

GLASS AND DISHWASHERS



AMX SERIES

INSTALLATION AND OPERATION INSTRUCTIONS



HOBART FOOD EQUIPMENT CO., LTD

REV1.4 1301

Translation of the original instructions

This guide does not apply to physical, sensory or mental defective, or there is a lack of experience and knowledge of people (including children)

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

1 Important Notes	4
2 Brief Introduction	5
3 Installation	6
3.1 Transportation and storage.....	6
3.2 Location	6
3.3 Converting to corner operation	6
3.4 Electrical connection	7
3.5 Water connection	8
3.6 Drain connection	9
4 Connecting external dispensers	10
5 Controls	11
6 Start-up	12
6.1 Detergent / rinse aid	12
6.2 Priming the suction hoses	12
6.3 Softener (only on option)	13
7 Operation	14
7.1 Preparation	14
7.2 Run	14
7.3 Program selection	16
8 Switch-off and cleaning the machine	17
8.1 Switch-off	17
8.2 Cleaning (daily)	17
8.3 Cleaning (weekly)	17
9 Preview of temperatures	18
10 Faults	18
11 Settings and Counter values	20
11.1 Adjustment of detergent dosage quantity	20
11.2 Adjustment of rinse aid dosage quantity	20
11.3 Adjustment of water hardness	20
11.4 Cycle counter	21
11.5 Water consumption counter	21
11.6 Remaining water quantity counter for external water treatment	21
11.7 Activation / deactivation of chemicals deficiency sensors	21
11.8 Termination of setting mode / counter display	21
12 Frost prevention	22
13 Maintenance	22
14 Troubleshooting guide	22
15 EC Declaration of Conformity	24

1 IMPORTANT NOTES

Use in Accordance with Regulations

This machine is exclusively to be used to wash ware such as plates, cups, glasses, cutlery, trays etc.

Do not use for electrically heated cooking and heat conservation appliances.

Safety



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**.

The machine can be used by one person only, does not allow two or more people operate at the same time.

Machine noise level:

The machine noise level ≤ 70 dB (A).

Unpacking:

Immediately after unpacking, check for possible shipping damage. If the dishwasher is found to be damaged, save the package materials and contact the carrier within 15 days of delivery. Please take out parts of scene installation, manuals and maintenance card. Please fill out necessary information carefully.

2 BRIEF INTRODUCTION

Hood type dishwasher for straight through or corner operation, capacity 60 racks, 1080 plates or 2160 glasses per hour.

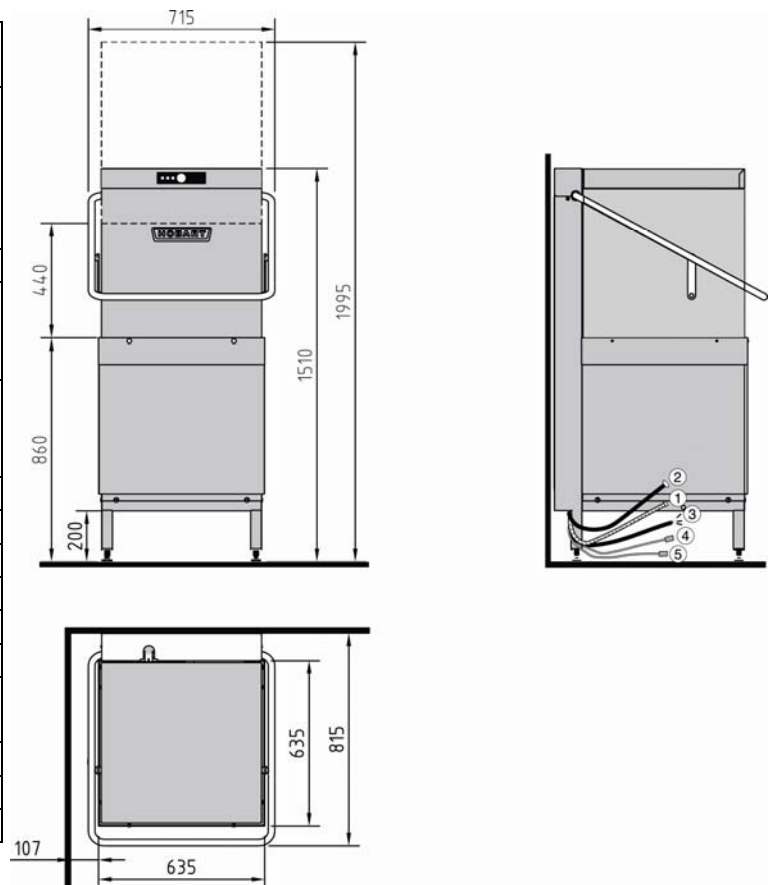


Product Advantages:

- ready to install, incl. fill and drain hoses, power cord, non return valve
- completely equipped with rinse pressure pump, drain pump and optional agent dispenser
- optimum service accessibility
- optimum hygienic safety by deep drawn tank with rounded edges and self cleaning cycle
- hood closed on all sides
- electronic control with color coded status indication and ergonomic position of the control panel
- GENIUS-X fine filter system: achieving better wash results due to permanent filtration of wash water-saving energy and detergent

Option: Tabling Technical Data

① Flexible drain hose 1500mm	24mm inner/ 28mm outer
② Fresh water connection pressure hose 1500mm Flow pressure	R 3/4" inside 0.5-10bar Max60°C
③ Power cord	2500mm
④ Hoses for Detergent(option)	1600mm each (if required)
⑤ Aid rinse agent	
Cycle times	60 sec 90 sec 120 sec
Water consumption	2.5 L/rack
Tank capacity	22L
Tank heating	3kw
Power supply	380/50/3/N
Booster loading	12kw
Total loading	16kw/3X24A
Pump capacity	0.73kw/370L/ min
Loading height	440mm
Noise level	70dB(A)
Weight net	Appr.120kg

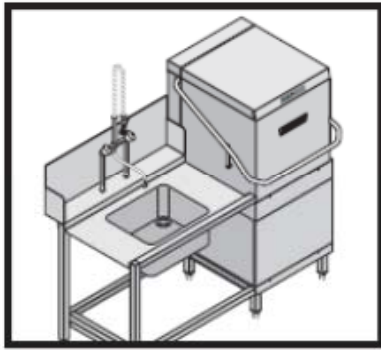


3 INSTALLATION

3.1 Transportation and storage



Forklift must be used during transportation and storage instead of vertical loading, pay attention to upturn and prevention of break, moisture and load. (See the marks on the package).



3.2 Location

- Rear wall clearance not required.

For corner installation lateral clearance of 107 mm is required.

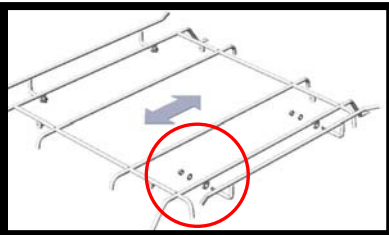


Installation should comply with all national and local appropriate codes at practice.

For free-standing installation the optional rear panel has to be installed.

Level machine by turning the feet.

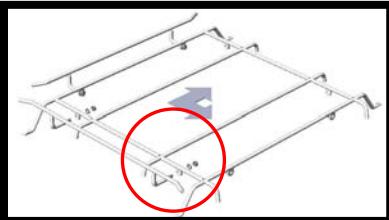
Distribute machine weight equally onto all feet.



3.3 Converting to corner operation

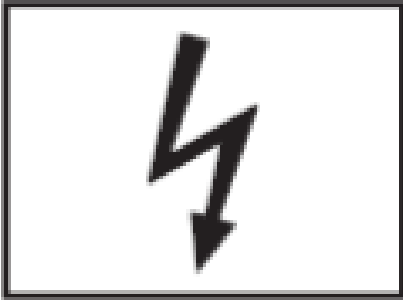
Depending on direction of operation, the guide rails may need to be adjusted to suit the direction of operation (see arrows).

- Unscrew the guide rail in front.



- Refit guide rail at right angle according to the direction of operation.

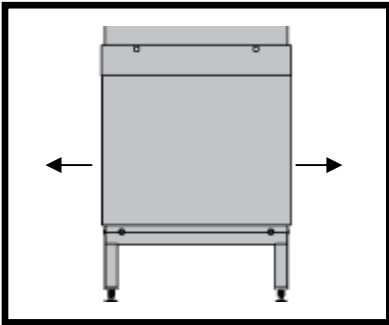
3.4 Electrical connection



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

A fused disconnects or circuit breaker with electrical leaking protector (not supplied) must be installed in the electrical line supplying the dishwasher and should meet the requirements of your local electrical code.

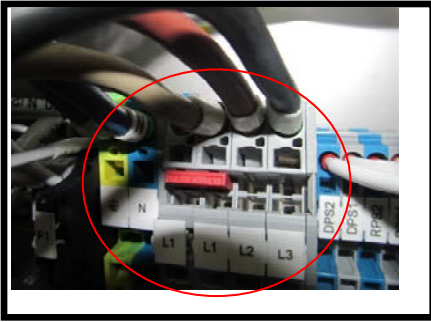
- The electrical supply shall comply with the name-plate data.
- Line fuses and cable cross section shall comply with the requirements.
- A cut-off device shall be provided to connect the supply cord (isolating switch or accessible plug device).
- Remove the front panel and two side panels.



- Let the power cable thread the cable bushing on the base plate.



- Fix the cable via the control box.



- Connect the power cable to terminals on the control board according to the picture.

- Replace the front panel and side panels.



According to EN 60 33 5 the appliance must be connected to an equipotential conductor. The connecting screw () is located beside the cable inlet.

3.5 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 demineralizer strongly recommended.

- Machines without softener: Connect to soft and if possible warm water (up to 4° Clark = 0.5 mmol/l, max. 60°C).

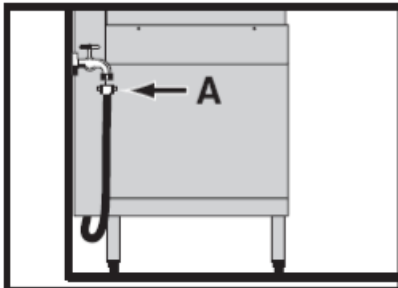
Important: The water hardness should be $\leq 0.5 \text{ mmol/L}$. If not, water softener is strongly recommended. Or else, may affect the warranty set out in the standard conditions of sale.

- Machines with softener: Connect to warm water (max. 60°C) if possible.
- Line flow pressure 0.5 – 10 bar.

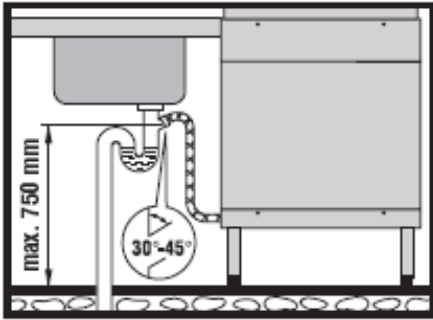
Important: the line flow pressure must not be less than 0.5 bar.

- 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.



3.6 Drain connection



- Connection between machine and site drain must not exceed max. Height of 0.75 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.

If a grease trap is required by code, it should have a minimum flow capacity of 95.5 liters per minute.

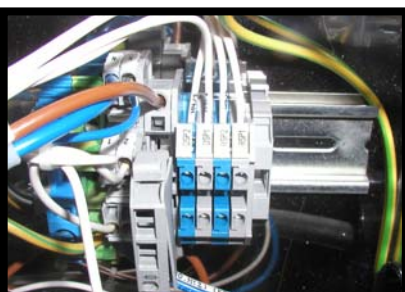
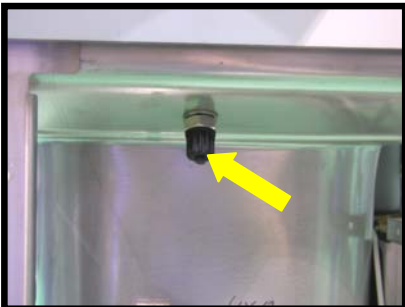
A hood or vent may be required in order to meet local codes. The ventilation volume should be more than 2.8m³/min in case of using hood or vent (supplied by others).

4 CONNECTING EXTERNAL DISPENSERS

Only for models without built-in dispensers

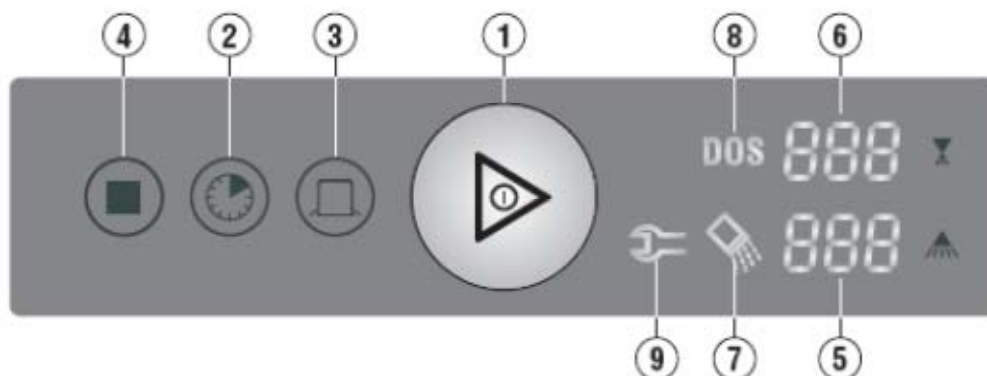


Must be carried out by an authorized technician according to the local and national codes.



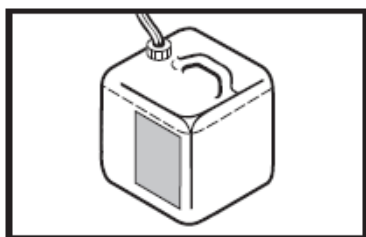
- Tank must be drained.
- Switch off main switch or unplug.
- Remove front panel and the right hand side panel
- Take out the cup on detergent hose adapter, plug in detergent hose, and tighten the nut.
- Lift up control box and turn it to front.
- Take out the cup on rinse aid hose adapter, plug in rinse aid hose, and tighten the nut.
- Close control box. Connect dosage pump wires to DPS and RPS terminals (max. 100 VA)
- Put panels back into place.
- Switch on main switch at site or put the plug in.

5 CONTROLS



① Machine ON / OFF	Pushing this button switches the machine on. By pushing and holding (3 seconds) 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! Furthermore the button illuminates to indicate the mode of the machine: <table> <tr> <td>GREEN (flashing)</td><td>= Machine is filled and heated</td></tr> <tr> <td>GREEN (permanent)</td><td>= Machine is ready for operation</td></tr> <tr> <td>BLUE (permanent)</td><td>= Wash cycle is running</td></tr> <tr> <td>BLUE (flashing)</td><td>= Machine is drained / switches off</td></tr> <tr> <td>RED (permanent)</td><td>= Failure indication (see chapter 9)</td></tr> <tr> <td>GREEN/RED (alternate flashing)</td><td>= Failure indication (see chapter 9)</td></tr> <tr> <td>BLUE/RED (alternate flashing)</td><td>= Failure indication (see chapter 9)</td></tr> </table>	GREEN (flashing)	= Machine is filled and heated	GREEN (permanent)	= Machine is ready for operation	BLUE (permanent)	= Wash cycle is running	BLUE (flashing)	= Machine is drained / switches off	RED (permanent)	= Failure indication (see chapter 9)	GREEN/RED (alternate flashing)	= Failure indication (see chapter 9)	BLUE/RED (alternate flashing)	= Failure indication (see chapter 9)
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② Program button	By pushing this button, it is possible to select between different preset programs, according to the model and equipment. The program no. (e.g. P02) will be shown in the Display ⑥.														
③ High pressure button	AUX(X/L/T) models only														
④ Stop button	In case of operating error or faults, it is possible to switch-off the machine immediately without the drain cycle, by pushing this button. After switch off, the machine is not voltage free!														
⑤ Display	e.g. temperature indication Wash (°C) (see chapter 8).														
⑥ Display	e.g. temperature indication Rinse (°C) (see chapter 8).														
⑦ Salt required	Indicating the need for regeneration salt to be added. (Only with built-in softener.)														
⑧ Detergent/rinse aid indicator	Indicates detergent or rinse aid deficiency.														
⑨ Service indicator	Indicating, that the machine has a fault (see chapter 9).														

6 START-UP



With built in dispenser or softener options only

6.1 Detergent / rinse aid

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



The dosing pumps can operate to a maximum head height of 1.5 m. Do not confuse the containers !

Detergent/rinse of manufacturers should comply with all national and local sanitation and health codes at practice.

6.1.1 Detergent

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

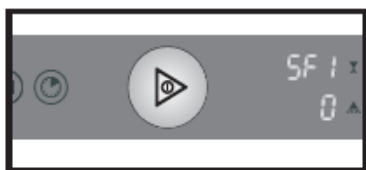
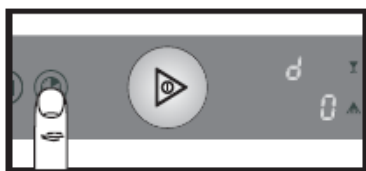
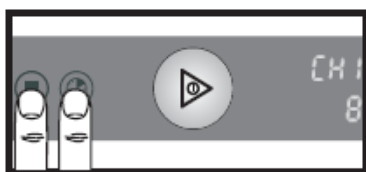
- Place the suction hose into the external detergent container. Fill the suction hose according to chapter 5.2.

6.1.2 Rinse aid

- Place the suction hose (**blue marking**) into the external rinse aid container. Fill the suction hose according to chapter 5.2.

6.1.3 Changing the type of detergent / rinse aid

- **Before changing to a different product type** (even from the same supplier), **the suction hoses must be rinsed thoroughly with fresh water** (procedure as described under 5.2). Otherwise, the mixing of different types of chemicals will cause crystallization, which may result in a malfunction of the dosing pump.
- If a new type of detergent / rinse aid is attached, maybe the deficiency sensor has to be readjusted.
- Contact the after sales service if necessary.



6.2 Priming the suction hoses

- Is carried out automatically but will take several wash cycles. Therefore we recommend the manual hose priming as follows.



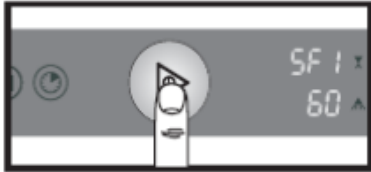
ATTENTION:

The machine has to be switched off.

- **Open the hood.**
- Push **Stop** button ④ and **Program** button ② simultaneously until the upper **Display** ⑥ shows "CH1".

- Push **Program** button repeatedly, until "d" is displayed.
- **Close the hood.**

In the upper **Display** appears "**SF1**", in the lower one "**0**".



6.2.1 Detergent suction hose

- Pushing the **ON/OFF** button ① activates the hose priming for 60 seconds.

Each cycle can be interrupted by pushing the **ON/OFF** button again.



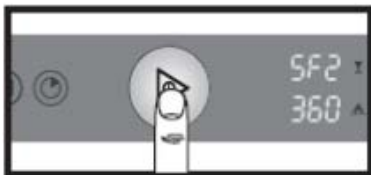
6.2.2 Rinse aid suction hose

- Push the **Program** button ②.

In the upper **Display** ⑥ appears "**SF2**", in the lower one ⑤ "**0**".

- Pushing the **ON/OFF** button ① activates the hose priming for 360 seconds.

Each cycle can be interrupted by pushing the **ON/OFF** button again.



6.2.3 Termination of hose priming

- Open hood and close it again or do not press any button for 10 seconds.

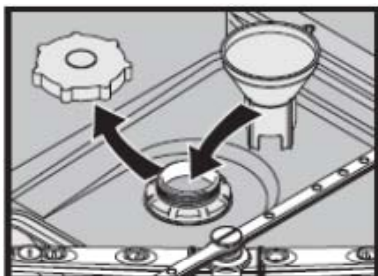
6.3 Softener (only on option)

For the first run, the softener has to be filled with regeneration salt and potable water.

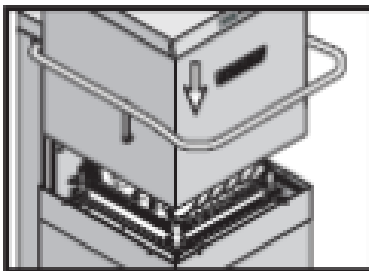
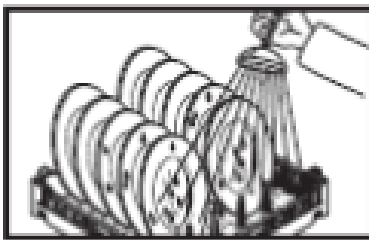
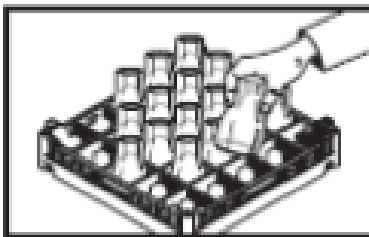
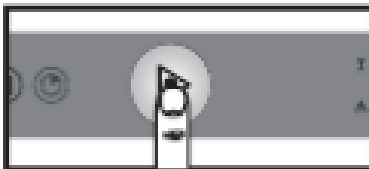
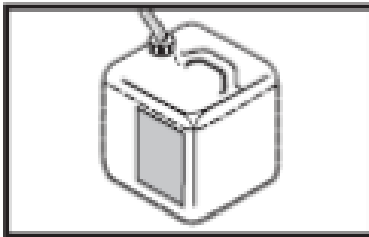
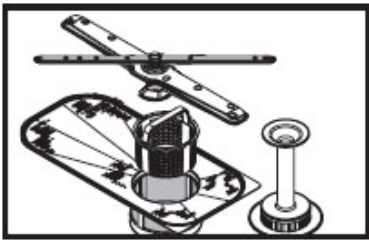


Filling the salt reservoir with cleaning agent will damage the water softener.

- Open the hood.
- 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 (only at the first run).
Clean seal and rim of softener lid carefully, before closing the lid.
- Close lid and tighten.
- **Adjust the water hardness according to chapter 10.3 !**
- When the **Salt** indicator ⑦ illuminates during operation, the softener has to be refilled with regeneration salt.
There will be a slight delay before salt light goes out after refill.



7 OPERATION



7.1 Preparation

- Check correct position of rack guide, 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 hood and push the **ON/OFF** button ①, tank will be filled.
- The **ON/OFF** button flashes **green** during fill and heating cycle. This process can take several minutes.

When the button changes to **green** steady burning light, machine is ready for operation.

- Place glasses and cups face downwards into the rack.

- Remove any food debris before loading plates into rack.
- Spray off greasy food soil.



If dishes are placed incorrectly, dishes may be not washed cleanly.

Total weight of dishes and rack should be less than 25kg, and should be placed steadily in the direction of operation to prevent human body from injury caused by falling.

7.2 Run

- Put rack into the machine and close the hood.
- The **ON/OFF** button ① illuminates **blue**, wash cycle is running.
- As soon as the **ON/OFF** button changes to **green** light, the wash cycle is finished.
- Open the hood and take out rack.
- Allow dishes to dry for 1 minute approx.



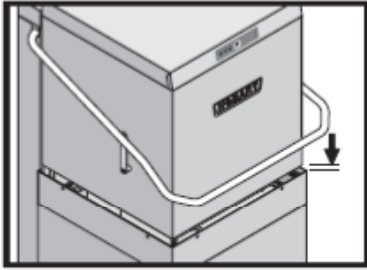
- The spring device can keep the hood halt at any position during closure, and that crushing hazards must be avoided.



-The hood is closed during wash/rinse operation; the door magnetic switch is triggered in the case of hood exceeding the edge of wash tank, the spray risk can be prevented from immediate stop of wash/rinse operation.



-The heat insulation gloves and uniform, skid-proof shoes are required to prevent the person from scald and slip.



- To avoid heat loss, lower hood to "Stand By" position between wash cycles.

7.3 Program selection

The machine is operating automatically with short cycle. If needed, it is possible to select a longer program.

To show the present program, push the **Program** button ② before starting the wash cycle.

To change the program, push the **Program** button again.

P 01 = short cycle (for light / medium soiled dishes and glassware)

P 02 = middle cycle (for medium / heavy soiled dishes)

P 03 = long cycle (for dried on soiling and containers)

P 04 = Endless cycle

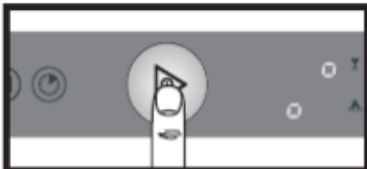
An endless cycle will be indicated by moving light points in the displays.

To stop the wash cycle, push **ON/OFF** button ①.

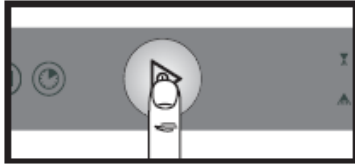
(After 20 minutes the machine will stop automatically.)

After a short break, rinse starts automatically.

The machine continues with the chosen cycle time until it is switched off or another program is chosen.



8 SWITCH-OFF AND CLEANING THE MACHINE



8.1 Switch-off

- Close the hood.

Push and hold the **ON/OFF** button ① until the button flashes "blue".

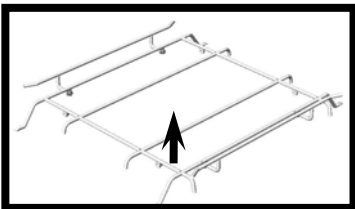
NOTE:

During the drain cycle, the interior of the machine is cleaned automatically.

A final inspection is recommended to remove any food debris.

- When the **ON/OFF** button goes off:

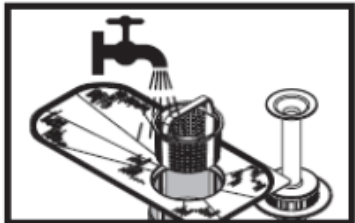
Switch off main switch or unplug and close the shut-off valve!



8.2 Cleaning (daily)



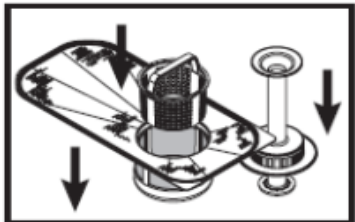
To clean the machine do not use any chloric, acidic or abrasive products and no metallic brushes.



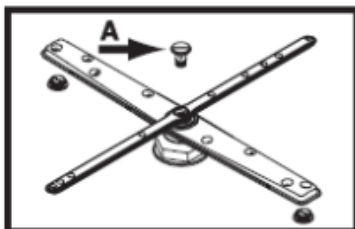
- Open hood and take out rack guide.
- Take out strainers and flush.

Please ensure that food debris does not enter pump intake!

- Clean interior of the machine.



- Put strainers and rack guide back into place.
- Leave hood open for ventilation.



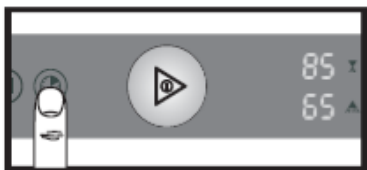
8.3 Cleaning (weekly)

- Take out rack guide.
- Loosen the retaining screw (A) by turning them counter-clockwise.
- Take out and clean wash and rinse arms.



Never hose down the machine.

9 PREVIEW OF TEMPERATURES



- Press and hold (3 seconds) the **Program** button ② until the actual temperatures (°C) are displayed (top = rinse, bottom = wash).

- The indicators go out 10 seconds after releasing the **Program** button.

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

10 FAULTS



- According to the fault, an error code will be shown in the upper display ⑥ (see table below).

Please report the error code to the service technician



For the following non-serviceable items, please report the fault code for maintenance technicians, by authorized service personnel for repair.

For pumps, motors, power connector and other parts, you must disconnect the power before repair.

Pump covers and panels must be installed well after repair.

If the **ON/OFF** button ① is flashing **GREEN/RED** alternately – restricted operation may be possible:

CODE		POSSIBLE CAUSE	MEASURES
AL		Drain hose blocked.	Restart drain cycle. Clean drain hose if necessary.
HEI		Rinse booster heating defective.	Call the after sales service.
d 0		OPTION External demineralization cartridge depleted.	Replace cartridge.
CH1	DOS	Detergent deficiency.	Replace container. After replacement it can take several wash cycles until the indication goes out.
CH2		Rinse aid deficiency.	If required, hose priming should be carried out according to chapter 5.2.
SAL		Salt deficiency (Only with built-in softener).	Refill the softener with granular regeneration salt.
CLOSE Hood		Filling interrupted because hood is open.	Close hood, filling will continue.

The **ON/OFF** button ① illuminates **RED** and the **Service indicator** ⑨ is illuminated:

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.
SIE	Tank strainer not correctly positioned.	Put strainer correctly in place.
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.
F03	Pressure transmitter "rinse booster" defective.	Call the after sales service.
F04	Pressure transmitter "tank" defective.	Call the after sales service.

Other indications

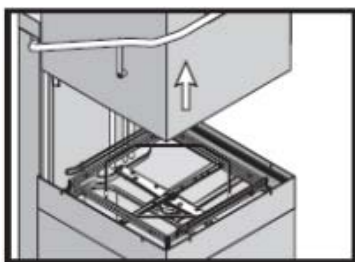
Moving light point in the upper display:

CODE	CAUSE	MEASURES
...	Softener regeneration active (only with built-in softener).	None.

The **ON/OFF** button ① is flashing **BLUE/RED** alternately:

CODE	CAUSE	MEASURES
	Wash tank filters blocked.	Remove and flush strainers. Replace in machine, lower hood to recommence wash cycle.

11 SETTINGS AND COUNTER VALUES



ATTENTION:

The machine has to be switched off.

- Open the hood.

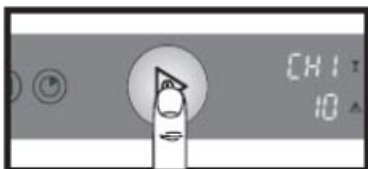
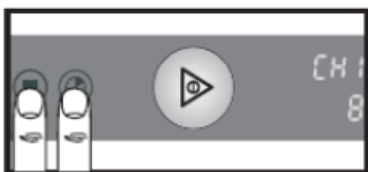
If the hood will be closed or if no button is pressed for 10 seconds, the indicator automatically switches off and the new settings will be saved.

Therefore the setting procedure can be interrupted at any time.

11.1 Adjustment of detergent dosage quantity

With built in dispenser option only

- Push **Stop** button ④ and **Program** button ② simultaneously until in the upper **Display** ⑥ "CH1" appears.
- In the lower **Display** ⑤ appears e.g.:
"8" = pre-adjusted value of the detergent dosage time
= 8 s H 2.0 g/l.

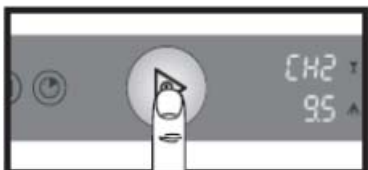
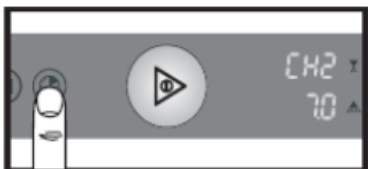


- To adjust the detergent dosage time, push **ON/OFF** button ① repeatedly, until the desired value (0-50 s H 0-15.4 g/l) appears.
Adjustment should be done in accordance with chemical suppliers recommendations.

11.2 Adjustment of rinse aid dosage quantity

With built in dispenser option only

- Push **Program** button ② again.
In the upper **Display** ⑥ appears "CH2".
In the lower **Display** ⑤ appears e.g.:
"7.0" = pre-adjusted value of the rinse aid dosage time
=7.0 s H 0,31 g/l.



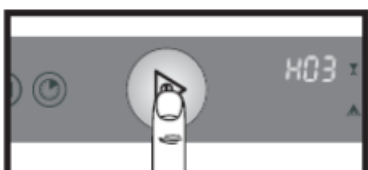
- To adjust the rinse aid dosage time, push **ON/OFF** button ① repeatedly, until the desired value (0-50 s H 0-2.2 g/l) appears.
Adjustment should be done in accordance with chemical suppliers recommendations.

11.3 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 ② repeatedly until in the upper **Display** ⑥ "H02" appears.
- Push **ON/OFF** button ① repeatedly, until the required value (H01-H04) will be displayed.
H01 = up to 9 °eh / H02 = 10 to 18 °eh / H03 = 19 to 26 °eh /
H04 = 27 to 38 °eh water hardness (°eh = Clark).

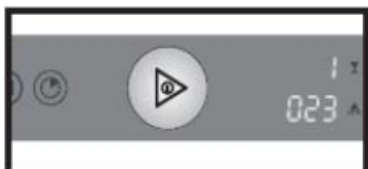


11.4 Cycle counter



- Push **Program** button ② again.

The display will show alternately "P" or the number of wash cycles.



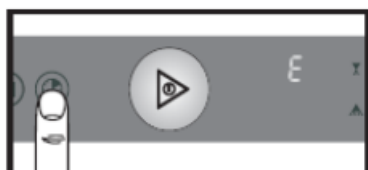
- In the lower **Display** ⑤ appears the value up to 999.

Thousands will be shown in the upper Display ⑥.

Example: 1023 wash cycles

Max. indication: 999 999

11.5 Water consumption counter



- Push **Program** button ② again.

The display will show alternately "E" or the water consumption (liter).

In the lower **Display** ⑤ appears the value up to 999 liter.

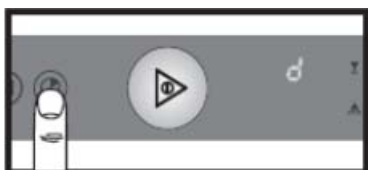
Thousands will be shown in the upper Display ⑥.

Example: 10217 liter

Max. indication: 999 999



11.6 Remaining water quantity counter for external water treatment (Only available if activated in service mode (S18). The capacity (liter) of the water treatment has to be stored via C79/80.)



- Push **Program** button ② again.

The display will show alternately "d" and/or the remaining water quantity (liter).

In the lower **Display** ⑤ appears the value up to 999 liters.

Thousands will be shown in the upper Display ⑥.

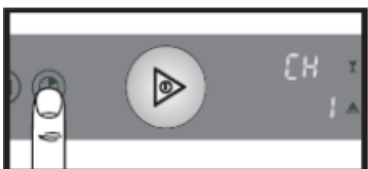
Example: 1586 liter

Max. indication: 999 999



To reset the counter to pre-set value, push and hold (3 seconds) the **ON/OFF** button ①.

11.7 Activation / deactivation of chemicals deficiency sensors



- Close the hood.

- In the upper **Display** ⑥ appears "SF1".

- Push **Program** button ② repeatedly, until "CH" is displayed.

The lower Display ⑤ shows "I" (activated) or "0" (deactivated).

- By pushing the **ON/OFF** button ① sensors can be activated / deactivated.

11.8 Termination of setting mode / counter display

Open the hood and close it again or do not press any button for 10 seconds.

12 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**.

Reset for operation according to chapter 5.

13 MAINTENANCE



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

14 TROUBLESHOOTING GUIDE

TYPE OF FAILURE	POSSIBLE CAUSE	REMEDY
Poor wash result		
Dishes are not clean.	Wash arms stiff (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 10.1.
	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 dishes.	Select program with longer wash cycle.
Dishes or glasses do not dry properly.	Rinse aid concentration too low.	Increase concentration. See also operating instructions point 10.2.
	Dishes 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-scrapping procedure.
	Rack is not suitable for type of dishes (sloping).	Use appropriate racks to create a sloping position which allows water to drain away from cavities.
	Dishes stay too long in the machine at the end of program.	Take out dishes as soon as cycle is completed to enable them to dry.

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 glasses is max. 150 µS/cm and for dishes max. 400 µS/cm.
	Rack is not suitable for type of dishes (sloping).	Use appropriate racks to create a sloping position which allows water to drain away from cavities.
	Insufficient rinse aid concentration causes stains.	Increase quantity (see instructions)
	Machine with softener: Wrong type of salt used.	Use only granular regeneration salt.
Other malfunctions		
Glasses are totally or partially cloudy	Surface of glasses is rough and porous, this is called glass corrosion.	This is not caused by a malfunction of the machine. Replace with new glasses
Glass breakages.	Use of inappropriate dish or glass racks.	Use appropriate racks.
Machine suddenly stops during wash program.	Machine is connected to a "maximum power supply unit" 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 during **6 hours**, the machine switches off automatically without draining.

15 CE CERTIFICATION



amtri veritas 

Certificate of Conformity

Voluntary Examination against the Machinery Directive 2006/42/EC
issued to:

Hobart Food Equipment Co., Ltd

No. 8 Yesheng Road, Xiqing Economic & Development Zone, Tianjin, China

in respect of machinery manufactured by:

Hobart Food Equipment Co., Ltd

No. 8 Yesheng Road, Xiqing Economic Development Area, Tianjin, China

Machine Type: **AMX and AM900 Commercial Dishwashers**

Model numbers: **AMX Series, AM900 Series**

Sample Machines: **AMX serial number 2109050007,
AM900 serial number 2109050007**

amtri veritas certifies that the technical file relating to the machinery mentioned above contains all the necessary information.

amtri veritas is satisfied that, having examined and performed such tests as have been considered appropriate on the sample machinery, the sample machinery is representative of the range(s) mentioned above, and has been manufactured in conformity with the technical file and that the standards or transposed harmonised standards, as the case may be, if used, have been properly applied and that the sample complies with the relevant essential health and safety requirements.

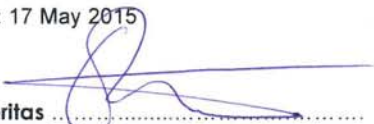
amtri veritas confirms that it accepts that the company has chosen to address the Low Voltage Directive 2006/95/EC via compliance with EN 60335-2-58, and the EMC Directive 2004/108/EC via compliance with EN 55014-1, EN 55014-2, EN 61000-3-2, EN 61000-3-11 and EN 62233.

Certificate Number: AVEX3287

Issue Date: 18 May 2010

Expiry Date: 17 May 2015

for **amtri veritas**


Eline Beun, Managing Director

amtri veritas, hulley road, macclesfield, cheshire, sk10 2ne, england

Certification is subject to compliance with contractual agreements and terms and conditions.
Any unauthorised modifications to this machinery will invalidate this certificate.

AVVEXP1.3





Dishwasher Maintenance

For AMX/AM900 H502L/E502L AM50E/AM60E

Clean machine(Customer)		
Items	Content	
1	Tank flat strainer	Visual inspection & cleaning
2	Wash tank housing	Visual inspection (lime deposits etc.)
3	Wash & rinse arms	Removing & cleaning of upper and lower wash arms. Tighten screws when installing.
4	Overflow & Tank strainer	Check overflow tube in right place
5	Milled nut	Check wash arm milled nut before operation, and tight it.

Machine inspection (Service)		Machine maintenance after 0.5 year or 20 000 cycles. The maintenance must be carried out by authorized service technicians.	
Component	Inspection	Machine Type	
1	General condition (first impression)	- Visual control, condition	All
2	Machine tightness	- Visual control, become less crowded	All
3	Fill hose, fill valve & air gap system	- condition and function	All
4	Water level wash tank, air chamber	- Condition & function due to visual control - Check soil level inside air chamber	AMX/AM900
5	Pressure transmitter, pressure hose	- Check soil level inside air chamber - Condition & function due to visual control - Check sealing of pressure hose	All
6	Booster, rinse pump, rinse manifold	- Condition & function due to visual control - Tightness - Check Booster water level using routine S56 (Service manual)	AMX/AM900
7	Wash & rinse arms	- Check wash & rinse arm spinning - Removing & cleaning of upper and lower rinse and wash arms - Visual inspection of abrasion and lime deposits of wash & rinse arms, replace it when necessary.	All
8	Wash arm bearing, sliding ring and milled nut	- Visual inspection of abrasion and lime deposits of wash arm bearing sliding ring and milled nut, replace it when necessary. Hxle-wash arm(00-883452-001), milled nut(7159006-6), gasket(00-775933-003).	All
9	Wash arm washer	- Visual inspection of abrasion, warping and deformation of wash arm washer, replace it. Teflon washer(00-774072-001/002, 00-774072-007).	All
10	Safety equipment: hood end switch	- Check function	All
11	Bosster and tank heating elements	- Condition, fuction and tightness	All
12	Door & Hoodlift	- Operating noise (rolls) - Adujstment of the hood in standby position - Visual control, condition, tightness - Function check - Function, check door slide bearing, doorstop damper, replace it when necessary.	AMX/AM900 AM50E/60E
13	Door mechanism clamping force	- Check clamping force	AMX/AM900 AM60E
14	Bow	- Function, check bow bearing	AMX/AM900
15	Tighness of top cover / BAE	- Visual inspection: tightness top cover and BAE - Humidity in BAE, if necessary replace and change seal top cover	AMX/AM900 H(E)502L(P)
16	Machine control unit, contactor, fuses & touch panel	- Check condition and function, if necessary test run	All
17	Control unit & circuit board: _____ number of cycles	- Visual inspection, check moisture penetration	All
18	Detergent & rinse aid dosing	- Check function - Check dosing level	All
19	Detergent & Rinse aid hoses	- Check tightness, especially on interface hose / connection nipple - Exchange all hoses every 2 years	All
20	Chemical sensor for rinse- and detergent agent	- Check switching function	All
21	Drain pump	- Check residual water after drain, if necessary check drain pump (impeller)	All
22	Drain hose	- Visual inspection, exchange by porosity or damaging	All
23	Wash & rinse result	- Performance control	All
24	Softener (if existing)	- Visual inspection, condition, corrosion ect. - Check hardness	All
25	Descale	-Check the deposit of scale in wash tank and booster, descale it promptly.	All
26	If necessary water analysis °d (GH); _____ °d (KH); _____ µS		All
27	Test run		All
28	Wash pump	-Check the leakage of shaft seal. if necessary replace and change shaft seal.	