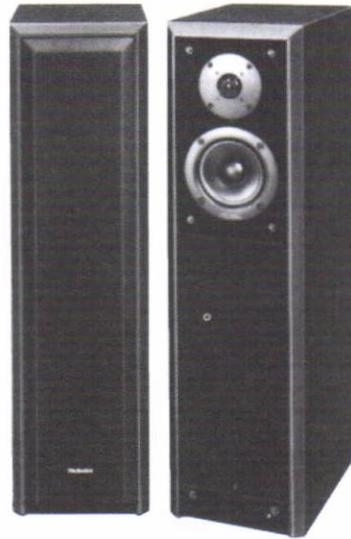


Service Manual

Speaker System

Hi-Fi Speaker System

SB-M500



Colour

(K) ... Black Type

(M) ... Brown Type

SPECIFICATIONS

Type Speakers	3-way 4-speaker system Woofer: Dual Dynamic Drive System 18 cm passive radiator 14 cm cone type driver unit Midrange: 14 cm cone type Tweeter: 2,5 cm dome type
Impedance	6 Ω
Input Power	160 W, Music 80 W, DIN
Output Sound Pressure Level	86 dB/W (1,0 m)
Crossover Frequency	90 Hz, 2,5 kHz
Frequency Range	35 Hz \approx 45 kHz (-16 dB) 41 Hz \approx 38 kHz (-10 dB)
Dimensions (W x H x D)	220 x 790 x 365 mm
Weight	18,5 kg

Note:
Design and specifications are subject to change without notice.

ESPECIFICACIONES

Tipo Altavoces	Sistema con 4 altavoces Graves: Dual Dynamic Drive System Radiador pasivo de 18 cm Activo tipo cónico de 14 cm Medios: tipo cónico de 14 cm Agudos: tipo cúpula de 2,5 cm
Impedancia	6 Ω
Capacidad de potencia	160 W, Música 80 W, DIN
Nivel de presión acústica de salida	86 dB/W (1,0 m)
Frecuencia de cruce	90 Hz, 2,5 kHz
Respuesta de frecuencias	35 Hz \approx 45 kHz (-16 dB) 41 Hz \approx 38 kHz (-10 dB)
Dimensiones (W x H x D)	220 x 790 x 365 mm
Peso	18,5 kg

Nota:
Estas especificaciones están sujetas a cualquier cambio sin previo aviso.

SPECIFICATIONS

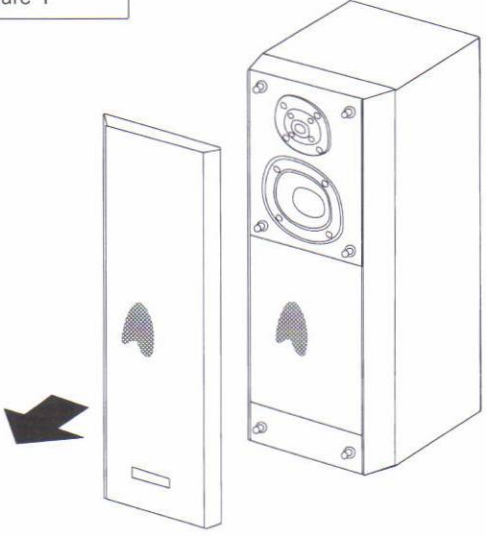
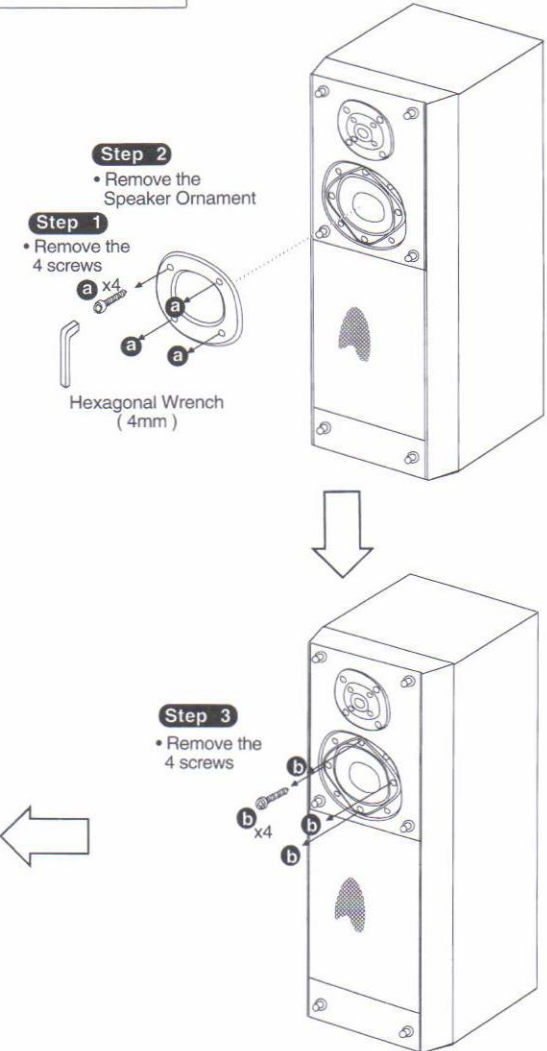

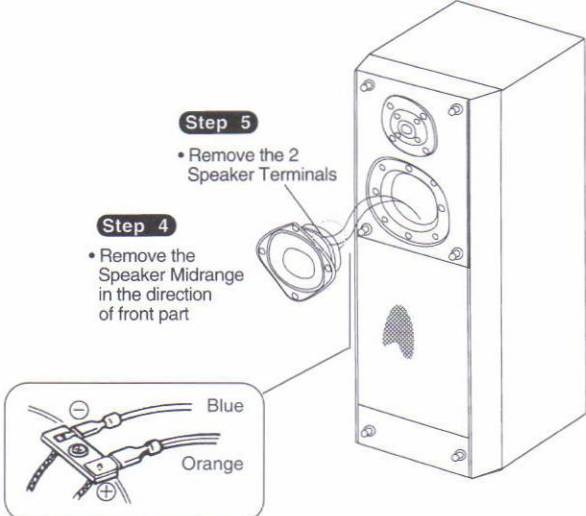
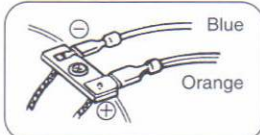
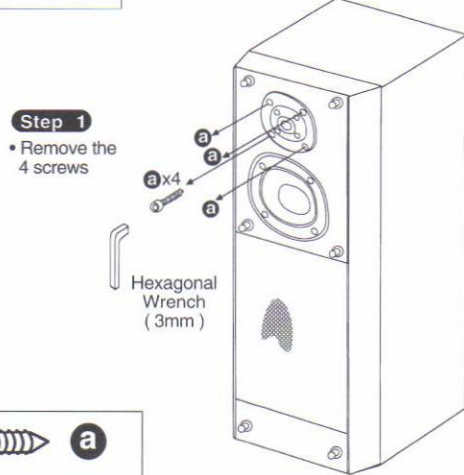

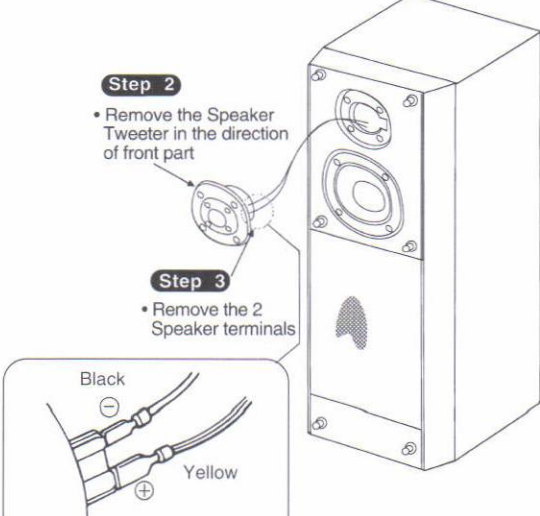
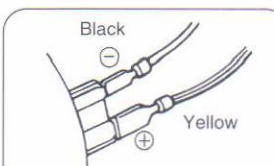
Type Haut-parleurs	3-voies 4-haut-parleurs Graves: Dual Dynamic Drive System Graves: 18 cm diffuseur passive 14 cm type a cone exciteur active Moyennes: 14 cm type a cone Aigus: 2,5 cm type dome
Impédance	6 Ω
Entrée maximale	160 W, Musique 80 W, DIN
Niveau de pression sonore de sortie	86 dB/W (1,0 m)
Fréquence de commutation	90 Hz, 2,5 kHz
Gamme de fréquences	35 Hz \approx 45 kHz (-16 dB) 41 Hz \approx 38 kHz (-10 dB)
Dimensions (W x H x D)	220 x 790 x 365 mm
Poids	18,5 kg

Note:
Sujet à changement sans preavis.

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 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.

DISASSEMBLY INSTRUCTIONS

Ref. No. 1	Removal of the Speaker Net	Ref. No. 2	Removal of the Speaker Midrange
Procededure 1	 <ul style="list-style-type: none"> Remove the Speaker Net in the direction of arrow. 	Procededure 1 → 2	 <ul style="list-style-type: none"> Step 1 <ul style="list-style-type: none"> Remove the 4 screws Step 2 <ul style="list-style-type: none"> Remove the Speaker Ornament Step 3 <ul style="list-style-type: none"> Remove the 4 screws 
	 <ul style="list-style-type: none"> Step 4 <ul style="list-style-type: none"> Remove the Speaker Midrange in the direction of front part Step 5 <ul style="list-style-type: none"> Remove the 2 Speaker Terminals 		
Ref. No. 3	Removal of the Speaker Tweeter		
Procededure 1 → 3	 <ul style="list-style-type: none"> Step 1 <ul style="list-style-type: none"> Remove the 4 screws 	 <ul style="list-style-type: none"> Step 2 <ul style="list-style-type: none"> Remove the Speaker Tweeter in the direction of front part Step 3 <ul style="list-style-type: none"> Remove the 2 Speaker terminals 	

Ref. No. 4

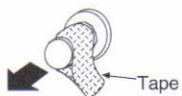
Removal of the Front Panel

Procededure 1 → 4

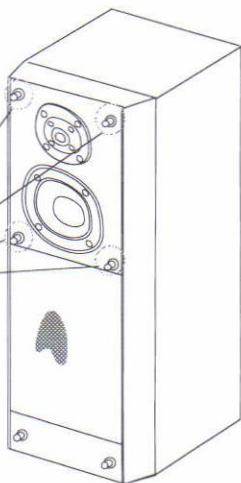
Step 1

- Remove the 4 Catch Pin

■ Removal of the Catch Pin

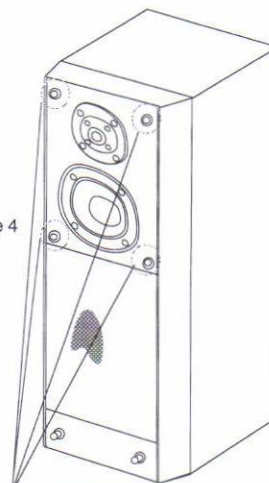


Put the tape in Catch Pin

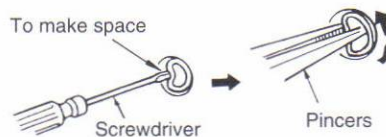


Step 2

- Remove the 4 Net Holder



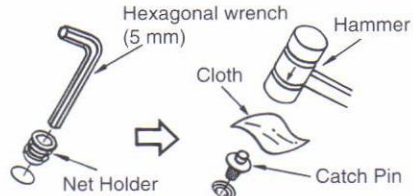
■ Removal of the Net Holder



1. To use a screwdriver ⊖ and make space between the front panel and the Net Holder.
 2. To insert the pincers type point and take the Net Holder to rotate.
- ※ Pay attention not to break the Net Holder. Please, they stock the Net Holder. (SHG8G9044).

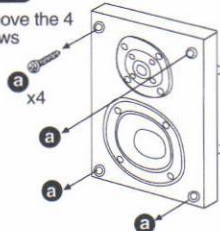
■ Inserting the Net Holder and Catch Pin

1. Insert the Net Holder using the 5 mm type hexagonal wrench or similar tool like rod.
2. After inserting the Catch Pin, press the Catch Pin covering with cloth using the hammer or screwdriver grip.



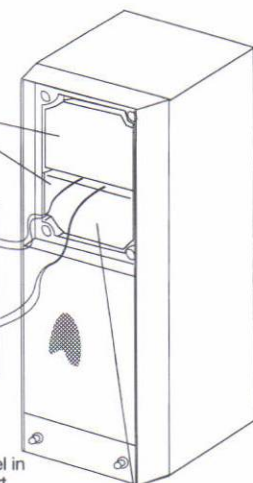
Step 3

- Remove the 4 screws



Step 4

- Remove the Front Panel in the direction of front part



ATTENTION

This absorber should cover the cables of the conection wit the Speaker Midrange. So that they don't touch the cavity.



Screw Ø 4,2 x 25 mm

Ref. No. 5

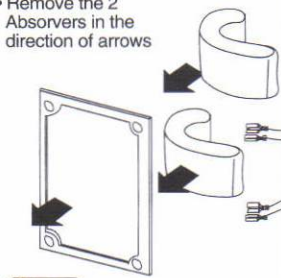
Removal of the Network Ass'y

Procedudure

1 → 2 → 3 → 4 → 5

Step 2

- Remove the 2 Absorbers in the direction of arrows



Step 1

- Remove the gasket Front Panel in the direction of arrow

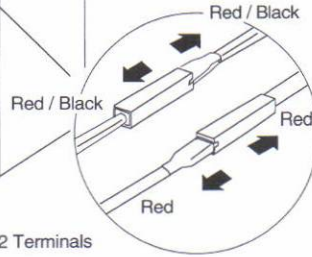


a

Screw Ø 4,2 x 8 mm

Step 3

- Remove the 2 Terminals



Step 7

- Remove the Absorber

Step 4

- Remove the 2 screws

a x2

a

Step 5

- Remove the Cavity and gasket in the direction of arrow

Step 6

- Remove the gasket Cavity

Ref. No. 6

Removal of the Speaker Woofer Frontal

Procedudure 1 → 6

Step 1

- Remove the 2 Catch Pin

Removal of the Catch Pin

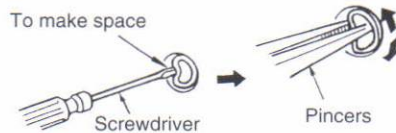


Put the tape in Catch Pin

Step 2

- Remove the 2 Net Holder

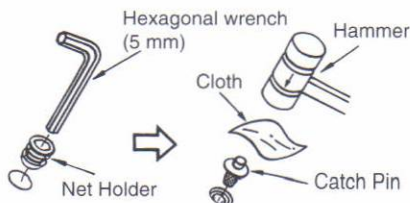
Removal of the Net Holder



1. To use a screwdriver ⊖ and make space between the front panel and the Net Holder.
 2. To insert the pincers type point and take the Net Holder to rotate.
- ※ Pay attention not to break the Net Holder. Please, they stock the Net Holder. (SHG8G9044).

Inserting the Net Holder and Catch Pin

1. Insert the Net Holder using the 5 mm type hexagonal wrench or similar tool like rod.
2. After inserting the Catch Pin, press the Catch Pin covering with cloth using the hammer or screwdriver grip.



Step 4

- Remove the Ornament Frontal in the direction of arrow

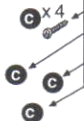
Step 3

- Remove the 2 screws



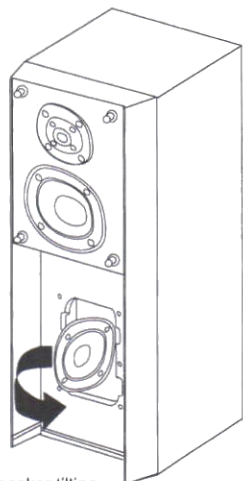
Step 8

- Remove the 4 screws



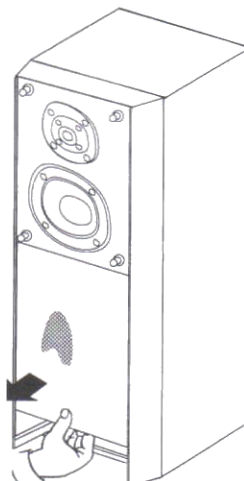
Step 9

When remove the speaker tilting it as indicated in this picture



Step 5

- Remove the Net Frame in the direction of arrow

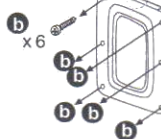


ATTENTION

- When assembly the Passive Radiator put UP mark to upward.

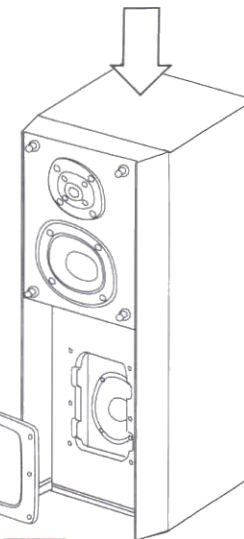
Step 6

- Remove the 6 screws



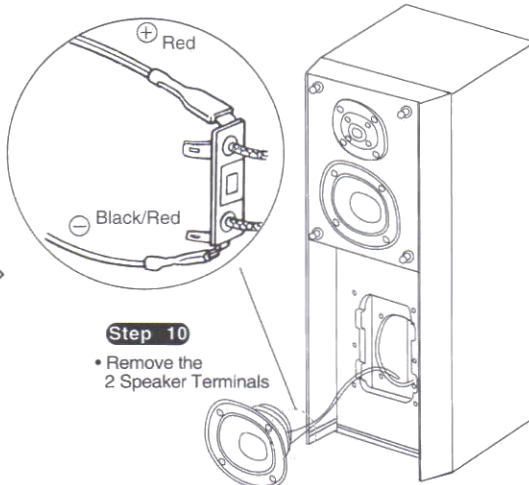
Step 7

- Remove the Passive Radiator and gasket.



Step 10

- Remove the 2 Speaker Terminals



a

Screw Ø 4,2 x 25 mm



b

Screw Ø 4,2 x 25 mm



c

Screw Ø 4,2 x 20 mm

Ref. No. 7

Removal of the Speaker Woofer Rear

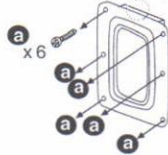
Procededure 7

ATTENTION

- When assembly the Passive Radiator put UP mark to upward.

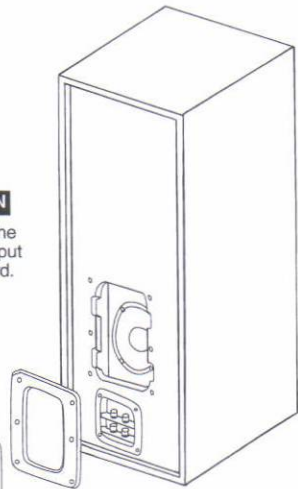
Step 1

- Remove the 6 screws



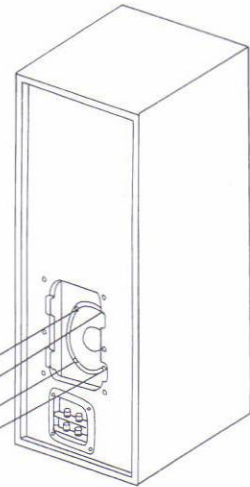
Step 2

- Remove the Passive Radiator and gasket.



Step 3

- Remove the 4 screws



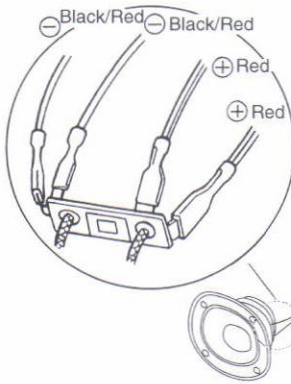
Step 4

- When remove the speaker tilting it as indicated in this picture



Step 5

- Remove the 4 Speaker Terminals



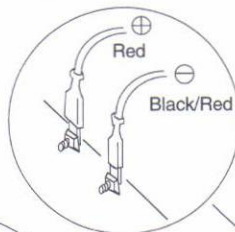
Ref. No. 8

Removal of the Terminal Block

Procededure 8

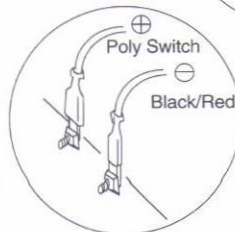
Step 2

- Remove the 2 Terminals HF



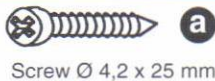
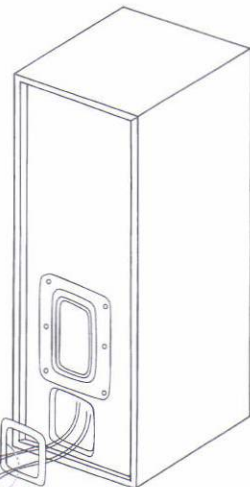
Step 3

- Remove the 2 Terminals LF

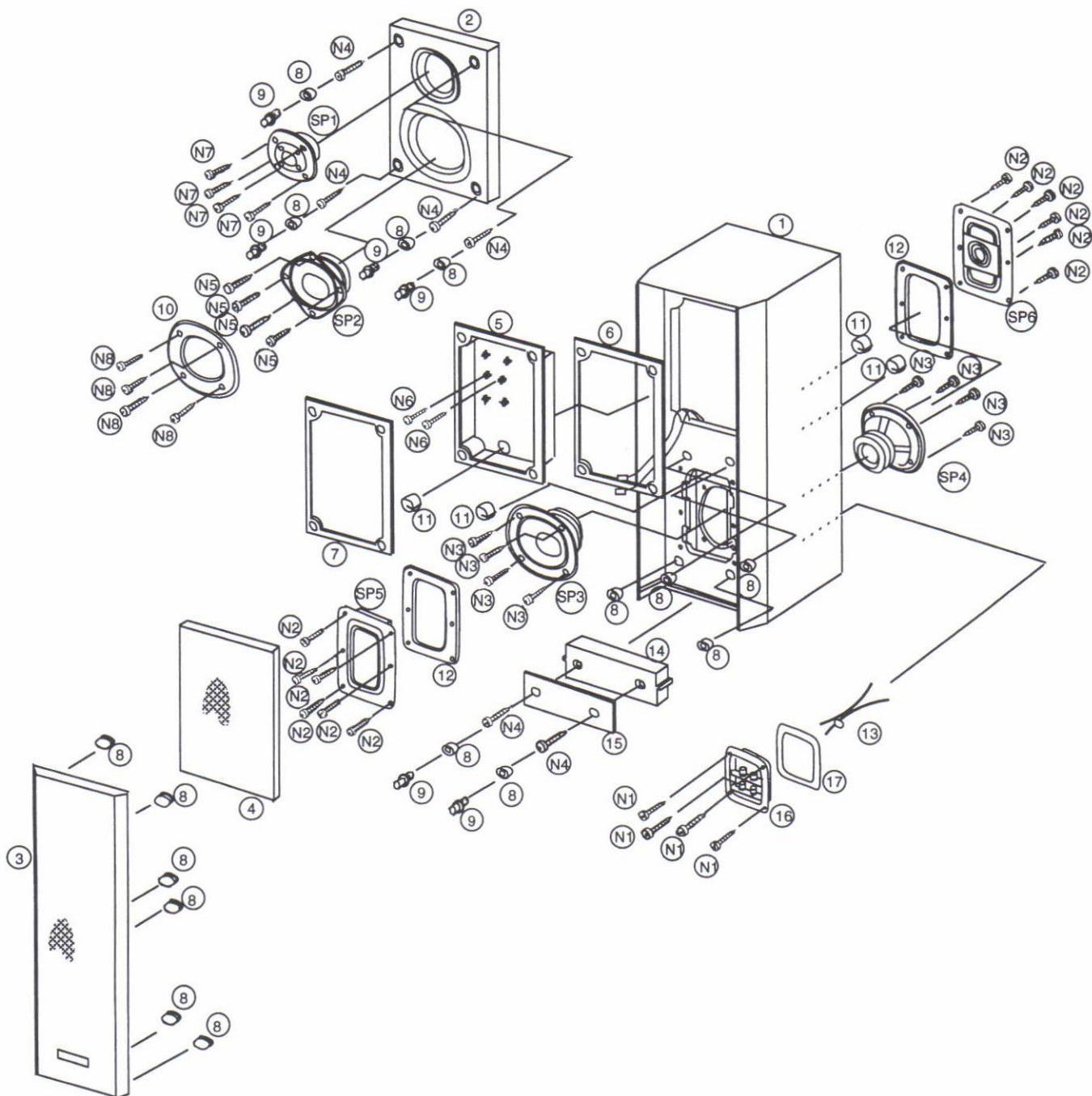


Step 1

- Remove the 4 screws



EXPLODED VIEW



REPLACEMENT PARTS LIST

Notes 1. Part numbers are indicated on most mechanical parts. Please use this part number for parts orders.

2. **PAES** indicates parts that are supplied by PAES.

3. **AD** indicates parts that are supplied by AD. M.E.I.

Notas 1. El código está indicado en la mayoría de las piezas. Por favor, use este código para sus pedidos.

2. La indicación **PAES** significa recambios suministrados a través de PAES.





3. La indicación **AD** significa recambios suministrados a través de AD. M.E.I.

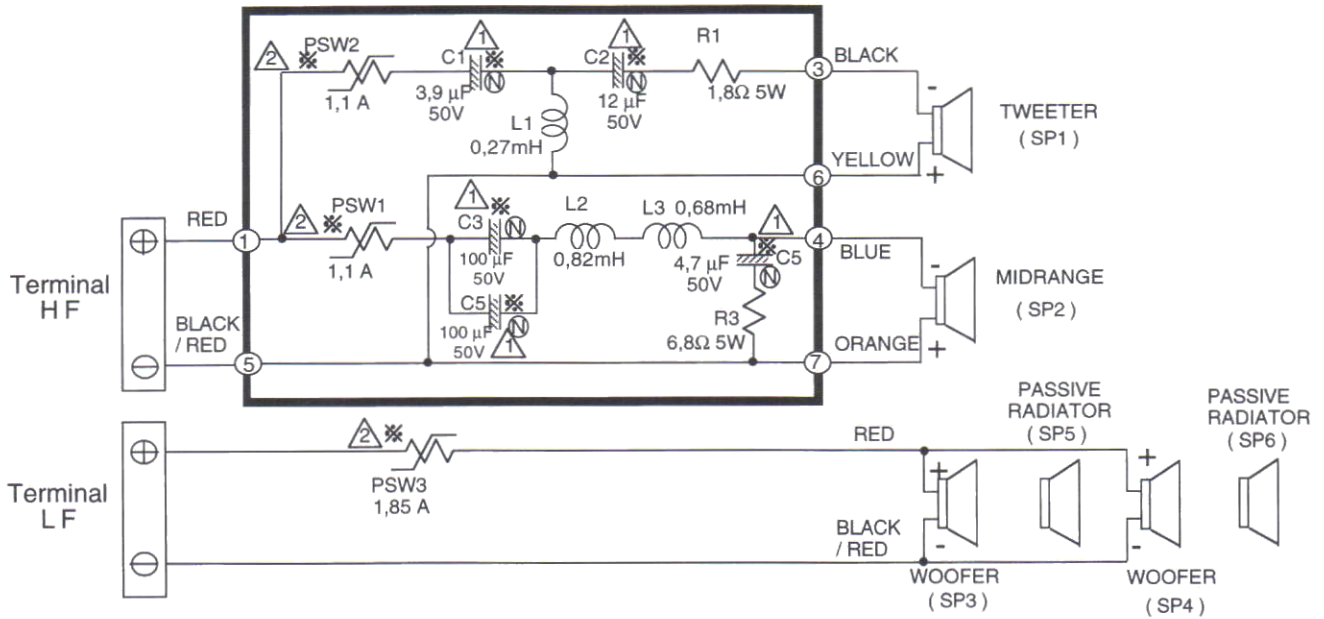
Ref. No.	Part No.	Part Name & Description	Remarks
		SPEAKER (S)	
SP1	EAS25KH327A6	SPEAKER (TWEETER)	PAES
SP2	EAS12PL337A6	SPEAKER (MIDRANGE)	PAES
SP3	EAS14PL328B6	SPEAKER (WOOFER)	PAES
SP4	EAS14PL328B6	SPEAKER (WOOFER)	PAES
SP5	EAS18PY29A6	SPEAKER (PASSIVE RADIATOR)	PAES
SP6	EAS18PY29A6	SPEAKER (PASSIVE RADIATOR)	PAES
		COIL (S)	
L1	SLCP271J7	CHOQUE COIL 0,27mH	PAES
L2	SLCP821J7	CHOQUE COIL 0,82mH	PAES
L3	SLCP681J7	CHOQUE COIL 0,68mH	PAES
		CAPACITOR (S)	
C1	ECA50YT3R9KE	NON-POLAR CAPACITOR 3,9µF 50V	PAES
C2	ECEA50Y12KE	NON-POLAR CAPACITOR 12µF 50V	PAES
C3	ECEA50Y100KE	NON-POLAR CAPACITOR 100µF 50V	PAES
C5	ECA50YT4R7KE	NON-POLAR CAPACITOR 4,7µF 50V	PAES
C6	ECEA50Y100KE	NON-POLAR CAPACITOR 100µF 50V	PAES
		RESISTOR (S)	
R1	ERF5ZXK1R8	RESISTOR 1,8Ω 5W	AD
R3	ERF5ZXK6R8	RESISTOR 6,8Ω 5W	AD
		POLY SWITCH	
PSW1	SSBSRXE110	POLY SWITCH 1,1A	PAES
PSW2	SSBSRXE110	POLY SWITCH 1,1A	PAES
PSW3	SSBSRXE185	POLY SWITCH 1,85A	PAES
		CABINET ASS'Y	
1	SYMPM500K	CABINET ASS'Y (K)	PAES
1	SYMPM500M	CABINET ASS'Y (M)	PAES
2	RYPP0122	FRONT PANEL	PAES
3	SYBPM500A	NET FRAME (OUTSIDE)	PAES
4	SYBPM500B	NET FRAME (INSIDE)	PAES
5	RMRP0993	CAVITY	PAES

Ref. No.	Part No.	Part Name & Description	Remarks
6	RMQP0602	GASKET CAVITY	PAES
7	RMQP0588A-1	GASKET FRONT PANEL	PAES
8	SHG8G9044	NET HOLDER	PAES
9	RMQP0455	CATCH PIN	PAES
10	RGKP0719KE	ORNAMENT MIDRANGE	PAES
11	SHGS8G9071	GASKET	PAES
12	RMQP0589A	GASKET PASSIVE RADIATOR	PAES
13	REXP500WT	CABLE LF ASS'Y	PAES
14	RGQP0189	BASEBOARD	PAES
15	RGKP0828-K	ORNAMENT BASEBOARD	PAES
16	REJ0076	TERMINAL BLOCK	PAES
17	RMQP0589B	GASKET TERMINAL	PAES
		SCREW (S)	
N1	XTNP42+25FG	SCREW TERMINAL BLOCK	PAES
N2	XTN42+25FG	SCREW PASSIVE RADIATOR	PAES
N3	XTN42+20	SCREW WOOFER	PAES
N4	XTN42+25	SCREW FRONT PANEL	PAES
N4	XTN42+25	SCREW BASEBOARD	PAES
N5	XTN42+16	SCREW MIDRANGE	PAES
N6	XTBS42BZ+8	SCREW NETWORK ASS'Y	PAES
N7	SNES4+16FG	SCREW TWEETER	PAES
N8	SNES5+16FG	SCREW ORNAMENT MIDRANGE	PAES
		ACCESORIES	
A1	SQXPM500	INSTRUCTION BOOK	PAES
A2	XZBA4	BAG	PAES
		PACKING PARTS	
P1	SPGPM500K	CARTON BOX (K)	PAES
P1	SPGPM500M	CARTON BOX (M)	PAES
P2	SPSPM500	PAD	PAES
P3	SPHP23045	SHEET	PAES

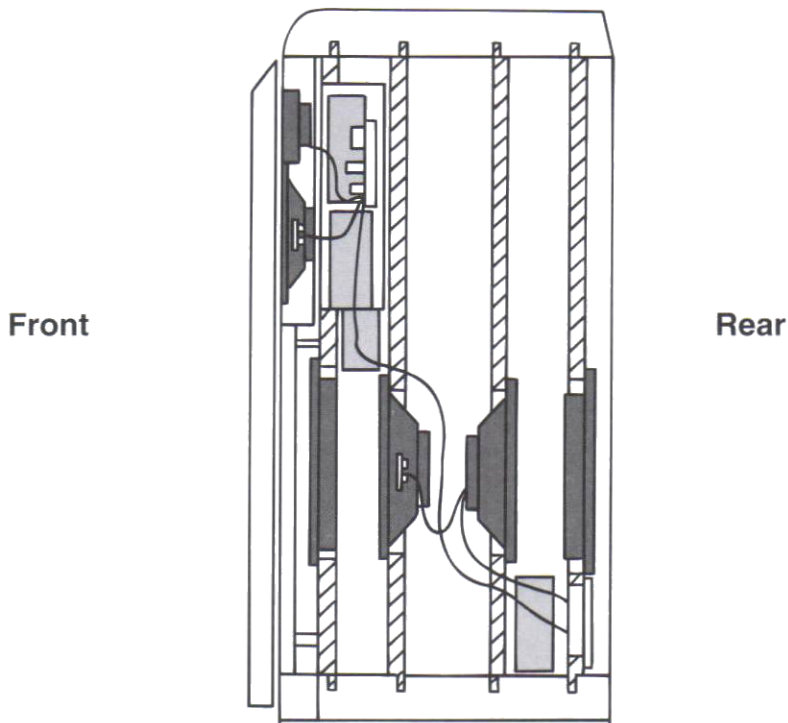
SCHEMATIC DIAGRAM

(This schematic diagram may be modified at any time with development of new technology.)
 (Este esquema puede ser modificado en cualquier momento con el desarrollo de nuevas tecnologías.)

-   NON POLAR CAPACITOR
-   POLY SWITCH



SECTION VIEW



■ PACKAGING

