

# XU

## Operator Manual



**STARLINE**<sup>®</sup>  
PROFESSIONAL WASH SYSTEMS



**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.

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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.

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**Service 0800 782 754**

**Parts 09 829 0930**



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# 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 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 fitted
- Potable water quality is required - filter or soften if necessary

### Water Quality Requirements

Hardness	fH	dH	ppm	gf/gal	pH
Min	2	1	220	1	7
Max	10	6	100	6	8

Ions	Cl <sup>-</sup>	SO <sub>4</sub>	Fe	Mn	Cu	Cl <sub>2</sub>
Max mg/L	100	400	0.1	0.5	0.05	0.1

## Power

- Machine shipped with cordset for 15 A 230V 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

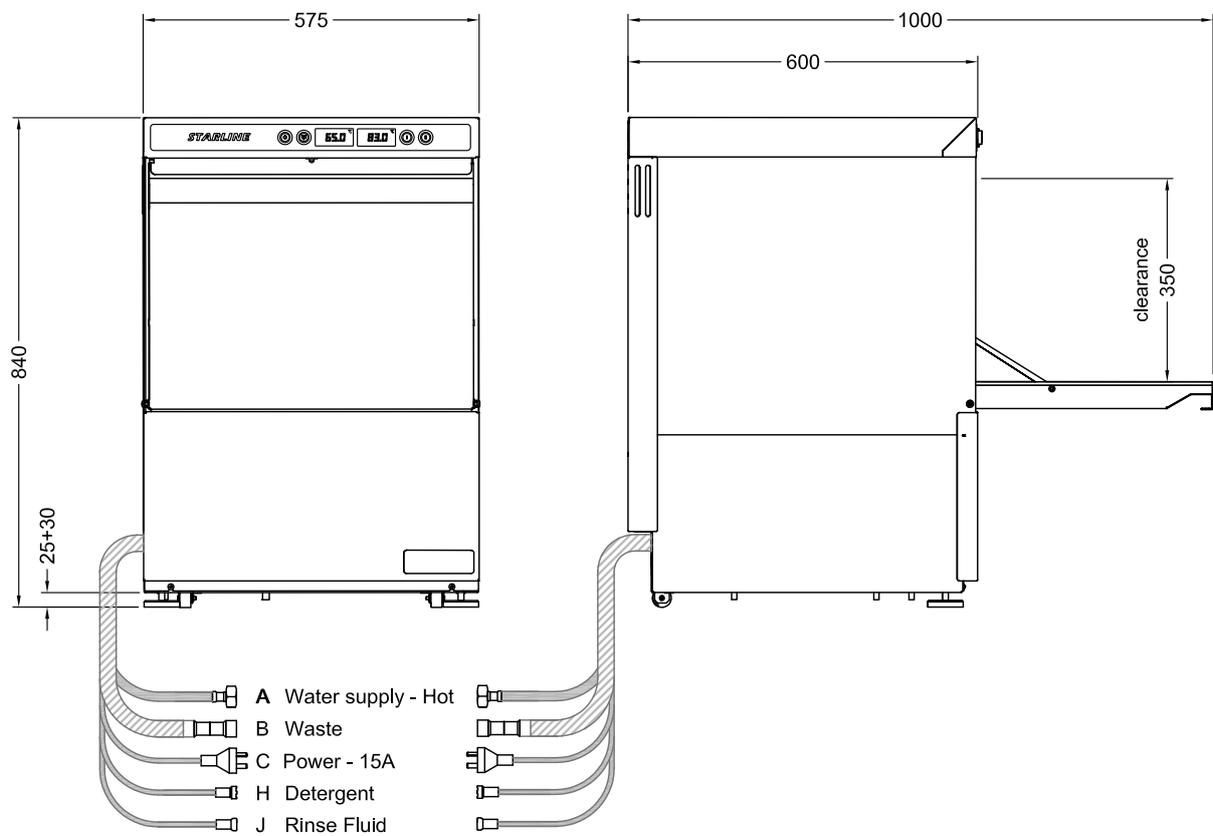
- Run several cycles, ensure that operator has read and understands instructions

## 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.

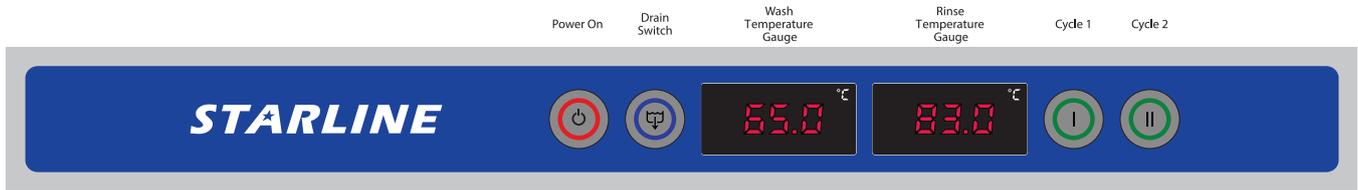
# XU Installation Diagram

XU-S INST 30-06-16 3 B



All dimensions in millimeters

# XU Machine Operation



## START UP

Turn machine on at wall. Fit filter, upstand and shut door.  
Turn on power at the wall and press Power button on machine.  
Power button light glows red and machine fills automatically  
Wash and Rinse temperatures will begin to rise on the temperature gauges once the machine has filled.

## OPERATION

Load rack into machine and shut door  
Select either cycle 1 (60 seconds) or cycle 2 (120 seconds)  
Cycle lights glow green while machine operates.  
When Cycle lights go out, cycle is complete.

NOTE 1: Machine might operate longer than specified above if rinse water temperature is below required temperature.

## SHUT DOWN EVERY NIGHT

Open door and press Drain button  
Drain button glows blue as machine drains.  
After draining starts remove drain upstand once the water level is below the top of the upstand.  
Allow to drain for approximately 2 minutes.  
Turn Drain and Power buttons off.  
Remove filter and rinse clean.  
Replace filter and drain upstand.

## DAILY CLEANING

The machine must be drained and cleaned at the end of each day.  
Drain the machine as per the shut down instructions.  
Remove, clean and replace filters.  
Regularly check the wash and rinse jets and clean if necessary.

## MAINTENANCE

Regular servicing of the dishwasher is essential for high performance, efficient operation and long machine life.  
Contact us for information on a maintenance program.



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## Operating Procedures

### PRE-RINSING

Pre-scraping of dishes is required by Food Hygiene Regulations. The best method is to pre-rinse with warm water with a Fisher Pre-rinse Unit - or alternatively by scraping or dunking in water. Cutlery should be pre-soaked in warm water, preferably containing cutlery pre-soak compound - refer your chemical supplier.

### RACKING PROCEDURES

Do not overload racks or cutlery containers, minimise the overlap of crockery. Wash cutlery unsorted, handles down. Cycle times are short and water consumption per cycle low - so there is no advantage in overloading racks.

### CYCLE TIMES

The XU has 60 and 120 second cycles.

### CHEMICAL

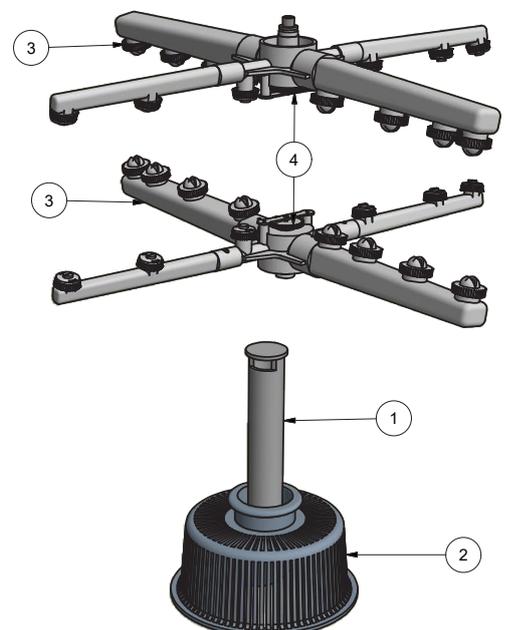
Correct type and quantity of detergent is essential for good results. Use good quality chemicals and regularly check containers. Discuss the use of drying agent and cutlery pre soak solution with your chemical supplier. Chemical concentrations can be adjusted by removing the front panel to gain access to the pumps. Detergent concentration can be increased by turning the adjusting screw clockwise. Rinse Fluid is set to a low injection rate and will take many cycles to prime. The operator can increase this by turning the adjusting screw anti-clockwise.

### DRYING

Single tank commercial dishwashers do not have a drying cycle. However, the machines do rinse at high temperatures which promotes fast drying particularly when drying agents are used. At the end of the cycle promptly remove the rack from the machine - leave the rack on the bench for 2 to 3 minutes before emptying.

### REGULAR CLEANING – at least once a week

Remove upstand (1) and filter (2).  
Remove wash and rinse arms (3) by undoing the central thumbscrews (4). Inspect all jets - use toothpick or paperclip and remove arm end-caps if necessary to flush and clear.  
Clean and then replace all items.

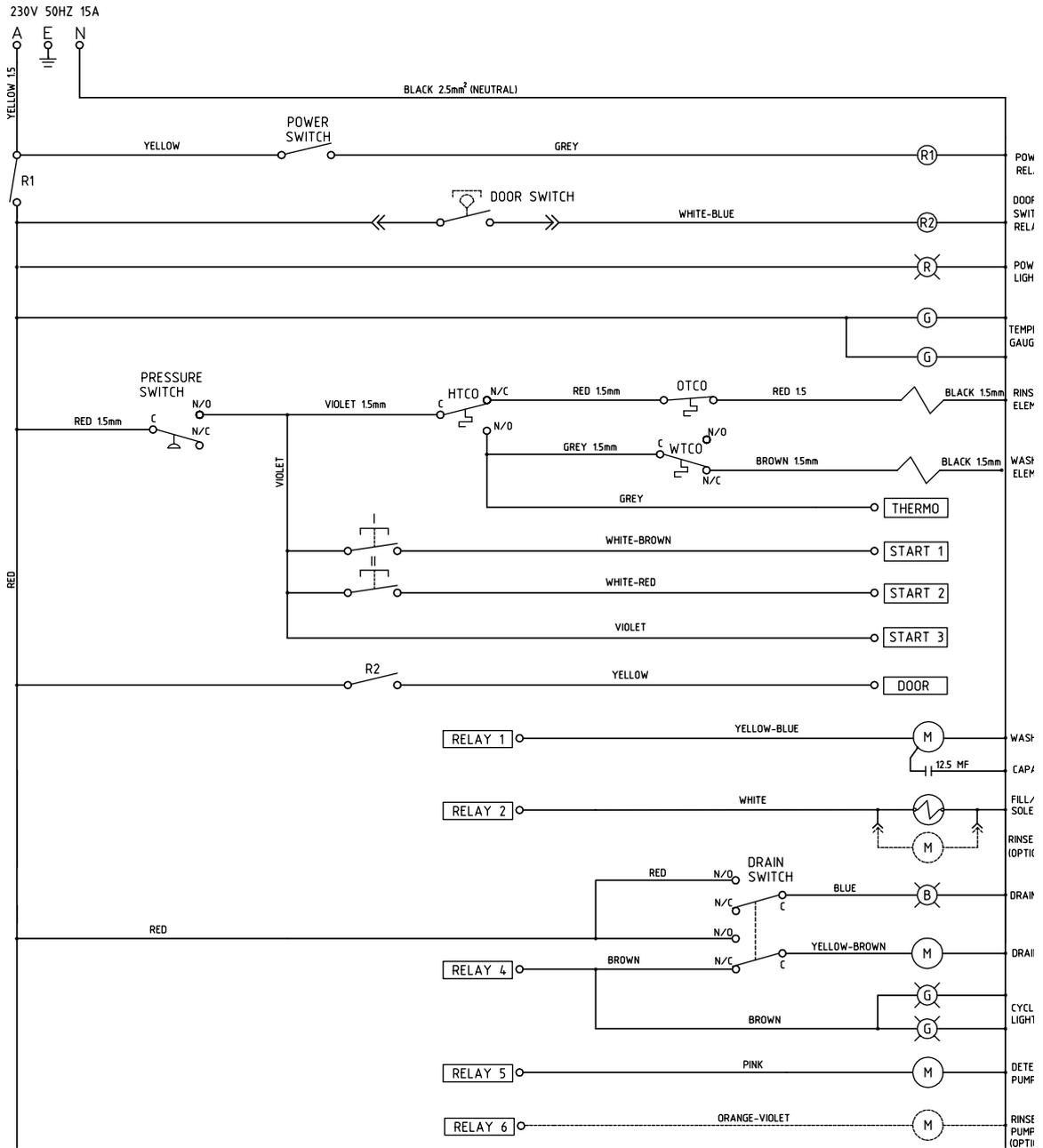


# Troubleshooting

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

# XU-3 Schematic Diagram

120121 09/02/16 1A



# Accessories

	<b>Code</b>	<b>Description</b>
	600 70029	Cuprack 500mm
	600 70028	Dishrack 500mm
	C660503	G Cutlery Container



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