

270249 - PFM Service Manual Addendum

This sheet contains an addendum to PFM Service Manual including:

PFM15.3XL a big three way passive speaker.

PFM18S a 18" passive subwoofer speaker.

PFM18SA a 18" active subwoofer speaker.

Service note about 350W amplifier module replacing on following subwoofer speakers:

SP SUB

SPX SUB

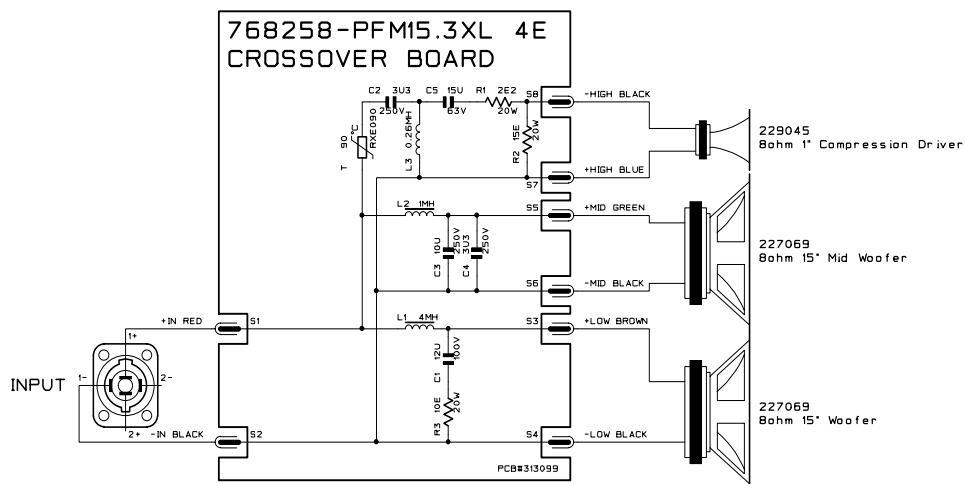
PFM15SA

PFM18SA

Note: the PFM18SA have the same schematics of PFM15SA at page 13 of 270249 Service Manual, the only difference is the speaker and the 4 resistors value specified further.

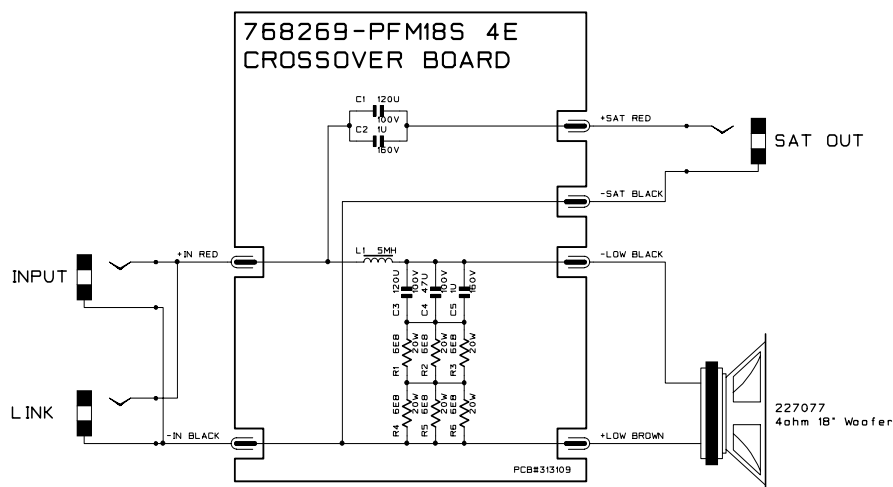
PFM 15.3XL 4ohm

SPECIFICATION	
WAYS	3
XOVER FREQ.	400Hz ~ 2.6KHz
SLOPE	6-12-18dB/oct
POWER rms	500W
POWER max	1000W
NOMINAL IMPEDANCE	4ohm



PFM 18S 4ohm

SPECIFICATION	
WAY	1
XOVER FREQ.	120Hz
SLOPE	6dB/oct
POWER rms	350W
POWER max	500W
NOMINAL IMPEDANCE	4ohm



SERVICE NOTE

Regarding 951093/094 SP SUB, 951318/319 SPX SUB, 951177/178 PFM15SA, 951341/342 PFM18SA subwoofer amplified speakers they use the same two 350W amplifier module with only few differences.

These modules are:

737117 350W 230Vac Power Amplifier Module (EU)

737118 350W 115Vac Power Amplifier Module (US)

where the only difference is the mains AC supply.

PLEASE ORDER TO GM ONLY THESE PARTS WHEN YOU REPLACE THE WHOLE AMPLIFIER MODULE.

The few differences between subwoofer speakers are located on 768181 - STEREO CROSSOVER AND CONTROLS BOARD, only few resistors change their values and the following table explain these changes:

SP SUB	SPX SUB	PFM-15SA	PFM-18SA
R21 6K81	12K7	6K81	18K2
R22 115K	88K7	115K	121K
R32 10K0	10K0	10K0	5K00 (two 10K0 paralleled)
R33 10K0	10K0	10K0	5K00 (two 10K0 paralleled)

The 737117 and 737118 modules mount on R21, R22, R32, R33 positions the SP SUB and PFM-15SA resistor values, this means that you can replace the module in these speakers without changing the resistors.

While if you replace a module in SPX SUB or PFM-18SA you have to change these resistors, therefore order to GM also these parts:

Code	Qnty	Description	Model	Note
042717	1	88K7 1/4W 1% Metalized Film Resistor	SPX SUB	sold it instead R22
042614	1	12K7 1/4W 1% Metalized Film Resistor	SPX SUB	sold it instead R21
042732	1	121K 1/4W 1% Metalized Film Resistor	PFM-18SA	sold it instead R22
042632	1	18K2 1/4W 1% Metalized Film Resistor	PFM-18SA	sold it instead R21
042605	2	10K0 1/4W 1% Metalized Film Resistor	PFM-18SA	sold each one in parallel to R32 and R33

For schematics and other spare part replacement codes refer to the appropriate service manual.

Spare Part List

Legend
EU=Europe Version at 230Vac
US=US Version at 115Vac

Accessories
277387 Owner’s Manual (new for all PFM speakers)

PFM-15.3XL 40hm
768258 Crossover Filter Board (4E) (Pcb#313099)
The service is made replacing the entire board.
727634 Rear Panel Assembly
778164 * Cables Assembly
141200 ** Speakon Socket (NL4MP Neutrik)
667743 * Panel
120581 * M3 Black Self-Locking Nut
120451 * 3.2x7x0.5 Black Washer
120030 * M3x12tsp Black Screw
727633 Horn Assembly
347407 * EWT Gray Elliptical Horn
229045 * 1” 8ohm Horn Tweeter Speaker
229049 ** 1” 8ohm Diaphragm for 229045 Tweeter
210267 * Gasket between Horn and Box
210211 * Gasket between Driver and Horn
177123 * Driver Support
120346 * WL4x20tc Black Screw
120106 * M5x10tsp Black Screw
717082 Speaker Box Assembly
430088 * PFM-15.3XL Wooden Speaker Box
340969 * 37x15mm Rubber Foot
177783 * Black Metallic Flange
177328 * 220x160mm Metal Handle
120664 * M6 4-tips Lock Nut
120662 * M5 4-tips Lock Nut
120661 * M4 4-tips Lock Nut
120417 * WL4X35tt Black Screw
120411 * WL3.5x20tt Black Screw
120111 * M6x25tsp Black Screw
667742 Speaker Net
227069 15” 8ohm Woofer Speaker
210274 Speaker Filler (400gr/m² 100x50x4cm)
210273 Speaker Filler (400gr/m² 50x50x4cm)
210217 Black Sealer (specify mt)
180662 "Lem" Adhesive Blue Plate
150298 100x2.5mm Nylon Cable Tie
120483 5mm Black Shakeproof Washer
120461 5.3x10x1 Black Washer
120414 WL3.5x35tt Black Screw
120411 WL3.5x20tt Black Screw
120364 WL3.5x12tt Black Screw
120124 M5x30tc Black Screw
120059 M4x25tc Black Screw

PFM-18S 40hm
768269 PFM18S 4E Crossover Board (Pcb#313109)
The service is made replacing the entire board.
727637 Rear Panel Assembly
778149 * Input Cables Assembly (dual jack socket)
140193 ** Jack Mono Socket
778148 * Input Cables Assembly (single jack socket)
140193 ** Jack Mono Socket
667716 * Input Panel
180805 * PFM Sub I/O Adhesive Label
120541 * 16x9x1.6 Washer for Jack
717086 Speaker Box Assembly
657246 * 100x200mm Black Tube
430092 * PFM-18S Wooden Speaker Box
340969 * 37x15mm Rubber Foot
177783 * Black Metallic Flange
177328 * 220x160mm Metal Handle
120664 * M6 4-tips Lock Nut

120662	*	M5 4-tips Lock Nut
120417	*	WL4X35tt Black Screw
120411	*	WL3.5x20tt Black Screw
120111	*	M6x25tsp Black Screw
667746 Speaker Net		
347204		Jack Socket Cap
227077 18” 4ohm Woofer Speaker		
210273		Speaker Filler (400gr/m² 50x50x4cm)
210272		Speaker Filler (400gr/m² 30x50x4cm)
210217		Black Sealer (specify mt)
210215		Adhesive Rubber Foam 10x1.9mm (Specify mt)
180662		"Lem" Adhesive Blue Plate
120483		5mm Black Shakeproof Washer
120461		5.3x10x1 Black Washer
120411		WL3.5x20tt Black Screw
120364		WL3.5x12tt Black Screw
120124		M5x30tc Black Screw

PFM-18SA
737117 350W 230Vac Power Amplifier Module (EU)
737118 350W 115Vac Power Amplifier Module (US)
for a particular spare part code of 737117 and 737118 assemblies refer to 737090 and 737091 (PFM-15SA) at page 15 of 270249 service manual, read also the service note explained above.
717085 Speaker Box Assembly
657246 * 100x200mm Black Tube
430091 * PFM-18SA Wooden Speaker Box
340969 * 37x15mm Rubber Foot
177783 * Black Metallic Flange
177328 * 220x160mm Metal Handle
120664 * M6 4-tips Lock Nut
120662 * M5 4-tips Lock Nut
120661 * M4 4-tips Lock Nut
120417 * WL4X35tt Black Screw
120411 * WL3.5x20tt Black Screw
120111 * M6x25tsp Black Screw
667746 Speaker Net
659027 White Pot Knob
659026 Orange Pot Knob
227077 18” 4ohm Woofer Speaker
210273 Speaker Filler (400gr/m² 50x50x4cm)
210272 Speaker Filler (400gr/m² 30x50x4cm)
210217 Black Sealer (specify mt)
210215 Adhesive Rubber Foam 10x1.9mm (Specify mt)
180662 "Lem" Adhesive Blue Plate
120483 5mm Black Shakeproof Washer
120461 5.3x10x1 Black Washer
120364 WL3.5x12tt Black Screw
120124 M5x30tc Black Screw
120059 M4x25tc Black Screw
130297 Mains Cable 10A (EU)
130283 Mains Cable 10A (US)

Note:
Each spare part is single quantity unless otherwise specified.
Asterisk prefix explanation:
Omitted = First level spare part.
One asterisk = Second level, part of previous listed first level part.
Two asterisk = Third level, part of previous listed second level part.
Three asterisk=
Any request for not above mentioned part must encompass specific description including:
1) Model name,
2) Section name,
3) Module code,
4) Reference name,
5) Quantity number.