**
 - HS COVER board:** Indicated as "not supplied", it is secured with screw #1.
 - HS COVER-BT board:** Indicated as "not supplied", it is secured with screw #1.
- Heatsink Section:** A long component with multiple fins, secured with screws 121. It is connected to a power supply unit (T901) via cables labeled K, L, and M.
- Front Panel Section:** The main front-facing component, secured with screws 124. It features a "front side" and a "rear side".
- Internal Components:**
 - STANDBY board:** Indicated as "not supplied", it is secured with screw #1.
 - Other components:** Various internal parts are shown, including a component labeled F901 and a component labeled 122.
- Assembly Points:** Numerous screw locations are marked with #1, 121, 122, 123, 124, and M.

35
SYS SET

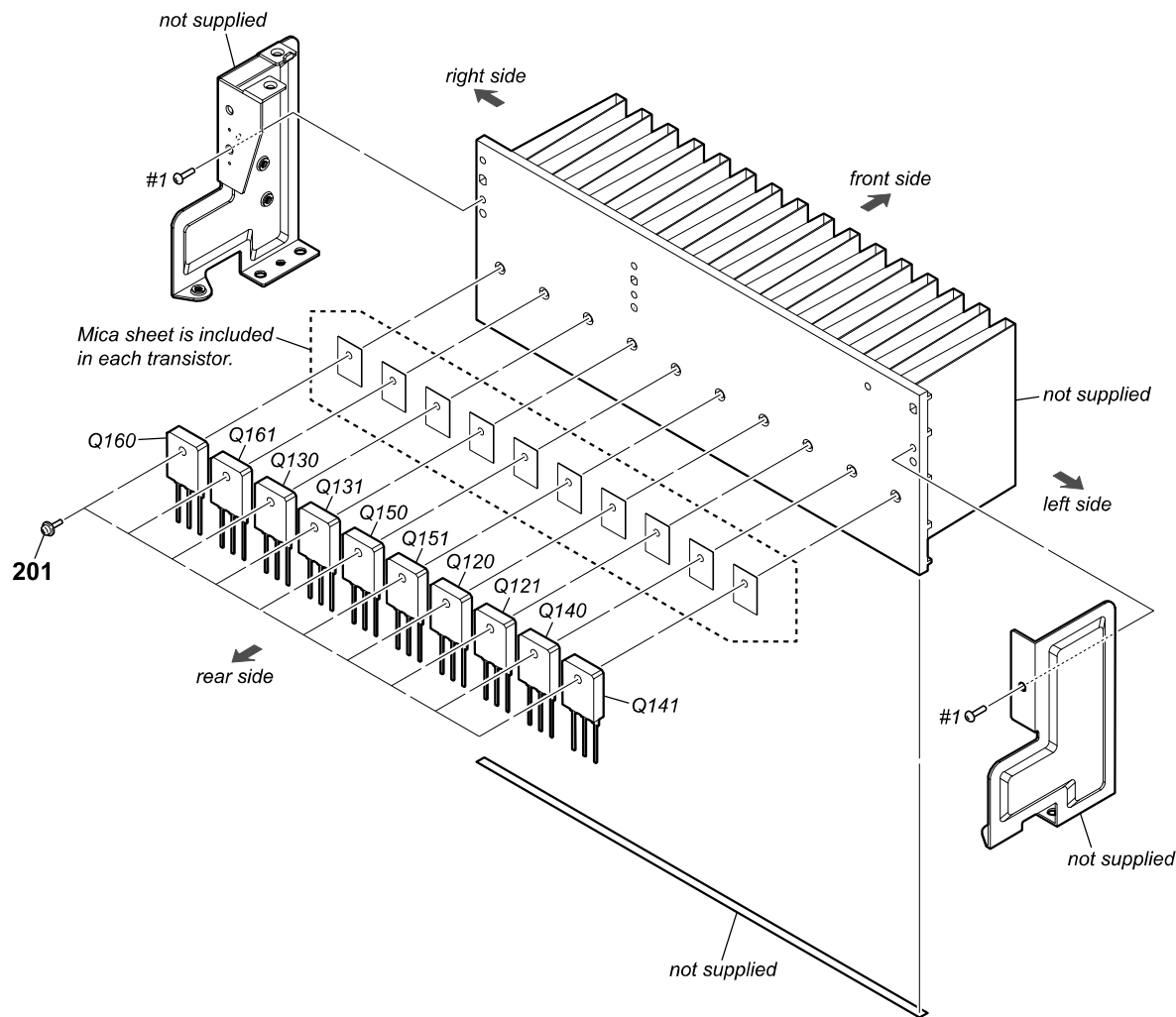
STR-DH590/DH790**3-6. FRONT PANEL SECTION (STR-DH590/DH790)**

Note: The illustration on this page shows STR-DH590.



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	3-087-053-01	+BVTP2.6 (3CR) (L = 8.0 mm)		BT1	1-493-097-71	BLUETOOTH MODULE	
152	4-977-358-01	CUSHION		FFC2	1-912-590-11	FFC (25P) (L = 205 mm) (DH590)	
153	X-2595-382-2	FRONT PANEL ASSY (DH790)		FFC2	1-912-591-11	FFC (25P) (L = 175 mm) (DH790)	
153	X-2595-383-2	FRONT PANEL ASSY (DH590)		FFC3	1-912-588-12	FFC (18P) (L = 205 mm) (DH790)	
154	A-2193-928-B	KNOB, VOLUME ASSY		FFC3	1-912-589-11	FFC (18P) (L = 175 mm) (DH590)	
155	A-2193-929-B	KNOB, MENU ASSY					

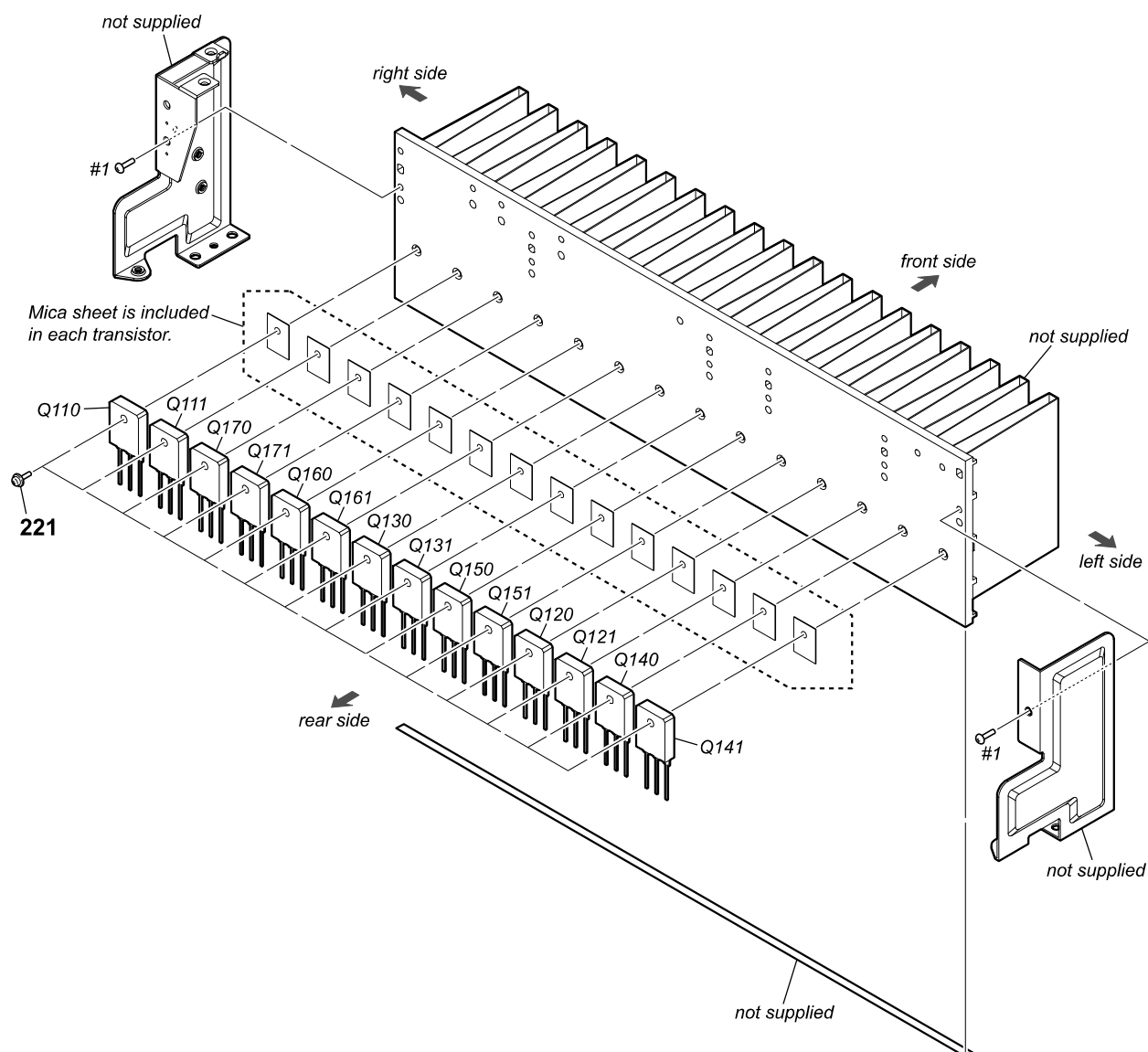
3-7. HEATSINK SECTION (STR-DH590)



Ref. No.	Part No.	Description	Remark
201	3-905-609-31	SCREW (TRANSISTOR)	
Q120	6-702-390-01	TRANSISTOR MN2488-OPY-MK	(Including Mica sheet)
Q121	6-702-391-01	TRANSISTOR MP1620-OPY-MK	(Including Mica sheet)
Q130	6-702-390-01	TRANSISTOR MN2488-OPY-MK	(Including Mica sheet)
Q131	6-702-391-01	TRANSISTOR MP1620-OPY-MK	(Including Mica sheet)
Q140	6-702-390-01	TRANSISTOR MN2488-OPY-MK	(Including Mica sheet)

Ref. No.	Part No.	Description	Remark
Q141	6-702-391-01	TRANSISTOR MP1620-OPY-MK	(Including Mica sheet)
Q150	6-702-390-01	TRANSISTOR MN2488-OPY-MK	(Including Mica sheet)
Q151	6-702-391-01	TRANSISTOR MP1620-OPY-MK	(Including Mica sheet)
Q160	6-702-390-01	TRANSISTOR MN2488-OPY-MK	(Including Mica sheet)
Q161	6-702-391-01	TRANSISTOR MP1620-OPY-MK	(Including Mica sheet)
#1	7-685-646-71	SCREW +BVTP 3X8 TYPE2 IT-3	

3-8. HEATSINK SECTION (STR-DH790)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
221	3-905-609-31	SCREW (TRANSISTOR)		Q150	6-702-390-01	TRANSISTOR MN2488-OPY-MK	
Q110	6-702-390-01	TRANSISTOR MN2488-OPY-MK	(Including Mica sheet)				(Including Mica sheet)
Q111	6-702-391-01	TRANSISTOR MP1620-OPY-MK	(Including Mica sheet)	Q151	6-702-391-01	TRANSISTOR MP1620-OPY-MK	(Including Mica sheet)
Q120	6-702-390-01	TRANSISTOR MN2488-OPY-MK	(Including Mica sheet)	Q160	6-702-390-01	TRANSISTOR MN2488-OPY-MK	(Including Mica sheet)
Q121	6-702-391-01	TRANSISTOR MP1620-OPY-MK	(Including Mica sheet)	Q161	6-702-391-01	TRANSISTOR MP1620-OPY-MK	(Including Mica sheet)
Q130	6-702-390-01	TRANSISTOR MN2488-OPY-MK	(Including Mica sheet)	Q170	6-702-390-01	TRANSISTOR MN2488-OPY-MK	(Including Mica sheet)
Q131	6-702-391-01	TRANSISTOR MP1620-OPY-MK	(Including Mica sheet)	Q171	6-702-391-01	TRANSISTOR MP1620-OPY-MK	(Including Mica sheet)
Q140	6-702-390-01	TRANSISTOR MN2488-OPY-MK	(Including Mica sheet)	#1	7-685-646-71	SCREW +BVTP 3X8 TYPE2 IT-3	
Q141	6-702-391-01	TRANSISTOR MP1620-OPY-MK	(Including Mica sheet)				

SECTION 4
ACCESSORIES

Ref. No.	Part No.	Description	Remark
	4-726-905-15	MANUAL, INSTRUCTION (Operating Instructions) (ENGLISH) (DH790)	
	4-726-905-23	MANUAL, INSTRUCTION (Operating Instructions) (FRENCH, SPANISH) (DH790)	
	4-726-906-13	MANUAL, INSTRUCTION (Operating Instructions) (ENGLISH) (DH590)	
	4-726-906-23	MANUAL, INSTRUCTION (Operating Instructions) (FRENCH, SPANISH) (DH590)	
501	1-493-370-13	REMOTE COMMANDER (RMT-AA401U) (Remote control)	
502	1-754-852-11	ANTENNA (FM) (FM wire antenna (aerial))	
503	1-542-830-11	MEASUREMENT MIC (MONO) (ECM-AC2) (Calibration microphone)	

