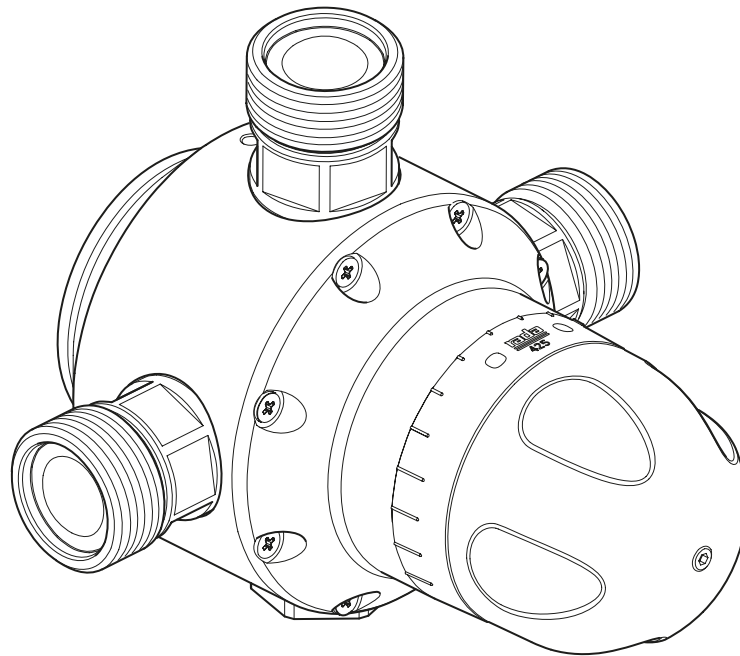




Model 425

Installation and Maintenance

Water Temperature Controls
Groups of Fixtures - Thermostatic



Model No. Model 425
 Model 425D

Serial No. :

Ship Date :



Armstrong International
221 Armstrong Blvd., Three Rivers, Michigan, 49093 - USA
armstronginternational.com/brain

Keep this manual with installation for
future reference.

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Water Temperature Control - Groups of Fixtures

Thermostatic

Model 425

The model 425 Thermostatic Mixing Valve is for institutional group fixture water temperature control. Compact design with top and/or bottom blended water outlet makes Model 425 ideal for recessed enclosure, plumbing chase and utility/mechanical room installation.

Powerful internal mechanism and stainless steel operating mechanism resist mineral deposition.

Capable of close temperature control at diverse flow rates between 2 gpm (7.5 lpm) and 49 gpm (185 lpm). Able to blend to within 5°F (2°C) of either inlet supply due to "low seepage" across internal proportioning mechanism.



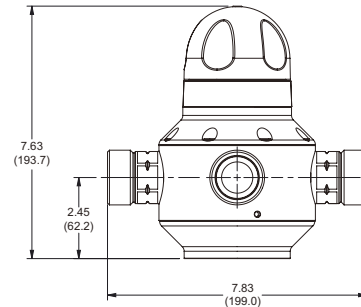
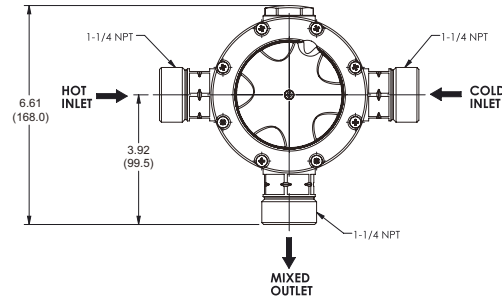
Operational Specifications

- Dual thermostatic elements provide redundancy in the event of individual thermostat failure.
- Typical outlet temperature control +/-2°F
- Adjustable maximum temperature limit stop
- Adjustable single temperature lockout
- Thermal shutdown mode upon inlet supply failure

Technical Specifications

- 1-1/4" NPT inlets and 1-1/4" outlet
- Chrome plated brass/stainless steel
- Lead Free compliant
- Operating pressures
 - Maximum: 150 psi (10 bar)
 - Minimum: 10 psi (.7 bar)
- Integral inlet check valves and strainers
- ASSE 1017 and CSA B125 certified
- Shipping weight 18 lbs (8.1 kg)

For a submittal drawing, refer to D73767.



| Thermostatic Mixing Valves (GPM and PSI) | | | | | | | | | | | | |
|--|---------------------|----|----|----|----|----|----|----|----|----|-----------|----------------|
| Model | Pressure Drop (PSI) | | | | | | | | | | Min. Flow | C _v |
| | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | | |
| 425 | 15 | 22 | 27 | 31 | 35 | 38 | 41 | 44 | 46 | 49 | 2.0 | 6.9 |
| GPM | | | | | | | | | | | | |

| Thermostatic Mixing Valves (LPM and BAR) | | | | | | | | | | | | |
|--|---------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|----------------|
| Model | Pressure Drop (BAR) | | | | | | | | | | Min. Flow | C _v |
| | 0.3 | 0.7 | 1.0 | 1.4 | 1.7 | 2.1 | 2.4 | 2.8 | 3.1 | 3.4 | | |
| 425 | 56.8 | 83.3 | 102.2 | 117.3 | 132.5 | 143.8 | 155.2 | 166.6 | 174.1 | 185.5 | 7.6 | 6.9 |
| LPM | | | | | | | | | | | | |



Armstrong® Water Temperature Control - Groups of Fixtures

Thermostatic

Model 425D

A derivative of the standard Model 425 Thermostatic Mixing Valve for institutional group fixture control. Compact design with top and/or bottom blended water outlet makes Model 425 ideal for recessed enclosure, plumbing chase and utility/mechanical room installation.

Factory supplied pre-plumbed and pressure-tested Model 425D is supplied as standard with inlet check valves, strainers, unions, isolations valves and outlet thermometer and stop valve*.

*Model 425D is supplied with top outlet and can be site reconfigured for bottom outlet applications.

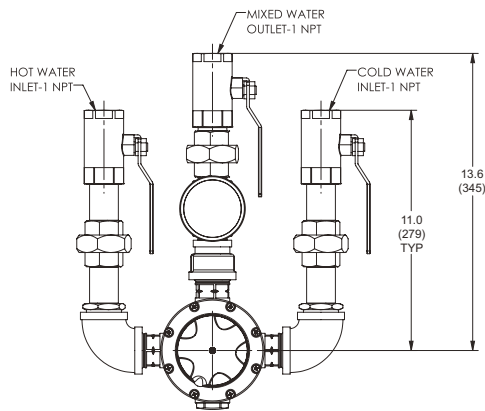
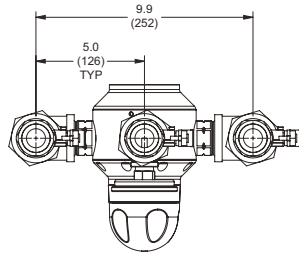
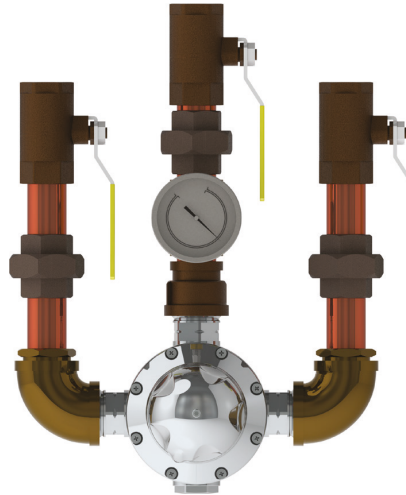
Operational Specifications

- Dual thermostatic elements provide redundancy in the event of individual thermostat failure.
- Typical outlet temperature control +/-2°F
- Adjustable maximum temperature limit stop
- Adjustable single temperature lockout
- Thermal shutdown mode upon inlet supply failure

Technical Specifications

- 1" NPT inlets and 1" NPT outlet
- Chrome plated brass/polymer construction with self finish brass and bronze lead free components
- Lead Free compliant
- Operating pressures
 - Maximum: 150 psi (10 bar)
 - Minimum: 10 psi (.7 bar)
- Inlet check valves, strainers, unions and isolation valves
- Fitted with outlet thermometer and isolation valve
- ASSE 1017 and CSA B125 certified
- Shipping weight 35 lbs (15.9 kg)

For a submittal drawing, refer to D76002.



| Thermostatic Mixing Valves (GPM and PSI) | | | | | | | | | | | | |
|--|---------------------|----|----|----|----|----|----|----|----|----|-----------|----------------|
| Model | Pressure Drop (PSI) | | | | | | | | | | Min. Flow | C _v |
| 425D | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | | |
| GPM | 15 | 22 | 27 | 31 | 35 | 38 | 41 | 44 | 46 | 49 | | |

| Thermostatic Mixing Valves (LPM and BAR) | | | | | | | | | | | | |
|--|---------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|----------------|
| Model | Pressure Drop (BAR) | | | | | | | | | | Min. Flow | C _v |
| 425D | 0.3 | 0.7 | 1.0 | 1.4 | 1.7 | 2.1 | 2.4 | 2.8 | 3.1 | 3.4 | | |
| LPM | 56.8 | 83.3 | 102.2 | 117.3 | 132.5 | 143.8 | 155.2 | 166.6 | 174.1 | 185.5 | | |

Specifications

| Operating Specifications | |
|--|----------------------------|
| Maximum Hot Water Supply Temperature | 158°F (70°C) * |
| Minimum Cold Water Supply Temperature | 33°F (1°C) - 77°F (25°C) |
| Optimum Minimum Inlet to Outlet Temperature Differential | 59°F (15°C) ** |
| Optimum Thermostatic Control Range | 86°F (30°C) - 122°F (50°C) |
| Flow Rate at 45 psi | 46 gpm (174 lpm) |
| Minimum Flow Rate | 2 gpm (7.5 lpm) |
| Maximum Inlet Supply Pressure | 150 psi (10 bar) |
| Minimum Inlet Supply Pressure | 10 psi (0.7 bar) |

*Model 425 can accept temporary excursions above 185°F (85°C) and maintain control without sustaining internal damage. (ASSE 1017 certification requires exposure to 200°F (93°C) for a period of 30 minutes). Prolonged operation of the Mixing Valve at such elevated temperatures is not recommended.

** Normal operating conditions are considered as a differential of approximately 122°F (50°C) between the hot and cold inlet temperatures, and with differentials of 59°F (15°C) - 95°F (35°C) between the blend setting and either supply. 59°F (15°C) is the optimum published minimum differential required to achieve full thermal performance.

General Advisory

This Model 425 Valve has been supplied for this application based upon information provided to Armstrong at the time the order was placed.

This Model 425 Valve is configured for use in a “dead-leg” piping configuration.

This Model 425 Valve has **not** been configured for use in a central pumped re-circulation system.

This Model 425 Valve is **not** designed to deliver tepid water to emergency fixtures.

For further information, please call our technical department 1-269-279-3602 between 08:00 a.m. to 05:00 p.m. EST.

Safety

Icon Legend

If instructions are not followed:



- injury or death and property damage are **imminent**



- injury or death and property damage are **possible**



- potential property damage, expensive repairs, and/or voiding the warranty may result



- Applicable codes must be followed and supersede any other instructions. Generally applicable codes in the US include:
 - IPC (International Plumbing Code)
- Read this manual
- Improper installation or operation may cause a flood resulting in property damage, personal injury, or death. Armstrong strongly recommends that a qualified installer be used.
- Service must be performed by a qualified person.
- Improper installation, start-up, operation, maintenance, or service may void the warranty.



Hot water or metal may cause scald burns. Skin exposure to 140°F water or metal for only five seconds may cause a second degree burn.

The function of a Thermostatic Mixing Valve is to deliver water consistently at a pre-designated temperature.

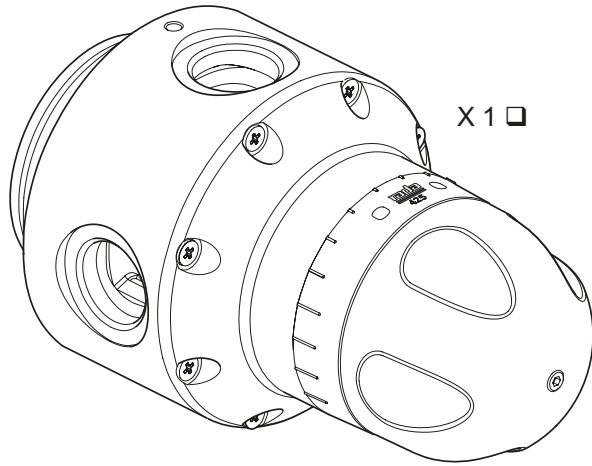
Model 425 Thermostatic Mixing Valves are precision engineered to give continued superior and safe performance provided:

- 1. They are installed, commissioned, operated and maintained in accordance with the recommendations provided and accepted plumbing practices.**
- 2. Periodic attention is given, as necessary, to maintain the product, the accessory fittings and the plumbing system in good functional order.**

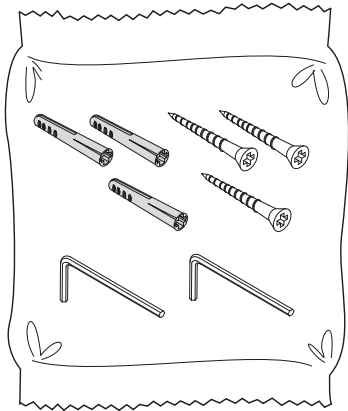
In keeping with every other mechanical product, Model Mixing Valves should not be considered as functionally infallible and, as such will never totally replace the vigilance and attention of facility nursing/ bathing or other institutional supervisory or industrial safety staff.

Provided that they are installed, commissioned, operated and maintained, the risk of product failure and its associated consequences, if not eliminated, are reduced to the minimum achievable.

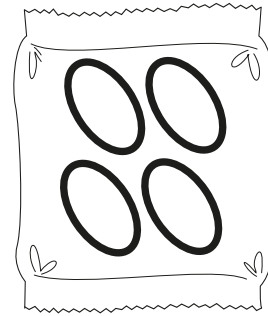
Pack Contents



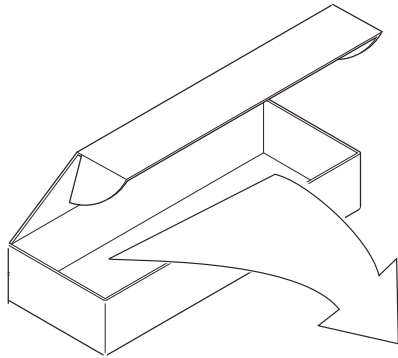
X 1 □



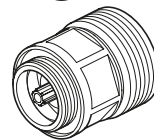
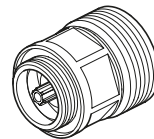
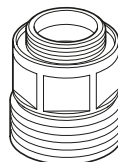
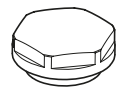
X 1 □



X 1 □

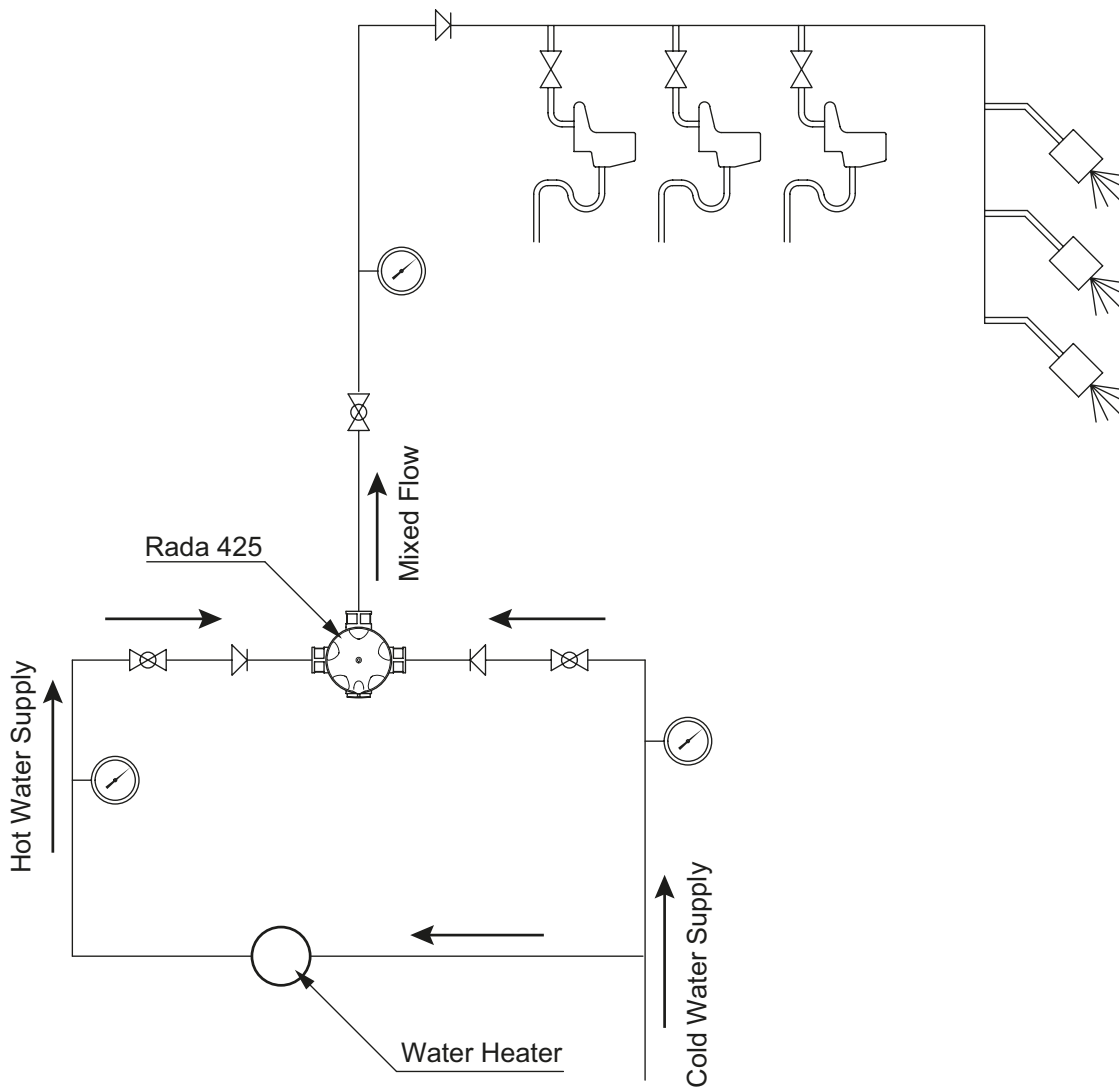










X 1 □



X 3 □

Schematic Piping



| System Layout | | | |
|---|-------------|---|-----------------|
|  | Thermometer |  | Isolation Valve |
|  | Sink |  | Stop Valve |
|  | Shower |  | Flow Direction |
|  | Check Valve |  | Pipeline |

Installation

General

Installation must be carried out in accordance with these instructions, and must be conducted by designated, qualified and competent personnel.

The installation must comply with all relevant local and state water plumbing codes.

All plumbing components are to be supplied by the installer. Failure to include these components will compromise the product, system performance and will void the warranty.

Notes:

1. Model 425 is supplied fully performance and pressure tested.
2. Suitable connections for ease of maintenance should be used on the inlet and outlet ports. (*Isolation valves and unions.*)
3. The hot and cold water inlet supply pressures must be nominally equal.
4. The inlet supply pipework **must** be thoroughly flushed before fitting the Model 425 valve.
5. The Model 425 can be installed in both rising supplies and falling supplies.

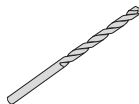
Installation Requirements

- 1 The use of supply strainers will reduce debris entering the Model 425. The recommended gauge for such strainers is 35 mesh (mesh aperture dimension = 0.5mm).
- 2 Inlet pressure tapings which allow measurement of the inlet pressures to the Model 425 under operating conditions are particularly recommended for in-service testing.
- 3 Pipework must be rigidly supported to avoid any strain on the connections.
- 4 Inlet and outlet threaded joint connections should be made with PTFE thread sealing tape or liquid sealant. Do not use oil-based, non-setting joint compounds.
- 5 Run water for 1 minute from both hot and cold supplies to eliminate pipe debris. It is essential that supply pipes are thoroughly flushed through before connection to the Model 425.

Tools Required



Drilling Machine



Drill Bit size 6 mm



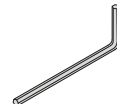
Screw Driver Plus & Minus



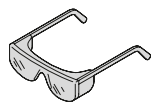
Pencil



Adjustable Spanner

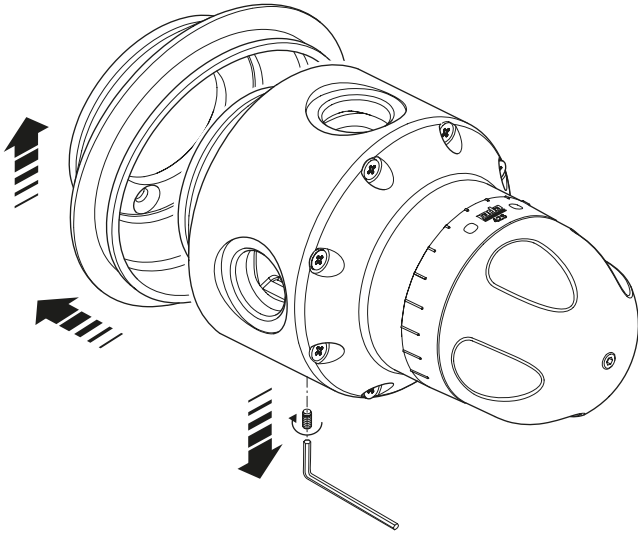


3.0 mm
Allen Key size 3mm



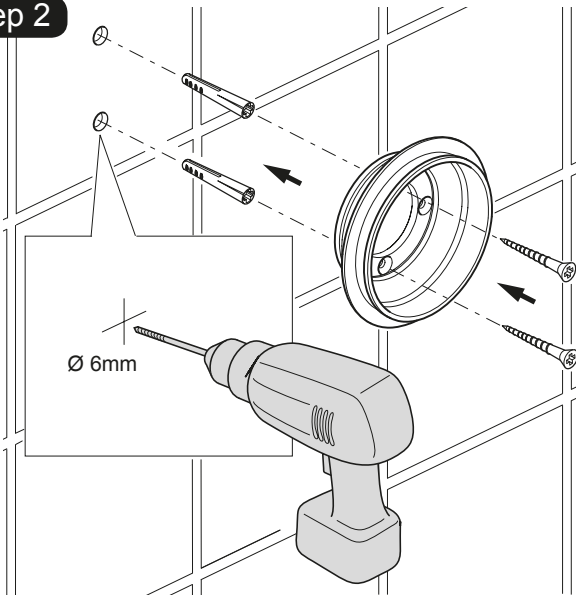
Safety Glasses

Step 1



- a. Unscrew the set screw.
- b. Remove the Backplate.

Step 2

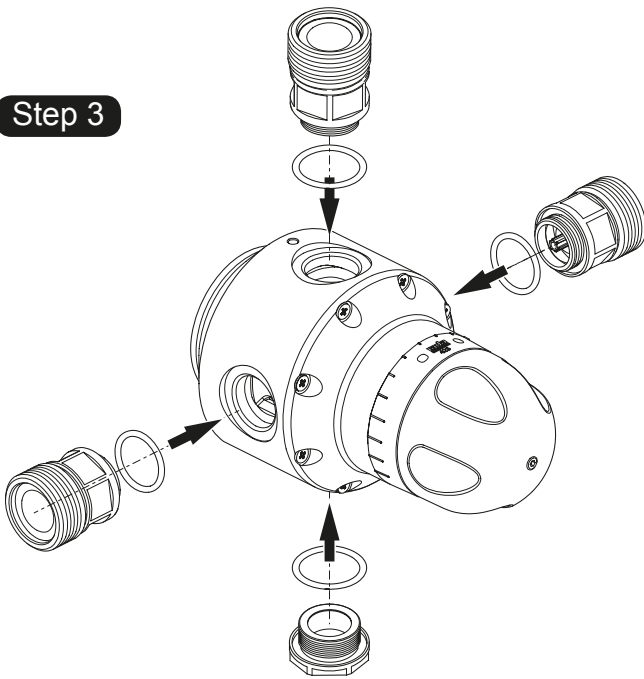


- a. Use the Backplate to mark the two mounting holes at the desired height.
- b. Drill the holes (6 mm) and fit the wall anchors. Screw the Backplate to the wall.



Caution! Avoid area where underground wirings or pipelines pass through.

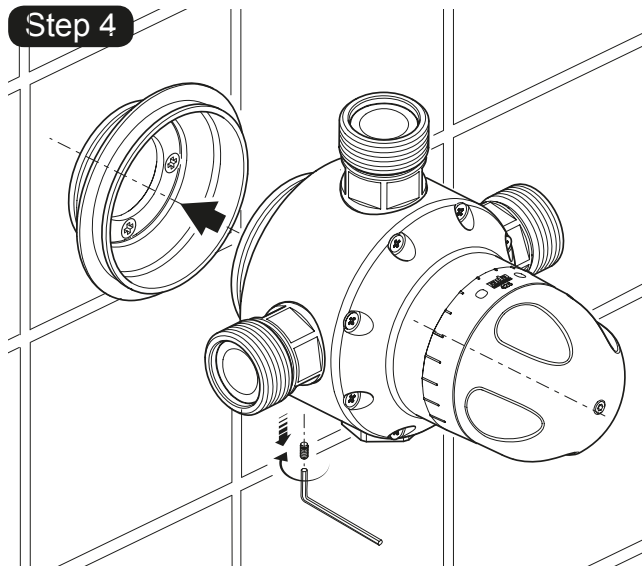
Step 3



- a. **Important!** Prior to assembly of the hot and cold adapters, look inside each one and ensure that there is a strainer and a white plastic checkvalve. The adapter with nothing inside is for the outlet.

Thread the coupling nuts onto the Valve assembly then tighten using an adjustable spanner.

Step 4

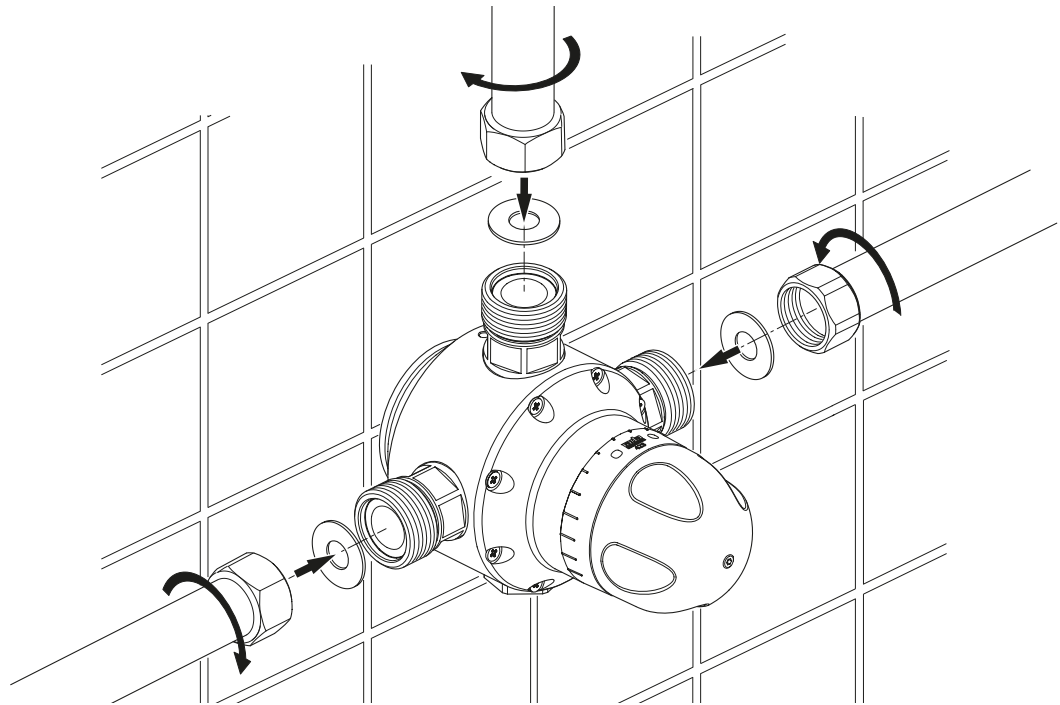


- a. Mount the Valve assembly on the Backplate fixed on the wall. Make sure the Valve assembly locks in the groove.
- b. Tighten the set screw.



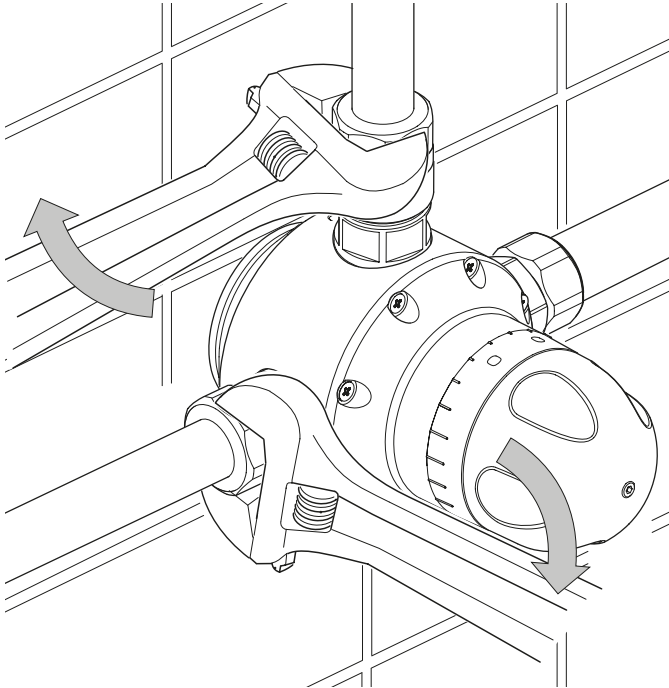
Caution! Use a soft cloth to protect the plating from damage while tightening the spanner.

Step 5



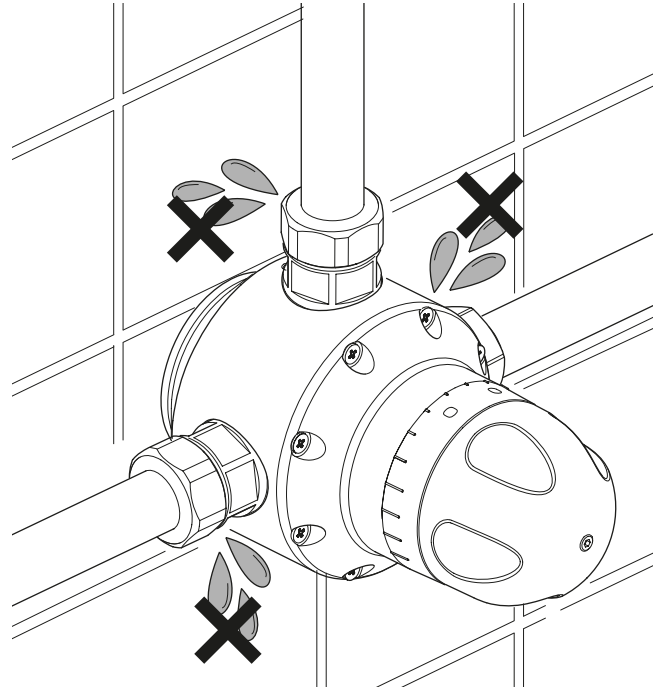
a. Hand-tighten all the nuts as shown above.

Step 6




a. Fully tighten all of the couplings using an adjustable spanner.

Step 7



a. Turn on the water supply and ensure that there are no leaks.

 **Caution!** Use a soft cloth to cover the plating from damage while tightening with spanner.

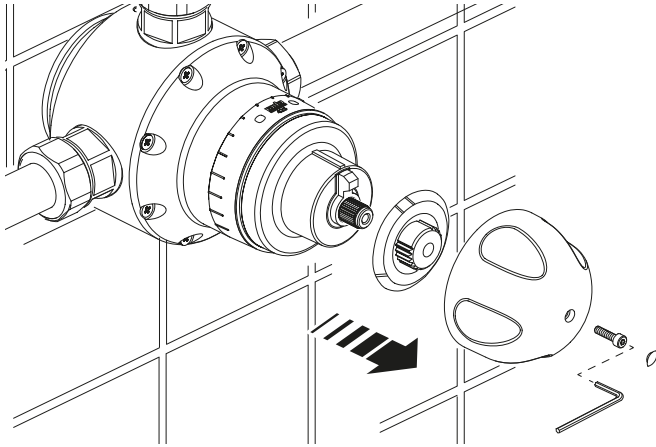
Commissioning

Model 425 is designed for two types of configurations:

1. Locked Temperature (Temperature control is locked and cannot be adjusted)
2. Adjustable Temperature (Temperature can be adjusted through a desired range)

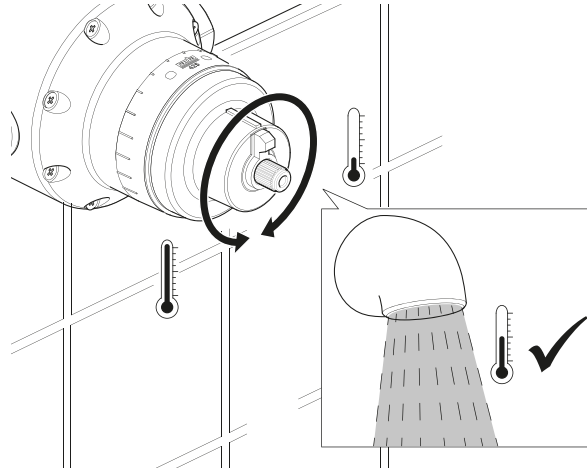
The following steps show the procedure for both type of installations:

Step 1



- a. Remove the concealing cap.
- b. Unscrew the knob using a 3mm Allen Key.
- c. Remove the Knob and Hub.

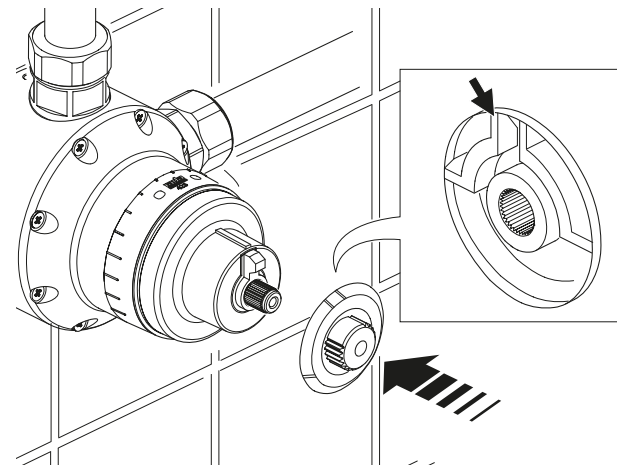
Step 2



Open the hot and cold water supplies and open outlets prior to adjusting the temperature. Rotate the spindle to adjust the temperature to a desired level.
 Clockwise = Decrease temperature.
 Anti-clockwise = Increase temperature.
 Keep the spindle undisturbed.

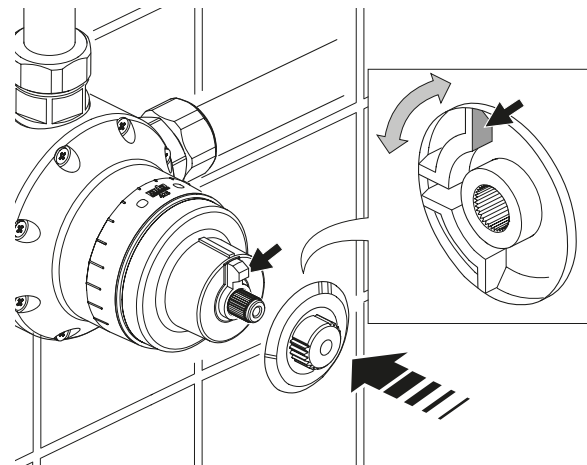
Step 3

For Locked temperature



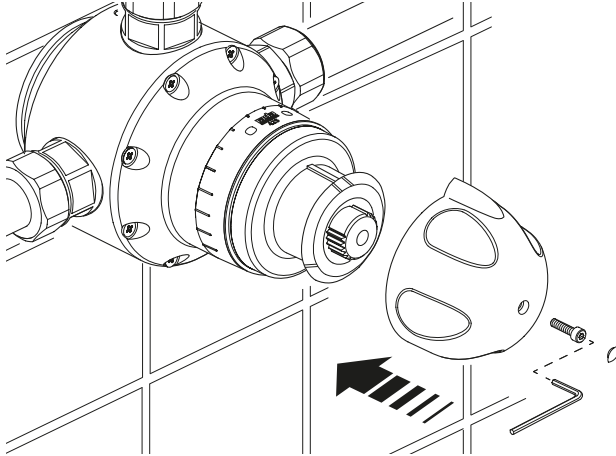
Obtain the desired maximum blend temperature then re-fit the Hub in the 6 o'clock position so that the Center Stop Slot fits over the Cartridge Stop, locking rotation in either direction.
 Factory pre-set outlet temperature = 110°F (43°C)

For Adjustable temperature



Obtain the desired maximum blend temperature then re-fit the Hub in the 9 o'clock position so the Hub Stop hits the Cartridge Stop, preventing further anti-clockwise rotation.
 This sets the desired temperature as maximum achievable temperature.

Step 4



Re-fit the Knob, tighten the screw and replace the concealing cap.

Make sure the indicator is in either the 9 o' clock position (adjustable temperature configuration) or 6 o' clock position (locked temperature configuration).

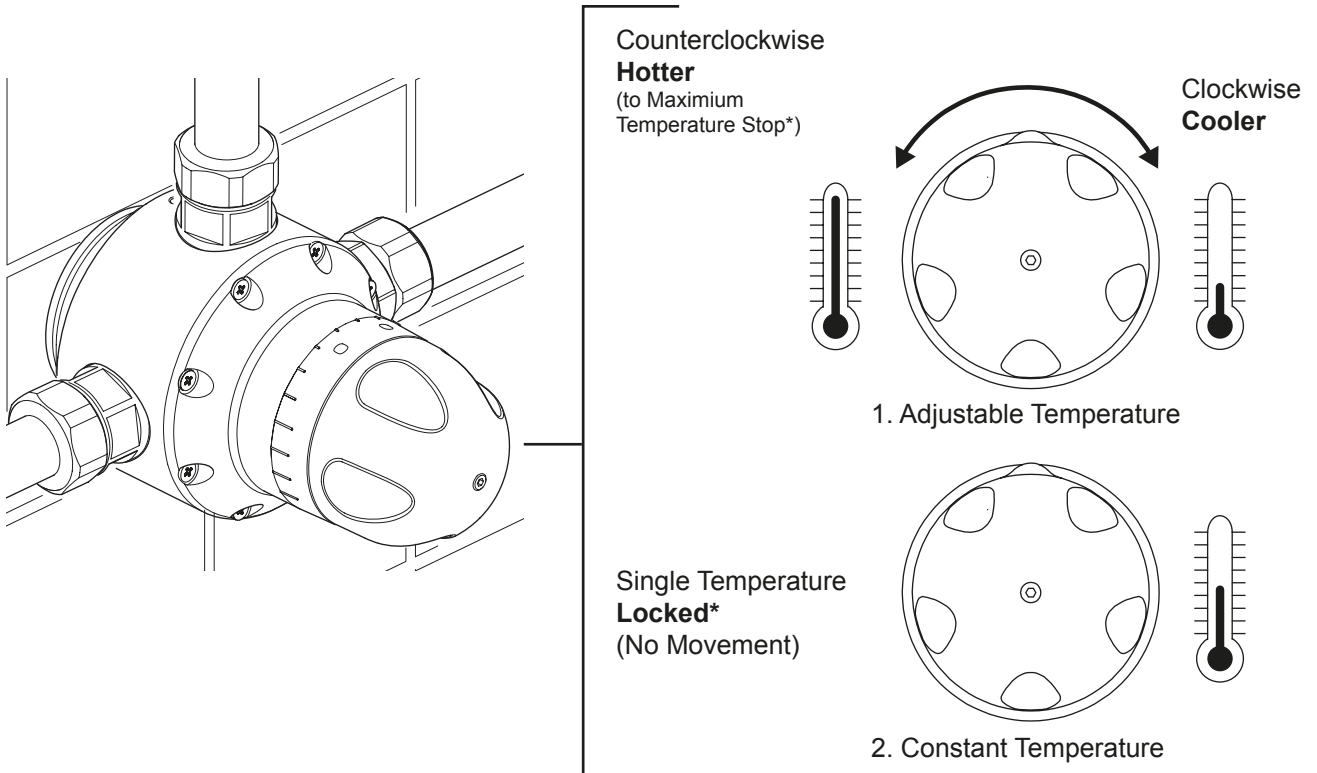
Exercising the Thermostat

Thermostatic mixing valves with thermostats are inclined to lose their responsiveness if not used. Valves which have been in storage, installed but not commissioned, or simply not used for some time should be exercised before setting the maximum temperature or carrying out any tests. A simple way to provide this exercise is:

1. Ensure that the hot and cold water are available at the valve inlets, and the outlet is open.
2. Move the temperature control rapidly from cold to hot and hot back to cold several times, pausing at each extreme.

Operation

For models with a standard temperature knob fitted, adjustment of the blend temperature from preset maximum to cold is achieved by clockwise rotation of the knob.



*Maximum temperature stop or single temperature locking feature is established during the on-site commissioning protocol .

Servicing & Maintenance



Warning! Isolate water supply to Model 425 before proceeding.

Model 425 Thermostatic Mixing Valves and its components should be inspected annually, or more frequently where acknowledged site conditions such as high mineral content water dictate.

Model 425 can be completely serviced from the front/top and all of the internal components are replaceable. To access the valves internal components for inspection, cleaning or replacement proceed as follows.

Maintenance must be carried out in accordance with these instructions, and must be conducted by designated, qualified and competent personnel. This mixing valve is designed for minimal maintenance under conditions of normal use. External surfaces may be wiped clean with a soft cloth, and if necessary, a mild detergent or soap solution can be used.



Warning! Many household and industrial cleaning products contain mild abrasives and chemical concentrates, and should not be used on polished, chromed or plastic surfaces.

Components are precision-made, so care must be taken while servicing to avoid damage.

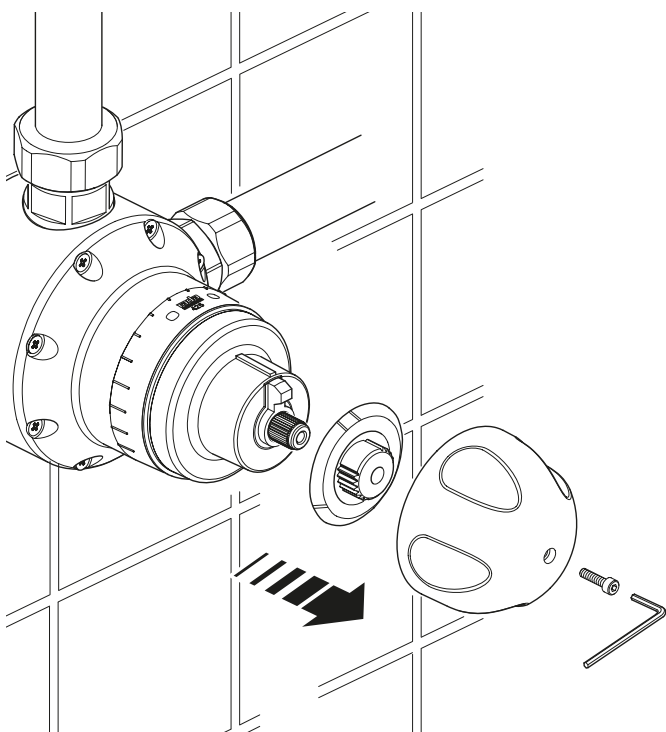
Lubricant

Important! All seals are pre-lubricated. If you need to further lubricate the seals, use only a small amount of silicone-only based lubricants on this product. Do not use oil-based or other lubricant types as these may cause rapid deterioration of seals.

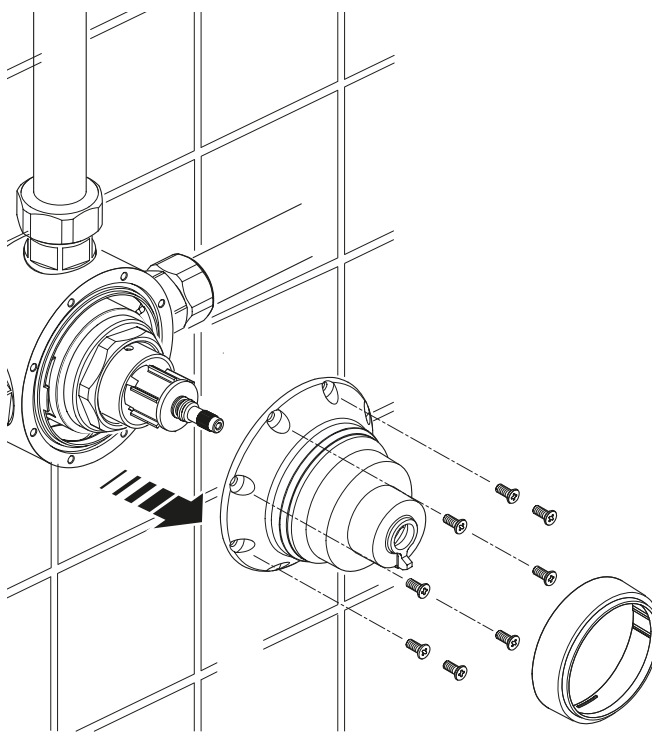
Maintenance Procedure - Thermostat Assembly

Isolate the water supplies to the mixing valve . Open an outlet fitting to release pressure and to assist the draining of residual water.

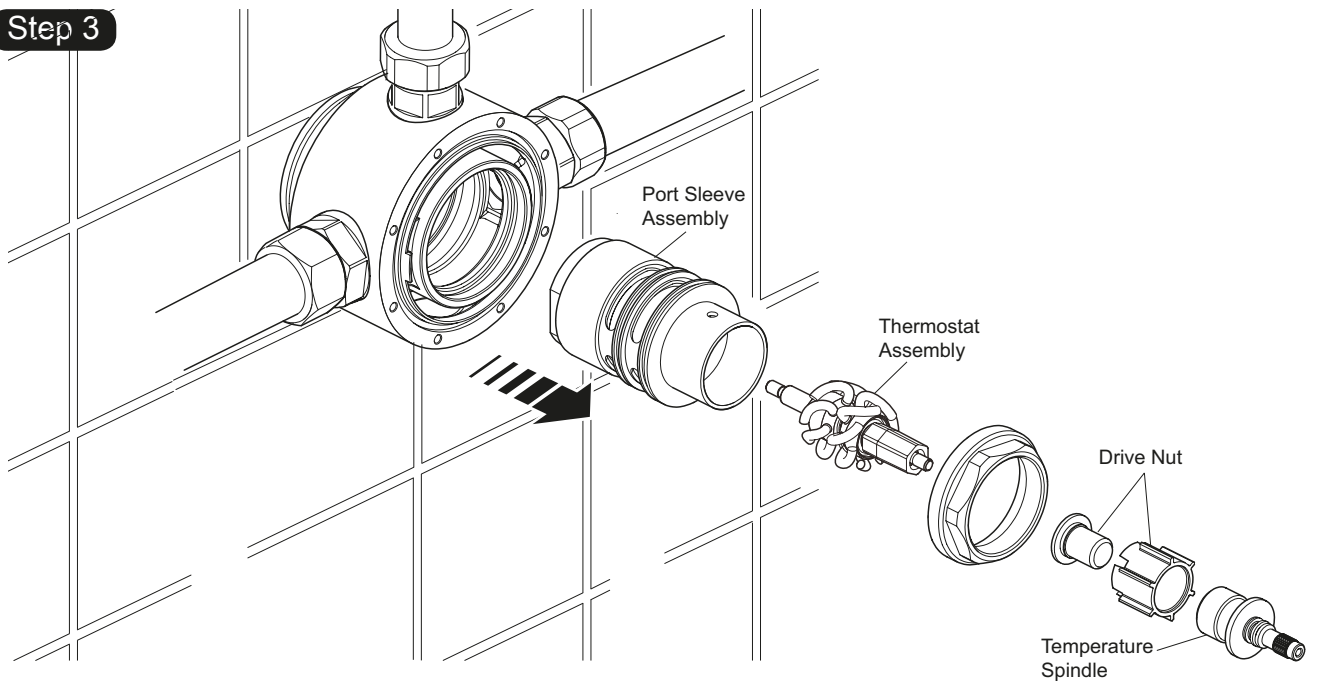
Step 1



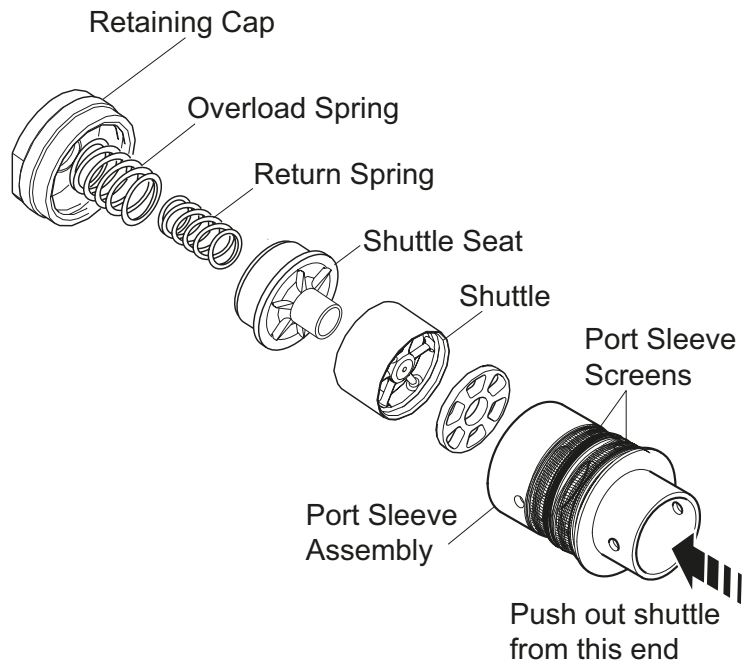
Step 2



Step 3



Maintenance Procedure - Port Sleeve/Shuttle Assembly



Disassembly

1. Remove both port sleeve screens by releasing the folded tabs.
2. To dismantle the shuttle and sleeve assembly, again insert the bar through the holes at the front of the port sleeve to hold the assembly whilst the retaining cap is **loosened only** using a spanner (50 mm) across the flats.
There is spring tension behind the retaining cap, so complete the unscrewing and removal by hand.
3. Lift out the overload spring and return spring and carefully push out the shuttle seat and shuttle.

Cleaning/Renewal of Parts

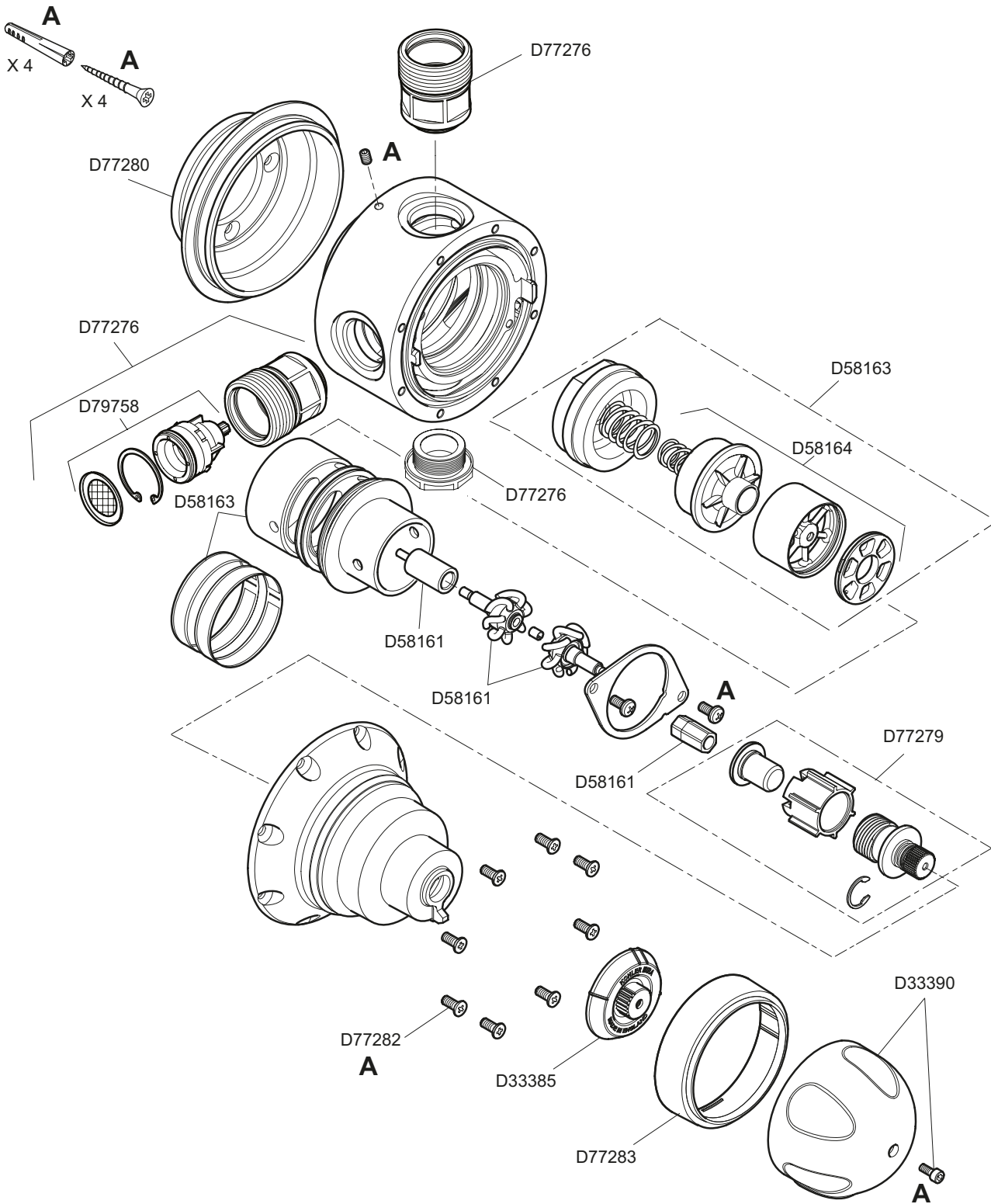
1. Internal parts (with the exception of the Thermostat Assembly) can be cleaned using a mild proprietary inhibited scale solvent e.g. domestic kettle descaler. After descaling, always rinse parts thoroughly in clean water before refitting.
Note! The body interior must be cleaned carefully and not damaged in any way. Do not use any abrasive material.
2. Examine all accessible seals for signs of deformation or damage, and renew as necessary, taking care not to damage the seal grooves.
3. Lightly smear all seals and threads with a **silicone-only based lubricant** to assist re-assembling.
4. Inspect the thermostat assembly for signs of damage.
Note! This component cannot be tested individually, its service condition should be assessed as part of the performance check; refer to **Commissioning Checks**.
5. Examine the shuttle seat, the shuttle and the port sleeve for signs of damage or corrosion; renew as necessary.

Re-assembly

1. Insert the shuttle fully into the port sleeve (wider open end) with radius centre face inwards, ensuring that the separator seal remains in place and is not damaged.
2. Insert shuttle seat into the port sleeve, ensuring that the cut-outs locate into the webs in the shuttle.
3. Insert the return spring through the centre of the overload spring. Insert both springs into the shuttle seat rear face.
4. Locate the retaining cap over the springs, compress and screw the cap fully into the port sleeve, ensuring that the threads are correctly engaged.
5. Replace the port sleeve screens, positioning the joint against one of the two solid sections. This will prevent debris entering through the slot in the screen.
6. Insert the shuttle and sleeve assembly into the valve body and secure in position with the four screws.
7. Install the actuator sleeve and the thermostat assembly into the shuttle assembly.
8. Install the drive nut and the temperature spindle into the cover.
Note! The drive nut will need to be aligned with the grooves inside the cover
9. Fit the cover, ensuring the end of the thermostat locates correctly into the drive nut. Rotate the cover so that it is positioned in the same position as it was when you removed it. Secure the cover in position with the eight screws
10. Fit the pressure washer and secure the spindle in position with the circlip. Make sure that the circlip locates correctly in the groove in the temperature spindle.
11. Before fitting the hub, the temperature will need resetting; refer to **COMMISSIONING**.
12. Fit the cover shroud and secure in position with the two screws.
13. Re-fit the temperature knob.

Model 425 Spare Parts

Model 425 Spare Parts



| Part No: | Description |
|-----------------|---|
| D33385 | Hub Pack |
| D33390 | Knob Pack |
| D58161 | Thermostat Pack |
| D58163 | Port Sleeve Pack |
| D58164 | Shuttle Assembly Pack |
| D77276 | 1 - 1/4" NPT Connector Pack (two inlets, one outlet and one blanking plug) |
| D77279 | Drive Mechanism Pack |
| D77280 | Backplate |
| D77281 | Seal Pack - Not illustrated |
| D77282 | Screw Pack - Components Identified 'A' |
| D77283 | Indicator Trim |
| D79758 | 1 - 1/4" Check Valve Service Pack - (1) Pair |
| D79759 | Critical Components Pack - Consists of: (1) D58151 Thermostat Pack (1) D58164 Shuttle Assembly Pack (1) D77281 Seal Pack |

Troubleshooting

Fault Diagnosis

Read the section “**Important Safety Information**” first.

If any maintenance is required then it **must** be carried out by a competent tradesperson. Before replacing any parts make sure that the underlying cause of the malfunction has been resolved.

Warning! There are no user serviceable components beneath the casing of the appliance. Only a competent tradesperson should remove the cover.

| Symptoms | Probable Cause | Possible Remedy |
|---|--|--|
| 1. Only hot or cold water from outlet. | a. Inlet supplies reversed (i.e.: hot to cold or vice-versa) | Check-Rectify. Tip: Check rear of valve under polymer mounting plate for raised “H” (hot) on appropriate inlet. If sight evaluation is not possible consult factory Technical Support for additional diagnosis tips. |
| | b. No hot water available from hot water source. | Check-Rectify |
| | c. Screen/filters occluded or inlet supply fittings plugged. | Refer to Servicing/Maintenance - Rectify. |
| | d. Refer to Symptom 4 below. | Refer to Symptom 4 below. |
| | e. Proportioning mechanism (shuttle) trapped against hot/cold seat. | Refer to Servicing/Maintenance. Place thumb into port sleeve and depress. Shuttle should move and spring back when pressure is relieved. |
| 2. No flow from Mixing Valve outlet. | a. Hot or Cold inlet supply failure; Thermostat holding correct shutdown function. | Check-Rectify. |
| | b. Screens/filters blocked or inlet supply fittings plugged. | Refer to Servicing/Maintenance - Rectify. |
| 3. Mixed water temperature at TMV outlet fluctuates and does not respond to adjustment. (contd...) | a. Thermostat not operating correctly. | Refer to Servicing/Maintenance - Rectify. |
| | b. Mixing Valve operating below minimum required flow rate. | Check that at least 2 GPM is flowing through valve. |
| | c. Static inlet supply pressures beyond valves capability to correct. | Check-Rectify |
| | d. Inlet supply pressures fluctuating beyond valves capability to correct. | Check-Rectify |
| | e. Hot water supply temperature fluctuating beyond valves capability to correct. | Check by carefully sensing inlet hot supply pipe work- rectify. |
| | f. Partially occluded screens/filters or partially blocked inlet fittings. | Refer to Servicing/Maintenance - Rectify. |

| | | |
|---|--|--|
| 4. Hot water in cold supply and vice-versa. | a. Indicates non-functioning check valve (s). | Diagnose by turning off mixed water outlet flow and check to see if inlet hot pipe work becomes cold and vice-versa. |
| 5. Mixed water temperature too high. | a. Mixing Valve set too high and has not been commissioned correctly. | Refer to Commissioning - Rectify. |
| | b. Mixing Valve has not been commissioned correctly and was set when the hot supply temperature was too low. | Refer to Commissioning - Rectify. |
| | c. Hot water is migrating into cold supply. | See Item 4 above. |
| | d. Thermostat not operating correctly. | Refer to Servicing/Maintenance - Rectify. |
| 6. Mixed water temperature too low. | a. Mixing Valve set too low and has not been commissioned correctly. | Refer to Commissioning - Rectify. |
| | b. Hot water heat is not keeping up with demand. | Check-Rectify. |
| 7. Mixed water flow rate is reduced. | a. Partially occluded inlet screens/filters or partially blocked inlet fittings. | Refer to Servicing/Maintenance - Rectify. |
| | b. Inlet supply pressure has fallen. | Check-Rectify. |
| | c. Accumulated pressure losses within the system are too high. | Refer to a trained and appropriate authority for system sizing assistance. |
| 8. Water leaking from valve body. | a. Seals worn or damaged. | Obtain Seal Pack (D77281) and renew all seals. Note: If leak from around temperature spindle persists renew Drive Mechanism Pack (D77289). |

Notes

Limited Warranty and Remedy

Armstrong Hot Water Group, Inc. ("Armstrong") warrants to the original user of those products supplied by it and used in the service and in the manner for which they are intended, that such products shall be free from defects in material and workmanship for a period of one (1) year from the date of installation, but not longer than 15 months from the date of shipment from the factory [unless a Special Warranty Period applies, as listed below]. This warranty does not extend to any product that has been subject to misuse, neglect, or alteration after shipment from the Armstrong factory. Except as may be expressly provided in a written agreement between Armstrong and the user, which is signed by both parties, **Armstrong DOES NOT MAKE ANY OTHER REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.** The sole and exclusive remedy with respect to the above limited warranty or with respect to any other claim relating to the products or to defects or any condition or use of the products supplied by Armstrong, however caused, and whether such claim is based upon warranty, contract, negligence, strict liability, or any other basis or theory, is limited to Armstrong's repair or replacement of the part or product, excluding any labor or any other cost to remove or install said part or product, or, at Armstrong's option, to repayment of the purchase price. As a condition of enforcing any rights or remedies relating to Armstrong products, notice of any warranty or other claim relating to the products must be given in writing to Armstrong: (i) within 30 days of last day of the applicable warranty period, or (ii) within 30 days of the date of the manifestation of the condition or occurrence giving rise to the claim, whichever is earlier. **IN NO EVENT SHALL ARMSTRONG BE LIABLE FOR SPECIAL, DIRECT, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOSS OF USE OR PROFITS OR INTERRUPTION OF BUSINESS.** The Limited Warranty and Remedy terms herein apply notwithstanding any contrary terms in any purchase order or form submitted or issued by any user, purchaser, or third party and all such contrary terms shall be deemed rejected by Armstrong.

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