







#### WARNING

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.



#### IMPORTANT

This machine is intended for commercial use only.

#### CONTENTS

Safety Instructions	3
Installation	
Installation Diagram	
Operating Instructions	
User Programming	
Troubleshooting	
Wiring Diagram	
Notes	10

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.

Specifications and 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.

# Service1 800 622 216Parts1 800 337 963



Distributed in Australia by Moffat Pty Limited 740 Springvale Road, Mulgrave, Victoria Tel 09 9518 3888 | Fax 03 9518 3818

### **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 & water supply valves

#### **Training and Supervision**

- · Read and understand the Operating instructions and train all staff
- This appliance must not be operated by children or infirm persons
- Machine front panel may be removed to access chemical pumps. Access of any further wiring or componentry must only be done by suitably qualified and trained personnel internal hazards include live electrics and very hot surfaces
- This appliance is not intended for use as a stepladder

#### **Hot Surfaces**

• Some surfaces may be hot or very hot

#### Chemicals

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

#### **Hot Water**

- Do not put hands in wash water which may be over 60°C and contain hazardous caustic detergent
- Rinse water can be over 90°C
- Door safety switches are designed for emergency use only

#### 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

#### Service/repair

- Under no circumstances the user should attempt to carry out repairs
- All service/repair work must be carried out by qualified personnel only

#### **Power Cord Replacement**

• If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similar qualified person in order to avoid a hazard

### **Installation Checklist**

#### WARNING

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

#### Unpack

• Unpack the machine, check for damage and complete delivery.

#### Positioning

- Place machine on sound waterproof self draining floor, fit feet and adjust feet to level
- Allow room for adjacent chemical containers

#### Water

- Flush supply lines before connection
- Connect hose supplied to adjacent accessible isolator valve 20 mm 3/4 male
- Flow rate required 20 litres per minute
- Temperature 65°C
- Consumption per cycle 2.6 litres
- Pressure required 200-350 kPa fit limiter above this pressure
- Back Flow Atmospheric Vacuum Breaker
- Potable water quality is required filter or soften if necessary

#### Water Quality Requirements

Hardness min max	nin 20		<b>pH</b> 7 8			
<b>lons</b>	<b>Cl-</b>	<b>SO</b> ₄	<b>Fe</b>	<b>Mn</b>	<b>Cu</b>	<b>Cl</b> ₂
Max mg/L	100	400	0.1	0.5	0.05	0.1

#### Power

• Machine shipped with cordset for 15 A 240V 50Hz via adjacent switched outlet

#### Waste

• Connect drain pump hose supplied to upstand or sink waste connection

#### Detergent

- · Note that detergent is hazardous read instructions and handle with care
- Insert hose into container of commercial dishwasher low foam detergent
- Detergent will come up to strength with use during the day

#### **Rinse Fluid**

· Insert hose into adjacent container of commercial dishwasher rinse fluid

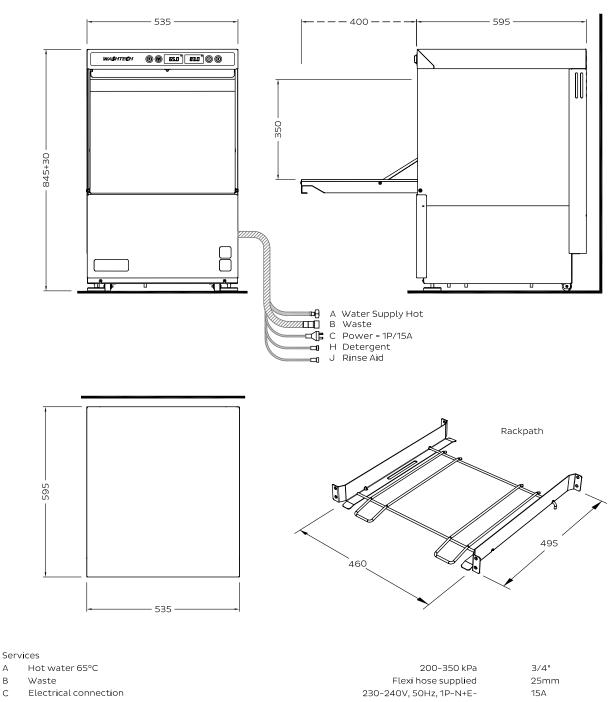
#### Operation

• Run several cycles, ensure that operator has read and understands instructions

#### **Troubleshooting Installation**

• If machine doesn't fill after switching on power, check & ensure that hot water supply tap is open, water supply pressure is not below specification

## **XV Installation Diagram**



Note: Isolating switch must be within 1m of, and not directly behind the machine. Isolating water valve must be readily accessible

А

В

С

### **XV Operating Instructions**

WASHTECH

- Start
- Turn on at wall
- Ensure the Filter (2) is in place
- Ensure the Upstand (1) is in place and shut door
- Press the Power button which will glows red, and the machine will fill automatically

#### Operation

- · Load rack into machine and shut door
- Select either Cycle 1 (1 minute) or Cycle 2 (2 minute) button to start a cycle
- Both Cycle buttons glow green while machine operates
- When Cycle lights go out, the cycle is complete

NOTE: The machine may be started while the rinse water is being heated – in this instance it will continue to run the wash cycle until the rinse water is up to 83 degrees

#### Detergent & Rinse Aid

Detergent and rinse aid concentration can be changed using the adjusting screws on the front cover.

#### Shut Down - Every Night

- Open the door and press the Drain button
- Remove Upstand (1) once the top of this is above the level of the water
- Allow to drain for approximately 1 minute or until the tank is empty with door open
- Turn the Drain and then the Power buttons off
- Remove and rinse Filter (2) before replacing back in machine along with the Upstand (1)

#### Cleaning - At Least Once A Week

Remove, rinse and replace:

Upstand	1
Filter	2
Wash/rinse Arm	З
Thumbscrew	4

#### Inspect and clear all jets in the wash/rinse arms

#### **Suggested Best Practice**

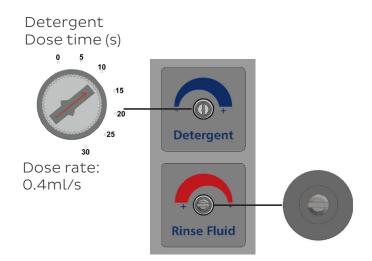
Pre-rinseScrape and/or rinse plates & glasses in cool waterChemicalUse good quality non foaming commercial detergent and drying agent. Do not<br/>use domestic detergent which will cause the machine to foam

## **Chemical Adjustment**

#### **Chemical Pumps**

This machine includes external adjustment ports for the detergent pump and rinse aid injector. These ports are clearly marked by new labels.

Chemical dosing times per cycle may now be adjusted by turning the dial on each pump with a screwdriver through the front panel.



#### To reset to the factory default level of detergent:

Turn the dial anticlockwise as far as it will go using a small flat or philips screwdriver, then turn it back clockwise one quarter turn. This equates to a 12 second injection rate or a 4.8mL dose of detergent per cycle.

#### To reset to the factory default level of rinse aid:

Turn the screw clockwise as far as it will go using a sturdy flat screwdriver, then turn it back anticlockwise 5 full turns. This equates to 1mL per cycle.

#### To prime detergent:

Fill the machine, then drain and fill again. The detergent pump will operate during each fill cycle and will need a complete fill cycle to prime approximately 1.5m of the inlet line.

#### To prime rinse aid:

First, fully unscrew the rinse aid adjustment screw anticlockwise. Press firmly on this screw and it will spring inwards. Repeat ~15 times to fully prime chemical (less if the inlet lines have been shortened), and then reset the adjustment to the factory setting as above.

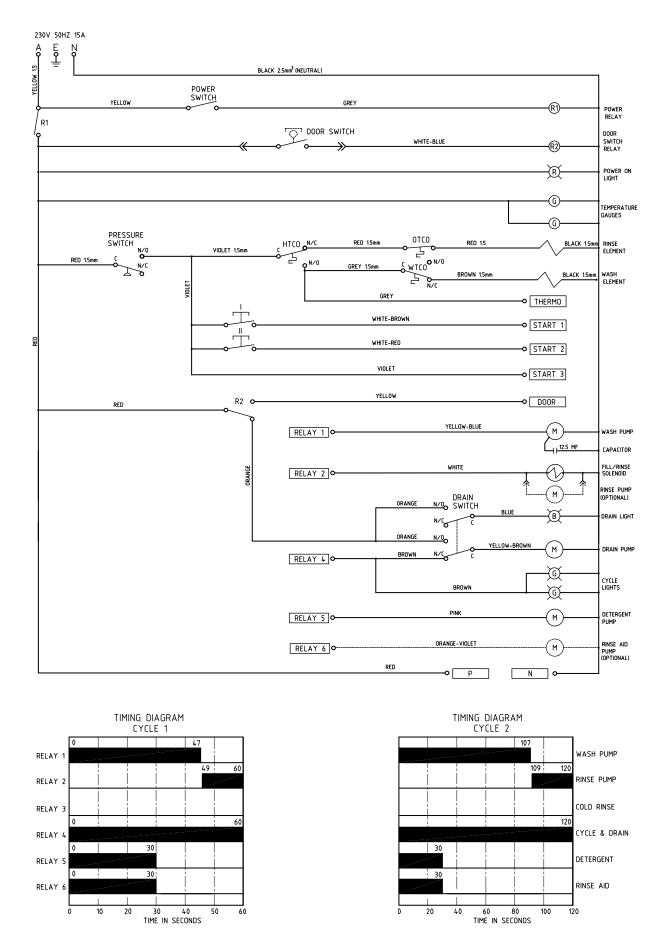
NOTE: A wide range of commercial detergents are available and the effectiveness of these can be impacted by water quality, the operation of the dishwasher and how frequently it is cleaned. As such, fine tuning of the chemical dosage is generally required with the best person to assist being a chemical specialist.

# Troubleshooting

<b>Fault</b> Filling	Cause	Remedy
Not filling	Water supply valve shut	Check Water supply valve
	Door Switch not operating	Check Door is closed
Filling during wash cycle	Upstand not fitted properly	Check Drain upstand is fitted
Heating		
Dishes not hot enough	Machine not rinsing	Check water supply temperature
	Rinsing but not hot	Check water supply temperature & arms spinning freely
Cycle start		
Does not start	Door switch	Check door is closed
Cycle Finish		
Wash too long	Water supply cold	Check water supply temperature
Performance		
Poor wash result	Detergent not used	Use quality low foam product
	Overloading racks	Do not overload racks
	Not pre-rinsing	Use Fisher pre-rinse
	Wash arms not rotating	Remove and clean arms/check bushes
	Wash jets blocked	Remove arms and clean jets
	Excessive soiling	Pre-rinse/use long cycle
	Unrealistic expectation	E.g. baked on soiling requires pre-soaking
Poor rinse results	Rinse jets blocked	Remove arms and clean jets
	Rinse arms not turning	Remove arms, clean jets, check bushes
	Poor racking procedures	Do not overload racks
	Excessive wash tank soil build up	Pre-rinse, change wash water regularly
Not drying	Poor wash/rinse performance	Refer above
	Low temperatures	Check heating systems
	Drying agent not used	Use quality drying agent/rinse fluid
Foaming Wash	Excessive Rinse Fluid	Adjust Rinse Fluid Injector

### **XV Schematic Dlagram**

120121 01/11/18 1 B



### Accessories

	600 70080 CUPRACK 450mm PLASTIC
	600 70081 DISHRACK 450mm PLASTIC
	C660503 CUTLERY CONTAINER G
0	600 60080 HOSE SS 2M
	C440201 RUBBER FOOT D.60 X 10
	600 41209 FILTER ***CHECK IN MACHINE***
	216 10031 365mm RACK ADAPTOR
	OPERATOR MANUAL

### Notes

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

Manufactured in New Zealand by Washtech Ltd.

#### WASHTECH

414 Rosebank Roac Avondale Auckland 1026 New Zealand

PO Box 90548, Auckland

24HR Service0800 StarlineTel09 829 0930Fax09 829 0935E-mailinfo@washtech.co.nzwebwww.starline.co.nz

ISO9001

All Washtech products are designed and manufactured by Washtech using the internationally recognised ISO9001 quality management system, covering design, manufacture and final inspection, ensuring consistent high quality at all times.

In line with policy to continually develop and improve its products, Washtech Ltd reserves the right to change specifications and design without prior notice.

an Ali Group Company

