Parts Cleaner
PCS200

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1. Safety instructions

This unit can only be used safely if you read this user manual carefully and strictly follow the instructions.

The equipment must be set up on a suitable stable, level surface.

Please note the application and warning messages on the label of the detergent. Wrong use could cause damage to material and health.

When operating the system please always wear safety gloves, safety glasses and protective clothing.

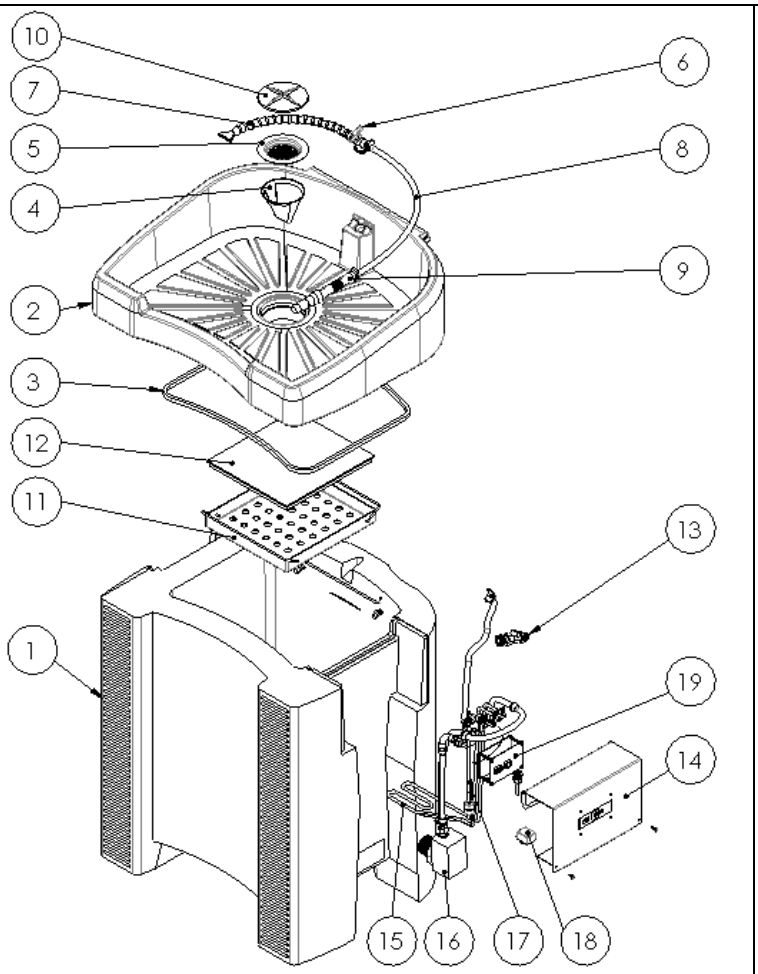
The mains supply connection has to be in accordance with the corresponding regulations. For safety reasons the equipment must be only operated, if a Residual Current protective Device (RCD) with a release current of 30 mA is connected upstream.
This must be checked by a qualified electrician.

Detergents which contain highly flammable substances must not be used. Use only detergents approved by Bihr for this unit.

2. Technical data

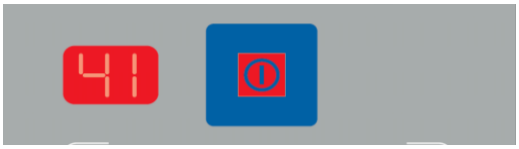
Dimensions	890 x 750 x 1155 mm
Net weight	45 kg
Power consumption	max. 660 W
Electrical connection	1/N/PE 230V~, protection category 1
Pre-fusing	10 A
Work surface height	950 mm
Load capacity	100 kg
Tank	LDPE
Maximum fill capacity	approx. 80L
Minimum fill capacity	40L
Usable work surface	760 x 560 mm
Heater	600 W
Level switch	Minimum fill level (approx. 40L)
Operating temperature	Set at 41°C in the factory
Pump, flow rate	4L/min

3. Product description



1	Sump
2	Sink
3	Sealing
4	600 µm filter screen
5	Coarse filter
6	Valve
7	Nozzle kit
8	Hose
9	Brush
10	Drain plug
11	Mat support grid
12	Filter BIHR
13	Drain
14	Control box
15	Heater
16	Pump
17	Level Switch
18	Temperature limiter
19	Commande

Function indicators on the display

Display  **Multi-Control button**

Function	Indicator
Heater in process	Display “40” flashing, LED on, rising horizontal bars
Operational temperature reached, heater on	Display “40“, LED on
Operational temperature reached, heater off	Display “40“, LED off
Excess temperature	Temperature display flashing at T > 40°C
Energy-saving mode	Display “30”
Fault indications, see chapter Troubleshooting	Display “LO”; F1 to F7

3.2 Intended use

The parts cleaning unit PCS200 is used to manually clean oil and grease from parts with a maximum weight of 100kg in an efficient, environmentally sustainable way using cleaning fluids authorised by Rozone.

Other detergents such as degreasers or alkali cleaning agents must **not** be used!

Solvents, disinfectants, alkali or acidic fluids, carburettor and diesel fuels or turpentine must not be poured into the appliance.

The unit is not meant for cleaning painting tools

The machine is not meant for disposing of used oil. If large quantities of oil, petrol, engine oil, anti-frost agents or similar substances get in the system, it can hamper the bio-degradation of oil/grease by the microbes

3.3 How it works

The microbes are first introduced to the system in the filter mat and are then transported by the liquid cleaning solution through the filter mat into the base unit. The cleaning solution in the base unit is heated by the heater element and transported by the pump to the cleaning tools. The cleaning solution must be heated for the microbes to function properly. A pump feeds the cleaning fluid to the three-way valve and the cleaning brush. An air pump ensures a good supply of oxygen for the cleaning fluid.
The air pump and heater run continuously.
The heating is controlled via an integrated sensor.
When connected to power supply, air pump and heater are switched on.

4. Initial Operation

After removing the packaging (including the blue protective foam around the pump), check the unit casing and operating components for any possible damage caused in transit. If such damage is found, do not connect the unit to the mains. Report damage immediately to the carrier who delivered the unit and to Bihr. The original packaging should be kept.
Place the unit in a dry, stable location as required.
The floor must be level. If necessary, level out any uneven surfaces with suitable shimming material.

4.1 Filling with the cleaning fluid

The unit can be opened at the side for servicing or to fill the tank with fresh detergent. To do so, lift up the right-hand side of the unit top and prop it up using the bar you can find inside.

Maintenance position of sink
(angle approx. 50°)

4.2 Electrical connection

The unit is connected to the customer's mains supply via the power cable and plug.

Mains voltage: The voltage of the power source has to comply with the details on the identification place of the appliance

Warning: It is recommended that you connect this device to a socket that has a 30mA RCD device to guard against earth leakage faults.

After connecting the unit to the mains, the air pump and heater are switched on. The warming-up process can take up to 5 hours, depending on the initial temperature. The operating temperature is set at 41°C in the factory and can not be changed. You can measure the current temperature of the cleaning fluid with a standard thermometer. After reaching the operating temperature the parts cleaning unit is ready for use.

5. Initial Operation

Place the parts to be cleaned in the cleaning basin.

Do not exceed the maximum load of 100 kg!

Activate the ball valve (6.1.) Press the on/off switch (A). The parts are cleaned with a wash brush.

The dirty detergent runs back into the tank via the middle plug outlet where special micro-organisms remove oil and grease contaminants.

Note:

When interrupting work, do not disconnect the unit from the mains, so the detergent remains warm. The micro-organisms in the detergent require heat and oxygen to degrade the oil and grease. For this reason, the heating system maintains the temperature of the detergent at 41º C and an aerator ensures oxygen is permanently fed to the micro-organisms. If the unit is switched off, or it breaks down for a long period of time, the micro-organisms become inactive.

Energy-saving mode

When not in use, for example at night, the device can be set into energy-saving mode for a specified duration.

While in energy-saving mode the temperature is kept at 30° C. At this temperature the microorganisms will stay active and an optimal decomposition of oil and grease takes place.

Setting the duration of the energy-saving mode

1) Press and hold the multi control button for > 3 sec. ►A two digit number will appear (period for the energy-saving mode, last inputted number will be stored). The first number will flash.
2) Short press of the multi control button ►The flashing number counts up (0 follows 9).
3) Press the multi control button for > 2 sec. ►The second number will flash.
4) Short press of the multi control button ►The flashing number counts up (0 follows 9).
5) Press the multi control button for > 2 sec. ►The adjusted time flashes "30" for the energy-saving mode intermittently with the number of hours remaining in the energy-saving mode.

If the operator doesn't make any setting, after 10 seconds the indicated value is taken over automatically. The time switch function is not used by adjusting of the value "00" and the energy-saving mode must be finished by short pressing of the multi control button. When setting "00", the time display will not be used. After finishing the energy-saving mode the unit will heat the detergent to 40º C again. The warm-up stage takes about an hour, depending on the ambient temperature. Once this temperature is reached and "40" is
shown continuously on the display, the unit is ready for operation with optimum cleaning assured.

By pressing down the multi push-button the energy-saving mode is stopped, even if the time display

is still active. The pump is switched on or off using the ON-OFF-switch (20).

General Advice
When pausing or finishing work at the sink, only switch off the pump and do not remove the device from the power supply in order to keep the operating temperature of the cleaning fluid constant. The heater will keep the temperature of the cleaning agent
at 40° C.

6. Maintenance

Warning!

Before starting work on the parts cleaner unplug from the mains!
Test the equipment to ensure the power is off!

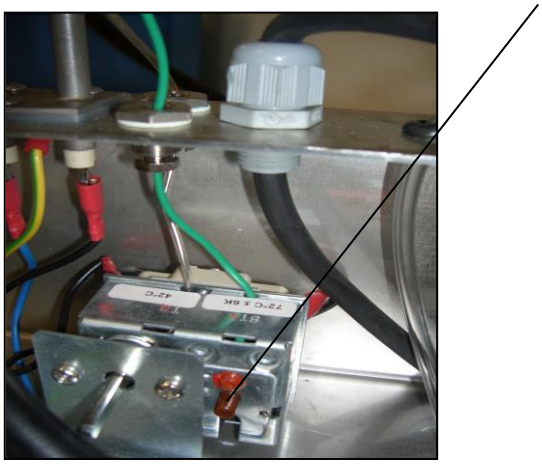
The unit can be opened at the side for servicing or to fill the tank with fresh detergent (see point 4.1).

Fill level
Check the fill level regularly so you can refill to make up for any losses through evaporation and removal. The mark on the back wall of the container shows the maximum fill length. If the minimum fill level (approx .23 cm below the maximum level) is reached, the pump and the heating system switch off automatically for safety reasons. The red control display (B) lights up. Please refill enough cleaning fluid so that the optimum fill level is reached and the maximum mark is not exceeded. The message will disappear once there is enough detergent in the tank.

Filter
The parts cleaner is equipped with two filters as standard. A stainless steel perforated filter in the sink and a synthetic filter for impurities underneath. It is recommended to clean these filters on a daily basis. To do so, remove the filters from the unit and rinse with water.

Safety temperature limiter

In case of overheating of the cleaning fluid, the power supply will be interrupted by the safety temperature limiter. To start again press red button. (see picture)



Cleaning fluid
The cleaning fluid has to be replaced if
- there is a significant fall in the cleaning performance
- when checking the fill level there are notable sediment deposits on the floor of the tank

Use the draining device (7) to drain the dirty fluid. Then the tank has to be freed from any sediment residue. Please follow the same process when inserting the new fluid as for the initial operation.

7. Optional Accessories

Accessories	Description	Item number
Residual current device adapter	Adapter for fuse protection for the appliance Release current: 30 mA, Protection category: IP44	177335
Filter screen Fineness 80 µm	Can be used as an alternative for filter screen (4)	161047
Perforated metal insert	To protect the work surface of the parts cleaner Makes it possible to work without tilting	172239
Dolly	For portable use of the parts cleaning unit	172240
Curved brush	For cleaning curved edges, prevents signs of fatigue when working for a long time.	172560
Lid		174288

8. Notes regarding disposal

Detergent
The following EC waste codes are applicable to the cleaning solution.

Filter BIHR	130899 Oil waste a.n.g.
BIHR Fluid Cleaning Solution	070601 Watery Wash Liquids
Microbe Booster Liquid	161002 Watery Liquid Wastes

Appliance

According to the electronic and electrical appliance regulations, owners of disused appliances are legally required to dispose of such items separately. Please help to protect the environment by not disposing of disused appliances with household waste.

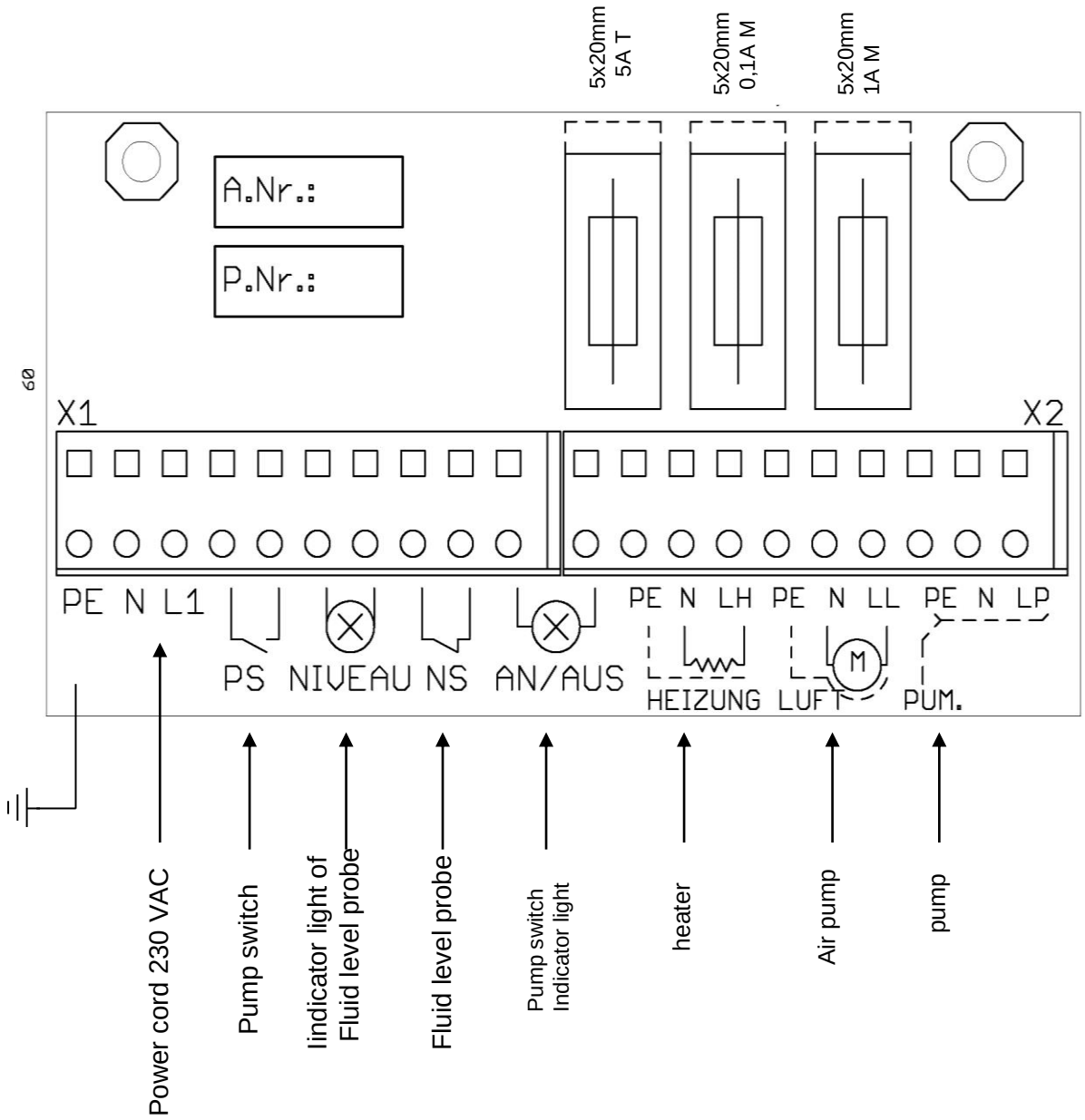
9. Faults

Warning! Before starting work on the parts cleaner, switch off the electrics and unplug from the mains! Test the equipment to ensure the power is off!

Fault	Cause	Solution
Detergent cold, heating system not working	1. The heater is not connected properly or is faulty; 2. Fuse faulty 3. Safety temperature limiter has been triggered	1. Check the electrical connections of the heater. If necessary, replace the heater 2. Replace fuse. 3. Check the appliance, remove the cause for the overheating, press the button for the safety temperature limiter
Wash pump not working	1. The wash pump is not connected properly or is faulty; 2. Fuse faulty	1. Check the electrical connections of the wash pump. If necessary, replace the wash pump 2. Replace fuse.
Air pump not working	1. The air pump is not connected or is faulty 2. Fuse faulty	1. Check the electrical connections of the air pump. If necessary, replace the air pump. 2. Replace fuse.
Level switch not working	1. The level switch is not connected properly 2. The level switch is faulty. Short-circuit in level switch	1. Check the electrical connection of the level switch. 2. Replace level switch
Heating system and wash pump not working. Level display flashing	Fill level fallen below minimum level	Refill with detergent
Level display flashing, although the appliance is filled sufficiently	The ball in the float switch is stuck	Lift the float switch briefly

Note:
To check the fuses the technical components can be removed completely from the appliance after pulling the hose from the ball valve and loosening the tapping screws.
If you have a more complex fault please contact our service technician.

10. Connection Diagram



11. EC Declaration of Conformity

CE Declaration of Conformity

Herewith we, Bihr S.A.S ZI Parc 3 , 07 rue Robert schuman 68870 Bartenheim France declares that the PartsCleaner 200 complies with following guidelines:

EU Directives
2006/42/EC
2004/108/EC

Harmonised standards applied
EN 349
EN 12100 -1,-2
EN 60204-1
EN 12981-1;-2.