HAP-Z1ES

SERVICE MANUAL

Ver. 1.1   2015.11

US Model
Canadian Model
AEP Model
UK Model
Australian Model
Chinese Model
Singapore Model
Malaysia Model

Note:
Be sure to keep your PC used for service and checking of this unit always updated with the latest version of your anti-virus software.
In case a virus affected unit was found during service, contact your Service Headquarters.

SPECIFICATIONS

Playback Specifications

Frequency response
    2 Hz - 80 kHz (−3 dB)
Dynamic range
    105 dB or higher
THD
    0.0015% or less

Network section

Wired LAN
    1000BASE-T/100BASE-TX/10BASE-T
Wireless LAN
    Compatible standards
        IEEE 802.11 b/g/n
    Frequency band/channel
        2.4 GHz band: channels 1-11 (US, Canadian)
        2.4 GHz band: channels 1-13
        (AEP, UK, Australian, Chinese, Singapore, Malaysia)

HDD section

Capacity
    1 TB*
    *   Some portions of the capacity are used for data management.
        Therefore, the capacity a user can use is less than 1 TB.

Supported playback format
    DSD (DSF, DSDIFF), LPCM (WAV, AIFF), FLAC, ALAC, ATRAC Advanced
    Lossless, ATRAC, MP3, AAC, WMA (2 channels)

Jack section

Output jacks
    LINE OUT UNBALANCED
        Output level: 2.0 Vrms (50 kilohms), Impedance: 10 kilohms or
        higher
    LINE OUT BALANCED
        Output level: 2.0 Vrms (50 kilohms), Impedance: 600 ohms or
        higher
EXT port
    Type A USB, Hi-Speed USB, for connecting an external hard disk drive

IR REMOTE OUT jack
    for connecting the monaural mini-plug cable (supplied) or IR blaster
    (supplied)

General and others

Power requirements
    AC 120 V 60 Hz (US, Canadian)
    AC 230 V 50/60 Hz (AEP, UK, Australian)
    AC 220 V 50 Hz (Chinese)
    AC 230 V - 240 V 50/60 Hz (Singapore, Malaysia)
Power consumption
    On: 35 W
    During standby mode (when [Network Standby] is set to [Off]): 0.3 W
    During standby mode (when [Network Standby] is set to [On] and a
    wired LAN is used): 2.6 W
    During standby mode (when [Network Standby] is set to [On] and a
    wireless LAN is used): 2.8 W
Dimensions (approx.) (w/h/d)
    430 mm × 130 mm × 390 mm (17 inch × 5 1/8 inch × 15 3/8 inch)
    including projecting parts and controls
Mass (approx.)
    14.5 kg (32 lb 0 oz)
Supplied accessories
    AC power cord (1)
    Remote control (RM-ANU183) (1)
    R03 (size-AAA) batteries (2)
    LAN cable (1)
    Monaural mini-plug cable (1)
    Audio cord (1)
    IR blaster (1)
    Quick Start Guide (1)
    Reference Guide (1)

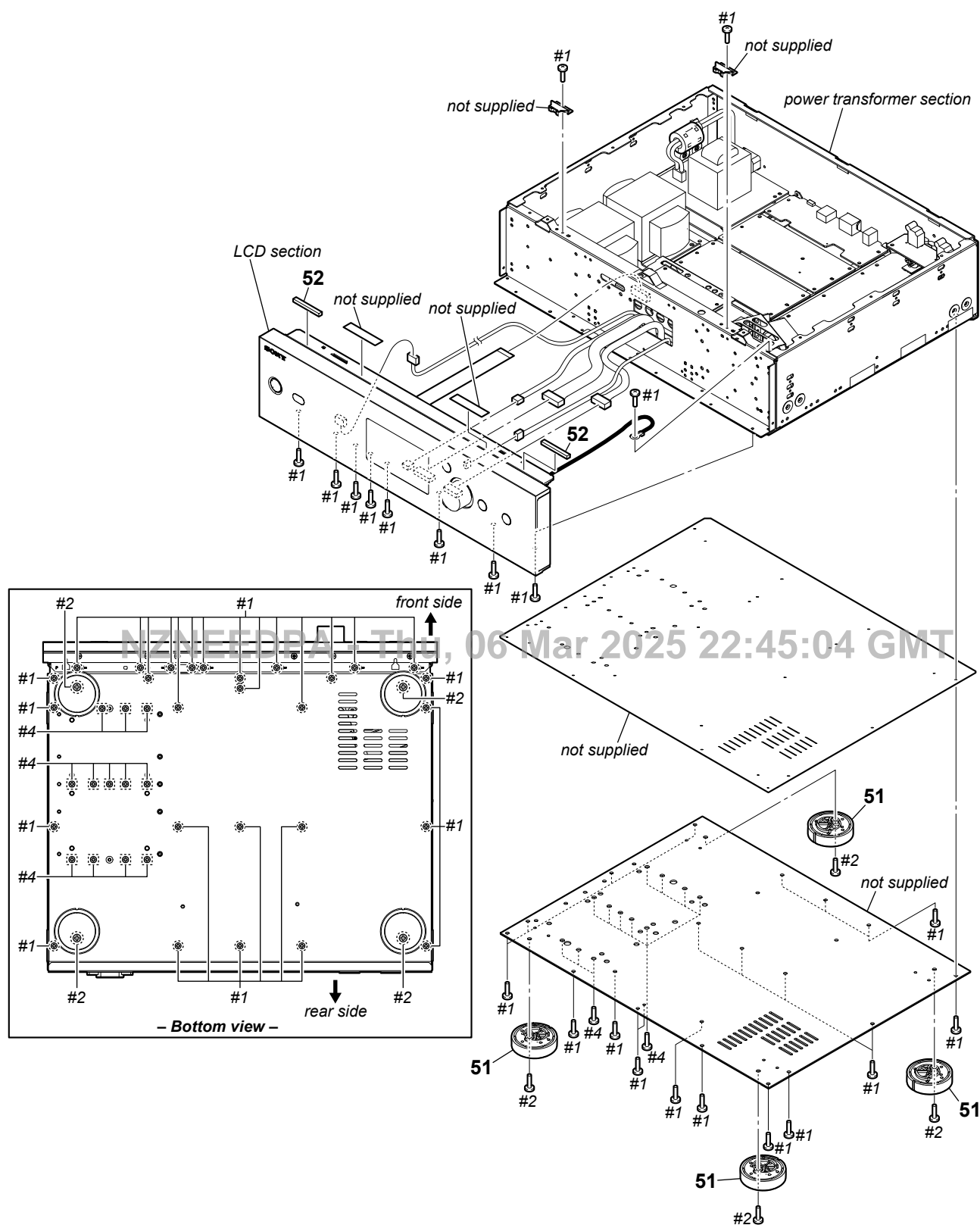Design and specifications are subject to change without notice.

HDD AUDIO PLAYER

SONY®

SECTION 6
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
- Abbreviations
  AUS : Australian model
  CH : Chinese model
  CND : Canadian model
  MY : Malaysia model
  SP : Singapore model

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

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

原理图和零件清单中标有⚠记号的零部件，或带有⚠记号的虚线所圈示的零部件，对于维系安全至关重要。因此只能以指定号码的零部件来更换。

6-1. OVERALL SECTION

not supplied

not supplied

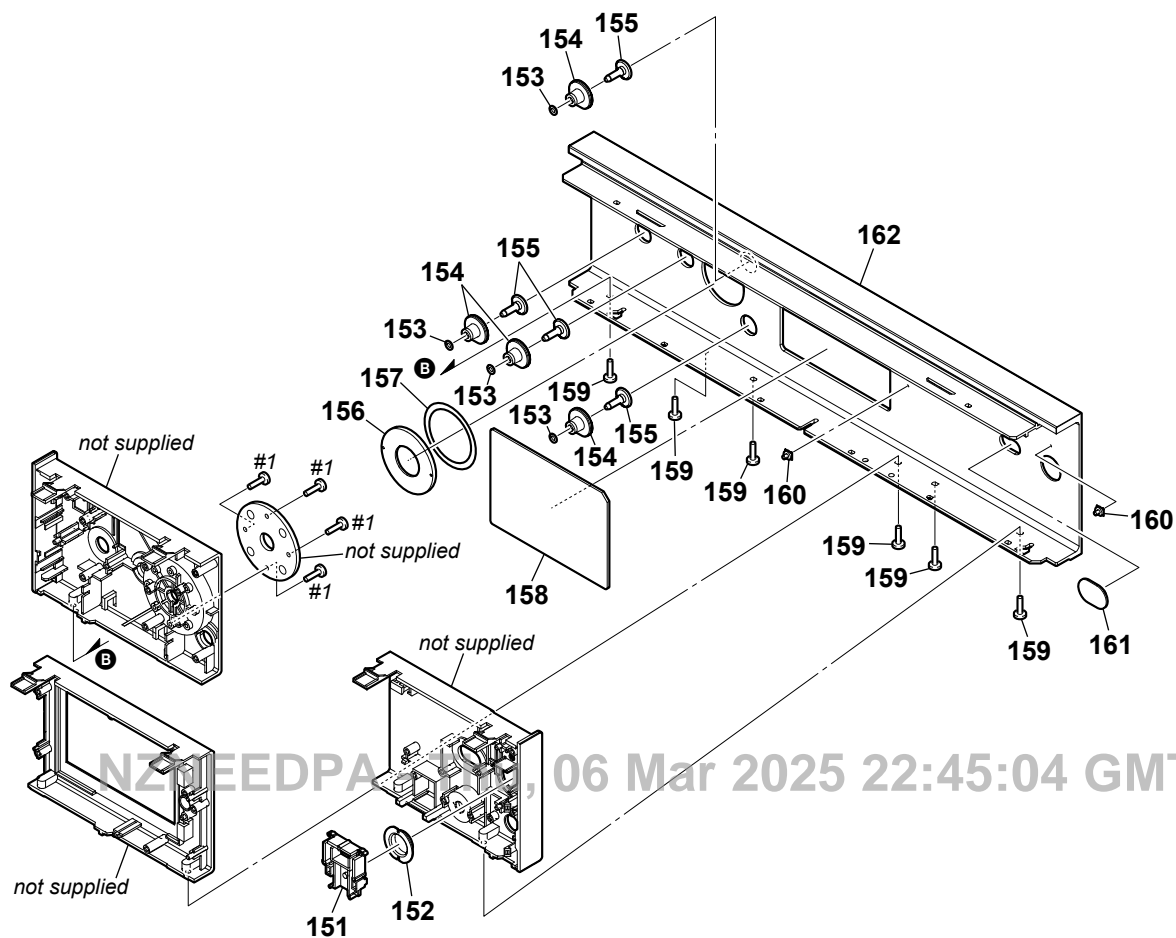bottom section

6-2. BOTTOM SECTION

6-3. LCD SECTION

• Rear view

6-4.   FRONT PANEL SECTION

• Rear view

6-5. POWER TRANSFORMER SECTION

not supplied

FC1

not supplied

#3

#3

E F

D

WR5

#3

T2

#3 #3

MAIN board section

hard disk section

#3

C

#1

H I

#3

T1

#3

#3

E

F

#1

D

H

C

I

G

201

FFC2

#1

201

#1

FC2
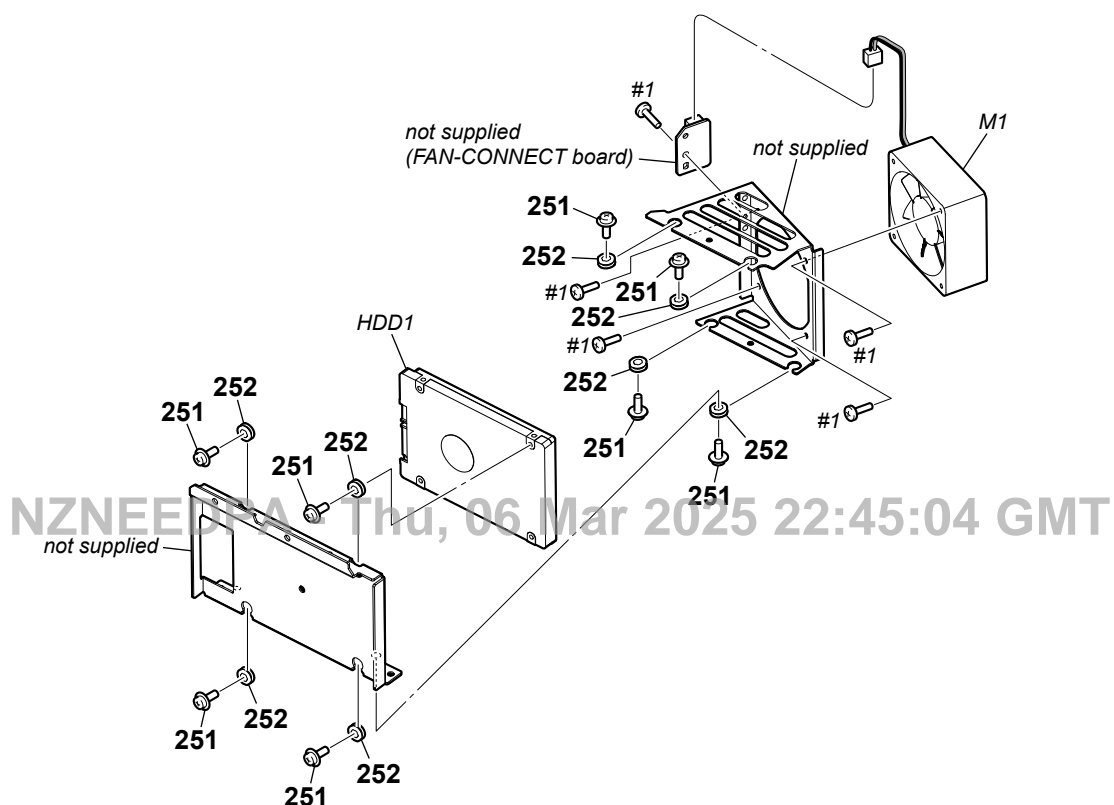
not supplied

G

not supplied
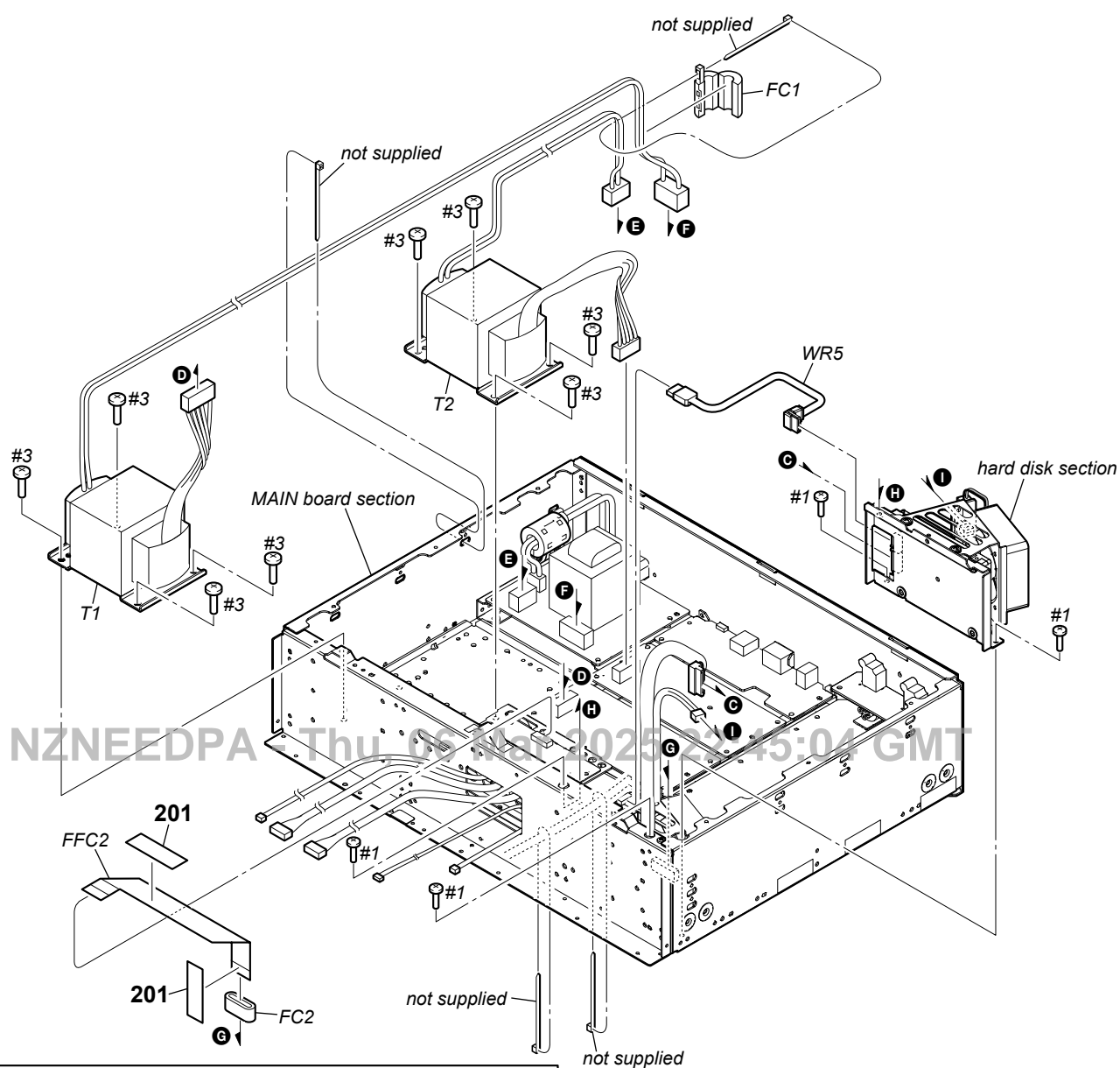
Note: Wire (flat type) (24 core) (Ref. No. FFC2) for service is all straight.
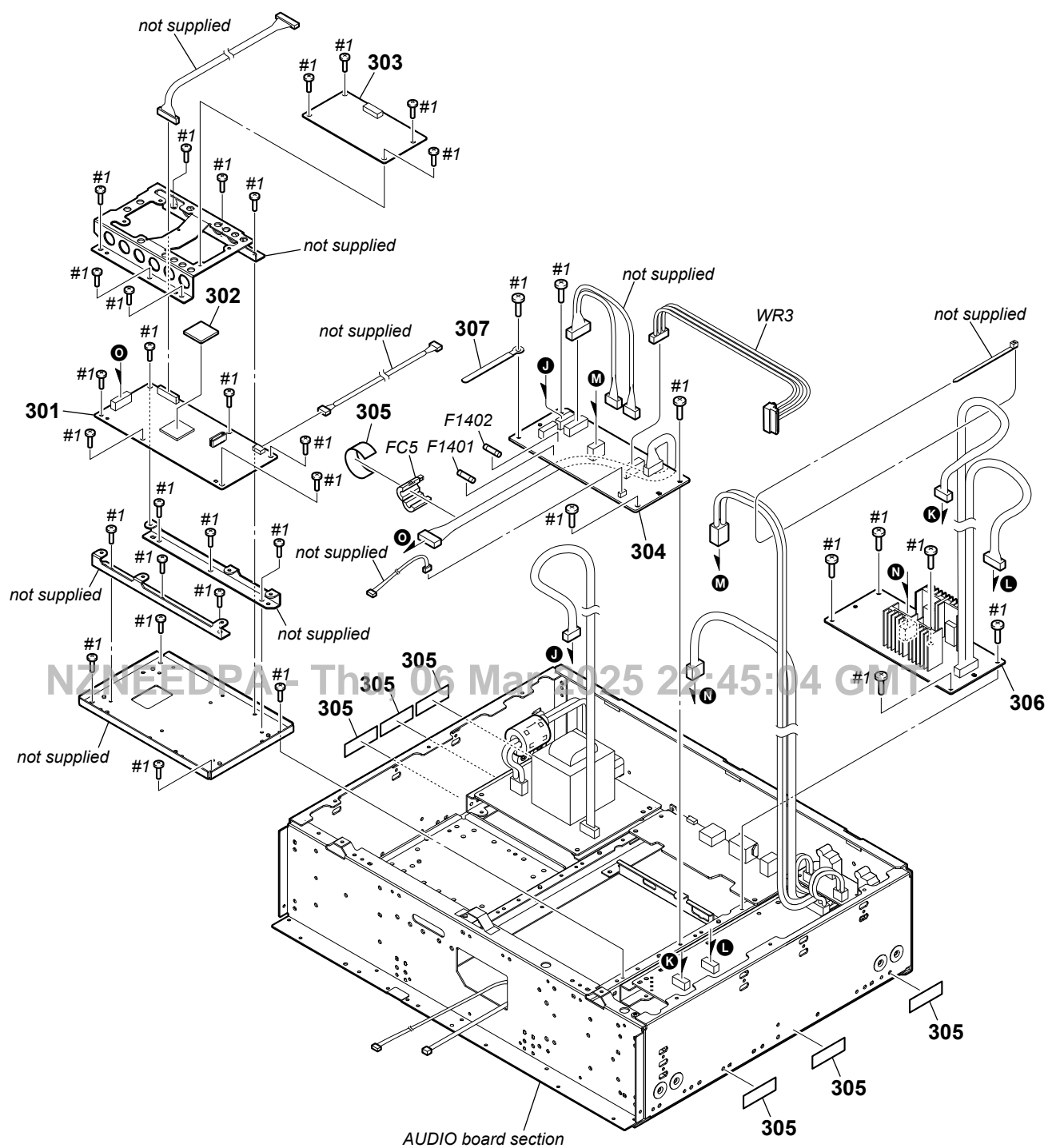When installing it, please bending it by referring to the figure below.

FPGA DSP board
(CN506)

15 mm

The upper side is
terminal side.

30 mm

The upper side is
terminal side.

AUDIO board
(CN103)

6-6. HARD DISK SECTION

not supplied
(FAN-CONNECT board)

#1

not supplied

M1

251

252

#1

251

252

#1

HDD1

252

251

251

252

252

251

252

251

not supplied

#1

#1

#1

252

251

252

251

252

251
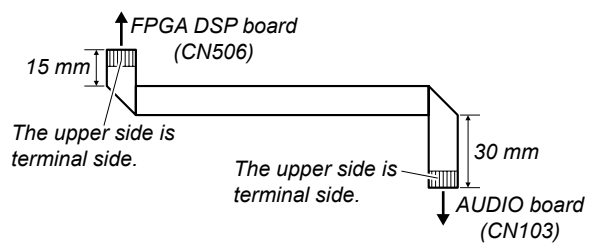
6-7. MAIN BOARD SECTION
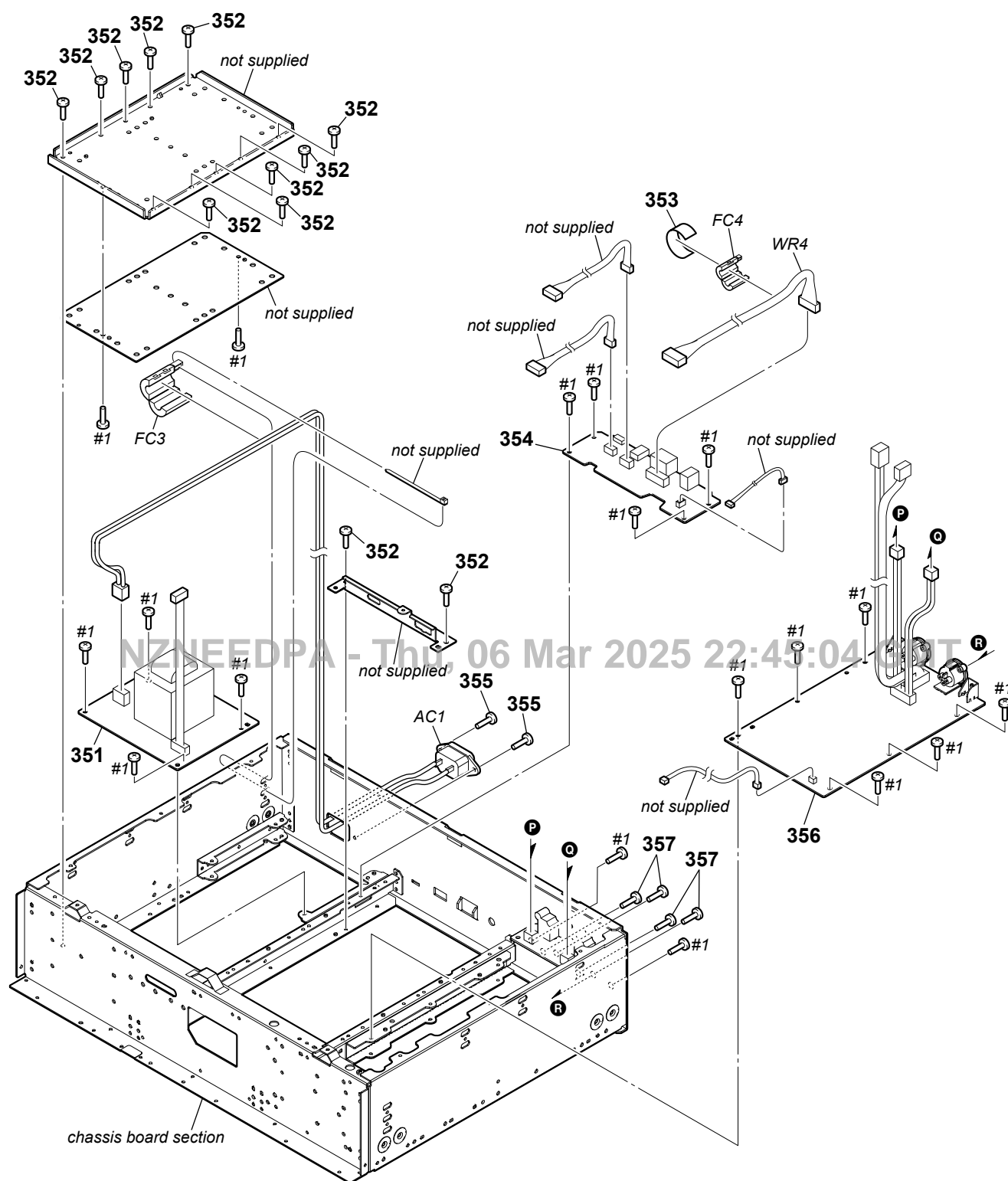

AUDIO board section

Note: When the complete MAIN board is replaced, refer to "NOTE OF REPLACING THE COMPLETE MAIN BOARD" and "NOTE OF REPLACING THE WLAN/BT COMBO CARD AND CHECKING METHOD OF NETWORK CONNECTION" on page 5.

6-8. AUDIO BOARD SECTION

6-9. CHASSIS SECTION