

# STR-AN1000/AZ1000ES

## 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-AN1000/AZ1000ES

## SERVICE MANUAL

US Model



Photo: STR-AZ1000ES

### SPECIFICATIONS

#### (STR-AN1000)

#### AUDIO POWER SPECIFICATIONS

##### POWER OUTPUT AND TOTAL HARMONIC DISTORTION

With 6 ohm loads, both channels driven, from 20 Hz – 20 000 Hz; rated 100 watts per channel minimum RMS power in stereo mode, with no more than 0.09% total harmonic distortion from 250 milliwatts to rated output.

##### Amplifier section<sup>1)</sup>

Minimum RMS Output Power  
(6 ohms, 20 Hz – 20 kHz, THD 0.09%)  
100 W + 100 W

Stereo Mode Output Power  
(6 ohms, 1 kHz, THD 0.9%)  
120 W + 120 W

Surround Mode Output Power<sup>2)</sup>  
(6 ohms, 1 kHz, THD 0.9%)  
165 W per channel

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

<sup>2)</sup> 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, equalizer and 360SSM bypassed)

##### Input

Analog  
Sensitivity: 500 mV/50 kilohms  
S/N<sup>3)</sup> 105 dB (A, 500 mV<sup>4)</sup>)

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

Digital (Optical)  
S/N: 100 dB (A, 20 kHz LPF)

##### Output (Analog)

ZONE 3  
Voltage: 2 V/1 kilohm  
SUBWOOFER  
Voltage: 2 V/1 kilohm

##### Equalizer

Gain levels  
±10 dB, 1 dB step

<sup>3)</sup> INPUT SHORT (with sound field and equalizer bypassed).

<sup>4)</sup> 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\*

\* GAME (for AUDIO) and MEDIA BOX jacks support

##### Support

HD-CP2.3, 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.

##### USB section

Ⓜ(USB) port:  
Type A (For connecting USB flash drive)  
Maximum current  
1 A

##### 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

##### 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)<sup>1)</sup>  
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<sup>2)</sup>  
A2DP (Advanced Audio Distribution Profile)  
AVRCP (Audio Video Remote Control Profile)  
Supported Codecs<sup>3)</sup>  
SBC<sup>4)</sup>, 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)

<sup>1)</sup> 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.

<sup>2)</sup> BLUETOOTH standard profiles indicate the purpose of BLUETOOTH communication between devices.

<sup>3)</sup> Codec: Audio signal compression and conversion format

<sup>4)</sup> Subband Codec

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## MULTI CHANNEL AV RECEIVER

**STR-AN1000/AZ1000ES****(STR-AN1000)****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  
240 W  
Standby mode: 0.5 W  
(When [Standby Through],  
[Network/Bluetooth Standby], 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 × 156 mm × 331 mm (17 in ×  
6 1/4 in × 13 1/8 in) including projecting parts  
and controls  
Mass (Approx.)  
9.4 kg (20 lb 12 oz)

**Supplied Accessories**

Remote control (1)  
R03 (size AAA) batteries (2)  
FM wire antenna (aerial) (1)  
Calibration microphone (1)  
Mic stand top (1)  
Mic stand pillar (1)  
Mic stand bottom (1)

Design and specifications are subject to change  
without notice.

**Playable types of audio files**

Codec	Extension
MP3 (MPEG-1 Audio Layer III)	.mp3
MPEG-H	.mp4
AAC/HE-AAC <sup>1)</sup>	.m4a, .aac <sup>2)</sup> , .mp4 <sup>2)</sup> , .3gp <sup>2)</sup>
WMA9 Standard <sup>1)</sup>	.wma
LPCM	.wav
FLAC <sup>1)</sup>	.flac
DSF <sup>1)</sup>	.dsf
DSDIFF <sup>1), 3)</sup>	.dff
AIFF <sup>1)</sup>	.aiff, .aif
ALAC <sup>1)</sup>	.m4a
Vorbis	.ogg
Monkey's Audio	.ape

<sup>1)</sup> The receiver may not play this file format on a home network server.

<sup>2)</sup> The receiver does not play this file format on a home network server.

<sup>3)</sup> The receiver does not play DST encoded files.

**Note**

- 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.
- Some USB devices may not work with this receiver.
- The receiver can recognize Mass Storage Class (MSC) devices.

**Supported digital audio formats**

The digital audio formats that this receiver can decode depend on the digital audio output jacks of the connected device. This receiver supports the following audio formats. The words in brackets are those indicated on the display panel.

Digital audio format	Maximum number of decoding/rendering channels	Connection with the receiver
Dolby Digital [DD]	5.1	COAXIAL/OPTICAL, HDMI, eARC, ARC
Dolby Digital Plus [DD+] <sup>1)</sup>	7.1	HDMI, eARC, ARC
Dolby Atmos – Dolby Digital Plus [ATMOS] <sup>1), 2)</sup>	5.1.2, 7.1, or 7.1.2 <sup>3)</sup>	HDMI, eARC, ARC
DTS [DTS]	5.1	COAXIAL/OPTICAL, HDMI, eARC, ARC
DTS 96/24 [DTS]	5.1	COAXIAL/OPTICAL, HDMI, eARC, ARC
LPCM [LPCM]	7.1/2.0	COAXIAL/OPTICAL(2.0), HDMI(7.1), eARC(7.1), ARC(2.0)
Dolby TrueHD [DTHD] <sup>1)</sup>	7.1	HDMI, eARC
Dolby Atmos TrueHD [ATMOS] <sup>1), 2)</sup>	5.1.2, 7.1, or 7.1.2 <sup>3)</sup>	HDMI, eARC
Dolby Atmos [ATMOS]	5.1.2, 7.1, or 7.1.2 <sup>3)</sup>	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] <sup>1)</sup>	7.1	HDMI, eARC
DTS-HD Master Audio [DTS-HD] <sup>1)</sup>	7.1	HDMI, eARC
DTS Express [DTS-HD]	5.1	HDMI, eARC
DTS:X Master Audio [DTS:X] <sup>1)</sup>	5.1.2, 7.1, or 7.1.2 <sup>3)</sup>	HDMI, eARC
DTS:X [DTS:X] <sup>1)</sup>	5.1.2, 7.1, or 7.1.2 <sup>3)</sup>	HDMI, eARC
DSD [DSD] <sup>4), 5)</sup>	5.1	HDMI

<sup>1)</sup> 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.

<sup>2)</sup> 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].

<sup>3)</sup> Available only when [SpeakerRelocation/PhantomSurroundBack] is set to [Type A] or [Type B].

<sup>4)</sup> This format is not output to wireless headphones.

<sup>5)</sup> This format is not output to wireless speakers.

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## STR-AN1000/AZ1000ES

## (STR-AZ1000ES)

## 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 in stereo mode, with no more than 0.09% total harmonic distortion from 250 milliwatts to rated output.

Amplifier section<sup>1)2)</sup>

Rated Power Output at Stereo Mode  
(6 ohms, 20 Hz – 20 kHz, THD 0.09%): 90W + 90 W  
Reference Power Output at Stereo Mode  
(8 ohms, 20 Hz – 20 kHz, THD 0.09%): 70W + 70 W  
Reference Power Output  
(6 ohms, 1 kHz, THD 0.9%)  
FRONT: 110 W + 110 W  
CENTER: 110 W  
SURROUND: 110 W + 110 W  
SURROUND BACK: 110 W + 110 W  
Reference Power Output  
(8 ohms, 1 kHz, THD 0.9%)  
FRONT: 100 W + 100 W  
CENTER: 100 W  
SURROUND: 100 W + 100 W  
SURROUND BACK: 100 W + 100 W  
Reference Power Output at Surround Mode<sup>3)</sup>  
(6 ohms, 1 kHz, THD 0.9%): 140 W per channel

<sup>1)</sup> Measured under the following conditions:

Power requirements: 120 V AC, 60 Hz

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

<sup>3)</sup> Reference power output for front, center, surround, surround back

## Frequency response

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

## Input

Analog  
Sensitivity: 500 mV/50 kilohms  
S/N<sup>4)</sup>: 105 dB (A, 500 mV<sup>2)</sup>)  
Digital (Coaxial)  
Impedance: 75 ohms  
S/N: 100 dB (A, 20 kHz LPF)  
Digital (Optical)  
S/N: 100 dB (A, 20 kHz LPF)

## Output (Analog)

ZONE 3  
Voltage: 2 V/1 kilohm  
SUBWOOFER  
Voltage: 2 V/1 kilohm

## Equalizer

Gain levels  
±10 dB, 1 dB step

<sup>4)</sup> INPUT SHORT (with sound field and equalizer bypassed)

<sup>5)</sup> 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\*

\* GAME (for AUDIO) and MEDIA BOX jacks support

## Support

HDCP2.3, 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 [DD]	5.1	COAXIAL/OPTICAL, HDMI, eARC, ARC
Dolby Digital Plus [DD+] <sup>1)</sup>	7.1	HDMI, eARC, ARC
Dolby Atmos - Dolby Digital Plus [ATMOS] <sup>1),2)</sup>	5.1, 2, 7.1, or 7.1.2 <sup>3)</sup>	HDMI, eARC, ARC
DTS [DTS]	5.1	COAXIAL/OPTICAL, HDMI, eARC, ARC
DTS 96/24 [DTS]	5.1	COAXIAL/OPTICAL, HDMI, eARC, ARC
LPCM [LPCM]	7.1/2.0	COAXIAL/OPTICAL, HDMI (7.1), eARC (7.1), ARC (2.0)
Dolby TrueHD [DTHD] <sup>1)</sup>	7.1	HDMI, eARC
Dolby Atmos TrueHD [ATMOS] <sup>1),2)</sup>	5.1, 2, 7.1, or 7.1.2 <sup>3)</sup>	HDMI, eARC
Dolby Atmos [ATMOS]	5.1, 2, 7.1, or 7.1.2 <sup>3)</sup>	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

Digital audio format	Maximum number of decoding/rendering channels	Connection with the receiver
DTS-HD High Resolution Audio [DTS-HD] <sup>1)</sup>	7.1	HDMI, eARC
DTS-HD Master Audio [DTS-HD] <sup>1)</sup>	7.1	HDMI, eARC
DTS Express [DTS-HD]	5.1	HDMI, eARC
DTS-X Master Audio [DTS-X] <sup>1)</sup>	5.1, 2, 7.1, or 7.1.2 <sup>3)</sup>	HDMI, eARC
DTS-X [DTS-X] <sup>1)</sup>	5.1, 2, 7.1, or 7.1.2 <sup>3)</sup>	HDMI, eARC
DSD [DSD] <sup>4),5)</sup>	5.1	HDMI

<sup>1)</sup> 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.

<sup>2)</sup> 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].

<sup>3)</sup> Available only when [SpeakerRelocation/PhantomSurroundBack] is set to [Type A] or [Type B].

<sup>4)</sup> This format is not output to wireless headphones.

<sup>5)</sup> This format is not output to wireless speakers.

## USB section

ψ (USB) port:  
Type A (For connecting USB flash drive)  
Maximum current  
1 A

## 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 <sup>1)</sup>	.m4a, .aac <sup>2)</sup> , .mp4 <sup>3)</sup> , .3gp <sup>3)</sup>
WMA9 Standard <sup>4)</sup>	.wma
LPCM	.wav
FLAC <sup>1)</sup>	.flac
DSF <sup>1)</sup>	.dsf
DSDIFF <sup>1),3)</sup>	.dff
AIFF <sup>1)</sup>	.aiff, .aif
ALAC <sup>1)</sup>	.m4a
Vorbis	.ogg
Monkey's Audio	.ape

<sup>1)</sup> The receiver may not play this file format on a home network server.

<sup>2)</sup> The receiver does not play this file format on a home network server.

<sup>3)</sup> 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)<sup>1)</sup>  
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<sup>2)</sup>  
•A2DP (Advanced Audio Distribution Profile)  
•AVRCP (Audio Video Remote Control Profile)  
Supported Codecs<sup>3)</sup>  
•SBC<sup>4)</sup>, 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)

<sup>1)</sup> 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.

<sup>2)</sup> BLUETOOTH standard profiles indicate the purpose of BLUETOOTH communication between devices.

<sup>3)</sup> Codec: Audio signal compression and conversion format

<sup>4)</sup> 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  
•240 W  
Standby mode: 0.5 W  
(When [Standby Through] [Network/Bluetooth Standby], 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 (Approx.)  
•430 mm × 156 mm × 331 mm (17 in × 6 1/8 in × 13 1/8 in) (width/height/depth) including projecting parts and controls  
Mass (Approx.)  
•9.3 kg (20 lb 9 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)

Design and specifications are subject to change without notice.

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- 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
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**SAFETY CHECK-OUT**

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

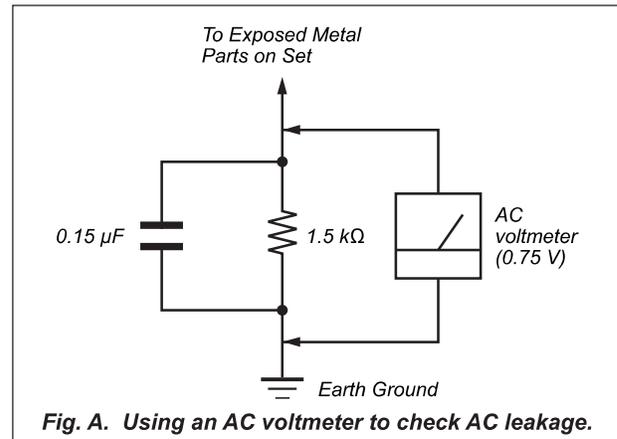
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage.

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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2-24. FRONTJACK Board, POWERKEY Board, DISPLAY Board Block .....	35		
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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.

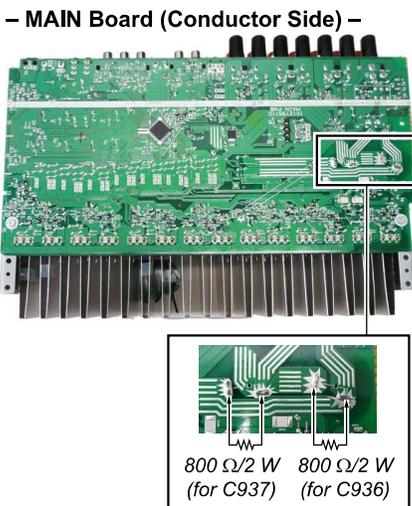
### NOTE OF REPLACING THE FUSE

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 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.



### 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  $\psi$  (USB) port was detected. Disconnect the USB device as prompted in the warning message and close the message.

# STR-AN1000/AZ1000ES

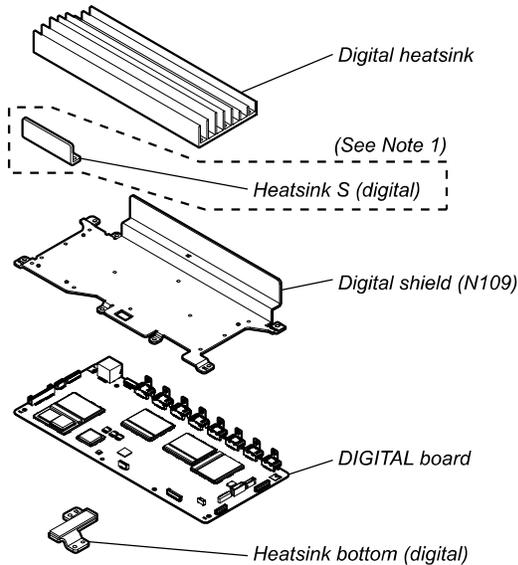
## NOTE OF PERFORMING THE OPERATION CHECK IN THE STATUS THAT HEATSINK IS REMOVED

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.

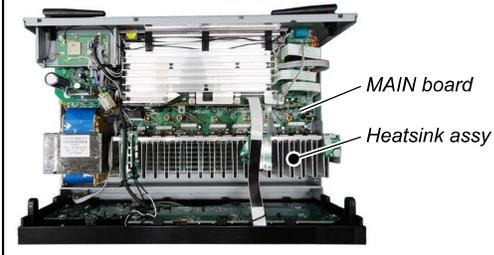
However, in that case, set the volume to low level and perform the work in the short time so as a few minutes.

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.

**Note 1:** The heatsink S (digital) has been deleted in the midway of production.



**Note 2:** Be sure to check the operation in the status that heatsink assy on the MAIN board installed.

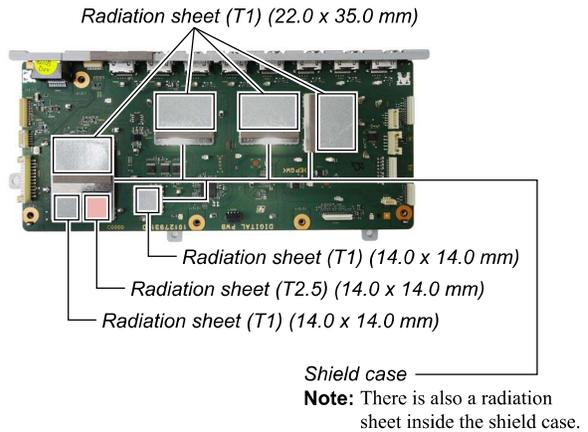


## ABOUT THE RADIATION SHEETS AND THE THERMAL SHEET

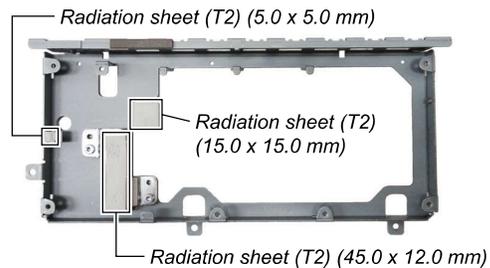
The radiation sheets and the thermal sheet are attached in various places.

When assembling after disassembly work, be sure to check that the radiation sheets and the thermal sheet are properly attached before reassembling.

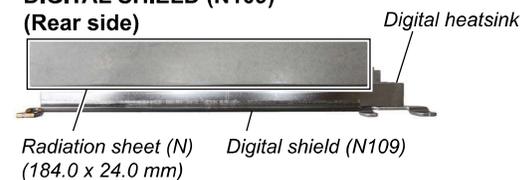
### DIGITAL Board (Side A) (With the heatsink removed)



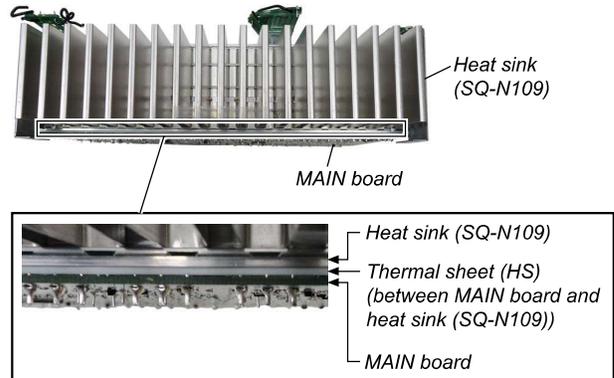
### DIGITAL BRACKET (N109) (With the DIGITAL board removed)



### DIGITAL SHIELD (N109) (Rear side)



### MAIN Board Block (Heatsink rear side)



# STR-AN1000/AZ1000ES

## MODEL IDENTIFICATION

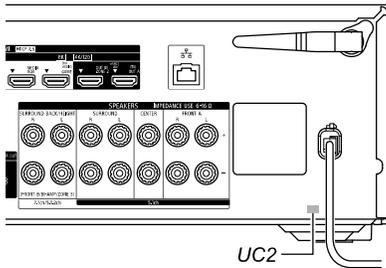
When checking the destination, check that “UC2” is indicated at the lower right on the rear side.

When “UC2” is indicated, it is STR-AN1000 or STR-AZ1000ES for US.

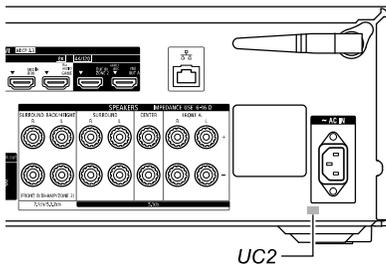
When “UC2” is not indicated, it is STR-AN1000 other than US.

**Note:** STR-AZ1000ES does not have any indication other than “UC2”.

**STR-AN1000**  
– Rear side –



**STR-AZ1000ES**  
– Rear side –



## INITIALIZATION METHOD

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

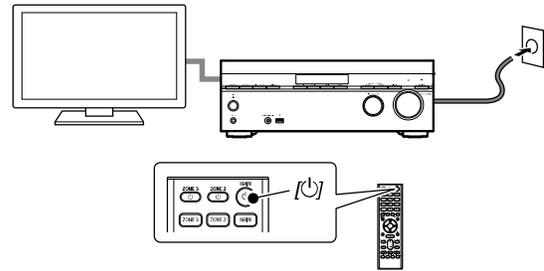
**Note 1:** When performing the initialize, all settings return to the factory default.

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

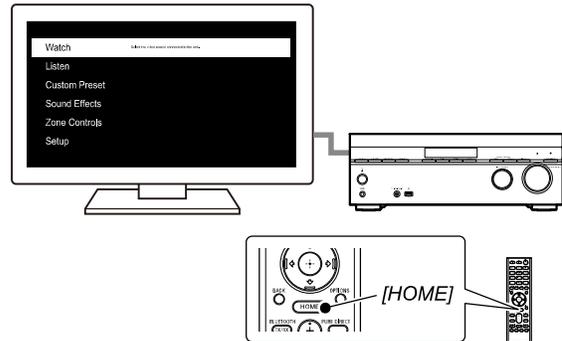
### Initialization procedure:

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.

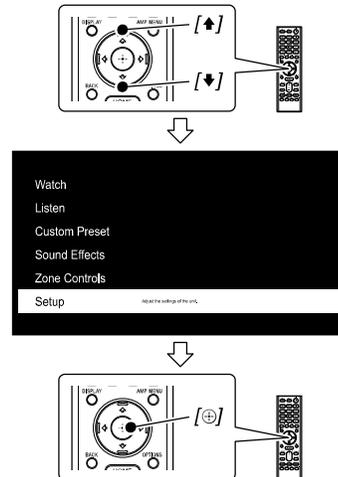
**Note 3:** For details on how to connect the TV monitor, refer to the instruction manual supplied with this unit.



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



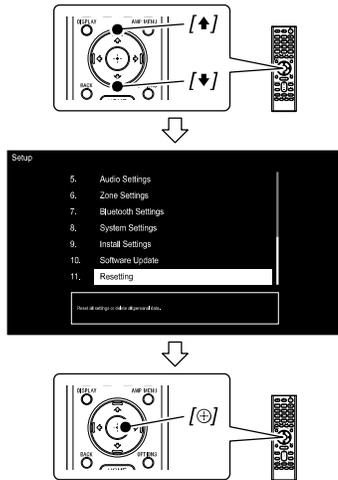
3. Press the [↑]/[↓] button on the remote control, select the “Set-up”, and press the [⊕] button.



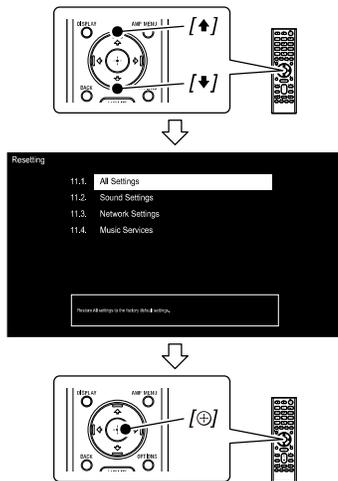
– Continued on next page –

# STR-AN1000/AZ1000ES

- Press the [▲]/[▼] button on the remote control, select the “Resetting”, and press the [⊕] button.

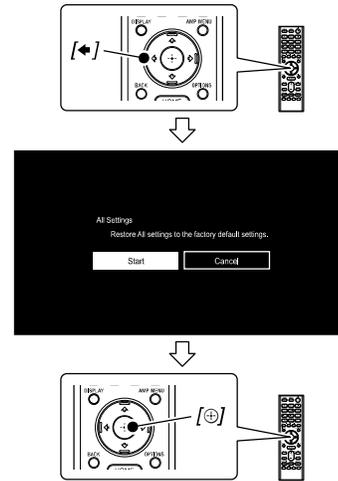


- Press the [▲]/[▼] button on the remote control, select the “All Settings”, and press the [⊕] button.



- 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.

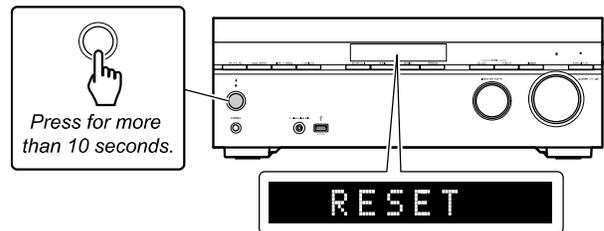


- After reboot automatically, the power is turned off automatically and return to factory default.

• **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.



– Continued on upper right –

## STR-AN1000/AZ1000ES

### 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 12)
- Check the BLUETOOTH connection  
(Refer to “BLUETOOTH CONNECTION CHECKING METHOD” on page 13)

### 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 BLUETOOTH connection  
(Refer to “BLUETOOTH CONNECTION CHECKING METHOD” on page 13)

### NOTE OF REPLACING THE ANT2 BOARD

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

- Make the wireless connection of optional subwoofer and optional rear speaker  
(Refer to “WIRELESS CONNECTION (LINK) WORK” on page 15)

### 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

#### Works:

- Check the network connection  
(Refer to “NETWORK CONNECTION CHECKING METHOD” on page 12)
- Check the BLUETOOTH connection  
(Refer to “BLUETOOTH CONNECTION CHECKING METHOD” on page 13)
- Make the wireless connection of optional subwoofer and optional rear speaker  
(Refer to “WIRELESS CONNECTION (LINK) WORK” on page 15)

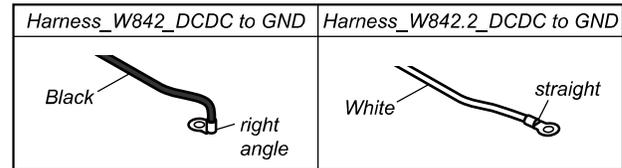
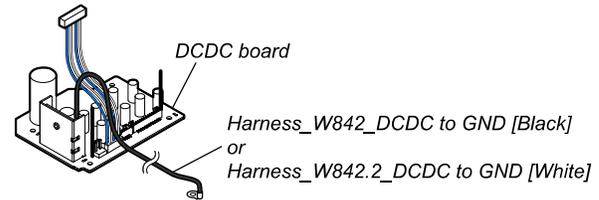
### ABOUT THE HARNESS CHANGE OF DCDC BOARD (STR-AN1000 only)

The harness\_W842\_DCDC to GND [Black] of the DCDC board has been changed to harness\_W842.2\_DCDC to GND [White] in the midway of production.

However, the complete DCDC board (EXPLODED VIEWS: Ref. No. 104) for repair parts has a harness\_W842\_DCDC to GND [Black] mounted.

There is no problem in replacing the DCDC board with harness\_W842.2\_DCDC to GND [White] mounted to the DCDC board with the harness\_W842\_DCDC to GND [Black] mounted.

**Note:** The DCDC board with harness\_W842.2\_DCDC to GND [White] mounted cannot be used for STR-AZ1000ES. If you mistakenly install the DCDC board with harness\_W842.2\_DCDC to GND [White] mounted to the STR-AZ1000ES, the terminals may contact the RS232C board.



**STR-AN1000/AZ1000ES****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 “Set-up”, 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 “Set-up”, 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.

## STR-AN1000/AZ1000ES

### BLUETOOTH CONNECTION CHECKING METHOD

When checking the BLUETOOTH connection, refer to the following.

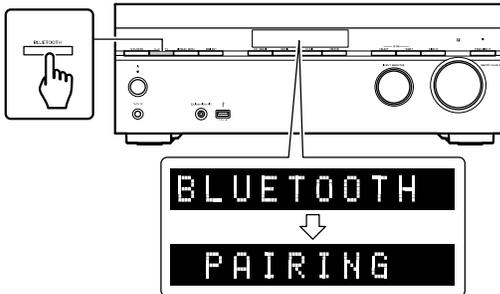
#### Preparation:

- 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.

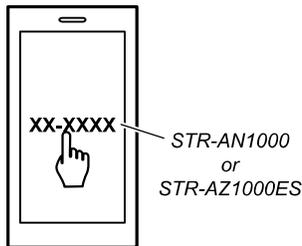
**Note 1:** If “NOT USE” is displayed when you press the [BLUETOOTH] button on this unit, it is in BLUETOOTH transmitter mode. In this case, press the [BLUETOOTH TX/RX] button on the remote control to switch to BLUETOOTH receiver mode.



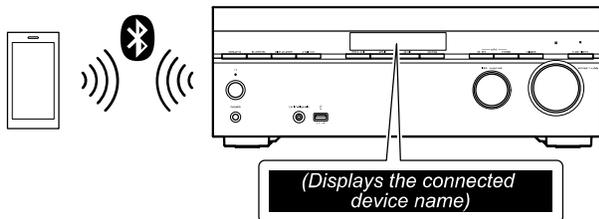
3. Operate the device with BLUETOOTH function such as a smartphone to search for “STR-AN1000” or “STR-AZ1000ES”, and perform the pairing.

**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”.



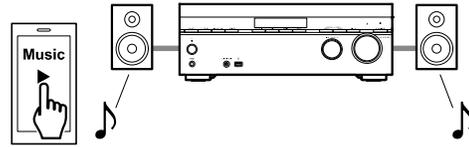
4. When the BLUETOOTH connection is established, the connected device name is displayed on the display panel.



– 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.

## STR-AN1000/AZ1000ES

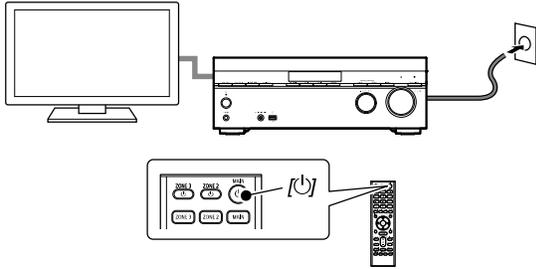
## MAC ADDRESS CHECKING METHOD

When checking the MAC address, refer to the following.

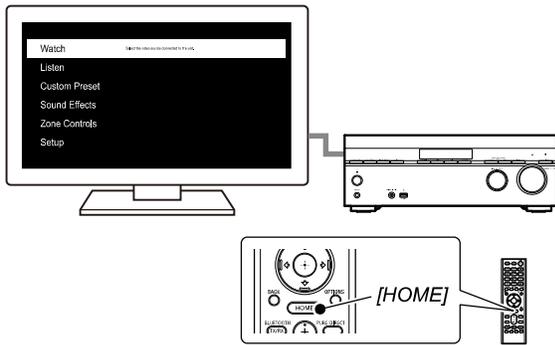
## Checking Procedure:

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.

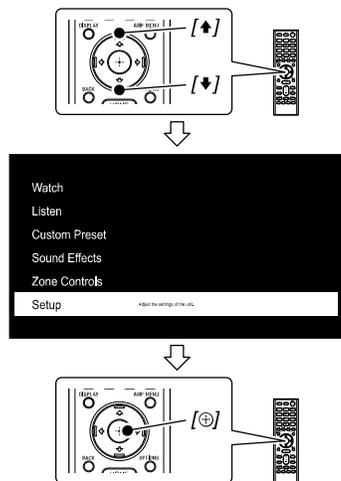
**Note:** For details on how to connect the TV monitor, refer to the instruction manual supplied with this unit.



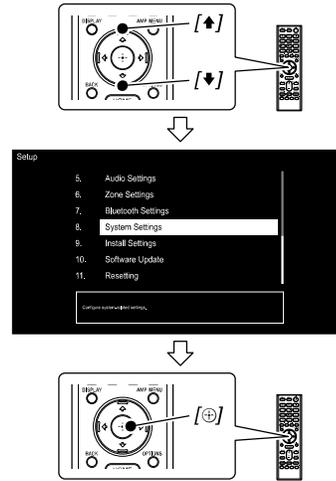
2. Press the [HOME] button on the remote control to display the home menu on the TV monitor.



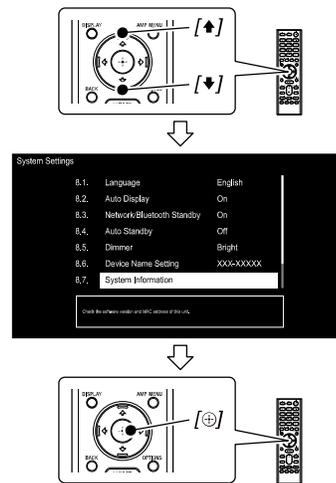
3. Press the [▲]/[▼] button on the remote control, select the “Setup”, and press the [⊕] button.



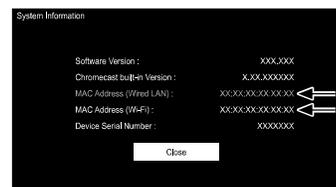
4. Press the [▲]/[▼] button on the remote control, select the “System Settings”, and press the [⊕] button.



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.

– Continued on upper right –

**STR-AN1000/AZ1000ES****WIRELESS CONNECTION (LINK) WORK**

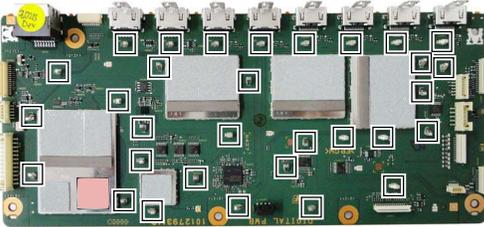
When replace the board or parts related to the wireless connection (link) with optional unit such as a wireless subwoofer or wireless rear speaker, or when perform initialization, the wireless connection (link) between this unit and the optional unit may be disconnected, or may not connected properly.

Refer to the help guide for this unit, about method of wireless connection between this unit and wireless rear speaker, or wireless subwoofer.

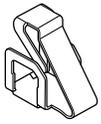
**NOTE OF TOUCHING THE CONTACT TERMINAL**

There are 31 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



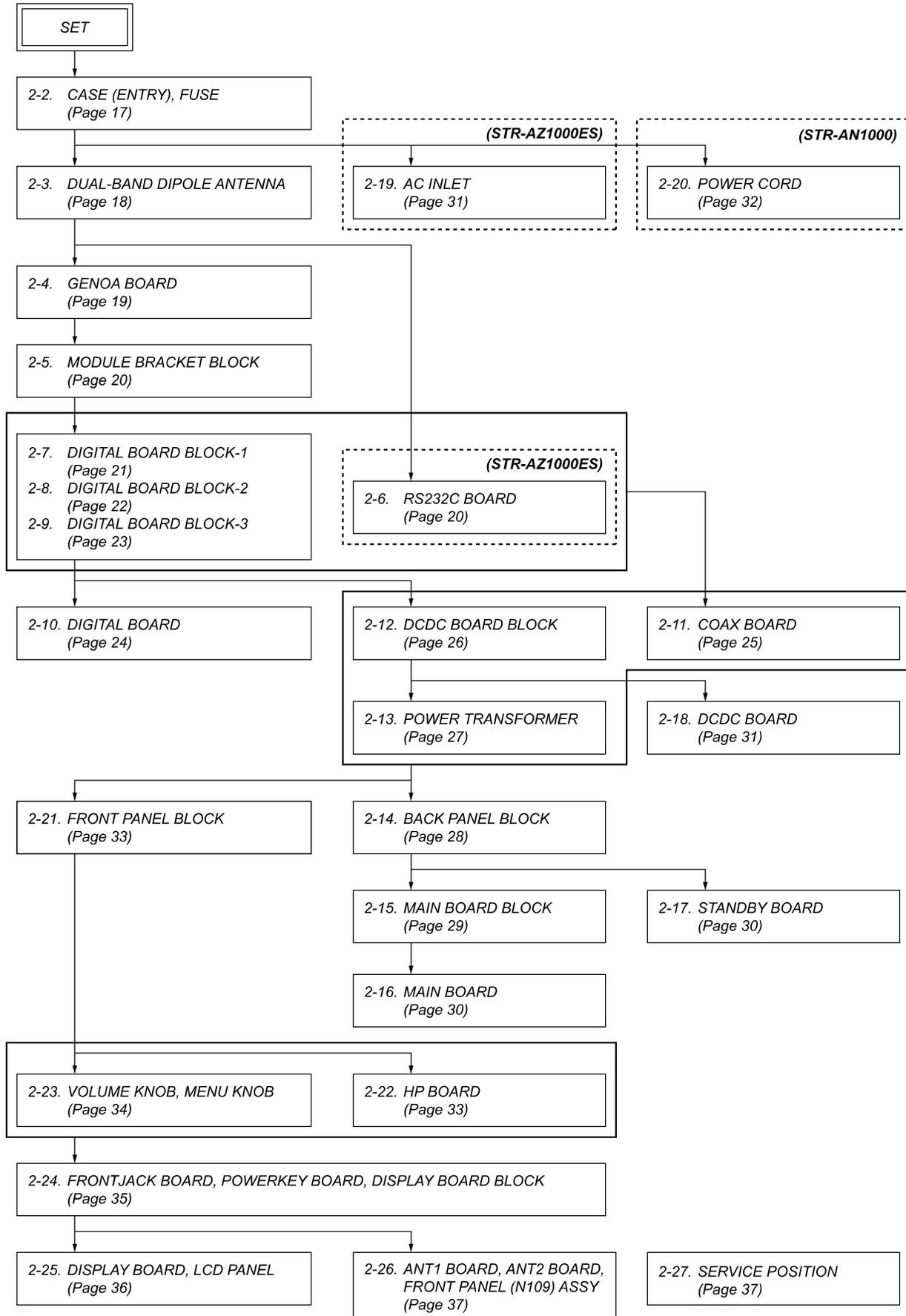
Ref. No.

ET2001, ET2002, ET2003, ET2005, ET2006,  
 ET2007, ET2009, ET2010, ET2011, ET2014,  
 ET2015, ET2016, ET2017, ET2018, ET2019,  
 ET2020, ET2021, ET2022, ET2023, ET2024,  
 ET2026, ET2027, ET2029, ET8262, ET8263,  
 ET8264, ET8265, ET8562, ET8563, ET8862,  
 ET8863

## SECTION 2 DISASSEMBLY

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

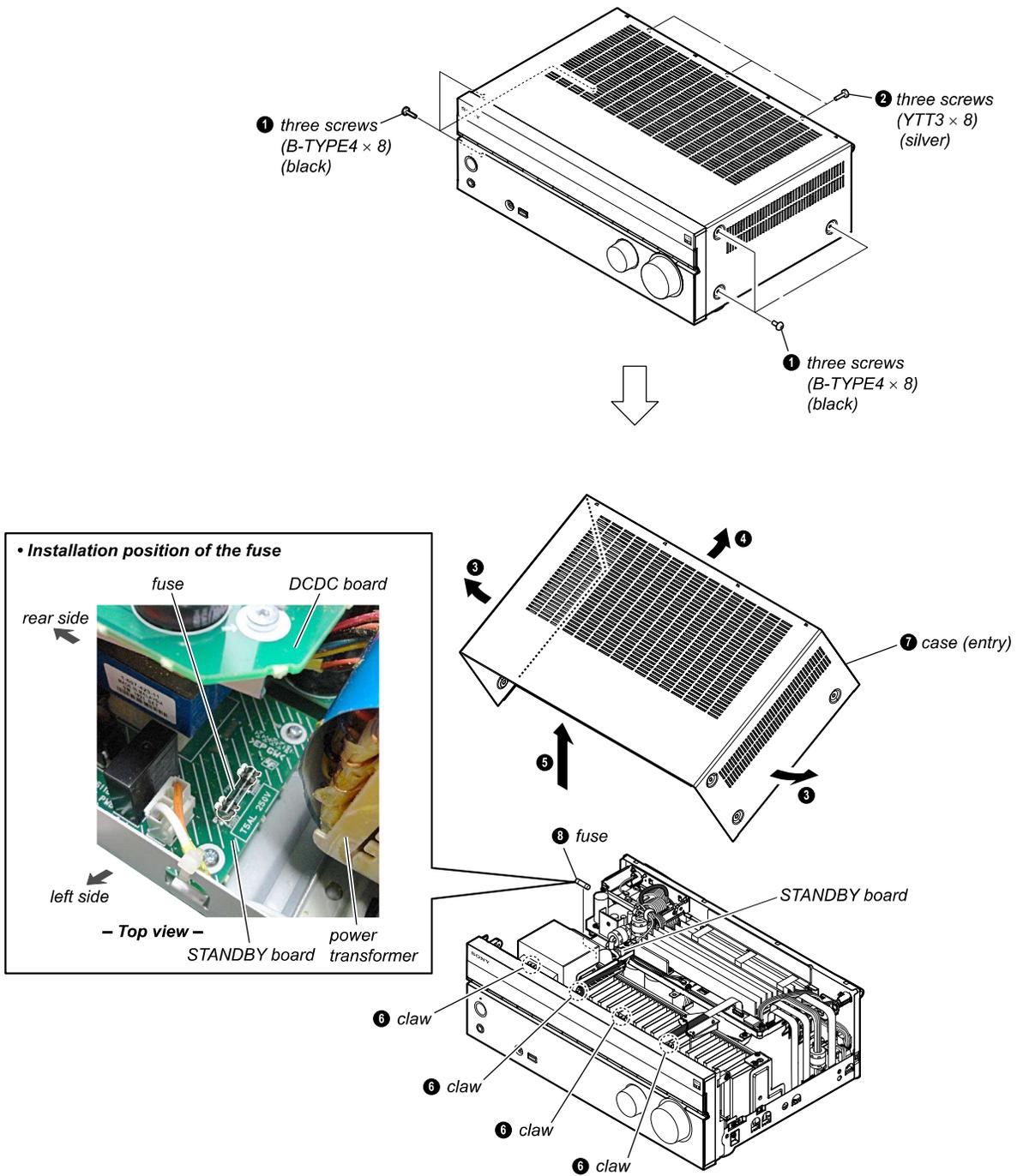
### 2-1. DISASSEMBLY FLOW



# STR-AN1000/AZ1000ES

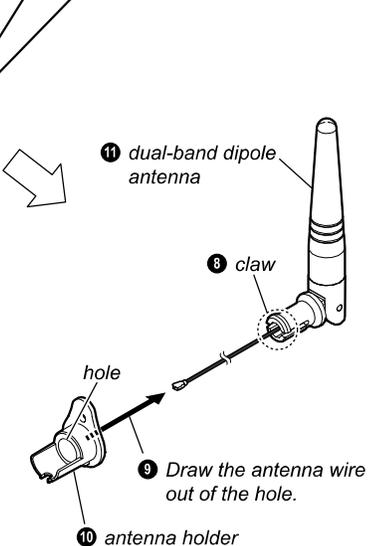
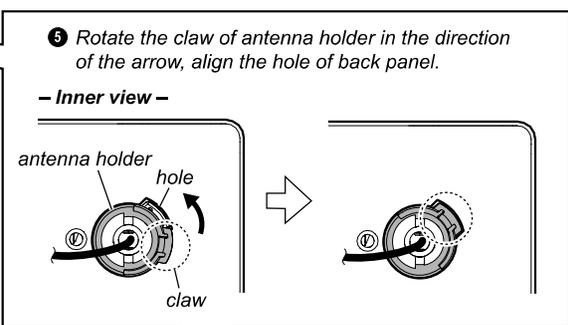
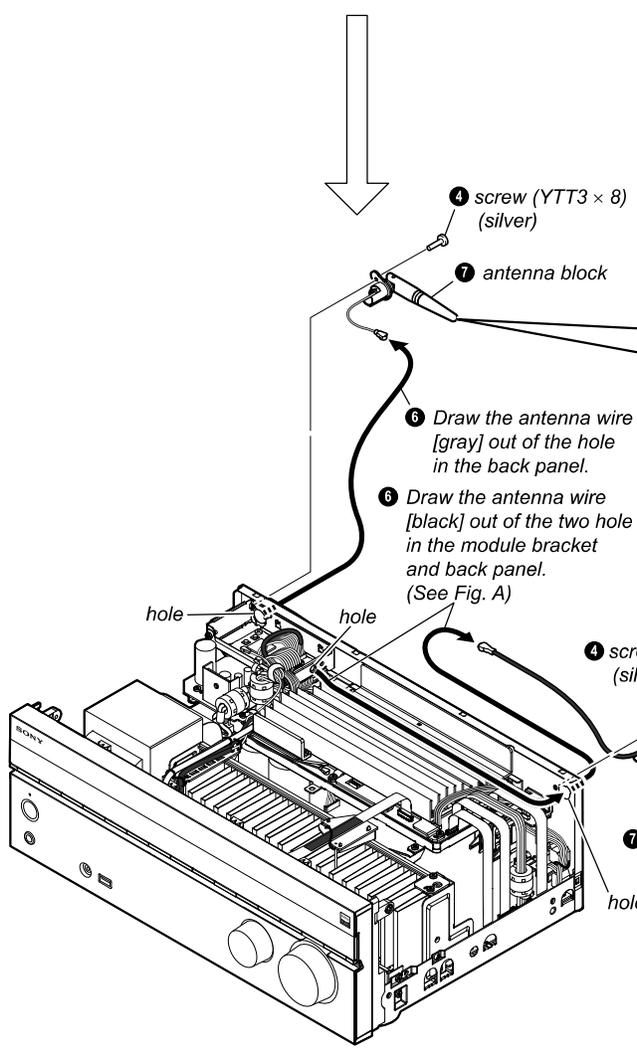
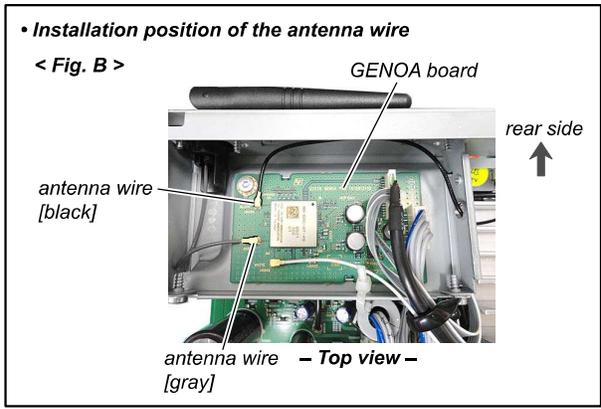
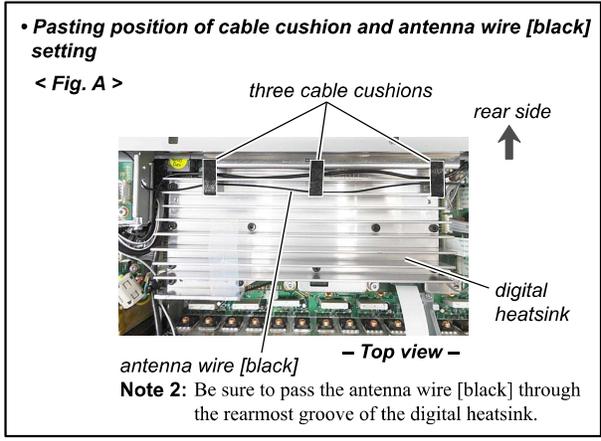
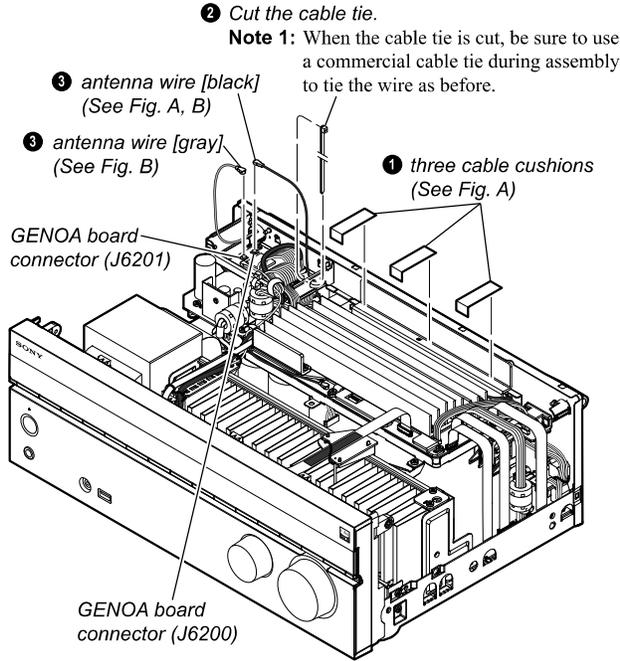
**Note:** Follow the disassembly procedure in the numerical order given.

## 2-2. CASE (ENTRY), FUSE



# STR-AN1000/AZ1000ES

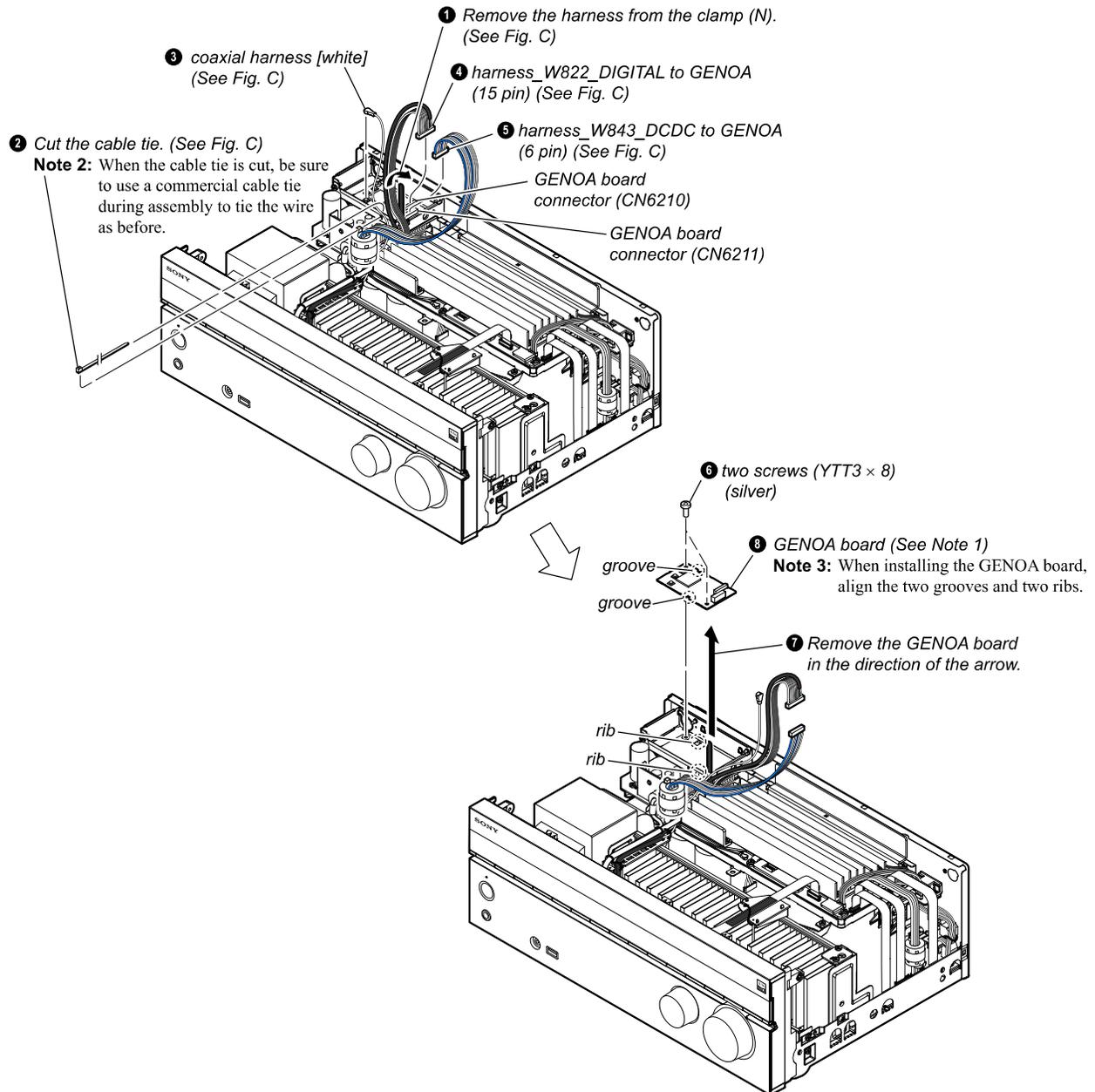
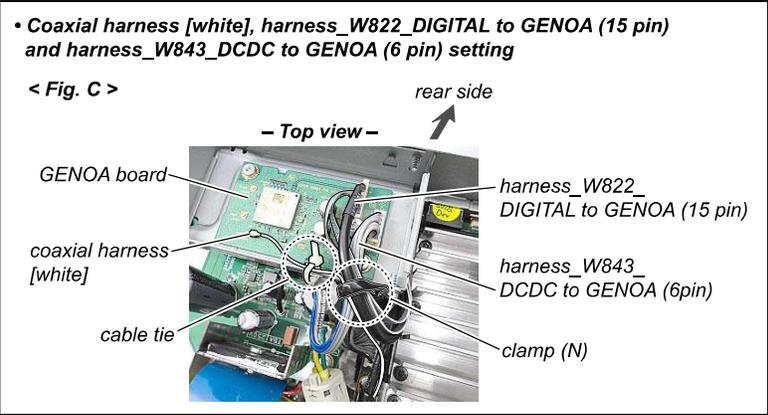
## 2-3. DUAL-BAND DIPOLE ANTENNA



# STR-AN1000/AZ1000ES

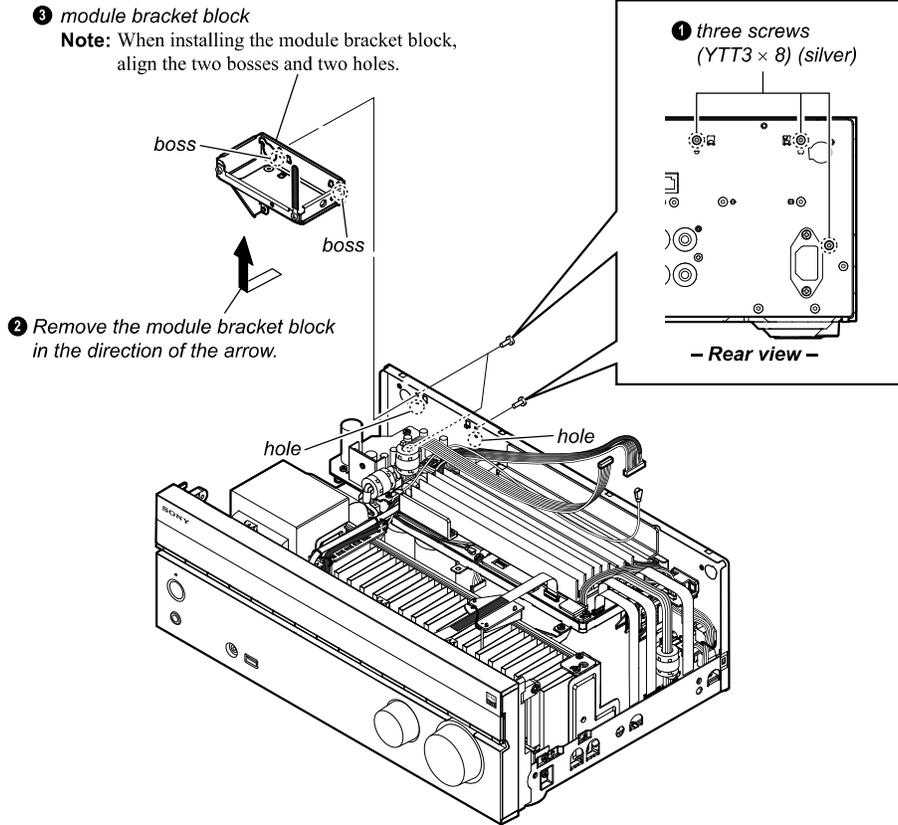
## 2-4. GENOA BOARD

**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 11.

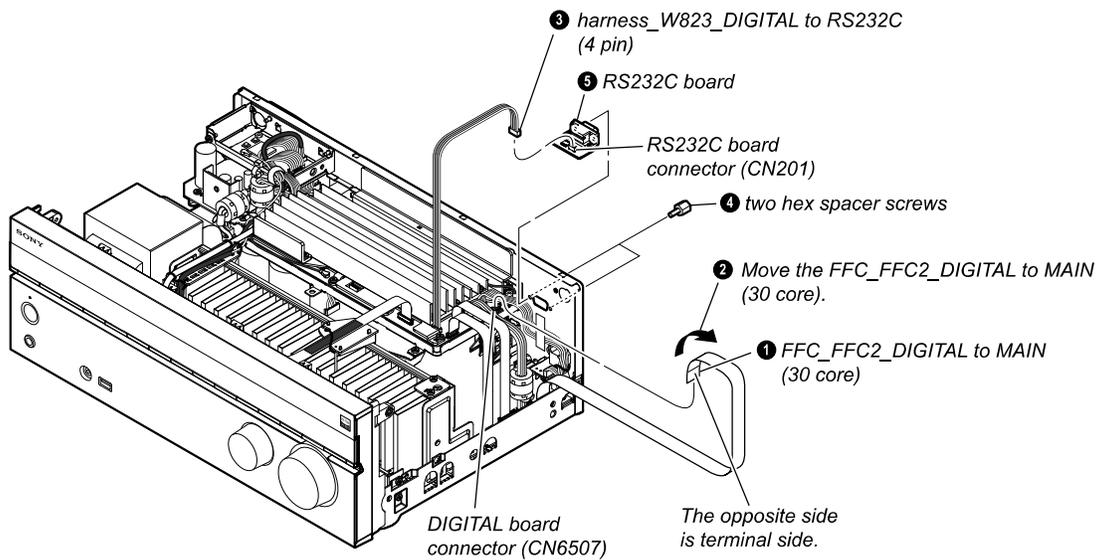


# STR-AN1000/AZ1000ES

## 2-5. MODULE BRACKET BLOCK



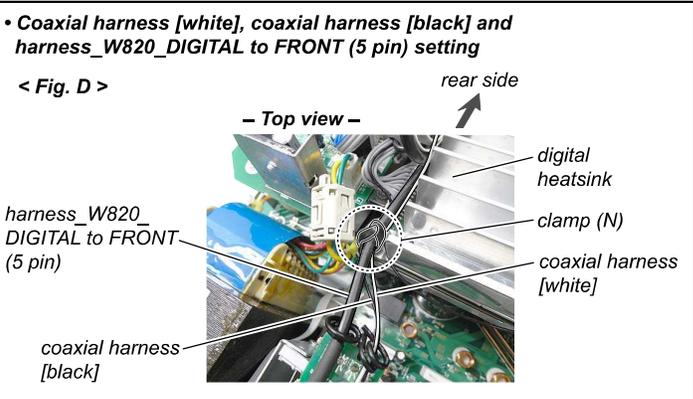
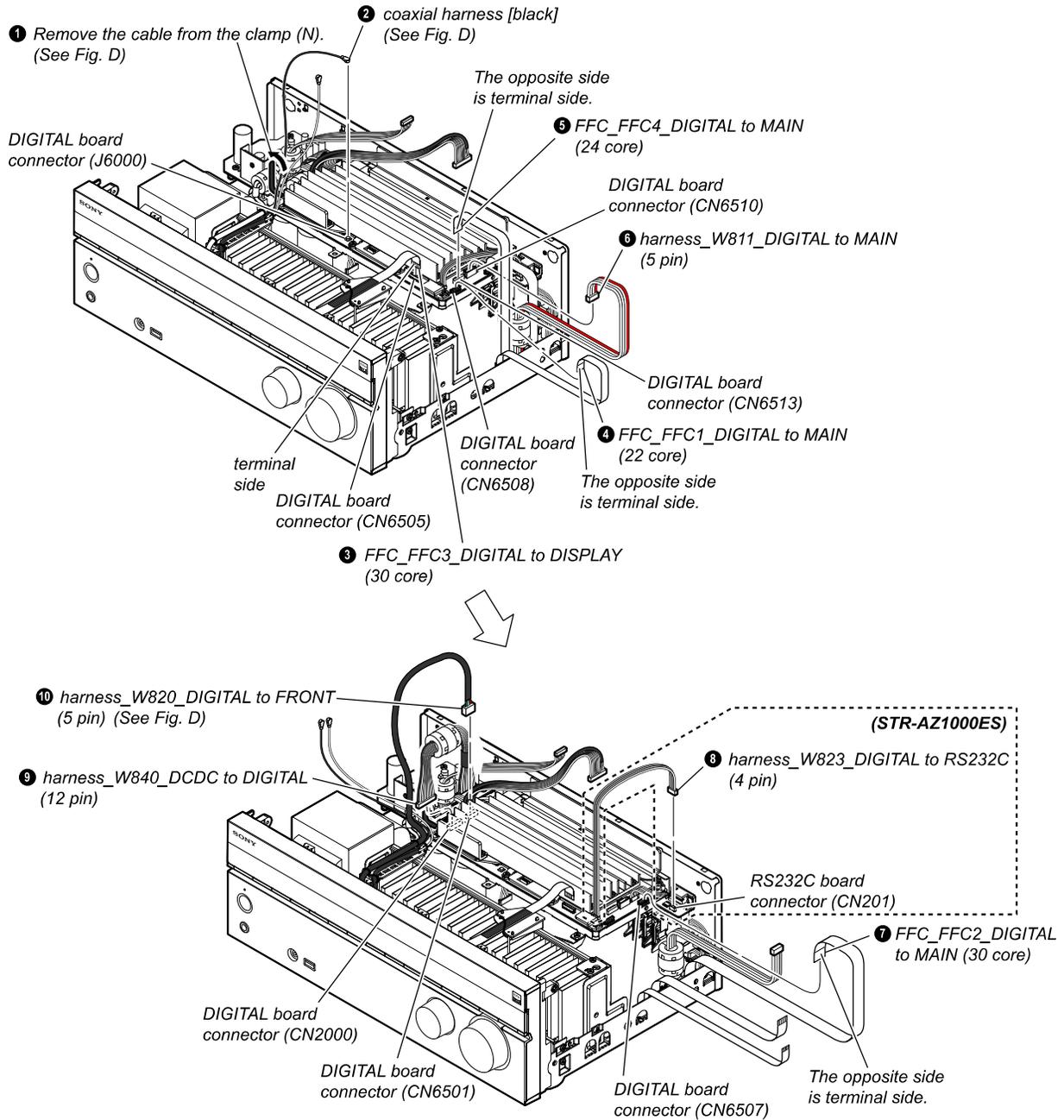
## 2-6. RS232C BOARD (STR-AZ1000ES)



# STR-AN1000/AZ1000ES

## 2-7. DIGITAL BOARD BLOCK-1

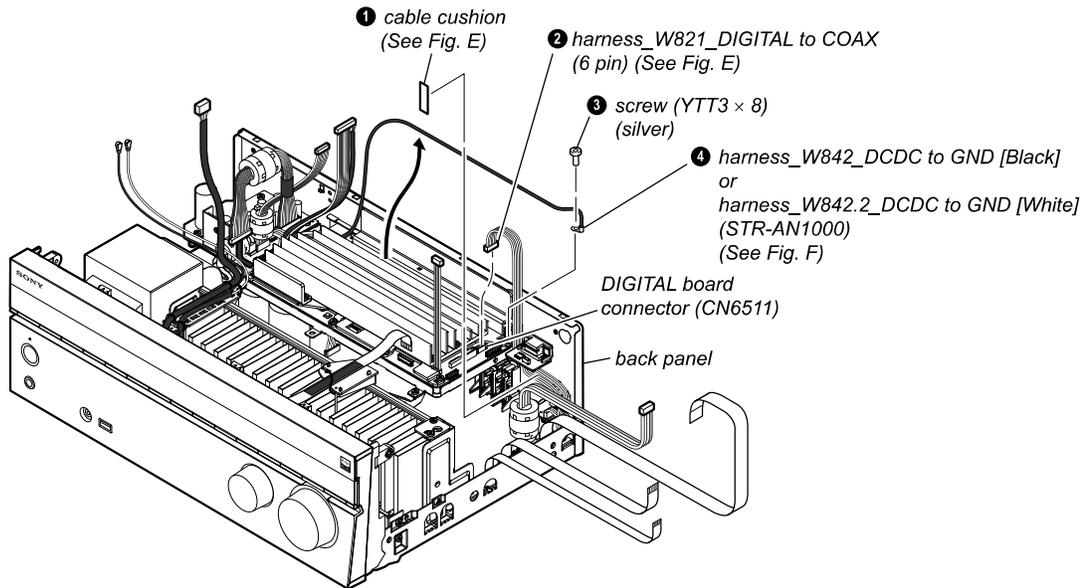
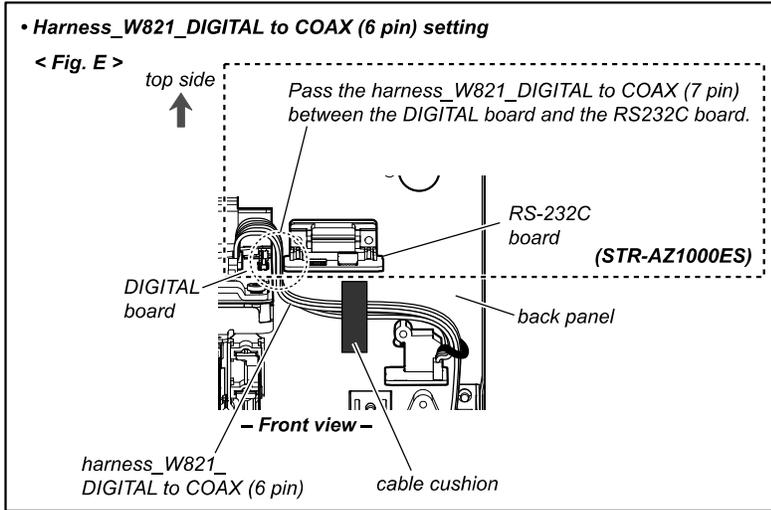
• Continued on 2-8 (page 22).



# STR-AN1000/AZ1000ES

## 2-8. DIGITAL BOARD BLOCK-2

• Continued on 2-9 (page 23).

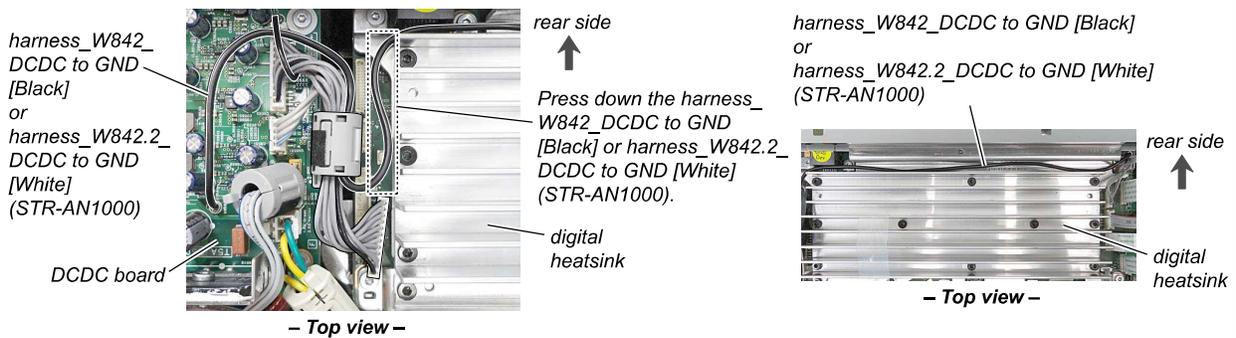


< Fig. F >

**• Harness\_W842\_DCDC to GND [Black] or harness\_W842.2\_DCDC to GND [White] setting**

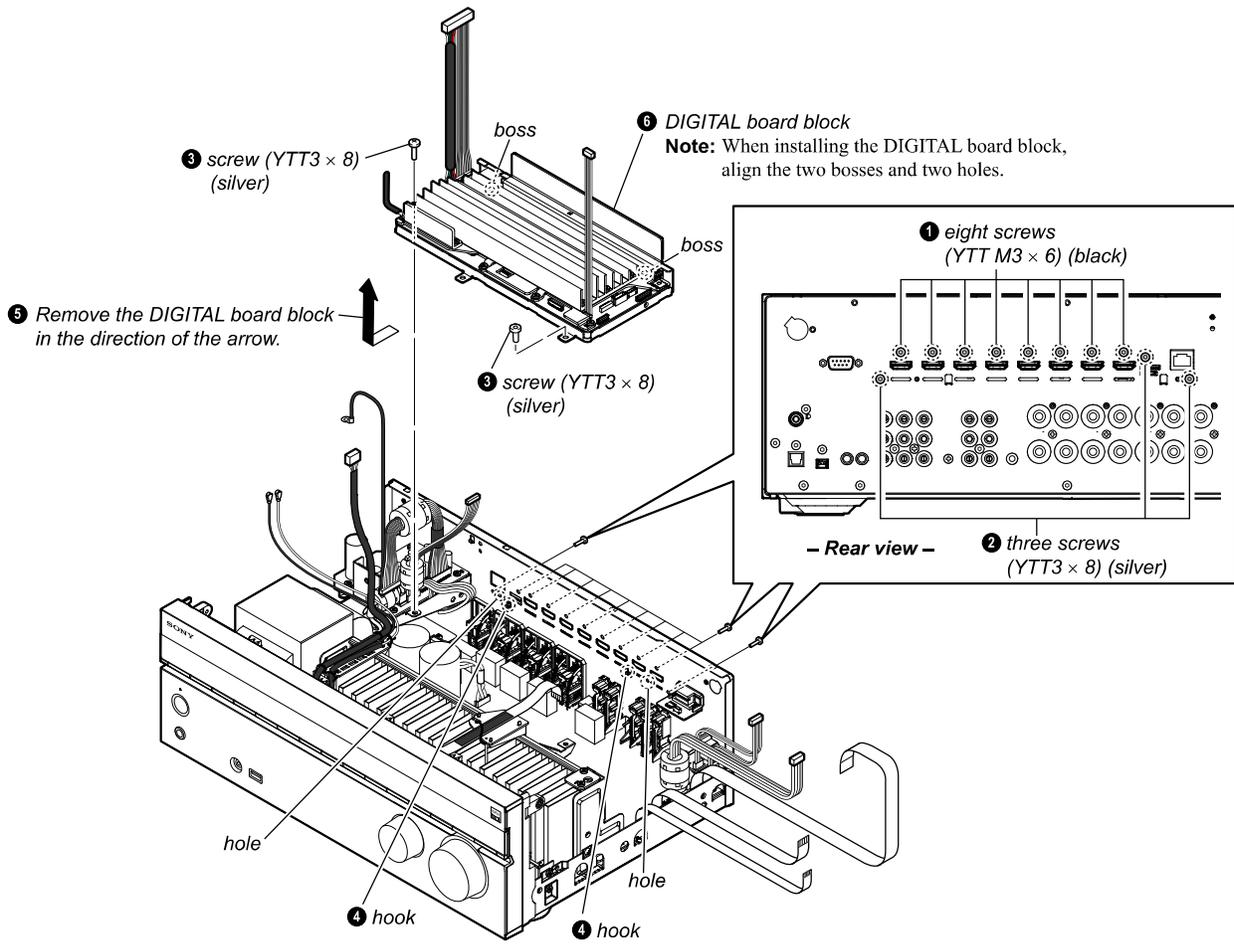
**(STR-AN1000 only)**

**Note:** The harness\_W842\_DCDC to GND [Black] has been changed to harness\_W842.2\_DCDC to GND [White] in the midway of production. For change of the harness, refer to “ABOUT THE HARNESS CHANGE OF DCDC BOARD” on page 11.



# STR-AN1000/AZ1000ES

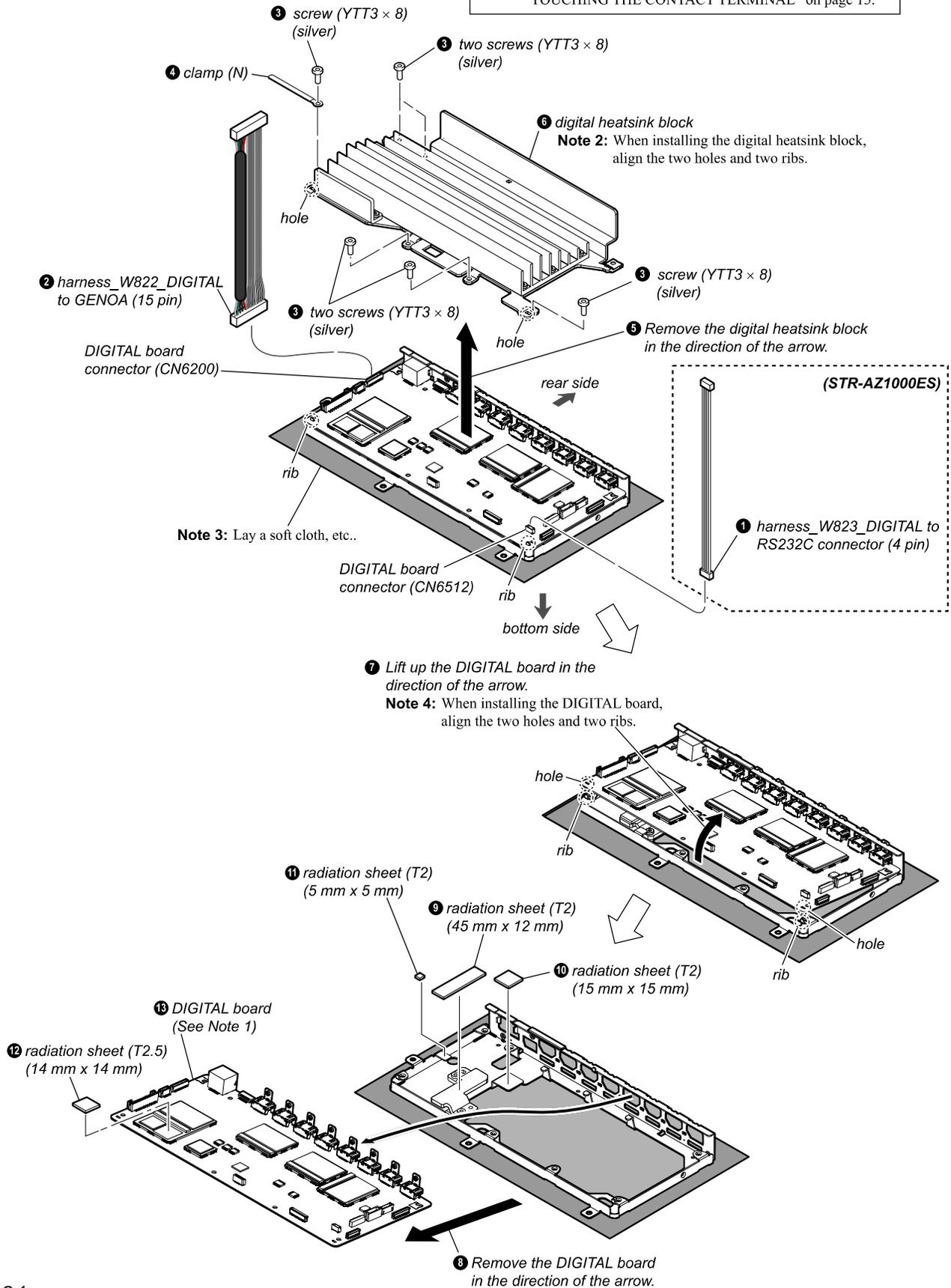
## 2-9. DIGITAL BOARD BLOCK-3



# STR-AN1000/AZ1000ES

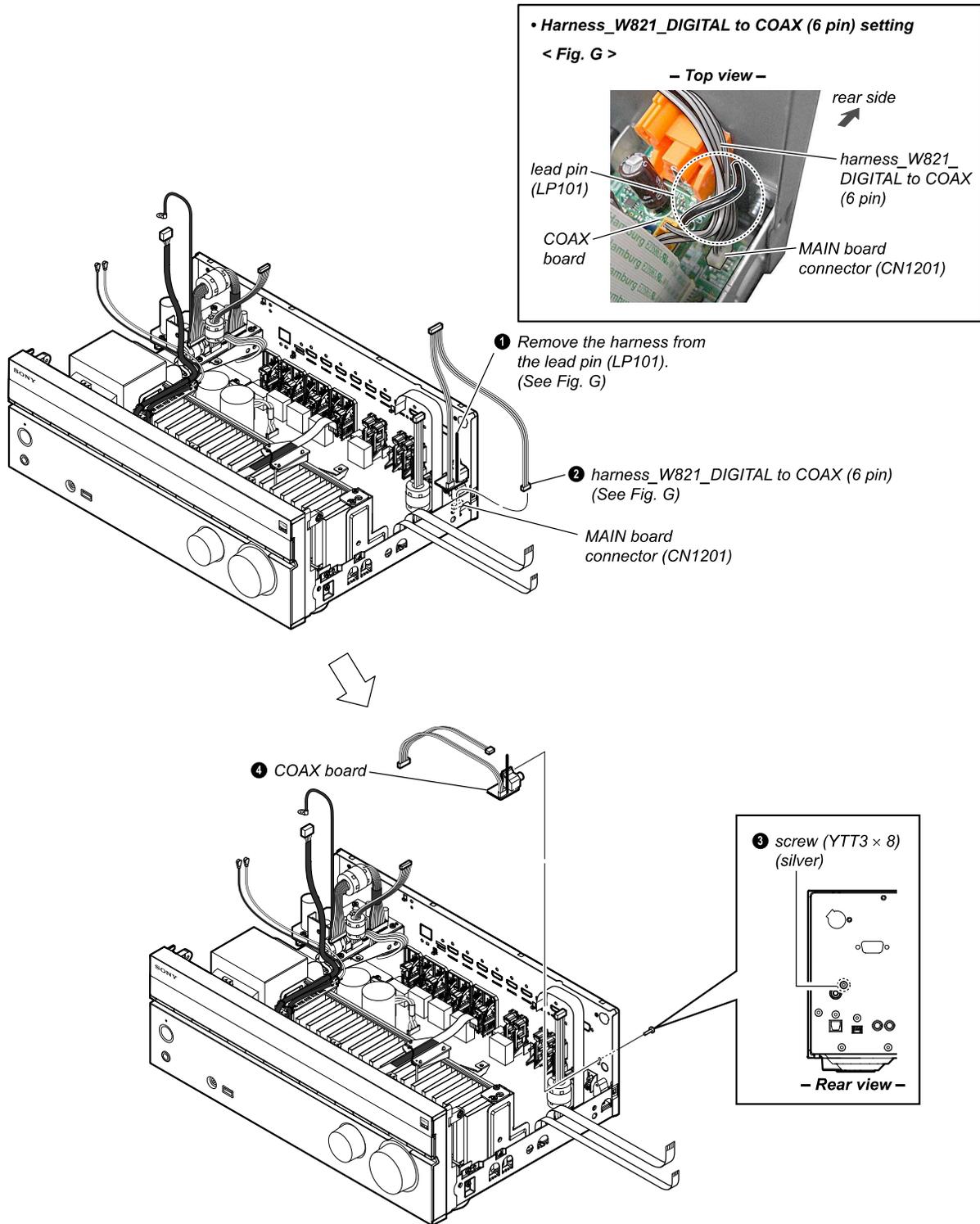
## 2-10. DIGITAL BOARD

**Note 1:** 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 15.



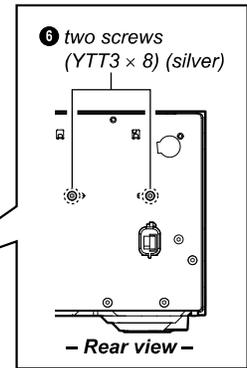
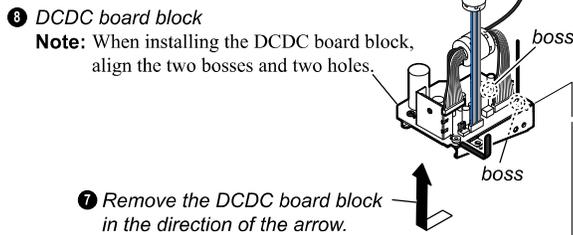
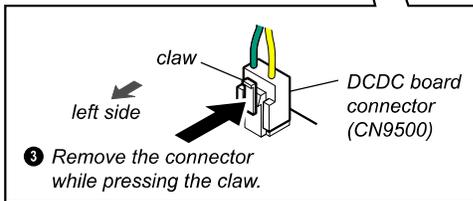
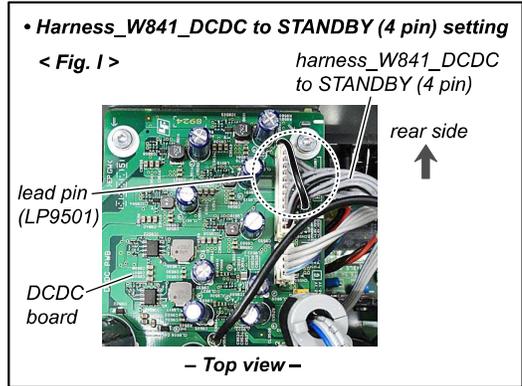
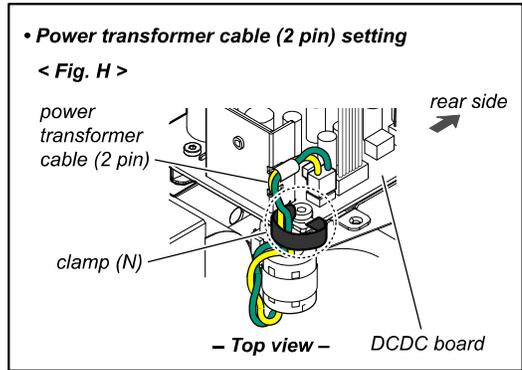
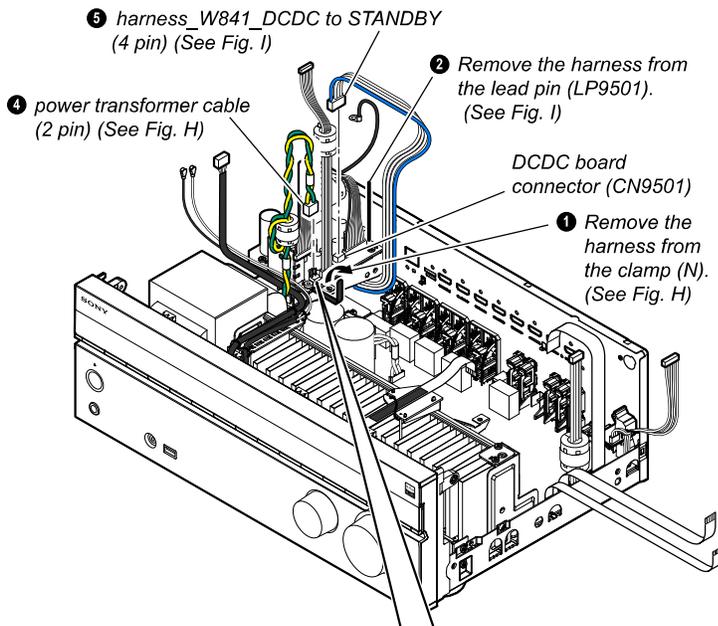
# STR-AN1000/AZ1000ES

## 2-11. COAX BOARD



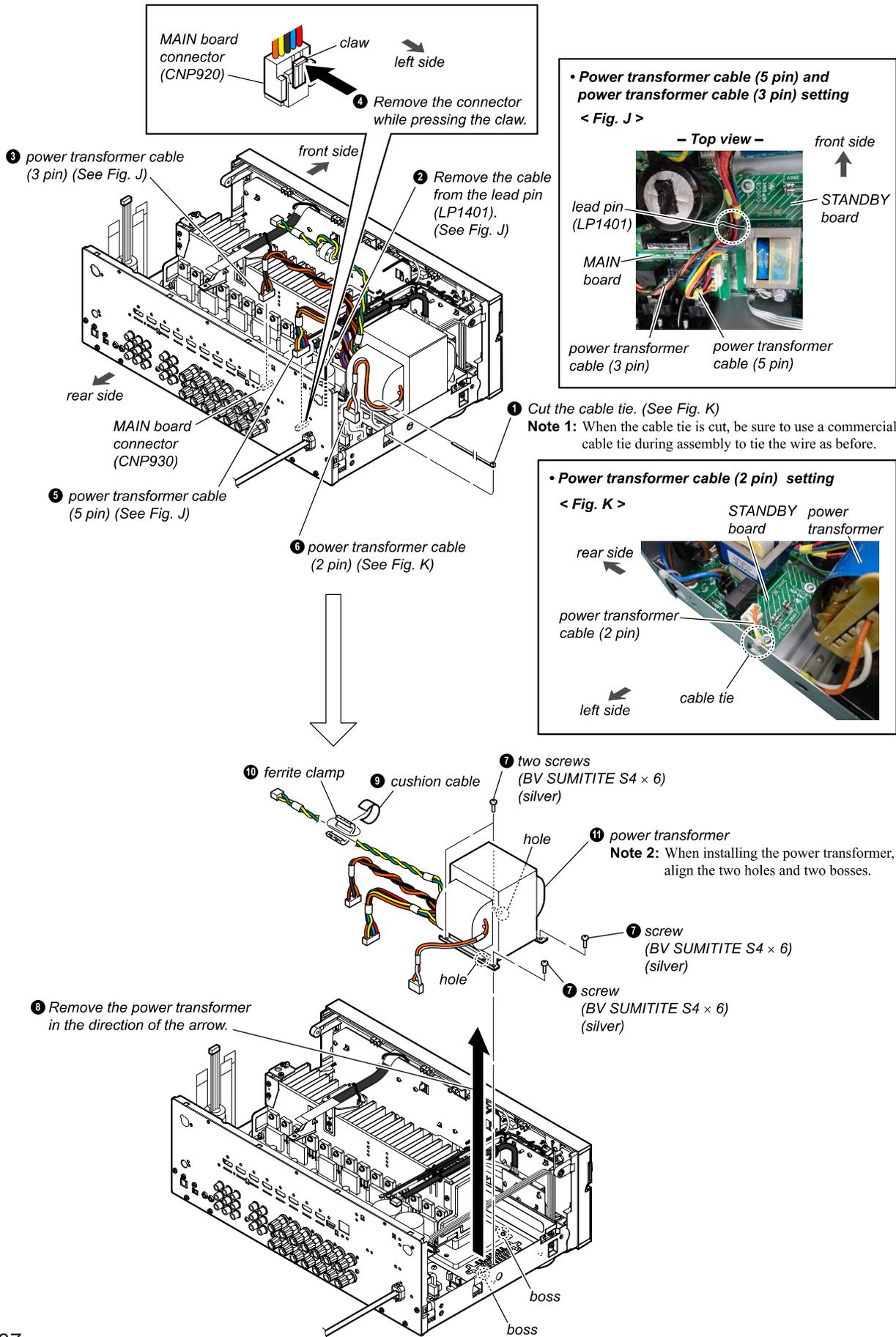
# STR-AN1000/AZ1000ES

## 2-12. DCDC BOARD BLOCK



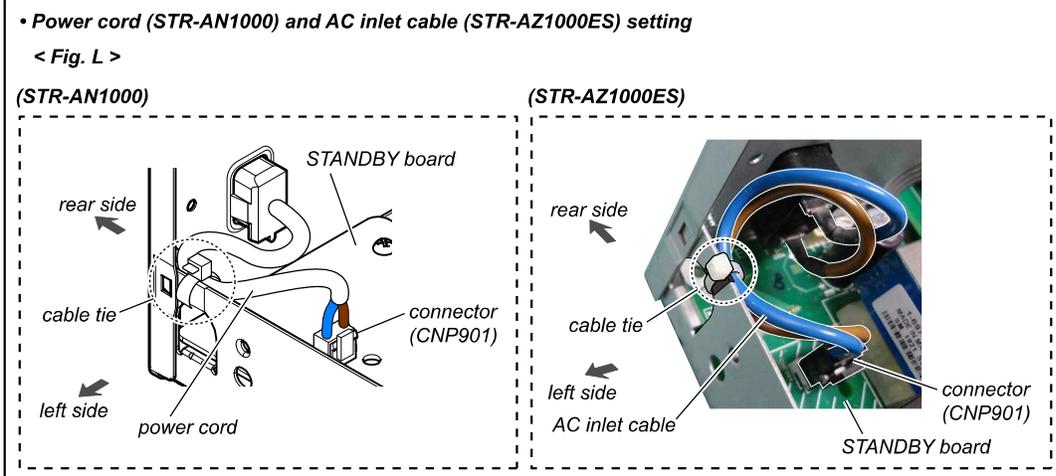
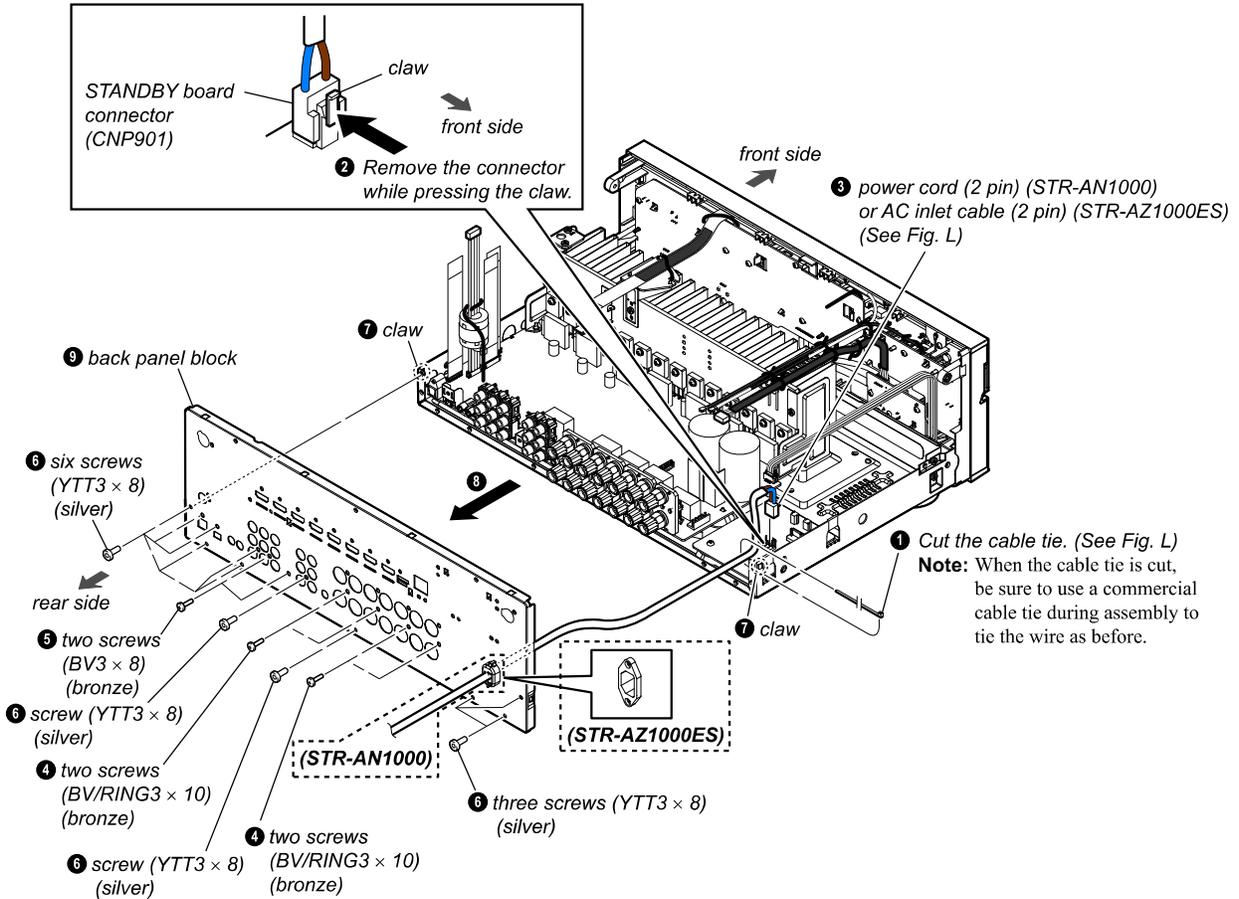
# STR-AN1000/AZ1000ES

## 2-13. POWER TRANSFORMER



# STR-AN1000/AZ1000ES

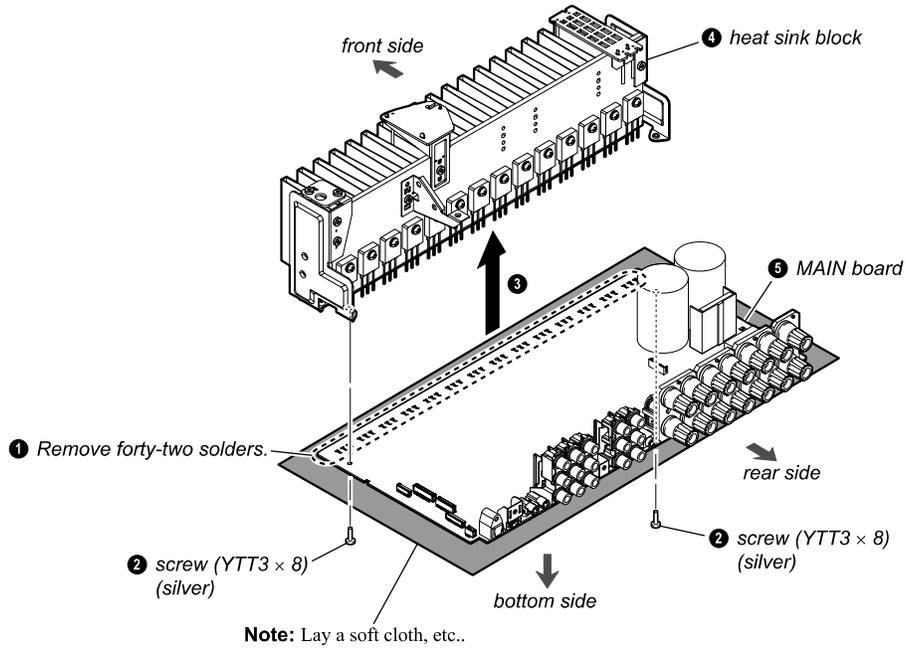
## 2-14. BACK PANEL BLOCK



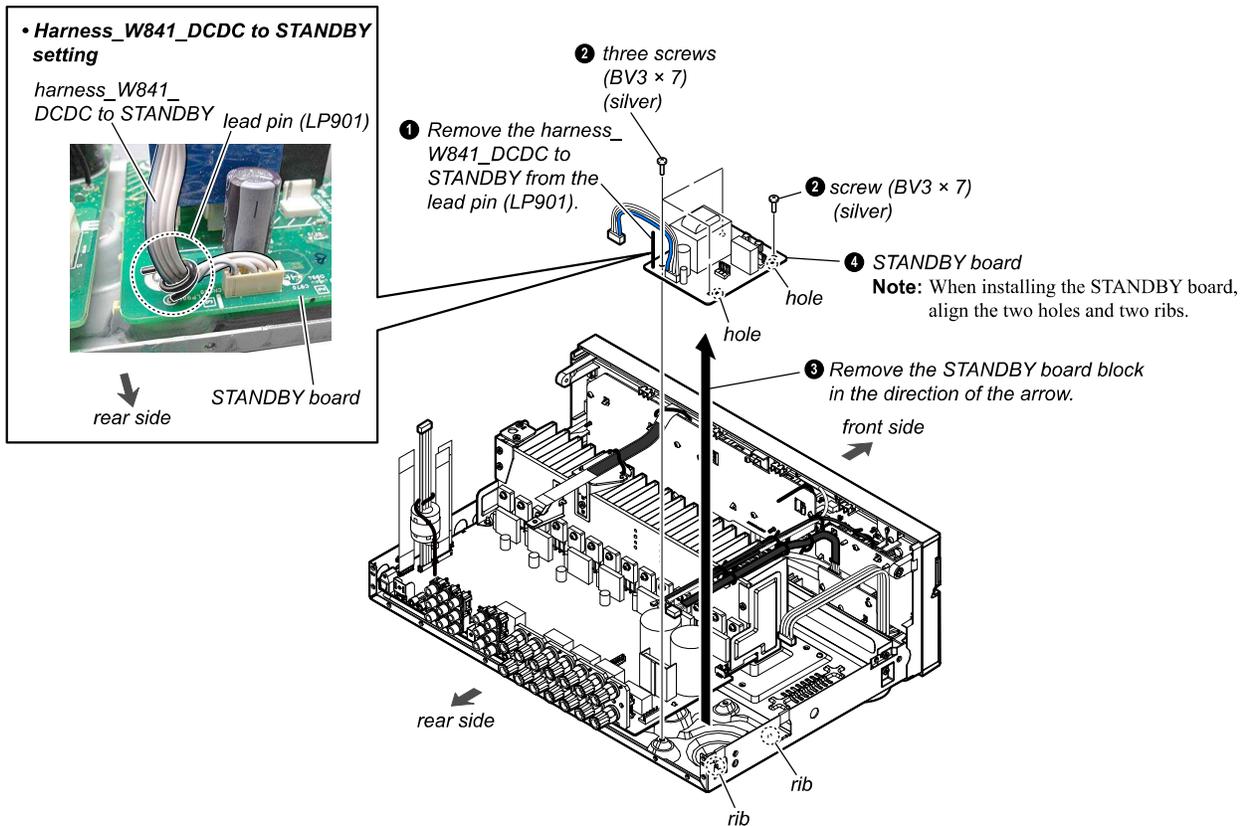


# STR-AN1000/AZ1000ES

## 2-16. MAIN BOARD

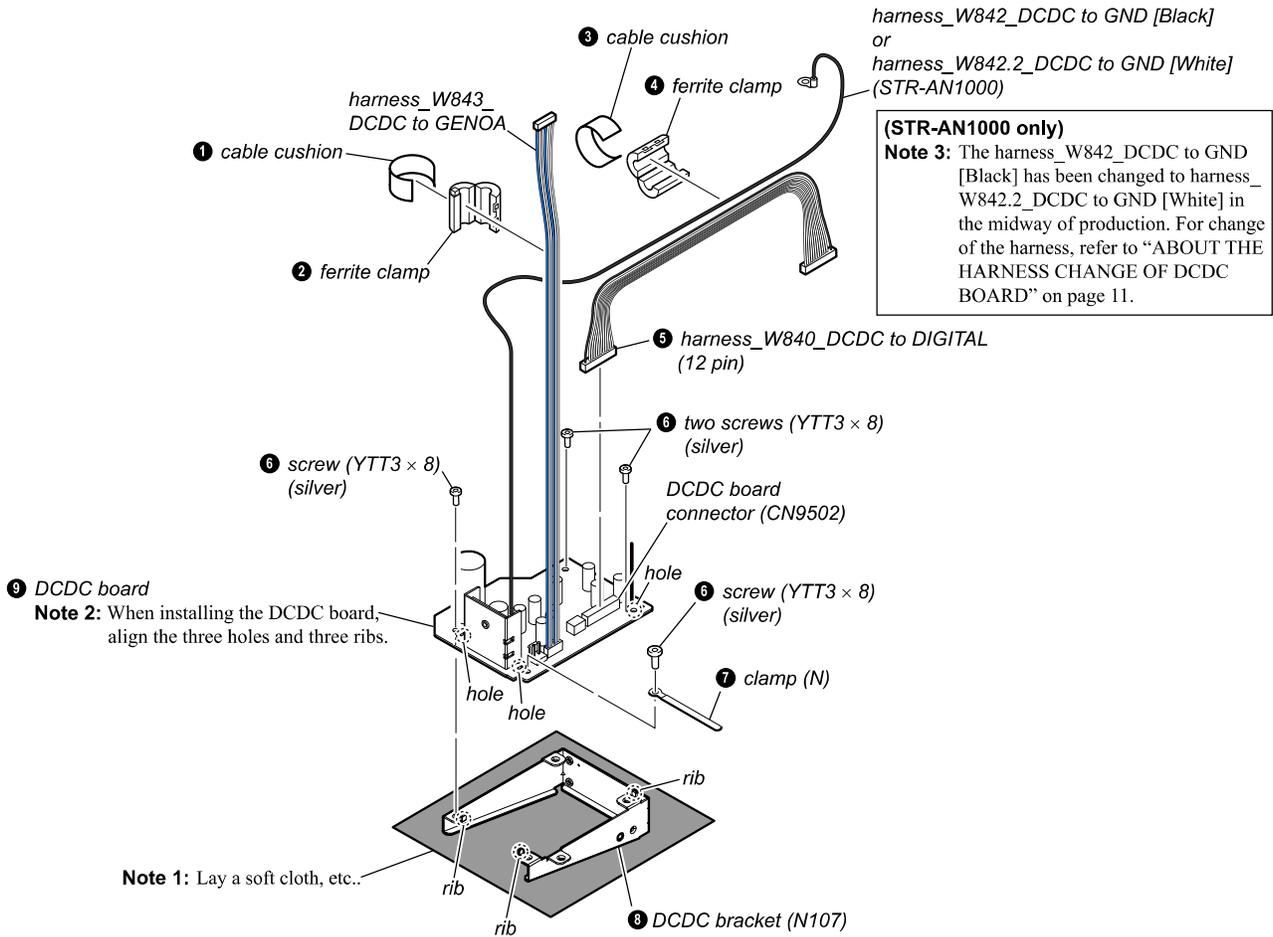


## 2-17. STANDBY BOARD

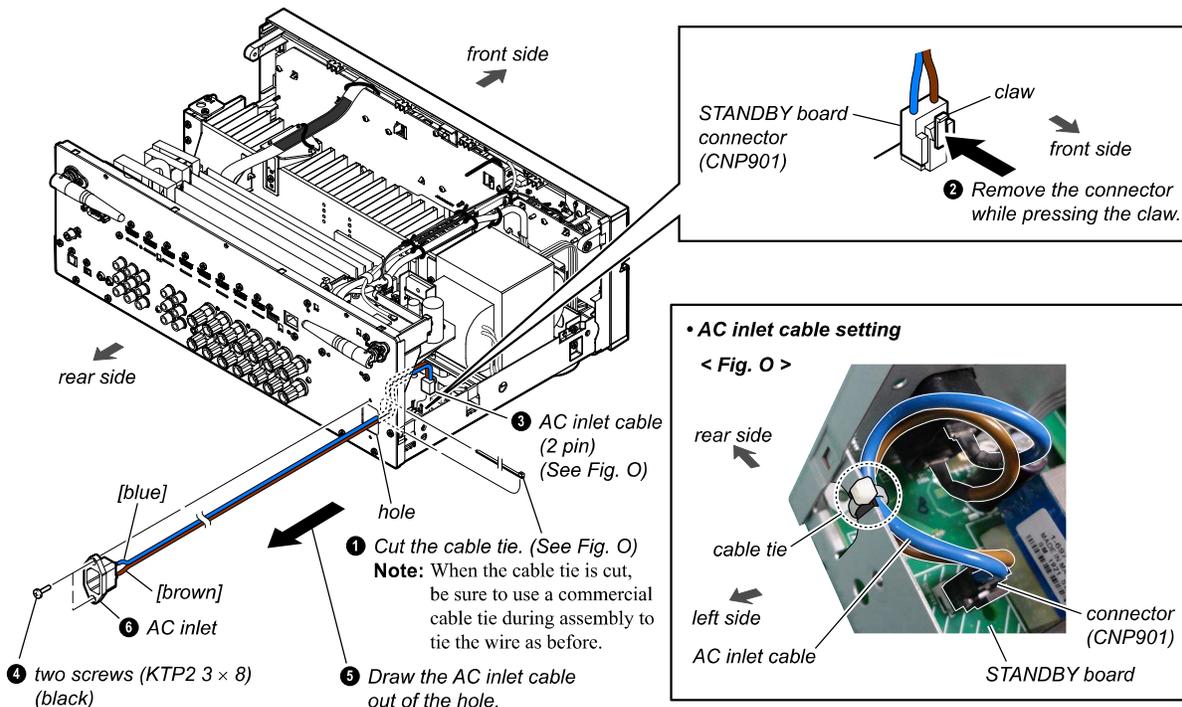


# STR-AN1000/AZ1000ES

## 2-18. DCDC BOARD

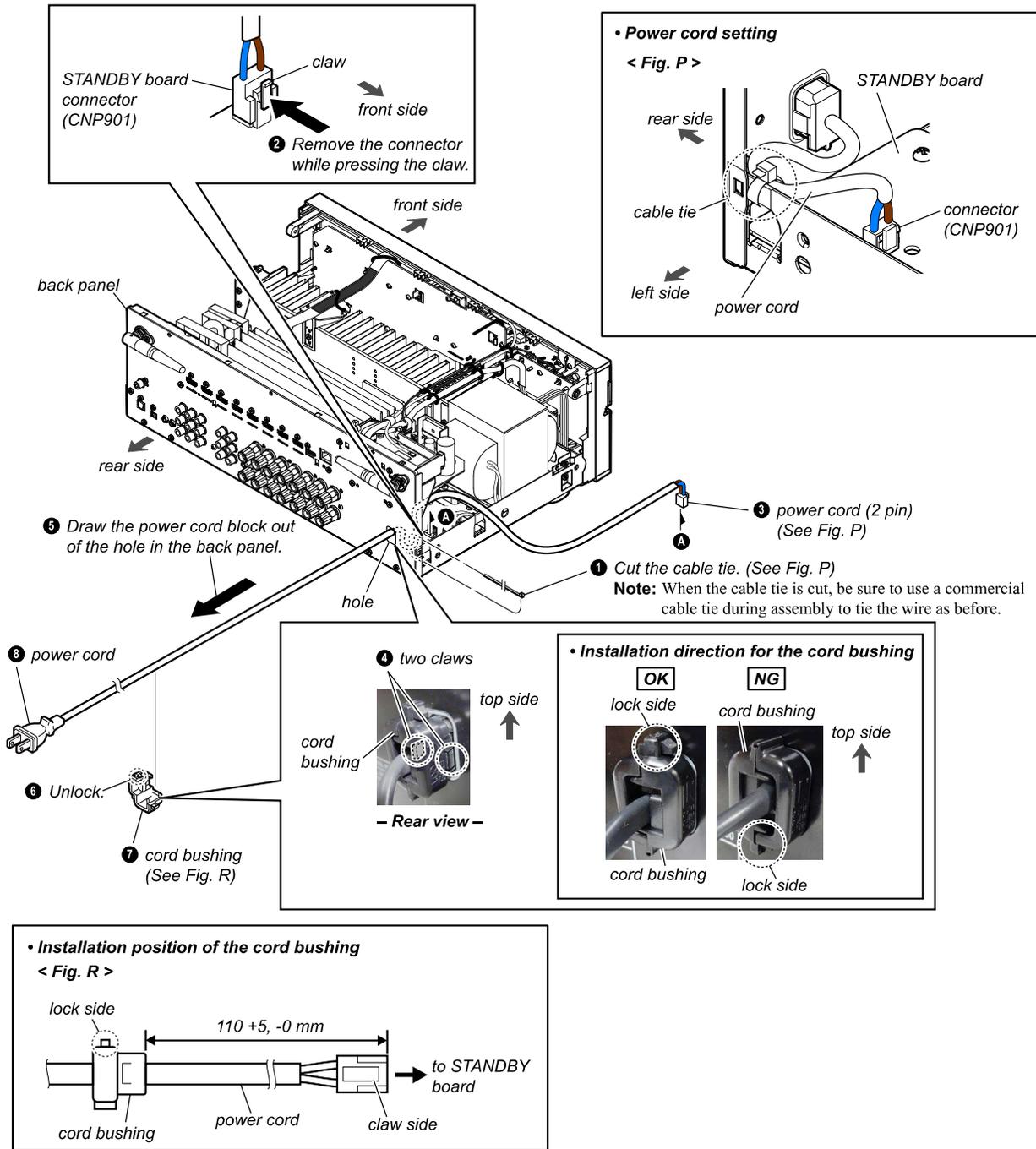


## 2-19. AC INLET (STR-AZ1000ES)



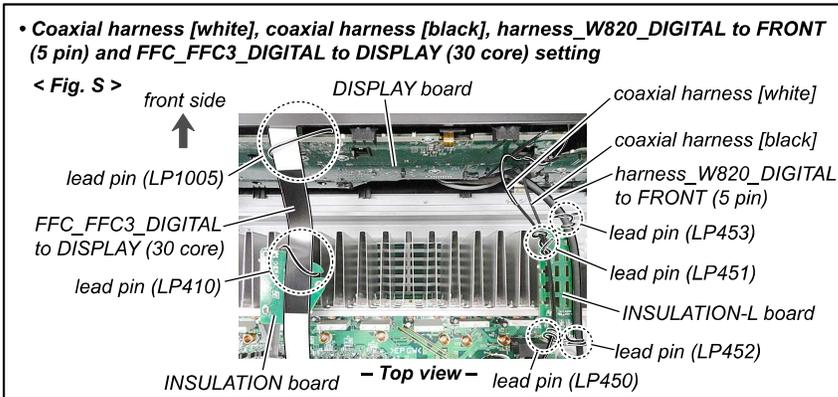
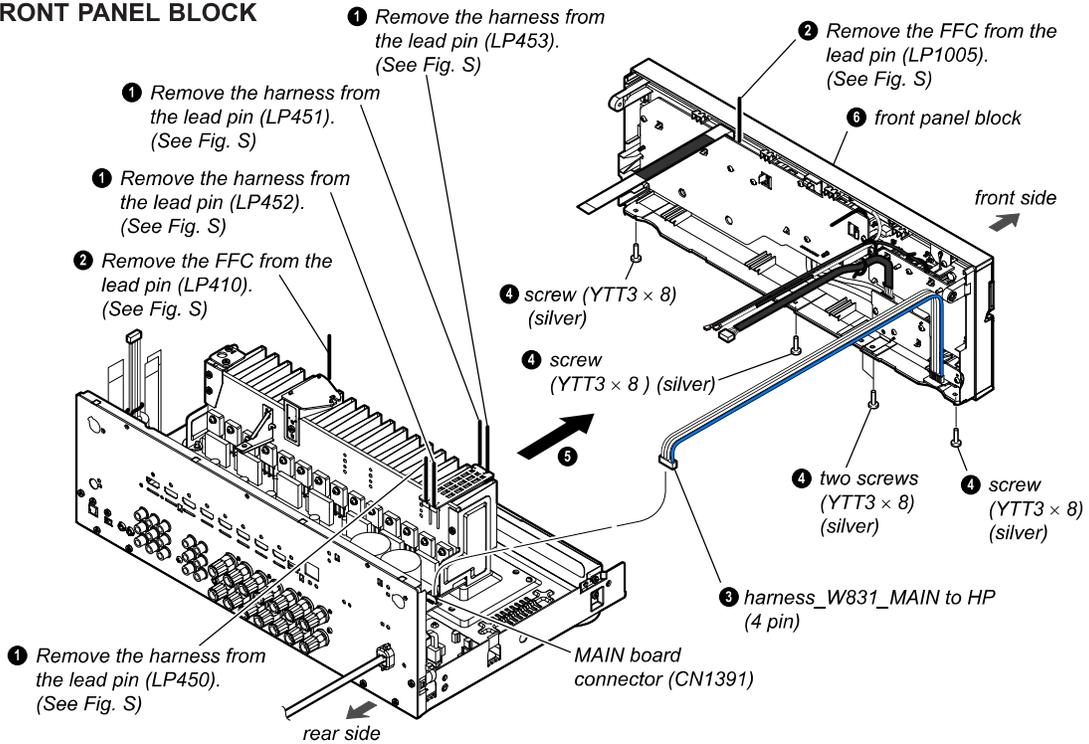
# STR-AN1000/AZ1000ES

## 2-20. POWER CORD (STR-AN1000)

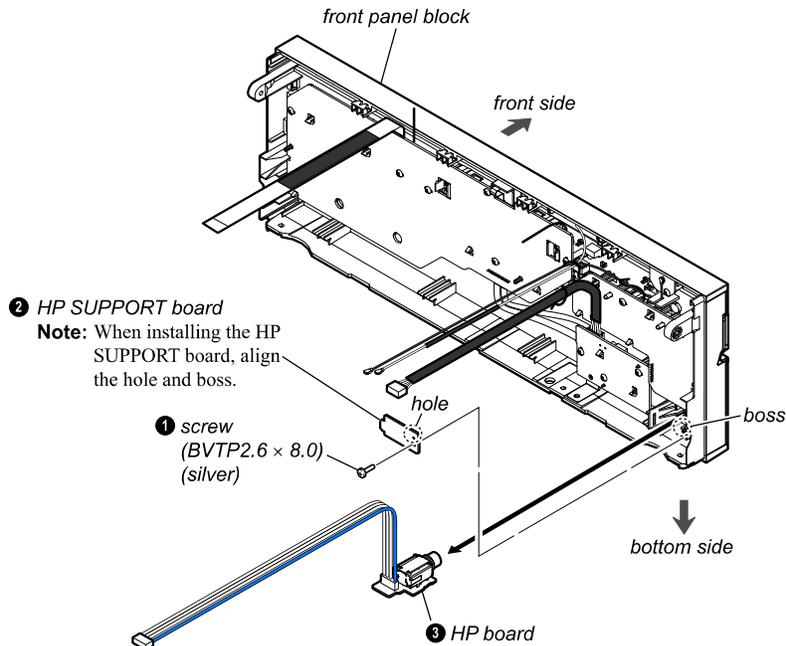


# STR-AN1000/AZ1000ES

## 2-21. FRONT PANEL BLOCK



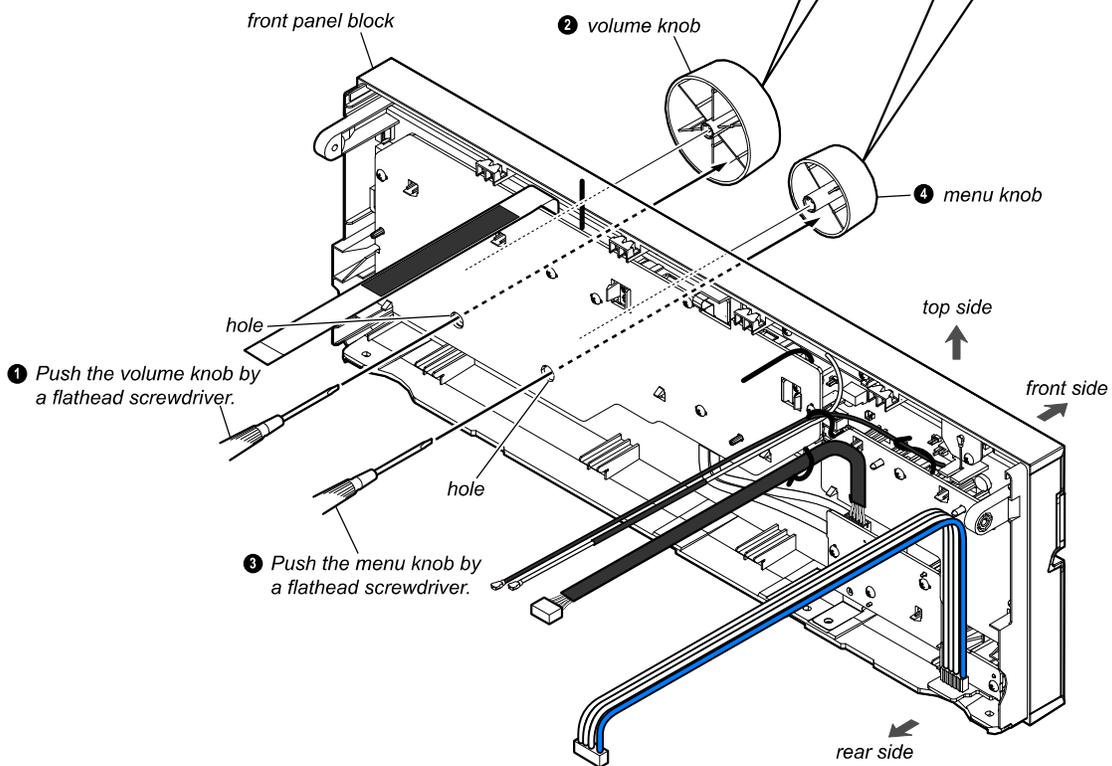
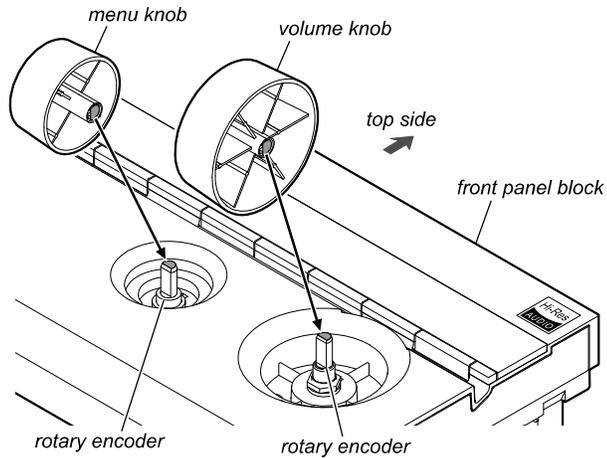
## 2-22. HP BOARD



## 2-23. VOLUME KNOB, MENU KNOB

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

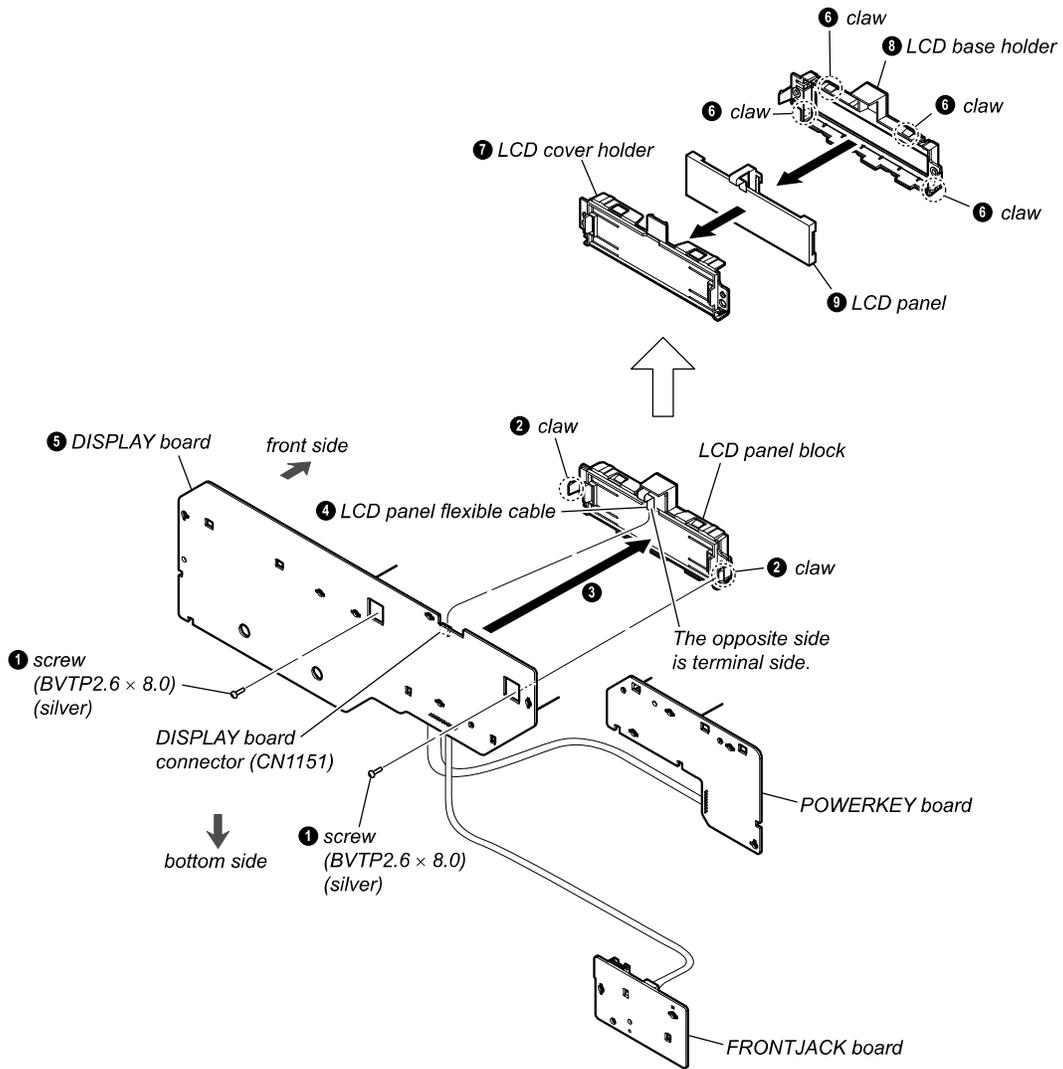
When installing the volume knob or menu knob to the rotary encoder, align the directions of the D-shaped tip of the rotary encoder and the D-shaped notch at the inner side of the volume knob or menu knob.





# STR-AN1000/AZ1000ES

## 2-25. DISPLAY BOARD, LCD PANEL



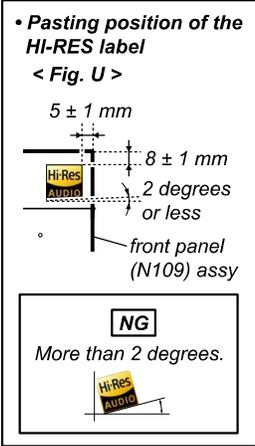
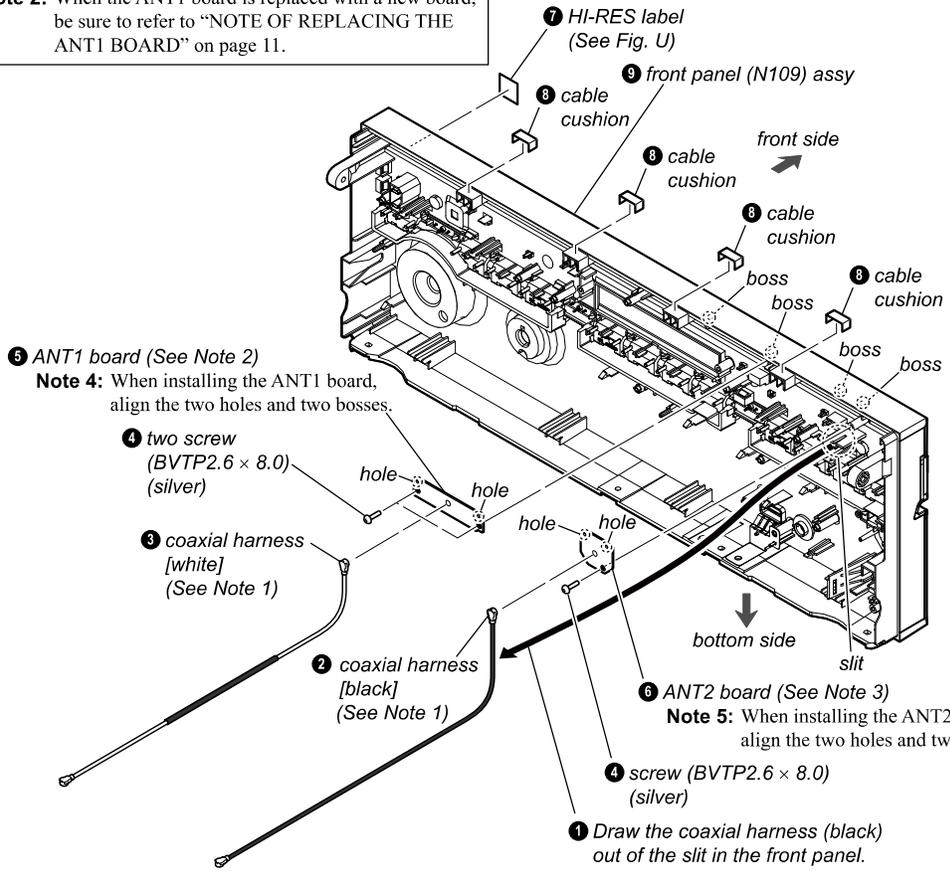
# STR-AN1000/AZ1000ES

## 2-26. ANT1 BOARD, ANT2 BOARD, FRONT PANEL (N109) ASSY

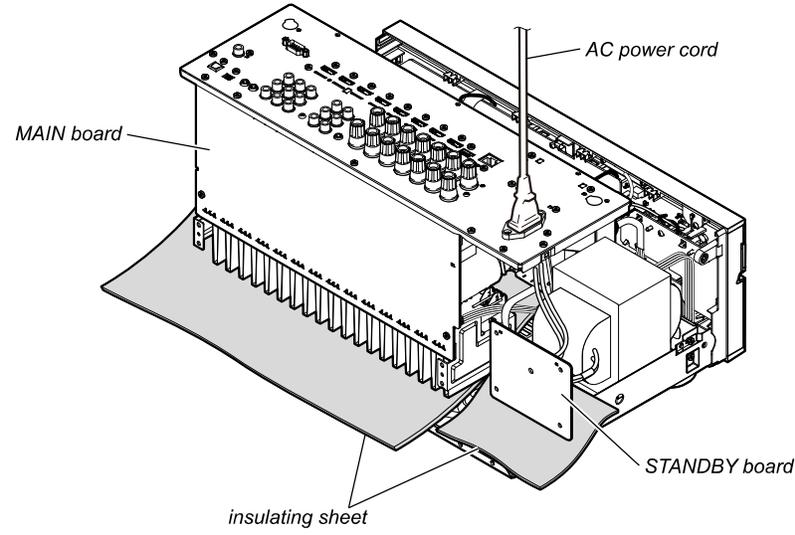
**Note 1:** When the coaxial harness is replaced with a new part, be sure to refer to "NOTE OF REPLACING THE COAXIAL HARNESS" on page 11.

**Note 3:** When the ANT2 board is replaced with a new board, be sure to refer to "NOTE OF REPLACING THE ANT2 BOARD" on page 11.

**Note 2:** When the ANT1 board is replaced with a new board, be sure to refer to "NOTE OF REPLACING THE ANT1 BOARD" on page 11.

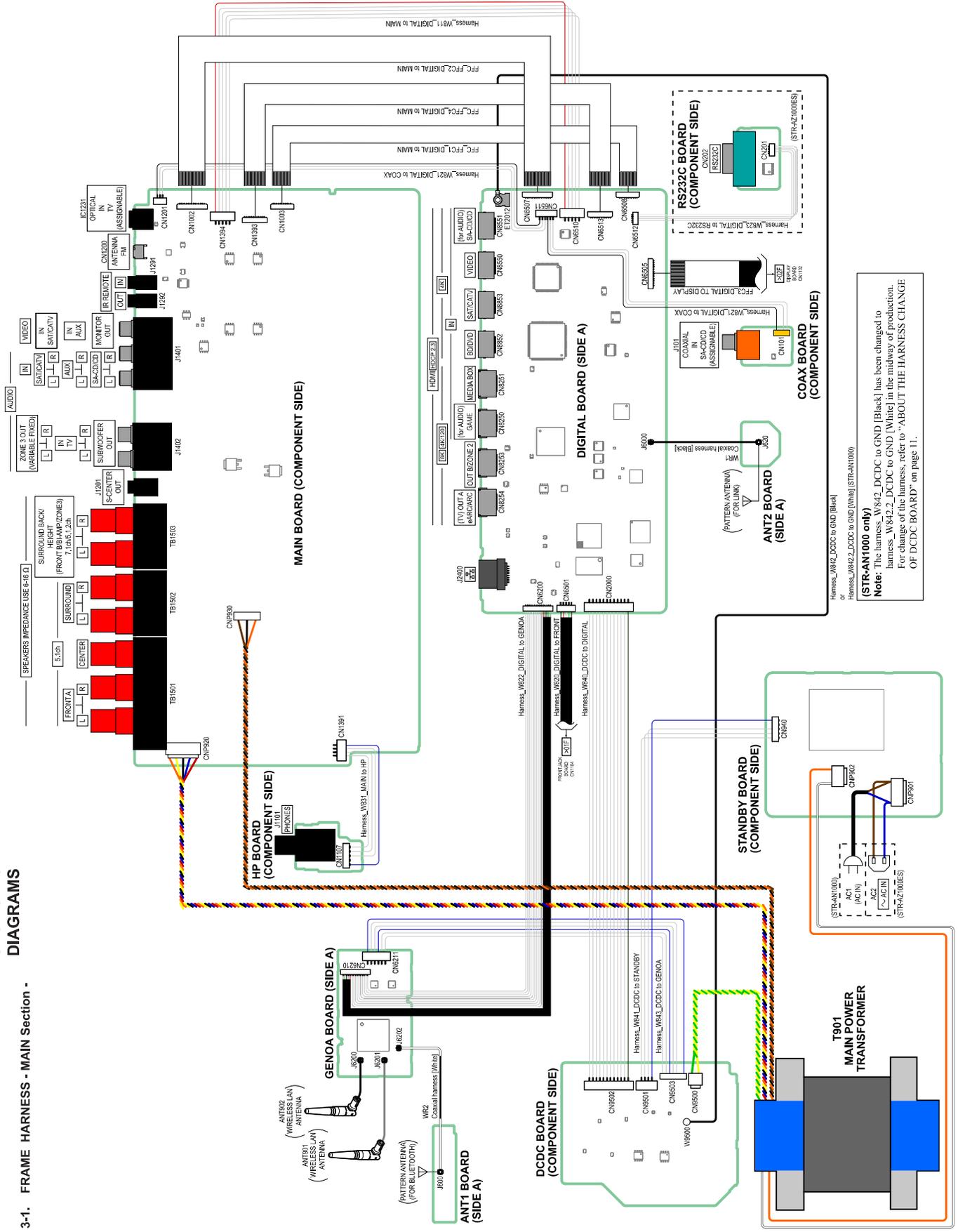


## 2-27. SERVICE POSITION



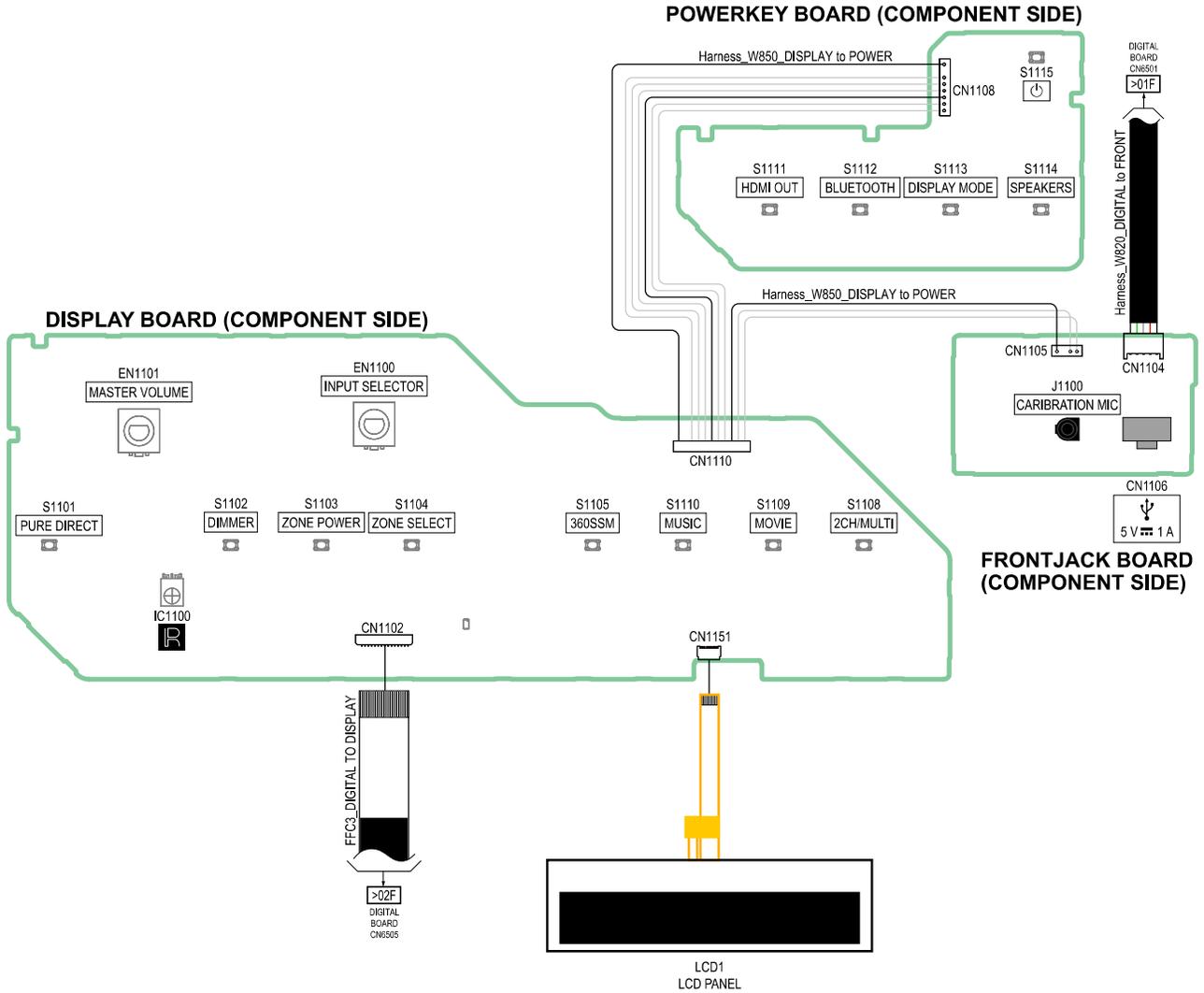
SECTION 3  
DIAGRAMS

3-1. FRAME HARNESS - MAIN Section -



# STR-AN1000/AZ1000ES

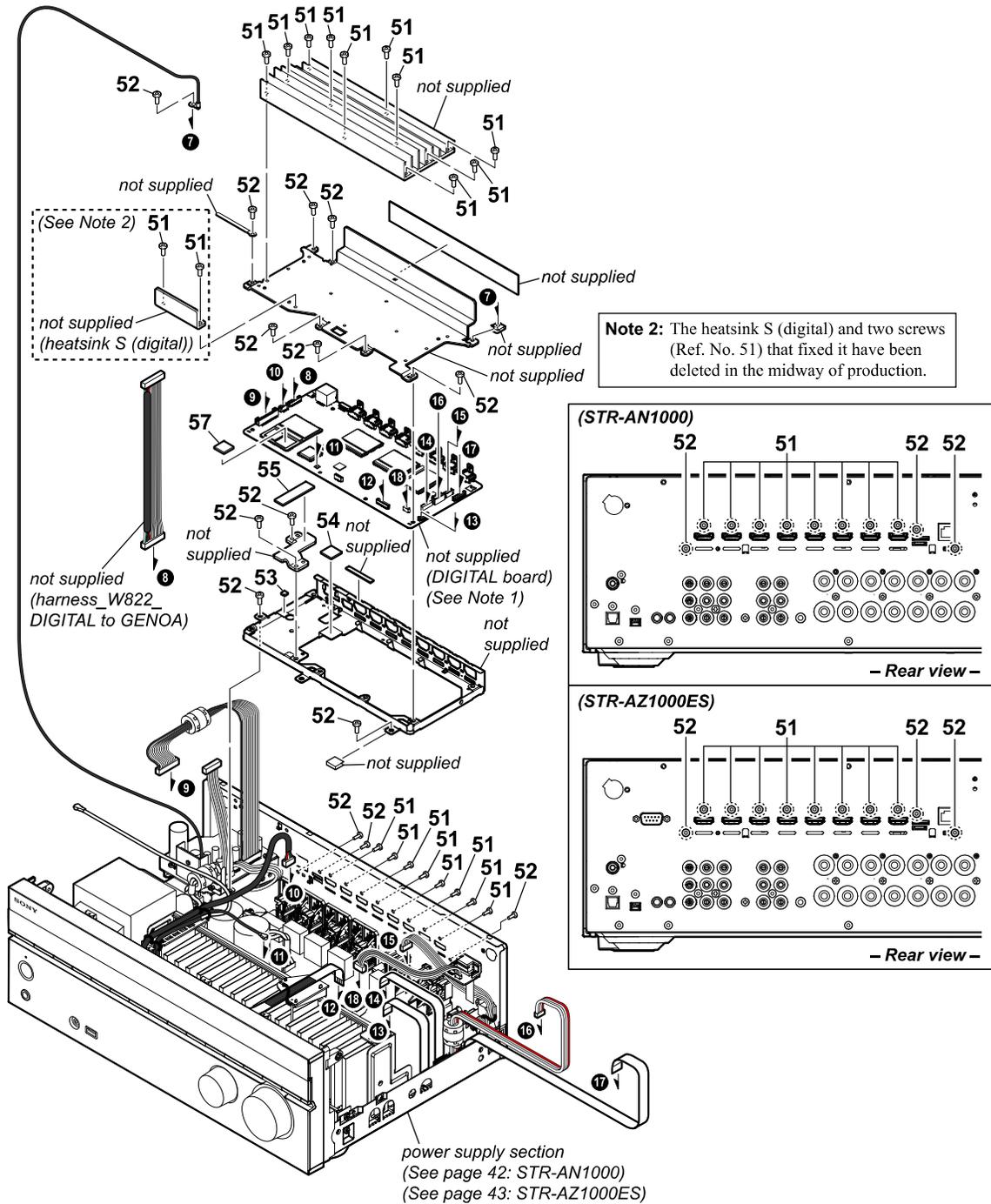
## 3-2. FRAME HARNESS - PANEL Section -





# STR-AN1000/AZ1000ES

## 4-2. DIGITAL BOARD SECTION

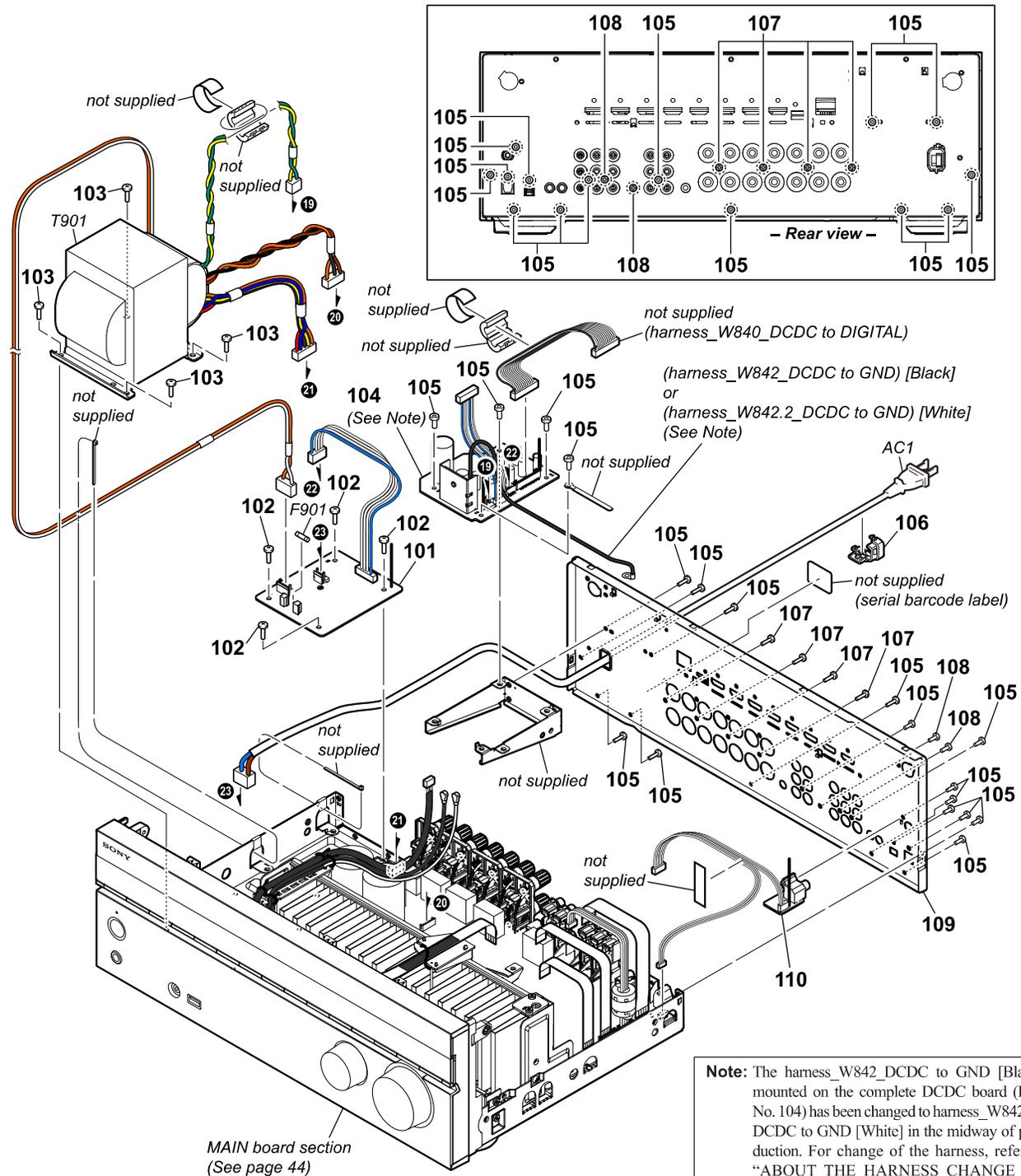


Ref. No.	Part No.	Description	Remark
51	502719711	SCREW YTT M3X6 (BLACK)	
52	502719501	SCREW YTT 3X8 (SILVER)	
53	503887501	SHEET, RADIATION (T2) (5 mm x 5 mm)	
54	503887511	SHEET, RADIATION (T2) (15 mm x 15 mm)	

Ref. No.	Part No.	Description	Remark
55	503887521	SHEET, RADIATION (T2) (45 mm x 12 mm)	
57	504215401	SHEET, RADIATION (T2.5) (14 mm x 14 mm)	

# STR-AN1000/AZ1000ES

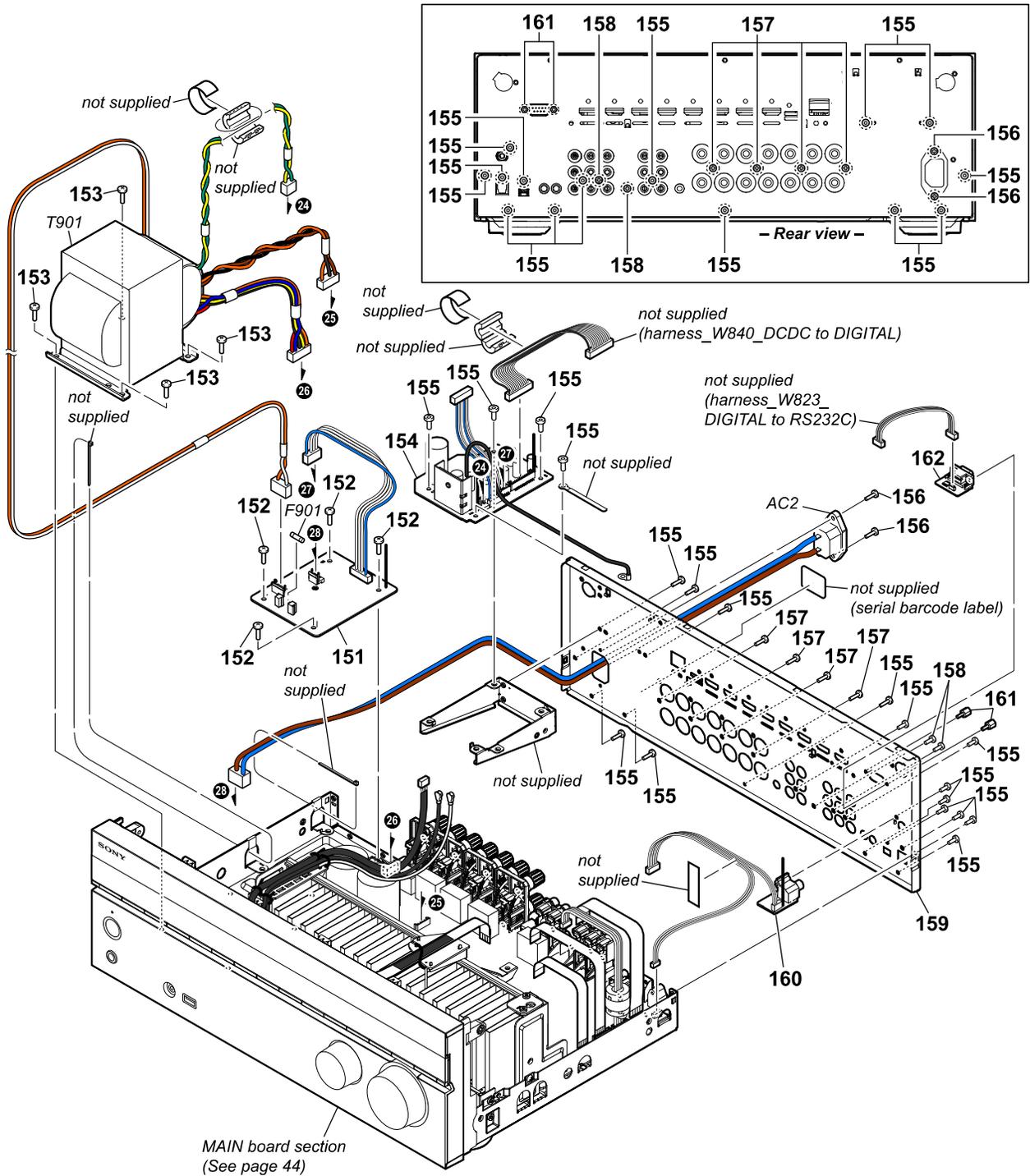
## 4-3. POWER SUPPLY SECTION (STR-AN1000)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	A5058102A	STANDBY BOARD, COMPLETE (SV)		108	497451011	SCREW (+BV 3X8 CU) (BRONZE)	
102	307733171	+BV3 (3-CR) (L = 7 mm) (SILVER)		109	503511801	PANEL, BACK (N109)	
103	424967502	+BV SUMITITE S 4X6 ROUND (SILVER)		110	A5058104A	COAX BOARD, COMPLETE (SV)	
104	A5058103A	DCDC BOARD, COMPLETE (SV) (See Note)		△ AC1	101601811	POWER-SUPPLY CORD	
105	502719501	SCREW YTT 3X8 (SILVER)		△ F901	153250533	FUSE (T 5AL/250 V)	
△ 106	496626712	BUSHING (FBS001), CORD		△ T901	101324911	POWER TRANSFORMER	
107	370451551	SCREW (BV/RING) (3X10) (BRONZE)					

# STR-AN1000/AZ1000ES

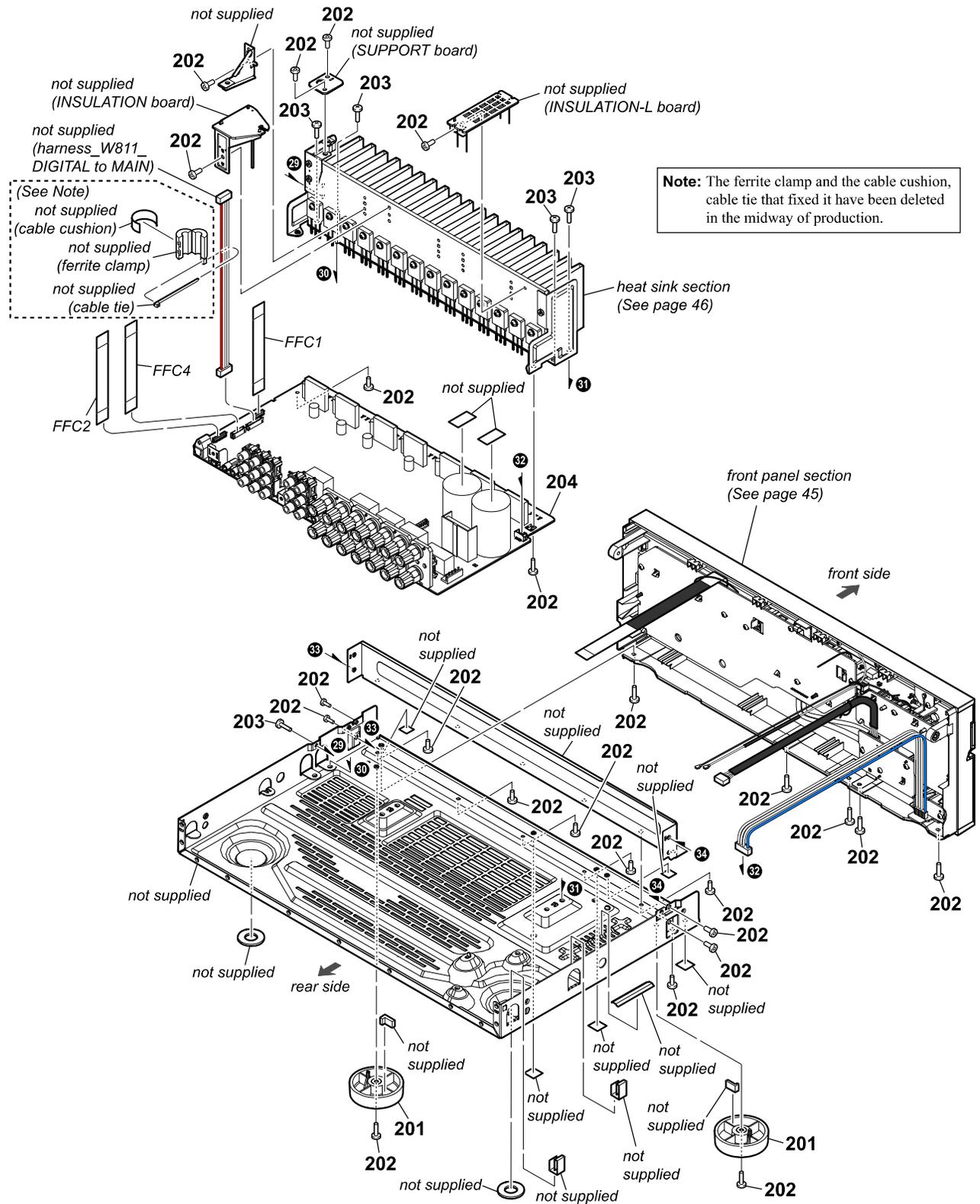
## 4-4. POWER SUPPLY SECTION (STR-AZ1000ES)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	A5058102A	STANDBY BOARD, COMPLETE (SV)		159	503511871	PANEL, BACK (N109)	
152	307733171	+BV3 (3-CR) (L = 7 mm) (SILVER)		160	A5058104A	COAX BOARD, COMPLETE (SV)	
153	424967502	+BV SUMITITE S 4X6 ROUND (SILVER)		161	504263701	SCREW, HEX SPACER	
154	A5058103A	DCDC BOARD, COMPLETE (SV)		162	A5058105A	RS232C BOARD, COMPLETE (SV)	
155	502719501	SCREW YTT 3X8 (SILVER)		△ AC2	182108243	AC INLET (2P) (∼ AC IN)	
156	258064401	SCREW, +KTP2 3X8 (BLACK)		△ F901	153250533	FUSE (T 5 AL/250 V)	
157	370451551	SCREW (BV/RING) (3X10) (BRONZE)		△ T901	101324911	POWER TRANSFORMER	
158	497451011	SCREW (+BV 3X8 CU) (BRONZE)					

# STR-AN1000/AZ1000ES

## 4-5. MAIN BOARD SECTION



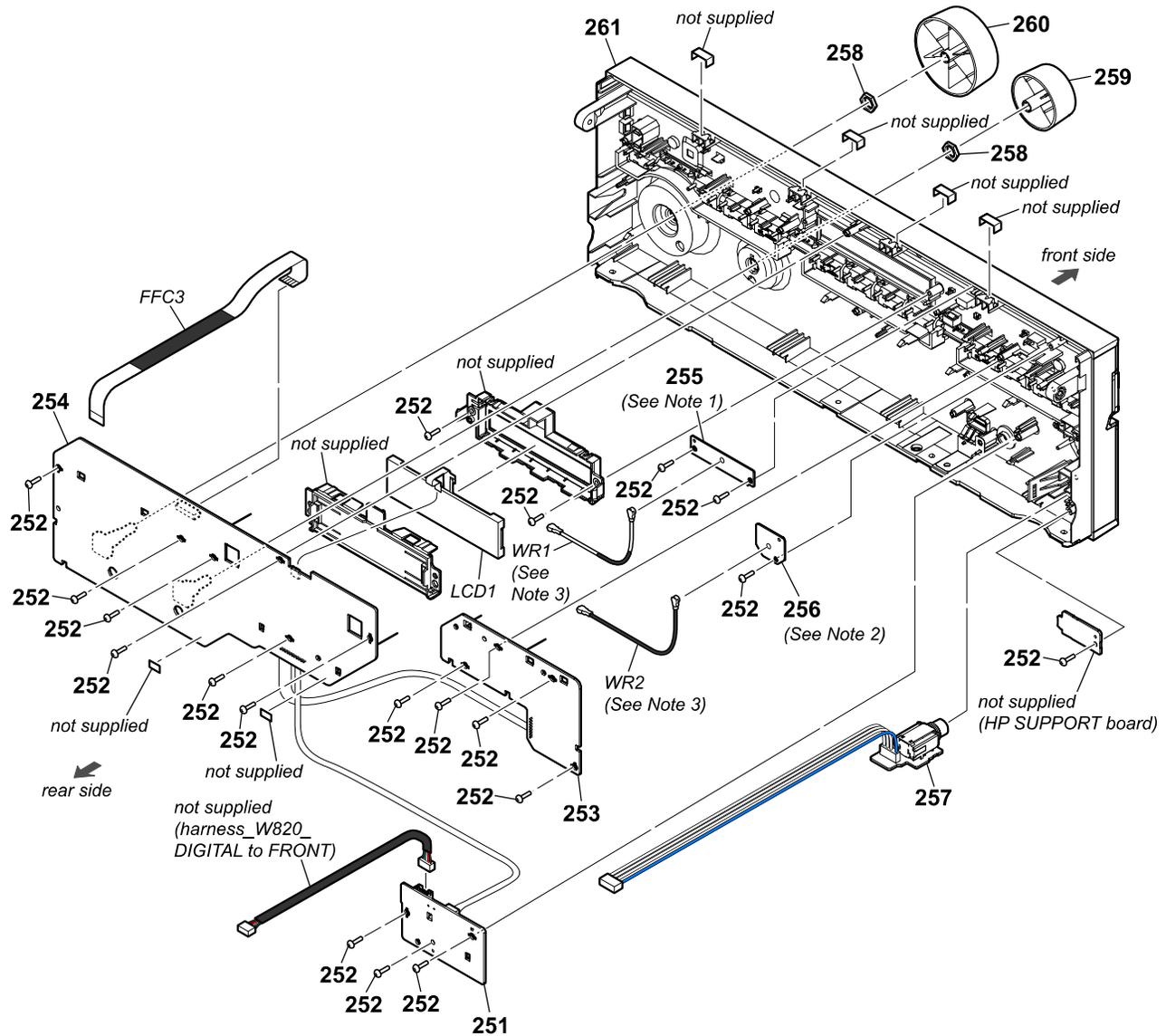
**Note:** The ferrite clamp and the cable cushion, cable tie that fixed it have been deleted in the midway of production.

Ref. No.	Part No.	Description	Remark
201	X50032461	FOOT (N) ASSY	
202	502719501	SCREW YTT 3X8 (SILVER)	
203	307733171	+BV3 (3-CR) (L = 7 mm) (SILVER)	
204	A5058101A	MAIN BOARD, COMPLETE (SV)	
FFC1	101307911	FFC_FFC1_DIGITAL TO MAIN (22 core)	(L = 150 mm)

Ref. No.	Part No.	Description	Remark
FFC2	101308011	FFC_FFC2_DIGITAL TO MAIN (30 core)	(L = 150 mm)
FFC4	101306711	FFC_FFC4_DIGITAL TO MAIN (24 core)	(L = 155 mm)

# STR-AN1000/AZ1000ES

## 4-6. FRONT PANEL SECTION



**Note 1:** When the complete ANT1 board (Ref. No. 255) is replaced with a new board, be sure to refer to "NOTE OF REPLACING THE ANT1 BOARD" on page 11.

**Note 2:** When the complete ANT2 board (Ref. No. 256) is replaced with a new board, be sure to refer to "NOTE OF REPLACING THE ANT2 BOARD" on page 11.

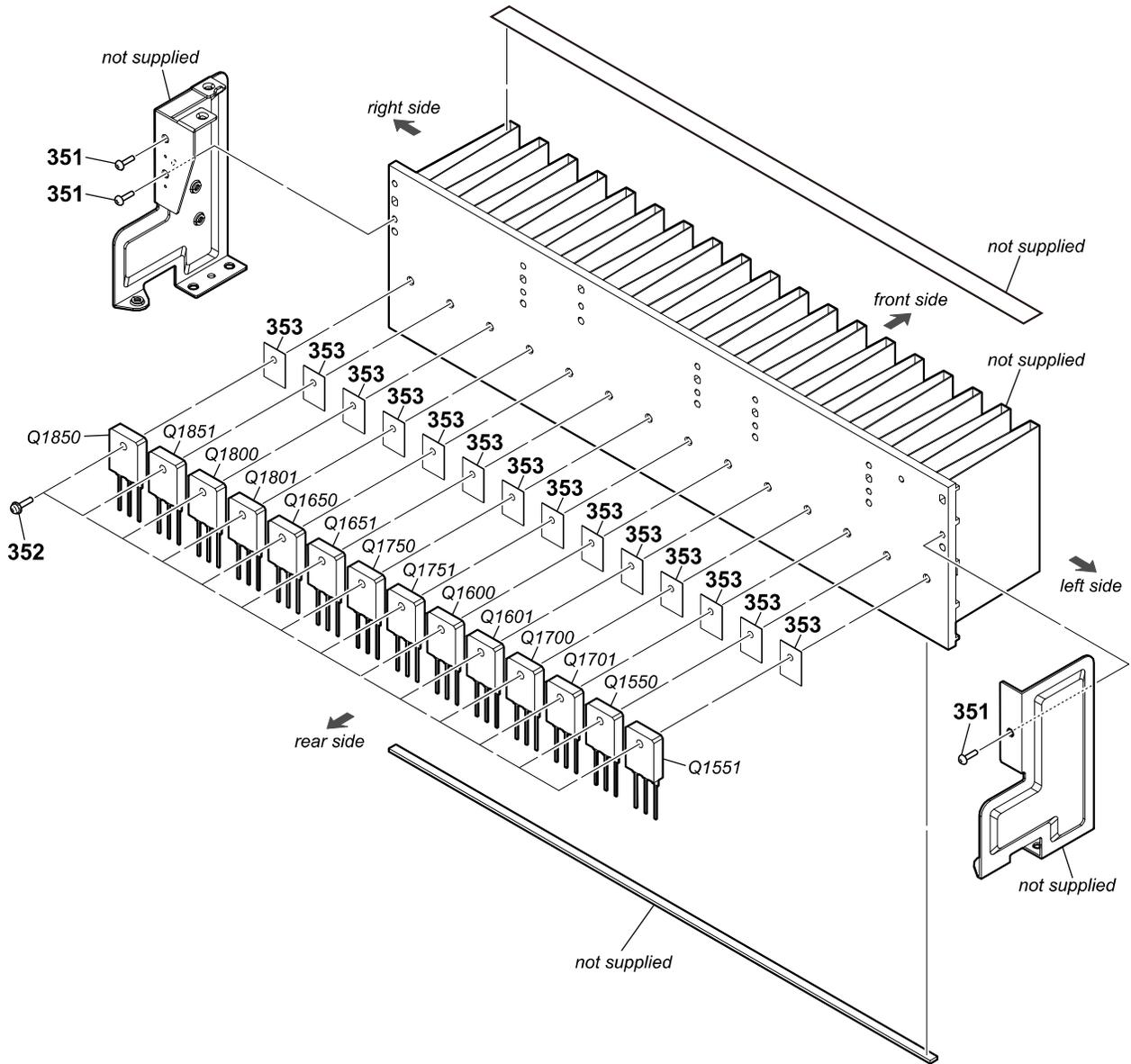
**Note 3:** When the coaxial harness (Ref. No. WR1, WR2) is replaced with a new part, be sure to refer to "NOTE OF REPLACING THE COAXIAL HARNESS" on page 11.

Ref. No.	Part No.	Description	Remark
251	A5058108A	FRONTJACK BOARD, COMPLETE (SV)	
252	308705301	+BVTP2.6 (3CR) (L = 8 mm) (SILVER)	
253	A5058107A	POWERKEY BOARD, COMPLETE (SV)	
254	A5058106A	DISPLAY BOARD, COMPLETE (SV)	
255	A5058111A	ANT1 BOARD, COMPLETE (SV) (See Note 1)	
256	A5058112A	ANT2 BOARD, COMPLETE (SV) (See Note 2)	
257	A5058109A	HP BOARD, COMPLETE (SV)	
258	504211201	NUT, M9	
259	444285911	KNOB, MENU	

Ref. No.	Part No.	Description	Remark
260	444286011	KNOB, VOLUME	
261	X50028541	PANEL (N109) ASSY, FRONT (STR-AN1000)	
261	X50029201	PANEL (N109) ASSY, FRONT (STR-AZ1000ES)	
FFC3	101308111	FFC_FFC3_DIGITAL TO DISPLAY (30 core) (L = 225 mm)	
LCD1	101314211	PANEL, LCD	
WR1	101539211	HARNESS, COAXIAL (WHITE) (See Note 3)	
WR2	101539111	HARNESS, COAXIAL (BLACK) (See Note 3)	

# STR-AN1000/AZ1000ES

## 4-7. HEAT SINK SECTION

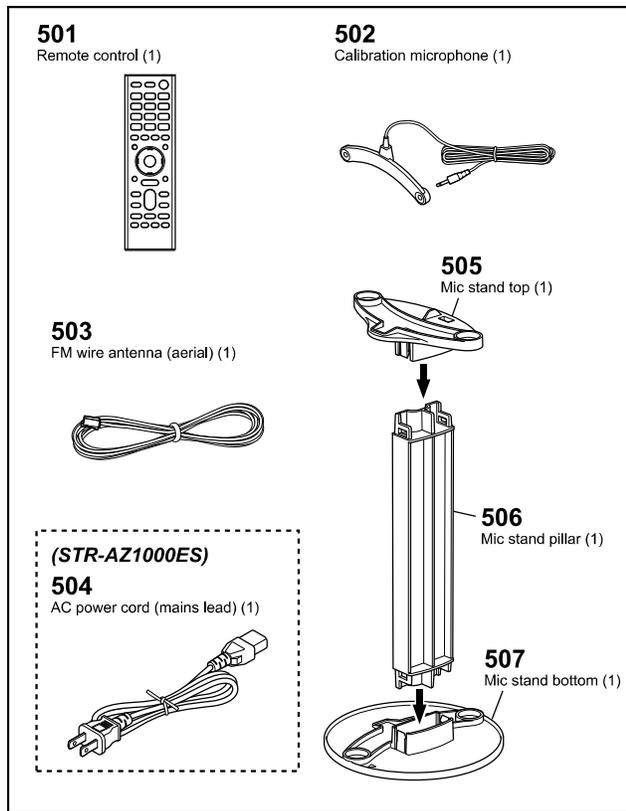


Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
351	502719501	SCREW YTT 3X8 (SILVER)		Q1700	690338101	TRANSISTOR	MN2488-OPY-MK
352	390560913	SCREW (TRANSISTOR) (BRONZE)		Q1701	690338201	TRANSISTOR	MP1620-OPY-MK
353	504348101	SHEET, MICA		Q1750	690338101	TRANSISTOR	MN2488-OPY-MK
Q1550	690338101	TRANSISTOR	MN2488-OPY-MK	Q1751	690338201	TRANSISTOR	MP1620-OPY-MK
Q1551	690338201	TRANSISTOR	MP1620-OPY-MK	Q1800	690338101	TRANSISTOR	MN2488-OPY-MK
Q1600	690338101	TRANSISTOR	MN2488-OPY-MK	Q1801	690338201	TRANSISTOR	MP1620-OPY-MK
Q1601	690338201	TRANSISTOR	MP1620-OPY-MK	Q1850	690338101	TRANSISTOR	MN2488-OPY-MK
Q1650	690338101	TRANSISTOR	MN2488-OPY-MK	Q1851	690338201	TRANSISTOR	MP1620-OPY-MK
Q1651	690338201	TRANSISTOR	MP1620-OPY-MK				

**STR-AN1000/AZ1000ES**

**SECTION 5  
ACCESSORIES**

Ref. No.	Part No.	Description	Remark
	503701411	STARTUP GUIDE (ENGLISH, FRENCH, SPANISH)	
			(STR-AZ1000ES)
	503701813	OPERATING INSTRUCTIONS	
		(ENGLISH, FRENCH, SPANISH)	(STR-AZ1000ES)
	503702711	STARTUP GUIDE (ENGLISH, FRENCH, SPANISH)	
			(STR-AN1000)
	503702812	OPERATING INSTRUCTIONS	
		(ENGLISH, FRENCH, SPANISH)	(STR-AN1000)
501	101326012	REMOTE COMMANDER (RMT-AA511U)	
			(Remote control)
502	154290312	MEASUREMENT MIC (STEREO) (ECM-AC3)	
			(Calibration microphone)
503	175485231	ANTENNA (FM) (FM wire antenna (aerial))	
△ 504	101435211	POWER SUPPLY CORD SET	
		(AC power cord (mains lead))	(STR-AZ1000ES)
505	503513301	MIC STAND (TOP) (Mic stand top)	
506	503513201	MIC STAND (PILLAR) (Mic stand pillar)	
507	X50028551	MIC STAND (BOTTOM) ASSY (Mic stand bottom)	



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