

Service Manual

Speaker System

Model No. **SB-MAX700PH**
SB-MAX700GS

Product Color : (K)... Black Type



SB-MAX700

⚠ 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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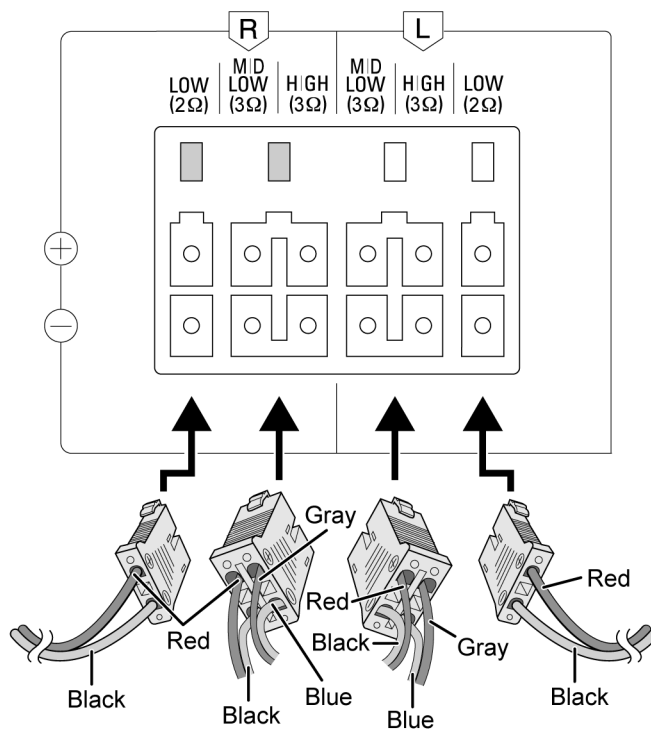
1 Service Navigation

1.1. Speaker System Information (SB-MAX700PHK)

SB-MAX700PHK is use for the following models:
SC-MAX700PHK

SB-MAX700GSK is use for the following models:
SC-MAX700GSK

1.2. Speakers Setup



2 Specifications

Front Speakers

Type	4 way, 4 speaker system (Bass reflex)
Speaker(s)	
Super Woofer (Low)	38 cm cone type
Super Woofer (Medium Low)	20 cm cone type
Woofer	10 cm cone type
Tweeter	6 cm cone type
Impedance	3 Ω (High), 3 Ω (Medium Low), 2 Ω (Low)
Output sound pressure	88 dB/W (1 m)
Frequency range	38 Hz to 23 kHz (-16 dB) 44 Hz to 18 kHz (-10 dB)
Dimensions (W x H x D)	558 mm x 796 mm x 525 mm
Mass (Weight)	31.0 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.

3 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-MAX700PHK)

- Disassembly of Upper Front Panel Assembly
- Disassembly of Tweeter Speaker (SP1)
- Disassembly of Full Range Speaker (SP4)
- Disassembly of Full Range Speaker (SP3)
- Disassembly of Lower Front Panel Assembly
- Disassembly of Woofer Speaker (SP2)
- Disassembly of Lighting Wire P.C.B. Assembly

CAUTION NOTE:

Please use original screw and at correct locations.

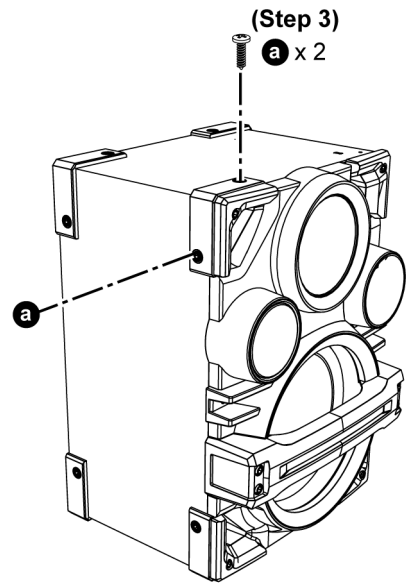
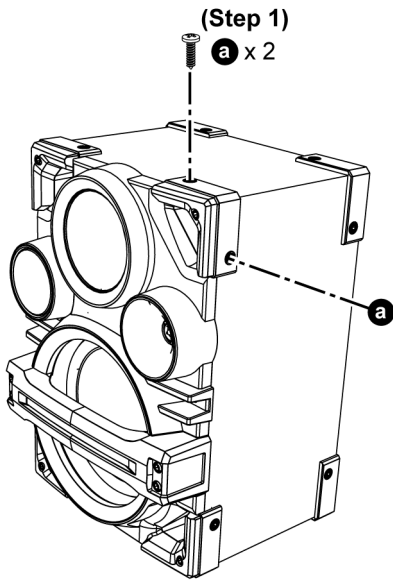
Below shown is part no. of different screw types used:

- a** : XTB4+16AFJK
- b** : XTB4+12GFJ
- c** : XTB4+20AFJK
- d** : XTB3+12GFJ

3.1. Disassembly of Upper Front Panel Assembly

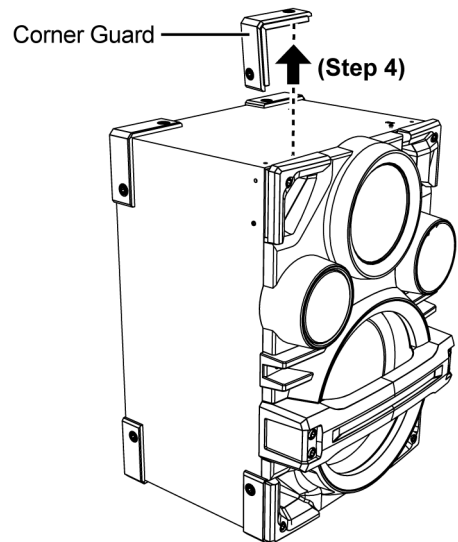
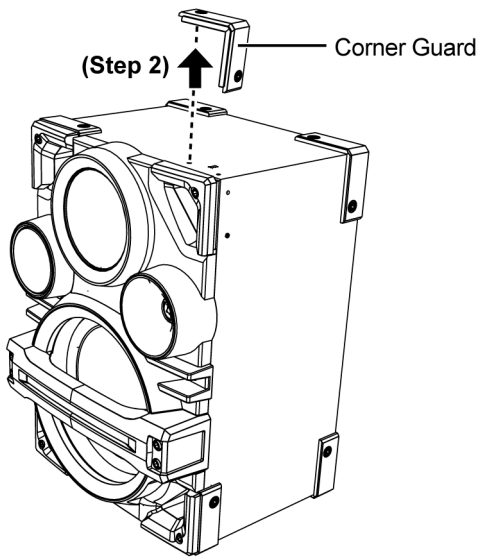
Step 3 : Remove 2 screws.

Step 1 : Remove 2 screws.

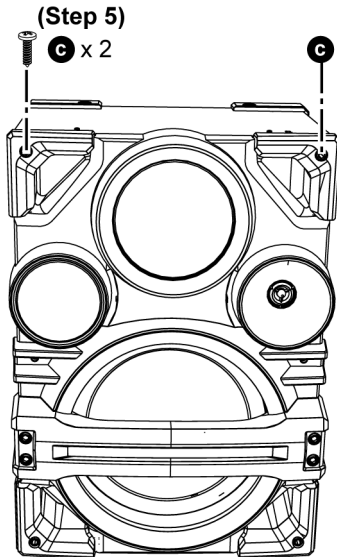


Step 2 : Remove Corner Guard.

Step 4 : Remove Corner Guard.

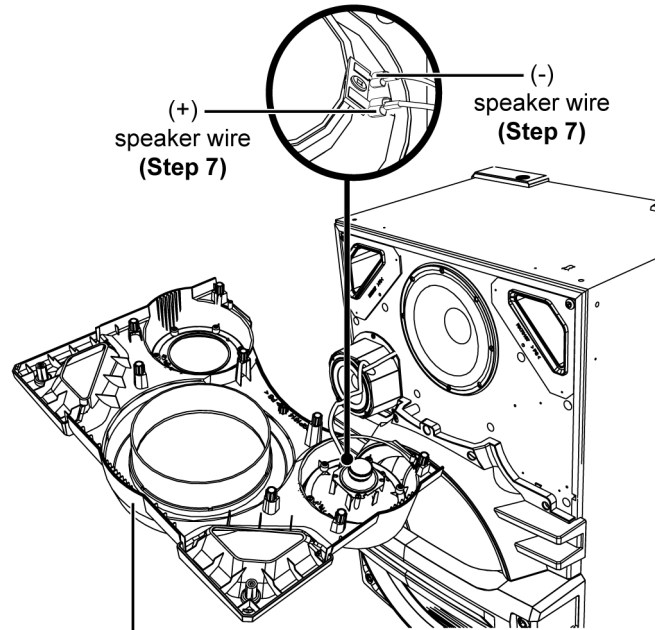


Step 5 : Remove 2 screws.



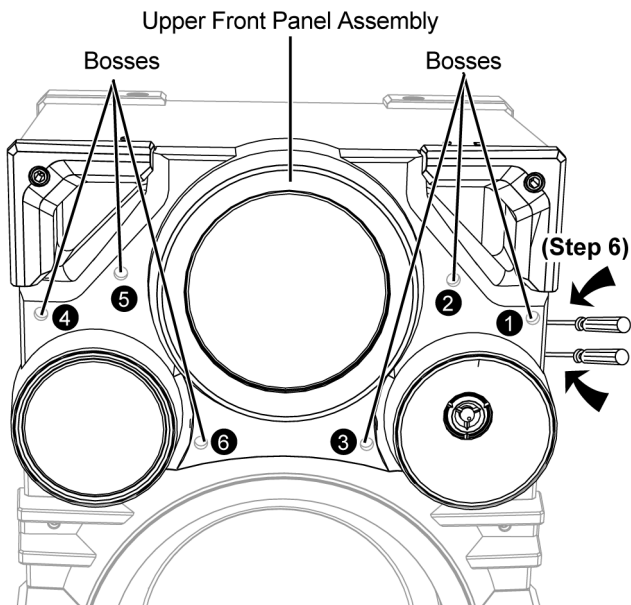
Step 7 : Detach the (+) and (-) speaker wires.

Step 8 : Remove the Upper Front Panel Assembly.



Step 6 : Insert two flathead screwdriver at the sides of the boss and apply light force to push out the Upper Front Panel Assembly by sequence (1-6) shown.

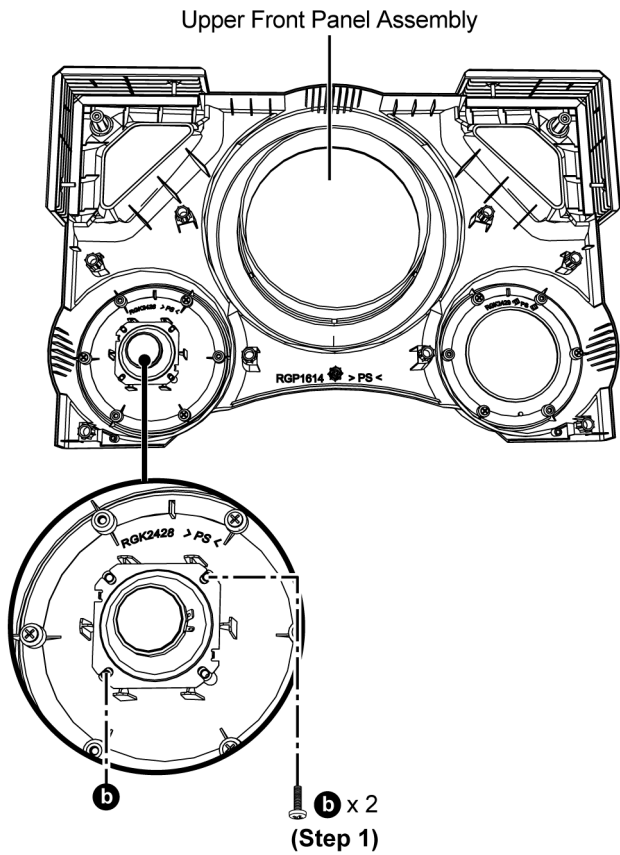
Caution : Do not exert too much force as it may damage the Upper Front Panel Assembly.



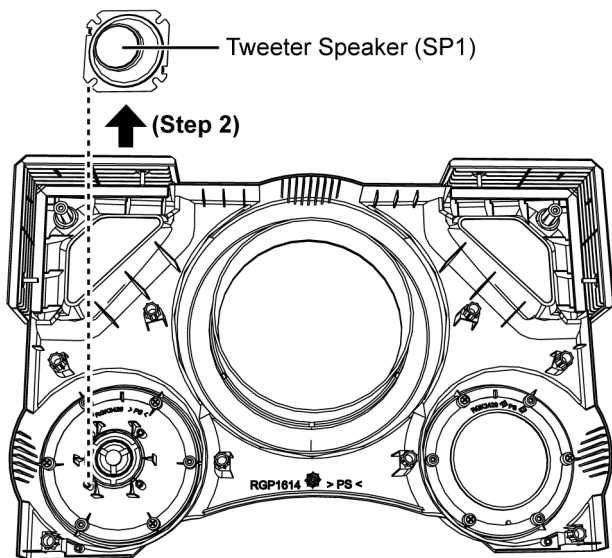
3.2. Disassembly of Tweeter Speaker (SP1)

• Refer to “Disassembly of Upper Front Panel Assembly”.

Step 1 : Remove 2 screws.



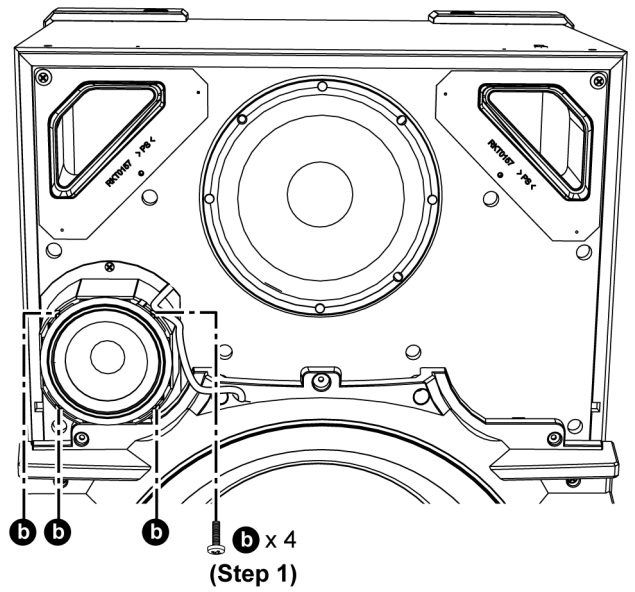
Step 2 : Remove the Tweeter Speaker (SP1).



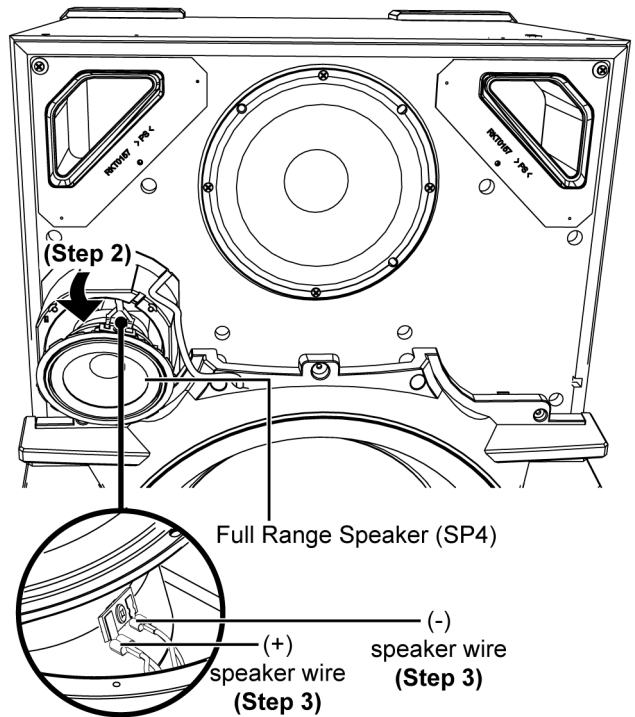
3.3. Disassembly of Full Range Speaker (SP4)

• Refer to “Disassembly of Upper Front Panel Assembly”.

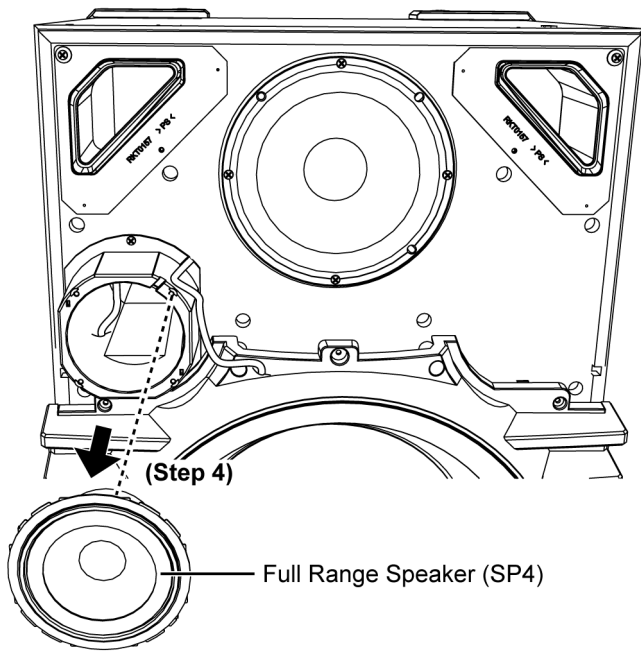
Step 1 : Remove 4 screws.



Step 2 : Slightly lift up Full Range Speaker (SP4) as shown.
Step 3 : Detach the (+) and (-) speaker wires.



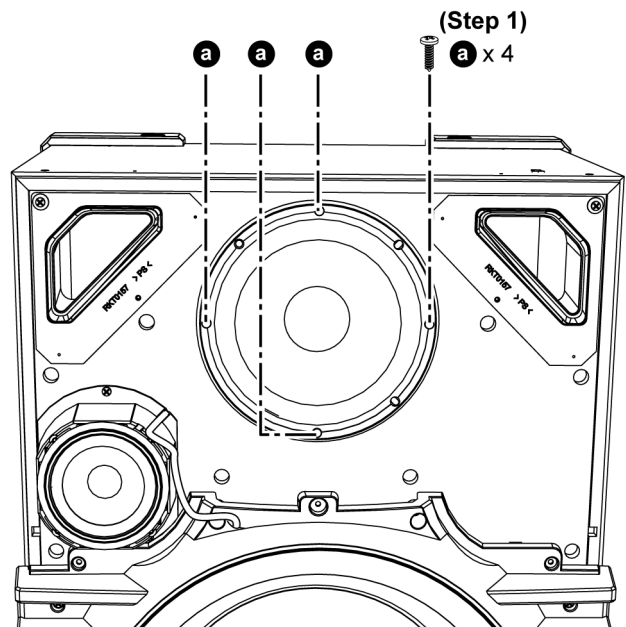
Step 4 : Remove the Full Range Speaker (SP4).



3.4. Disassembly of Full Range Speaker (SP3)

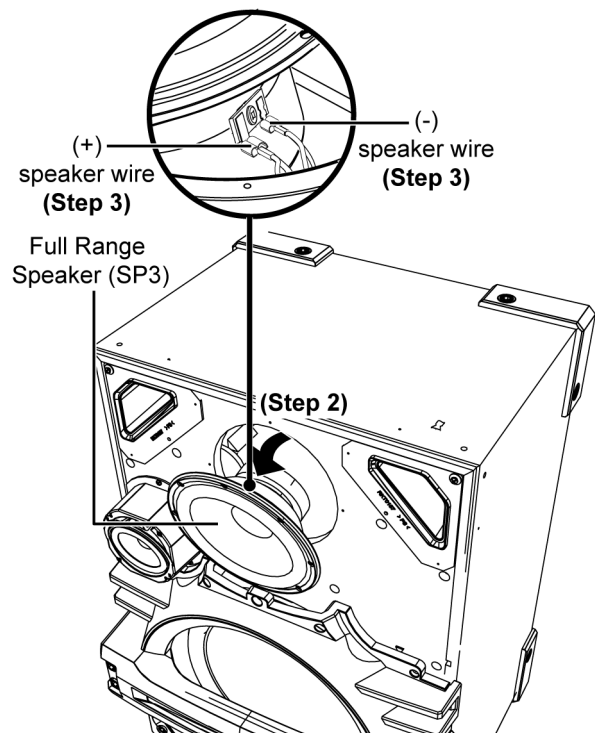
• Refer to "Disassembly of Upper Front Panel Assembly".

Step 1 : Remove 4 screws.

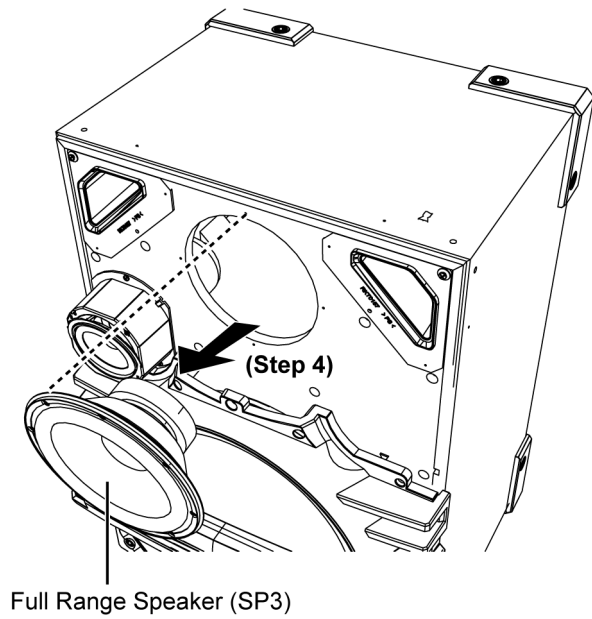


Step 2 : Slightly lift up Full Range Speaker (SP3) as shown.

Step 3 : Detach the (+) and (-) speaker wires.



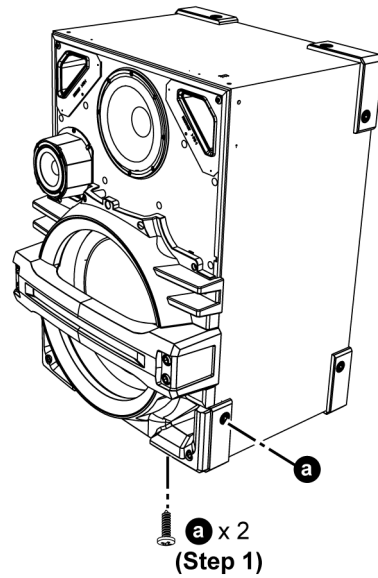
Step 4 : Remove the Full Range Speaker (SP3).



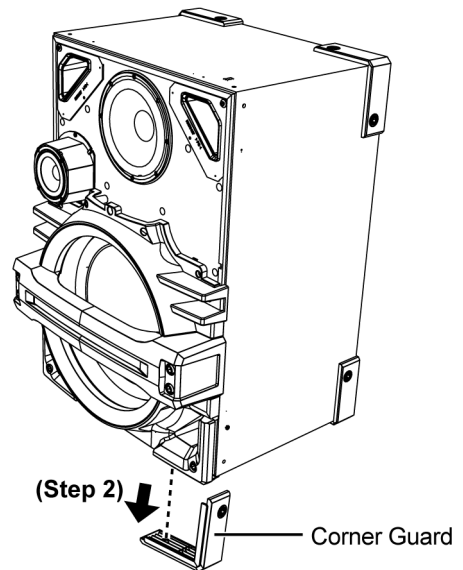
3.5. Disassembly of Lower Front Panel Assembly

• Refer to "Disassembly of Upper Front Panel Assembly".

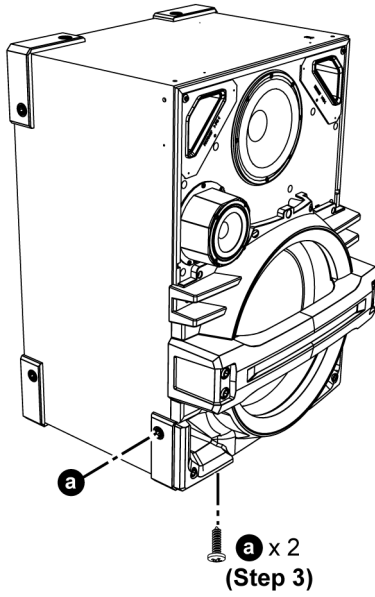
Step 1 : Remove 2 screws.



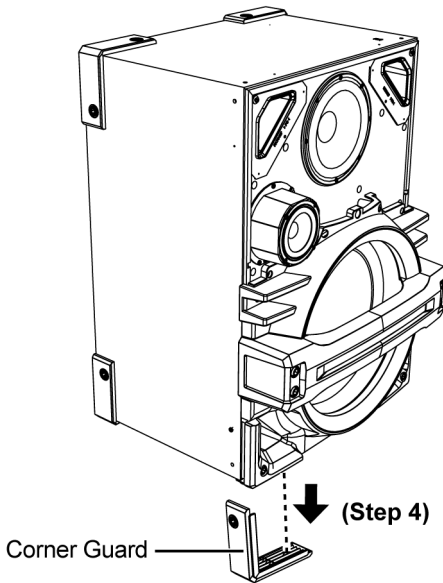
Step 2 : Remove Corner Guard.



Step 3 : Remove 2 screws.

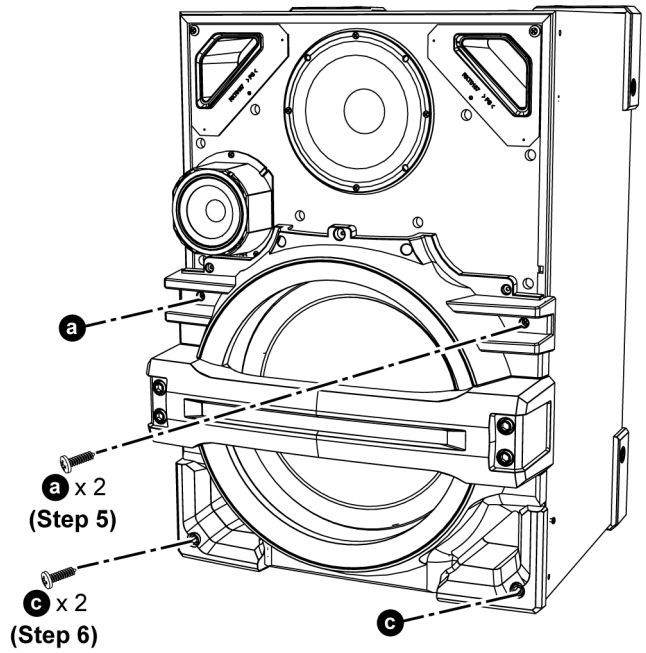


Step 4 : Remove Corner Guard.



Step 5 : Remove 2 screws.

Step 6 : Remove 2 screws.

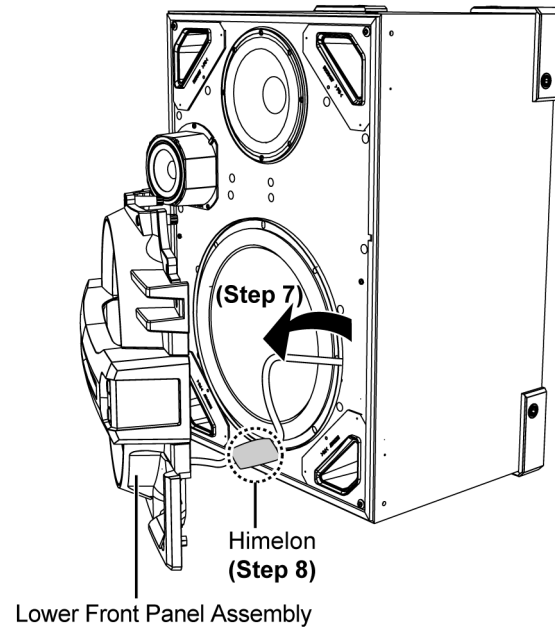


Step 7 : Detach the Lower Front Panel Assembly slightly as arrow shown.

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

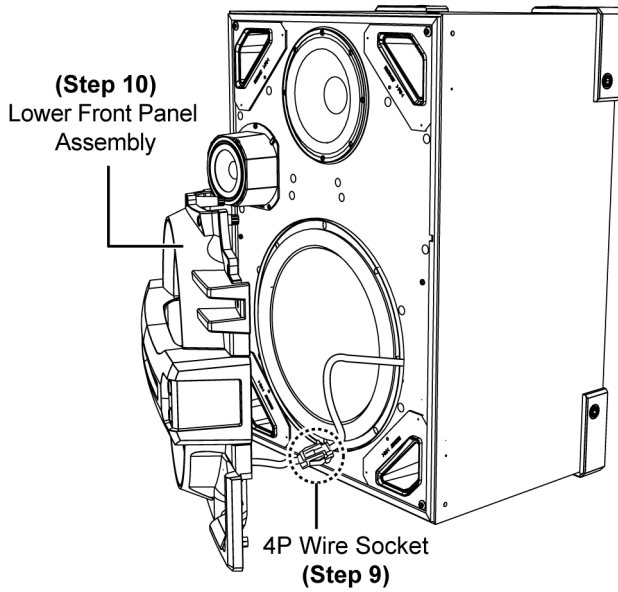
Step 8 : Lift up the Himelon.

Caution : Replace the Himelon if they are torn during dis-assembling.



Step 9 : Detach the 4P Wire Socket.

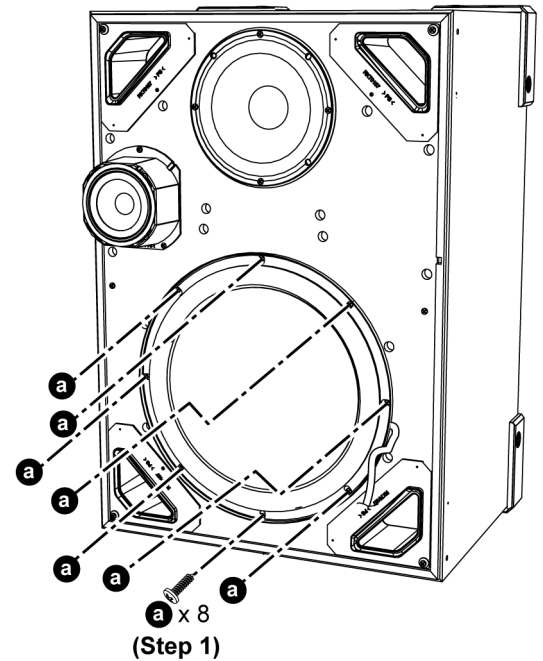
Step 10 : Remove the Lower Front Panel Assembly.



3.6. Disassembly of Woofer Speaker (SP2)

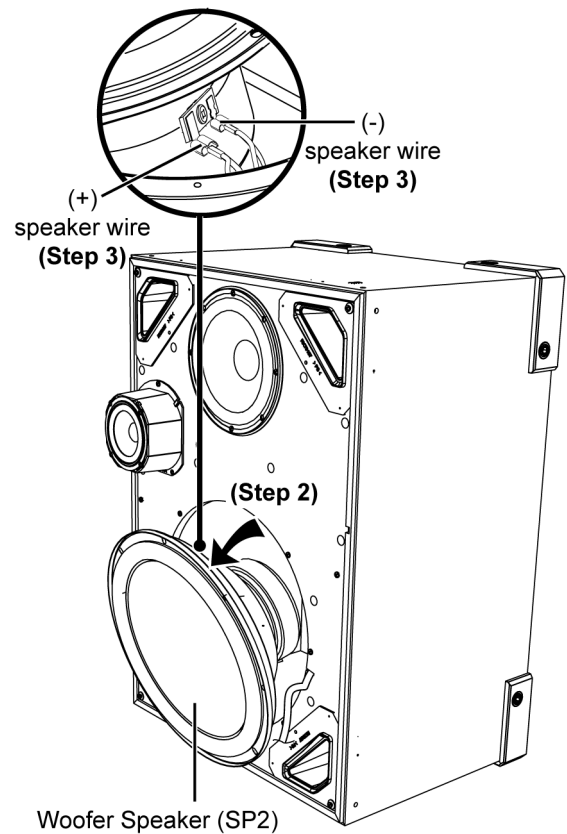
- Refer to "Disassembly of Upper Front Panel Assembly".
- Refer to "Disassembly of Front Ornament Assembly".

Step 1 : Remove 8 screws.

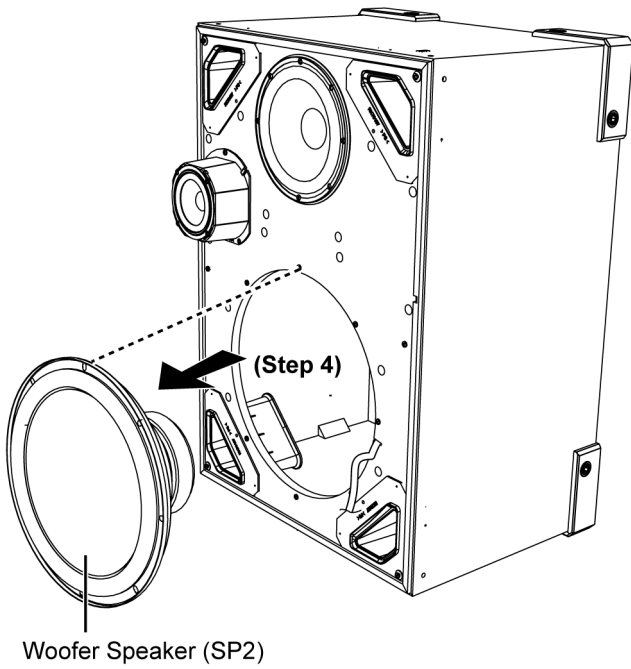


Step 2 : Slightly lift up Woofer Speaker (SP2) as shown.

Step 3 : Detach the (+) and (-) speaker wires.



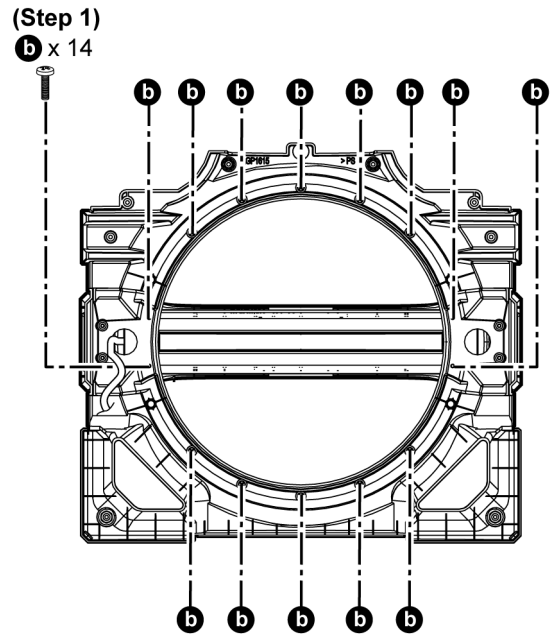
Step 4 : Remove the Woofer Speaker (SP2).



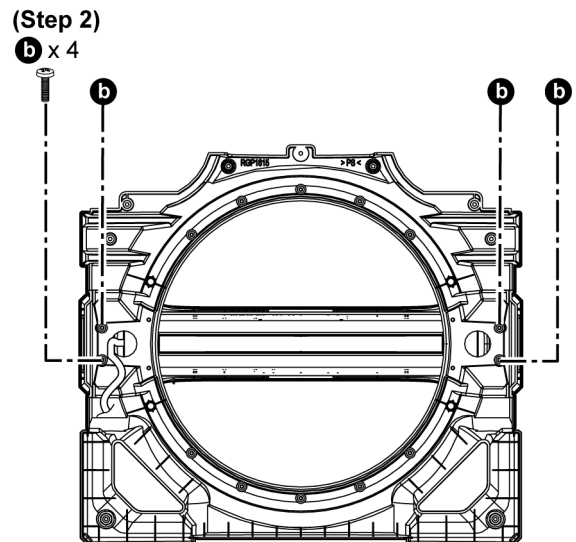
3.7. Disassembly of Lighting Wire P.C.B. Assembly

- Refer to "Disassembly of Upper Front Panel Assembly".
- Refer to "Disassembly of Front Ornament Assembly".

Step 1 : Remove 14 screws.



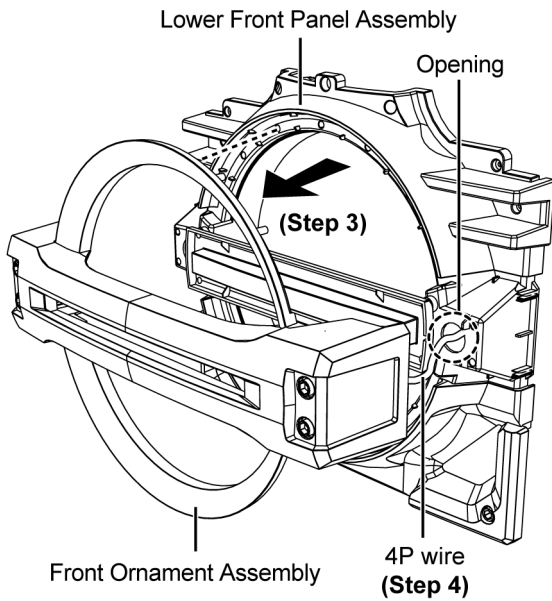
Step 2 : Remove 4 screws.



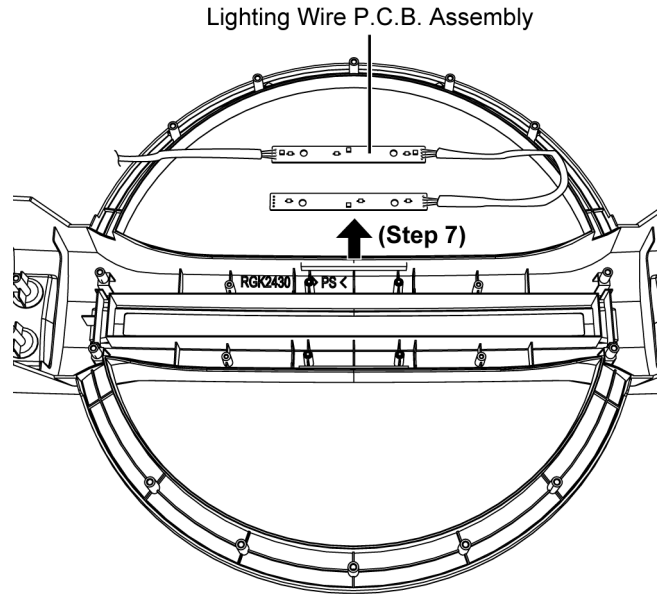
Step 3 : Slightly lift up Front Ornament Assembly.

Step 4 : Release the 4P wire from the hole of Lower Front Panel Assembly.

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



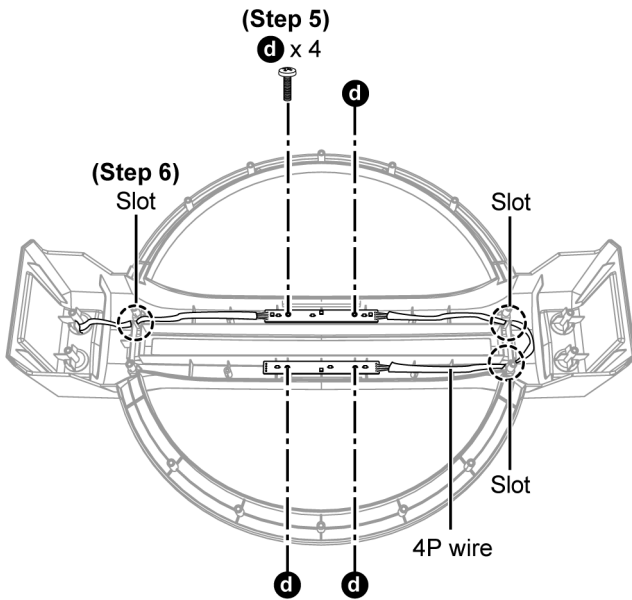
Step 7 : Remove Lighting Wire P.C.B. Assembly.



Step 5 : Remove 4 screws.

Step 6 : Release the 4P wire from the slots.

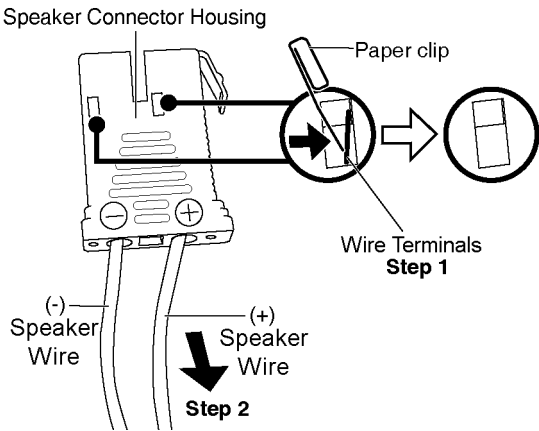
Caution : During assembling, ensure that the 4P wire is properly inserted into the slot.



3.8. Replacement of Speaker Connector Housing (For SB-MAX700PHK)

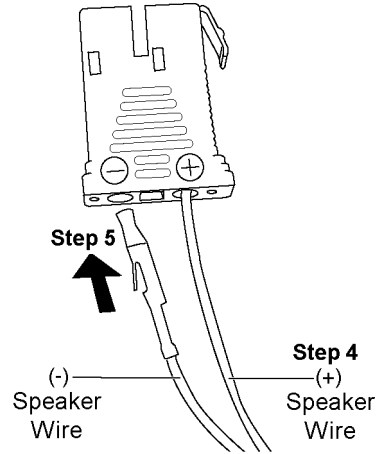
3.8.1. Disassembly of Speaker Connector Housing

Step 1: Insert a paper clip & push the Wire terminals outwards.
Step 2: Detach the (+) and (-) speaker wire.



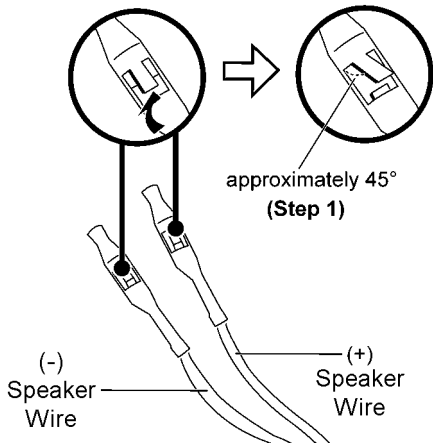
Step 4: Insert the (-) speaker wire into the (-) hole of the speaker connector housing.

Step 5: Push in the speaker wire until hear the "click" sound.



3.8.2. Assembly of Speaker Connector Housing

Step 1: Slightly lift up the wire terminals approximately 45° as shown.

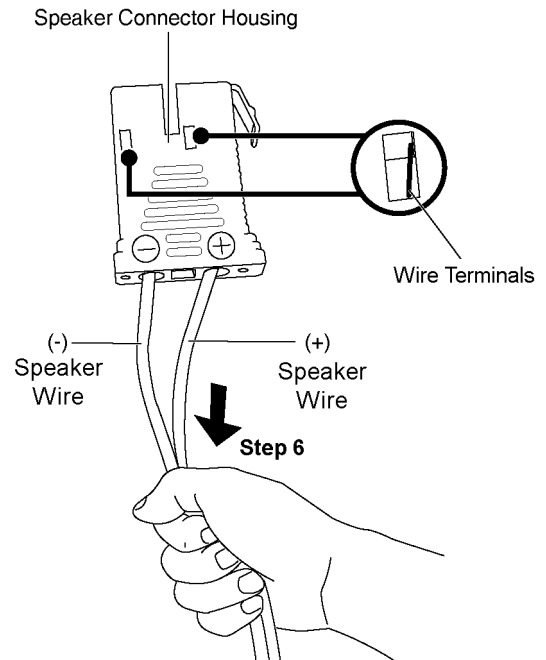
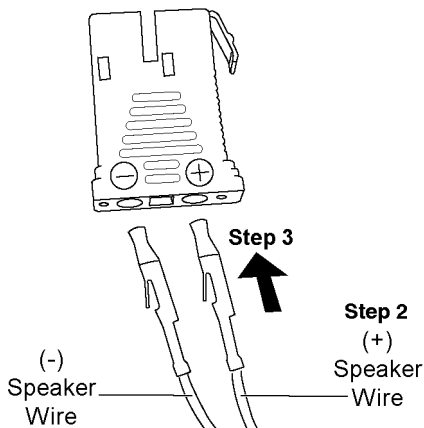


Step 6: Pull both speaker wires gently to ensure they lock-in firmly.

Note: Repeat these procedures if the speaker wires come out.

Step 2: Insert the (+) speaker wire into the (+) hole of the Speaker Connector Housing.

Step 3: Push in the speaker wire until hear the "click" sound.



3.9. Replacement of Speaker Connector Housing (For SB-MAX700PHK)

For Speaker wire connection, please refer to 1.2. Speaker setup

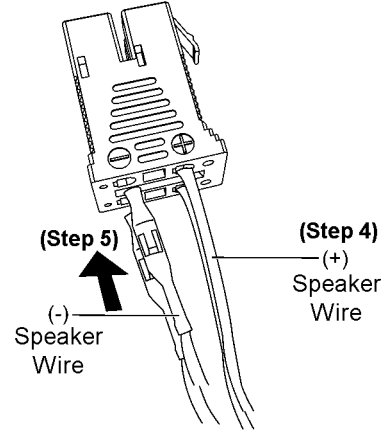
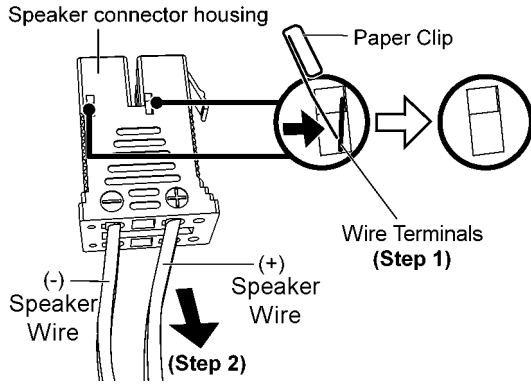
3.9.1. Disassembly of Speaker Connector Housing

Step 1: Insert a paper clip & push the Wire terminals outwards.

Step 2: Detach the (+) and (-) speaker wire.

Step 4: Insert the (-) speaker wire into the (-) hole of the speaker connector housing.

Step 5: Push in the speaker wire until hear the “click” sound.

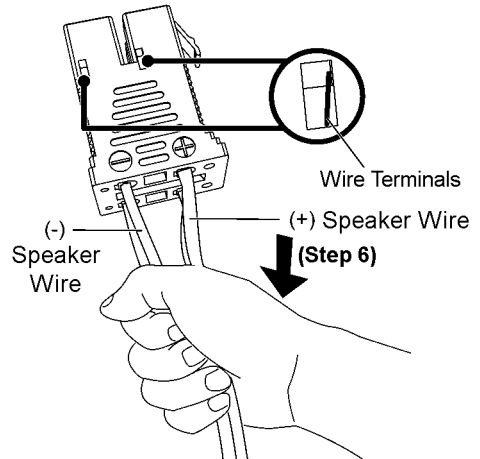
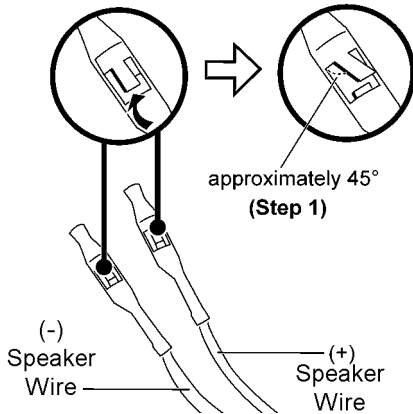


3.9.2. Assembly Disassembly of Speaker Connector Housing

Step 1: Slightly lift up the wire terminals approximately 45° as shown.

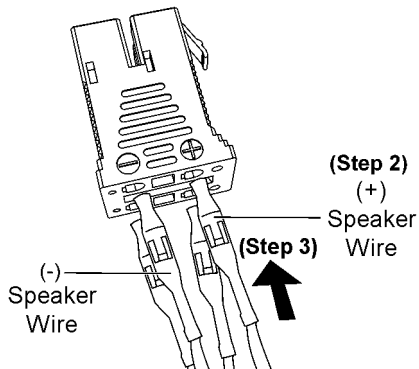
Step 6: Pull both speaker wires gently to ensure they lock-in firmly.

Note: Repeat these procedures if the speaker wires come out.



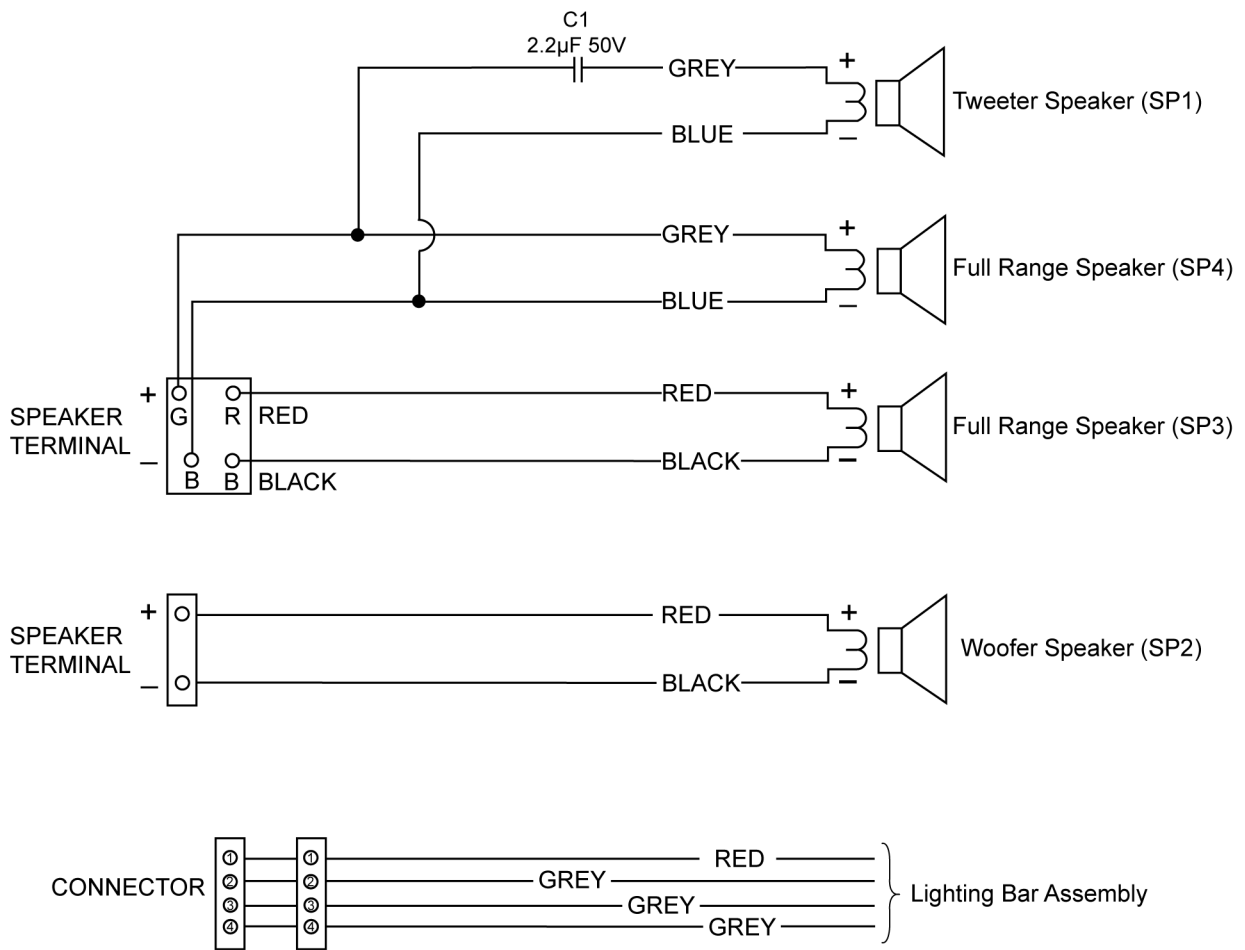
Step 2: Insert the (+) speaker wire into the (+) hole of the Speaker Connector Housing.

Step 3: Push in the speaker wire until hear the “click” sound.



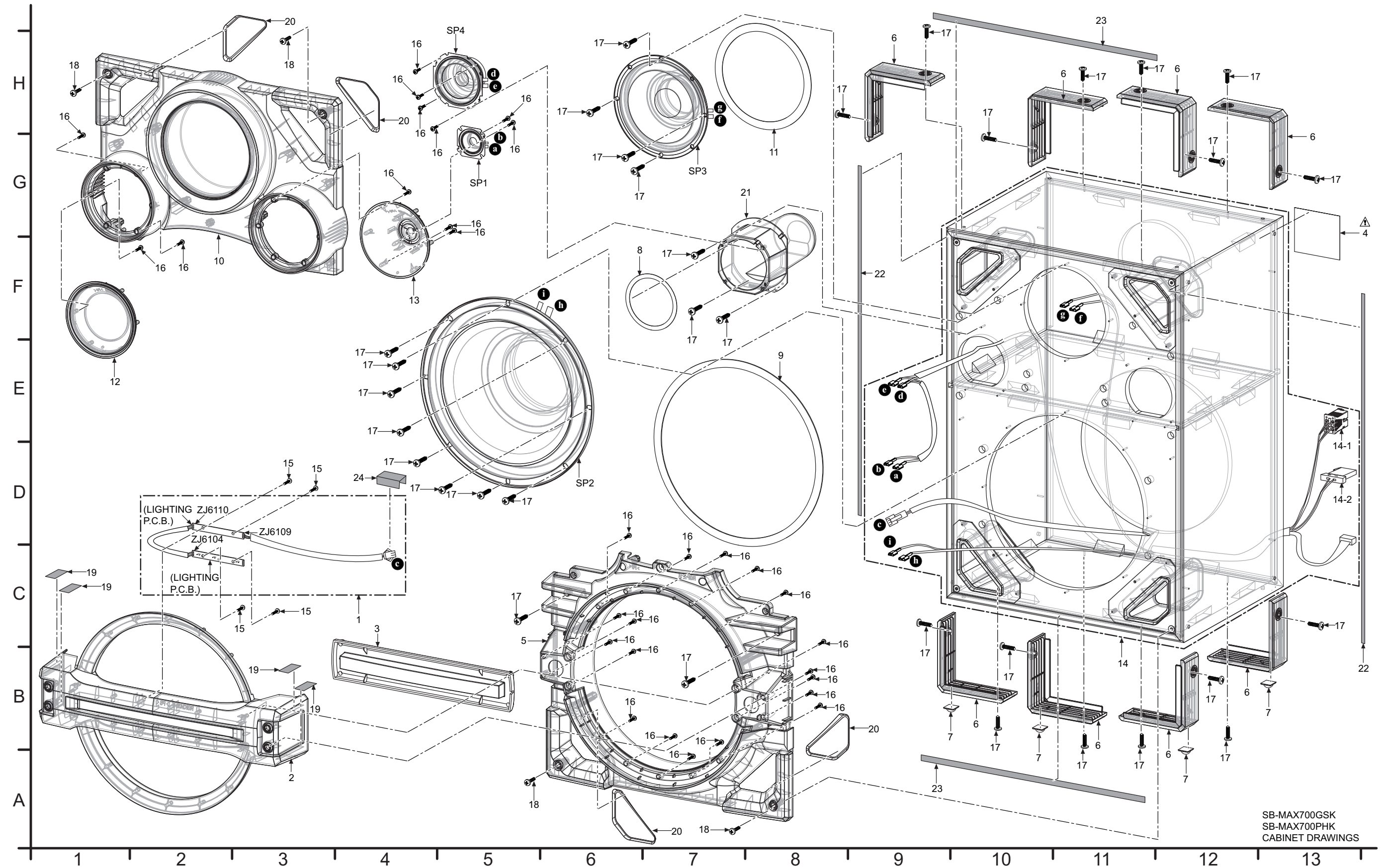
4 Wiring Connection Diagram

4.1. Front Speakers (SB-MAX700PHK)



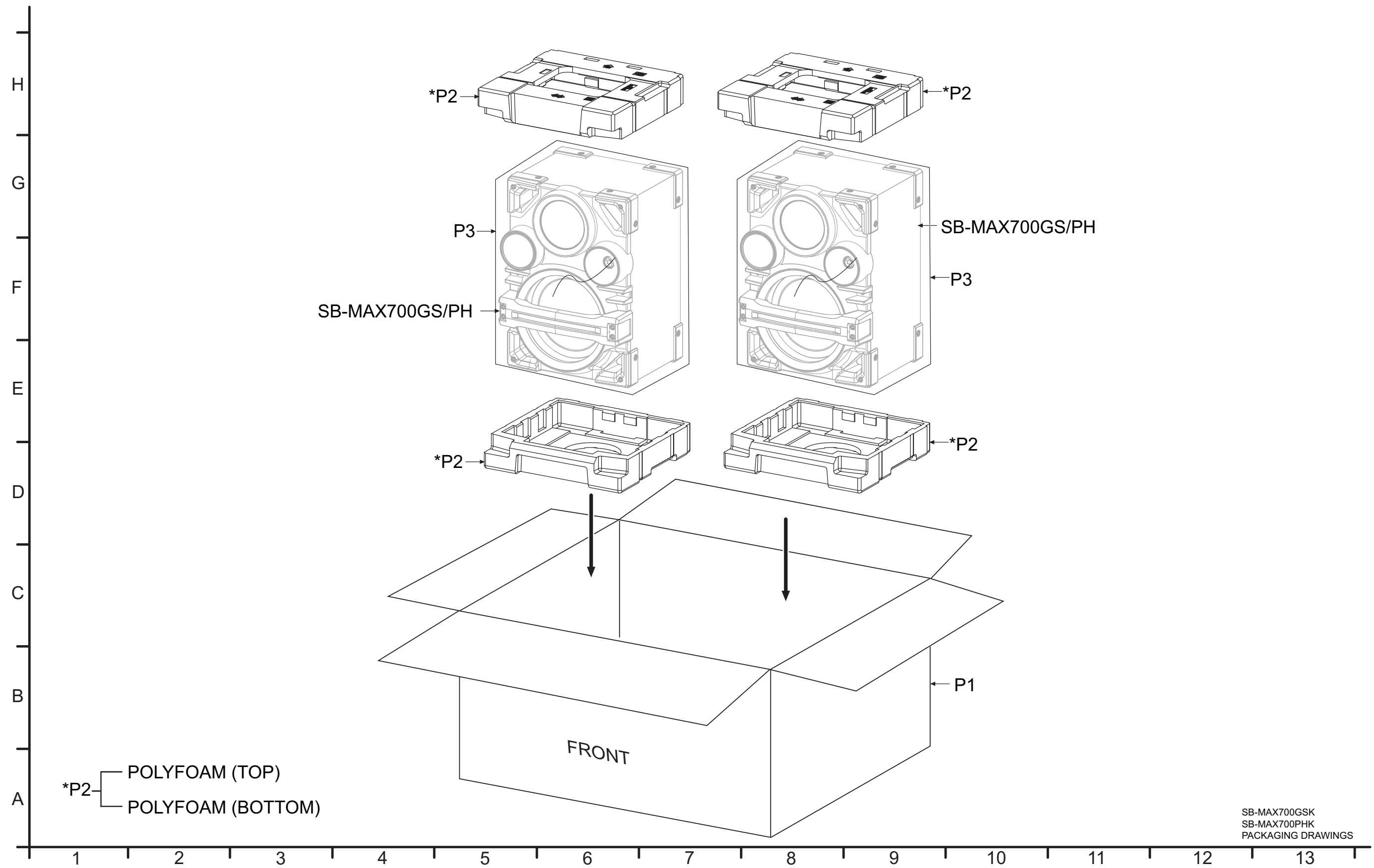
5 Exploded View and Replacement Parts List

5.1. Front Speakers (SB-MAX700PHK) Cabinet Parts Location



SB-MAX700GSK
SB-MAX700PHK
CABINET DRAWINGS

5.2. Packaging



SB-MAX700GSK
 SB-MAX700PHK
 PACKAGING DRAWINGS

5.3. Replacement Parts List

Important Safety Notice

Components identified by Δ 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.

5.3.1. Front Speakers (SB-MAX700PH/ GSK)

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			CABINET & CHASSIS		
	1	REE1765	LIGHTING WIRE PCB ASS'Y	1	
	2	RGK2430-S	FRONT ORNAMENT	1	
	3	RGL0781-Q	LIGHTING PIECE	1	
Δ	4	RGN3336-K	SPEC LABEL (L)	1	
Δ	4	RGN3336A-K	SPEC LABEL (R)	1	
	5	RGP1615-K	LOWER FRONT PANEL	1	
	6	RGQ0708-K	CORNER GUARD	8	
	7	RKA0283-K	LEG RUBBER	4	
	8	RMQ0819	EVA PACKING	1	
	9	RMQ2123	EVA PACKING	1	
	10	RYP1856-K	UPPER FRONT PANEL ASS'Y	1	
	11	RMQX0285-K	EVA PACKING	1	
	12	RYQ1114-K	NET FRAME ASSY (WOOFER)	1	
	13	RYQ1153-K	TWEETER HOLDER ASSY	1	
	14	RYQ1155-K	WOODEN BOX ASSY (L)	1	
	14	RYQ1155A-K	WOODEN BOX ASSY (R)	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	14-1	RFKVBVKX60-W	4P SPK CONNECTOR HOUSING WHITE (L)	1	
	14-1	RFKVBMAX700P	4P SPK CONNECTOR HOUSING RED (R)	1	
	14-2	RFKVBPT760-W	2P SPK CONNECTOR HOUSING WHITE (L)	1	
	14-2	RFKVBPT760-R	2P SPK CONNECTOR HOUSING RED (R)	1	
	15	XTB3+12GFJ	SCREW	4	
	16	XTB4+12GFJ	SCREW	30	
	17	XTB4+16AFJK	SCREW	33	
	18	XTB4+20AFJK	SCREW	4	
	19	RMF0600B	HIMELON	4	
	20	RMF0600C	HIMELON	4	
	21	RMR2103-K	WOOFER SPACER	1	
	22	RMF0600	HIMELON	2	
	23	RMF0600A	HIMELON	2	
	24	RMQ2070	HIMELON	1	
			SPEAKERS		
	SP1	EAS6PH124K	TWEETER	1	
	SP2	L0AA10A00035	WOOFER SPEAKER	1	
	SP3	L0AA20A00024	SPEAKER	1	
	SP4	L0AA38A00007	SPEAKER	1	

5.3.2. Packing Materials

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			PACKING MATERIALS		
	P1	RPG0E40	PACKING CASE	1	GS
	P1	RPG0D55	PACKING CASE	1	PH
	P2	RPN2531	POLYFOAM	2	
	P3	RPF0643	MIRAMAT BAG	2	

IPSG1301