STR-AZ3000ES/AZ5000ES/ AZ7000ES

SERVICE MANUAL

DISCLAIMER: USE AT OWN RISK.
SONY AND ITS AFFILIATES ARE NOT LIABLE FOR ANY DAMAGE OR INJURY CAUSED TO ANY DIGITAL ELECTRONIC EQUIPMENT, PERSON, OR PROPERTY, WHICH OCCURS DUE TO USE OF THE TOOLS, PARTS, DOCUMENTATION, OR OTHER MATERIALS HEREIN PROVIDED, WHETHER FOR REPAIR, DIAGNOSIS, MAINTENANCE, MODIFICATION, OR OTHERWISE, INCLUDING BUT NOT LIMITED TO: ANY INDIRECT, INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES; ANY LOSS OF DATA, PRIVACY OR PROFITS; OR ANY INABILITY TO USE, OR REDUCED FUNCTIONALITY OF, THE DIGITAL ELECTRONIC EQUIPMENT. PLEASE READ ALL INSTRUCTIONS IN THIS MANUAL BEFORE PROCEEDING. PLEASE FOLLOW ALL STEPS IN THE ORDER IN WHICH THEY ARE DESCRIBED. IF YOU DO NOT HAVE ALL TOOLS AND PARTS AVAILABLE TO YOU, OR ARE NOT COMFORTABLE PERFORMING THE REPAIRS DESCRIBED HEREIN, DO NOT PROCEED. FAILURE TO FOLLOW THESE INSTRUCTIONS, OR USE THE PROPER TOOLS AND PARTS, MAY DAMAGE YOUR PRODUCT, LEAD TO PERSONAL INJURY OR CAUSE PROPERTY DAMAGE.

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

9-930-784-61
2024F33-1
© 2024.06

Sony Corporation

SONY®

STR-AZ3000ES/AZ5000ES/ AZ7000ES

SERVICE MANUAL

US Model

Photo: STR-AZ7000ES

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION

STR-AZ7000ES
With 8 Ω loads, both channels driven, from 20 Hz – 20 000 Hz; rated 140 W per channel minimum RMS power in stereo mode, with no more than 0.09% total harmonic distortion from 250 mW to rated output.

STR-AZ5000ES
With 8 Ω loads, both channels driven, from 20 Hz – 20 000 Hz; rated 120 W per channel minimum RMS power in stereo mode, with no more than 0.09% total harmonic distortion from 250 mW to rated output.

STR-AZ3000ES
With 8 Ω loads, both channels driven, from 20 Hz – 20 000 Hz; rated 110 W per channel minimum RMS power in stereo mode, with no more than 0.09% total harmonic distortion from 250 mW to rated output.

Amplifier section[1][2]

STR-AZ7000ES
Rated Power Output at Stereo Mode
(8 ohms, 20 Hz – 20 kHz, THD 0.09%): 140 W + 140 W
Reference Power Output
(8 ohms, 1 kHz, THD 0.9%)
FRONT: 150 W + 150 W
CENTER: 150 W
SURROUND: 150 W + 150 W
SURROUND BACK: 150 W + 150 W
HEIGHT 1: 150 W + 150 W
HEIGHT 2: 150 W + 150 W
HEIGHT 3: 150 W + 150 W

STR-AZ5000ES
Rated Power Output at Stereo Mode
(8 ohms, 20 Hz – 20 kHz, THD 0.09%): 120 W + 120 W
Reference Power Output
(8 ohms, 1 kHz, THD 0.9%)
FRONT: 130 W + 130 W
CENTER: 130 W
SURROUND: 130 W + 130 W
SURROUND BACK: 130 W + 130 W
HEIGHT 1: 130 W + 130 W
HEIGHT 2: 130 W + 130 W

STR-AZ3000ES
Rated Power Output at Stereo Mode
(8 ohms, 20 Hz – 20 kHz, THD 0.09%): 110 W + 110 W
Reference Power Output
(8 ohms, 1 kHz, THD 0.9%)
FRONT: 120 W + 120 W
CENTER: 120 W
SURROUND: 120 W + 120 W
SURROUND BACK: 120 W + 120 W
HEIGHT: 120 W + 120 W

1) Measured under the following conditions:
Power requirements: 120 V AC, 60 Hz

2) Depending on the sound field settings and the source, there may be no sound output.

Frequency response
Analog
10 Hz – 100 kHz, ±3dB (with sound field, equalizer and 360SSM bypassed)

Input
Analog
Sensitivity: 150 mV/50 kilohms
S/N[3]: 105 dB (A, 500 mV[4])
Digital (Coaxial)
Impedance: 75 ohms
S/N: 96 dB (A, 20 kHz LPF)
Digital (Optical)
S/N: 96 dB (A, 20 kHz LPF)

Output (Analog)

STR-AZ7000ES
ZONE 2, ZONE 3
Voltage: 2 V/1 kilohm
FRONT L/R, CENTER, SURROUND L/R, SURROUND BACK L/R, HEIGHT 1 L/R, HEIGHT 2 L/R, HEIGHT 3 L/R, SUBWOOFER
Voltage: 2 V/1 kilohm

STR-AZ5000ES
ZONE 2, ZONE 3
Voltage: 2 V/1 kilohm
FRONT L/R, CENTER, SURROUND L/R, SURROUND BACK L/R, HEIGHT 1 L/R, HEIGHT 2 L/R, SUBWOOFER
Voltage: 2 V/1 kilohm

STR-AZ3000ES
ZONE 2, ZONE 3
Voltage: 2 V/1 kilohm
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, 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

Video section
Inputs/Outputs
Video: 1 Vp-p, 75 ohms

HDMI Video
Resolution
- 480p/60 Hz
- 576p/50 Hz
- 720p/60 Hz, 50 Hz, 30 Hz, 24 Hz
- 1080i/60 Hz, 50 Hz
- 1080p/120 Hz, 100 Hz, 60 Hz, 50 Hz, 30 Hz, 24 Hz
- 4K/120 Hz*, 100 Hz*, 60 Hz, 50 Hz, 30 Hz, 25 Hz, 24 Hz
- 8K/60 Hz*, 50 Hz*, 30 Hz*, 25 Hz*, 24 Hz*

* HDMI IN1, IN 2, IN 3, IN 4 supports
Support
HDCP 2.3, HDR (HDR10, Hybrid Log-Gamma, Dolby Vision), 3D, Deep Color, ITU-R BT.2020, eARC/ARC, VRR, ALLM
For details on supported video formats, visit the Help Guide.

Supported digital audio formats

Digital audio format	Maximum number of decoding/ rendering channels	Connection with the receiver
Dolby Digital [DOLBY AUDIO]	5.1	COAXIAL/OPTICAL, HDMI, eARC, ARC
Dolby Digital Plus [DOLBY AUDIO][1]	7.1	HDMI, eARC, ARC
Dolby Atmos - Dolby Digital Plus [DOLBY ATMOS][1,2]	STR-AZ7000ES: 7.1.6 / 9.1.4 STR-AZ5000ES: 7.1.4 STR-AZ3000ES: 5.1.4 / 7.1.2 / 7.1.4[3]	HDMI, eARC, ARC
DTS [DTS]	5.1	COAXIAL/OPTICAL, HDMI, eARC, ARC
DTS 96/24 [DTS]	5.1	COAXIAL/OPTICAL, HDMI, eARC, ARC
LPCM [LINEAR PCM]	7.1/2.0	COAXIAL/OPTICAL, HDMI(7.1), eARC(7.1), ARC(2.0)
Dolby TrueHD [DOLBY AUDIO][1]	7.1	HDMI, eARC
Dolby Atmos TrueHD [DOLBY ATMOS][1,2]	STR-AZ7000ES: 7.1.6 / 9.1.4 STR-AZ5000ES: 7.1.4 STR-AZ3000ES: 5.1.4 / 7.1.2 / 7.1.4[3]	HDMI, eARC
Dolby Atmos [DOLBY ATMOS]	STR-AZ7000ES: 7.1.6 / 9.1.4 STR-AZ5000ES: 7.1.4 STR-AZ3000ES: 5.1.4 / 7.1.2 / 7.1.4[3]	HDMI, eARC
DTS-ES DISCRETE (DTS-ES Discrete 6.1) [DTS]	6.1	COAXIAL/OPTICAL, HDMI, eARC, ARC
DTS-ES MATRIX (DTS-ES Matrix 6.1) [DTS]	6.1	COAXIAL/OPTICAL, HDMI, eARC, ARC
DTS-HD High Resolution Audio [DTS-HD][1]	7.1	HDMI, eARC
DTS-HD Master Audio [DTS-HD][1]	7.1	HDMI, eARC
DTS Express [DTS-HD]	5.1	HDMI, eARC
DTS:X Master Audio [DTS:X][1]	STR-AZ7000ES: 7.1.6 / 9.1.4 STR-AZ5000ES: 7.1.4 STR-AZ3000ES: 5.1.4 / 7.1.2 / 7.1.4[3]	HDMI, eARC
DTS:X [DTS:X][1]	STR-AZ7000ES: 7.1.6 / 9.1.4 STR-AZ5000ES: 7.1.4 STR-AZ3000ES: 5.1.4 / 7.1.2 / 7.1.4[3]	HDMI, eARC
DSD [DSD][4,5]	5.1	HDMI

1) Audio signals are output in another format if the playback device does not correspond to the actual format. For details, refer to the operating instructions of the playback device.

2) Dolby Atmos is decoded as Dolby Digital Plus or Dolby TrueHD if the speaker pattern is set to 2.0, 2.1, 3.0, 3.1, 4.0, 4.1, 5.0 or 5.1, and [Virtualizer] is set to [Off].

3) Available only when [SpeakerRelocation/PhantomSurroundBack] is in operation.

4) This format is not output to wireless headphones.

5) This format is not output to wireless speakers.

USB section
Ψ(USB) port:
Type A (For connecting USB flash drive)
Maximum current
500 mA

Network section
Ethernet LAN
100BASE-TX
Wireless LAN
Compatible standards: IEEE 802.11 a/b/g/n/ac
Security: WPA/WPA2-PSK
Radio frequency: 2.4 GHz, 5 GHz

Playable types of audio files

Codec	Extension
MP3 (MPEG-1 Audio Layer III)	.mp3
MPEG-H	.mp4
AAC/HE-AAC[1]	.m4a, .aac[2], .mp4[2], .3gp[2]
WMA9 Standard[1]	.wma
LPCM	.wav
FLAC[1]	.flac
DSF[1]	.dsf
DSDIFF[1,3]	.dff
AIFF[1]	.aiff, .aif
ALAC[1]	.m4a

– Continued on next page –

MULTI CHANNEL AV RECEIVER

Codec	Extension
Vorbis	.ogg
Monkey's Audio	.ape

1) The receiver may not play this file format on a home network server.
2) The receiver does not play this file format on a home network server.
3) The receiver does not play DST encoded files.

Notes
- Some files may not play depending on the file format, the file encoding, the recording condition, or the home network server condition.
- Some files edited on a PC may not play.
- Fast forward or fast reverse may not be available with some files.
- The receiver does not play coded files such as DRM.
- The receiver cannot recognize a file/folder depending on the name/metadata.
- Some USB devices may not work with this receiver.
- The receiver can recognize Mass Storage Class (MSC) devices.

BLUETOOTH section
Communication system
BLUETOOTH Specification version 5.0
Output
BLUETOOTH Specification Power Class 1
Maximum communication range
Line of sight approx. 30 m (98.4 feet)[1]
Maximum number of devices to be registered
10 devices
Frequency band
2.4 GHz band (2.4000 GHz – 2.4835 GHz)
Modulation method
FHSS (Freq Hopping Spread Spectrum)
Compatible BLUETOOTH profiles[2]
A2DP (Advanced Audio Distribution Profile)
AVRCP (Audio Video Remote Control Profile)
Supported Codecs[3]
SBC[4], AAC, LDAC
Transmission range (A2DP)
20 Hz – 40 000 Hz (LDAC sampling frequency 96 kHz with 990 kbps transmission)
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

Wireless Transmitter/Receiver Section
Communication system
Wireless Sound Specification version 4.0
Frequency band
5 GHz
Modulation method
OFDM

General
Power requirements
120 V AC, 60 Hz
Power consumption
STR-AZ7000ES: 540 W
STR-AZ5000ES: 500 W
STR-AZ3000ES: 440 W
Standby mode: 0.5 W
(When [Standby Through], [Network/Bluetooth Standby], [External Control] and all zone power are set to [Off].)
Network/Bluetooth Standby mode: 3.5 W
(When [Network/Bluetooth Standby] is set to [On], and [Standby Through] and all zone power are set to [Off].)
Dimensions (width/height/depth) (Approx.)
430 mm × 194 mm × 440 mm (17 in × 7 ⅝ in × 17 ⅜ in) including projecting parts and controls
Mass (Approx.)
STR-AZ7000ES: 21.8 kg (48 lb)
STR-AZ5000ES: 19.2 kg (42 lb 6 oz)
STR-AZ3000ES: 19.0 kg (41 lb 15 oz)

Supplied accessories
Operating Instructions
Startup Guide (1)
Calibration microphone (1)
Calibration mic stand (1)
FM wire antenna (aerial) (1)
AC power cord (mains lead) (1)
Remote control (1)
R03 (size AAA) batteries (2)
Front cover (1)

Design and specifications are subject to change without notice.

Trademarks

- Windows Media is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.
- The LDAC™ name is a trademark of Sony Group Corporation or its affiliates.
- LDAC is an audio coding technology developed by Sony that enables the transmission of High-Resolution (Hi-Res) Audio content, even over a Bluetooth connection. Unlike other Bluetooth compatible coding technologies such as SBC, it operates without any down-conversion of the Hi-Res Audio content*, and allows approximately three times more data** than those other technologies to be transmitted over a Bluetooth wireless network with unprecedented sound quality, by means of efficient coding and optimized packetization.
  * excluding DSD format contents
  ** in comparison with SBC (Subband Coding) when the bitrate of 990 kbps (96/48 kHz) or 909 kbps (88.2/44.1 kHz) is selected
- The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Sony Group Corporation and its subsidiaries is under license.
- The terms HDMI™, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.
- Google, Google Play, Google Home and Chromecast built-in are trademarks of Google LLC. Google Assistant is not available in certain languages and countries.
- Apple, AirPlay, iPad, iPhone and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries.
- "BRAVIA" logo is a trademark of Sony Group Corporation or its affiliates.
- Wi-Fi®, Wi-Fi Protected Access® and Wi-Fi Alliance® are registered trademarks of Wi-Fi Alliance.
- Wi-Fi CERTIFIED™, WPA™, and WPA2™ are trademarks of Wi-Fi Alliance.
- Being Roon Tested means that Sony and Roon have collaborated to ensure you have the best experience using Roon software and Sony equipment together, so you can just enjoy the music.
- "TRILUMINOS" and "TRILUMINOS" logo are a registered trademark of Sony Group Corporation or its affiliates.
- Spotify and Spotify logos are trademarks of the Spotify Group.*
  * Depending on the country and region, this function may not be available.
- All other trademarks and registered trademarks are trademarks or registered trademarks of their respective holders. In this manual, ™ and ® marks are not specified.

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)

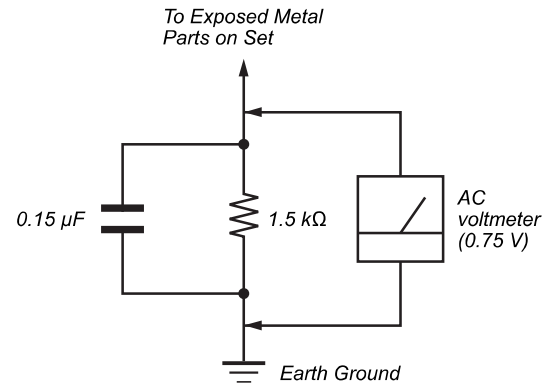


Fig. A. Using an AC voltmeter to check AC leakage.

SAFETY-RELATED COMPONENT WARNING!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ 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.

TABLE OF CONTENTS

1. SERVICING NOTES 5

2. DISASSEMBLY

2-1. Disassembly Flow 14
2-2. Cover Front Assy, Case Assy, Fuse 16
2-3. AC Inlet (2P) 17
2-4. JACK Board 18
2-5. Harness (Top)-1 19
2-6. Harness (Top)-2 20
2-7. Dual-band Dipole Antenna-1 21
2-8. Dual-band Dipole Antenna-2 22
2-9. Dual-band Dipole Antenna-3 23
2-10. GENOA Board-1 24
2-11. GENOA Board-2 25
2-12. DIGITAL Board Block-1 26
2-13. DIGITAL Board Block-2 27
2-14. DIGITAL Board Block-3 28
2-15. DIGITAL Board-1 29
2-16. DIGITAL Board-2 30
2-17. ANALOG Board Block-1 31
2-18. ANALOG Board Block-2 32
2-19. ANALOG Board 33
2-20. DC Fan Block-1 34
2-21. DC Fan Block-2 35
2-22. FAN CONNECTER Board, DC Fan 36
2-23. DCDC Board Block 37
2-24. STBY Board Block 38
2-25. DCDC Board 39
2-26. STBY Board 39
2-27. Front Panel Block-1 (AZ5000ES/AZ7000ES) 40
2-28. Front Panel Block-2 41
2-29. Front Panel Block-3 (AZ3000ES) 42
2-30. Front Panel Block-4 (AZ5000ES/AZ7000ES) 42
2-31. F-HDMI Board Block (AZ5000ES/AZ7000ES) 43
2-32. F-HDMI Board (AZ5000ES/AZ7000ES) 44
2-33. Knob VOL Assy 45
2-34. POWER_KEY Board 46
2-35. VOL Board, DISPLAY Board Block 47
2-36. DISPLAY Board, LCD Panel 48
2-37. ANT1 Board, ANT2 Board 49
2-38. Button, Panel Front Assy 50
2-39. Power Transformer-1 51
2-40. Power Transformer-2 52
2-41. Panel Back 53
2-42. Harness (Inner)-1 54
2-43. Harness (Inner)-2 55
2-44. How to Install the Harness (Inner)-1 56
2-45. How to Install the Harness (Inner)-2 57
2-46. SPTM Board 58
2-47. AMP Block 59
2-48. 2F AMP Board 60
2-49. AMP Board 61
2-50. PS Board 62

3. DIAGRAMS

3-1. Frame Harness - MAIN Section - 63
3-2. Frame Harness - PANEL/POWER SUPPLY Section - 64

4. EXPLODED VIEWS

4-1. Case Section 65
4-2. JACK Board Section 66
4-3. GENOA Board, LAN Antenna Section 67
4-4. DIGITAL Board Section 68
4-5. ANALOG Board Section 69
4-6. STBY Board, DCDC Board, DC Fan Section 70
4-7. Power Transformer, AC Inlet Section 71
4-8. PS Board, SPTM Board Section 72
4-9. Foot, Panel Back Section 73
4-10. DISPLAY Board, VOL Knob Section 74
4-11. Panel Front, Button Section 75
4-12. AMP Board Section 76
4-13. Heatsink Section (AZ3000ES/AZ5000ES) 77
4-14. Heatsink Section (AZ7000ES) 78

5. ACCESSORIES 79

STR-AZ3000ES/AZ5000ES/AZ7000ES

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.

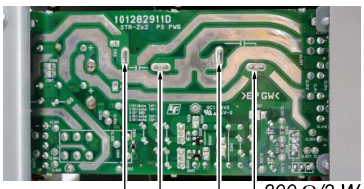
NOTE OF REPLACING THE FUSE

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 METHOD

When disassembling the unit after checking the operation, for the electric shock prevention, perform the discharge processing by connecting the resistor at both ends of the specified capacitor with referring to the figure below.
Note: Be sure to use a resistor of 800 Ω or higher for the discharge processing.

– PS Board (Conductor Side) –
(With panel bottom removed view)



800 Ω/2 W
(for C911 (STR-AZ7000))
(for C913 (STR-AZ3000/AZ5000))

800 Ω/2 W
(for C912 (STR-AZ7000))
(for C914 (STR-AZ3000/AZ5000))

ABOUT THE PROTECT

If "PROTECTOR" or "THERMAL" appears on the display panel and this unit automatically turns off after a few seconds:

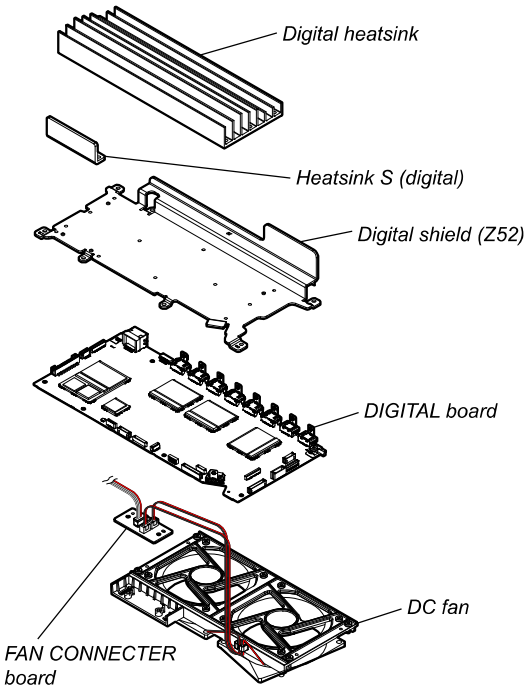
- There may be an electrical surge or power failure. Unplug the AC power cord and then plug in the AC power cord again after 30 minutes.
- This unit is covered and the ventilation holes are blocked. Remove the object covering the ventilation holes of this unit.
- The impedance of the connected speakers is below the rated impedance range indicated on the back panel of this unit. Reduce the volume level.
- Unplug the AC power cord and let this unit 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.
  -- Connect the front speaker first, increase the volume level and operate this unit 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.

If [Overload has been detected.] appears on the TV screen:

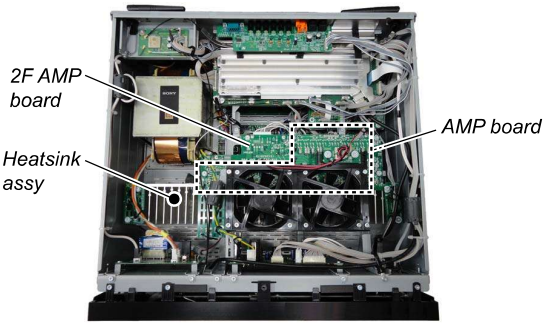
An over-current from the ♆ (USB) port was detected. Disconnect the USB device as prompted in the warning message and close the message.

NOTE OF PERFORMING THE OPERATION CHECK IN THE STATUS THAT HEATSINK AND DC FAN ARE REMOVED

When performing the operation check in the status that this unit is disassembled, it is possible to perform the operation check in the status that heatsink is removed from the DIGITAL board.
Also, it is possible to perform the operation check in the status that DC fan is removed from the FAN CONNECTER board.
However, in that case, set the volume to low level and perform the work in the short time so as a few minutes.
When it is necessary to work in the middle level volume or more, or a few minutes or more, be sure to perform in the status that heatsink is installed to the DIGITAL board, and DC fan is installed to the FAN CONNECTER board.



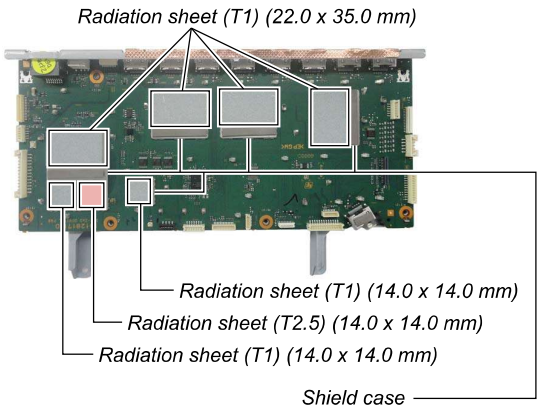
Note: Be sure to check the operation in the status that heatsink assy on the AMP board and 2F AMP board installed.



ABOUT THE RADIATION SHEETS AND THE THERMAL SHEET

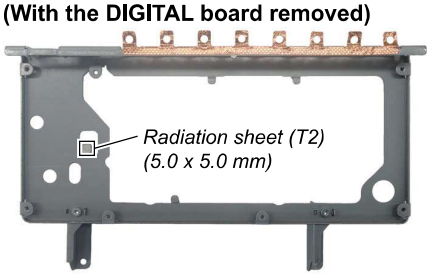
The radiation sheets and the thermal sheet are attached in various places.
When assembling after disassembly work, be sure to check that the radiation sheets and the thermal sheet are properly attached before reassembling.
(Refer to figure on the right)

DIGITAL Board (Side A)
(With the heatsink removed)

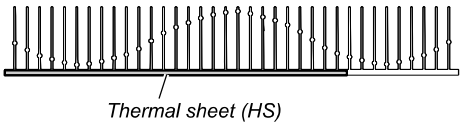


Note: There is also a radiation sheet inside the shield case.

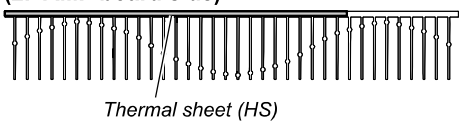
BRACKET (3F DIGITAL)
(With the DIGITAL board removed)



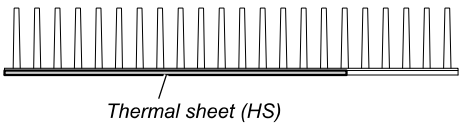
HEATSINK EXT (13CH) (STR-AZ7000ES)
(AMP board side)



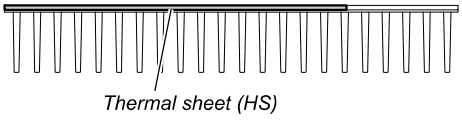
HEATSINK EXT (13CH) (STR-AZ7000ES)
(2F AMP board side)



HEATSINK SQ (11CH) (STR-AZ3000ES/AZ5000ES)
(AMP board side)



HEATSINK SQ (11CH) (STR-AZ3000ES/AZ5000ES)
(2F AMP board side)



INITIALIZATION METHOD

When this unit does not operate properly, or after repairs are completed etc., perform the initialization according to the following procedure.

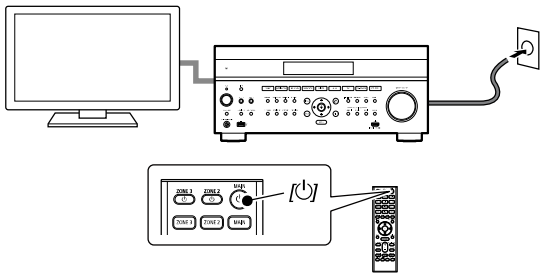
Note 1: When performing the initialize, all settings return to the factory default.

Note 2: When the optional subwoofer or optional rear speaker is connected, wireless connection might be broken.

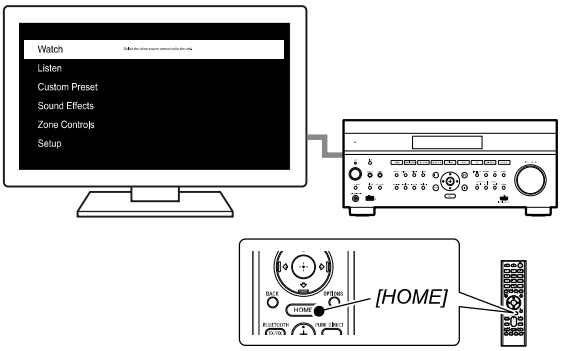
Initialization procedure:

1. Connect this unit to the TV monitor, plug the power cord to an AC outlet, and press the [⏻] button on the remote control to turn the power on.

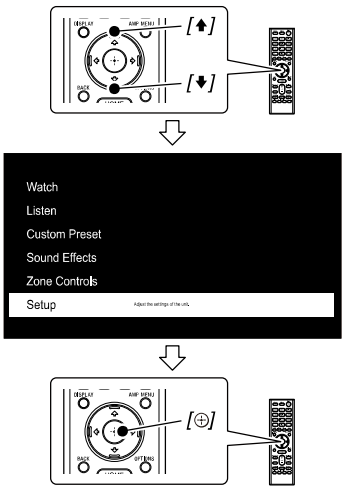
Note 3: For details on how to connect the TV monitor, refer to the instruction manual supplied with this unit.



2. Press the [HOME] button on the remote control to display the home menu on the TV monitor.

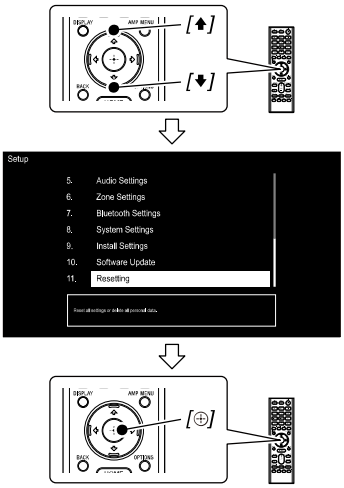


3. Press the [🡅]/[🡇] button on the remote control, select the “Setup”, and press the [⊕] button.

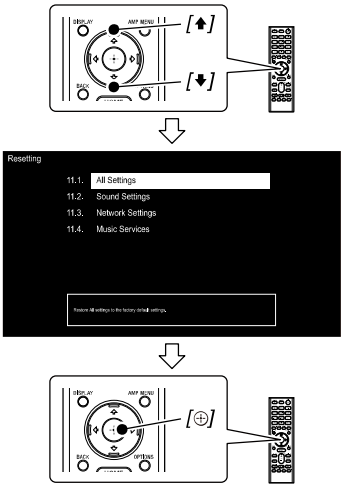


– Continued on upper right –

4. Press the [🡅]/[🡇] button on the remote control, select the “Resetting”, and press the [⊕] button.



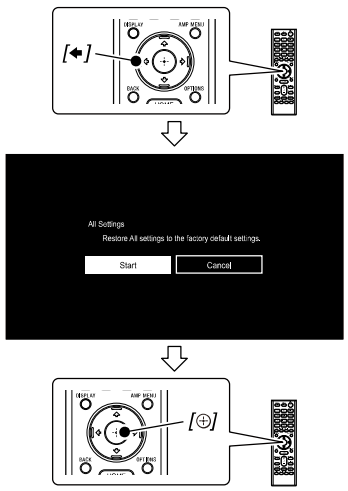
5. Press the [🡅]/[🡇] button on the remote control, select the “All Settings”, and press the [⊕] button.



– Continued on next page –

6. Press the [🡄] button on the remote control, select the “Start”, and press the [⊕] button to start the initialization.

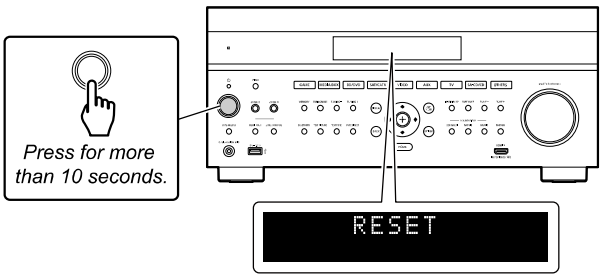
Note 4: When it cancel the initialization operation, select the “Cancel” in this procedure, and press the [⊕] button on the remote control.



7. After reboot automatically, the power is turned off automatically and return to factory default.

- **When it cannot initialization by operating the home menu**

With the power has turned off, press the [⏻] button for more than 10 seconds on front panel of unit.
The message “RESET” is displayed on the display panel, it performs the initialization and reboot automatically, then power is turned off automatically.



NOTE OF REPLACING THE GENOA BOARD

When replacing the GENOA board with a new board, be sure to perform the following checking work.

- Check the network connection
  (Refer to “NETWORK CONNECTION CHECKING METHOD” on page 9)
- Check the BLUETOOTH connection
  (Refer to “BLUETOOTH CONNECTION CHECKING METHOD” on page 10)

NOTE OF REPLACING THE ANT1 BOARD

When replacing the ANT1 board with a new board, be sure to perform the following checking work.

- Check the network connection
  (Refer to “NETWORK CONNECTION CHECKING METHOD” on page 9)
- Check the BLUETOOTH connection
  (Refer to “BLUETOOTH CONNECTION CHECKING METHOD” on page 10)

NOTE OF REPLACING THE ANT2 BOARD

When replacing the ANT2 board with a new board, be sure to perform the following checking work.

- Check the network connection
  (Refer to “NETWORK CONNECTION CHECKING METHOD” on page 9)
- Check the BLUETOOTH connection
  (Refer to “BLUETOOTH CONNECTION CHECKING METHOD” on page 10)

NOTE OF REPLACING THE COAXIAL HARNESS

When replacing the following coaxial harness with a new part, be sure to perform the following checking work.

Target parts:

- Coaxial harness between ANT1 board and GENOA board
- Coaxial harness between ANT2 board and DIGITAL board

Checking works:

- Check the network connection
  (Refer to “NETWORK CONNECTION CHECKING METHOD” on page 9)
- Check the BLUETOOTH connection
  (Refer to “BLUETOOTH CONNECTION CHECKING METHOD” on page 10)

NETWORK CONNECTION CHECKING METHOD

When checking the network connection refer to the following.

1. Checking the wireless LAN connection

Necessary equipment:

- TV monitor
- Access point

Procedure:

1. Connect this unit to the TV monitor.

Note 1: For details on how to connect the TV monitor, refer to the instruction manual supplied with this unit.

2. Press the [⏻] button to turn the power on.
3. Press the [HOME] button on the remote control, display the home screen.
4. Press the [↑]/[↓] buttons on the remote control to select the "Setup", and press the [⊕] button on the remote control.
5. Press the [↑]/[↓] buttons on the remote control to select the "Network Settings", and press the [⊕] button on the remote control.
6. Press the [↑]/[↓] buttons on the remote control to select the "Internet Settings", and press the [⊕] button on the remote control.

Note 2: Make sure that the item "Wi-Fi connection" above "Internet Settings" is set to [On]. If a network LAN cable is connected, the "Wi-Fi connection" item is grayed out. Unplug the network LAN cable before proceeding to the next step.

7. The message "Next" is displayed.
8. Press the [⊕] button on the remote control, it automatically starts searching for Wi-Fi networks.
9. Press the [↑]/[↓] buttons on the remote control to select the Wi-Fi network to connect to this unit.
10. Enter the password for Wi-Fi network to connect to this unit using the remote control.
11. When Wi-Fi network connection is completed, "Connection Method: Wi-Fi" and "Internet Access: OK" is displayed.

Note 3: Refer to the help guide about details of the network connection method.

2. Checking the wired LAN connection

Necessary equipment:

- TV monitor
- Router
- Network LAN cable

Procedure:

1. Connect this unit to the TV monitor.

Note 1: For details on how to connect the TV monitor, refer to the instruction manual supplied with this unit.

2. Connect this unit to the router with the network LAN cable.
3. Press the [⏻] button to turn the power on.
4. Press the [HOME] button on the remote control, display the home screen.
5. Press the [↑]/[↓] buttons on the remote control to select the "Setup", and press the [⊕] button on the remote control.
6. Press the [↑]/[↓] buttons on the remote control to select the "Network Settings", and press the [⊕] button on the remote control.
7. Press the [↑]/[↓] buttons on the remote control to select the "Internet Settings", and press the [⊕] button on the remote control.
8. The message "Next" is displayed.
9. Press the [⊕] button on the remote control.
10. Press the [←]/[→] buttons on the remote control to select the "Auto", and press the [⊕] button on the remote control.
11. The "The network will be configured with the following settings" screen is display, and press the [→] button on the remote control.
12. Press the [←]/[→] buttons on the remote control to select the "Save & Connect", and press the [⊕] button on the remote control.
13. When wired LAN connection is completed, "Connection Method: Wired" and "Internet Access: OK" is displayed.

Note 2: Refer to the help guide about details of the network connection method.

BLUETOOTH CONNECTION CHECKING METHOD

When checking the BLUETOOTH connection refer to the following.

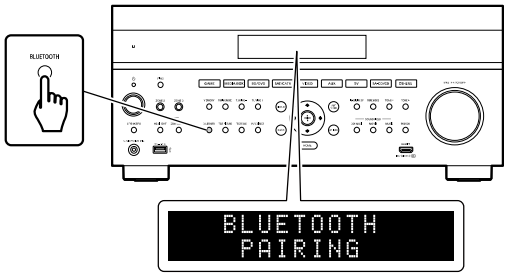
Preparation:

- Devices with BLUETOOTH function (smartphone or music player etc.)

Bluetooth Connection Procedure:

1. Press the [⏻] button to turn the power on.
2. Press the [BLUETOOTH] button, and enter the pairing mode. Check that the message “BLUETOOTH PAIRING” is displayed on the display panel.

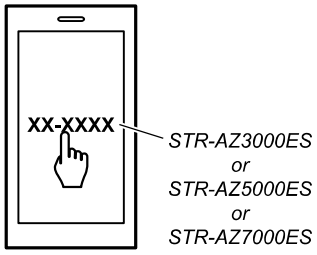
Note 1: If “NOT USE” is displayed when you press the [BLUETOOTH] button on this unit, it is in BLUETOOTH transmitter mode. In this case, press the [BLUETOOTH TX/RX] button on the remote control to switch to BLUETOOTH receiver mode.



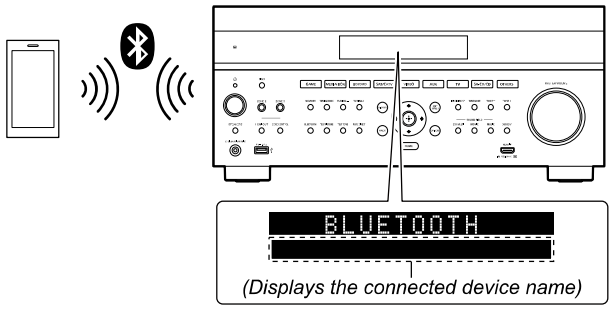
3. Operate the device with BLUETOOTH function such as a smartphone to search for “STR-AZ3000ES”, “STR-AZ5000ES” or “STR-AZ7000ES”, and perform the pairing.

Note 2: For the pairing operation method of the device with BLUETOOTH function, refer to the instruction manual of device with BLUETOOTH function.

Note 3: If a passkey is requested, input “0000”.



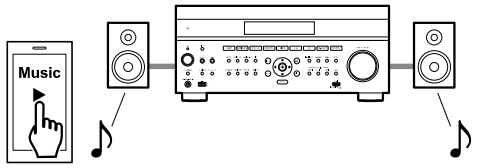
4. When the BLUETOOTH connection is established, the connected device name is displayed on the display panel.



– Continued on upper right –

5. Operate the device with BLUETOOTH function, start the audio playback, and check that the sound is output normally from each speakers.

Note 4: The speaker connection figure below is a reference example.



6. Operate the device with BLUETOOTH function, stop the audio playback.

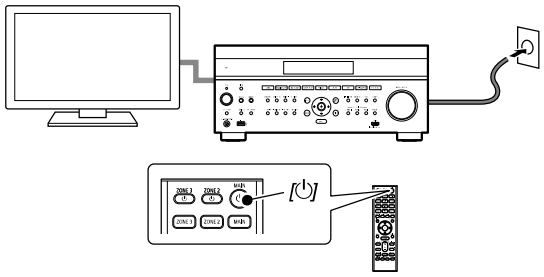
MAC ADDRESS CHECKING METHOD

When checking the MAC address, refer to the following.

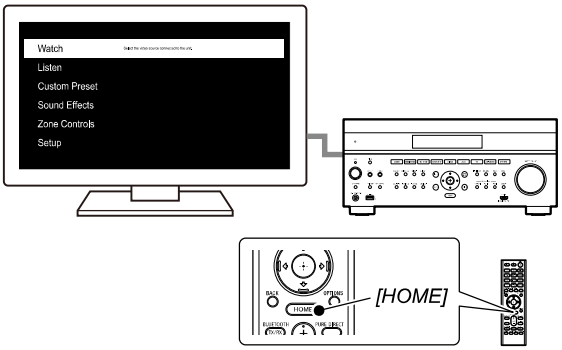
Checking Procedure:

1. Connect this unit to the TV monitor, plug the power cord to an AC outlet, and press the [⏻] button on the remote control to turn the power on.

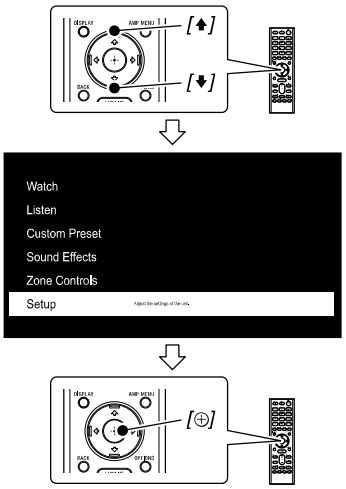
Note: For details on how to connect the TV monitor, refer to the instruction manual supplied with this unit.



2. Press the [HOME] button on the remote control to display the home menu on the TV monitor.

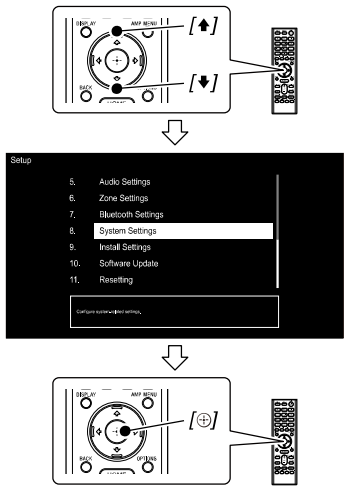


3. Press the [🡅]/[🡇] button on the remote control, select the “Set-up”, and press the [⊕] button.

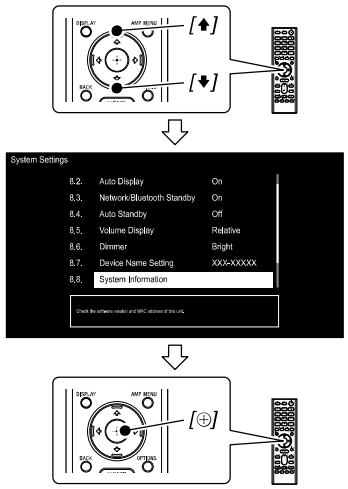


– Continued on upper right –

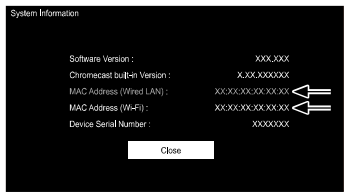
4. Press the [🡅]/[🡇] button on the remote control, select the “System Settings”, and press the [⊕] button.



5. Press the [🡅]/[🡇] button on the remote control, select the “System Information”, and press the [⊕] button.



6. Check the MAC address by referring to the MAC address (Wired LAN) field and MAC address (Wi-Fi) field on the displayed “System Information” screen.



7. Press the [⊕] button on the remote control to close the system information screen, press the [⏻] button on the remote control to turn the power off, and complete the check of MAC address.

WIRELESS CONNECTION (LINK) WORK

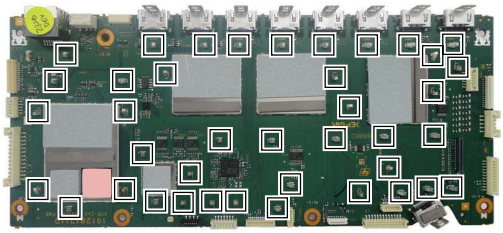
When replace the board or parts related to the wireless connection (link) with optional unit such as a wireless subwoofer or wireless rear speaker, or when perform initialization, the wireless connection (link) between this unit and the optional unit may be disconnected, or may not connected properly.
Refer to the help guide for this unit, about method of wireless connection between this unit and wireless rear speaker, or wireless subwoofer.

NOTE OF TOUCHING THE CONTACT TERMINAL

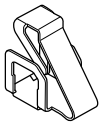
There are 40 contact terminals mounted on the DIGITAL board. Be careful not to touch the contact terminals directly.

- Location of contact terminals

DIGITAL Board (Side A)



Contact terminals



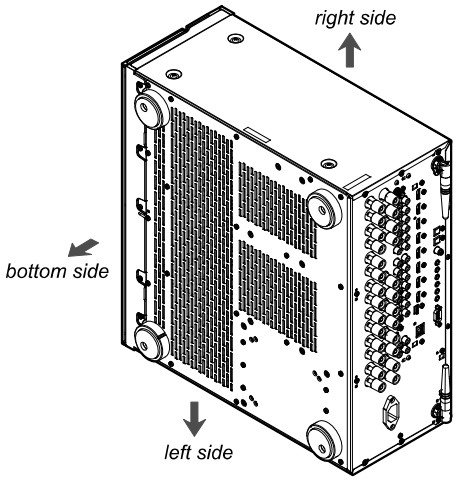
Ref. No.
ET2001, ET2002, ET2003, ET2004, ET2005, ET2006, ET2007, ET2008, ET2009, ET2010, ET2011, ET2014, ET2015, ET2016, ET2017, ET2018, ET2019, ET2020, ET2021, ET2022, ET2023, ET2024, ET2025, ET2026, ET2027 ET2028, ET2029, ET2030, ET2031, ET2032, ET2033, ET8262, ET8263, ET8412, ET8413, ET8414, ET8415, ET8562, ET8563, ET8564

THE CONDUCTOR SIDE OF THE AMP BOARD, SPTM BOARD AND PS BOARD CHECKING METHOD

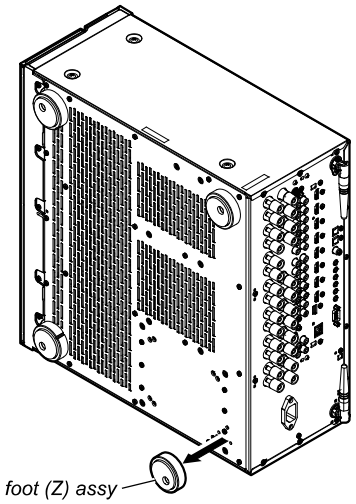
It is possible to remove the panel bottom of this unit and check the reverse side of the board from the bottom side. Refer to this method when checking the conductor side of the AMP board, SPTM board, or PS board.

Procedure:

1. Place the unit so that the bottom of the unit can be seen.

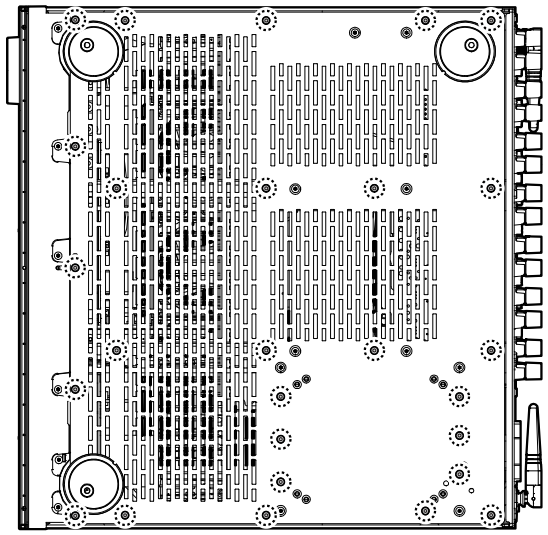


2. Remove the foot (Z) assy shown in the figure below.

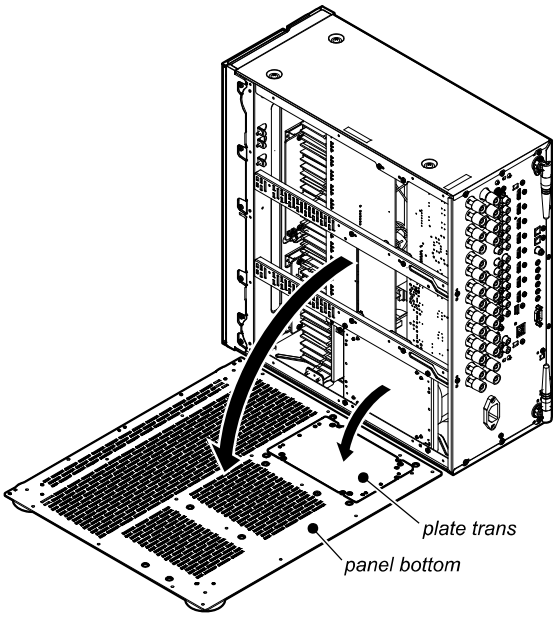


– Continued on next page –

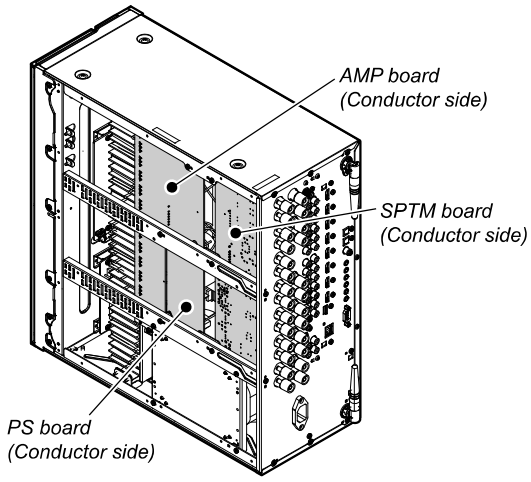
3. Remove the screws shown in the figure below.



4. Remove the panel bottom (and plate trans).



5. Check the conductor side of the AMP board, SPTM board, or PS board.

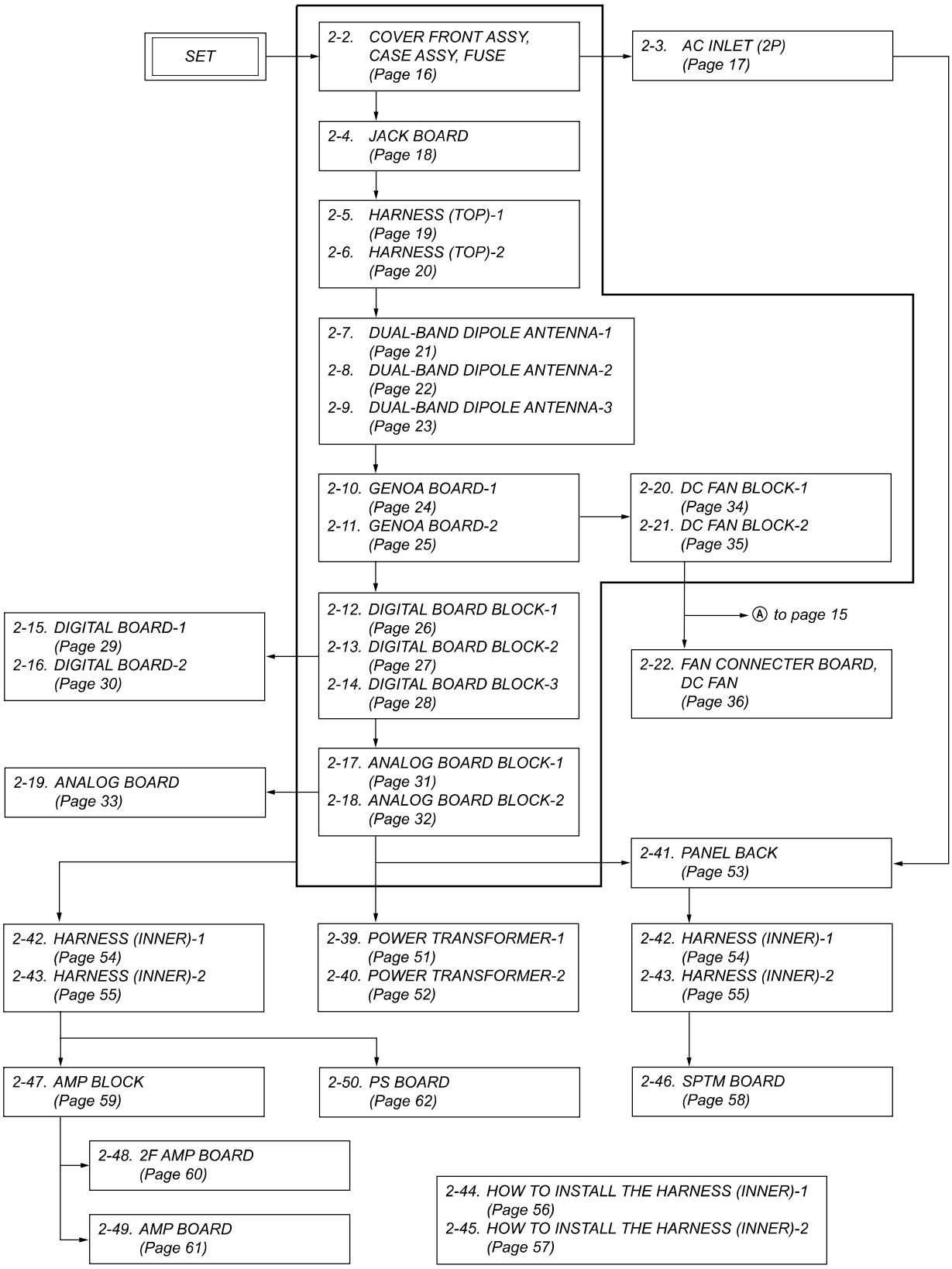


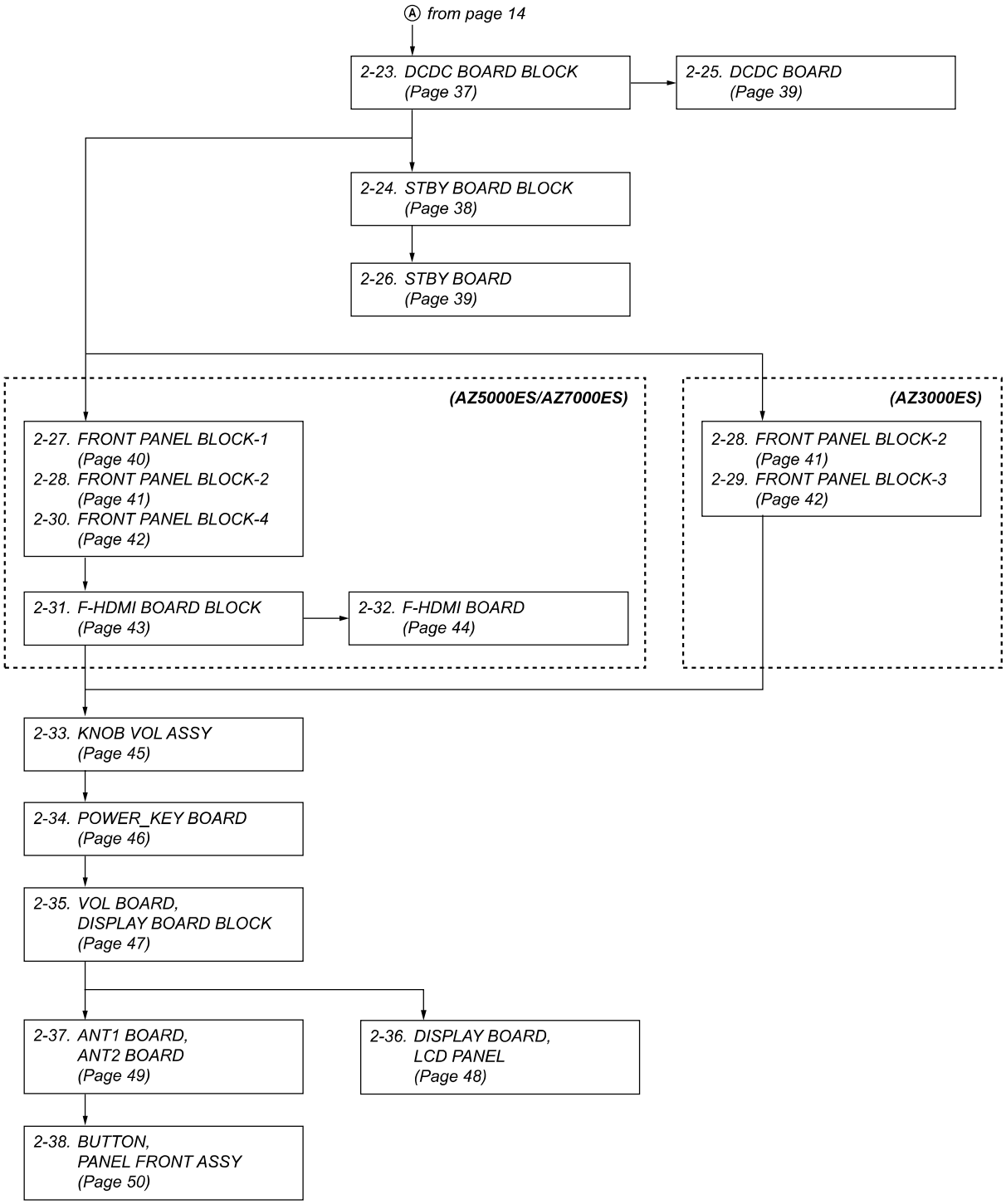
STR-AZ3000ES/AZ5000ES/AZ7000ES

SECTION 2
DISASSEMBLY

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

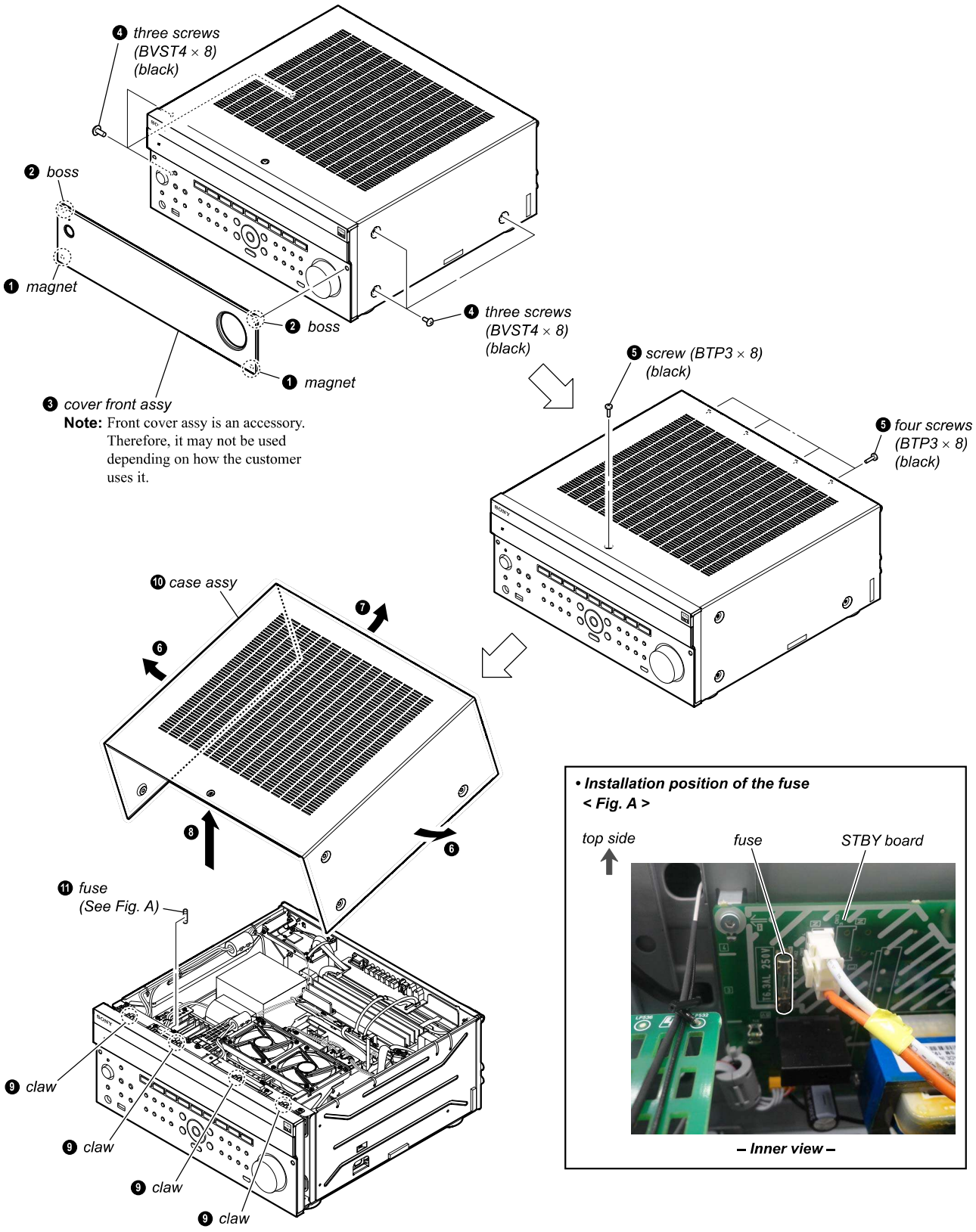
2-1. DISASSEMBLY FLOW




Ⓐ from page 14
2-23. DCDC BOARD BLOCK (Page 37)
2-25. DCDC BOARD (Page 39)
2-24. STBY BOARD BLOCK (Page 38)
2-26. STBY BOARD (Page 39)
(AZ5000ES/AZ7000ES)
(AZ3000ES)
2-27. FRONT PANEL BLOCK-1 (Page 40)
2-28. FRONT PANEL BLOCK-2 (Page 41)
2-30. FRONT PANEL BLOCK-4 (Page 42)
2-28. FRONT PANEL BLOCK-2 (Page 41)
2-29. FRONT PANEL BLOCK-3 (Page 42)
2-31. F-HDMI BOARD BLOCK (Page 43)
2-32. F-HDMI BOARD (Page 44)
2-33. KNOB VOL ASSY (Page 45)
2-34. POWER_KEY BOARD (Page 46)
2-35. VOL BOARD, DISPLAY BOARD BLOCK (Page 47)
2-37. ANT1 BOARD, ANT2 BOARD (Page 49)
2-36. DISPLAY BOARD, LCD PANEL (Page 48)
2-38. BUTTON, PANEL FRONT ASSY (Page 50)

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

2-2. COVER FRONT ASSY, CASE ASSY, FUSE

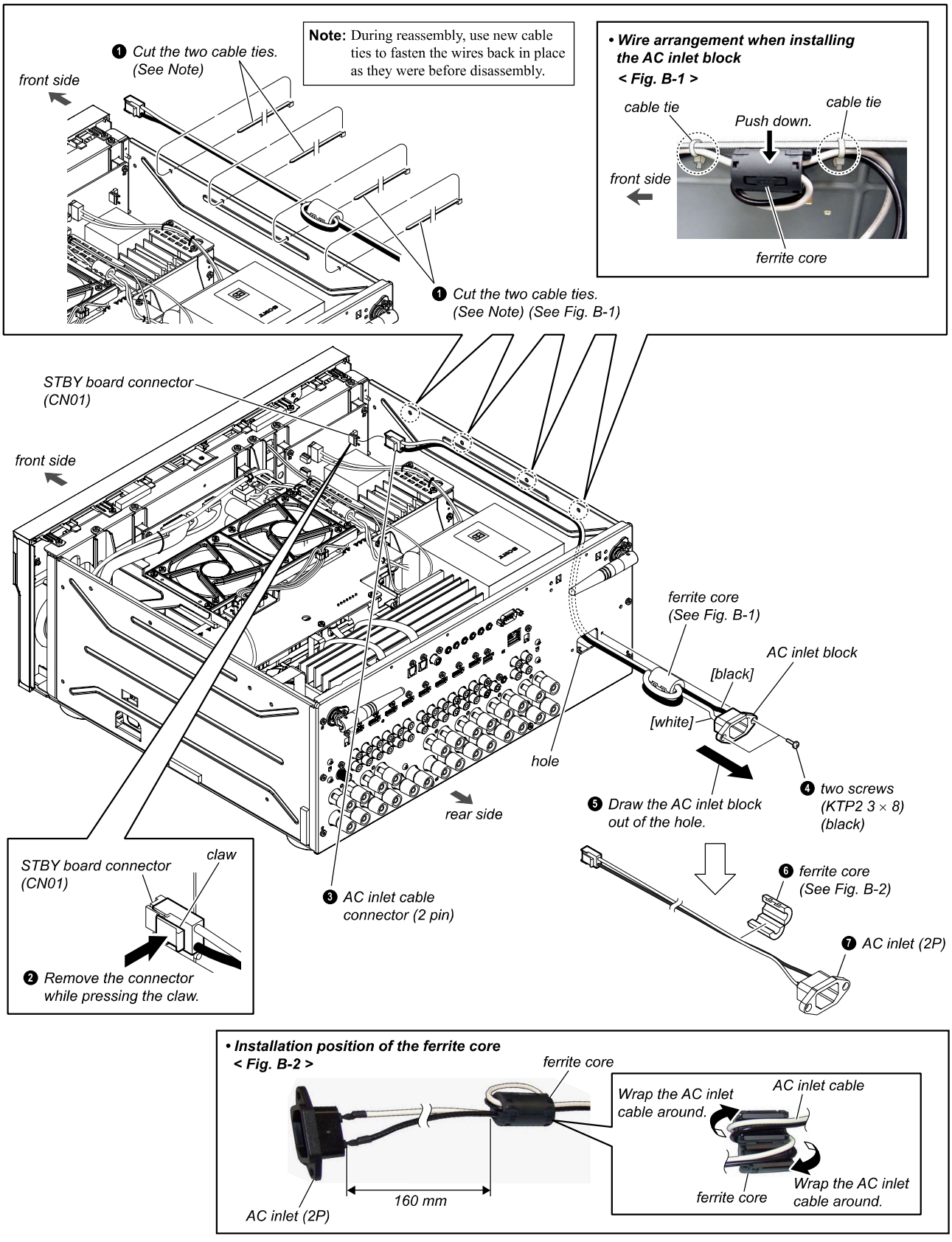


Note: Front cover assy is an accessory. Therefore, it may not be used depending on how the customer uses it.

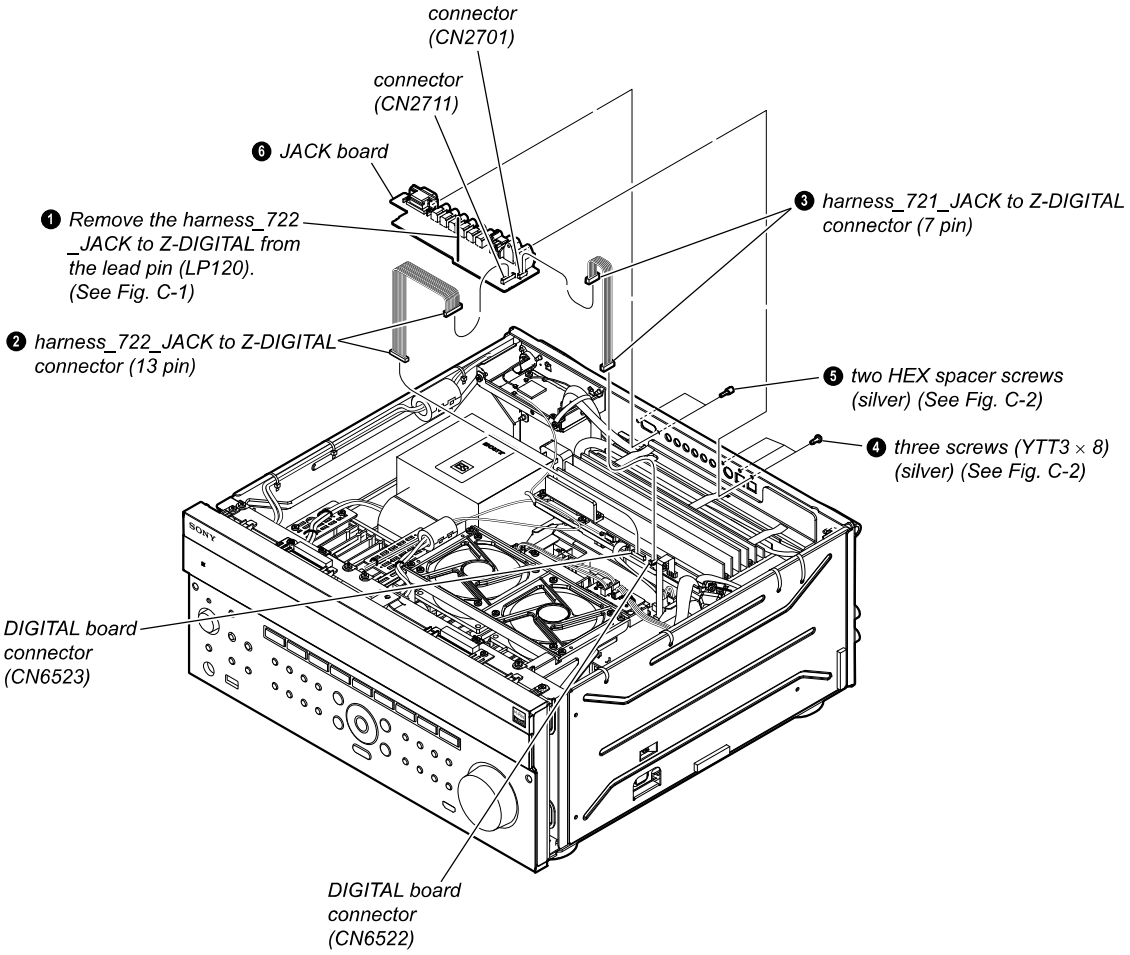
• ***Installation position of the fuse***
< Fig. A >

– Inner view –

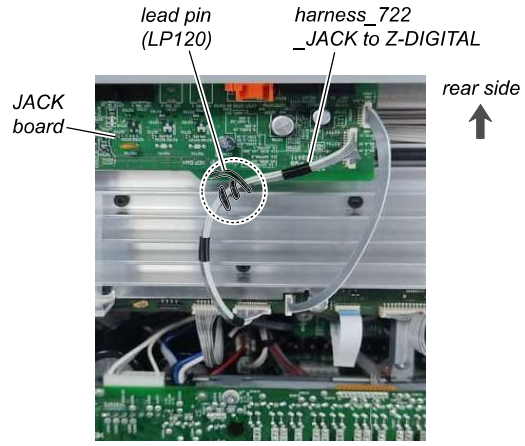
2-3. AC INLET (2P)



2-4. JACK BOARD



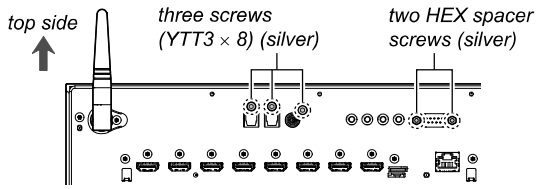
• *Wire arrangement when installing the JACK board*
< Fig. C-1 >



– Top view –

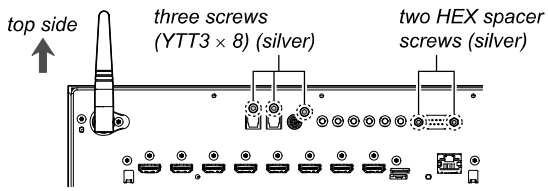
• *Installation position of the screw*
< Fig. C-2 >

(AZ3000ES)



– Rear view –

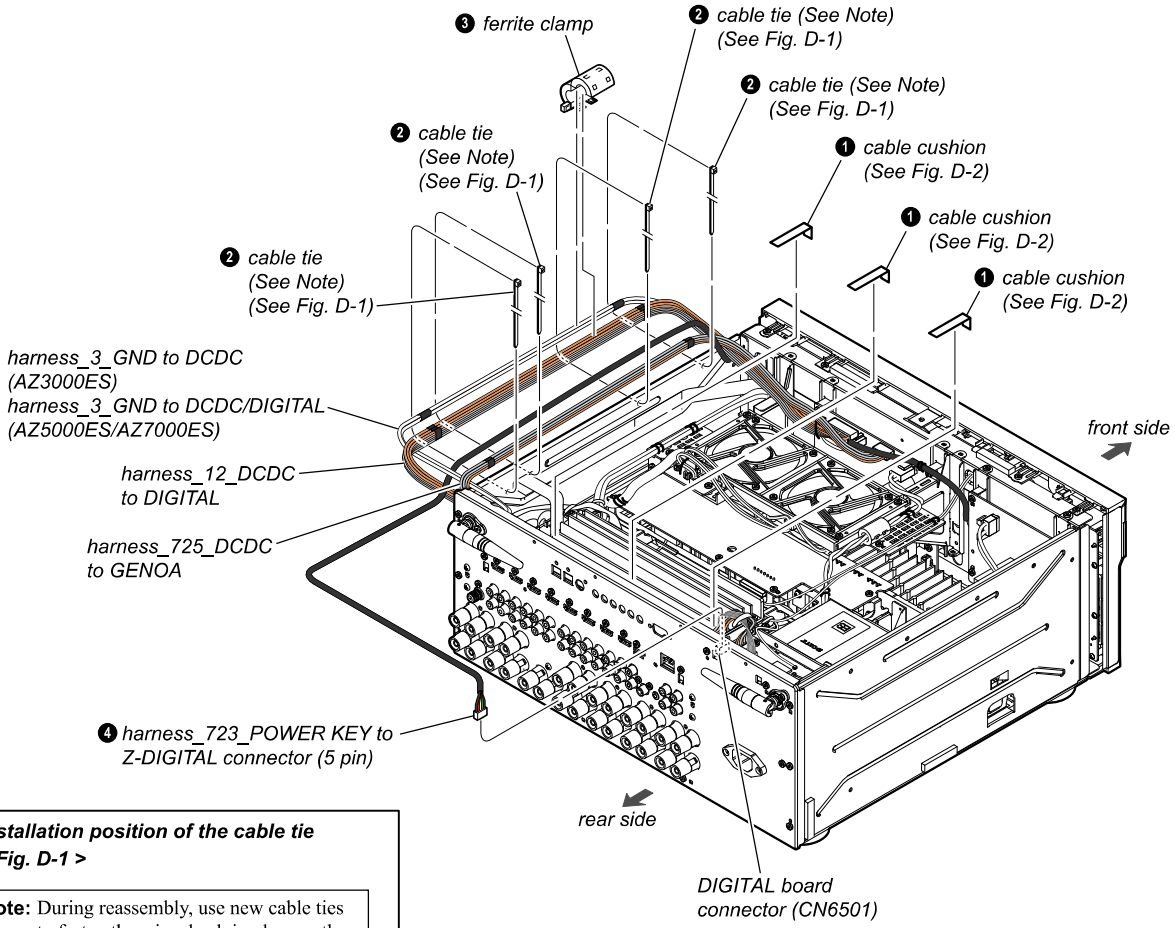
(AZ5000ES/AZ7000ES)



– Rear view –

2-5. HARNESS (TOP)-1

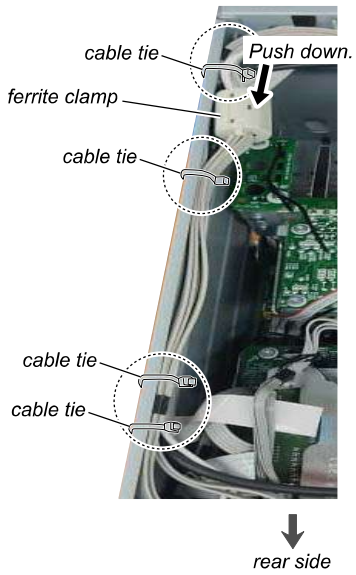
• Continued on 2-6 (page 20).



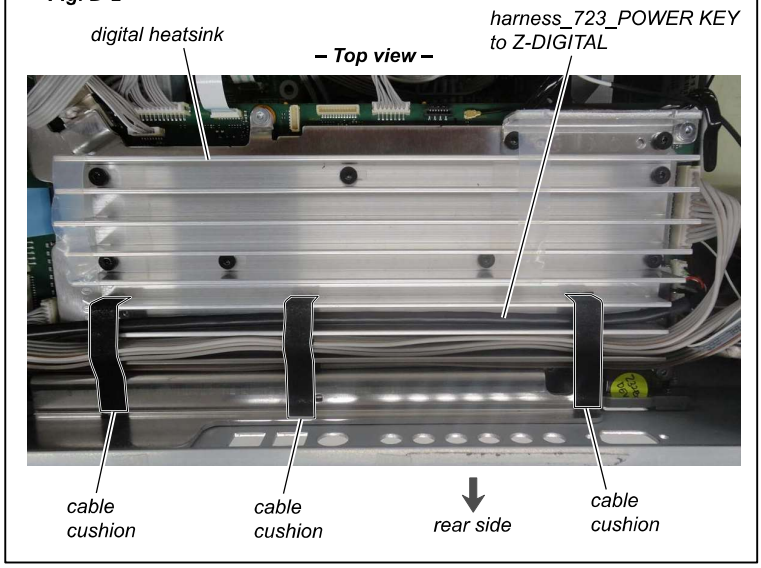
• Installation position of the cable tie
< Fig. D-1 >

Note: During reassembly, use new cable ties to fasten the wires back in place as they were before disassembly.

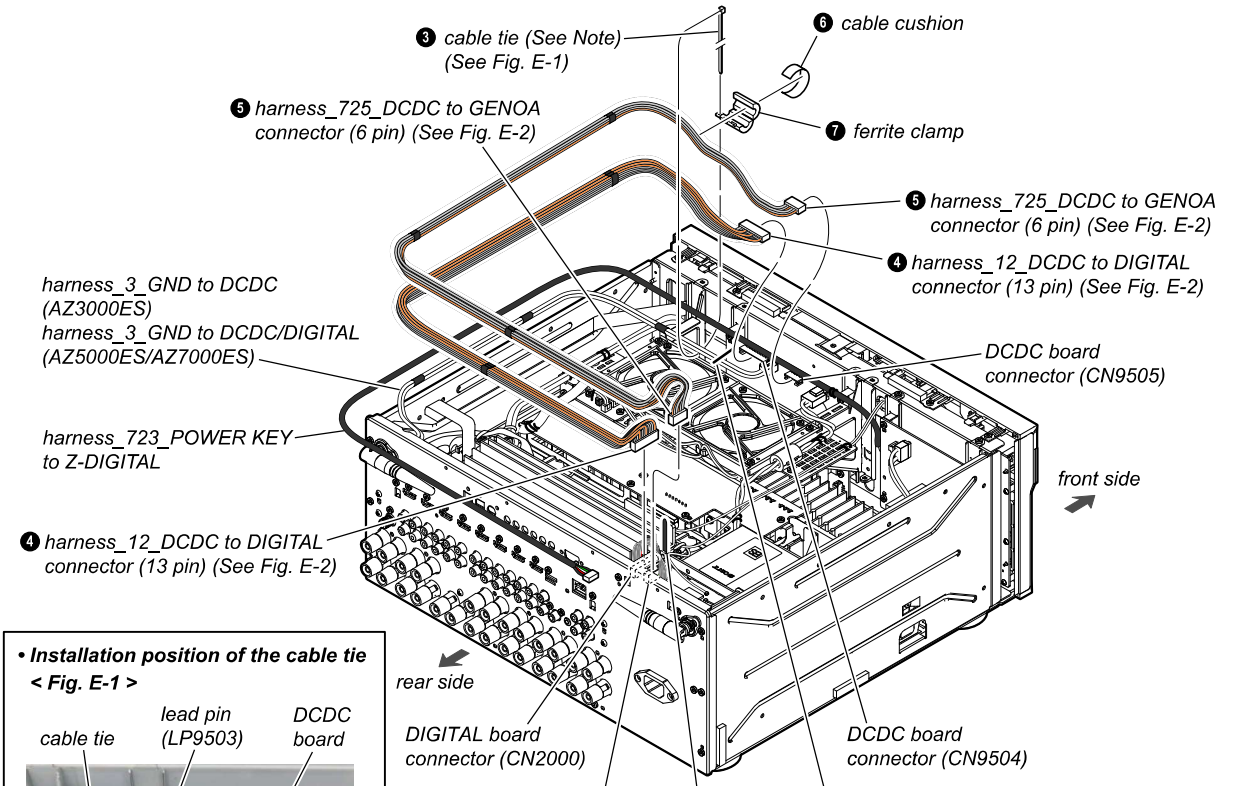
– Top view –



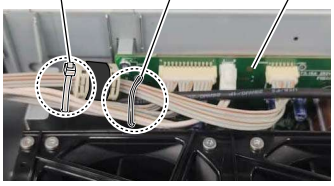
• Pasting position of the cable cushion
< Fig. D-2 >



2-6. HARNESS (TOP)-2



• Installation position of the cable tie
< Fig. E-1 >



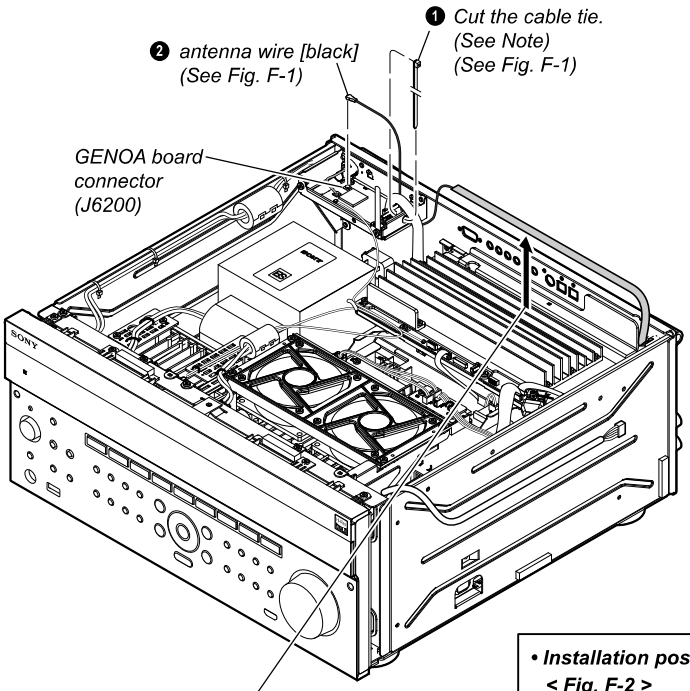
– Inner view –

• Wire setting of the harness_12_DCDC to DIGITAL and harness_725_DCDC to GENOA
< Fig. E-2 >

– Top view –

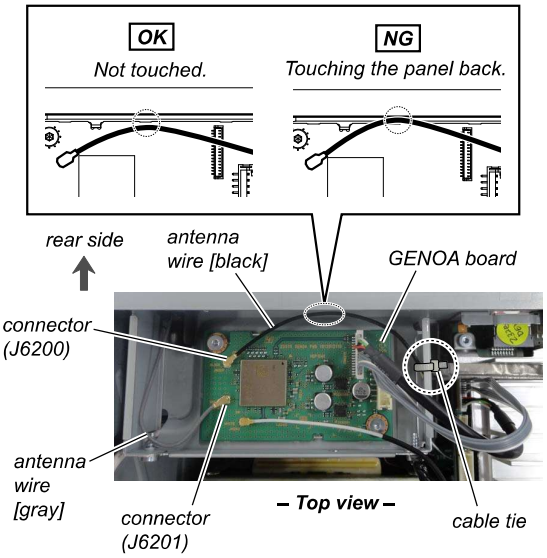
2-7. DUAL-BAND DIPOLE ANTENNA-1

• Continued on 2-8 (page 22).

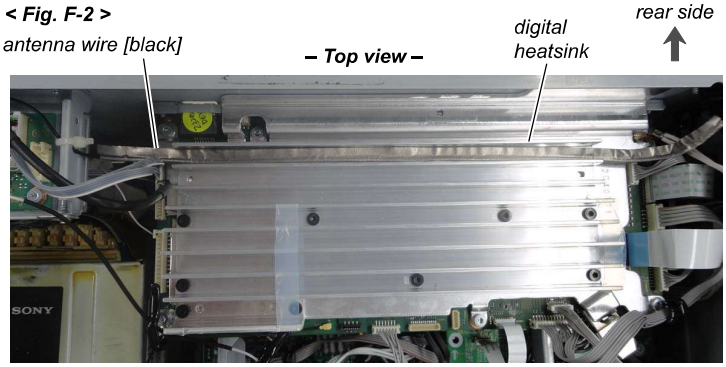


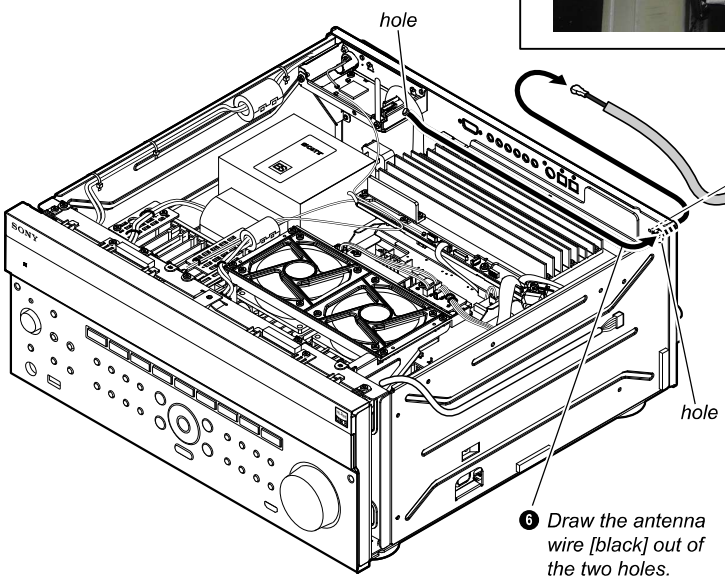
• ***Wire setting of the antenna block [black]***
< Fig. F-1 >

Note: During reassembly, use new cable ties to fasten the wires back in place as they were before disassembly.

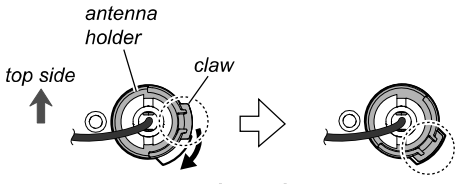


• ***Installation position of the antenna wire [black]***
< Fig. F-2 >



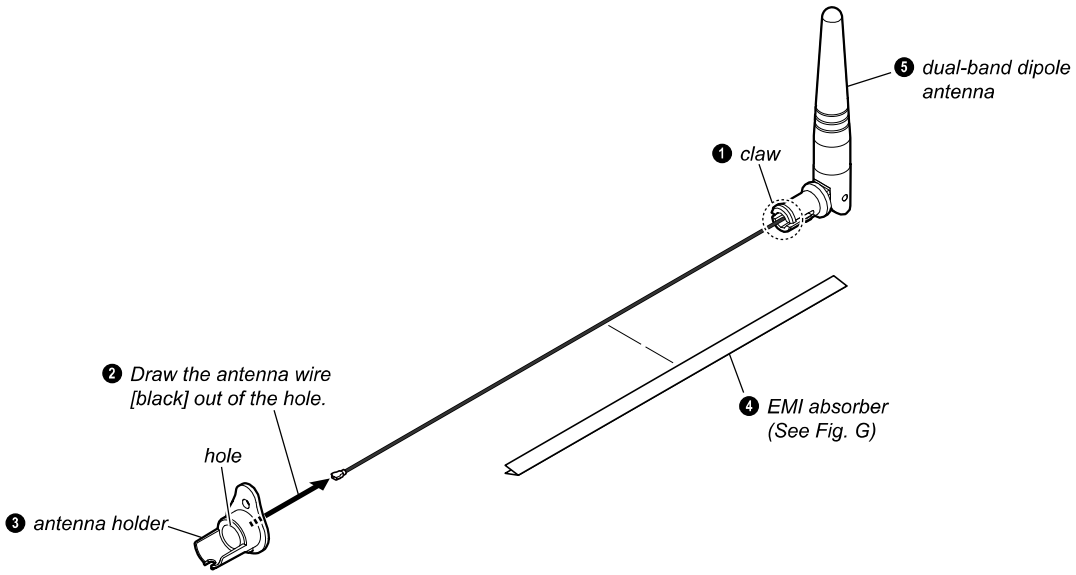


❺ *Rotate the claw of antenna holder in the direction of the arrow, align the hole of panel back.*

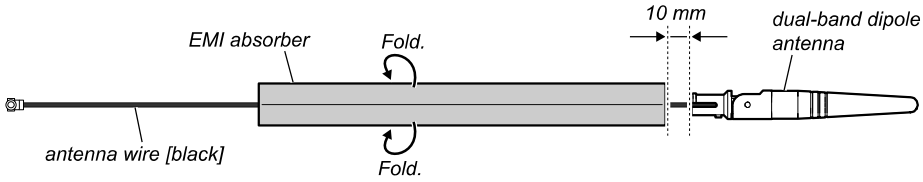


2-8. DUAL-BAND DIPOLE ANTENNA-2

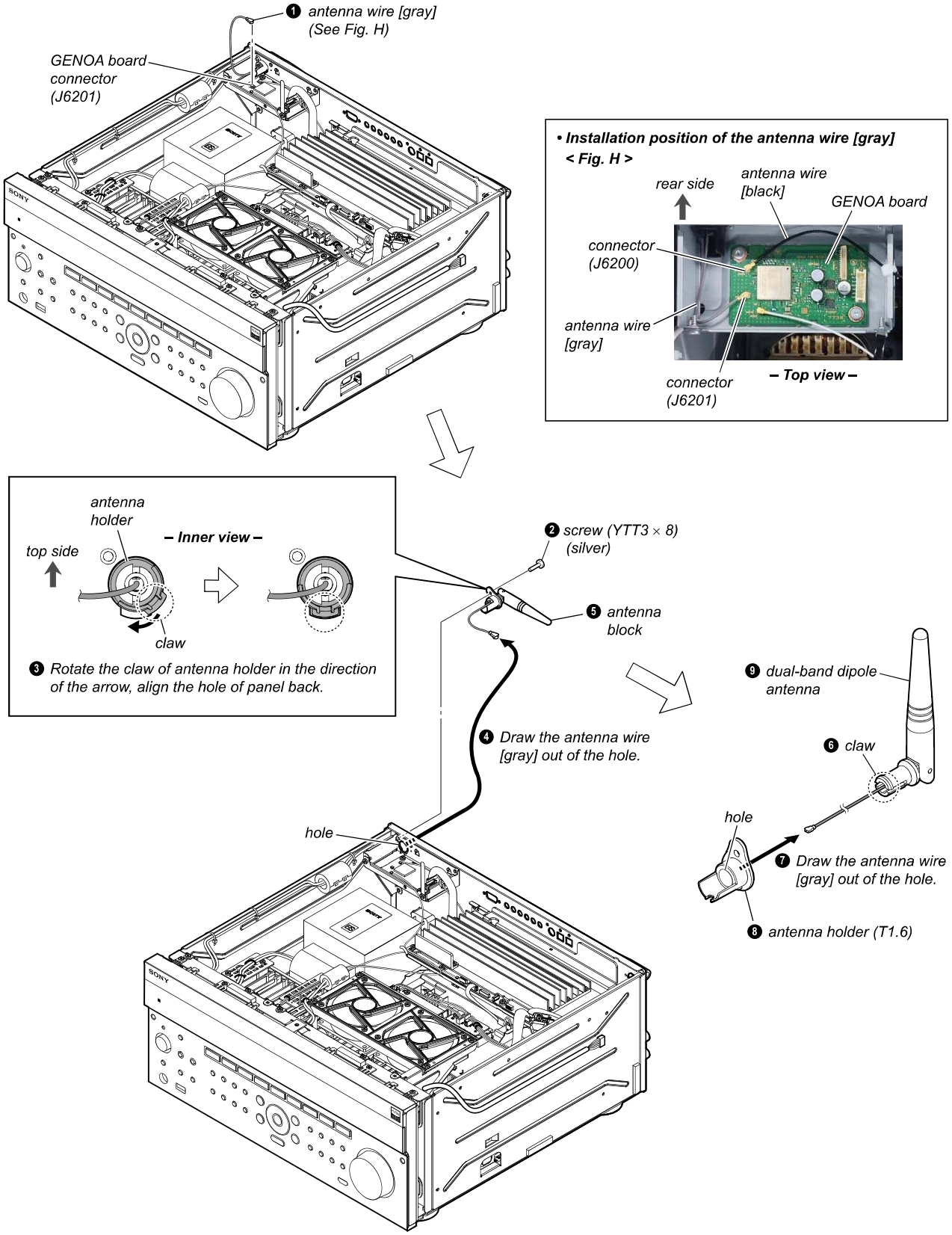
• Continued on 2-9 (page 23).



• Pasting position of the EMI absorber
< Fig. G >

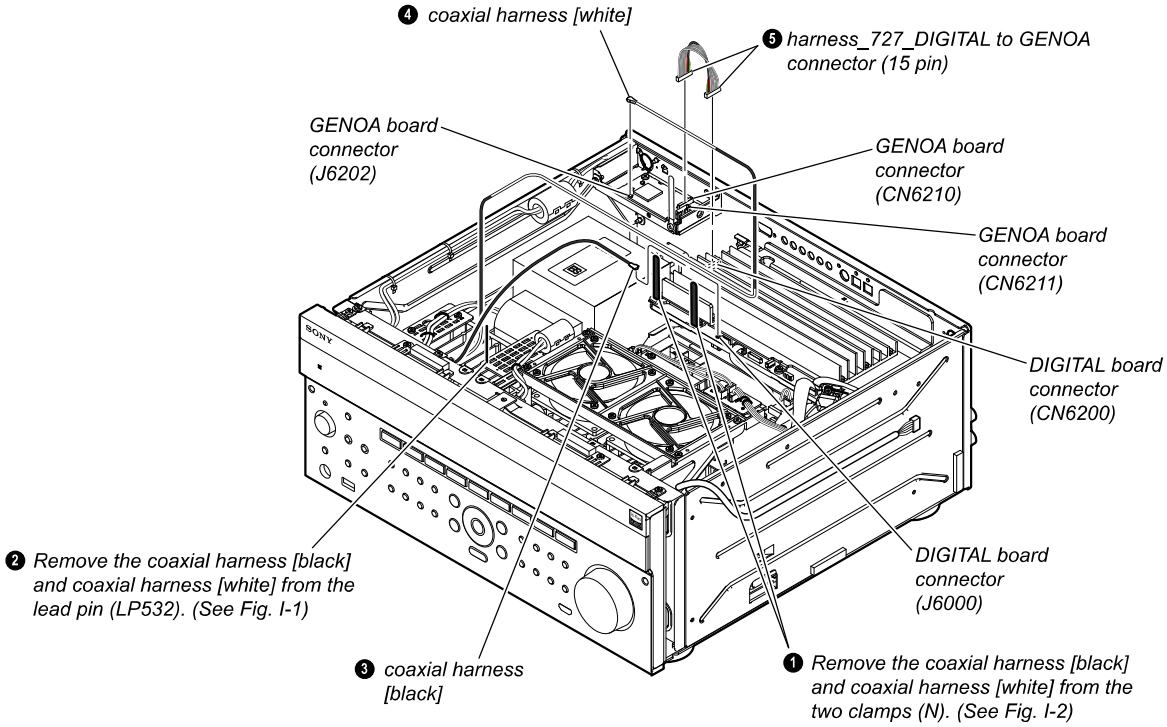


2-9. DUAL-BAND DIPOLE ANTENNA-3



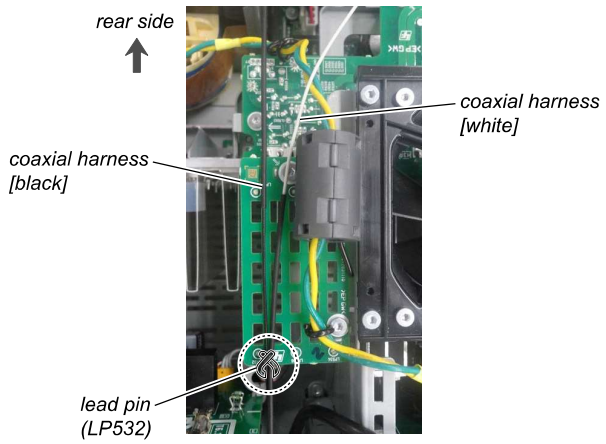
2-10. GENOA BOARD-1

• Continued on 2-11 (page 25).



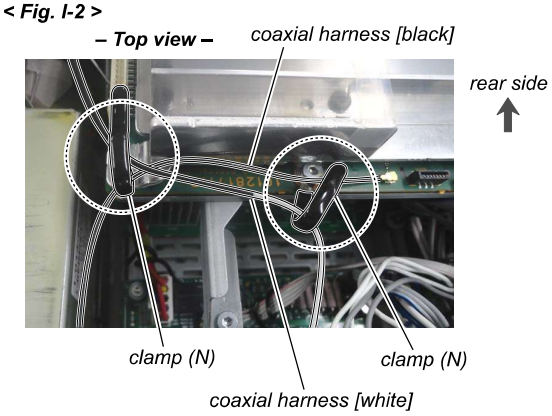
• Wire setting of the coaxial harness [black] and coaxial harness [white]

< Fig. I-1 >



– Top view –

< Fig. I-2 >

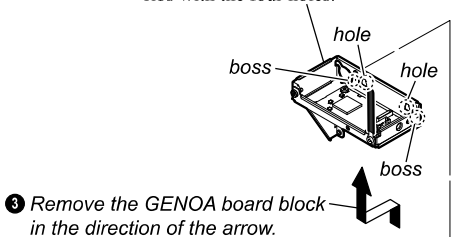


2-11. GENOA BOARD-2

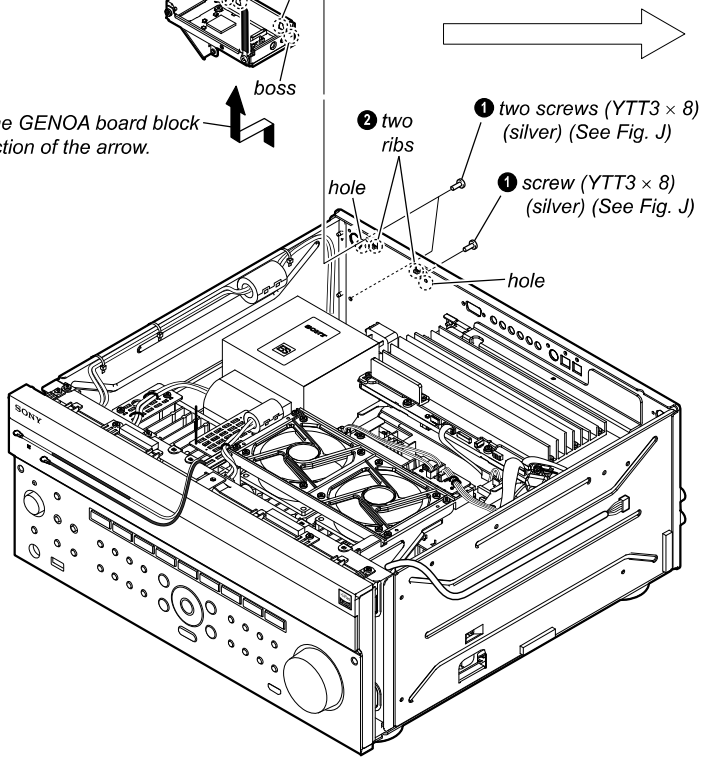
Note 1: When the GENOA board is replaced with a new board, be sure to refer to "NOTE OF REPLACING THE GENOA BOARD" on page 8.

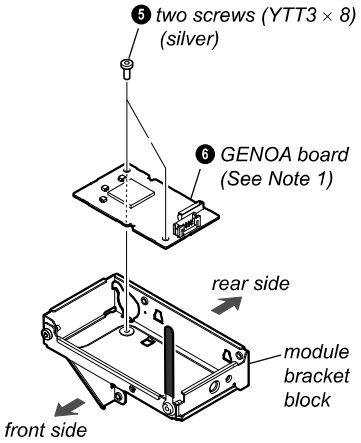
❹ *GENOA board block*

Note 2: When installing the GENOA board block, align the two bosses and two ribs with the four holes.

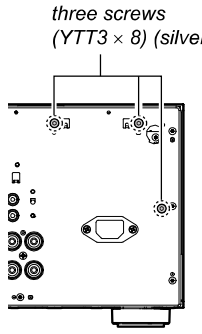


❸ *Remove the GENOA board block in the direction of the arrow.*





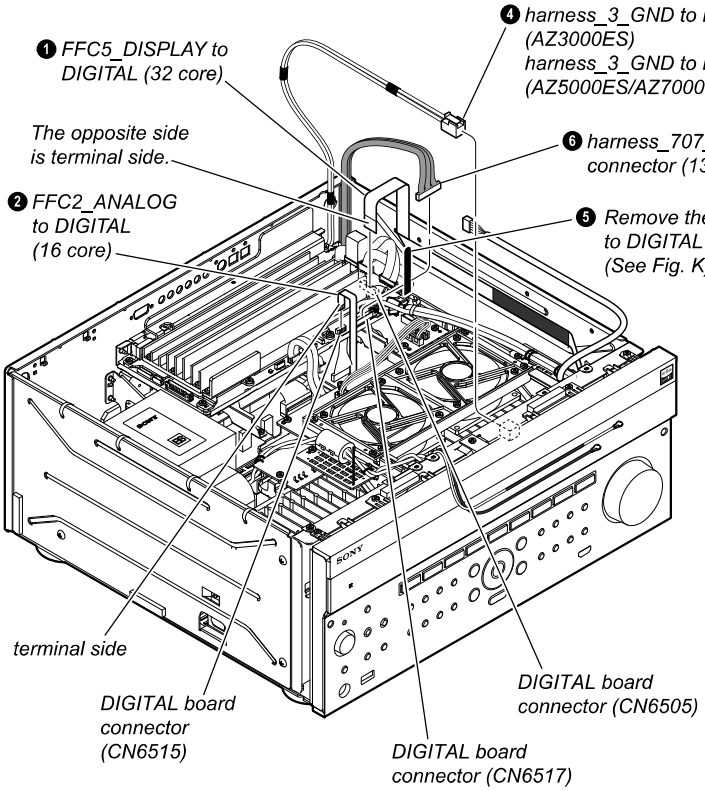
• ***Installation position of the screw***
< Fig. J >

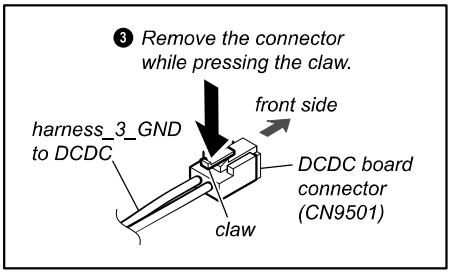


– Rear view –

2-12. DIGITAL BOARD BLOCK-1

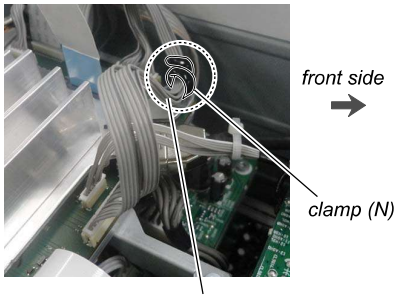
• Continued on 2-13 (page 27).

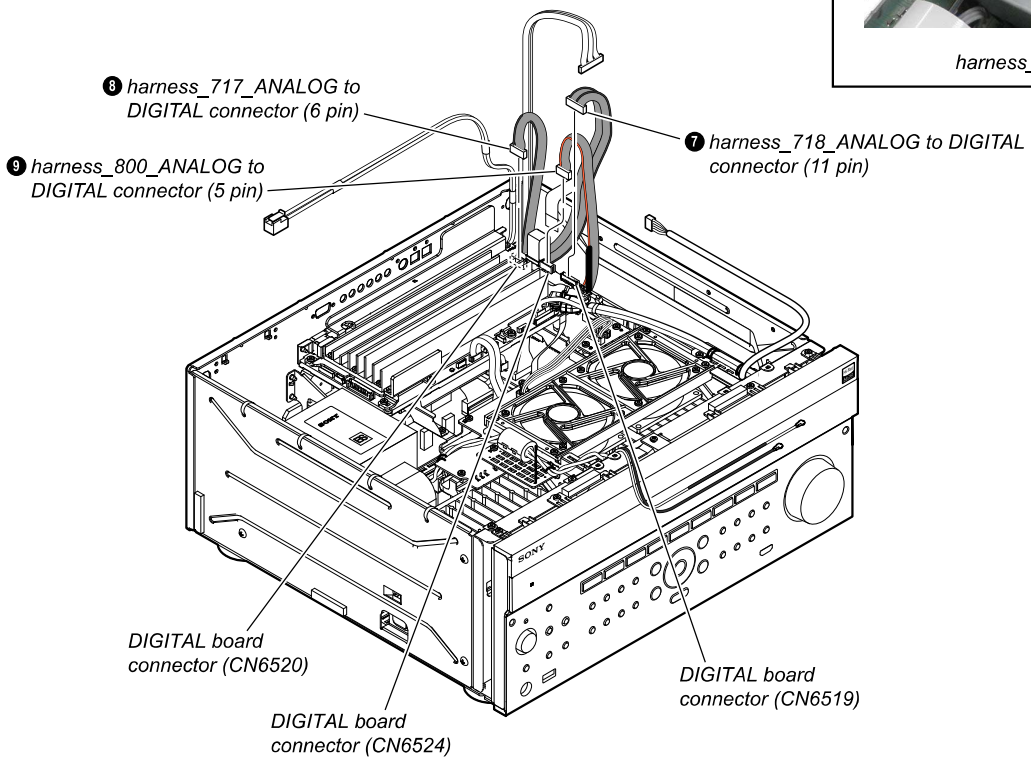




• Wire setting of the harness_707 _AMP to DIGITAL

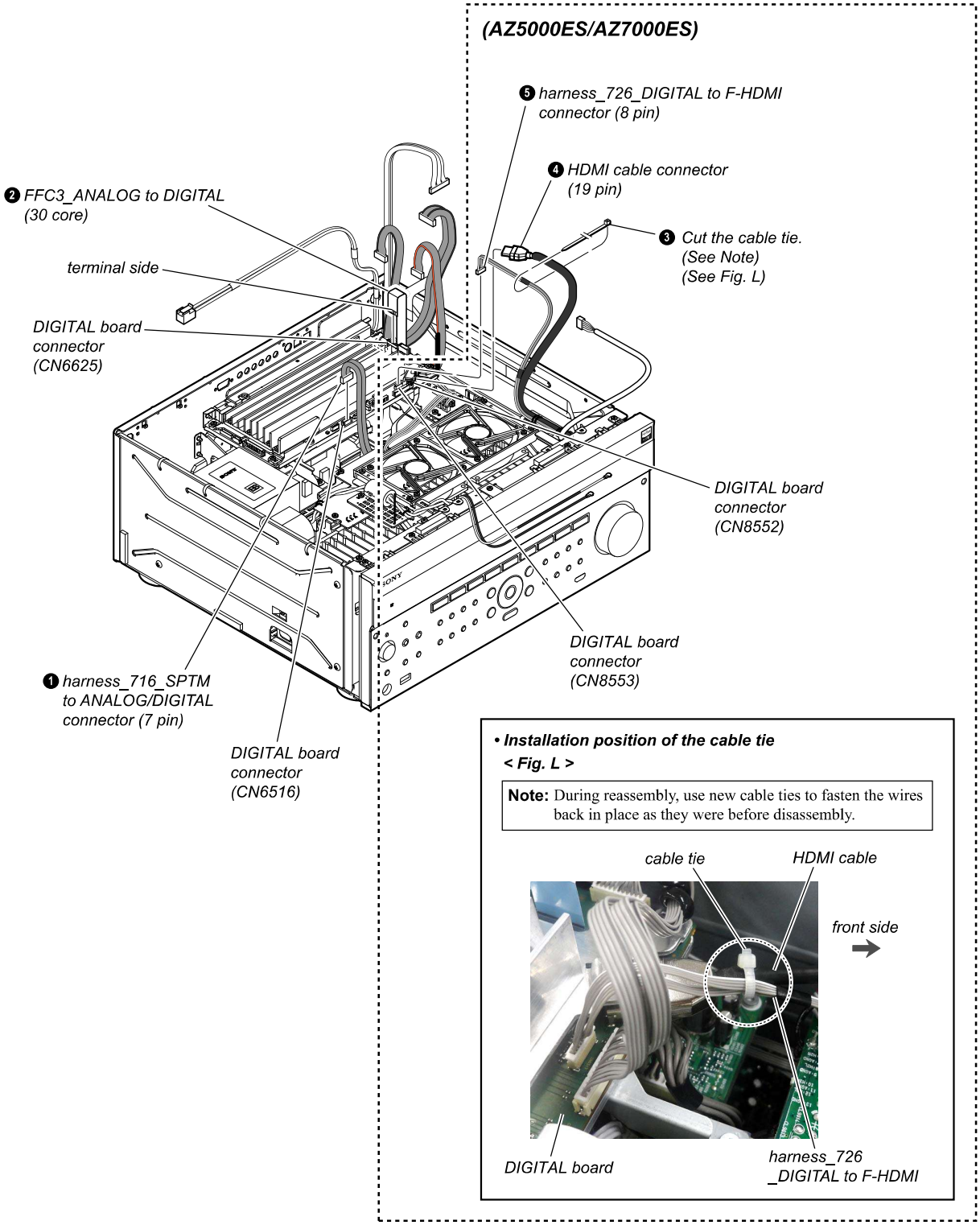
< Fig. K >



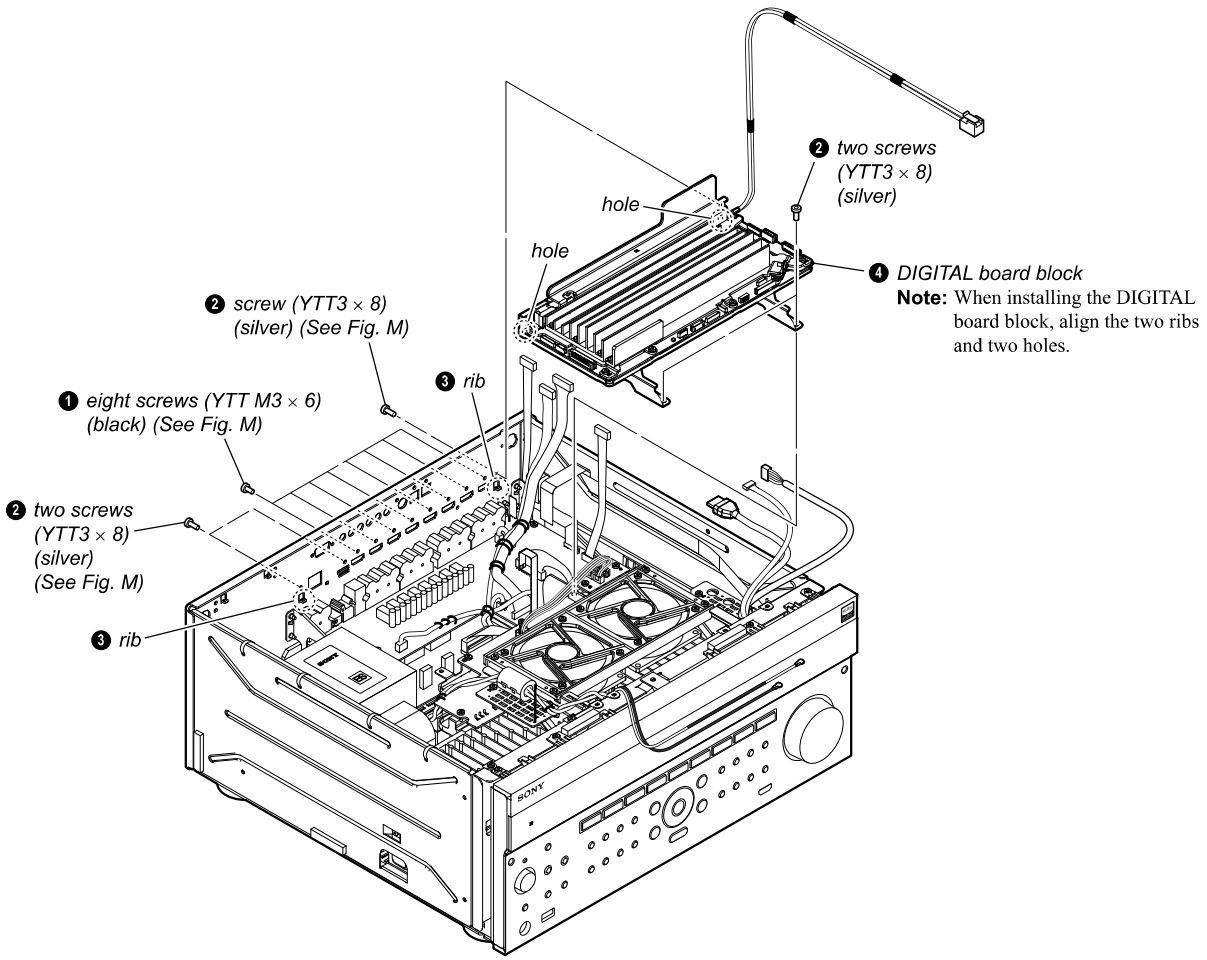


2-13. DIGITAL BOARD BLOCK-2

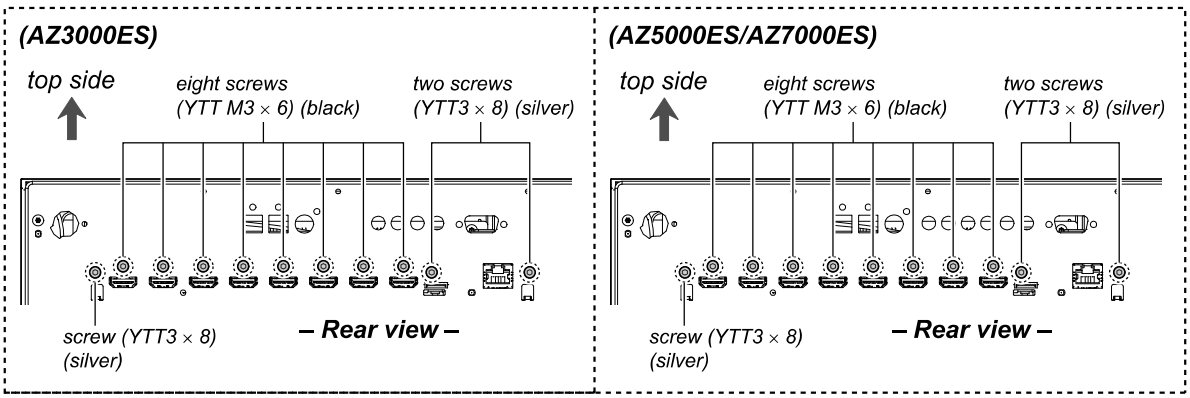
• Continued on 2-14 (page 28).



2-14. DIGITAL BOARD BLOCK-3

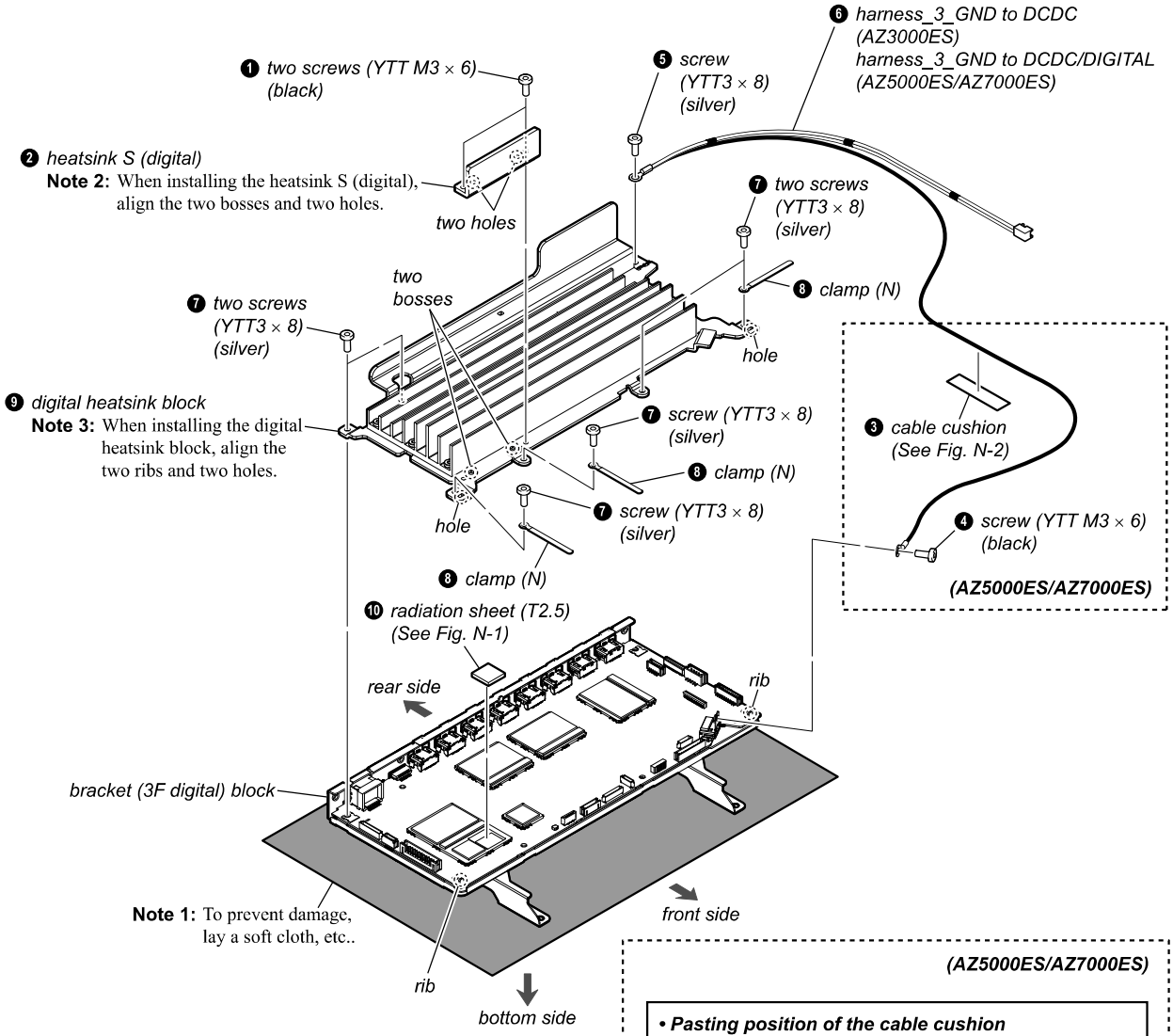


• ***Installation position of the screw***
< Fig. M >

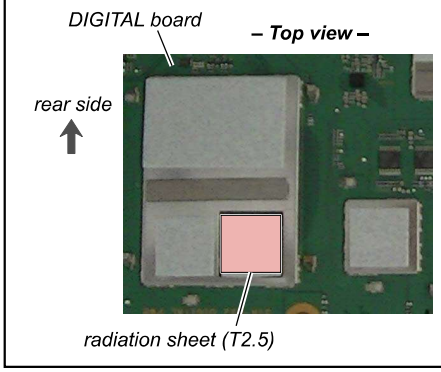


2-15. DIGITAL BOARD-1

• Continued on 2-16 (page 30).



• Pasting position of the radiation sheet (T2.5)
< Fig. N-1 >

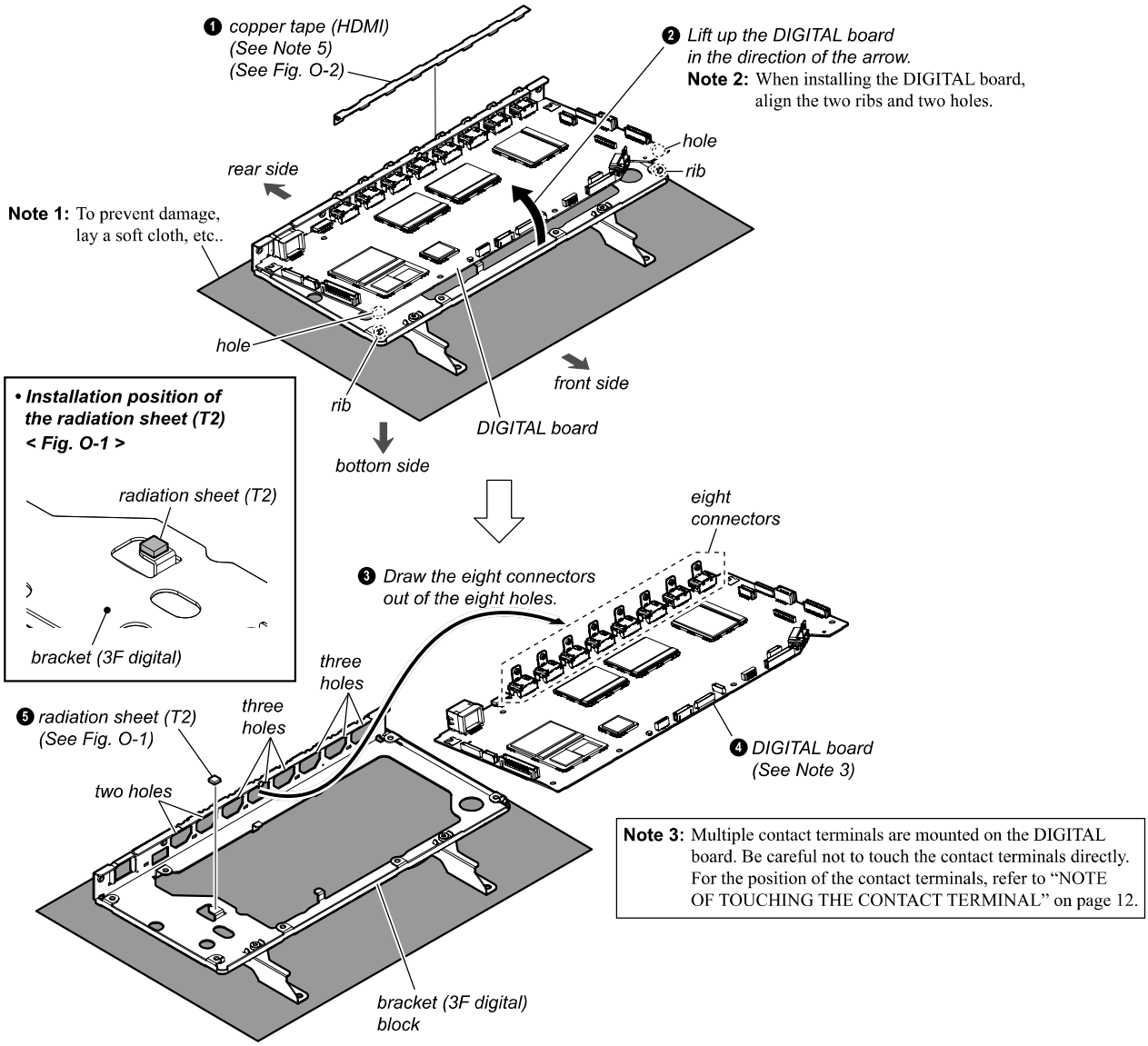


(AZ5000ES/AZ7000ES)

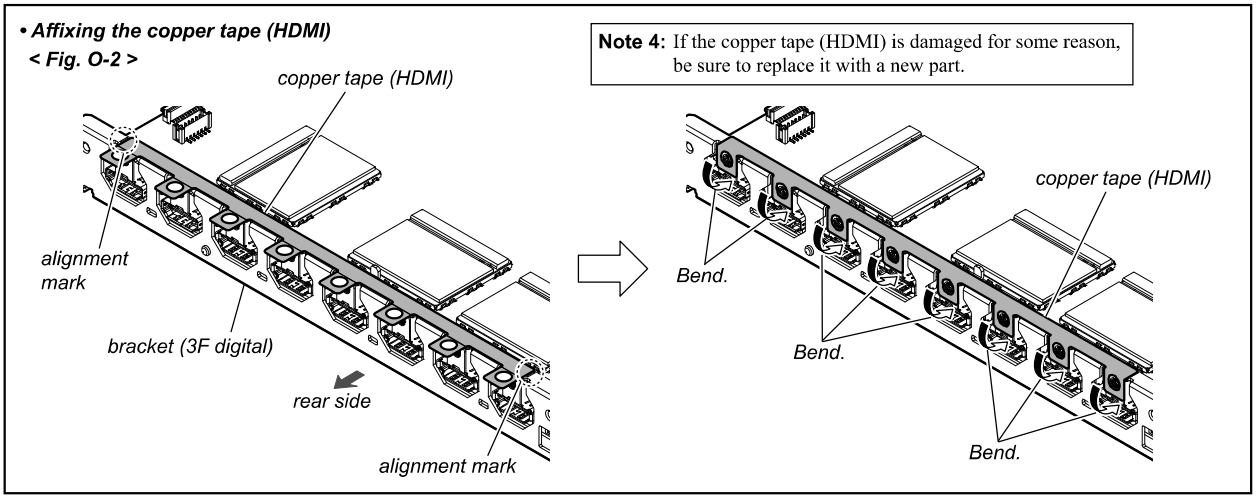
• Pasting position of the cable cushion
< Fig. N-2 >

– Bottom view –

2-16. DIGITAL BOARD-2



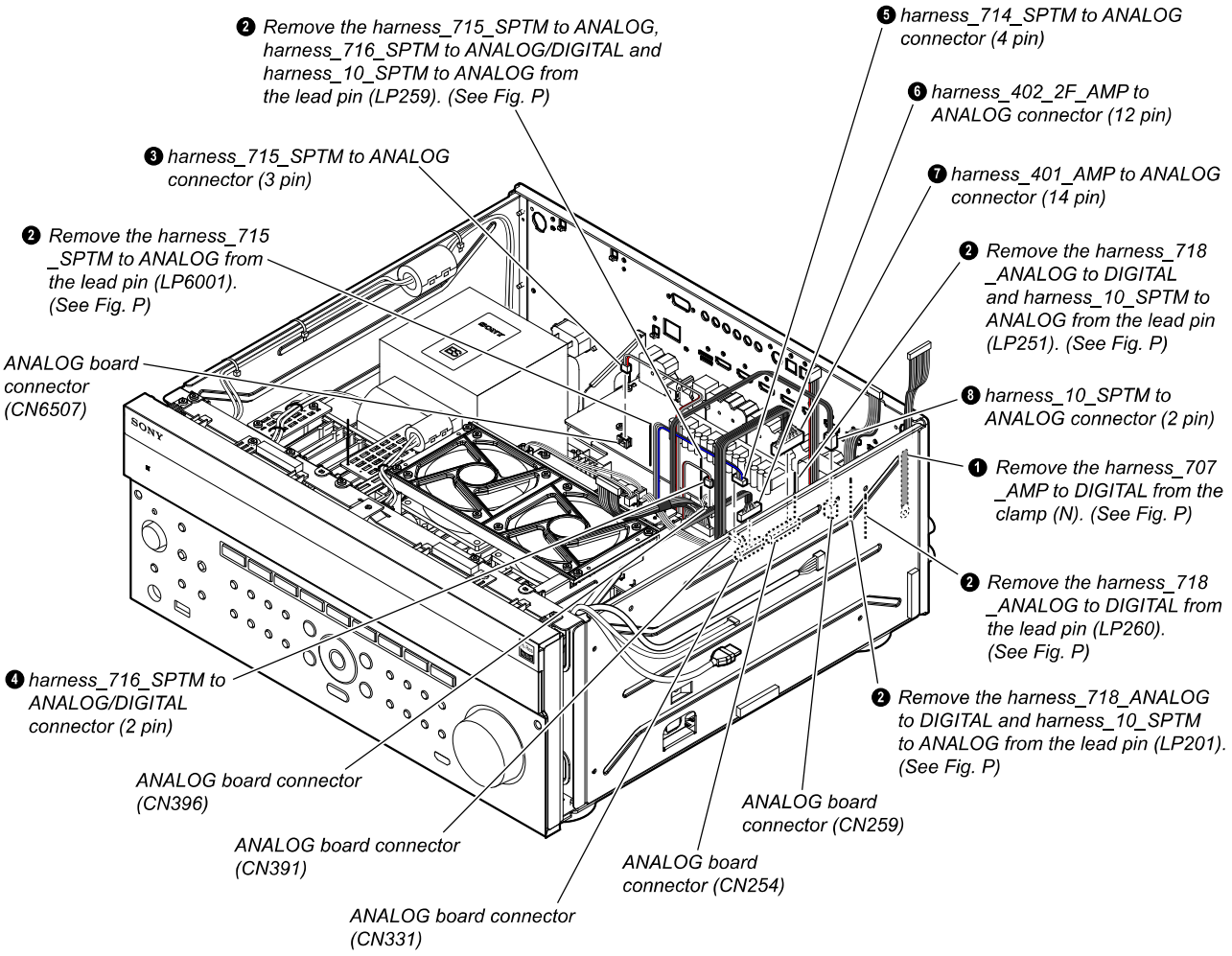
Note 3: Multiple contact terminals are mounted on the DIGITAL board. Be careful not to touch the contact terminals directly. For the position of the contact terminals, refer to "NOTE OF TOUCHING THE CONTACT TERMINAL" on page 12.



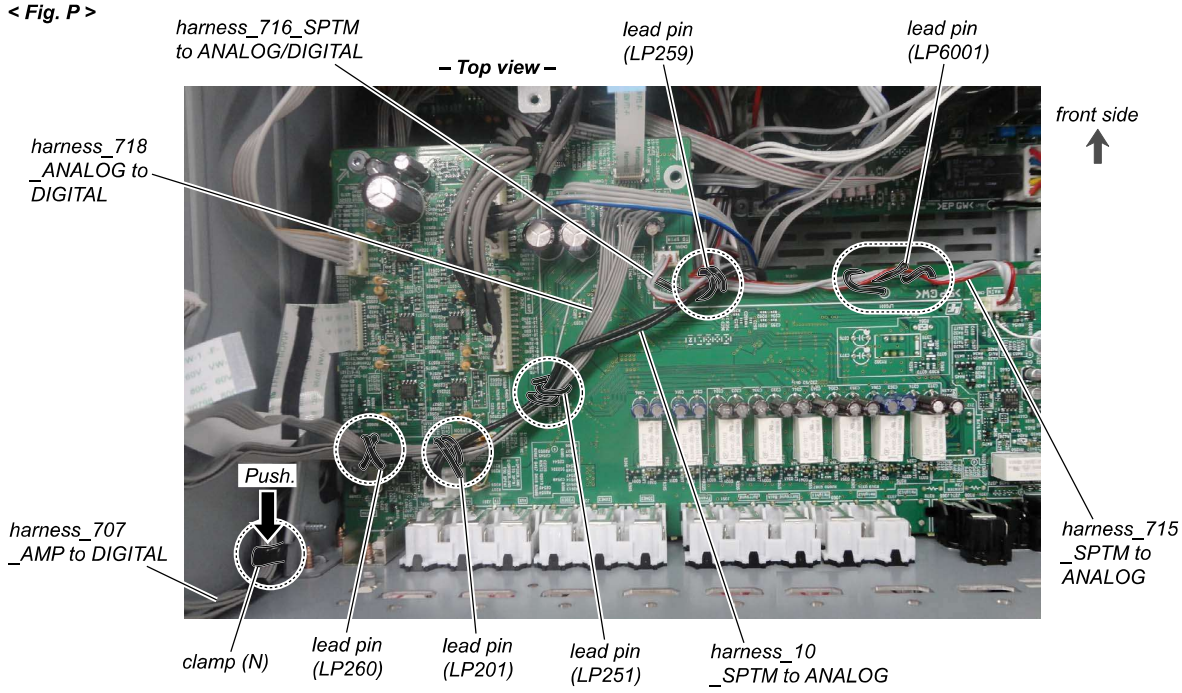
Note 4: If the copper tape (HDMI) is damaged for some reason, be sure to replace it with a new part.

2-17. ANALOG BOARD BLOCK-1

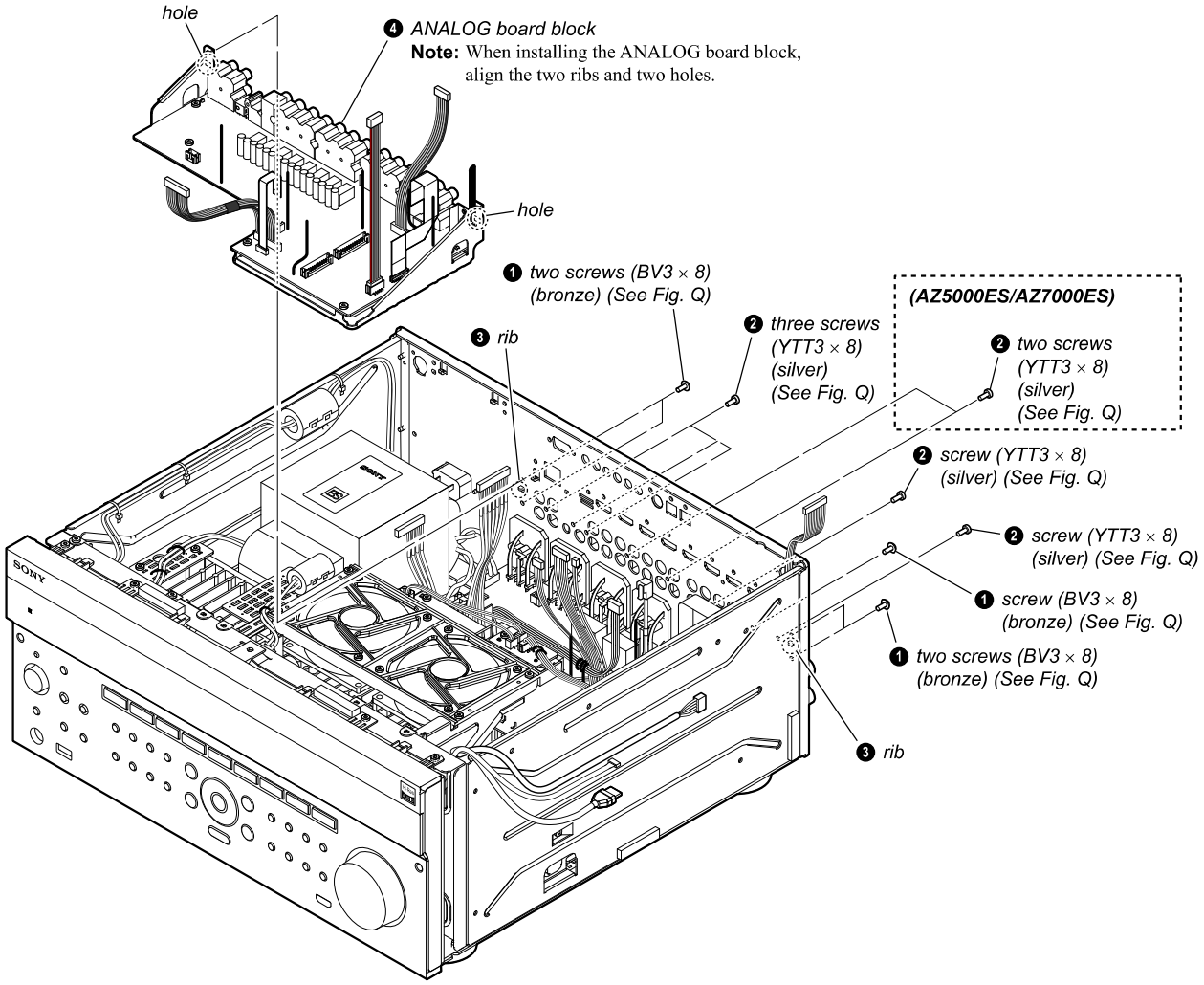
• Continued on 2-18 (page 32).



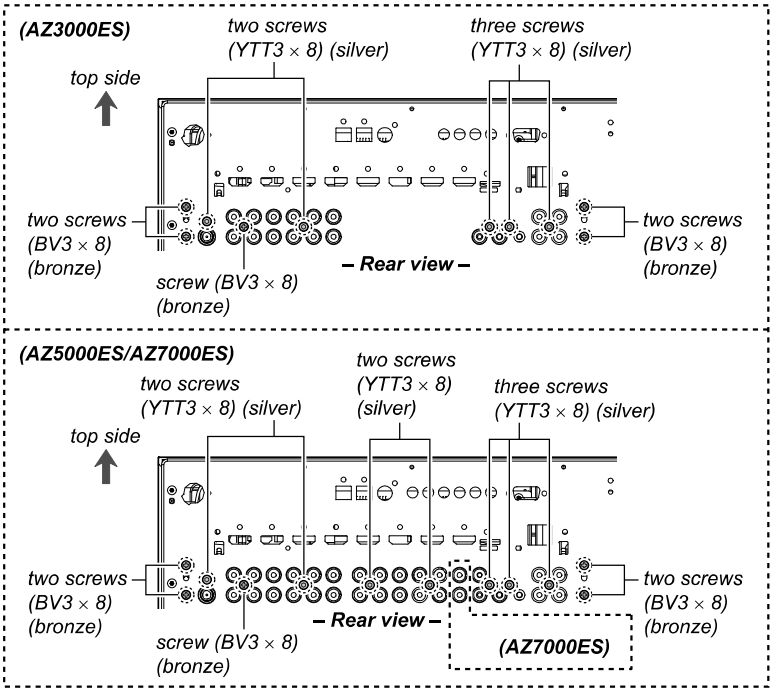
• Wire arrangement when installing the ANALOG board block
< Fig. P >



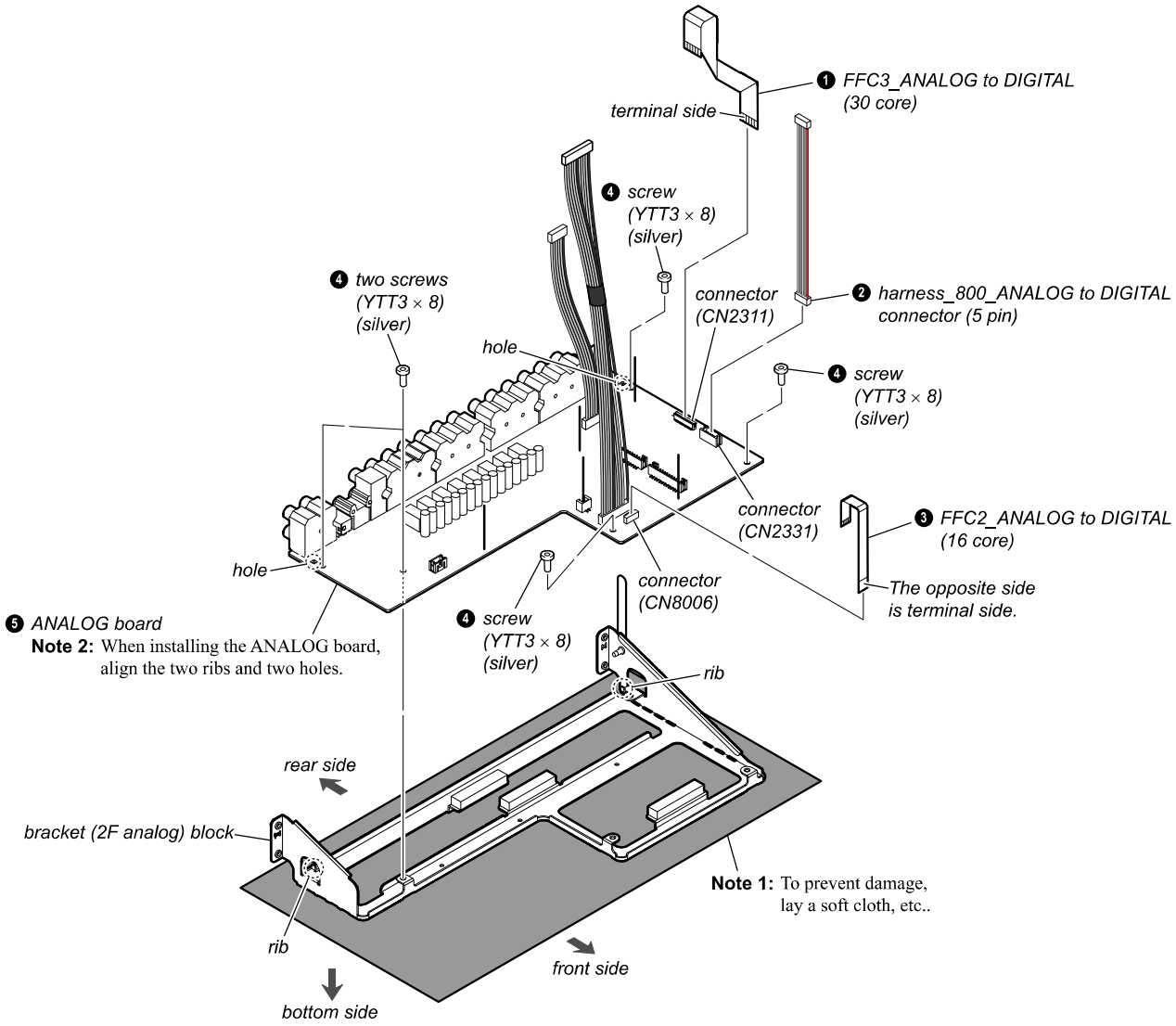
2-18. ANALOG BOARD BLOCK-2



• Installation position of the screw
< Fig. Q >

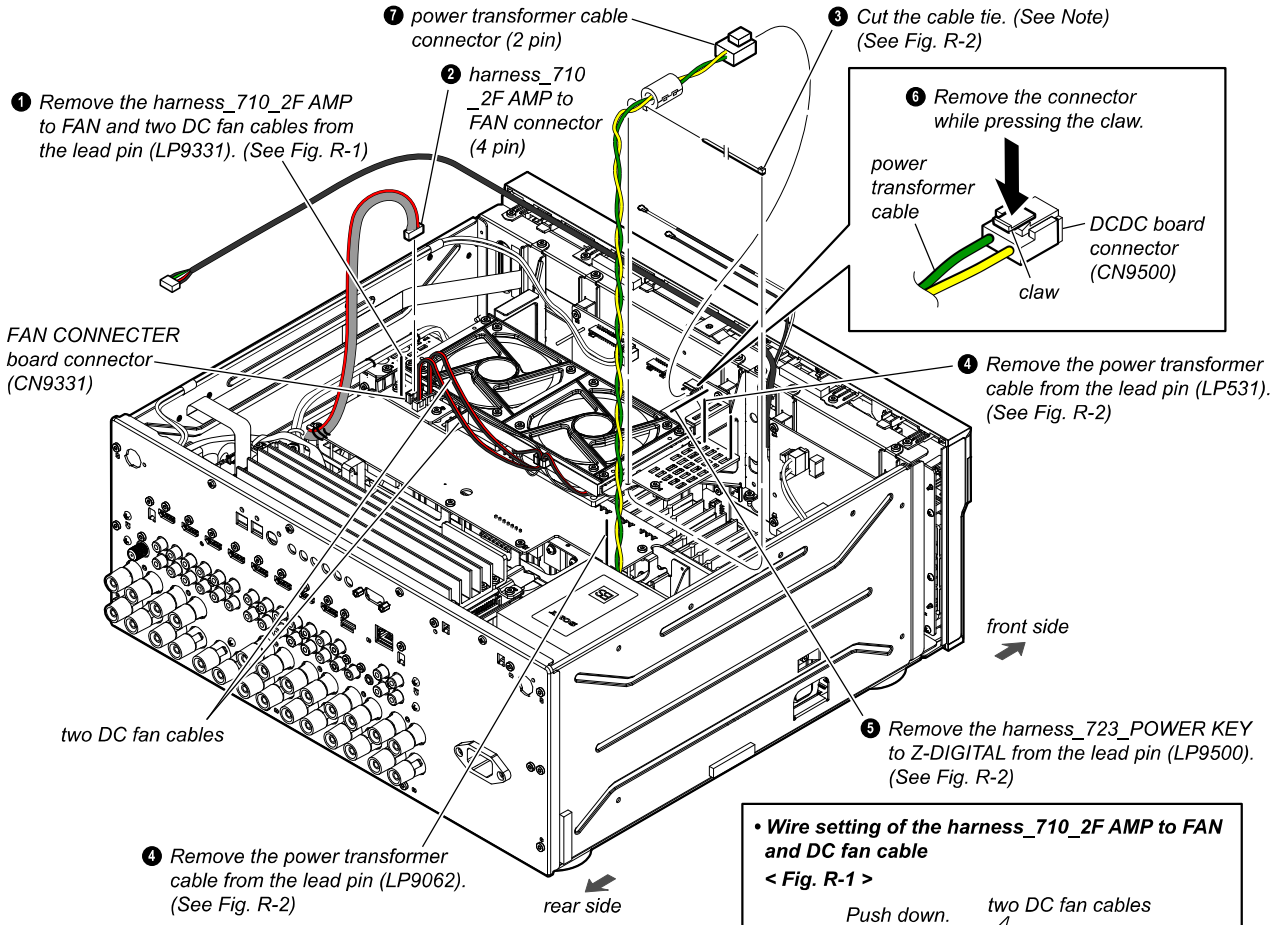


2-19. ANALOG BOARD

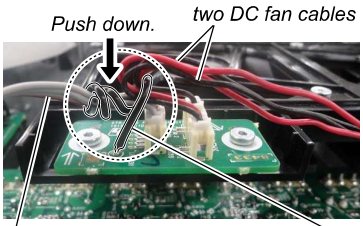


2-20. DC FAN BLOCK-1

• Continued on 2-21 (page 35).

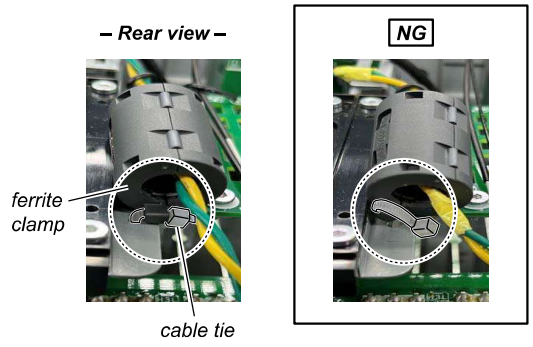


• Wire setting of the harness_710_2F AMP to FAN and DC fan cable
< Fig. R-1 >

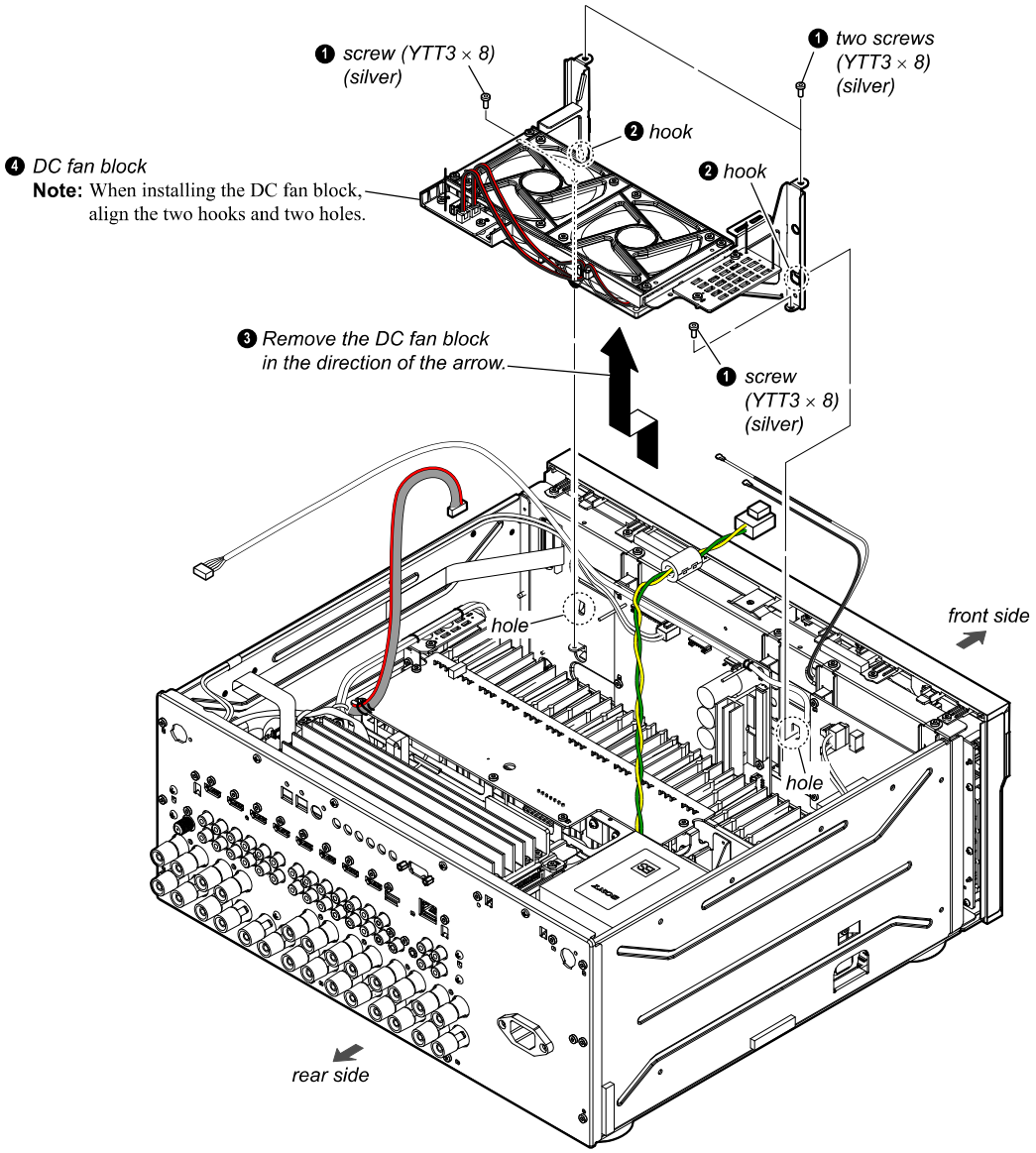


• Wire setting of the power transformer cable
< Fig. R-2 >

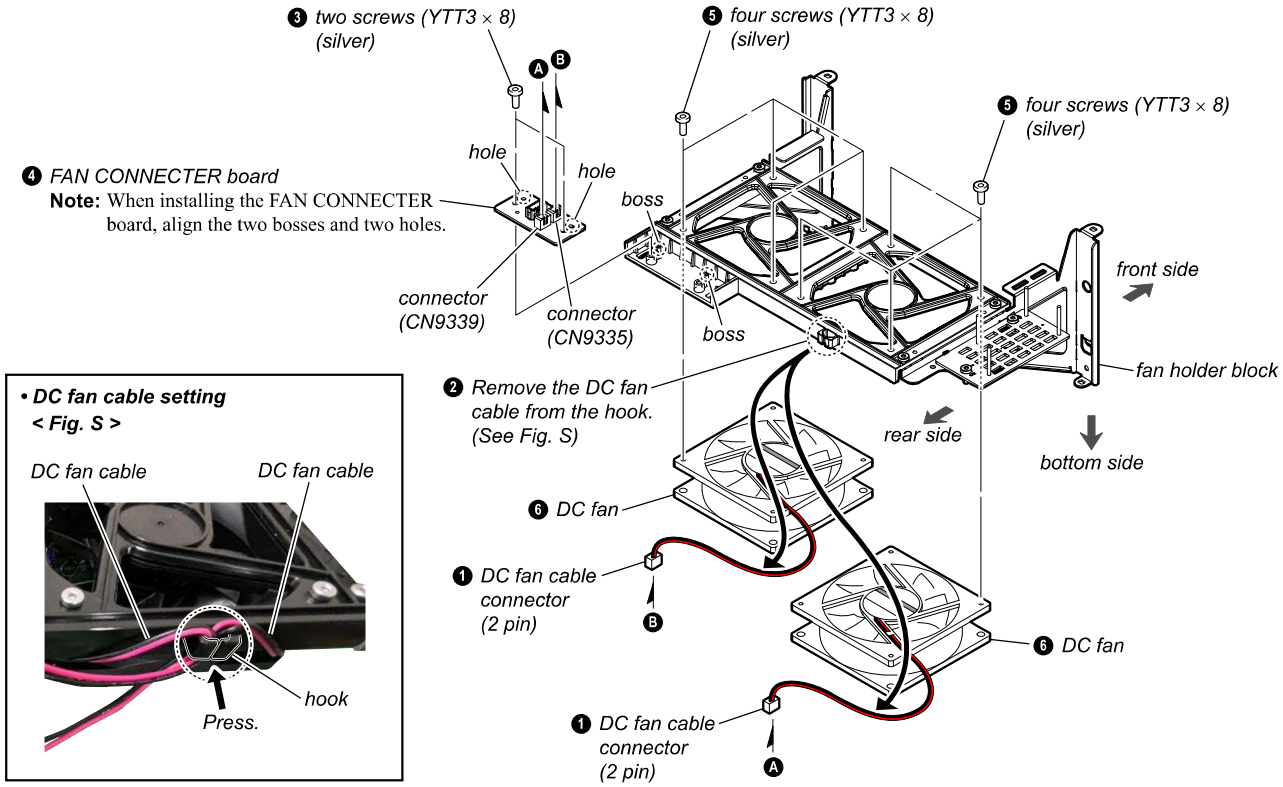
Note: During reassembly, use new cable ties to fasten the wires back in place as they were before disassembly.



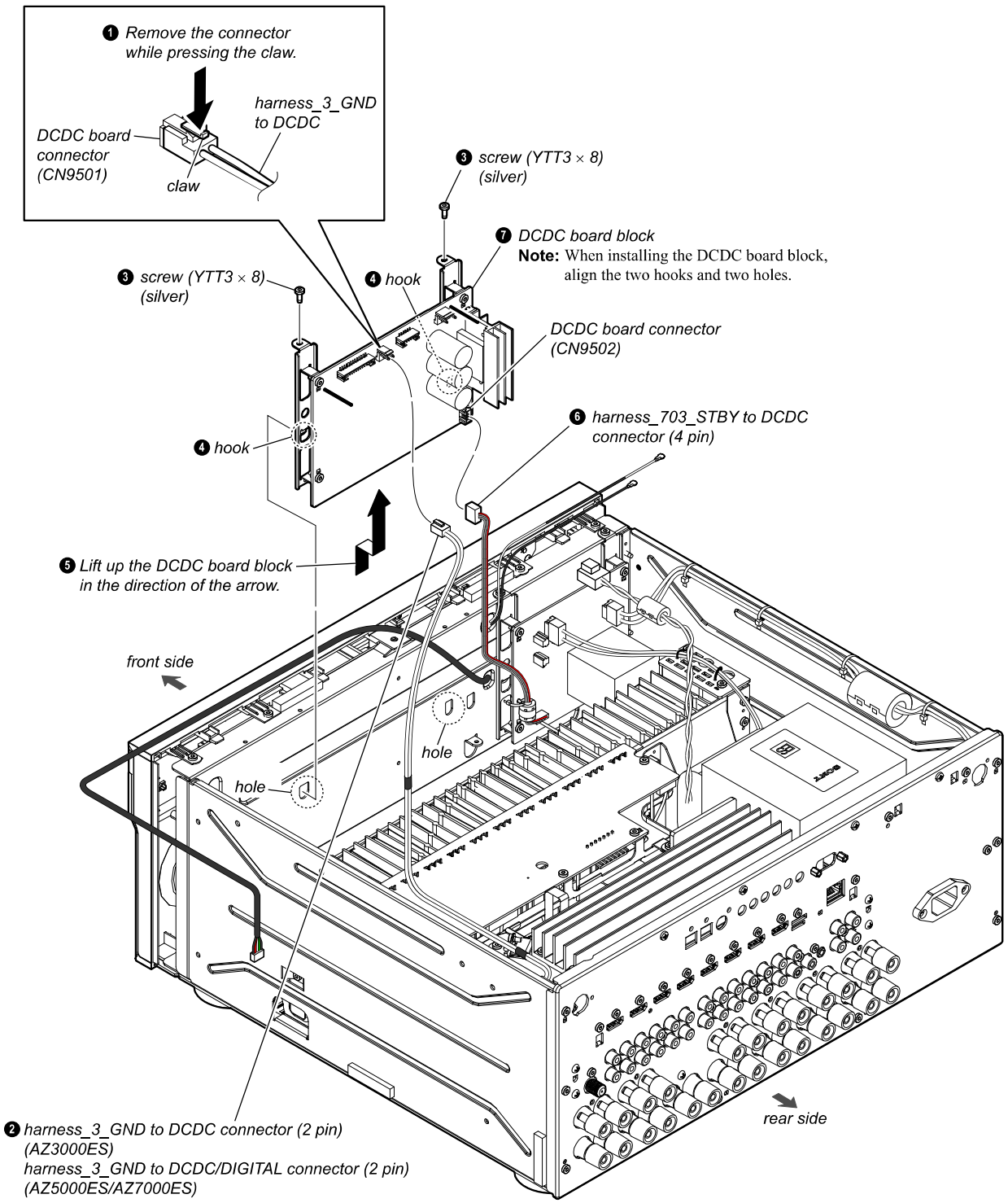
2-21. DC FAN BLOCK-2



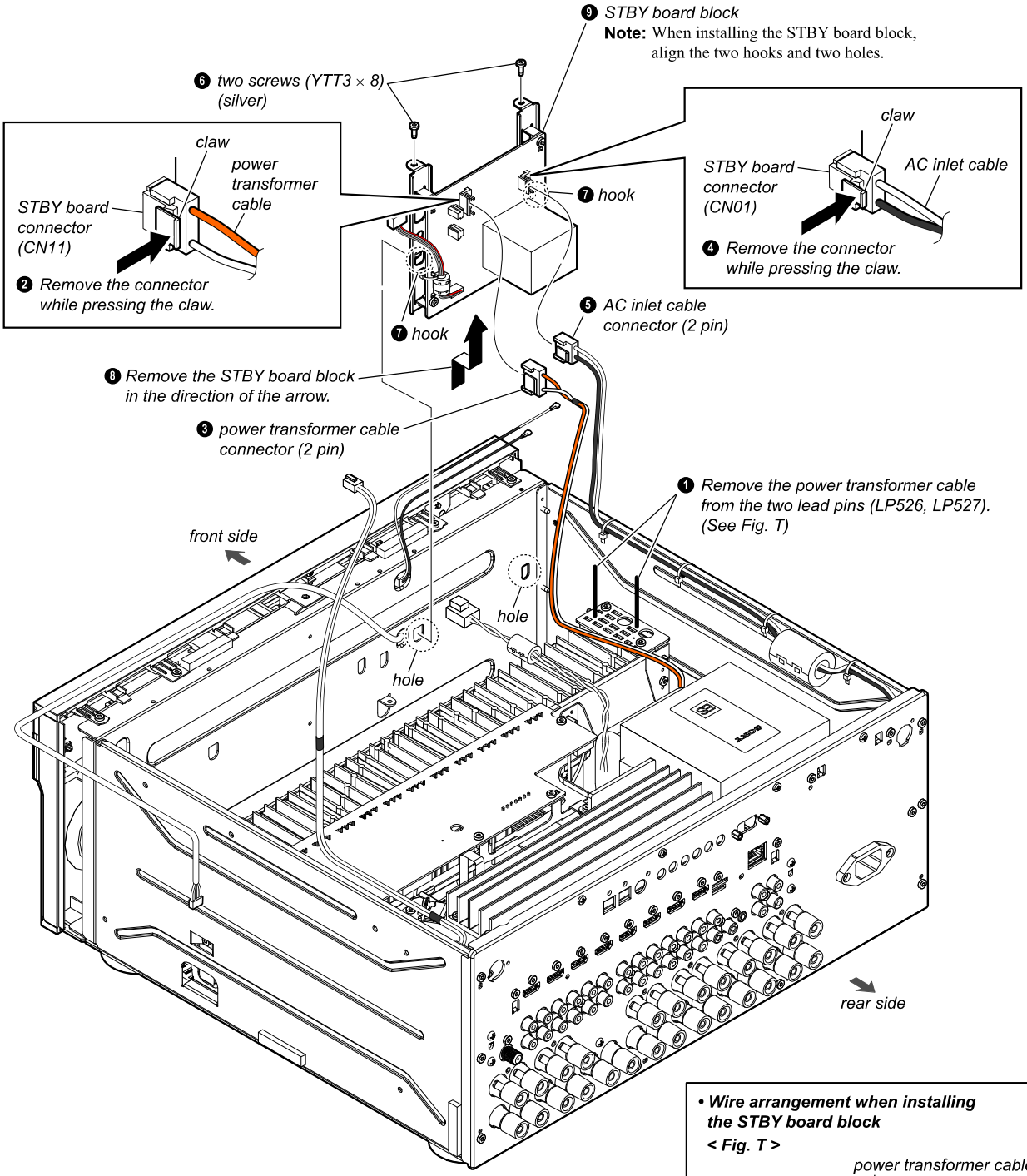
2-22. FAN CONNECTER BOARD, DC FAN



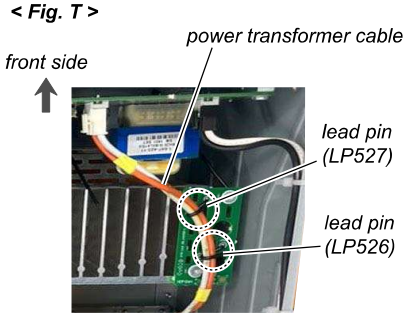
2-23. DCDC BOARD BLOCK



2-24. STBY BOARD BLOCK

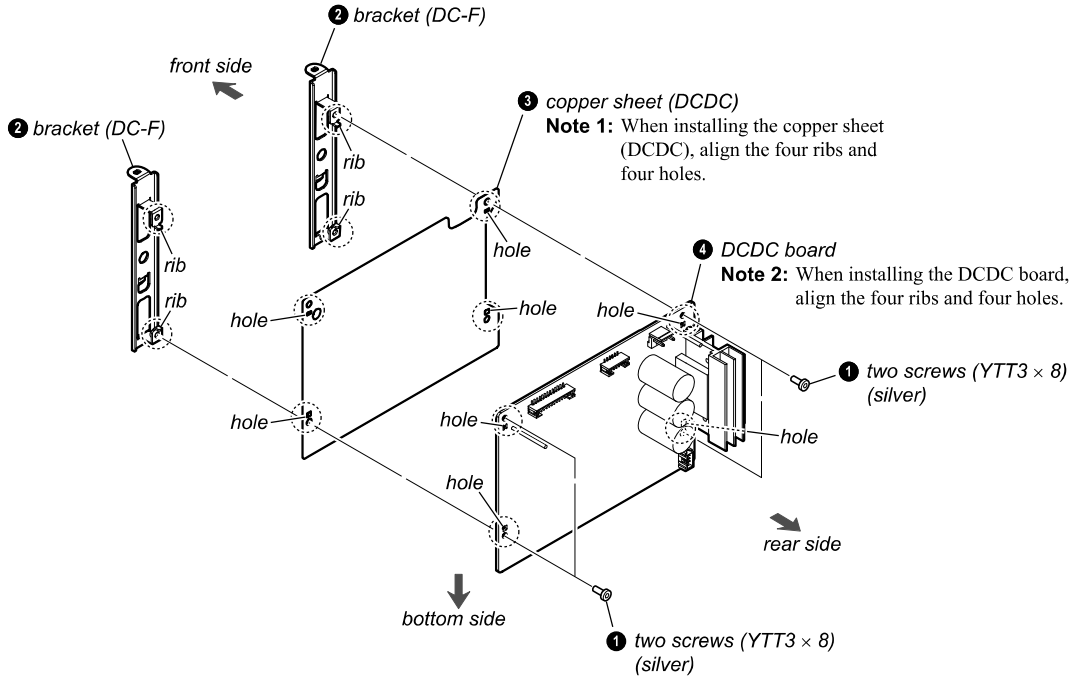


• **Wire arrangement when installing the STBY board block**
< Fig. T >

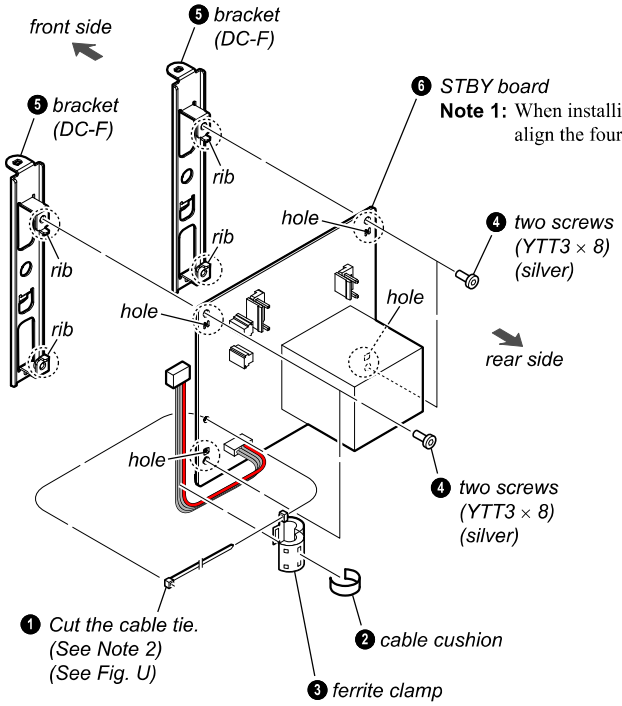


– Top view –

2-25. DCDC BOARD

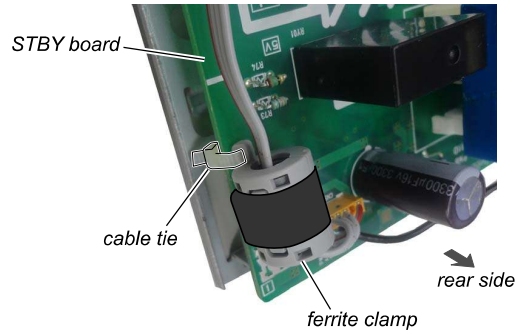


2-26. STBY BOARD



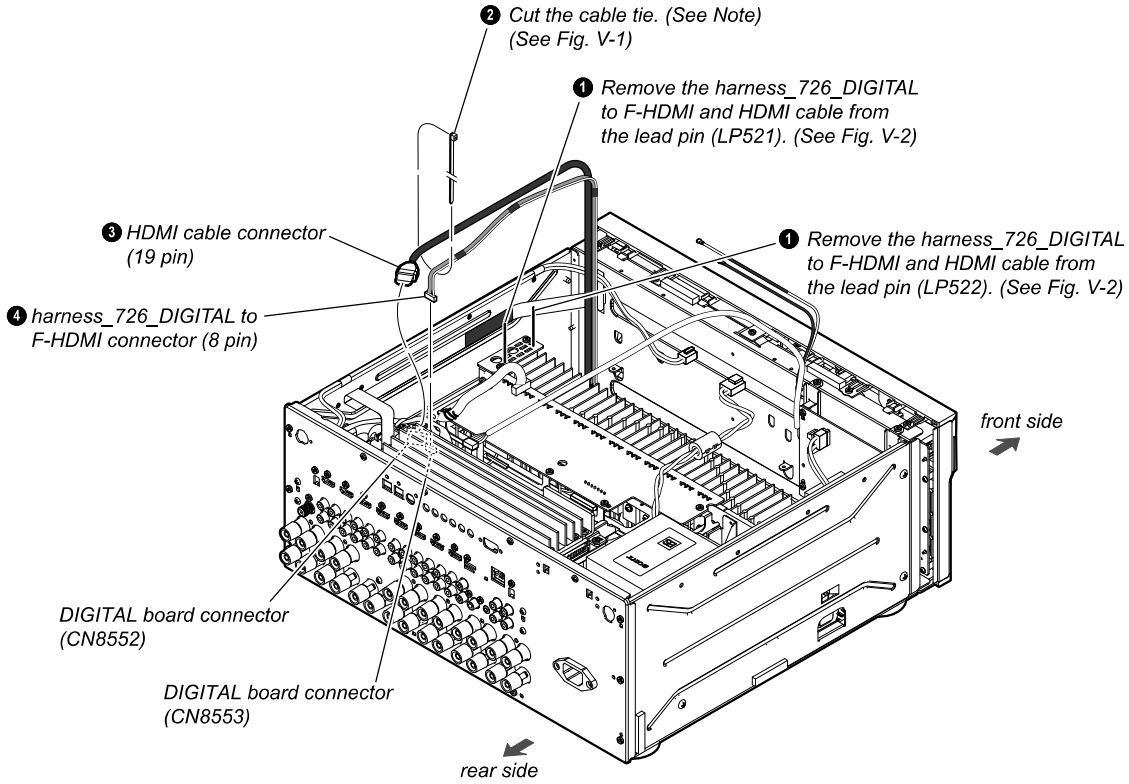
• ***Wire arrangement when installing the MAIN board block < Fig. U >***

Note 2: During reassembly, use new cable ties to fasten the wires back in place as they were before disassembly.



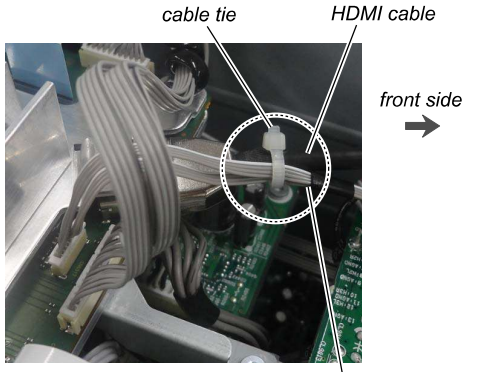
2-27. FRONT PANEL BLOCK-1 (AZ5000ES/AZ7000ES)

• Continued on 2-28 (page 41).

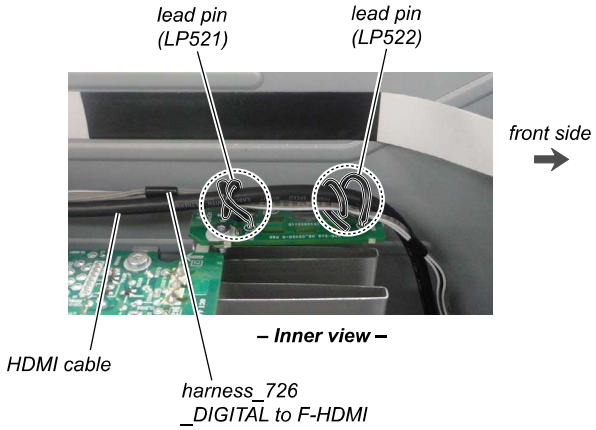


• Installation position of the cable tie
< Fig. V-1 >

Note: During reassembly, use new cable ties to fasten the wires back in place as they were before disassembly.

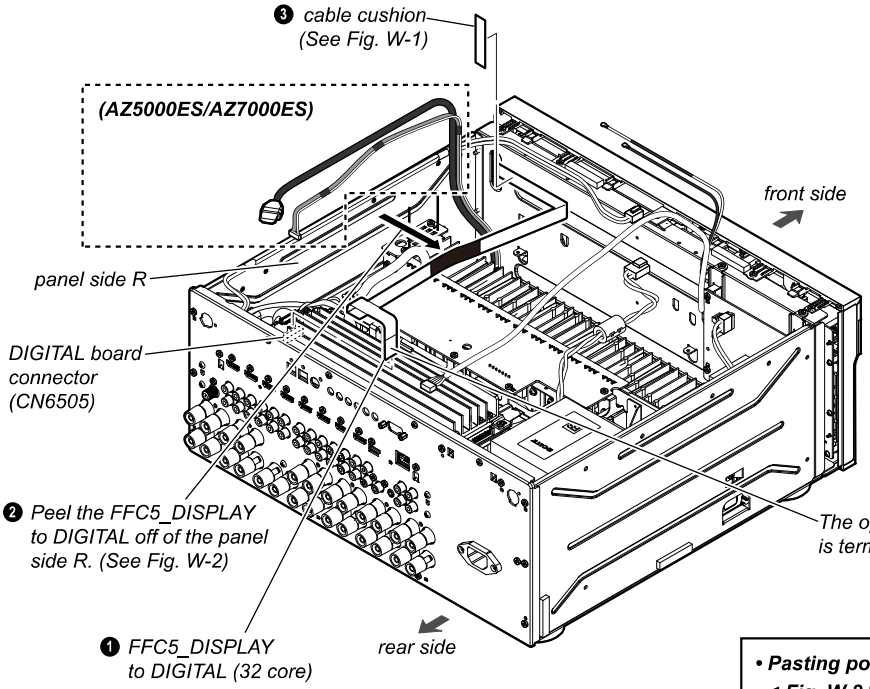


• Wire setting of the HDMI cable and harness_726_DIGITAL to F-HDMI
< Fig. V-2 >

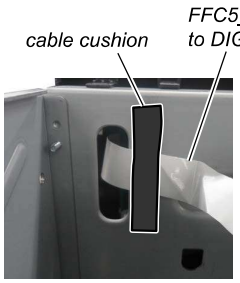


2-28. FRONT PANEL BLOCK-2

• Continued on 2-29 (AZ3000ES) or 2-30 (AZ5000ES/AZ7000ES) (page 42).

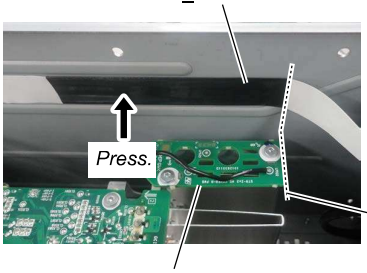


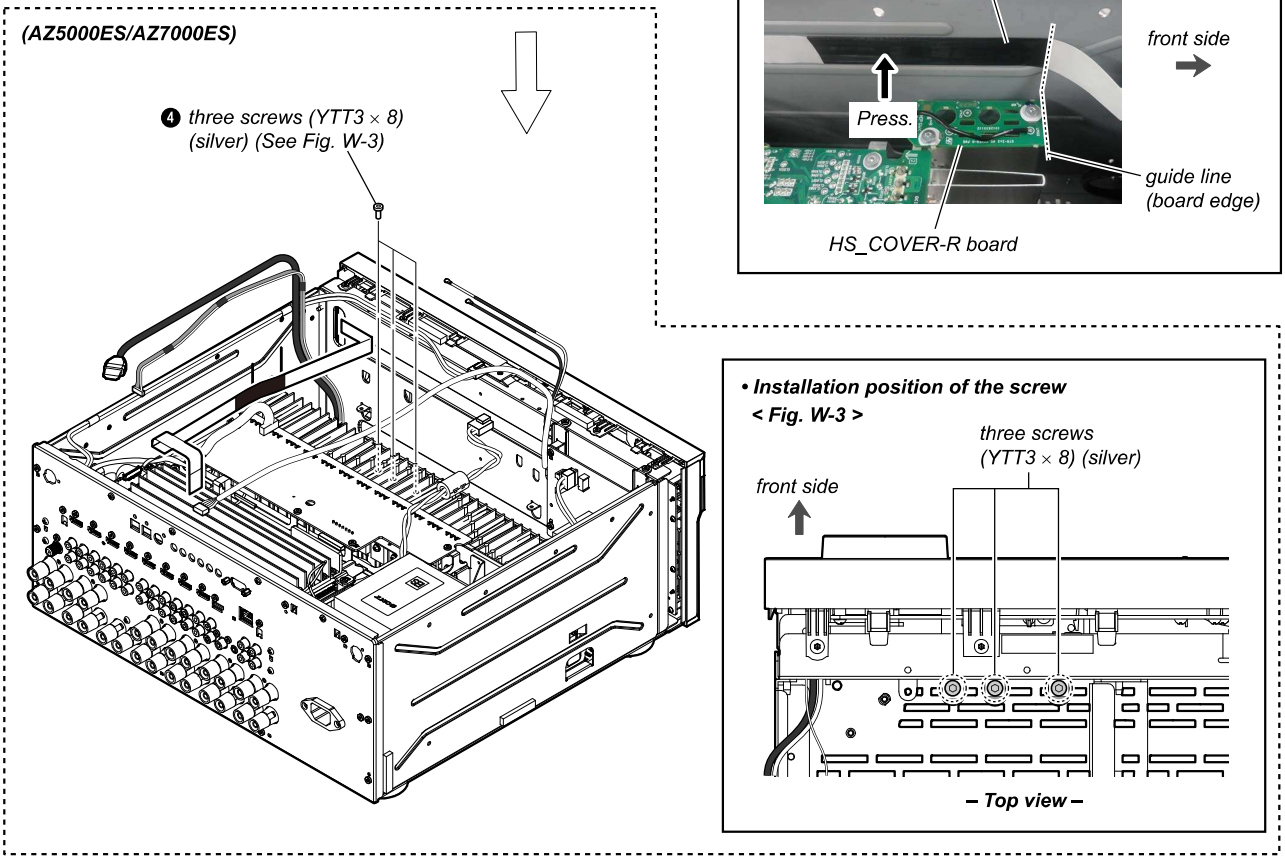
• Pasting position of the cable cushion
< Fig. W-1 >



– Inner view –

• Pasting position of the FFC5_DISPLAY to DIGITAL
< Fig. W-2 >

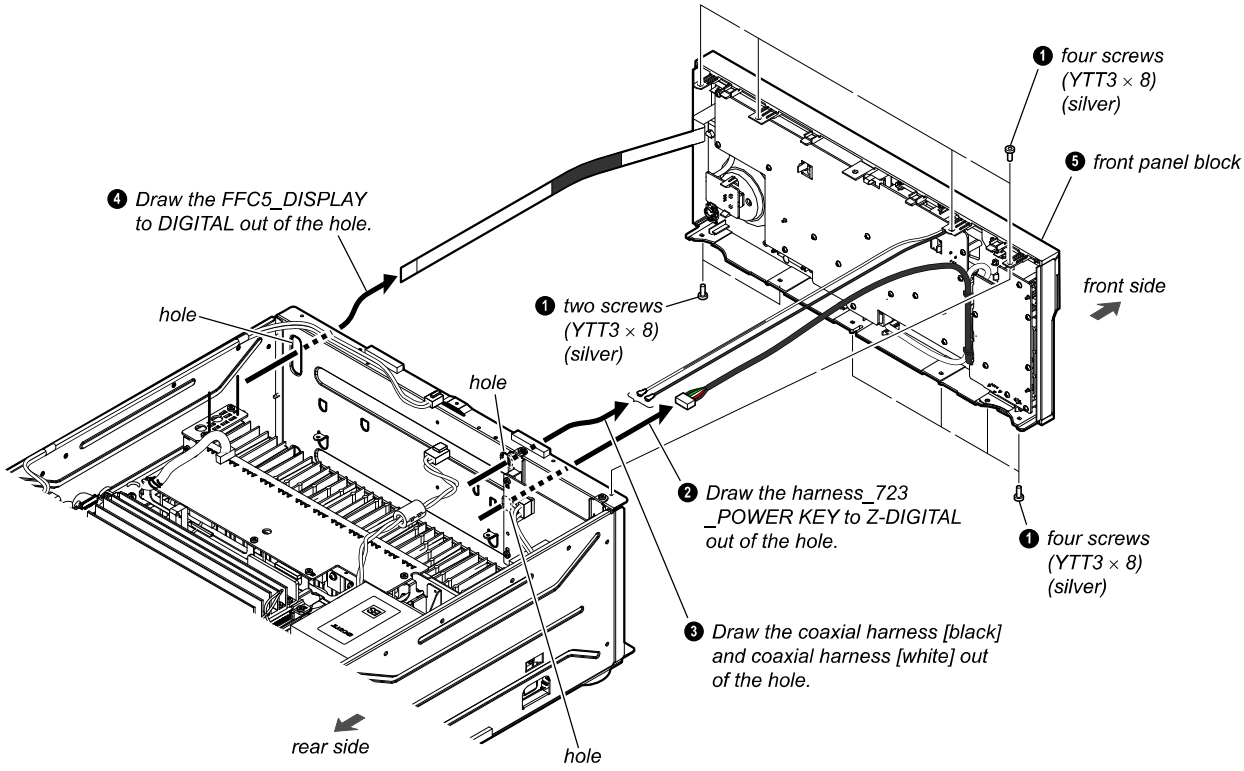




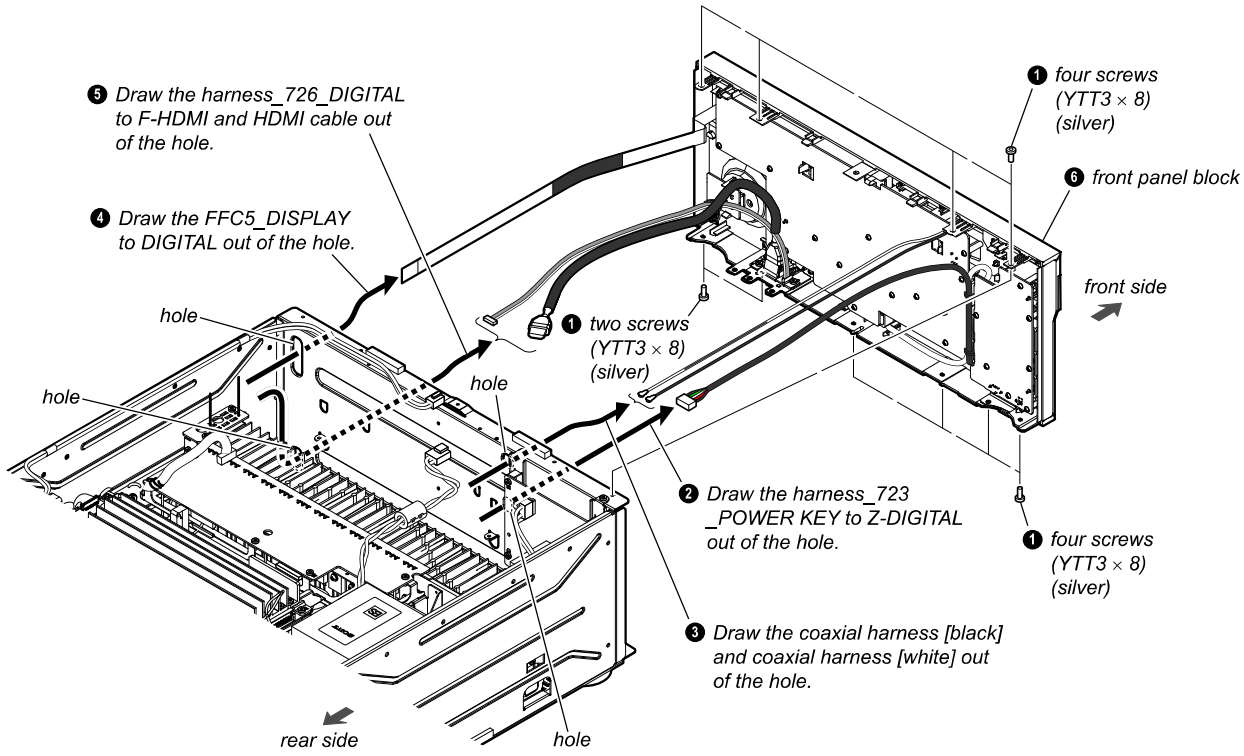
• Installation position of the screw
< Fig. W-3 >

– Top view –

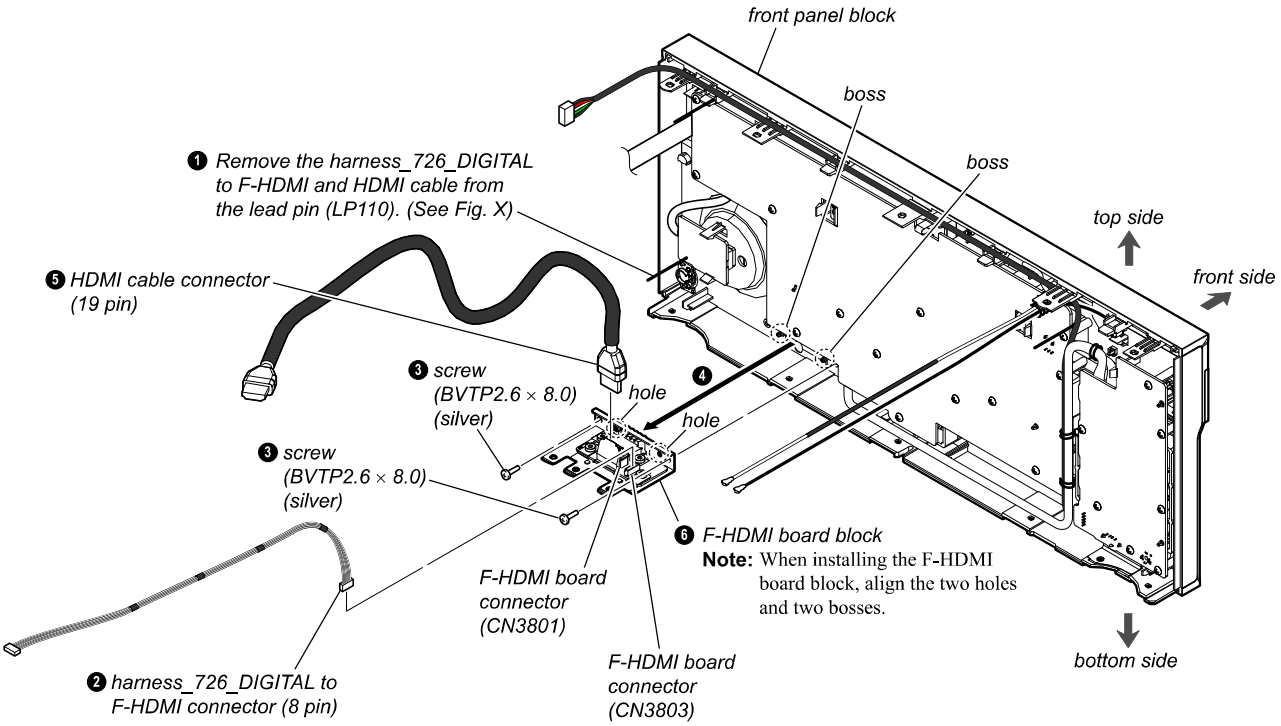
2-29. FRONT PANEL BLOCK-3 (AZ3000ES)

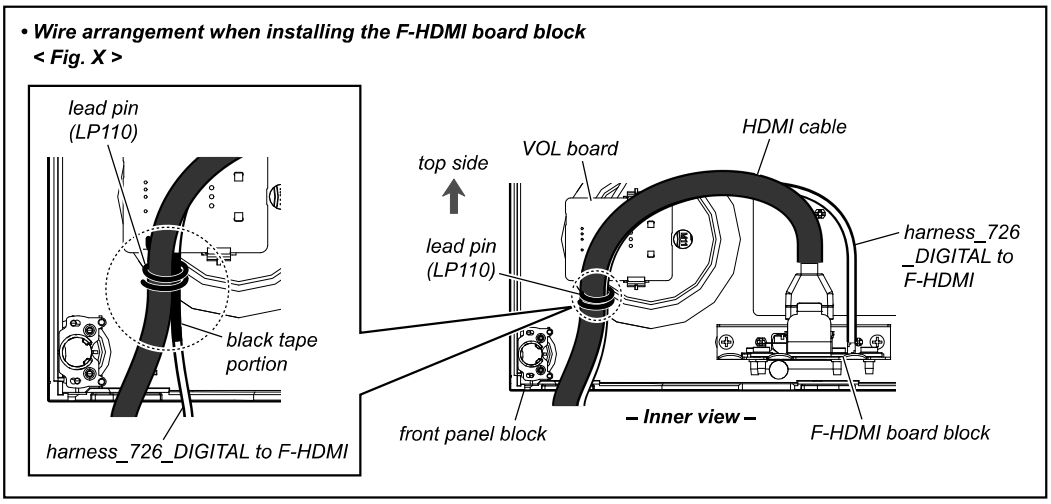


2-30. FRONT PANEL BLOCK-4 (AZ5000ES/AZ7000ES)

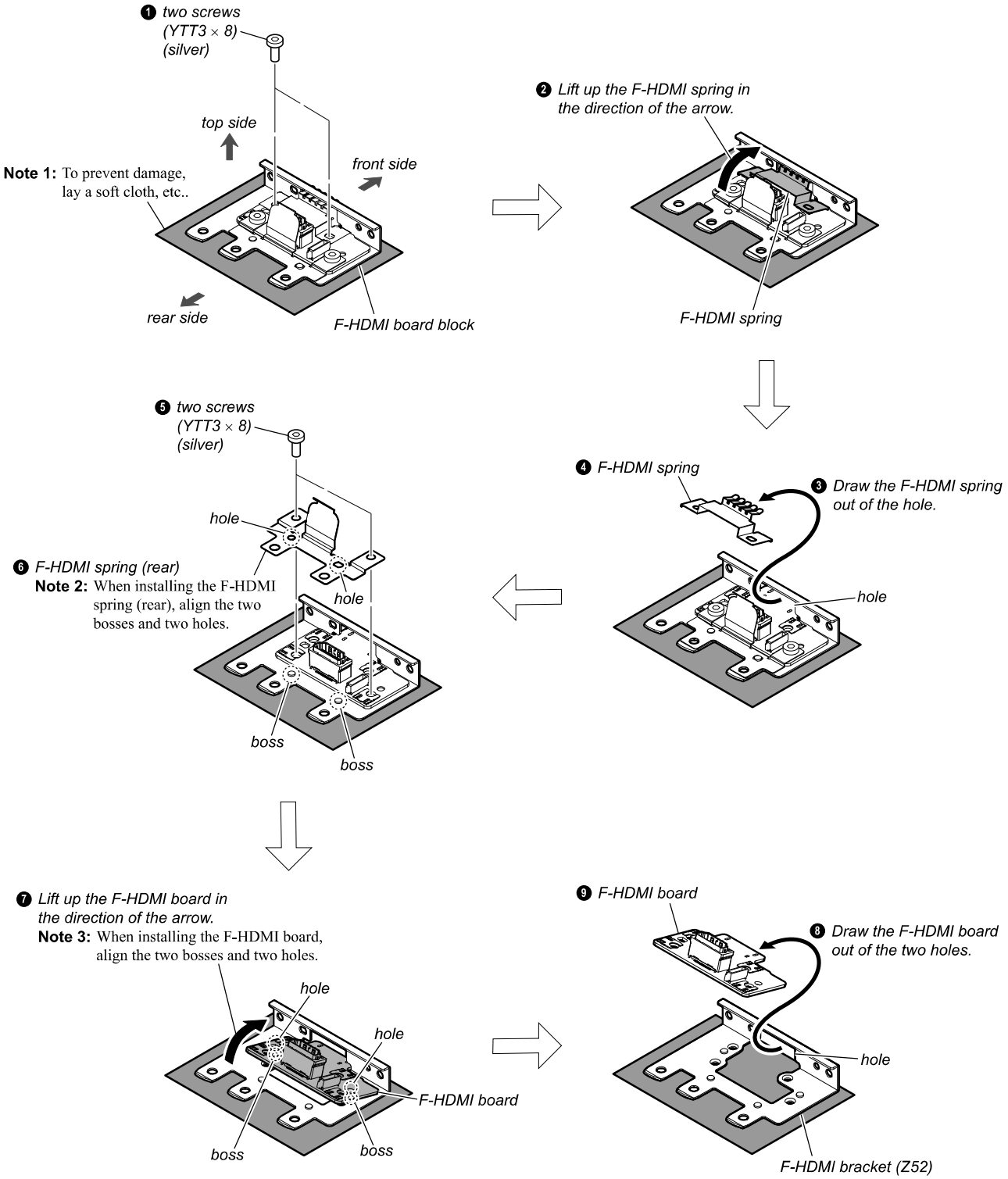


2-31. F-HDMI BOARD BLOCK (AZ5000ES/AZ7000ES)

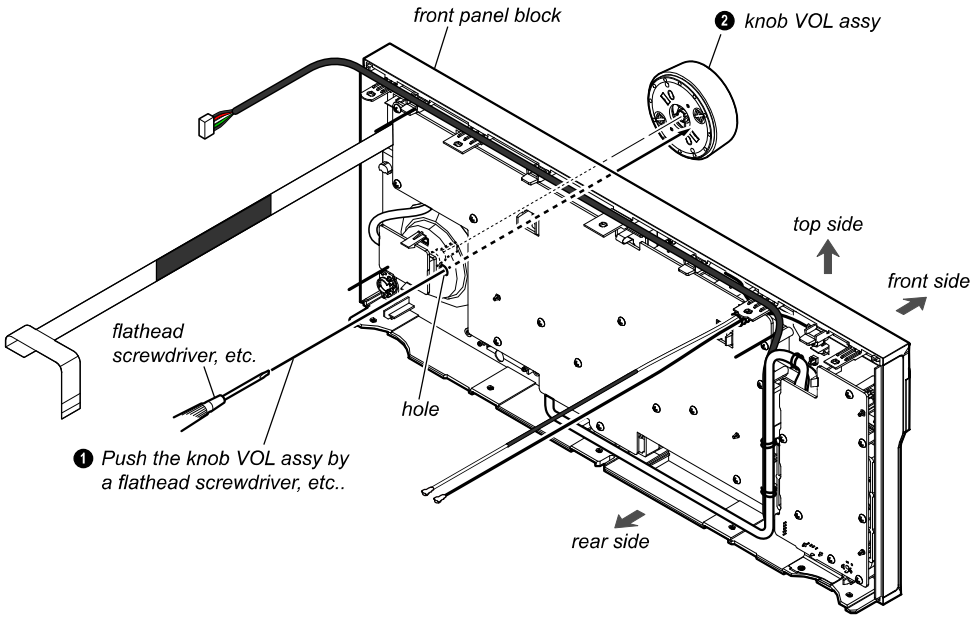




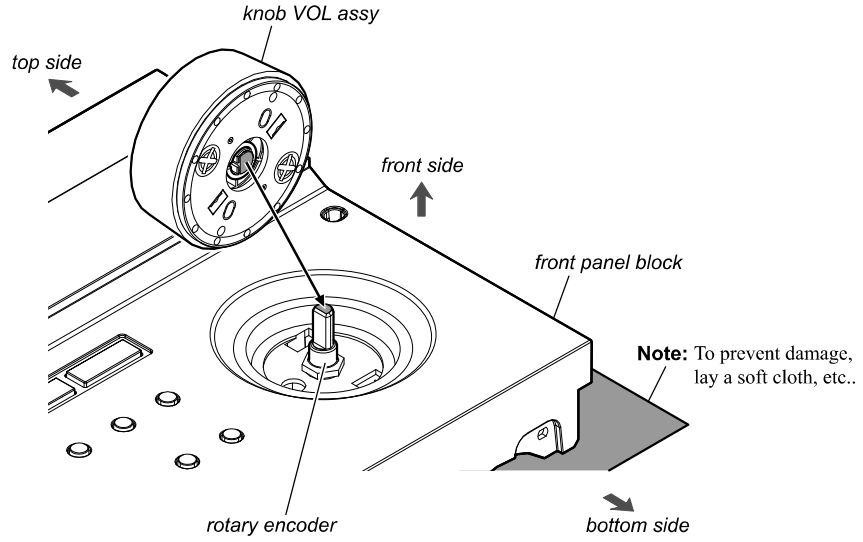
2-32. F-HDMI BOARD (AZ5000ES/AZ7000ES)



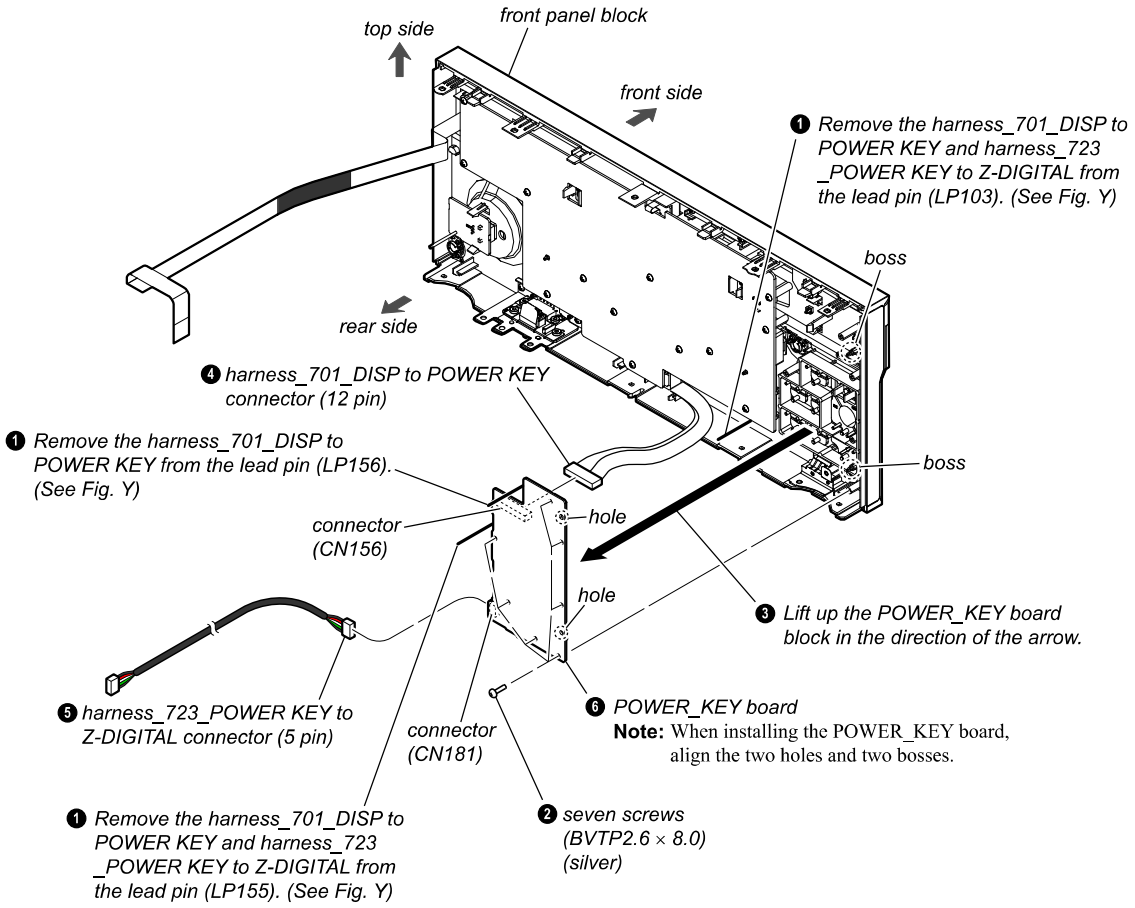
2-33. KNOB VOL ASSY



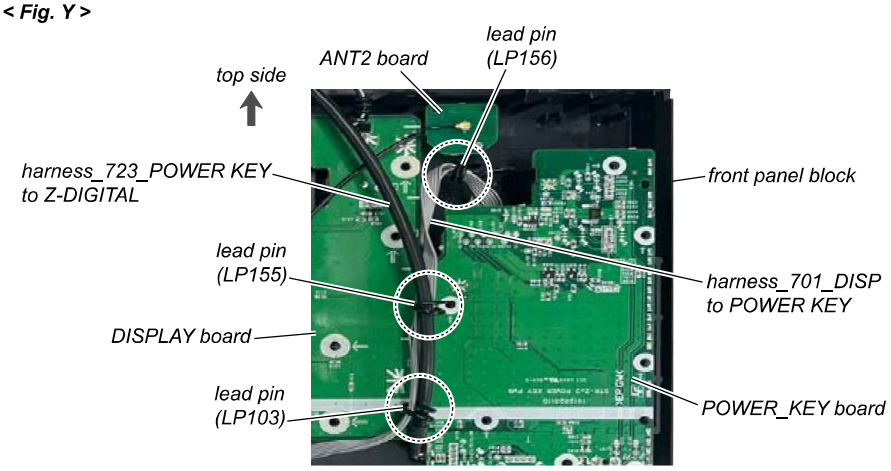
• ***How to install the knob VOL assy***
When installing the knob VOL assy to the rotary encoder, align the directions of the D-shaped tip of the rotary encoder and the D-shaped notch at the inner side of the knob VOL assy.



2-34. POWER_KEY BOARD

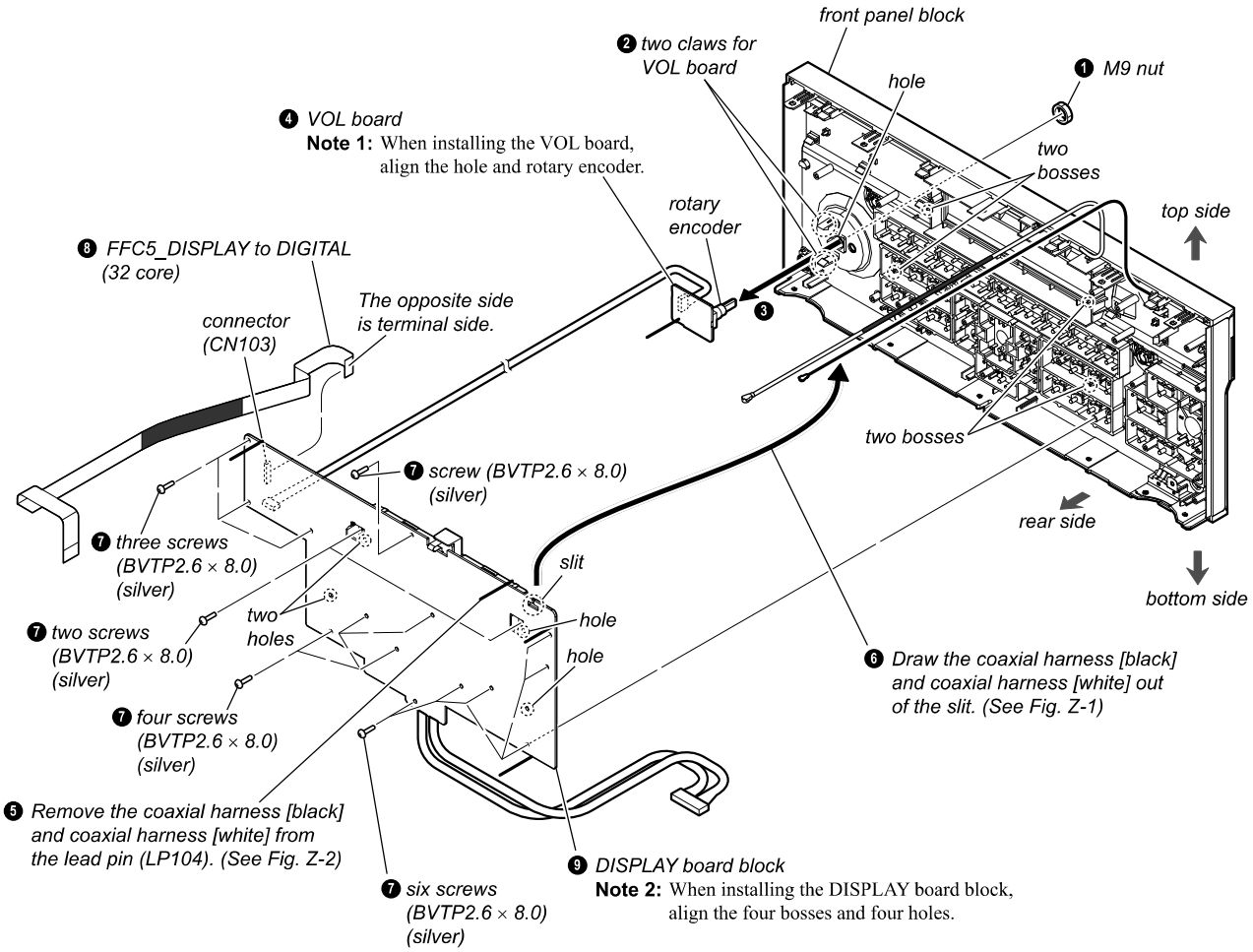


• Wire arrangement when installing the F-HDMI board block
< Fig. Y >



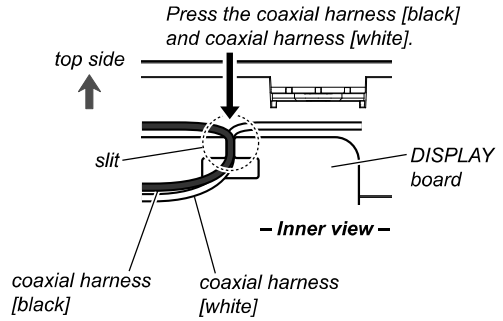
– Inner view –

2-35. VOL BOARD, DISPLAY BOARD BLOCK

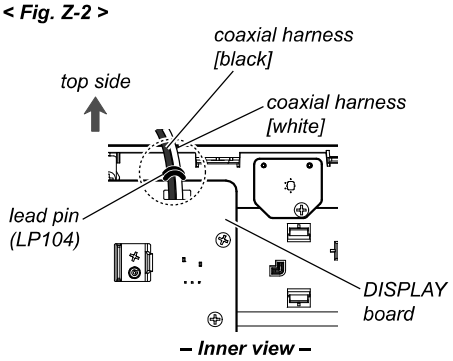


• Wire arrangement when installing the DISPLAY board block

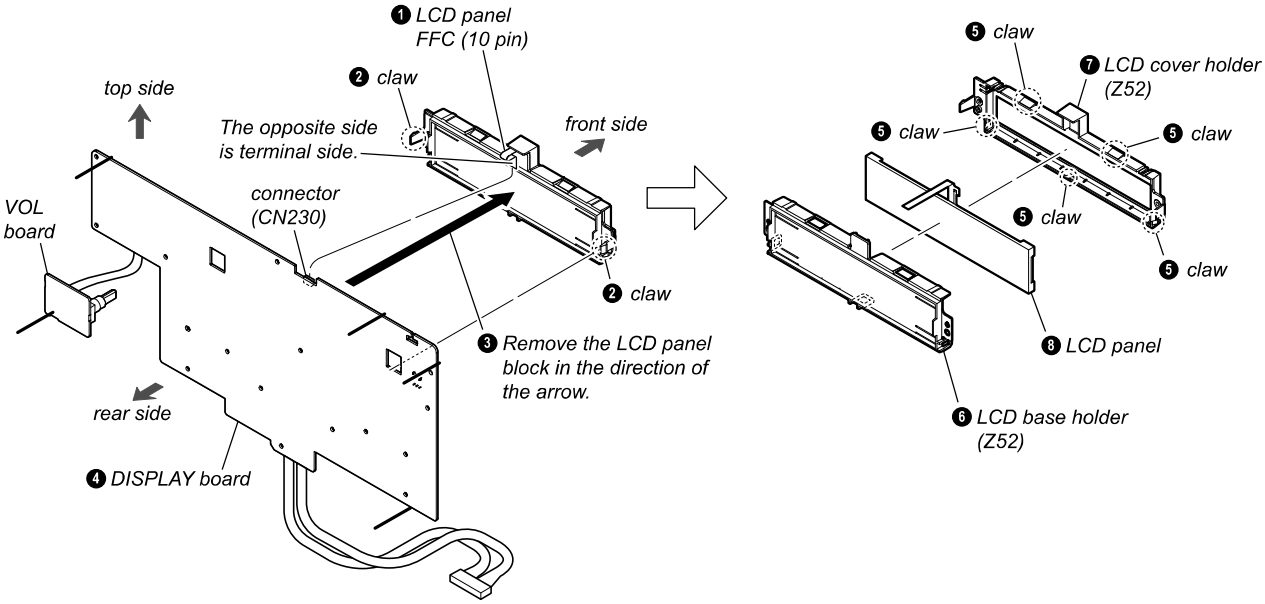
< Fig. Z-1 >



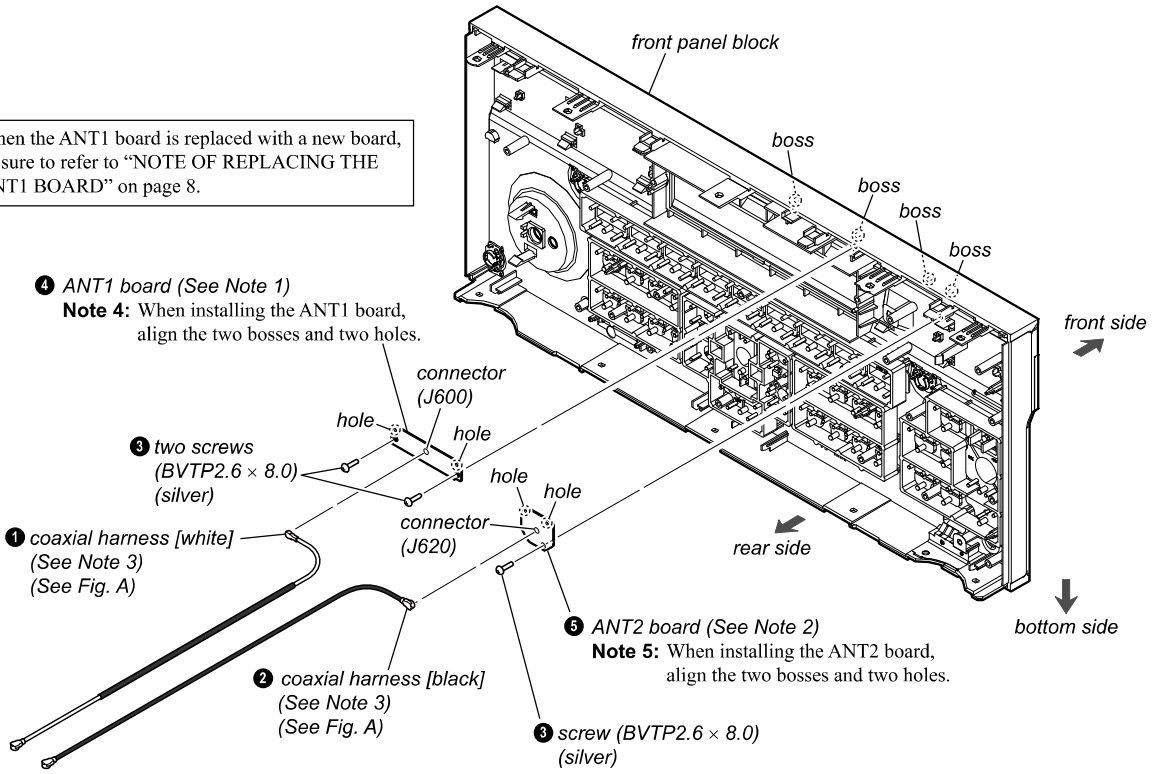
< Fig. Z-2 >



2-36. DISPLAY BOARD, LCD PANEL



2-37. ANT1 BOARD, ANT2 BOARD

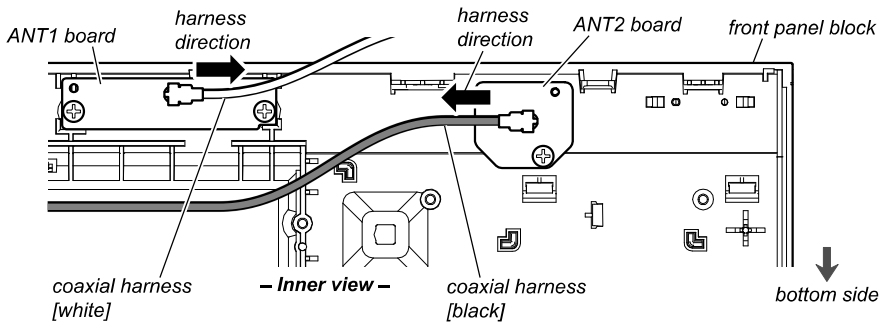


Note 1: When the ANT1 board is replaced with a new board, be sure to refer to "NOTE OF REPLACING THE ANT1 BOARD" on page 8.

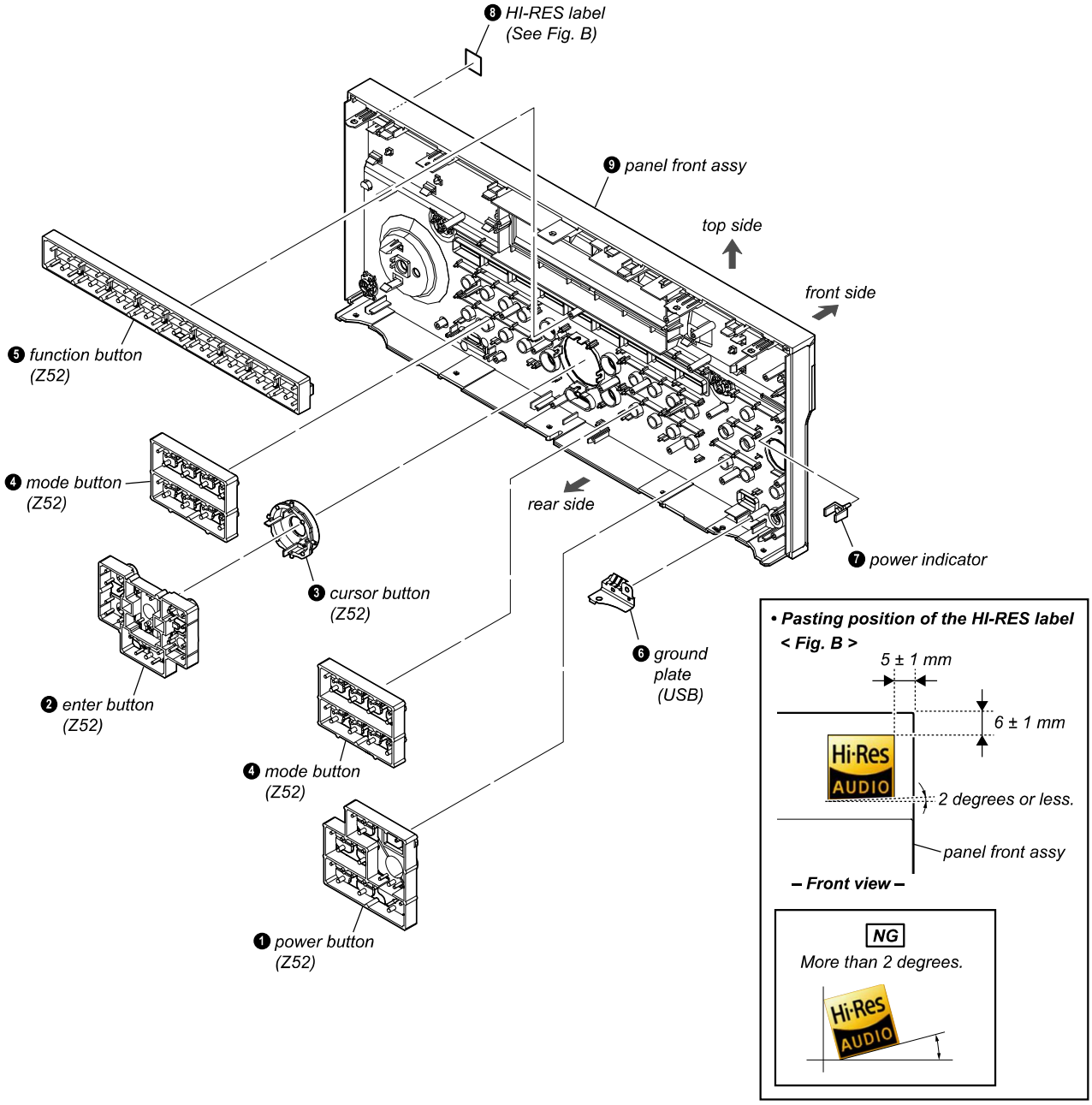
Note 3: When the coaxial harness is replaced with a new part, be sure to refer to "NOTE OF REPLACING THE COAXIAL HARNESS" on page 8.

Note 2: When the ANT2 board is replaced with a new board, be sure to refer to "NOTE OF REPLACING THE ANT2 BOARD" on page 8.

• Installation direction for the coaxial harness
< Fig. A >

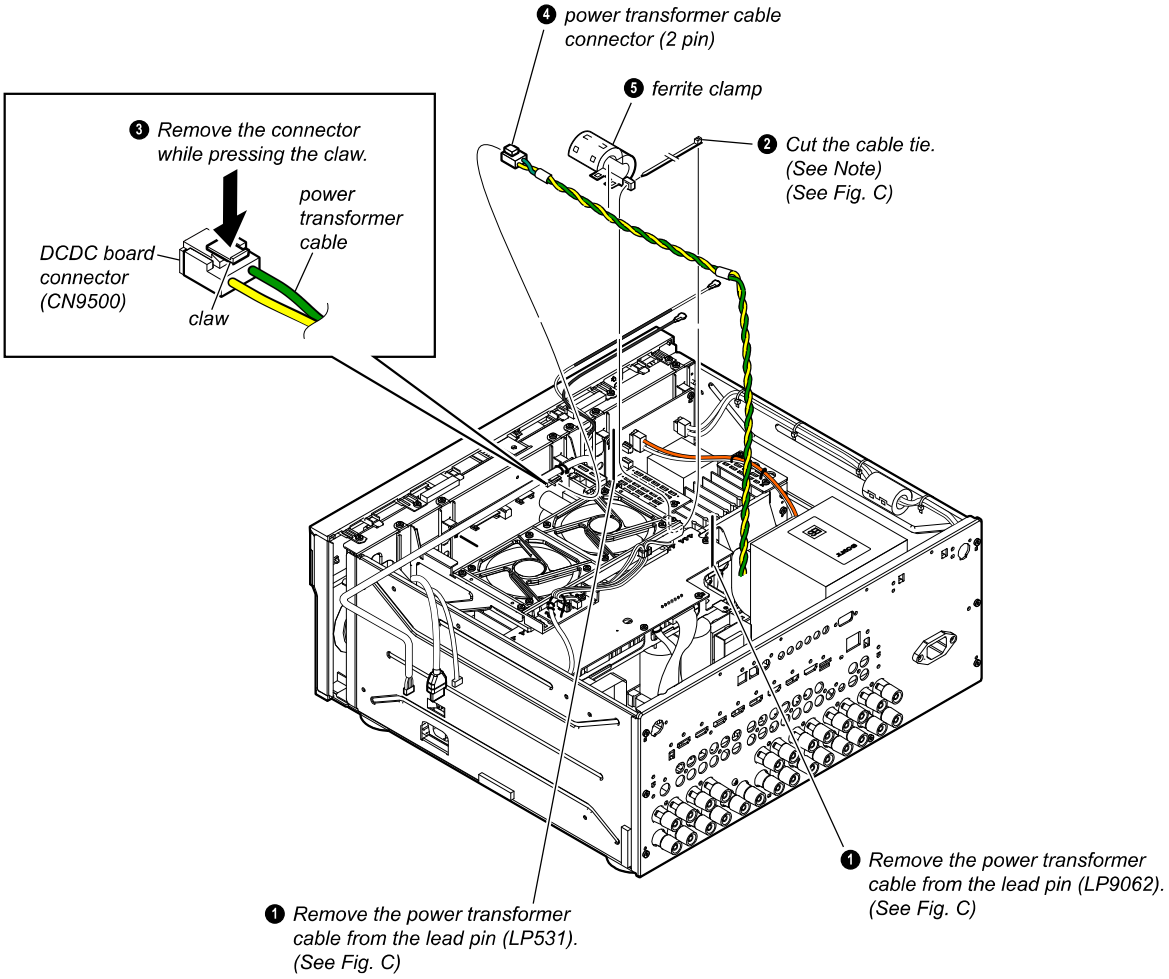


2-38. BUTTON, PANEL FRONT ASSY



2-39. POWER TRANSFORMER-1

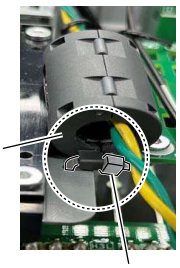
• Continued on 2-40 (page 52).



• Wire setting of the power transformer cable
< Fig. C >

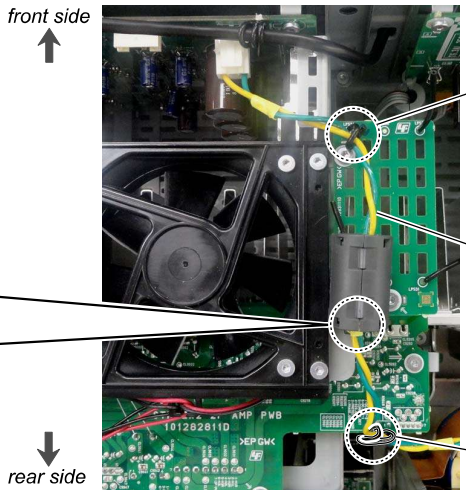
Note: During reassembly, use new cable ties to fasten the wires back in place as they were before disassembly.

– Rear view –

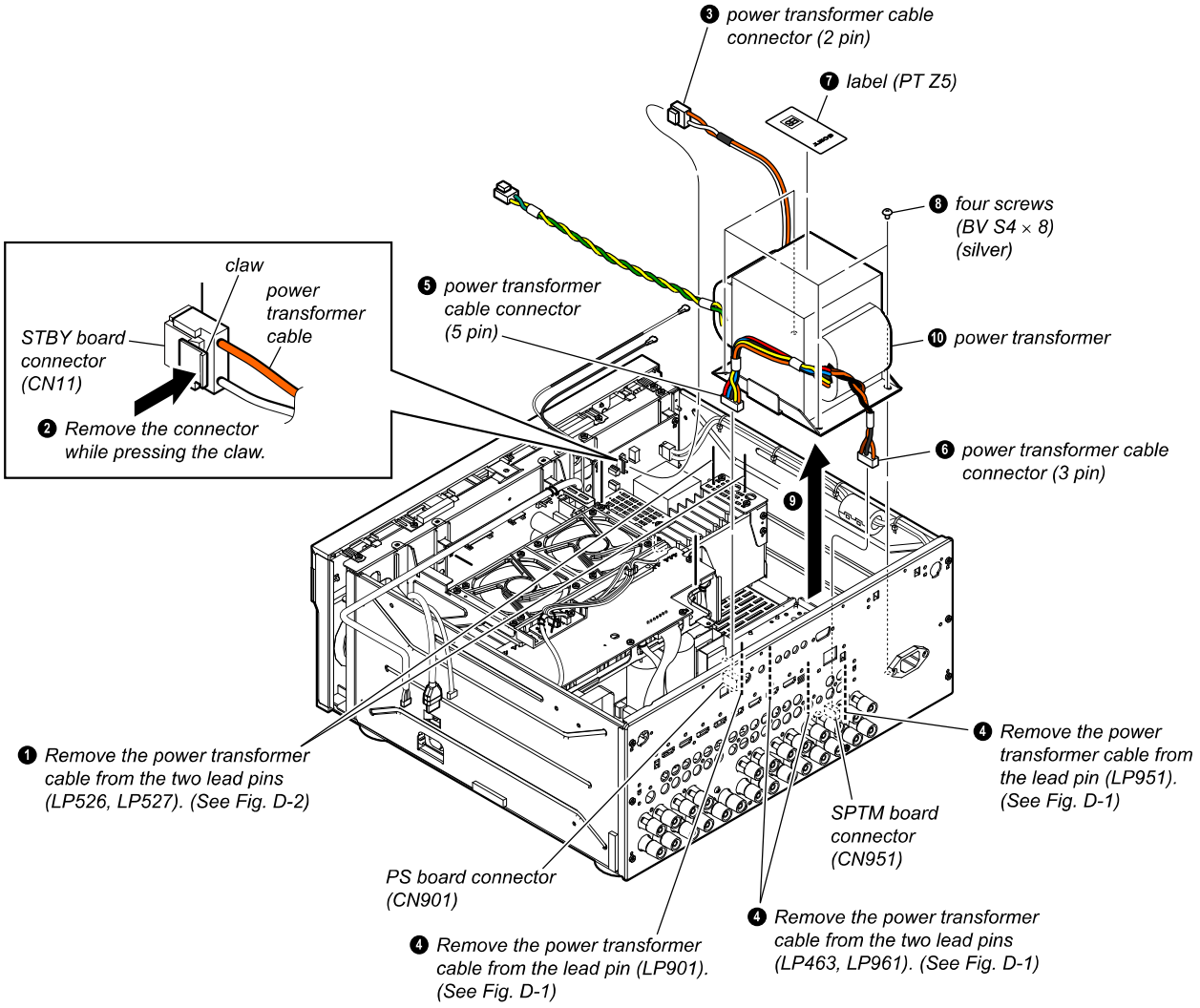


NG

– Top view –



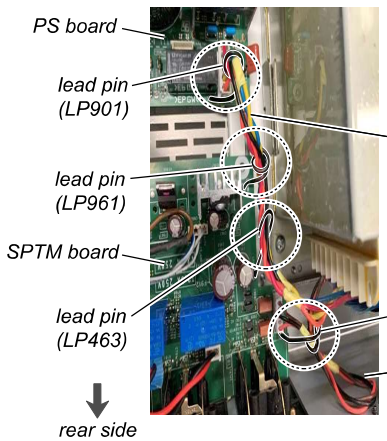
2-40. POWER TRANSFORMER-2



• Wire arrangement when installing the power transformer

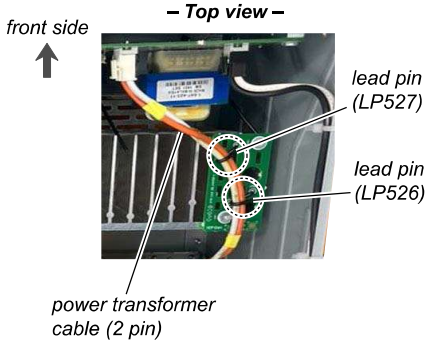
< Fig. D-1 >

– Top view –

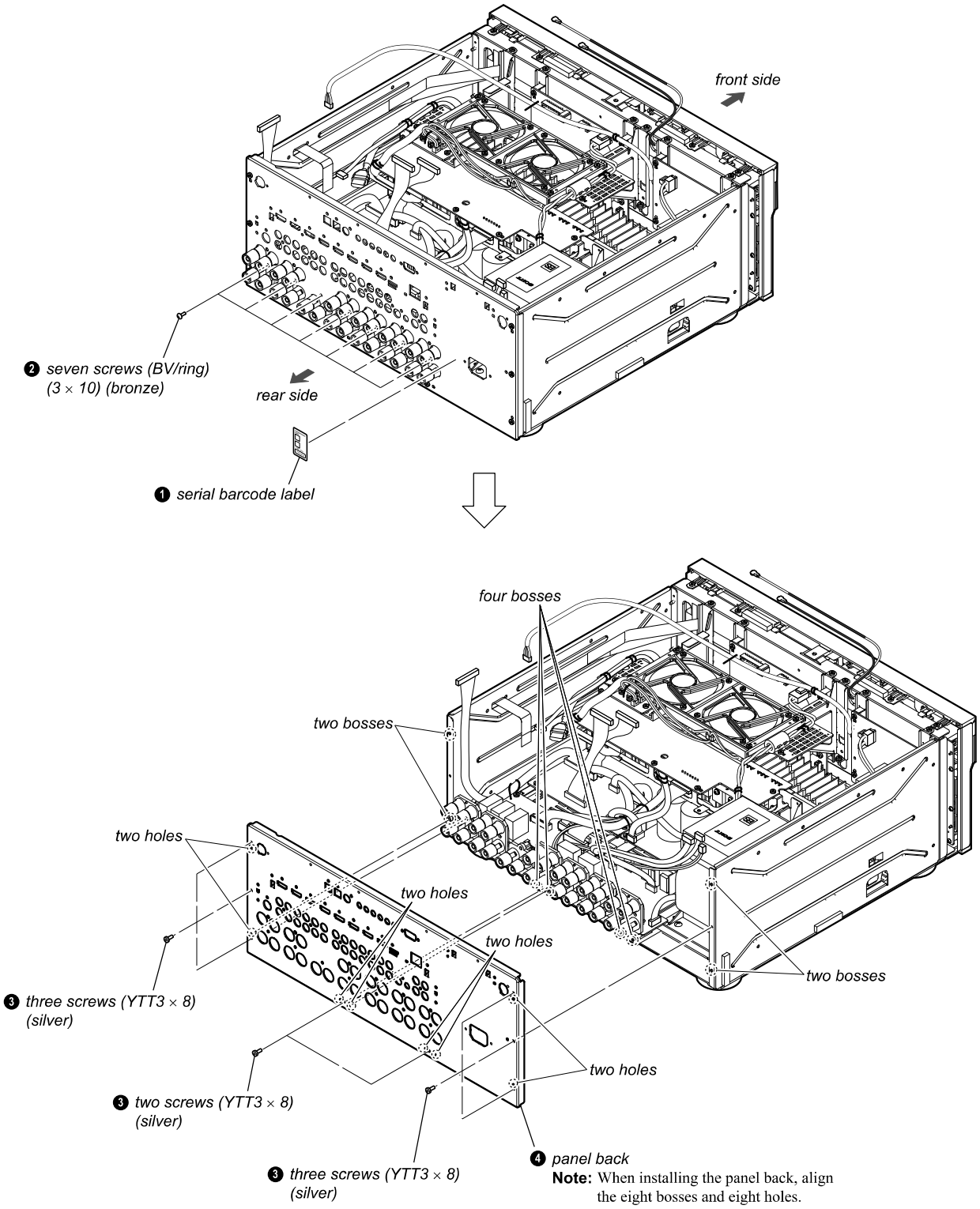


< Fig. D-2 >

– Top view –

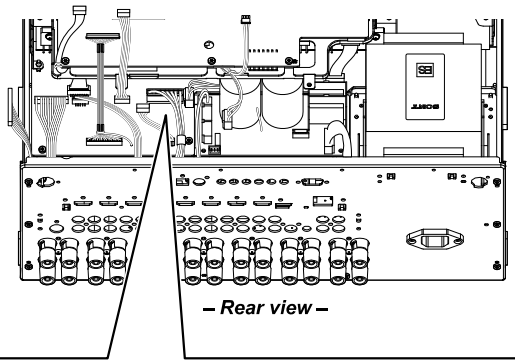


2-41. PANEL BACK



2-42. HARNESS (INNER)-1

• Continued on 2-43 (page 55).



❻ Remove the harness_4_SPTM to AMP and harness_8_SPTM to PS from the lead pin (LP911).

❺ harness_704_AMP to PS connector (3 pin)

❷ Remove the harness_705_AMP to PS from the lead pin (LP913).

❻ Remove the harness_4_SPTM to AMP, harness_713_SPTM to AMP, harness_5 or 6 or 7_SPTM to 2F AMP and harness_8_SPTM to PS from the lead pin (LP912).

❸ harness_705_AMP to PS connector (5 pin)

PS board connector (CN931)

PS board connector (CN921)

❹ harness_711_2F_AMP to PS connector (3 pin)

❶ Remove the harness_10_SPTM to ANALOG, harness_716_SPTM to ANALOG/DIGITAL, harness_714_SPTM to ANALOG and harness_715_SPTM to ANALOG from the lead pin (LP462).

PS board connector (CN926)

harness_1 _AMP to PS

claw

❶❶ Remove the connector while pressing the claw.

rear side

PS board connector (CN911)

harness_2 _2F_AMP to PS

claw

❾ Remove the connector while pressing the claw.

rear side

PS board connector (CN916)

harness_5 or 6 or 7_SPTM to 2F_AMP

rear side

2F AMP board connector (CN9031)

claw

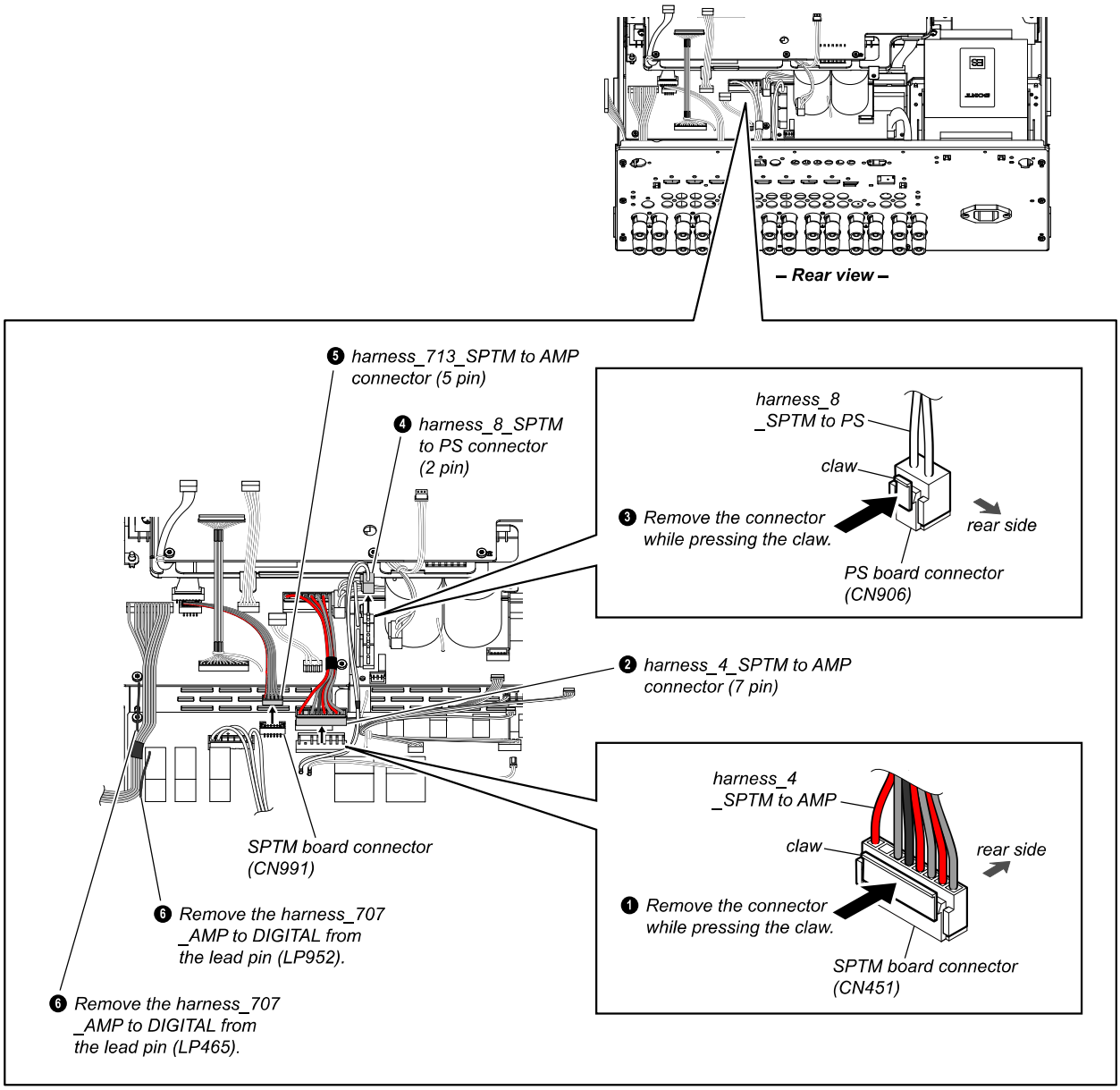
❼ Remove the connector while pressing the claw.

❶❷ harness_1_AMP to PS connector (3 pin)

❽ harness_7_SPTM to 2F_AMP connector (3 pin) (AZ3000ES) harness_6_SPTM to 2F_AMP connector (5 pin) (AZ5000ES) harness_5_SPTM to 2F_AMP connector (7 pin) (AZ7000ES)

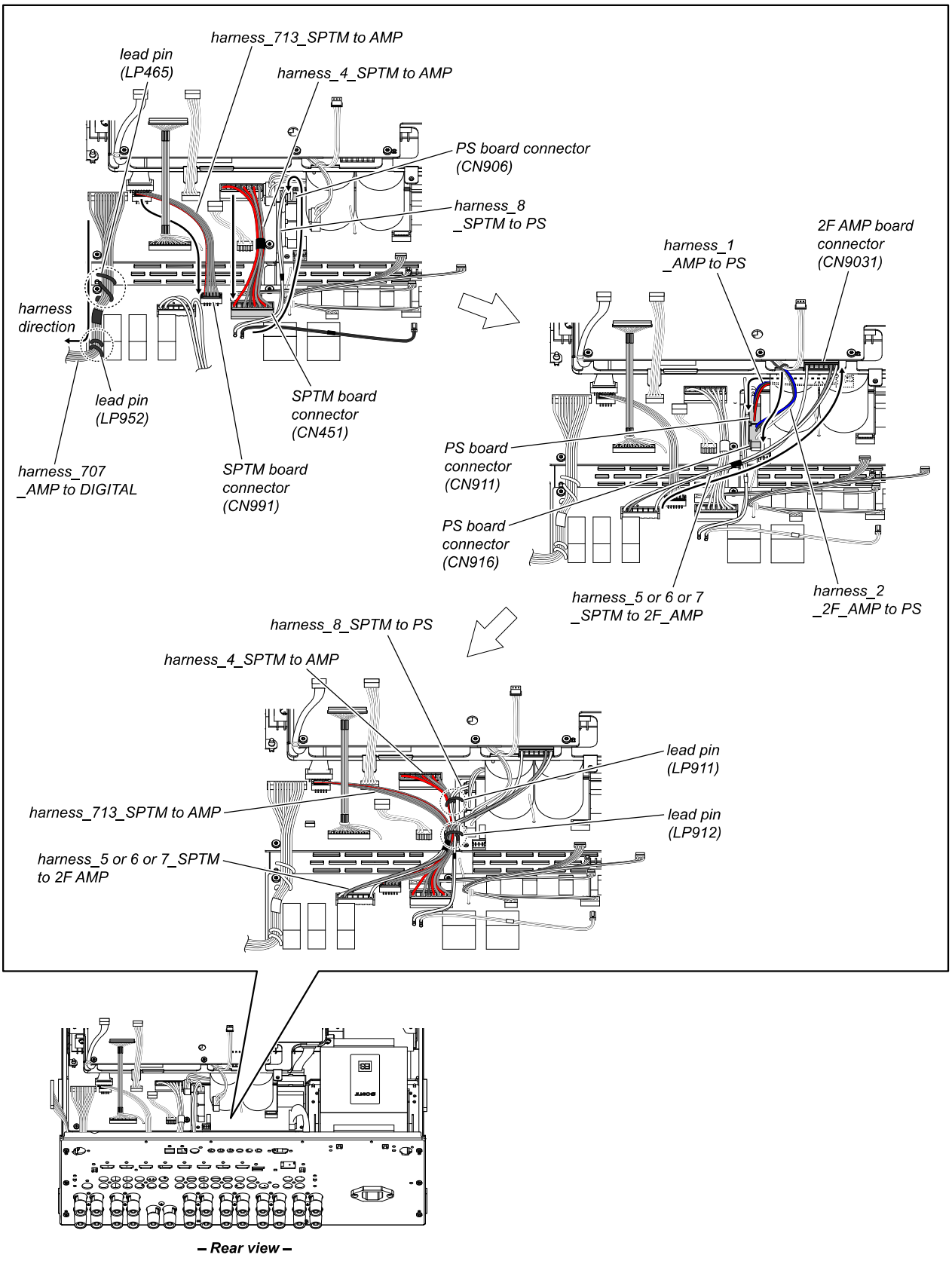
❿ harness_2 _2F_AMP to PS connector (3 pin)

2-43. HARNESS (INNER)-2



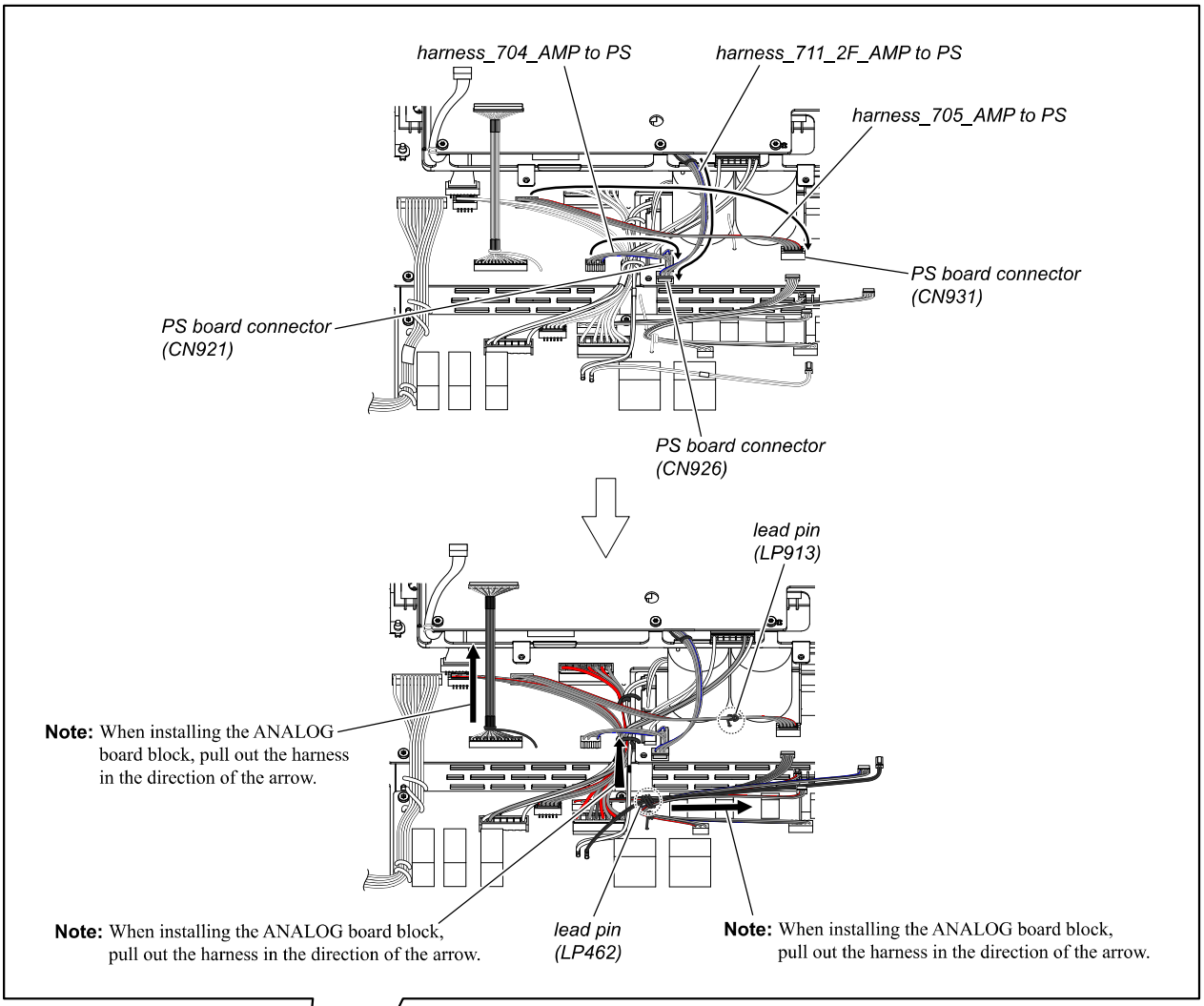
2-44. HOW TO INSTALL THE HARNESS (INNER)-1

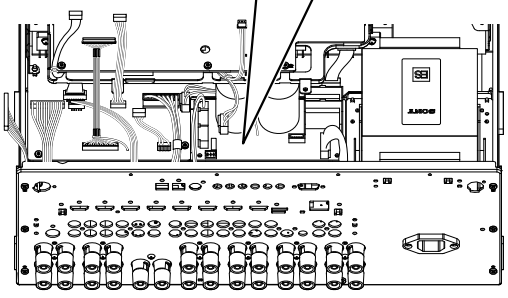
• Continued on 2-45 (page 57).



– Rear view –

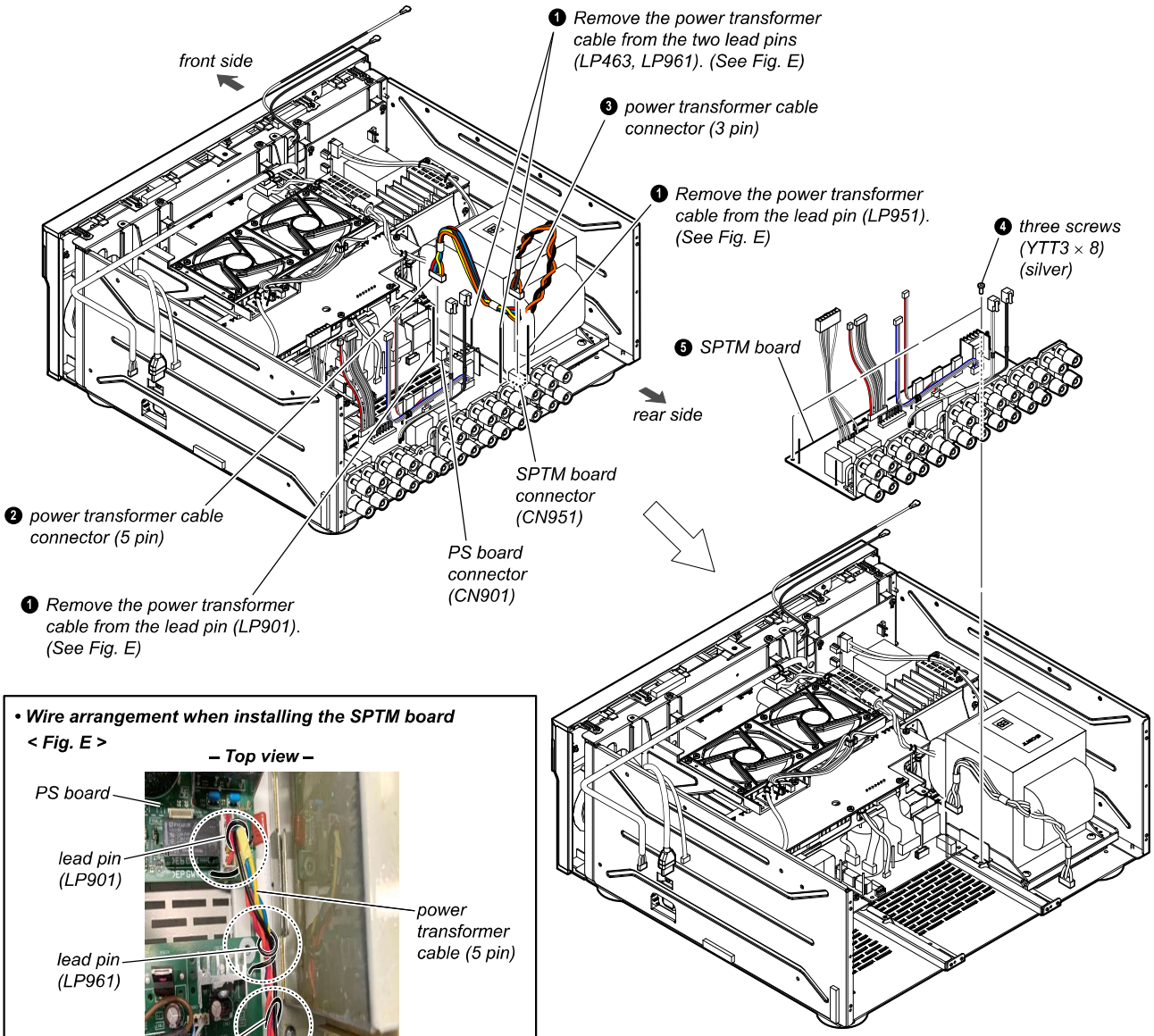
2-45. HOW TO INSTALL THE HARNESS (INNER)-2





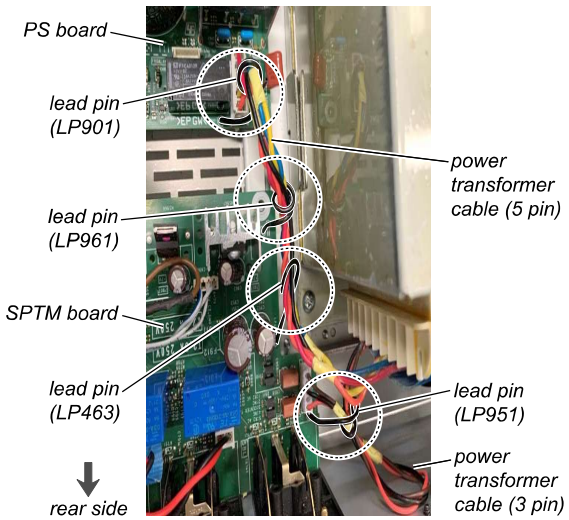
– Rear view –

2-46. SPTM BOARD

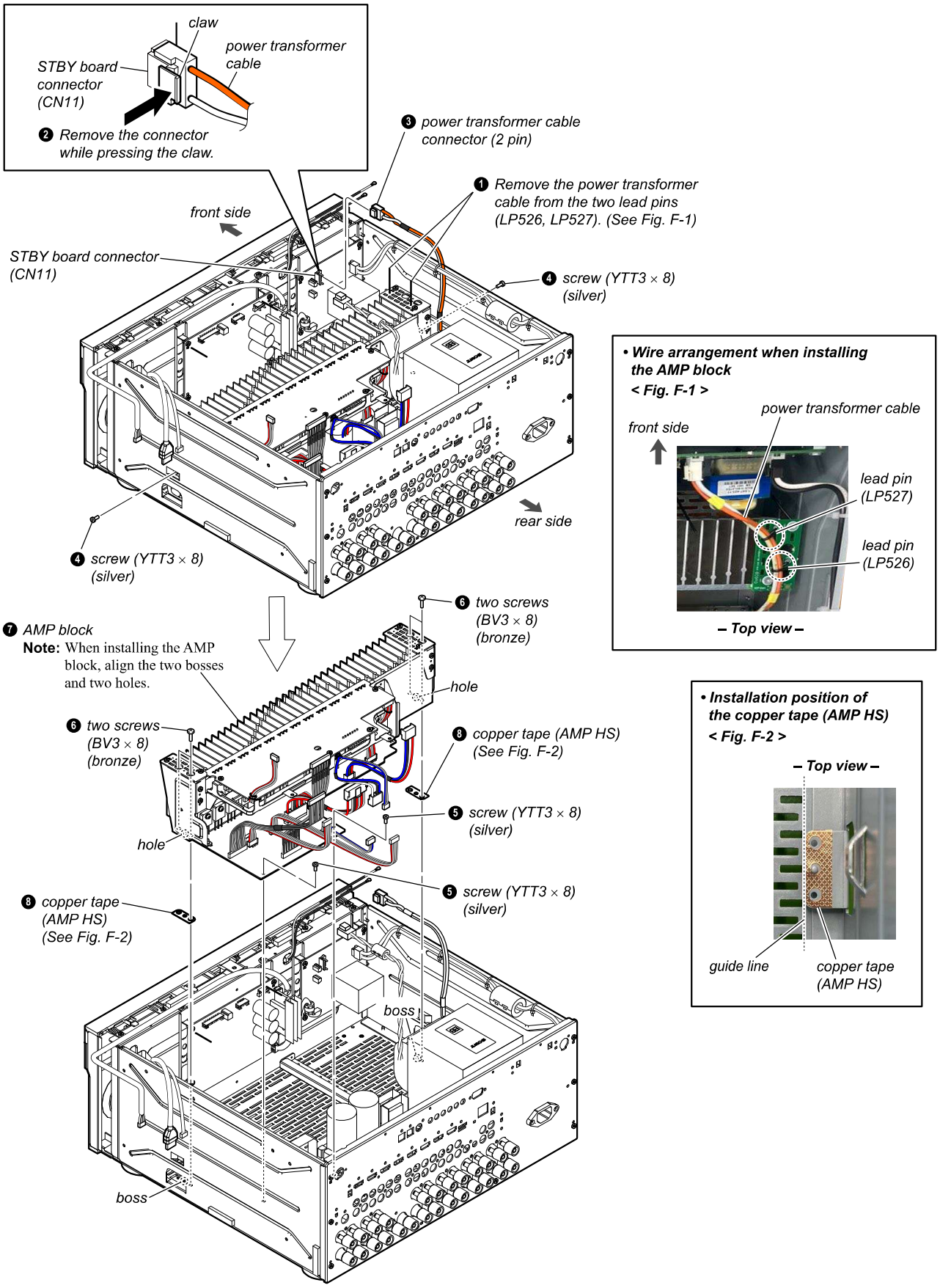


• Wire arrangement when installing the SPTM board
< Fig. E >

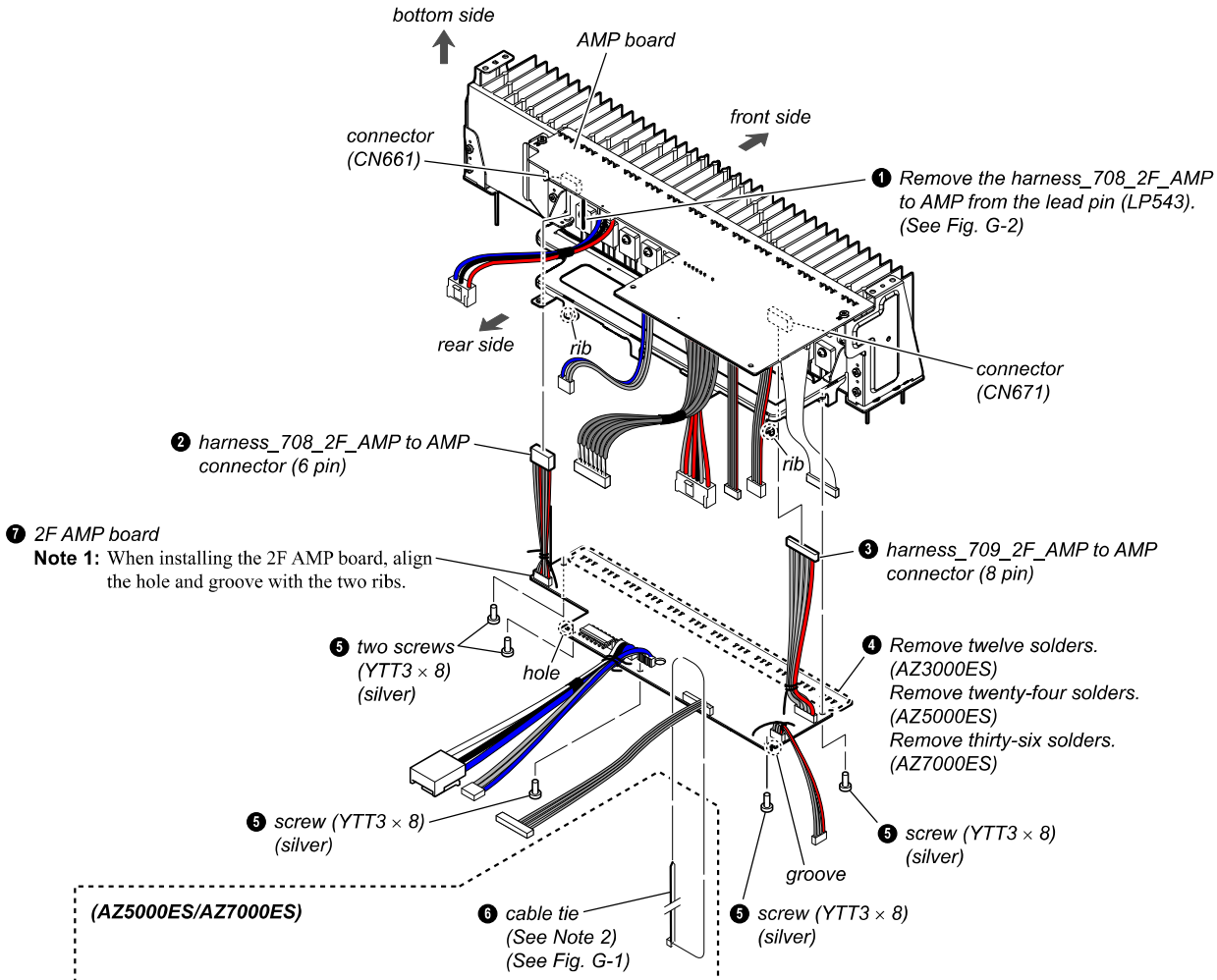
– Top view –



2-47. AMP BLOCK

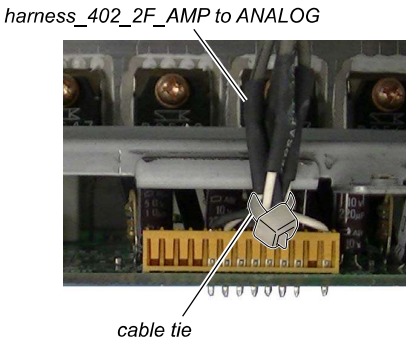


2-48. 2F AMP BOARD

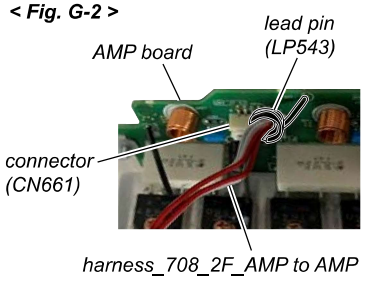


• Installation position of the cable tie
< Fig. G-1 >

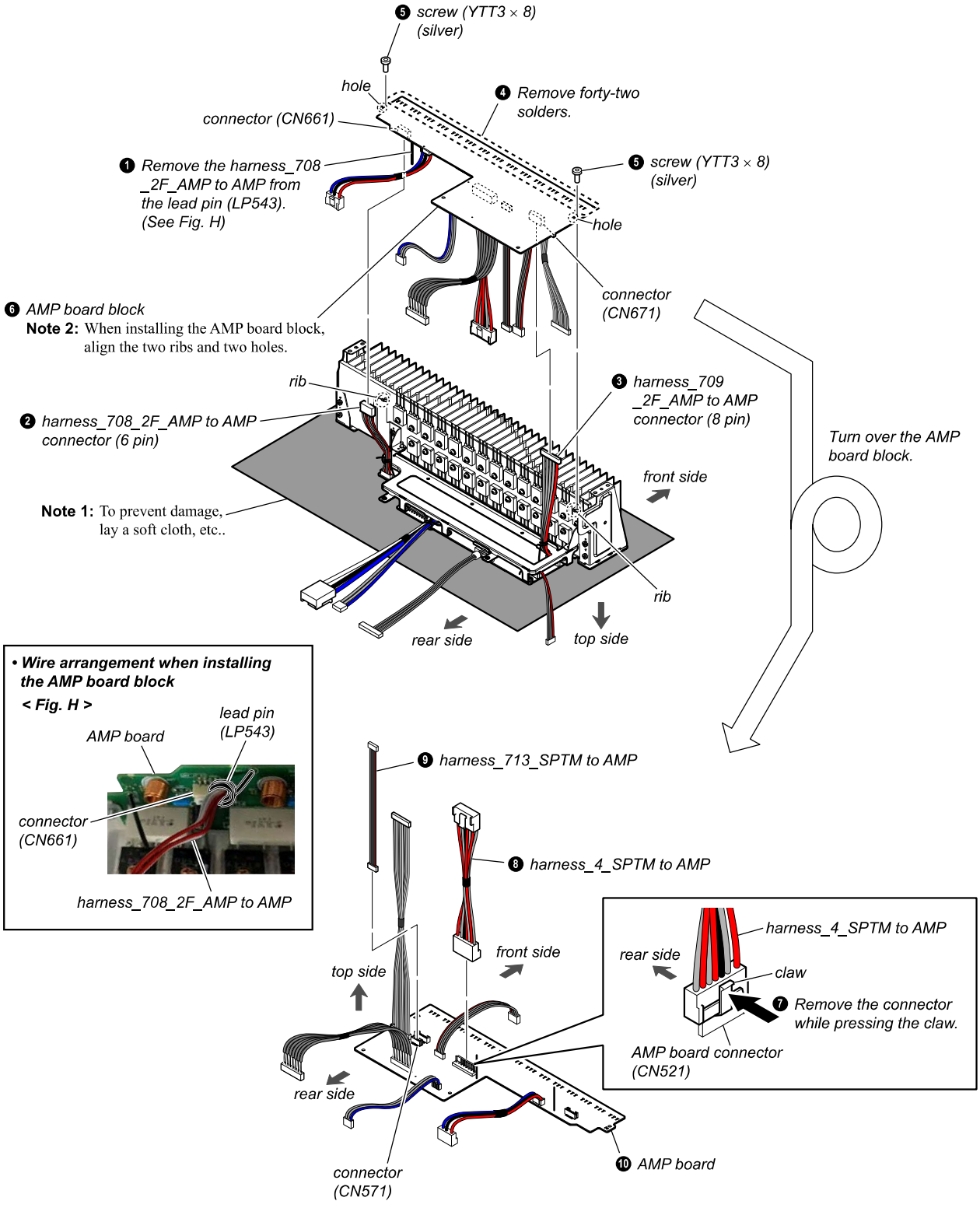
Note 2: During reassembly, use new cable ties to fasten the wires back in place as they were before disassembly.



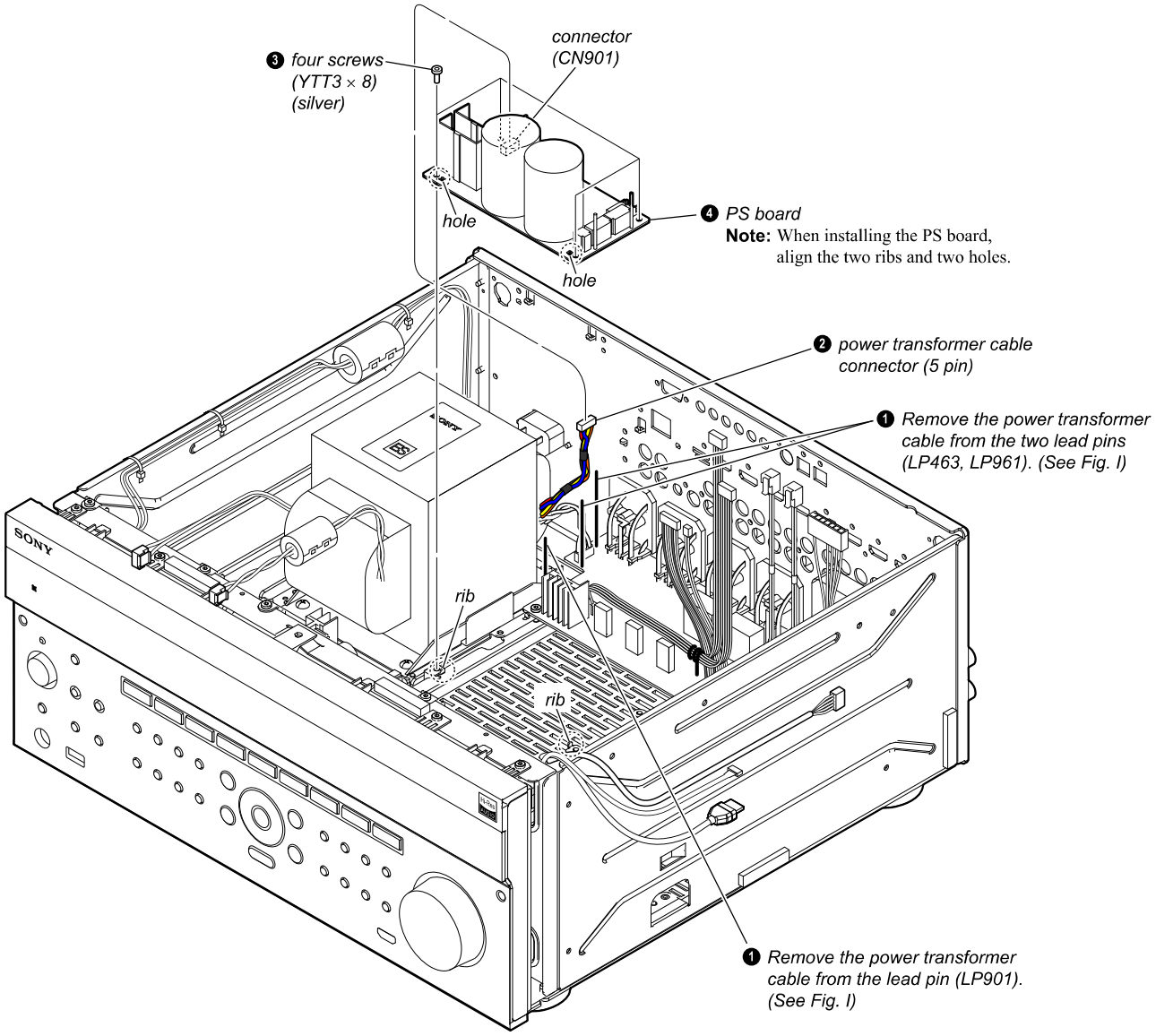
• Wire arrangement when installing the 2F AMP board
< Fig. G-2 >



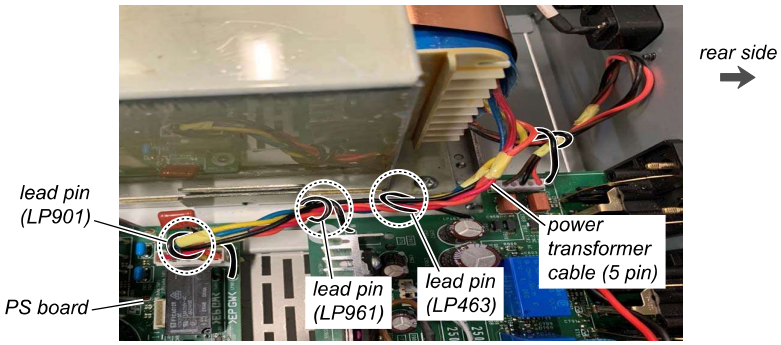
2-49. AMP BOARD



2-50. PS BOARD



• ***Wire arrangement when installing the PS board***
< Fig. I >

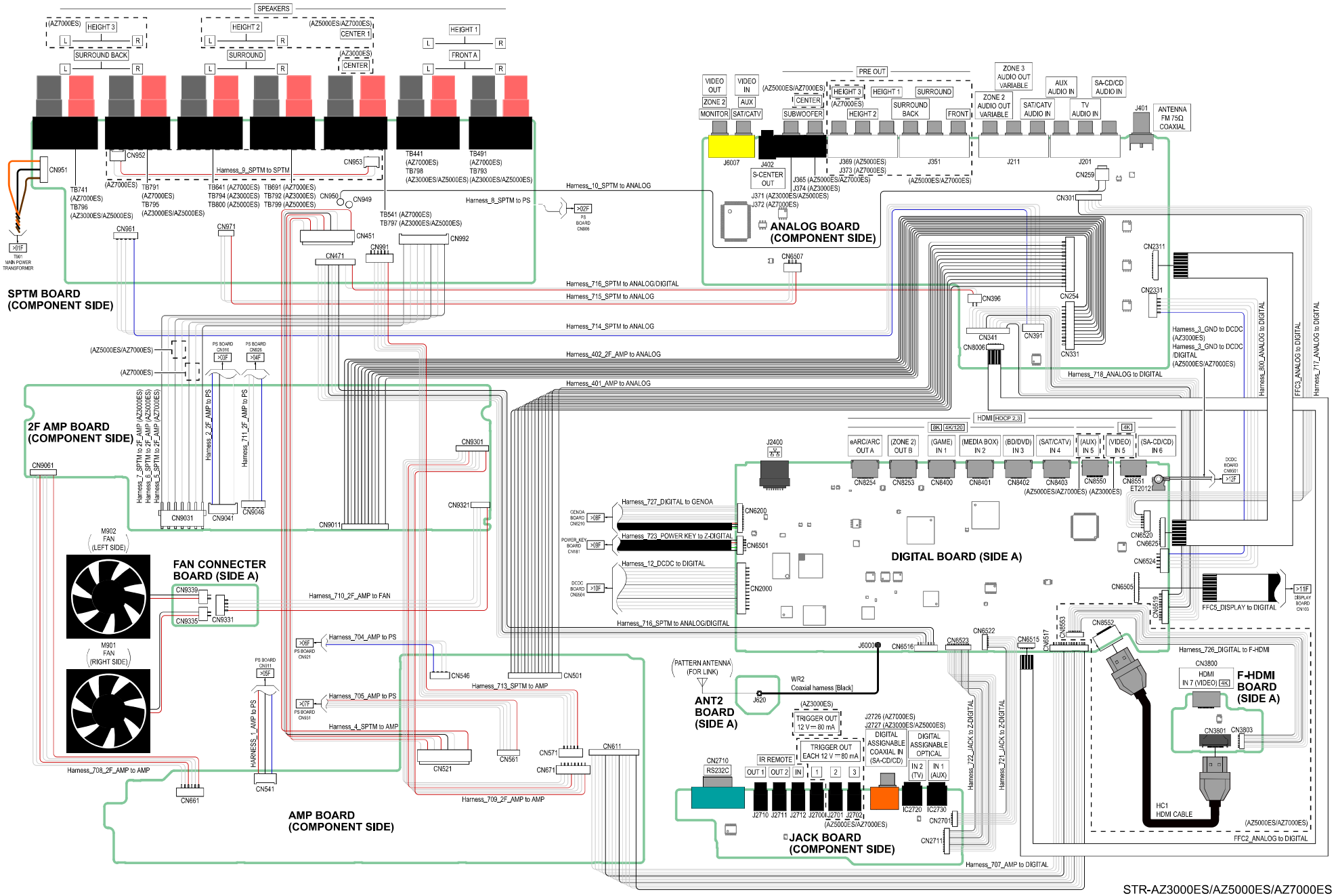


– Top view –

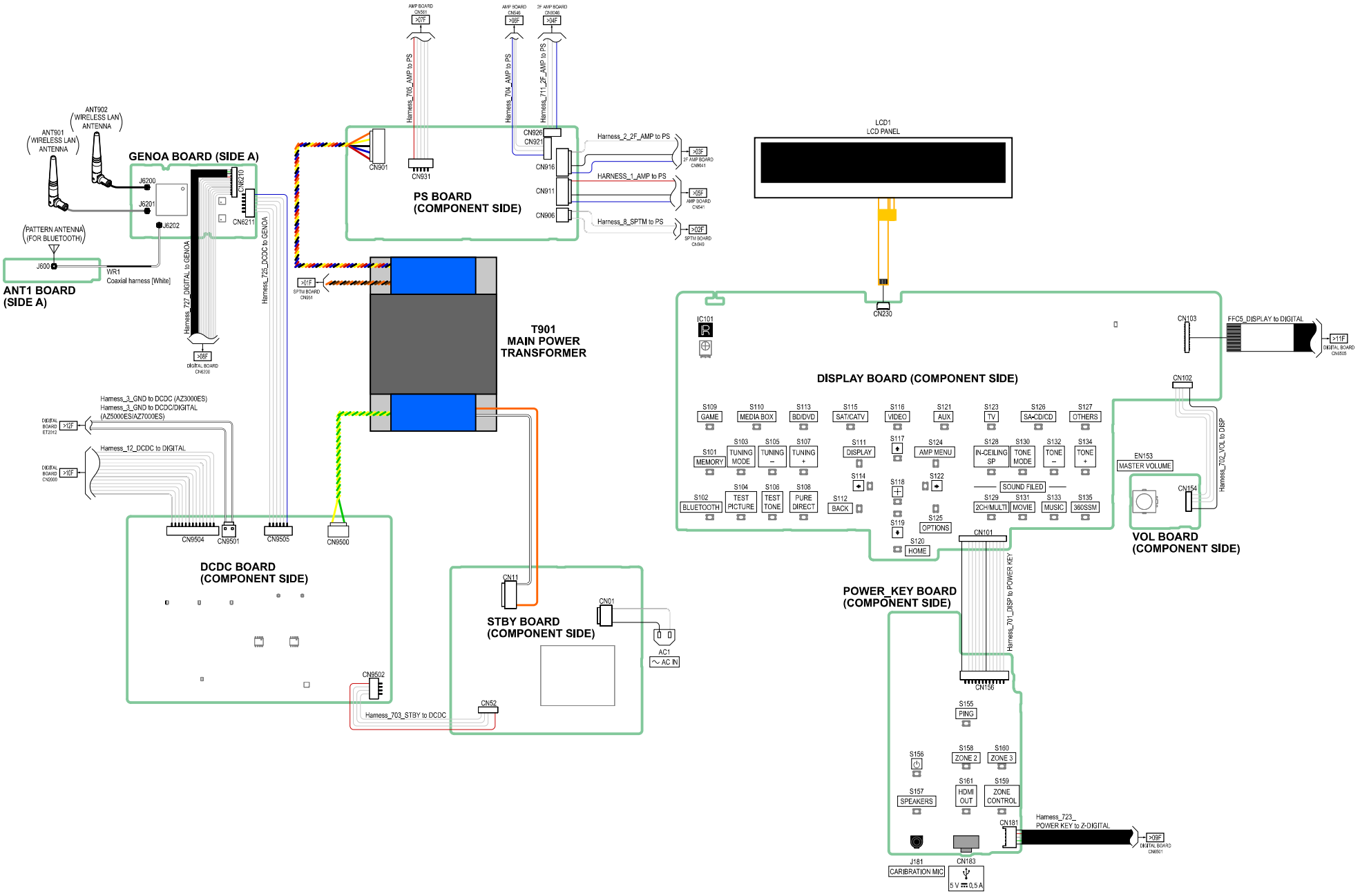
STR-AZ3000ES/AZ5000ES/AZ7000ES

SECTION 3
DIAGRAMS

3-1. FRAME HARNESS - MAIN Section -



3-2. FRAME HARNESS - PANEL/POWER SUPPLY Section -



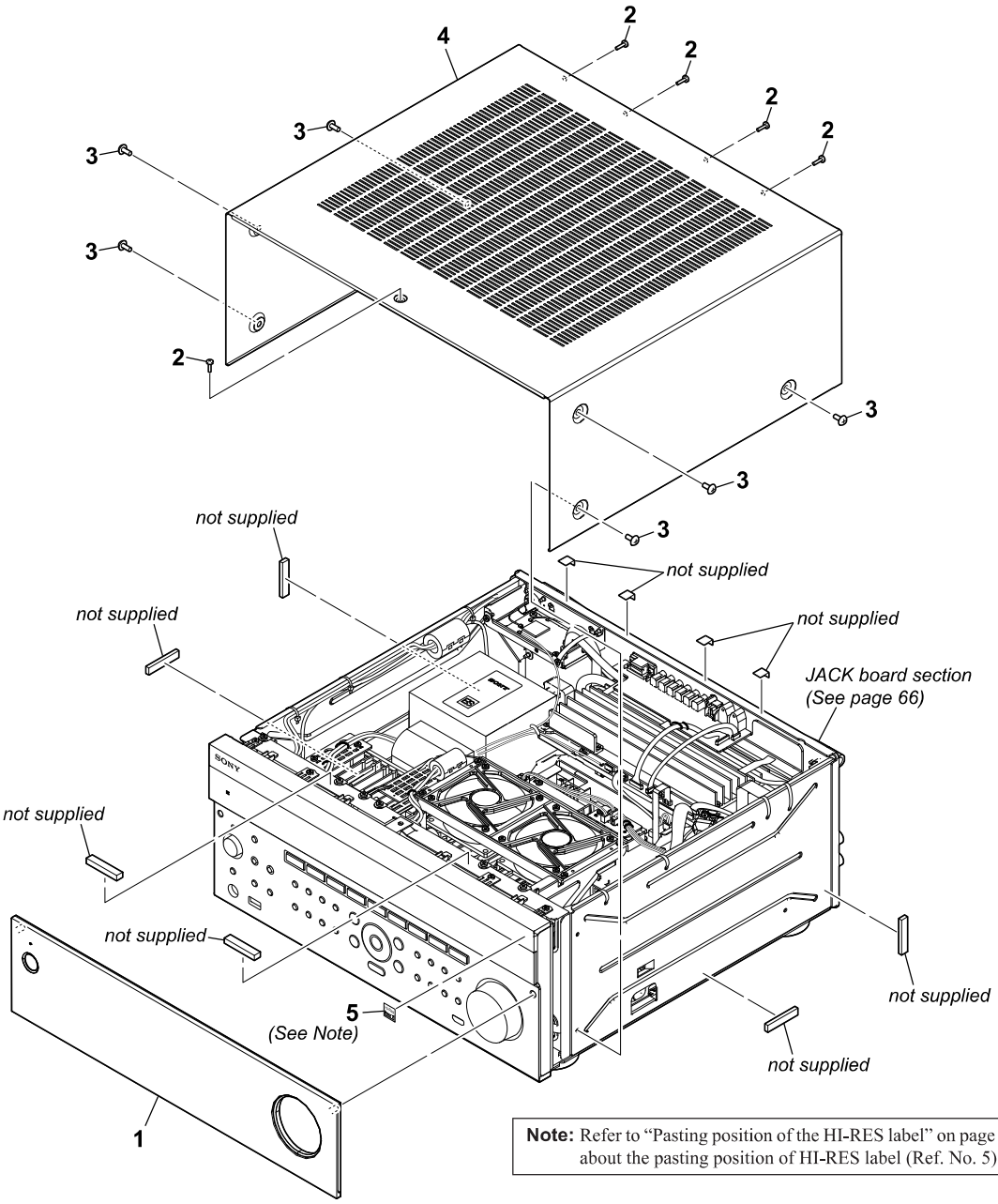
STR-AZ3000ES/AZ5000ES/AZ7000ES

SECTION 4
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 exploded views uses an illustration of the STR-AZ7000ES.
  However, an illustration of the STR-AZ-3000ES/AZ5000ES is used in "4-13. HEAT-SINK SECTION" (page 77) only.

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

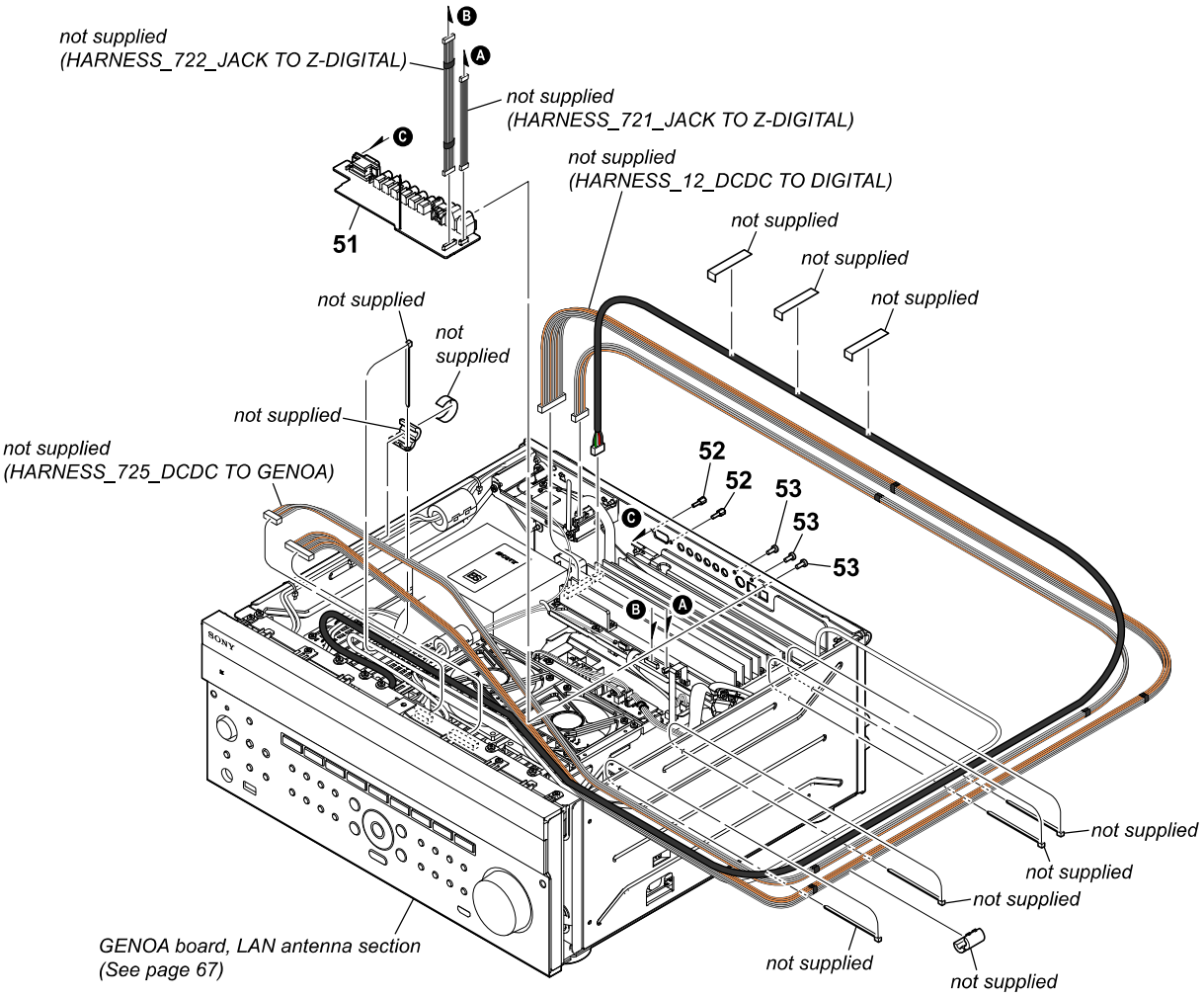
4-1. CASE SECTION

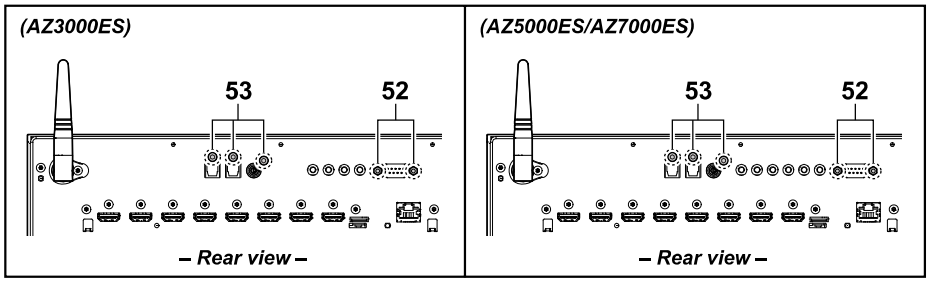


Note: Refer to "Pasting position of the HI-RES label" on page 50 for more about the pasting position of HI-RES label (Ref. No. 5).

Ref. No.	Part No.	Description	Remark
1	A5059869A	COVER FRONT ASSY (SERVICE) (Front cover)	(Accessories)
2	390688711	SCREW (+BTP) (DIA. 3) (BZN-N) (L=8.0 mm)	(BLACK)
3	258063001	SCREW, +BVST 4X8 (BLACK)	
4	A5057878A	CASE ASSY (SERVICE)	(Including Spacer cushion (T6), TEF tape, Slion tape)
5	447746532	HI-RES LABEL (See Note)	

4-2. JACK BOARD SECTION

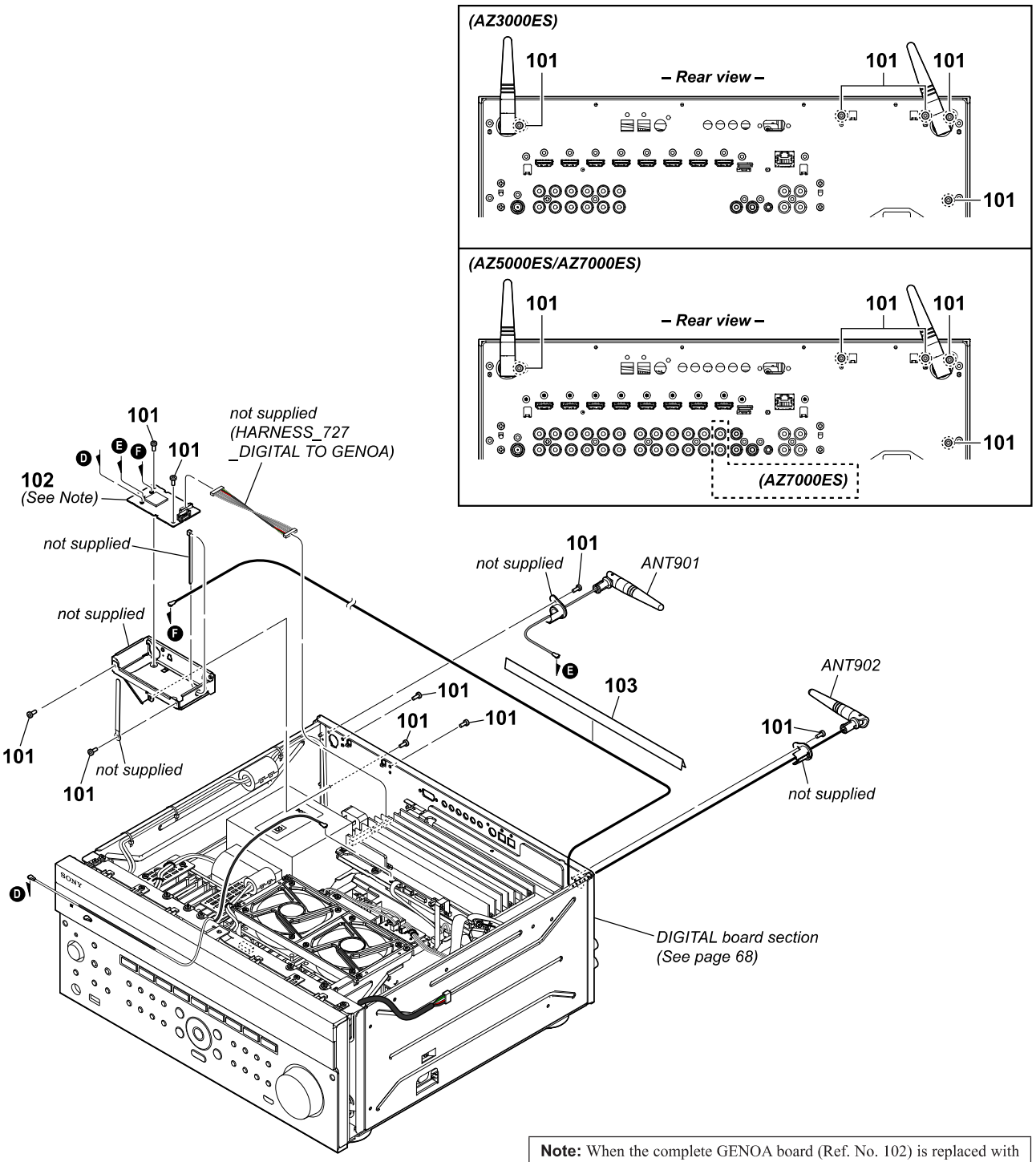




Ref. No.	Part No.	Description	Remark
51	A5058132A	JACK BOARD, COMPLETE (SV) (AZ7000ES)	
51	A5058141A	JACK BOARD, COMPLETE (SV) (AZ5000ES)	
51	A5058147A	JACK BOARD, COMPLETE (SV) (AZ3000ES)	

Ref. No.	Part No.	Description	Remark
52	504263701	SCREW, HEX SPACER (SILVER)	
53	502719501	SCREW YTT 3X8 (SILVER)	

4-3. GENOA BOARD, LAN ANTENNA SECTION

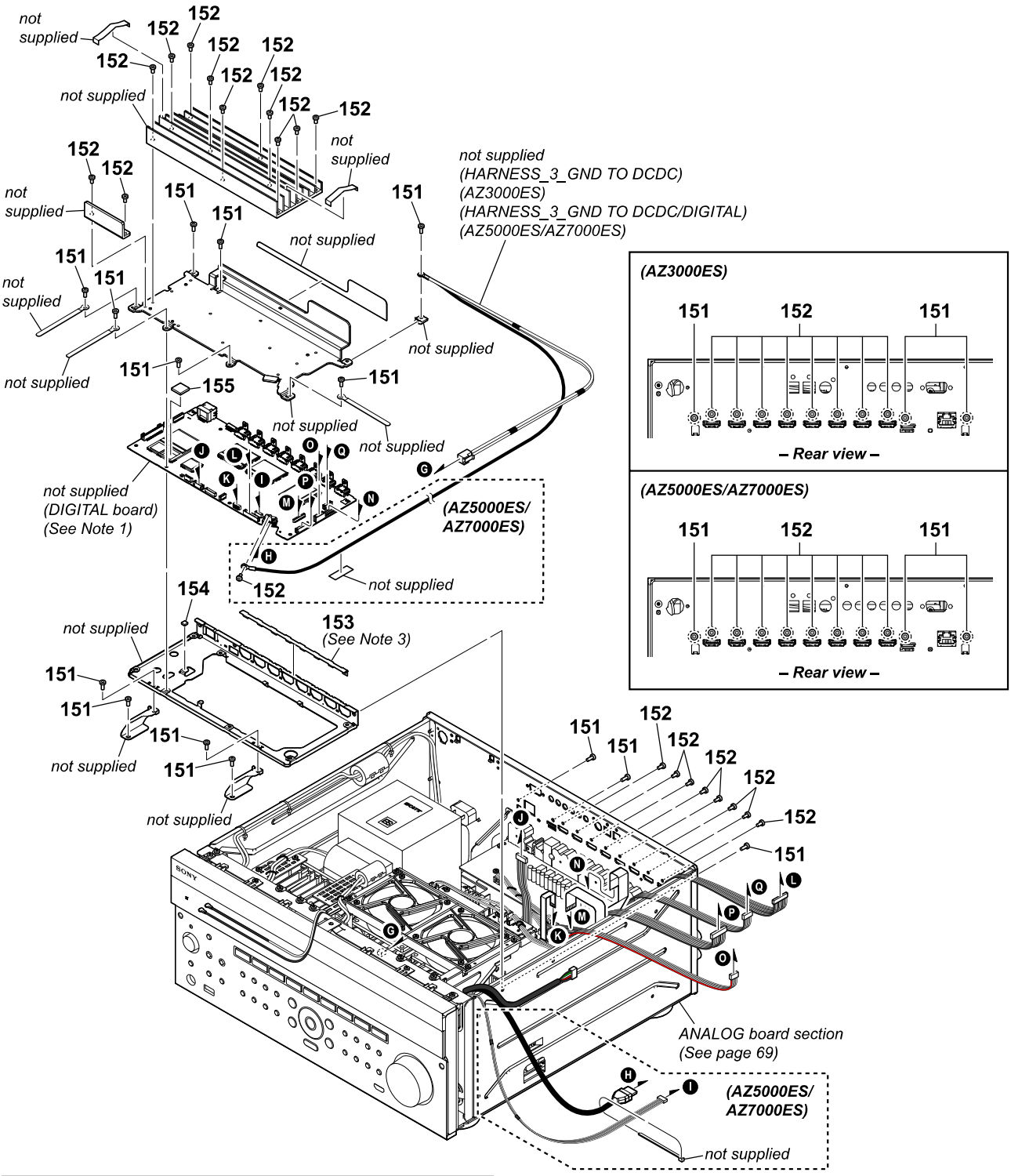


Note: When the complete GENOA board (Ref. No. 102) is replaced with a new board, be sure to refer to "NOTE OF REPLACING THE GENOA BOARD" on page 8.

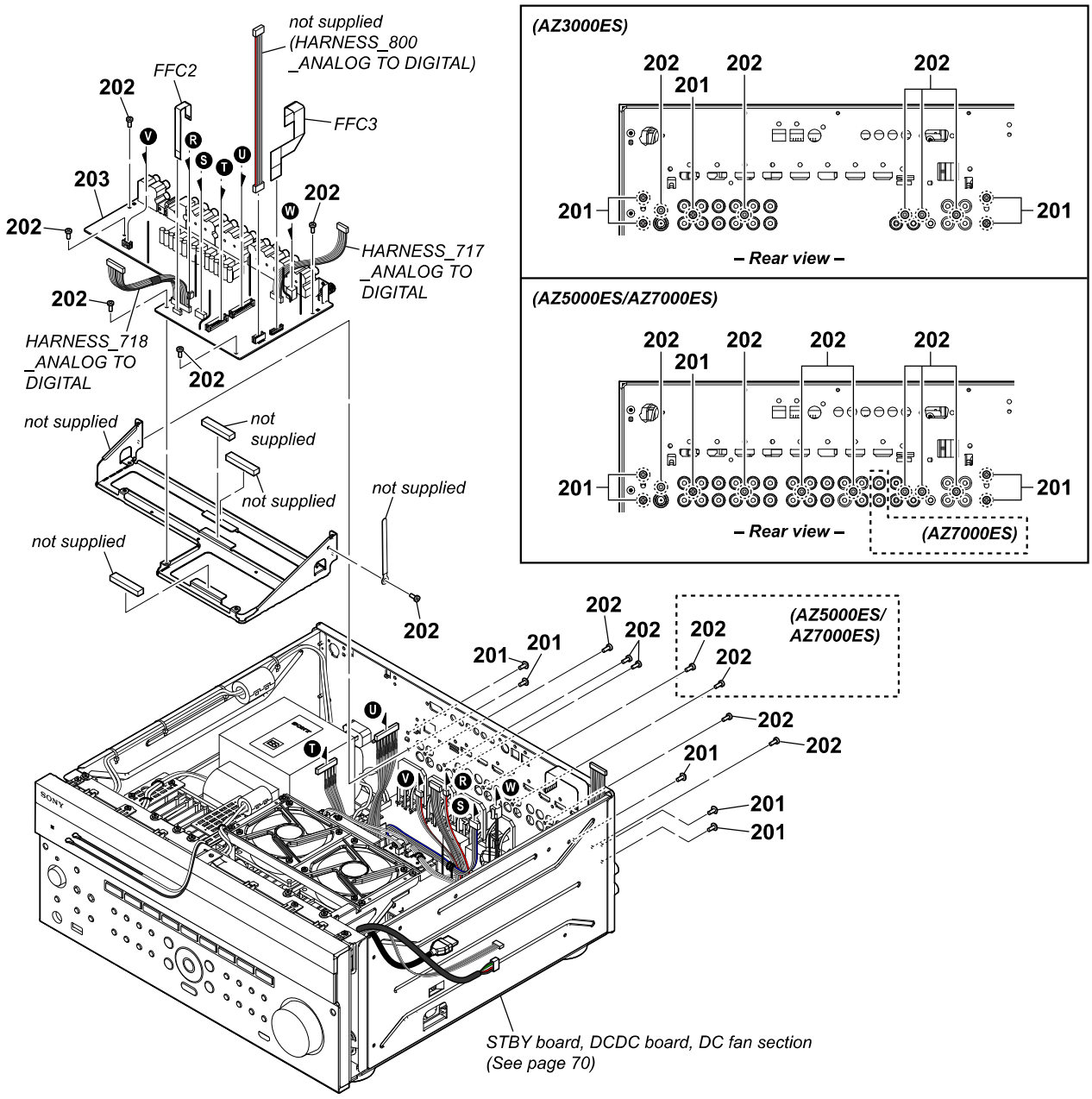
Ref. No.	Part No.	Description	Remark
101	502719501	SCREW YTT 3X8 (SILVER)	
102	A5058110A	GENOA BOARD, COMPLETE (SV) (See Note)	
103	504253601	EMI ABSORBER	

Ref. No.	Part No.	Description	Remark
ANT901	175497121	DUAL-BAND DIPOLE ANTENNA	(Wireless LAN antenna)
ANT902	175497131	DUAL-BAND DIPOLE ANTENNA	(Wireless LAN antenna)

4-4. DIGITAL BOARD SECTION

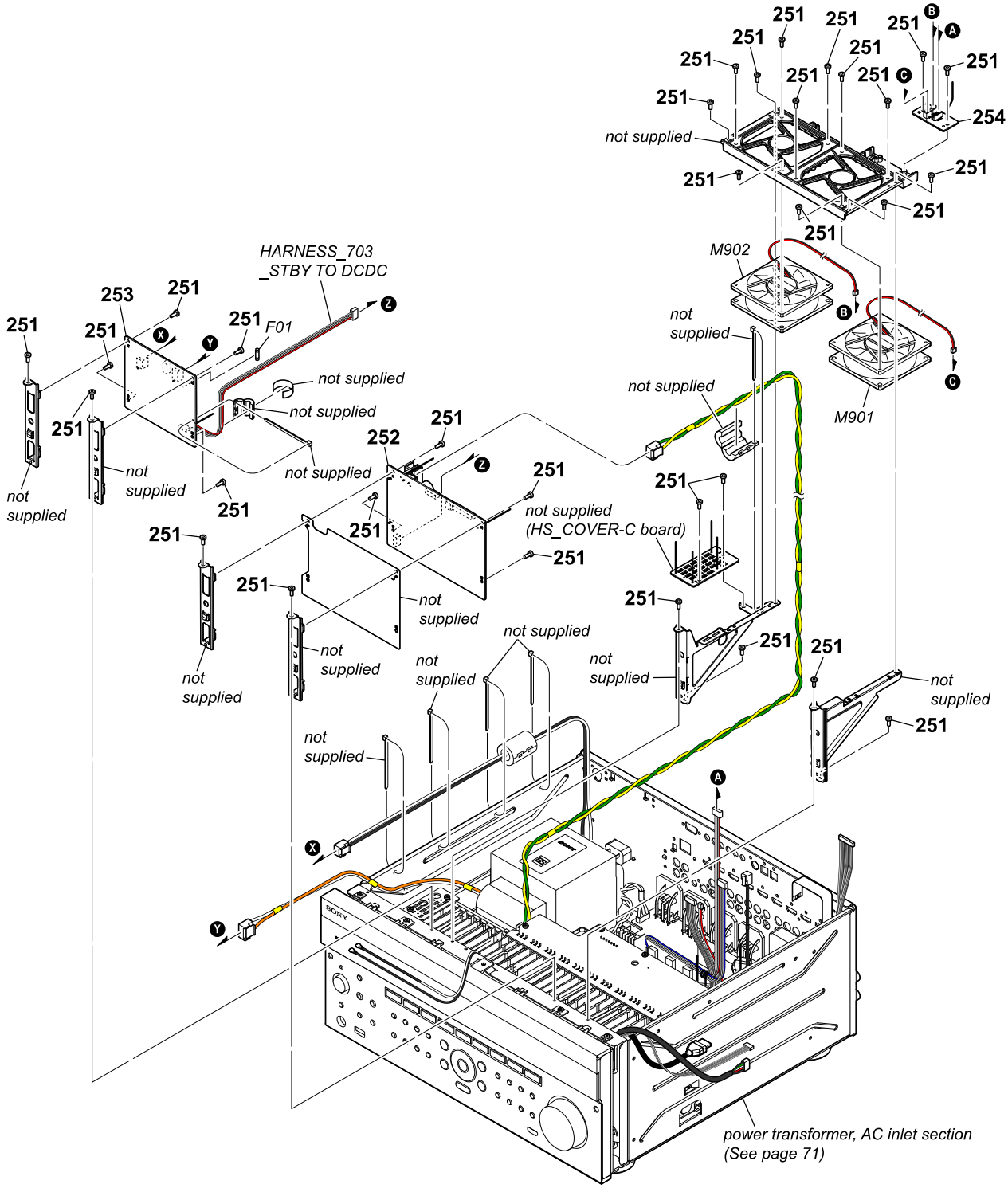

not supplied
not supplied
not supplied

4-5. ANALOG BOARD SECTION



Ref. No.	Part No.	Description	Remark
201	497451011	SCREW (+BV 3X8 CU) (BRONZE)	
202	502719501	SCREW YTT 3X8 (SILVER)	
203	A5058139A	ANALOG BOARD, COMPLETE (SV) (AZ7000ES)	
203	A5058146A	ANALOG BOARD, COMPLETE (SV) (AZ5000ES)	
203	A5058154A	ANALOG BOARD, COMPLETE (SV) (AZ3000ES)	
FFC2	101370511	FFC2_ANALOG TO DIGITAL (16 core)	
FFC3	101357811	FFC3_ANALOG TO DIGITAL (30 core)	

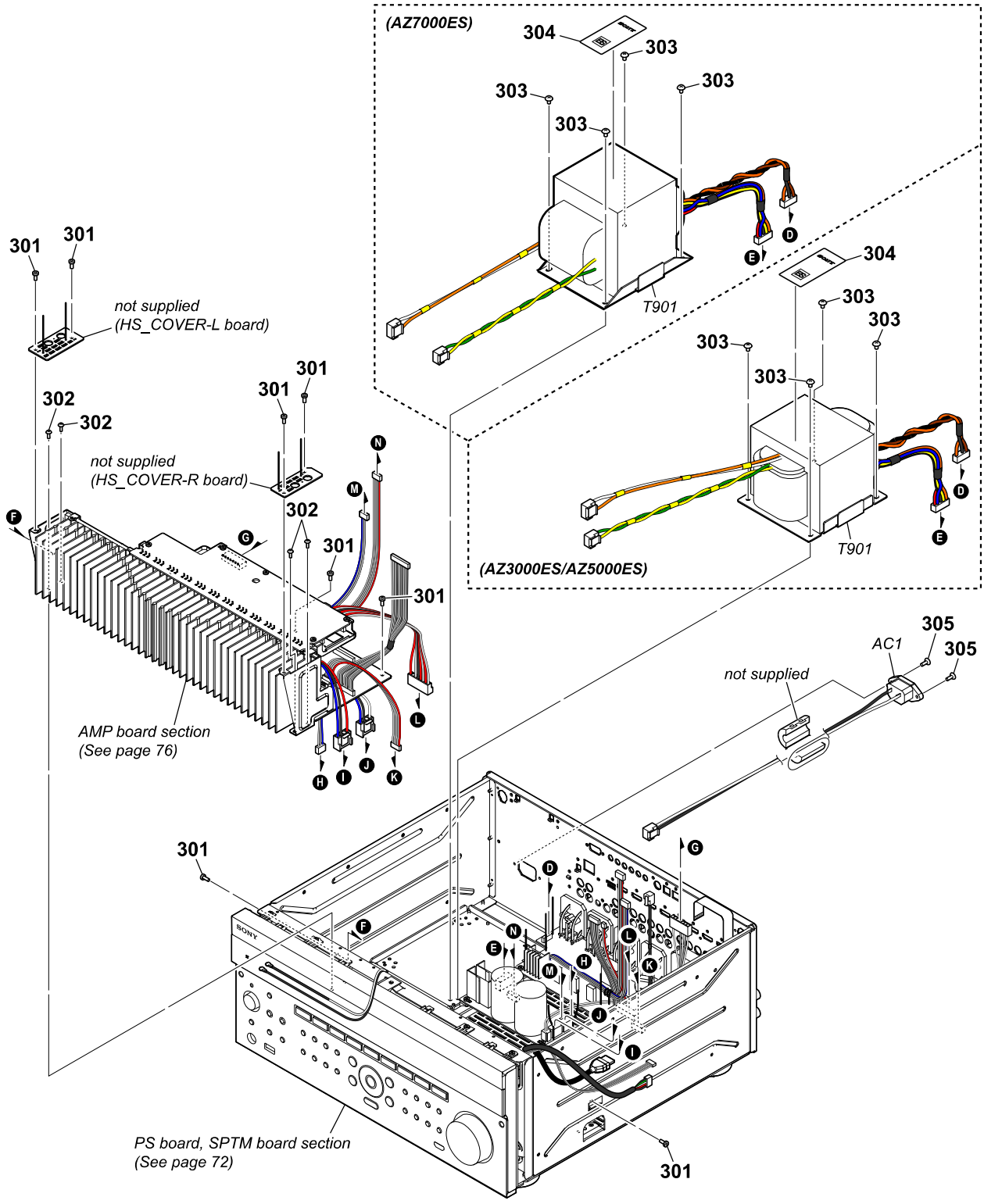
4-6. STBY BOARD, DCDC BOARD, DC FAN SECTION



Ref. No.	Part No.	Description	Remark
251	502719501	SCREW YTT 3X8 (SILVER)	
252	A5058140A	DCDC BOARD, COMPLETE (SV)	
253	A5058133A	STBY BOARD, COMPLETE (SV)	
254	A5058137A	FAN CONNECTER BOARD, COMPLETE (SV)	

Ref. No.	Part No.	Description	Remark
⚠ F01	153250633	FUSE (T 6.3 AL/250 V)	
M901	185500641	FAN, DC	
M902	185500641	FAN, DC	

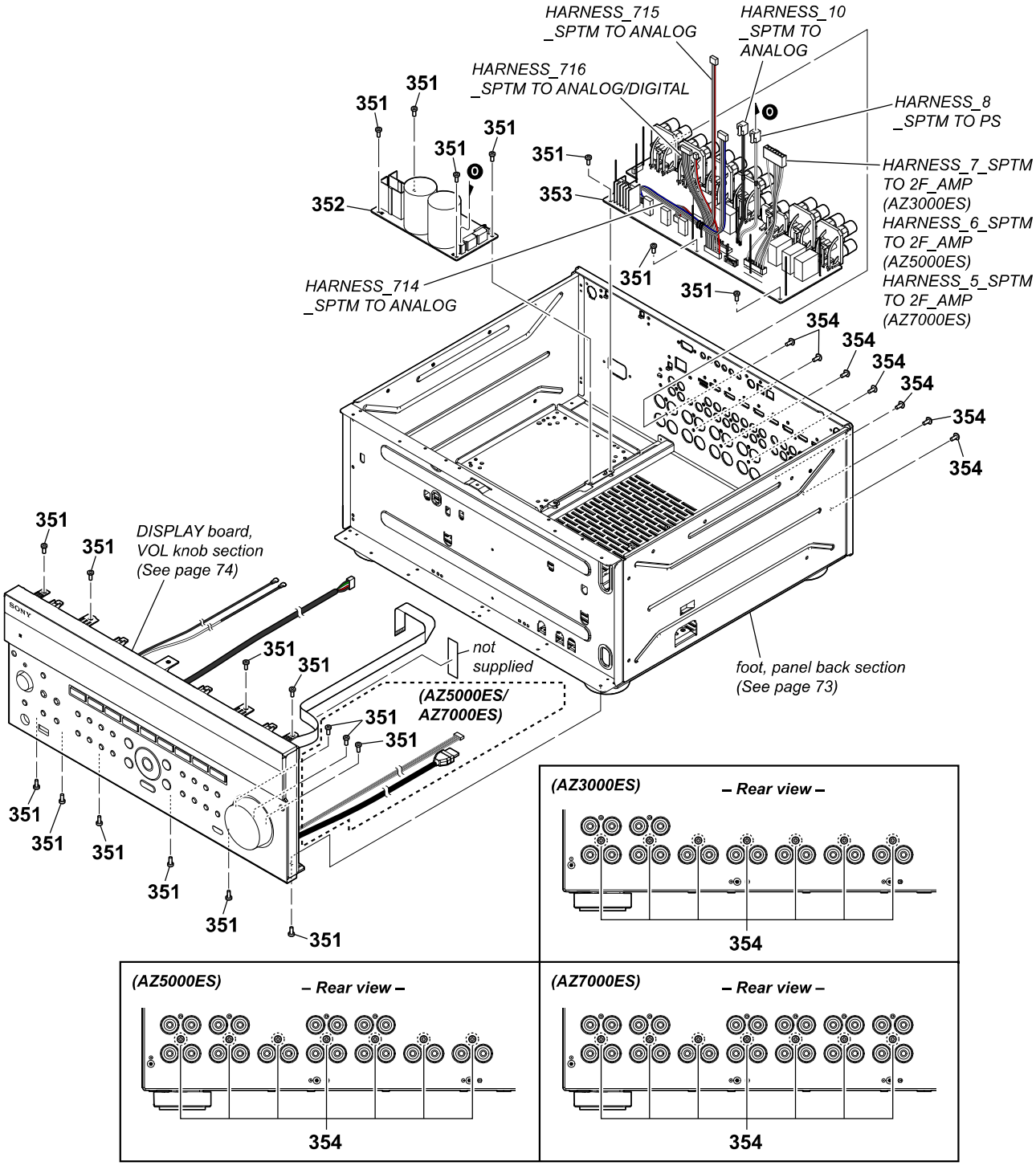
4-7. POWER TRANSFORMER, AC INLET SECTION



Ref. No.	Part No.	Description	Remark
301	502719501	SCREW YTT 3X8 (SILVER)	
302	497451011	SCREW (+BV 3X8 CU) (BRONZE)	
303	490038602	SCREW +BV SUMITITE S 4X8 ROUND (SILVER)	
304	458536701	LABEL (PT Z5)	
305	258064401	SCREW, +KTP2 3X8 (BLACK)	

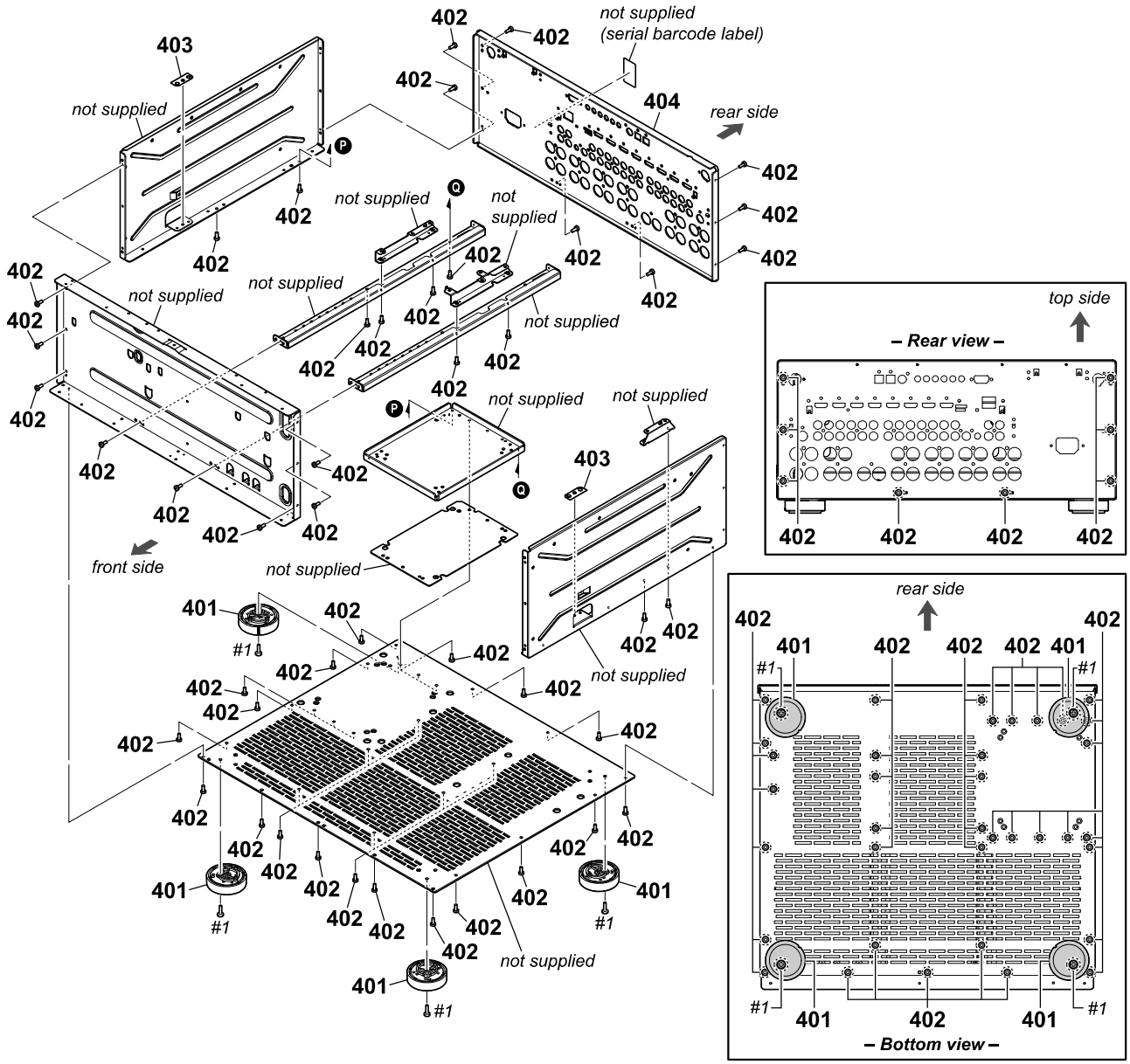
Ref. No.	Part No.	Description	Remark
⚠ AC1	184408612	AC INLET (2P) (~ AC IN)	
⚠ T901	101325211	POWER TRANSFORMER (AZ3000ES/AZ5000ES)	
⚠ T901	101325311	POWER TRANSFORMER (AZ7000ES)	

4-8. PS BOARD, SPTM BOARD SECTION



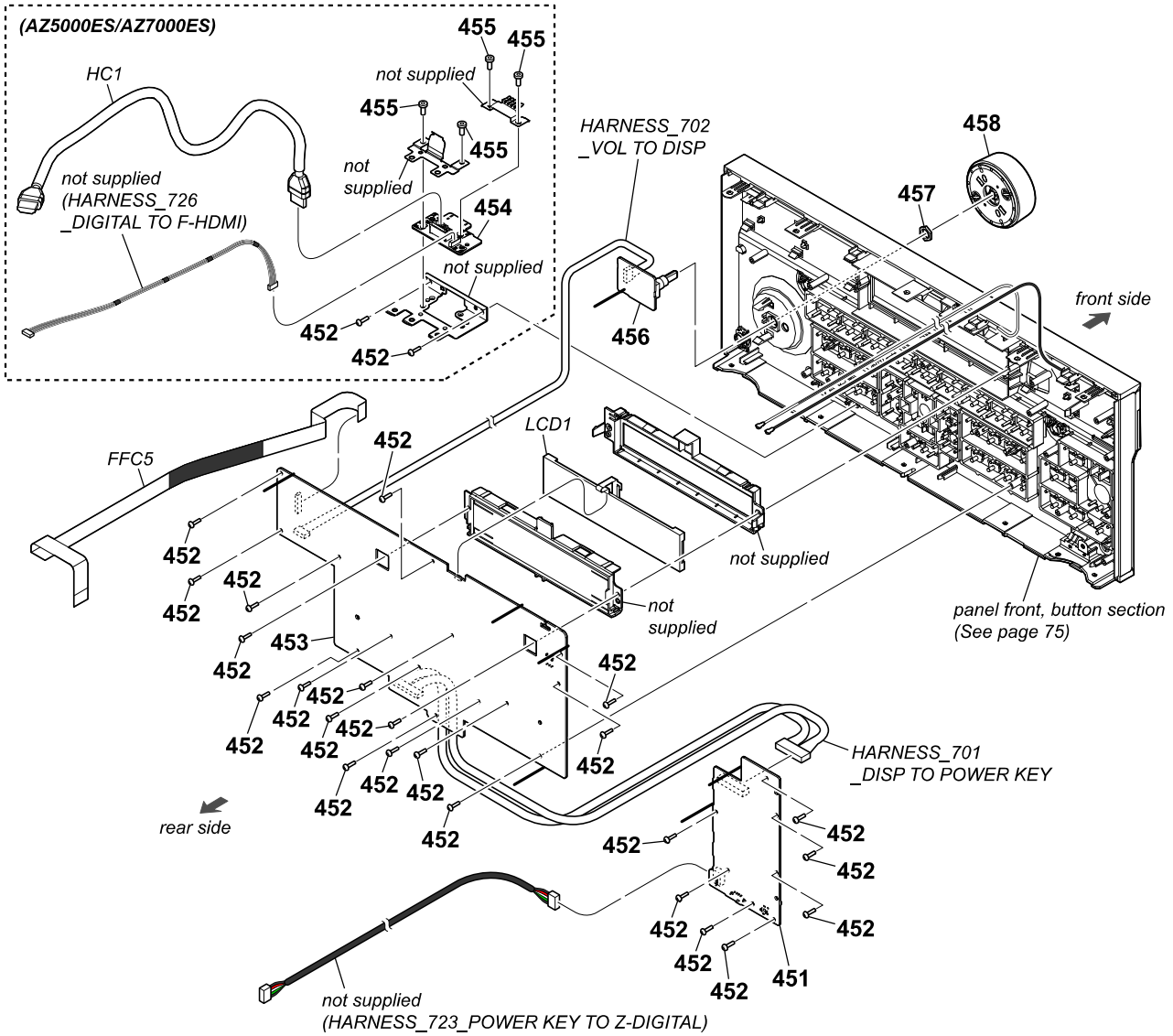
Ref. No.	Part No.	Description	Remark
351	502719501	SCREW YTT 3X8 (SILVER)	
352	A5058136A	PS BOARD, COMPLETE (SV) (AZ7000ES)	
352	A5058144A	PS BOARD, COMPLETE (SV) (AZ5000ES)	
352	A5058152A	PS BOARD, COMPLETE (SV) (AZ3000ES)	
353	A5058138A	SPTM BOARD, COMPLETE (SV) (AZ7000ES)	
353	A5058145A	SPTM BOARD, COMPLETE (SV) (AZ5000ES)	
353	A5058153A	SPTM BOARD, COMPLETE (SV) (AZ3000ES)	
354	370451551	SCREW (BV/RING) (3X10) (BRONZE)	

4-9. FOOT, PANEL BACK SECTION



Ref. No.	Part No.	Description	Remark
401	X50032451	FOOT (Z) ASSY (with Foot cushion (Z))	
402	502719501	SCREW YTT 3X8 (SILVER)	
403	504702901	TAPE, COPPER (AMP HS)	
404	503514601	PANEL BACK (AZ3000ES)	
404	503514611	PANEL BACK (AZ5000ES)	
404	503514621	PANEL BACK (AZ7000ES)	
#1	768588609	SCREW +BVTT 4X20 (S) (BLACK)	

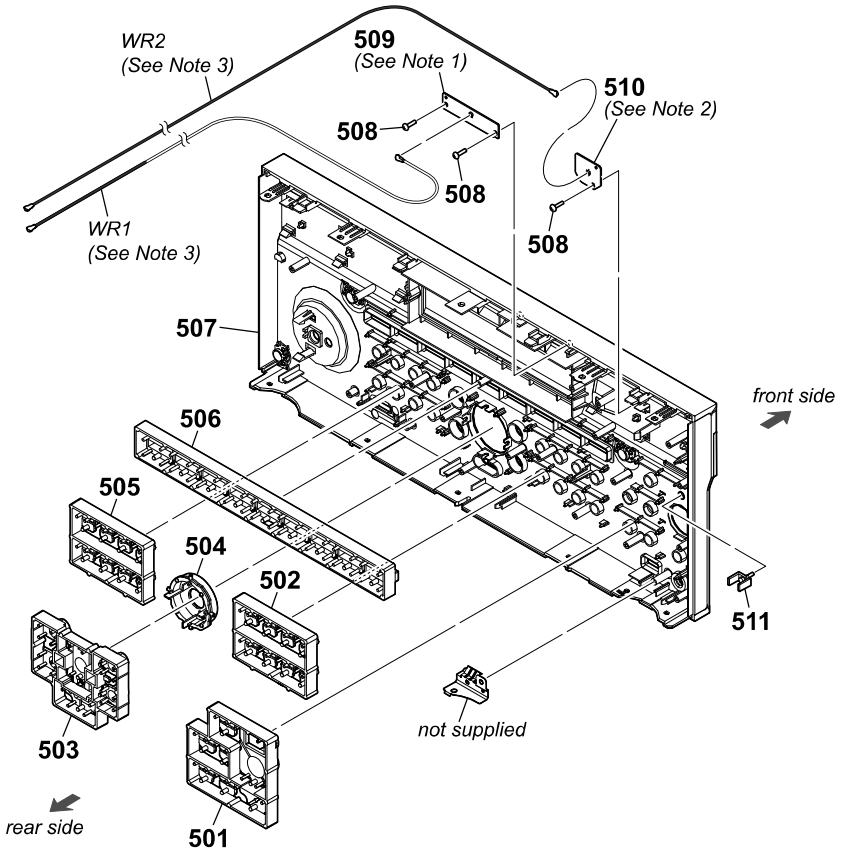
4-10. DISPLAY BOARD, VOL KNOB SECTION



Ref. No.	Part No.	Description	Remark
451	A5058131A	POWER_KEY BOARD, COMPLETE (SV)	
452	308705301	+BVTP2.6 (3CR) (L=8.0 mm) (SILVER)	
453	A5058129A	DISPLAY BOARD, COMPLETE (SV)	
454	A5055391A	F-HDMI BOARD, COMPLETE (SERVICE) (AZ5000ES/AZ7000ES)	
455	502719501	SCREW YTT 3X8 (SILVER) (AZ5000ES/AZ7000ES)	
456	A5058130A	VOL BOARD, COMPLETE (SV)	

Ref. No.	Part No.	Description	Remark
457	504211201	NUT, M9	
458	A5059738A	KNOB VOL ASSY (SERVICE) (Including Ring spring, Base knob (Z52))	
FFC5	101746411	FFC5_DISPLAY TO DIGITAL (32 core)	
HC1	184832411	HDMI CABLE (AZ5000ES/AZ7000ES)	
LCD1	101314311	PANEL, LCD	

4-11. PANEL FRONT, BUTTON SECTION



Note 1: When the complete ANT1 board (Ref. No. 509) is replaced with a new board, be sure to refer to "NOTE OF REPLACING THE ANT1 BOARD" on page 8.

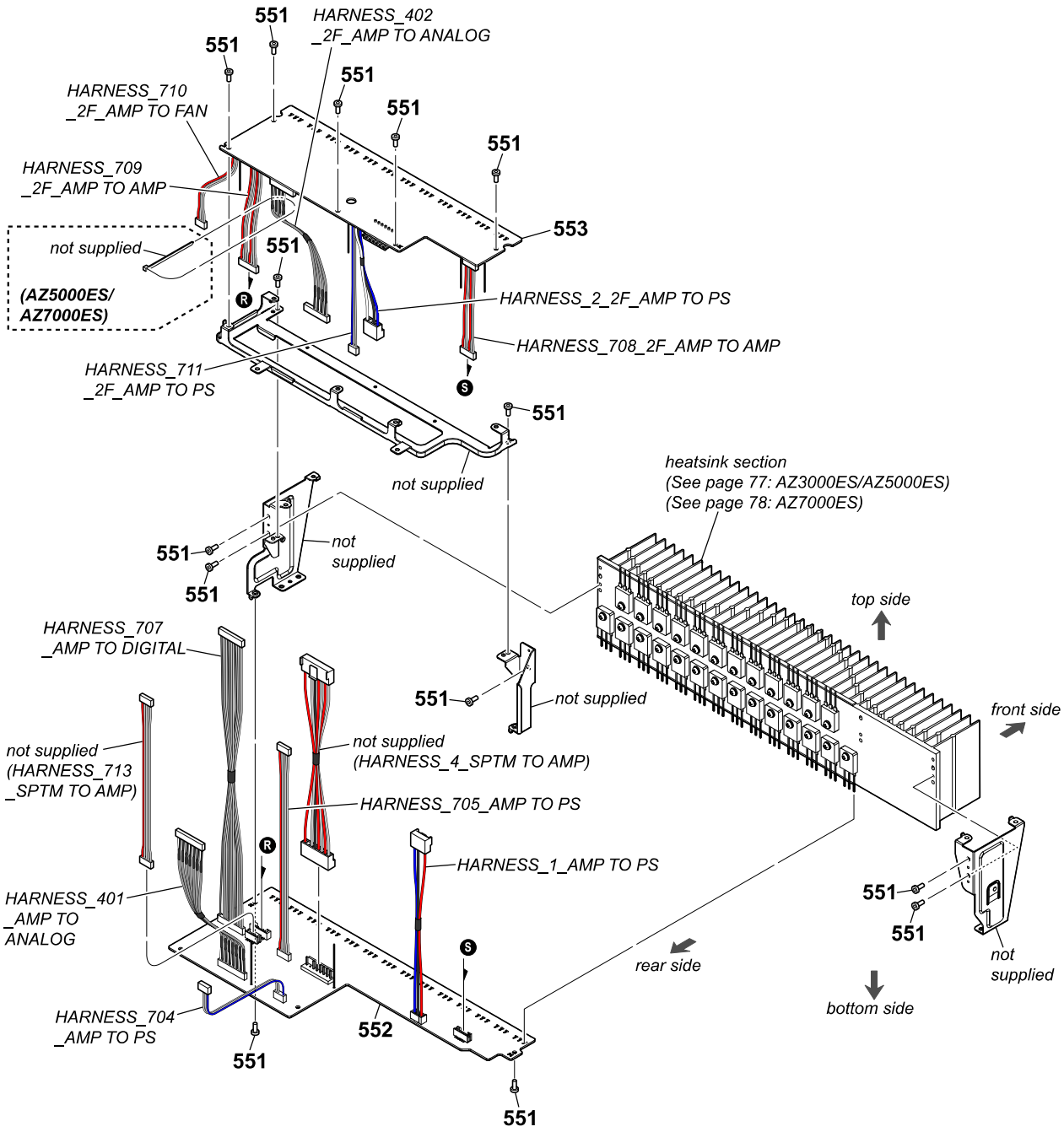
Note 2: When the complete ANT2 board (Ref. No. 510) is replaced with a new board, be sure to refer to "NOTE OF REPLACING THE ANT2 BOARD" on page 8.

Note 3: When the coaxial harness (Ref. No. WR1, WR2) is replaced with a new part, be sure to refer to "NOTE OF REPLACING THE COAXIAL HARNESS" on page 8.

Ref. No.	Part No.	Description	Remark
501	503513901	BUTTON, POWER (Z52) (⏻, PING, ZONE 2, ZONE 3, SPEAKERS, HDMI OUT, ZONE CONTROL)	
502	503513801	BUTTON, MODE (Z52) (MEMORY, TUNING MODE, TUNING-, TUNING+, BLUETOOTH, TEST PICTURE, TEST TONE, PURE DIRECT)	
503	503514001	BUTTON, ENTER (Z52) (DISPLAY, AMP MENU, BACK, OPTIONS, HOME)	
504	503514101	BUTTON, CURSOR (Z52) (↑, ←, →, ↓)	
505	503513801	BUTTON, MODE (Z52) (IN-CEILING SP, TONE MODE, TONE-, TONE+, 2CH/MULTI, MOVIE, MUSIC, 360SSM)	
506	503513701	BUTTON, FUNCTION (Z52) (GAME, MEDIA BOX, BD/DVD, SAT/CATV, VIDEO, AUX, TV, SA-CD/CD, OTHERS)	

Ref. No.	Part No.	Description	Remark
507	A5055088A	PANEL FRONT ASSY (SERVICE) (Including Adhesive sheet (magnet), Magnet) (AZ3000ES)	
507	A5055089A	PANEL FRONT ASSY (SERVICE) (Including Adhesive sheet (magnet), Magnet) (AZ5000ES)	
507	A5055090A	PANEL FRONT ASSY (SERVICE) (Including Adhesive sheet (magnet), Magnet) (AZ7000ES)	
508	308705301	+BVTP2.6 (3CR) (L=8.0 mm) (SILVER)	
509	A5058111A	ANT1 BOARD, COMPLETE (SV) (See Note 1)	
510	A5058112A	ANT2 BOARD, COMPLETE (SV) (See Note 2)	
511	453438102	INDICATOR, POWER (⏻)	
WR1	101539411	HARNESS, COAXIAL (WHITE, L=520 mm)	(See Note 3)
WR2	101539311	HARNESS, COAXIAL (BLACK, L=410 mm)	(See Note 3)

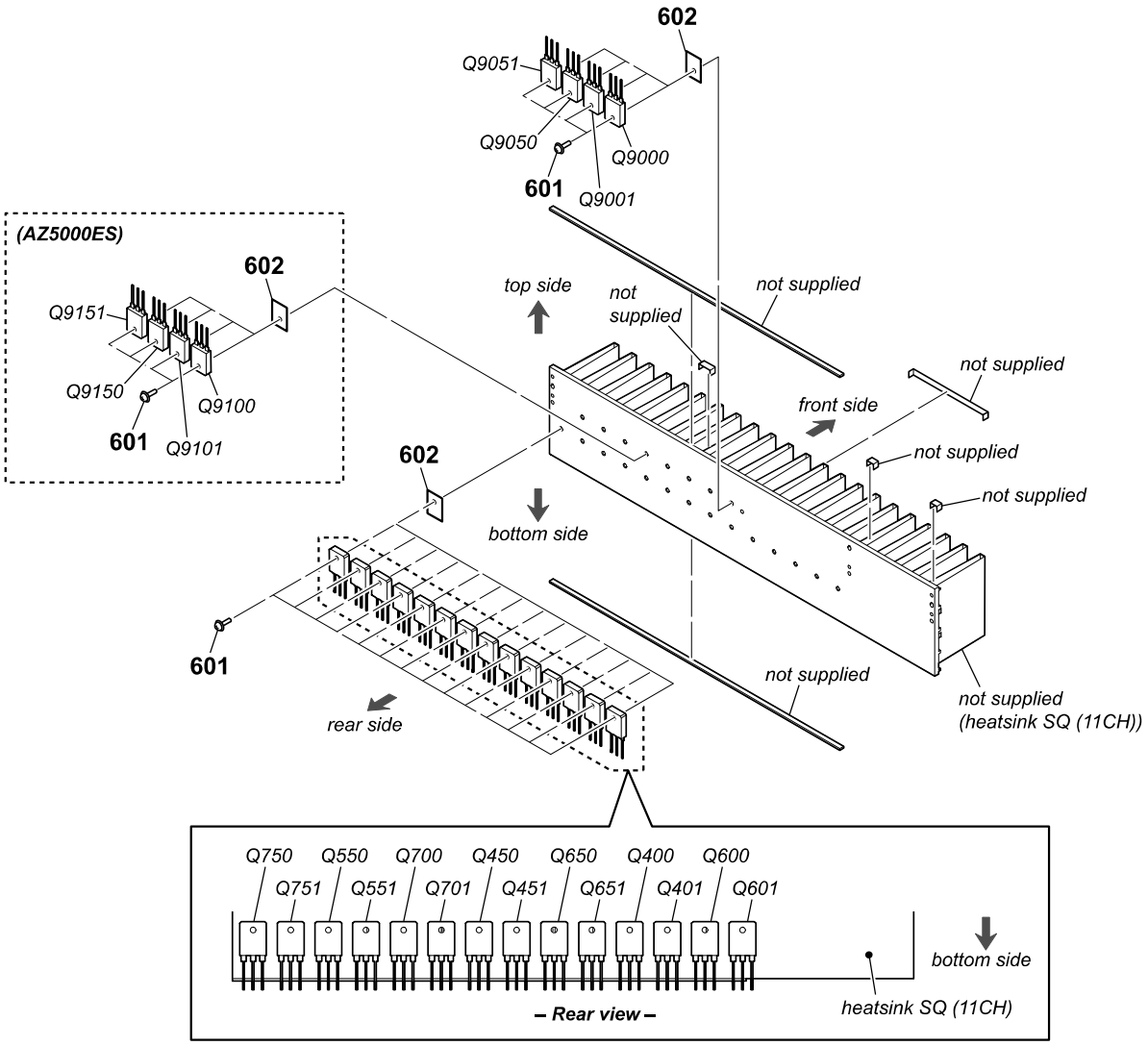
4-12. AMP BOARD SECTION



Ref. No.	Part No.	Description	Remark
551	502719501	SCREW YTT 3X8 (SILVER)	
552	A5058134A	AMP BOARD, COMPLETE (SV) (AZ7000ES)	
552	A5058142A	AMP BOARD, COMPLETE (SV) (AZ5000ES)	
552	A5058148A	AMP BOARD, COMPLETE (SV) (AZ3000ES)	

Ref. No.	Part No.	Description	Remark
553	A5058135A	2F AMP BOARD, COMPLETE (SV) (AZ7000ES)	
553	A5058143A	2F AMP BOARD, COMPLETE (SV) (AZ5000ES)	
553	A5058151A	2F AMP BOARD, COMPLETE (SV) (AZ3000ES)	

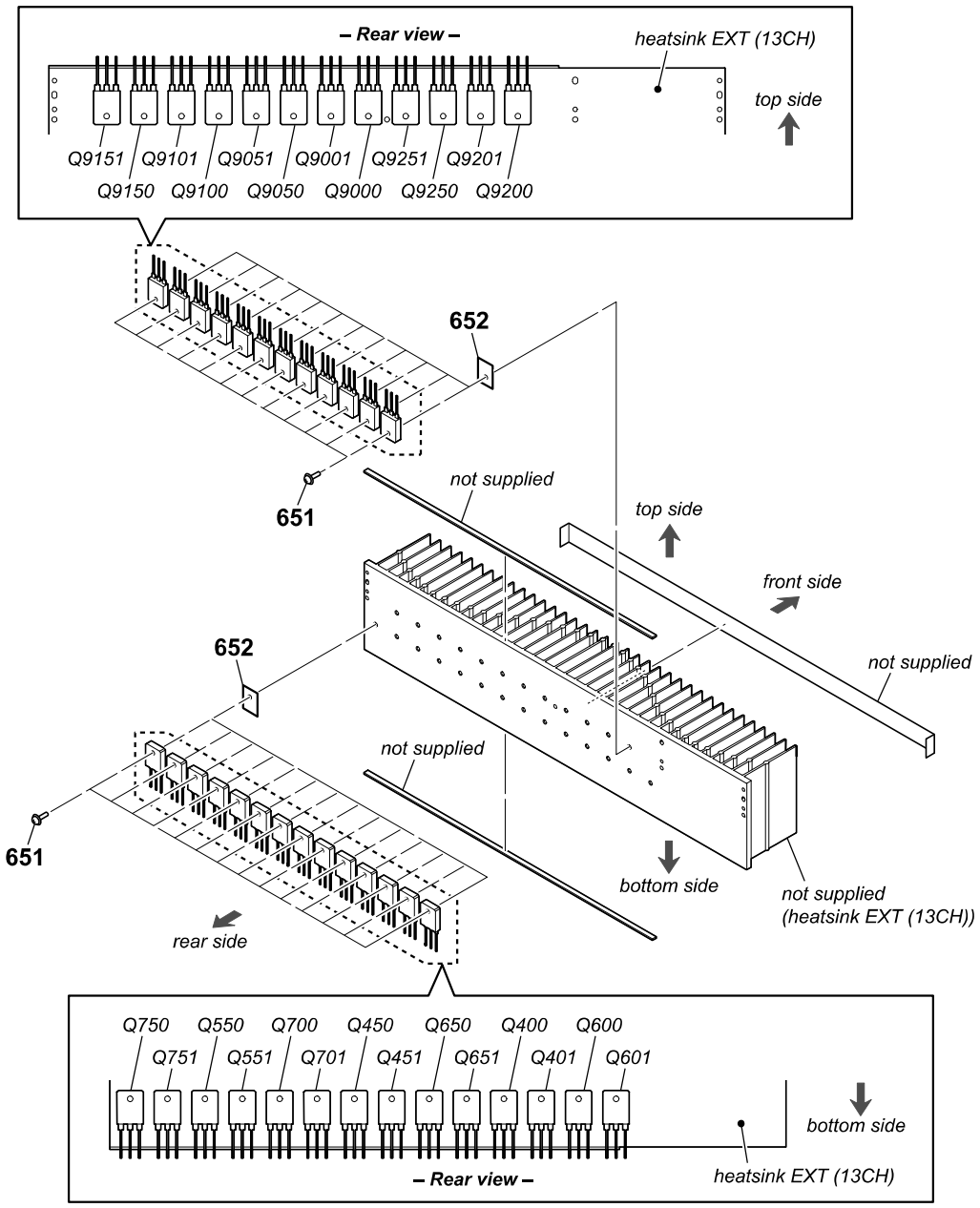
4-13. HEATSINK SECTION (AZ3000ES/AZ5000ES)



Ref. No.	Part No.	Description		Remark
601	390560913	SCREW (TRANSISTOR) (3X14) (BRONZE)		
602	504348101	SHEET, MICA		
Q400	690338301	TRANSISTOR	2SD2560	
Q401	690338401	TRANSISTOR	2SB1647	
Q450	690338301	TRANSISTOR	2SD2560	
Q451	690338401	TRANSISTOR	2SB1647	
Q550	690338301	TRANSISTOR	2SD2560	
Q551	690338401	TRANSISTOR	2SB1647	
Q600	690338301	TRANSISTOR	2SD2560	
Q601	690338401	TRANSISTOR	2SB1647	
Q650	690338301	TRANSISTOR	2SD2560	
Q651	690338401	TRANSISTOR	2SB1647	

Ref. No.	Part No.	Description		Remark
Q700	690338301	TRANSISTOR	2SD2560	
Q701	690338401	TRANSISTOR	2SB1647	
Q750	690338301	TRANSISTOR	2SD2560	
Q751	690338401	TRANSISTOR	2SB1647	
Q9000	690338301	TRANSISTOR	2SD2560	
Q9001	690338401	TRANSISTOR	2SB1647	
Q9050	690338301	TRANSISTOR	2SD2560	
Q9051	690338401	TRANSISTOR	2SB1647	
Q9100	690338301	TRANSISTOR	2SD2560 (AZ5000ES)	
Q9101	690338401	TRANSISTOR	2SB1647 (AZ5000ES)	
Q9150	690338301	TRANSISTOR	2SD2560 (AZ5000ES)	
Q9151	690338401	TRANSISTOR	2SB1647 (AZ5000ES)	

4-14. HEATSINK SECTION (AZ7000ES)



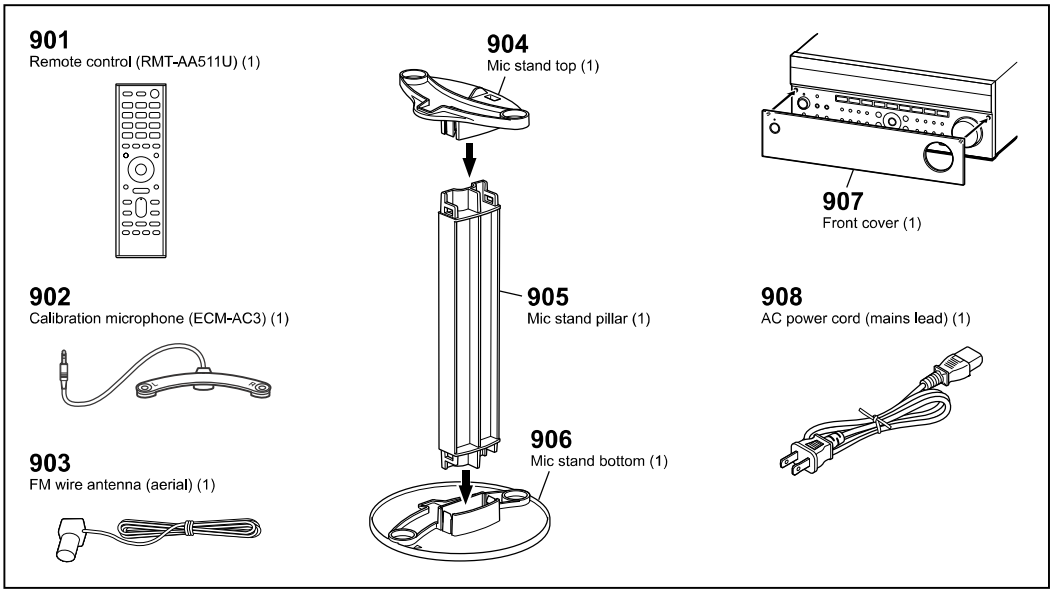
Ref. No.	Part No.	Description		Remark
651	390560913	SCREW (TRANSISTOR) (3X14) (BRONZE)		
652	504348101	SHEET, MICA		
Q400	690338301	TRANSISTOR	2SD2560	
Q401	690338401	TRANSISTOR	2SB1647	
Q450	690338301	TRANSISTOR	2SD2560	
Q451	690338401	TRANSISTOR	2SB1647	
Q550	690338301	TRANSISTOR	2SD2560	
Q551	690338401	TRANSISTOR	2SB1647	
Q600	690338301	TRANSISTOR	2SD2560	
Q601	690338401	TRANSISTOR	2SB1647	
Q650	690338301	TRANSISTOR	2SD2560	
Q651	690338401	TRANSISTOR	2SB1647	
Q700	690338301	TRANSISTOR	2SD2560	
Q701	690338401	TRANSISTOR	2SB1647	
Q750	690338301	TRANSISTOR	2SD2560	

Ref. No.	Part No.	Description		Remark
Q751	690338401	TRANSISTOR	2SB1647	
Q9000	690338301	TRANSISTOR	2SD2560	
Q9001	690338401	TRANSISTOR	2SB1647	
Q9050	690338301	TRANSISTOR	2SD2560	
Q9051	690338401	TRANSISTOR	2SB1647	
Q9100	690338301	TRANSISTOR	2SD2560	
Q9101	690338401	TRANSISTOR	2SB1647	
Q9150	690338301	TRANSISTOR	2SD2560	
Q9151	690338401	TRANSISTOR	2SB1647	
Q9200	690338301	TRANSISTOR	2SD2560	
Q9201	690338401	TRANSISTOR	2SB1647	
Q9250	690338301	TRANSISTOR	2SD2560	
Q9251	690338401	TRANSISTOR	2SB1647	

STR-AZ3000ES/AZ5000ES/AZ7000ES

SECTION 5
ACCESSORIES

Ref. No.	Part No.	Description	Remark
	503701511	STARTUP GUIDE (ENGLISH, FRENCH, SPANISH)	(AZ3000ES)
	503701611	STARTUP GUIDE (ENGLISH, FRENCH, SPANISH)	(AZ5000ES)
	503701711	STARTUP GUIDE (ENGLISH, FRENCH, SPANISH)	(AZ7000ES)
	503701912	OPERATING INSTRUCTIONS (ENGLISH, FRENCH, SPANISH)	
901	101326012	REMOTE COMMANDER (RMT-AA511U)	(Remote control)
902	154290312	MEASUREMENT MIC (STEREO) (ECM-AC3)	(Calibration microphone)
903	179318461	CONNECTOR (F TYPE ADAPTOR)	(FM wire antenna (aerial))
904	503513301	MIC STAND (TOP) (Mic stand top)	
905	503513201	MIC STAND (PILLAR) (Mic stand pillar)	
906	X50028551	MIC STAND (BOTTOM) ASSY (Mic stand bottom)	
907	A5059869A	COVER FRONT ASSY (SERVICE) (Front cover)	
⚠ 908	101435211	POWER SUPPLY CORD SET	(AC power cord (mains lead))



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