D400 D500

G350 G400 G500

Undercounter Warewasher

User Manual

CAUTION: Read these instructions before operating the warewasher

CLASSEQ

Dear Customer,

Thank you for choosing ***Classeq***, the warewasher you have selected has been designed to give you lasting service.

Please read these instructions before installing, commissioning and operating this warewasher.

Make sure all users understand the controls prior to using your warewasher.

Please keep these instructions in a safe place for future reference.

If you have any questions, or are not sure about any information contained in this Manual please contact either your distributor or ***Classeq***. Contact details can be found in the 'Useful Contact Details' section of this Manual (►14).

Please record the Model number and Serial number of your warewasher. You will need these if you need to contact ***Classeq*** for support or to make a claim under the warranty. You will find these on the warewasher rating plate which can be found low down on one side of your warewasher.

Model number:

Serial number:

TABLE OF CONTENTS

1. Safety

1.1 Symbols Used in this Manual

The following symbols are used in this Manual:

DANGER!

Warning against potential serious or fatal injuries to persons if the described precautionary measures are not taken.

Warning!

Warning against potential minor injuries to persons or potential material damage if the described precautionary measures are not taken.

Caution

Warning against defects in or destruction of the product if the described precautionary measures are not taken.

Recycling instructions.

►

This symbol refers to a chapter with more detailed information

For safety reasons the warewasher MUST be bonded to adjacent metalwork or earthed so that it is at the same potential (i.e. voltage).

For safety reasons, two persons are required for the task.

1.2 Danger Warnings

For safety reasons your warewasher **MUST** be bonded to adjacent metalwork or earthed so that it is the same potential (i.e. voltage). 

A means for disconnection that has all poles separation of more than 3mm must be incorporated in the fixed wiring in accordance with wiring rules (►4.3).

If a mains supply cable is damaged, it must be replaced by a cable supplied by Classeq, its service agents or similar qualified persons, in order to avoid hazards.

All mains electrical work must be carried out in accordance with local and national regulations, and by a qualified electrician (►4.4.1).

The warewasher **MUST** be disconnected from its power source during cleaning, servicing or when replacing parts (►7).

Ensure the base of the warewasher is never submerged or standing in water when operating the warewasher (►7).

1.3 Warnings

The warewasher should only be operated at or within the voltage specified on the rating plate (►2.3).

If Classeq warewashers are used outside the designation for the appliance, you invalidate your warranty and make the appliance unsafe.

Maximum inlet water pressure is 400 kPA and minimum inlet water pressure is 200 kPA.

For water inlet pressures >400 kPA – a pressure reducing valve is required.

Use only the hose supplied with your warewasher to connect it to the water supply. Old existing, defective or damaged water supply hoses **MUST NOT** be used (►4.5.3).

The installer and user are responsible for ensuring the installation and operation of this warewasher are in accordance with this Manual and local and national regulations (►4).

DO NOT use electrical extension lead(s) to supply power to your warewasher (►4.4.1).

Children should be supervised to ensure that they do not play with, or operate the warewasher (►6).

Be aware that wares may be hot when removed from the warewasher (►6.7).

Before cleaning the Wash Chamber, ensure all sharp items, such as broken glass or other items which could cause injury, are removed carefully.

DO NOT use cleaning agents that contain CHLORINE, BLEACH or HYPOCHLORITE.

Wear the correct Personal Protective Equipment, e.g., gloves and goggles, when handling chemicals and observe all safety notes and dosing recommendations printed on the packaging. (►4.7) (►0) (►9.1).

If the warewasher is being drained immediately after use, water draining from the 'Boiler drainage hose' may be hotter than **95°C** (►9.4).

1.4 Cautions

Damage to the warewasher caused by limescale or poor water quality will **NOT** be covered by the **Manufacturer's Warranty** (►7.3).

In hard water areas (>3°dH), **DO NOT** run the warewasher without the use of either an internal or external water softener as this could result in damage to the warewasher. Failure to observe this warning will invalidate the warranty.

Only use commercial grade detergents and rinse aids in your warewasher (►4.7).

Always remove excess food / debris from any dishes / glasses to be washed. **DO NOT** use your warewasher as a waste disposal unit (►6.7).

It is very important that the warewasher is drained down at the end of each working day (►6.8).

DO NOT use STEEL WOOL, WIRE BRUSHES or any other abrasive materials.

De-scale chemical must not remain in the warewasher for more than 2 hours (►7.4).

Items placed on the open door of the warewasher must not exceed 20kg (►7).

DO NOT spray the exterior or interior of the warewasher and the surrounding area *(panels, base)* using a water jet, steam cleaner or high pressure cleaner.

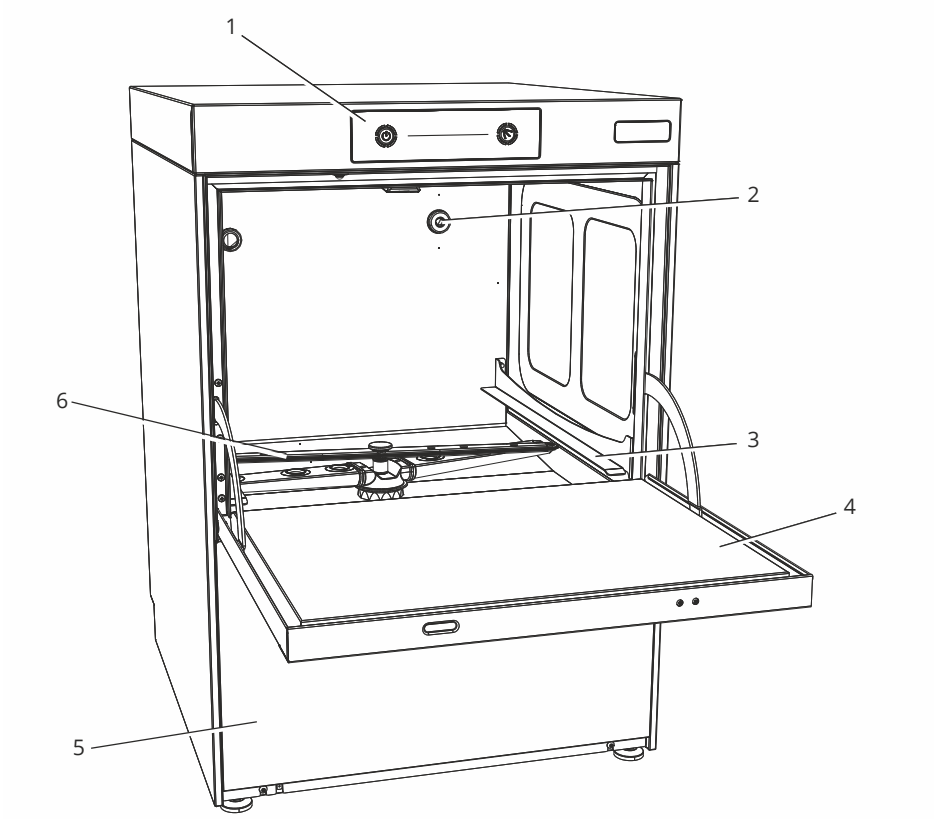
The function of this warewasher is the washing of dishes, plates, glassware, cutlery and similar articles only. No other activity is permitted with this warewasher.

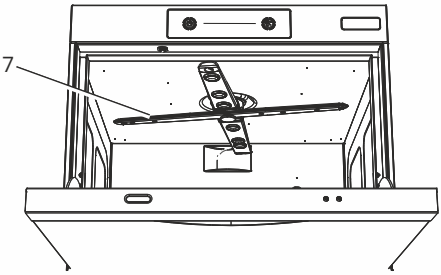
Authorised spare parts only must be used in the event of a breakdown.

2. Know Your Warewasher

Before installing your warewasher you should familiarise yourself with the various components shown below.

2.1 Warewasher Layout

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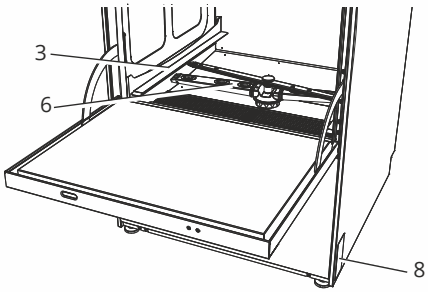
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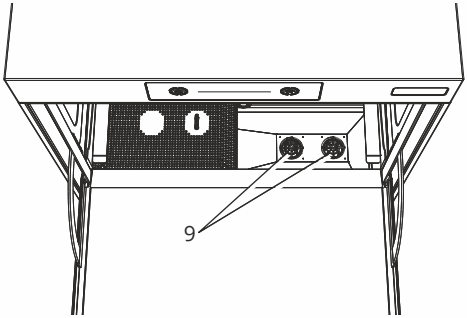
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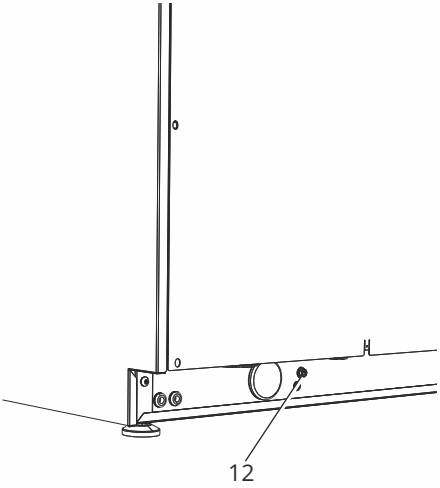
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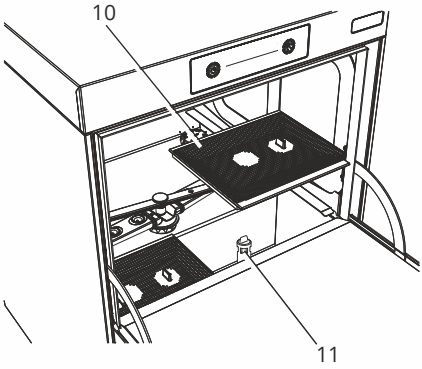

10
11

Item	Description
1	Control Panel
2	Anti-syphon device (**Note 2**)
3	Basket Ramp
4	Door (**Note 1**)
5	Removable Lower Front Panel
6	Bottom Wash and Rinse Arms

Item	Description
7	Top Wash and Rinse Arms
8	Rating Plate
9	Secondary Filters
10	Primary Filters
11	Drain Plug (**Note 3**)
12	Earth bonding stud

Notes:

1. The Door of the warewasher should never be used as a step or seat.
2. Fitted to pumped drain warewashers only.
3. Fitted to gravity drain warewasher s only.

2.2 Intended Use

2.2.1 Glasswasher

The intended use is the washing of glasses.

2.2.2 Dishwasher

The intended use is the washing of kitchen and tablewares.

2.3 Designation of the Warewasher

X XXX - STANDARD MACHINES
X XXX XXX XX - PREMIUM MACHINES

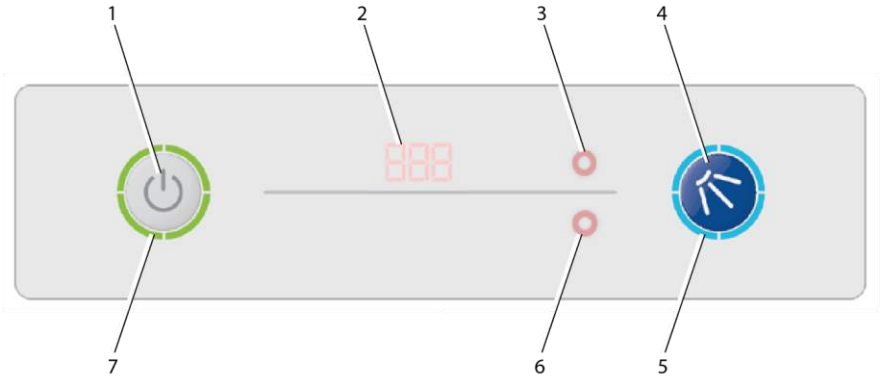
Basic machine function:
G = glasswasher
D = dishwasher

Basket size:
STANDARD MACHINES
G350 = 350mm
G400 / D400 = 400mm
G500 / D500 = 500mm
PREMIUM MACHINES
G400 / D400 = 400mm
G500 / D500 = 500mm

Range definer:
DUO = Premium

Water softener option:
WS = water softener option installed

2.4 Warewasher Controls



Item	Description
1	On/Off button
2	Hidden until lit display
3	Up button
4	Enter button

Item	Description
5	Cycle indicator (**Note 2**)
6	Down button
7	Heating indicator (**Note 1**)

Notes:

1. **Heating indicator:**

FLASHING AMBER - warewasher not ready (Wash Tank not full / Rinse Tank not full / Wash Tank still heating / Rinse Tank still heating).

GREEN - warewasher is ready / in standby (Wash Tank full / Rinse Tank full / Wash Tank at operating temperature / Rinse Tank at operating temperature).

Note that Tank full interlocks always apply. Operating temperature interlocks can be altered as required (►5.5).

GREEN plus Cycle indicator BLUE - warewasher will start the selected wash cycle.

2. Cycle indicator:

BLUE - warewasher is in a wash cycle.

BLUE plus Heating indicator FLASHING AMBER - a wash cycle has been selected but not started.

FLASHING BLUE - warewasher is draining down (pumped drain warewashers only).

RED - indicates that warewasher is in Commissioning Mode.

RED plus warewasher turned off - a serious error condition has occurred.

3. Unpacking the Warewasher

After unpacking your warewasher, check it for any transport damage. Never install and use a damaged warewasher. If your warewasher is damaged contact your retailer immediately.

Make sure the water and electricity connections of your warewasher comply with the specifications given in this Manual.

Remove all outer packaging and the protective film from your warewasher before positioning it.

Remove any accessories shipped inside the warewasher and unpack them carefully.

Ensure all packaging materials are disposed of in accordance with local and national regulations.

3.1 Accessories Supplied

The warewasher is supplied with the following accessories (**Note 1**):

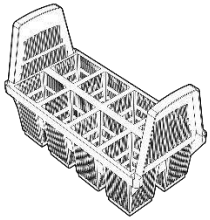
Open Basket

x2 Glasswasher

x1 Dishwasher

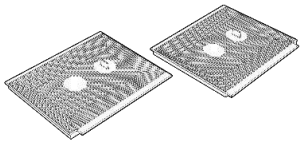
Plate Basket

x1 Dishwasher only



Cutlery Basket

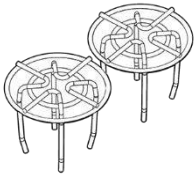
x1 Dishwasher only



Primary Filters

x1 Left hand filter

x1 Right hand filter (**Note 2**)

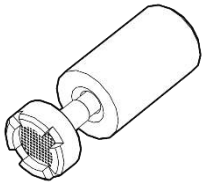
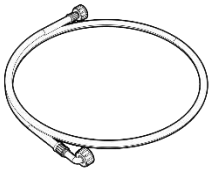


Secondary Filters

x2 (**Note 3**)

Drain Plug

x1 (**Note 4**)

	Bottle Weights x2
	Water Inlet Hose x1
	Waste Hose Hook x1
	Quick User Guide
	User Manual
	Good Practice Guide

Notes:

1. Images are for reference only, actual parts supplied may differ.
2. Differs depending on drain type.
3. On gravity drain warewashers x1.
4. On gravity drain warewashers only.

4. Installation

Warning!

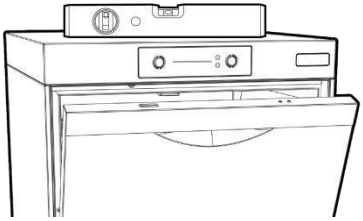
The installer and user are responsible for ensuring the installation and operation of this warewasher are in accordance with this Manual and with local and national regulations.

4.1 Recommended Hand Tools

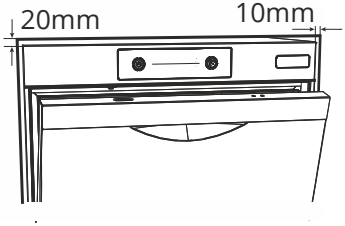
The following hand tools are required when installing the warewasher:

- Spirit level
- 8mm spanner
- Multimeter or voltmeter
- Insulated No. 2 Posi screw driver
- Drill with 8mm bit

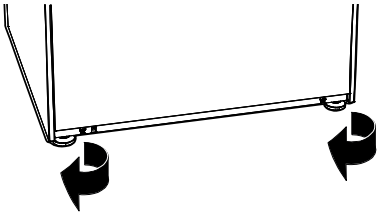
4.2 Warewasher Placement



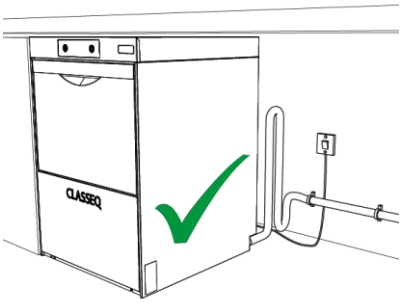
Your warewasher should be installed on a flat, stable surface that is capable of holding the full weight of the filled warewasher and withstanding the vibration of regular use.



Ensure there is a minimum of 10mm clearance on each side of your warewasher and 20 mm clearance at the top and rear of the warewasher (►4.3).



Once your warewasher is in its final position, adjust the adjustable feet to ensure the warewasher is stable, its weight is being distributed equally, and it does not tilt more than 2 degrees in any direction.



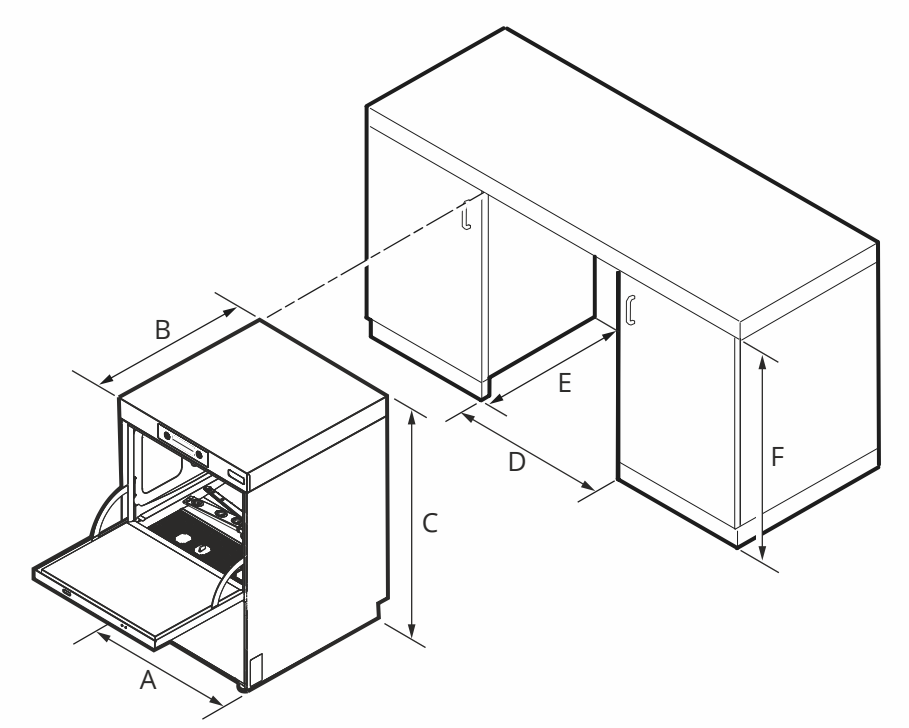
Your warewasher should be placed in a location that allows the electrical, supply water and waste water connections to be fitted (▶4.3).

When positioning your warewasher, ensure that the water inlet, chemical tubes and drain hoses are not kinked or squashed. Care must also be taken to ensure the warewasher does not rest on any of its supply hoses / leads.

4.3 Site Requirements

Overall Warewasher and Clearance Dimensions

Dimensions (mm)		G350	G400 / D400	G500 / D500
Warewasher	A = width	410	450	550
	B = depth	517	517	605
	C = height (min)	644	760	830
Recess	D = width	430	470	570
	E = depth	537	537	625
	F = height	664	780	850



Weights (kg)	G350	G400 / D400	G500 / D500
Empty	32	32	44
Fully Loaded	43.5	43.5	65.5

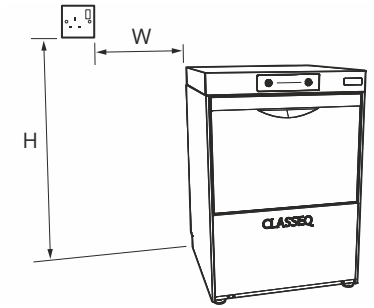
Electrical Supply

Electrical connections MUST be carried out in accordance with local regulations. As a minimum ***Classeq*** recommends the following are maintained:

- All warewashers are connected via a residual current device (RCD) or earth leakage protection device.
- A means for disconnection that has all poles separation of more than 3 mm must be incorporated in the fixed wiring in accordance with wiring rules.
- Connect to an equipotential conductor, connection stud located at rear of the warewasher, this is in addition to the earthed electrical supply.
- Prior to connecting the warewasher, ensure voltage and supply fuse comply with rating plate.

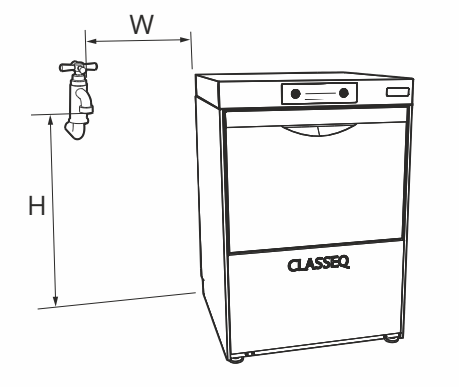
Electrics		G350	G400 / D400	G500 / D500
Supply 1	220-240V (1-phase) 13A	2.85 kW	2.85 kW	6.58 kW
Supply 2	380-415V (3-phase) 13A		6.58 kW	6.58 kW
Supply 3	220-240V (1-phase) 30A		6.58 kW	-
Supply 4	220-240V (1-phase) 12A			2.58 kW

Supply Socket (mm)		G350	G400 / D400	G500 / D500
Max position of electrical supply socket (mm)	W = width	950	950	700
	H = height (max)	1450	1500	1550



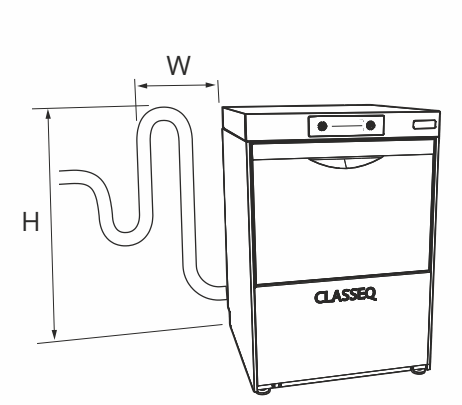
Water Inlet

		G350	G400 / D400	G500 / D500
Temperature range			4 - 55°C	
Pressure	0 - 2 bar		Booster pump required	
	2 - 4 bar		No modification	
	4 bar +		Pressure reducing valve required	
Flowrate			11 l/min	
Water connection			G¾" (¾" BSP)	
Maximum position of water supply (mm)	W = width	700	650	600
	H = height	700	700	650



Waste Outlet

Drainage Dimensions (mm)	G350	G400 / D400	G500 / D500
Drain standpipe diameter		35	
W = maximum distance from warewasher	750	750	400
H = Drain pipe height (gravity drain)		0 - 40	
Drain pipe height (drain pump)	0 - 420	0 - 540	0 - 600



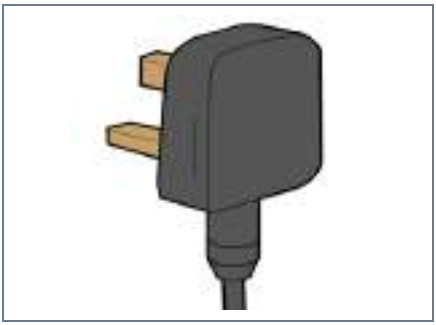
4.4 Electrical Connection

4.4.1 Mains cable connection

Prior to connecting the warewasher, ensure that the available electrical outlet voltage and the supply fuse comply with the rating of the warewasher. For the electrical rating of your warewasher refer to the rating plate.

Contact your distributor, a qualified electrician, or ***Classeq*** if you are unsure how to check this.

The electrical supply must incorporate a disconnection device (circuit breaker / fuse) that complies with local and national regulations.



Your warewasher must be connected directly to the mains electricity using the mains electrical cable provided. DO NOT use electrical extension lead(s) to supply power to your warewasher.

DANGER!

All mains electrical work **must** be carried out in accordance with local and national regulations by a qualified electrician.

4.4.2 Electrical connection specification

Depending on the specification of your warewasher it may be supplied with or without a moulded mains electrical plug.

When hard wiring the warewasher into the mains outlet, use a multimeter or voltmeter to ensure that the connection point is electrically isolated before attempting to make the connections.

4.4.3 Electrical cable specification

If the mains electrical supply cable is damaged or has deteriorated, it MUST be replaced by a cable or cord assembly supplied by ***Classeq***, its service agents or suitably qualified persons in order to avoid hazards, and be to the following minimum specifications.

Warewasher rating (Volts / Phase / Amps)	Cable size	Temperature rating	Length of cable	Conforms to
220-240V / 1N~/30A	3G 4.0	60°C min.	3m	H07RN-f
380-415V / 3N~/12A	5G 2.5			
380-415V / 3N~/16A	5G 2.5			
380-415V / 3N~/22A	5G 4.0			

For electrical rating of your warewasher refer to the rating label (►2.3).

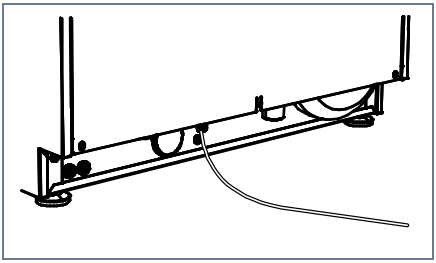
4.4.4 Equipotential bonding

DANGER!

For safety reasons your warewasher MUST be bonded to adjacent metalwork or earthed so that it is at the same potential *(i.e. voltage).*

Consult your distributor, ***Classeq*** or a qualified electrician if you are unsure how to do this.

The equipotential bonding stud is located at the rear of the warewasher and is fitted with an M5 nut. Use the 8mm spanner to connect the bonding wire terminal to this location and ensure the nut is securely fastened.



4.5 Water Supply and Connection

4.5.1 Water supply restrictions

Commercial warewasher wash results may be affected by external conditions such as incoming water temperature, pressure, hardness and choice of chemicals.

Supply water temperature:

- 4°C minimum
- 55°C maximum

Supply water dynamic pressure:

The dynamic pressure of the water supply will determine whether your warewasher needs additional equipment to be installed in the water supply system, as follows:

Measured water pressure	Consequence
0 to 2 bar (0 to 200 kPa)	An external rinse booster pump must be installed to increase the pressure of the water supply to the warewasher.
2 to 4 bar (200 to 400 kPa)	No modifications required - warewasher can be installed with a direct hose connection to the existing water supply.
>4 bar (400 kPa)	A pressure reducing valve must be installed to reduce the pressure of the water supply to the warewasher - maximum allowable pressure is 4 bar.

Minimum supply flow rate:

- 11 litres/minute.

Water hardness:

Caution

Damage to the warewasher caused by limescale will **NOT** be covered by the manufacturer's warranty (►12).

For the longevity of your warewasher, and to ensure you get consistently good washing results, your warewasher must wash with soft water, ie water that contains a low concentration of ions, in particular ions of calcium and magnesium. There are three ways to achieve this:

- The supply water must be naturally soft.
- Your water supply to the warewasher is from a suitable external water softener unit.

4.5.2 Water hardness explained

Water hardness occurs because certain chemicals in the rocks through which the water passes on its way to the consumer slowly leach out into the water.

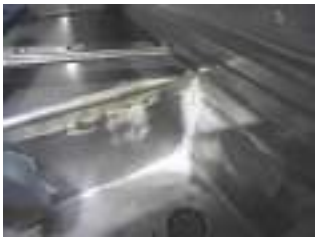
The problem shows itself in two forms:

1. When hard water is heated the chemicals come out of solution and appear as solid particles (limescale) that are carried round the warewasher. These particles are formed most quickly at the hottest part of the warewasher – typically, the rinse element and the Rinse Tank. This is why the Rinse Tank is the best place to look to judge if limescale is being formed in a warewasher.
2. Most commercial washing chemicals operate much less efficiently in hard water, and this will often show as poor results, failure to remove tannin stains or condensation on glasses. Tannin stains appear to cling to the hard water film in the drink, which then clings to the surface of the cup or saucer. With soft water this is not the case.

Some types of hard water do not produce limescale when heated, but still reduce the performance of washing chemicals, as mentioned above. This is known as permanent hardness. Temporary hardness is when the hardness can be largely removed by conversion into limescale by boiling.

If limescale is produced inside a warewasher it will cause a number of maintenance problems, for example:

- Coating of heating elements leading to slow heating and eventually, element failure.
- Blockage of rinse jets, showing as poor results.
- Wear of bushes in the centre boss, showing as poor results and possibly wash water passing backwards into the rinse system.
- Blockage of the rinse aid injection point in the boiler.
- White marks appearing on glasses, dishes and cutlery.
- Dishes or cups may appear dirty even after a wash. Especially coffee or tea cups.
- Discolouration of the inside of the warewasher, making cleaning difficult.
- Blockage of hoses due to limescale deposits “furring up” the inside of the hoses.



When limescale is found, it must be removed with commercial de-scaling chemicals, used with care in accordance with the instructions on the product.

The descaling instructions in this Manual should always be followed.

The Rinse Tank is difficult to de-scale and a service engineer may be required to carry this out.

Your local water board / water supply company should be able to tell you if the water in your area is hard or soft.

Alternatively you can establish the hardness of your water supply yourself using a simple water hardness testing kit.

4.5.3 Water supply hose connection

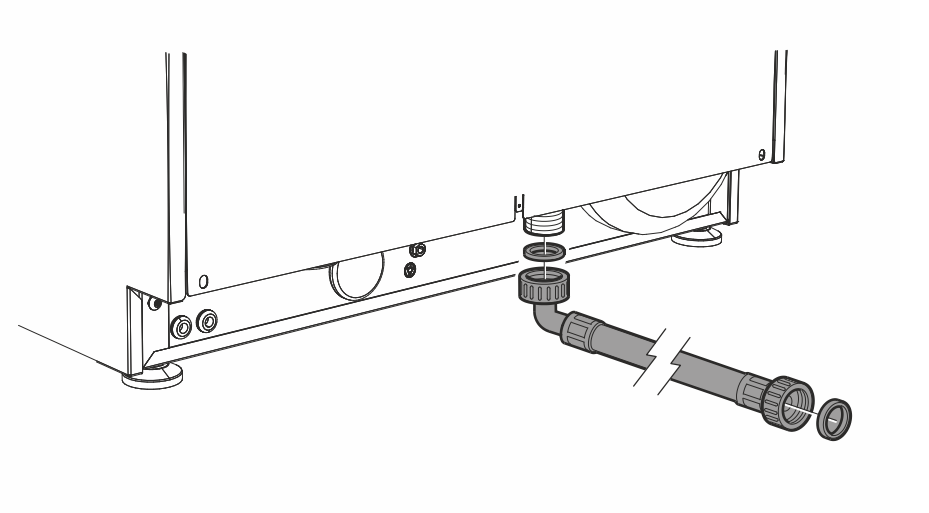
Classeq recommend installing a shut off valve in the mains water supply line near the warewasher such that it is easily accessible.

Your warewasher is supplied with a new UK Water Regulations Advisory Scheme (WRAS) approved water inlet hose, requiring a G¾" (¾" BSP) male threaded connection at the mains water outlet.

Warning!

Use only the hose supplied with your warewasher to connect it to the water supply. Old existing, defective or damaged water supply hoses **MUST NOT** be used.

Connect the 90 degree bend connector of the water supply hose to the inlet on the back of your warewasher and the straight connector to the mains water supply.



- Ensure the rubber seals are in place in the connectors.
- Hand tighten the connectors only.
- Ensure all connections are watertight before using your warewasher.

4.6 Waste Water and Connection

4.6.1 Waste water system type

The waste system of your warewasher will vary depending on the variant. You can identify the type of drain your warewasher has by checking whether there is a Drain Plug, as shown, present in the Wash Sump.

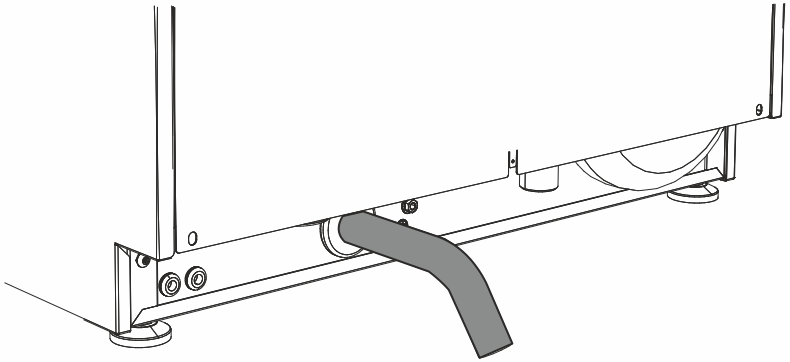
Warewashers with a Drain Plug are gravity drain type and warewashers without a Drain Plug are pumped drain type.

4.6.2 Waste water connection

Gravity drain warewashers:

If your warewasher has a Drain Plug fitted in the Wash Sump the waste hose will fit into Ø40mm plumbing or over a Ø20mm spigot.

The waste hose for this type of warewasher has to lead away below the base of the warewasher.

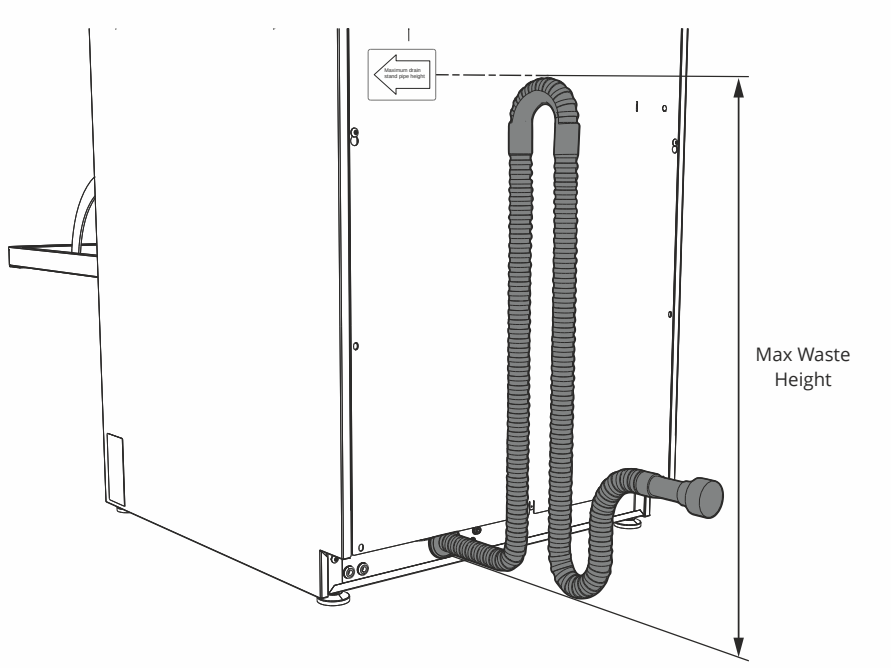


Pumped drain warewashers:

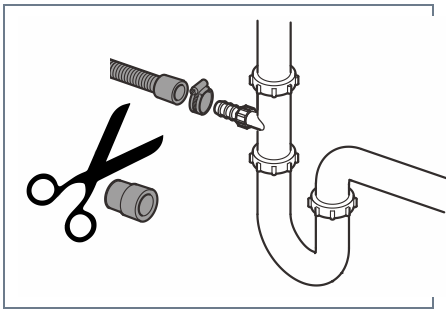
The outlet end of the waste hose of a pumped drain type warewasher will fit into Ø40mm plumbing or over a Ø20mm spigot.

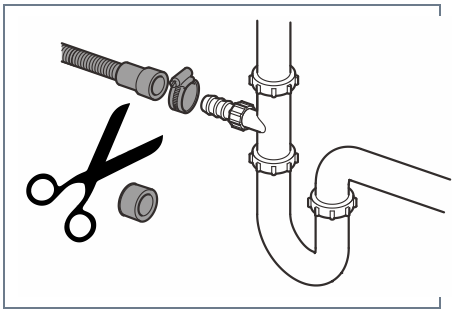
The waste plumbing for this type of warewasher can be up to a maximum of the following heights from the base of the warewasher:

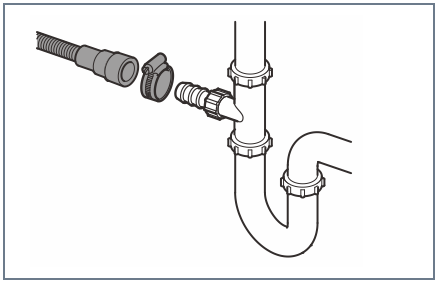
Warewasher size	Max waste height (mm)
350mm (G350)	420
470mm (D400/G400)	540
570mm (D500/G500)	600

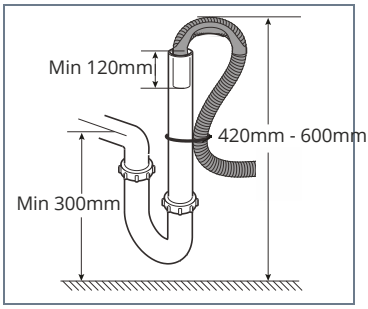


Fit the waste hose of your warewasher to the existing waste piping. Ensure that the waste hose is not kinked. Ensure that the waste hose is fitted in such a way that it will not come off or out of the existing waste piping during warewasher operation.





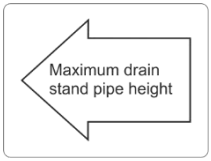




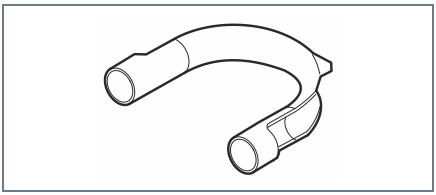
The waste water from your warewasher must be disposed of down the foul drains system, i.e. the drains from sinks and WCs. The waste water from your warewasher **must not** be connected to the surface water drainage system.

A form of back flow prevention must be installed into the waste water plumbing in accordance with local and national regulations.

Ensure that no part of the waste hose from the warewasher is higher than the mark on the rear of the warewasher (shown), when the warewasher is in place.



Where the warewasher is fitted to a stand pipe, the Waste Hose Hook should be used to help manage the hose.



4.7 Attaching Chemical Bottles

Warning!

Wear the correct Personal Protective Equipment, e.g., gloves and goggles, when handling chemicals and observe all safety notes and dosing recommendations printed on the packaging.

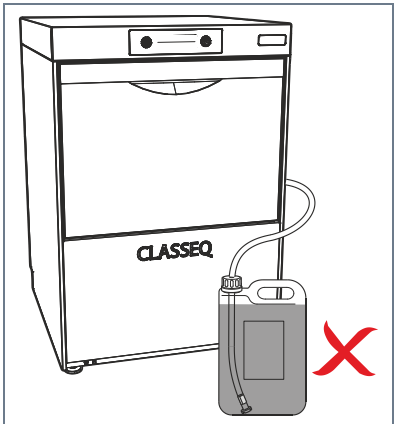
Caution

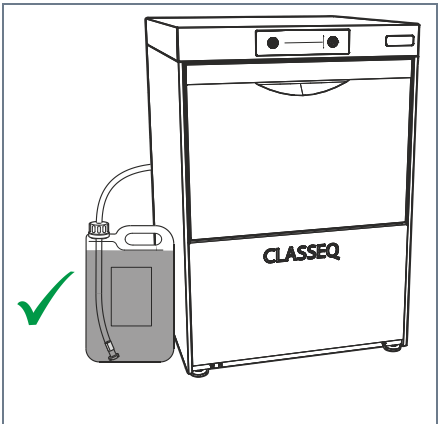
Only use commercial grade detergents and rinse aids within your warewasher.

The chemical bottles should be placed in a safe, stable location that is close to the warewasher and easily accessible in order to check the levels and replace the bottles as needed.

A coil of PVC tubing is connected to each of the chemical pumps inside the warewasher.

These tubes exit the rear of the warewasher and should be routed to the chemical bottle locations. The tubes need to be long enough to allow the bottles to be moved without the risk of falling over. Excess tubing may be cut off.

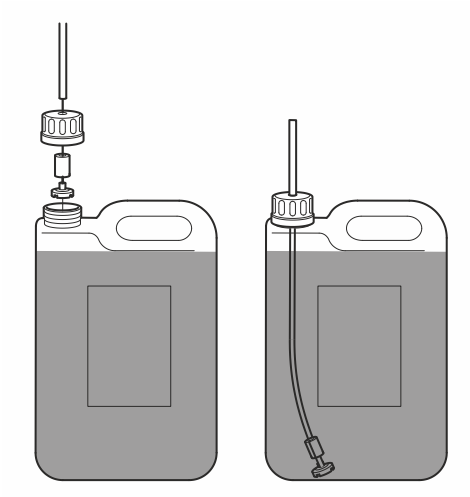




Tubing colour	Chemical
BLUE	Rinse aid
CLEAR	Detergent

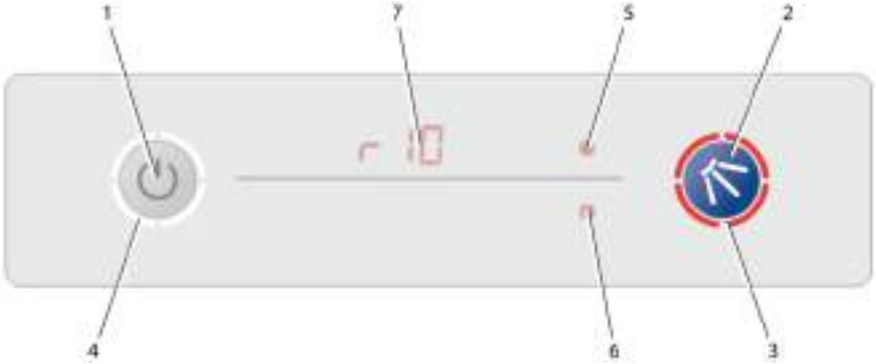
4.7.1 Preparing the bottles

1. Remove the cap from the chemical bottle.
2. Using the drill and 8mm bit, carefully drill a hole in the centre of the cap.
3. Feed the tube through the hole.
4. Fit the bottle weight over the tube and then attach the end of the tube to a filter.
5. Feed the filter and bottle weight into the bottle and screw on the cap.



5. Commissioning

5.1 Commissioning Interface

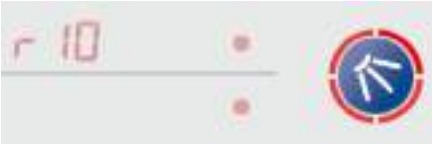


Item	Description
1	Exit button
2	Enter button
3	Cycle indicator
4	Heating indicator

Item	Description
5	Up button
6	Down button
7	Hidden until lit Display

5.2 Commissioning Mode

With the warewasher turned on at the mains electrical supply but off on the Control Panel, press and hold the Exit (**1**) and Enter (**2**) buttons simultaneously for 3 seconds.



The Display (**7**) will illuminate to show the first menu item and the Cycle indicator (**3**) will illuminate red.

If no buttons are pressed for a period of time the warewasher will cancel the Commissioning Mode and return to the off state.

Below is the complete menu list:

Display	Description
r 10 **	Rinse aid setting (e.g. 15 = 1.5mL/L)
rPO	Rinse aid prime
d30 **	Detergent setting (e.g. 33 = 3.3mL/L)
dPO	Detergent prime

*** The numbers indicated refer to the setting of the chemical dosing and water hardness. For example, the default setting for rinse aid is 1ml of chemical per 1 litre of water, this will be displayed as 'r10'. The default setting for detergent is 3ml of chemical per 1 litre of water, this will be displayed as 'd30'.*

5.3 Setting the Chemical Dosage Rate

Your warewasher will be set to the default chemical dosing settings. However, since there are many different chemicals on the market and each of these have different concentration requirements, the dosage can be adjusted by following the instructions given below:

Refer to the chemical bottle or contact the chemical supplier to find the concentration requirements for the rinse aid and detergent in millilitres of chemical per litre of water (ml/L).

Enter Commissioning Mode - press and hold the Exit (**1**) and Enter (**2**) buttons simultaneously for 3 seconds (►5.2).

Using the Up and Down buttons (**5** and **6**), scroll to the rinse aid setting menu (r**), press Enter (**2**). The display will flash.

Use the Up and Down buttons (**5** and **6**) to scroll to the required ml/L setting and press Enter (**2**).

Using the Up and Down buttons (**5** and **6**), scroll to the detergent setting menu (d**), press Enter (**2**). The display will flash.

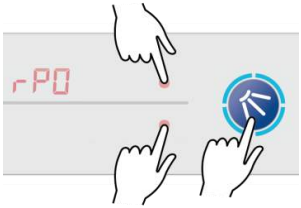
Use the Up and Down buttons (**5** and **6**) to scroll to the required ml/L setting and press Enter (**2**).

Press Exit (**1**) until the warewasher exits Commissioning Mode and returns to the off state.

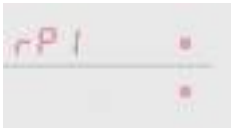
5.4 Priming the Chemical Pumps

Before the warewasher can be used the chemical tubes need to be filled with chemicals, in order to do this you will need to follow the instructions given below to prime the chemical pumps.

Enter Commissioning Mode - press and hold the Exit (**1**) and Enter (**2**) buttons simultaneously for 3 seconds (►5.2).

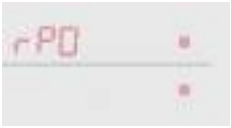


Using the Up and Down buttons (**5** and **6**), scroll to the rinse aid prime menu (rP0) and press Enter (**2**)

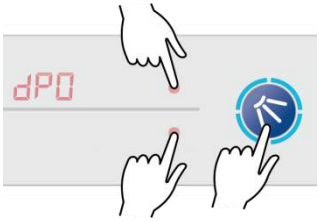


The display will flash and will change to rP1.

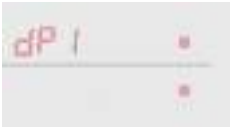
This will start and run the Rinse Aid Pump for a maximum of 12 minutes, drawing chemical into the warewasher. When the chemical has reached the back of the warewasher (the chemical is visible through the tubing), press Enter (**2**) again to stop the Pump.



The display will stop flashing and revert to rP0.

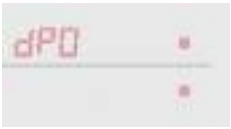


Using the Up and Down buttons (**5** and **6**), scroll to the detergent prime menu (dP0) and press Enter (**2**)



The display will flash and will change to dP1.

This will start and run the Detergent Pump for a maximum of 2 minutes, drawing chemical into the warewasher. When the chemical has reached the back of the warewasher (the chemical is visible through the tubing), press Enter (**2**) again to stop the Pump.



The display will stop flashing and revert to dP0.

Press Exit (**1**) until the warewasher exits Commissioning Mode and returns to the off state.

5.5 Wash and Rinse Tank Temperatures

The Wash and Rinse Tank (Boiler) temperatures have been factory set to pre-set temperatures. These temperatures do not normally need to be adjusted by the user.

Please refer to the latest version of the Engineers Manual on the Classeq website for full information regarding temperatures and interlock settings.

6. Operation

Before operating the warewasher, ensure that the mains electrical and water supplies are turned on.

Children must be supervised to ensure that they do not play with, or operate, the warewasher.

6.1 Operation Interface

Item	Description
1	On/Off button
2	Cycle button

Item	Description
3	Cycle indicator
4	Heating indicator

6.2 Turning on the Warewasher

To turn on the warewasher, ensure the door is closed and press the On/Off button (**1**) on the Control Panel. The display will illuminate and the warewasher will start to fill, as long as the door is closed.

6.3 Warewasher Ready to Operate

Your warewasher operates a pulse fill function, this means that it will fill the Rinse Tank, heat this to a pre-set temperature then transfer this water to the Wash Tank. During the fill stage the Heating indicator (**4**) will flash amber.

Once the Wash Tank is filled and both Tanks are up to the required temperatures, the Heating indicator will illuminate green to indicate the warewasher is ready to run a cycle.

The time required for the warewasher to fill and heat will vary depending on the power rating of the warewasher, as stated on the rating label (►2.3), and the incoming water temperature. Below is a guide to these fill and heating times when the incoming water is 16°C.

Rating	Time
220-240V / 1N~ / 13A	50 min
220-240V / 1N~ / 28A	25 min
380-415V / 3N~ / 11A	25 min

6.4 Selecting a Wash Program

Your warewasher has one possible program time that is pre-set to offer the best possible results. These times are as follows:

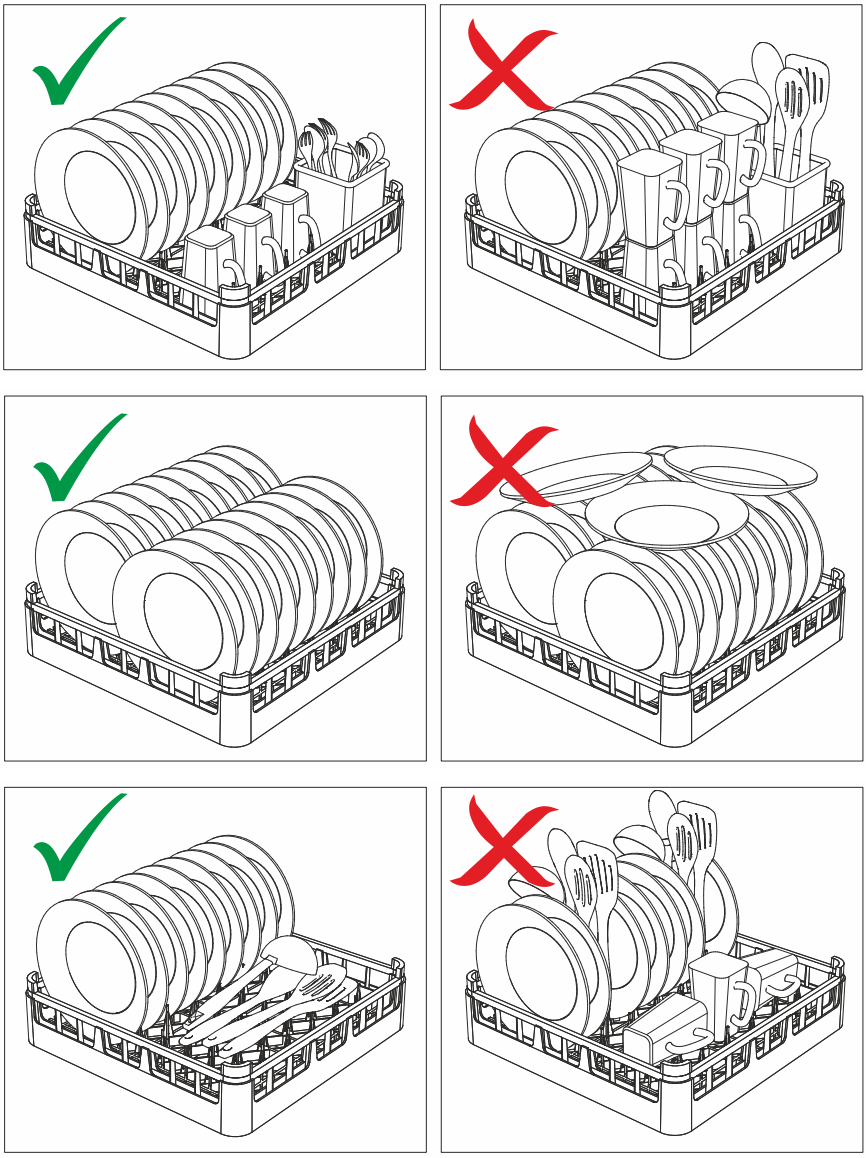
- Dishwasher – 3 min
- Glasswasher – 2 min

Your warewasher has a heat interlock to ensure that the rinse is in accordance with environmental health requirements. A recovery time may be experienced between cycles to get back to this interlock temperature indicated by the flashing amber heating indicator.

For full information on operating temperatures and the interlock, please refer to the latest version of the Engineers Manual on the Classeq website for full information regarding temperatures and interlock settings.

6.5 Loading a Dishwasher Basket

For dishwashers ONLY



6.5.1 Is it Suitable?

Before loading any item into your dishwasher, check that it is dishwasher compatible.

- Pots and pans made of aluminium or stainless steel are normally safe to put in a dishwasher - but always check for a dishwasher-safe indication on the base of the pans. If this is not obvious, check the manufacturer's website or label.
- Non-stick pans - many manufacturers state that they are dishwasher safe, however, always check for a dishwasher-safe indication on the base of the pans. If this is not obvious, check the manufacturer's website or label.
- Items made of brass, bronze, wood, or china with gold leaf embellishment are not suitable for washing in a dishwasher. Wash these items by hand.
- Large kitchen knives may suffer over time if washed in a dishwasher. Wash these items by hand.

6.5.2 Preparation

Large chunks of leftover food should be scraped off plates / bowls / pans.

For best results pre-rinse all dirty wares before they go in the dishwasher. Pre-rinse in plain hot water or water with dishwasher detergent added to it. Do not use handwash detergent as this may cause foaming when the wares are transferred into the dishwasher.

6.5.3 Service Cutlery

Knives, forks and spoons should be loaded into the Cutlery Basket. Load forks and spoons handle end down. Load knives handle end up, to prevent cuts when unloading the warewasher / Basket. Do not overfill the compartments. Do not sort into cutlery types, i.e. do not fill one compartment in the Basket with all spoons as these may nest with each other and not wash properly.

6.5.4 Tableware

Adjust the Plate Basket Inserts to suit your plate / bowl size. Stack plates / bowls so that they are free-draining. Large platters should be placed face down in the bottom of a Basket.

6.5.5 Preparation / Serving Utensils

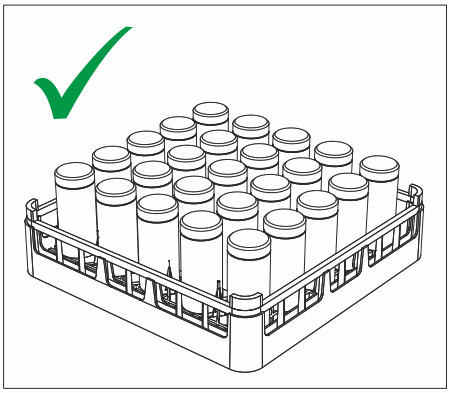
Long utensils / cutlery, such as ladles and long knives etc., must be placed horizontally on the bottom of an Open Basket. This will avoid possible collision with Wash / Rinse Arms.

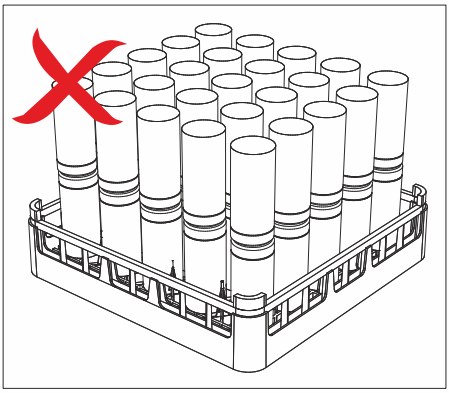
6.5.6 Pots and Pans

Pots and pans should be placed in an Open Basket face down. Try not to overlap items.

6.6 Loading a Glasswasher Basket

For glasswashers ONLY





Glasses should be placed in the Open Basket open end down.

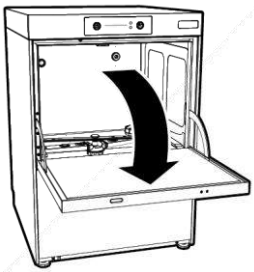
Always try to fill the Basket - to prevent glasses from clinking against each other during a wash cycle.

With tall glasses always check carefully that they will fit in the glasswasher when stood upright in the Open Basket.

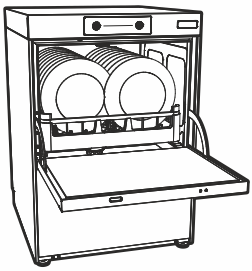
6.7 Starting a Cycle

Always remove excess food / debris from any dishes / glasses to be washed. **DO NOT** use your warewasher as a waste disposal unit.

To start a cycle, follow the instructions given below.



Open the Door.



Load the full Basket, ensuring that the bottom and top Arms rotate freely.

Close the Door.

Press the Cycle button (**2**). The cycle will start once the warewasher has achieved its correct water levels. The cycle will start when it has completed it's initial heat and fill. During the cycle the Cycle indicator (**3**) will be illuminated blue.

Do NOT open the door during a cycle.

If the Cycle button is pressed before the warewasher has reached the required levels and temperatures the Cycle indicator (**3**) will illuminate blue to indicate that a cycle has been selected, the Heating indicator (**4**) will flash amber, and the warewasher will automatically start when the requirements have been met.

1. At the end of the cycle, the Cycle indicator (**3**) goes out. Open the Door and remove the Basket.
2. Reload the warewasher and repeat as required.

Wares in the basket may be wet and will dry in a short time due to evaporation.

Warning!

Wares may be hot when removed from the warewasher.

6.8 Draining Down the Warewasher

Caution

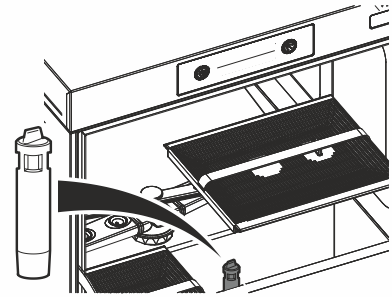
It is very important the warewasher is drained down at the end of each working day.

During normal operation the warewasher will drain out any excess water.

To fully drain down the warewasher follow the instructions given below.

6.8.1 Draining a gravity drain warewasher

1. Open the Door of the warewasher.
2. Locate and remove the Drain Plug.



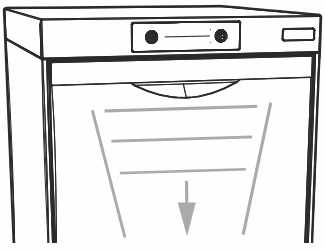
6.8.2 Draining a pumped drain warewasher

Close the Door to the warewasher.

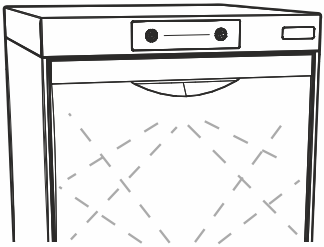
Press the On/Off button (**1**) to turn off the warewasher.

Press the Cycle button (**2**).

The Cycle indicator (**3**) will flash blue.



The warewasher will drain down the Wash Tank.



The warewasher will do a self-rinse.

When the Cycle indicator (**3**) goes out the drain cycle is complete.

Notes:

1. Once empty, ***Classeq*** recommends that the mains water and electricity supplies are turned off and the warewasher is cleaned (►7.2).
2. For hygiene reasons it is recommended that once the warewasher has been drained and cleaned the door is left open to assist in natural drying of the Wash Chamber.

6.9 Warewasher Malfunction

In the event of a warewasher malfunction:

- Switch the warewasher off using the On/Off button.
- Isolate the electrical supply to the warewasher.
- Turn off the water supply.
- Request a service callout.

7. Maintenance and Servicing

DANGER!

The warewasher MUST be disconnected from its power source during cleaning, servicing or when replacing parts.

DANGER!

Ensure the base of the warewasher is never submerged or standing in water when operating the warewasher.

Caution

DO NOT spray the exterior or interior of the warewasher and the surrounding area *(panels, base)* using a water hose, steam-jet air ejector or high pressure cleaner.

Caution

Ensure that the items placed on the open door of the warewasher do not exceed 20kg in weight.

7.1 Prior to Cleaning

Ensure the warewasher has first been drained down (►6.8).

Turn off the mains electrical supply before cleaning the warewasher.

Warning!

DO NOT use cleaning agents that contain CHLORINE, BLEACH or HYPOCHLORITE.

Warning!

Before cleaning the Wash Chamber, ensure all sharp items, such as broken glass or other items which could cause injury, are removed carefully.

Caution

DO NOT use STEEL WOOL, WIRE BRUSHES or any other abrasive materials.

7.2 Daily Cleaning

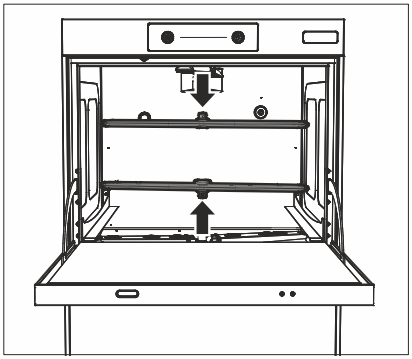
It is recommended that the warewasher is cleaned daily to ensure good hygiene in the warewasher.

7.2.1 Interior cleaning

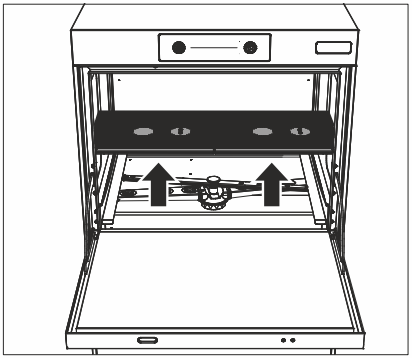
The interior of the warewasher should be cleaned after each service when the warewasher is drained down.

As a minimum ***Classeq*** recommends the following are checked and cleaned:

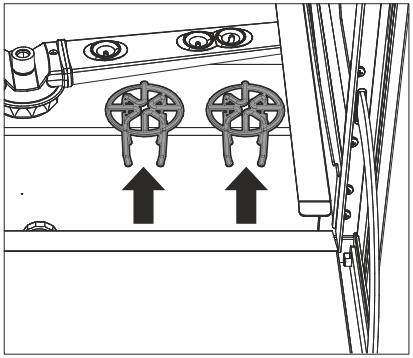
- Remove and clean the top and bottom Rinse and Wash Arms.



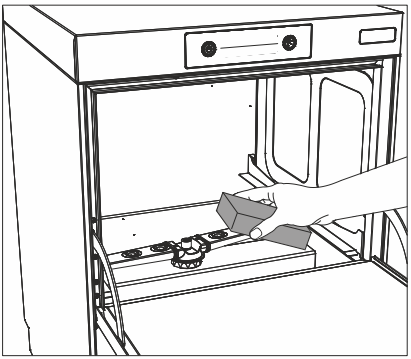
- Remove and clean the primary filters.

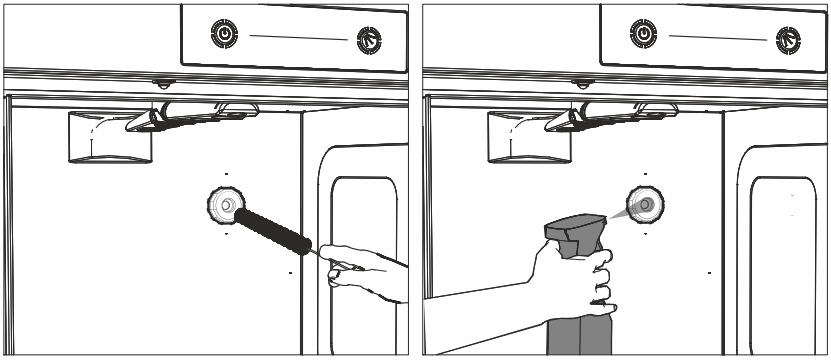


- Remove and clean the secondary filters.



- Clean the interior of the Wash Tank with a sponge and/or brush for all apertures and outlets.
- Clean around the door hinge.





- Use a small bottle brush followed by a trigger spray bottle with a jet nozzle, clean the ball in the anti-syphon device (pumped drain warewashers only).
- If required apply food grade grease to the Door Ball Catch.

Ensure all arms and filters are refitted to the warewasher before turning the warewasher on.

7.2.2 Exterior cleaning

Wipe the exterior of the warewasher with a damp *(NOT WET)* sponge.

Once dry, clean using a STAINLESS STEEL cleaning agent.

7.3 Limescale Build Up

For best results ensure your warewasher is operated with soft water so that limescale does not build up.

If your warewasher is connected to an external Water Softener, ensure this is routinely regenerated as per the manufacturer's instruction manual.

If your warewasher is operated with hard water, without the relevant water treatment, the internal workings and water lines can become scaled, your washing results will deteriorate and the warewasher could be damaged. For more information on hard water refer to Water Supply and Connection (►4.5).

Caution

Damage to the warewasher caused by limescale will **NOT** be covered by the manufacturer's warranty (►12).

7.4 Descaling

You can de-scale the Wash Tank of your warewasher yourself with the help of the following notes; to de-scale the Rinse Boiler you will need to contact your service engineer or ***Classeq***.

Warning!

Wear the correct Personal Protective Equipment, e.g., gloves and goggles, when handling chemicals and observe all safety notes and dosing recommendations printed on the packaging.

Caution

De-scale chemical must not remain in the warewasher for more than 2 hours.

In order to descale the Wash Tank follow the instructions below:

1. Remove the chemical tubes from the chemical bottles and place the ends of the tubes into a container of water.
2. Use the commissioning menu to prime the Rinse Aid and Detergent Pump for at least 60 seconds (►5.4) to draw water all the way into the warewasher.
3. Fill and drain the warewasher to remove any chemical residue.
4. Refill the warewasher.
5. Follow the instructions on the chemical packaging to de-scale the Wash Tank.
6. Once the de-scale process is complete drain the warewasher.
7. Refill and drain the warewasher at least 3 times to remove any chemical residue.
8. Refit the chemical tubes to the bottles and prime the Pumps (►5.4).

8. Troubleshooting

If you believe the warewasher is not behaving as expected or has gone into error mode (Cycle indicator illuminated red), reset the warewasher by pressing the On/Off button, then follow the troubleshooting tips before requesting a service callout. The service support number can be found in the Useful Contact Details section (►14).

Note: In the event of a service call being made under Warranty and it is found that the fault(s) are due to non-observance of instructions in this Manual, the call will be charged at current rates.

Problem	Possible Cause	Solution / Check
Warewasher does not fill.	The warewasher is still heating the water in the Rinse Boiler, indicated by the Heating indicator flashing amber.	Wait for heating stage to complete.
Warewasher has not filled and Heating indicator has been flashing amber for more than 30 minutes.	There is a problem with the water supply.	Ensure the water supply hose is connected to the warewasher and has not been trapped or kinked. Ensure the water supply is turned on. Check that the site water supply has not been turned off.
	The warewasher is not turned on.	Press the On/Off button.
	The door is not closed properly.	Close the door.

Problem	Possible Cause	Solution / Check
Warewasher will not turn on.	There is a problem with the power supply.	Ensure the warewasher is connected to the mains power supply. Check the power supply outlet is turned on. On 13A warewasher s check and replace the fuse in the plug, ensuring that the correct rating is used. On all ratings of warewasher check and reset the circuit breaker in the site fuse board. If the fuse or breaker keeps tripping, request a service callout.
Warewasher fills slowly.	There is a problem with the water supply.	Ensure the water supply is turned fully on. Ensure the water supply hose has not been trapped or kinked. Check that the site water supply has not been turned off. Check that the site water pressure is adequate (►4.5.1).
Warewasher is over filling (too much water in the Wash Tank - visible with the Door open, or water spills out when the Door is opened).	There is a problem with the drains system.	Attempt to drain the warewasher (►6.8). If warewasher does not drain, stop the warewasher and check the site drains system.

Problem	Possible Cause	Solution / Check
	There is a problem with the warewasher's control system.	Request a service callout.
Warewasher is over filling (pumped drain warewashers only).	Drain Pump failure.	Attempt to drain the warewasher (►6.8). If warewasher does not drain, stop the warewasher and request a service callout.
Warewasher does not heat up.	Warewasher not turned on.	Check that the indicators and display on the Control Panel are illuminated. Press the On/Off button.
	Warewasher not able to fill.	Ensure the water supply is turned fully on. Ensure the water supply hose has not been trapped or kinked. Check that the site water supply has not been turned off. Check that the site water pressure is adequate (►4.5.1).
	Warewasher still going through fill / heat cycle.	Check that Heating indicator is flashing amber. Allow enough time for the warewasher to fill and heat (►6.3).
Excessive foam in Wash Tank.	Wrong type of wash and/or rinse aid chemicals.	Check that the wash and/or rinse aid chemicals are commercial ware washer grade. Always use the correct grade of chemicals.

Problem	Possible Cause	Solution / Check
	Wash and/or rinse aid chemical injection rate too high.	Check / adjust the injection rates of the wash and rinse aid chemicals.
	Wash Tank not fully heated.	Check Wash Tank temperature on Control Panel display.
	Wrong type of Prewash	Do not prewash with soap based detergent.
Cycle does not start. (Your warewasher has a heat interlock that will delay the start of the wash cycle until all cycle start criteria have been met. When the criteria have been met the heat indicator will illuminate green and the cycle should start. If this is not the case please check the below items before requesting a service callout.)	Warewasher not turned on.	Check that the indicators and display on the Control Panel are illuminated. Press the On/Off button.
	Warewasher still going through fill / heat cycle.	Check that Heating indicator is flashing amber. Allow enough time for the warewasher to fill and heat (▶6.3). Please refer to the latest version of the Engineers Manual on the Classeq website for full information regarding temperatures and interlock settings.
	Wash Tank not full.	Ensure the water supply is turned fully on. Ensure the water supply hose has not been trapped or kinked. Check that the site water supply has not been turned off. Check that the site water pressure is adequate (▶4.5.1).

Problem	Possible Cause	Solution / Check
Cycle runs for a long time.	Rinse water not hot enough.	Your warewasher has a heat interlock to ensure that the rinse is in accordance with UK environmental health requirements. This will extend the wash cycle if the Rinse Boiler has not achieved the required temperature If rinse water is not hot enough Heating indicator will be flashing amber. Check Rinse Tank temperature on Control Panel display. Please refer to the latest version of the Engineers Manual on the Classeq website for full information regarding temperatures and interlock settings.
Warewasher runs through a full cycle but does not rinse.		If your warewasher runs through a full cycle, but does not rinse, you will need to request a service callout to identify the root cause of the problem.
Warewasher overflowing.	Wrong Drain Plug fitted.	Check that the Drain Plug is the right one for the warewasher (►4.6).
	Primary / Secondary Filters blocked.	Check the Primary / Secondary Filters - if blocked remove and clean thoroughly.

Problem	Possible Cause	Solution / Check
	There is a problem with the drains system.	Check that the warewasher waste hose is not kinked or blocked. Check that the site waste is not blocked.
		If the warewasher continues to overflow isolate the warewasher and request a service callout.
Poor wash results.	Warewasher not being supplied with soft water.	Check the operation of the external Water Softener if fitted. Regenerate the external Water Softener.
	There is a problem with the wash and rinse aid chemicals system.	Check the level of chemicals within the detergent and rinse aid bottles. Ensure the bottle weights and tubes are correctly positioned. Check the chemical dosing rates are correctly set (►5.3).
	Warewasher not properly cleaned.	Ensure that the warewasher is regularly cleaned (►7.2). Check for presence of beige or black film deposits around the door and door hinges of the warewasher indicating a build up of growing yeast cells. Check glasses and renovate if required.

Problem	Possible Cause	Solution / Check
Warewasher does not drain.	Wrong Drain Plug fitted.	Check that the Drain Plug is the right one for the warewasher (►4.6).
	Primary / Secondary Filters blocked.	Check the Primary / Secondary Filters - if blocked remove and clean thoroughly.
	There is a problem with the drains system.	Check that the warewasher waste hose is not kinked or blocked. Check that the site waste is not blocked. Correct drain procedure is being used for the warewasher type (►6.8).
	Ball in anti-syphon device dirty / blocked (pumped drain warewasher s only).	Remove the anti-syphon device cover inside the warewasher, gently clean the ball by inserting and agitating a small bottle brush, flush using a trigger spray bottle with a jet nozzle.
Warewasher will not turn off when the On/Off button is pressed.	There is a problem with the warewasher's control / electrical system.	Isolate the electrical supply to the warewasher, turn off the water supply, and request a service callout.

9. Decommissioning

If for any reason you need to remove or decommission your warewasher, do so in accordance with local and national regulations.

Classeq recommends the following procedures are followed.

9.1 Flush Out Chemical Dosing Systems

Prior to removing any chemicals refer to all safety statements on the chemical bottles for dealing with any spillage.

Warning!

Wear the correct Personal Protective Equipment, e.g., gloves and goggles, when handling chemicals and observe all safety notes and dosing recommendations printed on the packaging.

1. Remove the chemical tubes from the chemical bottles.
2. Place the ends of the tubes into a container of water.
3. Use the commissioning menu to prime the Rinse Aid and Detergent Pumps to draw water all the way into the warewasher.
4. Fill and drain the warewasher to remove any chemical residue.
5. Ensure the bottles are then capped to prevent any spillage.

9.2 Drain the Warewasher

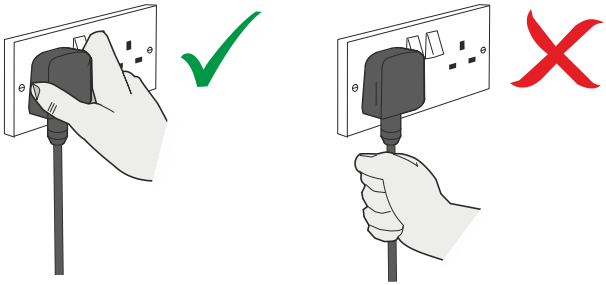
6. Ensure the warewasher is fully drained (►6.8).
7. Remove the Waste Hose from the drain standpipe; ensure any spilt liquid is dried prior to advancing to the next stage.

9.3 Disconnect the Warewasher

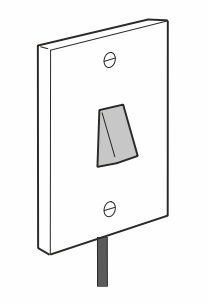
8. Turn off the mains electrical supply at the socket / isolator / junction box.

When disconnecting the warewasher from the mains electrical supply:

- Warewashers with an electrical plug, always pull the plug. Never pull the cord itself.



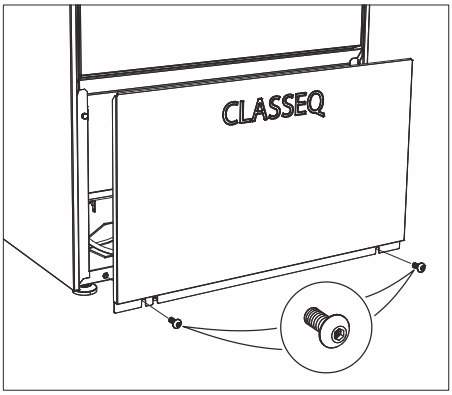
- Warewashers that are hardwired *(i.e. no plug),* must be disconnected in accordance with local and national regulations. ***Classeq*** recommends this is performed by a qualified electrician.

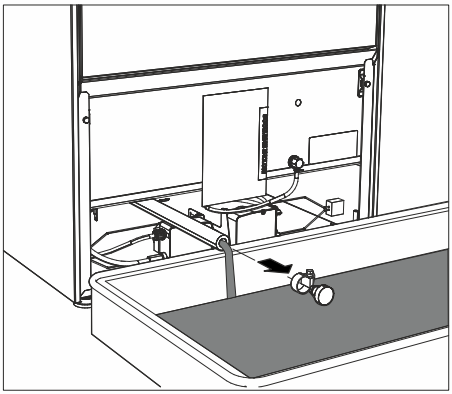


9. Once the electrical supply has been disconnected, disconnect the equipotential wire from the stud at the rear of the warewasher.
10. Turn off the water supply to the warewasher and disconnect the Water Supply Hose from the mains water supply, ensuring any spillage is cleared up.

9.4 Drain the Rinse Tank / Boiler

11. Remove the lower Front Panel from the warewasher using a 3mm hex key.
12. Locate the Boiler Drainage Hose. Ensure the Hose protrudes from the front of the warewasher.
13. Position a container large enough to hold eight litres of water so that the Hose will drain into it.





Warning!

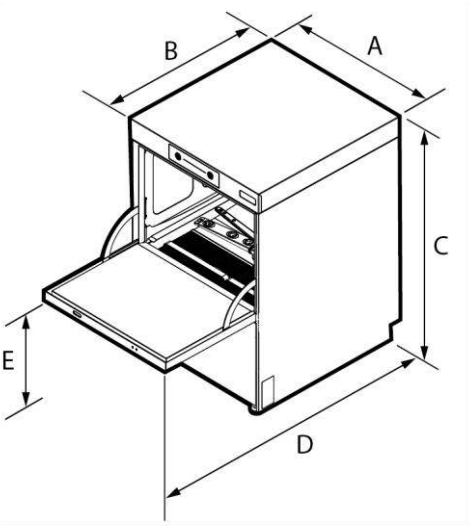
If the warewasher is being drained immediately after use, the water draining from the Boiler Drainage Hose may be as hot as **95°C**.

14. Loosen the Jubilee Clip and remove the Drain Plug, ensuring the water flows into the container. Once fully drained replace the Drain Plug and retighten the Jubilee Clip.
15. Replace the Front Panel, and ensure all cables and hoses are secured to the warewasher to prevent tripping hazards. The warewasher is now ready to be removed.

RECYCLING: If you are recycling or disposing of your warewasher, you must ensure this is done in accordance with local and national regulations.

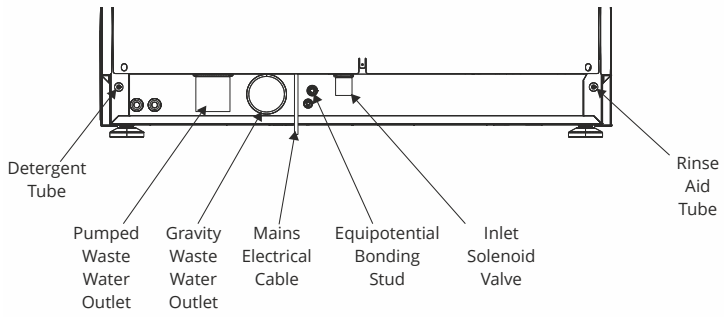
10. Warewasher Specifications

Model No.	G350	G400-D400	G500-D500
A. Width (mm)	410	450	550
B. Depth - door closed (mm)	517	517	605
C. Height (mm) min/max	644/674	760/790	830/870
D. Depth - door open (mm)	810	865	987
E. Height to open door (mm)	272	338	375



Model No.	G350	G400 / D400	G500 / D500
Water supply connection	G¾" (¾"BSP)	G¾" (¾"BSP)	G¾" (¾"BSP)
Water pressure - min (bar)	2.0 bar	2.0 bar	2.0bar
Water flow rate - min (L/min)	11	11	11
Water temperature - min/max (°C)	4/55	4/55	4/55
Drain height - gravity (mm)	40	40	40
Drain height - pumped (mm)	420	540	600
Drain size (mm)	Ø40	Ø40	Ø40
Current - standard (A)	13 (1 phase)	13 (1 phase)	30 (1 phase)
Voltage - standard (V)	220-240 /1N~/50Hz	220-240 /1N~/50Hz	220-240 /1N~/50Hz
Power consumption - standard (kW)	2.85	2.85	6.58
Current - option 1 (A)	-	13 (3 phase)	13 (3 phase)
Voltage - option 1 (V)	-	380-415 /3N~/50Hz	380-415 /3N~/50Hz
Power consumption - option 1 (kW)	-	6.58	6.58
Current - option 2 (A)	-	30 (1 phase)	12 (1 phase)
Voltage - option 2 (V)	-	220-240 /1N~/50Hz	220-240 /1N~/50Hz
Power consumption - option 2 (kW)	-	6.58	2.58

Model No.	G350	G400 / D400	G500 / D500
Wash Tank element rating (kW)	2.00	2.00	2.00
Rinse Tank element rating (kW)	2.60	2.60	6.00
Wash Tank capacity (litres)	5.75	9.77	14.33
Rinse Tank capacity (litres)	6.5	6.5	7.5
Rinse water consumption @3bar (L/cycle)	3.00	3.00	3.00
Wash Tank temperature (°C)	55	55	55
Rinse Tank temperature (°C)	70	82	82
Noise level (dB)	<70	<70	<70
Weight - empty (kg)	32	32	44
Weight - fully loaded (kg)	43.5	43.5	64.5
Weight - packed (kg)	43.2	43.2	57.6



11. Ordering Accessories and Supplies

To view and order accessories and supplies for your product please go to the ***Classeq*** website at:

www.classeq.co.uk/product-category/accessories/

12. Parts and Labour Warranty

Classeq Ltd.

Parts and Labour Warranty Terms

The user is entitled to free replacement and fitting of any part found to be faulty in material or workmanship, including any parts rendered inoperative by the effect of a faulty component, for a period of one year, or as specified by the vendor at the time of purchase.

Exceptions

All faults or conditions caused by Operator misuse, including (but not exclusively):

- Incorrect Installation.
- No fault found.
- Problems with electricity supply or plumbing e.g. water and waste.
- Failure to follow instructions in the User Handbook.
- Use of incompatible chemicals or chemical set at incorrect concentration.
- Drain pump or drain system blocked or damaged by foreign bodies.
- Wash pumps damaged due to foreign bodies entering the wash system.
- Use of un-softened (hard) water. The use of a faulty water softener or the failure to properly regenerate a water softener.
- Use of excessive force on the warewasher, e.g. switches etc.
- The cost of replacing any item found to be lost or missing.
- Use of non-compatible cleaning materials.
- Incorrect assembly after cleaning.
- Damage to warewasher caused by any 3rd party.

13. Notes

14. Useful Contact Details

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Document number: 30012490

Revision: F

Date: 28/02/2018

Language: English

Original instructions