ASPIRANTE by TRITON

Aspirante pumped electric shower

Installation and operating instructions

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

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CONTENTS

This shower is designed for domestic use and is not vandal resistant.
To check the product suitability for commercial and multiple installations, please contact Triton's specification advisory service before installation.

Telephone: +44 (0) 24 7632 5491
Facsimile: +44 (0) 24 7632 4564
E mail: technical@tritonshowers.co.uk

PLEASE READ THIS IMPORTANT SAFETY INFORMATION

- Products manufactured by Triton are safe and without risk provided they are installed, used and maintained in good working order in accordance with our instructions and recommendations.
- DO NOT connect this shower directly to the mains water supply.
- 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 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 restarting the shower immmediately after stopping, be aware that a slug 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 sprayhead 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 the 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 the shower unit, as heat can transfer along the pipework and 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 tight 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), Building 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 Aspirante pumped 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 in the sequence of this instruction book.

Do not attempt any electrical or plumbing work necessary to install this product unless you have good practical experience and adequate understanding of the IEE regulations and water regulations

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

SPECIFICATIONS

Electrical

Nominal power rating at 230V
8.7kW – (40A MCB rating)

Nominal power rating at 240V
9.5kW – (40A MCB rating)

Pump motor rating 120 Watt – single phase.

Water

Inlet connection – 15mm diameter.
Outlet connection – ½" BSP male thread.

Entry Points

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

Materials

Backplate, cover, controls, sprayhead – ABS.
Elements – Minerally insulated corrosion resistant metal sheathing.

Dimensions

Height – 261 mm
Width – 330 mm
Depth – 104 mm

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 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 the winter the cold water supply will be cooler than in the summer months. Therefore, the temperature of the water will vary from season to season on any one setting of the temperature control, e.g. if you have chosen 'Medium' power for your preferred shower temperature in the summer, you may have to increase that to 'Full' power during the winter months.

c. If for any reason there is a sudden rise in water temperature, the Aspirante pumped electric shower has thermal cut-out devices built-in (see items 3 and 4 under *'Fault Finding'*).

d. Switch off immediately at the isolating switch if water ceases to flow. Press the Start/Stop button and contact Triton Customer Service for advice.

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

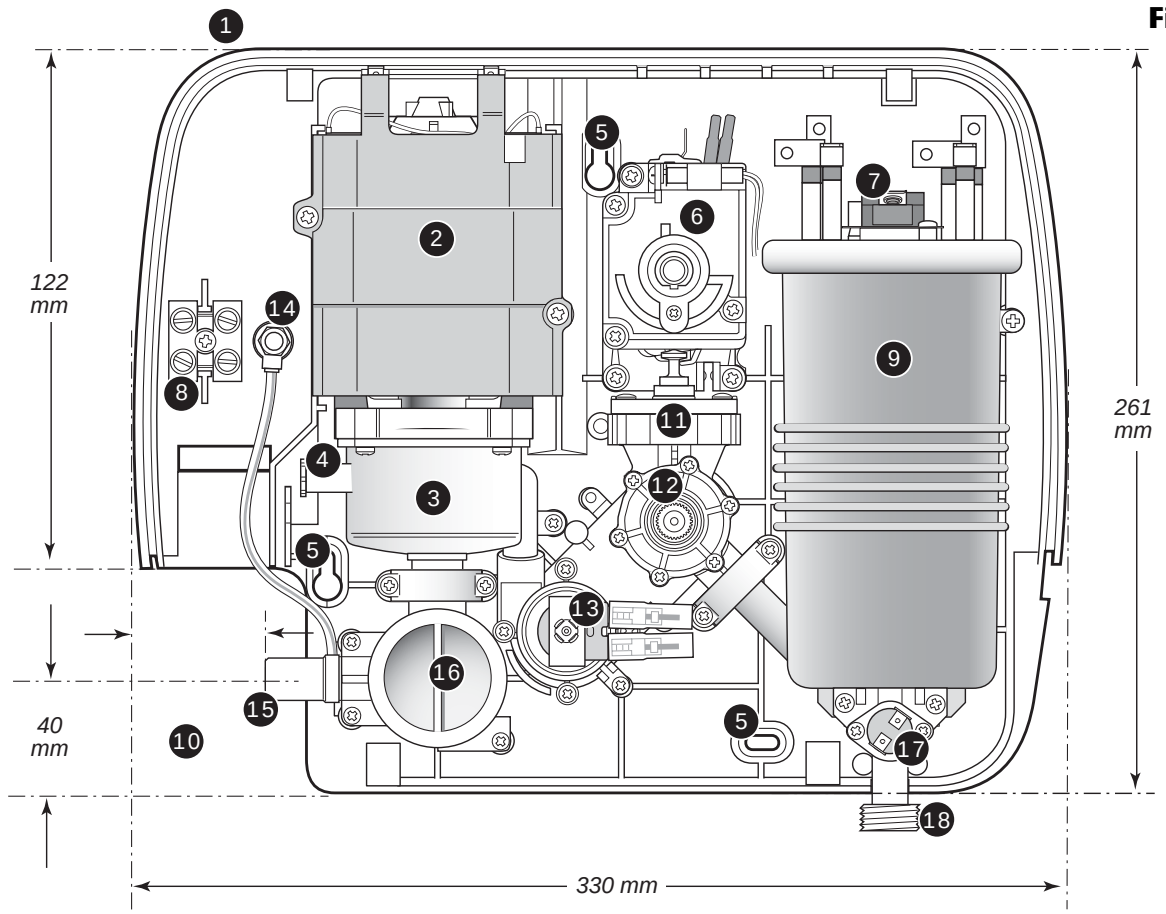
DO NOT place items such as soap or shampoo bottles on top of the unit. Liquid could seep through the joint between the cover and backplate, and possibly damage the sealing rubber.

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

Fig.1



Note: *Not all wires have been depicted for reason of clarity.*

Main components (fig.1)

1 Top pipe/cable entry
2 Motor assembly
3 Pump assembly
4 Bleed screw
5 Wall screw fixing
6 Power selector assembly
7 Thermal cut-out (main)
8 Terminal block
9 Can and element assembly
10 Area for bottom and back pipe/cable entry
11 Pressure switch
12 Temperature valve
13 Solenoid valve
14 Earth connection
15 Inlet pipe
16 Filter
17 Thermal cut-out (outlet)
18 Outlet pipe

Pack contents

Shower unit
Riser rail
Sprayhead
Sprayhead holder
Riser rail brackets
Hose
Soap dish
Fixing screws and plugs
Compression elbow
Two year and extended guarantee options

ELECTRICAL REQUIREMENTS

WARNING!
THIS APPLIANCE MUST BE EARTHED

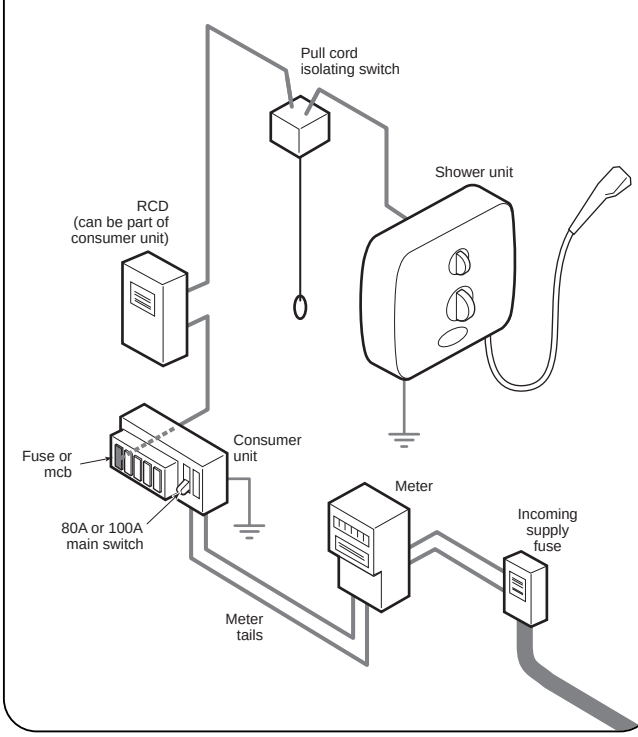
The installation, supply cable and circuit protection must conform with IEE wiring regulations and be sufficient for the amperage required.

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.

Fig.2

Fig.3 *Schematic of installation circuit*



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, make sure 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 miniature circuit breaker (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 supply and carry out what is necessary. They will also check the main bonding.

5 The earth continuity conductor of the

Table A

CIRCUIT PROTECTION

unit rating	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 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.

5.1 All exposed metallic parts in the bathroom must be bonded together using a cable of at least 4mm^2 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 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 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.

Table B

Twin and earth PVC insulated cable

CURRENT CARRYING CAPACITY

installed in an insulated wall	**in conduit or trunking**	**clipped direct or buried in a non insulated wall**
6mm^2	6mm^2	6mm^2
32A	38A	46A
10mm^2	10mm^2	10mm^2
43A	52A	63A
16mm^2	16mm^2	16mm^2
57A	69A	85A

Note: Cable selection is dependent on derating factors

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

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

9.2 It is also necessary to satisfy the disconnection time and thermal constraints which means 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, derating 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 It is essential that individual site conditions are assessed by a competent electrician to determine correct cable size and permissible circuit length.

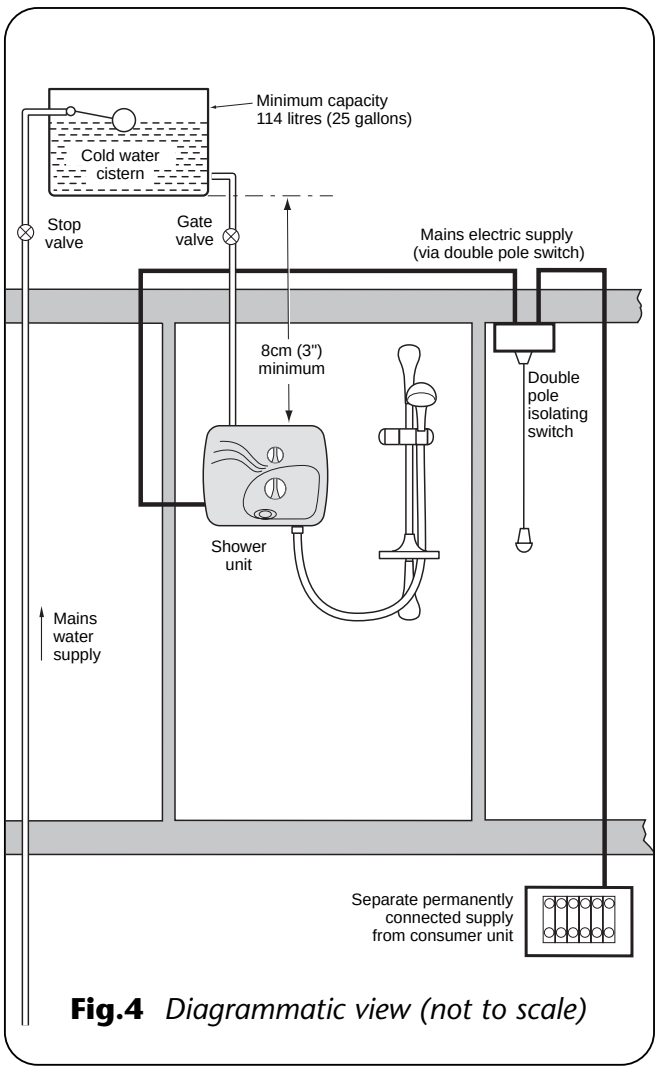


Fig.4 *Diagrammatic view (not to scale)*

WATER REQUIREMENTS

WARNING!

Under no circumstances must this Aspirante pumped electric shower be connected directly to the mains water supply.

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

To make sure of activation of the heating elements, the shower must be connected to a cold water supply which is gravity fed from a static cold water storage cistern with a minimum capacity of 114 litres (25 gallons).

There must be a maximum head of water of 10 metres and a minimum head of 8cm as measured between the bottom of the cistern and the top of the shower unit. There must be no other cold water draw offs between the cistern and the unit and the pipe must not supply water to any other tap or fitting at a lower level.

Note: The supply pipe from the cistern should be on the opposite side to the float operated valve to prevent air being drawn into the pipe when the cistern is filling.

If it is intended to operate the shower in hard water areas (above 200 ppm temporary hardness) a scale inhibitor should be fitted.

Fig.4 shows a typical system layout.

DO NOT use jointing compounds on any pipe fittings for the installation.

SITING OF THE SHOWER

IMPORTANT: If installing onto a tiled wall always mount the unit on the surface of the tiles. NEVER tile up to the unit.

Refer to **fig.5** for correct siting of the shower. This product is splashproof rated and is approved for use in shower cubicles and over baths. However, do not install the unit in a position where the sprayhead will consistently direct water over it.

The shower unit MUST be positioned vertically.

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

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. Failure to follow this procedure may also result in causing the PRD to operate.

Make sure 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.

The PRD is situated behind the outlet pipe **(fig.6)**. To access the PRD, FIRST SWITCH OFF THE ELECTRICITY SUPPLY, unscrew the hose then remove the cover. Remove the two screws holding the outlet pipe to the base of the can. Carefully pull away from the can and then unscrew the two screws holding the PRD to the outlet pipe.

CAUTION: DO NOT attempt to replace the PRD unless competent to do so.

Note: Before replacing the cover, it is strongly advised to prime the unit (see *'commissioning'*).

WARNING!

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

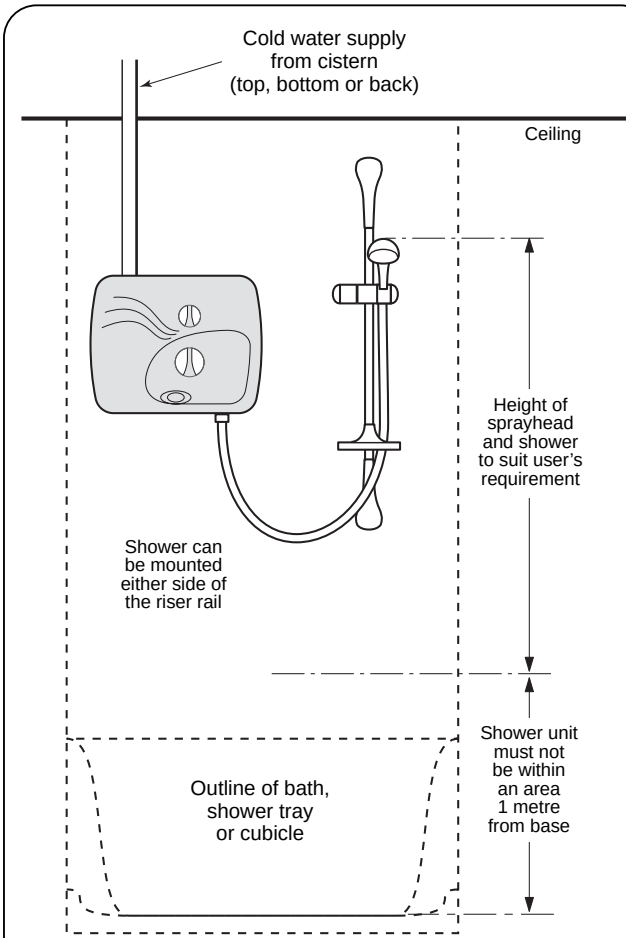


Fig.5 *Diagrammatic view (not to scale)*

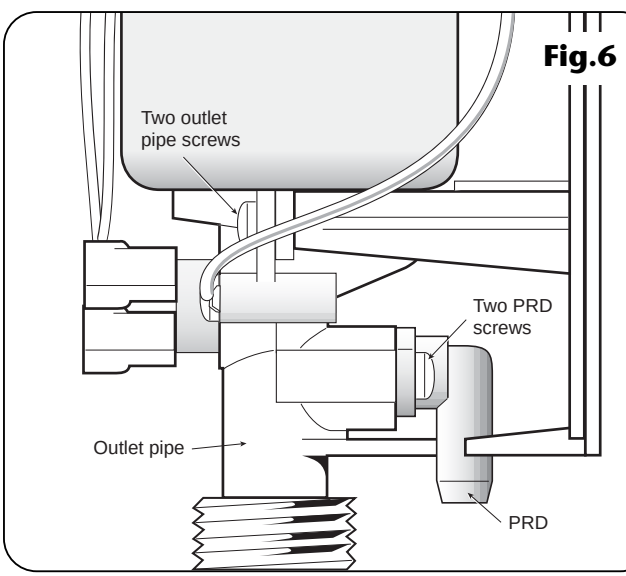


Fig.6

Fig.7

Fig.8

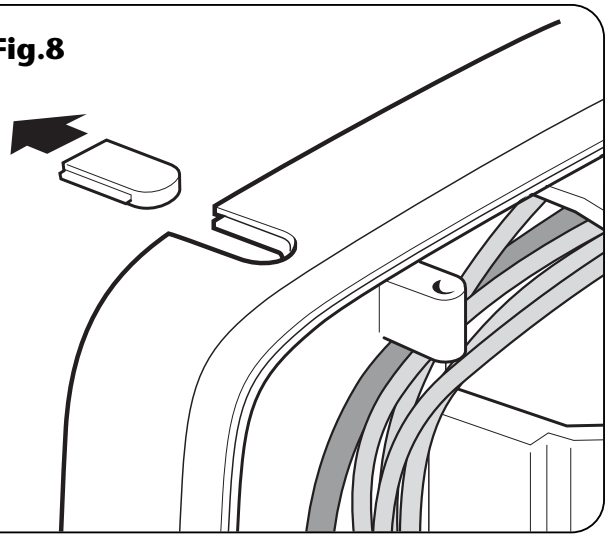
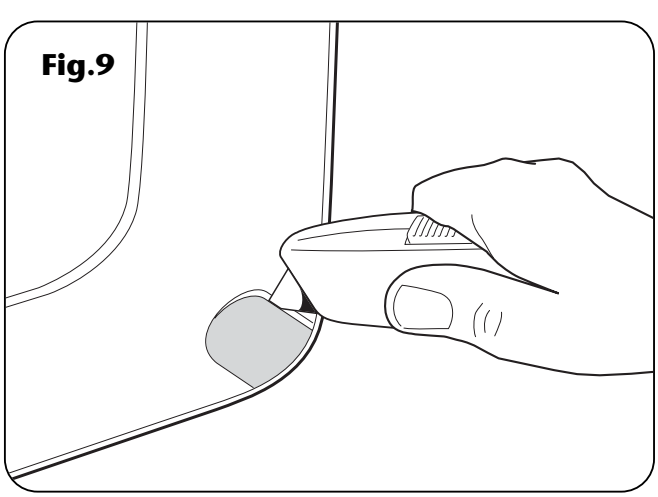


Fig.9



FITTING THE SHOWER TO THE WALL

Note: The control knobs are an integral part of the cover – DO NOT attempt to remove them.

IMPORTANT: 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 and subsequent operation of the unit may be impaired.

Unscrew the two top and two bottom retaining screws **(fig.7)** and lift the cover from backplate.

If a top entry is required for the water pipe, then remove the top cut-out in the backplate **(fig.8)**.

If a bottom entry is required for the cold water pipe, then a hole will need to be cut out of the cover **(fig.9)**.

If entry is from the back, the nut of the compression fitting will be partially behind the surface of the wall **(fig.10)**. This area must be left clear when plastering over the pipework to make the nut accessible for future adjustments.

Note: Make sure the hole in which the pipe enters through the wall is filled in completely in order to prevent any possible ingress of water into the cavity area **(fig.10)**.

Note: Deviations from the designated entry points will invalidate product approvals.

After choosing the site for the shower, use the backplate as a template and mark the three fixing holes **(fig.11)**.

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, use special wallplugs and a suitable drill bit).*

Screw the two upper fixing screws into position leaving the base of the screw heads protruding 6mm out from the wall.

Hook the backplate over the top screws and fit the lower 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.

Note: A temporary factory fitted locking screw is fitted to the power selector spindle **(fig.16)**. This is to make sure the spindle is in the Cold position while the commissioning procedure is carried out.

DO NOT remove the locking screw before this procedure is completed.

Fig.10

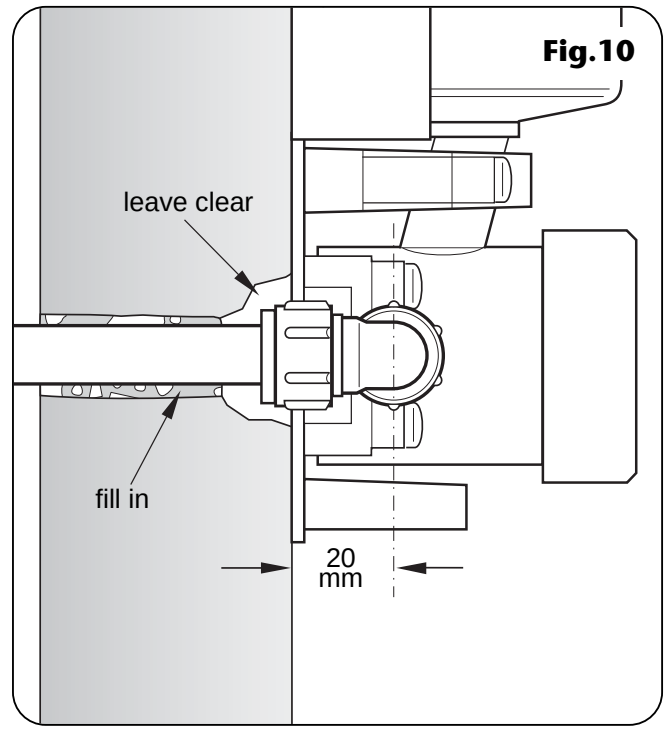
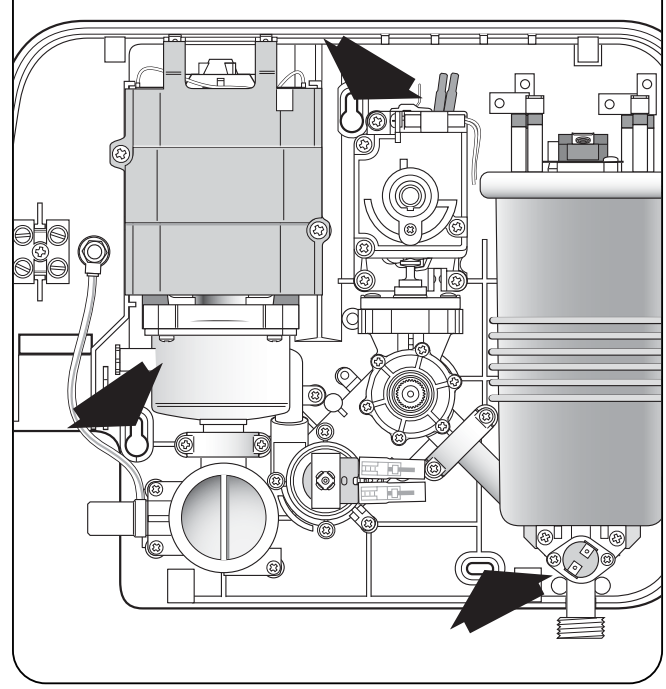


Fig.11



WARNING!

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

PLUMBING CONNECTIONS

Plumbing to be carried out before wiring

DO NOT use jointing compounds on any pipe fittings for the installation.

DO NOT solder fittings near the shower unit as heat can transfer along the pipework and damage components.

Note: An additional gate valve or fullway lever valve must be fitted in the water supply to the shower as an independent means of isolating the water supply should maintenance or servicing be necessary.

Procedure

Turn off water supply either at the mains stopvalve or the isolating stopvalve to the cistern. Drain the cistern.

IMPORTANT: The pipework must be brought direct from the cold water storage cistern with no other cold water draw-offs between the shower and the cistern.

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 water supply long enough to clear the debris to waste.

Connect the water supply to the inlet of the shower via 15mm copper, stainless steel or plastic pipe using a 15mm x 15mm elbow compression fitting. Do not use excessive force when making these connections.

Although the pipework connection to the shower is via 15mm diameter pipework, on long runs use 22mm diameter piping as far as possible to avoid restricting the flow to the shower.

Make sure that the backplate of the unit is flat on the wall and positioned squarely. Tighten the fixing screws.

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

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

ELECTRICAL CONNECTIONS

SWITCH OFF THE ELECTRICITY SUPPLY AT THE MAINS.

Fig.12 shows a schematic wiring diagram.

The cable entry points are shown in **fig.1**.

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

Note: Metal 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 make sure that no cable insulation is trapped under the screws. Loose connections can result in cable overheating.

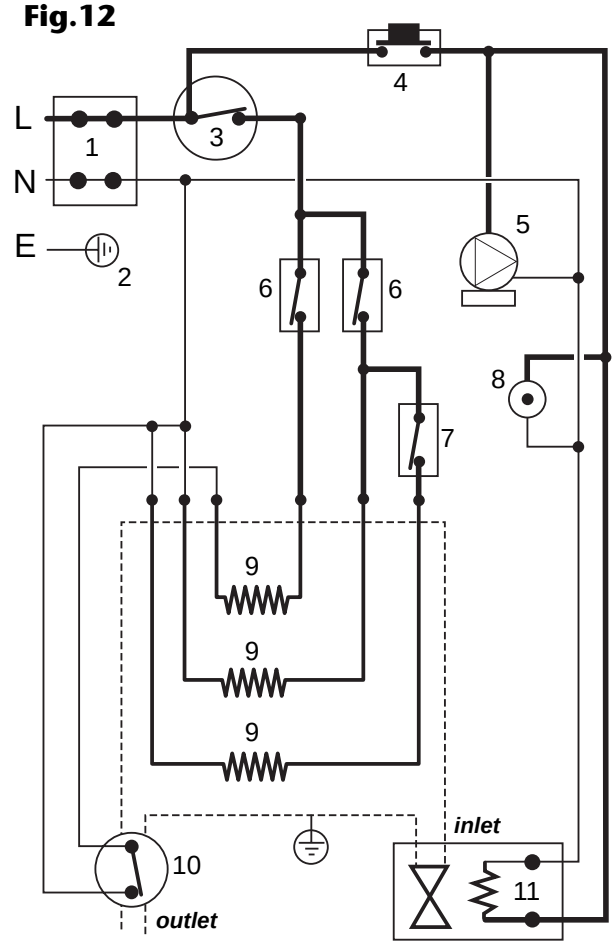
Note: The supply cable earth conductor must be sleeved. The outer sheath of the supply cable must be stripped back to the minimum.

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.

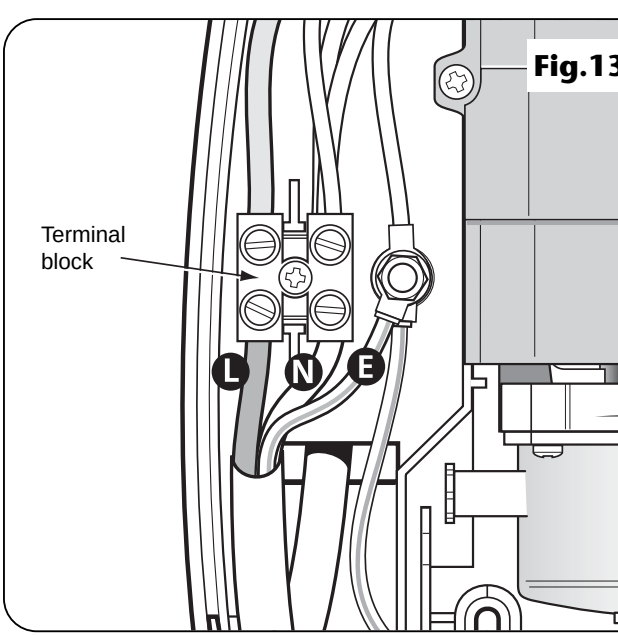
DO NOT switch on the electricity supply until the cover has been fitted.

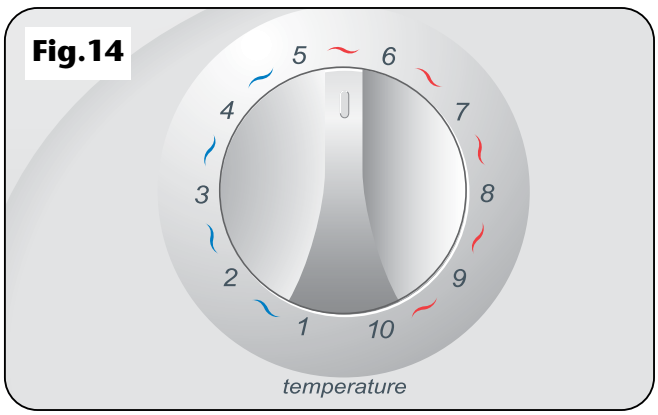
Fig.12

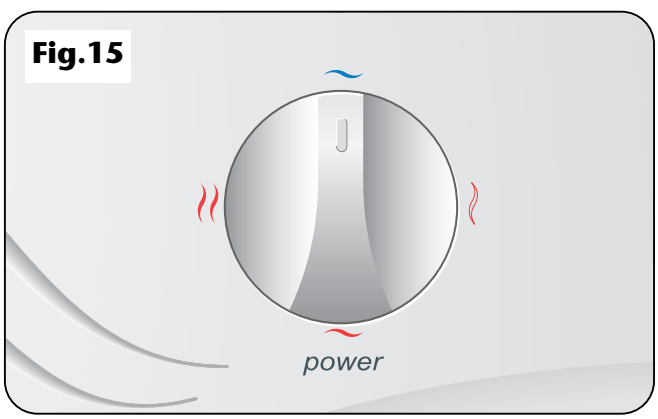


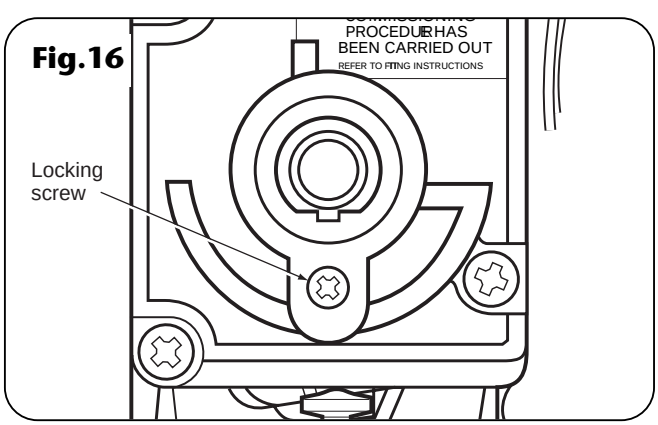
1 Terminal block
2 Earth post
3 Thermal cut-out (main)
4 Start/stop button
5 Pump and motor assy.
6 Selector microswitches
7 Microswitch (9.5kW)
8 Neon indicator
9 Elements
10 Thermal cut-out
11 Solenoid valve

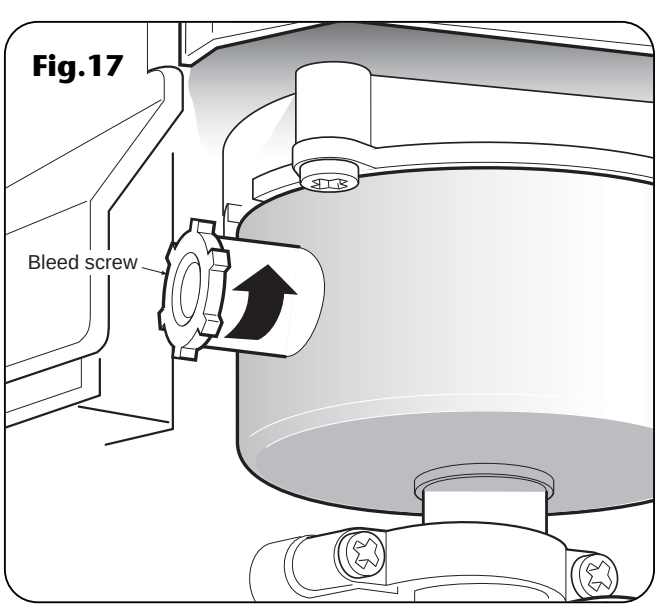
Fig.13











COMMISSIONING

WARNING!

DO NOT switch on the electricity supply until the following procedure has been completed and the cover has been fitted. Failure to do so could cause the pump to run dry and invalidate the guarantee.

The first operation of the shower is intended to flush out any remaining unit debris, and to make sure the heater unit contains water before the elements are switched on.

This operation must be carried out with the flexible hose screwed to the outlet but without the sprayhead attached. Make sure the outlet of the flexible hose is directed to waste and the Cold position selected.

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

Remove the cover and position the temperature control so that it points towards '1' **(fig.14)**. Position the power selector to the Cold position **(fig.15)**.

DO NOT remove the locking screw fitted to the power selector spindle **(fig.16)** – it can be removed when the commissioning procedure has been completed.

Make sure the water supply is still turned on to the shower.

Open the bleed screw on the pump unit **(fig.17)** by rotating one revolution. When water flows from the opening, this indicates that any trapped air is vented and that the pump unit is primed. The bleed valve must now be closed by rotating in the opposite direction.

Offer the cover to the backplate unit. Make sure the power selector is still at the Cold position and the temperature control is at '1'.

Note: Make sure the Start/Stop button is not depressed in the cover which indicates 'start'. The button should be flush with the cover,

otherwise water will flow as soon as the electricity is switched on.

Attached to the Stop/Start switch inside the cover is a two wire lead. The socket on the end of this lead must be connected to the plug that is situated at the bottom of the right-hand side of the backplate unit **(fig.18)**.

Note: The plug and socket can only fit one way.

Replace the cover squarely to the backplate and guide into position so that the controls locate correctly into the spindles while at the same time, making sure the wires are not trapped.

Should any difficulty arise, recheck the points above.

Secure the cover temporarily in position with two retaining screws. DO NOT OVERTIGHTEN.

Switch on the mains electric supply to the shower at the isolating switch.

Press the Start/Stop button **(fig.19)**. The power indicator will light and the pump starts to operate.

It will take about thirty seconds for a smooth flow of water to be obtained while air and any debris is being flushed from the shower.

When a smooth flow of water is obtained, rotate the temperature control from '1' to '10' several times **(fig.20)** to release any trapped air within the unit.

Once flushing out has been completed, stop the water flow by pressing the Start/Stop button.

SWITCH OFF THE ELECTRICITY SUPPLY TO THE SHOWER AT THE ISOLATING SWITCH.

Unscrew the cover retaining screws again and lift the cover from the backplate. Remove the locking screw from the power selector spindle **(fig.16)** and store for future use. Make sure the selector spindle is left in the same position.

Replace the cover as described above and permanently secure with the four retaining screws. DO NOT OVERTIGHTEN.

Switch the mains electric supply back on to the shower at the isolating switch. Once the riser rail is fitted, the shower is ready for normal use.

Fig.18

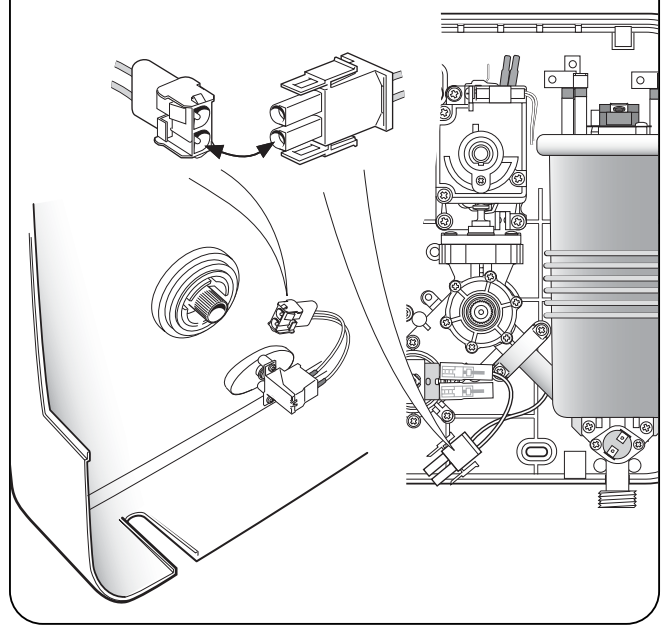


Fig.19

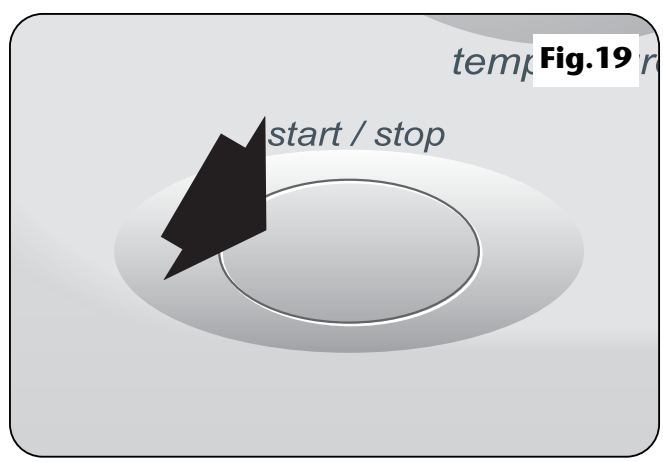
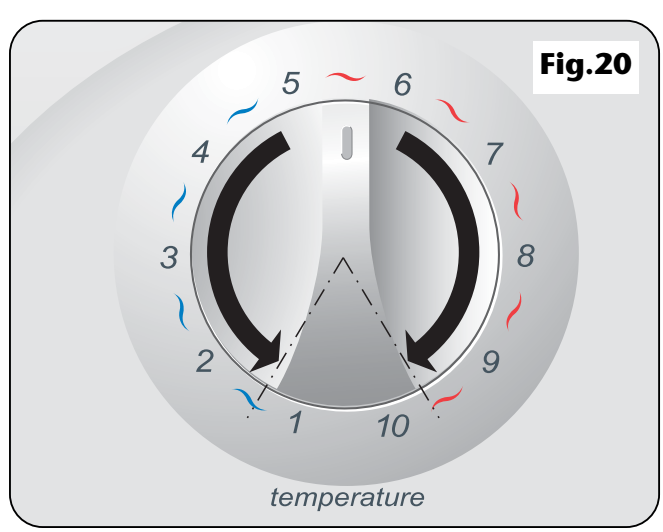
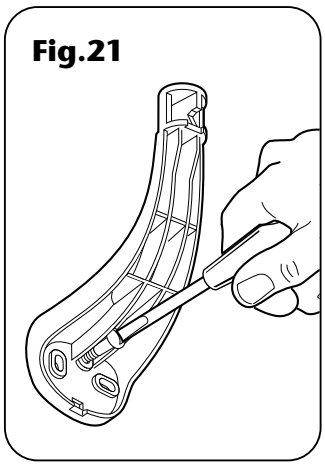
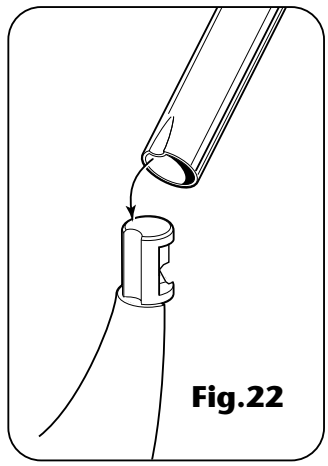
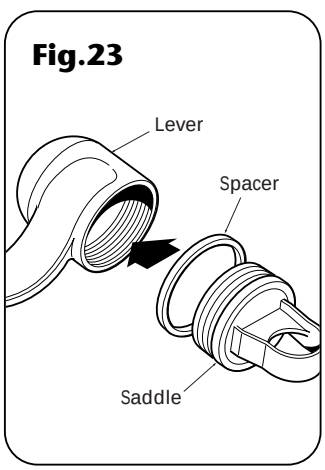


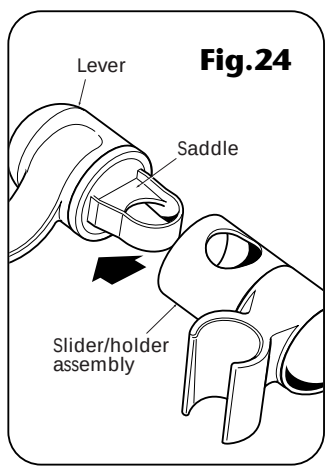
Fig.20

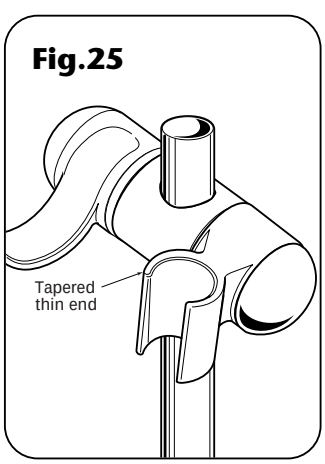


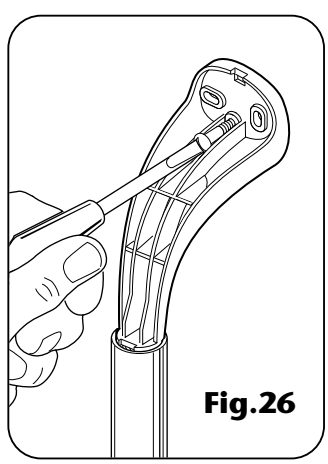


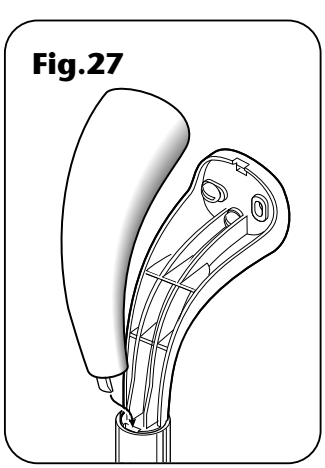


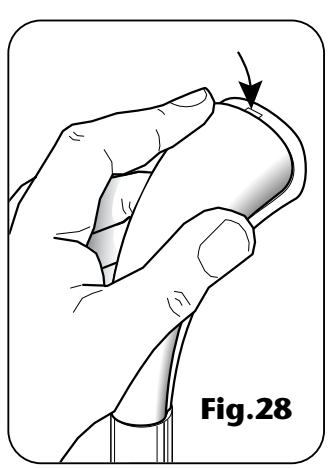












FITTING THE RISER RAIL

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.

Decide the position for the rail on the wall within the shower area. Proceed as follows:

Offer one of the two brackets to the wall for the lower position only. Note there are three holes in the brackets but two screws will usually be enough. Mark the centre hole and either of the other two. Drill and plug the wall. Replace the bracket to the wall and secure to the wall with the screws supplied **(fig.21)**. Locate the rail onto this lower bracket, making sure the rail engages fully on the bracket. Make sure the indent in the riser rail engages into the cut-out on the bracket end **(fig.22)**.

Locate the second bracket on top of the rail. Make sure the rail is vertical. Again mark the centre hole plus one of the other two holes. Remove the bracket and rail.

Drill and plug the wall. *(The wallplugs provided are suitable for most brick walls – use an appropriate masonry drill, but if wall is plasterboard or a soft building block, you must use suitable wallplugs and a suitable drill bit)*.

With the saddle, spacer and lever parts to hand, screw the saddle two or three turns into the lever **(fig.23)**. Place the saddle and lever into the slider/holder assembly **(fig.24)** so that the holes align, then slide onto the rail **(fig.25)**. Tighten to the rail by turning the lever. When tight, the lever should be facing forwards and not pointing to the wall. If not, slacken off and remove from the rail. Rotate the saddle and lever 180° within the slider/holder assembly then replace onto the rail and tighten. Make sure the tapered thin end of the sprayhead holder is in the uppermost position.

Place the rail onto the installed lower bracket.

Replace the upper bracket onto the rail and secure the bracket to the wall with the screws supplied **(fig.26)**.

Place a trim cover onto each bracket, making sure the large tab at the narrow end of the trim cover engages into the slot between the rail and bracket **(fig.27)** before pushing and clicking the other end into place **(fig.28)**.

Snap the soap dish onto the rail **(fig.29)** below the holder assembly. Prise open the soap dish collar and fit onto the rail **(fig.30)** below the dish. Note the collar is slightly tapered and should be fitted 'thinner section' uppermost. Make sure it locates firmly in the soap dish **(fig.31)** so that the dish is held at the required height on the rail.

FITTING THE HOSE AND SPRAYHEAD

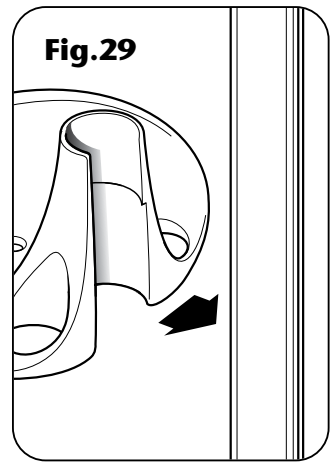
Feed the flexible hose through the soap dish opening **(fig.32)** so that the dish acts as a retaining ring (Water Regulations).

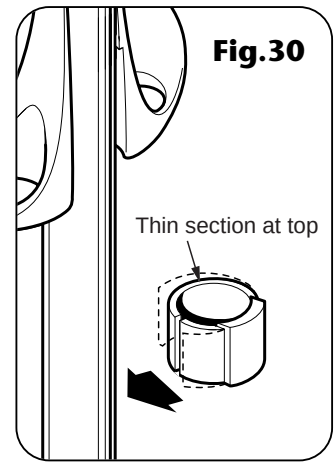
Screw the flexible hose to the shower outlet and sprayhead **(fig.33)**, making sure the supplied washers are in place at both ends of the flexible hose.

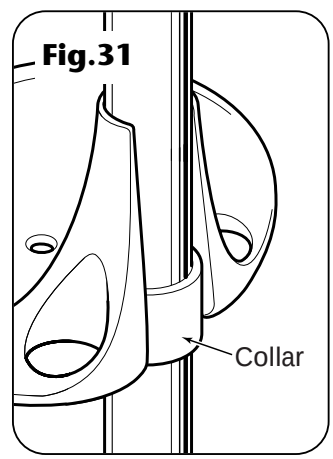
Place the sprayhead into the holder **(fig.34)** and check that it fits correctly.

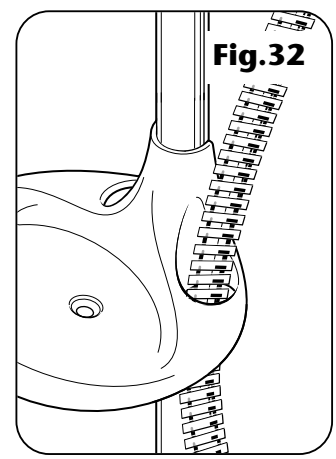
Note: The holder is slightly tapered and the sprayhead and hose will only fit from one direction.

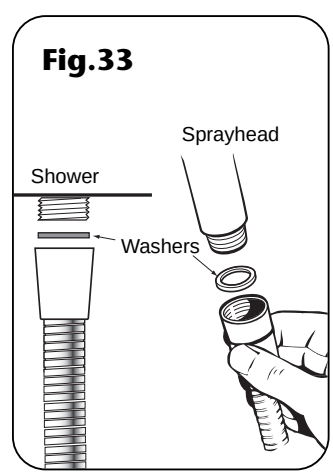
IMPORTANT: It is the conical end of the hose which grips into the holder. The sprayhead will not fit in the holder without the hose attached.

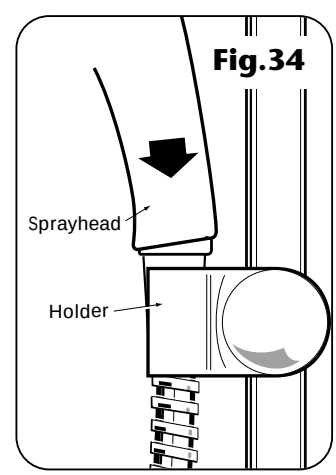






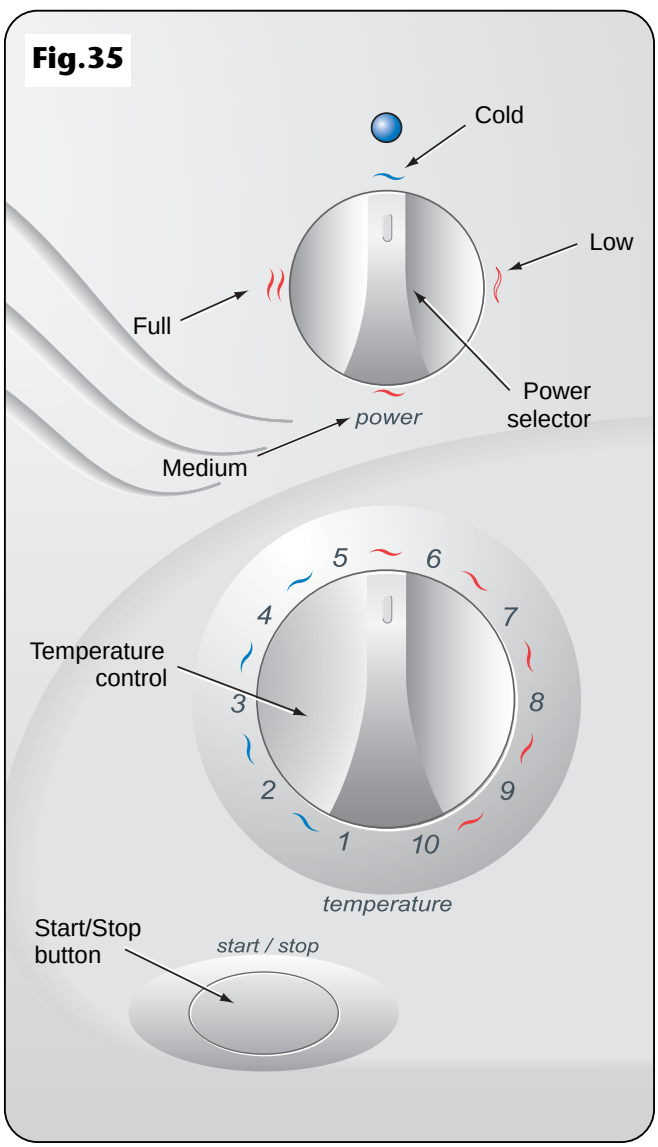






WARNING!

If restarting immediately after stopping, be aware that a slug of hot water will be expelled for the first few seconds.



OPERATING THE SHOWER

IMPORTANT: Make sure the commissioning procedure has been carried out.

To start the shower

Pressing the Start/Stop button **(fig.35)** switches on the pump, allowing water to immediately flow through the unit.

To stop the shower

Press the Start/Stop button. This switches off the pump and the water flow will cease.

To use the power selector

The power selector **(fig.35)** has four settings – cold, low, medium and full power.

Blue symbol is cold water only. Adjusting the temperature control at this setting will only increase or decrease the force of the water from the sprayhead. It will not alter the water temperature.

Red outline symbol is the low setting for extra economy during warmer months. Temperature adjustment at this setting is via the temperature control.

Single red symbol is the medium setting for economy during warmer months and any temperature adjustment at this setting is via the temperature control.

Double red symbol is maximum power setting which allows the highest flow achievable for your preferred temperature. Temperature adjustment at this setting is via the temperature control.

To adjust the shower temperature

The shower temperature is altered by increasing or decreasing the flow rate of the water through the shower via the temperature control.

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

To decrease the shower temperature

Turn the temperature control anti-clockwise towards the lower numbers; this will increase the water flow.

To increase the shower temperature

Turn the temperature control clockwise towards the higher numbers; this will decrease the water flow.

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 a few 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 while showering. Special consideration should be given to young children and the less able bodied.

OPERATING FUNCTIONS

Power on indicator (fig.36)

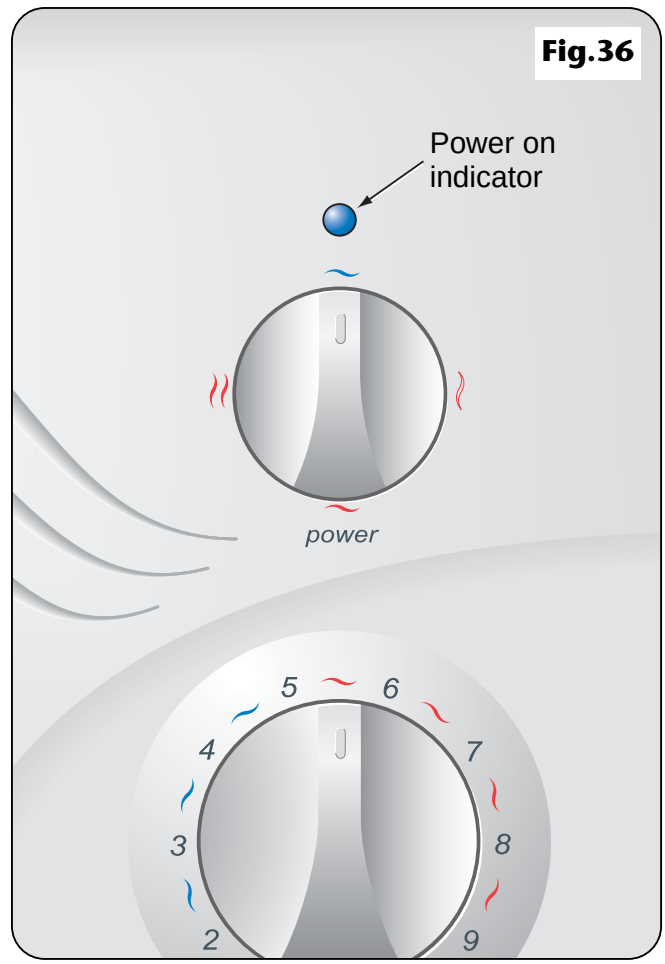
The power neon will light when the Start/Stop button is pressed. This indicates that power is on to the pump and power selector.

Low water pressure cut-out

Should the water pressure fall below the minimum required to operate the shower, power will be switched off to the heating elements preventing any maintained temperature rises.

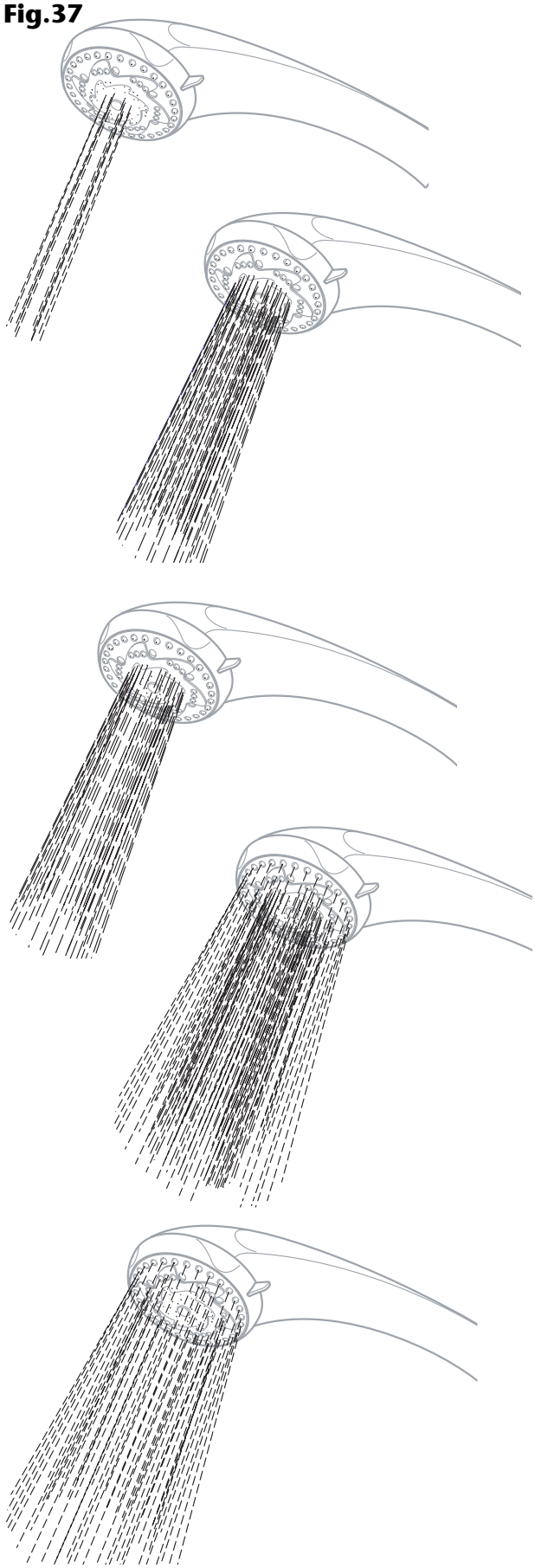
Overheat cut-out

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 enough power to the elements will be automatically restored to the previous setting at the time of interruption.



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.**

Fig.37



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.

ADJUSTING THE SPRAYHEAD

Five sprayhead patterns are available **(fig.37)**. Adjust the spray pattern by turning the bezel on the sprayhead in either direction until the desired pattern is obtained.

CLEANING

WARNING!

DO NOT use 'powerful' abrasive or solvent cleaning fluids when cleaning the shower as they may damage the plastic fittings.

Before cleaning, turn off the unit at the isolation switch to avoid 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.

Sprayplate removal

There is no need to remove the sprayhead from the hose.

Using the removal tool supplied **(fig.38)**, locate the raised 'bosses' into the recesses in the sprayplate. Hold in firmly and twist anti-clockwise **(fig.39)**. This movement may turn the cartridge assembly as well until it reaches a 'stop'.

Hold the cartridge firmly and continue to twist anti-clockwise. Having loosened the sprayplate, it can be unscrewed and removed completely.

Clean the sprayplate with a suitable brush or preferably leave it to soak overnight in a mild proprietary descalent. Make sure all traces of scale are removed and thoroughly rinse in clean water afterwards.

Before replacing the sprayplate, switch the power back on at the isolating switch and direct the hose and sprayhead to waste.

Turn the temperature control fully anti-clockwise, and turn the power selector to COLD.

Press the Start/Stop button. This operation will flush out any loose scale deposits in the unit and sprayhead. Stop after about thirty seconds.

Refit the sprayplate by screwing clockwise. Use the tool to screw the sprayplate tight.

Fig.38

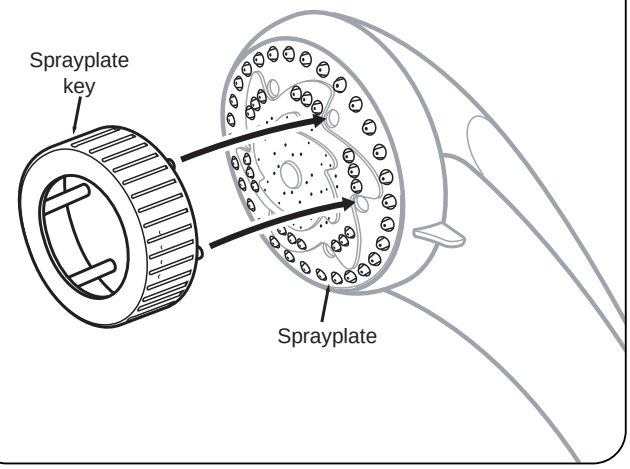
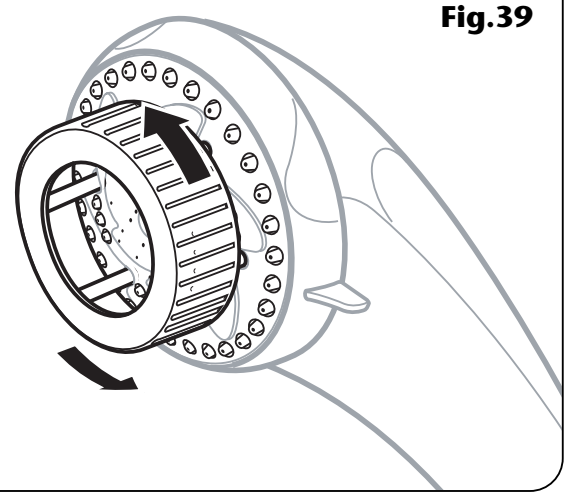


Fig.39



INSTRUCTIONS FOR INSTALLERS AND SERVICE ENGINEERS ONLY

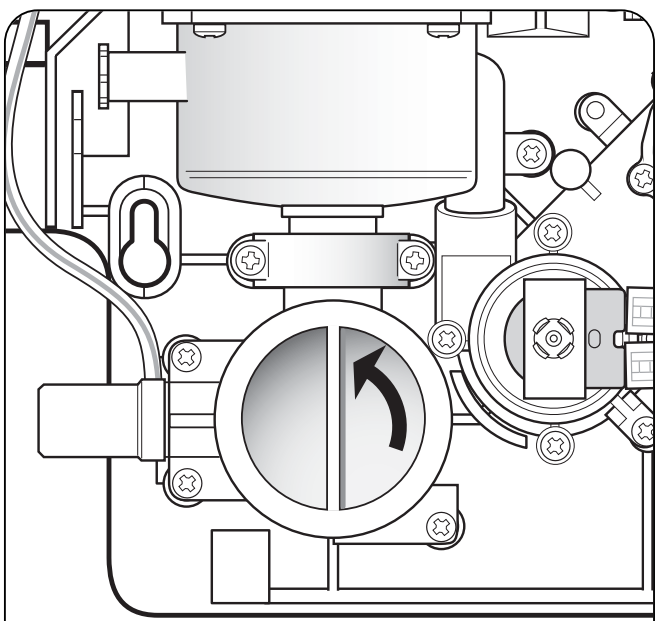


Fig.40

CLEANING THE FILTER

It is recommended that the filter is periodically cleaned in order to maintain the performance of the shower. It is essential that this operation is carried out by a competent person.

SWITCH OFF THE ELECTRICITY SUPPLY AT THE MAINS.

Remove the cover and disconnect the plug.

Note: Should debris be trapped on the shut off seat inside the valve, water will continue to flow out as the filter is removed. Before removing the filter turn off the supplies at the service valve .

DO NOT rely on the filter shut off valve when carrying out repairs or service to other areas of the shower unit.

Unscrew the filter **(fig.40)** by turning anti-clockwise. Remove the unit complete with the filter and wash under running water. Make sure all debris is removed.

Replace by pushing the unit back into its housing until the threads engage and then turn fully clockwise until tight. DO NOT OVERTIGHTEN.

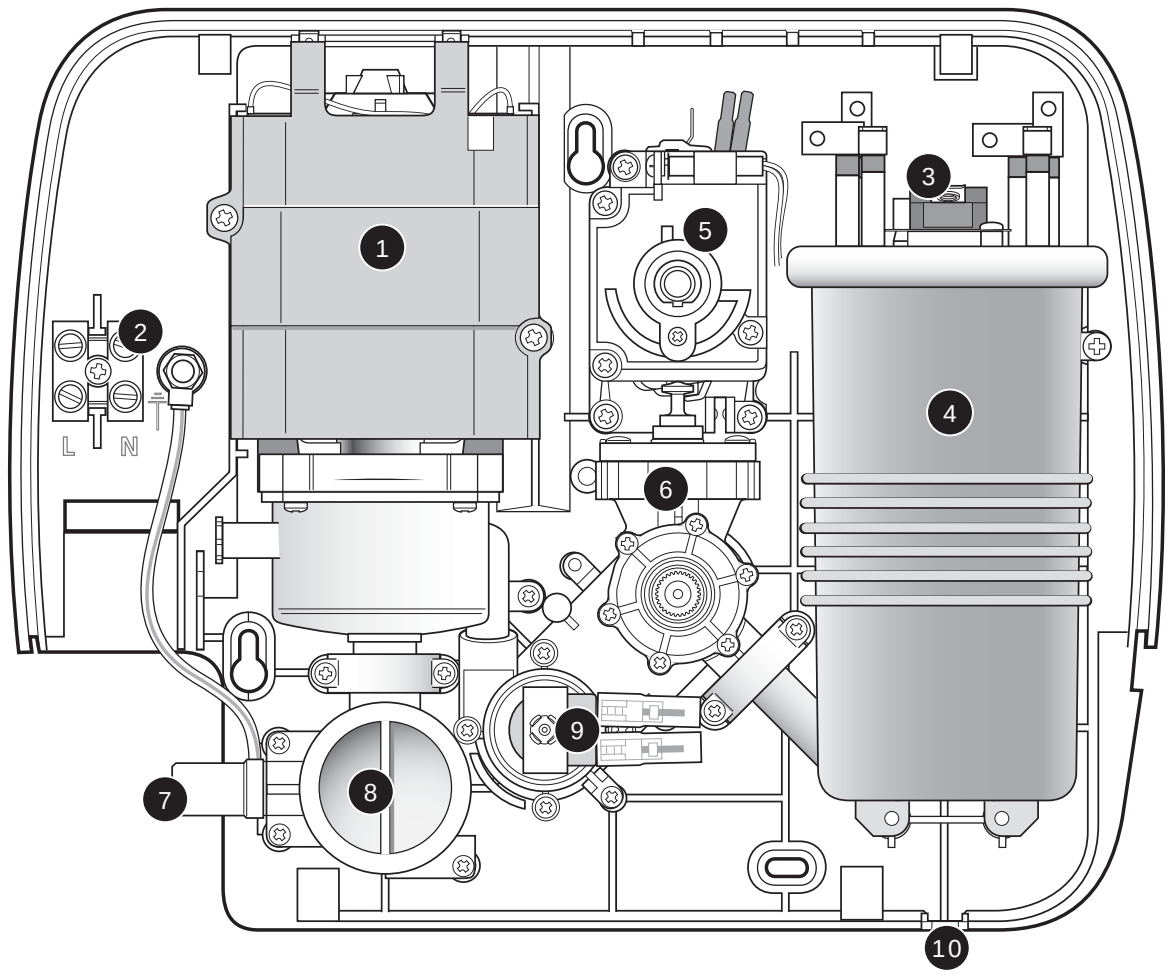
Before replacing the cover, it is strongly advised to prime the unit by opening the bleed screw until water drains from it.

Close the bleed screw and connect the plug to the cover. Replace the cover and secure with the fixing screws.

Switch on the electric supply and start the shower on the COLD SETTING ONLY and with the temperature control rotated fully anti-clockwise.

When a smooth flow of water is obtained, the shower can then be used in the normal manner.

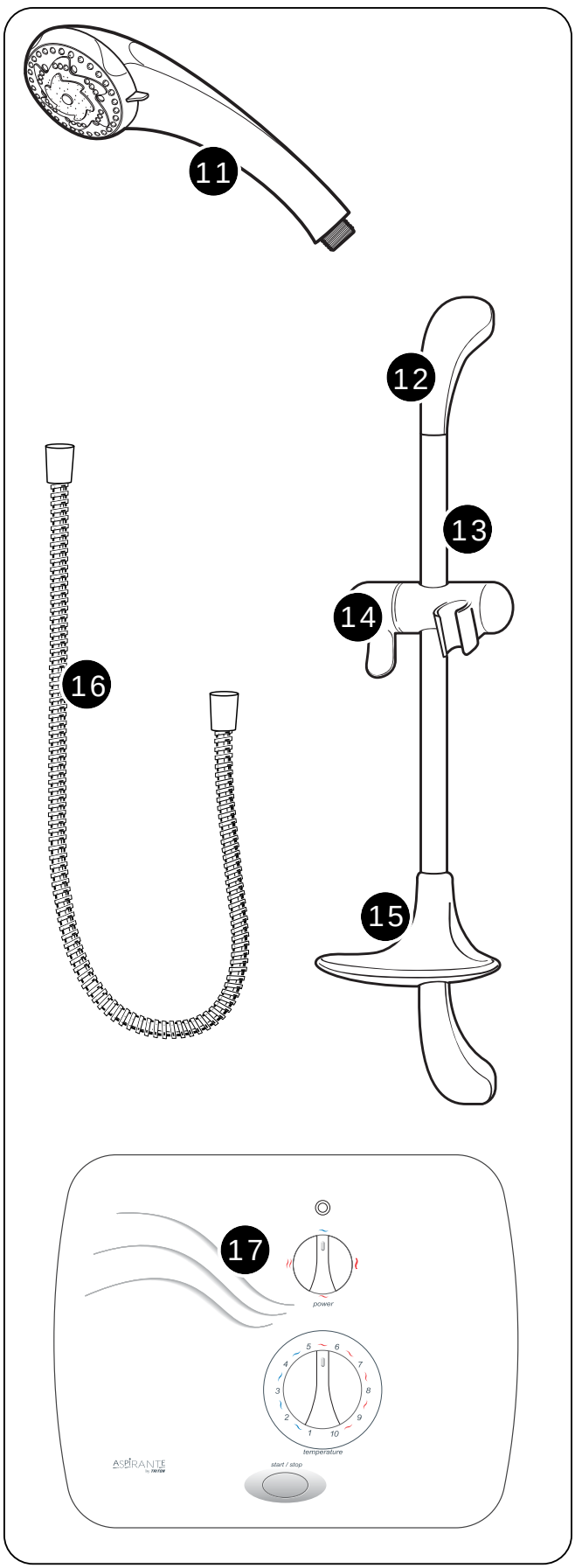
SPARE PARTS



Ref.	Description	Part No.
1	Pump and motor assembly	84000090
2	Terminal block	22009230
3	Thermal cut-out	22010070
4	Can assembly (dual rated 240V/230V) 9.5kW/8.7kW	84500790
5	Selector switch microswitch & wire assy.	82500250
6	Flow valve assembly	82100310
7	Inlet pipe assembly	83306460

Ref.	Description	Part No.
8	Filter assembly	83306470
9	Solenoid	22009110
10	Outlet pipe & terminal block wiring assy.	82200810
–	Start/Stop switch	82300510
–	Pressure relief device	82800450

SPARE PARTS



Ref.	Description	Part No.
11	Five mode sprayhead – chrome	22011130
12	Brackets (pair) – chrome	83306170
13	Riser rail – plated chrome	7042412
14	Sprayhead holder – chrome	83306200
15	Soap dish – clear	22008970
16	Flexible hose – chrome effect	28100050
17	Cover assembly	85300020

FAULT FINDING

IMPORTANT: Switch OFF the electricity at the mains supply and remove the circuit fuse before attempting any fault finding inside the unit.

Problem/Symptom	*Cause*	*Action/cure*
1 Shower inoperable, no water flow when the start/stop button is pressed.	**1.1** Interrupted power supply.	**1.1.1** Check if a general power cut. Check other appliances and if necessary, contact the local Electricity Supply Company. **1.1.2** If the power neon does not illuminate when the Start/Stop button is pressed, check the consumer unit fuse or circuit breaker or isolating switch. If blown or faulty, renew or reset as applicable. If it fails again, consult a competent electrician.
	1.2 Plug not connected to socket inside the cover.	**1.2.1** Remove the cover and make sure the plug and socket are firmly connected.
	1.3 Solenoid valve malfunction.	**1.3.1** Have solenoid checked by a competent electrician or contact Customer Service.
	1.4 Pump motor faulty.	**1.4.1** If the power neon is lit when the Start/Stop button is pressed, have the pump checked by a competent person or contact Customer Service.
2 Water too hot.	**2.1** Not enough water flowing through the shower.	**2.1.1** Increase the flow rate via temp. control. **2.1.2** Blocked sprayhead – clean or replace sprayhead. **2.1.3** Blocked filter – see *'filter maintenance'*.
	2.2 Increase in ambient water temperature.	**2.2.1** Switch to reduced power setting and readjust flow rate (via temperature control) to give the required temperature.
3 Water temperature cycling hot/cool at intervals.	**3.1** Heater cycling on outlet thermal cut-out.	**3.1.1** See *'Water too hot'* causes 2.1 and 2.2 and their appropriate action/cures. If it continues, contact Triton Customer Service.
4 Water too cool or cold.	**4.1** Too much flow.	**4.1.1** Reduce the flow rate via the temperature control.
	4.2 Reduction in the ambient water temperature.	**4.2.1** Switch to full power setting and readjust the flow rate using the temperature control to give the required temperature.
	4.3 Electrical malfunction or safety cut-out has operated.	**4.3.1** Have the shower unit checked by a competent electrician or contact Customer Service.

FAULT FINDING (continued)

Problem/Symptom	*Cause*	*Action/cure*
5 During use, the water flow ceases abruptly.	**5.1** Interrupted power supply.	**5.1.1** See 1.1.1 and 1.1.2.
	5.2 Solenoid valve malfunction (pump still operates).	**5.2.1** Switch off immediately. Have solenoid checked by a competent electrician or contact Customer Service.
	5.3 Pump motor faulty.	**5.3.1** See 1.5.1.
6 Shower performance drops indicated by a gradual reduction in water flow.	**6.1** Water starvation to the unit.	**6.1.1** Check the filter is not blocked. First, isolate the electricity supply and then remove the cover. **6.1.2** Check the cold water cistern is full. **6.1.3** Make sure the water supply pipe is not blocked or air locked. **6.1.4** Check there is no simultaneous demand from the cistern during showering. **6.1.5** Reprime the unit without electricity switched on to the unit (see *'commissioning'*).
7 Pressure relief device has operated (water ejected from PRD tube).	**7.1** Blocked sprayhead.	**7.1.1** Clean or replace blocked cartridge in the sprayhead and then fit a new PRD.
	7.2 Twisted/blocked flexible shower hose.	**7.2.1** Check for free passage through the hose. Replace the hose if necessary and then fit a new PRD.
	7.3 Sprayhead not removed while commissioning.	**7.3.1** Fit a new PRD. Commission the 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 competent person.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Service Policy

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

1 Telephone Customer Service on 01 628 6711 or 01 628 6845, having available the model number and power rating of the product, together with the date of purchase.

2 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.

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:

By post, pre-payment of pro forma invoice by cheque or money order.

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.

Earthridge Customer Service

(Republic of Ireland):

☎ 01 628 6711

☎ 01 628 6845

Triton Showers
Triton Road
Nuneaton
Warwickshire CV11 4NR

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Earthridge International Ltd
Maynooth
Co. Kildare.