

Concealed Thermostatic Shower Valve Installation & Aftercare Instructions

Suitable for the installation of:

Two Function Concealed Shower Systems

Introduction

Thank you for choosing this R2 product. This guide covers the installation and commissioning of the shower valve.

This shower valve must be installed in accordance with the Water Supply (Water Fittings) Regulations 1999. We recommend this product should on be fitted by a qualified plumber.

Operating Conditions Of Use

Before installation the operating conditions of use must be checked. The table below contains details of the necessary conditions of operation. This valve is suitable for use in high pressure (BS1111) operating conditions.

Valves must always be operated within the range for BS1111 as described in the table below. Valves cannot operate effectively where a hot or cold pressure system crosses the boundaries of the two ranges. In addition the maximum ratio of unbalanced hot and cold water pressures for the valves to operate effectively is 2:1. Hot or cold pressure must be reduced or boosted so as to work within the required range.

The minimum operating pressure of this valve is 0.5 BAR but it is suitable for use with all water supply systems up to a maximum of 5.0 Bar. Operating pressures above 5.0 Bar will require the installation of pressure reducing valves.

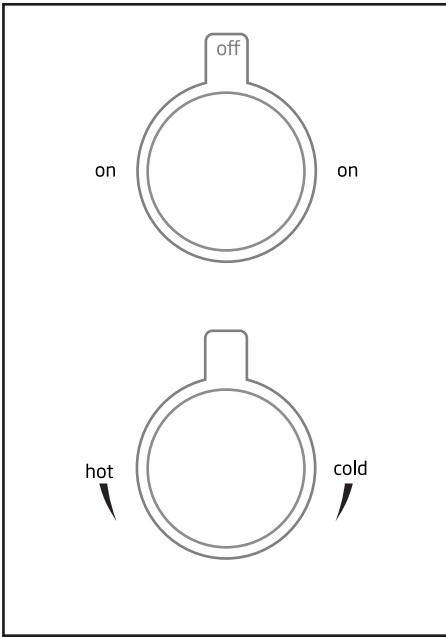
	HIGH PRESSURE BS1111
MAX STATIC BAR	10 BAR
FLOW PRESSURE (BAR) HOT & COLD	0.5 - 5 BAR
HOT SUPPLY (°C)	55 - 65
COLD SUPPLY (°C)	MAX 25
MIXED WATER (°C)	MAX 44

Valve Installation Guidelines And Compliance

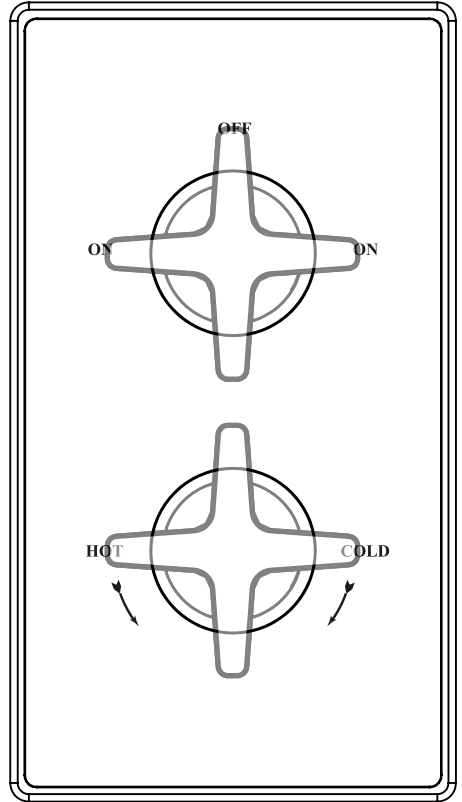
The valve must be installed so that it is readily accessible for commissioning and maintenance. The valve must be installed with isolation valves on both the hot and cold water systems as close as possible to the valve; so as to allow the valve to be commissioned and tested correctly. The valve is fitted with integral check valve cartridges which command the water supply, therefore the thermostatic valve is protected against cross-flow due to unbalanced line pressures as required by the Water Supply (Water Fittings) Regulations 1999.

Operation

Figure 1.



Modern Valve



Traditional Valve

The flow control can be operated by rotating the top handle clockwise or anti-clockwise to the 'ON' position. To turn the shower valve off, return the top handle to the 'OFF' position.

The bottom handle controls the temperature of the water from the shower outlets. Rotating the bottom handle clockwise will decrease the temperature, whilst rotating the handle anti-clockwise will increase the water temperature.

Valve Installation

Most problems associated with the operation of thermostatic shower valves are caused by debris in the new pipe work getting into the thermostat. These problems are easily avoided by thoroughly flushing the pipe work BEFORE the valve is fitted. Failure to do so may invalidate your guarantee.

1. Before starting installation, turn the water supply off. Determine the mounting position of the shower valve and mount the valve to the stud and noggins with fixing screw.

Ensure that when the depth of the finished wall surface is taken into account, that between 10mm and 30mm of the chrome cartridge covers are accessible to securely assemble the shower handles, cover plate and trim rings.

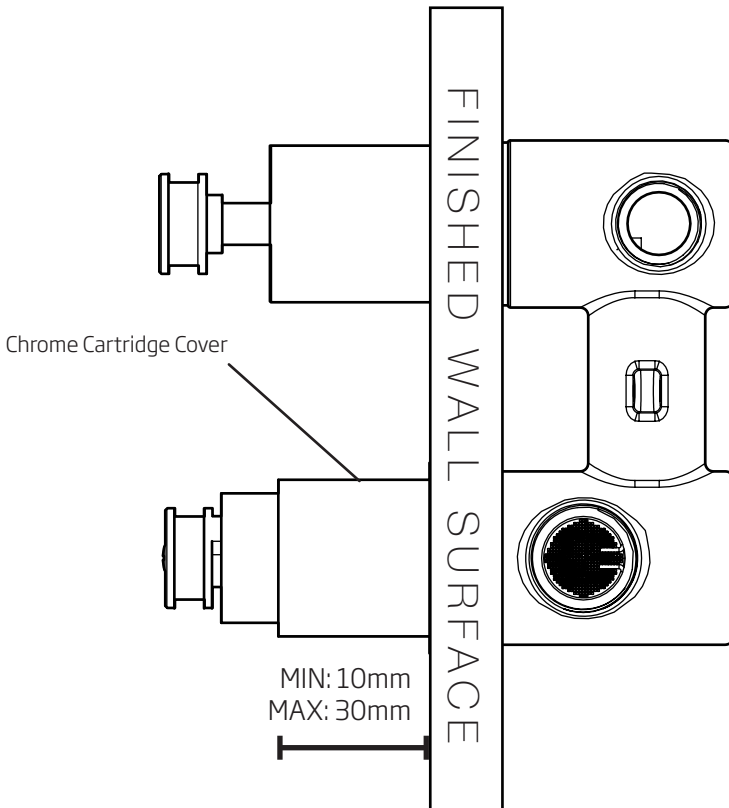


Figure 2.

2. With the valve securely mounted, make the appropriate plumbing connections to the hot and cold supplies with PTFE tape. The hot and cold inlets are suitable for 3/4" BSP threaded fittings and the two outlets are suitable for 1/2" BSP threaded fittings. (Figure 3)

Note: It is recommended that the plumbing union used should allow for the valve to be completely removed for servicing and maintenance.

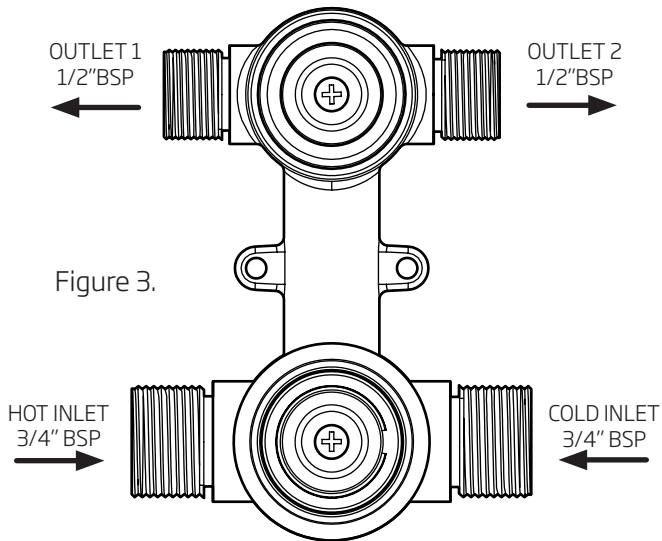


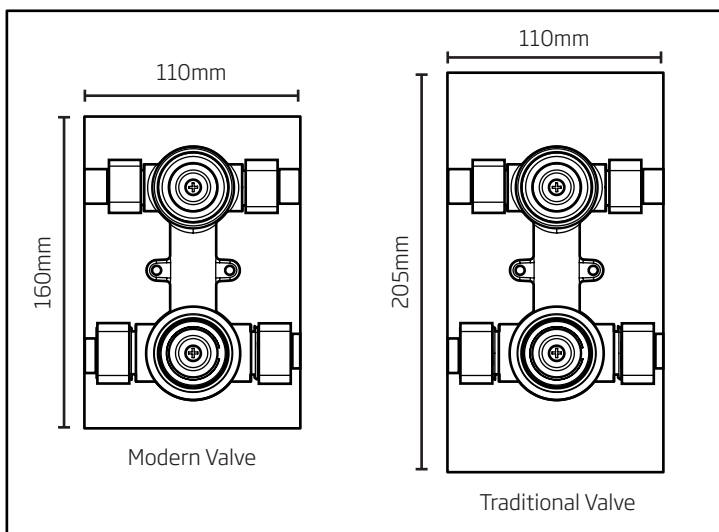
Figure 3.

3. Connect the outlet pipework to the chosen shower accessory (wall elbow, shower head, etc.) and turn on the water supply to check for leaks. Use the instructions provided with your shower accessories for installation information.

4. When all plumbing is checked and tested for leaks, proceed with installing the final finished wall surface.

For the installation of systems that use the modern cover plate, ensure the access hole in the final finished surface is no larger than 110mm x 160mm.

For the installation of systems that use the traditional cover plate, ensure the access hole in the final finished surface is no larger than 110 x 205mm.



Cover Plate Installation

5. Insert the fixing collars (packed inside the handle box) through the holes in the cover plate and secure to the back of the plate using the black rubber retaining O-rings. (Figure 4)

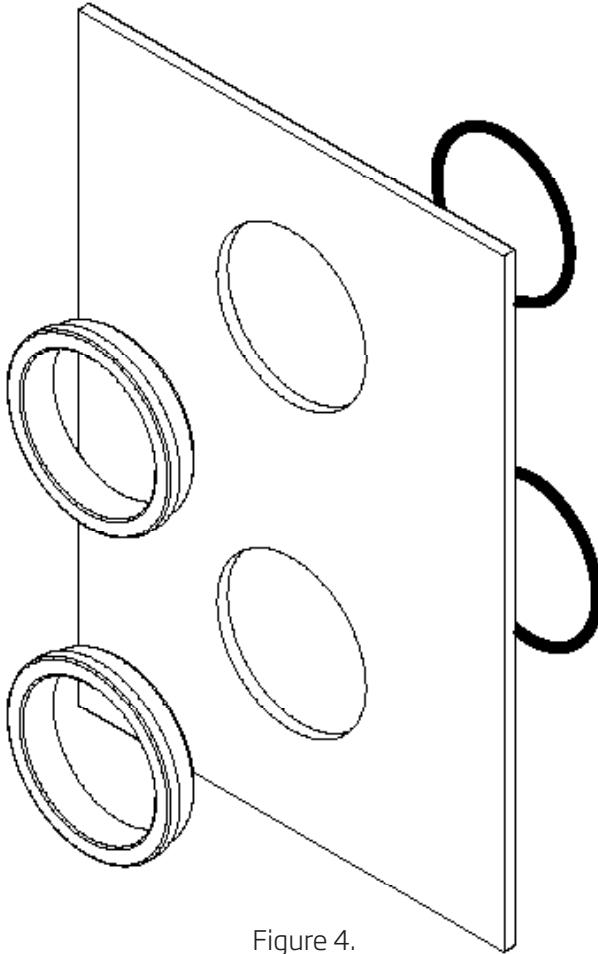


Figure 4.

6. Apply a small bead of silicone on the outer edge of the back of the cover plate. Slide the cover plate over the cartridge covers until the plate is flush with the wall. Allow the silicone to cure fully before proceeding.

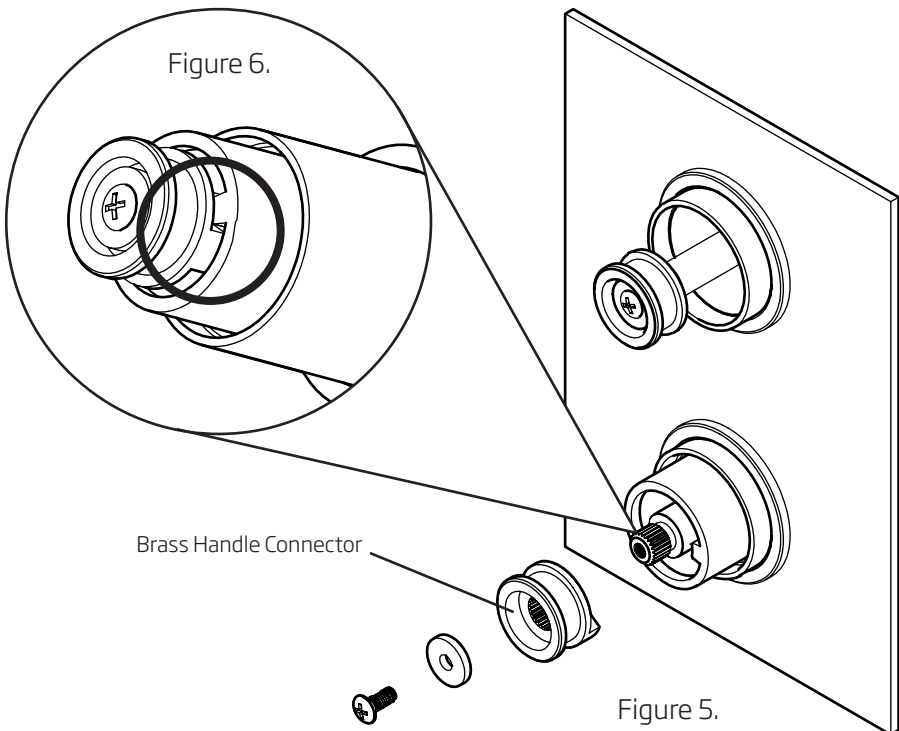
Setting / Adjusting Temperature

7. Before fitting the handles, it is necessary to check the valve operates at the correct outlet temperature. To test the outlet water temperature, rotate the temperature control fully anti-clockwise and turn the water supply on.

Use a thermometer to check the outlet temperature. The maximum temperature should not exceed 44°C. If the valve does not exceed this temperature, proceed to step 6. If the valve does exceed this temperature, it can be adjusted.

For modern style valve systems, use the following instructions:
(See over for traditional style instructions)

1. Remove the brass handle connector from the temperature cartridge (Figure 5).
2. Rotate the cartridge spindle anti clockwise to increase the temperature - clockwise to reduce the temperature.
3. Retest the water temperature until 44°C is reached and leave the temperature spindle in this position.
4. Re-assemble the brass handle connector to the temperature cartridge, ensuring the two parts of the temperature stop are touching and the cartridge cannot rotate any further anti-clockwise (Figure 6).

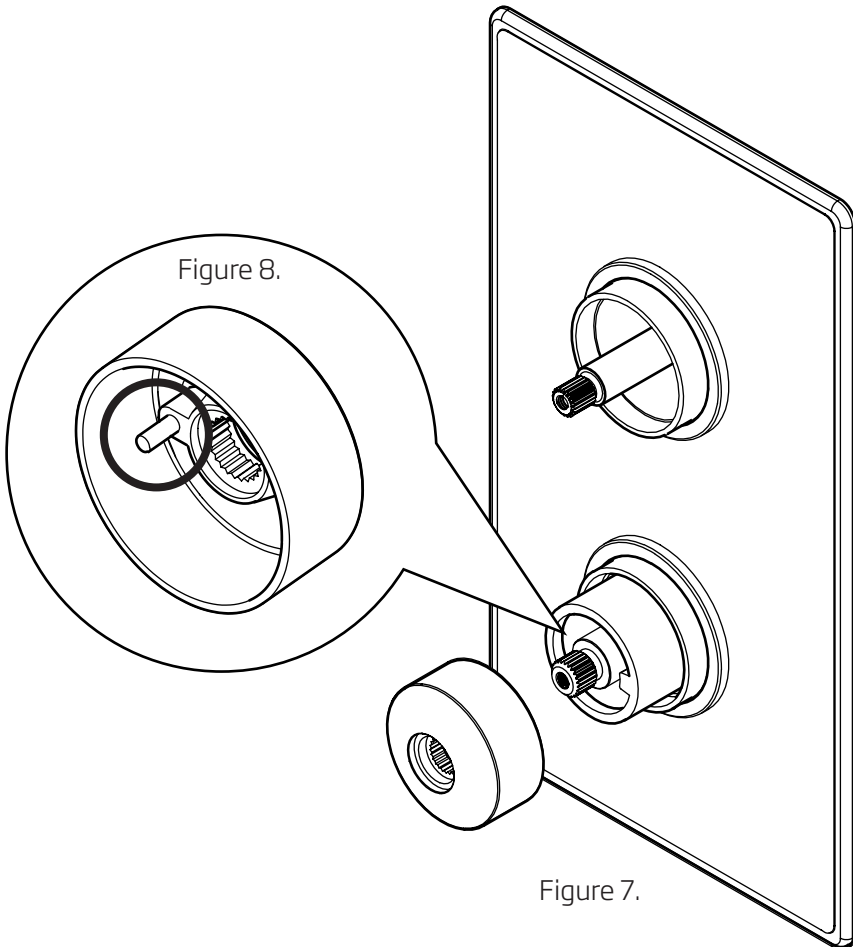


Setting / Adjusting Temperature

For traditional valve systems, use the following instructions:

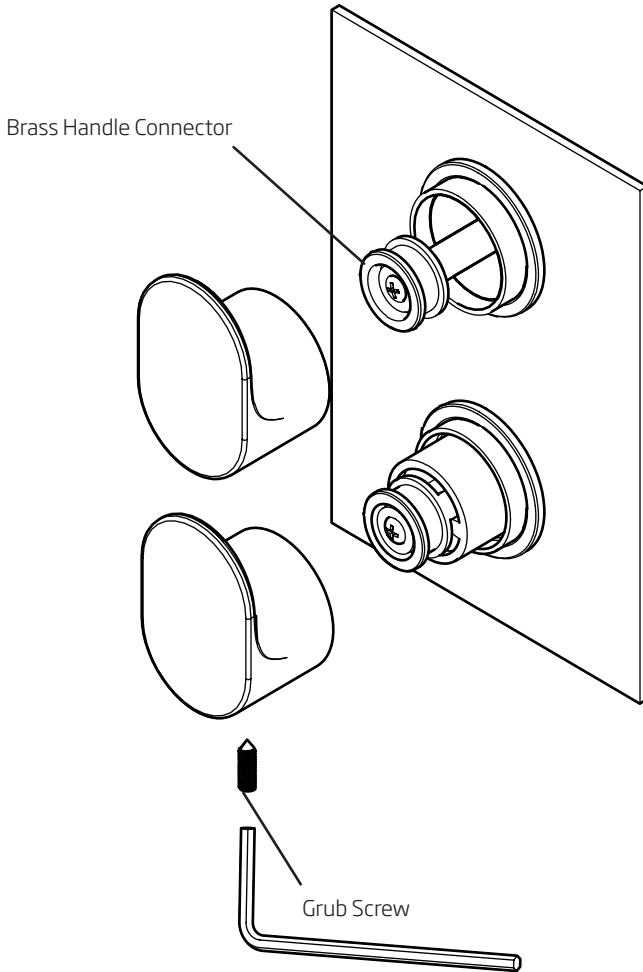
Using the same test method in Step 5, check the temperature of the mixed water from one of the outlets. If the maximum temperature needs to be adjusted proceed with the following steps:

1. Rotate the cartridge spindle anti clockwise to increase the temperature - clockwise to reduce the temperature
2. Retest the water temperature until 44°C is reached and leave the temperature spindle in this position.
3. Assemble the temperature handle shroud supplied in the handle box to the temperature spindle (Figure 7). On the underside of the handle is a temperature stop (Figure 8). Ensure that when assembled the two temperature stops prevent the handle rotating any further anti clockwise.



Handle Installation - Modern Shower System Handles

For valves supplied with brass handle connectors, follow the instructions below:



1. Remove the grub screw cover from the back of the shower handle to access the fixing grub screw. For Joy shower systems, removing the handle lever rod allows access to the grub screw.

2. Loosen the grub screw and position the handle onto the brass handle connectors assembled during temperature setting stage.

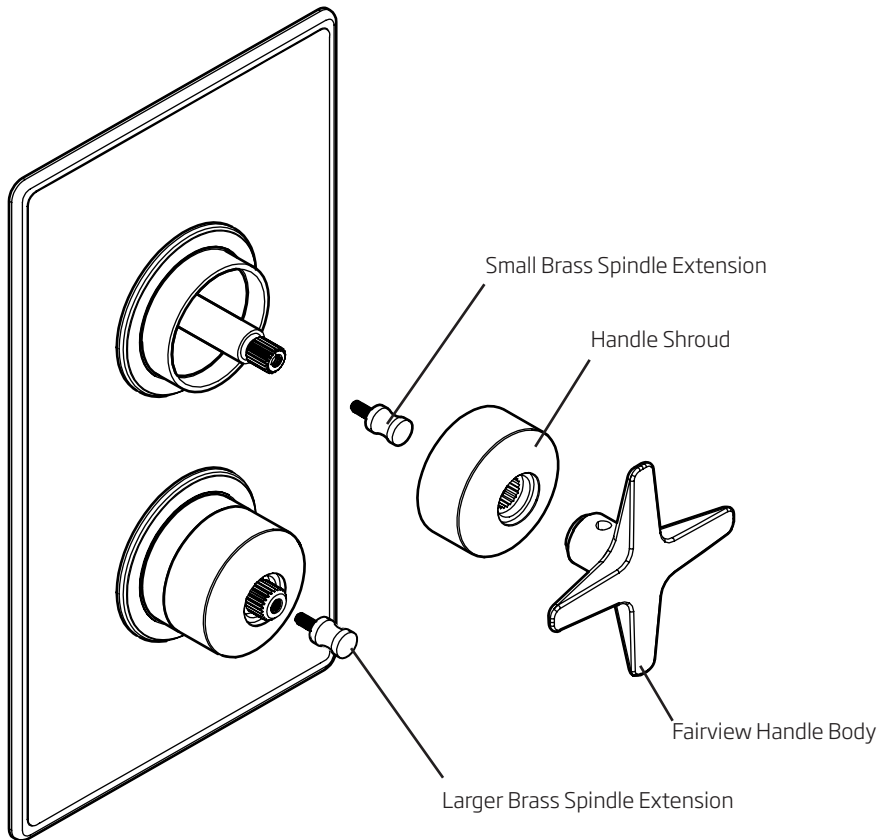
Note: Ensure the handles are appropriately placed for the etching on the cover plate.

3. Tighten the grub screw to fix the shower handle in place and replace the grub screw cover or handle lever rod.

4. Installation of your valve is now complete.

Handle Installation - Fairview Handle

For assembling the Fairview shower system handles:



1. The Fairview shower handle is supplied with two brass spindle extensions. Screw these into the thread on the diverter and temperature cartridges.

Note: There are two different sized spindle extensions - the smaller diameter extension should be secured to the diverter and the larger one secured to the temperature spindle.

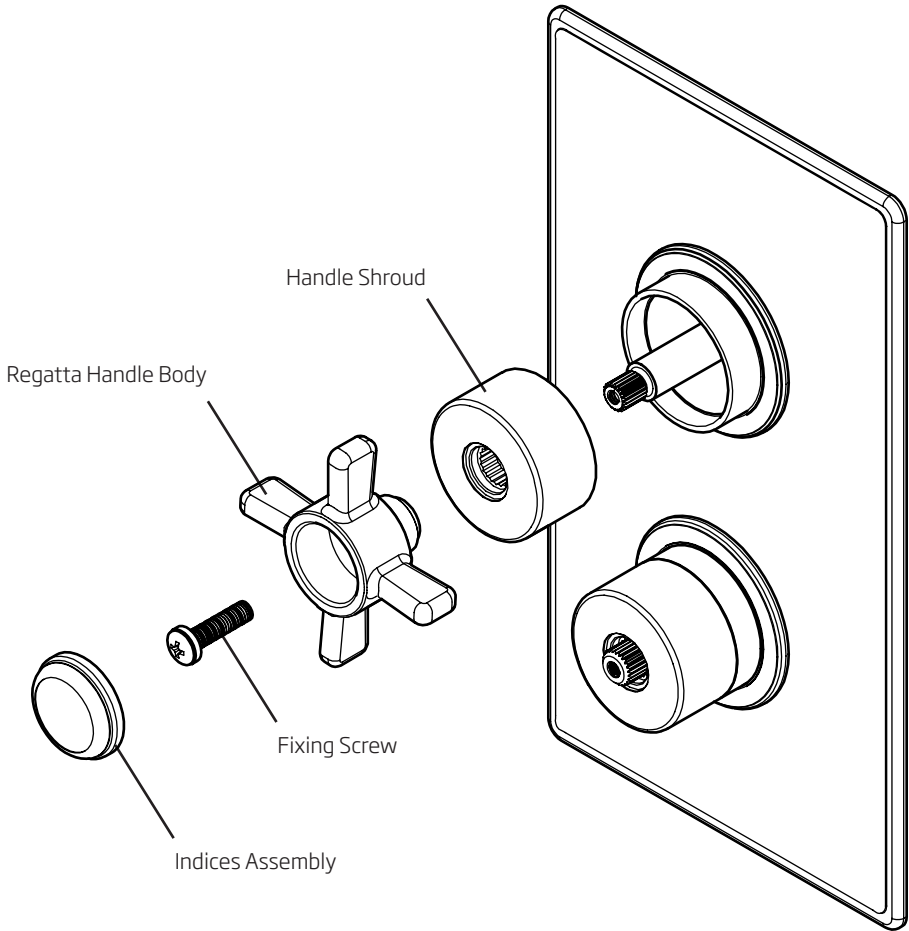
2. Position the handle shrouds onto the spindles - the temperature handle shroud should already be assembled with the temperature stop correctly aligned after following the temperature setting section of this installation guide.

3. The handle body should then be secured to the valve. Position the body over the spindle extension and secure in place with the grub screw in the handle body.

4. Installation of your valve is now complete.

Handle Installation - Regatta Handle

For assembling the Regatta shower system handles:



1. The Regatta shower handle consists of multiple parts - remove the indices assembly from the handle body to allow access to the fixing screw hole.
2. Position the handle shrouds onto the spindles - remembering that the temperature handle should be assembled with the temperature stop correctly aligned.
3. Position the handle body onto the spindles and secure with the fixing screw.
4. Screw the indices assembly into the handle body until tight.
5. Installation of your valve is now complete.

Testing And Annual Servicing

It is recommended that showers do not exceed 44°C. The valve temperature should never exceed 46°C. After commissioning, carry out the cold failure test to ensure the valve operates at the correct outlet temperature.

The valve should be tested to ensure correct operation at installation and thereafter at stated intervals decided by the user but never at greater than 12 monthly intervals. The testing will only require a normal thermometer with a scale greater than 65°C. The temperature sensitive element of the thermometer should always be fully inserted into the water flow.

Follow the procedure below:

1. Measure the mixed water temperature.
2. Carry out a cold fail/safe shut-off test by using the mains isolation valve to shut off the water to the cold supply. Wait 5 seconds, if water is still flowing check that the water temperature is below 44°C. The flow should stop or reduce to a trickle.
3. Open the cold water isolation valve and measure mixed water temperature. If there is no significant change from the original settings and fail/safe shut off is functioning the valve is working correctly and no further service is required. If the outlet temperature has drifted by more than 2°C, or if the fail/safe function does not work, a full service or re-commissioning is required. We recommend that in these circumstances you contact a plumber for advice as servicing should only be undertaken by a competent person.

Troubleshooting

If you require further assistance beyond the guide below, please contact customer services using the contact details at the bottom of this page.

PROBLEM	SOLUTION
After installation, shower only runs HOT or Cold - there is no mixed water.	Hot & Cold supplies are plumbed the wrong way around.
Shower will not run hot enough when first installed.	The maximum temperature needs to be adjusted - see the temperature setting guide in this manual.
Cold water is running back through the valve and into the hot water system.	Check and clean the check valve cartridges and filters located under the check valve. These may need to be replaced.