



# GM

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.

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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.

Specifications and document subject to change without prior notice.

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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 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 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 – 15 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

## **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 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
- Refer operator procedures

## **Rinse Fluid**

- Insert hose into adjacent container of commercial dishwasher rinse fluid
- Refer operator procedures

## **Operation**

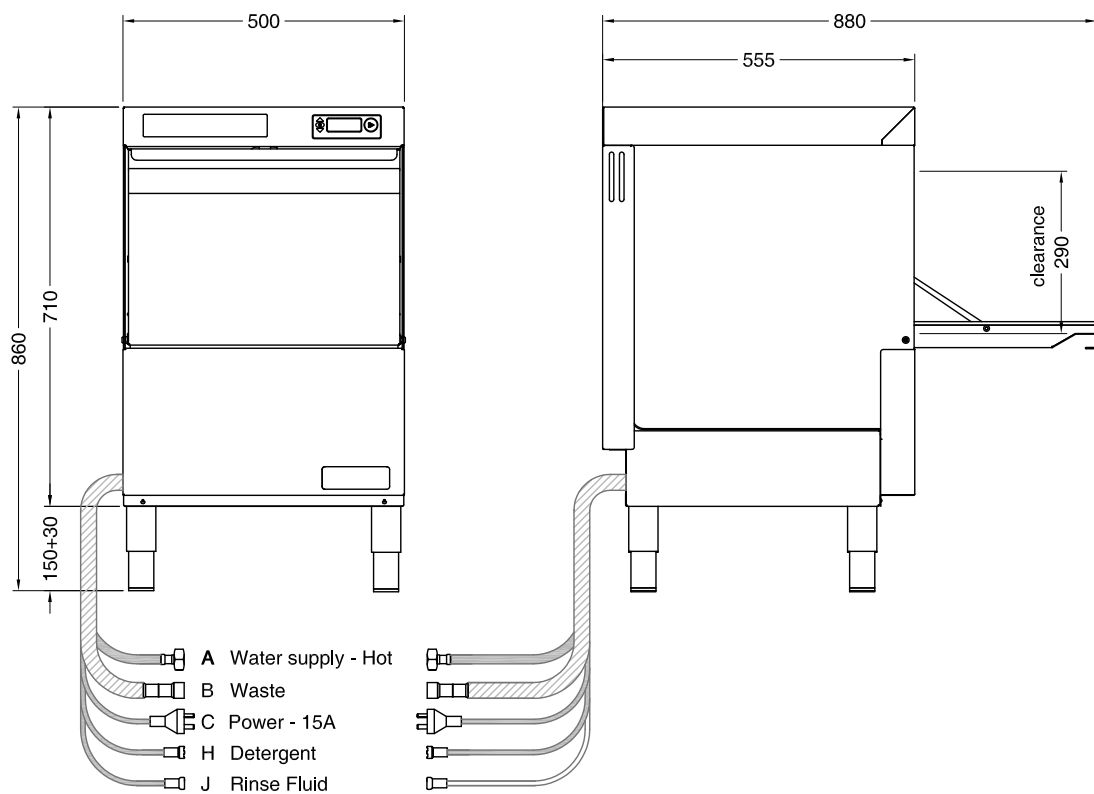
- Run several cycles, ensure that operator has read and understands instructions

## **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.

# GM Installation Diagram

GM INST 08-12-14 3A



All dimensions in millimeters

# GM Machine Operation

Turn machine on at wall. Fit scrap tray, filter, upstand and shut door.  
Press On/Off Key for 3 Seconds

Start key glows white as machine fills. If door is open then the start key glows purple

Once full, rinse heating starts. Start key glows orange while heating.  
Machine can be started when machine is heating. NOTE: If rinse temperature is not sufficient cycle countdown will stop at 22 seconds. Washing continues until rinse reaches temperature required for sanitization and countdown then resumes.

Start key glows green when machine is fully heated. For different cycles press the UP and DOWN arrows: Light, Medium, Heavy, Manual or Drain.

Close door/Press start key to start cycle. When manual cycle is selected machine will continue washing until START button is pressed. Rinsing and draining follow washing to complete cycle.

Start key glows red during cycle. Pressing Start key again terminates cycle without rinse. Timer counts down to double zero and flashes 00 at cycle end until door is opened.



## SHUT DOWN - EVERY NIGHT

Press UP or DOWN keys to select Drain cycle. Remove drain upstand and shut the door. Press START key to start Drain cycle. Machine drains for 100 seconds with a cleaning rinse mid-cycle. When Draining is complete machine goes into Standby mode. Remove upstand, filter basket and scrap tray; rinse clean and replace.

## 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 programs.



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# Operating Procedures

## PRE-RINSING

Food scraps must be removed from dishes by scrapping, dunking in water or preferably with a Fisher pre-rinse spray unit. Soak accumulated cutlery in container filled with water before washing.

## RACKING PROCEDURES

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

## CYCLE TIMES

The GM has a 1, 2, 3 minute cycle and an extended manual cycle.

## CHEMICAL

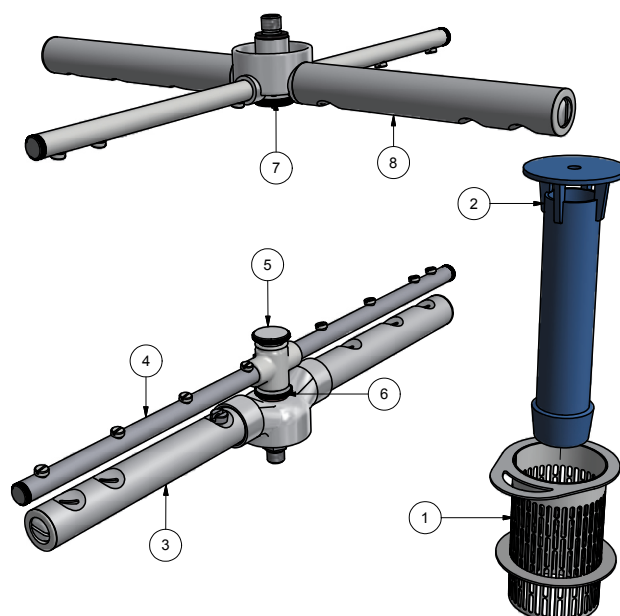
Correct type and quantity of detergent is essential for good results and rinse fluid speeds drying. Use good quality chemicals and regularly check supply containers. Detergent and rinse fluid concentration can be changed by adjusting dispensing time on the keypad (refer to page 8 User Programming). Prime detergent line by turning on the DETERGENT PRIME option in the User Settings menu. Detergent pump will operate continuously for up to 1 minute and prime the line; repeat process as necessary until line is fully primed.

## DRYING

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

## REGULAR CLEANING – at least once a week

Remove filter 1 and upstand 2. Remove wash 3 and rinse arms 4 by undoing the central thumbscrews 5. Remove joined wash and rinse arm 8 by undoing central thumb screw 7. Inspect all jets – use toothpick or paperclip and remove arm end-caps if necessary to flush and clear. Clean and then replace all items.



# Keypad Start Button Colours

Machine State	Colour
Door Open	Purple
Filling	White
Heating	Orange
Ready	Green
Ecopower	Blue
Washing	Red
Error	Flashing Red

## 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
Fill Detergent Injection Time	40	0 - 180 secs
Wash Detergent Injection Time	15	1 - 30
Rinse Aid Injection 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.

**QuickStart** starts washing regardless of rinse temperature. If rinse temperature is not sufficient cycle countdown will stop at 22 seconds. Washing continues until rinse reaches temperature required for sanitization and countdown then resumes.



# 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.

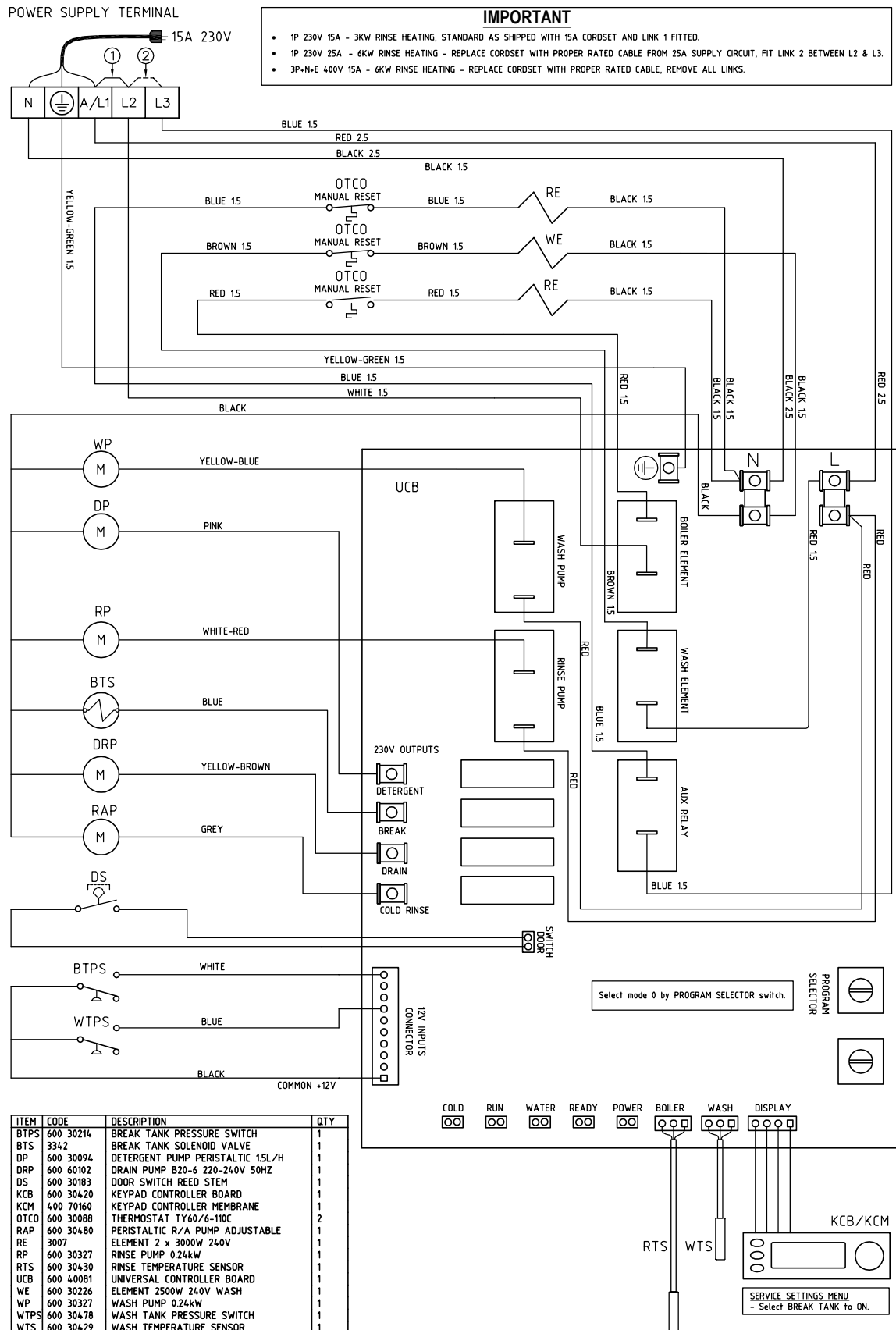
Issue	Resolution
Error 7	Fill failure – check drain upstand is fitted & water supply is turned on and good flow rate
Error 8	Drain failure – check drain upstand is removed & drain hose is not kinked or blocked
Not filling	Check water supply is on and door is closed
Refills during Wash	Check Drain upstand 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**

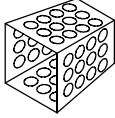
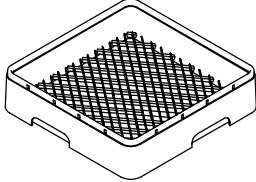
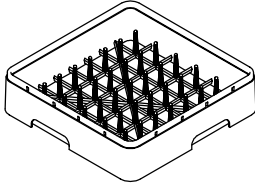
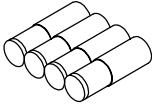
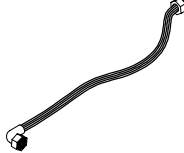

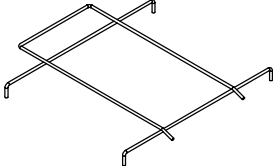


Pre-scrap and pre-rinse washware  
Do not overload dishracks – avoid overlap of plates, wash cutlery unsorted, handles up  
Use quality low foam detergent and rinse fluid – check containers and adjustment  
Use heavy cycle – baked on soil requires pre-scraping and/or pre-soaking  
Remove and check wash & 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

# GM7(S) Wiring Diagram

060248 19/06/15 1 B



# Accessories

	C660503 CUTLERY CONTAINER G	QTY 1
	600 70080 450 mm PLASTIC CUPRACK	1
	600 70081 450mm PLASTIC DISHRACK	1
	600 90021 ASSY GA/GM LEG (INOX 32x180xM10)	4
	600 60080 2m HOSE ANGLE END	1
	400 10038 GM / XG FILTER ASSEMBLY  ***CHECK IN MACHINE***	1
	213 30001 GL7 RACK ADAPTOR  ***CHECK IN MACHINE***	1
	ELECTRICAL WIRING DIAGRAM	( UNDER FRONT COVER ) 1
	OPERATOR MANUAL	1

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