

# GUARANTEE

Terms and Conditions for UK (outside UK contact your local distributor)

We, Applied Energy Products Limited, guarantee this product for domestic use only, for the period of 36 months\* from the date of purchase.

Within the guarantee period we will resolve, free of charge, any manufacturing defects in the product resulting from faulty workmanship or material on condition that:-

- a) The appliance has been correctly installed in accordance with our instructions and is being used on the supply circuit or voltage printed on the rating plate.
- b) The appliance has been used in accordance with these instructions and has not been tampered with or otherwise subject to misuse, neglect or accident.
- c) The appliance has not been taken apart, modified or repaired except by a person authorised by us.
- d) Evidence of the date of purchase in the form of an invoice or receipt will be required in order to qualify for an in-guarantee repair.
- e) The guarantee period for the products used in commercial applications will be limited to 12 months.
- f) For the service work to be undertaken free of charge, the work must be only undertaken by Applied Energy Products Limited, or our approved agents.
- g) Service under guarantee has no effect on the expiry date. The guarantee on any exchanged parts or product ends when the original guarantee period ends.

## EXCLUSIONS

This guarantee **DOES NOT** cover damage or defects arising from poor or incorrect installation, improper use or lack of maintenance, including build-up of limescale. It is the responsibility of the installer to check that the installation parameters meet the requirements of the product, and any relevant regulations.

If we are called out to a fault, which is subsequently identified as being an installation fault, we will make a charge. It is important that the routine checks are completed before calling us out, as many issues can be simply diagnosed and resolved.

We make no guarantees as to response times for repairs. We will endeavour to achieve the most timely response possible but while we indicate an average response time, this should not be taken as a guarantee.

The guarantee applies to a repair or replacement (at our discretion) of the product subject to the conditions above, and **DOES NOT** cover compensation for the loss of the product or consequential loss of any kind.

The guarantee does not apply to the repair or replacement of pressure relief devices, sprayheads, hoses, accessories, isolating switches, electrical cable, fuses and/or circuit breakers.

This guarantee does not affect your statutory rights.

\* Months 25 to 36 of your free guarantee are conditional on the registration of your product at the time of purchase. Product registration helps us to identify when products are installed, and in what location in order to facilitate a more efficient response to your requests.

## After Sales Service

We offer a technical advisory service on the telephone to installers and other customers with problems in the field.

**RING 0844 372 7766 (UK ONLY)**

Remember to quote type of shower, as written on the front of the shower and on this leaflet.

The model and serial number are located on the bottom face of the shower.  
Make a note of those numbers here, and be sure to quote them if you call for advice.

**Model Number: 53--** \_\_\_\_\_ **/ Serial Number:** \_\_\_\_\_

**Note:** You may be charged for a service call if you do not have the serial number.

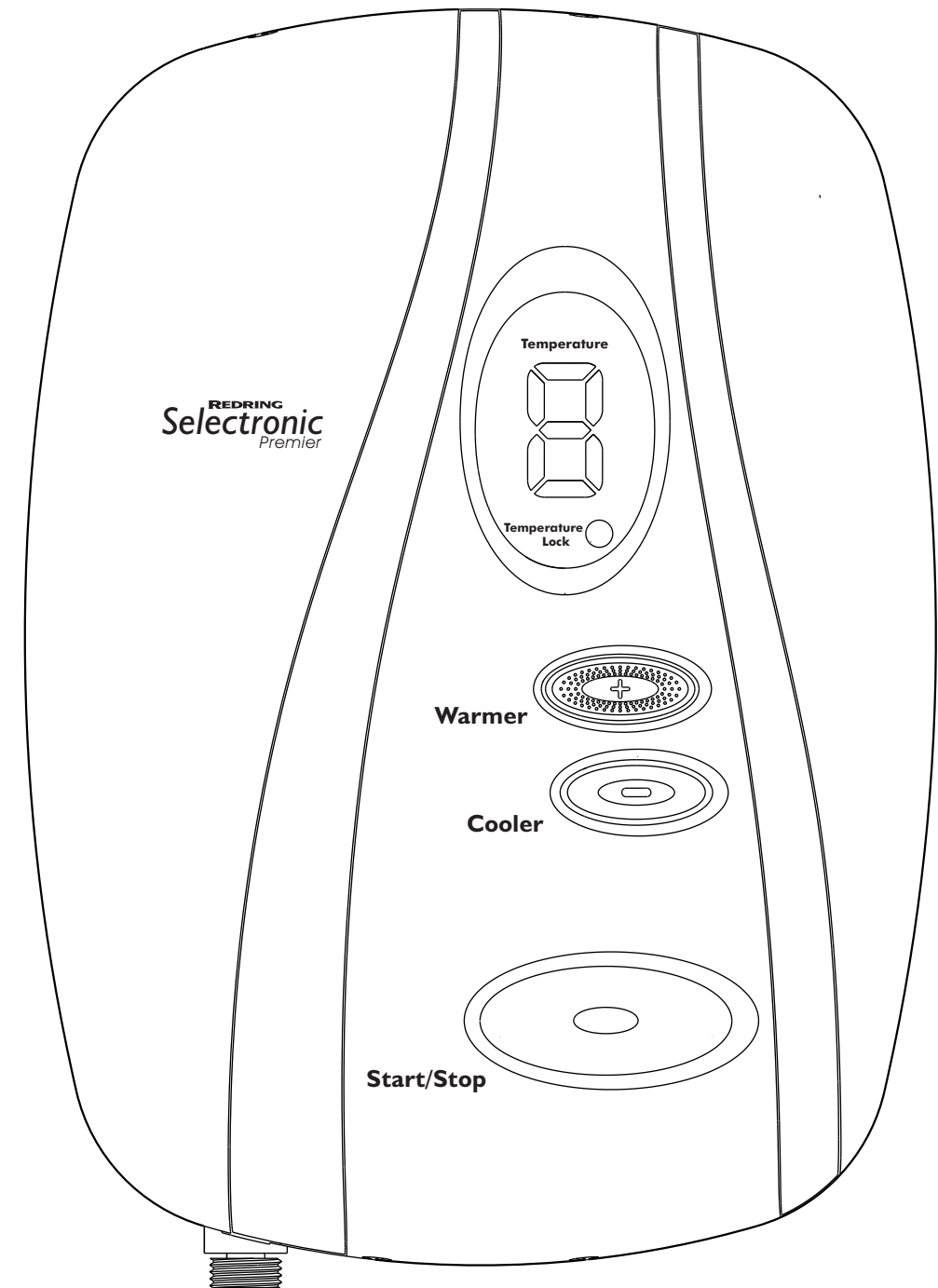
Full details of terms and conditions are available on request from:-



Applied Energy Product Ltd, Morley Way, Peterborough, PE2 9JJ  
Website: [www.redring.co.uk](http://www.redring.co.uk)

# REDRING Selectronic Premier

## Thermostatic Instantaneous Electronic Shower Handbook

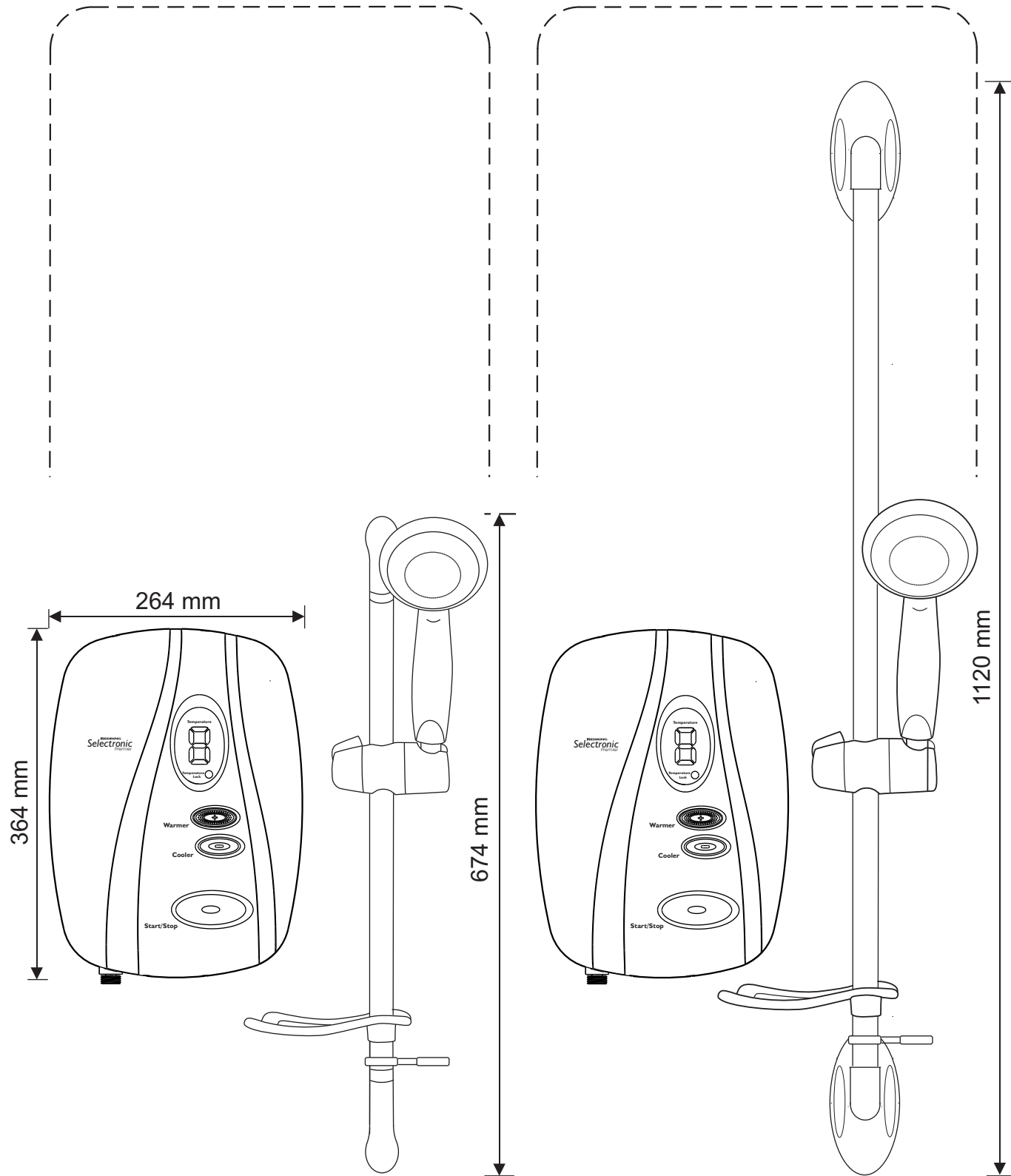


### IMPORTANT

This booklet should be given to the customer after installation and demonstration

**Selectronic Premier**  
*(with 1.25m Hose)*

**Selectronic Premier Plus**  
*(with 2m Hose)*



## Contents

Installer Information;-	Page	User Information	Page
Product Dimensions	2	Product Dimensions	2
Installation Instructions	3	How To Use Your Shower	12
Plumbing Connections	5	How Your Shower Works	15
Electrical Connections	7	Handset Operation	17
Changing The Operation Mode Templock/Normal	9	Routine Maintenance	17
Changing 'DIP Switch' Default Setting	9	Periodical Maintenance	18
Commissioning	11	Trouble Shooting (User)	18
Trouble Shooting (Installer)	19	BEAB Care Wash Scheme	21
BEAB Care Wash Scheme	20	Guarantee	24
Spares	21		

## Installation Instructions

**ALL WIRING AND INSTALLATION MUST BE SUPERVISED BY A SUITABLY QUALIFIED PERSON.**

We recommend that the installation be done in the following sequence: -

- Fix the shower to the wall
- Plumbing
- Electrical connections
- Commissioning

**Warning! Do Not Install The Shower In A Room Where It May Be Subject To Freezing**

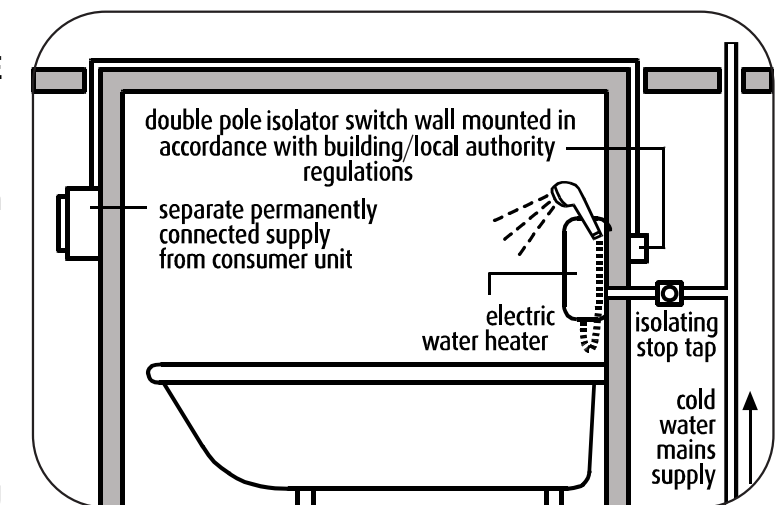
### a) Fix The Shower To The Wall

(To assist, a mounting template is printed on the shower carton - "Selectronic-Plus" only)

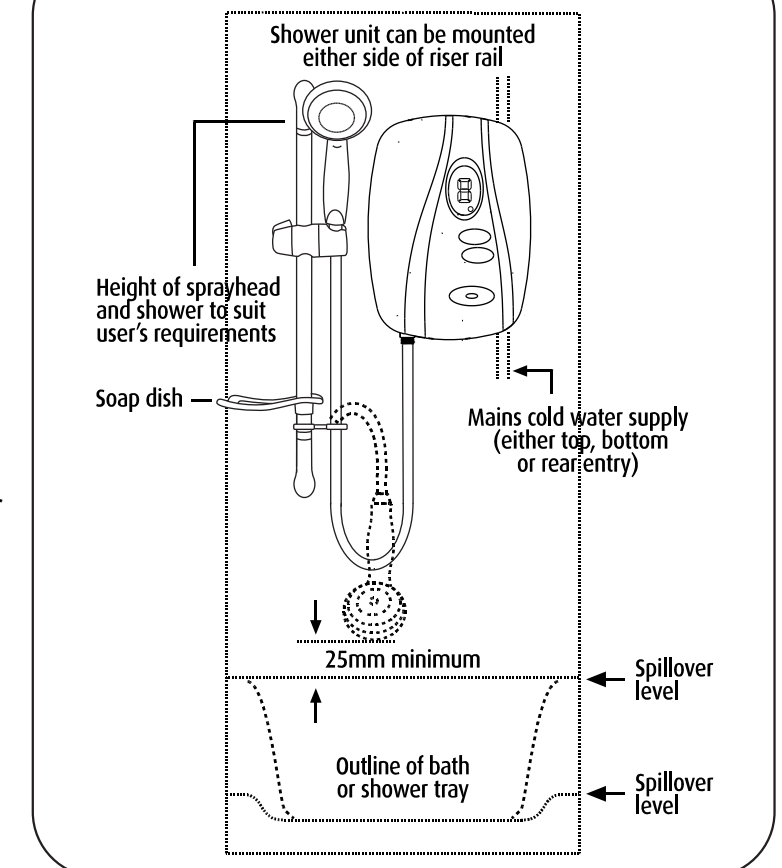
When deciding where to place the unit a few things need to be taken into consideration: -

- The unit must not be mounted directly in the path of the spray from the handset**
- The handset could be used over a sink for hair washing.
- The handset does not come into contact with the used water in the cubicle, bath or basin.  
A hose retainer is supplied with the Accessories (See Diagrams 25 & 26).
- The unit can be mounted at a lower level for less able users combined with optional extended hose and riser rail.  
The installation must comply with BS 8300: 2001. (Design of buildings and their approaches to meet the needs of disabled people. Code of practice). Remembering to Adhere to point 1.
- Choose a flat piece of wall to avoid the possibility of distorting the backplate and making the front cover a poor fit.

A TYPICAL INSTANTANEOUS ELECTRIC SHOWER INSTALLATION



## PRODUCT POSITIONING GUIDE



Remove the four cover screws and lift the cover off.

Remove the four inlet cover screws and remove inlet cover - also the two side access trimplate section screws and remove complete with seal.

Having determined the direction of the inlet water mains supply and cable approach for the installation (Top, Bottom, or Rear or any combination) - it is necessary to remove the appropriate section inserts. See **Plumbing Connections** and **Electrical Installation** sections (Pages 5 and 7) for detailed guidance.

Hold the shower vertically against the wall and mark the top hole first.

Drill the hole to take the rawl plug provided (**taking care to keep dust away from the shower**).

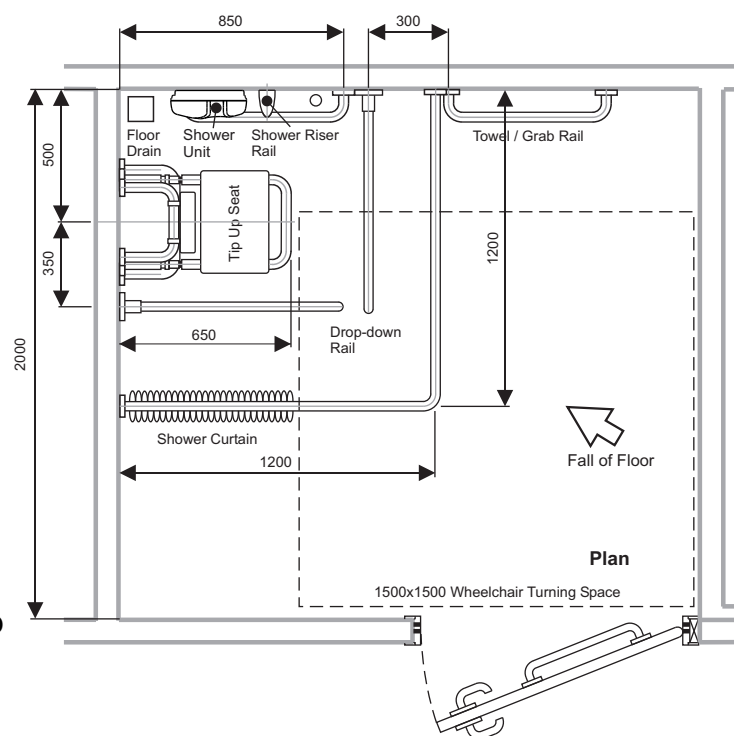
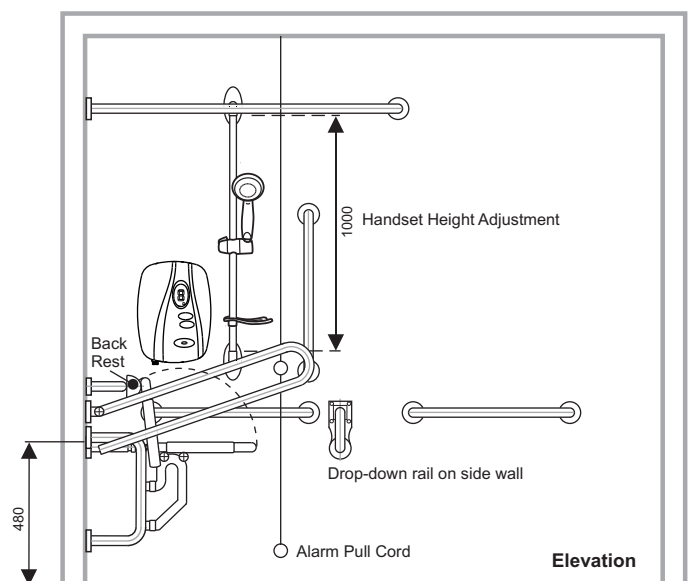
Put the top screw in first leaving it proud by 5mm approximately. The shower can now be hung on this screw.

Position the shower so that it is vertical then mark and drill the other two holes. Then fix the Shower to the wall.

Assemble the accessories as shown in Diagram 25 (or 26 for 'Plus' model Accessories). Fix the riser rail with screws provided. The fixing holes are revealed by removing the plastic fronts.

**Note:** For "Plus model accessories" ensure that the notch in the riser rail is **fully engaged** into the corresponding lug in the wall bracket. This has been made a **firm fit** to aid stability and stop rotation.

## Typical guideline dimensions used for less-abled bathroom installations



All measurements shown are in millimetres. Drawing sizes are not to scale. Shower model shown is a Selectronic Premier Plus.

## Spares (Ring 0844 372 7750 UK ONLY)

Please Note:- The fitting of all spares should be supervised by a suitably qualified person

Part No.	Description	Part No.	Description
93594102	Triac PCB	93594143	Main Logic Board
93594104	Flow Valve Assy (No Outlet)	93594144	Inlet Filter Housing Complete
93594105	Valve Stepper Motor	93594145	Backplate Trimplate
93594117	Flow Transducer	93594146	Backplate Side Section
93594135	Front Cover Complete	93593578	6-Mode Handset
93594136	Heat Exchanger 8.5kW	93797641	1.25m Long Chrome Shower Hose
93594137	Heat Exchanger 9.5kW	93550865	2m Long Chrome Shower Hose
93594138	Heat exchanger 10.8kW	93593522	Wall Bracket Set (Std Models)
93594139	Thermal Cut-Out c/w Cables	93550834	Wall Bracket Set (Plus Models)
93594140	Outlet Connector c/w Temp Sensor	93593526	22mm x 455mm Bright Riser Rail
93594141	Cable/Pipe Entry Set	93550864	22mm x 1m Bright Riser Rail
93594142	PRV Housing Complete	93593580	Height Adjuster Assy

Diagram 25

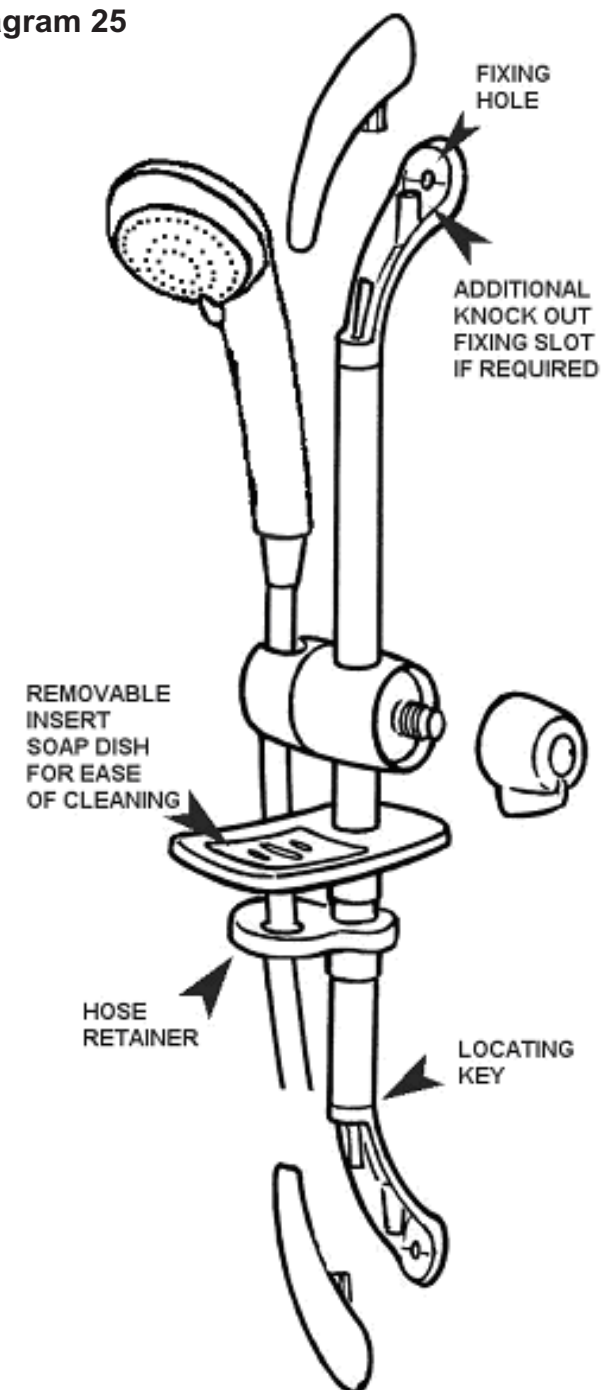
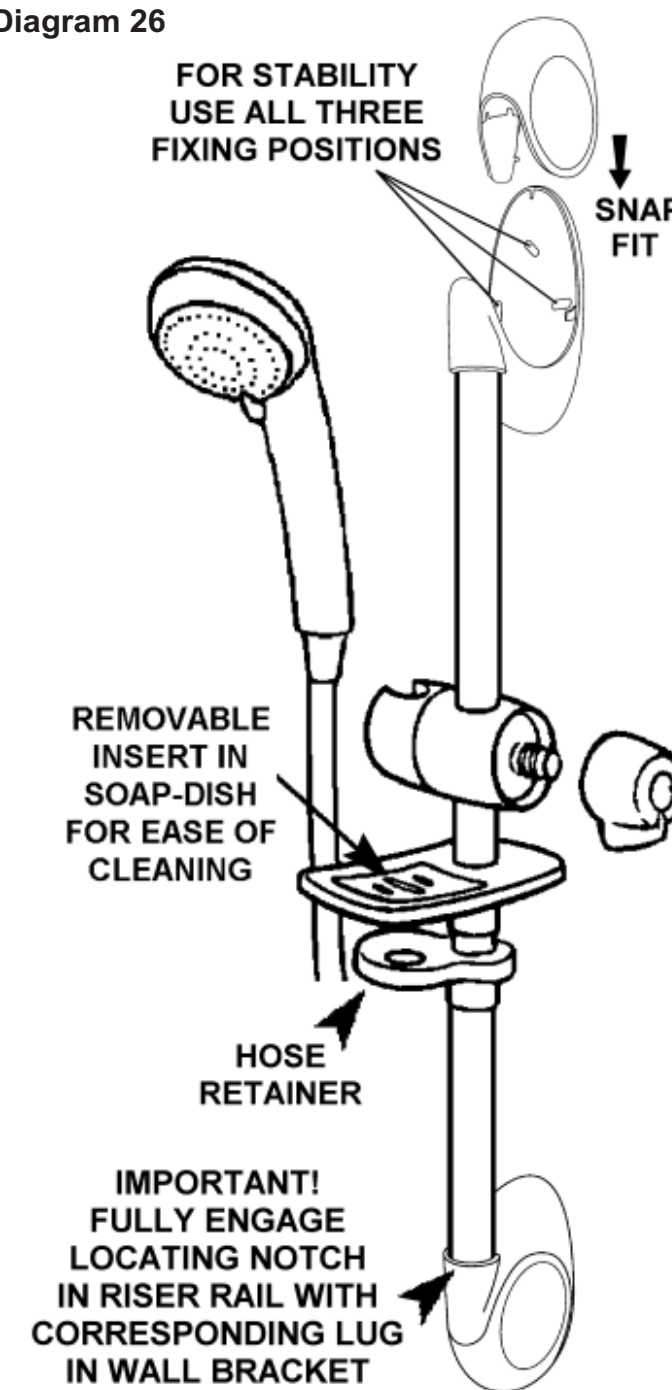


Diagram 26



g) Temperature buttons have a limited adjustment range.	Unit is in Temp/Lock mode. Remove cover and change position of templock switch to '4' (see Diagram 8 for location) or explain feature to user. Note: For Care Wash installations the Temperature Lock Switch <b>MUST</b> be set to 1 or 2.
h) Shower runs for about 5 seconds and then switches OFF by itself.	Flow transducer fault. Check that internal blade "spins" when the water flows: If not, replace transducer.

## BEAB Care Wash Scheme

**Note:** For Care Wash Installations the Temperature Lock Switch **MUST** be set to either **1** or **2**.

For those installations where the BEAB Care Wash Scheme is required please refer to separate handbook "Commissioning, In Service Testing and Maintenance of the Selectronic Premier Shower for BEAB."

## Plumbing Connections

### Plumbing to be carried out before wiring

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

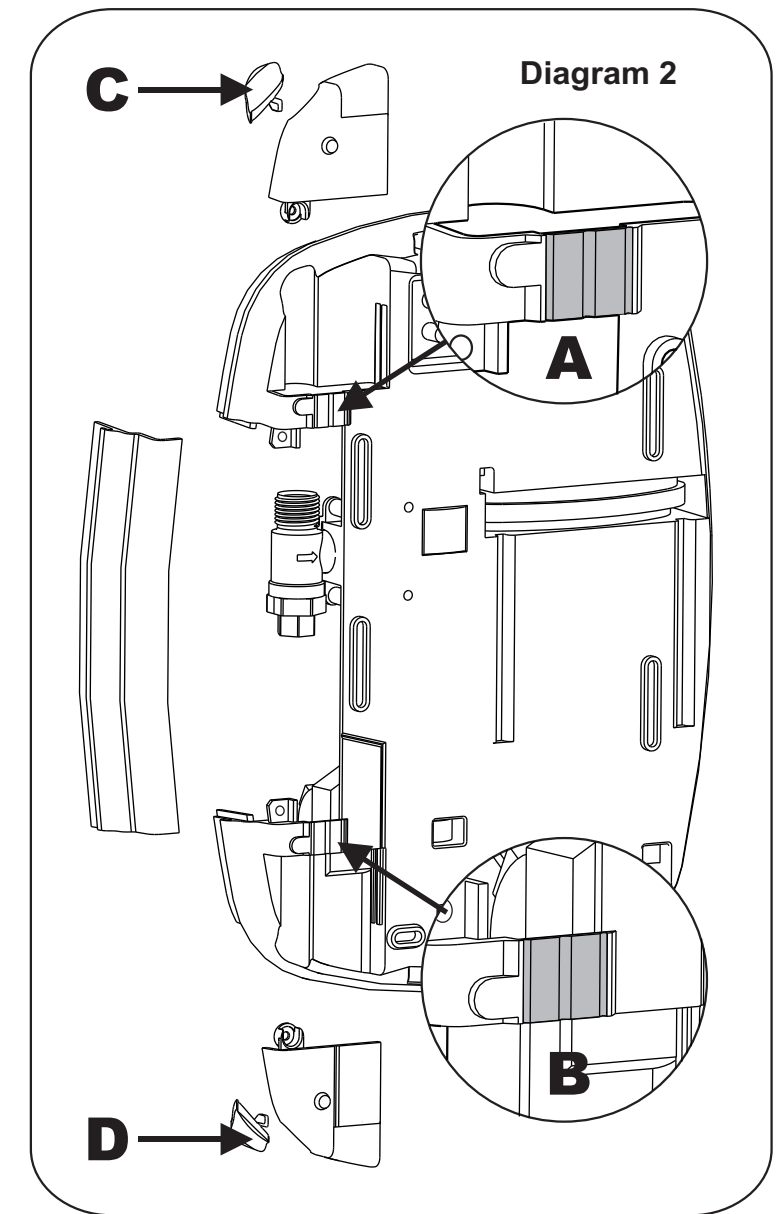
DO NOT solder fittings near the shower unit as heat can travel along pipework and damage components.

Compression fittings **MUST** be used to connect to the inlet of the shower.

**Note:** We recommended that a WRAS (Water Regulations Advisory Scheme) listed isolating valve be fitted between the rising main and the unit. This will allow the unit to be serviced without having to turn off the house water at the stop valve.

The unit can be connected to the mains COLD water supply. This must have a minimum running pressure of 0.07 MPa (0.7bar / 10 p.s.i.) and a maximum pressure of 1MPa (10bar / 145 p.s.i.).

This unit can be fed from a header tank provided this has a minimum head of 7 metres (23ft).



**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.

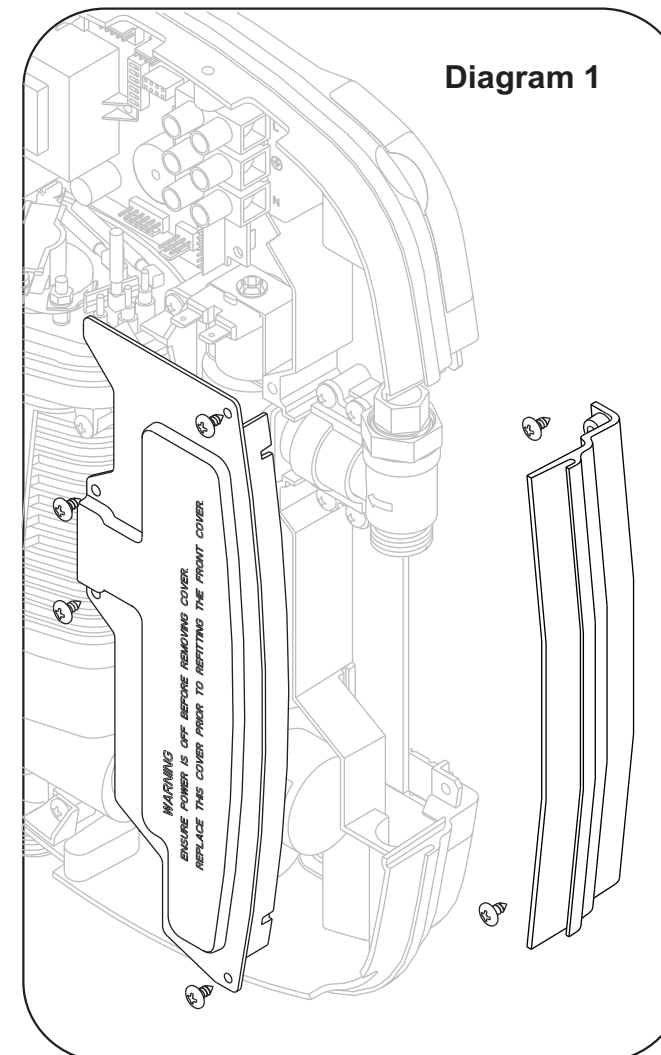
A blockage in the waterways (particularly the spray plate of the handset and solenoid valve) will prevent the unit from working correctly.

The shower is designed to have an open outlet and should **ONLY** be used with the fittings recommended by the manufacture.

### Installation Procedure

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

For ease of access to the inlet fitting the right hand side of the shower has a removable inlet cover. See Diagram 1. Also remove the backplate side access trimplate shown in Diagram 1.

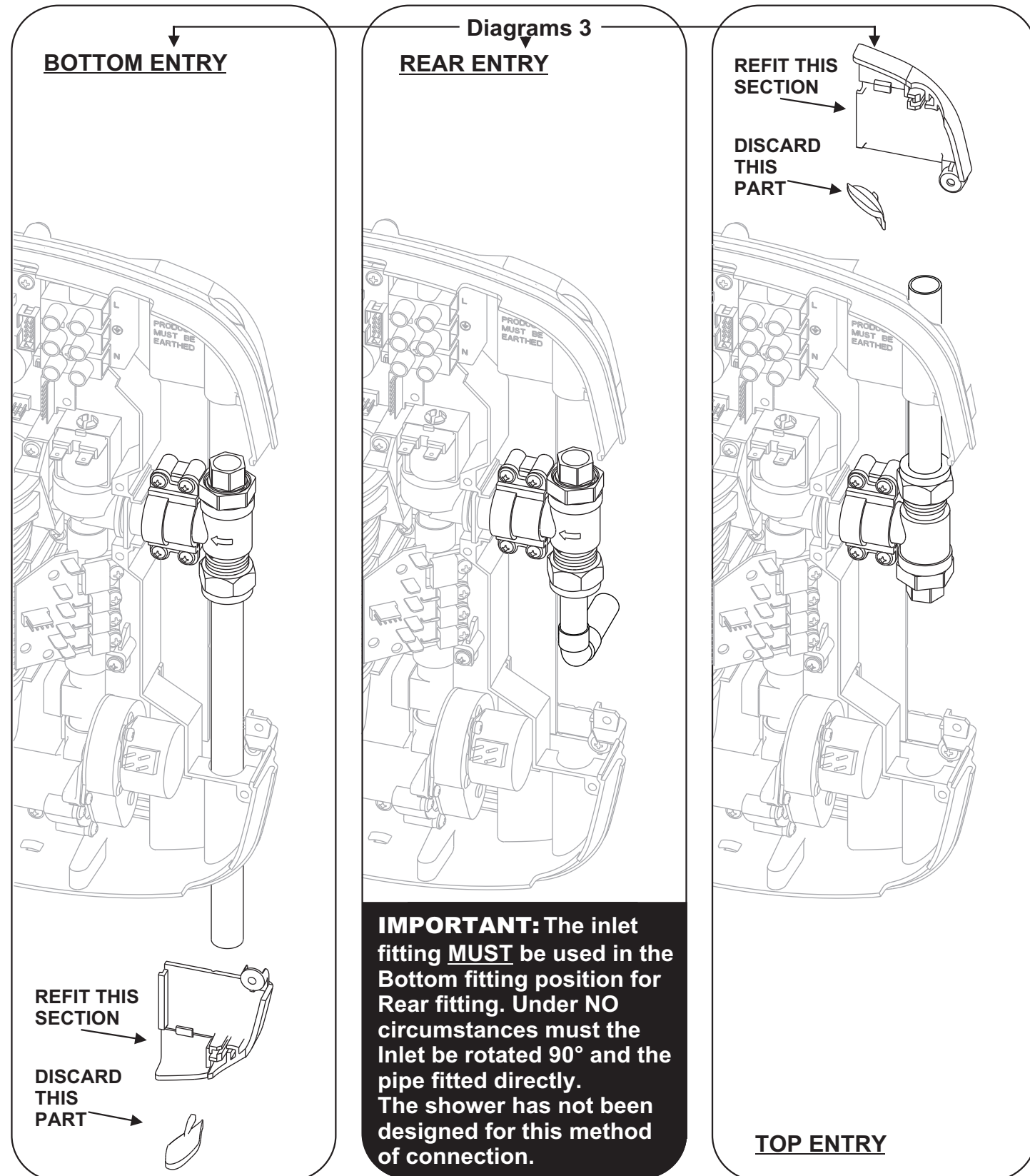


Connect the mains water supply to the Inlet of the shower via 15mm copper, stainless steel or plastic pipe using a 15mm compression fitting. See (Diagram 4) for advice on Rear Entry fitting.

The Inlet fitting is designed to rotate through 180° to allow for either Top or Bottom/Rear entry fitting (See Diagrams 3).

**Installation Note:** The inlet fitting is designed to enter a compression fitting only. DO NOT use push Fit connectors as full engagement cannot be guaranteed. DO NOT use excessive force when making these connections.

**Installation Note:** If installing a water feed pipe from the back, the use of a soldered Elbow Connector is recommended. It should be positioned approximately **87mm from the inlet connector centre**. The centre of the inlet connector to the wall surface is **21mm**.



If these fail to restore the performance you should seek professional help.

The person who installed the shower is probably the best one to repair it and is certainly the person to contact if you have a problem in the guarantee period.

**SELF HELP CHECK LIST**

a) Water too HOT	Press the cooler button. Clean spray plate holes on showerhead.
b) Water too COLD	Press the warmer button (See Page 9 For allowed adjustment range) .
c) Spray pattern poor	Clean spray plate. Select Outer/Inner only.
d) Display behaves erratically	Switch OFF electricity at ceiling/wall isolating switch, wait a few seconds, switch on again. (Note: The shower should be switched OFF each time after use at the ceiling/wall isolating switch.
e) Water does not flow when START/STOP button is pressed. Lights ON. "o" and "t" flashing in display. No lights.	Note: If there is no water flowing then the shower will automatically switch OFF after about 5 seconds. Check the water supply is turned ON. Unit in over temperature mode see section on "purging". Check ceiling/wall isolating switch is ON. Check power is ON.
f) Warmer/Cooler buttons do not function.	Temperature range may be limited by Temp/Lock setting setting (See Page 9)
g) Unit makes a whirring noise, especially at the start of the shower session.	This is normal. There is a motor inside the shower used to adjust the flow and this always operates at the start of each shower.

**PROFESSIONAL SERVICE CHECK LIST**

This additional checklist is provided for the benefit of the qualified service representative.

**WARNING! Switch Off The Electricity At The Isolator Before Removing The Front Cover To Make Checks.**

a) Poor temperature control.	Check inlet/outlet thermistors to see if they are in circuit. Check for blockage in the inlet filter.
b) Water too COLD	Check circuit through thermal cut-out. Check circuit through all 4 elements. Test should be done using a low voltage resistance meter whilst the power is switched OFF at the isolating switch. Check working voltage.
c) Poor or no control over water flow.	Replace inlet valve assembly.
d) No water when START/STOP button is pressed.	Check water supply. Check circuit through solenoid coil. If OK replace logic PCB.
e) Unit has been switched OFF using START/STOP button but can be heard heating the water.	Replace triac PCB.
f) Pressure relief valve operated.	Check for cause of high pressure and remove it. Replace pressure relief valve. (Not covered under Guarantee).

After use it is normal for some water to drip from the spray head for a few moments. This helps prevent scale build up over prolonged use.

### Shower Accessories :-

It is recommended that as well as checking the showerhead as detailed above, the shower unit, riser rail, hose etc. be cleaned using a soft cloth and that the use of abrasive or solvent based cleaning fluid be avoided, especially on any plated finishes.

We recommend that before any cleaning, the isolating switch be turned off, thus avoiding accidentally switching on the shower.

**You Must Regularly Inspect The Shower Hose For Wear And Damage. Replace If Necessary, Or Every Two Years, With Our Approved Part.**

### Periodical Maintenance

#### 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.

**WARNING! Switch OFF the electricity at the isolating switch and the water supply at the mains before removing the cover.**

The inlet filter is situated inside the water inlet fitting (See Diagram 24).

To gain access to the filter remove the cover and right hand trim plate. When removing the cover be careful that you **DO NOT** tug the flying lead from the PCB which is attached to the cover. Disconnect the flying lead from the reverse of the front cover.

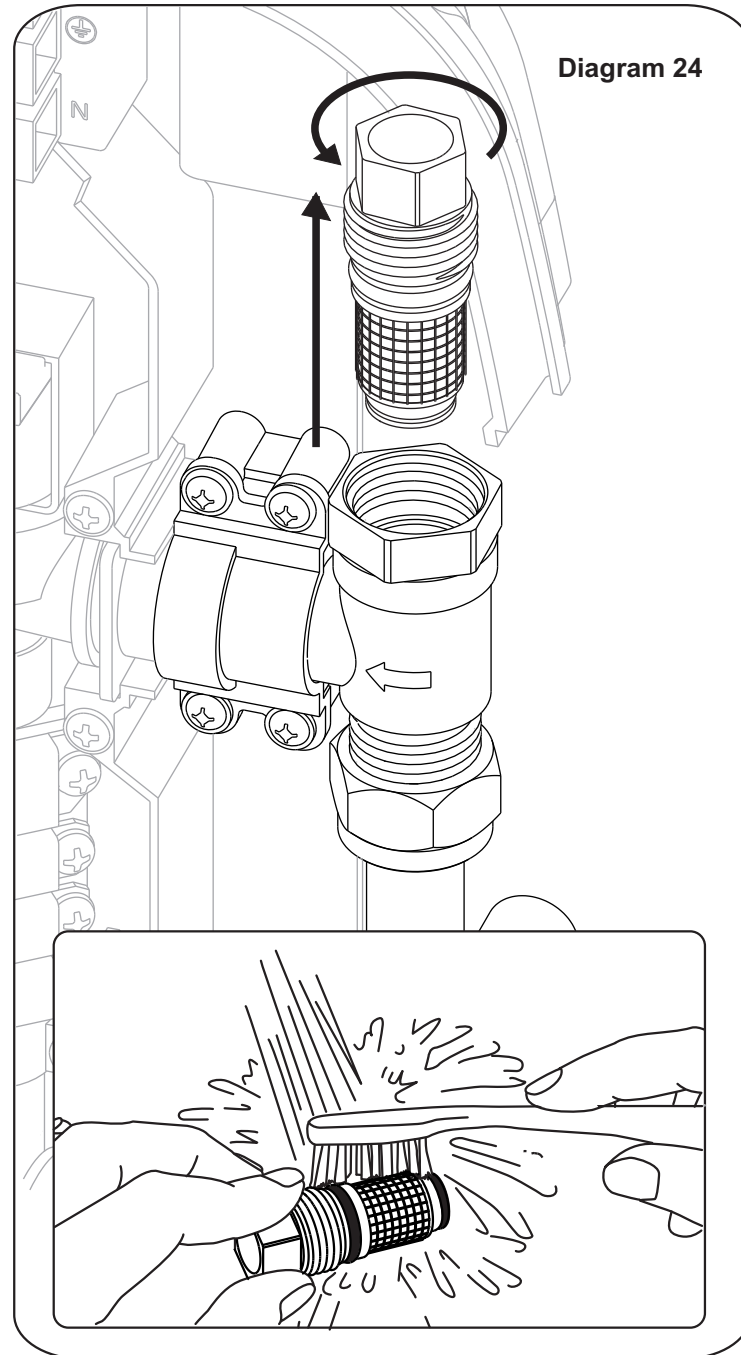
Holding the filter body with a spanner across the flats, unscrew the top cap on the water inlet fitting using another spanner.

Inspect the 'O' rings on the filter body for any damage when removed from the inlet assembly.

When cleaning the filter, **DO NOT** use a sharp object, as it will cause damage. It is preferable to use an old toothbrush or similar

Do not remove the filter mesh from the body and clean whilst still in position.

Refit the filter making sure it is screwed fully home. Do not over tighten the filter cap on reassembly.



### Troubleshooting

If the performance of the shower deteriorates in service, follow the checks in the "Self Help" table below before calling out the contractor. Any one of the simple adjustments could restore the performance.

If you are replacing an earlier model of the Redring Selectronic you will need to remove the appropriate backplate section subject to whether the mains water plumbing approach is either top or bottom entry. See Diagram 2 - Options 'A' or 'B'.

For surface mounted Top entry for plumbing remove and discard section 'C' and for the Bottom entry option do likewise with section 'D'.

Make sure the backplate is square on the wall and tighten the 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.

**IMPORTANT:** Using a suitable sealant, always seal around the incoming pipework through the wall to prevent water entering the wall.

**WARNING! The outlet of the shower acts as a vent and MUST not be connected to anything other than the Hose and Showerhead supplied or approved by the manufacturer**

### Electrical Connections

The electrical installation must be in accordance with the current BS7671 (I.E.E. wiring regulations) and "Part P" of the Building Regulations and/or local regulations.

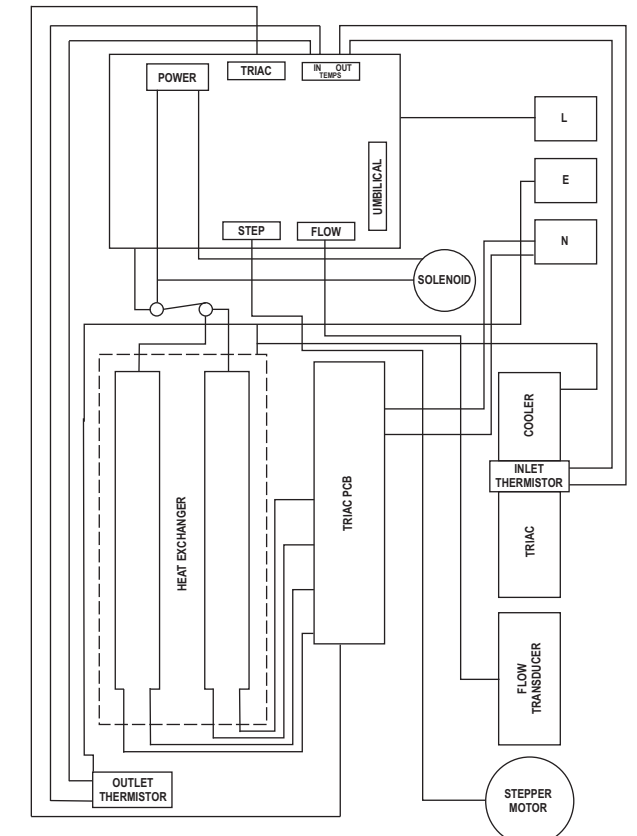
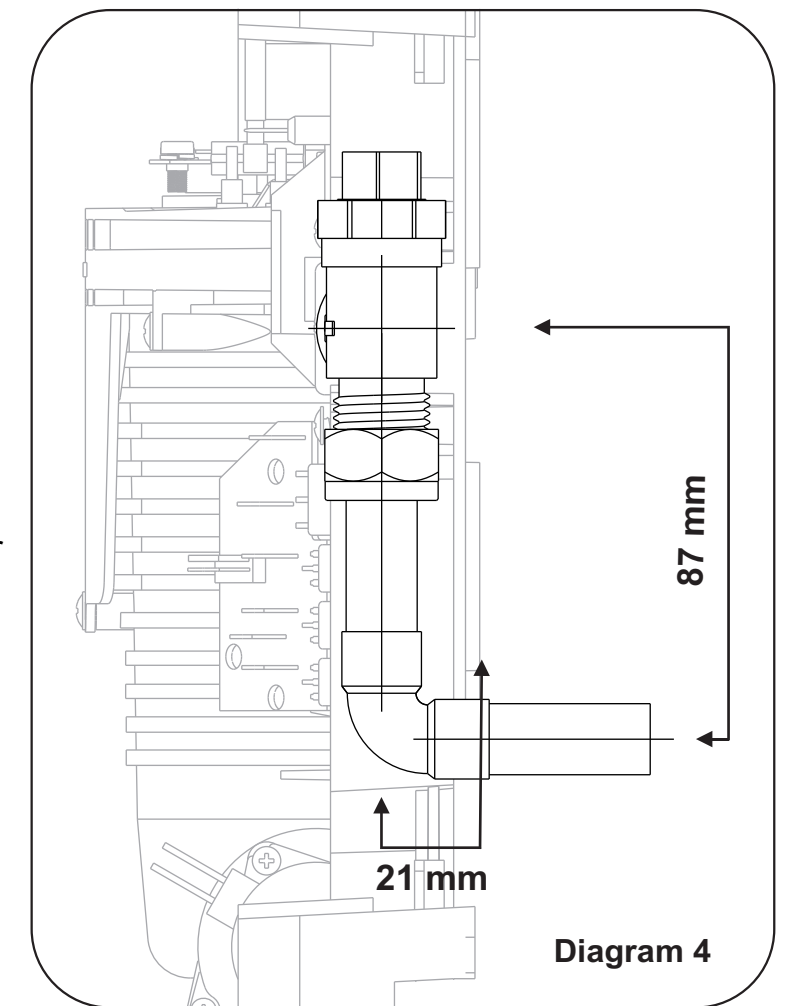
The unit is designed for a single phase 50 Hz a.c. electrical supply.

Please check the rating plate on the unit to see what details apply to your unit.

A means for disconnection in all poles **must be** incorporated in the fixed wiring in accordance with the wiring rules. **We recommend ceiling switches.**

The cable size required is determined by the kW rating of the shower and the distance between the shower and the consumer unit. The table on Page 8 is for **guidance only** in choosing the correct cable for your installation.

If on installation it is the intention to use YT2 conduit trunking to conceal the surface electrical cable to either the Top or Bottom



Wiring Diagram

entry points then the following backplate component will need to be discarded allowing for the conduit to fit into the backplate. See Diagram 5 - Option 'E' or 'F'.

CIRCUIT PROTECTION		
Unit Rating	MCB	Cartridge Fuse
8.5kW	40A	45A
9.5kW	40/45A	45A
10.8kW	45A	45A

Twin and earth PVC insulated cable Current carrying capacity		
Installed in an insulated wall	In conduit trunking	Clipped direct or buried in a non-insulated wall
6 mm <sup>2</sup> 32A	6 mm <sup>2</sup> 38A	6 mm <sup>2</sup> 46A
10 mm <sup>2</sup> 43A	10 mm <sup>2</sup> 52A	10 mm <sup>2</sup> 63A
16 mm <sup>2</sup> 57A	16 mm <sup>2</sup> 69A	16 mm <sup>2</sup> 85A

**Note:** Cable selection is dependent on derating factors

If the installation requires the use of 10mm<sup>2</sup> or 16mm<sup>2</sup> cable up through the Bottom Entry option, then you will need to remove the appropriate backplate section 'G' shown in Diagram 5.

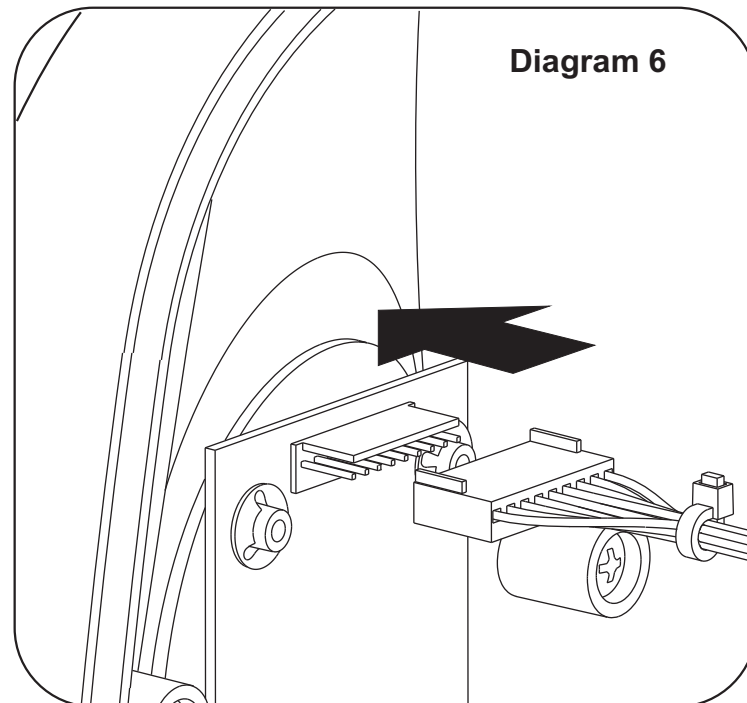
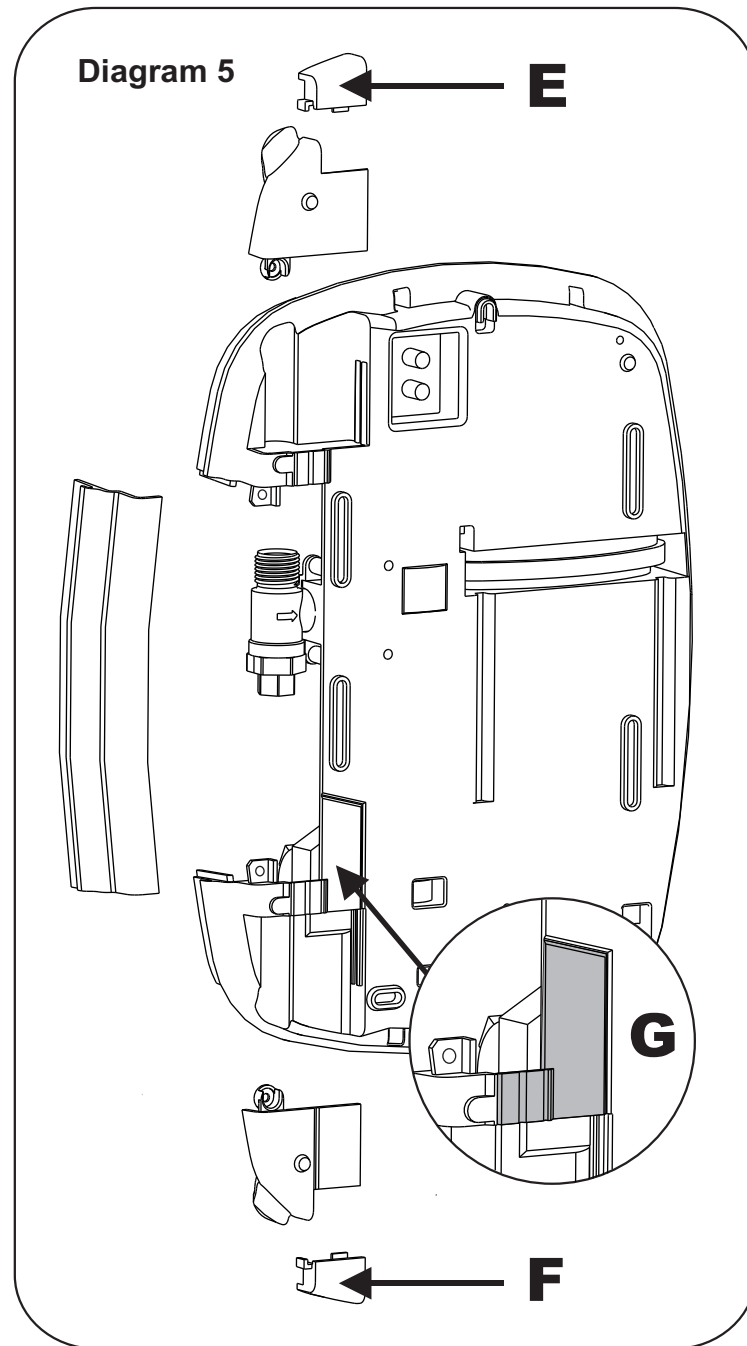
The cable connected to the appliance must be fixed wiring, and should be stripped back as shown in Diagram 7

Connect the cable to the terminal block. Ensure that all the retaining screws are **VERY** tight and that no cable insulation is trapped under the screws.

**Warning! Failure To Comply With These Instructions Could Result In A Failure Of The Terminal Block.**

**Warning! This Appliance Must Be Earthed**

Replace the inlet cover and side access trimplate section complete with seal.



## Handset Operation

There are a number of defined spray plate setting modes (patterns) adjustable by rotating the spray plate (see Diagram 23).

These modes (patterns) have a positive click to identify them.

The spray plate rotates through (360°) in either direction to change the spray pattern.

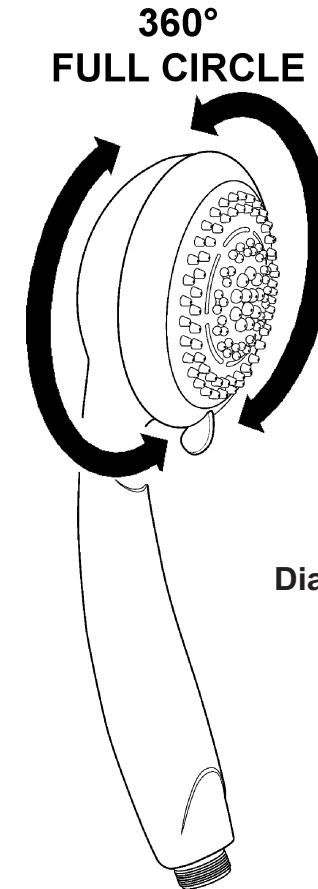
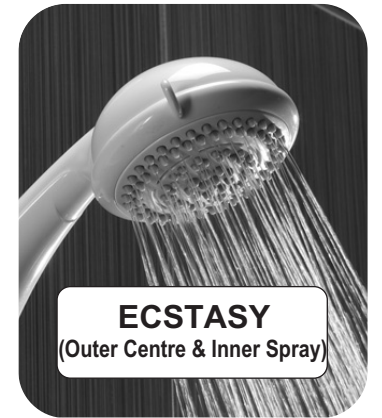


Diagram 23



## Routine Maintenance

**Handset:-**

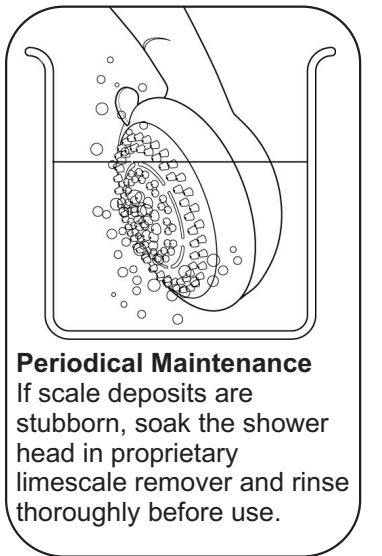
**In Order To Maintain The Performance Of Your Shower You Must Clean The Shower Head Regularly.**

All water contains particles of lime-scale, which build up in the showerhead and unit reducing the performance.

It is therefore important to clean the showerhead by simply rubbing the rubber nozzles or soaking in proprietary lime-scale remover and rinsing thoroughly before use.

The frequency of this will vary from weekly to quarterly depending on the water hardness and experience.

In some winter conditions, when the incoming mains water is particularly cold it may be necessary to select the inner or outer spray pattern only; this will ensure correct operation of the shower with a slightly lower water flow rate.





5. A stabiliser is built into the flow valve to automatically compensate for small fluctuations in water pressure that frequently occur in households.

There are three further controls to cater for exceptional reductions in water pressure to prevent the shower from getting too hot.

a) If the flow of water is less than 1.0 l/min the power to the elements is switched off, but the solenoid valve remains open allowing water to flow through the shower.

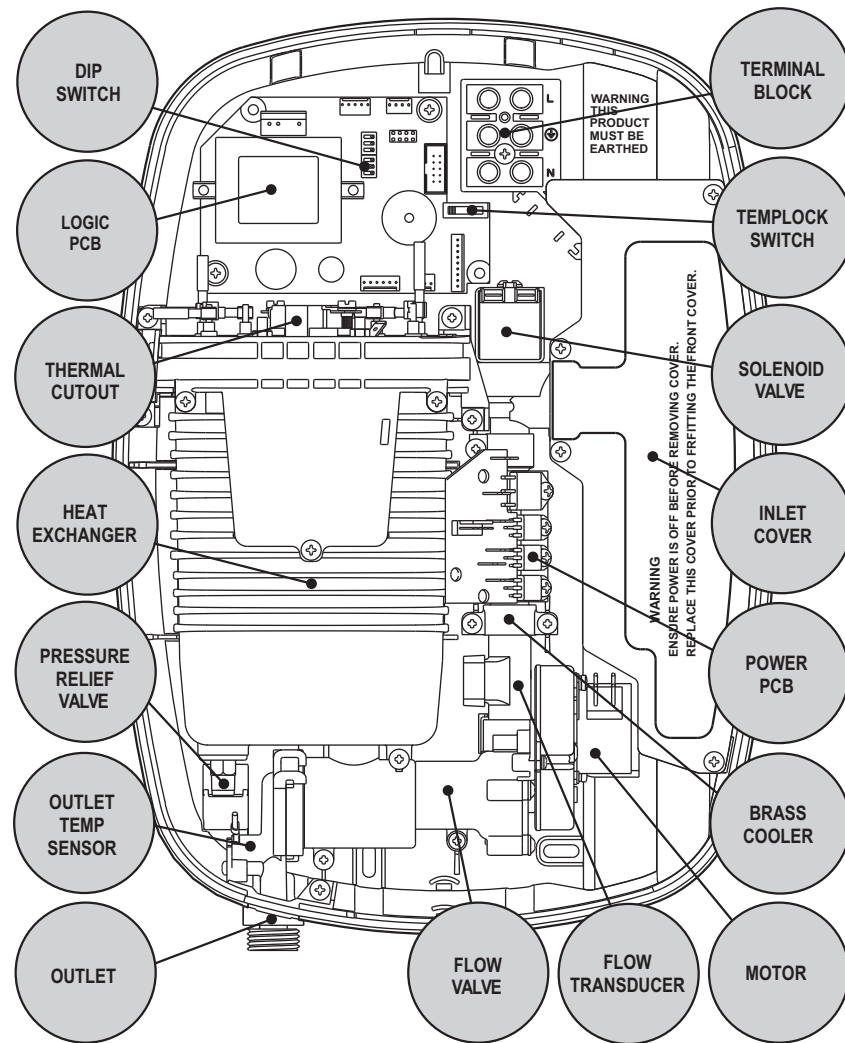
b) If the outlet temperature sensor senses an excessive temperature the flow of water and the heating elements will automatically switch off. The electronics will signal over Temperature condition (see "over temperature shutdown" section).

c) A two stage mechanical thermal cut-out is mounted on the top of the heat exchanger independent of the electronics.

Stage one switches the power off to the elements if it senses an excessive temperature. The switch operates with an audible click and will reset if cold water is run through the shower.

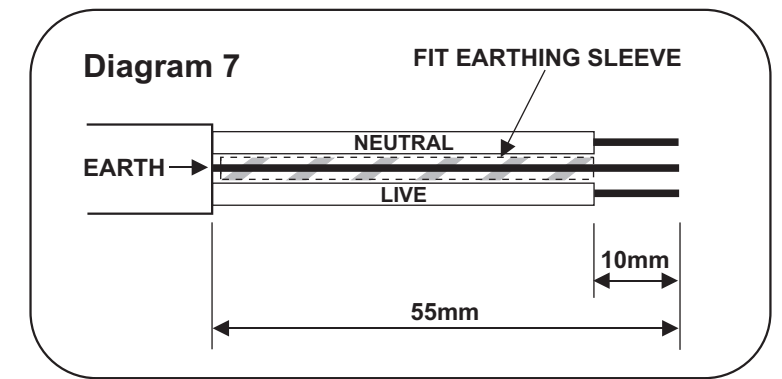
Stage two only operates if an extreme temperature is sensed. The cut out will permanently switch off and it will then have to be replaced.

6. A pressure relief device is fitted to safeguard against abnormal pressure conditions, and provides a level of appliance protection should an excessive build of pressure occur within the shower. If this operates a replacement part will be required.



**IMPORTANT** Connect flying lead from PCB to rear of the front cover - see Diagram 6.

Replace the front cover and fasten in position with four screws.



### Changing The Operating Mode Templock/Normal

**WARNING!** Switch OFF the electricity at the isolating switch before removing the cover.

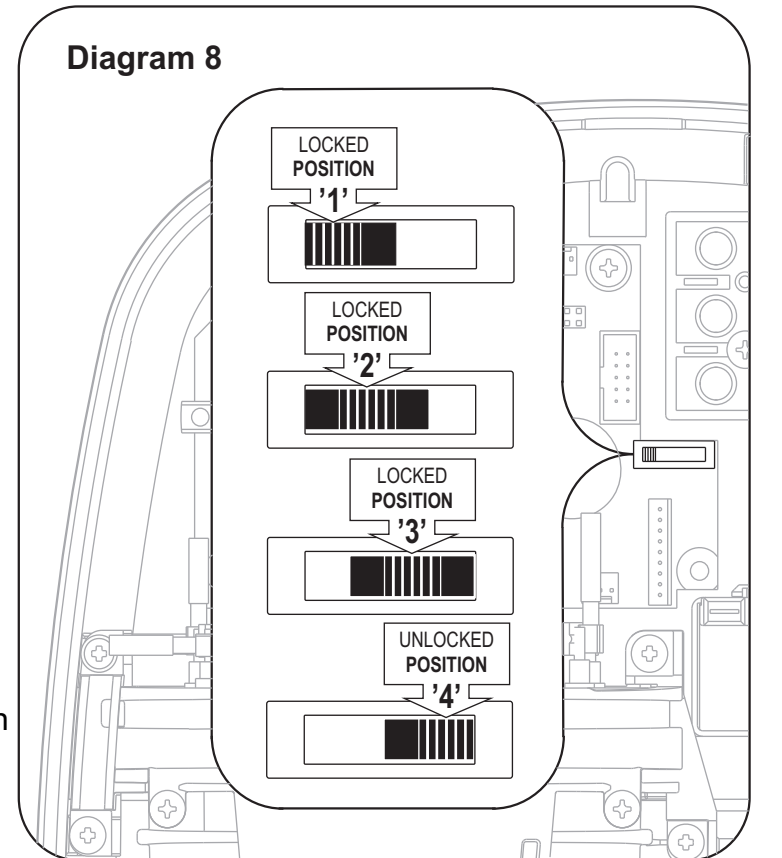
On the extreme right hand side of the PCB mid way up is the '4 Way Temp Limit Slider Switch' (See Diagram 8).

**PLEASE NOTE!** The Selectronic Premier is factory set with the 'Temp Limit Slider Switch' set at 'Locked Position 1'.

After the unit is commissioned, you have the option of choosing from any of three different lockable temperature settings plus normal operation position from left to right.

Remove the front cover taking care not to strain the flying lead.

Change the switch to the desired temperature control position.



	Locked Position 1 (Extreme Left)	Locked Position 2 (First 'Click' from the Extreme Left)	Locked Position 3 (Second 'Click' from the Extreme Left)	Unlocked Position 4 (Extreme Right)
Temperature Adjustment Range	34-40°C Nominal	34-41°C Nominal	34-43°C Nominal	25-46°C Nominal

Replace and refasten the front cover.

Switch on electricity. Check that the unit operates correctly.

**PLEASE NOTE!** The Temperature Lock light on the front cover of the shower will not illuminate if Normal Position 4 has been selected.

### Changing 'DIP Switch' Default Setting

**WARNING!** Switch OFF the electricity at the isolating switch before removing the cover.

On the PCB directly to the left of the transformer there are two sets of vertically arranged 'DIP Switches' (See Diagram 9) The top set of 3 are **NOT TO BE CHANGED** they are used for the shower software configuration.

The second set of 3 mounted directly below are 'Shower Control Feature Setting Options' and can be set to suit the requirements of user. The function and options for each 'DIP Switch' are shown below:-

	Position '0' (Switch to the Left)	Position '1' (Switch to the Right)
<b>DIP 1:</b> Flow Optimiser Switch	Fixed Flow	Maximise Flow
<b>DIP 2:</b> Start-Up Temperature Setting	Preset Start-Up	Previous Setting
<b>DIP 3:</b> Maximum Flow Limiter	Flow Limited to 6 l/m max	Flow Limited to 9 l/m max

**PLEASE NOTE!** The Selectronic Premier is factory set with the 'DIP Switch' set as follows:-

- 1 at '0' (Fixed Flow)
- 2 at '0' (Preset Start-Up)
- 3 at '0' (Flow Limited to 6 l/m Max).

**DIP 1:-** This is used to select "Eco Power Save".

**Fixed Flow =**

With the 'DIP Switch' pushed to the left the shower will save power. As the temperature is reduced, the shower will use less power (Eco Power ON).

**Maximise Flow =**

When the 'DIP Switch' is pushed to the right the shower will use maximum power at all temperature settings (Eco Power OFF).

**DIP 2:- Preset Start-up =**

With the 'DIP Switch' pushed to the left the shower will start up at a preset temperature every time it is used.

The start up temperature depends on The setting of the 'Temp Lock Switch'.

- a) When set to 1 the start up = 40°C Nominal (Digit 5 on front cover display)
- b) When set to 2 the start up = 41°C Nominal (Digit 6 on front cover display)
- c) When set to 3 the start up = 43°C Nominal (Digit 8 on front cover display)
- d) When set to 4 the start up = 41°C Nominal (Digit 6 on front cover display)

**Previous Setting =**

With the 'DIP Switch' is pushed to the right the shower will start up at the same temperature as the last time the shower was used. E.g. If the shower was set to Digit 4 (39°C) when it was switched off, then it will start up at Digit 4 the next time it is used.

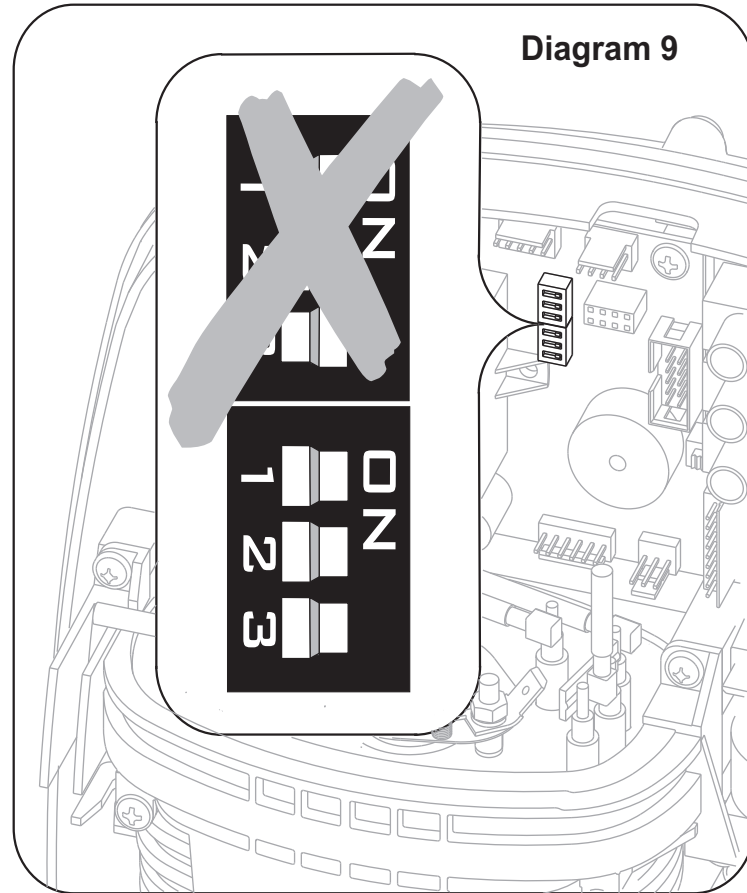
**DIP 3:-** This is used to select "Eco Water Save"

**Flow Limited to 6 l/m max =**

When the 'DIP Switch' is pushed to the left the shower will prevent high water flow rates. The shower will not supply water at a flow rate greater than 6 l/m (Eco Water Save ON) Temperature unaffected. This selection meets the 'Sustainable Home' water consumption requirement per person for showering.

**Flow Limited to 9 l/m max =**

When the 'DIP Switch' is pushed to the right the shower does not restrict the flow rate. The shower is capable of supplying water at a flow rate greater than 6 l/m 'DIP Switch' (Eco Water Save OFF).



bleep several times and the display will change to "t" (See Diagram 21).

In order to stop the shower automatically switching off, press either the warmer or cooler button.

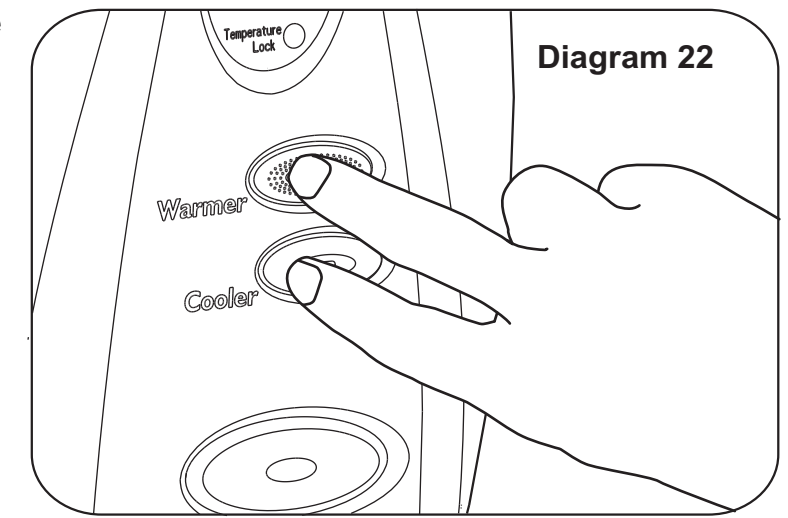
**Temperature Lock Override**

**Note:** For Care Wash installations the Temperature Lock Switch **MUST** be set to ON (Templock Position 1 or 2) and must not be overridden.

The temperature lock feature can be overridden, while the shower is running, by **pressing the warmer and cooler buttons together** for more than **three seconds** (See Diagram 22).

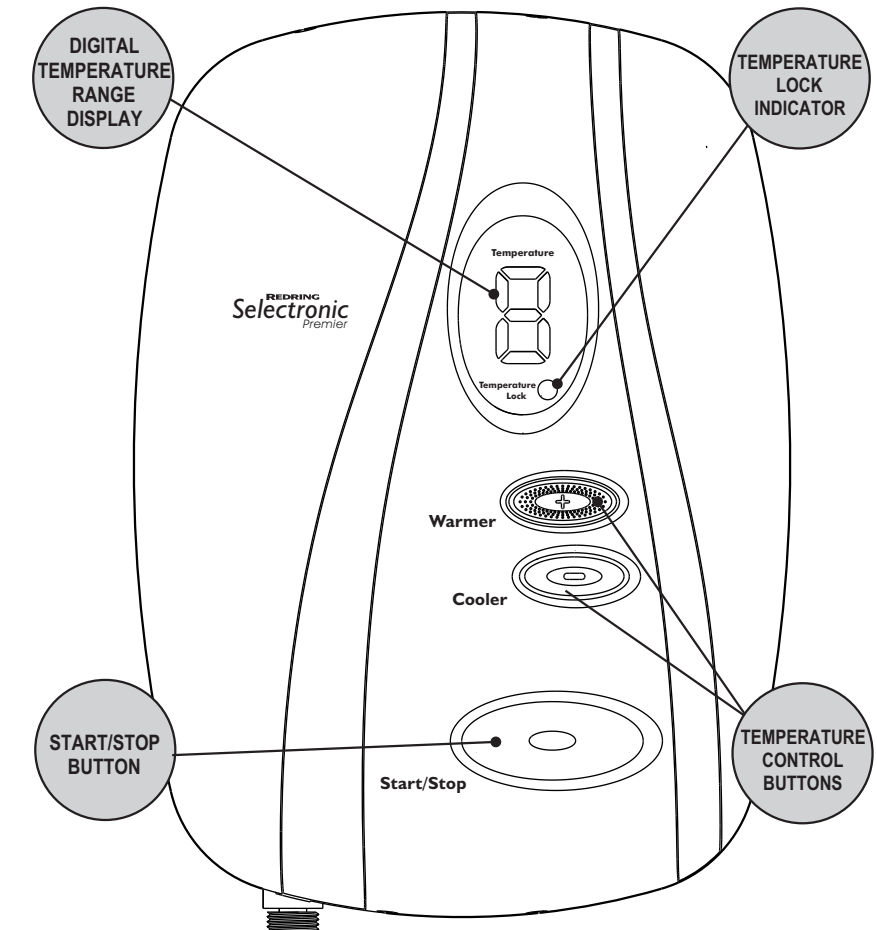
The shower will revert back to normal operation (Unlocked).

However, it will return to temperature lock mode the next time it is used.



**How Your Shower Works**

1. Water is heated instantaneously as it flows over the heaters in the heat exchanger assembly.
2. The thermostatic shower automatically adjusts the power to the heating elements and flow of water to achieve the selected water temperature. The electronics senses the incoming water temperature and the flow of water through the heat exchanger. It then works out how many heaters to switch on so that the shower temperature matches the temperature selected by the buttons.
3. The amount of hot water available at the selected temperature is limited by the total power of the heater. The ideal flow rate is calculated and adjusted automatically.
4. The water is turned on and off by the solenoid valve built into the Shower.



## Over Temperature Shutdown

If an abnormal condition occurs which causes the water to get too hot.

The **unit will automatically shutdown straight away and the water will stop flowing**. This is to prevent any hot water coming out of the handset.

This is indicated by **8 short bleeps** and the display flashing a lowercase “o” and then “t” (see Diagram 18). This will continue until the water is at a safe temperature. The unit will then switch off automatically and will need to be restarted in the normal way (see “normal operation” section)

It can take a long time for the unit to reach a safe temperature. To speed this temperature reduction up, the **hot water can be purged** from the unit.

## Purging

While the unit is in “o” (Over) “t” (Temperature) shutdown mode. **Press the cooler button for more than 3 seconds**. (See Diagram 19)

This will switch the water on **ONLY** while the button is pressed.

## Caution!!

**Water Will Be Hot stand clear** of the spray from the handset.

Keep pressing the button the unit will then **switch off automatically with 3 short bleeps** when a safe water temperature has been reached.

## Temperature Lock Operation

This mode is **selected on installation** to prevent the temperature being set too Hot or too Cold. See section in ‘Changing the Operating Mode’ Page 9.

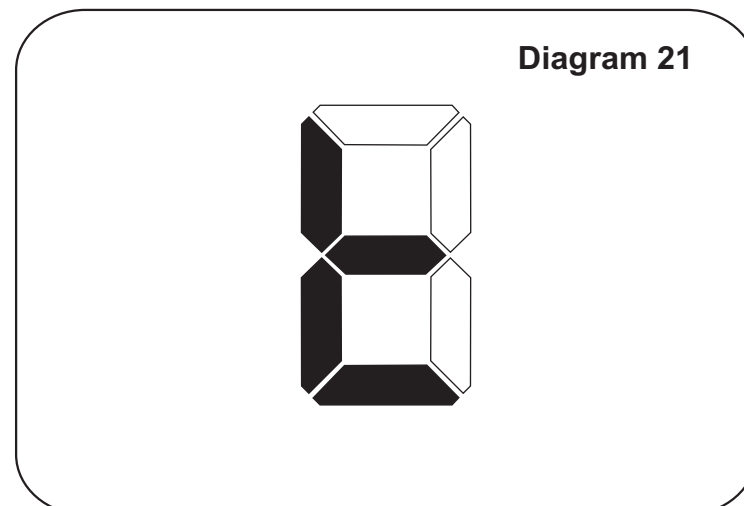
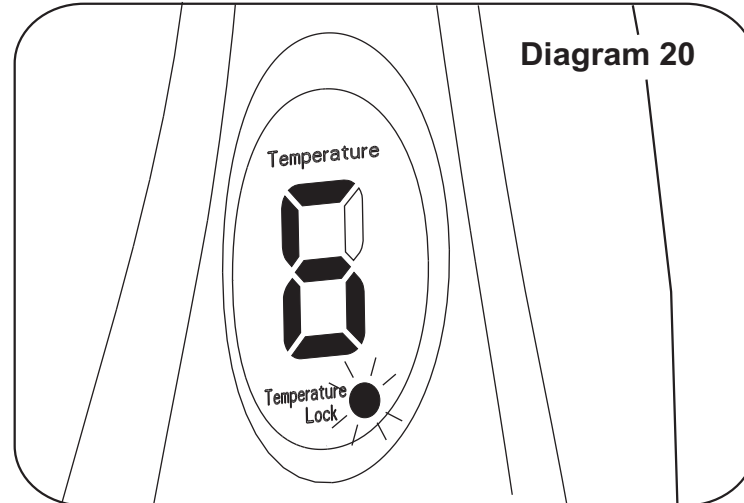
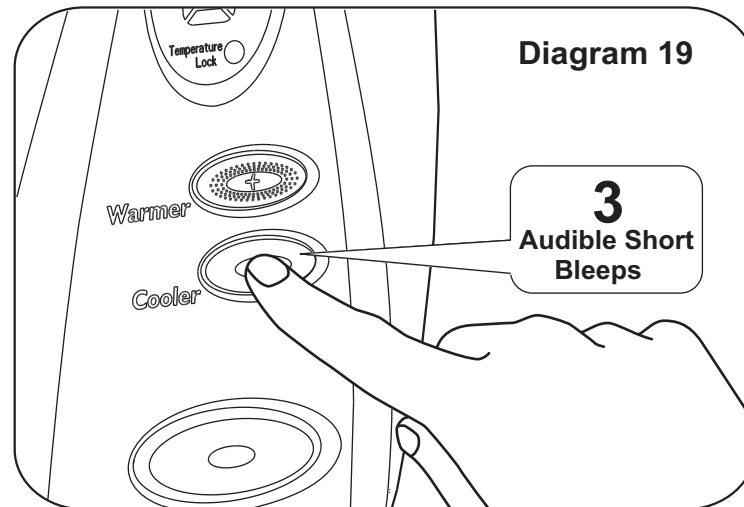
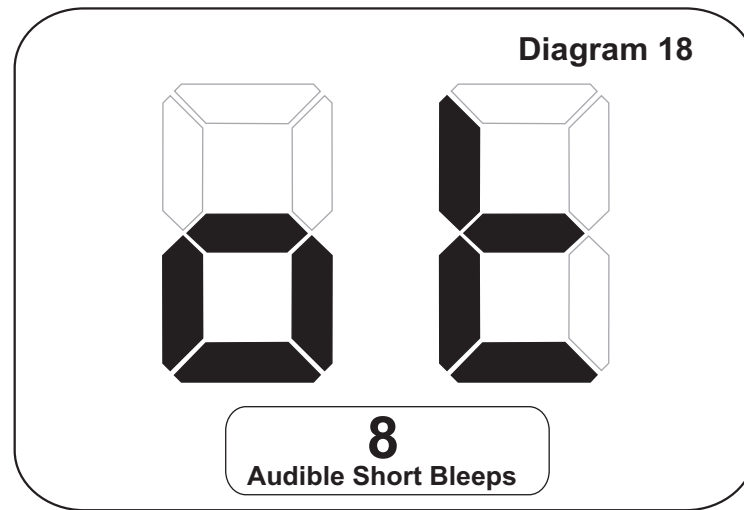
All the controls are the same as previously described.

However, the **warmer and cooler** adjustment is **locked** to the digit range (Shown in table on Page 9) and the temperature lock light will come on (See Diagram 20).

## Automatic Switch Off

With temperature lock selected, the shower will automatically switch off after 30 minutes.

Near the end of the 30 minutes the shower will



## Commissioning

Ensure the water and electricity are switched on to the unit.

Press and hold the **Cooler button** until confirmed with **one audible short bleep**. See Diagram 10

The digital display will illuminate with a capital “C”. See Diagram 11

If the button does not respond, ensure that the flying lead from the PCB has been connected to the front cover. See Diagram 6

Allow the unit to fill and wait for the water to come out of the handset then press the Stop/Start button turning the shower OFF (Confirmed with **three audible short bleeps**). See Diagram 12

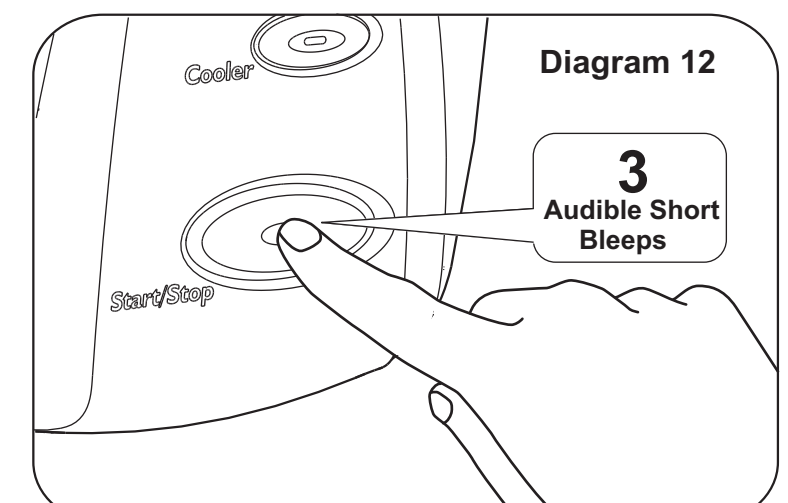
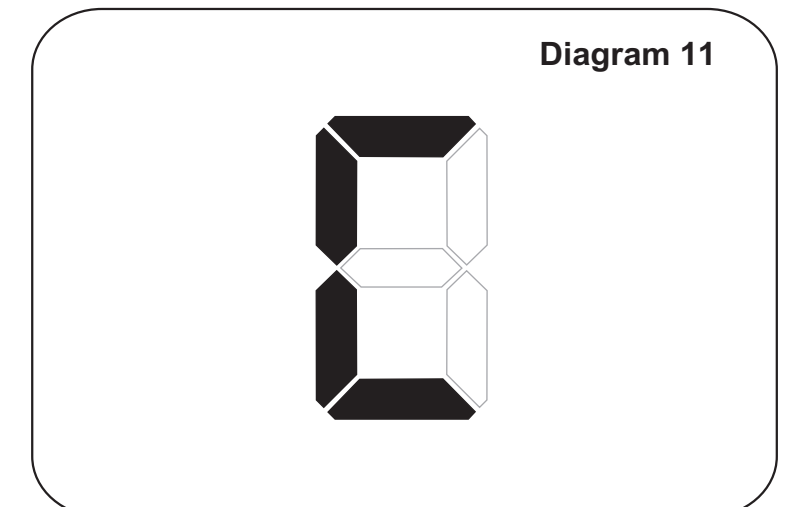
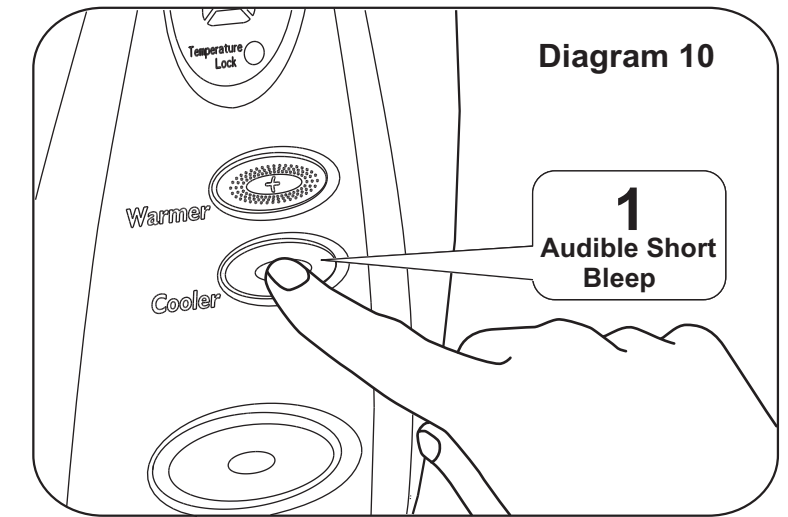
Re-start - **Press Start /Stop Button in the centre**. (Confirmed with a **single bleep**) See Diagram 12

Check that the outlet temperature increases to a comfortable temperature.

Check for leaks.

Press **START/STOP** button to switch the unit OFF (Confirmed with **three audible short bleeps**). See Diagram 12

This completes the commissioning.



**IMPORTANT!** This appliance is not intended for use by persons (including children and the infirm) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

**Children should be supervised to ensure that they do not play with the appliance.**

**Warning!** Do Not Switch The Shower On If You Suspect It Of Being Frozen, Wait Until You Are Sure That It Has Been Completely Thawed Out.

## How To Use Your Shower

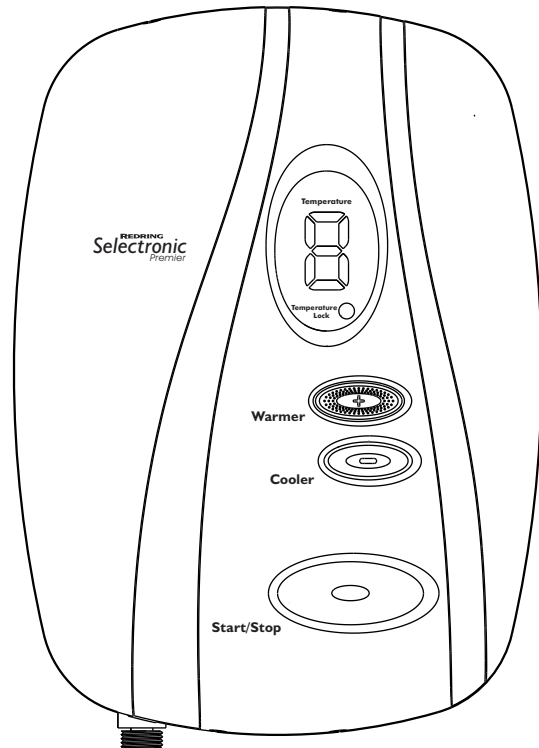
Your shower has four modes of operation, **Normal** and three **Temperature Lock** positions **1, 2** and **3**. (Please see *Changing the Operating Mode Templock/Normal* section on Page 9)

The **Temperature Lock** feature ensures a preset maximum temperature is not exceeded.

The shower is factory preset at **Locked Position 1** (40°C maximum - temperature range 34 - 40°C). This can be changed on installation / commissioning for any of the other three options.

**Temperature Lock** is achieved by limiting the adjustment of the temperature control buttons, so that the less able, elderly and children cannot accidentally adjust the shower so that it is too Hot.

Button Function	Location	Shape / Texture
Start / Stop	At The Bottom Of The Shower	Large, A Raised Pip In The Centre, Made From Soft Rubber
Warmer	Towards Middle Of The Shower	Textured Front And A Central Recess With A Raised Plus Symbol In The Centre. Made From Hard Plastic
Cooler	Directly Below The Warmer Button	Same Shape As Warmer However Smooth With A Central Recess With A Raised Minus Symbol. Made From Hard Plastic



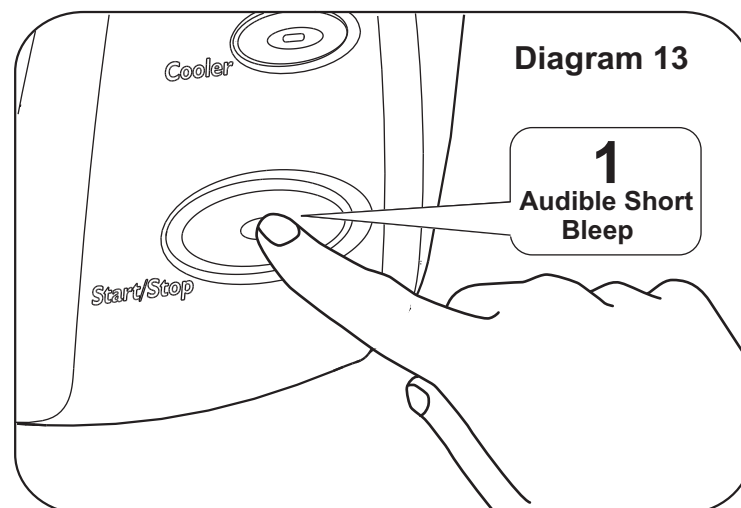
### Normal Operation

**Switch On Electricity** at ceiling / isolating switch.

**Press Start /Stop Button** in the centre. (Confirmed with a **single bleep**) See Diagram 13

The unit will start and the motorised valve will reset. Display will show the target temperature (6) for two seconds and then change to the actual temperature (Usually "L").

The digit will flash and increase until display shows number 6. (The average showering



temperature).

When the unit has reached this setting it stops flashing and **sounds a double bleep** and the unit is **ready for use**.

The unit will only count up and double bleep once per shower session.

### To Increase Temperature

**Press the warmer button** once in the centre (Confirmed with a **single bleep**). The number will change to the new setting. i.e. Display will change from digit 6 to digit 7. See Diagram 14

**Wait for a few seconds** for the shower to increase the temperature to the new setting.

**Repeat this for your ideal setting** waiting each time for the temperature to be achieved. (Maximum setting is letter H).

**Please Note!** There are eleven temperature options when the Operating Mode Templock is set to "Unlocked" which are as follows:- **L-1-2-3-4-5-6-7-8-9-H**.

### To Decrease Temperature

**Press the cooler button** once in the centre (Confirmed with a **single bleep**) The number will change to the new setting i.e. Display will change from digit 6 to digit 5. See Diagram 15

**Wait for a few seconds** for the shower to decrease the temperature to the new setting.

**Repeat this for your ideal setting** waiting each time for the temperature to be achieved. (Minimum setting is letter L)

**Please Note!** There are eleven temperature options when the Operating Mode Templock is set to "Unlocked" which are as follows:- **L-1-2-3-4-5-6-7-8-9-H**.

### Switching OFF

**When you have finished showering press the start /stop button** in the centre. See Diagram 16 (Confirmed with 3 short bleeps)

The water will continue to run for a few seconds so that the unit is cooled down ready for the next time the shower is used.

While this is happening the display will circle round and round (see Diagram 17).

The unit will then switch off automatically.

**Switch Off Electricity** at ceiling / isolating switch.

