

HEATRAE SADIA Handy

ELECTRIC HANDWASH INSTALLATION and USER INSTRUCTIONS

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PLEASE READ AND UNDERSTAND THESE INSTRUCTIONS BEFORE COMMENCING INSTALLATION



PLEASE LEAVE THESE INSTRUCTIONS WITH THE USER

Model numbers
HANDY 3.1kW - 95 020 111
HANDY 7.2kW - 95 020 112

CAUTION

2.21 This appliance must be earthed.
2.22 Fuses do not give personal protection against electric shock. **To enhance electrical safety a 30mA residual current device (RCD) should be installed in all electric handwash circuits.** This may be part of the consumer unit, or a separate unit.

2.23 Ensure that all terminal block connections are sufficiently tight.

2.24 Switch off appliance immediately and isolate if water ceases to flow during use.

2.25 Other electrical equipment e.g. extractor fans, must not be connected to the handwash or its supply circuit.

2.26 The appliance must be switched off at the isolating switch when not in use.

3.3 MATERIALS

Backplate, cover and control knob- High Impact Polystyrene
Element(s) - Copper sheathed rod type

3.4 DIMENSIONS

Height - 232mm
Width - 146mm
Depth - 95mm

3.5 STANDARDS AND APPROVALS

Complies with the requirement of EN 60335-2-35.

British Electrotechnical Approvals Board (BEAB) approved.

Complies with European Community Directives (CE).

4 SITE REQUIREMENTS

WARNING

4.1 **The handwash must not be positioned where it will be subjected to freezing conditions.**

WATER REQUIREMENTS

4.2 The installation must be in accordance with Water Regulations. To ensure activation of the heating elements, the handwash must be connected to a mains water supply with a minimum running pressure of 1 bar (14.5 psi) and a maximum static pressure of 7 bar (100 psi). If in doubt, the pressure should be checked taking account of other services from the same water supply which could cause the pressure to fall below the minimum. The water supply can also be taken from a cold water storage cistern provided there is a minimum head of 10m above the unit. It must be an independent supply to the handwash only.

3 TECHNICAL SPECIFICATIONS

3.1 CONNECTIONS

Inlet connection - 15mm ext. diameter (copper or push fit Stem Elbow)

Water entry point - bottom and rear

Cable entry point - bottom and rear

3.2 ELECTRICAL

Nominal Power Rating

Model	240V	230V	Minimum cable size
3.1kW	3.1kW 12.9amp	2.8kW 12.4amp	1.5mm ²
7.2kW	7.2kW 30amp	6.6kW 28.75amp	6mm ²

1 INTERNAL COMPONENTS

1.1 A pressure relief device (PRD) is designed into the handwash unit, which complies with European standards. The PRD provides a level of appliance protection should an excessive build-up of pressure occur within the unit.

1.2 **DO NOT** operate the handwash with a damaged spout or blocked sprayplate, which can cause the PRD to operate.

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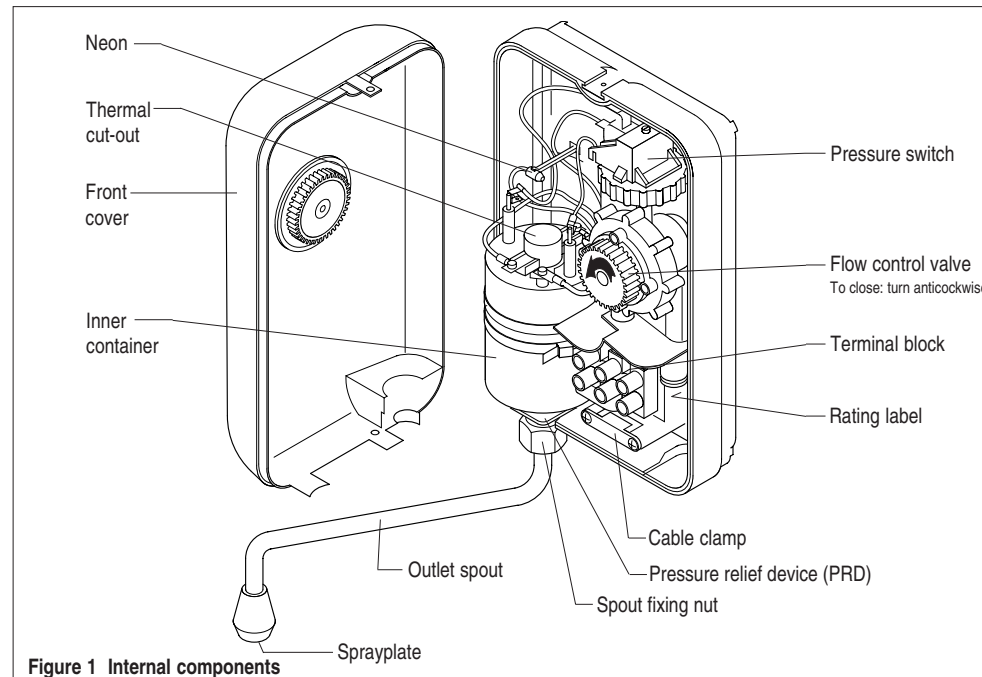


Figure 1 Internal components

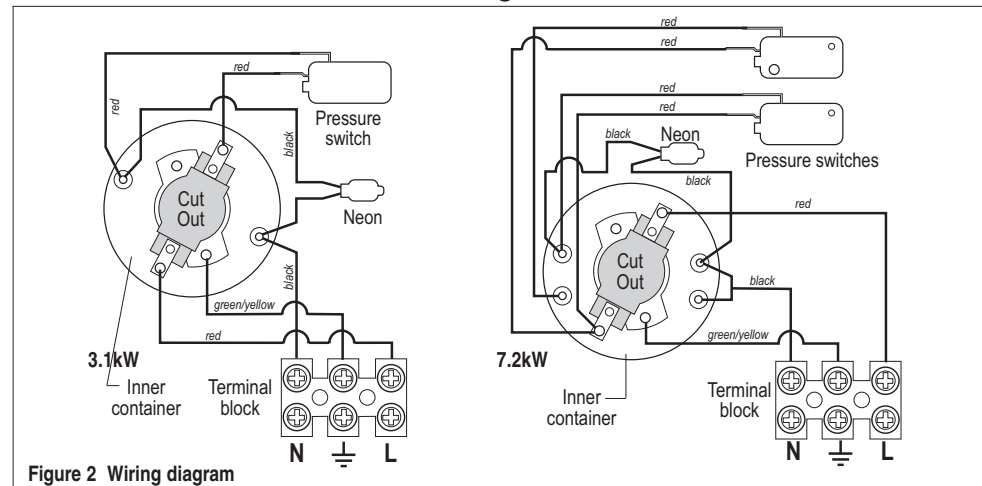


Figure 2 Wiring diagram

4.3 If the handwash is operated outside of the stated pressure parameters, it may not be possible to achieve optimum performance from the unit throughout the year.

ELECTRICAL REQUIREMENTS

WARNING

4.4 **The appliance must be earthed.**

IMPORTANT

4.5 The installation, supply cable and circuit protection must conform to BS 7671.

4.6 Before making any sort of electrical connection ensure that no terminal within the circuit is live. If in any doubt, SWITCH OFF the whole installation at the consumer unit.

4.7 The handwash must only be connected to a 230-240V ac supply.

4.8 The earthing and protective conductor arrangement within the property, in particular

the supplementary bonding in the room containing the handwash, shall comply with BS 7671.

4.9 Ensure that the supply cable and fuse are sufficient for the rated input of your unit. Please refer to the rating label within the unit.

4.10 For a 3.1kW unit:

A minimum cable size of 1.5mm² should be used. The handwash can be connected in two different ways.

1. Via a fused and switched connection unit taken as a spur from a 13amp ring main.

2. As a separate circuit taken directly from a spare way in a consumer unit.

In each case a double pole isolating switch having a contact separation of at least 3mm in each pole and a minimum rating of 13amp must be incorporated in the wiring to the unit.

4.12 To obtain full advantage of the power provided by the handwash, use the shortest cable route possible from the consumer unit to the handwash.

2 SAFETY

IMPORTANT INFORMATION

2.1 Products manufactured by Heatrae Sadia to British and European Standards are safe and without risk provided they are installed, used and maintained in good working order in accordance with our instructions and recommendations.

2.2 Read all of these instructions before starting work and retain them for later use.

2.3 **DO NOT** operate the unit if it is frozen, or suspected of being frozen. It must thaw out before using.

2.4 **DO NOT** operate the unit if:-
1. Water ceases to flow during use.
2. Water has entered inside the unit because of an incorrectly fitted cover.
3. If unit is damaged.

2.5 **ISOLATE** the electrical and water supplies before removing the cover.

2.6 **ISOLATE** electrical and water supplies **BEFORE** proceeding with installation or servicing.

2.7 The unit must be mounted onto a finished wall surface (or on top of the tiles).

2.8 **DO NOT** tile up to unit after fixing to wall.

2.9 The sprayplate must be cleaned when any of its holes become blocked, otherwise restriction to the flow from the outlet spout will result in higher temperatures and could also cause the pressure relief device in the unit to operate - see 1.1 and 10.2.

2.10 The product is **NOT SUITABLE** for mounting into steam rooms or steam cubicles.

CAUTION

2.11 It is recommended that persons who may have difficulty understanding or operating the controls should not be left unattended whilst washing hands. Special consideration should be given to young children and the less able-bodied.

2.12 Only use designated entry points for cable and pipe.

PLUMBING

2.13 The plumbing installation must comply with Water Regulations.

2.14 The supply pipe must be flushed to clear debris before connecting to the handwash unit.

2.15 **DO NOT** solder pipes or fittings within 300mm of the appliance, as heat transfer can damage components.

2.16 **DO NOT** fit any form of outlet flow control, as the outlet acts as a vent for the heater can.

2.17 **DO NOT** use excessive force when fitting spout fixing nut, finger tightness is sufficient.

2.18 All plumbing connections must be completed and checked for leaks before making the electrical connections.

ELECTRICAL

2.19 Before fitting the unit, ensure that the consumer unit and any switches are suitable for the additional load. If in doubt, contact your electricity supplier.

2.20 The installation must comply with BS 7671 'Requirements for electrical installations' (IEE Wiring Regulations).

4.13 If your consumer unit has a rating below 80A or if there is no spare fuse way, then the installation will not be straightforward and may require a new consumer unit. A qualified electrician should install the new consumer unit. It may be necessary to contact your electrical supplier to upgrade your supply.

CAUTION

4.14 To enhance electrical safety a 30mA residual current device (RCD) should be installed in all electric handwash circuits. This may be part of the consumer unit or a separate unit. **DO NOT** use a rewirable fuse. Instead use a suitably rated miniature circuit breaker (MCB) or cartridge fuse. The handwash must be connected to its own independent electrical circuit.

5 CONSIDERATIONS BEFORE FITTING

IMPORTANT

5.1 The unit must be mounted on a flat surface, which covers the full width and length of the backplate. It is important that the wall surface is flat otherwise difficulty may be encountered when fitting the cover.

5.2 Ensure that the handwash is positioned over the basin because if the PRD operates water will eject from the bottom of the unit.

5.3 The outlet of the handwash acts as a vent and **MUST NOT** be connected to any form of outlet flow control or any other fitting not recommended by Heatrae Sadia.

5.4 **DO NOT** fit the handwash to the wall and tile up to the case. It must be fitted **on to a finished flat and even wall surface**. This allows removal for servicing.

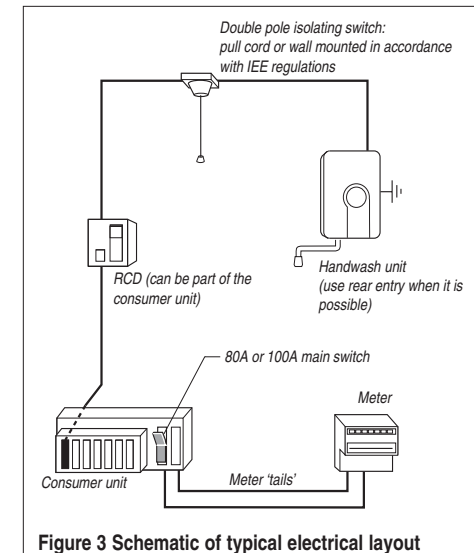


Figure 3 Schematic of typical electrical layout

4.11 For a 7.2kW unit:

A minimum cable size of 6mm² should be used and be connected to its own separate circuit protected by a 30 amp fuse. A double-pole isolating switch having a contact separation of at least 3mm in each pole and a minimum rating of 30 amp must be incorporated in the wiring to the unit.

Check your consumer unit (main fuse box) has a main switch rating of 80A or above and that it has a spare fuse way which will take the fuse or miniature circuit breaker (MCB) necessary for the handwash.

5.5 The control knob is an integral part of the cover - do not attempt to remove it.

5.6 Position the unit above the basin so that the spray will be contained within the basin and at a convenient height for hand washing - see Fig. 4.

5.7 A clearance of at least 130mm above and below the unit should be allowed for access to the cover screws.

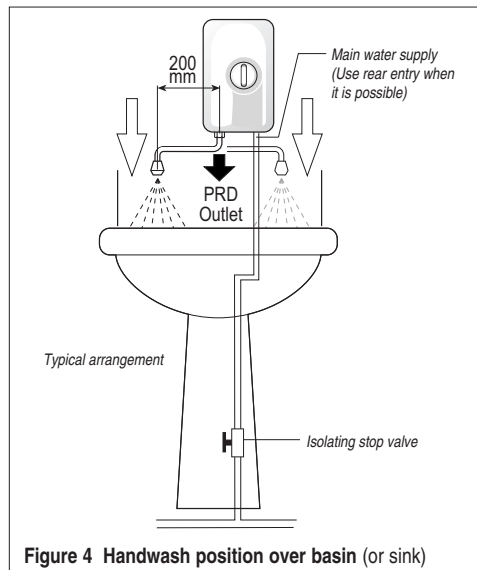


Figure 4 Handwash position over basin (or sink)

CABLE ENTRY

5.8 Cable entry can be from the rear (preferred) or from the bottom. The backplate has cut out positions to suit 2 sizes of cable. When opting for bottom entry make cut out to suit cable before fitting backplate to the wall - see Fig. 5.

7.7 Strip the outer sheath of the cable to a point about 5mm above the clamp, **thus ensuring that the cable is clamped across its outer sheath.**

7.8 Strip the insulation from the cores and make connections - see Fig. 13.

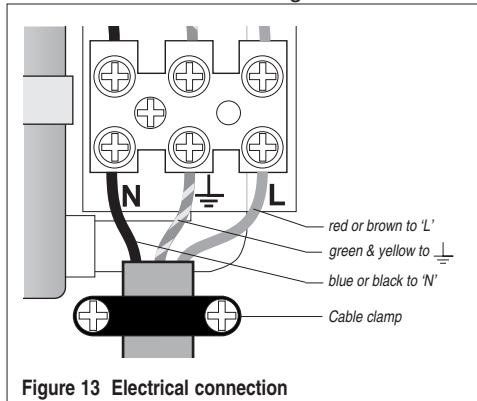


Figure 13 Electrical connection

7.9 Make sure that all the terminal block screws are tightened **FIRMLY.**

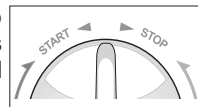
7.10 Refit the clamp bar (for a 10mm² cable, the clamp bar is not required).

FITTING COVER

7.11 Fit outlet spout if required - see 6.4.

7.12 Check that the flow control valve is fully closed by turning the gear fully anticlockwise.

7.13 Turn control knob until the indicator is between 'START' and 'STOP'.



7.14 Place the cover onto the backplate.

7.15 Secure the cover to backplate using screws provided.

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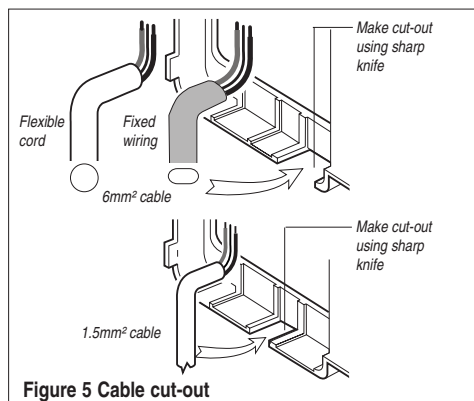


Figure 5 Cable cut-out

PIPE ENTRY

5.9 Plumbing entry can be from the rear (preferred) or from the bottom. The backplate has a cut out position to suit 15mm pipe. When opting for bottom entry make cut out before fitting backplate to the wall - see Fig. 6.

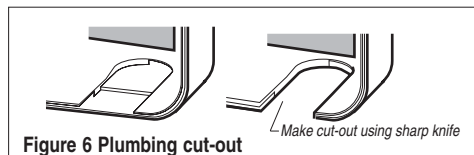


Figure 6 Plumbing cut-out

6 FITTING INSTRUCTIONS

6.1 **TURN OFF** water and electrical supply.

6.2 The unit is designed for bottom and rear entries of water pipe and electric cable. **It is advised to use the rear entry (when it is possible) in order to have a neater installation.**

6.3 Unscrew the retaining screws and lift the cover from the backplate - see Fig. 7.

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8 COMMISSIONING

NOTE: The first operation of the handwash is intended to ensure the heater unit contains water before the unit is switched on.

8.1 Before turning on the electricity and mains water to the handwash, ensure the control knob is turned fully clockwise.

8.2 Turn on the main water supply at the isolating stop valve and slowly turn the control knob anticlockwise, (it will take approximately 30 seconds for a smooth flow of water to be obtained whilst any air is being dispersed from the handwash).

8.3 Stop the water flow by rotating the control knob clockwise.

8.4 Turn on the electrical supply at the isolating switch.

8.5 Rotate the control knob half a turn anticlockwise. After approximately 15 seconds, the water will start to heat.

8.6 To obtain warmer water turn the control knob clockwise and for cooler water turn anticlockwise.

8.7 Shut off the handwash by turning the control knob clockwise. The unit is now ready to use.

8.8 The neon will illuminate when the water is heating.

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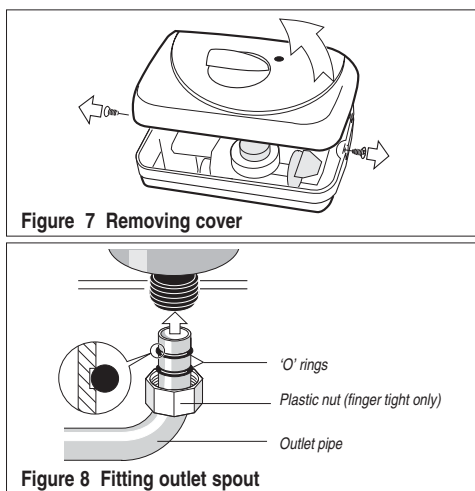


Figure 7 Removing cover

Figure 8 Fitting outlet spout

6.4 Fit the outlet spout - **DO NOT** over tighten, finger tight will be sufficient - see Fig. 8.

6.5 After choosing the correct site for the handwash, use the backplate as a template and mark the two fixing holes - see 5.1 to 5.7.

BEWARE OF CABLES AND PIPES WHICH MAY BE BURIED IN THE WALL

6.6 Drill holes using 6.5mm diameter masonry drill.

6.7 Use plugs to suit wall and fixing screws supplied.

PIPE CONNECTION

6.8 The outlet spout can be removed to ease installation.

6.9 The handwash has been designed for a 15mm water pipe using the pushfit connection - see Fig. 11.

6.10 Decide where to connect the cold water

9 FAULT FINDING

9.1 In the unlikely event of a problem, consult the trouble-shooting chart below.

9.2 If you are unable to remedy the problem, **CONTACT YOUR INSTALLER** in the first instance.

IMPORTANT

9.3 Do not attempt any electrical or plumbing work unless you are competent to do so.

9.4 If you still cannot solve the problem, please contact Heatrae Sadia Customer Service Department.

SYMPTOM	POSSIBLE CAUSE	REMEDY
1 No water flows with valve open	A Water supply turned off	Turn on water supply
	B Unit frozen	Turn OFF ELECTRICITY at isolating switch and contact installer. DO NOT USE THE HANDWASH
	C Spout blocked	Clean spray plate - see 10.2
2 Water too cold	A Water control knob at wrong setting	Turn knob clockwise until temperature is comfortable
	B Water flow too high	Turn knob clockwise until temperature is comfortable
	C Electricity off	Turn on electricity at isolating switch
3 Water too hot	A Temperature control knob at wrong setting	Turn knob fully anticlockwise to increase flow and lower temperature
	B Spout partially blocked	Clean spray plate - see 10.2
	C Isolating valve not fully open	Open isolating valve

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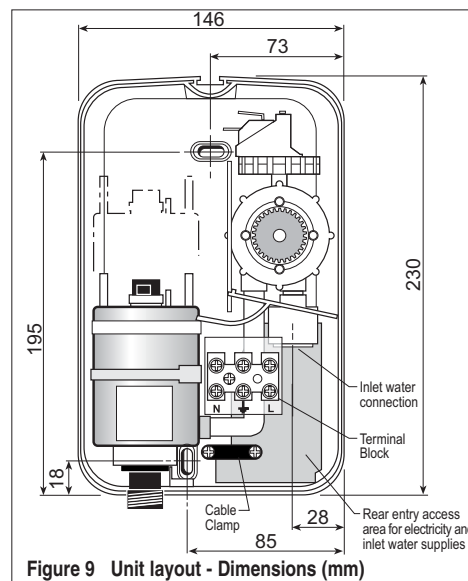


Figure 9 Unit layout - Dimensions (mm)

mains feed to the handwash. Ensure that the pipe you have selected is not a gas pipe or a hot water pipe.

6.11 An isolating stopvalve **MUST** be incorporated to the main water supply to comply with Water Regulations - see Fig. 4.

6.12 Cut all necessary pipework to length with a pipecutter and not a hacksaw, to minimise swarf - see Fig. 10.

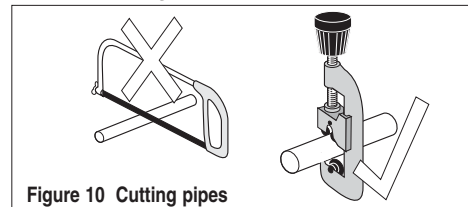


Figure 10 Cutting pipes

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SPARE PARTS

9.5 A full range of spare parts is available for this product. Please consult your local Heatrae Sadia stockist for any requirements you may have or contact Heatrae Sadia directly.

INSPECTION

9.6 It is advisable that, in the interests of safety, the handwash and its electrical installation is checked by a competent electrician, at least every two years.

6.13 Assemble the installation before making any soldered joints to ensure that the pipe is the correct length. **DO NOT** use jointing compounds on any pipe fittings for the installation.

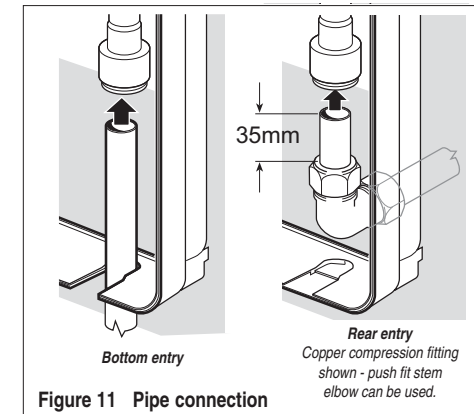


Figure 11 Pipe connection

6.14 Remove the unit before soldering the connections.

6.15 It is essential to flush the pipe in order to clear debris, particles of solder and swarf - see Fig. 12.

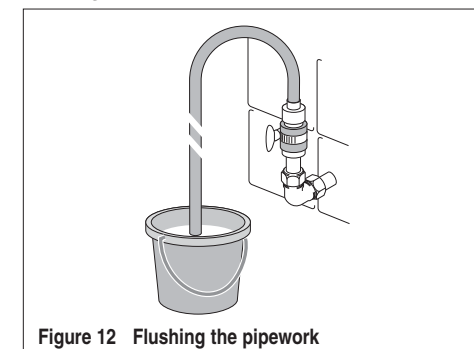


Figure 12 Flushing the pipework

10 MAINTENANCE

10.1 It is recommended that the handwash casing be cleaned using a soft cloth and that the use of abrasive or solvent cleaning fluids be avoided. It is advised that before cleaning, the isolating switch is turned off, thus avoiding accidental operation of the handwash.

IMPORTANT

10.2 **IT IS MOST IMPORTANT TO KEEP THE SPRAYPLATE CLEAN IN ORDER TO MAINTAIN THE PERFORMANCE OF THE HANDWASH.** The hardness of the water will determine the frequency of cleaning.

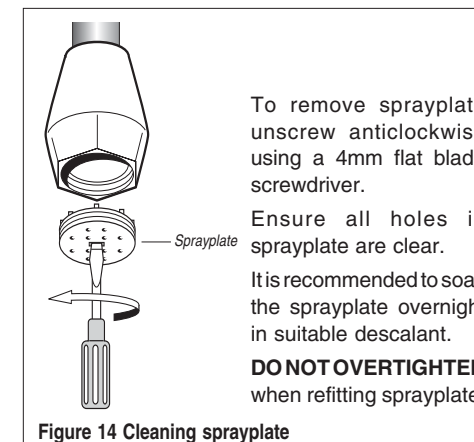


Figure 14 Cleaning sprayplate

Due to continuous improvement and updating, specifications may be altered without prior notice.

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6.16 Turn the water off after flushing using the isolating stop valve.

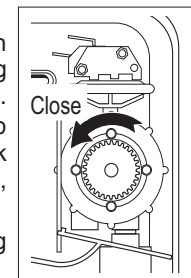
6.17 Connect the cold water supply pipe to the inlet of the handwash, this is a push fit - see Fig. 11.

6.18 Fit top and bottom screws and secure the backplate to the wall ensuring that it is level.

6.19 Close the handwash flow control valve by turning the gear fully anticlockwise.

6.20 Turn the isolating stop valve on slowly and check for leaks in all pipework, and rectify as necessary.

6.21 Turn off the isolating stop valve.



7 ELECTRICAL CONNECTIONS

WARNING

7.1 This appliance must be earthed.

CAUTION

7.2 When working on electrical components, ensure they are **NOT LIVE.** If in any doubt, **SWITCH OFF THE ELECTRICITY SUPPLY.**

7.3 A double-pole isolating switch having a contact separation of 3mm in each pole **MUST** be incorporated to the circuit - see paragraphs 4.10 and 4.11.

7.4 The cable entry should have been decided before fitting the backplate - see 5.8.

7.5 Remove the screws and clamping bar from the cable clamp - see Fig. 13.

7.6 Feed the cable in the backplate (unscrew backplate for easy feeding if necessary).

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11 GUARANTEE & SERVICE POLICY

This product is guaranteed against faulty materials and manufacture for a period of two years from the date of purchase provided that:-

- 1 The unit has been installed in accordance with the Installation and User Instructions and all relevant Codes of Practice and Regulations in force at the time of Installation, and that all necessary controls and safety valves have been fitted correctly.
- 2 Any valves and controls are of Heatrae Sadia recommended type and specification.
- 3 The unit has not been modified or tampered with in any way, and has been regularly maintained as detailed in the Installation and User Instructions.
- 4 The unit has been used only for heating potable water.

The unit is not guaranteed against damage by frost, and the inner container with integral heating element is not guaranteed against excessive scale build-up. This guarantee in no way affects the statutory rights of the consumer.

The policy of Heatrae Sadia is one of continuous product development and, as such, we reserve the right to change specifications without notice.

12 ENVIRONMENTAL INFORMATION

12.1 Heatrae Sadia products are manufactured from many recyclable materials. At the end of their useful life they should be disposed of at a Local Authority Recycling Centre in order to realise the full environmental benefits.