

ULT TOWER 10

ECM-ULT1/SRS-ULT1000/YY7857E/YY7860E

SERVICE MANUAL

Ver. 1.1 2024.04

- This wireless speaker/home audio system has three types of names for communication name (ULT TOWER 10), model name (SRS-ULT1000), and model (YY7857E). In addition, the wireless microphone that come with this wireless speaker/home audio system has two types of names for model name (ECM-ULT1), and model (YY7860E).
- All of the units included in this product are required to confirming operation of this unit. Check in advance that the full set are prepared.



Photo: SRS-ULT1000/YY7857E



Photo: ECM-ULT1/YY7860E

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model
PX Model

- ULT TOWER 10/SRS-ULT1000/YY7857E come with a ECM-ULT1/YY7860E (Wireless microphone).

SPECIFICATIONS

► Wireless Speaker (YY7857E) (US, CND, AEP, UK, AUS, PX, SP, AR, IND, AF)/ Home Audio System (YY7857E) (LA)

Amplifier section (US, CND, PX)

Power output and total harmonic distortion:

With 4 Ω loads, both channels driven, from 100 Hz - 10 000 Hz; rated 20 W per channel minimum RMS power in stereo mode, with no more than 1% total harmonic distortion from 250 mW to rated output.

Communication Specification

Frequency band

BLUETOOTH®: 2.4 GHz band (2.400 0 GHz - 2.483 5 GHz)

Wireless microphone section: 2.4 GHz band (2.400 0 GHz - 2.483 5 GHz)

Operating frequency / Maximum output power (AEP, UK)

BLUETOOTH: 2.400 MHz - 2.483.5 MHz / < 14.0 dBm

Wireless microphone section: 2.400 MHz - 2.483.5 MHz / < 10.0 dBm

General

Inputs

- Type A USB port: Supported USB Device (Mass Storage Class)
- AUDIO IN jack (Φ 3.5 mm)
- OPTICAL IN connector (PCM)
- MIC/GUITAR jack (Φ 6.3 mm)

DC OUT

Type A USB port (for charging the battery of a connected device) (DC 5 V/MAX. 1.5 A)

Power

AC 120 V, 60 Hz (US, CND, PX)

AC 120 V - 240 V, 50/60 Hz (AEP, UK, AUS, SP, AR, IND, LA, AF)

Power consumption

Approx. 139 W

Standby power consumption

When BLUETOOTH standby mode is set to on: 2.0 W or less

When BLUETOOTH standby mode is set to off: 0.3 W or less

Operating temperatures

-5 °C - 40 °C (23 °F - 104 °F)

Dimensions (including projecting parts and controls)

Approx. 418 mm × 1106 mm × 428 mm (16.5 in × 43.6 in × 16.9 in) (w/h/d)

Mass

Approx. 29 kg (63 lb 15 oz)

► Wireless microphone (YY7860E)

Communication specification

Frequency band

2.4 GHz band (2.400 0 GHz - 2.483 5 GHz)

Operating frequency / Maximum output power (AEP, UK)

2.400 MHz - 2.483.5 MHz / < 10.0 dBm

Microphone

Type

Dynamic

Directivity

Uni directional

Effective frequency range

50 Hz - 15 000 Hz

General

Power

3 V DC, two LR6 (size AA) alkaline batteries

Power consumption

Approx. 0.2 W

Battery life

Approx. 25 hours*1

Operating temperatures

-5 °C - 40 °C (23 °F - 104 °F)

Dimensions (including projecting parts and controls)

Approx. 50 mm × 233 mm × 50 mm (2.0 in × 9.2 in × 2.0 in) (w/h/d)

Mass (including battery)

Approx. 280 g (10 oz)

Included items

Wireless Speaker (1) (US, CND, AEP, UK, AUS, PX, SP, AR, IND, AF)

Home Audio System (1) (LA)

AC power cord (mains lead) (1) (US, CND, AUS, PX, SP, AR, IND, LA)

AC power cord (mains lead) (2) (AEP, UK, AF)

Optical digital cable (optical rectangular plug ↔ optical rectangular plug) (1)

AC plug adaptor (1)*2 (SP, LA)

Wireless microphone (1)

LR6 (size AA) alkaline battery (2)

Documents (1 set)

For customers in the UK, Ireland, Malta, and Cyprus:

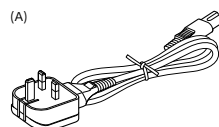
Use AC power cord (mains lead) (A).

For safety reasons, AC power cord (mains lead) (B) is not intended for the above countries/regions and shall therefore not be used there.

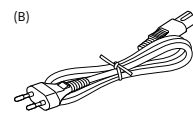
For customers in other countries/regions:

Use AC power cord (mains lead) (B).

(A)



(B)



*1 The actual battery life may differ from the listed time due to the surrounding temperature and usage conditions, and the type and manufacturer of the batteries.

*2 This plug adaptor is not for the use in Chile, Paraguay and Uruguay. Use this plug adaptor in the countries/regions where it is necessary.

Design and specifications are subject to change without notice.

ULT TOWER 10/SRS-ULT1000/YY7857E
(US, CND, AEP, UK, AUS, PX, SP, AR, IND, AF)

WIRELESS SPEAKER

(LA)

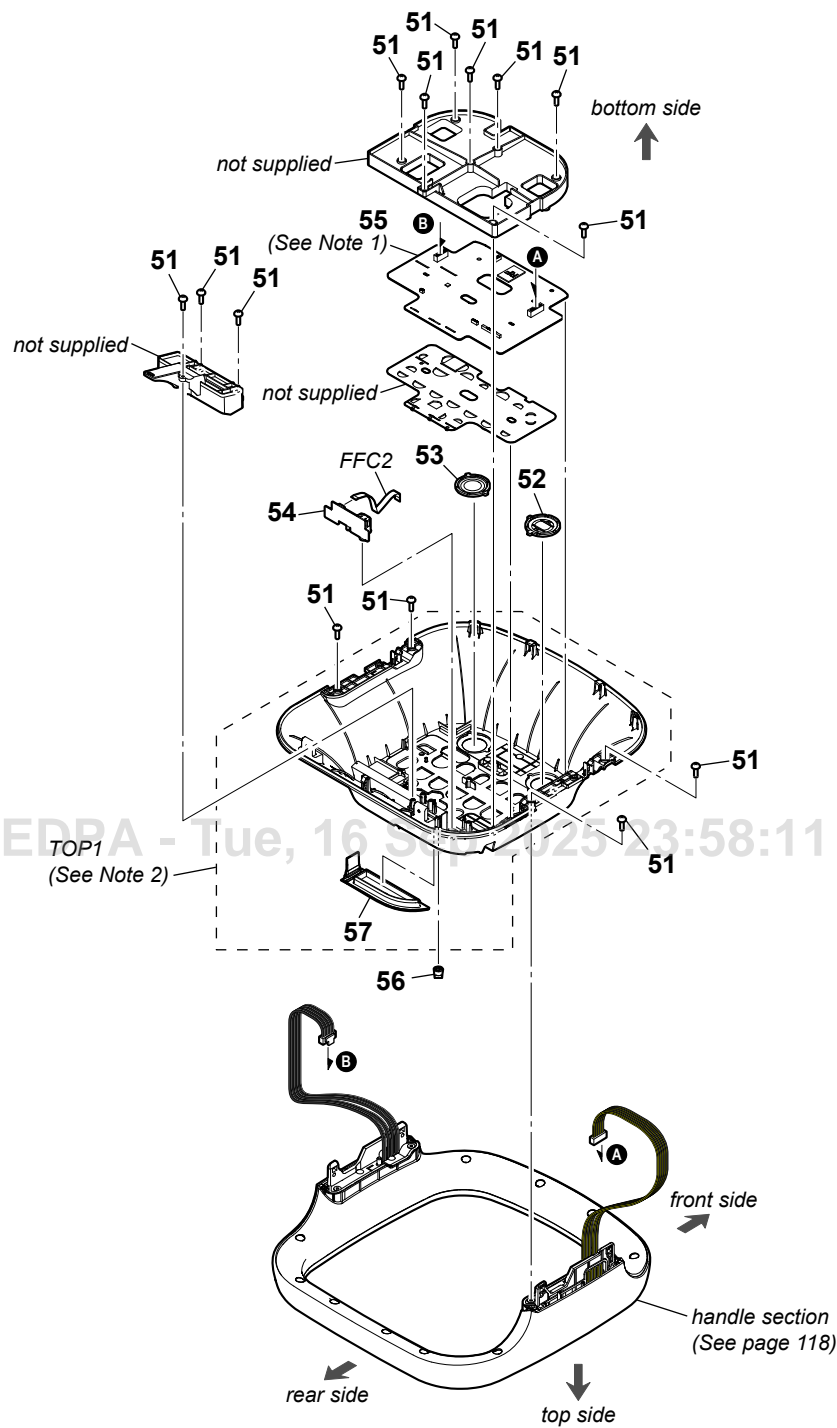
HOME AUDIO SYSTEM

ECM-ULT1/YY7860E

WIRELESS MICROPHONE

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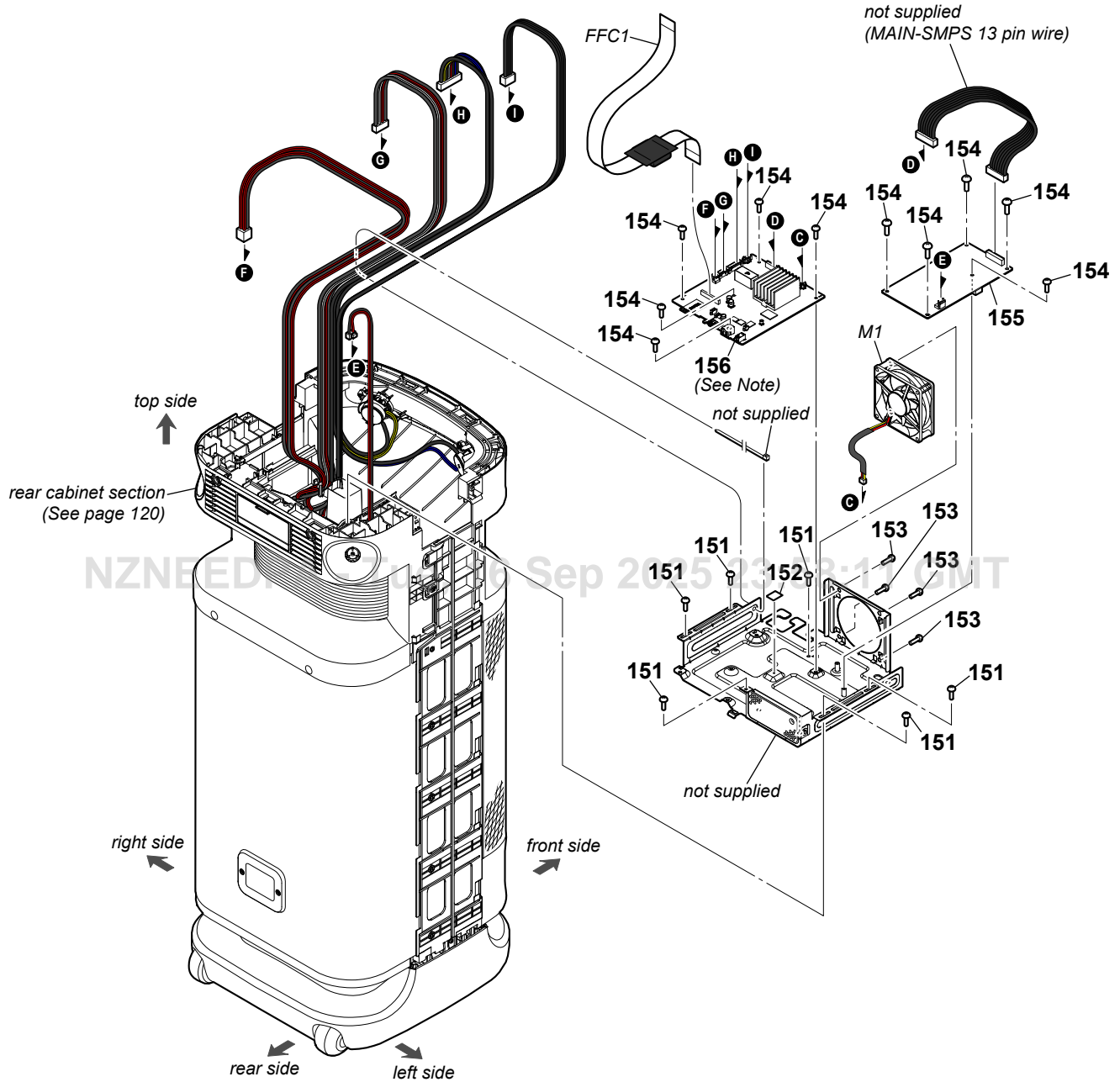
5-2. TOP PANEL SECTION (WIRELESS SPEAKER)



Note 1: When the complete TOUCH board (Ref. No. 55) is replaced with a new board, be sure to refer to “IMPORTANT NOTE OF REPLACING THE TOUCH BOARD” on page 10, and perform each work.

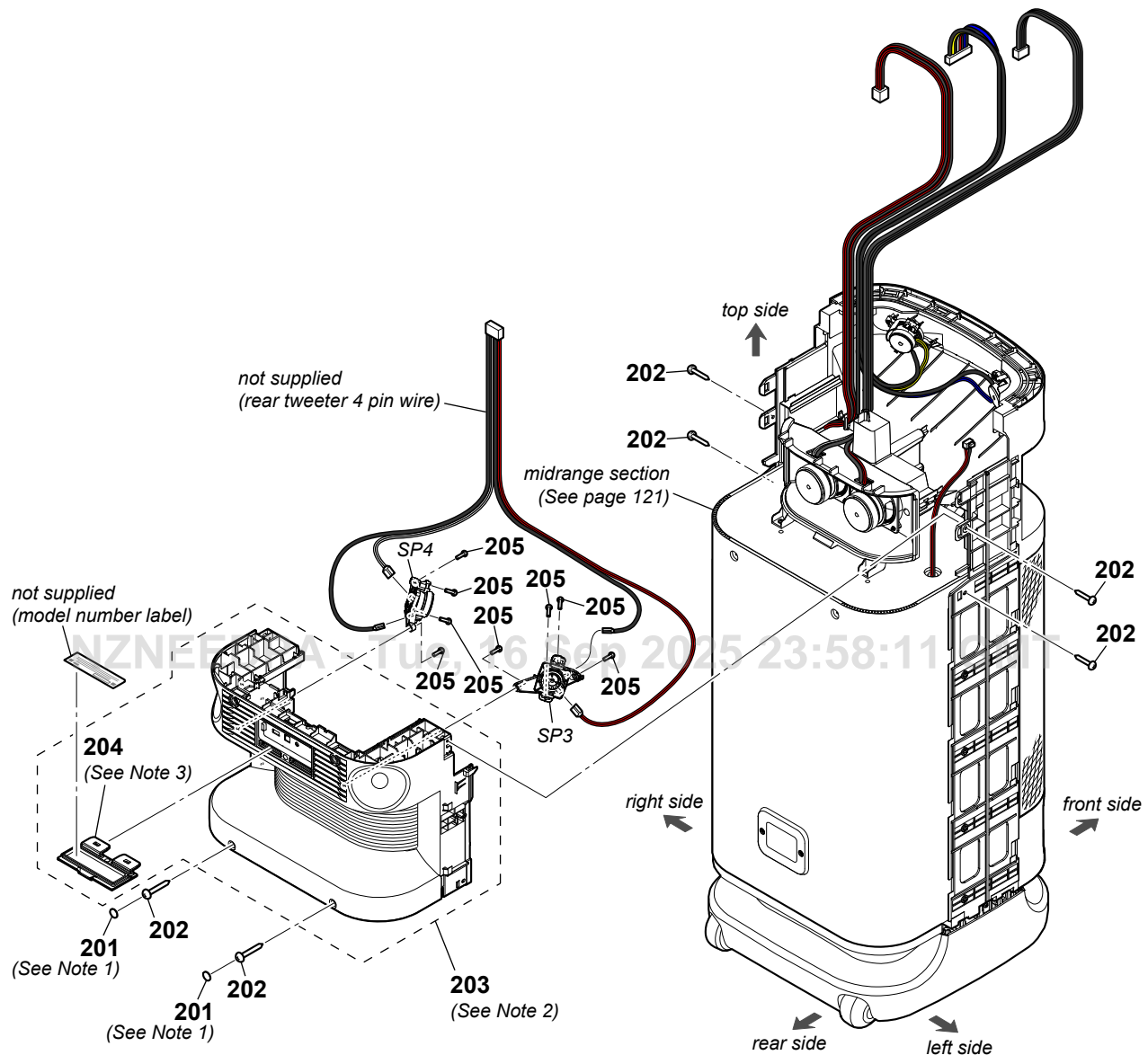
Note 2: The MEMS microphone is installed on the top panel assy (Ref. No. TOP1). When the top panel assy is replaced with a new part, be sure to refer to “MICROPHONE SENSING OPERATION CHECKING METHOD” on page 13, and perform the work.

5-4. SMPS BOARD, MAIN BOARD SECTION (WIRELESS SPEAKER)



Note: When the complete MAIN board (Ref. No. 156) is replaced with a new board, be sure to refer to "IMPORTANT NOTE OF REPLACING THE MAIN BOARD" on page 10, and perform each work.

5-5. REAR CABINET SECTION (WIRELESS SPEAKER)

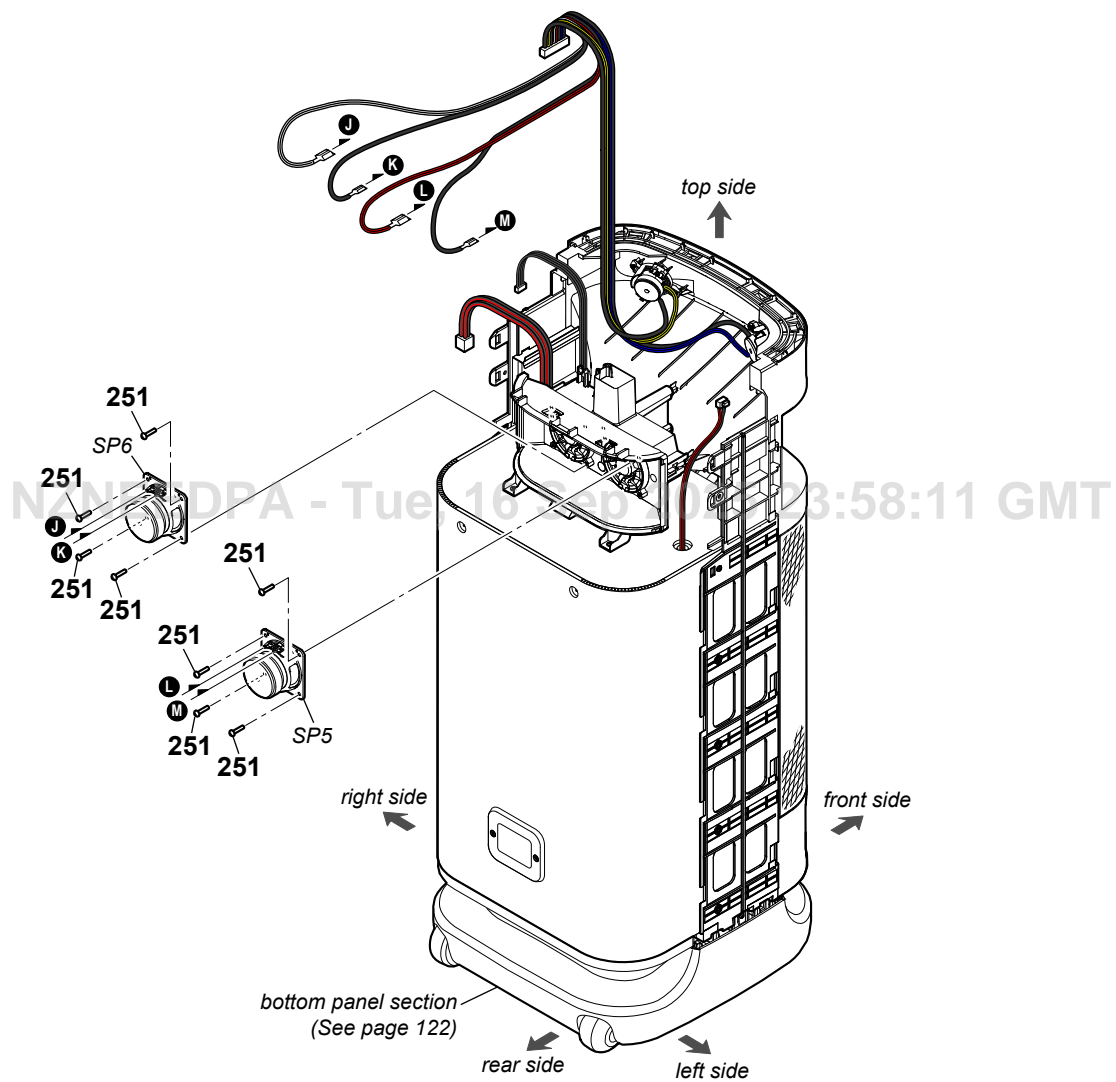


Note 1: When reusing the screw cover (rear) (Ref. No. 201) for installation, make sure that the screw cover (rear) is not weakened of the adhesive strength, broken, or damaged. If there is weakened of the adhesive strength, broken, or damaged, do not reuse the screw cover (rear) and replace it with a new part.

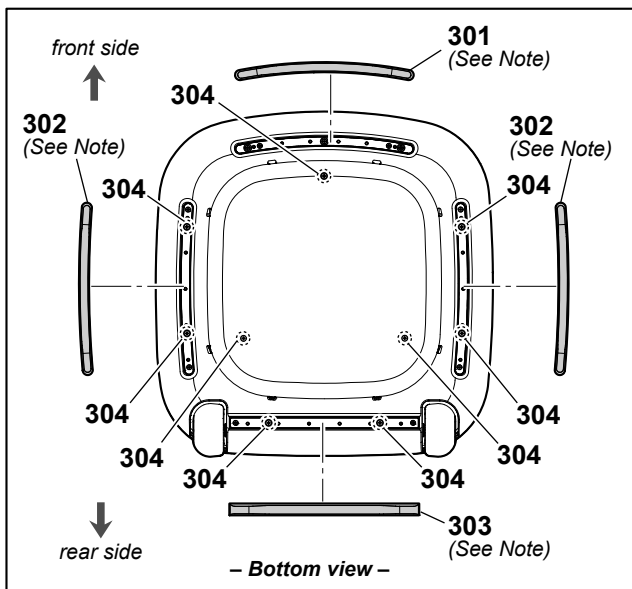
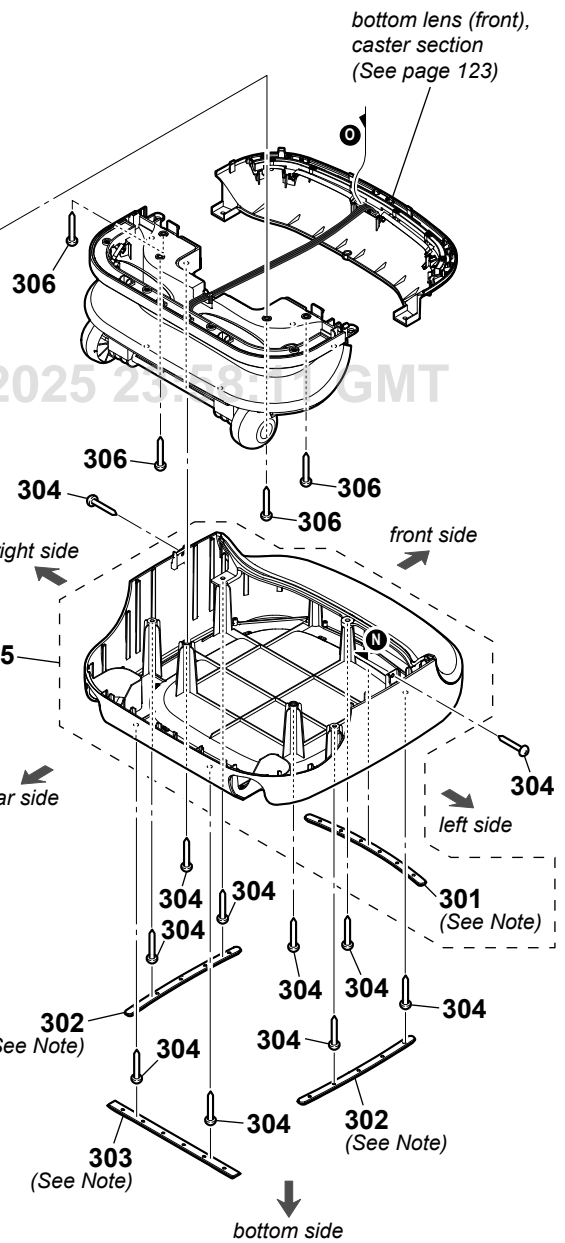
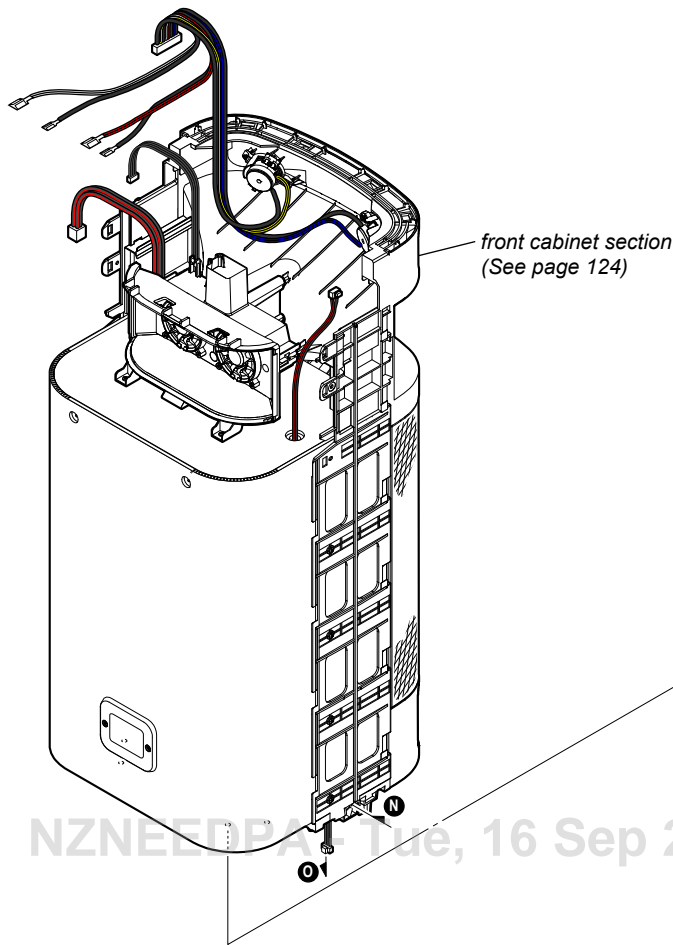
Note 2: When replacing the rear cabinet assy (Ref. No. 203) with a new part, open the jack cover (rear) on the rear side of the rear cabinet assembly, carefully peel off the model number label affixed to the inside, and affix it to the inside on the jack cover (rear) of the new rear cabinet assy.

Note 3: When replacing the jack cover (rear) (Ref. No. 204) with a new part, carefully peel off the model number label affixed to the inside on the jack cover (rear), and affix it to the inside of the new jack cover (rear).

5-6. MIDRANGE SECTION (WIRELESS SPEAKER)

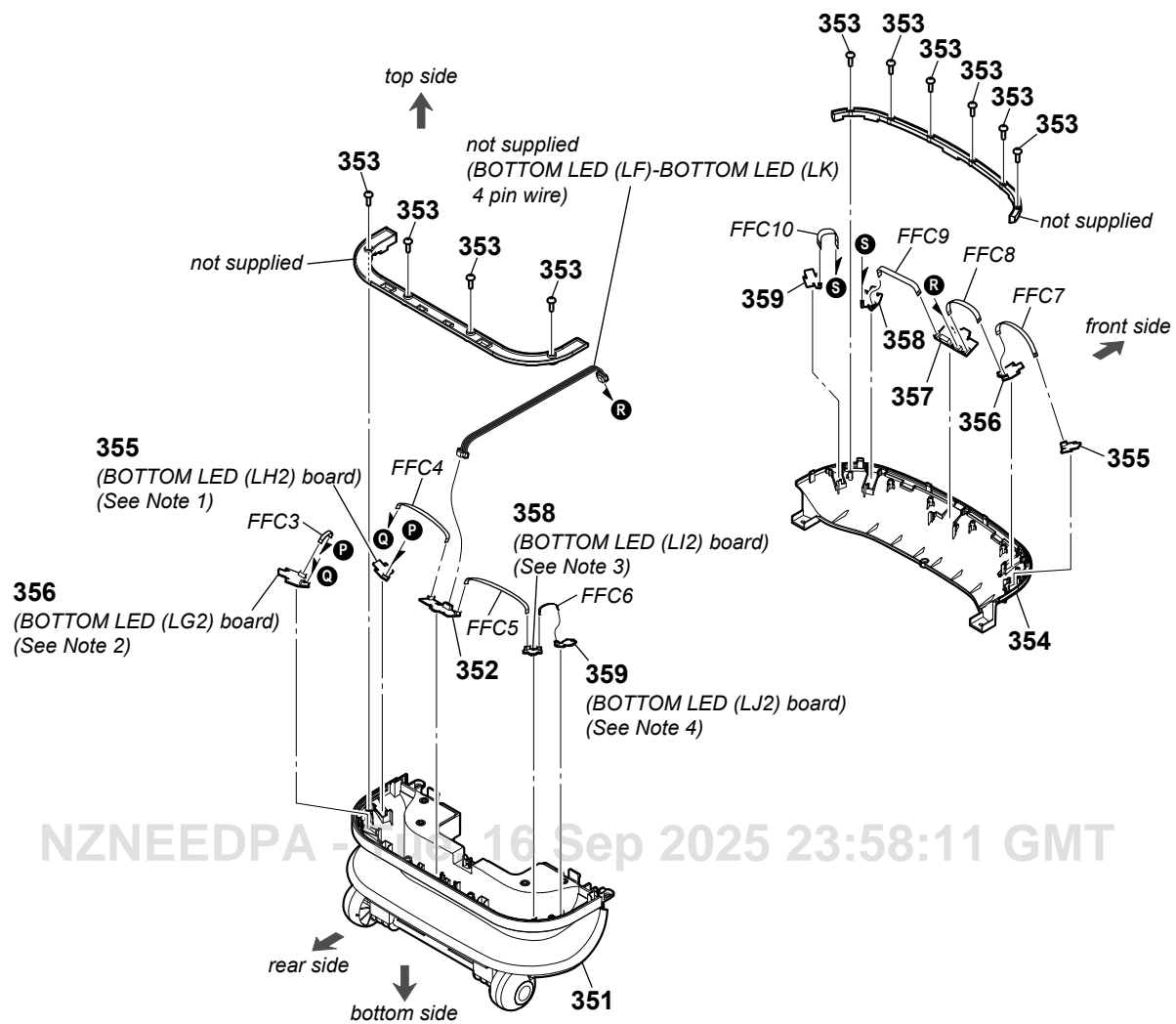


5-7. BOTTOM PANEL SECTION (WIRELESS SPEAKER)



Note: When reusing the foot (front or side or rear) (Ref. No. 301, 302, 303) for installation, make sure that the foot (front or side or rear) is not weakened of the adhesive strength, broken, or damaged. If there is weakened of the adhesive strength, broken, or damaged, do not reuse the foot (front or side or rear) and replace it with a new part.

5-8. BOTTOM LENS (FRONT), CASTER SECTION (WIRELESS SPEAKER)



Note 1: When the BOTTOM LED (LH2) board is replaced with a new board, it will be replaced with the BOTTOM LED (LH) board (Ref. No. 355). The BOTTOM LED (LH) board and the BOTTOM LED (LH2) board differ in the Ref. No. of each electrical parts in addition to the board name.

Note 3: When the BOTTOM LED (LI2) board is replaced with a new board, it will be replaced with the BOTTOM LED (LI) board (Ref. No. 358). The BOTTOM LED (LI) board and the BOTTOM LED (LI2) board differ in the Ref. No. of each electrical parts in addition to the board name.

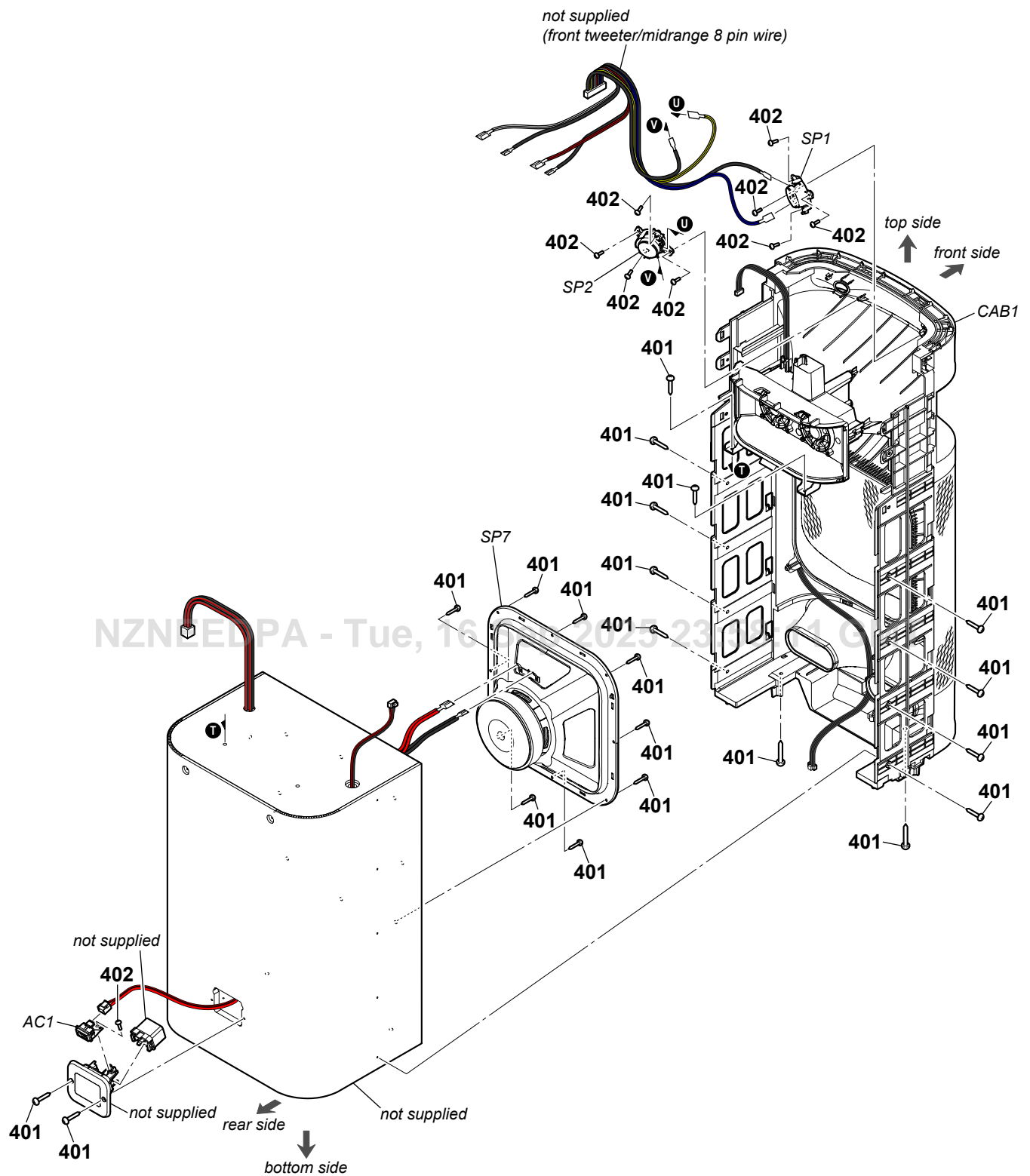
Note 2: When the BOTTOM LED (LG2) board is replaced with a new board, it will be replaced with the BOTTOM LED (LG) board (Ref. No. 356). The BOTTOM LED (LG) board and the BOTTOM LED (LG2) board differ in the Ref. No. of each electrical parts in addition to the board name.

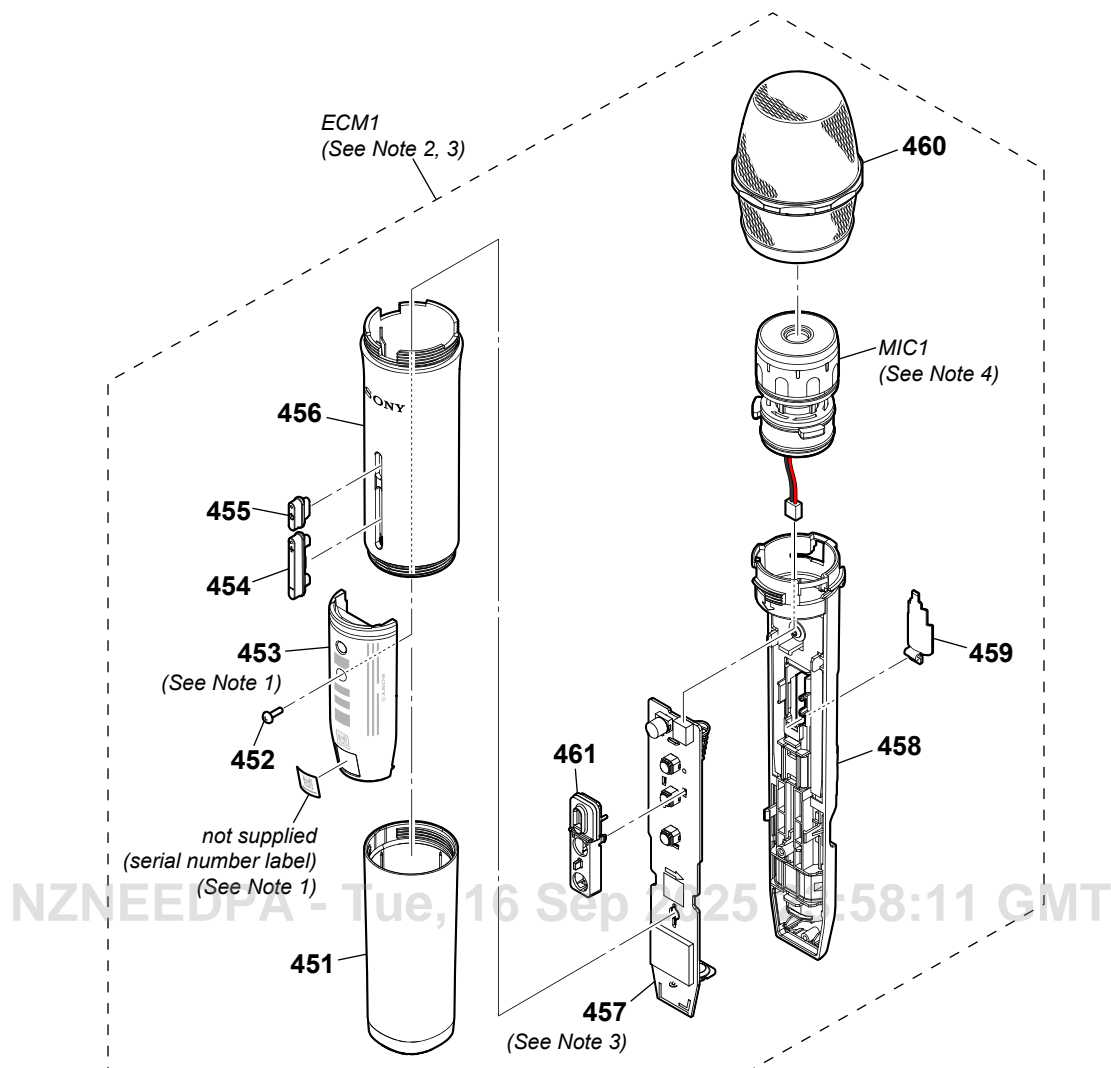
Note 4: When the BOTTOM LED (LJ2) board is replaced with a new board, it will be replaced with the BOTTOM LED (LJ) board (Ref. No. 359). The BOTTOM LED (LJ) board and the BOTTOM LED (LJ2) board differ in the Ref. No. of each electrical parts in addition to the board name.

ULT TOWER 10

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5-9. FRONT CABINET SECTION (WIRELESS SPEAKER)



5-10. MICROPHONE SECTION (WIRELESS MICROPHONE)


Note 1: When replacing the PCB cap (Ref. No. 453) with a new part, carefully peel off the serial number label affixed on the PCB cap, and affix it on the new PCB cap.

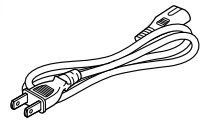
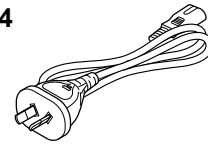
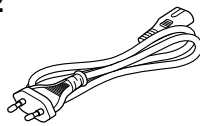
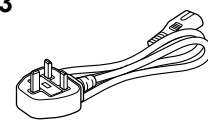
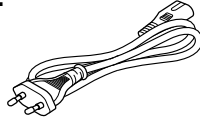
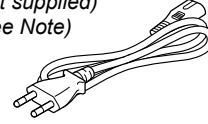
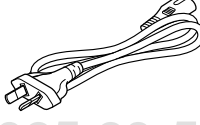
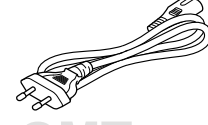
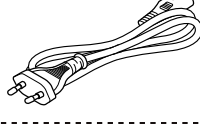


Note 2: When the wireless microphone (Ref. No. ECM1) is replaced with a new wireless microphone, the serial number will be changed.

Note 3: When the wireless microphone (Ref. No. ECM1) is replaced with a new wireless microphone, or the complete MICROPHONE board (Ref. No. 457) is replaced with a new board, be sure to refer to "IMPORTANT NOTE OF REPLACING THE WIRELESS MICROPHONE OR THE MICROPHONE BOARD" on page 10, and perform each work.

Note 4: Be careful not to touch the tip of the microphone (Ref. No. MIC1).

SECTION 6
ACCESSORIES

AC power cord (mains lead) (1) (US, CND, AUS, PX, SP, AR, IND, LA)
AC power cord (mains lead) (2) (AEP, UK, AF)

<p>(US, CND, PX) 901</p> 	<p>(AUS) 904</p> 
<p>(AEP, UK, AF) 902</p> 	<p>903</p> 
<p>(SP) 902</p> 	<p>905 (not supplied) (See Note)</p> 
<p>(AR) 906</p> 	<p>(IND) 907</p> 
<p>(LA) 902</p> 	<p>(SP, LA) 908 AC plug adaptor (1)</p> 
<p>909 Optical digital cable (optical rectangular plug ↔ optical rectangular plug) (1)</p> 	

Note: The AC power cord (Ref. No. 905) for Thailand included with the SP model cannot be replaced with new parts.