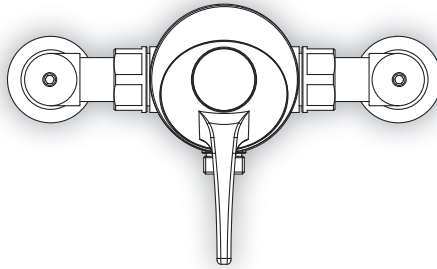


inta

Acura Shower Mixing Valve

90034CP

Installation and Maintenance Instructions



inta

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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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Thank you for choosing the Inta Acura shower mixing valve.

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Introduction

This installation guide has been produced for the Acura exposed thermostatic sequential 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.

It is recommended, especially in hard water areas, that a water softener such as the ActivFlo or ActivFlo lite be fitted to reduce the risk of calcium deposits forming. -

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

Acura Exposed Thermostatic Sequential Control Shower with top and bottom outlets.

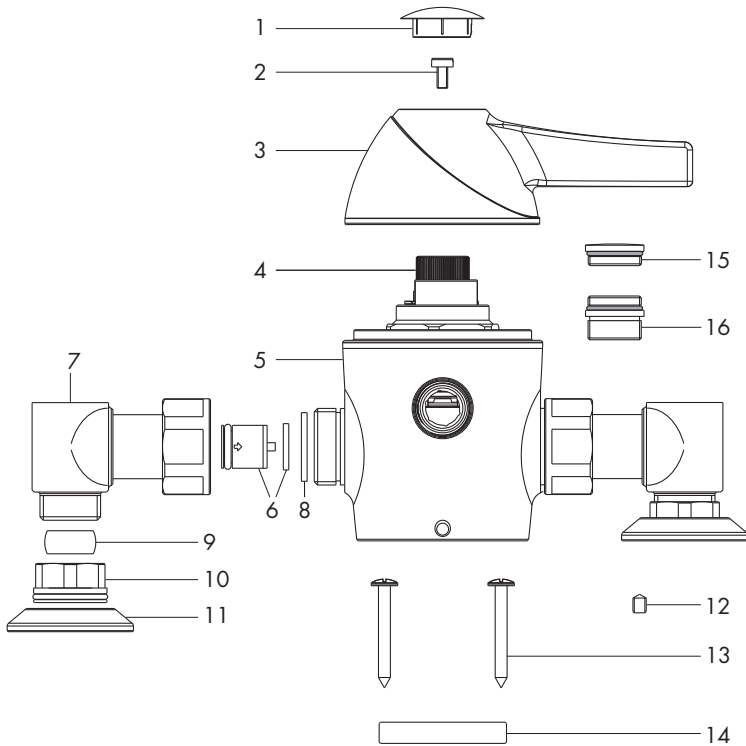
90034CP

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	Indice	9	2	Olive
2	1	Screw	10	2	Compression nut
3	1	Flow/Temperature control	11	2	Concealing plate
4	1	Thermostatic cartridge	12	1	Grub screw
5	1	Body	13	2	Fixing screw
6	2	Check valve & retaining clip	14	1	Back plate
7	2	Elbow & isolation valve	15	1	Blank plug
8	2	Sealing washer	16	1	Shower connector

Technical Data

This Inta Acura 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)	10 bar	Max Inlet Temperature	85°C
Max Inlet Pressure (Dynamic)	5 bar	Pre Set Factory Temp Setting	38°C
Min Operating Pressure (Dynamic)	0.2 bar	Temperature Stability	±2°C
Max Unbalanced Pressure Ratio	5:1	Min Temp Differential to	
Outlet Connections - Body	G½	ensure fail-safe between hot	
		inlet and mixed outlet	10°C

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.

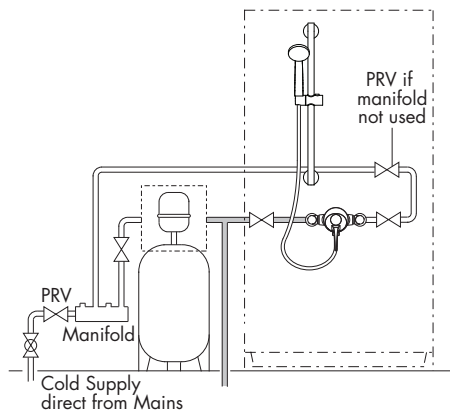
Whilst pressures are theoretically equal (balanced) most unvented hot systems have a pressure reducing valve on the incoming cold water prior to the hot water storage vessel. This means that the hot and cold pressures can be significantly different.

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.

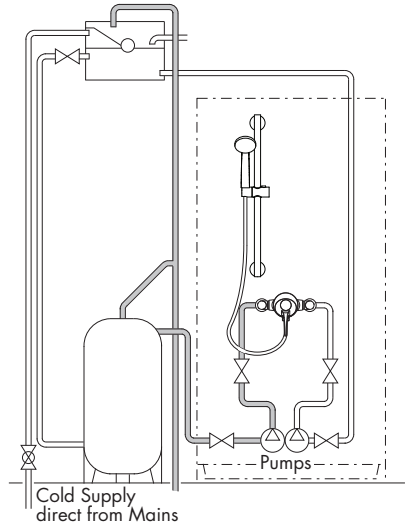
Please ensure that the performance of the pump is matched to suit the shower.

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



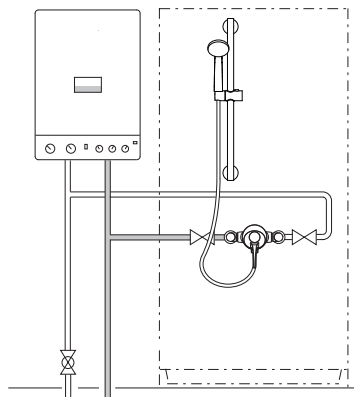
Modulating Combi Boiler / Instantaneous Gas Water Heater

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.

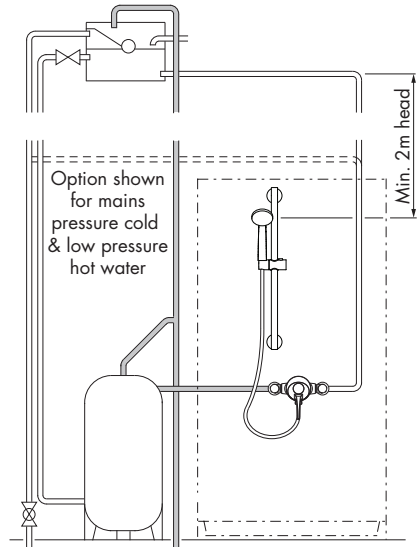
The cold water supply must be connected directly to the water cistern. The hot water supply should be connected to the hot water cylinder via an Essex flange or Sussex flange or to the vent or a draw off pipe as close as possible to the top of the cylinder.

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

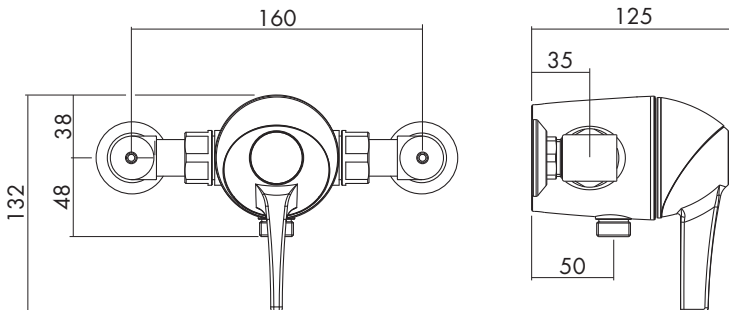
For systems with less than 2 metre head pressure, we recommend that a suitable booster pump is fitted to increase the supply pressure.

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 cistern you **MUST** fit a pressure reducing valve or a 6 l/min flow regulator.



Dimensions - Exposed Valve



Site Preparation - General

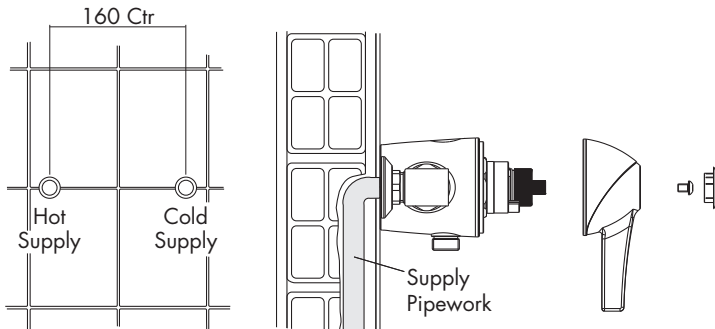
It is important to plan the installation thoroughly to suit site conditions before commencing.

- Before commencing the installation ensure site conditions are suitable.
- The shower valve is designed for exposed 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.
- Ensure the shower valve will be horizontal when installed.
- The supply pipes can come from below, above or through the wall.
- 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.

- The whole system should be thoroughly flushed, prior to connecting of 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



Site Preparation - Exposed Valve

Ensure the hot and cold supplies are positioned correctly to connect to the shower valve.

The two union joints can be used to remove the shower valve if servicing is required in the future.

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.

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.

Connection - Exposed Valve

The 90034CP shower valve is supplied with both the ½" bottom male connector and the ½" blanking plug fitted.

When used with a fixed riser kit, the shower connector can be moved to the upper threaded hole using a 12 mm Allen key. The blanking plug must then be fitted into the bottom threaded hole using a 6 mm Allen key.

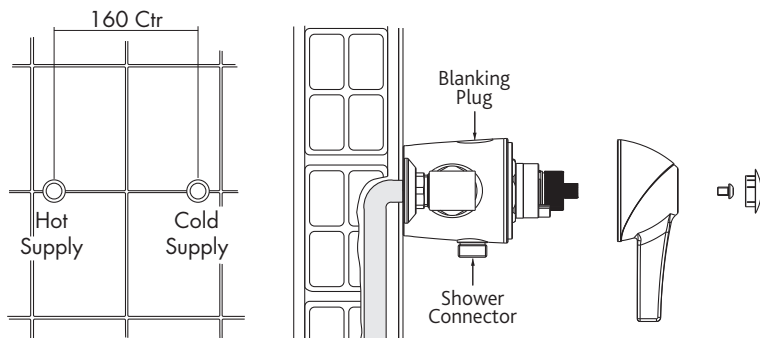
Fit the elbows into position and fit the valve body to the back plate and secure.

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.

Apply a bead of mastic to the back of the concealing plates and carefully push over the compression nuts and push to the wall.

Check the function of the valve, the maximum temperature should not exceed 41°C. If the maximum mixed water temperature exceeds this the valve must be re-calibrated to suit site conditions.

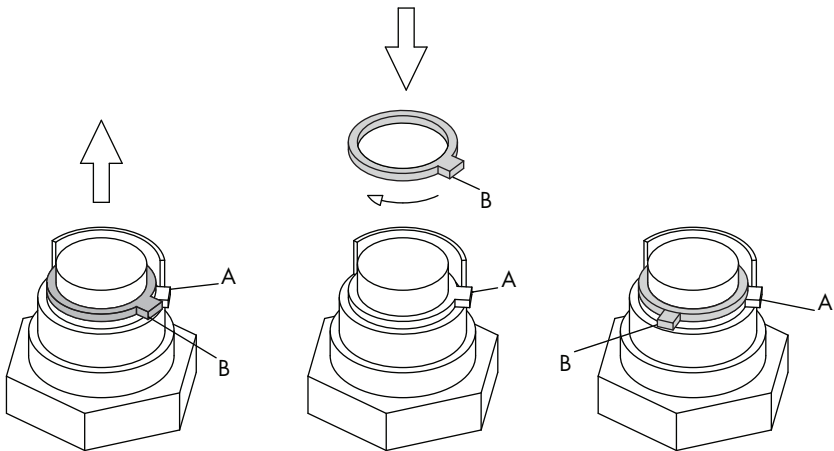


Calibration

The factory outlet temperature setting of 41°C can be altered to suit site conditions.

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

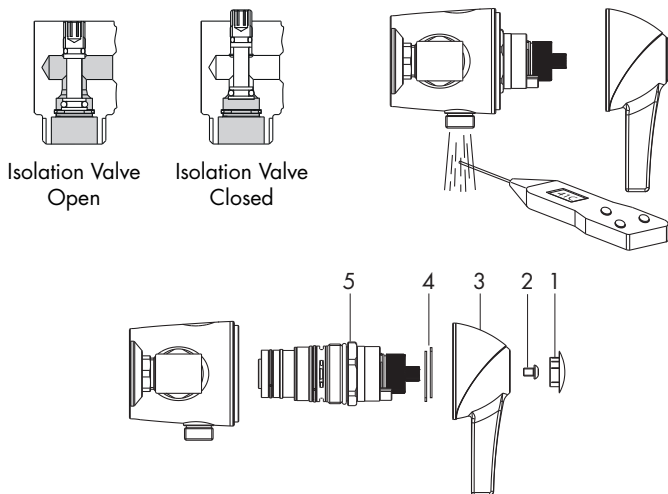
- Remove the indice (1) from the front of the shower valve.
- Remove the retaining screw (2) and handle (3).
- The temperature stop rings (4) are used to control the temperature. Ring A controls the hot and ring B controls the cold water.
- Remove both rings (4) from the cartridge and set the mixed water to the required temperature, maximum 41°C.
- Temporarily refit the handle (3) and using a digital thermometer it is possible to increase or reduce the mixed water outlet temperature until 41°C is re-established, by slowly rotating the handle.
- The temperature can be measured from mixed water outlet on the exposed valve.
- When the required temperature is achieved replace the two stop rings (4) on the splined spindle. The rings are used to set the temperature limits of the shower when in use.
- Re-assemble the handle (3), secure with the retaining screw (2) and re-fit the indice (1).



Cartridge Replacement

- Using a suitably sized Allen key isolate both the hot and cold water supplies using the isolation valves in the elbows. Rotate anti-clockwise to close the valves.
- Remove the indice (1), retaining screw (2), handle (3) and the two stop rings (4).
- Using a suitably sized spanner unscrew the cartridge (3).
- Replace with a new cartridge (5).
- Reopen the two isolation valves in the elbows to restore the water supplies.
- The shower valve must be re-calibrated after fitting the new cartridge following the procedure on page 9.
- Re-fit the handle, retaining screw and indice.

Calibration and Cartridge Replacement



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**.

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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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E & O.E

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