OPERATING INSTRUCTIONS BIOLOGICAL PART WASHER







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1 INFORMATION

We thank you for acquiring this biological, solvent-free part washer. The parts washer unit combines the action of a neutral pH water-based cleaning solution with tablets of special micro-organisms that biodegrade hydrocarbons and regenerate the cleaning bath.

1.1 PRODUCT REFERENCES

BLUELIQUID.: Cleaning solution for which the washer has been adapted.

BLUETAB: Micro-organism tablet.

OCEAN SUNSET: Degreasing parts washer.

1.2 WARNINGS

CAUTION



Please read these instructions carefully before using the unit. To be used only with the liquid and tabs provided by the supplier.

- 1- The parts washer must ONLY be connected to a 230 Volt supply with a ground terminal and ground fault circuit interrupter. Maximum power consumed by the parts washer is 1,100 W.
- 2- Do not use electric extension leads.
- 3- Do not pour any pollutants (solvent, oil, grease, engine oil, diesel fuel or petrol) directly into the parts washer. Pouring solvent-based products into the parts washer may destroy its internal organs.
- 4- Never add or pour in any products such as solvents, biocides or disinfectants, alcohols, halogenated agents, inflammable products, acid, bases, boiling water, esters or toxic products. Pouring these products into the parts washer may destroy its internal organs and be dangerous for health.
- 5- The operator must use gloves and safety glasses



6- To work with a complete security, this equipment have to be enlightened with a minimum lighting of 100 LUX.

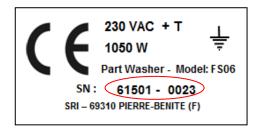
- **7-** Do not modify any elements on the parts washer. It has been designed for use with our cleaning solution and our micro-organism tablets.
- **8-** Leave the parts washer switched on to maintain the oxygenation and temperature levels required for the hydrocarbon-degrading micro-organisms to develop satisfactorily.
- 9- Low level detection: The parts washer is equipped with an automatic low-level control system. It runs with a liquid level of between 45 and 80 liters, when the level drops below 45 liters, the pump and heater stop automatically. In this case, the level must be topped up with 20 or 40 liters of our ready-to-use degreasing solution and micro-organism tablets.
- **10-** When the parts washer is switched on, following a power cut, it will go automatically into safety mode. Press the heating button for the unit to be fully operational.
- **11-** Unplug the parts washer:
 - . before draining.
 - . during cleaning.
- 12- Do not dismantle the pump or any other components without disconnecting the parts washer and leaving it sufficient time to cool down.
- **13-** Limit soaking time for all sensitive metals. Never leave a part to soak over-night.

GENERAL INFORMATION 1.3

The parts washer meets all safety requirements stipulated in the following directives:

- "Machines" directive 2006/42/EC;
- "Low voltage" directive 2006/95/EC;
- Directive 2004/108/EC on electromagnetic compatibility.

For assistance, please contact your commercial agent and with every request specify the serial number glued to the back of the machine:



HANDLING / TRANSPORTING / MOVING THE PARTS WASHER

- For moving or transporting the parts washer, drain it into empty cleaning solution cans (See procedure
- Place the parts washer vertically on a 600 x 800 mm palette (The parts washer should never be transported lying flat).
- Protect the parts washer with an appropriate packaging.
- Film the palette to prevent it from tipping over during transport.

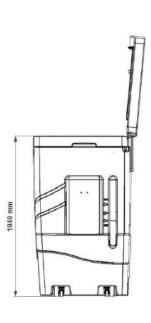
1.5 CHARACTERISTICS

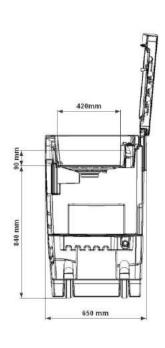
Maximum power	1050 watts.
Noise level	< 50 dBa.
Weight when empty (without cleaning	46 Kg
solution)	
Tank material	Medium density polyethylene (PEMD).
Power supply	230 V + T Ground, protected by a 30mA fault circuit
	breaker
Nominal operating temperature	38°C
Overall dimensions	905 x 650mm - h: 1080mm (lid closed).
Usable cleaning tank dimensions	790 x 420 x 200 mm
Filtration	SS basket filter 700µ / external SS filter 140µ
Tank Capacity	55 to 100 liters
Soaking area Capacity	30 liters. Soaking height 90 mm.
Minimum level without soaking	55 liters in the tank.
Minimum level with soaking	87 liters (55 liters in the tank + 30 liters in the soak-tank +
	2 liters of product in the piping).
Tool-holder flow (brush alone)	3.4 liters / mn (with clean filter)
	·

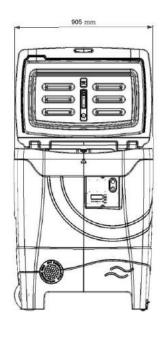
ELECTRICITY CONSUMPTION *

*MEASUREMENTS MADE OVER 24 HOURS WITH THE BATH AT 38° AND CONTAINING 60 LITERS OF PRODUCT

At an ambient temperature of 18 °C	Consumption is 250 w/h with 60 liters of product.
At an ambient temperature of 23 °C Consumption is 200 w/h with 60 liters of product.	
With 12 h in ECO mode Consumption is reduced by 25 % over 24h.	









2 PREPARING THE PARTS WASHER

2.1 PREPARATION & INSPECTION

- Remove the two sets from the two cardboards:
 - Set 1: Basis of the parts washer
 - Set 2: Tank, lid and sink.
- Double check that the parts washer has not suffered from any damage during transport and installation.

2.2 PUTTING ELEMENTS INTO POSITION

- 1. Assemble the tank, lid and sink on the basis.
- 2. Open the lid and unpack the pump that is on the tank.
- 3. Take off the pump, the soak tank cover (waves engraved), the soak tray bung and the SS basket filter.
- 4. Remove the sink unclipping the black hose under the sink and removing the brush hose from its indentation.



5. Make sure the electric kit is fitted in the adapted slide / compartment.



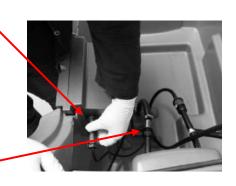
Deposit the pump on the bottom of the tank, in the appropriate place (between the 4 cones) and connect its electric cable to the kit: join the green-ring connector and turn it until it gets inside the kit connector.

CAUTION



You may have to make a complete turn to find the notch. Do not force, it just goes in smoothly.

- 7. Once connected properly, screw the green ring to fix the connector.
- 8. Connect the pump to the filter with the guick connector.



9. Place the electric kit hose in the adapted groove.



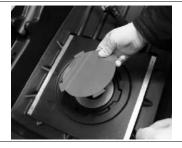
10. Position the sink to its standard position.

Beforehand, re-clip the black hose under the sink and replace the brush hose in its indentation.





11. Place back the SS basket filter, the soak tray bung (indexes should be positioned with ribs to the top) and the soak tank cover (waves engraved).



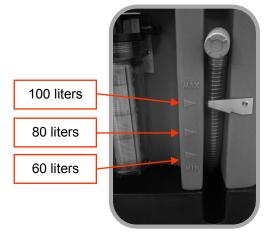
2.3 FILLING THE PARTS WASHER

1- Empty the cans into the tank.

CAUTION



Do not throw the empty cans away. They may be useful for recovering the cleaning solution if ever the unit needs to be drained.



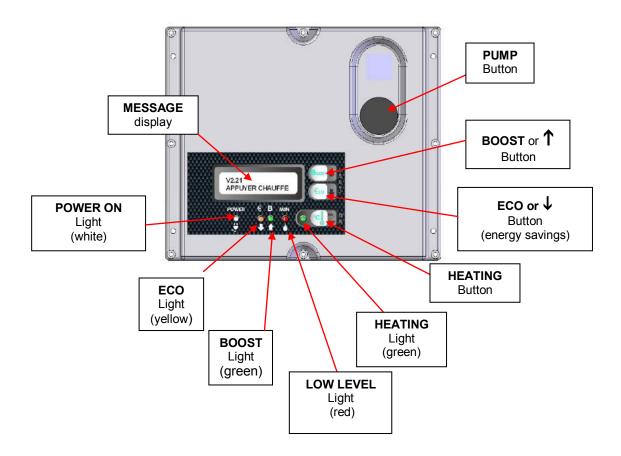
2- Insert a micro-organism tablet into the rectangular opening provided for the purpose.





3- Note the date on the servicing datasheet.

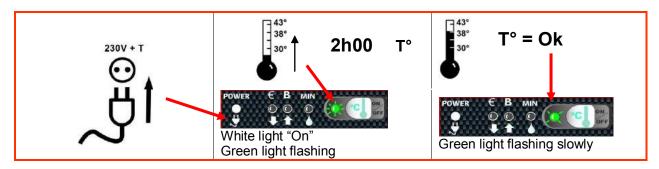
3 CONTROL BOX



4 START-UP

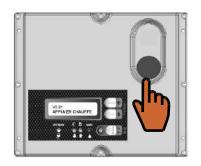
4.1 SWITCHING ON:

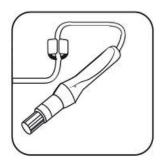
After the parts washer has been filled with cleaning solution, heating will start automatically when the unit is switched on and stop when the operating temperature has been reached.

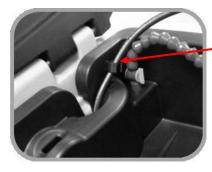


4.2 USING THE PARTS WASHER:

Press the pump control button, then clean your parts with the tool-holder and brush.







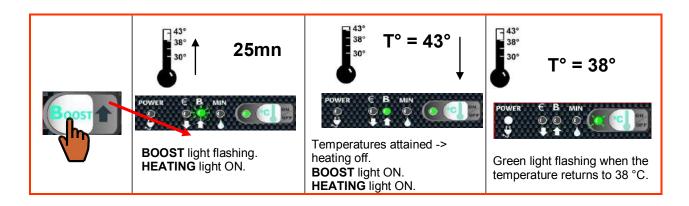
Toolholder hose clip

A clip is provided to make it easier to guide the tool-holder hose.



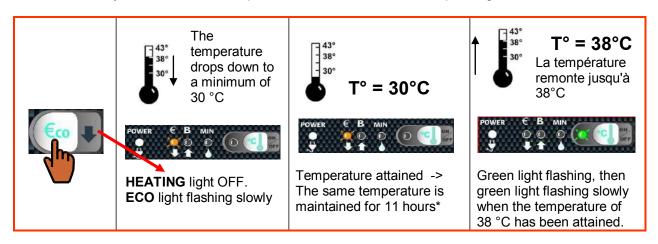
4.3 BOOST MODE (temporary temperature increase of 5 °C)

The higher temperature is to be used when severely fouled parts need to be cleaned.



4.4 ECO MODE (TEMPORARY REDUCTION IN TEMPERATURE DOWN TO 30 °C)

ECO mode enables the temperature of the bath to be reduced for **reducing electricity** consumption for 11 h* Beyond this time, the temperature will return to its normal operating level.



^{*} time adjustable - see paragraph 7.2

4.5 **SOAKING**

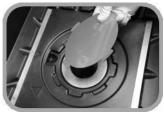
PRECAUTIONS

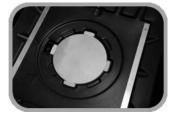


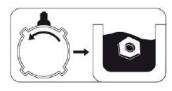
- Carry out tests for validating the cleaning protocol (compatibility of materials, soaking time, etc.), especially for sensitive metals such as zinc, brass and aluminium alloys (including those containing silicon).
- → Never leave a part to soak over-night.
- Limit soaking time to a minimum.

SOAKING OPERATION:

Close the tank drain by placing the plug in position with one of its lugs opposite the hollow used for raising the plate.







- 2- Close the soak-tank with the rectangular cover.
- **3-** Put the part in the tank.
- 4- Press the pump control button to fill the tank and leave it in operation so that the solution is maintained at the right level for soaking.
- 5- Open the tap of the semi-rigid hose.

CAUTION



- → Check that there is no residue (chips, sand, etc.) in the area where the plug is to be placed. Clean with the brush if necessary.
- Make sure that there is nothing blocking the overflow opening.
- → The plug with the four lugs is designed to provide a liquid flow that is sufficient for the solution to be renewed, and kept at the right temperature and for the soak-tank to empty when the pump is stopped.
- → For soaking, the plug must be positioned the right side up.





5 TANK

LIQUID LEVELS:

Level-checking: Unscrew the drain plug to let air enter the top of the hose.

- 100 liters: Top filling level (upper arrow).
- 80 liters: 80L filling level (middle arrow).
- 55 liters: Low-level detection level (lower arrow).



Drain plug

Drain hose support

CAUTION



There must be 80 liters of liquid in the machine for using the soak function and remaining above the minimum level.

DRAINING:

- **1-** Lift the parts washer up (on a pallet, pallet-jack, ...).
- **2-** Undo the drain hose support element at the back of the parts washer.
- **3-** Put an empty can in position ready for use.
- **4-** Remove the plug on the hose and pour the used product into the can(s).
- 5- The product must be recycled as per regulations in force.
- **6-** Clean the tank if necessary.

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MEMO

- Nominal operating temperature: Operating temperature at 38 °C +/- 1 °C. BOOST temperature: Nominal temperature + 5 °C, limited to 45 °C.
- ECO temperature: 29 °C / 30 °C.

H E A T	O OFF	When the green light is OFF, the heating is off.	
	ON OFF	When the green light flashes at normal speed, the bath is being heated.	
N G	OFF OFF	When the green light is on and flashes at long intervals (ON for 0.1 s, OFF for 2.5 s) this indicates that the bath is being maintained at nominal temperature.	
L E	MIN O	When the red light is OFF, there is enough liquid in the system.	
E L S	MIN	When the red light is ON, the liquid level is low. → Extra product must be added.	
B O O S T		When the green BOOST light is flashing, the temperature is rising above its normal operating level.	
	B O C ON OFF	When the green BOOST light is ON and steady and the HEATING light is also ON and steady, the BOOST temperature has been reached and the temperature of the bath is higher than its normal operating temperature	
E C O	€	When the orange light flashes slowly, the parts washer is in ECO mode.	
I			
B O O S T	Boost	 BOOST ON/OFF (Increases the HEATING temperature by 5 °C above the nominal operating temperature). Increases the value of the parameter (parameter setting mode) 	
E C O	€ ∞ ↓	- ECO ON/OFF (Lowers the temperature down as far as 30 °C) Reduces the value of the parameter (parameter setting mode)	
H E A T I N G	OFF OFF	- HEATING ON/OFF - Validates the parameter - Safeguards the parameter - Exits the parameter-setting mode (Press for over 2seconds)	
	EATING LEVELS BOOST ECO BOOST ECO HEATIN	E A T I N G LE VE L S BOOST E C O HE A T I N	

7 VIEWING & MODIFYING PARAMETERS.

7.1 PARAMETER-VIEWING MODE

	Control		Message on display screen
E N T R Y	300 E € co E	To enter the parameter-viewing mode, press sharply on the 2 BOOST and ECO buttons at the same time. The bath temperature and the length of operation in ECO mode will be displayed.	V4.5 37°C ECO TIME 18H
	OFF OFF	The "EVENTS" message will appear by pressing the °C –ON/OFF button Press the ■ button for viewing the events that	V4.5 37°C EVENTS
E V E	€∞ ↓	have been memorized. If no events have occurred over the last 48 hours, a "No error" message will be displayed.	V4.5 37°C No error
N T S	€co ↓	 → If an event has occurred over the last 48 hours, the first event will be displayed. - By pressing the button a second time, the time since the event will be displayed. - By pressing the button a third time, the 	V4.5 37°C ADD PRODUCT V4.5 37°C 01:35:20
		next event will be displayed.	
L A N G U A G E S	OFF OFF	Press the °C -ON/OFF button for viewing the language.	V4.5 37°C ITALIAN
E X I T	2 sec	Press the °C -ON/OFF button for 2 seconds to exit the viewing mode. → If no buttons are pressed the unit will return to normal mode after 10 s.	

7.2 CHANGING PARAMETERS

CAUTION



Before entering the parameter-setting mode, HEATING must be switched off (HEATING light OFF).

	Control		Message on display screen
E N T R	Boos 2.5 seconds	To enter the parameter-setting mode: Press for 2.5s on the BOOST and ECO buttons at the same time. → The bath temperature and the time of operation in ECO mode will be displayed. → "MODIF" will be displayed as long as the parameter-setting mode is activated.	V4.5 MODIF 37°C ECO TIME 11H
E C O	Boost ↑	Modifying ECO time: Press button	V4.5 MODIF 37°C ECO TIME 14H
	O C OFF	The parameter for the ECO mode TIME is safeguarded and the EVENT message is displayed by pressing the °C - ON/OFF button . (→ Press the °C - ON/OFF button for 2s to exit the parameter-setting mode).	
E V E	€co	Event-viewing: Use identical to the EVENT section in § Erreur! Source du renvoi introuvable	V4.5 MODIF 37°C EVENTS
N T S	€co ↓	The language parameter is displayed by pressing the "ON/OFF button. (Press the °C - ON/OFF button for 2s to exit the parameter-setting mode).	
L A N G	Boost ↑	Changing languages: The different languages are displayed by pressing the or buttons.	V4.5 MODIF 37°C ITALIAN
U A G E S		The "language" parameter is safeguarded by pressing the °C - ON/OFF button. The "ECO TIME" message will be displayed	V4.5 MODIF 37°C ECO TIME 14H
E X I T	(O C ON OFF	Press the °C - ON/OFF button for 2s to exit the parameter-setting mode. → If no buttons are pressed the unit will return to normal mode after 15 s.	V4.5 37°C ADD PRODUCT

8 MAINTENANCE

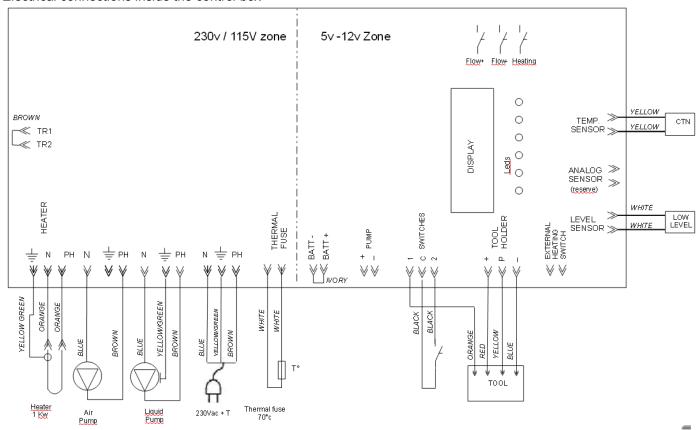
8.1 REGULAR SERVICING

- Clean the filters whenever they are clogged so as to make sure that the product flows into the tank correctly. Filter is located at the right of the parts washer.
- Add micro-organism tablets as per the schedule on the servicing datasheet supplied with the machine.

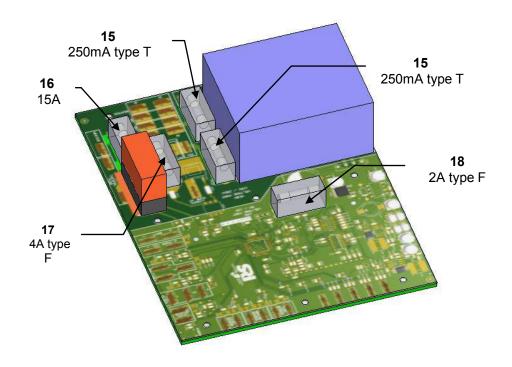
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8.2 ELECTRICAL DIAGRAM

Electrical connections inside the control box

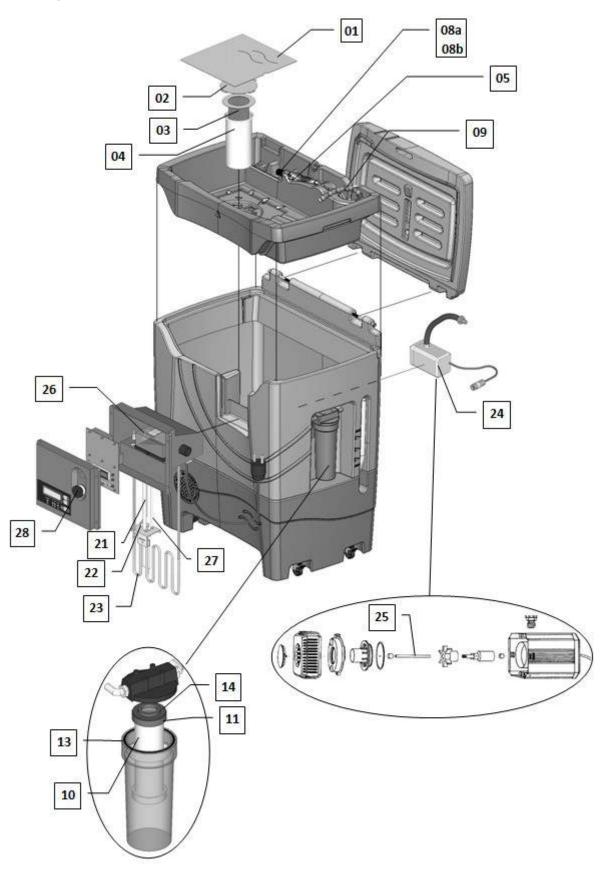


8.3



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EXPLODED VIEW



8.4 SPARE PARTS LIST

01	Soak tank cover	CSEQFOFC	065-001
02	Soak tray stopper	CSEQFO	000066
03	Basket filter 700µ	CSEQFO	000289
04	Sock filter 50μ	CSEQFO	000125
05	Tool holder set FS06	CSEQFO	000111-4
06	Connector Quick JB	CSEQFO	000103
08a	Screwable brush - Hard Brush FO 5/10e°	CSEQFO	000102-4
08b	Screwable brush - Soft Brush FO 4/10e° (option)	CSEQFO	000102-3
09	Semi-rigid Hose	CSEQFO	000523
10	Reusable nylon filter 100μ	CSEQFO	000123
11	Nylon net armour	CSEQFO	000433
12	Removal key for filter	CSEQFO	000537
13	O-ring for filter tank	CSEQFO	000160
14	Joint Ø 32x45 2mm	CSEQFO	000447
15	Strainer for pump 1200 L/h	CSEQFO	000518

20	FS06 Electric Kit without	CSEQFO	00055-2
	pump		
21	Temperature sensor	CSEQFO	000122-
			1
22	FS00 Level detector	CSEQFO	000035
23	FS06 Resistance	CSEQFO	000384
24	Circulation pump with	CSEQFO	000190-
	pipe		1
25	Pump axel	CSEQFO	000345
26	Air pump	CSECIEC	000187-
20	All pullip	CSEQFO	1
27	Air-pump hose	CSEQFO	_
21	All-pullip flose	CSEQIO	000282
28	Push button	CSEQFO	000053
29	Fuses kit (250mA T, 2A	CSEQFO	000011
	F, 4A F, 6,3A)		
30	Fuse (4A F)		
31	Fuse (250mA T)		
32	Fuse (2A F)		
33	Fuse (6,3A F - 230v)		
	Option :	CSEQFO	000349
	Washbasin lid		

8.5 WARRANTY

All parts on the parts washer are guaranteed for 1 year excepting normal wear parts (brush, filters, hoses, etc.) and any parts that may have been damaged by incorrect use, negligence or accident. The guarantee will run as from the parts washer's date of invoice.

The degreasing parts washer has been designed for use as described in the operating instructions. Any modification made to the parts washer will lead to the guarantee being declared null and void. This also applies if any consumables are used other than those indicated in paragraph 1.1.

The manufacturer cannot be held in any way liable for any damage caused by using the parts washer in any way other than the way recommended in the operating instructions, in technical datasheets and in the safety data concerning associated products.

The manufacturer reserves the right to modify the design of his products for improving them at any time.

9 WASTE MANAGEMENT OF THE SOLUTION AND THE UNIT

9.1 WASTE MANAGEMENT OF THE SOLUTION

Solution cannot be directly placed into pipings or traditional waste. User must liaise with waste management companies.

9.2 WASTE MANAGEMENT OF THE UNIT

At the end of life of the unit, user must proceed elimination of the unit in accordance with the regulations. User should take care of the general cleaning elements and separate parts constituting the parts washer: stainless steel parts, rubber parts, electronic card...These parts should then be sent or collected by specialised waste management companies.

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APPENDIX 1: DIAGNOSIS

Problem	Possible causes	Action
Nothing runs. No lights are ON. The air pump does not run (no noise comes from the kit)	The parts washer is not connected to the mains, or the electrical supply to the workshop is faulty.	Plug in the unit, or call for maintenance staff.
Nothing runs. No lights are ON. The air pump does not run (but noise comes from the kit)	One of the 2 fuses inside the control box has blown (fuses no. 17).	
The heating does not run. The pump does not run The °C light is OFF. The red "MIN" light is ON.	There is not enough product.	Add product Press the heating button.
Heating does not run. The pump runs. The °C light is OFF. The red "MIN" light is OFF.	There is not enough product for operating in soaking mode (See § 5-).	Add product Press the heating button.
The pump does not run. The red "MIN" light is OFF. POWER € B MIN	The brush is clogged.	Remove the brush and clean the input opening.
	The pump rotor is jammed.	Dismantle the pump rotor. Check the shaft and clean its housing (See Appendix 4 for dismantling the pump)

APPENDIX 2: REMOVING AND REFITTING THE ELECTRIC KIT

Tools required: None

CAUTION



- → Unplug the parts washer before the operation.
- → Warning: Electric connector of the pump to never be in contact with the liquid into the tank.

REMOVING

- 1 Lift up the sink, unclip the black hose under the semi-rigid hose.
- 2 Remove the brush hose from its indentation and remove the sink



- 3 Disconnect the pump hose and electric cable.
- 4 Disconnect the pump electric cable.
- 5 Take off the pump.



6 Slide up the electric kit to take it off.



REFITTING (see §2.2)

1 Fit the electric kit in its adapted slide / compartment.



- 2 Deposit the pump on the bottom of the tank
- 3 Connect the pump electric cable to the kit
- 4 Connect the pump to the filter entry hose..



5 Place the power cord in the adapted groove until the bottom of the sink.



- 6 Clip the black hose under the sink
- 7 Place back the brush hose in its indentation.
- 8 Position the sink to its standard position.



APPENDIX 3: DISMANTLING THE PUMP

- 1 Lift up the sink, unclip the black hose under the semi-rigid hose.
- 2 Remove the brush hose from its indentation and remove the sink



- 7 Remove grid 2 on the pump (cut the black plastic collar if necessary)
- Remove parts 3
 Remove the
 assembly
 comprising parts 4
 to 7 (photo)



CAUTION: The axel is fragile



- 3 Disconnect the pump hose and electric cable.
- 4 Disconnect the pump electric cable.
- 5 Take off the pump.
- 6 Slide up the electric



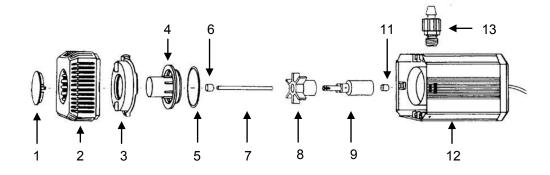
Remove the rotor assembly parts by pulling on the blade Remove the white axel.



kit to take it off.



For re-fitting, proceed in reverse order.



NOTES:		

YOUR CONTACT	
112	