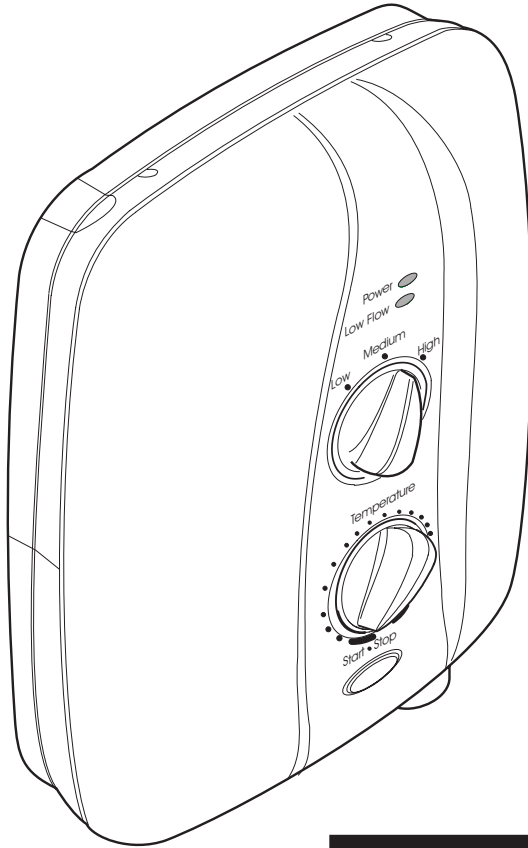


mira *elite 2*



PUMPED ELECTRIC

SHOWER

Installation, Operation &

Maintenance Guide

THESE INSTRUCTIONS ARE TO BE LEFT WITH THE USER

Contents

Section	Page
1 Introduction	3
2 Important Safety Information	4
3 Pack Contents Checklist	7
4 Dimensions	8
5 Wiring Diagram	9
6 Specifications	10
7 Installation Requirements	11
8 Installation	17
9 Commissioning.....	20
10 ... Operation	22
11 ... Fault Diagnosis.....	26
12 ... Maintenance.....	28
13 ... Spare Parts.....	38
14 ... Optional Accessories.....	40
Guarantee, Customer Care Policy, and How to contact us	Back cover

Thank you for purchasing a quality Mira product. To exploit the full potential of your new product, please take time to read this guide thoroughly, having done so, keep it handy for future reference.

The Mira Elite 2 is a high performance tank-fed (cistern-fed) pumped electric shower for use where the mains water supply pressure is too low, unreliable or non existent, to operate a conventional electric shower.

The Mira Elite 2 features an internal pump unit which has been designed to provide all year round performance, even at the highest flow rates which are necessary during the summer months. The Elite 2 has separate controls for power selection and temperature/flow adjustment. The Elite 2 **MUST** have its own separate cold water supply from the cistern to ensure correct operation.

Mira Elite 2, 9.8 kW @ 240 Volts white/chrome finish

Mira Elite 2, 9.0 kW @ 230 Volts white/chrome finish..

If you experience any difficulty with the installation or operation of your new shower control, then please refer to the **Maintenance and Fault Diagnosis** section, before contacting Kohler Mira Limited. Our telephone and fax numbers can be found on the back cover of this guide.

1. Warning!

1.1. Products manufactured by us are safe and without risk provided they are installed, used and maintained in good working order in accordance with our instructions and recommendations.

1.2. THIS MIRA ELITE 2 MUST BE EARTHED.

In accordance with the current edition of 'The Plugs and Sockets etc. (Safety) Regulations' in force at the time of installation, this Mira Elite is intended to be permanently connected to the fixed electrical wiring of the mains system.

1.3. **DO NOT** twist the individual cable cores of the live and neutral conductors, as this will prevent them from entering the terminal block.

1.4. **DO NOT** connect the Elite 2 to a mains-fed water supply. Such a connection will damage the appliance, and is not covered under the manufacturer's guarantee.

1.5. **DO NOT** allow the Elite 2 to be run dry. We would recommend a minimum 25 gallon/113 ltr cold storage tank for water supply.

1.6. The shower unit must not be fitted where it may be exposed to freezing conditions. Make sure that any pipework that could become frozen is properly insulated.

1.7. **DO NOT** operate the appliance if it is frozen. Allow the appliance to thaw before using again.

1.8. **DO NOT** operate this appliance if water leaks from the pressure relief valve, maintenance will be required before the appliance can be safely used.

1.9. **DO NOT** fit any form of outlet flow control as the outlet acts as a vent for the tank body. Only Mira recommended outlet fittings should be used.

1.10. There are no user serviceable components beneath the cover of this appliance. Only a competent tradesperson should remove the cover.

1.11. If any of the following conditions occur, isolate the electricity and water supplies and refer to "**To contact us**", on the back page of this guide.

1.11.1. If the cover is not correctly fitted and water has entered the Mira Elite 2 case.

1.11.2. If the case is damaged.

- 1.11.3. If the appliance begins to make an odd noise, smell or smoke.
- 1.11.4. If the appliance shows signs of a distinct change in performance, indicating a need for maintenance.
- 1.11.5. If the appliance is frozen.

1.12. Isolate the electrical and water supply before removing the cover.

1.13. Mains connections are exposed when the cover is removed.

1.14. Refer to the wiring diagram before making any electrical connections.

1.15. Ensure all electrical connections are tight, to prevent overheating.

2. Caution!

2.1. Read all of these instructions and retain this guide for later use.

2.2. Pass on this guide in the event of change of ownership of the installation site.

2.3. Follow all warnings, cautions and instructions contained in this guide, and on or inside the Mira Sport.

2.4. The electrical installation must comply with the “Requirements for Electrical Installations” commonly referred to as the IEE Wiring Regulations, or any particular regulations and practices, specified by the local electricity supply company in force at the time of installation. The installation should be carried out by an electrician or contractor who is registered, or is a member of, an association such as:

2.4.1. National Inspection Council for Electrical Installation and Contracting.

2.4.2. The Electrical Contractors Association (ECA), England and Wales.

2.4.3. The Electrical Contractors Association of Scotland (ECAS).

2.5. This is a high power unit; it is essential to contact your electricity supply company to ensure that the electricity supply is adequate for the purpose.

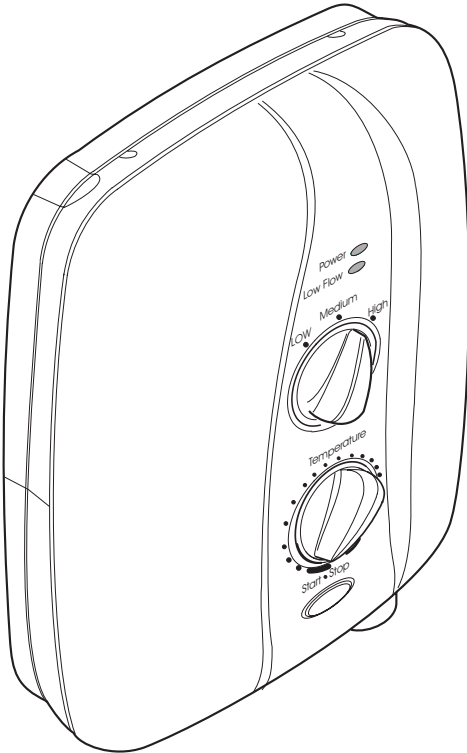
2.6. The plumbing installation must comply with the requirements of UK Water Regulations/Byelaws (Scotland), Building Regulations or any particular regulations and practices, specified by the local water company or water undertakers. The installation should be carried out by a plumber or contractor who is registered, or is a member of, an association such as:

- 2.6.1.** Institute of Plumbing (IOP), throughout the UK.
- 2.6.2.** National Association of Plumbing, Heating and Mechanical Services Contractors (NAPH & MSC), England and Wales.
- 2.6.3.** Scottish and Northern Ireland Plumbing Employers' Federation (SNIPEF), Scotland and Northern Ireland.

- 2.7.** Anyone who may have difficulty understanding or operating the controls of any shower should be attended whilst showering. Particular consideration should be given to the young, the elderly, the infirm, or anyone inexperienced in the correct operation of the controls.
- 2.8.** When this appliance has reached the end of its serviceable life, it should be disposed of in a safe manner, in accordance with current local authority recycling, or waste disposal policy.

Tick the appropriate boxes to familiarize yourself with the part names and to confirm that the parts are included.

1. Mira Elite 2



1 x Mira Elite 2



3 x Rubber Feet

1 x Olive



1 x Compression Nut



3 x Wall Plug



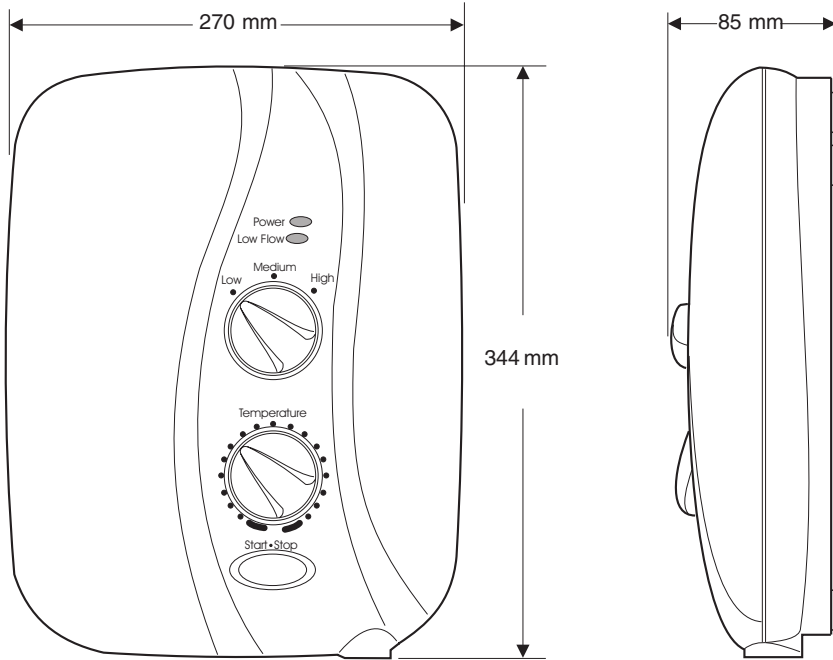
3 x Fixing Screws

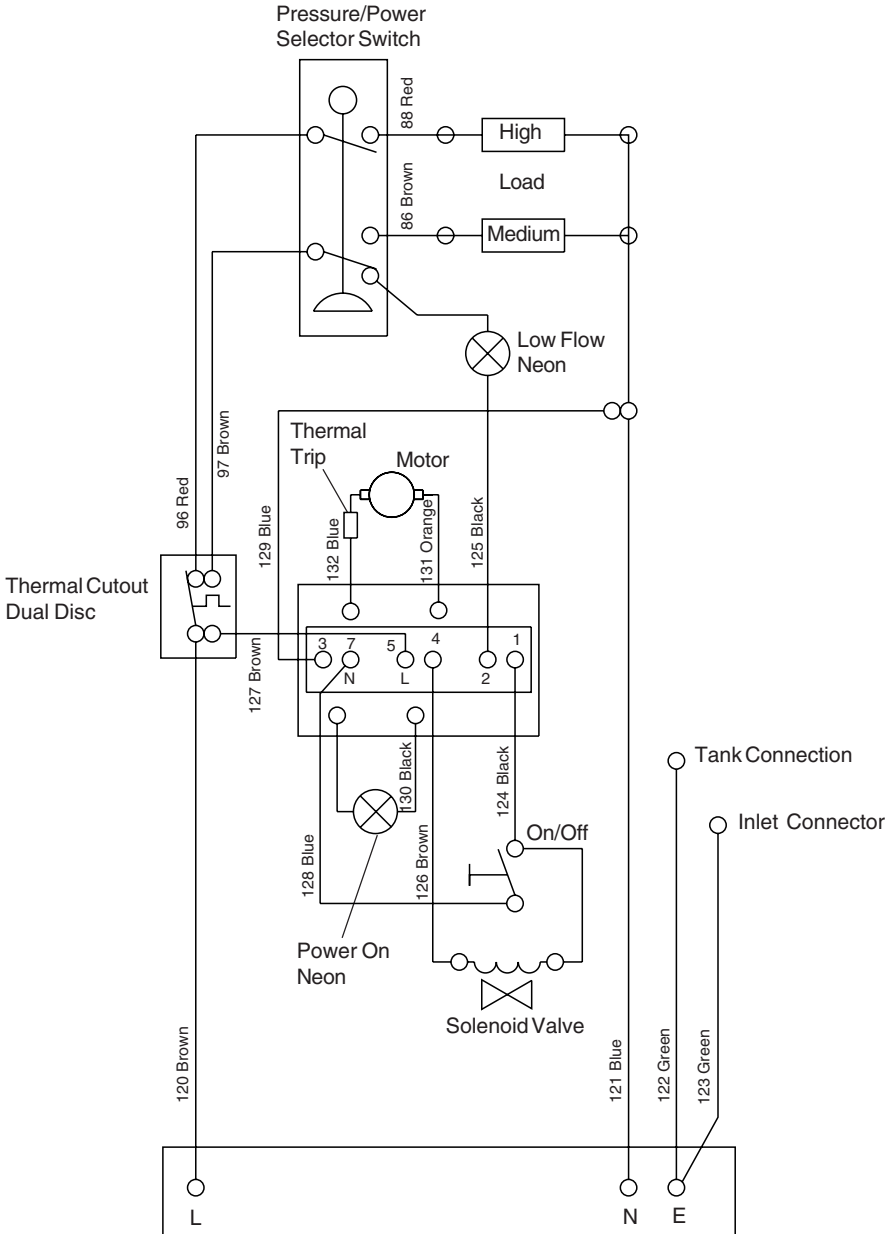
2. Documentation

1 x Installation, Operation and Maintenance Guide

1 x Installer Product Checklist

1 x Customer Support Brochure





1. Plumbing

- 1.1. The 15 mm inlet compression connector incorporates an inlet filter, which swivels to allow two entry positions, top and back.
- 1.2. The outlet terminates with a 1/2" BSP male thread for connection to a Mira flexible shower hose.

2. Electrical

- 2.1. The terminal block will not accept cable larger than 16 mm².
- 2.3. The motor is fitted with a self resetting thermal trip protection device, designed to operate if the ambient temperatures become too high. The maximum recommended ambient temperature for the Elite 2 is 30°C.
- 2.4. The following power ratings for the heater tanks are available with their respective voltages:
 - Mira Elite 2 9.8 @ 240V 45 Amps
 - Mira Elite 2 9.0 @ 230V 40 Amps
- 2.5. The motor will absorb approximately 100 Watts maximum power under normal working conditions.

3. Standards and Approvals

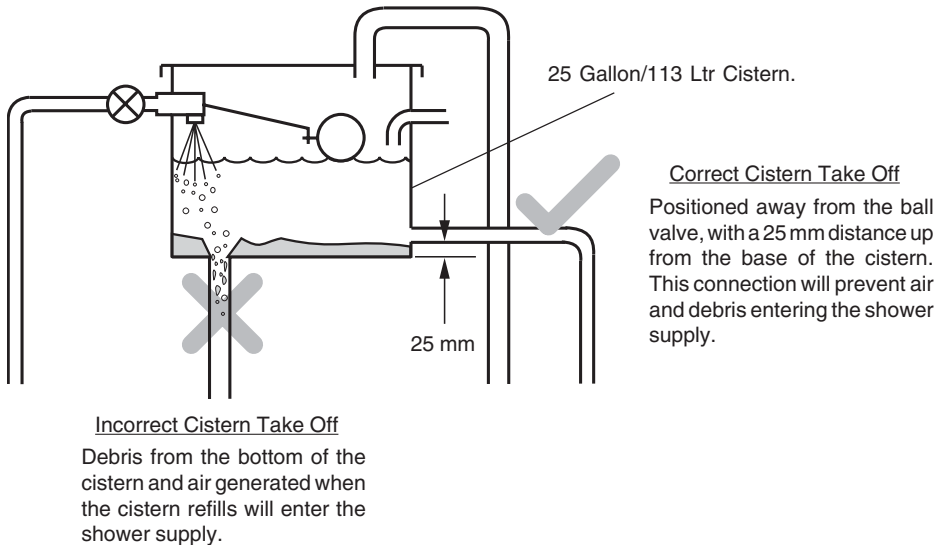
- 3.1. The Mira Elite 2 has been designed to comply with the requirements of the British Electrotechnical Approvals Board (BEAB) and the requirements of UK Water Regulations/Bylaws (Scotland).
- 3.2. This Mira Elite 2 complies with all relevant directives for CE marking.

1. Plumbing

Read the section “**Important Safety Information**” first

- 1.1. The Elite 2 is designed to operate with water supply pressures from 0.008 bar (80 millimetres head) to 1 bar (10 metres head) (i.e. the vertical distance from the base of the cold cistern to the top of the Elite 2). However, the minimum head required will increase with pipe length and the guide given in paragraph 1.17. should be used to ensure that adequate head is available for any given installation.

The Elite 2 **MUST** have its own separate supply from the cistern.



- 1.2. The Elite 2 is suitable for installation within the shower area and is fitted with a pressure relief valve. It must be positioned over a water catchment area with the controls at a convenient height. The shower fitting should be positioned so that it discharges down the centre line of the bath, or across the opening of a shower cubicle, and must be directed away from the shower unit.
- 1.3. Use a minimum of 15 mm diameter supply pipework. It should be noted, however, that on long pipe runs this should be increased to 22 mm (refer to para 1.17. for guidance). When using flexible plastic pipe it is essential that the pipe is kept flat and not looped up at any point as this may lead to air build up which may impair performance of the shower.

- 1.4. We recommend that a non restrictive (free flowing) isolating valve is fitted into the supply from the cold water cistern, for maintenance purposes.
- 1.5. The Elite 2 must be fitted ONTO the finished wall surface i.e. on top of the tiles. **DO NOT** block the air ventilation gaps around the sides of the unit, either by tiling up to the sides of the unit or by using a sealant around the case. This Elite 2 is designed to be ventilated. Failure to do this may cause product failure.
- 1.6. Inlet: 15 mm inlet compression connector is designed to accept plumbing supplies from the top or back.
- 1.7. Back entry plumbing is accommodated without the need to recess the 15 mm inlet compression connector, enabling the wall's surface to be completed and sealed to prevent water ingress, before final fitting.
- 1.8. Swivel the inlet connector assembly to suit (not directly back into the wall). Avoid trapping the green earth bonding wire.
- 1.9. Use only the 15 mm inlet compression connector supplied with the Elite 2, do not use any other types of fitting.
- 1.10. Outlet: 1/2" BSP male, to accept Mira flexible hose.
- 1.11. Refrain from applying excessive force when making connections.

Note! Excessive force on the pump housing can impair pumping performance. Make sure that the supply pipe is trimmed and bent such that the 15 mm inlet connector sits (or can be lightly pressed) easily on the back of the clamp bracket prior to connection with the pump housing.
- 1.12. To avoid damage to the case when soldered fittings are used, pre-solder the pipework and fittings before connecting them to the 15 mm inlet compression connector.
- 1.13. Supply pipework **MUST** be flushed to clear debris before connecting the Elite 2.
- 1.14. A hose retaining ring is supplied to prevent the handset from dropping below the spillover level of the bath or shower, which could lead to contamination from back-siphonage (refer to Figure 1). The supplied hose retaining ring should meet the great majority of user requirements for shower installations with flexible outlet fittings. However, there will be occasions when the hose retaining ring will not provide a suitable solution. In these instances an **outlet** double checkvalve, e.g. the Mira DCV-H, **must** be fitted. The inclusion of the Mira DCV-H will increase the required supply pressure typically by 0.1 bar.
Double checkvalves, fitted in the inlet supply to the appliance, cause a pressure build-up, which could exceed the maximum static inlet pressure for the appliance.

1.15. When installed in very hard water areas (above 200 ppm temporary hardness) your installer may advise the installation of a water treatment device, to reduce the effects of limescale formation. Mira Elite 2 malfunction due to excessive limescale formation is not covered by the manufacturer's guarantee. Your local water company will be able to advise the hardness of water in your area.

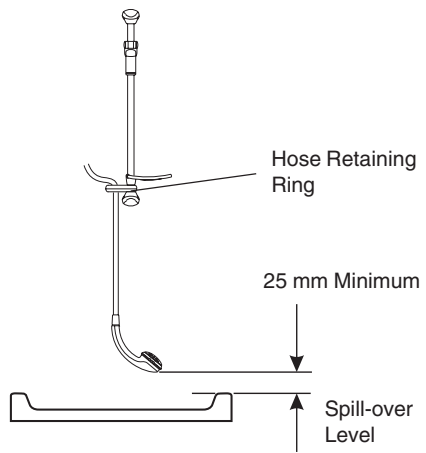
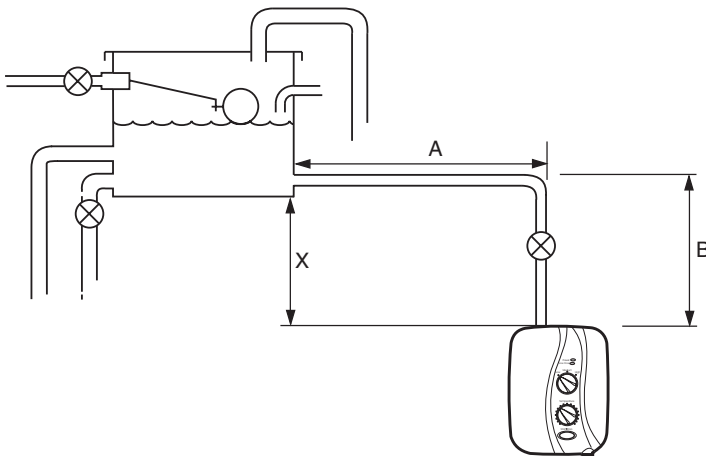


Figure 1

- 1.16.** Avoid layouts where the hose will be sharply kinked. This may reduce the life of the hose.
- 1.17.** Long pipe runs and excessive use of 90° elbows will significantly reduce the available head to supply the Elite 2. The pipework table should be completed to ensure that adequate head is available for any given application.

Plumbing Schematic Diagram (to be used with pipework table overleaf)



The dimension (x) is calculated from the table below to give you a minimum effective head of 80 mm which is necessary to produce a satisfactory shower in all conditions.

Pipework

Size	Quantity		Head Loss (mm)
15 mm Pipe	(A) _____ + (B) _____	_____ x 120	
22 mm Pipe	(A) _____ + (B) _____	_____ x 20	
15 mm Elbow	No. _____ Elbows	_____ x 55	
22 mm Elbow	No. _____ Elbows	_____ x 15	
Minimum Effective Head			80
(x) mm			

Example! Based on the diagram Figure X with 15 mm pipework and A = 1.5 m, B = 0.75 m.

Size	Quantity		Head Loss (mm)
15 mm Pipe	(A) <u>1.5</u> + (B) <u>0.75</u>	<u>2.25</u> x 120	270
22 mm Pipe	(A) _____ + (B) _____	_____ x 20	
15 mm Elbow	No. <u>1</u> Elbows	<u>1</u> x 55	55
22 mm Elbow	No. _____ Elbows	_____ x 15	
Minimum Effective Head			80
(x) mm			405

2. Electrical

Read the section “**Important Safety Information**” first

- 2.1. The electrical installation must comply with the “Requirements for Electrical Installations” commonly referred to as the IEE Wiring Regulations, or any particular regulations and practices, specified by the local electricity supply company in force at the time of installation.
- 2.2. In a domestic installation, the electricity company fuse must be a minimum of 80 Amps. As the Elite 2 is a high power unit it is essential to contact your electricity supply company to ensure that the supply is adequate for the purpose.

Mira Elite 2 9.8 @ 240V 45 Amps

Mira Elite 2 9.0 @ 230V 40 Amps

Note! Voltage drop due to local heavy demand will reduce the shower performance.

- 2.3. A separate permanently connected supply must be taken from the consumer unit to the shower, via a double pole switch, with at least a 3 mm contact separation. The switch can be a ceiling mounted pullcord switch within the bathroom, or a wall mounted switch in an adjacent room.

Suitable ceiling mounted pullcord switches for Mira electric showers include:-

Make	Model	Rating
Ashley	CS445N	45 Amp
Crabtree	2167	40 Amp
MK	3164 WHI	45 Amp
Tenby	CS7545	45 Amp
Volex	VX9706	40 Amp

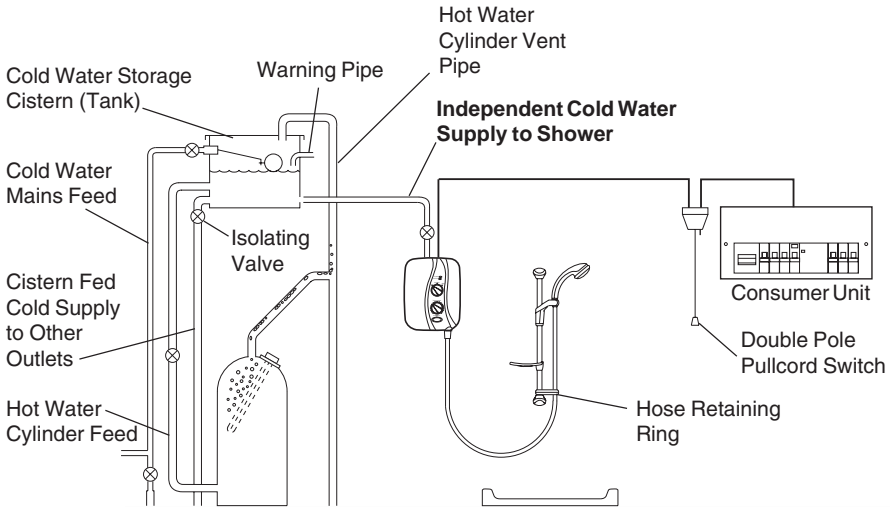
- 2.4. The minimum cable size required is 6 mm². To obtain full advantage of the electrical power provided by the Elite 2, use the shortest possible cable route from the consumer unit to the Elite 2.

As a guide only, the maximum 6 mm² cable length allowed with a 5 Volt drop and RCD installed, is 16 m for an Elite 2, 9.8. If longer cable runs are required then 10 mm² should be used. Refer to the IEE Wiring Regulations for further clarification.

- 2.5. We recommend the inclusion of a 30 mA residual current device (RCD). This may be part of the consumer unit or a separate unit.
- 2.6. The terminal block will not accept cable larger than 16 mm².

- 2.7. The Elite 2 must be earthed by connecting the supply cable earth conductor to the earth terminal. All exposed metal parts within 3 metres of the shower, within the shower room, must be electrically bonded to earth using a minimum cable size of 2.5 millimetres².
- 2.8. Do not turn on the electrical supply until the plumbing has been completed. Ensure the water supply is turned on as the unit must not be operated dry.
- 2.9. The Elite 2 is fitted with a pump motor, and some mechanical noise can be expected in addition to the noise generated by the spray from the handset. The type of wall surface will affect the perceived sound levels. Stud partition and panel walls have a tendency to resonate, whilst solid walls will provide the quietest operation. The tone of the pump motor may change when the temperature control knob is adjusted. This is quite normal.

Plumbing and Electrical Schematic Diagram



1. Mira Elite 2

Read the section “**Important Safety Information**” first.

WARNING! Isolate the electrical and water supplies before proceeding with the installation of the Mira Elite 2.

Note! An installation template is supplied on the internal packaging to help you install the Mira Elite 2.

1.1. Decide on a suitable position for the Mira Elite 2 (minimum distance of 200 mm from the ceiling to allow for cover fit and removal). The position of the Mira Elite 2 and the shower fittings must provide a minimum gap of 25 mm between the spill-over level of the shower tray/bath and the handset. This is to prevent backsiphonage.

1.2. Unscrew the four cover retaining screws sufficient to remove the cover and the service tunnel.

Note! The cover retaining screws are captive and should remain in the case and service tunnel.

1.3. Remove the cover.

1.4. Remove the service tunnel.

1.5. Determine the direction of the inlet water supply: top (falling) or back inlet .

Note! Make sure that the back inlet does not go directly back into the wall. Use a soldered elbow

1.6. Swivel the inlet connector assembly to suit. Remove the inlet blanking cap. Avoid trapping the green earth bonding wire.

1.7. A case insert is supplied with the Mira Elite 2, this can be removed to suit the supplies entering the product. Before fitting the unit, if necessary, make sure that the case insert is fitted.

1.8. Thoroughly flush the CISTERN FED cold water supply pipe. The supply must be clean and free from debris BEFORE connecting the Mira Elite 2.

1.9. An installation template is supplied on the internal packaging to help you install the Mira Elite 2. Put the installation template on the wall and mark through the positions of the fixing holes. Make sure that sufficient electrical supply cable is available for connection to the terminal block.

1.10. Drill and plug the top two fixing holes. Secure the Mira Elite 2 to the wall with the screws provided. Drill the bottom fixing hole with the product in place. Alternative fixings (not supplied) may be necessary for some wall structures. Avoid drilling into any supply cable/pipe.

Note! Rubber feet are supplied with the Mira Elite 2. The rubber feet locate in recesses in the rear of the case and can be fitted if required.

1.11. Install the **CISTERN FED** cold water supply pipe.

1.12. Make the connection to the **CISTERN FED** cold water supply pipe.

1.13. Bring the electrical supply cable into the case through one of the cable entry points.

1.14. Strip back sufficient of the outer cable insulation to enable routing to terminal block.

1.15. Fit an earth sleeve to the earth conductor. Connect the conductors firmly into the terminal block. Make sure that the bare cores of each conductor are securely trapped within each conductor clamp.

L = Red wire

N = Black wire

E = Yellow/Green sleeved wire.

1.16. Re-tighten the terminal block screws.

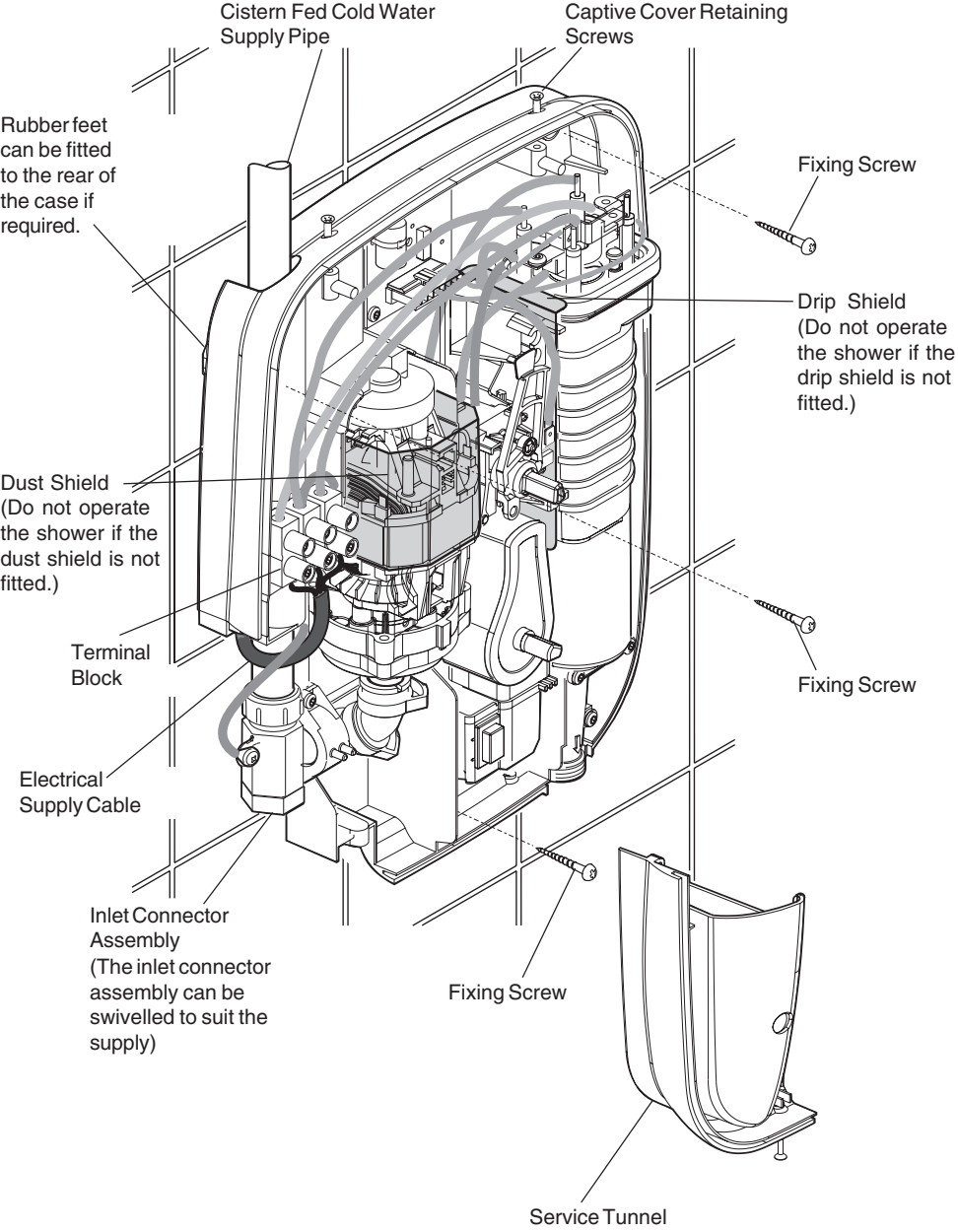
1.17. If necessary, fit an earth bonding clamp to the copper supply pipe and ensure bonding complies with the relevant regulations in force at the time of installation.

1.18 Ensure the drip shield and dust shield are correctly installed. **DO NOT** operate the shower if the dust and drip shields are not fitted.

1.19. Refit the service tunnel and the cover and tighten the four cover retaining screws.

1.20. Fit the shower fittings. Refer to separate instructions.

Important! Do not fit the Mira Elite 2 to the wall and tile up to the case. The Mira Elite 2 must be fitted **on to** a finished flat and even wall surface (small pillars moulded on to the back of the case allow air circulation).



Installation of the Mira Elite 2

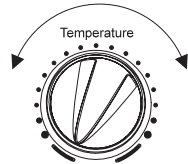
1. Mira Elite 2

If you are unsure how electric showers work, please read through the **Operation Section** before continuing.

- 1.1. Make sure that the **START/STOP** button is in the **outermost** position and that the electrical supply has been isolated.

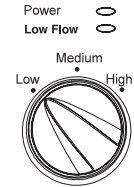


- 1.2. Turn the **BOTTOM** control knob fully anticlockwise to the full cold position.



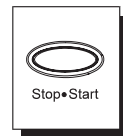
- 1.3. Turn the water supply fully on at the isolating valve, check that water is not leaking from the bottom of the case.

- 1.4. Turn the **TOP** control knob to '**LOW**'.

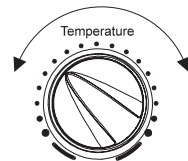


- 1.5. Switch on the electrical supply at the double pole switch. The '**POWER**' neon will provide a visual indication that the electrical supply is connected.

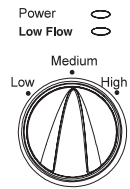
- 1.6. Press the **START** button. Check that water flows freely from the shower within a few seconds. If not refer to the **Maintenance Section**. The water from the handset will be at full force and at a cool temperature.



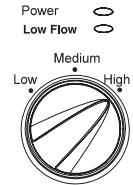
- 1.7. Turn the **BOTTOM** knob slowly clockwise. As the knob is rotated the flow will be reduced and the temperature will remain cool - this shows that the flow regulator assembly is operating correctly. Return the knob anticlockwise to full cold position.



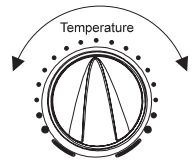
- 1.8. Turn the **TOP** knob to the '**MEDIUM**' position. The temperature of the water should rise slightly. Allow a few seconds for the warm water to reach the handset - this shows that the '**MEDIUM**' power setting is operating correctly.



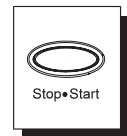
- 1.9. Turn the **TOP** knob to the '**HIGH**' position. The temperature of the water will rise further - this shows that the full power setting is operating correctly.



- 1.10. Set the shower temperature by rotating the **BOTTOM** knob as necessary. Turn the knob clockwise for hotter water and anticlockwise for cooler water.



- 1.11. When the required temperature is reached, push the **STOP** button to stop the flow. Water will continue to flow from the handset for a few seconds, as water is purged from the tank. Isolate the power at the double pole switch.



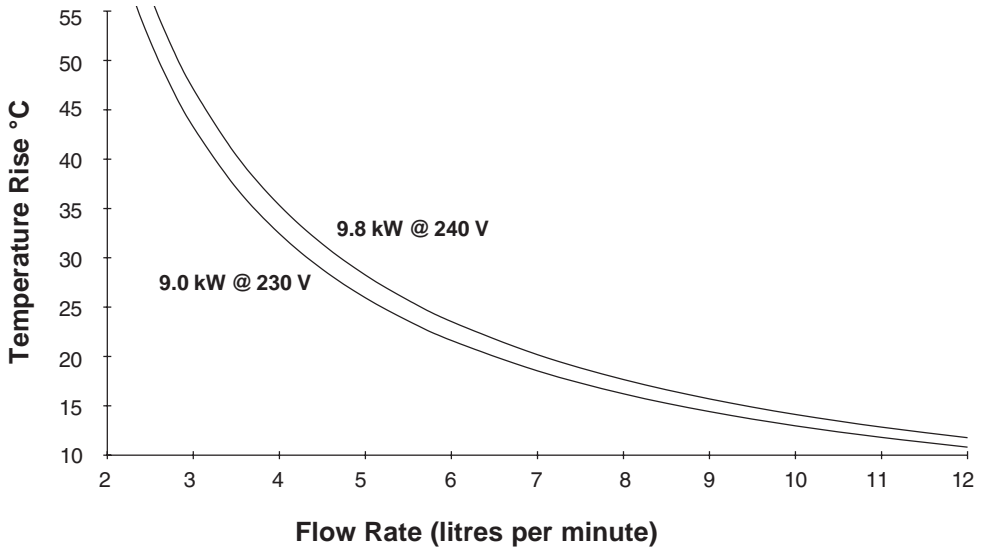
Note! A slight hissing sound may be heard from the Mira Elite 2 during operation. High shower temperatures will effect the tone. This is quite normal in use.

1. Advice to Users

Read the section “**Important Safety Information**” first

- 1.1. Pumped electric showers work by taking cold water and passing it over the heating elements contained in the heater tank of the shower.
- 1.2. The showering temperature is adjusted by turning the temperature control knob, which varies the flow of cold water across the elements. The slower the rate of flow, the warmer the water and vice versa. The holes in the spray plate of the shower handset should always be kept clean to maintain a consistent flow and assist in temperature control.
- 1.3. All Mira electric showers are designed to stabilise temperature changes caused by water pressure fluctuations. Average shower temperatures will be held within a 6°C band, provided that the minimum required pressure is maintained.
- 1.4. The current design of Mira pumped electric showers does not thermostatically control the showering temperature, and as such cannot react to changes in temperature caused by a change in mains voltage, or changes in the cistern-fed water temperature.
- 1.5. The temperature of cistern-fed water will vary between Summer and Winter, and therefore, the temperature control knob will need to be adjusted to take account of these seasonal conditions. The length of dead leg of the water supply pipe or its proximity to hot pipes, may effect the showering temperature.
- 1.6. If the water temperature reaches an unsafe level, the thermal switch assembly turns off the elements. When the water temperature falls the elements will be turned on. The switch will cycle on/off/on if the flow rate is not increased, and the shower temperature reduced. The “**OVERHEAT**” light on the Elite 2 will provide a visual indication of this condition.
- 1.7. When the shower is first turned on or a different temperature is selected, there will be a slight delay before the shower temperature changes, to allow the previously heated water to be used up.

Temperature Rise Versus Flow for the Mira Elite 2



- (i) All heaters have a manufacturing tolerance. Thus flow rates can be above or below those indicated.
- (ii) The left-hand scale is temperature rise. (Temperature rise = Showering temperature minus the incoming cold water temperature).

2. Mira Elite 2

Read the section “**Important Safety Information**” first.

THE SPRAY PLATE HOLES MUST BE KEPT CLEAR. The spray plate should be regularly removed and cleaned in descalent. Lack of regular spray plate cleaning will lead to poor performance and cause early failure of the Mira Elite 2.

- 2.1. **Switch on** pullcord or wall mounted switch. The '**POWER**' neon will provide a visual indication that the switch is on.
- 2.2. Press the **START** button.
- 2.3. Rotate the **TOP** control knob to position '**HIGH**' (Full Power).
- 2.4. Wait **15-20** seconds for warm water to reach the handset.

- 2.5.** If necessary turn the **BOTTOM** control knob slowly to adjust temperature. Allow **10-15** seconds for the adjusted temperature to reach the handset. The control knob operates through approximately $\frac{3}{4}$ of a turn from cold to hot.

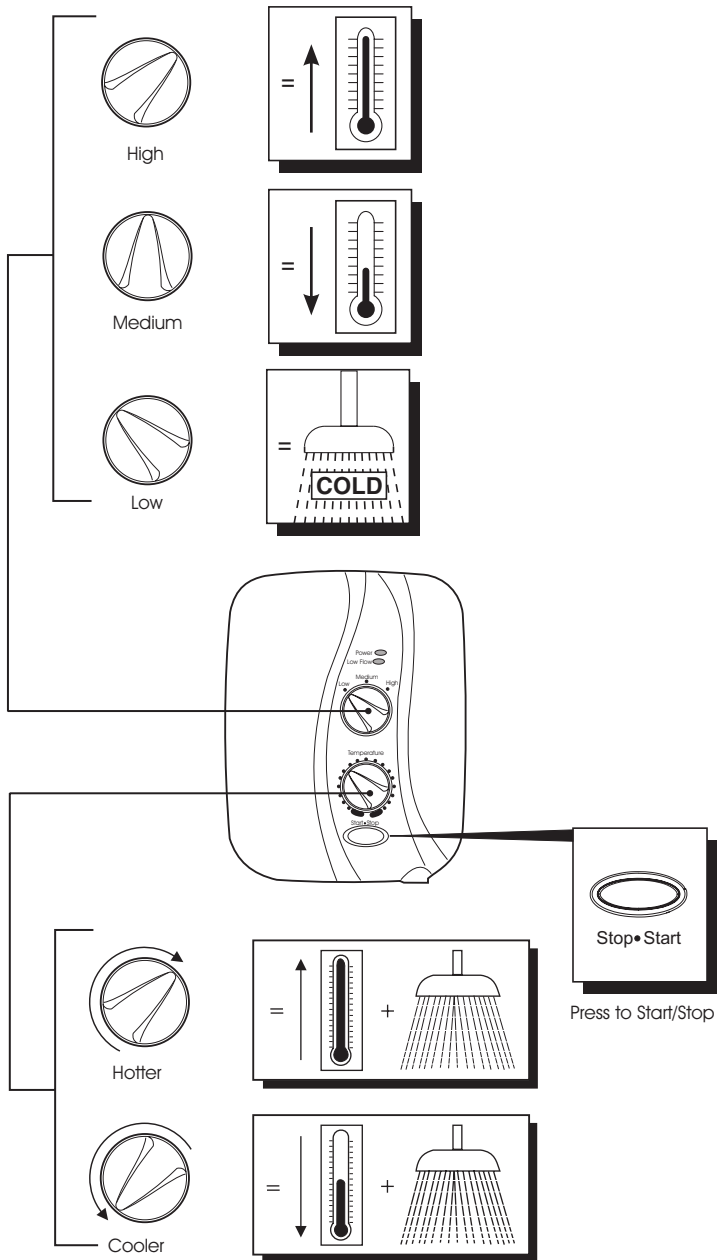
Clockwise rotation will give warmer water with less flow. Anticlockwise rotation will give cooler water with more flow.

- 2.6. TO TURN OFF** the Mira Elite 2 press the **STOP** button. The shower will continue to flow for a few seconds before stopping.

- 2.7.** A small amount of water may be retained in the shower handset after the shower control has been turned off. This may drain over a few minutes.

For summer economy showering use position '**MEDIUM**' (Half Power) on the control. For a cold shower select '**LOW**'.

- 2.8. Switch off** at the pull-cord or wall mounted switch.



Operation of the Mira Elite 2

Fault Diagnosis

Warning! There are no user serviceable components beneath the cover of the Elite 2. Only a competent tradesperson should remove the cover.

The trouble shooting information tabled below gives details on what you can do as a user without removing the cover, should you encounter difficulties whilst operating the shower.

Note! Should these remedies prove to be unsuccessful in solving your problem, contact your installer for advice.

Malfunction	Cause	Remedy
Elite 2 fails to operate in any switch position.	Electrical supply isolated at double pole switch (the pullcord).	Switch on electrical supply via the pullcord.
	Fuse blown or MCB/RCD tripped indicating possible electrical fault.	Renew the fuse or reset the MCB/RCD. If fault persists, contact your installer.
No water or very low flow rate.	Handset sprayplate blocked.	Remove & clean: Refer to Maintenance in the I, O & M guide for the fittings.
	Incoming water supply stop valves or isolating valve turned down or off.	Turn stop/isolating valve to fully on position.
	Hose or Handset blocked.	Clear blockage or renew.
	Possible blocked inlet filter	Clean or replace.

(Continued)

Malfunction	Cause	Remedy
<p>Shower cycles from hot to cold.</p>	<p>The temperature knob is positioned at an unsafe level causing the Elite 2 thermal trip to operate and cut the power to the heater tank.</p> <p>Handset sprayplate blocked.</p>	<p>Turn the temperature knob sufficiently anti clock-wise to increase water flow and reduce temperature.</p> <p>Remove and clean (Refer to Maintenance in the I, O & M guide for the fittings).</p>
<p>Unable to select a cool enough shower during summer months.</p>	<p>Due to the rise in water mains supply temperature, the power rating may be too high.</p>	<p>Turn the TOP knob to MEDIUM setting and re-adjust temperature knob until suitable temperature is achieved.</p>
<p>Operation of temperature knob has little or no effect on water temperature.</p>	<p>Handset sprayplate blocked.</p>	<p>Remove Handset and clean (Refer to Maintenance in the I, O & M guide for the fittings). If fault still persists contact your installer.</p>
<p>No water and motor tone increases.</p>	<p>Cistern has run out of water.</p> <p>Internal pump unit faulty or thermal trip has operated.</p>	<p>Turn off the Elite 2 immediately and resolve cistern storage difficulty.</p> <p>Wait for internal pump/shower to cool down. If still faulty contact your installer.</p>

1. General

Read the section “**Important Safety Information**” first.

Providing the shower has been correctly installed and is operated in accordance with the instructions contained in this guide, difficulties should not arise. If any maintenance is required then it must be carried out by a competent tradesperson for whom the maintenance instructions are provided. Before replacing any parts ensure that the underlying cause of the malfunction has been resolved.

WARNING! There are no user serviceable components beneath the cover of the Elite 2. Only a competent tradesperson should remove the cover.

2. Cleaning

Many household cleaners contain abrasives and chemical substances, and should not be used for cleaning plated or plastic fittings. These finishes should be cleaned with a mild washing up detergent or soap solution, and then wiped dry using a soft cloth.

3. Flow Valve and Switch Assembly - Removal and Installation

WARNING! Isolate the electrical and water supplies before removing the cover. Mains electricity connections are exposed when the cover is removed.

- 3.1. Unscrew the four cover retaining screws sufficient to remove the cover and service tunnel.

Note! The cover retaining screws are captive and need not be removed.

- 3.2. Remove the hose from the outlet connector and loosen the connection to the inlet connector assembly.
- 3.3. Remove the screw that holds the terminal block in position. This will give you sufficient room to carry out the procedure without disconnecting any mains electrical wiring.
- 3.4. Remove the screws that hold the inlet clamp bracket in position and remove the clamp bracket.
- 3.5. Remove the screws that hold the flow valve and switch assembly and the heater tank in position.

- 3.6.** Carefully pull the flow valve and switch assembly and the heater tank away from the case. Make sure that you ease the flow valve and switch assembly off the motor/pump assembly..
- 3.7.** Remove the outlet connector from the heater tank.
- 3.8.** Remove the heater tank from the flow valve and switch assembly.
- 3.9.** Remove the microswitches from the flow valve and switch assembly.
- 3.10.** Make a note of the positions of the solenoid wires on top of the heater tank. Remove the solenoid wires.
- 3.11.** Remove the flow valve and switch assembly.
- 3.12.** Refit the components in reverse order. Make sure that the electrical wires are installed in the correct positions.

Cistern Fed Cold Water
Supply Pipe

PCB Assembly

Motor/Pump Assembly

Splash Guard

Heater Tank

Electrical
Supply Cable

Terminal Block

Microswitch

Switch Assembly

Flow Valve

Inlet Connector
Assembly

Clamp Bracket

Clamp Bracket
Retaining Screws

Heater Tank
Retaining Screws

Outlet Connector

Flow Valve and
Switch Assembly
Retaining Screw

Flow Valve and Switch Assembly - Removal and Installation

4. Heater Tank - Removal and Installation

WARNING! Isolate the electrical and water supplies before removing the cover. Mains electricity connections are exposed when the cover is removed.

- 4.1. Unscrew the four cover retaining screws sufficient to remove the cover and service tunnel.

Note! The cover retaining screws are captive and need not be removed.

- 4.2. Remove the hose from the outlet connector and loosen the connection to the inlet connector assembly.
- 4.3. To improve access to the terminals on the top of the tank, the terminal block may be loosened by removing the fixing screw.
- 4.4. Remove the screws that hold the clamp bracket in position and remove the clamp bracket.
- 4.5. Remove the screws that hold the flow valve and switch assembly and the heater tank in position.
- 4.6. Carefully pull the flow valve, switch assembly and heater tank away from the case.
- 4.7. Make a note of the positions of the wiring on top of the heater tank.
- 4.8. Remove the blue wire and associated solenoid wires.
- 4.9. Remove the brown and red wires from one side of the thermal switch and the second brown wire from the other side of the thermal switch.

Caution! Do not press printed disc on the thermal switch as this will make the component unserviceable.

- 4.10. Remove the fixing screw and remove the thermal switch and the green earth bonding wire from the top of the heater tank.
- 4.11. Remove the red and black tank wires from the microswitches.
- 4.12. Separate the heater tank from the flow valve and switch assembly.
- 4.13. Remove the outlet connector from the heater tank.
- 4.14. Refit the components in reverse order. Make sure that the electrical wires are installed in the correct positions. In particular the green earth bonding wire must be reconnected above the thermal switch flange.

Cistern Fed Cold Water
Supply Pipe

PCB Assembly

Motor/Pump Assembly

Splash Guard Heater Tank

Electrical
Supply Cable

Terminal Block

Microswitch

Switch Assembly

Flow Valve

Inlet Connector
Assembly

Clamp Bracket

Clamp Bracket
Retaining Screws

Flow Valve and
Switch Assembly
Retaining Screw

Heater Tank
Retaining Screws

Outlet Connector

Heater Tank - Removal and Installation

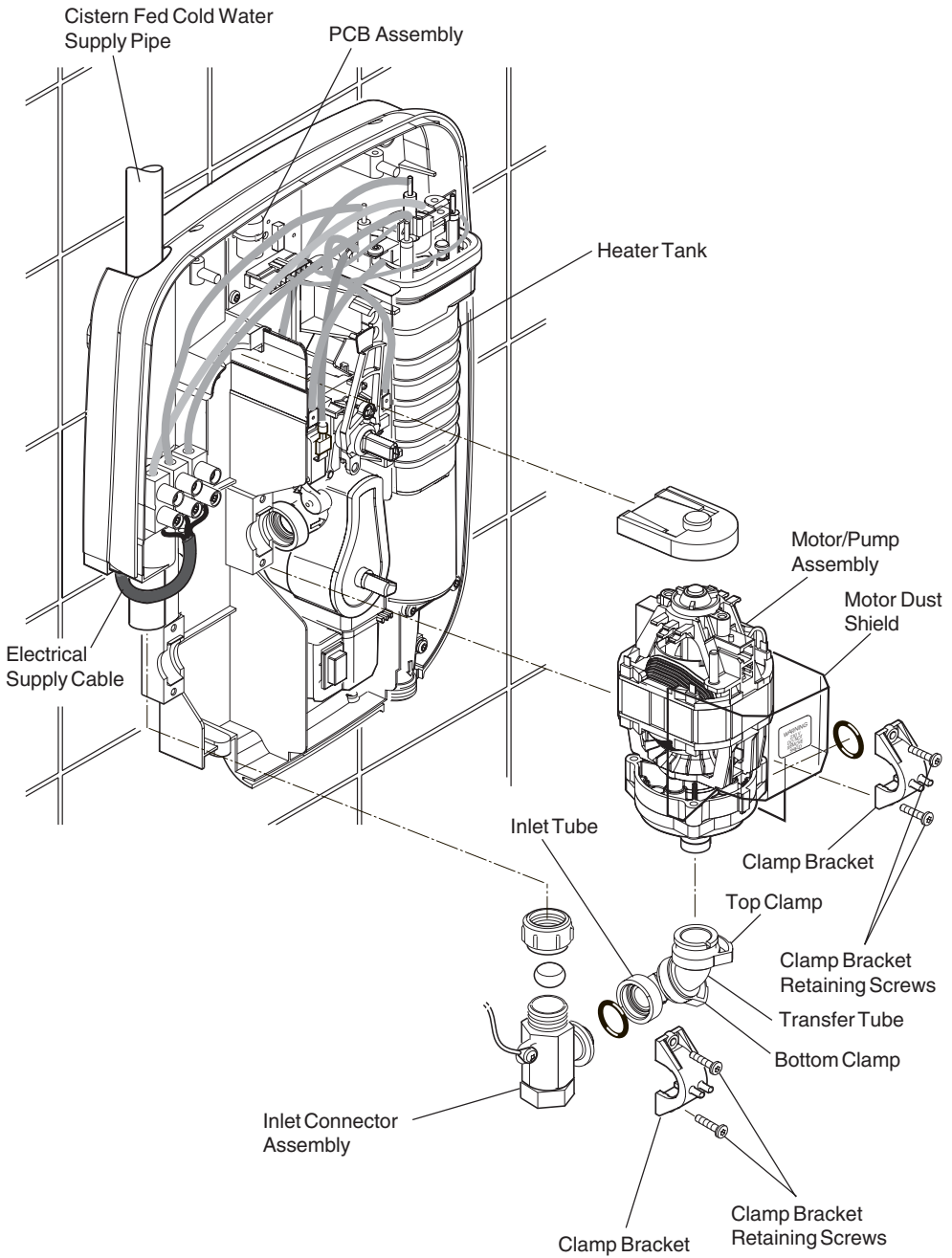
5. Motor/Pump Assembly - Removal and Installation

WARNING! Isolate the electrical and water supplies before removing the cover. Mains electricity connections are exposed when the cover is removed.

- 5.1. Unscrew the four cover retaining screws sufficient to remove the cover and service tunnel.

Note! The cover retaining screws are captive and need not be removed.

- 5.2. Remove the clamp bracket retaining screws from both clamp brackets. Remove the clamp brackets.
- 5.3. Remove the motor dust shield
- 5.4. Ease the motor/pump assembly away from the inlet connector assembly and the flow valve and switch assembly.
- 5.5. Carefully pull the motor/pump assembly away from the case and the mounting block.
- 5.6. Make a note of the positions of the wiring on top of the motor/pump assembly.
- 5.7. Remove the blue wire and the orange wire from the top of the motor/pump assembly and remove the motor/pump.
- 5.8. Install the transfer/inlet tube to the motor/pump assembly as follows:
 - Fit the transfer tube to the motor/pump assembly making sure that the location pip on the motor/pump assembly aligns with the slot in the transfer tube.
 - Tighten the top clamp.
 - Fit the motor/pump assembly in position and swivel the inlet tube so that it locates correctly in the inlet connector assembly.
 - Tighten the bottom clamp.
- 5.9. Refit the components in reverse order. Make sure that the electrical wires are installed in the correct positions and that the motor dust shield is replaced.



Motor/Pump Assembly - Removal and Installation

6. Thermal Switch - Removal and Installation

WARNING! Isolate the electrical and water supplies before removing the cover. Mains electricity connections are exposed when the cover is removed.

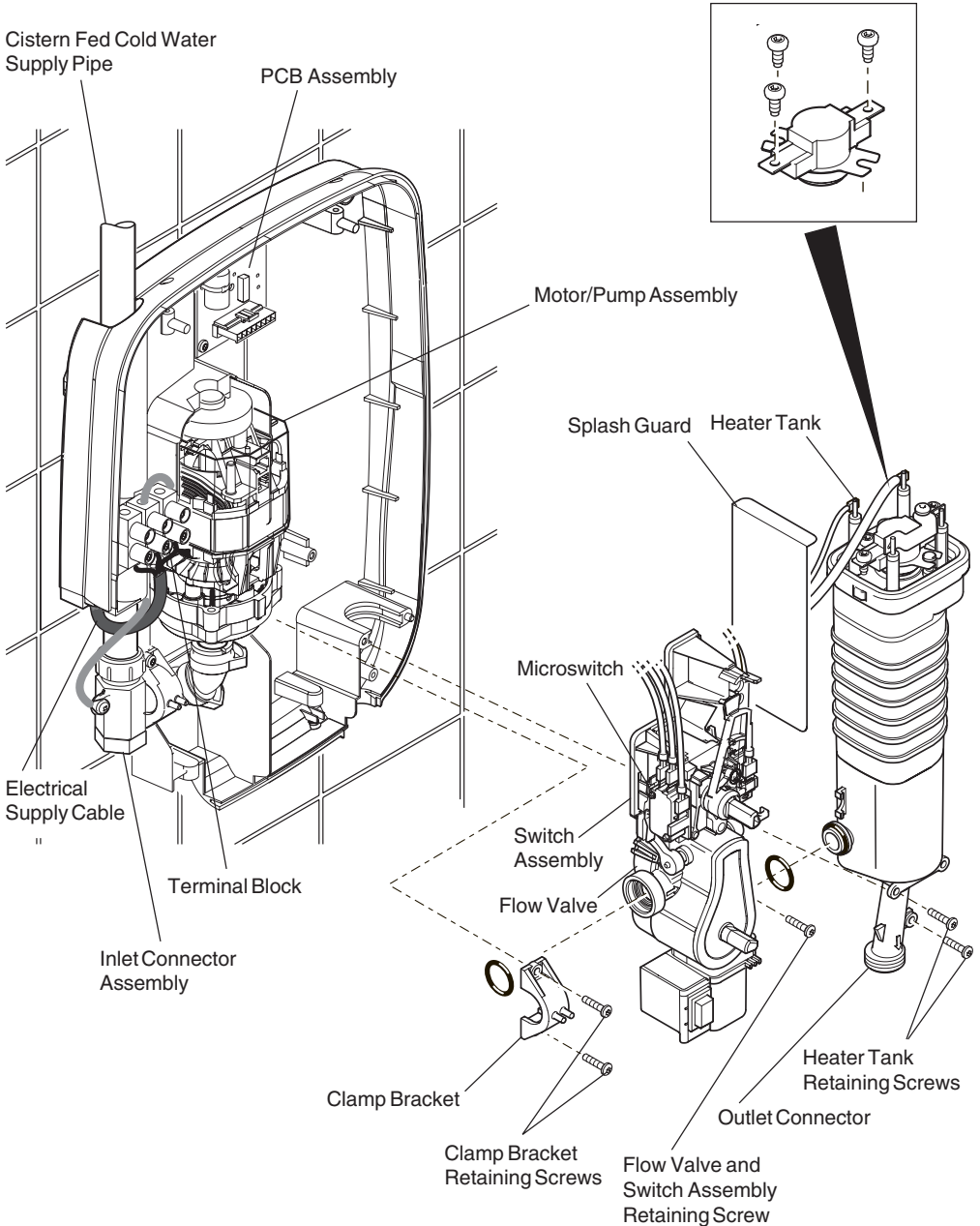
- 6.1. Unscrew the four cover retaining screws sufficient to remove the cover and service tunnel.

Note! The cover retaining screws are captive and need not be removed.

- 6.2. Remove the hose from the outlet connector and loosen the connection to the inlet connector assembly.
- 6.3. To improve access to the terminals on top of the tank the terminal block may be loosened by removing the fixing screw.
- 6.4. Remove the screws that hold the clamp bracket in position and remove the clamp bracket.
- 6.5. Remove the screws that hold the flow valve and switch assembly and the heater tank in position.
- 6.6. Carefully pull the flow valve and switch assembly and the heater tank away from the case.
- 6.7. Remove the brown and red wires from one side of the thermal switch and the second brown wire from the other side of the thermal switch.
- 6.8. Remove the fixing screw and remove the thermal switch and green earth bonding wire.

Caution! Do not press printed disc on the replacement thermal switch as this will make the component unserviceable.

- 6.9. Refit the components in reverse order. Make sure that the electrical wires are installed in the correct positions. In particular the green earth bonding wire must be reconnected above the thermal switch flange.



Thermal Switch - Removal and Installation

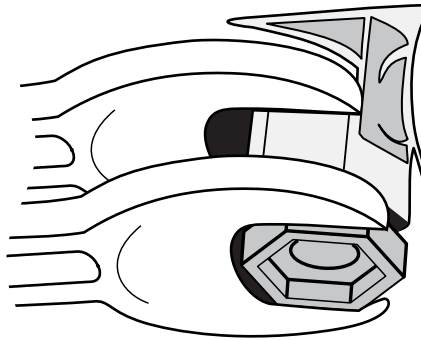
7. Inlet Filter - Cleaning

WARNING! Isolate the electrical and water supplies before removing the cover. Mains electricity connections are exposed when the cover is removed.

- 7.1. Unscrew the four cover retaining screws sufficient to remove the cover and service tunnel.

Note! The cover retaining screws are captive and need not be removed.

- 7.2. Hold a wrench across the flats of the inlet connector assembly to prevent damage to the connector, and unscrew the inlet filter.
- 7.3. Withdraw the inlet filter. Clean or renew as necessary.
- 7.4. Refit in reverse order. **Ensure that the filter is screwed fully home.**



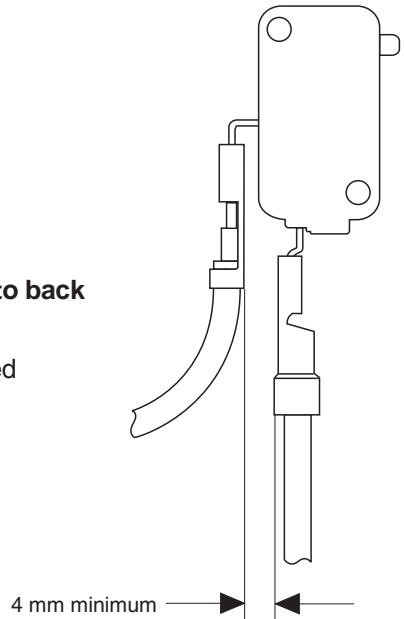
Mira Elite 2 Spare Parts List

215 12	Thermal Trip Pack
405 58	Inlet Connector Assembly
406 27	Inlet Filter (with 'O' seal fitted)
416 38	Clamp Bracket
416 41	Thermal Switch
416 43	Splash Guard
416 48	Latching Switch
416 51	Solenoid Coil Assembly
416 52	Outlet Connector
417 33	Heater Tank 9.8 kW
417 50	FlowValve Assembly
417 51	Switch Assembly
428 55	Cover Assembly
428 56	Cover Seal (not shown)
428 58	Component Pack - components identified 'A'
428 59	Service Tunnel
428 60	Terminal Block Assembly
428 61	Transfer/Inlet Tubes
428 62	Motor/Pump Assembly
428 64	Motor Dust Shield
428 66	Screw Pack - components identified 'B'
428 67	Connector Assembly
428 68	PCB Assembly
872 01	Microswitch N/O - 2 pin
872 28	Microswitch C/O - 3 pin

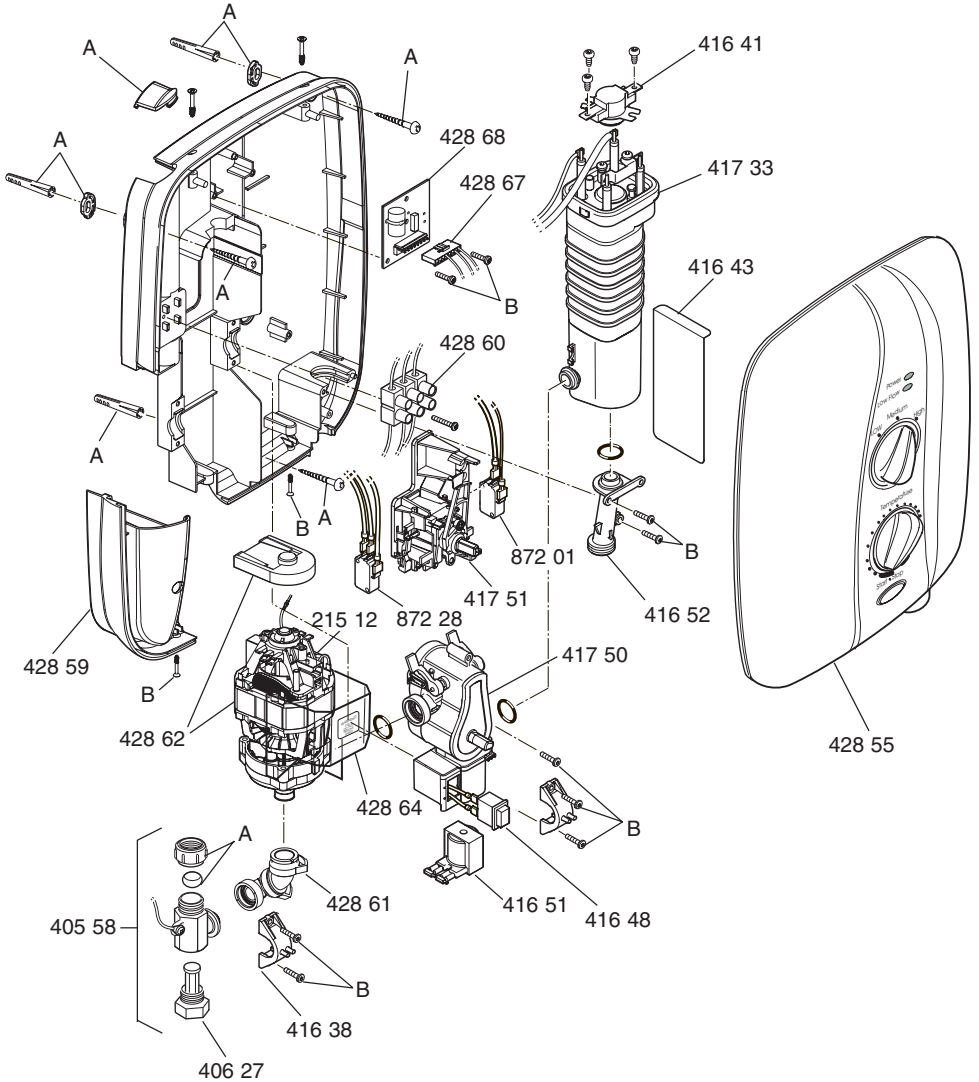
Important Note!

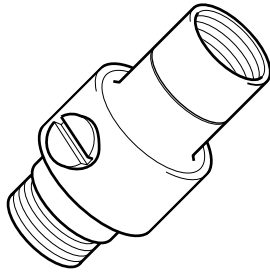
Push-fit connectors must be assembled **back to back** onto the micro-switch terminals.

A minimum air gap of **4 mm** must be maintained between the connectors after assembly.

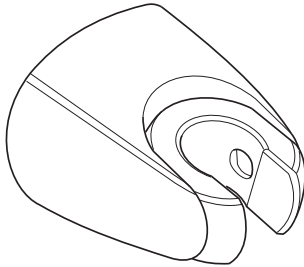


Mira Elite 2 Spare Parts Diagram





DCV-H: An outlet double check valve, designed to prevent the backflow or backsiphonage of potentially contaminated water, through shower controls which are fitted with a flexible hose as part of the outlet shower fitting. Available as an optional accessory from your Kohler Mira stockists.



RF2 Fixed handset holder. A simple alternative or additional holder for a shower handset, available as an optional accessory from your Kohler Mira stockists.

Notes

Notes

Notes

Customer Service

Guarantee of Quality

Mira Showers guarantee products against any defect of materials or workmanship for one year from the date of purchase (2 years for Mira Select and 3 years for Mira Excel ranges).

To validate the guarantee, please return your completed registration card.

Within the guarantee period we will resolve defects, free of charge, by repairing or replacing parts or modules as we may choose.

To be free of charge, service work must only be undertaken by Mira Showers or our approved agents in Northern Ireland and Republic of Ireland.

Service under this guarantee does not affect the expiry date. The guarantee on any exchanged parts or product ends when the normal product guarantee period expires.

Not covered by this guarantee:

Damage or defects arising from incorrect installation, improper use or lack of maintenance, including build-up of limescale.

Damage or defects if the product is taken apart, repaired or modified by any person not authorised by Mira Showers or our approved agents.

This guarantee is in addition to your statutory and other legal rights.

Before using your shower

Please take the time to read and understand the operating and safety instructions detailed in this manual.

What to do if something goes wrong

If when you first use your shower it doesn't function correctly, first contact your installer to check that installation and commissioning are satisfactory and in accordance with the instructions in this manual. We are on-hand to offer you or your installer any advice you may need.

Should this not resolve the difficulty, simply contact our Customer Services who will give every assistance, and if necessary arrange for our service engineer to visit.

If later the performance of your shower declines, consult this manual to see whether simple home maintenance is required. Please call our Customer Services to talk the difficulty through, request service under guarantee if applicable, or take advantage of our comprehensive After-Sales service.

As part of our quality and training programme calls may be recorded or monitored

After Sales Service

Our Customer Services Team is comprehensively trained to provide every assistance you may need: help and advice, spare parts or a service visit.

Spare Parts

We maintain an extensive stock of spares, and aim to have functional parts available for ten years from the date of final manufacture of the product.

Spares can be purchased from approved stockists or merchants (locations on request) or direct from Customer Services.

Spares direct will normally be despatched within two working days. Payment can be made by Visa or Access at the time of ordering. Should payment by cheque be preferred a pro-forma invoice will be sent.

Note! In the interests of safety, spares requiring exposure to mains voltages can only be sent to competent persons.

Service

Our Service Force is available to provide a quality service at a reasonable cost. You will have the assurance of a Mira trained engineer/agent, genuine Mira spares – and a 12 month guarantee on the repair.

Payment should be made directly to the Service Engineer/Agent, using Visa, Access or a cheque supported by a banker's card.

To contact us:

England, Scotland & Wales

Mira Showers Customer Services

Telephone: 01242 262888
8.30am to 5pm Working days (4.30pm Fri)
8.30 am to 12.30pm Saturday
E-mail: Mira_technical@mirashowers.com
Fax: 01242 282595
By Post: Cromwell Road
Cheltenham
Gloucester GL52 5EP

For Customers in Northern Ireland

Wm H Leech & Son Ltd

Telephone: 028 9044 9257 – Mon to Fri 9 am-5pm
Fax: 028 9044 9234 – 24 hours
Post: Maryland Industrial Estate
Ballygowan Road
Moneyreagh, Co Down
BT23 6BL

For Customers in Republic of Ireland

Modern Plant Ltd

Telephone: Dublin 01 4591344 - Mon to Fri 9am to 5pm
Fax: Dublin 01 4592329 – 24 hours
Post: Otter House
Naas Road
Clondalkin
Dublin 22

Mira Showers

Kohler Mira Ltd
Cromwell Road,
Cheltenham GL52 5EP.

Mira is a registered trade mark of Kohler Mira Limited.
The company reserves the right to alter product specifications without notice.



BS EN ISO 9001 : 1994
Reg. No. FM 14648

mira
SHOWERS