UD

Operator Manual

STARLINE®

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.

CONTENTS

Safety Instructions....3
Installation....4
Installation Diagram....5
Operating Procedures....6
Troubleshooting....8
Wiring Diagram....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.

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STARLINE®

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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 panels must only be removed 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 andMaterial 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 - 15 litres per minute
- Temperature - 65˚C
- Consumption per cycle - 2.4 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	ppm	pH
min	20	7
max	100	8

Ions	Cl^-	SO_4	Fe	Mn	Cu	Cl_2
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.
- Easily upgradeable to single phase 25 A 230V 50Hz or three phase 15 A per phase 400V 50Hz

Waste
- Connect drain pump hose supplied to vented upstand or sink waste connection

Detergent
- Insert hose into container of commercial dishwasher low foam detergent
- Adjust detergent dosing and prime detergent using the keypad (refer to page 7)
- Use good quality chemicals and regularly check containers

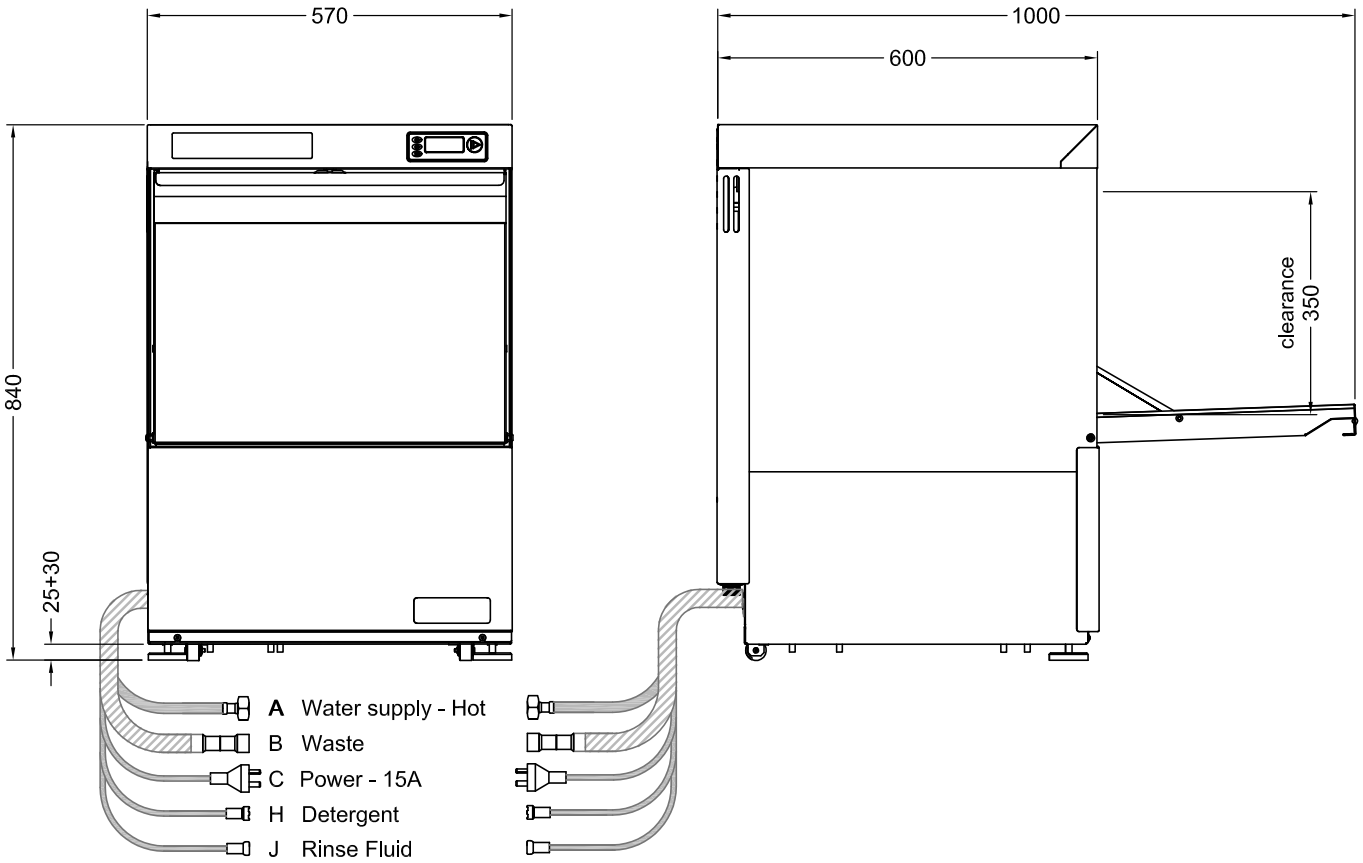
Rinse Fluid
- Insert hose into container of commercial dishwasher rinse fluid
- Adjust rinse fluid dosing and prime rinse aid using the keypad (refer to page 7)
- Use good quality chemicals and regularly check containers

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

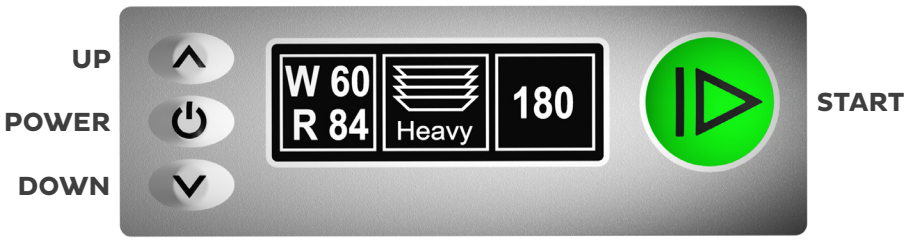
Troubleshooting Installation
- If machine doesn't fill after switching on power, check & ensure that hot water supply tap is open and water supply pressure is not below specification.

UD Installation Diagram

UD8S INST 29-02-16 3A



UD Operating Instructions



START
- Turn on at wall
- Ensure the Scrap tray (3) is in place
- Ensure the Upstand (1) and Drain filter (2) is in place and shut door
- Press Power button for 3 seconds to turn machine on and begin the fill cycle

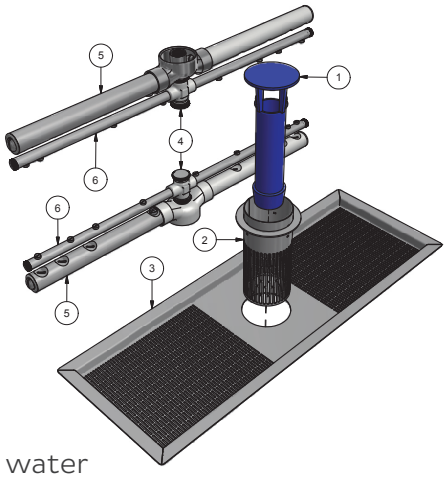
OPERATION
- Select cycle using Up/Down buttons (use the Heavy cycle whenever possible)
- Press Start button (once this is Green or Orange) to begin washing
- Timer counts down to 00 then resets after door is opened

START BUTTON COLOURS
- White = machine is filling
- Red = cycle is running
- Green = rinse water is up to temperature
- Purple = door is open
- Orange = machine is heating
- Blue = power saving mode

NOTE: The machine may be started while Orange light is on and while rinse water is being heated and the timer will pause at 22 seconds until rinse water is up to 83 degrees

SHUT DOWN – EVERY NIGHT
- Select Drain cycle via Up or Down buttons
- Remove drain Upstand (2) and shut door
- When Drain cycle is finished after 100 seconds, remove and rinse Upstand (1), Drain filter (2) and Scrap tray (3) before replacing back in machine along with Upstand (2)

CLEANING – AT LEAST ONCE A WEEK
- Remove, rinse and replace:
- Upstand 1
- Drain Filter 2
- Scrap Tray 3
- Thumbscrew 4
- Wash Arm 5
- Rinse arm 6
- Inspect and clear all jets in the wash and rinse arms



SUGGESTED BEST PRACTICE
- Pre-rinse Scrape and/or rinse plates and glasses in cool water
- Chemical Use good quality non foaming commercial detergent and drying agent Do not use domestic detergent which will cause the machine to foam

User Programming

The **User Settings** menu is accessed by pressing the UP and DOWN keys simultaneously for 5 seconds, the screen should then change to:

Press the POWER button to scroll between settings.
Press the UP and DOWN keys to change a specific setting,
Press the START button to return to the operator screen.

The programming options are specified in the table below:

User Settings	Factory Setting	Selection
Power Save	ON	ON/OFF
Detergent Prime	OFF	ON/OFF
F-Detergent Injection Time	40	0 - 180 secs
W-Detergent Injection Time	15	1 - 30
RInse Aid Prime	OFF	ON/OFF
W-Rinse Aid Time	12	1 - 30
Display Contrast	27	10 - 40

Power Save function reduces the rinse temperature setting by 10°C when the machine is idle for 5 minutes or more. The temperature settings return to the set value when door is opened or START/STOP key is pressed.

Detergent Prime function allows manual operation of the detergent pump to fill the detergent hose with chemicals. Press UP key to switch the detergent pump on, DOWN key to switch the pump off. If the detergent pump is turned on and left running, it will stop automatically after 1 minute of operation.

F-Detergent Time controls the operation time of the detergent pump during the fill of the wash tank. The factory settings for passthrough models – 80 seconds.

W-Detergent Time sets the injection time of the detergent pump at the beginning of each wash cycle. Ex-factory setting is 15 seconds as board default.

Rinse Aid Prime function allows manual operation of the rinse aid pump to fill the rinse aid hose with chemicals. Press UP key to switch the rinse aid pump on, DOWN key to switch the pump off. If the rinse aid pump is turned on and left running, it will stop automatically after 1 minute of operation.

W-Rinse Aid Time controls the injection time of the rinse aid peristaltic pump. The rinse aid pump is set to operate at the beginning of each wash cycle. Ex-factory setting is 12 seconds as board default.

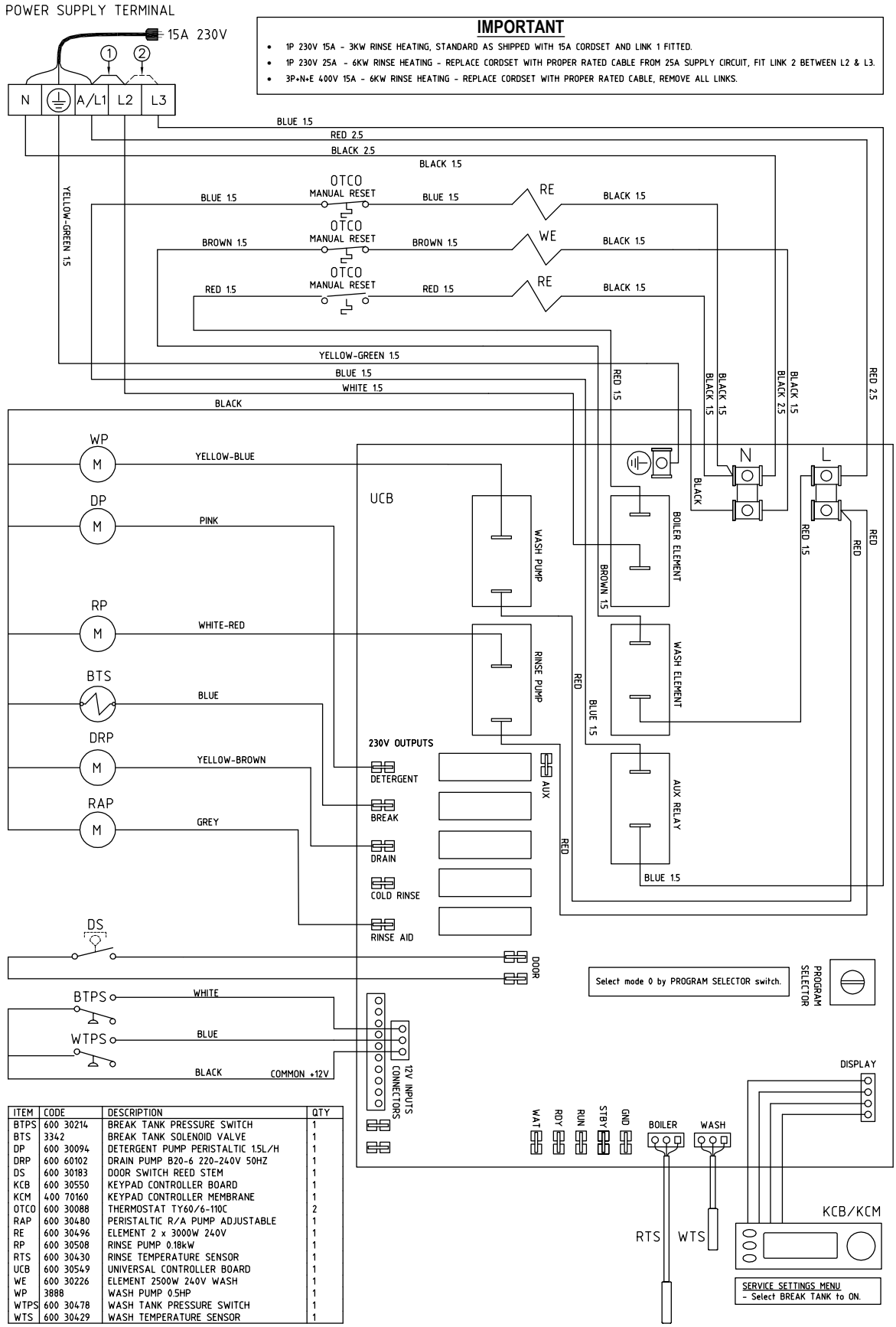
Troubleshooting

If an error message appears on the control display first try turning the machine OFF for 30 seconds and then back ON. If the error message remains call for service.

Issue	Resolution
Error 7	Fill failure - check drain upstand is fitted & water supply is turned on and good flow rate
Error 8	Drain failure - check drain upstand is removed & drain hose is not kinked or blocked
Not filling	Check water supply is on and door is closed
Refills during Wash	Check Drain upstand is fitted
Cycle does not start	Check door is closed
Wash too long	Check water supply temperature - wash stops at 22 seconds if rinse is still heating
Foaming Wash	Excessive use of rinse fluid and/or low wash temperature can cause foaming
Poor Results	Read and carefully follow the machine installation, operating and care procedures
	All of the following is actually in the instructions on previous pages of the manual
	Pre-scrap and pre-rinse washware
	Do not overload dishracks - avoid overlap of plates, wash cutlery unsorted, handles up
	Use quality low foam detergent and rinse fluid - check containers and adjustment
	Use heavy cycle - baked on soil requires pre-scraping and/or pre-soaking
	Remove and check wash & rinse arms & jets are clean and rotating freely
	If plates are not pre-rinsed wash water may need changing regularly
	Check wash and rinse temperatures
	Remove rack when cycle ends and leave on the bench a few minutes for drying

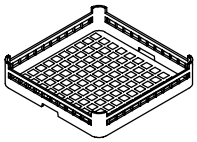
UD8(S) Wiring Diagram

030323 14/03/17 3C

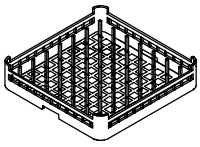


ITEM	CODE	DESCRIPTION	QTY
BTPS	600 30214	BREAK TANK PRESSURE SWITCH	1
BTS	3342	BREAK TANK SOLENOID VALVE	1
DP	600 30094	DETERGENT PUMP PERISTALTIC 1.5L/H	1
DRP	600 60102	DRAIN PUMP B20-6 220-240V 50HZ	1
DS	600 30183	DOOR SWITCH REED STEM	1
KCB	600 30550	KEYPAD CONTROLLER BOARD	1
KCM	400 70160	KEYPAD CONTROLLER MEMBRANE	1
OTCO	600 30088	THERMOSTAT TY60/6-110C	2
RAP	600 30480	PERISTALTIC R/A PUMP ADJUSTABLE	1
RE	600 30496	ELEMENT 2 x 3000W 240V	1
RP	600 30508	RINSE PUMP 0.18kW	1
RTS	600 30430	RINSE TEMPERATURE SENSOR	1
UCB	600 30549	UNIVERSAL CONTROLLER BOARD	1
WE	600 30226	ELEMENT 2500W 240V WASH	1
WP	3888	WASH PUMP 0.5HP	1
WTPS	600 30478	WASH TANK PRESSURE SWITCH	1
WTS	600 30429	WASH TEMPERATURE SENSOR	1

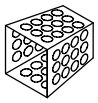
Accessories



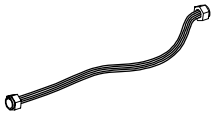
600 70029
CUPRACK CB 500mm X 75mm high



600 70028
DISHRACK P12/18 500mm 18 DISH

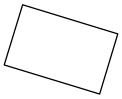


C660503
CUTLERY CONTAINER G

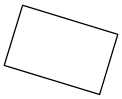


600 60080
HOSE SS 2M

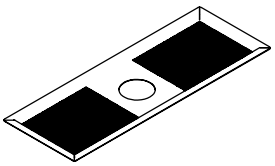
C440201
RUBBER FOOT D.60 X 10



ELECTRICAL WIRING DIAGRAM (**UNDER FRONT COVER**)

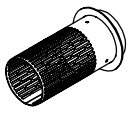


OPERATOR MANUAL



207 20159
SCRAP TRAY

*****CHECK IN MACHINE*****



207 10004
FILTER ASSEMBLY

*****CHECK IN MACHINE*****

Parts

Description	Part No.
Cabinet & Door	
Door Catch Plunger Assembly	400 10104
Door Seal Gasket (540mm)	600 90064
Controls & Indicators	
Digital Temperature 1000mm	600 30430
Door Reed Switch	600 30183
WI200 Controller PCBA	600 40081
WI200 Keypad Membrane	400 70160
WI200 LCD Interface PCBA	600 30420
Heating Components	
Over Temperature Thermostat	600 30088
Rinse Element 2 x 3kW	600 30496
Wash Element 2.5kW	600 30226
Hose & Fittings	
Hose Drain Pump 2.5m	600 60105
Pressure Switch Hose (520mm)	3067
Wash Pump Outlet Hose (75mm)	6195
Upper Wash Hose	400 90012
Pumps & Solenoids	
Detergent Pump	600 30094
Detergent Pump Hose	600 30148
Detergent Squeeze Tube	600 30134
Drain Pump	600 60102
Rinse Aid Pump Adjustable	600 30480
Rinse Aid Squeeze Tube	600 30119
Solenoid Valve	3342
Wash Pump	3888
Wash Tank Components	
Drain Upstand	207 10022
Pressure Bell	400 90135
Pressure Bell O Ring	ARP 205
Rinse Arm Assembly	400 10239
Rinse Spindle	400 30339
Wash Arm Assembly	400 10241
Wash Spindle	400 30072
Wash Spindle Nut	400 30074

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