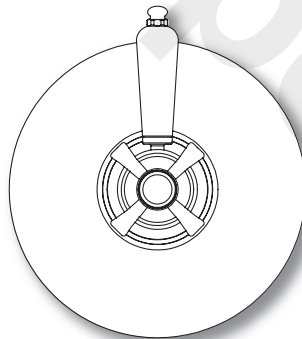
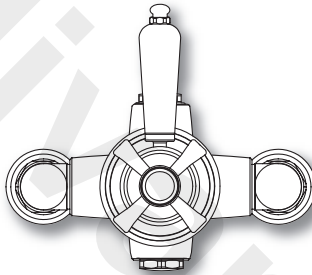


inta

Traditional Thermostatic Shower Valve

50014CP & 50015CP

Installation and Maintenance Instructions



inta

Intatec Ltd

Airfield Industrial Estate

Hixon

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ST18 0PF

In this procedure document we have endeavoured to make the information as accurate as possible.

We cannot accept any responsibility should it be found that in any respect the information is inaccurate or incomplete or becomes so as a result of further developments or otherwise.

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Introduction

This installation guide has been produced for the Traditional concealed and exposed thermostatic dual control shower mixing valves. These instructions cover the installation, operation and maintenance. Please read the enclosed instructions before commencing the installation of this product, please note;

We recommend that the installation of any Inta product is carried out by an approved installer.

The installation must be carried out strictly in accordance with the Water Supply (Water Fitting) Regulations 1999 and any local authority regulations.

If in doubt we recommend that you contact WRAS - Water Regulations Advisory Scheme on Tel: 0333 207 903, your local water authority - details available on the WRAS website or the Chartered Institute of Plumbing and Heating Engineers on Tel: 01708 472 791.

All products **MUST** be re-commissioned to suit site conditions to ensure optimum performance levels of the product are obtained.

Safety

This thermostatic shower must be installed and commissioned correctly to ensure that water is supplied at a safe temperature to suit the users.

43°C is the maximum mixed water temperature from a shower mixer. The maximum temperature takes account of the allowable tolerances inherent in thermostatic shower mixers and temperature losses.

It is not a safe washing Temperature for adults or children.

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

Products

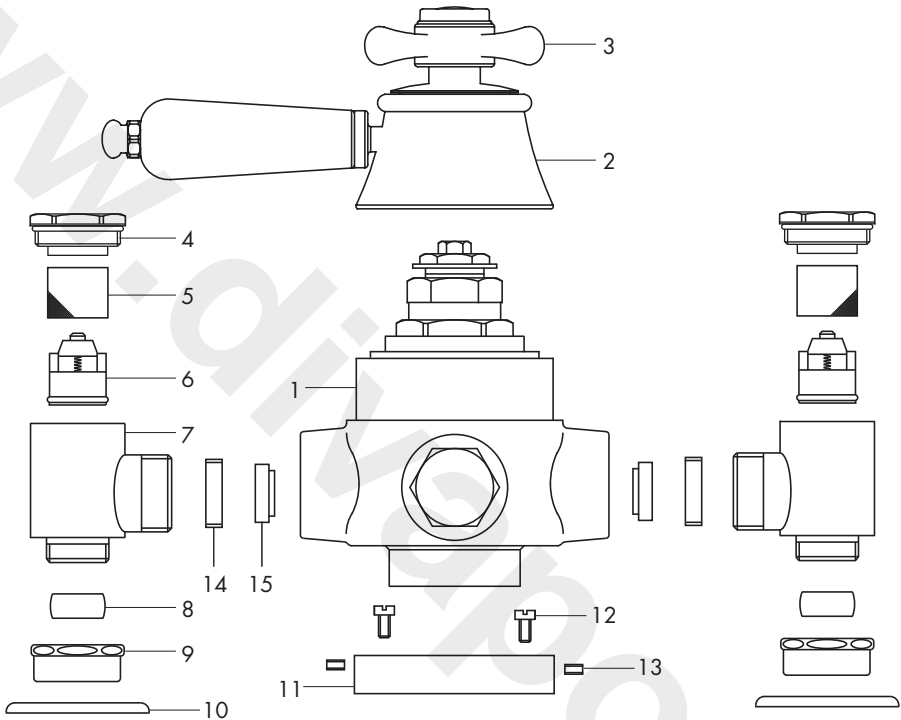
Traditional Exposed Thermostatic Dual Control Shower	50014CP
Traditional Concealed Thermostatic Dual Control Shower	50015CP

Check Content

Before commencing remove all components from packaging and check each component with the contents list.

Ensure all parts are present, before discarding any packaging. If any parts are missing, do not attempt to install your Inta shower valve until the missing parts have been obtained.

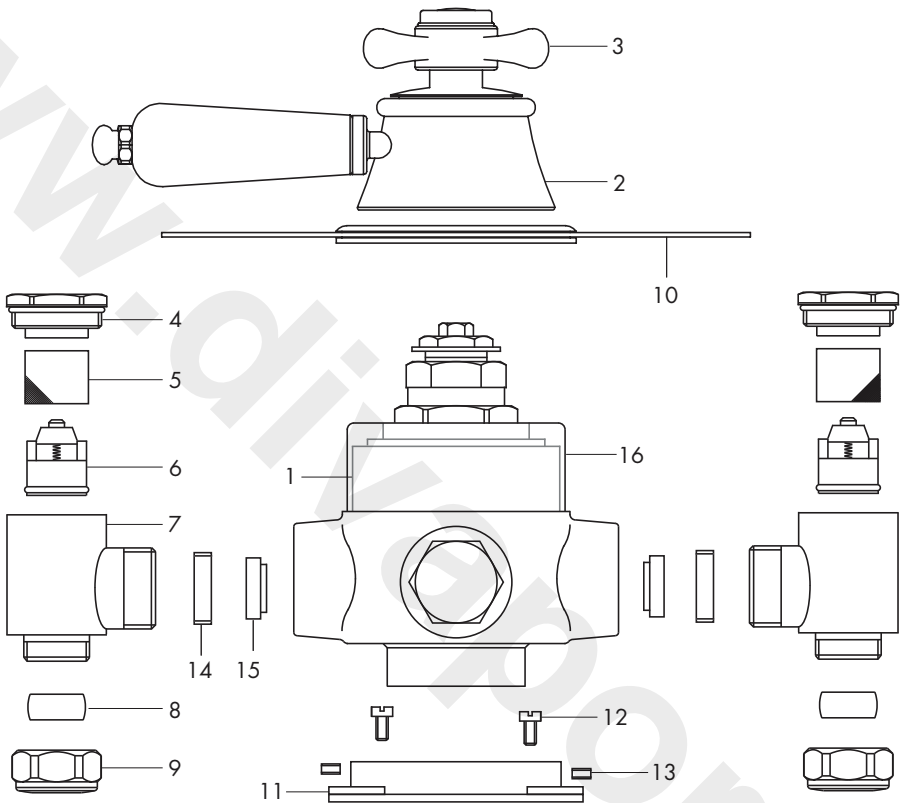
Components - Exposed



Item	Qty	Component	Item	Qty	Component
1	1	Body	9	2	Compression nut
2	1	Temperature control	10	2	Concealing plate
3	1	Flow control	11	1	Mounting back plate
4	2	Cap	12	2	Fixing screws
5	2	Filter	13	2	Grub screw
6	2	Check valve	14	2*	Flow regulator housing
7	2	Elbow	15	2*	Flow regulator
8	2	Olive			

* Optional

Components - Concealed



Item	Qty	Component	Item	Qty	Component
1	1	Body	9	2	Compression nut
2	1	Temperature control	10	1	Concealing plate
3	1	Flow control	11	1	Mounting back plate
4	2	Cap	12	2	Fixing screws
5	2	Filter	13	2	Grub screw
6	2	Check valve	14	2*	Flow regulator housing
7	2	Elbow	15	2*	Flow regulator
8	2	Olive	16	2	Sleeve

* Optional

Technical Data

The Traditional thermostatic shower valve is suitable for installations on all types of plumbing systems, including gravity supplies, fully pumped, modulating combination boiler, unvented water heater and unbalanced supplies i.e. Cold Mains & Tank Fed Hot. They are not suitable for non-modulating combination boilers.

Max Inlet Pressure (Static)	5 bar	Max Inlet Temperature	85°C
Min Operating Pressure (Dynamic)	0.2 bar	Temperature Stability	±2°C
Max Unbalanced Pressure Ratio (without flow regulator)	5:1	Min Temp Differential to ensure fail-safe between hot and cold supplies	10°C
Outlet Connections - Body	G½		

Unvented Mains Pressure System

The drawing shows a typical installation of a shower mixing valve in conjunction with an unvented hot water system. This type of installation must be carried out in accordance with Part G of the Building Regulations.

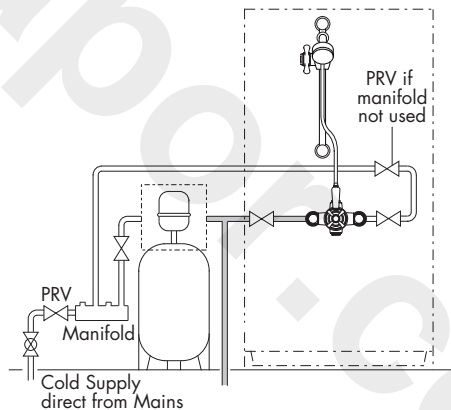
Whilst pressures are theoretically equal (balanced) most unvented hot systems have a pressure reducing valve on the incoming cold water prior to the hot water storage vessel. This means that the hot and cold pressures can be significantly different.

Most unvented systems use an inlet manifold located directly after the pressure reducing valve.

It is recommended that the cold supply be taken from one of the outlets of the manifold directly to the shower as an independent supply.

For systems without a manifold unit after the pressure reducing valve and where the cold water supply pressure is significantly higher than the hot supply we recommend that a separate pressure reducing valve is fitted to the cold supply, as close as possible to the shower valve and with no draw off points between it and the shower valve.

Flow regulators are required for installations where a PRV is not fitted to ensure simultaneous demand is accounted for.



Pumped Systems

Pumped systems use a booster pump to increase the pressure of the gravity fed water supplies.

These booster pumps are used where the head of water is insufficient to provide a satisfactory shower or where a high performance shower is required.

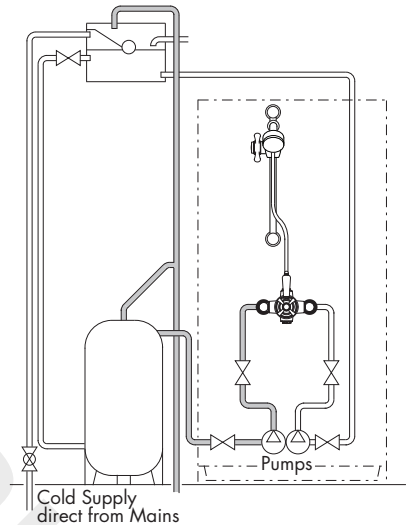
Please ensure that the performance of the pump is matched to suit the shower.

Follow the instructions for gravity fed installations taking into account the installation requirements of the pump.

Ensure that the hot and cold water storage capacity is sufficient to supply the shower and any other draw off points that may be used simultaneously.

Most pumps require a minimum head of water to allow the flow switches to operate automatically. Where this is not available a negative head kit may be required to operate the pump.

Please consult the pump manufacturer's installation requirements



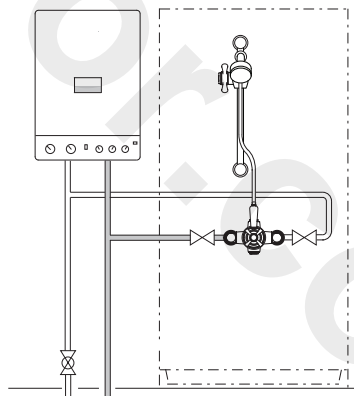
Modulating Combi Boiler / Instantaneous Gas Water Heater

The drawing shows a typical installation of a shower valve in conjunction with a combination boiler.

Combi boilers will produce a constant flow of water at a temperature within its operating range. However we recommend that the system should supply hot water in excess of 60°C.

The hot water flow rates are dependant upon the type of boiler / heater used and the temperature rise required to heat the cold water to the required temperature.

The cold water flow rates may be much greater as they are generally unrestricted from the mains cold water supply. To ensure relatively balanced flow rates, we recommend that a pressure reducing valve or 6 l/min flow regulator is fitted in the cold water supply pipe.



Gravity System

The drawing shows a typical installation of a shower valve on a gravity supplied system.

Please note the minimum head pressure required to ensure correct operation of the valve. In accordance with good plumbing practice, we recommend that a totally independent hot and cold water supply be taken to the valve.

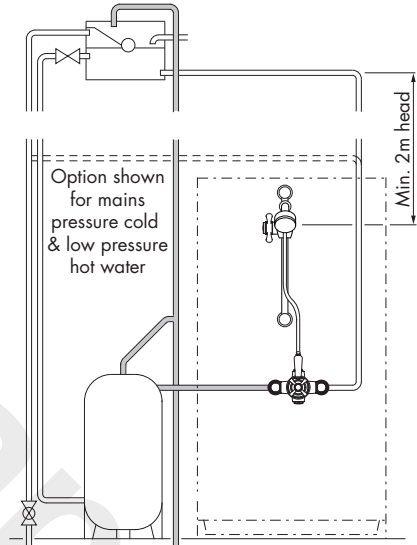
The cold water supply must be connected directly to the water cistern. The hot water supply should be connected to the hot water cylinder via an Essex flange or Sussex flange or to the vent or a draw off pipe as close as possible to the top of the cylinder.

For equal tank fed pressures there is no need to fit the flow regulators. This installation is the recommended minimum for gravity supplies.

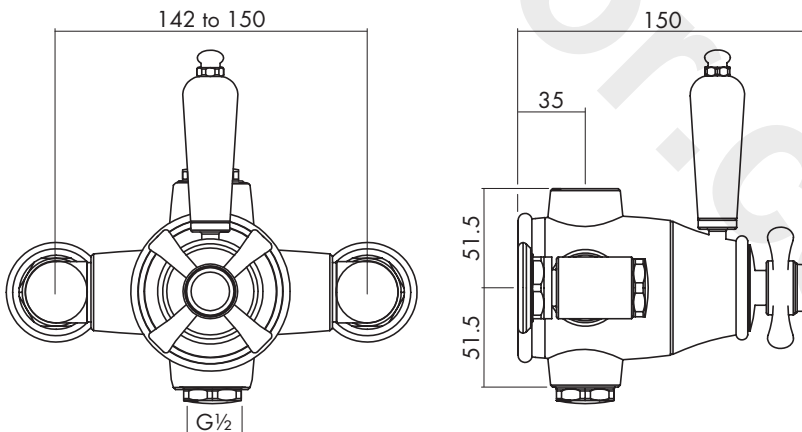
For systems with less than 2 metre head pressure, we recommend that a suitable booster pump is fitted to increase the supply pressure.

Cold Mains & Gravity Hot Supplies

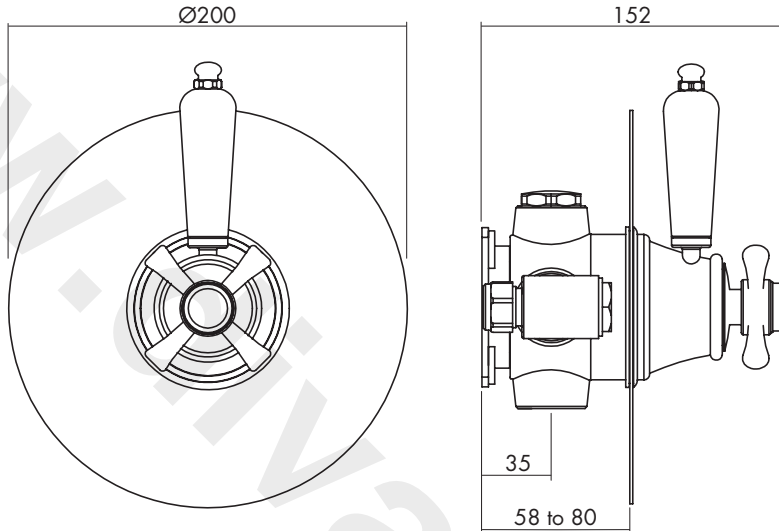
If the cold supply to the shower is direct from the cold water mains and the hot water supply is gravity fed from the cold water cistern via the hot water cylinder you **MUST** fit a pressure reducing valve or a 6 l/min flow regulator.



Dimensions - Exposed Valve



Dimensions - Concealed Valve



Site Preparation - General

It is important to plan the installation thoroughly to suit site conditions before commencing.

- Before commencing the installation ensure site conditions are suitable.
- Depending upon the model, the shower valve is designed for exposed or concealed pipework, whether in a solid or studded wall.
- The thickness of wall tiles, plaster or plaster board should all be considered when positioning the shower valve and routing the hot and cold supply pipes.
- The concealed shower valve must protrude sufficiently from the finished tiled surface to allow the concealing plate and control handle to be fitted.
- Ensure the shower valve will be horizontal when installed.
- The supply pipes can come from below, above, the side or through the wall.
- The concealed shower valve must be installed securely into the wall. If not embedded into the wall with plaster the shower valve must be fixed secure to the studding using screws in the 2 mounting holes.

Site Preparation - General

- Each shower valve is supplied with integral non return valves in the cold and hot inlet tail pieces to prevent cross contamination of the water supplies. Additional check valves may be necessary in certain circumstances to comply with the Water Regulations. With flexible hose kits, where the hand set is capable of falling within 25 mm of the top of the shower tray, additional backflow prevention devices may be required.
- Where possible, 22 mm hot and cold supplies should be used as close to the valve as possible and pipe runs should be kept to a minimum to maintain flow rates on low pressure installations.

NOTE: The inlets connections to the elbows to the shower valve are 15mm compression.

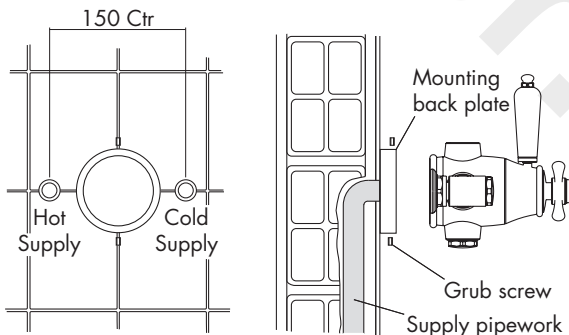
- Two 6 litre per minute flow regulators are supplied with the shower valve for when inlet pressures exceed 1.0 bar.
- The whole system should be thoroughly flushed, prior to connecting the hot and cold water supplies to the shower valve, to remove any debris that may be in the supply pipework.
- Ensure there are no joint leaks before finishing the wall.
- Isolation valves must be fitted in an accessible position to both the hot and cold supplies should the valve need to be isolated in the future for servicing.

Site Preparation - Exposed Valve

Ensure the hot and cold supplies are positioned correctly to connect to the shower valve and the main compression joints are accessible for future servicing.

When facing the shower valve the hot water supply should be on the left and the cold on the right.

Ensure the valve is positioned to allow the shower kit to be installed at the required height to suit the tallest user.



Connection - Exposed Valve

Apply a bead of mastic to the back of the mounting back plate and fit to the wall in the required position using the appropriate wall plugs to suit the wall type.

The shower valve has a bottom ½" male shower connector, suitable for use with a flexible hose kit.

Fit the valve body to the back plate and secure having first fitted any required flow regulators.

Connect the hot and cold supplies to the valve using the 15mm compression joints and check the joints for leakage.

Apply a bead of mastic to seal the joints around the hot and cold supply pipes and the joint between the wall and the mounting plate/valve.

Fit the temperature and flow controllers to the valve body.

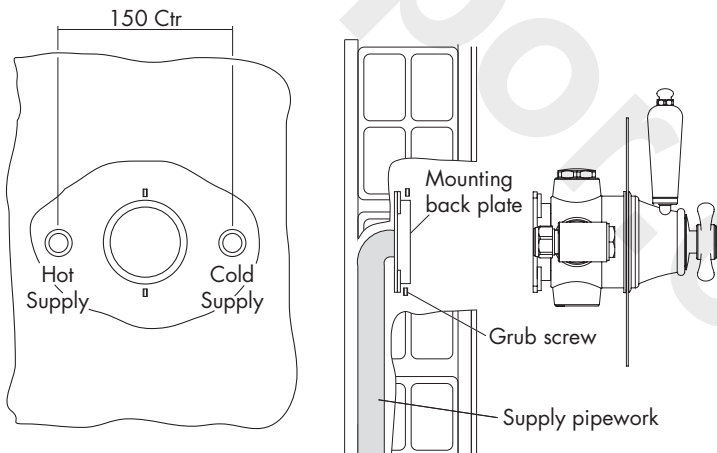
Check the function of the valve, the maximum temperature should not exceed 43°C. If the maximum mixed water temperature exceeds this the valve must be re-calibrated to suit site conditions.

Site Preparation - Concealed Valve

Prepare the cavity to receive the valve, ensure the hot and cold supplies are positioned correctly and isolation valves are fitted in an accessible position.

When facing the shower valve the hot water supply should be on the left and the cold on the right.

Fit the back plate to the wall.



NOTE: Wall elbow available for concealed installation for use with flexible hose shower kit.

Site Preparation - Concealed Valve

In a stud wall it may be necessary to fit a batten to support the valve.

Ensure the valve is positioned to allow the shower kit to be installed at the required height to suit the tallest user.

Depth of cavity 58 mm minimum to 73 mm maximum to the finished wall surface including wall tiles.

Ensure the second outlet is blanked off if not used.

Connection - Concealed Valve

The Traditional shower valve has both a bottom and top $\frac{1}{2}$ " female connection, ensure the blanking plug is fitted into the outlet which is not required and tighten to make a water tight joint.

Fit the valve body to the wall and secure, having first fitted any flow regulators into the elbows as required.

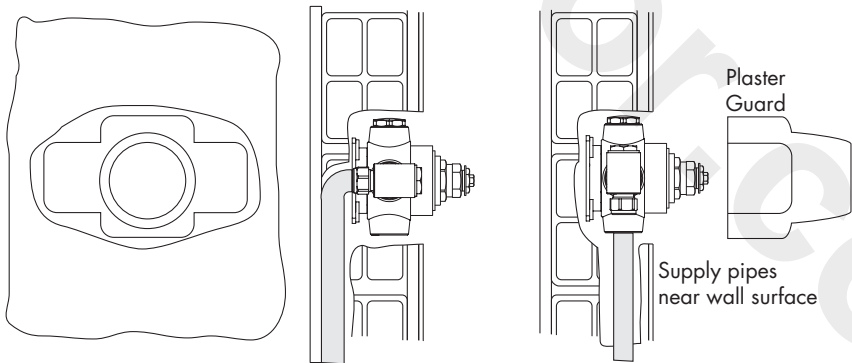
Connect the hot and cold supplies to the valve using the compression joints provided. The elbows are designed to allow access to the filters and check valves without the need to disconnect the valve from the pipework.

A plaster guard is included to protect the valve whilst the wall surface is finished, including the tiling.

Simply fit the guard over the valve and remove when the wall surface is finished.

Turn on the water supplies and check for leaks.

Check the function of the valve, the maximum temperature should not exceed 43°C. If the maximum mixed water temperature exceeds this the valve must be re-calibrated to suit site conditions.

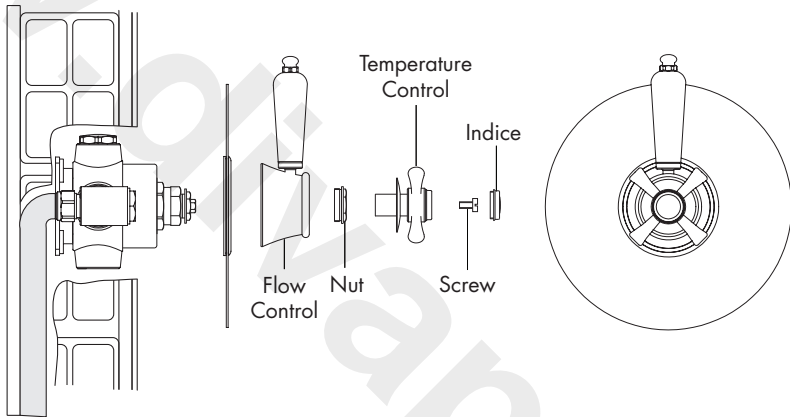


Concealed Valve - Fitting the Concealing Plate

Once the valve has been installed, all the connections have been checked for leakage and the surface of the wall has been finished the concealing plate can be fitted.

It may be necessary to lubricate the seal in the centre of the concealing plate to ease assembly onto the valve body.

Apply a bead of mastic to the outer edge, on the back of the concealing plate and slide the plate over the valve body and press firmly to the wall.

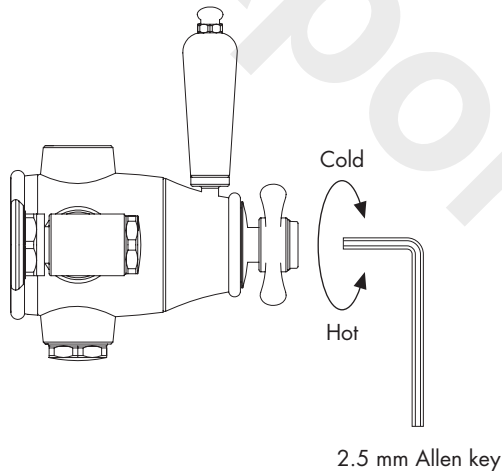


Calibration

The factory outlet temperature setting of 43°C can be altered to suit site conditions.

WARNING: Care should be taken when altering the setting as incorrect calibration can cause injury.

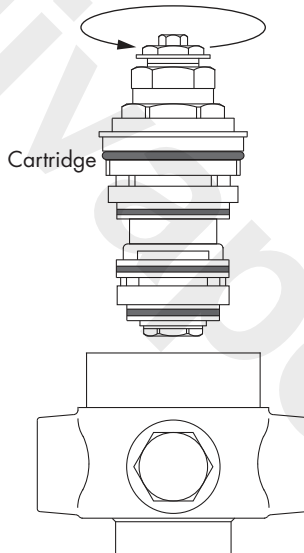
- Remove the indice from the temperature control knob.
- Fully open the flow control to establish a stable flow of water and rotate the temperature control to the maximum setting.
- Hold the temperature control knob at the maximum setting and using a 2.5 mm Allen key in the end of the splined shaft of the thermostatic cartridge, rotate the shaft clockwise by 90° to reduce the temperature by 1°C.
- To increase the temperature by 1°C rotate the shaft anti-clockwise by 90°.
- The temperature can be measured from mixed water outlet on the exposed valve and from the wall elbow or shower head outlet with the shower head removed for fully concealed installations.
- Turn the temperature control knob to the minimum setting and then back to the maximum and when stabilised re-measure the outlet temperature.
- Repeat the procedure until the required temperature has stabilised.
- Re-fit the indice.



Cartridge Replacement

- Isolate both the hot and cold water supplies
- Remove the control knobs and concealing plate (concealed only) to expose the hexagon section of the thermostatic cartridge.
- Using a suitably sized spanner unscrew the cartridge.
- Replace with a new cartridge and re-assemble the controls in the reverse order except for the indice.
- The shower valve must be re-calibrated after fitting the new cartridge following the procedure above.

Using a suitably sized spanner
rotate the cartridge from the body



Aftercare

Inta shower mixing valves have a high quality finish and should be treated with care.

An occasional wipe with a mild washing-up liquid on a soft damp cloth followed by a thorough rinsing is all that is required.

The nozzles in the hand set should be cleaned periodically to remove any build up of debris or deposits which may affect the performance of the shower.

Do not use an abrasive or chemical household cleaner as this may **cause damage**.

Spares

A full range of spares are available for this product.

PLEASE NOTE: Only genuine spares should be used.

Problem Solving

The following details are supplied for on site queries, should you require any further assistance our Technical Department can be contacted directly on 01889 272199.

Fault	Solution
Showering temperature is not hot enough.	Ensure the hot water supply is at a constant temperature above 60°C. Check for air locks in the pipework.
The water goes cold during showering.	Insufficient stored hot water. When used with a combi boiler confirm that the boiler is still firing. Adjust the boiler to a minimum setting of 65°C which may not necessarily be the best flow rate.
When the water is set at cold, the showering temperature is too hot.	The hot and cold supply connections have been made in reverse.
The maximum showering temperature is too hot or when set to hot water runs to cold.	Check the commissioned maximum temperature of the shower valve. Check the connections to the valve have not been made in reverse.
The flow of water from the shower valve is low.	Check the filters are clean and the supply pressure is above 0.2 bar.
No flow of water	Ensure the valve has not fail-safed and check that there is hot and cold water flow to the valve. Ensure the check valves are not closed.

Notes

Please leave this Manual for the User

To activate your product warranty please visit
www.intatec.co.uk
and click on Product Registration

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