

**TRITON**

# **Aquatronic 2 electric shower**



## **Installation and operating instructions**



**INSTALLERS PLEASE NOTE THESE INSTRUCTIONS ARE TO BE LEFT WITH THE USER**

| <b>CONTENTS</b>                            | <b>Page</b> |
|--|-------------|
| Important safety information               | 1           |
| Introduction                               | 2           |
| Advice to users                            | 2           |
| Key to main components                     | 3           |
| Electrical requirements                    | 4 - 5       |
| Water requirements                         | 6           |
| Siting of the shower                       | 6 - 7       |
| Fitting the shower to the wall             | 8           |
| Plumbing connections                       | 8 - 9       |
| Electrical connections                     | 10          |
| Replacing the cover                        | 11          |
| Fitting the riser rail, hose and sprayhead | 12 - 13     |
| Commissioning                              | 14          |
| Operating the shower                       | 15 - 16     |
| Operating functions                        | 16          |
| Cleaning                                   | 17          |
| Spare parts                                | 18          |
| Temperature / flow rate graph              | 19          |
| Fault finding                              | 20 - 21     |
| Guarantee, service policy, etc.            | rear cover  |

To check the product suitability for commercial and multiple installations, please contact Triton's specification advisory service before installation.

Telephone: 0870 067 3767

Facsimile: 0870 067 3334

E mail: [technical@tritonshowers.co.uk](mailto:technical@tritonshowers.co.uk)

### PLEASE READ THIS IMPORTANT SAFETY INFORMATION

- ◆ This product is safe and without risk provided it is installed, used and maintained in good working order in accordance with our instructions and recommendations.
- ◆ DO NOT operate shower if frozen, or suspected of being frozen. It must thaw out before using.
- ◆ DO NOT operate the unit if the sprayhead or spray hose becomes damaged.
- ◆ DO NOT restrict flow out of the shower by placing sprayhead in direct contact with your body.
- ◆ DO NOT operate the shower if water ceases to flow during use or if water has entered inside the unit because of an incorrectly fitted cover.
- ◆ WARNING: If re-starting the shower immediately after stopping, be aware that a quantity of hot water will be expelled for the first few seconds.

#### 1 GENERAL

- 1.1** Isolate the electrical and water supplies before removing the cover.
- 1.2** Read all of these instructions and retain them for later use.
- 1.3** DO NOT take risks with plumbing or electrical equipment.
- 1.4** Isolate electrical and water supplies BEFORE proceeding with the installation.
- 1.5** The unit must be mounted onto the finished wall surface (on top of the tiles). DO NOT tile up to unit after fixing to wall.
- 1.6** Contact Customer Service (see back page), if any of the following occur;
- a)** If it is intended to operate the shower at pressures above the maximum or below the minimum stated.
- b)** If the unit shows a distinct change in performance.
- c)** If the shower is frozen.
- 1.7** If it is intended to operate the shower in areas of hard water (above 200 ppm temporary hardness), a scale inhibitor may have to be fitted. For advice on the Triton Scale Inhibitor, contact Triton Customer Service.

**1.8** The sprayplate and cartridge must be cleaned regularly with descalent to remove scale and debris, otherwise restrictions to the flow on the outlet of the unit will result in higher temperatures and could also cause the Pressure Relief Device in unit to operate.

**1.9** This product is not suitable for mounting into steam rooms or steam cubicles.

#### 2 PLUMBING

- 2.1** The plumbing installation must comply with Water Regulations, Building Regulations or any particular regulations as specified by Local Water Company or Water Undertakers and should be in accordance with BS 6700.
- 2.2** The supply pipe must be flushed to clear debris before connecting to the shower unit.
- 2.3** DO NOT solder pipes or fittings within 300mm of shower, as heat transfer can damage components.

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

**2.5** DO NOT use excessive force when making connections to the flexible hose or sprayhead, finger tightness is sufficient.

**2.6** All plumbing connections MUST be completed BEFORE making the electrical connections.

#### 3 ELECTRICAL

**3.1** The installation must comply with BS 7671 'Requirements for electrical installations' (IEE wiring regulations) or any particular regulations as specified by the local Electrical Supply Company.

**3.2** This appliance MUST be earthed.

**3.3** In accordance with 'The Plugs and Sockets etc. (Safety) Regulations 1994', this appliance is intended to be permanently connected to the fixed wiring of the electrical mains system.

**3.4** Make sure all electrical connections are tight to prevent overheating.

**3.5** Fuses do not give personal protection against electric shock.

**3.6** *To enhance electrical safety* a 30mA residual current device (RCD) should be installed in all UK electric and pumped shower circuits. This may be part of the consumer unit or a separate unit.

**3.7** Switch off immediately at isolating switch if water ceases to flow during use.

**3.8** Other electrical equipment i.e. extractor fans, pumps must not be connected to the circuits within the unit.

**3.9** Switch off at isolating switch when not in use. This is a safety procedure recommended with all electrical appliances.

**3.10** As with all electrical appliances it is recommended to have the shower and installation checked at least every two years by a competent electrician to make sure there is no deterioration due to age and usage.

## INTRODUCTION

This book contains all the necessary fitting and operating instructions for your Triton Aquatronic 2 electric shower. Take time to read this book thoroughly and familiarise yourself with all instructions **before** commencing installation. Please keep it for future reference.

*The shower installation must be carried out by a suitably qualified person and in the sequence of this instruction book.*

Care taken during the installation will ensure a long, trouble-free life from your shower.

## SPECIFICATIONS

### Electrical

|                              |                              |
|------------------------------|------------------------------|
| Nominal power rating at 240V | Nominal power rating at 230V |
| 7.5kW – (32A MCB rating)     | 6.9kW – (32A MCB rating)     |
| 8.5kW – (40A MCB rating)     | 7.8kW – (40A MCB rating)     |
| 9.5kW – (40A MCB rating)     | 8.7kW – (40A MCB rating)     |

### Water

Inlet connection – 15mm diameter.  
Outlet connection – 1/2" BSP male thread.

### Entry Points

Water – top, bottom, back, left or right.  
Cable – top, bottom, back, left or right.

### Materials

Backplate, cover, controls, sprayhead – ABS.  
Sprayplate – Acetal.  
Elements – Mineraally insulated corrosion resistant metal sheathing.

### Dimensions

Height - 300mm  
Width - 198mm  
Depth - 115mm

### Standards and Approvals

Splashproof rating IPX4.  
Complies with the requirements of current British and European safety standards for household and similar electrical appliances.  
Complies with requirements of the British Electrotechnical Approvals Board (BEAB).  
Meets with Compliance with European Community Directives (CE).

## ADVICE TO USERS

The following points will help you understand how the shower operates:

**A** The electric heating elements operate at a constant rate at your chosen power setting. It is the flow rate of the water passing through the heater unit which determines the shower temperature at any given setting. (The slower the flow the hotter the water becomes, and the faster the flow the cooler the water).

**B** During Winter, mains water supply will be cooler than in Summer. Therefore the temperature of the shower will vary between seasons on any one setting of the temperature control, e.g. if you have chosen setting number 6 as your preferred shower temperature in the Summer, you will have to increase that number during Winter by adjusting the temperature control clockwise (which in effect slows the water flow).

**C** The stabiliser valve minimises variations in shower temperature during mains water pressure changes. If changes in shower temperature are experienced during normal use, it will most likely be caused by the water pressure falling near to or below the minimum level. The drop in pressure may be due to water being drawn off at other points in the house whilst the shower is in use. If pressure drops appreciably below the minimum, the heating elements will automatically cut out.

**If ever the water becomes too hot and you cannot obtain cooler water, first check that the sprayplate in the sprayhead has not become blocked.**

**DO NOT** place items such as soap or shampoo bottles on top of the unit. Liquid could seep through the joint between the cover and backplate, and possibly damage the sealing rubber.

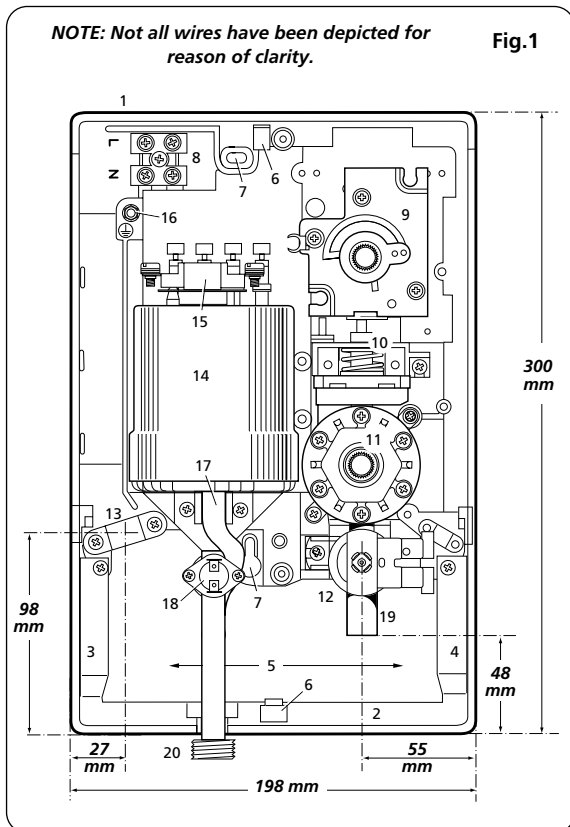
Replacement parts can be ordered from Customer Service. See 'spare parts' for details and part numbers.

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

**KEY TO MAIN COMPONENTS**

**Inside unit (fig.1)**

- 1 Top pipe/cable entry
- 2 Bottom pipe/cable entry
- 3 L.H. pipe/cable entry
- 4 R.H. pipe/cable entry
- 5 Area for rear pipe/cable entry
- 6 Cover screw fixing
- 7 Wall screw fixings
- 8 Terminal block
- 9 Power selector assembly
- 10 Pressure switch cartridge
- 11 Stabilising valve
- 12 Solenoid valve
- 13 Cable clamp
- 14 Can and element assembly
- 15 Thermal cut-out (main)
- 16 Earth connection
- 17 Pressure Relief Device (PRD)
- 18 Thermal cut-out (outlet)
- 19 Water inlet
- 20 Shower outlet



**Pack contents**

- Shower unit
- Sprayhead
- Riser rail kit and fittings
- Soap dish
- Flexible hose
- Screw fixing kit
- Hose retainer
- Instructions, guarantee, etc.

**ELECTRICAL REQUIREMENTS**

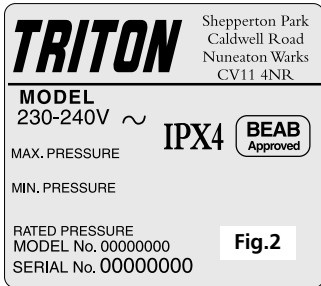
**WARNING**  
THIS APPLIANCE MUST BE EARTHED

**The installation, supply cable and circuit protection must conform with IEE wiring regulations and be sufficient for the amperage required.**

The following notes are for guidance only:

**1** The shower must only be connected to a 230-240V ac supply. If you are installing a shower with a kilowatt rating above 9kW, it is advisable to contact the local electricity supply company.

**1.1** The electrical rating of the shower is shown on the rating label (**fig.2**) within the unit.



**2** Before making any sort of electrical connection within the installation, ensure that no terminal is live. If in any doubt, switch off the whole installation at the consumer unit.

**3** The shower must be connected to its own independent electrical circuit. IT MUST NOT be connected to a ring main, spur, socket outlet, lighting circuit or cooker circuit.

**3.1** The electrical supply must be adequate for the loading of the unit and existing circuits.

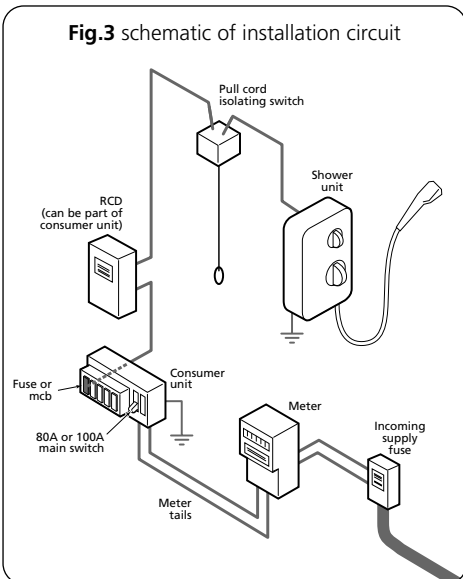
**4** Check your consumer unit (main fuse box) has a main switch rating of 80A or above and that it has a spare fuse way which will take the fuse or mcb necessary for the shower (**fig.3**).

**4.1** 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 serving the house or just the shower.

**4.2** You will need to contact the local electricity company. They will check the circuit and carry out what is necessary. They will also check the main bonding.

**5** The earth continuity conductor of the electrical installation must be effectively connected electrically to all exposed metal parts of other appliances and services in the room in which the shower is to be installed, to conform to current IEE regulations.

**Fig.3** schematic of installation circuit



**Table A**

| unit rating | CIRCUIT PROTECTION |                |
|-------------|--------------------|----------------|
|             | mcb                | cartridge fuse |
| 7.0kW       | 30/32A             | 30A            |
| 7.5kW       | 32A                | 35A            |
| 8.0kW       | 40A                | 35A            |
| 8.5kW       | 40A                | 45A            |
| 9.0kW       | 40A                | 45A            |
| 9.5kW       | 40/45A             | 45A            |
| 10.5kW      | 45A                | 45A            |

**ELECTRICAL REQUIREMENTS**

**5.1** All exposed metallic parts in the bathroom must be bonded together using a cable of at least 4mm<sup>2</sup> cross sectional area. These parts include metal baths, radiators, water pipes, taps and waste fittings.

**6** For close circuit protection DO NOT use a rewireable fuse. Instead use a suitably rated miniature circuit breaker (MCB) or cartridge fuse (see table A).

**6.1** In the interest of electrical safety a 30mA residual current device (RCD) should be installed in all UK electric and pumped shower circuits. This may be part of the consumer unit or a separate unit.

**7** A 45 amp double pole isolating switch with a minimum contact gap of 3mm in both poles must be incorporated in the circuit.

**7.1** It must have a mechanical indicator showing when the switch is in the OFF position, and the wiring must be connected to the switch without the use of a plug or socket outlet.

**7.2** The switch must be accessible and clearly identifiable, but out of reach of a person using a fixed bath or shower, except for the cord of a

cord operated switch, and should be placed so that it is not possible to touch the switch body while standing in a bath or shower cubicle. It should be readily accessible to switch off after using the shower.

**8** Where shower cubicles are located in any rooms other than bathrooms, all socket outlets in those rooms must be protected by a 30mA RCD.

**9** The current carrying capacity of the cable must be at least that of the shower circuit protection (see table B).

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

**9.2** It is also necessary to satisfy the disconnection time and thermal constraints which mean that for any given combination of current demand, voltage drop and cable size, there is a maximum permissible circuit length.

**10** The shower circuit should be separated from other circuits by at least twice the diameter of the cable or conduit.

**10.1** The current rating will be reduced if the cabling is bunched with others, surrounded by thermal loft or wall insulation or placed in areas where the ambient temperature is above 30°C. Under these conditions, de-rating factors apply and it is necessary to select a larger cable size.

**10.2** In the majority of installations, the cable will unavoidably be placed in one or more of the above conditions. This being so, it is strongly recommended to use a minimum of 10mm cabling throughout the shower installation.

**10.3** In any event, it is essential that individual site conditions are assessed by a competent electrician in order to determine correct cable size and permissible circuit length.

**Table B**

| Twin and earth PVC insulated cable<br>CURRENT CARRYING CAPACITY |                          |  |
|---|--------------------------|--|
| installed in an insulated wall                                  | in conduit or trunking   | clipped direct or buried in a non insulated wall |
| 6mm <sup>2</sup><br>32A   | 6mm <sup>2</sup><br>38A  | 6mm <sup>2</sup><br>46A                          |
| 10mm <sup>2</sup><br>43A  | 10mm <sup>2</sup><br>52A | 10mm <sup>2</sup><br>63A                         |
| 16mm <sup>2</sup><br>57A  | 16mm <sup>2</sup><br>69A | 16mm <sup>2</sup><br>85A                         |

**Note: Cable selection is dependent on de-rating factors**

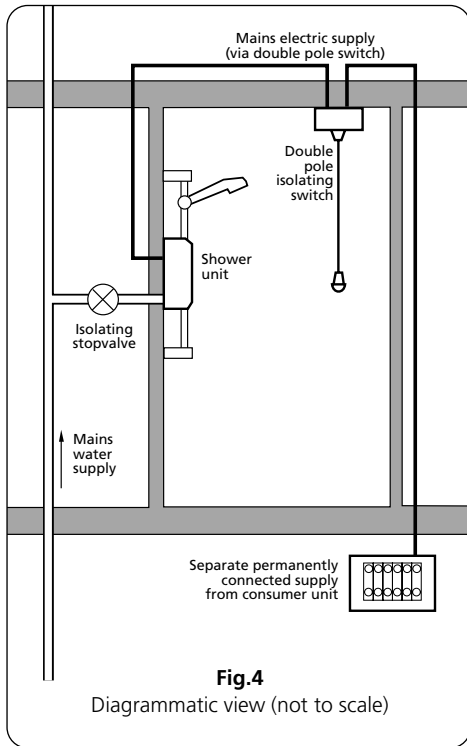


Fig.4

Diagrammatic view (not to scale)

## WATER REQUIREMENTS

The installation must be in accordance with Water Regulations/Byelaws.

To ensure activation of the heating elements, the shower must be connected to a mains water supply with a minimum running pressure of 100 kPa (1.0 bar) at a minimum flow rate of eight litres per minute for the 7.5kW and 8.5kW rated models and nine litres per minute for the 9.5kW rated model.

All units must have a maximum static pressure of 1,000 kPa (10 bar).

NOTE: If the stated flow rates are not available, it may not be possible to achieve optimum performance from the unit throughout the year.

During periods of high ambient temperatures it may be necessary to select a low power setting to achieve your preferred shower temperature.

The water supply can be taken from a cold water storage cistern *provided* there is a minimum head of ten metres above the sprayhead. It must be an independent supply to the shower only.

If it is intended to operate the shower at pressures above the maximum or below the minimum stated, contact Customer Service for advice.

Fig.4 shows a typical system layout.

*Do not* use jointing compounds on any pipe fittings for the installation.

## SITING OF THE SHOWER

**WARNING: The shower must not be positioned where it will be subjected to freezing conditions.**

FOR EASE OF SERVICING, THE UNIT MUST ALWAYS BE MOUNTED ON THE SURFACE OF TILED WALLS. NEVER TILE UP TO THE UNIT.

Refer to **figure 5** for the correct siting of the shower. Position the unit where it will NOT be in direct contact with water from the sprayhead. Position the shower unit vertically.

Allow sufficient room between the ceiling and the shower to access the cover top screws.

NOTE: Water regulations require the sprayhead be 'constrained by a fixed or sliding attachment so that it can only discharge water at a point not less than 25mm above the spill-over level of the



relevant bath, shower tray or other fixed appliance'. The use of the supplied hose retainer will in most cases meet this requirement, but if the sprayhead can be placed within a bath, basin or shower tray, then a double check valve, or similar, must be fitted in the supply pipework to prevent back-flow.

**Pressure relief safety device**

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

DO NOT operate the shower with a damaged or kinked shower hose, or a blocked sprayhead which can cause the PRD to operate.

When commissioning, the sprayhead must be removed from the flexible hose, while at the same time the temperature control must be at the minimum flow position.

Failure to follow this procedure may also cause the PRD to operate.

Ensure the shower is positioned over a bath or shower tray because if the PRD operates, then water will eject from the bottom of the unit. Should this happen, turn off the electricity and water supplies to the shower at the isolating switch and stopvalve.

Contact Customer Service for advice on replacing the PRD.

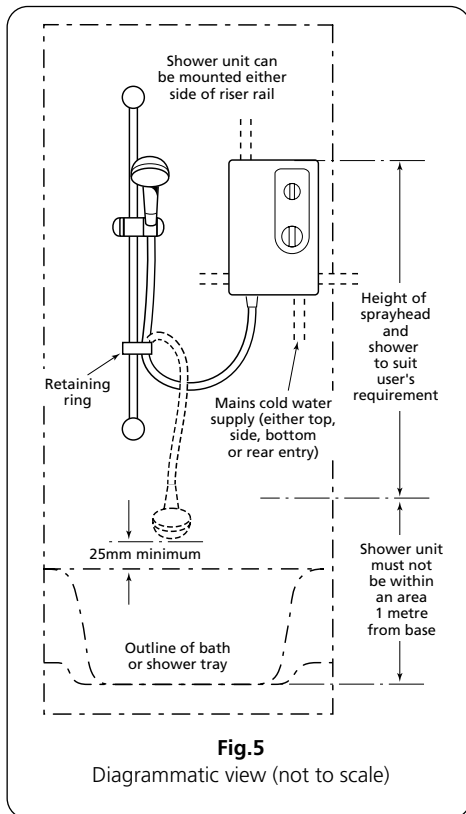
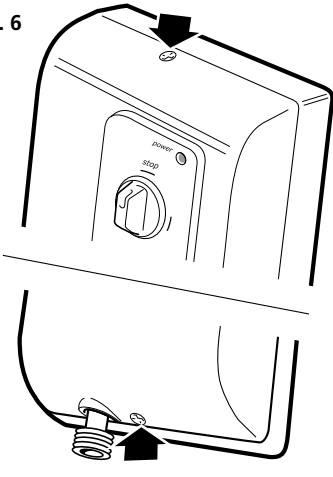


Fig. 6



### FITTING THE SHOWER TO WALL

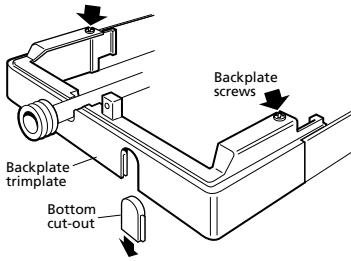
Unscrew the top and bottom retaining screws (**fig.6**) and lift the cover from the backplate.

NOTE: The two control knobs are an integral part of the cover – do not attempt to remove them. To facilitate the pipe and cable connections, remove two screws and take off the backplate trimplate (**fig.7**).

After choosing the site for the shower, use the backplate as a template and mark the two fixing holes (**fig.8**). Drill and plug to suit the fixing screws supplied. (The wallplugs provided are suitable for most brick walls – use an appropriate masonry drill, but if the wall is plasterboard or a soft building block, you must use special wallplugs and an appropriate drill bit).

Screw the bottom fixing screw into position leaving the base of the screw head protruding 6mm (0.25in) out from the wall. Hook the backplate over the bottom screw and fit the top fixing screw into position. Do not fully tighten the screws at this stage, as the fixing holes are elongated to allow for out of square adjustment after the plumbing connections have been completed.

Fig. 7



### PLUMBING CONNECTIONS

*Plumbing to precede wiring.*

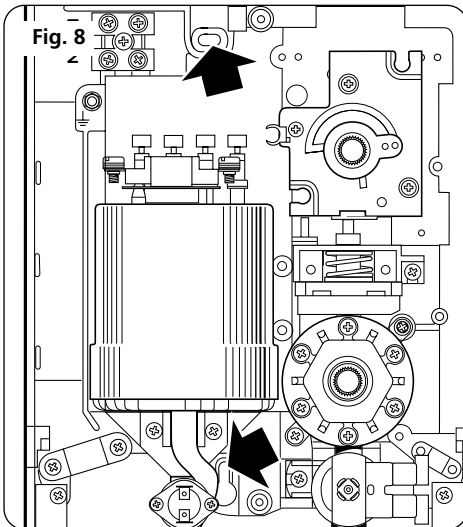
**WARNING: The outlet of the shower acts as a vent and must not be connected to anything other than the hose and sprayhead supplied.**

DO NOT use jointing compounds on any pipe fittings for the installation. DO NOT use soldered fittings within the vicinity of the shower unit.

NOTE: An additional stopvalve – complying with Water Regulations, MUST be fitted in the mains water supply to the shower as an independent means of isolating the water supply should maintenance or servicing be necessary. Entry positions for the mains water and electrical supplies are at the top, bottom, either side or at the bottom rear of the unit.

NOTE: Deviations from the designated entry points will invalidate product approvals. If top or bottom entry position is chosen, the relevant cut-out in the backplate or trimplate must be removed (**fig.7**).

Fig. 8



Turn off water supply either at the mains stopvalve or the isolating stopvalve. Connect the mains water supply to the inlet of the shower via 15mm copper or stainless steel pipe using a 15mm x 15mm straight coupler or elbow compression fitting.

If a side entry is required, the side of the backplate trimplate will have to be cut out.

With the trimplate at 90° to the bottom of the backplate (**fig.9**), line up the trimplate edge (A) with the shoulder (B) inside the backplate outer edge (these two faces butt when assembled). At the point where the trimplate touches the copper pipe mark the cut out position. Using an existing cut-out as a template will provide an accurate guide (**fig.10**).

If installing a feed pipe from the rear or bottom, the centre of the inlet valve to the wall surface is 20mm. (**fig.11**).

**NOTE:** If entry is from the rear, the compression nut fitting will be partially behind the surface of the wall (**fig.11**). This area **MUST** be left clear when plastering over the pipework in order to make the nut accessible for future adjustments.

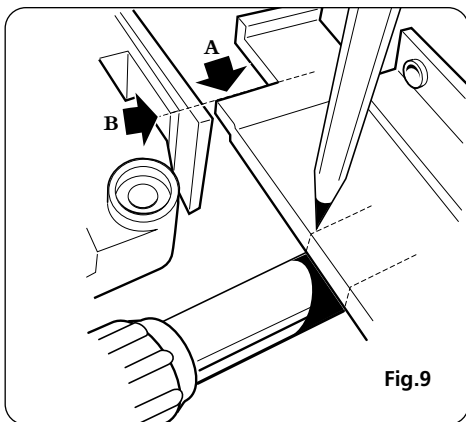
**DO NOT** use excessive force when making these connections.

**Important:** Before completing the connection of the water supply to the inlet of the shower, flush out the pipework to remove all swarf and system debris. This can be achieved by connecting a hose to the pipework and turning on the mains water supply long enough to clear the debris to waste.

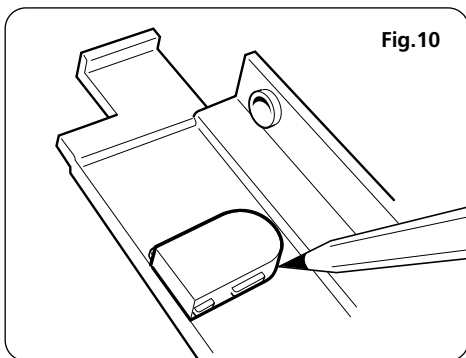
Ensure the backplate is square on the wall and tighten the two retaining screws which hold it to the wall.

Turn on the mains water supply and check for leaks in the pipework connection to the shower.

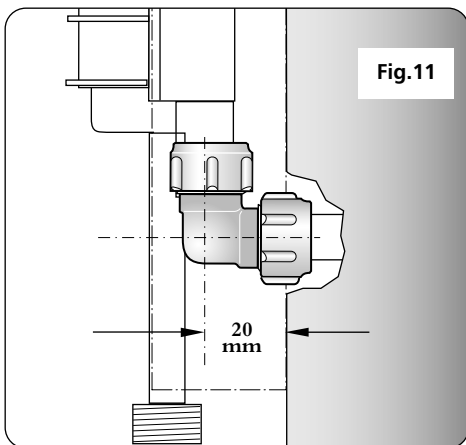
**NOTE:** At this stage no water can flow through the unit.



**Fig.9**

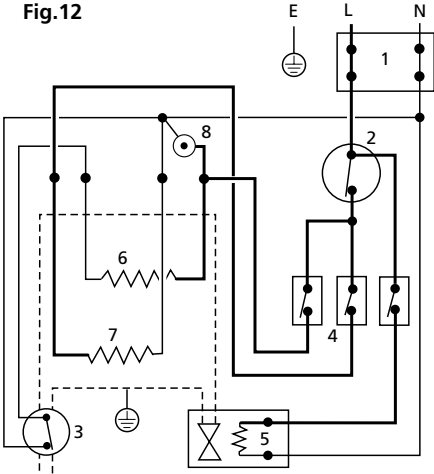


**Fig.10**



**Fig.11**

Fig.12



- |                            |                  |
|----------------------------|------------------|
| 1 Terminal block           | 5 Solenoid valve |
| 2 Thermal cut-out (main)   | 6 Element        |
| 3 Thermal cut-out (outlet) | 7 Element        |
| 4 Microswitches            | 8 Neon indicator |

**ELECTRICAL CONNECTIONS**

SWITCH OFF THE ELECTRICITY SUPPLY.

Fig.12 shows a schematic wiring diagram.

The cable can be surface clipped, hidden or via 20mm conduit.

NOTE: Conduit entry can only be from rear. Route the cable into the shower unit and connect to the terminal block (fig.13) as follows:-

Earth cable to terminal marked

Neutral cable to terminal marked **N**

Live cable to terminal marked **L**

**IMPORTANT: Fully tighten the terminal block screws and ensure that no cable insulation is trapped under the screws. Loose connections can result in cable overheating.**

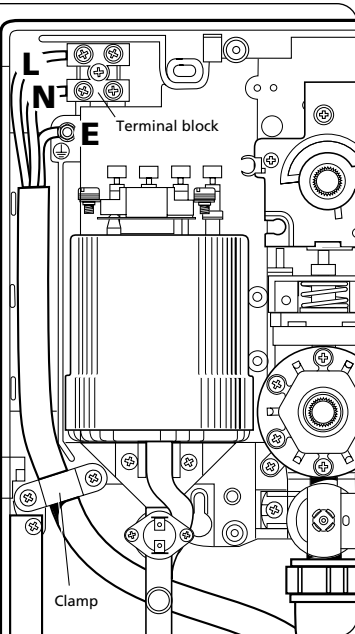
NOTE: The supply cable earth conductor must be sleeved. The outer sheath of the supply cable must be stripped back to the minimum.

The supply cable must be secured either by routing through conduit or in trunking or by embedding in the wall, in accordance with current IEE regulations.

The use of connections within the unit, or other points in the shower circuit, to supply power to other equipment i.e. extractor fans, pumps etc. will invalidate the guarantee.

**DO NOT switch on the electricity supply until the cover has been fitted.**

Fig.13



NOTE: The elements on UK models are to 240V specification and will give a lower kW rating if the voltage supply is below 240V.

## REPLACING THE COVER

Refit the backplate trimplate by first placing the bottom edge behind the outlet pipe then carefully enter the left and right top edges at an angle into the corresponding slots of the backplate (**fig.14**). Ensure the two bosses on the trim plate locate in their respective holes on the backplate. Secure with the two screws.

Ensure the power selector spindle is aligned as shown *vertically* (**fig.15**).

To ensure that the temperature control is correctly positioned on the stabilising valve, temporarily place the cover in position so that the splines engage and rotate the temperature control fully anti-clockwise.

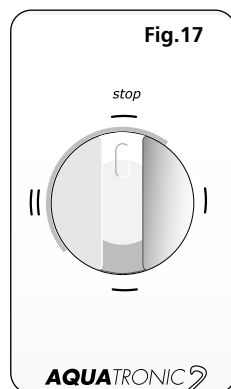
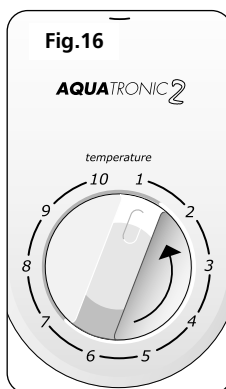
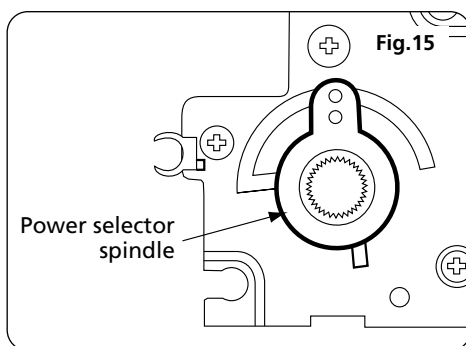
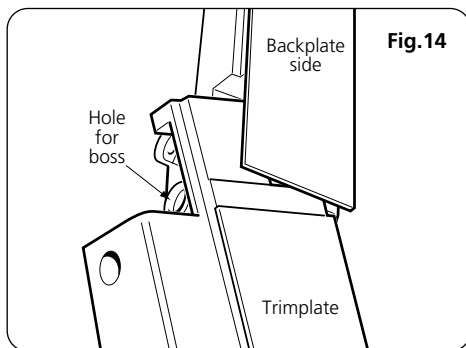
Remove the cover and position the temperature control so that it points towards '1' (**fig.16**).

Position the power selector to 'STOP' (**fig.17**).

Offer the cover to the backplate and carefully guide the cover squarely onto the backplate so that the knobs locate correctly into the splined spindles.

Should any difficulty arise, recheck the points above.

Secure the cover in position with the two retaining screws – do not overtighten.



## FITTING THE RISER RAIL

**WARNING:** Check there are no hidden cables or pipes before drilling holes for wall plugs. Use great care when using power tools near water. The use of a residual current device (RCD) is recommended.

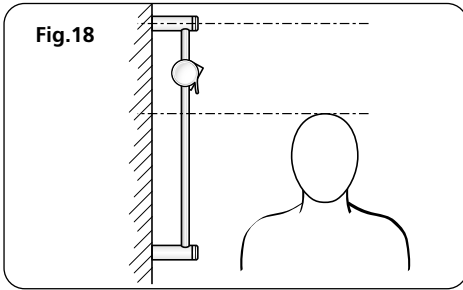


Fig.18

Establish the height of riser rail to suit the users requirements (**fig.18**). Allowances should be made to accommodate the tallest person who uses the shower regularly.

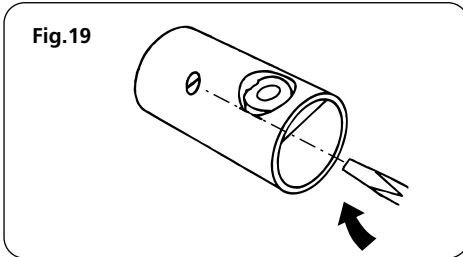


Fig.19

Having decided the location of the rail within the shower area, drill and plug wall for mounting a bracket in the **lower** position only. (The wallplugs provided are suitable for most brick walls – use an appropriate masonry drill, but if the wall is plasterboard or a soft building block, you must use special wallplugs and an appropriate drill bit).

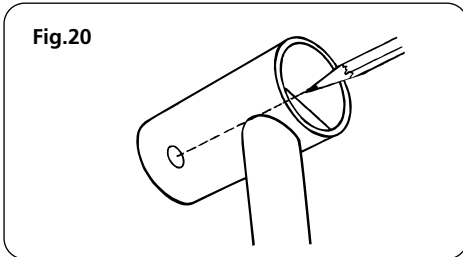


Fig.20

Screw the lower bracket to the wall (**fig.19**).

If required the riser rail can be shortened using a junior hacksaw. Cut the excess length from the plain end of the rail, not the crimped end.

Locate the riser rail in the lower mounting bracket. Place the other mounting bracket on top of the rail and mark the fixing hole on the wall (**fig.20**). Ensure hole position is vertically aligned. Remove the rail and drill and plug wall.

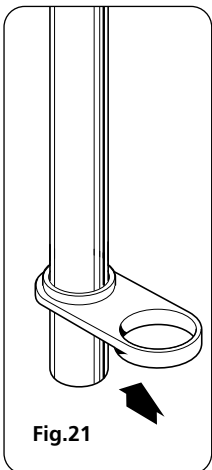


Fig.21

Slide the hose retainer onto the riser rail (**fig.21**).

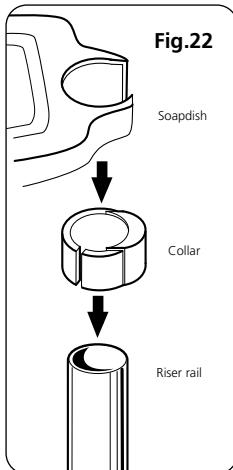


Fig.22

Slide the soapdish collar onto the riser rail (**fig.22**). Then slide the soapdish down the rail and locate onto the collar (**fig.22**).

Place the lever into the spray head holder so that the holes align, then slide onto the rail (**fig.23**). Rotating the lever slightly may ease the alignment. Once on the rail, lock in position by turning the lever.

Replace the rail, complete with holder assembly, hose retainer and soap dish into the lower bracket.

Replace the upper bracket on top of rail and screw the bracket to wall (**fig.24**).

Ensure crimped side of the riser rail is facing the wall and is firmly engaged into the lower bracket slot (**fig.25**).

Clip the finishing covers on both the upper and lower mounting brackets (**fig.26**).

### FITTING THE SPRAYHEAD

Feed the flexible hose through the hose retainer (**fig.27**) in order that it acts as a retaining ring.

Screw the conical end of the flexible hose to the spray head and screw the other end onto the shower outlet. Ensure the washers are correctly fitted at both ends of the flexible hose.

Place the spray head into the holder and check that it fits correctly. Note that the holder is slightly tapered and the spray head will only fit from one direction.

**Important:** It is the conical end of the hose which grips into the holder (**fig.28**). The spray head will not fit in the holder without the hose attached.

However at this stage, disconnect the spray head and lay aside until the shower unit has been commissioned.

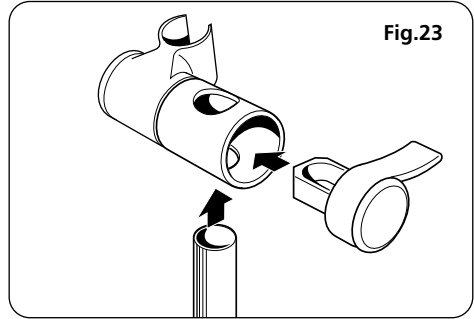


Fig.23

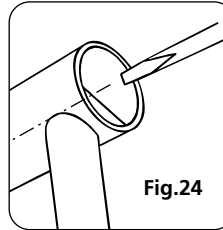


Fig.24

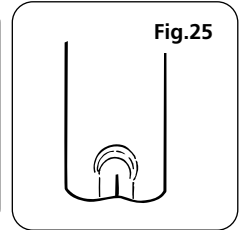


Fig.25

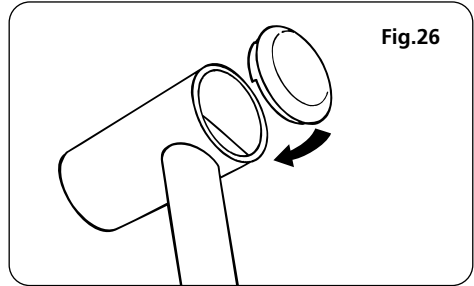


Fig.26

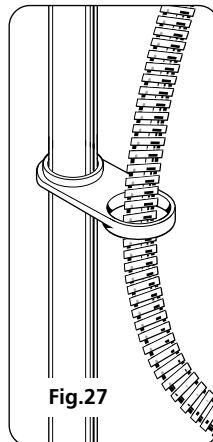


Fig.27

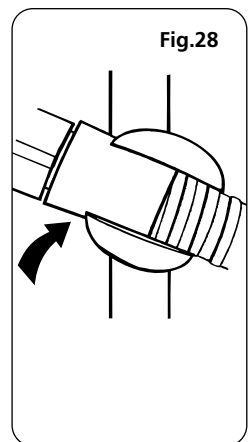
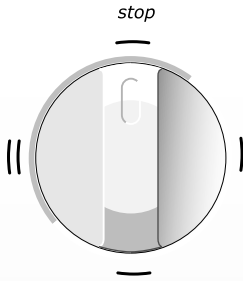


Fig.28

**COMMISSIONING**

**Fig.29**



The first operation of the shower is intended to flush out any remaining system debris, using the *cold setting only*. This operation must be carried out *without* the sprayhead attached to the flexible hose and with the outlet of the flexible hose directed to waste.

Before turning on the electric and mains water supplies to the shower, ensure the power selector is at the 'STOP' position (**fig.29**).

Rotate the temperature control fully clockwise to '10', the minimum flow position (**fig.30**).

NOTE: If the control is not positioned at '10', the PRD may operate.

Turn on the electric and mains water supplies to the shower.

Switch the power selector to the 'COLD' position (**fig.31**) and wait until water starts to flow from the flexible hose.

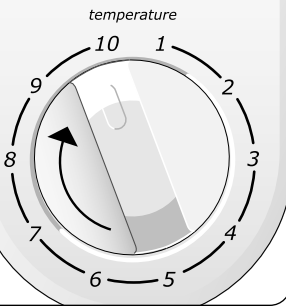
Slowly rotate the temperature control anti-clockwise to '1', the maximum flow position (**fig.32**).

It will take approximately thirty seconds for a smooth flow of water to be obtained whilst air and any debris is being dispersed from the shower. When a smooth flow of water is obtained, rotate the temperature control from '1' to '10' and back again several times to release any trapped air from within the unit.

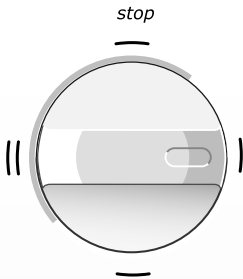
Once flushing out has been completed, stop the water flow by turning the power selector to the 'STOP' position. Fit the sprayhead to the flexible hose and place in the sprayhead holder.

The shower is now ready for normal operation.

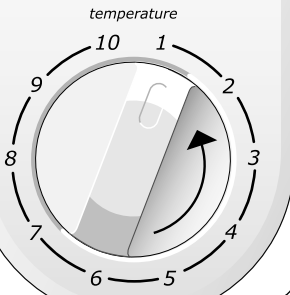
**Fig.30**



**Fig.31**



**Fig.32**





## OPERATING THE SHOWER

NOTE: Ensure the commissioning procedure has been carried out.

### To start the shower

Turning the power selector to the red or blue symbol positions (**fig.33**) will start water to flow.

### To stop the shower

Switch the power selector to the STOP position and water will cease to flow.

CAUTION: If re-starting immediately after stopping, be aware that a quantity of hot water will be expelled for the first few seconds.

### To use the power selector

STOP is to switch off the electric and water supply at shower - no flow or power used.

*Blue symbol* | is cold water only. Adjustment of the temperature control at this setting will only alter the force of the water from the sprayhead. IT WILL NOT ALTER THE WATER TEMPERATURE.

*Single red symbol* — is an economy setting for extra saving during warmer months when the ambient mains water temperature has risen. Temperature adjustment at this setting is via the temperature control.

PLEASE NOTE: If the stated flow rate required for the unit cannot be met due to low water pressure, it will be necessary to operate the unit on this setting during the warmer months because of flow rate limitations entering the unit.

*Double red symbol* || is a high power setting which allows the highest flow achievable for your preferred temperature. This setting should be regarded as normal for optimum shower performance throughout the year. Temperature adjustment at this setting is via the temperature control.

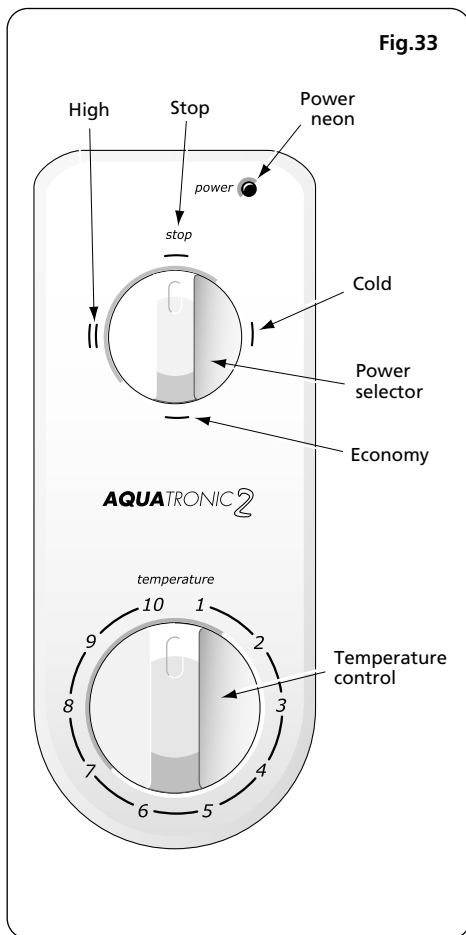
### To adjust the shower temperature

The water temperature is altered by increasing or decreasing the flow rate of the water through the shower via the temperature control (**fig.33**).

After obtaining your preferred shower temperature, the number can be remembered and left as the normal setting and should only need to be altered to compensate for seasonal changes in ambient water temperatures.

NOTE: The preferred number on 'economy' will give a different temperature to the same number position on 'high'.

Fig.33



NOTE: IN NORMAL USE, IT IS IN ORDER TO LEAVE THE WATER SUPPLY PERMANENTLY ON TO THE SHOWER UNIT, BUT AS WITH MOST ELECTRICAL APPLIANCES, **THE UNIT MUST BE SWITCHED OFF AT THE ISOLATING SWITCH WHEN NOT IN USE.**

### To decrease the shower temperature

Turn the temperature control anti-clockwise; this will increase the flow of water through the shower and be indicated by lower the numbers.

### To increase the shower temperature

Turn the temperature control clockwise; this will decrease the flow of water through the shower and be indicated by the higher numbers.

**NOTE:** It is advisable to be certain that the showering temperature is satisfactory by testing with your hand before stepping under the sprayhead. There will always be a time delay of ten to fifteen seconds between selecting a flow rate and the water reaching the stable temperature for that flow rate.

**CAUTION:** It is recommended that persons who may have difficulty understanding or operating the shower controls should not be left unattended whilst showering. Special consideration should be given to young children and the less able bodied.

**WARNING:** After any servicing of the mains water supply, always ensure the unit is started on COLD in order to purge any air in the pipework.

## OPERATING FUNCTIONS

### Power indicator

The power neon will light when the power selector is turned to either of the red symbol positions indicating that power is on to the heating elements. Note however, that the neon will extinguish during normal showering if the low water pressure cut-out operates.

### Low water pressure cut-out

If the water pressure falls below the minimum required for correct operation of the shower, power will be switched off to the heating elements preventing any undue temperature rises (water will continue to flow).

Power will automatically be restored when adequate water pressure returns.

### Overheat cut-out

During normal operation if an overheat temperature is sensed, power to the elements will be reduced. Water will continue to flow. When the temperature has cooled sufficiently, power to the elements will be automatically restored to the previous setting at the time of interruption.

### Safety cut-out

The unit is fitted with a non-resettable over-temperature safety device. In the event of abnormal operation which could cause unsafe temperatures within the unit, the device will disconnect the heating elements. It will require a visit from a qualified engineer to determine the nature of the fault and replace the safety device, once the unit has been repaired.

**CLEANING**

**Do not use abrasive or solvent cleaning fluids. The shower unit, riser rail, hose, etc. should be cleaned using a soft cloth and warm water.**

It is advised before cleaning, to turn the isolation switch off, thus avoiding the shower being accidentally switched on.

IT IS IMPORTANT TO KEEP THE SPRAYHEAD CLEAN TO MAINTAIN THE PERFORMANCE OF THE SHOWER. The hardness of the water will determine the frequency of cleaning. For example, if the shower is used every day in a very hard water area, it may be necessary to clean the sprayhead on a weekly basis.

**In shower maintenance**

To break away scale deposits on a daily basis simply rub your thumb over the surface whilst the shower is running (**fig.34**).

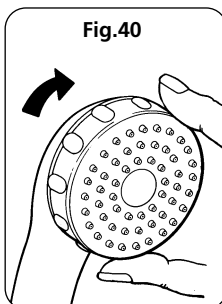
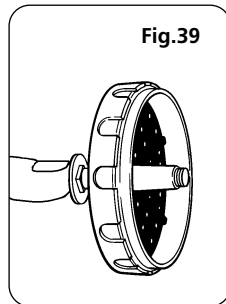
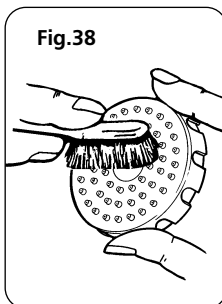
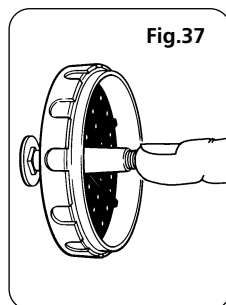
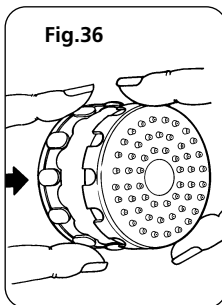
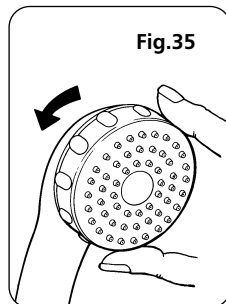
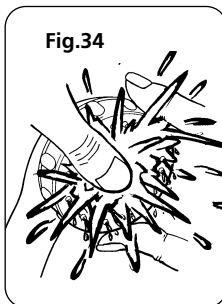
**Sprayhead removal procedure**

Remove sprayhead from the flexible hose. To remove the spray plate from the spray head by unscrewing anti - clockwise (**fig.35**). Remove decorative rubber sealing ring from the spray plate (**fig.36**). Push the plastic bolt out of the spray plate (**fig.37**).

Use a small stiff bristle brush (not wire brush) to scrub the front and rear interior of the spray plate (**fig.38**). Rinse thoroughly in running water.

Refit the plastic bolt through the spray plate (**fig.39**).

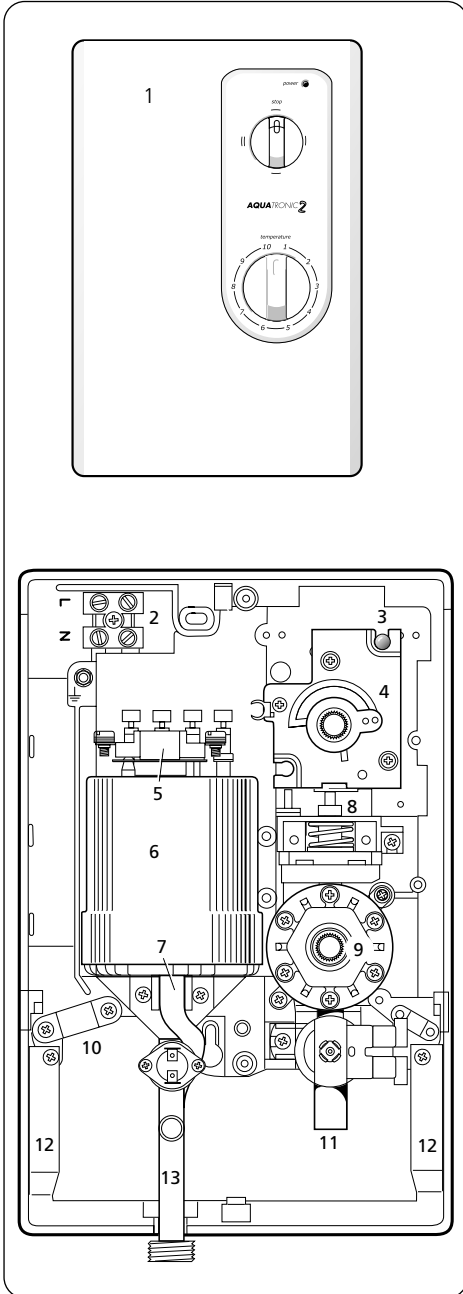
Fit the decorative sealing ring onto the rim of the spray plate and screw the assembly in a clockwise direction onto the spray head (**fig.40**). Refit the sprayhead to the flexible hose.



**WARNING**

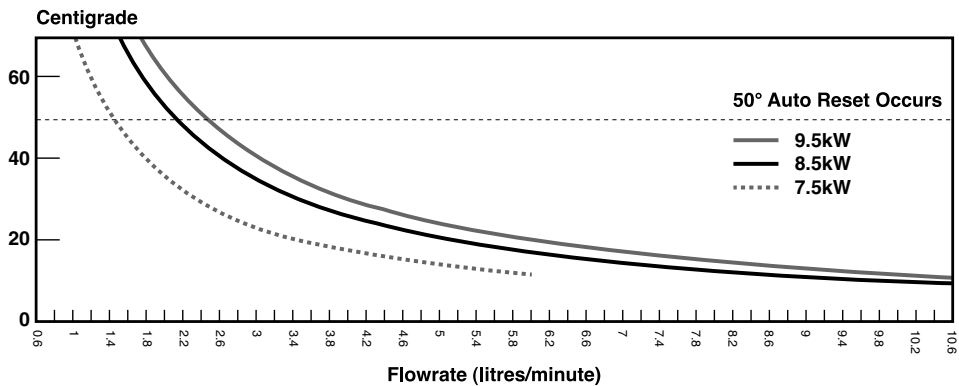
*Do not use 'powerful' abrasive or solvent cleaning fluids when cleaning the shower as they may damage the plastic fittings*

PARTS LIST



| Ref. | Description               | Part No. |
|------|---------------------------|----------|
| 1    | Cover assembly            | 85700160 |
| 2    | Terminal block & wires    | 82200620 |
| 3    | Power neon                | 2160309  |
| 4    | Selector switch assembly  | 82500050 |
| 5    | Thermal cut-out           | 22009870 |
| 6    | Can assembly 7.5kW        | 2060029  |
|      | 8.5kW                     | 2060028  |
|      | 9.5kW                     | 85600090 |
| 7    | PRD                       | 83301330 |
| 8    | Cartridge assembly        | 82400200 |
| 9    | Stabiliser valve assembly | 82600250 |
| 10   | Cable clamp               | 7050082  |
| 11   | Solenoid valve assembly   | 83300450 |
| 12   | Trimplate                 | 7051220  |
| 13   | Outlet pipe assembly      | 83303160 |
| -    | Switch and wire kit       | 83303170 |
| -    | 'O' ring pack             | 83301360 |
| -    | Riser rail                | 22006300 |
| -    | Sprayhead holder          | 22007510 |
| -    | Flexible hose             | 22007500 |
| -    | Sprayhead assembly        | 22009670 |
| -    | Flexible hose retainer    | 22009760 |
| -    | Soap dish                 | 22006840 |
| -    | Brackets (pair)           | 22007520 |

Temperature / flow rate graph (0° C ambient)



**FAULT FINDING**

**IMPORTANT: Switch OFF the electricity at the mains supply and remove the circuit fuse before removing the cover from the shower while attempting any fault finding inside the unit.**

| <i>Problem/Symptom</i>  | <i>Cause</i>   | <i>Action/cure</i>   |
|---|--|--|
| <b>1</b> Shower inoperable, no water flow.  | <b>1.1</b> Interrupted power supply.   | <b>1.1.1</b> Blown fuse or circuit breaker. Check supply. Renew or reset fuse or circuit breaker. If it fails again, consult a qualified electrician.<br><b>1.1.2</b> Power cut. Check other appliances and if necessary, contact local Electricity Supply Co. |
|   | <b>1.2</b> Unit malfunction.   | <b>1.2.1</b> Have unit checked. Ring Customer Service.   |
| <b>2</b> Water too hot.   | <b>2.1</b> Not enough water flowing through the shower.  | <b>2.1.1</b> Increase flow rate via temperature control.<br><b>2.1.2</b> Blocked sprayhead - clean or replace blocked sprayplate in sprayhead.   |
|   | <b>2.2</b> Blockage in supply.   | <b>2.2.1</b> Check if stop valves are fully open. Check if blockage in inlet filter.   |
|   | <b>2.3</b> Increase in ambient water temperature.  | <b>2.3.1</b> Re-adjust flow rate to give increased flow.<br><b>2.3.2</b> Select 'economy' power.   |
| <b>3</b> Water temperature cycling hot/cool at intervals.   | <b>3.1</b> Heater cycling on outlet thermal cut- out.  | <b>3.1.1</b> See ' <i>Water too hot</i> ' causes 2.1, 2.2 and 2.3 and their appropriate action/cures. If it continues, contact Triton Customer Service.  |
| <b>4</b> Water too cool or cold.  | <b>4.1</b> Too much flow.  | <b>4.1.1</b> Reduce flow rate via temperature control.   |
|   | <b>4.2</b> Water pressure below minimum required (see rating label).                                 | <b>4.2.1</b> Is water supply mains or tank fed ?   |
|   |  | <b>4.2.2</b> If tank fed, re-plumb to mains water supply or see 4.2.4.   |
|   |  | <b>4.2.3</b> If mains fed, ensure that mains stopvalve is fully open and that there are no other restrictions in the supply while shower is in use, or see 4.2.4.  |
| <b>4.2.4</b> Fit pump to give minimum pressure (see rating label). Contact Customer Service for advice. |  |  |
| <b>4.3</b> Reduction in ambient water temperature.  | <b>4.3.1</b> Re-adjust flow rate to give reduced flow.<br><b>4.3.2</b> Select 'high' power.          |  |
| <b>4.4</b> Electrical malfunction or safety cut-out has operated  | <b>4.4.1</b> Have unit checked by suitably qualified electrician or contact Triton Customer Service. |  |

**FAULT FINDING (continued)**

| <i><b>Problem/Symptom</b></i>   | <i><b>Cause</b></i>   | <i><b>Action/cure</b></i>  |
|---|---|--|
| <b>5</b> Shower varies from normal temperature to cold during use.          | <b>5.1</b> Water pressure has dropped below minimum required. | <b>5.1.1</b> Wait until the water pressure resumes to normal.                                    |
| <b>6</b> Pressure relief device has operated (water ejected from PRD tube). | <b>6.1</b> Blocked sprayhead.                                 | <b>6.1.1</b> Clean or replace blocked sprayplate in sprayhead and then fit new PRD.              |
|   | <b>6.2</b> Twisted/blocked flexible shower hose.              | <b>6.2.1</b> Check for free passage through hose. Replace the hose if necessary and fit new PRD. |
|   | <b>6.3</b> Sprayhead not removed whilst commissioning.        | <b>6.3.1</b> Fit new PRD. Commission unit with sprayhead removed.                                |

**Note:** Identify cause of operation before fitting new PRD unit. When fitting a new PRD, follow the commissioning procedure.

**It is advised all electrical maintenance/repairs to the shower should be carried out by a suitably qualified person.**

## Service Policy

In the event of a complaint occurring, the following procedure should be followed:

- 1 Telephone Customer Service on 0870 067 3333 (0845 762 6591 in Scotland and in Northern Ireland), having available the model number and power rating of the product, together with the date of purchase.
- 2 Triton Customer Service will be able to confirm whether the fault can be rectified by either the provision of a replacement part or a site visit from a qualified Triton service engineer.
- 3 If a service call is required the unit must be fully installed for the call to be booked and the date confirmed. In order to speed up your request, please have your postcode available when booking a service call.
- 4 It is essential that you or an appointed representative (who must be a person of 18 years of age or more) is present during the service engineer's visit and receipt of purchase is shown.
- 5 A charge will be made in the event of an aborted service call by you but not by us, or where a call under the terms of guarantee has been booked and the failure is not product related (i.e. scaling and furring, incorrect water pressure, pressure relief device operation, electrical installation faults).
- 6 If the product is no longer covered by the guarantee, a charge will be made for the site visit and for any parts supplied.
- 7 Service charges are based on the account being settled when work is complete, the engineer will then request payment for the invoice. If this is not made to the service engineer or settled within ten working days, an administration charge will be added.

## Replacement Parts Policy

**Availability:** It is the policy of Triton to maintain availability of parts for the current range of products for supply after the guarantee has expired. Stocks of spare parts will be maintained for the duration of the product's manufacture and for a period of five years thereafter.

In the event of a spare part not being available a substitute part will be supplied.

**Payment:** The following payment methods can be used to obtain spare parts:

- 1 By post, pre-payment of pro forma invoice by cheque or money order.
- 2 By telephone, quoting credit card (MasterCard or Visa) details.
- 3 By website order, [www.tritonshowers.co.uk](http://www.tritonshowers.co.uk)

Triton Showers  
Triton Road  
Nuneaton  
Warwickshire CV11 4NR

*Triton is a division of Norcros Group (Holdings) Limited*

## TRITON STANDARD GUARANTEE

Triton guarantee this product against all mechanical and electrical defects arising from faulty workmanship or materials for a period of two years for domestic use only, from the date of purchase, provided that it has been installed by a competent person in full accordance with the fitting instructions.

Any part found to be defective during this guarantee period we undertake to repair or replace at our option without charge so long as it has been properly maintained and operated in accordance with the operating instructions, and has not been subject to misuse or damage.

This product must not be taken apart, modified or repaired except by a person authorised by Triton. This guarantee applies only to products installed within the United Kingdom and does not apply to products used commercially. This guarantee does not affect your statutory rights.

### What is not covered:

- 1 Breakdown due to: **a)** use other than domestic use by you or your resident family; **b)** wilful act or neglect; **c)** any malfunction resulting from the incorrect use or quality of electricity, gas or water or incorrect setting of controls; **d)** faulty installation.
- 2 Repair costs for damage caused by foreign objects or substances.
- 3 Total loss of the product due to non-availability of parts.
- 4 Compensation for loss of use of the product or consequential loss of any kind.
- 5 Call out charges where no fault has been found with the appliance.
- 6 The cost of repair or replacement of pressure relief devices, showerheads, hoses, riser rails and/or wall brackets, isolating switches, electrical cable, fuses and/or circuit breakers or any other accessories installed at the same time.
- 7 The cost of routine maintenance, adjustments, overhaul modifications or loss or damage arising therefrom, including the cost of repairing damage, breakdown, malfunction caused by corrosion, furring, pipe scaling, limescale, system debris or frost.

**Customer Service:** ☎ 0870 067 3333

**Scottish and Northern Ireland  
Customer Service:** ☎ 0845 762 6591

**Trade Installer Hotline:** ☎ 0870 067 3767  
Fax: 0870 067 3334

[www.tritonshowers.co.uk](http://www.tritonshowers.co.uk)

**E mail:** [technical@tritonshowers.co.uk](mailto:technical@tritonshowers.co.uk)

**Extended Warranty AVAILABLE NOW. Call 0870 067 3333 for more details.**