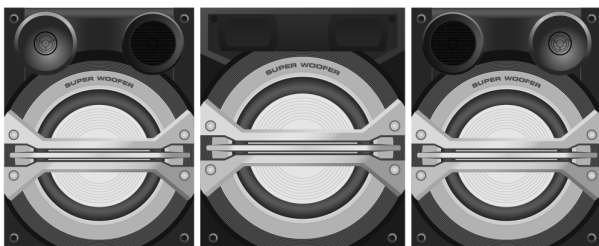


Service Manual

Speaker System

Model No. **SB-AKX78PN**
SB-AKW78PN

Product Color : (K)... Black Type



SB-AKX78

SB-AKW78

SB-AKX78

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by **⚠** in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

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1 Specifications

Front Speakers (SB-AKX78PN-K)

Speaker unit(s)

Super Woofer	20 cm cone type
Woofer	8 cm cone type
Tweeter	6 cm cone type

Impedance Hight 3 Ω / Low 3 Ω

Dimensions (W x H x D) 300 mm x 401 mm x 292 mm

Mass 6.1 kg

Subwoofer Speaker (SB-AKW78PN-K)

Speaker unit(s)

Super Woofer	25 cm Cone type
--------------	-----------------

Impedance 2 Ω

Dimensions (W x H x D) 360 mm x 401 mm x 271 mm

Mass Aprox. 7.7 kg

Notes:

1. Specifications are subject to change without notice.
Mass and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

2 Disassembly and Assembly Instructions

Caution Note:

- This section describes procedures for checking the operation and replacing the main components.
- For reassembly after operation checks or replacement, reverse the respective procedures.
- Special reassembly procedures are described only when required.
- Before carrying out the disassembly process, please ensure all the safety precautions & procedures are followed.
- During the disassembly and/or assembly process, please handle with care as there may be chassis components with sharp edges.
- During replacement of component parts, please refer to the section of "Replacement Parts List" as described in the service manual.
- Select items from the following indexes when disassembly or replacement are required.

Front Speakers (SB-AKX78PN-K)

- Disassembly of Front Panel Block
- Disassembly of Tweeter Speaker (SP1)
- Disassembly of Full Range Speaker (SP2)
- Disassembly of Woofer Speaker (SP3)

CAUTION NOTE:

Please use original screw and at correct locations.

Below shown is part no. of different screw types used:

a : XTB4+16AFJK

b : XTB4+10GFJ

Woofer Speaker (SB-AKW78PN-K)

- Disassembly of Front Panel Block
- Disassembly of Woofer Speaker (SP61)
- Disassembly of Lighting Wire P.C.B. Assembly

CAUTION NOTE:

Please use original screw and at correct locations.

Below shown is part no. of different screw types used:

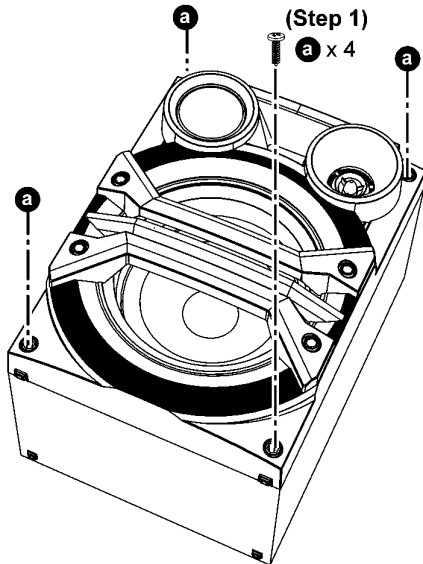
a : XTB4+16AFJK

b : XTB3+10GFJ

2.1. Front Speakers (SB-AKX78PN-K)

2.1.1. Disassembly of Front Panel Block

Step 1 : Remove 4 screws.



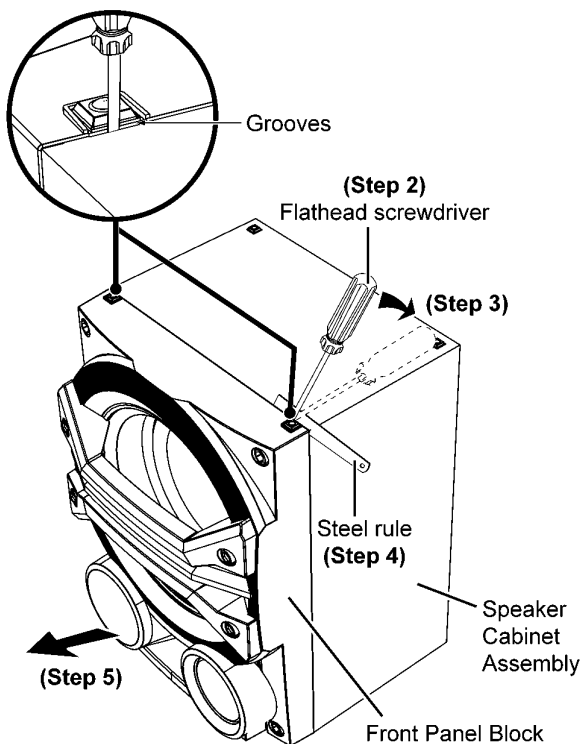
Step 2 : Insert flathead screwdriver into the grooves.

Step 3 : Apply light force to push open Front Panel Block as arrow shown.

Step 4 : Insert a steel rule between the Front Panel Block and Speaker Cabinet Assembly.

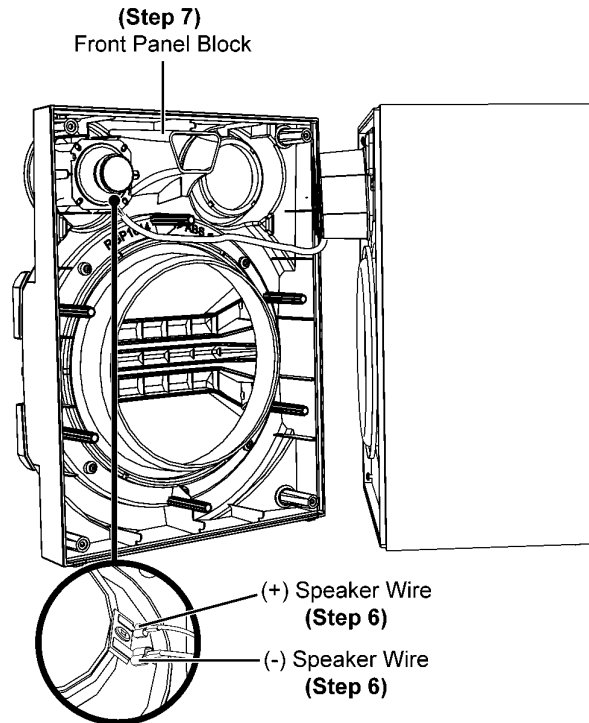
Step 5 : Detach Front Panel Block slightly.

Caution : Do not exert strong force as it may damage the Front Panel Block.



Step 6 : Detach speaker wire.

Step 7 : Remove Front Panel Block.

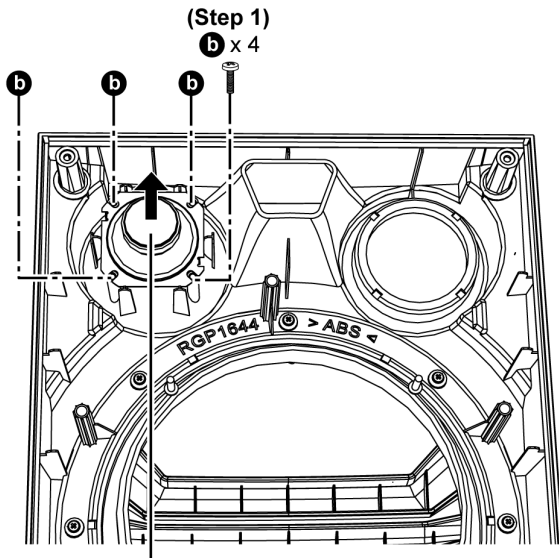


2.1.2. Disassembly of Tweeter Speaker (SP1)

- Refer to "Disassembly of Front Panel Block"

Step 1 : Remove 4 screws.

Step 2 : Remove Tweeter Speaker (SP1).

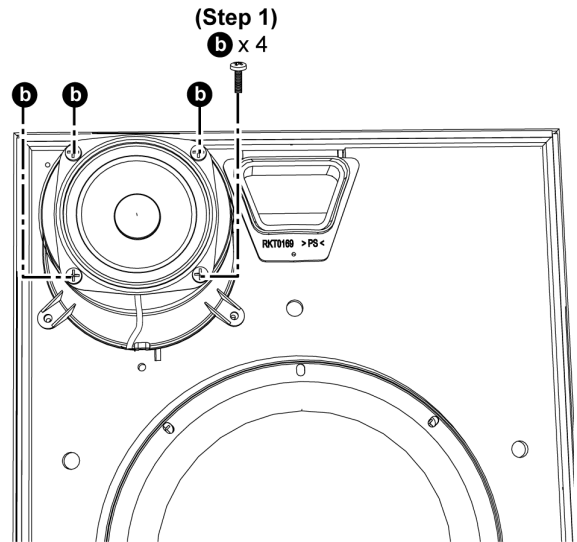


Tweeter Speaker (SP1)
(Step 2)

2.1.3. Disassembly of Full Range Speaker (SP2)

- Refer to "Disassembly of Front Panel Block"

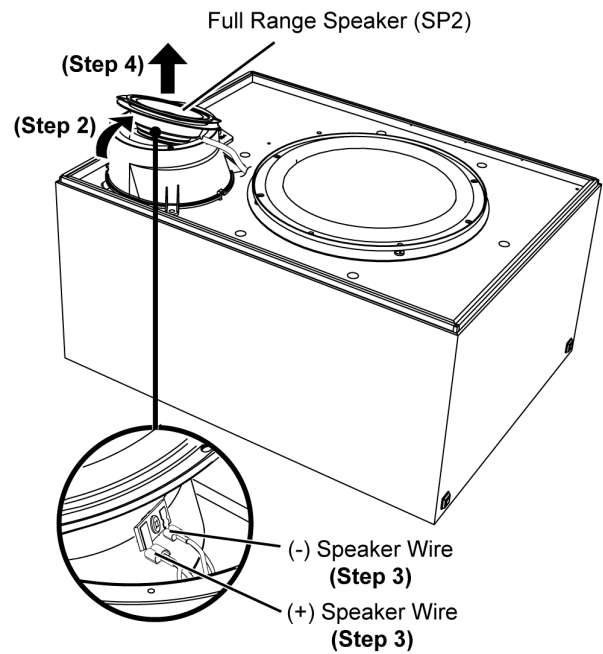
Step 1 : Remove 4 screws.



Step 2 : Slightly lift up Full Range Speaker (SP2).

Step 3 : Detach speaker wire.

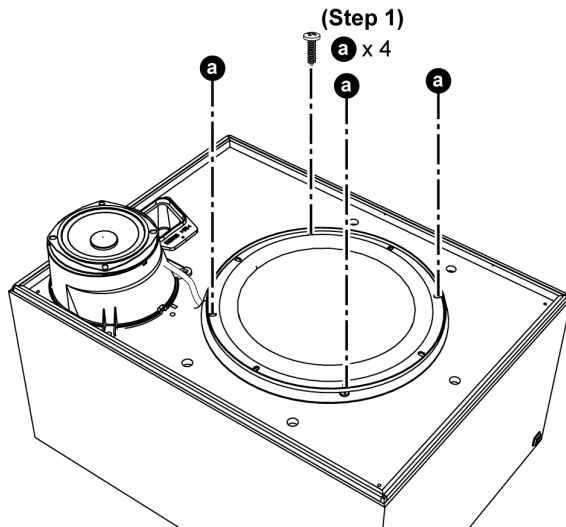
Step 4 : Remove Full Range Speaker (SP2).



2.1.4. Disassembly of Woofer Speaker (SP3)

- Refer to "Disassembly of Front Panel Block"

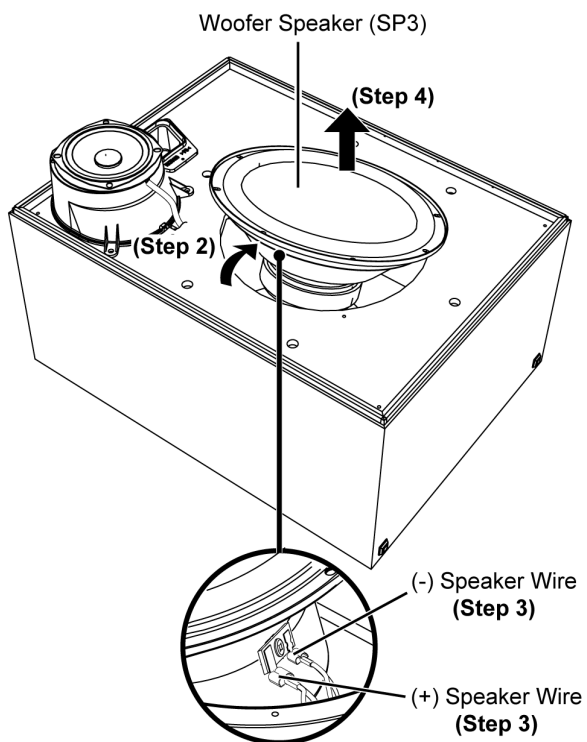
Step 1 : Remove 4 screws.



Step 2 : Slightly lift up Woofer Speaker (SP3) as shown.

Step 3 : Detach speaker wire.

Step 4 : Remove Woofer Speaker (SP3).



2.2. Subwoofer Speaker (SB-AKW78PN-K)

2.2.1. Disassembly of Front Panel Block

Step 1 : Remove 4 screws.

Step 2 : Insert flathead screwdriver into the grooves.

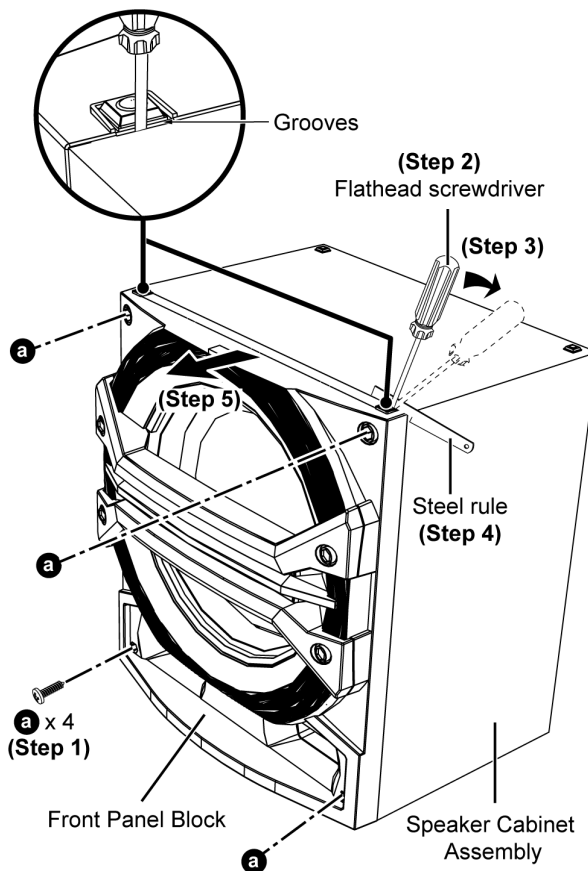
Step 3 : Apply light force to push open Front Panel Block as arrow shown.

Step 4 : Insert a steel rule between the Front Panel Block and Speaker Cabinet Assembly.

Caution : Do not exert strong force as it may damage the Front Panel Block.

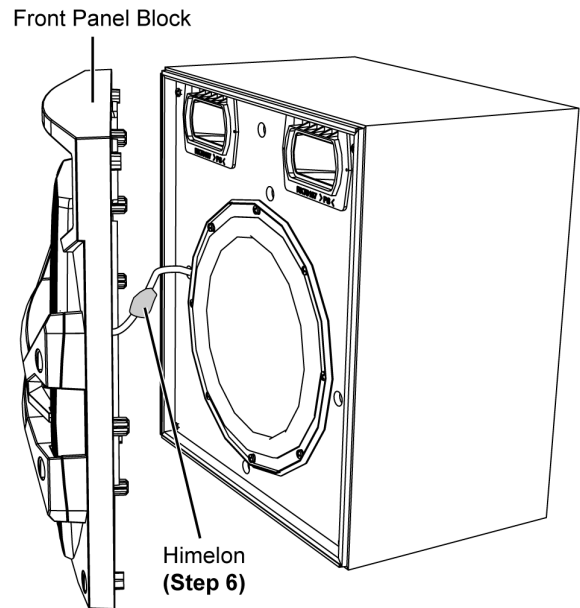
Step 5 : Detach Front Panel Block slightly.

Caution : Do not exert strong force as it may damage the wiring within.



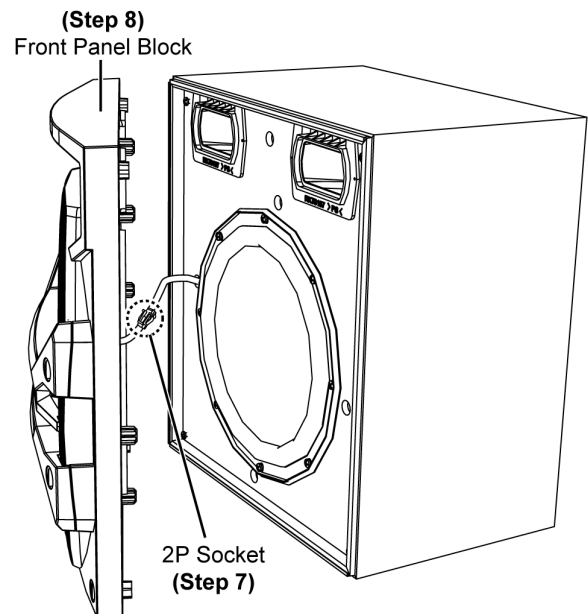
Step 6 : Lift up himelon.

Caution : Replace himelon if they are torn during disassembling.



Step 7 : Detach 2P Socket.

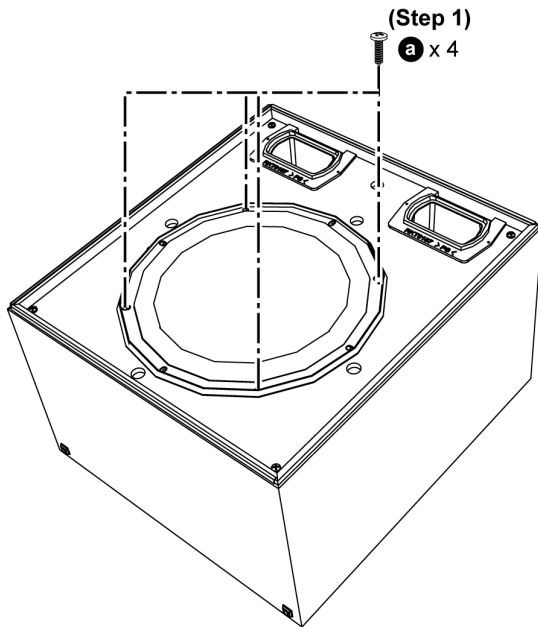
Step 8 : Remove Front Panel Block.



2.2.2. Disassembly of Woofer Speaker (SP61)

- Refer to "Disassembly of Front Panel Block"

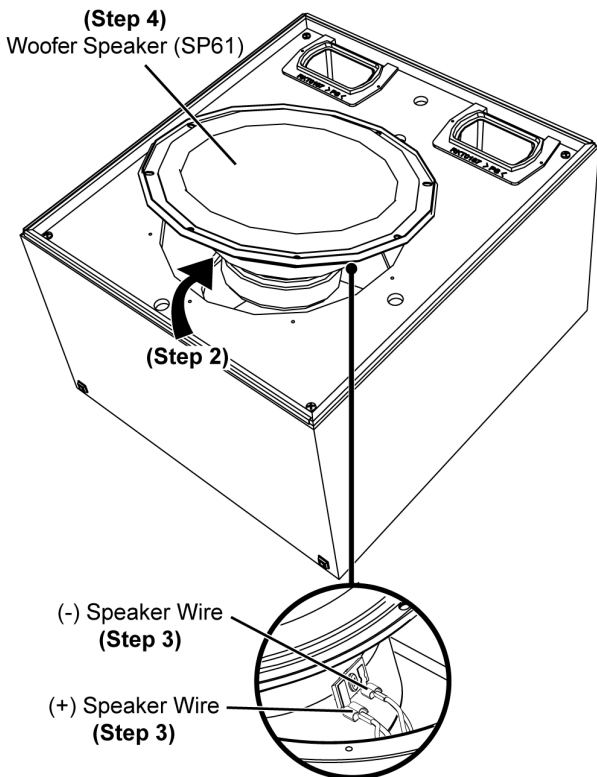
Step 1 : Remove 4 screws.



Step 2 : Slightly lift up Woofer Speaker (SP61) as shown.

Step 3 : Detach speaker wire.

Step 4 : Remove Woofer Speaker (SP61).

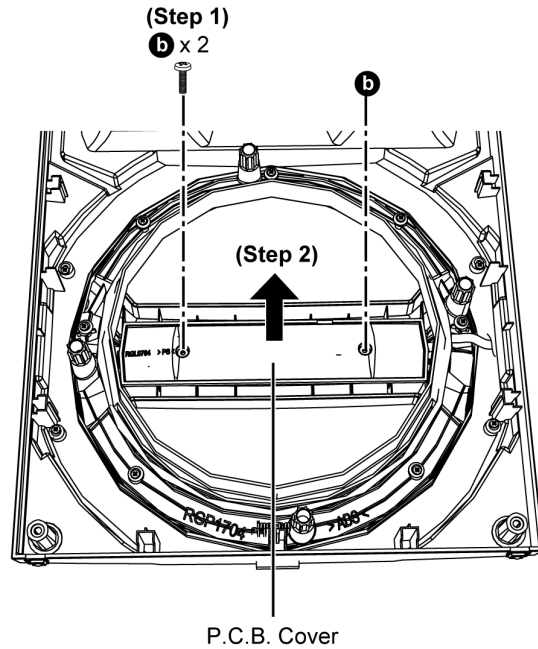


2.2.3. Disassembly of Lighting Wire P.C.B. Assembly

- Refer to "Disassembly of Front Panel Block"

Step 1 : Remove 2 screws.

Step 2 : Remove P.C.B. Cover.

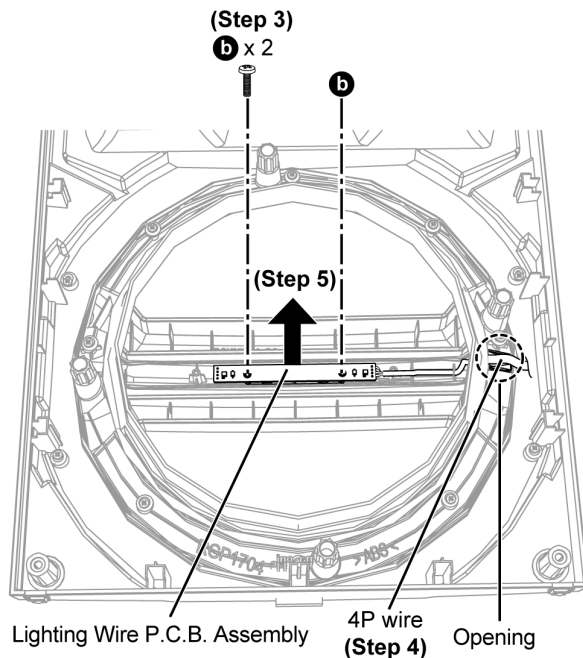


Step 3 : Remove 2 screws.

Step 4 : Release 4P wire from Front Panel Block.

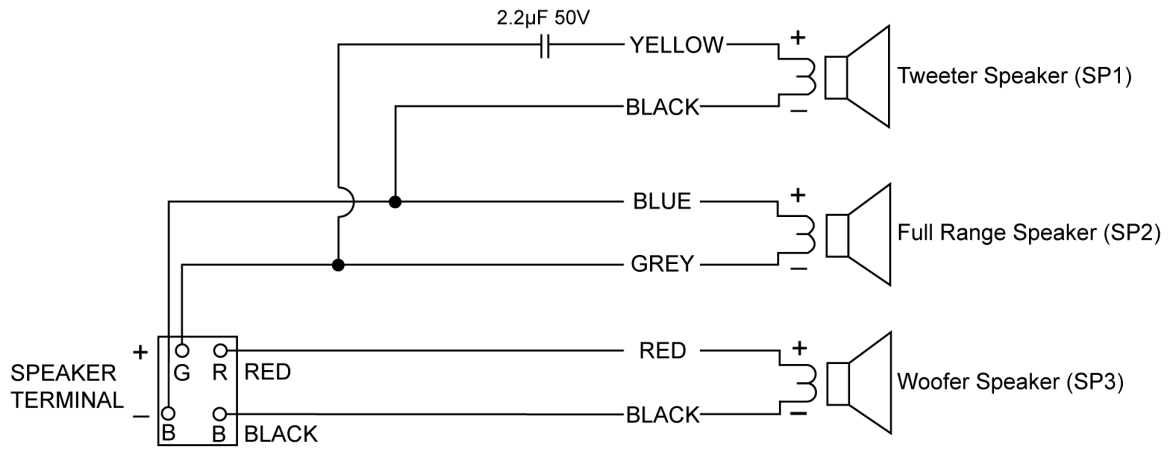
Caution : During assembling, inserted the 4P wire into the opening of Front Panel Block as diagram shown.

Step 5 : Remove Lighting Wire P.C.B. Assembly.

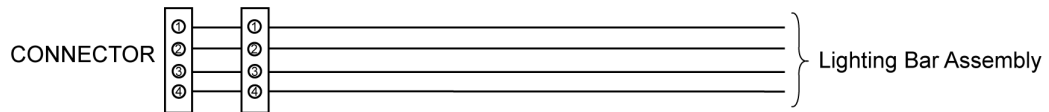
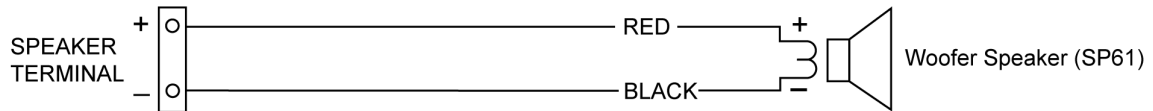


3 Wiring Connection Diagram

3.1. Front Speakers (SB-AKX78PN-K)

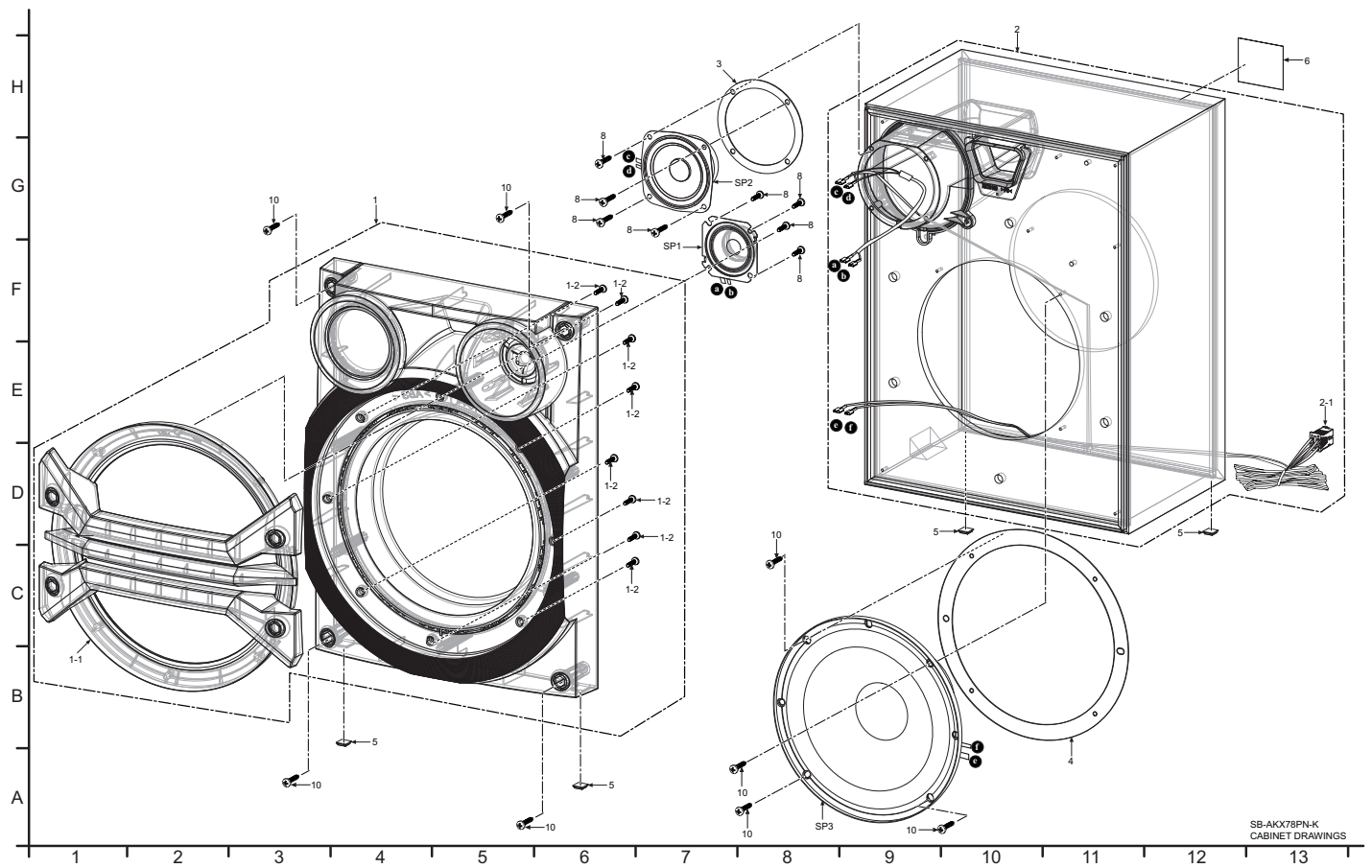


3.2. Subwoofer Speaker (SB-AKW78PN-K)

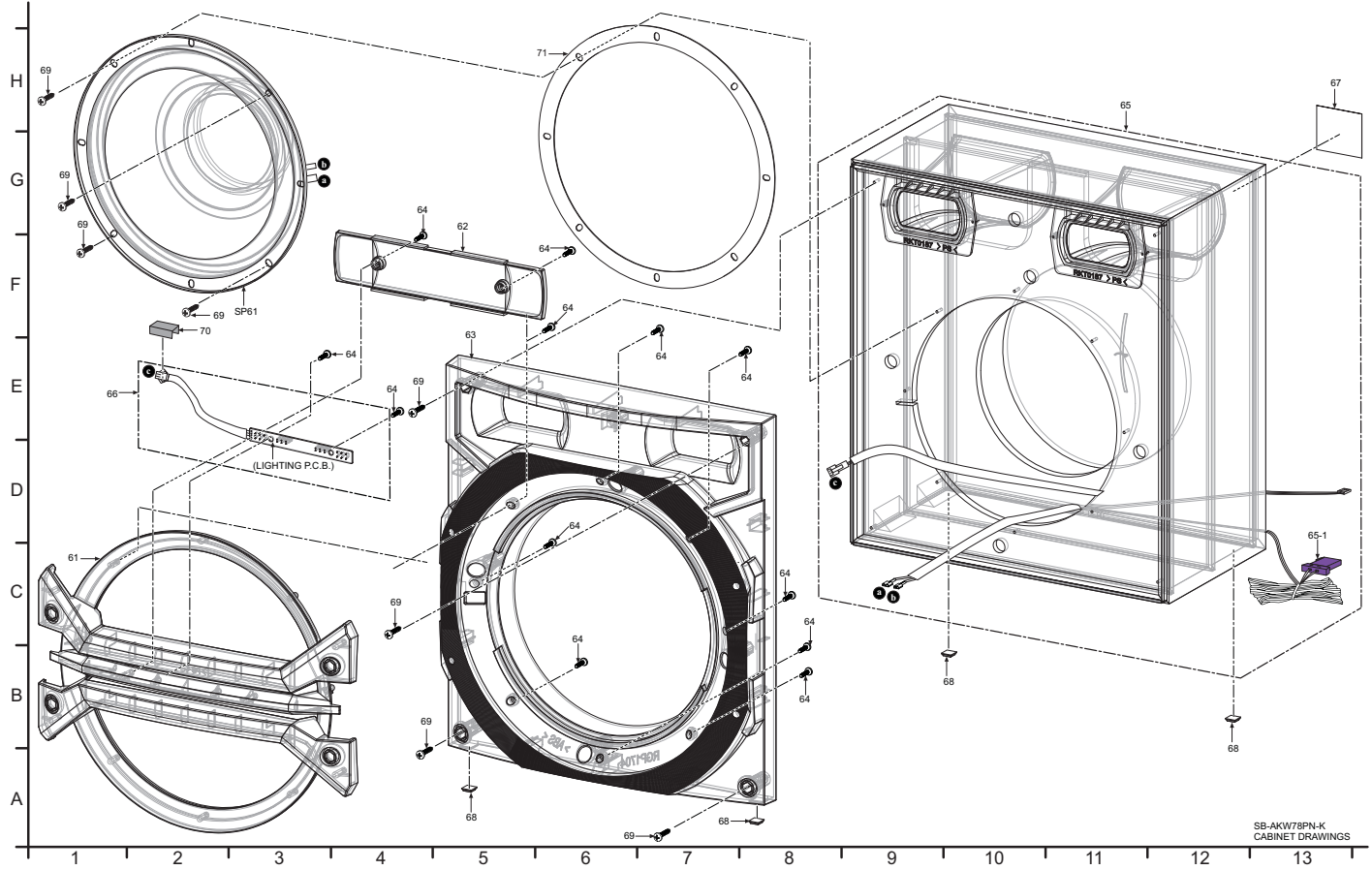


4 Exploded View and Replacement Parts List

4.1. Front Speakers (SB-AKX78PN-K) Cabinet Parts Location

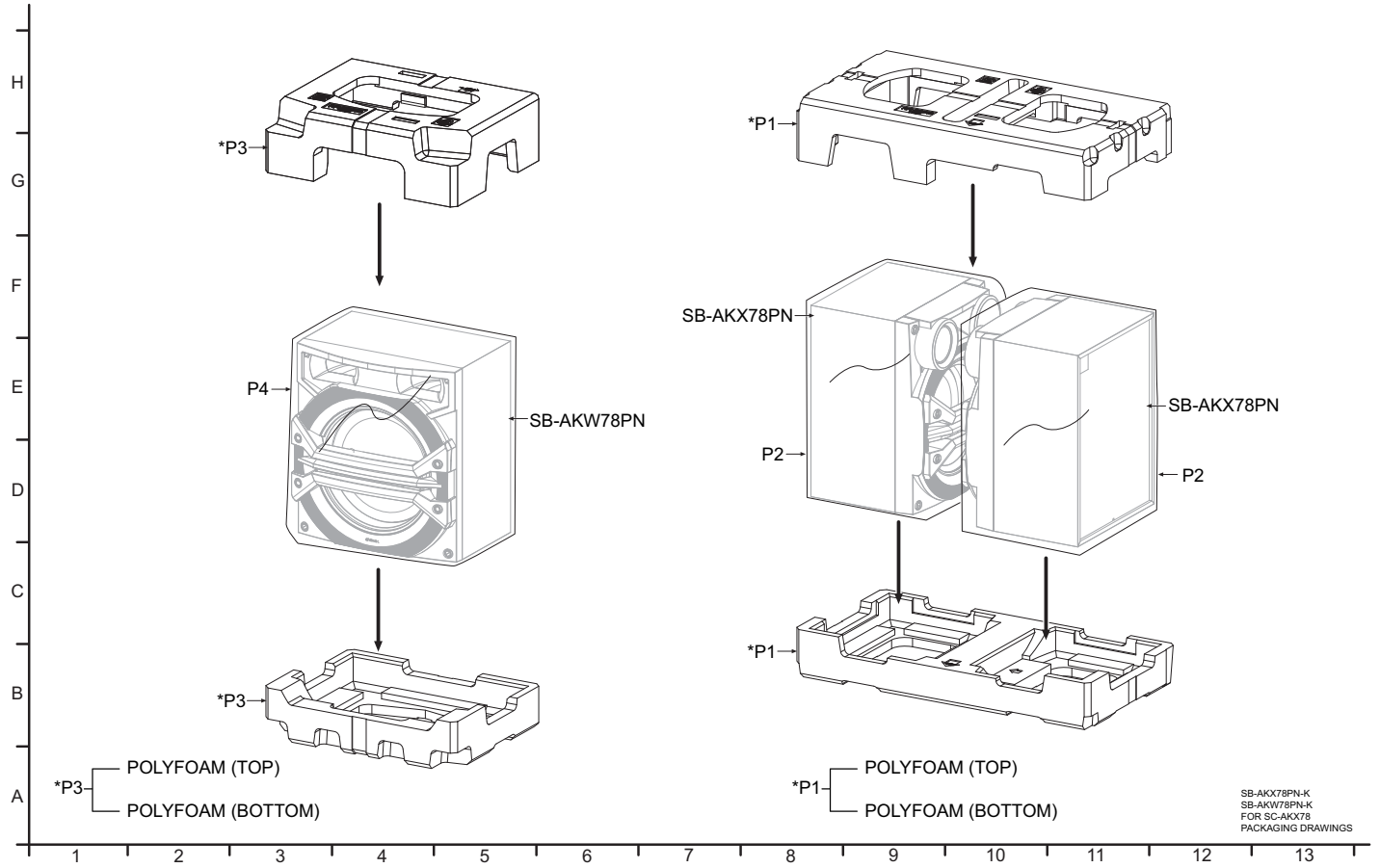


4.2. Subwoofer Speaker (SB-AKW78PN-K) Cabinet Parts Location

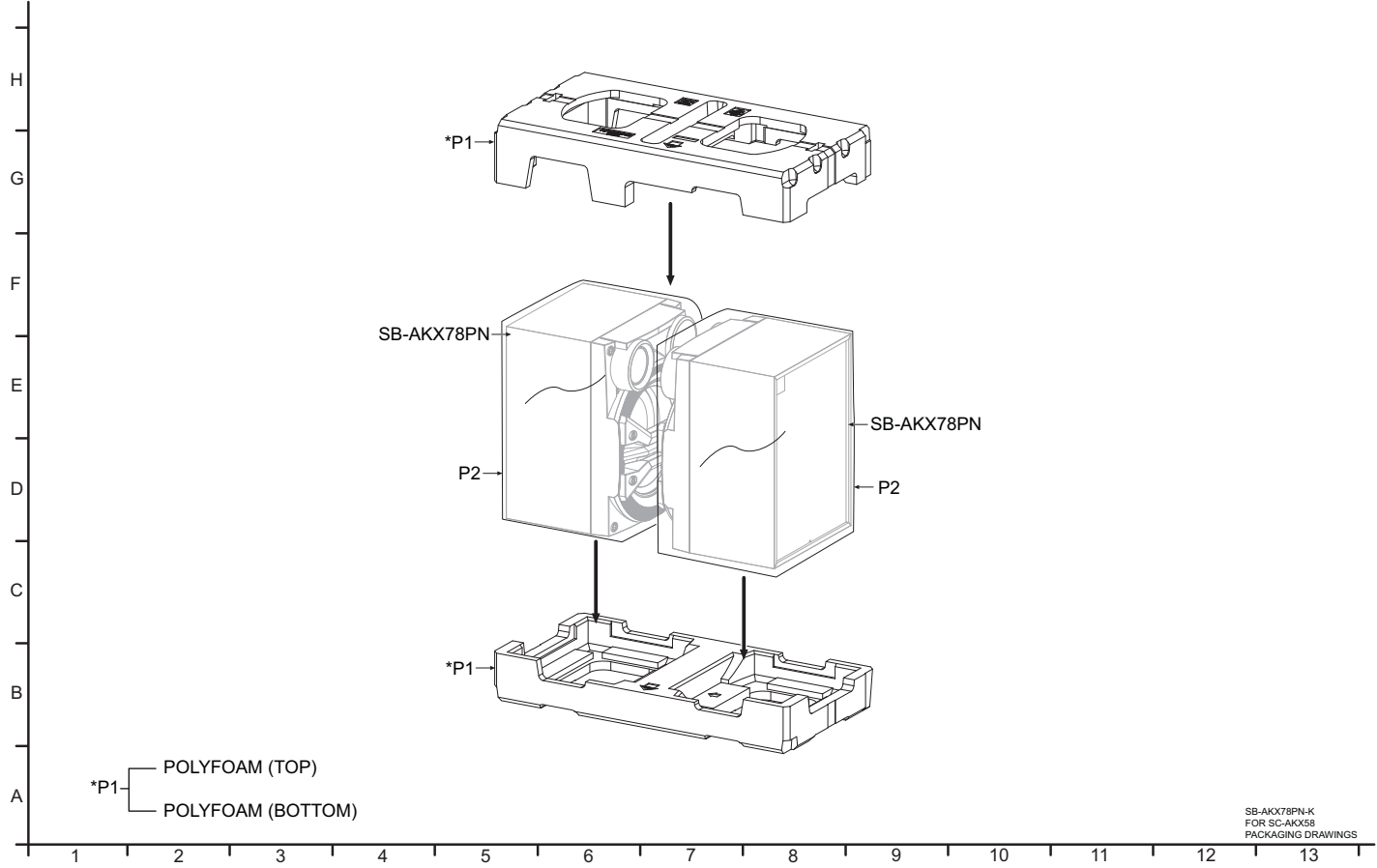


SB-AKW78PN-K
CABINET DRAWINGS

4.3. Packaging (For SC-AKX78)



4.4. Packaging (For SC-AKX58)



4.5. Replacement Parts List

Important Safety Notice

Components identified by \triangle mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

RTL (Retention Time Limited)

Note: The marking (RTL) indicates that the Retention Time is Limited for this item.

After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependant on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

Note:

- When replacing any of these components, be sure to use only manufacturer's specified parts shown in the replacement part list.
- The parenthesized indications on the Remarks column specify the destination & product color (Refer to the cover page for the information).
- Parts without these indications shall be used for all areas.
- All parts mentioned are supplied by PAVCJM unless indicated likewise.

4.5.1. Front Speakers (SB-AKX78PN-K)

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			CABINET AND CHASSIS		
	1	RYP1986-K	FRONT PANEL ASSY L	1	
	1	RYP1986A-K	FRONT PANEL ASSY R	1	
	1-1	RGK2562-S	FRONT ORNAMENT	1	
	1-2	XTB3+10GFJ	SCREW	8	
	2	RYQ1303-K	SPEAKER CABINET ASS'Y L	1	
	2-1	K1MY04A00003	SPEAKER CONNECTOR HOUSING (WHITE)	1	
	2	RYQ1303A-K	SPEAKER CABINET ASS'Y R	1	
	2-1	K1MY04A00004	SPEAKER CONNECTOR HOUSING (RED)	1	
	3	RMQX0285-K	EVA PACKING (FULL RANGE SPEAKER)	1	
	4	RMQ2178	EVA PACKING (WOOFER)	1	
	5	RKA0072-KJ	LEG CUSHION	4	
	6	RGN3460-K	SPEC LABEL L	1	
	6	RGN3460A-K	SPEC LABEL R	1	
	8	XTB4+10GFJ	SCREW	8	
	10	XTB4+16AFJK	SCREW	8	
			SPEAKERS		
	SP1	EAS6PH134A	TWEETER SPEAKER (6CM)	1	
	SP2	L0AA08A00043	FULL RANGE SPEAKER (8CM)	1	
	SP3	L0AA20A00034	WOOFER (20CM)	1	

4.5.2. Subwoofer Speaker (SB-AKW78PN-K)

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			CABINET AND CHASSIS		
	61	RGK2558-S	FRONT ORNAMENT	1	
	62	RGL0784-Q	LIGHTING PIECE	1	
	63	RGPI704-K	FRONT PANEL	1	
	64	XTB3+10GFJ	SCREW	12	
	65	RYQ1441D-K	SPEAKER CABINET ASSY	1	
	65-1	RFKVBPT760-P	CONNECTOR HOUSING (PURPLE)	1	
	66	REEE1844	LIGHTING WIRE ASSY	1	
	67	RGN3465-K	SPEC LABEL	1	
	68	RKA0072-KJ	LEG RUBBER	4	
	69	XTB4+16AFJK	SCREW	8	
	70	RMQ2070	HIMELON	1	
	71	RMQ2208	EVA PACKING (WOOFER)	1	
			SPEAKER		
	SP61	L0AA25A00026	WOOFER SPEAKER (25CM)	1	

4.5.3. Packing Materials

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			PACKING MATERIALS		

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	P1	RPN2654	POLYFOAM	1	
	P2	RPF0570-1	MIRAMAT BAG (FOR SB-AKX78)	2	
	P3	RPN2660	POLYFOAM	1	
	P4	RPF0571-1	MIRAMAT BAG (FOR SB-AKW78)	1	

IPSG1403