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Back cover
Thank you for purchasing a quality Mira product. To enjoy 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 Event is a dual speed all-in-one power shower with an integral mains voltage pump unit, with separate controls for flow and temperature. The Event features outlet flow control and a 15mm dual entry push-fit inlet manifold to enable the appliance to support various inlet supply configurations. The manifold incorporates inlet filters and check valves.

Designed to be surface mounted the Event is supplied complete with an adjustable spray handset with three different spray actions (start, champagne, massage) and an economy setting, flexible hose, adjustable clamp bracket assembly, slide bar and supports, soap dish and hose retaining ring. The Event is available with the shower fittings in white/chrome finish or all white finish.

The Event is not suitable for installation in institutional/commercial applications or for use with mains water pressure applications, e.g. Instantaneous electric heaters, instantaneous gas water heaters, unvented mains pressure systems, pumped shower systems and some combination type storage systems.

If you experience any difficulty with the installation or operation of your new Mira Event, then please refer to the back cover of this guide for Kohler Mira contact telephone and fax numbers.
1. Caution!

1.1. Read all of these instructions.

1.2. Retain this guide for later use.

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

1.4. Follow all warnings, cautions and instructions contained in this guide.

1.5. Follow all warnings, cautions and instructions contained on or inside the appliance.

1.6. The electrical installation must comply with BS 7671 “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. The installation should be carried out by an electrician or contractor who is registered, or is a member of, an association such as:

1.6.1. National Inspection Council for Electrical Installation and Contracting (NICEIC), throughout the UK, Tel: 0171 582 7746.

1.6.2. The Electrical Contractors Association (ECA), England and Wales, Tel: 0171 229 1266.

1.6.3. The Electrical Contractors Association of Scotland (ECAS), Tel: 0131 445 5577.

1.7. The plumbing installation must comply with Water Supply Bye-laws, 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:

1.7.1. Institute of Plumbing (IOP), throughout the UK, Tel: 01708 472791.

1.7.2. National Association of Plumbing, Heating and Mechanical Services Contractors (NAPH & MSC), England and Wales, Tel: 01203 470626.

1.7.3. Scottish and Northern Ireland Plumbing Employers’ Federation (SNIPEF), Scotland and Northern Ireland, Tel: 0131 225 2255.

1.8. 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.

1.9. 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.
2. **Warning!**

2.1. 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.

2.2. **THIS APPLIANCE MUST BE EARTHED.**

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

2.4. **DO NOT** connect this appliance to a mains-fed water supply. Such a connection will damage the appliance, and is not covered under the manufacturer’s guarantee.

2.5. Make sure that any pipework that could become frozen is properly insulated (Bye-law 49).

2.6. **DO NOT** operate this appliance if it is frozen. Allow the appliance to thaw. If water is emitted from either of the pressure relief valves, maintenance will be required before the appliance can be safely used.

2.7. **DO NOT** allow the appliance to be run dry.

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

2.9. If any of the following conditions occur, isolate the electricity and water supplies and refer to “**How to contact us**”, on the back page of this guide.

   2.9.1. If the cover is not correctly fitted and water has entered the appliance’s case.
   2.9.2. If the case is damaged.
   2.9.3. If the appliance begins to make an odd noise, smell or smoke.
   2.9.4. If the appliance shows signs of a distinct change in performance, indicating a need for maintenance.
   2.9.5. If the appliance is frozen.

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

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

2.12. Moving parts are exposed when the cover is removed.

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

2.14. Before proceeding with any electrical work on this unit, ensure that the capacitors on the printed circuit board are fully discharged by turning the flow control knob ‘on’ and ‘off’ again after the unit has been isolated from the power supply.
Tick the appropriate boxes to familiarize yourself with the part names and to confirm that the parts are included.

1. **Mira Event**

- 1 x Push-Fit Release Tool
- 1 x Event All-in-One Power Shower
- 3 x Wall Plugs
- 3 x Fixing Screws

2. **Documentation**

- 1 x Installation, Operation and Maintenance Guide
- 1 x Customer Support Brochure

Refer to the separate guide book for the shower fittings "Pack Contents Checklist".
1. General

1.1. **Continuous duty cycle** - 15 minutes on, 60 minutes off.

1.2. The motor is fitted with self-resetting thermal trip protection, designed to operate if the duty cycle is exceeded or ambient temperatures become too high.

1.3. **Ambient temperature** - Maximum recommended ambient temperature for the appliance is 30°C.

1.4. **Hot Water Temperature** - Maximum temperature 80°C. BS 6700 recommends that the temperature of stored water should never exceed 65°C. A stored water temperature of 60°C is considered sufficient to meet all normal requirements and will minimise the deposition of scale in hard water areas.

1.5. **Maximum static inlet pressures** - 1 bar or 10m (supplies must be gravity-fed at nominally equal pressures). Refer to “Installation Requirements – Plumbing; Note 3.18” for further advice.

1.6. **Minimum static inlet pressure** - 0.0075 bar or 75mm (required to prime the integral centrifugal pump).

1.7. **Maximum recommended inlet pressure** - 0.5 bar or 5m (supplies must be gravity-fed at nominally equal pressures).

1.8. **Noise** - The powerful pump motor is fitted on rubber isolation mounts to reduce the transmitted sound levels. The type of wall surface will affect the perceived sound levels. Solid walls will provide a quieter operation.

2. Plumbing

2.1. **Inlet** - 15mm Push-fit inlet manifold

2.2. **Outlet** - ½” BSP to BS2779.

3. Electrical

3.1. **Appliance power supply** - 230/240 V, 50Hz, fused at 3 Amps, via a double pole switched fused connection unit (not supplied) with a minimum 3mm contact separation in each pole.

3.2. **Power supply connection** - The Event is fitted with a terminal block and earth stud which will accept cable up to 2.5mm².

3.3. **Absorbed power** - Approximately 150 Watts under normal working conditions.
4. Standards

4.1. All materials used in the manufacture of this appliance which are in contact with water are “W.B.S. approved”.

4.2. Designed to comply with BS 3456.

4.3. B.E.A.B. approval applied for.


4.5. This appliance complies with the electromagnetic compatibility (EMC) directive EN50082-1 (1992), EN55014 (1987), and EN60555-2/3 (1987). Please see carton for CE approval label.
1. General

1.1. Do not take risks with plumbing or electrical equipment.
1.2. Do not install the appliance in a position where it could become frozen.
1.3. Isolate electrical and water supplies before proceeding with the installation of the appliance.
1.4. The shower control must be fed from a cold water storage cistern and hot water cylinder providing nominally equal pressures.
1.5. The installation must be carried out by a competent installer.
1.6. When installing into a cubicle, the appliance is best positioned to spray across the opening of the cubicle rather than towards the opening.
1.7. The appliance must be fitted onto the finished wall surface i.e. on top of the tiles. Do not fit the appliance to the wall and then tile up to the sides of the casing. (Small pillars moulded on to the back of the case allow water to drain from behind the appliance).
1.8. When fitting the appliance with back inlet supplies it is recommended that the supply pipework is sealed to the wall to prevent water from leaking back into the wall.
1.9. In solid wall installations the supply pipework should be installed within ducting to allow some free lateral movement when making supply connections and to ensure compliance with the requirements of Bye-law 58 “Accessibility of pipes and pipe fittings”.

2. Electrical

2.1. Do not turn on the electrical supply until the plumbing has been completed and the pump primed as the unit must not be operated dry.
2.2. The mains supply must be 230/240V at 50Hz connected to the appliance via a double pole switched 3 Amp fused connection unit (not supplied) with a minimum 3mm contact separation gap in each pole.
2.3. Fuses do not give personal protection against electric shock.
2.4. We recommend the inclusion of a 30mA residual current device (RCD). This may be part of the consumer unit or a separate unit.
3. Plumbing

3.1. **Do not** use excessive force when making connections to the flexible hoses or handset, finger tightness is sufficient.

3.2 **Do not** turn on the electrical supply until the plumbing connections have been completed and the pump primed as the unit must not be operated dry.

3.3 **Do not** solder supply pipework within 300mm of the appliance as transmitted heat may melt the inlet manifold.

3.4 When installed, the top of the appliance must be at least 75mm lower than the base of the cold water storage cistern to prevent the pump being run dry.

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

3.6 The storage cistern should have a minimum storage capacity of 230 litres to provide adequate showering time and to comply with BS6700 (1987). Insufficient storage may result in the pump being run dry.

3.7 The action of a pump is to increase the flow rate. If the supply pipework cannot handle the higher flow rate then:-

3.7.1 The expected flow rate may not be achieved.

3.7.2 Air may be drawn into the hot supply from the vent pipe, causing spluttering and temperature fluctuations at the handset.

3.8 To prevent such operational difficulties the feed from the cylinder should be as illustrated. Side entry cylinder bosses are not recommended because:-

3.8.1 A drop in cylinder water level could expose a top entry immersion element if fitted.

3.8.2 Air-in-water solution gathers at the edge of the cylinder and in the centre, during the heating process before travelling up the vent.

3.9 A high level hot feed pipe run as illustrated will result in air locking and should be avoided.

3.10 No form of flow control should be fitted to the outlet of the appliance.

3.11 Conveniently situated isolating valves should be fitted for servicing purposes (Bye-law 68).

3.13 The use of white polyethylene plastic pipe suitable for hot water is recommended to enhance the appearance of the finished installation, when using surface mounted inlet supply pipework. Internal pipe supports (not supplied) should be used with this type of pipe.

3.14 Use only the supplied Mira handset with this appliance.
3.15 If the appliance is installed on a common supply which feeds an adjacent tap, the maximum static inlet pressure for the appliance will, under certain circumstances be exceeded; the action of closing the tap can cause a pulse in the supply pressure which will result in damage to the appliance. This can be resolved by the installation of a suitably sized mini expansion vessel, sited as close as possible to the tap and pressurised to 0.5 bar.

3.16 Do not fit the appliance to the wall and tile up to the case. The appliance must be fitted on to the finished flat and even wall surface. This is important as difficulty may be encountered when fitting the cover and subsequent operation of the unit could be impaired. (Small pillars moulded on to the back of the case allow air circulation).

Warning!

This product does not incorporate any form of thermostatic control. If there is a cold water supply failure, hot water at a similar temperature to the hot tap will be available at the shower fitting.

To prevent excessive showering temperatures it is important that the procedure contained in the section “Commissioning: Adjustable Maximum Temperature Setting” is followed.
4. Schematic Installation Diagrams

**Schematic Installation - Correct**

- **Warning pipe**
- **Minimum 25mm**
- **Cistern**
- **Minimum 1.0m head**
- **Other hot draw offs**
- **Isolating valve**
- **D.H.W. 60°C**
- **Minimum Ø22mm**
- **Hot supply**
- **Vent pipe**
- **Hose retaining ring**
- **Cylinder Feed**
- **Cold Pump Feed**
- **Avoid high-level hot feed pipe runs** (may cause air locking)
- **Isolating valves missing**
- **Cold supply**
- **Strained hose**
- **This layout is not suitable for the Mira Event**
- **Incorrect supply connections**

**Schematic Installation - Incorrect**

- **Isolating valves missing**
- **Other cold draw offs**
- **Other hot draw offs**
- **Cold supply**
- **Hose retaining ring missing** (see Water Byelaws)
- **Strained hose**
- **This layout is not suitable for the Mira Event**
- **Incorrect supply connections**
5. Before You Start

The Mira Event features a 15mm dual entry push-fit inlet manifold to enable the appliance to support three inlet supply configurations. Choose the appropriate inlet supply configuration to suit your installation before proceeding to install the appliance.

The inlet manifold is factory fitted with inlet two blanking plugs fitted to the top inlets and allows for a bottom inlet supply configuration. The blanking plugs can be repositioned to suit the installation’s supply pipework configuration. A push-fit release tool is provided which can be used to lever out the blanking plugs. Refer to “Change the Inlet Supply Ports” for the complete procedure.

The Event will accept three dual inlet supply configurations:-

- **Top inlet supply** – Seal off bottom inlets of manifold.
- **Bottom inlet supply** – Seal off top inlets of manifold.
- **Back inlet supply** – Seal off bottom inlets of manifold.

To enhance the final appearance of the appliance the Mira Event case features two removable inlet blanking plates which are factory fitted in to the top and bottom of the case.

These blanks can be removed as follows to allow the three inlet supply configurations:-

- **Top inlet supply** – Remove top inlet blanking plate.
- **Bottom inlet supply** – Remove bottom inlet blanking plate.
- **Back inlet supply** – Removal of top or bottom inlet blanking plates not required.

The Mira Event case also caters for top, bottom or back electrical supply cable entry. In the case of top or bottom entry this is achieved by cutting away and trimming thinned sections in the top and bottom of the case. The cable can then be fitted into a moulded channel running up and down the back of the case.
6. Change the Inlet Supply Ports

6.1. This procedure changes the blanking plug positions to allow for a top or back inlet supply configuration.

6.2. Use the push-fit release tool (supplied) to lever off the flow knob, indicator trim and temperature knob.

**Note!** Use of a screwdriver will damage the knobs and the cover assembly.

6.3. Unscrew the cover retaining screw and remove the cover by pulling the bottom of the cover in an outward and upward direction.

6.4. Remove the inlet blanking plate as appropriate.

6.5. Insert the push-fit release tool between the flange of each of the blanking plugs and the grey collet of the inlet manifold, and lever the plugs outward.

Whilst holding back on the collet, pull out each appropriate blanking plug by hand.

Install the two blanking plugs in the manifold bottom inlets.
1. Mira Event

The following installation instructions are based on a rising hot and cold water supply entering the appliance from below (bottom inlet) and a falling concealed electrical supply (via miniature trunking) from above. The procedure should be applied to alternative inlet supply or electrical supply configuration as appropriate.

1.1. Ensure that you have read the section entitled “Before You Start” to select the appropriate inlet supply configuration to suit your installation.

1.2. The Mira Event should be positioned so that it is at a convenient height for all the family. It should be positioned so that it discharges down the centre line of the bath, or across the opening of the cubicle, and should be directed away from the appliance.

1.3. Decide on a suitable location for the appliance avoiding buried cables and pipes. Ensure that when the hose retaining ring is placed on the lowest position on the slide bar, that the handset will not fall below the minimum clearance gap between the bath or shower tray spillover level of 25mm (Bye-law 17).
1.4. Using a spirit level position the appliance on the wall, then mark through the three fixing points.

Tip! Special consideration should be given to the fixing arrangements when installing on to a dry lined, stud partition or dry partition wall structure. Installers may wish to obtain alternative proprietary cavity fixings, or choose other options such as fabricating rear supports using wooden blocks, however, these methods of fixing are beyond the scope of this guide.

Important! This Mira Event must be fixed to the wall at all three fixing positions.

The fixing holes are elongated to assist in vertical and horizontal alignment.

1.5. Drill and plug the wall.

Caution! Avoid buried cables and pipes!

1.6. Cut away and trim the thinned section in the top of the case to allow the electrical supply cable to run down the back of the case.
1.7. Run the electrical supply cable in surface mounted miniature trunking (not supplied).
Allow sufficient cable to connect to the appliance terminal block (approximately 275mm).
Strip back approximately 30mm of outer cable insulation.

1.8. Hot and cold inlet supply connections as marked are:-

**Hot – Left**  **Cold – Right**

**Note!** Reversed supply connections **cannot** be catered for with this appliance.

Run the hot and cold water supply pipes at 28mm centres, ensuring that the pipe ends project into the appliance by 30mm to allow connection into the inlet manifold.

All dimensions in millimetres
1.9. Ensure that the end of the supply pipework is cut squarely and **free from burrs**, which will damage the inlet manifold seals.

Chamfer the end of the pipe to assist insertion into the fitting and prevent tearing the ‘O’ seal.

**Thoroughly flush the incoming hot and cold water supply pipes** (Bye-law 55).

**Note!** If using chrome plated copper pipework then all traces of chrome plate will need to be removed from the connecting surfaces. If the chrome is not completely removed then the inlet manifold collet will not grip the supply pipe and under pressure the pipes may be forced out.

**Do not** use stainless steel piping.

**Note!** PTFE tape or liquid jointing is **not** required to assist connection.
1.10. Push the supply pipework inside the inlet manifold until resistance is felt.

**DO NOT FORCE!**

**Warning!**

*Do not* insert fingers into the push-fit connectors as this can result in injury.

1.11. The collet and ‘O’ seal will automatically make a hydraulic seal.

**Important!**

This Mira Event **must** be fixed to the wall at all three fixing positions.

The fixing holes are elongated to assist in vertical and horizontal alignment.

1.12. Screw the Mira Event to the wall using either the supplied wall screws or alternative fixings depending on the wall structure.

**Do not over tighten!**

Ensure that the electrical supply cable is correctly seated in the channel in the back of the case.

1.13. Connect the conductors of the electrical supply cable to the terminal block. Take the earth wire to the earth stud adjacent to the PCB terminal block. The supply cable earth connector should be sleeved.
1.14. Refit the cover by locating the cover onto the tongue on the top of the case. Push the bottom of the cover against the case, tighten the cover retaining screw, refit the temperature knob, indicator trim and flow knob.

Note! The flow knob and indicator trim have key-ways to ensure correct alignment.

1.15. This completes the installation of the Mira Event. The appliance will now require to be commissioned before connecting the electrical supply. Refer to “Commissioning: Priming the Appliance” and “Adjustable Maximum Temperature Setting”.

2. Shower Fittings

2.1. To install the shower fittings, please refer to the appropriate section in the Installation, Operation and Maintenance Guide which accompanies the fittings.
1. **Priming the Appliance**

The appliance **must not** be run dry. Before proceeding any further with the installation it is important to prime the pump assembly **before** switching on the electrical supply.

1.1 Connect the flexible hose from the shower fitting to the outlet of the appliance. Ensure hose washer is fitted.

**Do not over-tighten.**

1.2 Turn on water supplies.

1.3 Turn the flow control fully on.

1.4 Turn the temperature knob anti-clockwise to check the hot supply and clockwise to check the cold supply.

1.5 The pump is now primed.

1.6 Switch on the electrical supply to the product.
2. Adjustable Maximum Temperature Setting

To set the maximum temperature ensure that an adequate supply of hot water is available at a temperature at least 12°C in excess of that required from the appliance, and the temperature control knob is set to the full hot position. Turn the flow control knob fully anti-clockwise then check the temperature at the discharge point (allow sufficient time for hot water to reach the hot inlet of the appliance).

If the temperature is correct, turn the flow control knob fully clockwise to the off position as no further adjustment is necessary.

If the maximum temperature achieved at the discharge point is unsatisfactory then adjust the maximum temperature as follows:

2.1. Turn the flow control fully on.

2.2. Turn the temperature lever anti-clockwise to full hot, the lever will be against the left hand stop of the cover insert (3 o’clock position).

2.3. Use the push-fit release tool to lever off the flow

2.4. Pull off the indicator trim.
For a Hotter shower temperature

2.5. **For a Hotter shower temperature**, use the push-fit release tool to lever off the temperature knob and rotate the temperature knob clockwise so that the lever is in the 4 o’clock position and refit. Turn lever anti-clockwise and check that the new maximum temperature setting is correct. Repeat procedure if maximum temperature is not hot enough.

For a Cooler shower temperature

2.6. **For a Cooler shower temperature**, turn the temperature lever clockwise until the required temperature has been achieved. Use the push-fit release tool to lever off the temperature knob and rotate the temperature knob anti-clockwise until the end of the slot in the temperature knob is against the left hand stop of the cover insert. Refit the temperature knob.

2.7. Refit the indicator trim and flow knob taking care to correctly engage the keyways.

2.8. Turn the flow control fully off.

2.9. Recheck maximum temperature setting.
For safety reasons this appliance is fitted with an adjustable maximum temperature setting. This setting must be checked and adjusted as necessary to suit both site conditions and user’s comfort. Refer to the section “Commissioning: Adjustable Maximum Temperature Setting” for further details.

1.1. Turn the flow control knob until the desired force of water is obtained. The force of water will progressively increase the further the travel of the flow knob until full power is achieved in the last portion of knob rotation. This increase is graphically represented by the indicator trim which is visible as the knob is rotated. During this operation the tone and speed of the pump will change.

1.2. Turn the temperature control lever in the direction of the red indications for warmer water (anti-clockwise) and in the direction of the blue indicator for cooler water (clockwise), until the desired temperature of water is achieved.
# Fault Diagnosis

## 1. Fault Diagnosis - User Maintenance

The Mira Event is fully performance tested after assembly. Providing the Mira Event has been correctly installed and is operated as advised, difficulties should not arise. In the unlikely event that you experience problems with your appliance then the following procedure will enable you to undertake basic fault finding before contacting the person responsible for installing your shower.

<table>
<thead>
<tr>
<th>Malfunction</th>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum shower temperature too hot.</td>
<td>Incorrect setting of maximum temperature.</td>
<td>Reset maximum temperature. Refer to “Commissioning: Adjustable Maximum Temperature Setting”.</td>
</tr>
<tr>
<td>Shower temperature too cold.</td>
<td>Hot water cylinder temperature less than 12°C above shower temperature. Maximum temperature incorrectly set.</td>
<td>Adjust cylinder temperature. (Recommended not to exceed 60°C BS6700) Reset maximum temperature. Refer to &quot;Commissioning: Adjustable Maximum Temperature Setting&quot;</td>
</tr>
<tr>
<td>Blend temperature unstable</td>
<td>Spray plate blocked.</td>
<td>Clean spray plate. Refer to the Installation, Operation and Maintenance guide supplied with the shower fittings.</td>
</tr>
<tr>
<td></td>
<td>Inlet filter blocked.</td>
<td>Contact your installer.</td>
</tr>
<tr>
<td></td>
<td>Isolating valve partially closed.</td>
<td>Open valve.</td>
</tr>
<tr>
<td></td>
<td>Plumbing system fault.</td>
<td>Contact your installer.</td>
</tr>
<tr>
<td>Malfunction</td>
<td>Cause</td>
<td>Remedy</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Low or no water flow</td>
<td>Isolating valves closed.</td>
<td>Open valves</td>
</tr>
<tr>
<td></td>
<td>Inlet filters blocked.</td>
<td>Contact your installer.</td>
</tr>
<tr>
<td></td>
<td>Check valve fitted incorrectly.</td>
<td>Contact your installer.</td>
</tr>
<tr>
<td></td>
<td>Appliance sited above cold water storage cistern</td>
<td>The appliance is not suitable for negative head installations. Refer to &quot;Installation Requirements&quot;.</td>
</tr>
<tr>
<td></td>
<td>Plumbing system fault (airlock)</td>
<td>Contact your installer.</td>
</tr>
</tbody>
</table>
2. Fault Diagnosis - Installer Maintenance

The Mira Event is one part of an entire plumbing system. The fitting of a pump places additional requirements on the plumbing system. Some systems may require plumbing modifications to allow them to cope with higher flow rates.

Providing the Mira Event has been correctly installed and is operated as advised, difficulties should not arise. Fault diagnosis and maintenance must be carried out by a competent person for whom the fault diagnosis table is provided.

In the event of any of the following tests failing, re-check as appropriate before contacting the Kohler Mira Customer Support Department (Refer to Back Cover).

<table>
<thead>
<tr>
<th>Malfunction</th>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shower runs for a short time (30-60 seconds) then flow reduces, splutters or stops. Aggravated when other hot taps are in use. Less evident on full cold.</td>
<td>Air is being sucked down the vent pipe, as the hot take off to the shower is too high up the pipe.</td>
<td>Refer to plumbing system diagrams in the section &quot;Installation Requirements&quot; for correct connection method. Note the 1 metre hot take-off dimension. Consider increasing cold feed pipe to cylinder to 28mm diameter.</td>
</tr>
<tr>
<td>Shower runs cool after a short time (1-2 minutes) then flow splutters.</td>
<td>Air ingress into hot pipework.</td>
<td>Refer to plumbing system diagrams in the section &quot;Installation Requirements&quot; for correct connection method.</td>
</tr>
<tr>
<td>Flow of water virtually stops and surges on/off, after a few minutes.</td>
<td>Insufficient storage of cold water in cistern. BS6700 recommends 230 litres.</td>
<td>Increase storage of cold cistern.</td>
</tr>
<tr>
<td>Shower runs cold after 5-10 minutes.</td>
<td>Insufficient storage of hot water in cylinder.</td>
<td>Increase storage of hot water.</td>
</tr>
<tr>
<td>Shower temperature affected by use of adjacent hot/cold tap.</td>
<td>Insufficiently sized pipework for both systems to be used together.</td>
<td>Increase pipe sizes or separately feed shower. Refer to plumbing system diagrams in the section &quot;Installation Requirements&quot; for correct connection method.</td>
</tr>
<tr>
<td>Malfunction</td>
<td>Cause</td>
<td>Remedy</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Maximum shower temperature too hot.</td>
<td>Incorrect setting of maximum temperature.</td>
<td>Reset maximum temperature. Refer to “Commissioning: Adjustable Maximum Temperature Setting”.</td>
</tr>
<tr>
<td>Shower temperature too cold.</td>
<td>Hot water cylinder temperature less than 12°C above shower temperature. Maximum temperature incorrectly set.</td>
<td>Adjust cylinder temperature. (Recommended not to exceed 60°C BS6700) Reset maximum temperature. Refer to &quot;Commissioning: Adjustable Maximum Temperature Setting&quot;</td>
</tr>
<tr>
<td>Blend temperature unstable</td>
<td>Spray plate blocked.</td>
<td>Clean spray plate. Refer to the Installation, Operation and Maintenance guide supplied with the shower fittings.</td>
</tr>
<tr>
<td></td>
<td>Inlet filter blocked.</td>
<td>Contact your installer.</td>
</tr>
<tr>
<td></td>
<td>Isolating valve partially closed.</td>
<td>Open valve.</td>
</tr>
<tr>
<td>Drip from shower head.</td>
<td>Defective flow control.</td>
<td>Obtain flow control seal pack.</td>
</tr>
<tr>
<td>Pump does not operate.</td>
<td>Electrical supply failure.</td>
<td>Check power supply.</td>
</tr>
<tr>
<td></td>
<td>On/off micro-switch failure.</td>
<td>Renew.</td>
</tr>
<tr>
<td></td>
<td>PCB failure</td>
<td>Renew.</td>
</tr>
<tr>
<td></td>
<td>Motor overheated, thermal switch operated.</td>
<td>Allow motor to cool before further operation. (Refer to &quot;Specifications: Continuous duty cycle&quot;).</td>
</tr>
<tr>
<td>Malfunction</td>
<td>Cause</td>
<td>Remedy</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>--------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Low or no water</td>
<td>Isolating valves closed.</td>
<td>Open valves</td>
</tr>
<tr>
<td></td>
<td>Inlet filters blocked.</td>
<td>Clean filters.</td>
</tr>
<tr>
<td></td>
<td>Check valve fitted incorrectly.</td>
<td>Refer to &quot;Maintenance: Check Valve Renewal&quot;.</td>
</tr>
<tr>
<td></td>
<td>Appliance sited above cold water storage cistern</td>
<td>The appliance is not suitable for negative head installations. Refer to &quot;Installation Requirements&quot;.</td>
</tr>
<tr>
<td></td>
<td>Plumbing system fault (airlock)</td>
<td>Re-route the pipework to avoid airlock.</td>
</tr>
<tr>
<td></td>
<td>Blocked spray plate.</td>
<td>Clean spray plate. Refer to the Installation, Operation and Maintenance guide supplied with the shower fittings.</td>
</tr>
<tr>
<td></td>
<td>PCB failure.</td>
<td>Renew.</td>
</tr>
</tbody>
</table>
1. General

Each Mira Event is precision engineered to provide satisfactory performance provided it is installed and operated in accordance with our recommendations contained in section entitled “Installation Notes”.

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. Inlet Filters, Cleaning or ‘O’ Seals Renewal

The following procedure can be applied for cleaning or renewing the inlet filters or inlet filter ‘O’ seals.

Warning! Isolate the electrical and water supply to the appliance before proceeding.

Turn flow control on and off to relieve water pressure.

3.1. Use the push-fit release tool to lever off the flow knob, indicator trim and temperature knob. Unscrew the cover retaining screw and remove the cover by pulling the bottom of the cover in an outward and upward direction.

3.2. Remove the inlet filter cap retaining screw and filter cap.
3.3. Thoroughly clean the inlet filters. Inspect the ‘O’ seals and renew if required.

Before refitting the inlet filter cap lightly grease ‘O’ seals with a silicone based lubricant.

3.4. Refit in reverse order.

3.5. Restore the water supplies and check for any leaks.

3.6. Refit the cover by locating the cover onto the tongue on the top of the case. Push the bottom of the cover against the case, tighten the cover retaining screw, refit the temperature knob, indicator trim and flow knob.

3.7. Prime the pump, refer to “Commissioning: Priming the Appliance”. The adjustable maximum temperature will also require to be reset, refer to "Adjustable Maximum Temperature Setting".

3.8. Restore the electrical supplies.

4. Inlet Manifold, Check Valve or ‘O’ Seals Renewal

The following procedure can be applied for cleaning or renewing the inlet manifold, inlet check valves or ‘O’ seals.

Warning! Isolate the electrical and water supply to the appliance before proceeding.

4.1. Use the push-fit release tool to lever off the flow knob, indicator trim and temperature knob. Unscrew the cover retaining screw and remove the cover by pulling the bottom of the cover in an outward and upward direction.
4.2. Disconnect the electrical supply cable from the terminal block and earth stud. Remove the flexible hose from the appliance.

4.3. Remove the three wall fixing screws,

4.4. Using the push-fit release tool, push back and hold the collets from the supply pipework, lift the appliance from the wall to remove the supply pipework from the inlet manifold.

4.5. Remove the drip shield then remove the inlet manifold, mixer assembly, pump saddle clamp and on/off micro-switch retaining screws. Remove the micro-switch with drip shield and the pump saddle clamp.

4.6. Whilst gripping the mixer assembly disconnect the inlet manifold.
4.7. The ports adjacent to the mixer assembly contain the inlet check valves. The check valves can be removed and replaced if required. Ensure the check valve is inserted so the ‘O’ seal on check valve faces into the outlet of the manifold.

4.8. Inspect inlet manifold ‘O’ seals and renew if required. Ensure that the 'O' seals between the mixer assembly and the pump assembly are correctly seated on each male spigot.

Tip! When refitting the inlet manifold, lightly grease ‘O’ seals with a silicone based lubricant.

4.9. Refit in reverse order.

4.10. Restore the water supplies and check for any leaks.

4.11. Refit the cover by locating the cover onto the tongue on the top of the case. Push the bottom of the cover against the case, tighten the cover retaining screw, refit the temperature knob, indicator trim and flow knob.

4.12. Prime the pump, refer to “Commissioning: Priming the Appliance”. The adjustable maximum temperature will also require to be reset, refer to "Adjustable Maximum Temperature Setting".

4.13. Restore the electrical supplies.
5. **Push-fit Collet or ‘O’ Seals Renewal**

The following procedure can be applied for renewing the push-fit collets or inlet manifold internal ‘O’ seals.

**Warning!** Isolate the electrical and water supply to the appliance before proceeding.

5.1. Follow the instructions 4.1 to 4.4 contained in the section “Inlet Manifold, Check Valve or ‘O’ Seals Renewal”.

5.2. **For top or back inlet supplies**

Using the push-fit release tool lever out the collets. Renew the collets if required.

5.3. **For bottom inlet supplies**

Follow the instructions 4.5 to 4.6 contained in the section “Inlet Manifold, Check Valve or ‘O’ Seals Renewal”.

Using the push-fit release tool lever out the collets. Renew the collets if required.

**Warning!**

*Do not* insert fingers into the collets as this can result in injury.

5.4. Inspect the internal ‘O’ seals for signs of damage and renew if required.

5.4. Follow the instructions 4.9 to 4.13 contained in the section “Inlet Manifold, Check Valve or ‘O’ Seals Renewal”.
6. Mixer Assembly Renewal

The following procedure can be applied for cleaning or replacing the mixer assembly.

**Warning!** Isolate the electrical and water supply to the appliance before proceeding.

6.1. Use the push-fit release tool to lever off the flow knob, indicator trim and temperature knob. Unscrew the cover retaining screw and remove the cover by pulling the bottom of the cover in an outward and upward direction. Remove the flexible hose from the mixer assembly outlet.

6.2. Remove the on/off micro-switch retaining screw and the on/off micro-switch with drip shield. Do not remove pcb wiring from on/off micro-switch. Remove the other drip shield and lever off the smaller micro-switch. Do not remove the pcb wiring.

6.3. Loosen pump saddle clamp retaining screws and saddle clamp. Remove the inlet manifold retaining screws. Remove the mixer assembly retaining screws. Do not remove electrical supply wiring.
6.4. Separate the mixer assembly from the inlet manifold and the pump assembly.

6.5. Refit in reverse order.

**Note!** Ensure actuator and torsion spring are correctly fitted. Refer to "PCB and Micro-switch Renewal".

**Note!** Ensure that the ‘O’ seals between the mixer assembly and the pump assembly are correctly seated on each male spigot.

**Tip!** When refitting the mixer assembly lightly grease ‘O’ seals with a silicone based lubricant.

6.6. Restore the water supplies and check for any leaks.

6.7. Refit the cover by locating the cover onto the tongue on the top of the case. Push the bottom of the cover against the case, tighten the cover retaining screw, refit the temperature knob, temperature trim and flow knob.
6.8. Refit the flexible hose.

6.9. Prime the pump, refer to “Commissioning: Priming the Appliance”. The adjustable maximum temperature will also require to be reset, refer to "Adjustable Maximum Temperature Setting".

6.10. Restore the electrical supplies.

7. Pump Assembly Renewal

The following procedure can be applied for cleaning or replacing the pump assembly.

Warning! Isolate the electrical and water supply to the appliance before proceeding.

7.1. Use the push-fit release tool to lever off the flow knob, indicator trim and temperature knob. Unscrew the cover retaining screw and remove the cover by pulling the bottom of the cover in an outward and upward direction.

7.2. Disconnect pump electrical supply wiring from the pump assembly and the earth wire from the earth stud on the pcb.
7.3. Remove saddle clamp retaining screws and clamp.

7.4. Separate pump assembly from mixer assembly.

7.5. Refit in reverse order.

**Note!** Ensure that the ‘O’ seals between the mixer assembly and the pump assembly are correctly seated on each male spigot.

**Tip!** When refitting the pump assembly lightly grease ‘O’ seals with a silicone based lubricant.

7.6. Restore the water supplies and check for any leaks.

7.7. Refit the cover by locating the cover onto the tongue on the top of the case. Push the bottom of the cover against the case, tighten the cover retaining screw, refit the temperature knob, indicator trim and flow knob.

7.8. Prime the pump, refer to "Commissioning: Priming the Appliance". The adjustable maximum temperature will also require to be reset, refer to "Adjustable Maximum Temperature Setting".

7.9. Restore the electrical supplies.
8. Flow Control Seal Renewal

The following procedure can be applied for inspecting or replacing the flow control seal.

Warning! Isolate the electrical and water supply to the appliance before proceeding.

8.1. Follow the instructions 7.1 to 7.4 contained in the section "Pump Assembly Renewal".

8.2. Remove the flow control spring and seal from the mixer assembly port nearest the back of the case.

8.3. Inspect the seal for signs of damage and renew if required.

8.4. When refitting the seal ensure that the square profile of the seal seats into the square opening in the mixer assembly port.

Note! If the seal is not correctly located then water will continue to flow from the handset.

Tip! When refitting the flow control seal, lightly grease mating surfaces with a silicone based lubricant.

8.5. Refit the flow control spring.

8.6. Follow the instructions 7.5 to 7.9 contained in the section "Pump Assembly Renewal".
9. PCB Renewal

Warning! Isolate the electrical and water supply to the appliance before proceeding.

Disconnect wiring by pulling on body of spade connector only and not the wire itself.

To install a new pcb carry out the following:

Caution! Before proceeding with any electrical work on this unit ensure that the capacitors on the printed circuit board are fully discharged. To do this, turn the flow control knob fully 'ON' and 'OFF' again after the power has been isolated from the unit.

9.1. Use the push-fit release tool to lever off the temperature knob, temperature trim and flow knob. Unscrew the cover retaining screw and remove the cover by pulling the bottom of the cover in an outward and upward direction.

9.2. Disconnect the electrical supply cable from the appliance terminal block.

9.3. Remove the PCB securing screw.

9.4. Remove the drip shields and disconnect the PCB supply wires from on/off micro-switch and smaller micro-switch. Disconnect the pump supply wires from the pump assembly. Disconnect the earth wire from the PCB terminal block.
9.5. Disconnect and remove the old PCB.

9.6. Fit the shorter black wire of the new PCB to the free rear motor terminal.

9.7. Fit the longer black wire of the new PCB to one of the on/off micro-switch terminals.

9.8. Fit one end of the black wire that is supplied loose to the free front motor terminal and the other end to the free on/off micro-switch terminal.

9.9. There is no change to the connection of the orange wires to the boost micro-switch.

9.10. Position and secure the PCB and reconnect the Earth wire.

9.11. Ensure all wires are neatly tucked into the case V channels around the motor & mixer assembly.

9.13. Refit the appliance cover by locating the cover onto the tongue on the top of the case. Push the bottom of the cover against the case,

The adjustable maximum temperature will also require to be reset, refer to "Adjustable Maximum"
10. Micro-switches

On/off Micro-switch

Warning! Isolate the electrical and water supply to the appliance before proceeding.

Disconnect wiring by pulling on body of spade connector only and not the wire itself.

10.1. Remove on/off micro-switch retaining screw and remove the drip shield from the on/off micro-switch.

10.2. Remove electrical supply wiring to on/off micro-switch.

10.3. Renew on/off micro-switch.

10.4. If renewal of torsion spring or actuator is required, fit torsion spring on to actuator and fit the assembly over appropriate spigots.

10.5. Fit the new on/off micro-switch in reverse order.
11. Smaller Micro-switch

11.1. Remove drip shield and carefully lever off the smaller micro-switch.

11.2. Remove electrical supply wiring to micro-switch.

11.3. Reconnect the electrical supply wiring to the new micro-switch.

11.4. Fit the new micro-switch and refit the drip shield.

11.5. Refit the cover by locating the cover onto the tongue on the top of the case. Push the bottom of the cover against the case, tighten the cover retaining screw, refit the temperature knob, indicator trim and flow knob.

11.6. The adjustable maximum temperature will also require to be reset, refer to "Adjustable Maximum Temperature Setting".

Restore the electrical supplies.
To Motor

Black
Black

To Boost Switch Normally open

Orange
Orange

To Boost Switch Common

Wiring Diagram
All dimensions are nominal and in millimetres.
1. Spare Parts List

147 67    Check Valve Pack
209 46    Flow Control Seal Pack
209 59    Push-fit Release Tool
209 70    Mixer Assembly
209 71    Pump Assembly
209 72    Filter Pack
209 73    Unit Screw Pack - components identified 'A'
209 74    Fixing Screw Pack (not shown)
209 75    Seal Pack, Mixer - components identified 'C'
209 79    Manifold Assembly - components identified 'E'
209 80    Switch Assembly - components identified 'D'
209 92    PCB
211 62    Push-fit Pack
916 39    Knob Set
920 93    Cover Assembly
2. Spare Parts Diagram
**Optional Accessories**

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

**RF2 Fixed handset holder**
Customer Service

Guarantee of Quality
Mira Showers guarantee your product against any defect in materials or workmanship for the period shown in the Guarantee Registration Document included with your shower.
Alternatively, to confirm the applicable guarantee period please contact Customer Services.
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.
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:
Planned maintenance, or replacement parts required to comply with the servicing requirements of the TMV 2 and TMV 3 healthcare schemes.
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 persons not authorised by Mira Showers or our approved agents.
This guarantee is in addition to your statutory and other legal rights.

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 Team who will give every assistance and, if necessary, arrange for our service engineer to visit. If the performance of your shower declines, consult this manual to see whether simple home maintenance is required. Please call our Customer Services Team to talk the difficulty through, request a 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.
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 provide support throughout the product’s expected life.
Spares can be purchased from approved stockists or merchants (locations on request) or direct from Customer Services.
Spares 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.
All spares are guaranteed for 12 months from date of purchase. Spares that have been supplied directly form us can be returned within one month from date of purchase, providing that they are in good order and the packaging is unopened.

Note! Returned spares will be subject to a 15% restocking charge and authorisation must be obtained before return. Please contact our Customer Services Team.

Note! In the interests of safety, spares requiring exposure to mains voltages should only be fitted by 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 spare parts and a 12 month guarantee on the repair.
Payment should be made directly to the engineer/agent using Visa, MasterCard or a cheque supported by a banker’s card.

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Sat 8:30 am - 3:30 pm
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