

# **PW3** PASSTHROUGH WAREWASHER



# **Operator Manual**



### <u>WARNING</u>

Before installation and commissioning, you must read the safety instructions and warnings carefully and all the warning labels attached to the equipment.



#### **IMPORTANT**

Failure to comply (even partially) with the instructions given in this manual will invalidate the product warranty and relieves the manufacturer of any responsibility.



#### **IMPORTANT**

The alteration of machine operation, design or the replacement of parts not approved by the manufacturer may void warranties and approvals.

We have checked that the contents of this document correspond to the model described. There may be discrepancies nevertheless, and no guarantee can be given that they are completely identical. The information contained in this document is reviewed regularly and any necessary changes will be included in the next edition. We welcome suggestions for improvement.

Document subject to change without prior notice.

Information supplied in this manual is copyright. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical without the express permission of the author / publisher.



### **Safety Instructions**



### WARNING

Equipment contains dangerous voltages and can be hazardous if installed or operated incorrectly. Non-compliance with **Warnings** or failure to follow the instructions contained in this manual can result in loss of life, severe personal injury or serious damage to property.

#### Installation

- Use qualified, skilled personnel
- Follow installation instructions
- Connect to correct voltage and supply current
- Provide fully accessible Electrical Isolation Switch

### Training and Supervision

- Read and Understand the Operating instructions
- ♦ Train all staff
- This appliance is not intended for use by young children, who must be supervised to ensure they do not play with the appliance
- This appliance is not intended for use by infirm persons without supervision
- This appliance is not intended for use as a stepladder

#### Hot Surfaces

• Be aware some surfaces can be hot

#### Chemicals

- Commercial dishwashing detergents are hazardous
- Read and follow the safety information found on the labels of detergent containers and Material Safety Data Sheets
- ♦ Handle with care
- Use protective eyewear and clothing if decanting containers

### Hot Water

- Door safety switches are designed for emergency use only
- Wait for the green cycle light to go out before opening the door
- Wash water is 60°C and contains caustic detergent so DO NOT put hands in wash water

### Cleaning

- DO NOT hose down the machine or splash water over the exterior
- Watch for broken glass etc when cleaning the inside of the machine

### Installation

!\	

### WARNING

Installer must be suitably qualified and ensure compliance with all codes and standards including AS/NZS3500.1.



Failure to comply even partially with installation instructions may void the warranty.

### Positioning

Unpack machine, check for damage and complete delivery. Install machine on sound waterproof self-draining floor and use adjustable feet to level machine. Allow room for detergent to one side of machine or in adjacent cupboard. 20litre container requires about 450H x 250W x 350D, but smaller containers are available from many suppliers.

### **Benchwork**

Refer to the installation diagram.

Recommended bench depth is 850 mm, height 900 mm. We recommend sink smaller than rack with guide to prevent rack falling into sink. Align sink with dishrack path as shown on the installation diagram.

### Water Supply

Waste

Power

 $65^{\circ}C \pm 5^{\circ}C$ Hot water temperature Connection 20 mm (3/4" BSP Male) 8 litres approximately Consumption per cycle DCV = Dual Check Valve fitted standard Backflow prevention 100-350 KPa = 15-50 Psi. Pressure Above this range fit pressure limiter. Don't use small diameter plastic supply lines. FLUSH supply line before connection. Line strainer is fitted. Excessive water hardness may affect performance or damage machine - softening is recommended. 40 mm gravity drain – refer point B on the installation diagram – run waste directly behind the machine or through open side panels or base. Machine requires 3 Phase, Neutral and Earth, 415V, 30A/ph, 50Hz, permanently wired via wall switch mounted adjacent to machine. Wash pump rotation must be checked after installation to ensure correct direction (excessive noise and damage with incorrect direction). Detergent

Insert detergent pump inlet hose into container of commercial low foam detergent. Open machine door and switch machine on. Press and hold detergent prime switch behind front cover until chemical flows into machine.

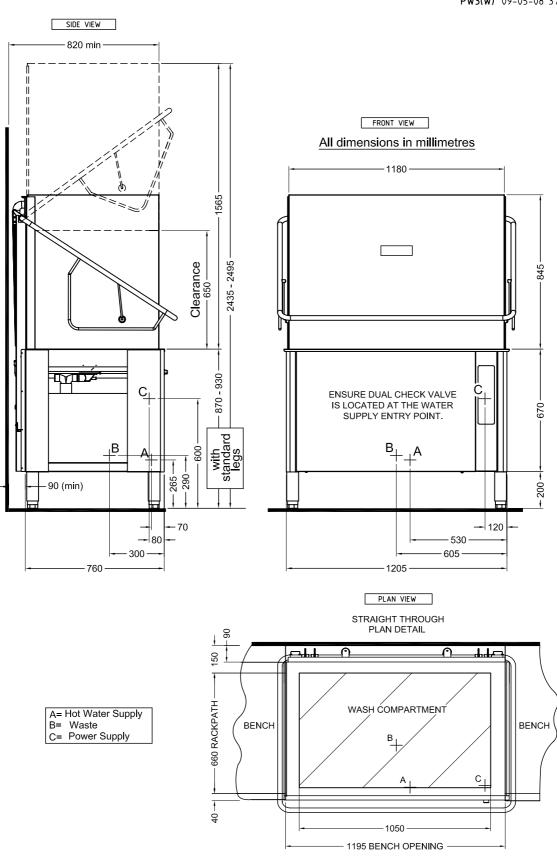
Commercial detergents can be hazardous - read instructions and handle with care.

### Installation Checklist

Complete attached Installation Checklist to ensure machine is installed and running correctly, and operator is familiar with operating procedures.

### Troubleshooting

If the machine doesn't fill after switching on the power, check and ensure that the hot water supply tap is open, water supply pressure is not below specification and Dual Check Valve is correctly installed (arrows on the dual check valve's body specify water flow direction).



### PW3(W) INSTALLATION DIAGRAM

PW3(W) 09-05-08 3 A

### **Installation Checklist**

CHECK OK / NOTES Delivery Supplied complete no transit damage Position Level and stable on sound, waterproof, self draining floor Water Isolator valve fitted Accessible, all fittings sound, no leaks DCVs fitted (Washtech only) Correct direction  $65 \pm 5^{\circ}C$ Temperature Flow rate Minimum 20 litres per minute Pressure 200-350 kpa, limiter fitted if above this range Booster fitted if below this range Cold water when required Pressure not above 350 kpa Hardness Filter or softening if required Power Isolating switch Fitted, functional and accessible Supply as specified Voltage, current, circuit breaker Waste Usually 40 mm Sound, no leaks Air gap on pumped drain Very important GLV and UD models Chemicals no leaks conc.OK product name container primed Detergent Rinse Aid Machine operation Run several cycles Including correct fill levels Confirm correct operation **Operator training** Confirm Operator has copy of Operator Manual and is familiar with procedures Start-up

 Start-up

 Pre-rinse and racking

 Machine operation

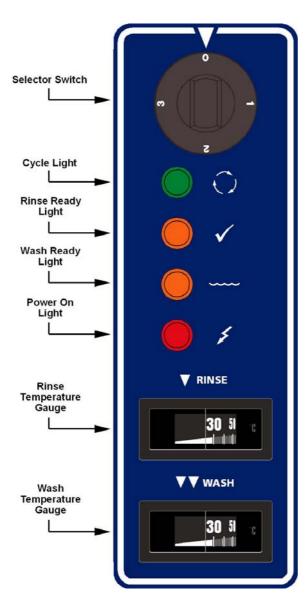
 Drain

 Clean

 Shut-down

Model / Serial	
Owner	
Location	
Technician	
Date	
Signed	

### **Operating Instructions**



### Start up

Fit drain upstand, wash pump filter, scrap trays and shut door.

Turn wall power switch on and select any cycle (1, 2 or 3).

Power light glows red and machine fills automatically.

Wash Ready light (water symbol) glows amber when wash tank is ready.

Rinse Ready light (tick symbol) glows amber when the machine is up to required temperature and ready to run.

### Operation

Select required cycle (1, 2 or 3 for 2, 4 or 6 minutes cycle accordingly).

Try cycle 3 initially and switch to faster cycles only if necessary.

Load rack into machine and close door to start the machine.

Cycle light glows green while machine operates.

When Cycle light goes out, cycle is complete.

Open door and remove rack.

After removing rack from maching, DO NOT shut door as machine will start again.

NOTE: Machine will not operate unless Ready lights are on.

### Shut down every night

Turn machine and wall power switches off.

Remove drain upstand to drain wash tank.

Remove scrap trays and wash pump filter and rinse clean.

Replace drain upstand, filter and scrap trays.

## **Dishwashing Procedures**

Note : these are general instructions to assist in getting the best performance from Washtech dishwashers – some comments and / or illustrations may not apply to every unit.

#### Installation



Read the Operator Manual. Correct installation, including an adequate supply of water at the correct temperature and pressure is essential for effective operation of your machine. Refer installation instructions for details. Drain hose outlet height is important on some models. Always install on a sound self-draining floor. Water softening is recommended in hard water areas - especially for glasswashing

### **Pre-rinsing**



Pre-scraping of dishes is required by hygiene regulations. The best method is to pre-rinse with a pre-rinse spray unit or alternatively by scraping or dunking in water.

### **Cutlery Procedures**



Pre-soak cutlery in warm water, preferably containing cutlery pre-soak compound - refer your chemical supplier.

Do not overfill cutlery containers. Cutlery should be loose with handles down. Sort after washing rather than before. Cutlery of only one type nests together and obscures wash water.

### **Racking Procedures**

Do not overload racks, minimize the overlap of crockery. Cycle times are short and water consumption per cycle low - so there is no advantage in overloading racks.



#### **Cycle Times**



For multi-cycle machine use the longest cycle whenever possible. Note that water consumption does not increase with longer cycles. Only choose shorter, faster cycles when necessary.



Detergent

Use of correct type and quantity of low foaming commercial grade detergent is essential to the performance of the machine. We strongly recommend that you use a professional dishmachine chemical supplier - and will be pleased to recommend a supplier in your region. Discuss with them the use of cutlery pre-soak solution, detergent and drying agent.



### **Dishwashing Procedures**

### Drying

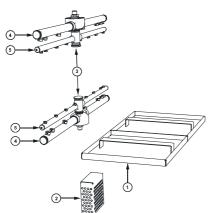


Single tank commercial dishwashers do not have a drying cycle. However, the machines do rinse at high temperatures which promote fast drying particularly when drying agents are used. We recommend prompt removal of the rack from the machine - leave the rack on the bench for 2 to 3 minutes before emptying. This time will be reduced with correct use of drying agent (rinse fluid) which reduces water surface tension and allows water to drain quickly from washware. For advice on drying agents and injectors refer to your chemical supplier.

### **Daily Cleaning**

It is essential that the machine is drained and cleaned at the end of each day. Drain the machine then remove, clean and replace filters as per the operating instructions. Regularly check the wash and rinse jets and clean them if necessary – see below.

### **Regular Cleaning**



Remove scrap trays<sup>①</sup> and wash pump inlet filter<sup>②</sup>, where fitted, and rinse or brush clean.

Remove wash and rinse arms by undoing the central thumbscrews<sup>③</sup>. If necessary, remove the end cap screws<sup>④</sup> from the wash arms and the end screws<sup>⑤</sup> from the rinse arms and flush the arms with water and/or use a toothpick or paperclip to clear jets.

Note: arms and filters vary with model and may appear different from this illustration e.g. those models with plastic wash arms have removable jets for ease of cleaning

### **Regular Servicing**

Regular servicing of the dishwasher is absolutely essential to keep the machine in top working condition and obtain the best performance.



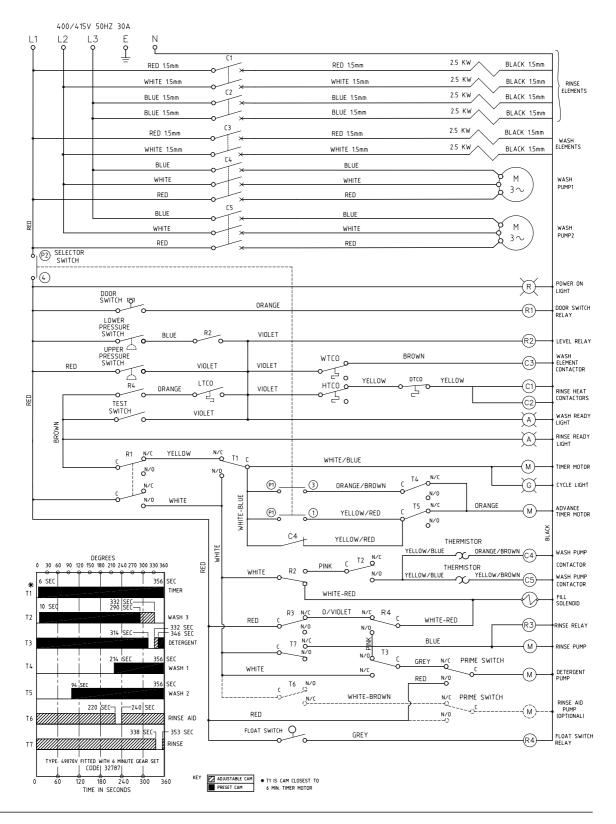
Please contact Moffat or your Authorised Service Provider to organize regular servicing of the dishwasher - discuss a Preventative Maintenance Agreement for optimum performance and long machine life.

Note : these are general instructions to assist in getting the best performance from Washtech dishwashers – some comments and / or illustrations may not apply to every unit.

### **Electrical Diagrams**

### PW3 SCHEMATIC DIAGRAM

010157 31/01/08 2 B



### Notes