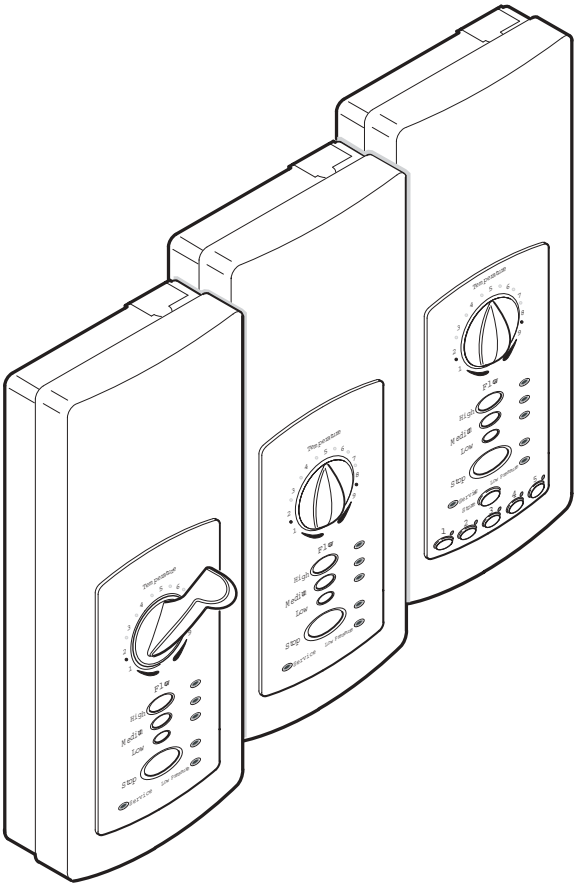
8.7 and 9.8 kW

mira

ADVANCE THERMOSTATIC ATL



Mira Advance ATL

Installation & User Guide

THESE INSTRUCTIONS ARE TO BE LEFT WITH THE USER

Contents

Section 1

Introduction

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

The Mira Advance ATL is a high performance electric shower, which provides thermostatic temperature control which compensates for pressure, temperature and voltage changes to achieve very accurate water temperatures whilst showering. Separate push-button controls allow the user to easily select three independent flow settings.

The Mira Advance ATL features as standard, a safe 'maximum temperature setting', but also benefits from a special feature allowing the maximum shower temperature to be limited to temperatures ranging between 37^0C - 48^0C.

The Mira Advance ATL Memory control model provides the user the opportunity to preset five choices of flow level and temperature, which can be easily recalled upon demand by simple push button control.

The Mira Advance ATL Flex is designed to be easily operated by users with restricted hand movement using ergonomically designed controls.

For healthcare or special need requirements, refer to section 13, "**Maximum Temperature Setting**".

Mira Advance models covered by this guide:

Mira Advance ATL Standard	8.7 kW 240 Volts, 8.0 kW 230 Volts
Mira Advance ATL Standard	9.8 kW 240 Volts, 9.0 kW 230 Volts
Mira Advance ATL Memory	8.7 kW 240 Volts, 8.0 kW 230 Volts
Mira Advance ATL Memory	9.8 kW 240 Volts, 9.0 kW 230 Volts
Mira Advance ATL Flex	8.7 kW 240 Volts, 8.0 kW 230 Volts
Mira Advance ATL Flex	9.8 kW 240 Volts, 9.0 kW 230 Volts

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

Section 2

Important Safety Information

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 APPLIANCE MUST BE EARTHED.** ENSURE SUPPLEMENTRY BONDING COMPLIES WITH THE "REQUIREMENTS FOR ELECTRICAL INSTALLATIONS".

In accordance with the current edition of 'The Plugs and Sockets etc. (Safety) Regulations' in force at the time of installation, this appliance 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. 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.

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

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

1.7. **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.

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

1.9. 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.

1.9.1. If the cover is not correctly fitted and water has entered the appliance case.
1.9.2. If the case is damaged.
1.9.3. If the appliance begins to make an odd noise, smell or smoke.
1.9.4. If the appliance shows signs of a distinct change in performance, indicating a need for maintenance.
1.9.5. If the appliance is frozen.

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

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

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

1.13. 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 appliance.

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 (NICEIC), throughout the UK.
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/Bye-laws (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.

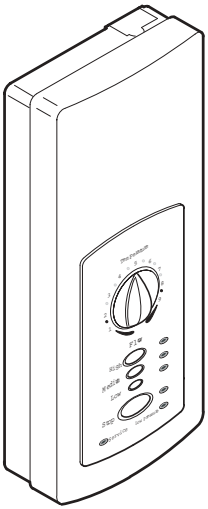
2.7. Anyone who may have difficulty understanding or operating the controls of any shower should be attended whilst showering. Particular consideration should be given to the young, the elderly, the infirm, or anyone inexperienced in the correct operation of the controls.

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.

Section 3

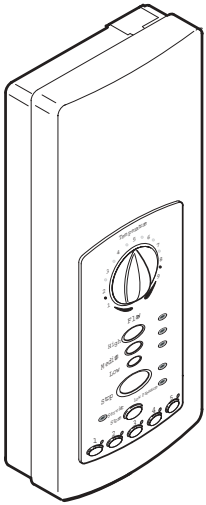
Pack Contents Checklist

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



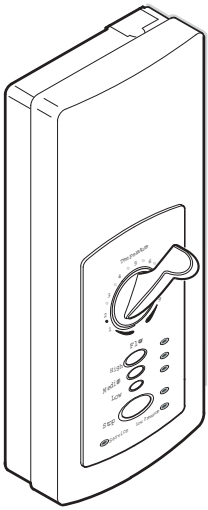
1 x Mira Advance ATL Standard ☐

Or



1 x Mira Advance ATL Memory ☐

Or

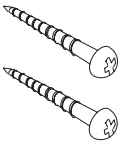


1 x Mira Advance ATL Flex ☐

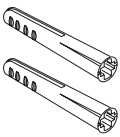
1 x Compression Nut ☐

1 x Olive ☐

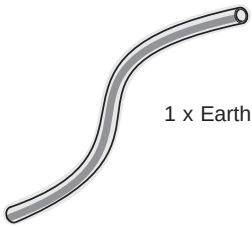
1 x Tap Connector Adaptor ☐
(for fitting to existing tap connector)



2 x Wall Screws ☐



2 x Wall Plugs ☐



1 x Earth Sleeve ☐

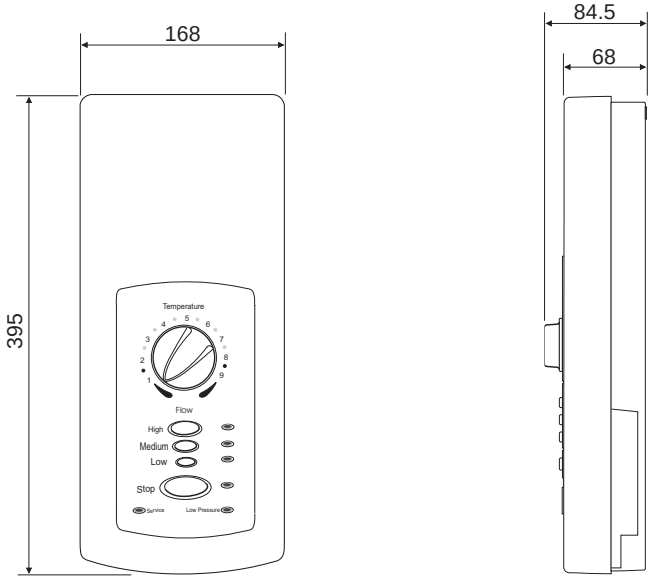
1 x Installation and User Guide ☐

1 x Customer Support Brochure ☐

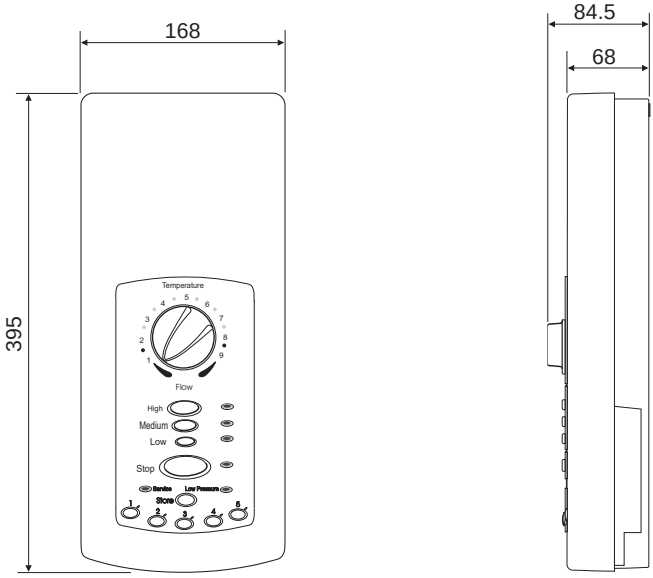
Section 4

Dimensions

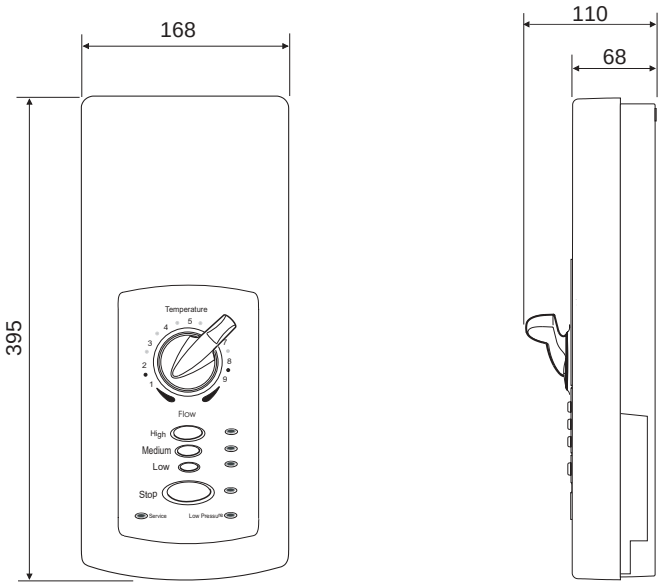
1. Mira Advance ATL



Standard Model



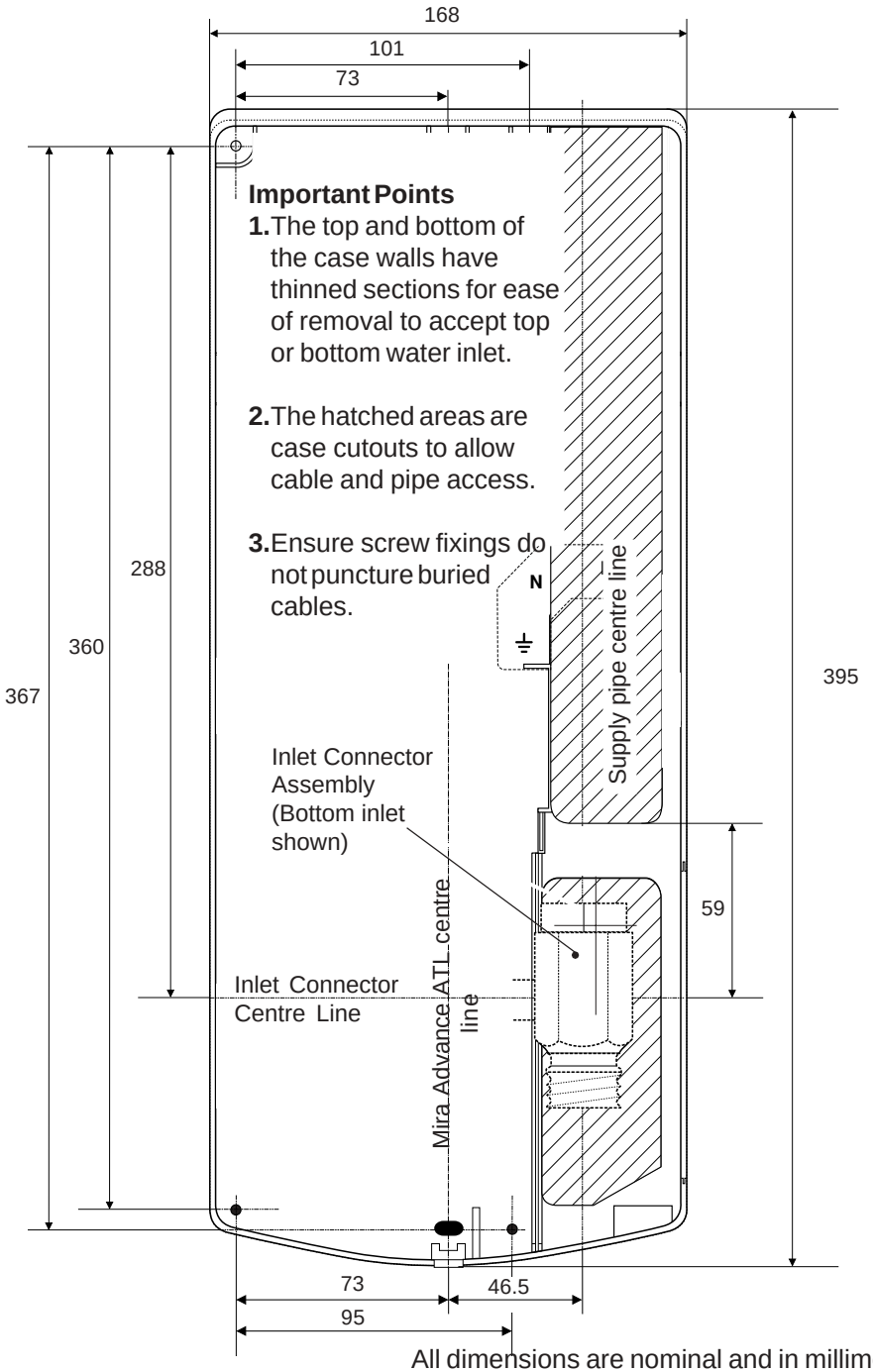
Memory Model



Flex Model

All dimensions are nominal and in millimetres.

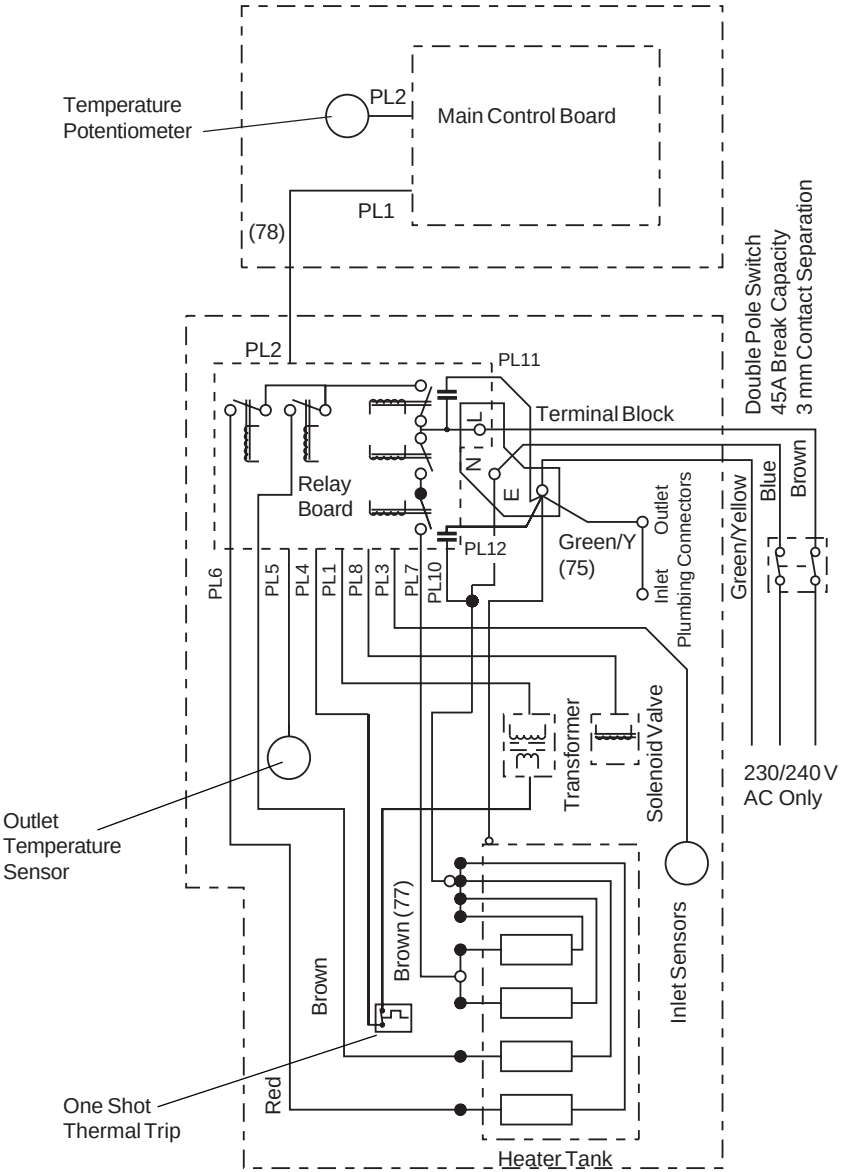
2. Water and Cable Entry Points



All dimensions are nominal and in millimetres.

Section 5

Mira Advance ATL Wiring Diagram



Section 6

Specifications

1. Plumbing

1.1. The inlet connector assembly incorporates an inlet filter, which swivels to allow these entry positions, top, top back, bottom and bottom back inlet.

1.2. The outlet terminates with a 1/2" BSP male thread for connection to a Mira flexible shower hose.

1.3. A maintained pressure of at least **1 bar** is recommended for the product up to a maximum static pressure of **10 bar**.

Thermostatic performance will be maintained down to **0.5 bar** maintained pressure. However, this will result in reduced power and therefore reduced flow.

1.4. Minimum static pressure 0.2 bar to keep the flow valve closed.

1.5. The Mira Advance ATL will provide satisfactory performance with incoming water supply temperatures between 2 - 28^{0}C.

1.6. Maximum ambient temperature for the Mira Advance ATL whilst in use is 30^{0}C.

2. Electrical

2.1. Mira Advance ATL supply fuse - 8.7 kW 40 Amp
9.8 kW 45 Amp

2.2. The terminal block will not accept cable larger than 16mm^2.

2.3. The Mira Advance ATL will provide satisfactory performance with an incoming electricity supply voltage of 230 V +/-10%.

3. Standards and Approvals

3.1. This Mira Advance ATL complies with all relevant directives for CE marking.

Section 7

Installation Requirements

1. Plumbing

Read Section 2, **"Important Safety Information"** first.

1.1. The Mira Advance ATL is normally connected to the cold water mains-fed supply.

1.2. The Mira Advance ATL is suitable for installation within the shower area and must be positioned over a water catchment area with the controls at a convenient height for the user. 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 Mira Advance ATL .

1.3. The Mira Advance ATL is fitted with an inlet connector assembly that is designed to accept plumbing supplies from the top, bottom or back. The water supply can be fed with 15mm pipe or 10mm microbore pipe, suitably adapted for the inlet connector assembly. If 10mm microbore is used, then an allowance for increased pressure loss must be made to ensure that the minimum maintained inlet pressure of 1 bar is achieved (refer to specification).

1.4. At pressures below 1 bar maintained the full flow performance may not be achieved.

1.5. The Mira Advance ATL 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 (Small pillars moulded on to the back of the case allow air circulation). This Mira Advance ATL is designed to be ventilated. Failure to do this may cause product failure (refer to Figure 1).

1.6. Use only the inlet connector assembly supplied with the Mira Advance ATL, do not use any other types of fitting.

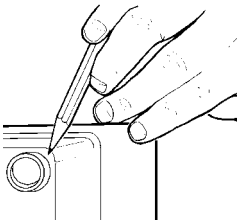


Figure 1

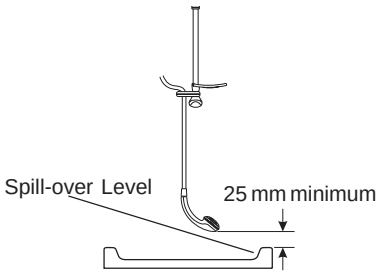


Figure 2

1.7. When installing the inlet connector for back inlet supply (refer to **Section 8, "Installation"**) connection, it is advisable to seal around the incoming mains-fed supply to prevent water ingress into the wall.

1.8. We recommend that a non-restrictive (free flowing) isolating valve is fitted in the cold water supply pipe to allow the complete maintenance of the Mira Advance. **Do not** use a valve with a loose washer plate (jumper) as this can lead to a build up of static pressures.

1.9. The Mira Advance ATL is fitted with a 1/2" BSP male outlet thread, to accept a Mira shower hose.

1.10. Refrain from applying excessive force when making any connections. Always provide mechanical support when making the plumbing connections.

1.11. To avoid damage to the case when soldered fittings are used, pre-solder the pipework and fittings before connecting them to the inlet connector assembly.

Note! Supply pipework MUST be flushed to clear debris before connecting the Mira Advance ATL. **Debris will reduce the performance of the unit**.

1.12. 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 Advance ATL 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.

1.13. 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 backsiphonage (refer to Figure 2). 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 buildup, which could exceed the maximum static inlet pressure for the appliance.

1.14. Avoid layouts where the shower hose will be sharply kinked. This may reduce the life of the hose.

2. Electrical

Read Section 2 **"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 rating of the electricity supply company fuse and the consumer unit must be adequate for the additional demand. As the Mira Advance ATL is a high power unit, it is essential to contact your electricity supply company to ensure that the supply is adequate for the Mira Advance ATL. Voltage drop due to local heavy demand will reduce the shower's performance.

2.3. The Mira Advance ATL **must be earthed** by connecting the supply-cable earth conductor to the earth terminal.

Supplementary bonding: Within the bathroom or shower room, all accessible conductive parts of electrical equipment and extraneous conductive parts that are likely to introduce earth potential, must be electrically bonded to earth using a minimum cable size of 4.0mm^2 if the cable is not mechanically protected (2.5mm^2 if mechanically protected).

2.4. The minimum cable size (cross-sectional area) required is 6mm^2 under normal conditions of installation. To obtain full advantage of the power provided by this unit the shortest possible cable route from the consumer unit to the shower should be used. The maximum permissible circuit length is dependent on current demand, voltage drop and cable size, refer to the IEE Wiring Regulations for further information.

Important! The shower circuit should be separated from other circuits by at least twice the diameter of the cable or conduit and it should not be run through thermally insulating material or in locations where the ambient temperature is likely to exceed 30^{0}C. If any of these conditions are unavoidable it is necessary to determine the cable size which will prevent damage to the cable caused by overheating. Refer to a qualified electrician and "the requirements for electrical installations" commonly referred to as the IEE Wiring Regulations.

As a guide only, the following maximum permissible lengths are given for 6mm^2 cable protected by a 40 A (for 8.7kW)/ 45A (for 9.8kW) MCB (type B) and allowing for a 5 Volt drop:

Advance ATL 8.7 kW (240 V AC) at 240 V - 18 Metres
Advance ATL 9.8 kW (240 V AC) at 240 V - 16 Metres

2.5. A separate, permanently connected supply must be taken from the consumer unit to the Mira Advance ATL through a double-pole switch, which has at least 3mm contact separation. The switch can be a ceiling mounted pull-cord type within the shower room or a wall mounted switch in an adjacent room.

2.6. A 30 mA RCD **MUST** be fitted. This may be part of the consumer unit or a separate unit.

Note! The terminal block will not accept cable larger than 16mm^2.

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

2.8. **DO NOT** exert strain on the terminal block.

2.9. **DO NOT** turn-on the electrical supply until the plumbing has been completed.

Plumbing and Electrical Schematic Diagram

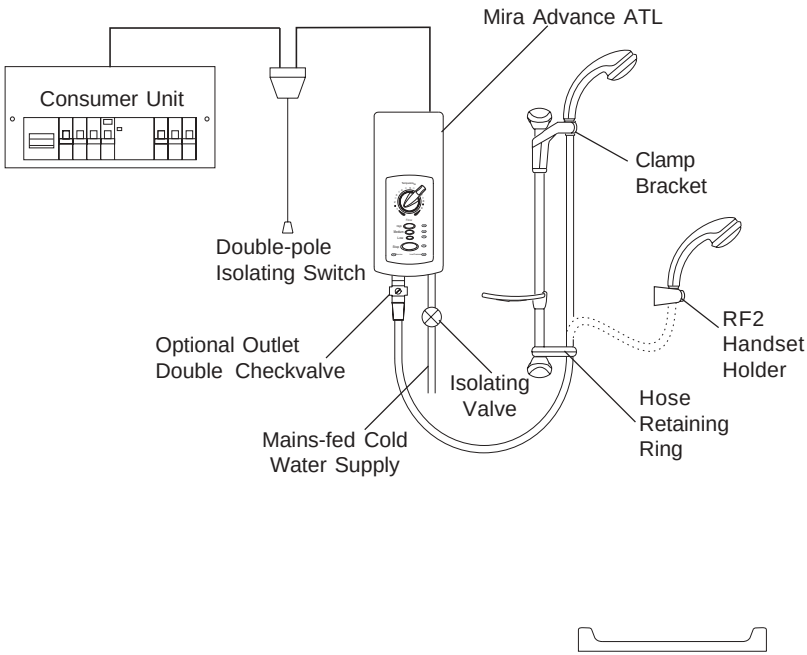


Figure 3

Installation

1. Mira Advance ATL

Read Section 2 **"Important Safety Information"** first.

WARNING! Isolate the electrical and water supplies before proceeding with the installation of the Mira Advance ATL. The electricity must be turned off at the mains and the appropriate circuit fuse removed, if applicable.

Note! Bottom inlet is illustrated for clarity in these instructions.

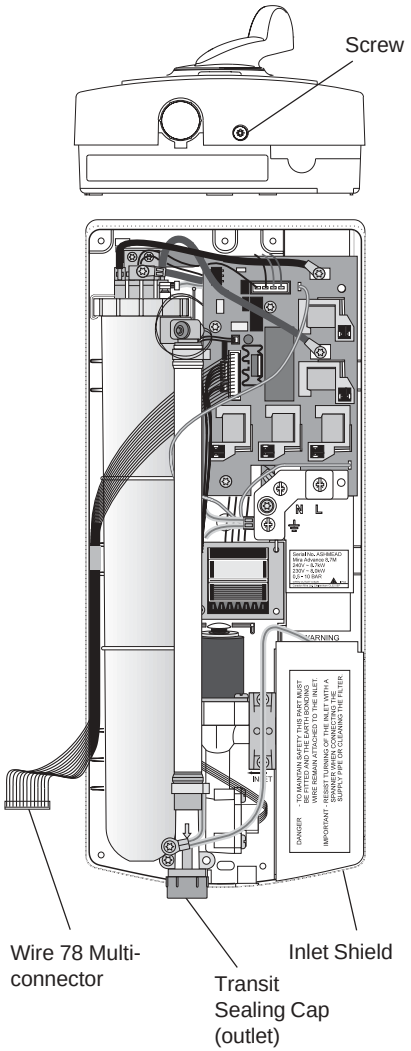
1.1. To remove the Mira Advance ATL case remove the screw at the bottom of the case.

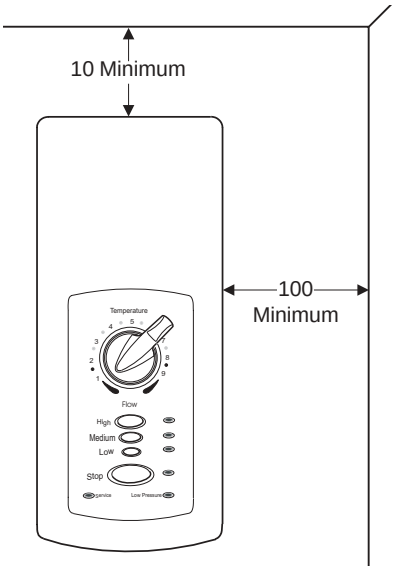
1.2. Pull the bottom of the Mira Advance ATL cover outwards and upwards off the case.

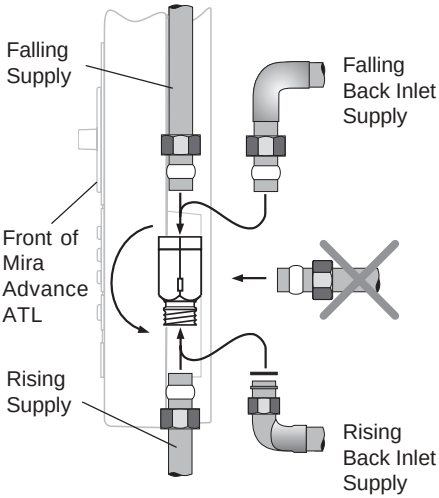
1.3. Slide out the inlet shield, located over the inlet connector assembly.

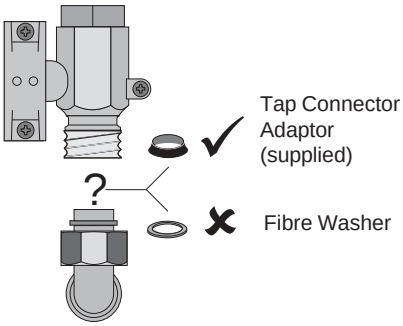
1.4. Unscrew the transit sealing caps from the inlet and outlet of the Mira Advance ATL.

1.5. When installing the Advance ATL with concealed water and electrical supplies refer to**, "Dimensions: Water and cable entry points".**









1.6. When deciding the position of the Mira Advance ATL on the wall:
Allow 100mm minimum clearance to the right hand side of the case, to provide unrestricted access to the inlet connector, for installation and future maintenance.
Allow 10mm minimum clearance from the top of the case to allow the cover to be removed.

1.7. Determine whether the cold water and cable supplies will be top (falling), bottom (rising), or back inlet to the Mira Advance ATL.

1.8. Swivel the inlet connector assembly to suit (not directly back into the wall). Avoid trapping the green earth bonding wire.

1.9. Remove as appropriate, the thinned sections in the Mira Advance ATL case, to allow the pipe and cable to enter the product.

1.10. Install the mains-fed cold water supply pipe
The Mira Advance ATL can be connected to either a compression fitting (supplied) or a tap connector (not supplied).
If upgrading from other Mira Advances that use a tap connector, then the tap connector adapter can be used in place of the fibre washer. This allows the tap connector to be used in conjunction with the compression fitting of the product (see diagram).
For back inlet supplies, the cold water pipe must emerge from the walls surface 'square' to prevent straining the inlet connector clamp bracket. See diagram for options.

DO NOT connect directly back into the wall.

1.11. Thoroughly flush the mains-fed cold water supply pipe. The supply must be clean and free from debris BEFORE connecting the Mira Advance ATL.

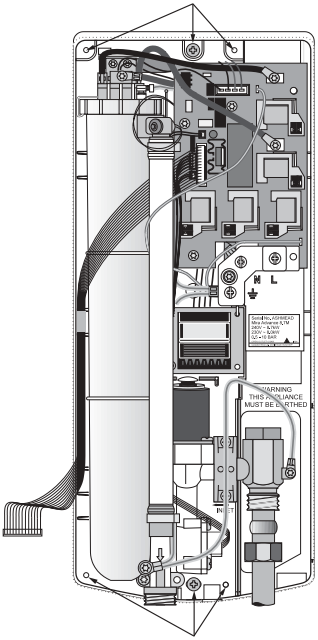
Note! Debris will reduce the performance of the unit.
To flush the pipework, turn on the water supply and drain a minimum of 10 litres (2 gallons) of water into a bucket or catchment area. Turn off the water supply.

1.12. Avoiding buried cables and pipes, choose one of the upper fixing holes which will allow the Mira Advance ATL to be firmly fixed to the wall structure, and drill through the thinned hole section in the back of the case.

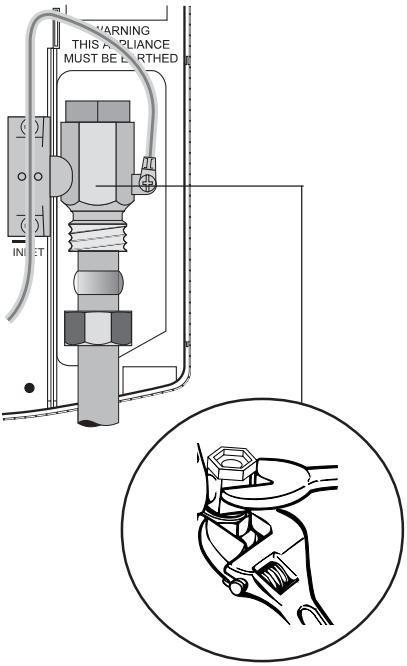
1.13. Offer the Mira Advance ATL up to the wall and temporarily connect the mains-fed cold water supply pipe. Mark through the casing the position of the upper and lower holes. Remove the Mira Advance ATL from the wall before drilling. This will prevent debris from entering the Mira Advance ATL.

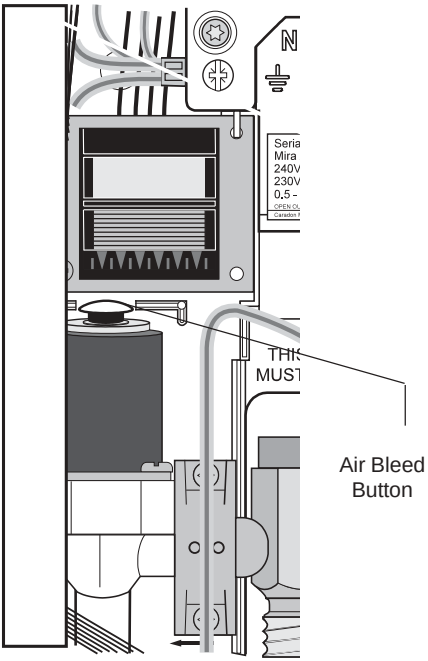
1.14. Drill and suitably plug the two fixing holes. Secure the Mira Advance ATL to the wall with the screws provided. Alternative fixings (not supplied) may be necessary for some wall structures.

Upper Fixing Holes



Lower Fixing Holes





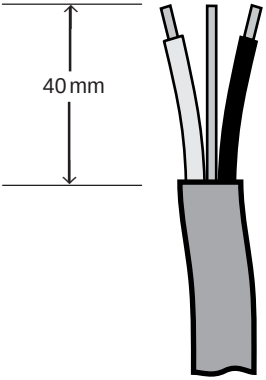
1.15. Make the connection to the mains-fed cold water supply pipe. Hold a wrench across the flats of the inlet connector assembly to prevent damage to the connector, whilst tightening the compression nut. Turn on the water supply.

Priming the Mira Advance ATL
Connect the shower hose to the Mira Advance ATL and position the hose to discharge into the shower tray or bath waste outlet.
Press the air bleed button, located on top of the flow valve, several times. This will allow the Mira Advance ATL to fill with water and expel any entrapped air.

Note! Failure to prime the unit will severely effect performance.

Note! Water at full mains supply pressure will flow from the shower hose and a small amount of water will be discharged from under the air bleed button.

Caution! Once the air bleed button has been pressed ensure that is not fouled when released, otherwise water will continue to discharge from the bleed button.



Earth Sleeve

1.16. Bring the electrical supply cable into the case via one of the cable entry points, and offer up to the terminal block.

1.17. Strip back approximately 40mm of the outer cable insulation. Fit the earth sleeve over the earth conductor.

Connect the conductors firmly into the terminal block (refer to wiring diagram). Ensure that the bare cores of each conductor are securely trapped **within** each conductor clamp.

L = Red Wire
N = Black Wire
⏚ = Yellow/Green sleeved wire

1.18. Check that the earth bonding wire to the inlet connector assembly is tight. Ensure that the multi-connector lead is clear of the cover when it is refitted. Refit the inlet shield over the inlet connector assembly. If the Mira Advance ATL has been installed with top inlet cable or water supplies, cut the top case insert to suit, and fit. Finally, re-tighten the screws of the terminal block.

1.19. 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 the installation.

1.20. Connect the wire 78 multi-connector lead from the relay board, in the Mira Advance ATL, to the socket on the control PCB located in the cover. The multi-connector is a one way fit into the receiving socket on the control PCB. Ensure that the multi-connector is correctly orientated as illustrated.
Ensure that the connector is fully pushed home.

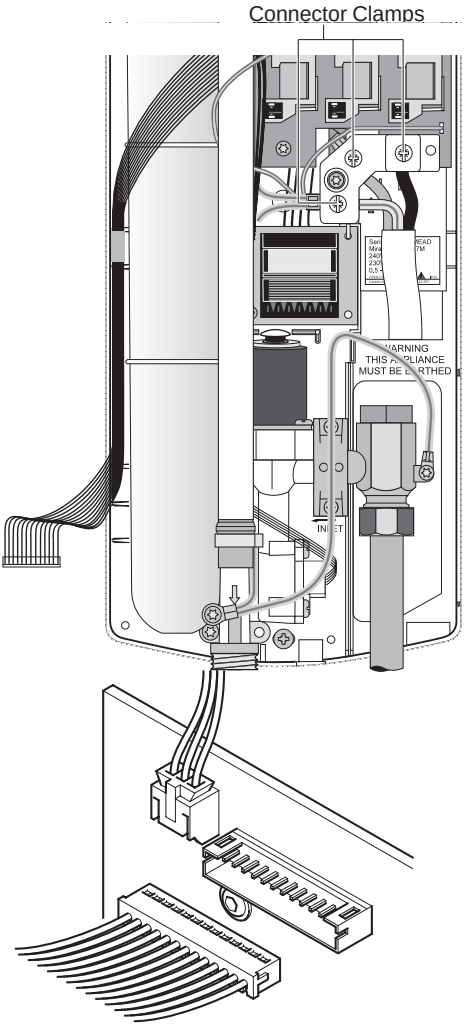
1.21. Refit the cover by locating the top of the cover onto the location strip on the top of the case. Ensure that the wire 78 multi-connector lead is seated between the tank body and the left- hand side of the case.

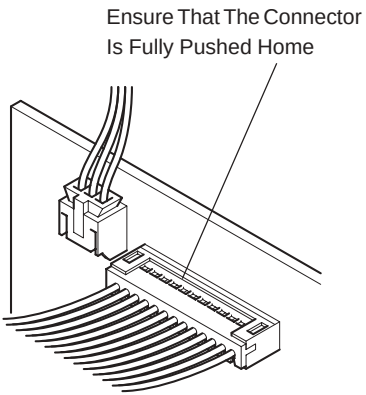
1.22. Push the bottom of the cover against the case until it locates correctly.
Install the screw and tighten.

1.23. Install the shower fittings, refer to the separate Installation, Operation and Maintenance Guide.

1.24. The high capacity spray plate illustrated in the shower fitting guide is not supplied with this Mira Advance ATL.

1.25. Now proceed to commission the Mira Advance. Refer to **Section 9, "Commissioning".**





Section 9

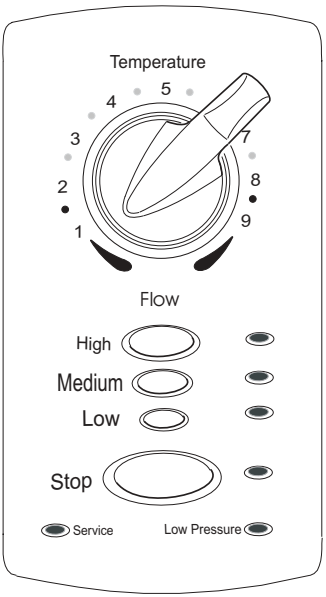
Commissioning

Read Section **2, "Important Safety Information"** first.

If you are unsure how electric showers work, please read through, **Section 10, Operation,** before continuing.

1. Connect the flexible hose from the shower fitting to the outlet of the Mira Advance ATL. Ensure that the hose seals are fitted, and that the handset is in the handset holder and aimed into the water catchment area.
   Do not overtighten. Over-tightening the flexible hose will shorten its life.

2. **Turn** the **'TEMPERATURE'** control knob to **full cold**. The control knob operates through approximately ¾ of a turn from cold to hot and features a detent on the final travel to the cold only position.
3. **Turn on** the water supply fully at the isolating valve. Check that water is not leaking from the bottom of the case.
4. **Switch on** the electrical supply at the double-pole switch. The red indicator beside the **'STOP'** button will illuminate providing a visual indication that the electrical supply is connected.
5. **Press** the **'LOW'** flow button and observe the green indicator and the audible tone. Check that cold water flows freely from the shower within a few seconds. If a delay of more than 5 seconds in encountered, then it is likely that the Mira Advance ATL has not been primed. Refer to **Section 8, "Installation".**



Warning! Isolate the electrical supply as this step requires that the Mira Advance ATL cover be removed. Should the Mira Advance ATL still not function then refer to **Section 11, "Fault Diagnosis"**.

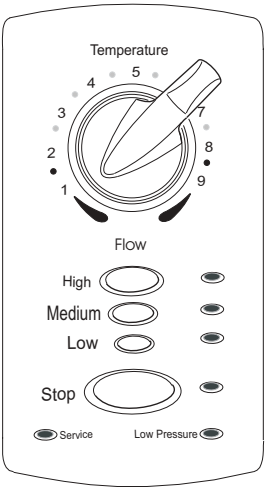
6. Turn the **'TEMPERATURE'** control knob to position **'5'** and allow the Mira Advance ATL to operate for 2 minutes. During this period the Mira Advance ATL will calibrate itself to the site conditions.

7. **Press** the **'MEDIUM'** flow button and observe an increase in flow of water, the green indicator and the audible tone. Allow the Mira Advance ATL to operate for 2 minutes.

8. **Press** the **'HIGH'** flow button and observe an increase in flow of water, the green indicator and the audible tone. Allow the Mira Advance ATL to operate for 2 minutes.

9. **Turn** the **'TEMPERATURE'** control to cold and then **slowly** turn the **'TEMPERATURE'** control from cold through to position **number 6**, which is a typical showering temperature. If a satisfactory temperature cannot be achieved, then turn the **'TEMPERATURE'** control through to position **number 8**.

Note! Changing the temperature requires the staged power up and power down of individual heating elements. During this sequence the user may hear a number of audible 'clicks' from the relays.



10. **Press** the **'MEDIUM'** flow button. The flow of water will decrease, but the selected temperature will remain relatively constant.

11. **Press** the **'LOW'** flow button. The flow of water will decrease, but the selected temperature will remain relatively constant.

12. **Press the 'STOP' button and observe the red indicator and audible tone. The Mira Advance ATL will continue to run for a few seconds before shutting off. Audible "clicks" will be heard.**

Note! To ensure the commissioning process is memorised by the Mira Advance ATL the **STOP** button must be pressed before electrically isolating the Mira Advance ATL.

Note! Water may continue to drip for a short time whilst the water drains out of the handset .

Note! High cold water mains supply pressures and high shower temperatures will cause a slight audible hissing sound to be heard from the Mira Advance ATL whilst it is operating. This is quite normal and does not indicate that there is a fault with the Mira Advance ATL.

Section 10

Operation

1. Advice to Users

Read Section **2, "Important Safety Information"** first.

1.1. In the event that the Mira Advance ATL fails to respond to any push-button instruction, or exhibits unusual performance characteristics during operation, **first** turn off the electrical supply by operating the pull-cord switch, **wait for a few moments for the Mira Advance ATL to reset**, then turn on the pull-cord switch and operate the Mira Advance ATL. If the problem still persists then refer to **Fault Diagnosis**.

1.2. Electric showers work by taking in cold water and passing it over the heating elements contained in the tank body of the shower Mira Advance ATL.

1.3. 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 stable shower temperatures.

1.4. Seasonal changes in the temperature of the incoming cold water supply and mains electrical voltage, will mean that the **flow rate of water** at accustomed 'TEMPERATURE' control knob settings will vary as follows:

Summer: Due to the thermostatic response of the shower the flow from the Advance ATL on medium/high flow setting in the summer may be higher than the flow in the autumn or spring.

Winter: Due to the thermostatic response of the shower the flow from the Advance ATL on low/medium flow setting in the winter may be lower than the flow in the autumn or spring.

1.5. The Mira Advance ATL monitors the following functions:

1.5.1. The incoming cold water temperature.
1.5.2. The outgoing shower temperature.
1.5.3. The flow rate of water.
1.5.4. The current user settings.

The Mira Advance ATL then calculates the flow rate and power level, to keep the outgoing temperature constant. This mode of operation requires the staged power up and power down of individual heating elements. During this sequence the user may hear a number of audible 'clicks' and the flow rate may change.

1.7. Low Pressure Thermostatic Performance (below 1 bar maintained)

If the supply pressure falls below 1 bar maintained the unit may switch off elements to maintain the temperature. A reduced flow will be observed even though the user selected flow indication remains unchanged.
Restoration of the original pressure condition will not automatically restore the flow setting. This can be achieved (subject to restoration of adequate supply pressure) by manually reselecting the desired flow condition (even though it is still indicated).

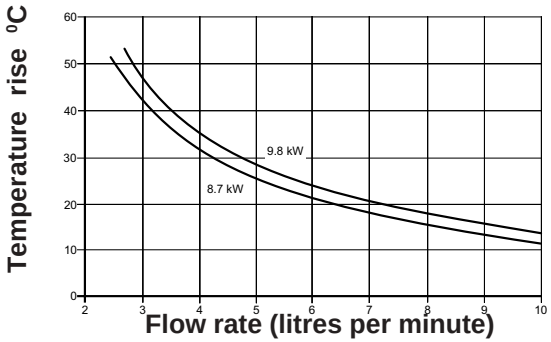
1.8. Low Pressure Failure

The Mira Advance ATL contains a 'LOW PRESSURE' indicator which will operate for three seconds, if the following conditions occur:
1.8.1. Low water pressure (below 0.5 bar maintained).
1.8.2. Blocked or partially blocked spray plate.
1.8.3. Blocked inlet filter.
If any of the above conditions occur, the unit will return to **STOP**.

1.9. The Mira Advance ATL contains a 'SERVICE' indicator which will operate if the following conditions occur:
1.9.1. Abnormal operating conditions (refer to **Maintenance**)
1.9.2. Faulty element or element assembly.
1.9.3. Overheating
Depending on the fault condition the Advance ATL may continue to operate.

1.10. Check the shower temperature before entering the shower. The previous user may have selected a **different** temperature or flow condition.

Temperature Rise Versus Flow for the Mira Advance ATL 8.7 & 9.8kW



(i) The curves on the graph are for the specified outputs at 240V from the Mira Advance ATL heater tank outlet.

(ii) All Mira Advance ATL heating elements have a manufacturing tolerance. Thus flow rates can be above or below those indicated.

(iii) The left-hand scale is temperature rise. (Temperature rise = Heater tank outlet temperature minus the incoming cold water temperature.)

Note! Because of temperature/flow loss through the shower hose and fittings, the showering flow rate achieved may not accurately match the flow rate given on the graph.

(iv) At pressures below 1 bar maintained the full flow performance may not be achieved (refer to **1.7.** Low Pressure Thermostatic Performance).

Example: For the Mira Advance ATL 9.8 kW on full power setting with an incoming water supply at 10^0C and a heater tank outlet temperature at 42^0C, the temperature rise is 32^0C. The flow rate is approximately, 4.5 l/min.

2. Mira Advance ATL Operation

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 Advance ATL.

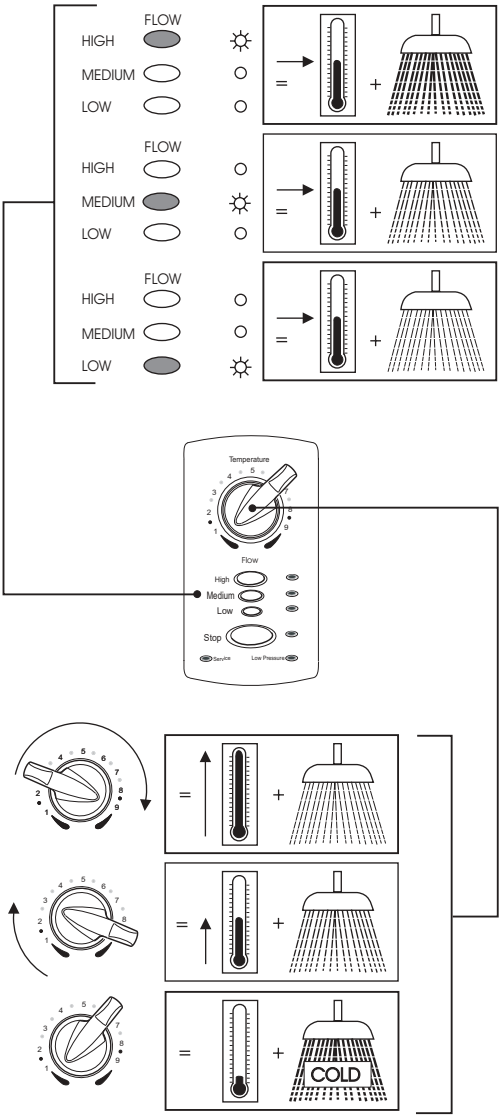
2.1. **Switch on** the pull-cord or wall mounted switch. The red **"STOP"** indicator on the Mira Advance ATL will provide a visual indication that the power is on.

2.2. **Press** one of the three flow buttons, **'HIGH'**, **'MEDIUM'** or '**LOW'**. The adjacent green indicator will illuminate and an audible tone will confirm the action.

For the **Advance ATL Memory,** press one of the five memory buttons. **Note!** The temperature control knob is **inactive** during memory control operation.

2.3. **Wait 15** - **20** seconds for warm water to reach the handset. If the **'LOW'** button was pressed then this time may be longer.

2.4. If necessary turn the **'TEMPERATURE'** control knob **clockwise** to increase the temperature, or **anticlockwise** to decrease the temperature. **Wait 10**–**15** seconds for the adjusted temperature to reach the handset. There will be a change in flow rate when the temperature is adjusted. The control knob operates through approximately 3/4 of a turn from cold to hot and features a detent on the final travel to the cold only position.



Thermostatic Performance

To maintain thermostatic performance the unit may override the selected flow condition. The selected flow indicated does NOT change.

Low Pressure Thermostatic Performance

The unit maintains thermostatic performance at low pressures, however it may be unable to achieve the desired flow conditions (refer to **1.7.** Low Pressure Thermostatic Performance).

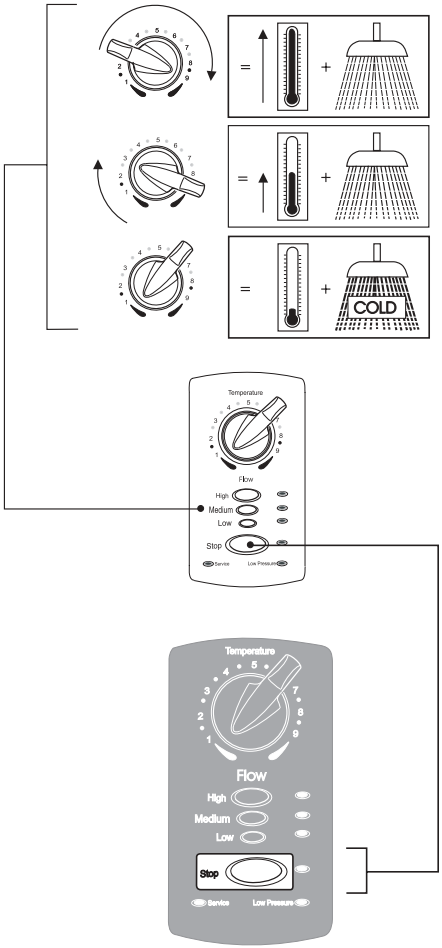
Clockwise ➔ **WARMER** ➔ less flow
Anticlockwise ➔ **COOLER** ➔ more flow

For the Advance ATL Memory model.

To leave memory control mode, and to regain the use of the **'TEMPERATURE'** control knob press one of the following buttons; **'HIGH', 'MEDIUM'** or **'LOW'**. The shower temperature and flow rate will change from the preset memory button condition to that selected by the chosen flow button and **'TEMPERATURE'** control knob position.

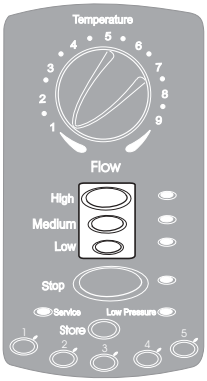
Hint! When returning to standard control, position the **'TEMPERATURE'** control knob at the midpoint i.e. **TEMPERATURE'** control knob vertical.

2.5. IMPORTANT! TO TURN OFF always press the 'STOP' button to allow the Mira Advance ATL to perform its shutdown sequence. The red indicator will illuminate and an audible tone will confirm the action. The Mira Advance ATL will continue to run for a few seconds before stopping. This phased shutdown is to remove heat from the element assembly and tank body.



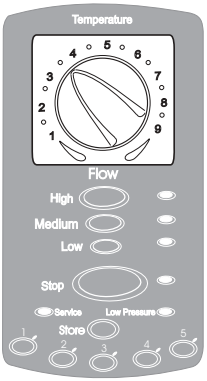
3. Storing the Memory Presets (Mira Advance ATL Memory control model only)

Should you wish to change the five factory presets, proceed as follows:



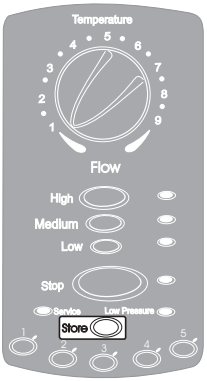
Step 1

Select your personal flow setting.



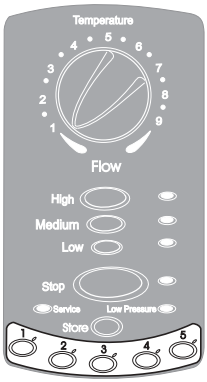
Step 2

Select your personal temperature setting.



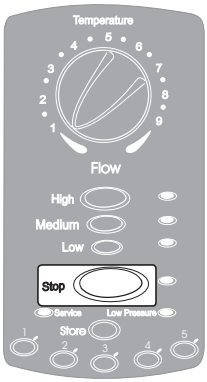
Step 3

Press 'STORE'



Step 4

Press one of the numbered preset buttons



Step 5

Press 'STOP' before turning off the Mira Advance ATL

Note! If the electrical supply is isolated without operating the stop button the memory setting will be lost. The 'Storing Memory' preset procedure will need to be repeated.

Section 11

Fault Diagnosis

1. Operators Troubleshooting Guide

The Mira Advance ATL electric shower is fully performance tested after assembly. In the unlikely event that you experience problems with the Mira Advance ATL, then the following procedures will enable you to undertake basic troubleshooting before contacting the person responsible for installing your shower.

WARNING! There are no user serviceable components beneath the cover of the Mira Advance ATL. Only a competent tradesperson should remove the cover.

Key
A = "STOP" indicator - ✓= light illuminated (right-hand side of button)
B = "LOW PRESSURE" indicator - ✓= light illuminated (right-hand side for 3 seconds only, then returns to STOP)
C = "SERVICE" indicator - ✓= light illuminated (left-hand side)
D = "FLOW INDICATION"

Malfunction	A	B	C	D	Cause	Remedy
No water or very low flow rate and then the unit switches off.	✓ ✓	✓ ✓			Spray plate blocked. Supply stop valve turned down.	Remove and clean. Refer to fittings guide. Turn on.
No visible flow change on flow selection change. Low flow rate.	 ✓	 ✓		✓	Low pressure thermostatic performance. Insufficient water supply pressure.	This is normal during low pressure thermostatic performance. Improve supply pressure. Contact a competent tradesperson.
Sudden rapid increase in flow for a short period, eventually returning to expected flow and temperature. This may occur after a period of non-use.				✓	A section of supply pipe allows pre-heating of water supply to the shower i.e. running through a warm loft or next to hot pipes.	Allow shower to run for a couple of minutes before entering shower to allow warmer water to clear the system.

Malfunction	A	B	C	D	Cause	Remedy
Water Temperature too low.					Check temperature limiter switch.	Reset temperature limiter switch. Refer to **"Section 13 Maximum Temperature Setting".**
Mira Advance ATL fails to operate in any button position.					Double-pole switch isolated.	Switch on.
					Supply fuse failed, MCB or RCD tripped.	Contact a competent tradesperson.
		✓			Incoming water supply below 1°C.	No remedy.
	✓				Temporary interruption of supply voltage.	Press one of the flow buttons or memory preset buttons.
Service light flashes and the flow will not stop after **STOP** button is pressed.			✓		Over temperature. **or**	Turn off the electrical supply by operating pull-cord switch , **wait for a few moments (approx. 10 secs) for Mira Advance ATL to reset**, turn on pull-cord switch and operate Mira Advance. If problem still persists then contact Kohler Mira for advice.
			✓		Abnormal site conditions.	
Any other fault condition.			✓			
Visible flow change (not pulsating) without user selection. User selection lights remain unchanged.				✓	Thermostatic operation.	This is normal to maintain thermostatic performance
No visible flow change on flow selection change.				✓	Thermostatic performance.	This is normal to maintain thermostatic performance under some conditions.

Malfunction	A	B	C	D	Cause	Remedy
After maximum temperature setting is altered, Advance ATL Memory shuts down when certain presets are selected.			✓		Presets set above level of new maximum temperature setting.	Re-configure presets in accordance with new maximum temperature setting.
Advance ATL shuts down without any user operation.					For safety reasons, the Mira Advance ATL is designed to shut down automatically after 30 minutes.	Switch on.

2. Installer Fault Diagnosis

Read Section **2, "Important Safety Information"** first.

WARNING! Isolate the electrical and water supply before removing the cover.
WARNING! Mains connections are exposed when the cover is removed.
WARNING! Refer to wiring diagram before making any electrical connections.
WARNING! Ensure all electrical connections are tight to prevent overheating.
WARNING! Ensure all plumbing connections are watertight.

Providing the Mira Advance ATL 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 fault diagnosis chart, wiring diagram and maintenance instructions are provided. Before replacing any parts ensure that the underlying cause of the malfunction has been resolved.

When following these instructions, it is sometimes necessary to examine the Mira Advance ATL with the electrical supply turned on, as well as the water supply. It is therefore essential that the appropriate safe working practices are followed in accordance with the current Health And Safety Legislation.

Using a device for measuring continuity (DVM, AVO Voltmeter), follow through the following tests.

Key
A = "FLOW" or **"STOP"** indicator - ✓ = light illuminated (right-hand side of button)
B = "LOW PRESSURE" indicator - ✓ = light illuminated (right-hand side) for 3 seconds
C = "SERVICE" indicator - ✓ = light illuminated (left-hand side)

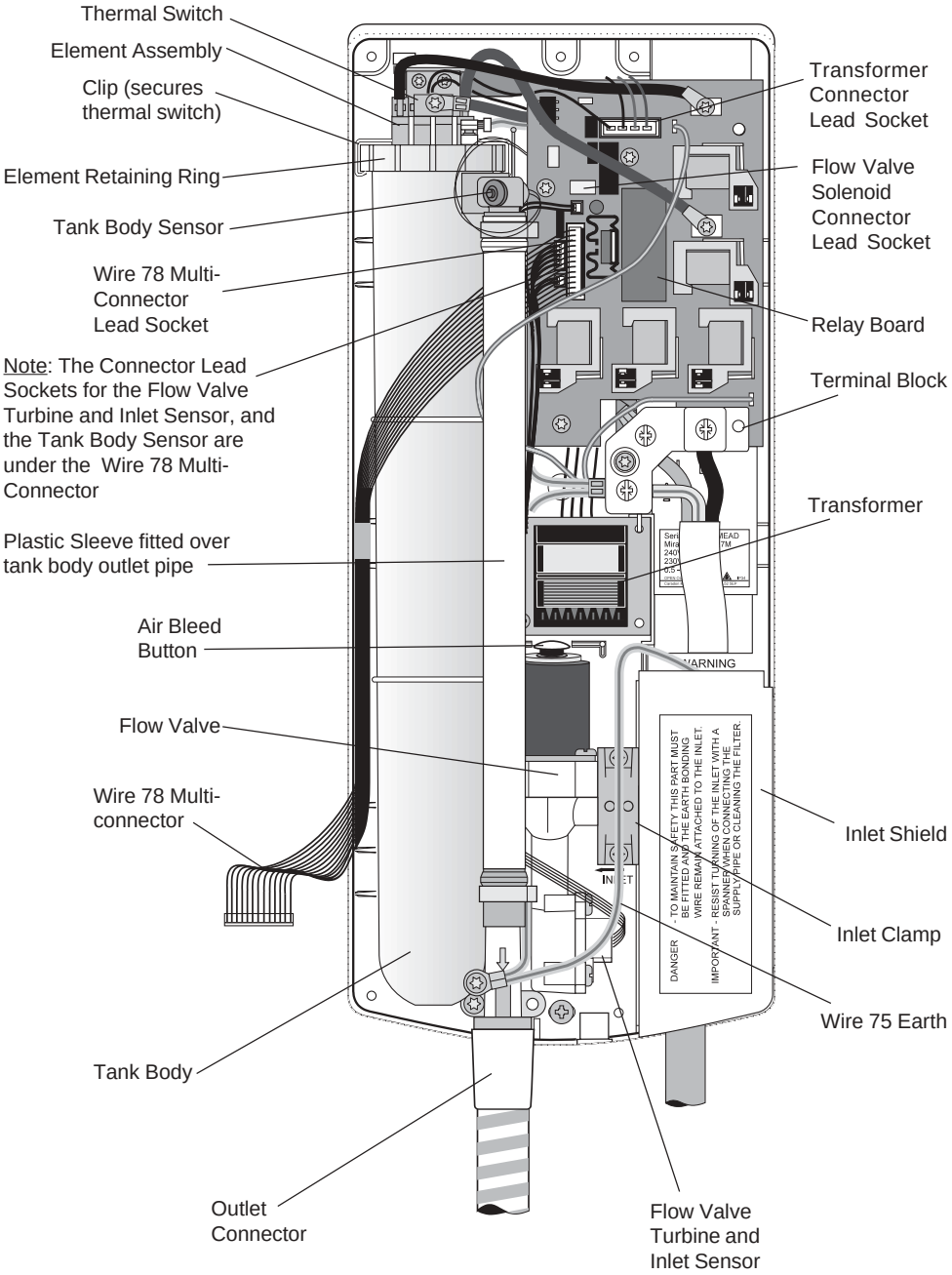
Note! Where more than one tick is indicated, any or all of the lights can be illuminated.

Malfunction	A	B	C	Cause	Remedy
Mira Advance ATL appears dead.				Supply fuse failed, MCB or RCD tripped. Poor internal wire connections.	Rectify fault and replace fuse or reset. Check integrity of internal wiring. Check multi connector plug (wire 78) is pushed fully home.

Malfunction	A	B	C	Cause	Remedy
				Faulty transformer.	Renew transformer.
				Faulty relay board assembly.	Renew relay board assembly.
				Faulty control PCB.	Renew control PCB.
No water or very low flow rate. Service light not on.	✓	✓		Inlet strainer blocked.	Remove and clean. When refitted ensure filter is screwed fully home.
	✓	✓		Faulty flow valve.	Renew flow valve.
	✓			Faulty relay board assembly.	Renew relay board assembly.
	✓			Faulty element assembly.	Renew element assembly.
	✓	✓		Insufficient water supply pressure.	Check water supply isolation.
	✓			Low pressure thermostatic performance.	See Operation
				Faulty or incorrectly connected wire 78 multi-connector.	Renew or reconnect wire 78 multi-connector. Ensure that the connector is fully pushed home.
Mira Advance ATL continues to drip after being turned off, or will not shut off.	✓			Faulty flow valve.	Renew flow valve.
	✓			Shower head will continue to drip for a period of time once the shower is turned off.	Change angle of shower head to speed up the discharge of retained water.

Malfunction	A	B	C	Cause	Remedy
Mira Advance ATL leaks from bottom of case.				Faulty flow valve. Faulty tank seal. Faulty tank body/sensor assembly.	Renew flow valve. Renew tank seal. Renew tank body/ sensor assembly. Dry thoroughly before retrying unit.
Control panel malfunction. e.g. No audible tone, continuous tone, indicators do not correspond with button depression or indicators do not illuminate.				Faulty control PCB. Faulty wire 78 multi-connector.	Renew control PCB. Renew wire 78 multi-connector.
Shower heats water but does not get hot enough.				Check temperature limiter switch. Faulty outlet sensor.	Reset temperature limiter switch. Refer to **"Section 13 Maximum Temperature Setting".** Renew outlet sensor.
Shower flow rate pulsates.				Air trapped in flow valve. Faulty inlet sensor. Debris in flow valve turbine. Pressure above 10 bar maximum.	With electrical supply off, press air bleed button several times. **Note!** Water at full mains supply pressure will flow from the handset and a small amount of water will be discharged from under the air bleed button. Renew flow valve. Clean turbine. Fit pressure reducing valve.

Malfunction	A	B	C	Cause	Remedy
Rapid continuous cycling of relays.				Faulty inlet sensor. Debris in flow valve turbine.	Renew flow valve. Clean turbine.
When unit switched on service light flashes and the flow will not stop after **STOP** button is pressed.			✓	Wet electronics or faulty relay board.	Dry out relay board, control board and wire 78. Renew relay board.
Intermittent Service light illumination during operation. or Any other fault condition.			✓ ✓	Abnormal site conditions.	Turn off the electrical supply by operating pull-cord switch, **wait for a few moments (approximately 10 seconds) for Mira Advance ATL to reset**, turn on pull-cord switch and operate Advance ATL. If problem still persists then contact Kohler Mira for advice.
Service light on when flow selected. Service light remains on - no flow			✓ ✓	Faulty inlet sensor. Faulty outlet sensor.	Renew inlet sensor. Renew tank assembly.
High flow rate - low pressure light comes on, unit then goes to stop.	✓	✓		Faulty inlet sensor. Debris in flow valve turbine. Poor wire 78 (multi-connector) connection.	Renew inlet sensor. Clean turbine. Check filter is screwed fully home. Check integrity of wire 78 connection. Ensure that the connector is fully pushed home.


Thermal Switch
Element Assembly
Clip (secures thermal switch)
Element Retaining Ring
Tank Body Sensor
Wire 78 Multi-Connector Lead Socket
Note: The Connector Lead Sockets for the Flow Valve Turbine and Inlet Sensor, and the Tank Body Sensor are under the Wire 78 Multi-Connector
Plastic Sleeve fitted over tank body outlet pipe
Air Bleed Button
Flow Valve
Wire 78 Multi-connector
Tank Body
Outlet Connector
Transformer Connector Lead Socket
Flow Valve Solenoid Connector Lead Socket
Relay Board
Terminal Block
Transformer
Inlet Shield
Inlet Clamp
Wire 75 Earth
Flow Valve Turbine and Inlet Sensor
DANGER - TO MAINTAIN SAFETY THIS PART MUST BE FITTED AND THE EARTH BONDING WIRE REMAIN ATTACHED TO THE INLET.
IMPORTANT - RESIST TURNING OF THE INLET WITH A SPANNER WHEN CONNECTING THE SUPPLY PIPE OR CLEANING THE FILTER.

Section 12

Maintenance

1. General

Read **Section 2, "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 appliance. Only a competent tradesperson should remove the cover.

2. Cleaning

2.1. 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.

2.2. Spray pattern deterioration can be caused by either, debris trapped in the spray head, or a limescale build-up in the spray holes. The spray head can be removed and cleaned in a proprietary plastic kettle descalent, following the manufacturer's instructions.

2.3. To clean the head or spray plate, please refer to the appropriate section in the Installation, Operation and Maintenance Guide which accompanies the shower fittings.

3. Mira Advance ATL Cover – Removal and Refitting

3.1. To remove the cover:

3.1.1. Remove the screw located at the bottom of Mira Advance ATL case.

3.1.2. **Caution!** The cover is connected to the case by wire 78 Multi-connector, which should not be strained when carrying out the next instruction (refer to Figure 4).

3.1.3. Carefully pull the bottom of the cover outwards and upwards off the case.

3.1.4. Carefully remove the wire 78 multi-connector from the socket on the control PCB, in the cover if the maintenance procedure requires.

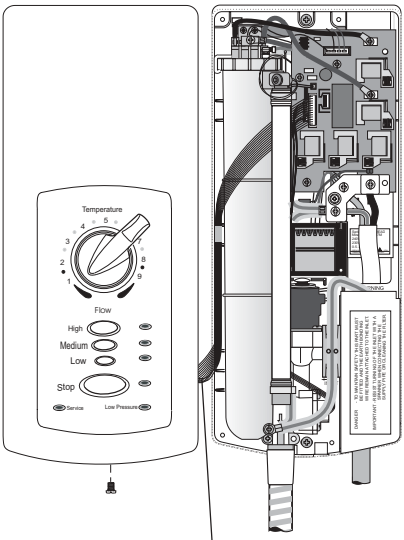


Figure 4

3.2. To refit the cover:

3.2.1. Connect the wire 78 multi-connector to the socket on the control PCB. The wire 78 multi-connector lead plug is a one way fit into the socket and must be pushed fully home (refer to Figure 5).

3.2.2. Refit the cover by locating the top of the cover onto the location strip on top of the case. Ensure that the wire 78 multi-connector lead is seated between the tank body and the left-hand side of the case.

3.2.3. Push the bottom of the cover against the case until it locates correctly. Install the screw and tighten.

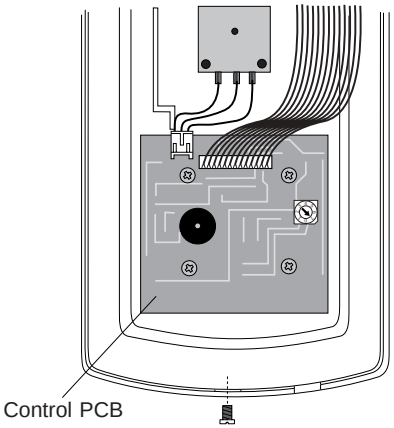


Figure 5

4. Relay Board – Renewal

4.1. To renew the relay board assembly:

4.1.1. Remove all the plug-in multi connectors.

4.1.2. Remove the terminal block cover retaining screws and the cover.

4.1.3. Remove the wires to the element assembly.

4.1.4. Remove the two earth fly leads.

4.1.5. Remove the relay board retaining screws.

4.1.6. Renew the relay board.

4.1.7. Refit in reverse order.

5. Transformer – Renewal

5.1. To renew the transformer:

5.1.1. Isolate the electrical power.

5.1.2. Remove the terminal block cover.

5.1.3. Remove the two upper relay board retaining screws.

5.1.4. Unplug the transformer connector lead.

5.1.5. Remove the transformer retaining screw.

5.1.6. Unplug the following:

- Solenoid plug PL8
- Flow sensor plug PL4
- Outlet sensor plug PL3.

5.1.7. Remove the two earth fly leads device leads fitted to the relay board.

5.1.8. Remove the element connections and remove the relay board.

5.1.9. Remove the transformer and unclip the thermal switch on top of the heater element. Remove the thermal switch.

5.1.10. Refit in reverse order. Make sure that:

- the transformer wires do not become trapped underneath
- the transformer or busbar when refitting.
- the thermal switch makes good contact with the tank top.

6. Inlet Filter – Cleaning

6.1. To clean the inlet filter:

6.1.1. Remove the inlet shield.

6.1.2. Hold a wrench across the flats of the inlet connector assembly to prevent damage to the connector, and unscrew the inlet filter (refer to Figure 6).

6.1.3. Withdraw the inlet filter. Clean or renew as necessary.

6.1.4. Refit in reverse order. **Ensure that the filter is screwed fully home.**

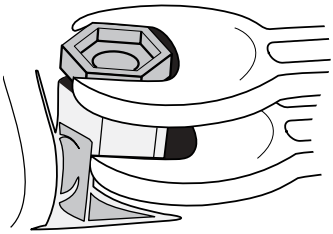


Figure 6

7. Inlet Connector Assembly – Renewal

7.1. To renew the inlet connector assembly:

7.1.1. Remove the inlet shield.

7.1.2. Remove the inlet clamp retaining screws.

7.1.3. Remove the inlet clamp.

7.1.4. Remove the earth bonding screw and cable.

7.1.5. Undo the compression nut and slide clear.

7.1.6. Renew the inlet connector assembly.

7.1.7. Refit in reverse order. Ensure the earth bonding wire is securely refitted.

8. Temperature Potentiometer – Renewal

8.1. To renew the temperature potentiometer:

8.1.1. Disconnect the three-pin connector lead from the control PCB, located inside the Mira Advance ATL cover.

8.1.2. Remove the temperature control knob.

8.1.3. Undo the temperature potentiometer retaining nut and remove the washer.

8.1.4. Renew the temperature potentiometer, locate into recess.

8.1.5. Refit in reverse order.

9. Draining the Mira Advance ATL

The remaining maintenance procedures **require** that the Mira Advance ATL is drained.

9.1. To drain the Mira Advance ATL:

9.1.1. Remove the shower hose.

9.1.2. Remove the inlet shield.

9.1.3. Remove the hose outlet connector retaining screws.

9.1.4. Locate release tab of hose outlet connector, underneath the flexible outlet pipe.

9.1.5. Rest a screwdriver on the interconnecting pipe to flow valve. Gently lever the tab upwards.

Caution! Do not try and force the outlet connector off by hand.

9.1.6. Move the flexible outlet pipe away to the right of flow valve.

9.1.7. Lift and partially separate the flow valve from the outlet of heater tank. Allow the water to drain out of the bottom of Mira Advance ATL.

9.1.8. When relevant maintenance procedure has been completed, refit in reverse order.

9.2. To renew the flow valve:

9.2.1. Refer to **Section 12, Maintenance: "9.1. To drain the Mira Advance ATL"** and follow instructions **9.1.1.** to **9.1.7.** inclusive.

9.2.2. Remove the flow valve turbine and inlet sensor connector lead (5 wires) from the relay board.

9.2.3. Remove the flow valve solenoid connector lead (2 wires) from the relay board.

9.2.4. Remove the inlet clamp retaining screws and clamp.

9.2.5. Separate the flow valve from the tank body and the inlet connector.

9.2.6. Renew the flow valve.

9.2.7. **Refit** the remaining components in reverse order. Make sure that the wiring is correctly routed and clears the flow valve air bleed button, and that all the screws are tight.

9.3. To clean the flow valve turbine:

9.3.1. Refer to **Section 12, Maintenance: "9.2. To renew the flow valve"** and follow instructions **9.2.1.** to **9.2.5.** inclusive.

9.3.2. Remove the three flow valve turbine and inlet sensor retaining screws.

9.3.3. Separate the turbine from the housing.

9.3.4. Clean the turbine and the annular groove in the housing in which the turbine rotates.

9.4. To renew the tank body/sensor assembly:

9.4.1. Refer to **Section 12, Maintenance: "9.1. To drain the Mira Advance ATL"** and follow instructions **9.1.1.** to **9.1.7.** inclusive.

9.4.2. Remove the wire 75 earth from the outlet connector.

9.4.3. Remove the tank body/sensor connector lead (2 wires) from the relay board and unclip the thermal switch clip.

9.4.4. Unscrew the element retaining ring.

9.4.5. Loosen the inlet clamp retaining screws.

9.4.6. Separate the tank body/sensor assembly from the flow valve and slide it off the element assembly.

9.4.7. Renew the tank body/sensor assembly. Make sure that the location spigot on the tank body/sensor assembly engages in the cutout in the element assembly.

9.4.8. Refit the remaining components in reverse order. Make sure that the wiring is correctly routed, and that all the screws are tight. Make sure that the thermal switch clip is fitted correctly.

9.4.9. When fitting the wire 75 earth to the outlet connector, fully tighten shower hose first to ensure the seal inside the outlet connector is compressed.

9.5. To renew the element assembly:

9.5.1. **Refer** to **Section 12, Maintenance: "9.1. To drain the Mira Advance ATL"** and follow instructions **9.1.1.** to **9.1.7.** inclusive.

9.5.2. Remove the wires and screws that connect the element assembly.

9.5.3. Swivel the top of the tank body/sensor assembly forward and unclip the thermal switch clip and unscrew the element retaining ring.

9.5.4. **Withdraw** the element assembly from tank body/sensor assembly.

9.5.5. **Renew** element assembly. Make sure that the location spigot on the tank body/sensor assembly engages in the cutout in the element assembly.

9.5.6. Refit in reverse order. To prevent overheating, make sure that the wiring is correctly routed, and that all the screws are tight and are not cross-threaded. Make sure that the thermal switch clip is fitted correctly.

9.6. To clean the element assembly:

9.6.1. Refer to **Section 12, Maintenance: "9.5. To renew the element assembly"** and remove the element assembly.

9.6.2. Unclip the thermal switch clip and remove the element retaining ring and the seal.

9.6.3. Immerse the element assembly up to the flange in a proprietary plastic kettle descalent. Follow the descalent manufacturer's instructions. **DO NOT allow the solution to come into contact with the element assembly terminals or the plastic components.**

Note! Heater elements may be damaged by excessive use of descalent solution.

9.6.4. Refer to **Section 12, Maintenance: "9.4. To renew the tank body/ sensor assembly"** and remove the tank body/sensor assembly.

9.6.5. Rinse out the tank body/sensor assembly in cold water to remove any limescale.

DO NOT immerse tank body/sensor assembly in descalent.

9.6.6. Refit in reverse order. Make sure that the thermal switch clip is fitted correctly.

Section 13

Maximum Temperature Setting

This shower has been factory preset to deliver a Maximum Outlet temperature of **48^{0}C**. If the appliance is to be operated within a healthcare or special needs environment, Mira recommend that you carry out the procedure detailed below.

The Mira Advance ATL has the capability of limiting the maximum water temperature, where by the maximum water temperature can be preset to temperatures ranging between 37^{0}C - 48^{0}C which is achieved by setting the **"adjustable temperature limiter"** located on the control PCB (refer to Figure 9).

The maximum water temperature is set by inserting a screwdriver into the slotted arrow located on the "restriction dial" and rotating the arrow to correspond with the number representing the desired maximum temperature as listed in Table 1, below.

Example - if the ATL has been set to correspond with position 4 (41^{0}C), then the maximum outlet water temperature of **41^{0}C** will be achieved at approximately **position 6** on the **"temperature dial"** positioned on the front of the appliance. Further clockwise movement of the "temperature dial" at this setting will not increase the temperature.

Note! Advance ATL Memory: Selecting a temperature preset that was previously set above the new maximum temperature setting will cause the shower to shut down automatically. This is a safety precaution.

Restriction Dial Setting	
Position	Temp ^{0}C
0	37
1	38
2	39
3	40
4	41
5	42
6	45
7	48

Table 1

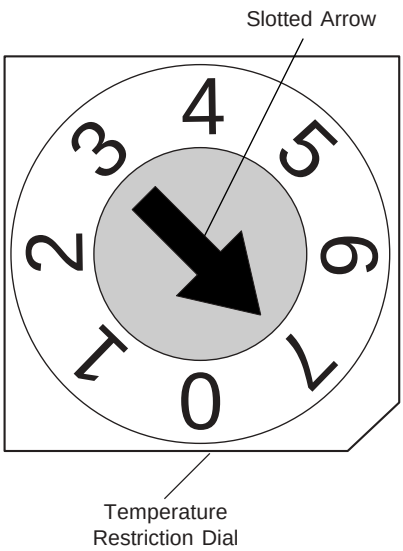


Figure 8

WARNING! Isolate the electrical and water supply before removing the cover.
WARNING! Refer to wiring diagram before making any electrical connections.

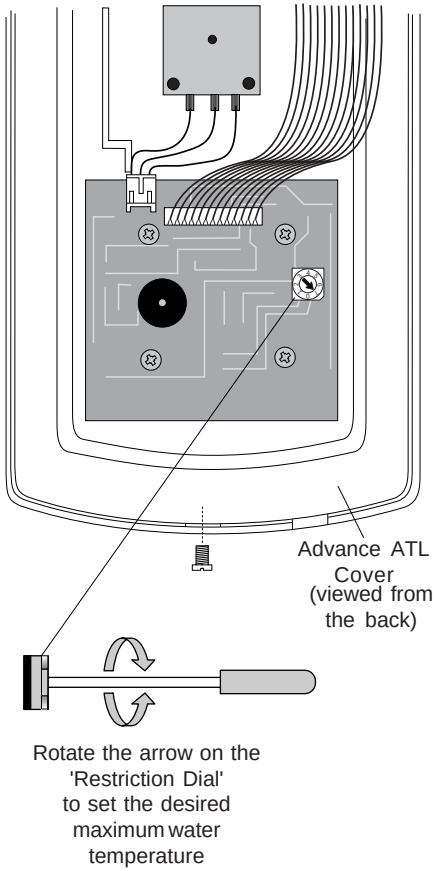


Figure 9

1.1. Use a screwdriver to remove the screw from the bottom of the case.

Caution! The cover is connected to the case by the wire 78 multi-connector, which should not be strained when carrying out the next instruction.

1.2. Pull the bottom of the cover outwards and upwards off the case.

1.3. The restriction dial is located on the control PCB, inside the Mira Advance ATL cover assembly (refer to Figure 9).

1.4. Insert a screwdriver into the slotted arrow on the restriction dial and rotate the arrow to the desired number to set the maximum water temperature as listed in Table 1.

1.5. Refit the cover by locating the top of the cover onto the location strip on the top of the case. Make sure that the wire 78 multi-connector lead is seated between the tank body and the left- hand side of the case and is pushed fully home.

1.6. Push the bottom of the cover against the case. Fit the screw and tighten.

Spare Parts

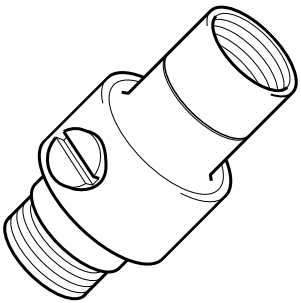
Section 14

Spare Parts

1. Spare Parts List (standard model)

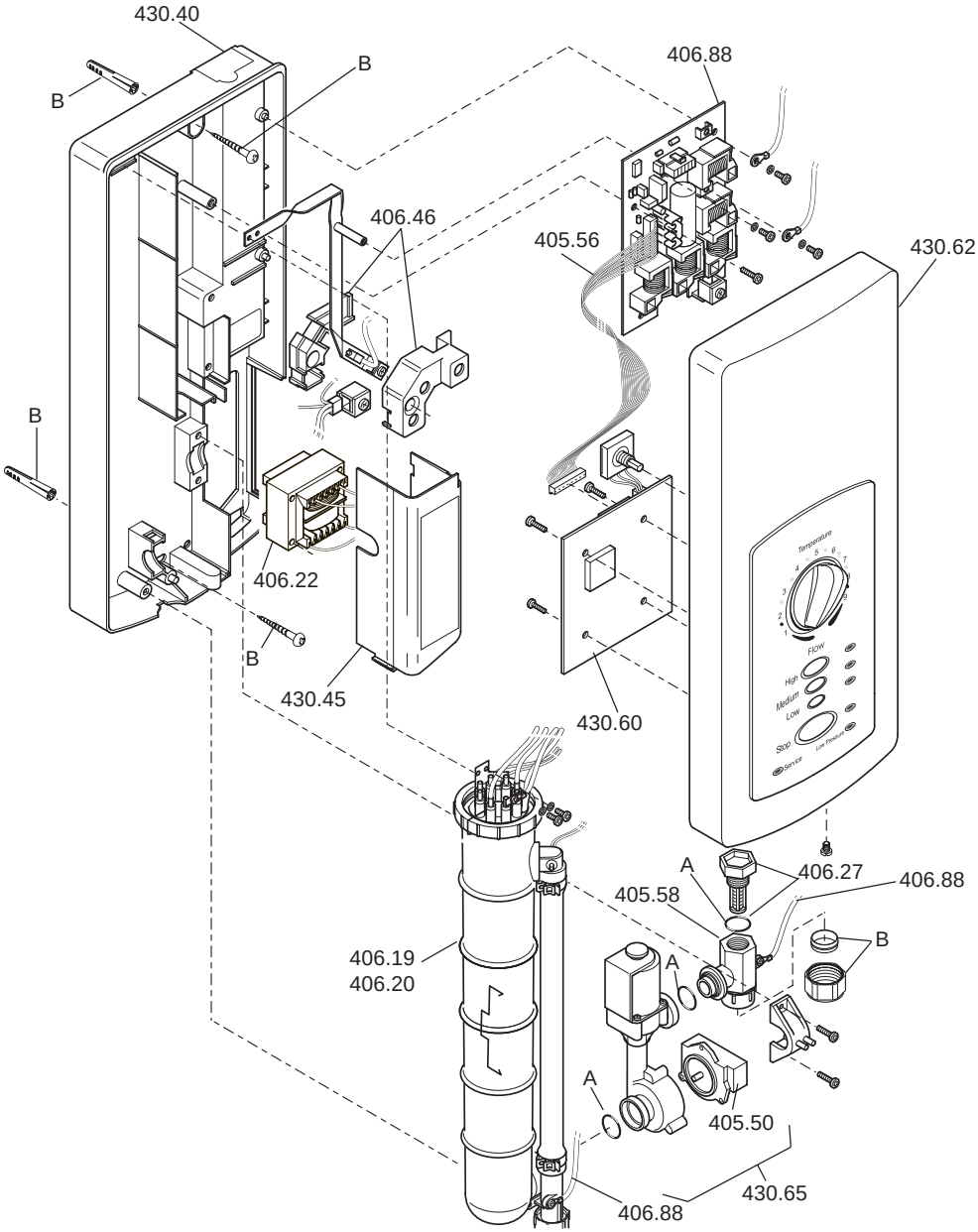
405.50	Inlet Sensor
405.56	Wire 78 Multi-connector
405.58	Inlet Connector Assembly
406.19	Tank Assembly 9kW/230V 9.8kW/240V
406.20	Tank Assembly 8kW/230V 8.7kW/240V
406.22	Transformer
406.25	Seals Pack - components identified 'A'
406.27	Inlet Filter
406.28	Component Pack - components identified 'B'
406.46	Terminal Block
406.88	Relay Board + Wire 75
430.40	Top Case Insert
430.45	Service Tunnel
430.60	Control PCB ATL Standard and Flex
430.62	ATL Cover Assembly (with Temperature Potentiometer)
430.65	Flow Valve

Accessories



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 Mira Showers stockists.

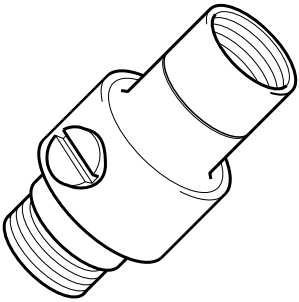
2. Spare Parts Diagram (standard model)



3. Spare Parts List (memory model)

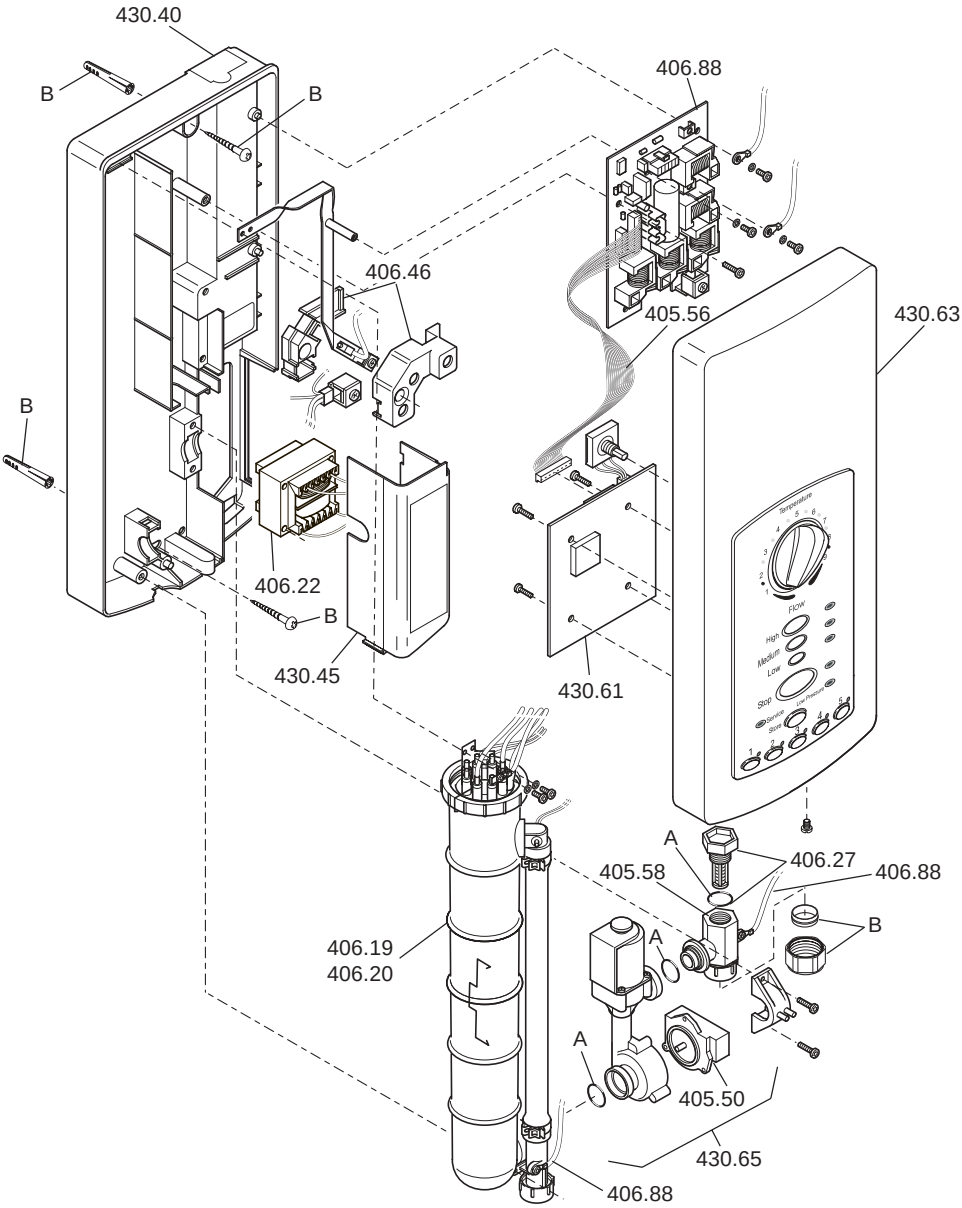
405.50	Inlet Sensor
405.56	Wire 78 Multi-connector
405.58	Inlet Connector Assembly
430.61	Control PCB ATL Memory
406.19	Tank Assembly 9kW/230V 9.8kW/240V
406.20	Tank Assembly 8kW/230V 8.7kW/240V
430.65	Flow Valve
406.22	Transformer
406.25	Seals Pack - components identified 'A'
406.27	Inlet Filter
406.28	Component Pack - components identified 'B'
406.46	Terminal Block
406.88	Relay Board + Wire 75
430.63	Cover Assembly ATL Memory (with Temperature Potentiometer)
430.40	Top Case Insert
430.45	Service Tunnel

Accessories



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 Mira Showers stockists.

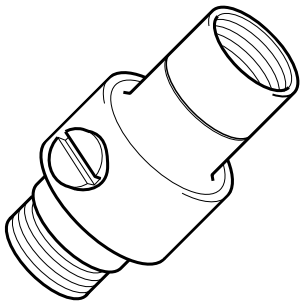
4. Spare Parts Diagram (memory model)



5. Spare Parts List (flex model)

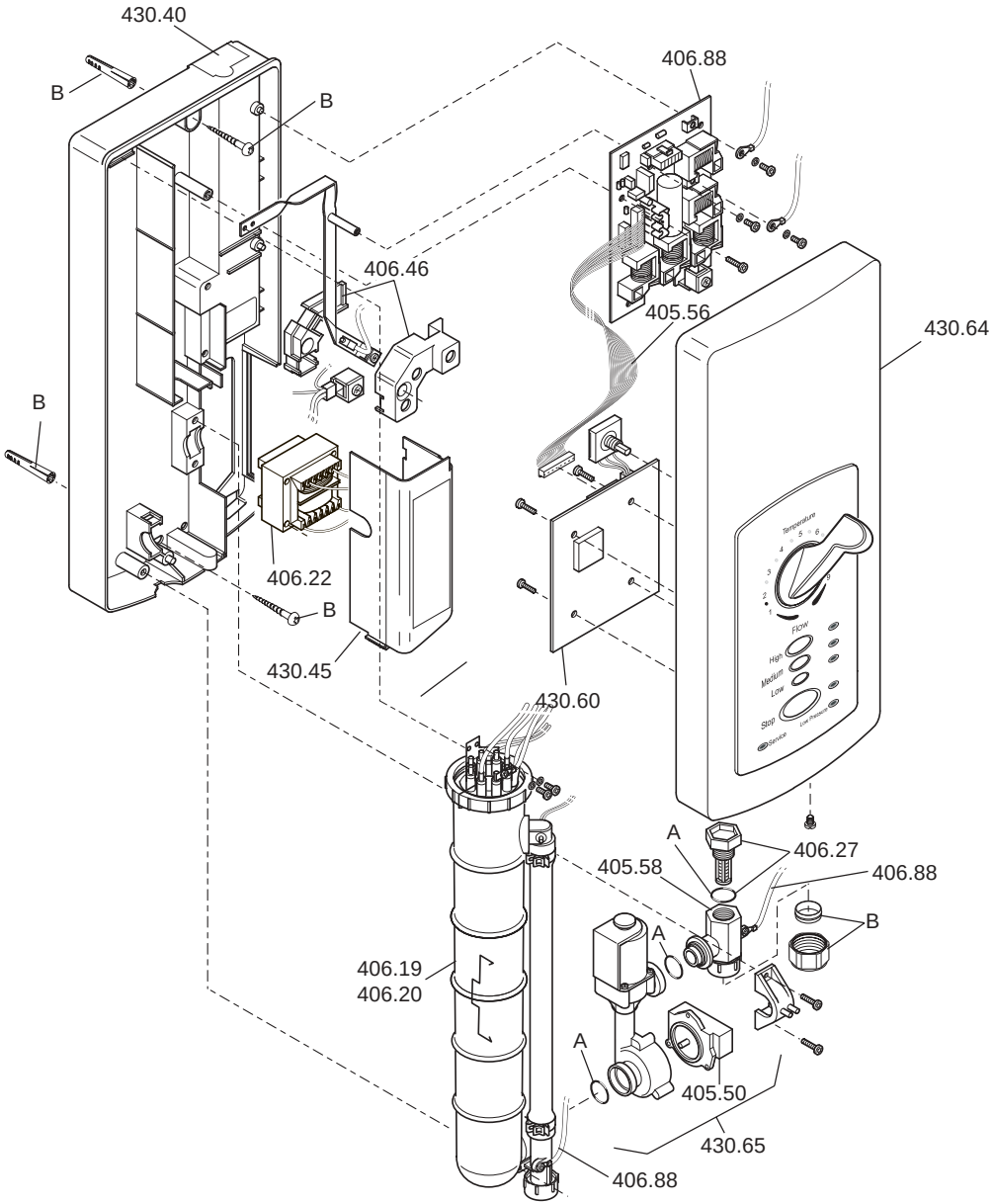
430.45	Service Tunnel
405.50	Inlet Sensor
405.56	Wire 78 Multi-connector
405.58	Inlet Connector Assembly
430.60	Control PCB ATL Standard and Flex
406.19	Tank Assembly 9kW/230V 9.8kW/240V
406.20	Tank Assembly 8kW/230V 8.7kW/240V
430.65	Flow Valve
406.22	Transformer
406.25	Seals Pack - components identified 'A'
406. 27	Inlet Filter
406.28	Component Pack - components identified 'B'
430.40	Top Case Insert
406.46	Terminal Block
406.88	Relay Board + Wire 75
430.64	Cover Assembly ATL Flex (with Temperature Potentiometer)

Accessories



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 stockist.

6. Spare Parts Diagram (flex model)



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 Mastercard 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 1 year guarantee on the repair.

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

To contact us:

England, Scotland & Wales

Mira Showers Customer Services

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Wm H Leech & Son Ltd

Telephone: 028 9044 9257 – Mon to Fri 9 am-5pm
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