

Operator's Manual



RP 1 & RP 1 HR Washer



INSTRUCTION MANUAL FOR DISHWASHERS



It is important to keep this instruction manual near the appliance for future consultation.

If the appliance is sold or transferred to another user, make sure this manual remains with the appliance so that the new owner is informed about the warnings and operation of the appliance. These instructions are given for safety reasons and they must be read carefully before installing or using the appliance.

GENERAL INSTRUCTIONS

- The appliance must be connected to water and electrical supplies by qualified tradespersons only and according to local regulations.
- The appliance must be used by adults only. Do not let children play with, or operate this machine.
- Only persons trained to use this dishwasher are permitted to operate it.
- This appliance has been designed to wash food preparation and eating utensils. It has NOT been designed to wash objects soiled with petrol, paint, remnants of steel or iron, corrosive chemical products such as acids, alkalis, or solvents or any item that cannot be immersed in water.
- Do not open the appliance door or lift hood while the appliance is operating. The appliance has a safety device which stops operation if the door or hood is accidentally opened.
- After using the appliance, isolate the electric and water supply.
- Do not attempt to repair the appliance. Repairs made by unqualified persons may cause further damage and will void warranty.
- Repairs and servicing of this appliance must be carried out by Rhima personnel only.

IMPORTANT CUSTOMER INFORMATION

- To request a service, detergents or rinse additive contact your local Rhima Service centre below:

Australia: **1300 347 944**

New Zealand: **0800 902 054**

Singapore: **+65 9107 8943**

ELECTRICAL INSTALLATION

This appliance is intended to be connected to a **3 x 11 Amps** electrical supply and **must be earthed**.

PLUMBING INSTALLATION

The Australian installation shall be in accordance with The Plumbing Code of Australia (PCA).

This appliance should be connected to a hot water supply (Max 65°C) for in accordance with Australian Standard AS/NZS 3500.1. for optimum performance.

The water supply pressure should be a minimum 200 kPa at all times and flow rate should be at least 10 litres per minute. A static pressure higher than 600 kPa (73.5 psi) requires a pressure reducing valve upstream of the supply line. If water pressure is below 150 kPa, the use of a rinse booster pump is recommended.

This appliance is designed to drain to a tundish. Waste connection to a spigot is not recommended and may cause draining issues.

The drainpipe should withstand 70°C (158°F) in continuous duty conditions.

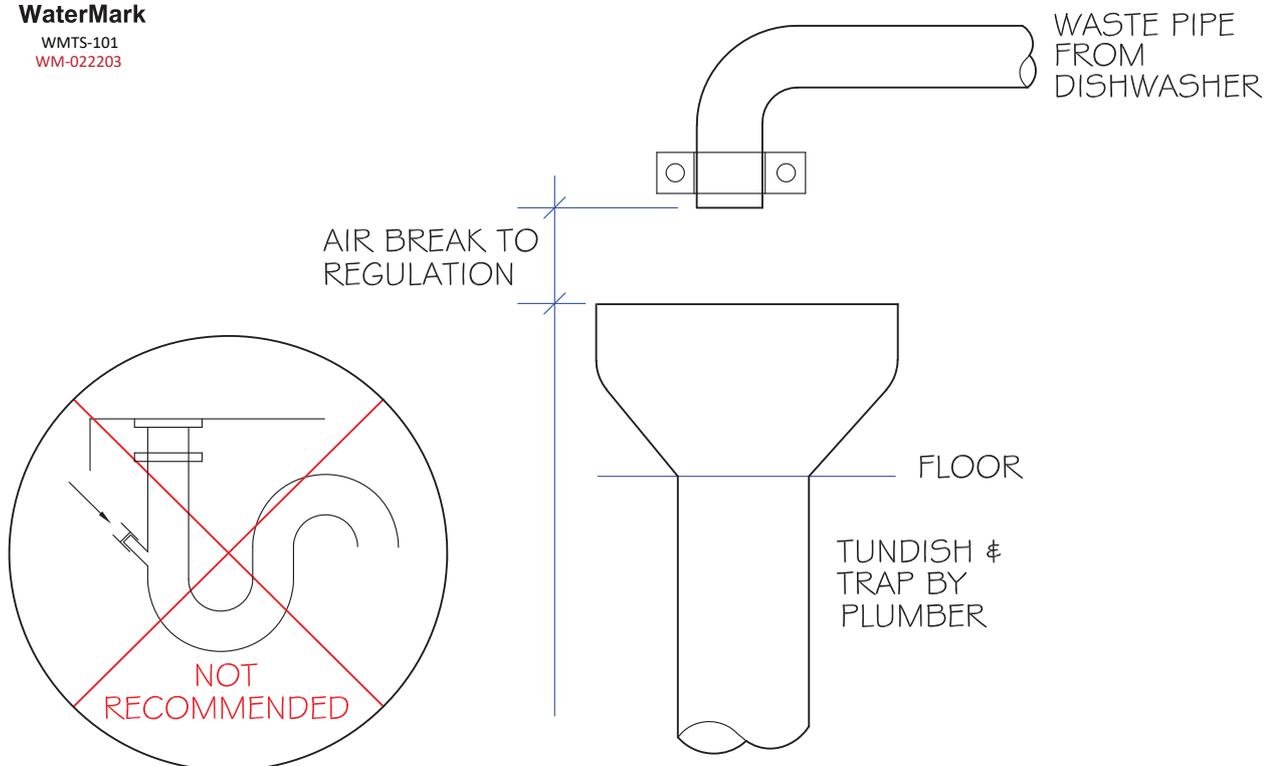
The grey water drain hose must have a fixed watertight seal above the tundish in accordance with the Australian Standard AS/NZS 3500.2.

A DIAGRAM SHOWING THE CORRECT METHOD OF WASTE INSTALLATION IN ACCORDANCE WITH THE AUSTRALIAN STANDARD AS/NZS 3500.2 IS BELOW



WaterMark
WMTS-101
WM-022203

INSTALLATION TO BE IN ACCORDANCE WITH
AUSTRALIAN STANDARD AS/NZS 3500.2

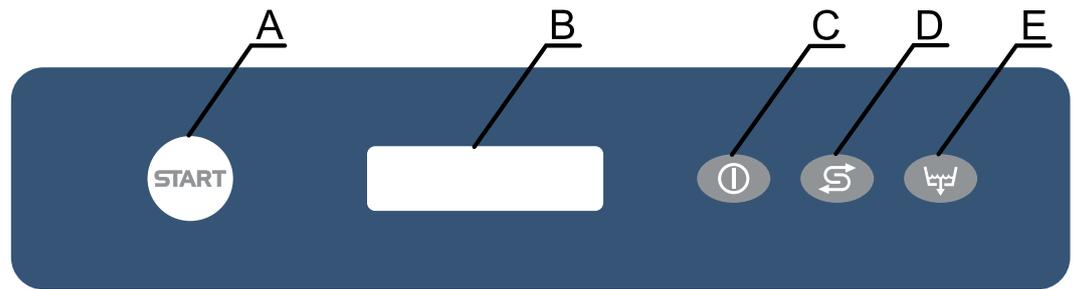


GRAVITY WASTE



OPERATION

Control panel and relative symbols



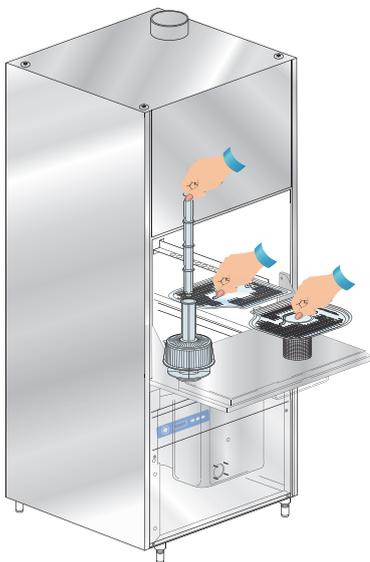
Pict. 1

- A) START push-button to start up cycle / select cycle
- B) Display
- C) Switching – On / STAND BY button
- D) Button, not available
- E) Drain Push-button (Not Available)

Machine start-up

Start-up

- Check if the drain filter is properly inserted in its seat in the wash-tank bottom (see pict. 2).
This filter must be cleaned every 20 wash-cycles or whenever necessary.
DO NOT use the appliance without the filters.
- Put the surface filters in place (see pict. 2).
- Shut the dishwasher door.
- Turn the water valve "open".
- Turn the main power switch ON.
- The machine is on "**STAND-BY**".
In the "**B**" display, the message "**STAND-BY**" will appear.



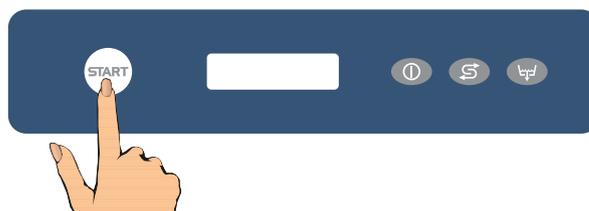
Pict. 2

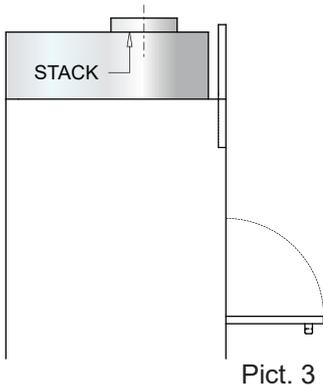


Turn the button "**C**".



The machine start will be active when the "**A**" button will light.
On the "**B**" display the "**STAND-BY**" message will be off.





Pict. 3

**Optional:
Heat recovery system**

The button “A” will light in white for a few seconds, while loading the software. After loading is complete, the button will light in red..

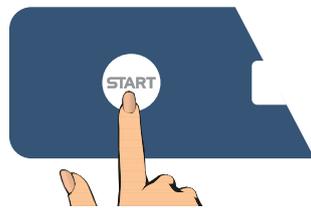
This happens only at the first start of the day of the machine.

- After filling, the machine automatically starts the heating phase. The display will read **"HEATING"**, till wash-tank and boiler will reach the set temperatures. During this process, the machine will not allow any cycle selection or start. If the machine is in standard configuration, with hot water in-feed (50°C), with no extra power, the “A” button will light in green after some 20 min.

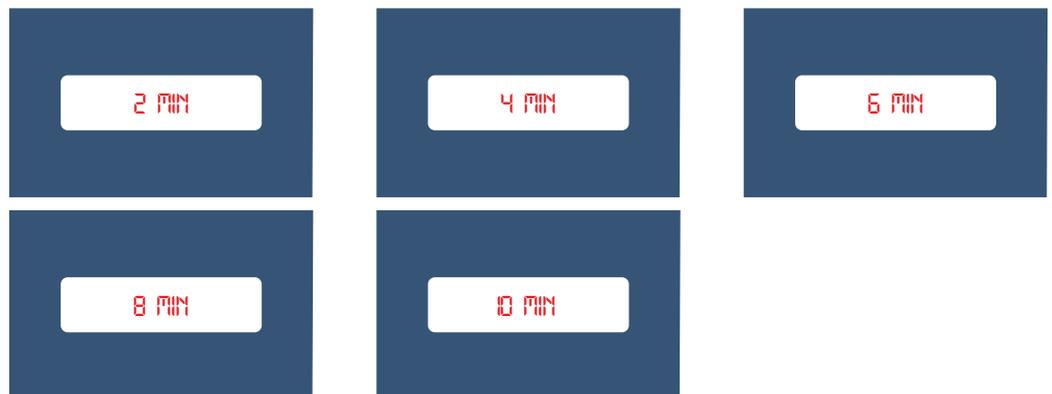
Should the machine be equipped with integrated heat recovery system (see pict 3), must be definitely supplied with cold water in-feed.

Operation

- Insert the rack filled with dishes to wash.



- Select the wanted washing cycle by pushing the green START button "A". The display will show in sequence all these available programs.



Once the wanted program is displayed, do release the button.

Push the **START "A"** button : the actual cycle start will be signaled by the change in colour of the **START "A"** button, that will switch from green to blue light.

- All wash-time long the display will read the wash-tank temperature and the boiler temperature. Below the temperatures indications line-bar is displayed to show the progression of the wash-cycle.



At the end of the washing cycle, a hot rinse cycle will take place
A blue/green flashing on the button "A" will indicate the "**CYCLE ENDED**".



NB: At cycle-end, keeping the door closed, dishes will not dry. Extract the rack or keep the door open to allow evaporation, helping the drying of the objects.
When opening the door, the button "A" will turn green, indicating that the machine is ready for a new wash-cycle.

NB: The last cycle used remain in the memory of the electronic board, ready for the next use.
We recommend to change water at least twice a day, or whenever needed.

Switching OFF

- Turn the button "C". The display will show "**STAND-BY**".



- At the end of the day, clean the machine (see chap. **MAINTENANCE**).
- Shut the water valve.
- Switch the main power switch OFF.



Detergent use

The machine has a standard detergent dispenser. The machine automatically sucks the product.

The detergent shall be the NO FOAM type, suitable for industrial dishwashers and must comply with the EN 60335-2-58/A11 norms.

The use of good quality liquid detergents is recommended.

Follow the manufacturer's recommendations for chemical dosage, related to the local water hardness. 1cm. of the product drawn into the tube is equal to about 0.15 g. A correct amount of detergent is very important for a successful wash.

Should the detergent lack, the display will show "**DETERGENT LEVEL**" (only with optional "Sensor for Chemicals Low Level").



Rinse aid use

The machine has a standard rinse aid dispenser. It automatically sucks the product.

The rinse-aid chemical, shall be suitable for professional glass and dishwashers and must comply with the EN 60335-2-58/A11 norms.

The recommended amount is 2-5 cm of product measured on the suction hose.

1 cm of the product drawn into the hose is equal to about 0.13g. A correct amount of rinse aid is very important for a quick and proper drying.

NB: Excessive amount of chemicals or foam will reduce wash pump efficiency.

Should the detergent lack, the display will show "**RINSE-AID LEVEL**" (only with optional "Sensor for Chemicals Low Level").





ECOLOGICAL ASPECTS

Recommendations for optimal use of energy, water and additives

Use the machine fully loaded when possible.

This shall prevent detergent, rinse aid, water and energy consumption waste.

Detergent and rinse-aids

Use detergents and rinse-aid chemicals with high biodegradability, to best respect the environment. Verify proper dosage in relation to water hardness.

Excess product pollutes rivers and seas while an insufficient dose results in unsatisfactory dish washing and/or hygiene.

Boiler and Wash-Tank temperatures

The boiler and tank temperatures are set by the manufacturer in order to obtain the best washing results with detergents on the market. The temperatures can be reset by the installer in relation to your detergent.

Pre-washing

Carefully pre-wash with a moderate amount of water at room temperature to facilitate the removal of animal fats. To remove encrusted materials warm water soaking is recommended.

Note:

Wash objects as soon as possible to avoid deposits from drying and compromise effective washing.

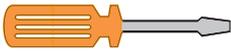
For effective washing routine dishwasher cleaning and maintenance is advised.

(see chap. **MAINTENANCE**)

Disregarding the points listed above and of any the information contained in this manual can cause energy, water and detergent waste with a subsequent increase in running costs and/or performance reduction.

H.A.C.C.P. AND HYGIENE REGULATIONS

- When starting the machine ON, no wash-cycle will be starting until the set boiler and wash-tank temperatures are reached. During operation, the machine will not start the rinse cycle till the set boiler temperature is reached.
- Remove carefully all solids from the objects to be washed, to avoid obstruction of filters, nozzles and piping.
- Drain the wash tank and clean the filters at least twice a day.
- Check if the detergent and rinse-aid dosage are correct (as recommended by the manufacturer). In the morning, before starting the machine, check that the quantity of chemicals in the canisters is enough for daily supply.
- Keep your working tables clean.
- Extract the rack with clean hands or gloves to avoid finger marks.
- Do not dry or polish the washed objects with cloths, brushes or rags that are not sterile.



MAINTENANCE

Routine maintenance

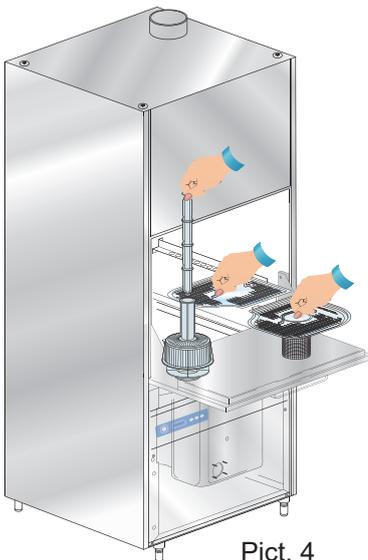
WARNING: The machine is not protected against pressurized water jets. Do not use pressure cleaning system against the machine.

It is recommended to contact the seller of chemicals for proper cleaning instructions, in order to have detailed indications on methods and products for the correct periodical machine sanitation.

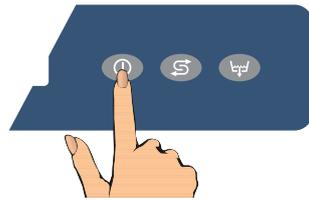
Do not use bleach or chlorine based detergents.

Daily cleaning is needed to ensure that the machine runs perfectly. The following shall be carried out:

- Turn the machine in **"STAND-BY"** mode, by pressing the push-button **"C"** of the control panel (see chap. **OPERATION**).



Pict. 4



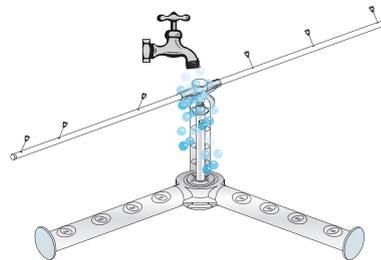
- Remove the surface filters (see pict. 4) and clean them under running water. Drain the sump water by removing the overflow pipe plug (see Pict. 4).

If the drain hose is elevated above the drain point of the machine the machine will not drain.

- Remove the drain filter (see pict. 5) and clean with a brush and a water shower.
- Remove the arms (see pict. 6) by loosening the fixing screws, and thoroughly clean them, and the nozzles under running water.

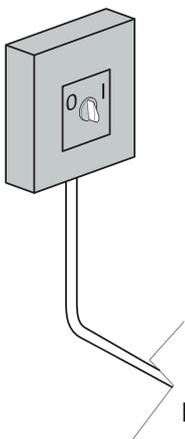


Pict. 5

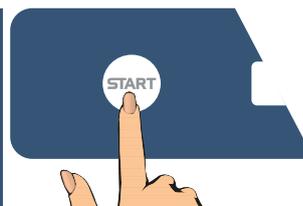


Pict. 6

- Reassemble the parts and reposition the wash pipes firmly in place.
- Clean the tank very carefully, using a water shower.
- It is recommended to leave the machine door open at the end of the day.
- Automatic cycle of machine self-cleaning/rinsing: recommended at each day end. The machine should be in **"STAND-BY"** mode. Push START button **"A"**; an automatic cycle of 60 seconds will start, after this the machine will be in **"STAND-BY"** mode.



Pict. 7



- Shut the water valve.
- Turned off the machine by switching the main power switch OFF (see pict. 7).

Extraordinary Maintenance - by qualified Service Personnel

Once or twice a year have the machine inspected by a qualified technician, in order to:

- 1 Clean the solenoid-valve(s) filters;
- 2 Remove scale from the heating elements;
- 3 Control the status of the seals;
- 4 Control for components integrity and/or consumption;
- 5 Control the dispenser(s) efficiency;

A qualified electrician, should check all electric connections inside the machine, at least once a year.



SIGNALS AND ALARMS

The alarm messages are displayed, based upon their meaning.

When displaying "**DETERGENT LEVEL**" add detergent in the detergent tank (only with optional "Sensor for Chemicals Low Level").

When displaying "**RINSE-AID LEVEL**" add rinse-aid chemical in the rinse-aid tank (only with optional "Sensor for Chemicals Low Level").

When displaying "**SHUT DOOR**" means that the open door does not allow the maneuver tried, or a wash cycle was in progress, when lifting the door.

When displaying "**DRAIN WATER IN WASH TANK**" means that a full wash-tank does not allow the maneuver tried.

When displaying "**SELF-CLEANING: REMOVE FILTERS AND PRESS START**" the machine requires a self cleaning cycle.

When displaying "**SELF-CLEANING CYCLE OVER**" the machine ended the self-cleaning cycle.

TYPE OF ALARM	CAUSE	REMEDIES
B1	BOILER FILLING FAIL	Open the water supply valve and verify a proper water supply flow. Contact the Rhima Service Department.
B2	BOILER PROBE FAIL.	Contact the Rhima Service Department
B3	BOILER HEAT. ALARM	Contact the Rhima Service Department
B4	RINSING FAILED TIME OUT RINSE	Contact the Rhima Service Department
B5	BOILER OVERHEATING	Contact the Rhima Service Department
E1	WATER LOAD FAILED	Open the water supply valve. Contact the Rhima Service Department.
E2	TANK PROBE FAIL.	Contact the Rhima Service Department
E3	TANK HEATING ALARM	Contact the Rhima Service Department
E5	TANK OVERHEATING	Contact the Rhima Service Department
E6	TANK DRAINING FAIL.	Check the overflow pipe. Contact the Rhima Service Department.

TROUBLESHOOTING



Type of Problem	Possible Causes	Cure
The machine does not load water.	Water tap shut.	Open the hot and/or cold water tap.
	Rinse area nozzles or solenoid-valve filter blocked and/or scaled with limestone.	Clean the rinse arm nozzles, conductors and solenoid-valve filter. Contact the Rhima Service Department.
	Defective pressure-switch.	Contact the Rhima Service Department.
Cycle LED A flashing (red colour)	See chapter Signals and Alarms	---
Washing results are unsatisfactory.	The washing nozzles are obstructed or the rack does not rotate.	Clean the nozzles carefully, and check the right positioning of the wash-arm, tightening firmly.
	Foam is present.	Use no-foam detergents or reduce the dose in use. Check the rinse-aid dosage.
	Fats or starches not removed.	Insufficient detergent concentration.
	Filters are dirty.	Remove filters, clean with brush under a jet of water and replace in original position.
	Check tank temperature (which must be between 55°C and 60°C).	Contact the Rhima Service Department.
	Wash time insufficient for the type of dirt.	Select a longer wash-cycle, if possible, otherwise repeat the wash cycle.
	Wash water is dirty.	Drain the tank water, clean the filters; refill the tank and replace the filters correctly.
Objects are not properly dried.	Not enough rinse aid.	Increase dosage. Contact the Rhima Service Department.
	The rack is not suitable for the objects.	Use the suitable rack which gives the objects an inclined position so that water can rinse away.
	The washed items may have been sitting in the wash chamber too long.	As soon as the cycle stops, remove the rack with pots and tools so that they can dry more quickly in the air.
	Rinse temperature under 80°C.	Contact the Rhima Service Department.
	Surface of objects too rough or porous for material wear.	Replace type of objects used. If the dirt on the objects is dry and old, soak before washing.
Streaks and spots on objects.	Too much rinse-aid chemical.	Reduce the rinse aid amount. Contact the Rhima Service Department.
	Too hard water.	Check the water quality. Water must not exceed 8°f in hardness.
The machine stops during the wash stage and starts refilling water.	The previous day's water was not changed.	Drain the tank totally and refill.
	Excessive water temperature in tank.	Contact the Rhima Service Department.
	Defective pressure switch.	
	Overflow pipe improperly positioned.	Remove and reposition the overflow pipe properly.
Machine will not drain.	Object stuck in drain pump*.	Contact the Rhima Service Department.
	Blocked drain.	Check sink's drain correctly. If not contact licenced plumber.

* If drain pump is supplied.



Australia

Tel: 1300 347 944

New Zealand

Tel: 0800 902 054

Singapore

Tel: +65 9107 8943

DETERGENTS

To request detergents or rinse additive contact your local Rhima Service centre below:

Australia: **1300 347 944**

New Zealand: **0800 902 054**

Singapore: **+65 9107 8943**



Superwash

10 Litre

For all other washing



Final rinse

5 Litre

