



UTENSIL WASHING MACHINES



UX SERIES

INSTALLATION AND OPERATION INSTRUCTIONS

Starting from Serial No.:
8650 6000

REV. 04.09.2009

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1 | IMPORTANT NOTES

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Use in Accordance with Regulations

This machine is exclusively to be used to wash ware such as pots and pans, baking sheets, cutlery, trays etc.
Do not use for electrically heated cooking and heat conservation appliances.

Do not put heavy objects on the top of the machine.

Safety

Do not stand on the open front door of the machine.

Never hose down the outside of the machine.



The "Attention" symbol is shown beside instructions that are essential for the **safe operation** of the machine.

Please read these passages thoroughly.

Liability

Installations and repairs which are carried out by **non authorized technicians** or the use of **other than original spare parts**, and any **technical alterations** to the machine, **may affect the warranty set out in the standard conditions of sale.**

Machine noise level:

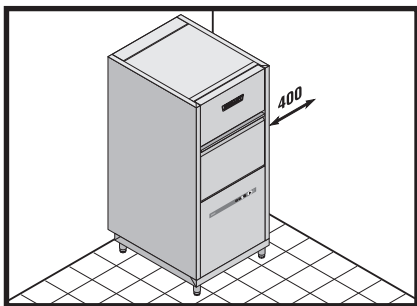
The machine noise level is 65 dB (A).

Connecting voltage:

The machine described in this operation manual has the following connecting voltage:
400 V/50 Hz/3 Ph/N/PE.

2 | INSTALLATION

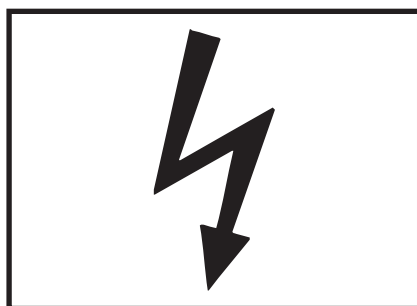
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2.1 | LOCATION

- Wall clearance is not required at the rear.
- The lateral distance between machine and wall should be 400 mm on one side.
- To avoid damage of the feet, do not slide the machine on floor after the skid is removed.
- Level machine by turning the feet.
- Distribute machine weight equally onto all feet.

2.2 | ELECTRICAL CONNECTION



Must be carried out by an authorized technician according to the local and national codes.

- The electrical supply shall comply with the name-plate data.
- Line fuses and cable cross section shall comply with the requirements.
- A cut-off device shall be provided to connect the supply cord (isolating switch or accessible plug device).

According to EN 60 335 the appliance must be connected to an equipotential conductor. The connecting screw () is located beside the cable inlet.

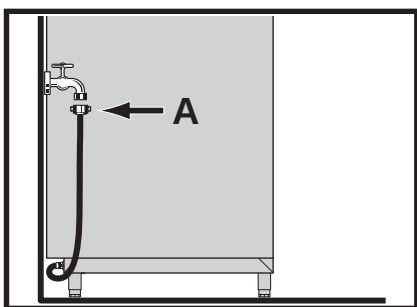
2.3 | WATER CONNECTION



Must be carried out by an authorized technician according to the national and local codes.

The machine must be operated with potable water. For water with an extremely high mineral content an external demineralisation is strongly recommended.

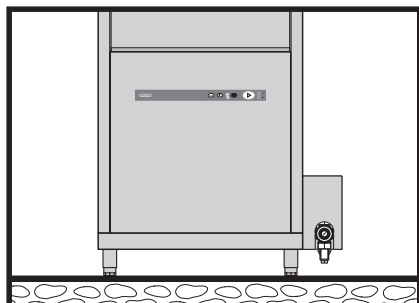
- **Machines without softener:** Connect to soft and if possible warm water (up to 4° Clark = 0.5 mmol/l, **max. 60 °C**).
- **Machines with softener:** Connect to warm water (**max. 60 °C**) if possible.
- **Machines with heat recovery (drain / exhaust):** Connect to cold water (**min. 10 °C**) if possible.
- Line flow pressure 0.5 – 10 bar.
Important: the line flow pressure must not be less than 0.5 bar.
- **If the line flow pressure is above 10 bar provide pressure reducer at source.**
- Connect the union nut "A" (3/4") of the water supply hose to the site shut off valve.
- Do **not kink** or **cut** the supply hose. If an extended supply hose is required, use one of the same specifications as the original.



2.4 | STEAM CONNECTION (STEAM HEATED MACHINES ONLY)

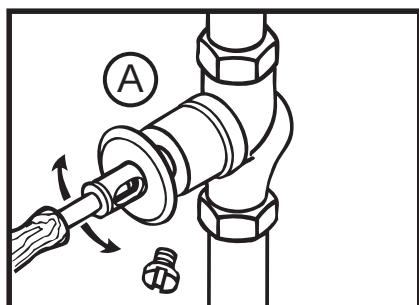


Must be carried out by an authorized technician according to the local and national codes.



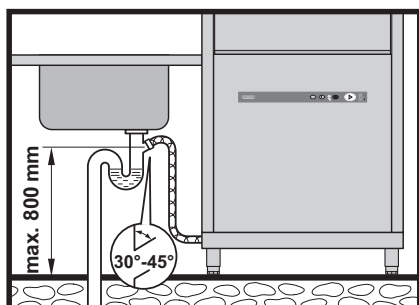
- Connection to steam supply (DN 20), 0.5 - 3.5 bar (max. 150°C) at the machine. See data plate!
- Dimension of steam and condensate piping has to be according to the requirements.
- The machine is equipped with all necessary fittings.
- Make sure that permissible pressures and temperatures will not be exceeded.
- All pipework has to be insulated with water and heat resistant material.

2.5 | ADJUSTMENT OF SHUT-OFF VALVE FOR STEAM SUPPLY



- The built-in shut-off valve is equipped with an adjustment device (A) to limit the steam flow rate. A special tool is necessary for adjusting the valve-seat.
- The correct adjustment is very important particularly for higher pressure, and therefore must be done by a HOBART trained service technician at first installation or after any changes are done at the customer site.
- The adjustment is correct if the heating-up time of the boiler is as long as the shortest wash cycle, while the valve is opened to maximum.
- If adjusted too far open pressure shocks may occur when the solenoid valve closes. This could cause damage at the installation. If adjusted too far close the required heating-power cannot be achieved.

2.6 | DRAIN CONNECTION



- Connection between machine and site drain must not exceed max. height of 0.80 m.
- Do not place the drain hose loosely on the floor (the hose could be rubbed through). Fix it at site!
- Do not kink the drain hose.

3 | CONNECTING OF DETERGENT PUMP

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If the machine is not equipped with a detergent pump, installation of an external dispenser must be done as follows.



Must be carried out by an authorized technician according to the local and national codes.

- Tank must be drained.
- Switch off main switch or unplug.
- Remove front panel.

- Lift up control box and swing it to front.

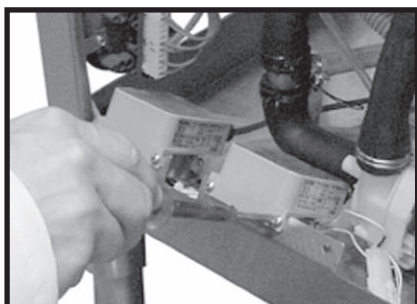
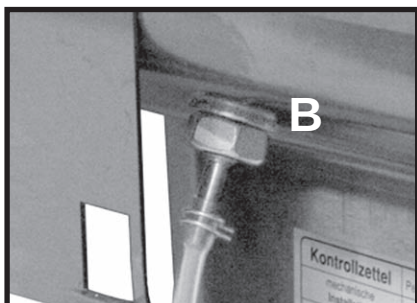
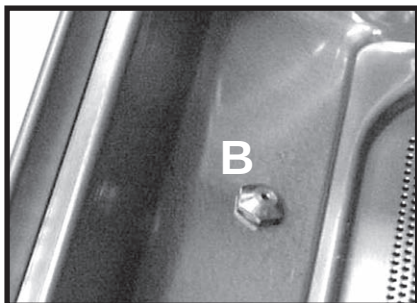
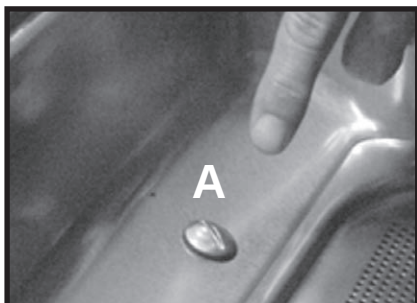
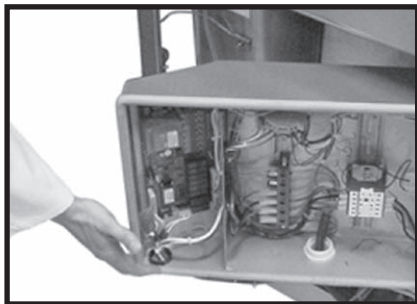
To connect a liquid detergent dispenser:

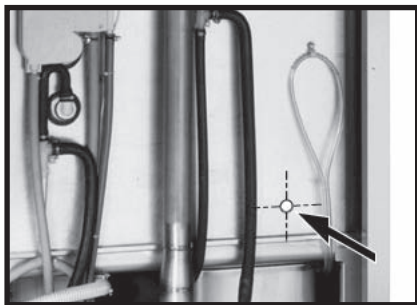
- Remove blanking plug (A).

- Install detergent inlet fitting + gasket (B).

- Connect a hose (PVC / 6mm outside Ø x 4mm inside Ø) between outlet of the detergent pump and the detergent inlet (B) of the wash tank. Tighten with hose clamp.

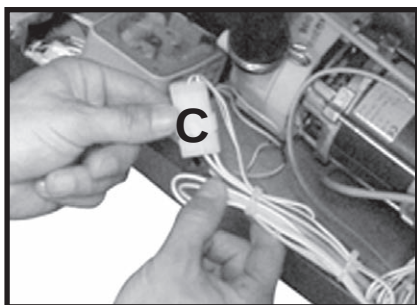
- Install detergent pump or mount externally.





To connect a powder or solid detergent dispenser:

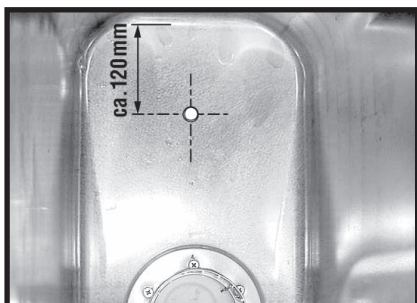
- Remove the rear panel.
- Drill a hole through the inner tank wall appropriate to the required connection diameter (see fig.).
- Screw up tightly the dosing connection with tank wall.



- Connect the plug (C) of the wire harness with the dosage pump (max. 100 VA).

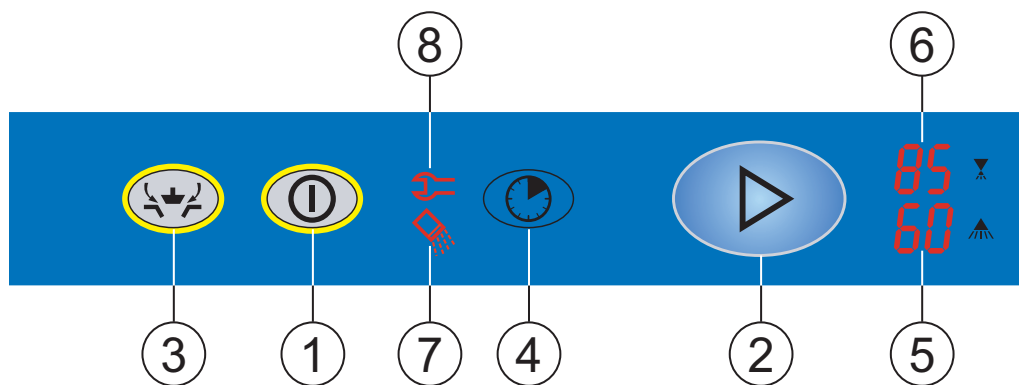


- Swing control box back into position and put panel(s) back into place. Switch on main switch at site or put the plug in.
- Dispenser adjustment see chapter 6.1

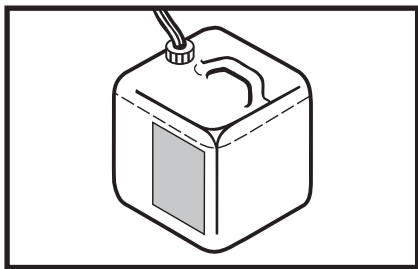


Conductivity probe:

- Conductivity probe should be installed at the flat part of tank bottom (see fig.).
- The hole size should be appropriate to the conductivity probe.



① Machine ON / OFF (illuminates during operation)	By pushing this button the machine will be switched on. In case of emergency (e.g. faults), it is possible to switch off the machine immediately without drain cycle, by pushing this button again. After switch off, the machine is not voltage free!															
② Start button	By pushing this button the wash cycle will be started. Furthermore the button illuminates to indicate the mode of the machine. <table><tr><td>RED</td><td>(permanent)</td><td>= Machine fills and starts heating</td></tr><tr><td>GREEN</td><td>(permanent)</td><td>= Machine is ready for operation</td></tr><tr><td>BLUE</td><td>(permanent)</td><td>= Wash cycle is running</td></tr><tr><td>GREEN</td><td>(flashing)</td><td>= Wash cycle finished, exhaust heat recovery is running (Option)</td></tr><tr><td>RED/BLUE</td><td>(alternate flashing)</td><td>= Blocked filter warning. Refer to "Faults" chapter 13</td></tr></table>	RED	(permanent)	= Machine fills and starts heating	GREEN	(permanent)	= Machine is ready for operation	BLUE	(permanent)	= Wash cycle is running	GREEN	(flashing)	= Wash cycle finished, exhaust heat recovery is running (Option)	RED/BLUE	(alternate flashing)	= Blocked filter warning. Refer to "Faults" chapter 13
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RED/BLUE	(alternate flashing)	= Blocked filter warning. Refer to "Faults" chapter 13														
<u>Only for machines with switchable washing pressure (optional):</u> High-pressure mode for a running cycle is activated by briefly pushing the blue illuminated Start button (not possible within the first 5 seconds after cycle start). By pushing the Start button and holding (3 sec.), high-pressure mode is permanently activated.																
③ Drain button (illuminates during operation)	By pushing and holding (2 sec.) this button, the drain and self cleaning cycle starts. At the end of the cycle, the machine switches off automatically. After switch off, the machine is not voltage free!															
④ Program -button	By pushing this button, it is possible to select between different pre-set programs, according to the model and equipment. The program no. (e.g. P02) appears at the rinse temperature indicator ⑥.															
⑤ Temperature indicator Wash (°C)	Indicates only on demand (see chapter 8).															
⑥ Temperature indicator Rinse (°C)	Indicates only on demand (see chapter 8).															
⑦ Salt required	Indicates the need for regeneration salt to be added. (Only with built-in softener.)															
⑧ Service indicator	Indicates that the machine has a fault.															



5.1 | RINSE AID

- Place the suction hose (blue marking) into the rinse aid container. Fill the suction hose according to chapter 6.5.

5.2 | DETERGENT

Do not use any acidic detergent products with the built-in detergent pump! (The ph-value has to be higher than 7.)

- Place the suction hose (clear) into the detergent container. Fill the suction hose according to chapter 6.4.



The maximum suction head of the dosage pumps is 1.5 meters. Do not confuse the containers !

Use only commercial detergent and rinse aid. **Please pay attention to the manufacturers safety instructions.**

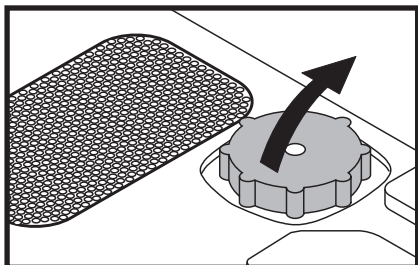
5.3 | SOFTENER (only on option)

The machine will be delivered without salt. For the first run, the softener has to be filled with salt and water.

- Open the door.
- Unscrew the softener lid and fill the softener with **2 kg** of "Granular regeneration salt" (do not use salt tablets).
- Fill up the softener with potable water.

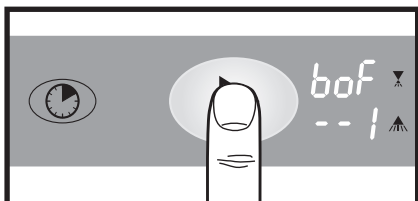
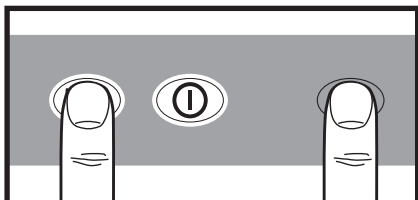
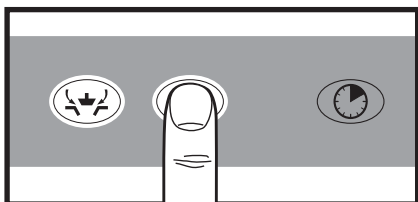
Clean seal and rim of softener lid carefully, before closing the lid.

- Close lid and tighten.



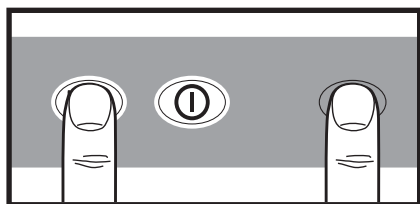
5.4 | FILLING OF THE RINSE BOOSTER HEATER AND DETERGENT PRE-DOSING

- Close the door.
- Open shut-off valve.
- Switch on main switch or put the plug in.
- Push the ON/OFF button ①, the button illuminates. At the temperature indicator Rinse ⑥, "boF" appears and flashes. The rinse booster heater has to be filled as follows.
- Push the ON/OFF button ① again to switch off the machine.
- Open the door, push Program button ④ and Drain button ③ simultaneously until "boF" appears again at the temperature indicator Rinse ⑥.
- Push Start button ②. At the temperature indicator Wash ⑤, "-- 1" appears. Wait until the indicator displays "-- 0".
- Close the door. The machine switches off and is now ready for operation.





ATTENTION:
The machine has to be switched off.

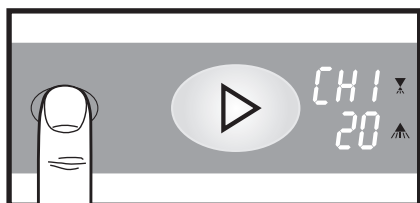


- Open the door, push Program button ④ and Drain button ③ simultaneously until "boF" appears at the temperature indicator Rinse ⑥.

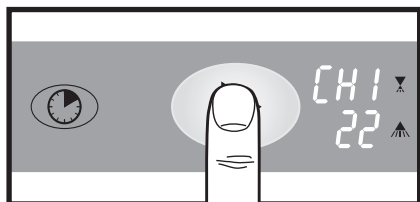
If the door is closed or if no button is pressed for 10 seconds, the indicator automatically switches off and the new settings are saved.

6.1 | ADJUSTMENT OF DETERGENT DOSAGE QUANTITY

(delivery values are only valid with built-in HOBART detergent pump)



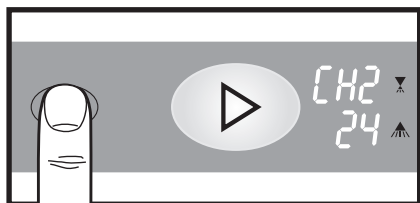
The temperature indicator Rinse ⑥ displays:
"CH1" = adjustment of the detergent dosage quantity.
The temperature indicator Wash ⑤ displays e.g.:
"20" = pre-adjusted value of the detergent dosage time = 20 sec. ≈ 3.0 g/l.



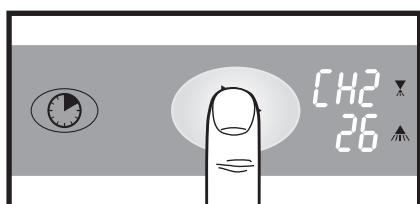
- To adjust the detergent dosage time, push Start button ② repeatedly until the desired value (0 - 50 sec. ≈ 0 - 7.6 g/l) appears at the Wash indicator ⑤.

Adjustment should be done in accordance with chemical suppliers recommendations.

6.2 | ADJUSTMENT OF RINSE AID DOSAGE QUANTITY



Push Program button ④ again.
The temperature indicator Rinse ⑥ displays:
"CH2" = adjustment of the rinse aid dosage quantity.
The temperature indicator Wash ⑤ displays e.g.:
"24" = pre-adjusted value of the rinse aid dosage time = 24 sec. ≈ 0.5 g/l.



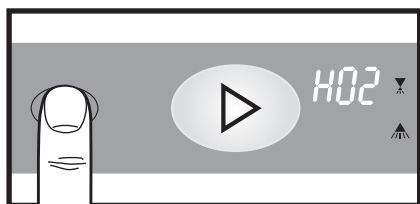
- To adjust the rinse aid dosage time, push Start button ② repeatedly, until the desired value (0 - 50 sec. ≈ 0 - 1.0 g/l) appears at the Wash indicator ⑤.

Adjustment should be done in accordance with chemical suppliers recommendations.

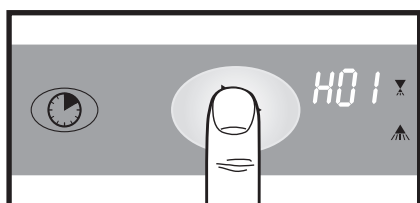
6.3 | ADJUSTMENT OF WATER HARDNESS

With optional softener only.

To adjust the softener to the local water hardness, (obtain details from local water authority):



- Push Program button ④ again.
The temperature indicator Rinse ⑥ displays:
"H02" = adjustment of the softener (if built in)



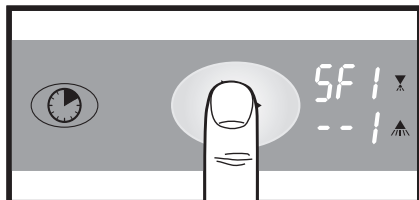
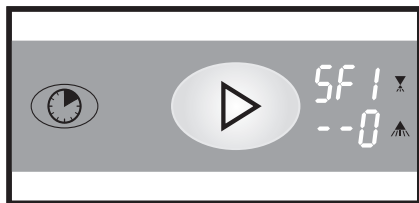
Push Start button ② repeatedly until the required value (H01 - H03) appears at the temperature indicator Rinse ⑥.
H01 = up to 12° eh / H02 = 13 to 25° eh / H03 = 26 to 37° eh water hardness (eh = Clark).

6.4 PRIMING THE SUCTION HOSES

(only with built in detergent pump)

To prime the detergent suction hose between the injector and container:

- Close door
The temperature indicator Rinse ⑥ displays:
"SF1" = Priming of detergent suction hose.

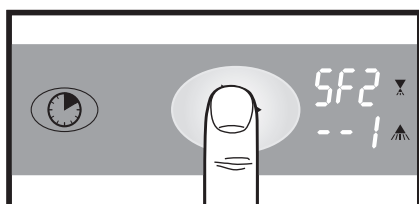
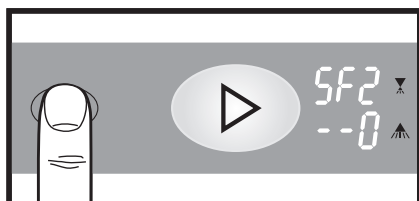


- Push and hold Start button ② for approx. 1 minute.

6.5 PRIMING OF SUCTION HOSE RINSE AID

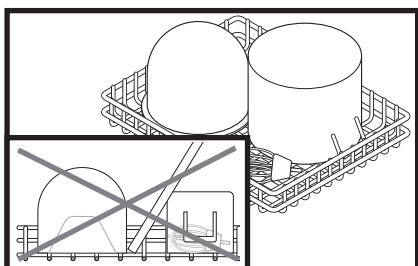
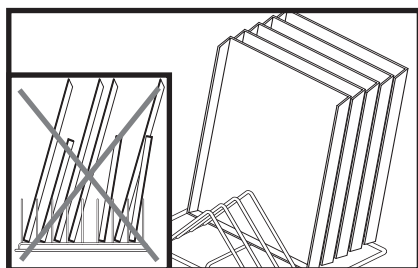
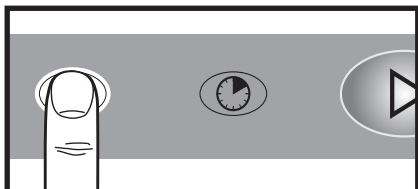
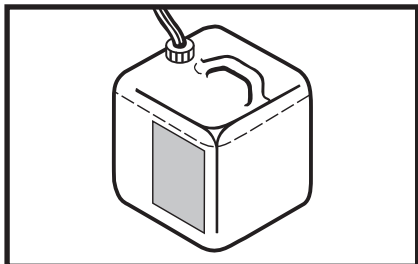
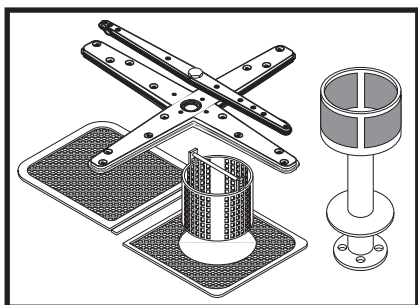
To prime the rinse aid suction hose between the injector and container:

- Push Program button ④ again.
The temperature indicator Rinse ⑥ displays:
"SF2" = Priming of rinse aid suction hose.



- Push Start button ② and hold for approx. 3 minutes.
If using a longer suction hose, hold the Start button ② for about 6 minutes.

7.1 PREPARATION



- Check correct position of wash/rinse arms and strainers.
- **Open shut-off valve.**
- **Switch on main switch or put the plug in.**

- Check level of detergent and rinse aid containers.

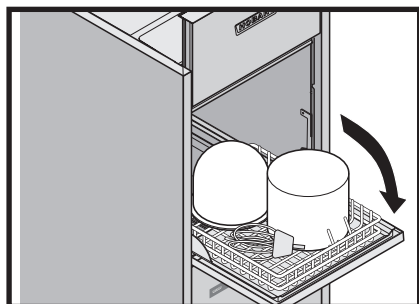
- Close door and push the ON button ①, tank will be filled.
- The Start button ② illuminates red during fill and heating cycle. This process can take several minutes. When the Start button changes to green light, machine is ready for operation.

- Remove coarse food debris.
- Avoid soiling by foam producing substances (albumins etc.).

- Insert baking sheets into the appropriate rack.

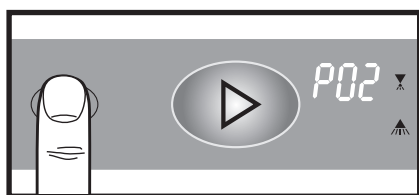
- Put pots and pans face downwards into the racks.
- Protect light washware by putting on a rack.

7.2 RUN



- Put rack into the machine and close door.
- Push the Start button ②. As long as the wash cycle is running, the Start button illuminates blue.

- As soon as the Start button changes to green, the wash cycle is finished.
- Machines with optional exhaust heat recovery: The Start button flashes green as long as the steam is exhausted.
- Open door and take out rack.
Allow washware to dry for approx 1 minute.

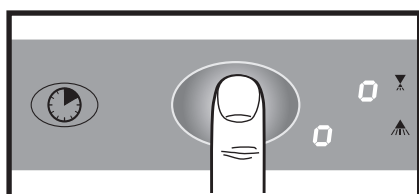


- Select program:

The machine operates automatically in the standard program. If needed, it is possible to select a shorter or longer program.

To show the present program, push Program button ④ before starting the wash cycle. To change the program, push Program button again.

- P 01** = Short cycle (for light/medium soiled washware)
- P 02** = Standard cycle (for medium/heavy soiled washware)
- P 03** = Long cycle (for dried on debris and containers)
- P 04** = Endless cycle

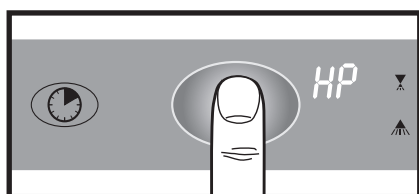


An endless cycle will be indicated by moving light points at the temperature indicators.

To stop the wash cycle, push Start button ②.
(After 20 minutes, the machine will stop automatically.)
After a short break, rinse starts automatically.

The chosen cycle remains programmed until the machine is switched off.

Only for machines with switchable washing pressure (optional):

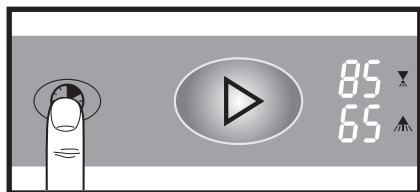


Activation of the high-pressure mode for a running cycle is done by briefly pressing the blue illuminated Start button (not possible within the first 5 seconds after cycle start).

By pushing the Start button and holding (3 sec.), the high-pressure mode is permanently activated until the program is changed or the machine is switched off.

At the temperature indicator Rinse ⑥, "HP" appears.

8 | PREVIEW OF TEMPERATURES



- Press the Program button (4) and hold (3 sec.) until the indicators Wash (5) and Rinse (6) show the actual temperatures (°C). The indicators go out 10 sec. after releasing Program button.

Permanent temperature display can be activated on request by the service technician.

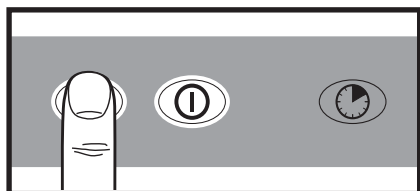
9 | SWITCH-OFF AND CLEANING THE MACHINE



ATTENTION !

Do not stand on the open front door of the machine.

9.1 | SWITCH-OFF



- Close door, push and hold Drain-button (3) for 2 secs.

NOTE:

During the drain cycle, the interior of the machine is cleaned automatically. A final inspection is recommended to remove coarse soil.

When Drain-button goes off:

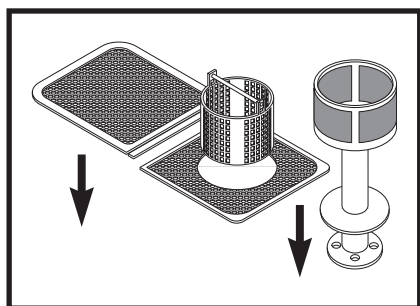
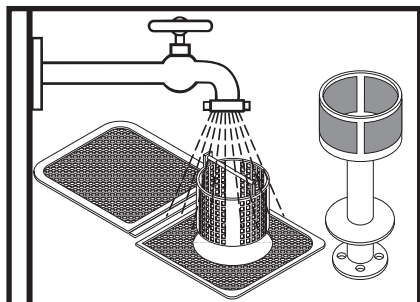
Switch off main switch or unplug and close shut off valve at site!

9.2 | CLEANING (DAILY)



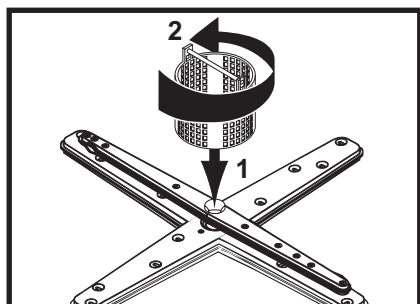
To clean the machine do not use any chloric, acidic or abrasive products and no metallic brushes.

- Open the door, take out and clean strainers.
- Clean interior of the machine.
- Put strainers back into place.
- Leave the door open for ventilation.



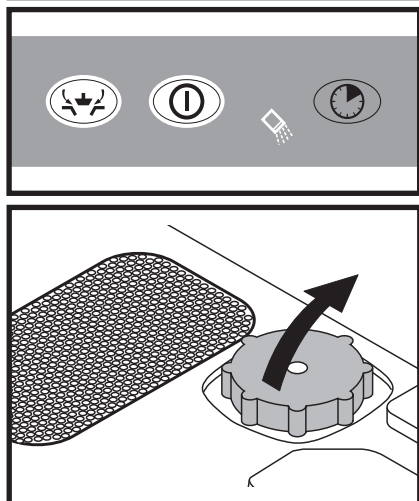
9.3 | CLEANING (WEEKLY)

- Take out wash and rinse arms. Use the strainer as a spanner to loosen the hexagon screw (1) by turning it counter-clockwise (2).
- Open plugs of wash and rinse arms and flush.
- Put all parts back into place.



10 | REFILLING THE SOFTENER WITH SALT

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Only for machines with optional built-in softener.

- When the Salt required ⑦ indicator illuminates, the softener has to be filled with regeneration salt.
- Wait until the wash program is finished.
- Open the door.
- Unscrew the softener lid and fill the softener with **2 kg** of "Granular regeneration salt" (do not use salt tablets).

Clean seal and rim of softener lid carefully, before closing the lid.

- Close lid and tighten.
The Salt required indicator ⑦ goes off with delay.

11 | FROST PREVENTION

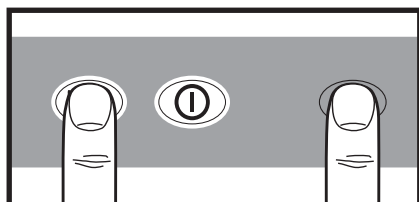


In case of frost or longer operation pauses (e.g. for seasonal operations), the machine must be completely drained.

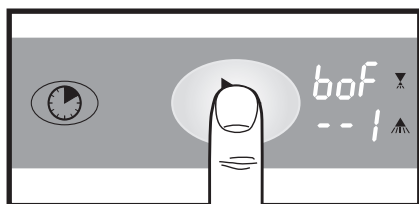
This should be carried out by **after sales service**.

- **Machines with exhaust heat recovery:** Drain both fill hoses and condenser (optionally, use compressed-air to empty).

Reset for operation:



- Open the door, push Program button ④ and Drain button ③ simultaneously until "boF" appears at the temperature indicator Rinse ⑥.

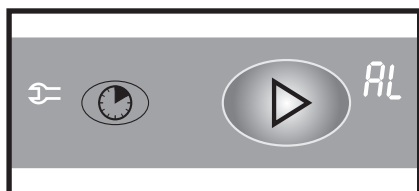


- Push Start button ② (" - 1" appears at the temperature indicator Wash ⑤) and hold until water comes out of the booster overflow.
- Close the door.
The machine switches off and is now ready for operation.

12 | MAINTENANCE



For trouble-free operation, we recommend you enter into a service contract with your local Service Office.



- The Service indicator ⑧ illuminates and the temperature indicator Rinse ⑥ displays a code: e.g. "AL" = drain fault.

Possible types of fault as follows (please report the code of fault to the service technician).

CODE	POSSIBLE CAUSE	MEASURES
FIL	Shut-off valve is closed.	Open shut-off valve at site and switch on machine again.
	Fill valve or fill system defective..	Call the after sales service.
FIL + 	Exceeded fill time.	Call the after sales service.
AL	Drain hose blocked.	Clean drain hose and restart drain cycle.
	Drain system defective.	Call the after sales service.
UL	Drain hose blocked.	Clean drain hose and restart drain cycle.
	Fill system or drain system defective	Call the after sales service.
F01	Temperature probe "rinse booster" defective.	Call the after sales service.
F02	Temperature probe "tank" defective..	Call the after sales service.
HEI	Rinse booster heating defective.	Maybe restricted operation possible – call the after sales service.
Flashing BLUE/RED Start button	Wash tank filters blocked.	Remove and flush scrap basket and tank strainer. Replace in machine, close door and press start button to recommence wash cycle.

14 TROUBLESHOOTING GUIDE

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TYPE OF FAILURE	POSSIBLE CAUSE	REMEDY
Poor wash result		
Washware is not clean.	Wash arms blocked (you should be able to turn them easily by hand).	Take out wash arms and clean them thoroughly. Check water outlet from machine to wash arms is clear.
	Wash arm nozzles are clogged (visual check).	Take out wash arm, remove cleaning cap and rinse wash arm thoroughly until soil is removed. Replace correctly.
	Rinse arm nozzles are clogged (possibly by lime deposit)	Remove rinse arms and decalcify them in separate container.
	Detergent concentration is too low or too high.	Check setting of detergent concentration. See also operating instructions point 6.1.
	Coarse strainer soiled.	Take out strainer, empty and clean it.
	Fine strainer soiled or obstructed by lime.	Take out fine strainer. If heavily soiled soak in a vinegar solution. Then clean it thoroughly until the pores are free. Cleaning is to be done daily (see operating instructions).
	Wrong program selected for heavily soiled washware.	Select program with longer wash cycle.
Washware does not dry properly.	Rinse aid concentration too low.	Increase concentration. See also operating instructions point 6.2.
	Washware still greasy.	1. Detergent concentration too low: increase (see instructions). 2. Check if detergent is appropriate. If not choose a stronger one. 3. Drain soiled water and refill machine. Check pre-scraping procedure.
	Washware stays too long in the machine at the end of program.	Take out washware as soon as cycle is completed to enable them to dry.

TROUBLESHOOTING GUIDE

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TYPE OF FAILURE	POSSIBLE CAUSE	REMEDY
Poor wash result		
Stripes and stains on dishes or glasses.	Rinse aid concentration too high.	Reduce quantity (see instructions).
	Hard water or high mineral content.	Check water quality. Obtain details from local water authority. Recommended values: Ideal degree of hardness is 4° Clark. Ideal conductivity value for washware made of stainless steel max. 80 µS/cm and for dishes max. 400 µS/cm.
	Insufficient rinse aid concentration causes stains	Increase quantity (see instructions)
	Machine with softener: wrong type of salt used.	Use only granular regeneration salt.
Trouble with foam		
Machine gets much louder during wash cycle.	Foam production above average caused by unsuitable detergent and rinse aid.	Use suitable detergent and rinse aid.
	Foam production above average caused by contact of foam producing substances (albumins etc.).	Pre-clean washware.
Other malfunctions		
Machine suddenly stops during wash program.	Machine is connected to an energy management system which cuts out the energy consumer at a given point, or machine is interlocked with another energy consumer unit.	Connect machine separately (call electrician).
	Blown site fuse.	Check site fuses.

If no button is pressed, the machine automatically switches off after **6 hours** without draining.

Follow the description below during the next switch on:

- Push the ON/OFF-button ①.
- Push the Drain-button ③ and wait until the machine is drained and switches off.
- Restart the machine as described in chapter 7.

As continued product improvement is a policy of HOBART, specifications are subject to change without notice.