



**BUILT TO LAST**

Makers of Commercial Dish and Glasswashers

**PROUDLY AUSTRALIAN MADE**

— Since 1954 —

# **Norris Glassmate Glasswasher**

## **Operation Manual**

Rev No. 3

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# 1 Introduction

Thank you for choosing a Norris Glasswasher. Since 1954 Norris has been manufacturing & supplying the hospitality industry our range of commercial Glass and dishwashers.

In true Australian tradition, our innovative founder Vince Norris designed and produced the first Australian commercial Glass washer in his garage. We are an Australian owned company and to this day our products are still proudly Australian made.

We have grown from our humble beginnings into our current headquarters and manufacturing plant located in Caves Beach NSW.

Norris believes that “We would like to leave the world a better place than when we found it” and was the recipient of the 2016 and 2017 HMA award for “Excellence in Environmentally Responsible Manufacturing Practices.”

Due to continued product development some details in this manual may vary to the appliance. This manual is correct at the time of printing and every effort is made to ensure that all information in this manual is current and correct.

Information contained in this manual is intended as a guide to the safe use and long life of the appliance, and should be kept handy for future reference.

For more information about the appliance not covered in this manual, or for spare parts, contact Norris Industries.

**Phone - 02 4971 4500**  
**Free call - 1800 803 569**

## 2 INSTALLATION

### 2.1 Requirements

<b>A safe location</b>	The Glasswashing machine must not be installed in a potentially explosive atmosphere or in areas subject to frost.
<b>Hot Water System</b>	A hot water system capable of supplying sufficient hot water at a constant temperature between 60°C and 80°C at the Glasswasher. Water pressure requirements are: 10 L/m minimum at 200-400 kPa max.
<b>Hot &amp; Cold Water</b>	Hot and Cold water taps (½" BSP male) located adjacent to the machine to allow the water supply to be isolated if maintenance is required.
<b>Drain Connection Point</b>	Drain "S" or "P" trap 32mm (not supplied) and waste connection point adjacent to the machine. Hot water discharge rate 20 litres per minute at approximately 80°C maximum.
<b>15 amp power supply</b>	A 15 amp power point with a dedicated power circuit. Note: The 10 amp Glasswasher only needs a 10 amp power point. (No power point should be behind the machine)

## 2.2 Positioning & Connecting

1. Screw adjustable legs to underside of machine in 4 places.
2. Position machine and adjust the legs so that the machine is level and in place.
3. Connect the water supply hoses to the taps. Prior to connecting the machine flush water from lines into a bucket to prevent dirt etc entering the Glasswasher. Not following this step could result in damage to the machine that is not covered by warranty.
4. Connect the hot water hose to the non-return valve of the rinse tank inlet. Connect the cold water hose to the cold water solenoid. **Note:** Do not over tighten. Connections only need to be tightened firmly by hand.
5. Connect the “S” or “P” trap to the waste drain.
6. Turn water taps on and check for leaks. The rinse tank will start to fill with water. If not, turn the water off and investigate.
7. Connect the power lead into the 15 amp power point and turn on. An earth screw is provided at the rear of the machine for connection of an external earth conductor.
8. Turn the Glasswasher power switch on. The rinse should begin to heat. If not, turn off the power and investigate. (Note: Water **MUST** be turned on before power is turned on. Failure to have water in the rinse tank will result in float valve damage.)

## 2.3 Detergent

The Glassmate is fitted with a peristaltic detergent pump. This pump is already factory set to deliver the correct dose of detergent per cycle, and is not adjustable.

A **commercial liquid non foaming glass washing detergent** must be used in accordance with the detergent manufacture’s recommendations.

## **2.4 Minimum Operating Temperatures**

Norris Glasswashers and Dishwashers are programmed to operate at minimum rinse and wash temperatures, as required by health regulations.

This Glasswasher is factory set to operate when the rinse water is 82°C, as indicated by the green ready light being on. Until the correct temperatures are indicated the Glasswasher will not operate.

If the appliance is slow to recover after a cycle, check that it is connected to a constant hot water supply. The temperature of the incoming water will affect the Glasswasher's recovery time.

## 3 OPERATION

### 3.1 General Operating Safety

- Carefully read through the safety and operating notes contained in these instructions. Norris Industries will not accept any liability and all warranty claims will be rendered null and void if the safety notes are not observed.
- Keep children away from the Glasswashing machine. The inside of the machine holds a solution of detergent in hot water at about 60°C - 65°C.
- Train the operating personnel in how to use the machine, and inform them of the information in the safety notes. Repeat the training at regular intervals in order to prevent accidents.
- Only use your fingers to operate the buttons; not sharp objects.
- Do not open the machine door whilst it is washing. There is a risk that hot washing solution could be sprayed out. Stop the wash cycle beforehand.
- In case of danger and/or defects, switch off the machine immediately. Switch off the local mains separator (main switch) then unplug machine. Only then is the machine without power.



## 3.2 Machine Operation

1. Check the hot and cold water taps are fully open.
2. Check the power supply lead is plugged in and the power is turned on.
3. Check the detergent level.
4. Check the wash chamber outlet is clear of blockages and scrap.
5. Select the required rinse cycle by the selector switch, the rinse water will begin to heat to the required temperature.
6. The green ready light will indicate that the rinse water is at the minimum required temperature and the machine is ready for operation.
7. Load the soiled glasses in the glass rack and slide into the Glasswasher. Close the door and press the green start button when the ready light is on.
8. The cycle light indicates when the cycle is in progress. When the light goes out, the cycle is finished, open the door and remove the rack. The machine is ready to operate again when the ready light is on.

### 3.3 End of Day Maintenance

Norris recommends carrying out appropriate daily and weekly maintenance on the machine to keep it in working order.

- Wear protective clothing and protective gloves before touching any parts which are covered with detergent solution (filters, wash fields etc.).
- Do not spray off the machine and the immediate vicinity (walls, floors) with a water hose, steam cleaner or pressure washer.
- Do not use any scouring powder or abrasive cleaning agents.
- At the end of the day, turn the cycle selector switch to the off position. Check and clean the waste outlet of any scraps. The wash arms and end caps of the wash arms are removable to clean the arms by flushing with fresh water.
- Maintenance is essential to the long life of the Glasswasher. Damage caused by failure to maintain the Glasswasher will not be covered under warranty.

## 3.4 Trouble Shooting Guide

Problem - No power when switched on.

Possible cause	Remedy
<ul style="list-style-type: none"><li>• Faulty fuse or circuit breaker.</li><li>• Power point not switched on.</li></ul>	<ul style="list-style-type: none"><li>• Replace fuse or reset circuit breaker.</li><li>• Turn on power point.</li></ul>

Problem - Ready light not on.

Possible cause	Remedy
<ul style="list-style-type: none"><li>• Rinse ready t/stat set too high</li><li>• Element t/stat set too low</li><li>• No power to element</li><li>• Element failure</li><li>• Faulty element relay</li></ul>	<ul style="list-style-type: none"><li>• Reset thermostat for light on at 82°C</li><li>• Reset thermostat for element off at 88°C</li><li>• Check wire connections to the thermostats</li><li>• Replace element</li><li>• Replace relay</li></ul>

Problem - Cycle will not start

Possible cause	Remedy
<ul style="list-style-type: none"><li>• Door open</li><li>• Faulty door micro switch</li><li>• Cycle timer unit faulty</li><li>• Faulty start button</li><li>• Wash pump faulty</li></ul>	<ul style="list-style-type: none"><li>• Close door</li><li>• Adjust or replace switch</li><li>• Replace timer unit</li><li>• Replace start button</li><li>• Replace wash pump</li></ul>

Problem - Long recovery time between cycles

Possible cause	Remedy
<ul style="list-style-type: none"><li>• Incoming water temperature.</li><li>• Rinse ready t/stat set too high.</li></ul>	<ul style="list-style-type: none"><li>• Check incoming water temperature.</li><li>• Reset thermostat for light on at 82°.</li></ul>

## 4 Specification

### 4.1 Dimensions (mm)

- Height (including legs) 850 - 875
- Usable height 250
- Cabinet width 505
- Cabinet depth 545

### 4.2 Electrical

#### 15 amp version

- 15 amp 240 volt 50 hertz single phase
- Pump 0.5 HP 0.375 kW
- Rinse tank element 3.0 kW

#### 10 amp version

- 10 amp 240 volt 50 hertz single phase
- Pump 0.5 HP 0.375 kW
- Rinse tank element 1.7 kW

### 4.3 Plumbing

- Water hose connections ½" BSP male
- Waste connection 32mm
- Water discharge rate 20 litres \ min @ 80°C
- Total water usage per cycle 8 litres
- Maximum water pressure 400 kPa
- Rinse tank capacity 20 litres

## 5 Packing List

### 5.1 Packed Items

Quantity	Item
1	Operation and Maintenance Manual
4	Adjustable Legs
2	Braided Hose
1	Glass Rack

## 5.2 Warranty Terms and Conditions

All Norris Australian Manufactured Glass and Dishwashers come with a two (2) year parts & labour warranty as set out below. This warranty is given by Norris Industries Pty Ltd, here in after referred to as Norris, ABN 69 002 351 840, of 28 Strathmore Road, Caves Beach, NSW, Australia, the manufacturer of Norris brand Glasswashers and Dishwashers (the appliance) and shall only apply to appliances installed in premises within the Commonwealth of Australia.

1. Subject to the exclusions set out in section 2 below, Norris warrants that the component parts of the appliance are free from defects in material and workmanship for the following periods:
  - 1.1. The warranty period for the cabinet is 5 years from the date of original purchase;
  - 1.2. The warranty period for all parts and labour, whether internal or external, is two (2) years from the date of original purchase.
  - 1.3. If a defect in workmanship or materials occurs within the warranty period, Norris will repair the defect using a Norris authorised technician, subject to the exclusions below.
2. Service under warranty will not apply where:
  - 2.1. The purchaser or installer has not complied with the conditions or directions contained within the operating and installation instructions supplied with the appliance;
  - 2.2. There is a failure of the purchaser / operator to reasonably maintain the appliance according to instructions supplied;
  - 2.3. There is a failure of wash and rinse arm bearings;
  - 2.4. There is a failure of the detergent and or rinse aid dispenser squeeze tubes;
  - 2.5. There is a failure of the "S" or "P" trap;
  - 2.6. There is a failure of the drain hose;
  - 2.7. There is a failure of the drain tube 'O' ring;
  - 2.8. There is normal wear and tear;
  - 2.9. There is malicious damage or damage caused by careless and improper use;
  - 2.10. There is a malfunction caused by dirty or poor quality water or water pressures outside the recommended range;
  - 2.11. There is damage caused to the appliance in delivery from the dealer to the customer;
  - 2.12. There is damage caused by the customer's installer at the time of installation;
  - 2.13. There is consequential damage caused to premises or fittings through a component part failure;
  - 2.14. There is damage caused by vermin, insects or other pests;
  - 2.15. The customer has used replacement parts not supplied by Norris or labour not being that of an authorised Norris technician;
  - 2.16. An authorised Norris technician attends to the appliance and no fault is found; or
  - 2.17. There is damage caused by the installation or attachment to the appliance of external apparatus not supplied to the customer by Norris, and will be charged at Norris technician normal rates.

Note 1: The adjustment of any detergent and or rinse aid dispensers, whether native to the machine or by other chemical supplier, is not covered under warranty.

Note 2: The detergent and rinse aid dispenser squeeze tubes are a consumable and as such should be replaced at six (6) monthly intervals. The squeeze tubes and the service to replace the squeeze tubes are not covered under warranty.

3. Warranty service is carried out on-site during business hours. This warranty does not cover distance in excess of 50km radius of the machine location, travelling time, or any after hour's charges or costs unless previously agreed to by Norris. For any warranty service call, Norris requires the customer to provide details of, and to authorise the use of, the customer's credit card to cover any excess charges under this item, and relevant service, labour and parts charges. If the warranty service call proves to be due to one of the exclusions set out in clause 2; relevant service, labour, and parts charges will be at the customer's expense. If Norris deems it necessary to return the appliance or a component part of the appliance to its factory for repairs the customer will pay freight in both directions unless otherwise agreed to by Norris.
4. Use of replacement parts not supplied by Norris or the use of labour not being that of an authorised Norris technician shall relieve Norris of all future liability and responsibility.
5. (a) This warranty is the only warranty applicable to the appliance and subject to any warranties that cannot be excluded at law is expressly in lieu of all other expressed or implied warranties including any implied warranty of merchantability or fitness for a particular purpose, and any other on the part of Norris.  
  
(b) The remedy contained in this warranty is the sole remedy for any defect found to exist in the appliance and subject to clause 6, all other remedies, losses and damages are excluded, including any liability for incidental or consequential damages.
6. If the Trade Practices Act 2012 or any other legislation implies a condition or warranty in respect of any appliance or any labour services provided, and Norris's liability for breach of that condition or warranty may not be excluded but may be limited, clause 5(b) does not apply to that liability and instead Norris's liability for such breach is limited to, in the case of supply of goods, Norris replacing the goods or supplying equivalent goods or repairing the goods, or in the case of a supply of services, Norris supplying the services again or paying the cost of having the services supplied again.
7. Persons requiring service and seeking to rely on this warranty must contact and deal with Norris (Free call 1800 803 569) who will appoint an approved Norris service technician.
8. All parts replaced under the provisions of this warranty shall become the property of Norris and shall be released by the customer to the authorised Norris technician for return to Norris.
9. The rights or obligations under this warranty must not be assigned, transferred or licenced by the original purchaser of the Appliance, and is not transferable to any subsequent owner of the appliance.
10. This warranty is only applicable to the Norris Australian Manufactured Machines.

Our products come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. For any further information please call Norris



[www.norris.com.au](http://www.norris.com.au)

