Installation Instructions and User Guide
Artisan Thermostatic Surface Mounted Bar Shower Valves

Models covered: AR2 SHXVOFF, AR2 SHXMTFF & AR2 SHXSMFF

Please keep this booklet for future reference.
Installer, when you have read these instructions please ensure you leave them with the user.
Thank you for choosing Bristan, the UK’s leading showers and taps expert.

Your Bristan shower valve is a thermostatic mixer incorporating a wax capsule thermostat to ensure constant shower temperatures. These instructions are for your guidance to a safe and successful installation and should be left with the user. All products manufactured and supplied by Bristan are safe providing they are installed correctly and receive regular maintenance in accordance with these instructions.

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• Please read these instructions thoroughly and retain for future use.

• All products manufactured and supplied by Bristan are safe provided they are installed, used correctly and receive regular maintenance in accordance with these instructions.

• If you are in any doubt about your ability to install this shower valve safely you must employ the services of an experienced qualified plumber.

• These fittings need to be installed in accordance with, and meet the requirements of the Water Supply (Water Fittings) Regulations 1999 and Scottish Byelaws 2004.

• Warning: Do not operate the shower valve if you suspect it is frozen. Do not site the shower valve where it might be subjected to freezing conditions.

• Do not crush or kink the shower hose, this could damage the hose and cause leaks.

• Remove all packaging and check the contents for damage before starting installation.

• Before starting any installation please consider the following: before drilling into walls, check that there are no hidden electrical wires, cables or water supply pipes. This can be checked with the aid of an electronic detector.

• If power tools are used do not forget to: - Wear eye protection - Unplug equipment after use

• Fitting isolating valves to the inlet feeds is required for ease of maintenance.

• Warning: Before installing the new shower valve it is essential that you thoroughly flush through the pipework in order to remove any remaining swarf, solder, etc. Failure to carry out this procedure could cause problems or damage to the workings of the shower valve.

• This shower valve must not be modified in any way as this will invalidate the guarantee.
General Information

Operating pressure range: Minimum 0.1 bar, Maximum 5.0 bar.

Maximum static pressure: 10.0 bar.

This product has been tested to the TMV2 scheme which complies with the BS EN 1287:1999 [LP] and BS 1111:1999 [HP] thermostatic mixing valve standards and satisfies the requirements of the water supply (water fittings) regulations 1999 and current bylaws.

BS 6700 recommends 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 build up of lime scale in hard water areas (see Map of Hard Water Regions in the UK on page 25).

If the fitting is installed at low pressure (tank fed), then the minimum distance from the highest installed position of the showerhead to the underside of the cold tank should be at least 1 metre to ensure adequate performance.

**Note:** Nominally equal (balanced) inlet supply pressures are recommended for optimum performance with mixer showers.

These shower valves should be installed in compliance with the Water Regulations.

For further details contact your Local Water Authority.
Product features

1. **Water Flow Control**
   Water flow settings: Off ( ), Medium (eco ) and High ( ).
   Controls the amount or flow of water from the showerhead.
   When in medium (eco ) setting the button must be pressed to increase the water flow.

2. **Temperature Control**
   Adjustable temperature control.
   Only press the button (and turn the control) when a water temperature over 38° is required.

### Recommended Usage

<table>
<thead>
<tr>
<th></th>
<th>Domestic</th>
<th>Heavy</th>
<th>Commercial</th>
<th>Light Commercial</th>
<th>Health Care</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Domestic</strong></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Commercial</strong></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Health Care</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
Installation Requirements

This shower valve must be installed in compliance with current water regulations. If you have any doubts about the water regulation requirements contact your local water services provider or use the services of a professional plumber.

This shower valve is suitable for use with the following water supply systems:

- **Gravity Fed Hot and Cold** (pressure balanced)
- **Gravity Fed Hot and Mains Cold** (differential pressure - see Specification section on page 12)
- **Instantaneous water heater** (combination boiler)
- **Unvented System**
- **Pumped System**

⚠️ **Important:** If you install this shower valve with a gravity fed system, there must be a minimum head (vertical distance) from the underside of the cold water storage tank to the showerhead position of at least 1 metre.

**Note: Pumped system (with Essex flange)** If you install this shower valve to a pumped gravity fed system where the minimum head (vertical distance) from the underside of the cold water storage tank to the top of the hot water cylinder is less than 1 metre we recommend an Essex flange is used as shown.

**Flushing Pipe-work**

⚠️ **Important:** Before connecting the shower valve (see ‘Installation’ on pages 16-17), supply pipe-work must be flushed to clear debris before connecting the shower valve. Debris will reduce the performance and life of the shower.

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**Gravity Fed Hot and Cold**

![Diagram of Gravity Fed Hot and Cold](image1)

**Gravity Fed Hot and Mains Cold**

![Diagram of Gravity Fed Hot and Mains Cold](image2)
Installation Requirements

Instantaneous Water Heater

Unvented System

Pumped System

Pumped System (with Essex flange)

Key:
- ❎ Isolating Valve
- △ Reducing Valve
- 🛀 Shower Valve
- ⚡ Pump
- 🗞 Essex Flange

Cold mains supply

1m min.

If less than 1m see note.

50mm
Installation Requirements

Conditions of use for Type 2 (Thermostatic mixer) valves

<table>
<thead>
<tr>
<th></th>
<th>High Pressure</th>
<th>Low Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Static Pressure (Bar)</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Flow Pressure, Hot &amp; Cold (Bar)</td>
<td>0.5 to 5</td>
<td>0.1 to 1</td>
</tr>
<tr>
<td>Hot Supply Temperature (°C)</td>
<td>55 to 65</td>
<td>55 to 65</td>
</tr>
<tr>
<td>Cold Supply Temperature (°C)</td>
<td>Equal to or Less than 25</td>
<td>Equal to or Less than 25</td>
</tr>
</tbody>
</table>

**Note:** Valves operating outside these conditions cannot be guaranteed by the Scheme to operate as Type 2 valves.

If a water supply is fed by gravity then the supply pressure should be verified to ensure the conditions of use are appropriate for the valve.

**Recommended outlet temperatures**

The BuildCert TMV scheme recommends the following set maximum mixed water outlet temperatures for use in all premises:

- 44°C for bath fill but see notes below;
- 41°C for showers;
- 41°C for washbasins;
- 38°C for bidets.

**The mixed water temperatures must never exceed 46°C.**

The maximum mixed water temperature can be 2°C above the recommended maximum set outlet temperatures.

**Note:** 46°C is the maximum mixed water temperature from the bath tap. The maximum temperature takes account of the allowable temperature tolerances inherent in thermostatic mixing valves and temperature losses in metal baths.

⚠️ **Warning:** It is not a safe bathing temperature for adults or children.

The British Burns Association recommends 37 to 37.5°C as a comfortable bathing temperature for children. In premises covered by the Care Standards Act 2000, the maximum mixed water outlet temperature is 43°C.

The thermostatic mixing valve (TMV) will be installed in such a position that maintenance of the TMV and its valves and the commissioning and testing of the TMV can be undertaken.

The fitting of isolation valves is required as close as is practical to the water supply inlets of the thermostatic mixing valve.
Flow Regulators

This shower valve is supplied with a 7 litre per minute flow regulator fitted in each water inlet which must be left in place when installed in conjunction with an instantaneous water heater/combination boiler.

Fitting both flow regulators and turning the water heater/combination boiler to its hottest setting, will ensure a sufficiently hot water supply to the shower valve during winter months (in the UK), when the mains cold water supply is at its coldest.

In the event that this shower valve is not installed with an instantaneous water heater/combination boiler, the flow regulators may be removed. Please follow the steps detailed to remove the flow regulators.

Using a thin flat bladed screwdriver or similar tool, carefully prise the flow regulators out of both inlets (1 & 2).

With the flow regulators removed from the inlets, the plastic inserts (supplied) must be fitted as shown, with the small diameter first (3 & 4).
This fitting needs to be installed in accordance with the following Installation Requirements and Notes (IRN) to ensure they meet the requirements of the Water Supply (Water Fittings) Regulations 1999 and the Scottish Byelaws 2004.

IRN R001: See text of entry for Installation Requirements or Notes.

IRN R040 - Schedule 2-15 (1): The fitting shall be installed so that its outlet discharges above the spill-over level of any fixed appliance as indicated below:

For backflow protection in domestic or installations up to, and including, Fluid Category 3.

If the fitting cannot be installed as indicated in the table opposite it shall be installed as either a or b below:

a: with an approved double check valve assembly or some other no less effective backflow prevention device immediately upstream of the inlet.

b: so that it draws water by gravity only from a cistern, or cylinder having a permanently open vent pipe, and the distributing pipe supplies no other fittings (other than a draining tap) at a lower level.

For backflow protection in premises or installations up to, and including Fluid Category 5.

The vertical distance of the outlet above the spill-over level shall be not less than 20mm or twice the diameter of the inlet pipe to the fitting, whichever is the greater. If the fitting cannot be installed as indicated it shall be installed with a backflow prevention arrangement suitable for the Fluid Category.

<table>
<thead>
<tr>
<th>Size of tap or combination fitting</th>
<th>Vertical distance of outlet above spill-over level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Not exceeding ½”</td>
<td>20mm</td>
</tr>
<tr>
<td>2. Exceeding ½” but not exceeding ¾”</td>
<td>25mm</td>
</tr>
<tr>
<td>3. Exceeding ¾”</td>
<td>70mm</td>
</tr>
</tbody>
</table>
*Note: The Riser rail wall brackets can be positioned up or down the riser rail as required. This allows any existing holes to be reused or covered by the wall brackets. The brackets can also be adjusted to sit in the middle of the tiles or in the tile joints.
Specifications

Inlet connections: 15mm compression with 150mm between centres.

Operating pressure range: Min. 0.1 bar - Max. 5.0 bar - Maximum recommended imbalance between hot and cold supply should not exceed a ratio of 5:1.

Maximum outlet temp: Factory pre-set to 41°C (can be re-set to suit site conditions).

Supply requirements:
Minimum cold water supply temperature: 5°C.
Maximum cold water supply temperature: 25°C.
Maximum hot water supply temperature: 80°C.
(a maximum hot water supply temperature of 60 - 65°C is recommended for ablutionary purposes)

Note: The inlet hot water temperature must be at least 10°C above the required blend temperature [eg. shower temperature 43°C: minimum hot supply 53°C].

Minimum dynamic pressure: 0.1 bar.
Maximum dynamic pressure: 5.0 bar.
Maximum static pressure: 10.0 bar.
Pack Contents - AR2 SHXVOFF C

1. Shower valve
2. Wall plates x2
3. Olives x2
4. Fixing bridges x2
5. Covers x2
6. Filter washers x2
7. Wall plate fixings x4/4
8. Plastic inserts x2
Pack Contents - AR2 SHXSMFF C

1 Shower valve
2 Wall plates x2
3 Olives x2
4 Fixing bridges x2
5 Covers x2
6 Filter washers x2
7 Wall plate fixings x4/4
8 Plastic inserts x2
9 Showerhead (single function)
10 Rubber washers x2
11 Shower hose
12 Riser rail
13 Riser rail fixings x4/4
Pack Contents - AR2 SHXMTFF C

1. Shower valve
2. Wall plates x2
3. Olives x2
4. Fixing bridges x2
5. Covers x2
6. Filter washers x2
7. Wall plate fixings x4/4
8. Plastic inserts x2
9. Showerhead (3 function)
10. Rubber washers x2
11. Shower hose
12. Riser rail
13. Riser rail fixings x4/4
Installation - First Fix

**Before Installation**
Flush through the pipework to ensure removal of debris. Turn off the mains water supply and close any isolating valves.

1. **Prepare water supply pipes**
The centres of the hot and cold water supply pipes should be 150mm apart.
At least 30mm of the 15mm diameter supply pipes should protrude through the finished wall surface.

2. **Attach wall plates**
Place the wall plates [2] over the supply pipes and mark the centres of the fixing holes onto the wall.

⚠️ **Warning:** Please check for any hidden pipes and cables before drilling holes in the wall.

Drill suitable holes and insert the wall plugs. Securely attach the wall plates [2] to the wall using the screws [7].

3. **Attach olives and fixing bridges**
Place olives [3] onto the protruding pipework.

**Important:** The pipework must not protrude past the olive [3] by more than 5mm.

Hold flat edges of the wall plates [2] with a 47mm spanner and screw the fixing bridges [4] onto the wall plates using a 22mm spanner.

**Note:** If required, any decorating should be complete now before starting the Second Fix (page 17).

**Important:** Water supplies to the mixer must be with hot on the left and cold on the right when viewed from the front.
Installation - Second Fix

1. Fit covers
Screw the covers (5) over the wall plates/fixing bridges (4), so they are flush against the wall.

2. Attach shower valve
Place the filter washers (6) into the shower valve fixing nuts.
Position the shower valve (1) against the fixing bridges and carefully tighten the shower valve fixing nuts onto the fixing bridges. Do not overtighten.

Note: Take care not to damage the finish of the shower valve fixing nuts.
Protect the chromium plated surfaces with a cloth.
1. Mark the position
Position the assembled riser rail on the wall, bearing in mind the different heights of people likely to use the shower and the length of the hose when connected to the shower.

With the riser rail vertical, mark the wall bracket positions onto the wall.

Release the slider handle and remove the slider and wall brackets from the rail.

2. Attach wall brackets
Remove the end caps and clamps from the wall brackets.
Position the wall brackets in the marked positions against the wall, ensure they are vertically in line with each other and mark the centres of the fixing holes onto the wall.

⚠️ Warning: Please check for any hidden pipes and cables before drilling holes in the wall.

Drill suitable holes and insert the wall plugs. Securely attach the wall brackets to the wall using the screws (13).

**Tips:** A piece of insulation or masking tape positioned where holes are to be drilled and before marking out the exact position for the fixing holes will help stop the drill bit from wandering, particularly on a tiled surface.

When working near a basin, bath or shower insert plug or cover waste to prevent losing small parts.

Take care not to drop tools/equipment into basin, bath or shower during shower installation.

**Note:** If replacing an existing riser rail, check to see if the existing holes can be reused or covered by the new wall brackets. Try to avoid drilling close to the edge of tiles, drill in the middle of the tiles or in the tile joints.
3. **Insert rail clamps**
Insert the rail clamps into both wall brackets.

4. **Insert riser rail**
Push the riser rail up through the bottom wall bracket.
Push the slider down onto the riser, ensuring it is the correct way up - as shown.
Then push the riser rail up through the top wall bracket.

5. **Tighten rail clamps**
Centre the riser rail within the wall brackets and tighten both clamps onto the rail.

6. **Fit wall bracket end caps**
Push-fit the wall bracket end caps onto both wall brackets.
Attaching the Shower hose

7. Connect shower hose to shower valve
Screw the shower hose (ribbed nut end) onto the mixer ensuring that the rubber washer is fitted.

8. Connect shower hose to showerhead
Screw the shower hose (conical end) onto the showerhead ensuring that the rubber washer is fitted.
Place the showerhead into the slider.

Single function showerhead shown as an example
Operation

**Water Flow Control (1)**
Water flow settings:
Off (●), Medium (eco●) and High (●).
Controls the amount or flow of water from the showerhead.
When in medium (eco●) setting the button must be pressed to change the setting.

**Temperature Control (2)**
Adjustable temperature control.
Only press the button (and turn the control) when a water temperature over 38˚ is required.

**Riser rail**
Turning the slider handle will allow the slider to be raised and lowered and the angle of the showerhead to be adjusted.

**Adjusting the Showerhead**
(AR2 SHXMTFF C only)
The AR2 SHXMTFF C showerhead has 3 spray functions - spray, jet spray and combination. Simply rotate the spray head one way or the other to the desired spray pattern.

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**Spray**

![Spray](image1)

**Jet spray**

![Jet spray](image2)

**Combination spray**

![Combination spray](image3)
Commissioning notes for Thermostatic Mixing Valves

The first step in commissioning a thermostatic mixing valve is to check the following:

1. The designation of the thermostatic mixing valve matches the application.
2. The supply pressures are within the valves operating range.
3. The supply temperatures are within the valves operating range.
4. Isolating valves (and strainers preferred) are provided.

If all these conditions are met, proceed to set the temperature as stipulated in the Maintenance section.

The mixed water temperature at the terminal fitting must never exceed 46°C.

It is a requirement that all TMV2 approved valves shall be verified against the original set temperature results once a year. When commissioning / testing is due the following performance checks shall be carried out:

- Measure the mixed water temperature at the outlet.
- Carry out the cold water supply isolation test by isolating the cold water supply to the TMV, wait for five seconds, if water is still flowing check that the temperature is below 46°C.

If there is no significant change to the set outlet temperature (+/-2°C or less change from the original settings) and the fail-safe shut off is functioning, then the valve is working correctly and no further service work is required.

Notes: If there is a residual flow during the commissioning or the annual verification [cold water supply isolation test], then this is acceptable providing the temperature of the water seeping from the valve is no more than 2°C above the designated maximum mixed water outlet temperature setting of the valve.

Temperature readings should be taken at the normal flow rate after allowing for the system to stabilise.

The sensing part of the thermometer probe must be fully submerged in the water that is to be tested.

Any TMV that has been adjusted or serviced must be re-commissioned and re-tested in accordance with the instructions in the Maintenance section.

The installation of thermostatic mixing valves must comply with the requirements of the Water Supply (Water Fittings) Regulations 1999.
Maintenance

General Cleaning
Your fitting has a high quality finish and should be treated with care to preserve the visible surfaces. All surfaces will wear if not cleaned correctly, the only safe way to clean your mixer is to wipe with a soft damp cloth. Stains can be removed using washing up liquid. All bath cleaning powders and liquids will damage the surface of your fitting, even the non-scratch cleaners.

Note: Never use abrasive detergents or disinfectants or those containing alcohol, hydrochloric acid or phosphoric acid.

Bristan recommend E-cloth for cleaning all of our bathroom & kitchen products. Using just water, E-cloth gives a smear free, deep clean by breaking up and holding dirt, which normal cloths leave behind. Order through your Bristan stockist (order code: ECLOTH).

Cleaning the Showerhead
Your Bristan showerhead has rub-clean nozzles for easy cleaning. Simply rub your fingers across the rubber spray jets regularly and before you turn the shower on to remove any scale or debris.

The hardness of the water in your area will determine how often you should clean your showerhead. Build up of scale in particularly hard water areas combined with constant use means you may need to clean your showerhead once a week. To ensure continued performance of your shower the showerhead needs to be regularly descaled.

Cartridge Maintenance
We advise that the shower valve is regularly serviced in hard water areas to maintain the flow of water (see Map of Hard Water Regions in the UK on page 25).

Isolate both hot and cold water supplies to the shower valve by either:

- Turning the water supply off at the mains stopcock or

- Turning off the isolation valves to the shower valve

1. Remove the temperature control cover, undo the screw, remove the handle and plastic stop.

2. Unscrew the cartridge anti-clockwise and remove from the valve body.

3. Place the cartridge in a bowl and carefully add hot water (just off the boil) and vinegar to de-scale the cartridge. Leave in the solution until the water has cooled and rinse with clean water.

4. Grease the seals with a silicon grease supplied by Bristan (part number: SP-495-0002) and carefully refit.

5. Reset the maximum temperature and refit the handle and cover.

Note: For step by step video guidance on how to service this shower valve please visit http://www.bristan.com/howto
Adjusting the Temperature

The shower valve has been factory set with equal (balanced) hot and cold water supply pressures with the hot water supply at 65°C.

If your operating conditions are different from those above, the outlet water temperature may differ from the factory setting.

If required the shower valve can be re-calibrated to suit your own temperature requirements.

Set the temperature control to 38°C and check the temperature of the water with a thermometer. If the temperature is not correct, re-calibrate the shower valve:

1. Remove the temperature control cover, undo the screw and carefully remove the handle but do not remove the plastic stop.
2. Turn the spline clockwise to decrease the temperature and anti-clockwise to increase the temperature. Check the temperature and adjust until you achieve the required temperature.
3. Replace the handle ensuring '38' is at the top of the handle and the 'stop pin' inside the handle is up against the plastic stop.
4. To finish, reinsert the screw and push on the cover (will only fit on in one position).
Hard Water Regions in the UK

Soft to moderately soft
0 - 100mg/l as calcium carbonate equivalent

Slightly hard to moderately hard
100 - 200mg/l as calcium carbonate equivalent

Hard to very hard
Above 200mg/l as calcium carbonate equivalent
### Troubleshooting

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>No flow or low flow rate and / or varying temperatures.</td>
<td>Check showerhead, hose and filters for any blockage.</td>
<td>Clean as necessary, refer to Maintenance section (page 23).</td>
</tr>
<tr>
<td></td>
<td>Partially closed stop or service valve in water supply pipework to the shower valve.</td>
<td>Open stop or service valve.</td>
</tr>
<tr>
<td></td>
<td>Instantaneous water heater cycles on and off as the flow rate or pressure is too low.</td>
<td>Increase water flow rate or pressure through system.</td>
</tr>
<tr>
<td></td>
<td>Head of water is below the minimum distance required.</td>
<td>Raise the cistern or fit a shower booster pump.</td>
</tr>
<tr>
<td></td>
<td>Inlet filter is partially blocked.</td>
<td>Clean or replace, flush through pipework before refitting.</td>
</tr>
<tr>
<td></td>
<td>Hot or cold water being drawn off elsewhere causing pressure changes or instantaneous boiler temperature changes.</td>
<td>Do not use other water outlets when using the shower.</td>
</tr>
<tr>
<td></td>
<td>Make sure the maintained inlet pressures are nominally balanced and sufficient.</td>
<td>Refer to Installation Requirements section (pages 6-10).</td>
</tr>
<tr>
<td></td>
<td>Airlock or partial blockage of the pipework.</td>
<td>Flush through pipework to ensure removal of debris and any airlocks.</td>
</tr>
<tr>
<td></td>
<td>No hot or cold water reaching the shower valve.</td>
<td>Check hot and cold feeds (the valve will shut down if either the hot or cold supply fails).</td>
</tr>
<tr>
<td>Water leaking from showerhead.</td>
<td>This is normal for a short time after turning off.</td>
<td>Adjust angle of showerhead in holder as necessary to vary draining time.</td>
</tr>
<tr>
<td></td>
<td>Shower control valve failing to close fully, possibly due to water borne debris.</td>
<td>Remove shower control valve assembly and check. Refer to Maintenance section (page 23) before dismantling shower valve.</td>
</tr>
<tr>
<td></td>
<td>Flow control valve seals damaged.</td>
<td>Check condition of flow control valve and replace as necessary.</td>
</tr>
<tr>
<td>Symptom</td>
<td>Cause</td>
<td>Remedy</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>--------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Maximum water temperature too hot or cold.</td>
<td>Maximum water temperature set incorrectly.</td>
<td>Reset maximum water temperature. Refer to ‘Maximum Temperature Setting’ in Commissioning section (page 22) and ‘Adjusting the Temperature’ in Maintenance section (page 23).</td>
</tr>
<tr>
<td>Outlet water temperature too hot / cold.</td>
<td>Inlet filter is partially blocked.</td>
<td>Check insert filters for any blockages and clean as necessary.</td>
</tr>
<tr>
<td>Installation conditions outside operating parameters.</td>
<td></td>
<td>Refer to Installation Requirements section (pages 6-10). Service shower valve as recommended. Refer to Maintenance section (page 23). Refer to Adjusting the Temperature section (page 24).</td>
</tr>
<tr>
<td>Water temperature too cold - maximum water temperature incorrectly set.</td>
<td>Hot water temperature is less than 10°C above the required blend temperature.</td>
<td>Adjust hot water temperature or wait for water to reheat if stored system is used.</td>
</tr>
<tr>
<td>Instantaneous water heater not igniting because water flow rate is too low.</td>
<td></td>
<td>Increase water flow rate through the system. Check cartridge inlet filters and clean or replace. Refer to Maintenance section (page 23). Contact the boiler manufacturer.</td>
</tr>
<tr>
<td>Instantaneous water heater not igniting because water pressure is too low.</td>
<td></td>
<td>Increase water pressure through the system. Contact the boiler manufacturer.</td>
</tr>
<tr>
<td>Only hot or cold water from shower valve outlet.</td>
<td>Inlet water supplies are reversed (hot to cold supply).</td>
<td>Check the connections are the correct way round. Hot on the left and cold on the right when viewed from the front. Rework pipework as necessary.</td>
</tr>
<tr>
<td></td>
<td>Inlet filter is partially blocked.</td>
<td>Clean or replace, flush through pipework before refitting.</td>
</tr>
</tbody>
</table>
Bristan offers solid guarantees to provide you with complete peace of mind.

**Taps and Mixers**
5 year parts and 1 year labour*. Gold, painted and special finishes 3 years parts only.

All subject to proof of purchase.

**Mixer Shower Valves**
5 year parts. 5 year labour* (subject to registration), or 1 year with proof of purchase.

Gold, painted and special finishes 3 years parts only.

**Pumps and Power Showers**
2 year parts. 1 year labour* (subject to registration).

**Electric Showers/Instantaneous Water Heaters**
2 year parts. 1 year labour* (subject to registration).

**Accessories**
5 year parts only. Includes bathrooms accessories, shower accessories (e.g. hoses, handsets and poles), wastes, WC levers and light pulls. Gold, painted and special finishes 3 years parts only.

**Sanitaryware**
5 year parts only. Subject to proof of purchase.

**Shower Enclosures and Shower Trays**
10 year parts (subject to registration), or 2 years with proof of purchase. 1 year labour* (subject to registration), or 1 year with proof of purchase.

**Heated Towel Rails**
5 year parts only. Gold, painted and special finishes 3 years parts only. All subject to proof of purchase.

*Labour provided by an approved Bristan engineer. Guarantee only applies to products with a manufacturing fault. A deferred payment will be necessary in order to secure any visits by our engineers which will be charged if the problem is found not to be a manufacturing fault. If the fault is found to be down to a manufacturing error, the payment will be released and not charged.

This guarantee applies to products purchased within the United Kingdom or Republic of Ireland, but does not apply to products used commercially.

The guarantee is only available to original purchasers who have proof of purchase.

The installation must allow ready access to all products for the purpose of inspection, maintenance or replacement.

Any part found to be defective during the above guarantee period will be replaced without charge, providing that the product has been installed in accordance with the instructions, used as intended, and regularly serviced.

Servicing should be carried out at regular intervals of no more than 12 months and more frequently in hard water areas (heavy lime scale) areas.

In the unlikely event that any problems are encountered with the product’s performance on installation, you must obtain guidance/authorisation from our Customer Service Department, and be able to supply proof and date of purchase, before any remedial action is taken.

The guarantee excludes general wear and tear and damage caused by accident, misuse or neglect, and does not cover the following:
Guarantee & Service Policy

• Components that are subject to general wear and tear such as filters, seals, ‘O’ rings and washers etc.
• Damage caused by faulty installation
• Damage caused by lime scale or any waterborne debris
• Damage caused by inappropriate cleaning products (see maintenance section)
• Damage caused by the use of non-Bristan parts
• The product being used for a purpose other than intended by the manufacturer.

In the interests of continuous product improvement Bristan reserves the right to alter specification as necessary.

If your product is out of its guarantee period, or you would like to extend the guarantee, then please see our extended warranty offer. Please refer to the Bristan website.

Replacement Parts Policy

Important:

In the event of product or component malfunction, DO NOT tamper with or remove the product from site. Telephone the Customer Services Department and be prepared with the date of purchase, model number and a clear description of the complaint.

Our service staff are fully qualified to advise on correct installation procedures and will be able to diagnose whether the fault will require a replacement part or a visit from a Bristan engineer.

If required, a service call will be booked and either yourself or an appointed representative (who should be a person of 18 years or over) must be present during the visit.

All site visits to product within the guarantee period will be carried out free of any parts or labour charges provided the conditions of the guarantee have been adhered to (the 2nd to 5th year of the guarantee is parts only, unless registered).

All site visits to product out of guarantee will be subject to charges for parts and labour. Charges will also be levied on cancelled appointments, unless advised to Bristan at least 24 hours in advance of the agreed date and time.

Should a product be discontinued, spare parts stocks will be maintained, but in the event of a part becoming unavailable Bristan reserve the right to supply a substitute of equal quality.

In order to log an enquiry with us please visit http://www.bristan.com/customerservice

Opening times: Please refer to the Bristan website.

Customer Service: Tel: 0844 701 6273 • Fax: 0844 701 6275
Notes

Please use this space to add any notes you or your installer may have regarding the plumbing system/installation of this product.
Notes
Part Number: FI AR2 SHX
Issue: D1