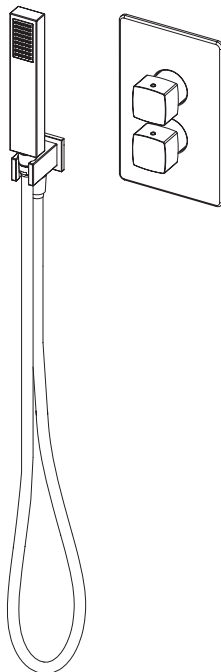
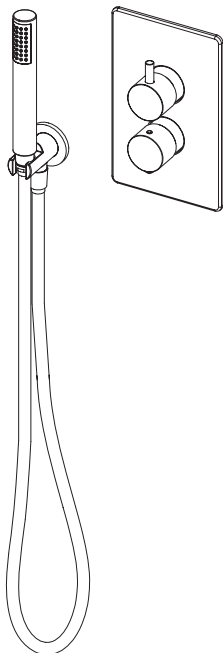
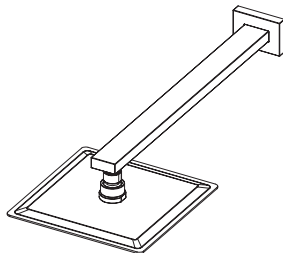
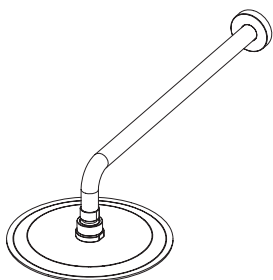


Thermostatic Dual Valve

Fitting instructions

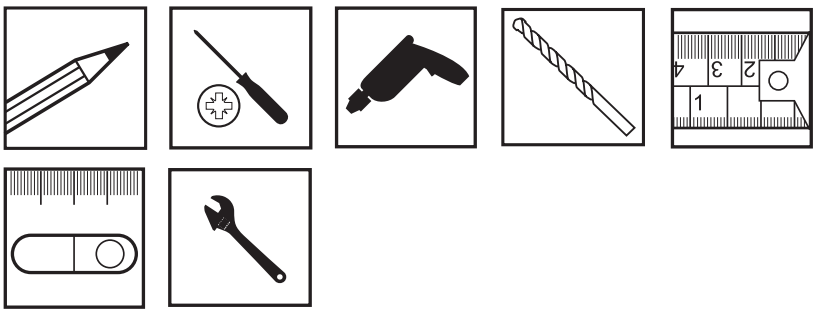


**Please note: Tap head shown is for illustration purposes only.
Please keep these instructions for future reference and request of replacement parts.**

We have taken great care to ensure that this product reaches you in perfect condition. However should any parts be damaged or missing please contact your point of purchase. This does not affect your statutory rights. In addition if you require replacement parts your point of purchase will be happy to assist.

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5. Water Supply Temperature	4
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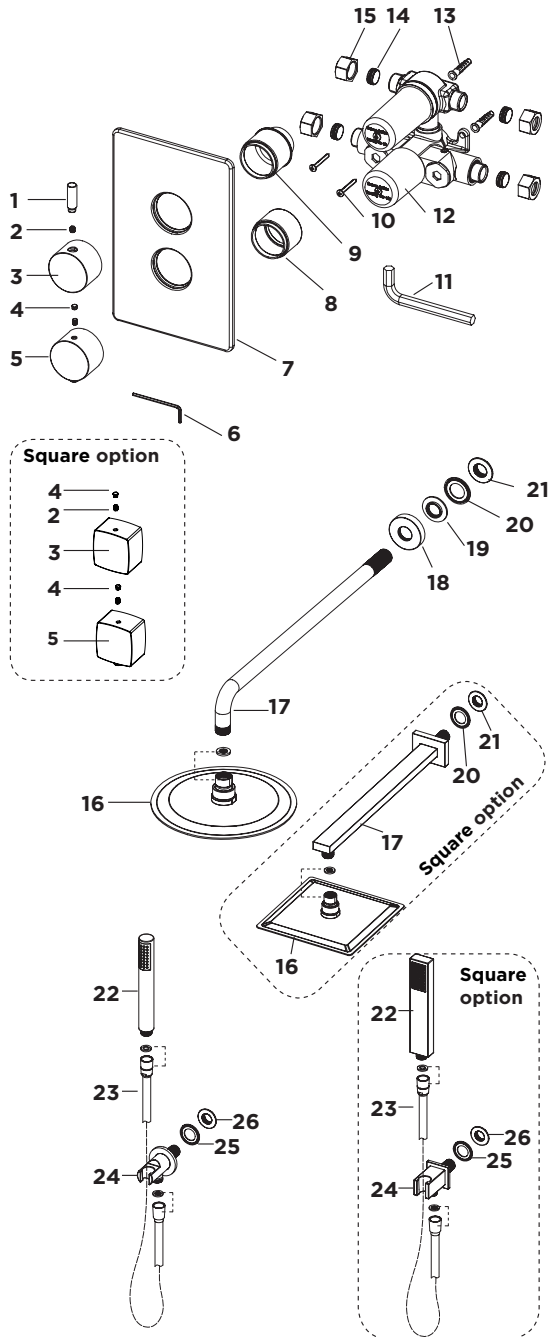
Tools Required
(Tools not supplied)



Parts Supplied

Mixer Shower

NO.	Description	Qty
1	Lever	1
2	Grub Screw	2
3	Flow Handle	1
4	Cap	1
5	Temperature Handle	1
6	Allen Key(2.5mm)	1
7	Concealing Plate	1
8	Flange A	1
9	Flange B	1
10	Wall Screws	2
11	Allen Key(10mm)	1
12	Shower Valve	1
13	Wall Plugs	2
14	Copper Rings	4
15	Fixing Nuts	4
16	Shower Head	1
17	Shower Arm	1
18	Cover Plate	1
19	Fixing Nut	1
20	Backnut Washer	1
21	Backnut	1
22	Handset	1
23	Shower Hose	1
24	Wall Outlet	1
25	Backnut Washer	1
26	Backnut	1



Before You Start

BS 8558 recommends hot water should be stored and distributed at a temperature of not less than 60°C which will help minimise the build-up of limescale.

For further details contact your Local Water Authority.

This shower should be installed in compliance with the UK Water Regulations.

(a) Identify all components and check pack contents.

(b) Turn off water mains supply.

Water Supply Temperature:

Hot Water Maximum: 70°C Recommended 60-65°C

Cold Water Minimum: 5°C Recommended 10-15°C

Always maintain a 10°C difference between hot system temperature and maximum hot setting of valve.

Hot and Cold Maximum pressure differential should be no more than 2 bars. If this limit is exceeded, fit a pressure reducing valve (not supplied).

Operating pressures on hot and cold lines should be kept as even as possible in order to ensure the maximum efficiency of the mixer.

When water pressure is higher than 5 bar a pressure reducing valve (not supplied) must be fitted before the mixer.

Flow restrictors(not supplied) can be fitted into the wall unions to reduce water consumption on high pressure system.

Installation

-Fitting the thermostatic shower valve

Important: Minimum wall cavity depth: 67mm

Min-Max Concealing Plate adjustment: 67-87mm

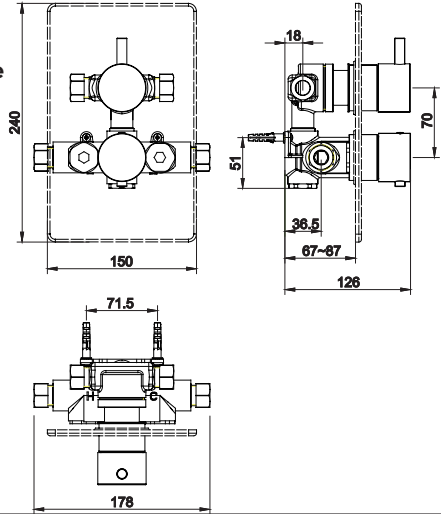
When installing this shower please ensure the thickness of the tiles, adhesive and plasterboard are taken into consideration as part of the product installation.

-Front Access

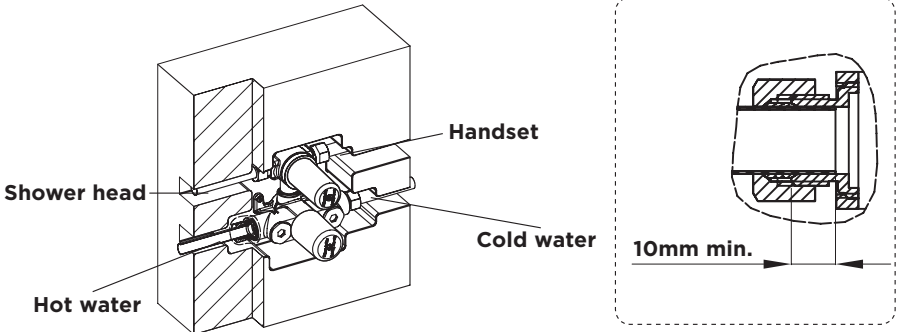
Prior to Installing this mixer shower, please flush all pipework to ensure it is clear of any debris that could cause damage to the valves in your new shower.

Before starting any work - Please ensure you have fully isolated both the hot and cold water supply.

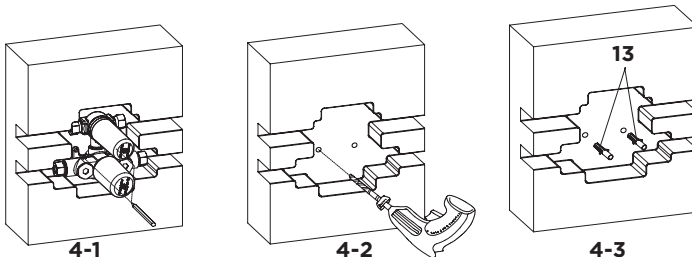
1. Prepare the recess in the wall for the mixer body pipe work - please note the diagrams to the right to ensure adequate clearance is awarded for installation and additional tiling.



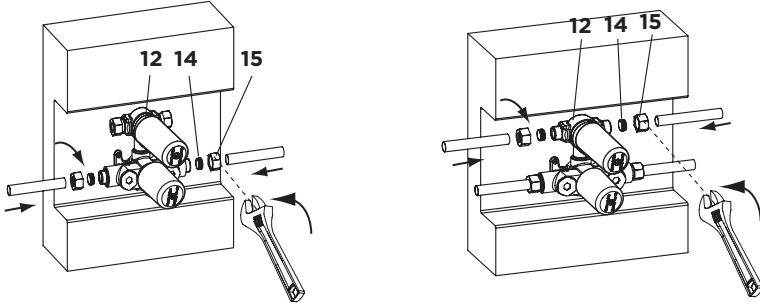
2. Arrange the pipework so that the hot water is connected from the left and to the inlet marked "H" on the valve body, ensure sufficient pipe length, make sure the pipe end inserts into the valve a minimum of 10mm.



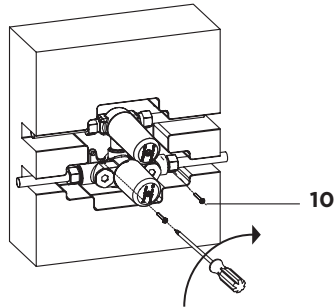
3. Connect the valve loosely to the pipework, do not tighten.
4. Hold the valve in the position inside the cavity and mark the screw holes, disconnect the valve drill the holes and insert wall plugs(13).



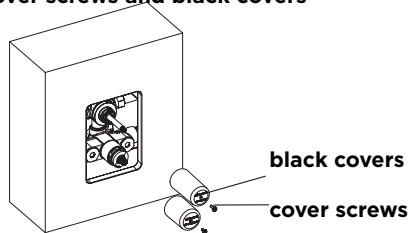
5. Connect the Shower Valve(12) to the pipework using Copper Rings (14) and Fixing Nuts (15), but do not tighten.



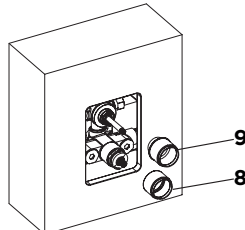
6. Tighten Wall screws(10) until secure.



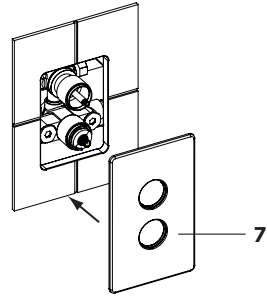
- 7. Tighten connection of valve to the pipework until watertight.
- 8. Plasterboard and tile the cavity wall ensuring there is an adequate gap between the tiles and the shower valve. See page 4.
- 9. Turn on the water supply and check for leaks.
- 10. Turn off the water supply . Remove the cover screws and black covers from the valve.



11. Screw both of the Flange(8、 9) into valve (do not overtighten).

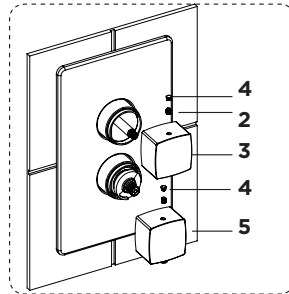
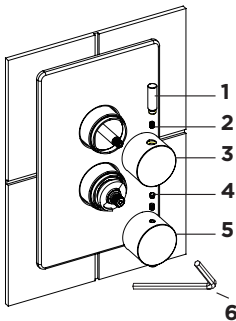


- 12. Install Concealing plate(7) over Shower Valve(12).**
Note: the concealing plate can be used as a template by drawing around the plate and measuring in by 15mm to give sufficient clearance.
Run a bead of waterproof silicon sealant around the inner edge of the concealing plate.
Slide the concealing plate onto the shower valve control handles and apply firm pressure to ensure to silicon sealant spreads.



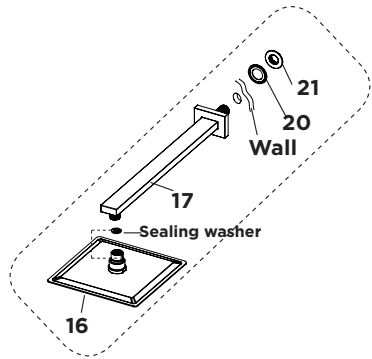
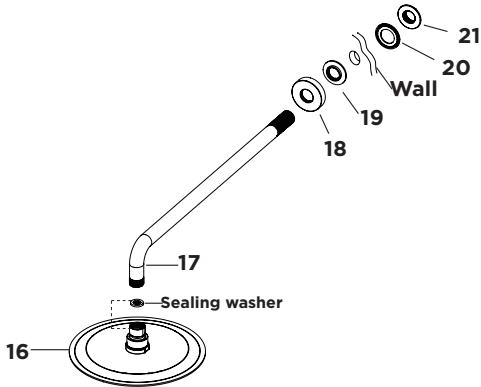
13. Fit handle assembly as below installation.

- a. Fit Temperature Handle(5) to the valve, being sure that the handle stops at the factory pre-set temperature.
- b. Fit the Flow Handle(3) to the valve.
- c. Fit Handle Grub Screw(2) to the handle and tighten with Allen key(6).
- d. Fit Lever(1) to the Handle and tighten by hand. fit Cap (4) to the handles.



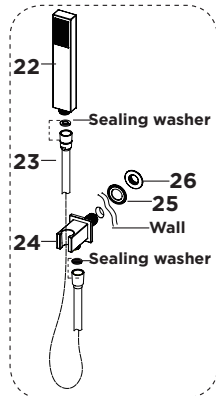
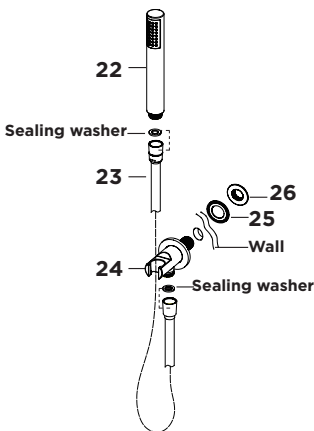
-Fitting the Shower Arm

1. Before installation flush out pipes, and then turn off water supply.
2. Prepare a hole in the desired location of the Shower Arm (17).
3. Determine the length of pipe required to connect the mixer to the Shower Arm (17). To do this, Fit the Flange (18) and Nut (19) to the Shower Arm (17), push tail end of Shower Arm (17) through hole in the wall.
4. Place Backnut Washer(20) over tail end and secure with Backnut (21). Be sure to leave 10mm of pipe to be fitted into tail end.
5. Connect to water supply using suitable plumbing joints.
6. Push Flange (18) to wall until cover all joints.
7. Ensuring the sealing washers are positioned within the Shower Head(16), Assemble Shower Head(16) to the Shower Arm(18) .
8. Turn on water supply and check for leaks.



-Fitting the Wall Outlet

1. Before installation flush out pipes, and then turn off water supply.
2. Prepare a hole in the desired location of the Wall Outlet (24).
3. Determine the length of pipe required to connect the mixer to the Wall Outlet (24). push tail end of Wall Outlet (24) through hole in the wall.
4. Place Backnut Washer(25) over tail end and secure with Backnut (26).
Be sure to leave 10mm of pipe to be fitted into tail end.
5. Connect to water supply using suitable plumbing joints.
6. Ensuring the sealing washers are positioned within the Shower Hose(23), Assemble Handset(22) to the Shower Hose(23).
7. Ensuring the sealing washers are positioned within the Shower Hose(23), Assemble Shower Hose(23) to the Wall Outlet (24).
8. Turn on water supply and check for leaks.



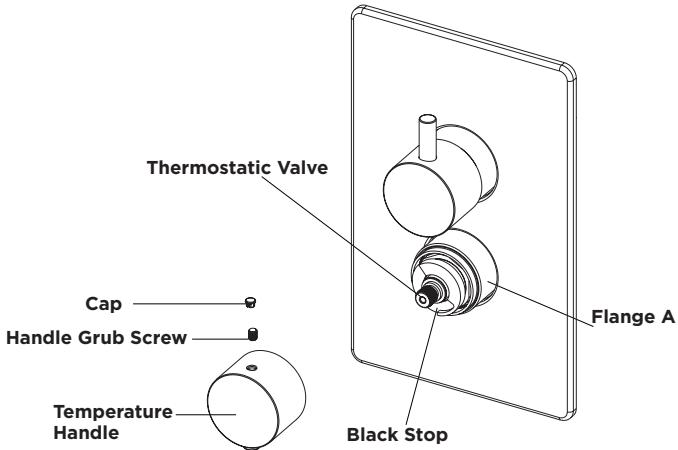
Temperature Setting (To be done only when essential)

This mixer has been set in the factory under balanced pressures and the hot water supply set at 65°C.

When operating conditions vary significantly from the above, the temperature of the mixed water may vary from the factory setting. In this case, you can set the temperature of the mixer to suit your requirements.

The valve is set to a maximum 43°C. This can be checked if required using a thermometer. If this temperature is incorrect, you can reset it as the following:

1. Turn the handle to 38°C position.
2. Remove Cap, then the handle grub screw, then the handle.
3. Without removing the black stop, turn the spindle of thermostatic valve until the temperature is at the required level.
4. Test again using a thermometer.
5. When the required temperature is reached, re-fit the components, so that the stop position will be at your new set temperature.

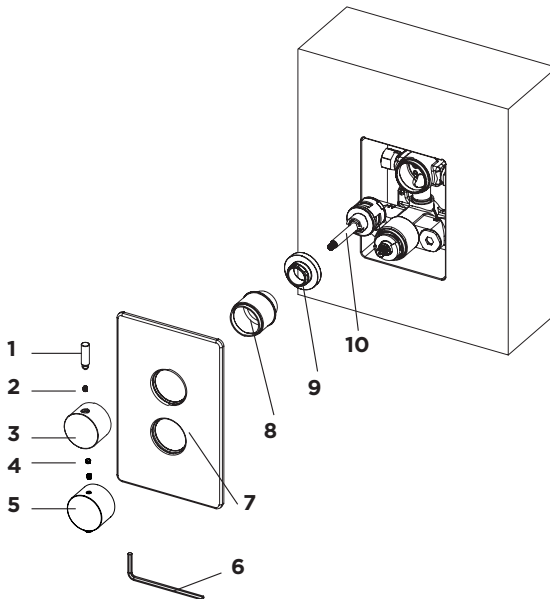


Aftercare

Cleaning the diverter cartridge

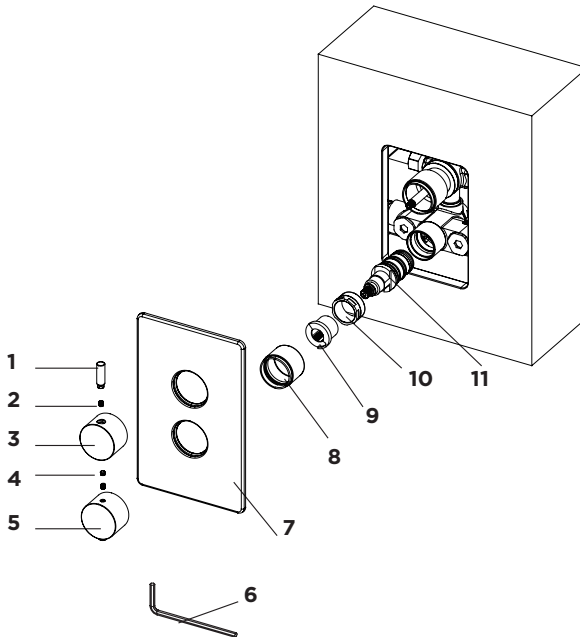
(if water leaking from shower head or handset)

1. Before carrying out any maintenance, turn off the mains water supply. If unsure contact a qualified tradesman.
2. Remove the lever(1), Cap(4), grub screw(2), diverter handle(3), temperature handle(5), then remove the wall plate(7), flange (8).
3. Remove the retaining nut(9) using a suitable spanner, remove and clean the diverter cartridge(10) rinse thoroughly under cold water to remove any build up of limescale or debris.
4. If necessary replace the diverter cartridge (10).
5. Replace the diverter cartridge (10) into the body, tighten the retaining nut(9) using a suitable spanner.
6. Replace the Flange B (8), wall plate(7) and handle(3 & 5), tighten the grub screw(2) and re-fit lever(1) , Cap(4) to handle(3 & 5).



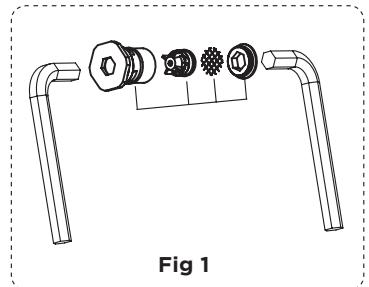
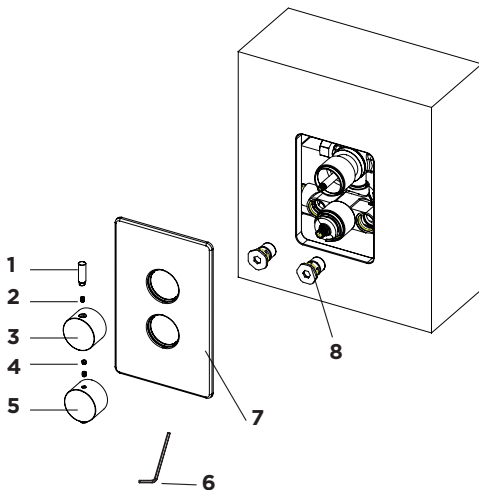
Cleaning the thermostatic cartridge

1. Before carrying out any maintenance, turn off the mains water supply. If unsure contact a qualified tradesman.
2. Remove the lever(1), Cap(4), grub screw(2), temperature handle(5) and diverter handle(3), then remove the wall plate(7), flange A (8).
3. Pull the black stop(9) from the cartridge(11). Remove the retaining nut(10) using a suitable spanner, remove and clean the thermostatic cartridge(11) rinse thoroughly under cold water to remove any build up of limescale or debris.
Note: take note of the position of the black stop(9) and cartridge(11), they must be refitted in the same position.
4. If necessary replace the cartridge(11).
5. Replace the cartridge(11) into the body, tighten the retaining nut(10) using a suitable spanner.
6. Replace the black stop(9), Flange A (8), wall plate(7) and handle(3 & 5), tighten the grub screw(2) and re-fit lever(1) , Cap(4) to handle.



Cleaning the Filter (if no flow or low flow rate, varying temperature)

1. Before carrying out any maintenance, turn off the mains water supply. If unsure contact a qualified tradesman.
2. Remove the lever(1), Cap(4), grub screw(2), temperature handle(5) and diverter handle(3), then remove the wall plate(7).
3. Remove the filter(8) using a suitable allen key(10mm) , clean the filter(8) rinse thoroughly under cold water to remove any build up of limescale or debris. See Fig 1.
4. Re-fit the filter(8) into the body, tighten the filter(8) using a suitable allen key (10mm).
5. Re-fit the wall plate(7) and handle (No.3 & 5), tighten the grub screw (2) and re-fit lever(1) , Cap(4) to handle.



General Cleaning

Whilst modern plating techniques are used in the manufacture of these fittings, the plating will wear if not cleaned properly. The safest way to clean your product is to wipe with a soft damp cloth. Stains can be removed using washing up liquid. All cleaning powders and liquids will damage the surface of your fitting even the non-scratch cleaners.

Troubleshooting

Symptom	Cause	Remedy
No flow or low flow rate and /or varying temperatures.	Check showerhead, hose and filters for any blockage.	Clean as necessary. Refer to Aftercare section (page 10-12).
	Partially closed stop or service valve in water supply pipework to the shower valve.	Open stop or service valve.
	Instantaneous water heater cycles on and off as the flow rate or pressure is too low.	Increase water flow rate or pressure through system. Contact the boiler manufacturer.
	Head of water is below the minimum distance required.	Raise the cistern or fit a shower booster pump.
	Inlet filter is partially blocked.	Clean or replace, flush through pipework before refitting.
	Hot or cold water being drawn off elsewhere causing pressure changes or instantaneous boiler temperature changes.	Do not use other water outlets when using the shower.
	Make sure the maintained inlet pressures are nominally balanced and sufficient.	Refer to Water Supply Temperature (page 4).
	Airlock or partial blockage of the pipework.	Flush through pipework to ensure removal of debris and any airlocks.
	No hot or cold water reaching the shower valve.	Check hot and cold feeds (the valve will shut down if either the hot or cold supply fails).
Only hot or cold water from the shower valve outlet.	Partially closed stop or service valve in water supply pipework to the shower valve.	Open stop or service valve.
	Inlet filter is partially blocked.	Clean or replace, flush through pipework before refitting.
	Inlet water supplies are reversed (hot to cold supply).	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.
Water leaking from showerhead.	This is normal for a short time after turning off.	Adjust angle of showerhead in holdre as necessary to vary draining time.
	Shower flow valve failing to close fully, possibly due to water borne debris.	Remove flow valve and check. Refer to Aftercare section (page 10-12) before dismantling shower valve.
Maximum water temperature too hot or cold.	Maximum water temperature set incorrectly.	Reset maximum water temperature. Refer to Temperature setting (page 9).
Outlet water temperature too hot / cold.	Inlet filter is partially blocked.	Check inlet filters for any blockages and clean as necessary.
	Installation conditions outside operating parameters.	Refer to Water Supply Temperature (page 4). Refer to Aftercare section (page 10-12). Refer to Temperature setting (page 9).
Water temperature too cold Maximum water temperature incorrectly set.	Hot water temperature is less than 10°C above the required blend temperature.	Adjust hot water temperature or wait for water to reheat if stored system is used.
	Instantaneous water heater not igniting because water flow rate is too low.	Increase water flow rate through the system. Check inlet filters and clean or replace. Refer to Aftercare section (page 10-12). Contact the boiler manufacturer.