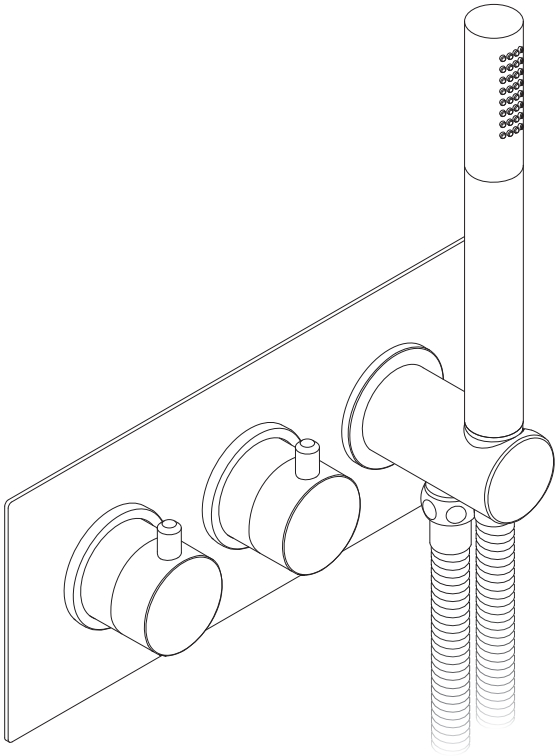
COALBROOK



2 OUTLET SHOWER VALVE WITH HANDSPRAY INSTALLATION

3101

IMPORTANT INFORMATION

Installation
We recommend that Coalbrook products are fitted by a fully qualified professional plumber. They should be installed correctly and in accordance with all local water regulations. All products and connections should be accessible for routine servicing.

System suitability
This Coalbrook product is potentially suitable for every possible application, type of boiler and water supply pressure. However, for full 'power' shower performance it is advisable to fit a water pump if the supply pressure is below 1 bar. For systems with combination boilers, it is not advisable to fit pumps (refer to boiler manufacturer).

Recommended supply temperatures
HOT - See duty of care section
COLD - 10/15°C

Water quality
In hard water areas, a suitable water treatment system should be provided to prevent limescale deposits (calcium deposits) which may affect the long term performance of the cartridges. Exterior surfaces should be gently wiped with a dry soft cloth after use to minimise water stains and limescale deposits.

It is important that the outlets/holes in the handspray/shower head are kept free of limescale. If limescale is allowed to form, it will reduce water flow and can result in damage. We recommend regular cleaning to prevent the formation of limescale.

Servicing
We recommend periodic servicing to help maintain the best performance from your shower.

Flushing system
It is most important to flush out all pipework thoroughly before connecting the product. Failure to do so is the single most common cause of cartridge failure and water restriction.

Supply connections
The hot water supply must be connected to the upper left port and cold water to the bottom left port as viewed from the front.

Making connections

Parallel fittings (direct to valve)
Direct connections to the valve inlets and outlets should only be made using parallel fittings.

Tapered fittings (use adaptors)
Parallel to tapered adaptors must be used to convert the connections when using tapered fittings. These should be securely fitted to the valve using a suitable thread sealing compound to make a watertight joint.

Tapered fittings must NOT be connected directly to the valve without the use of adaptors.

All connections should be pressure tested before the valve is sealed behind the wall.

IMPORTANT INFORMATION

Balancing flow
If there is a significant difference in water pressures between hot & cold supplies, we recommend an in-line flow suppressor/regulator (not supplied) be fitted. This should be fitted to whichever has the greater flow rate, in an accessible position close to the valve.

Non-return valves
To protect your water system, non-return/check valves are fitted. These can be removed and cleaned if required.

Safety/Anti-scald
This thermostatic valve not only maintains a constant temperature to approximately plus or minus 1°C, but will automatically shut down completely on failure of hot or cold supplies.

Temperature setting
Once the installation has been completed the 'safe temperature' must be checked and set. The valve is factory set, but the working temperature may differ subject to the hot & cold water temperatures being supplied to the valve.

Setting the 'safe temperature'
To avoid damage, when setting the 'safe temperature', the thermostatic cartridge spindle must be turned by hand only. The spindle will require only minor adjustment. **Turning the spindle to the end of its travel and forcing it beyond this point will cause internal damage to the thermostatic cartridge.**

Always fit the 'temperature stop' before fitting the thermostatic control handle. One of the functions of the temperature stop is to prevent the thermostatic cartridge spindle being turned beyond the end of its travel. **Not fitting the temperature stop will result in damage to the thermostatic cartridge.**

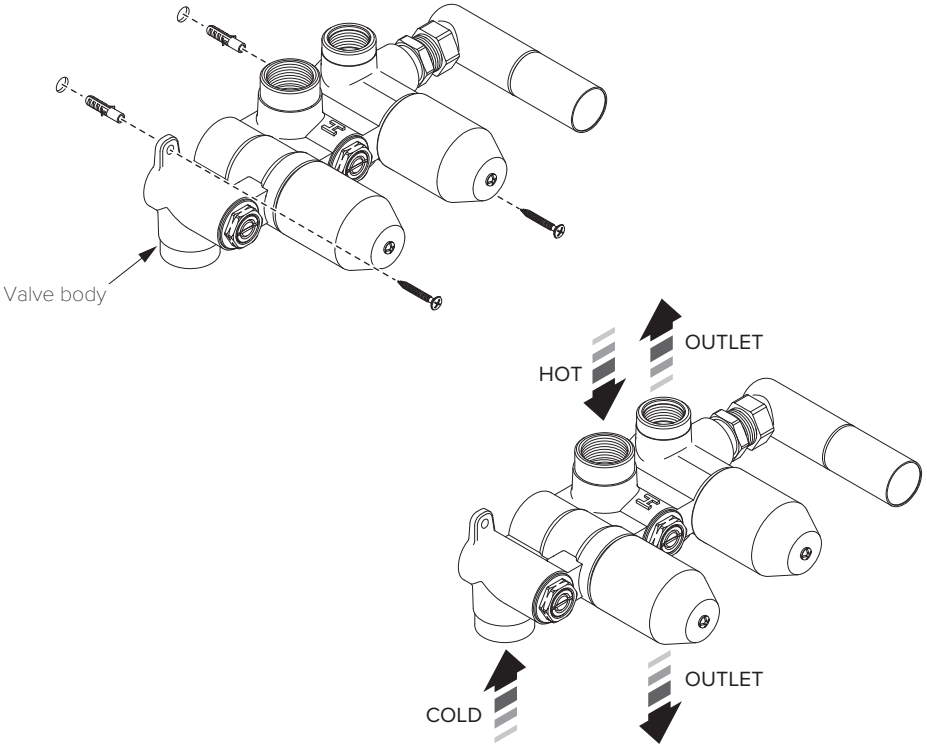
Duty of care

Legislation
Legislation dictates recommendations and guidelines on health and safety, including safe hot water temperatures. The emphasis is on regulatory and design criteria, with responsibility for meeting such guidelines being that of a suitably appointed responsible person.

How hot water temperatures affect the skin
65°C – A partial thickness burn in about 2 seconds
60°C – A partial thickness burn in about 5 seconds
55°C – A partial thickness burn in about 15 seconds
50°C – A partial thickness burn in about 90 seconds

Safe temperature
The age, mental and physical capabilities of persons occupying the property will affect the 'safe temperature' setting of the hot water supply. For specific details please refer to local building regulations, current legislation, relevant standards and codes of practice.

SHOWER VALVE INSTALLATION (STEPS 1 - 6)



1. Offer the valve body up to the mounting surface. Use a spirit level to ensure that the valve is horizontal then mark the hole locations.

2. Drill holes using a suitable drill bit for the required fixings/wall plugs.

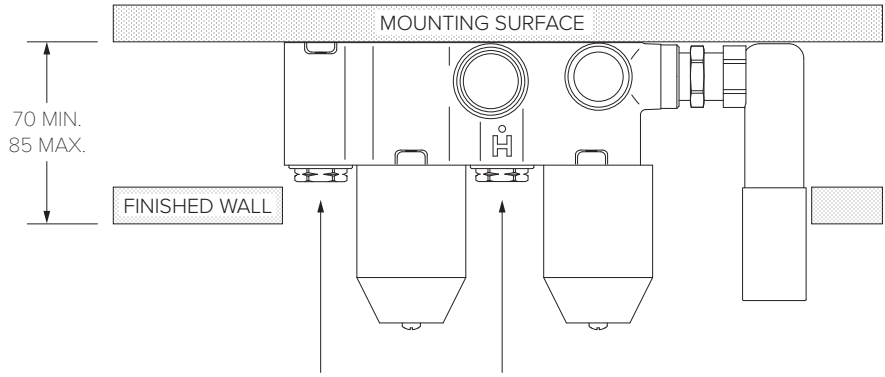
3. Using appropriate fixings/screws for the mounting surface, secure the shower valve in place.

4. Ensure that the water supplies have been flushed before connection is made to the valve body. Connect the hot and cold water supplies to the G3/4 inlets of the valve. The HOT connection must be connected to the upper left port, and the COLD connected to the bottom left port. H & C are marked on the valve body as an aid.

5. The valve has two G1/2 outlets, one at the top and the other at the bottom. Make a connection to one of the outlets then cap the remaining outlet using the blanking plug. As supplied, the blanking plug is usually fitted to the bottom outlet.

6. Check all connections for leaks and ensure the protective covers are securely assembled before concealing pipework and continuing installation.

SHOWER VALVE INSTALLATION (STEPS 7 - 8) (mm)

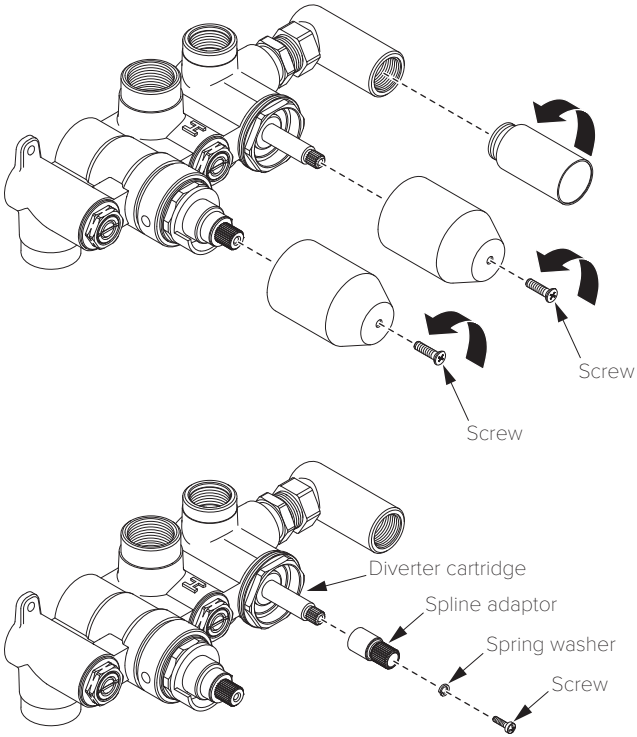


Access to non-return/check valves required in aperture

7. The valve must be installed to comply with the minimum and maximum measurements shown. Please note that the dimensions are from the mounting surface to the finished wall surface.

8. Ensure the aperture left in the finished wall allows access to the non-return/check valves which are located on the front face of the valve body. These need to be accessible for servicing.

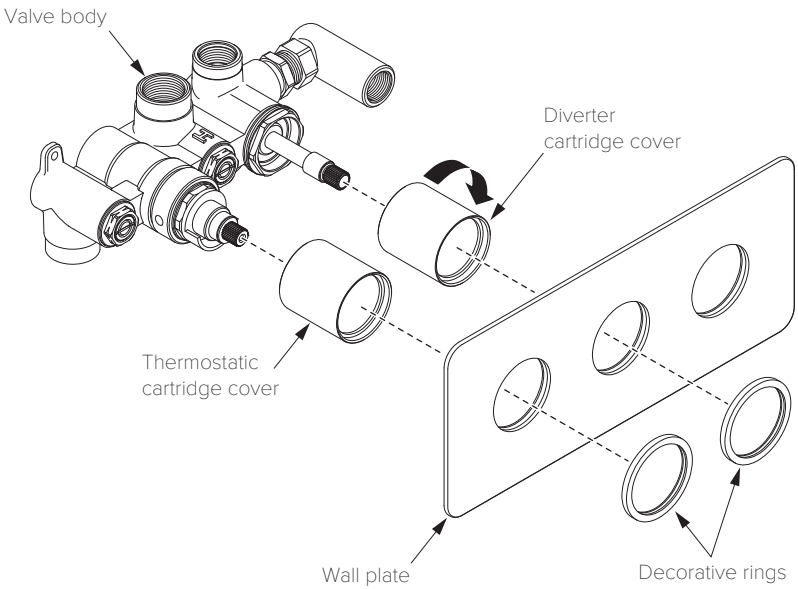
DIVERTER CARTRIDGE SPLINE ADAPTOR INSTALLATION



1. Remove the protective covers. Dispose of the protective covers and their screws.

2. Locate the spindle adaptor onto the diverter cartridge and secure using the screw and spring washer provided.

WALL PLATE, COVERS & DECORATIVE RING INSTALLATION



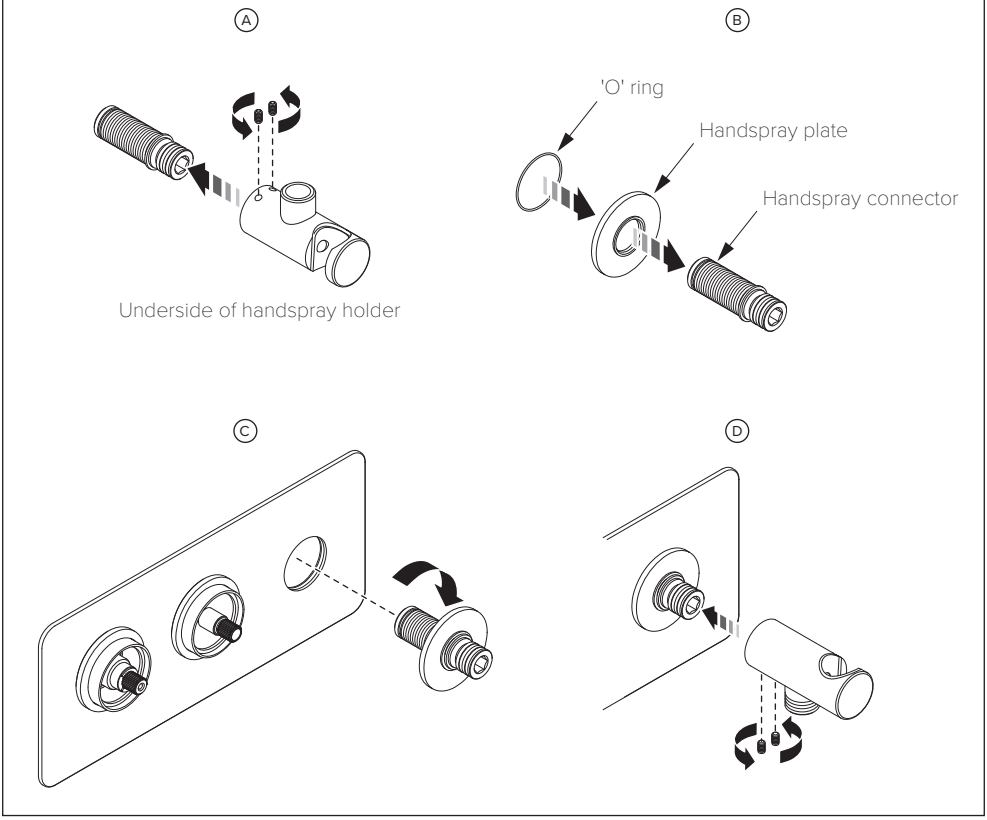
1. The valve body has a large plain diameter with an 'O' ring present. Gently push the thermostatic cartridge cover onto the large plain diameter.

2. Locate and screw the diverter cartridge cover over the diverter spindle to secure.

3. Inspect the wall plate and ensure that 'O' rings are present in the three circular openings. Install the wall plate by removing the adhesive sticker backing from the rear face and locating over the covers. Use suitable sealant if necessary.

4. Ensure that 'O' rings are present in the central recesses of the decorative rings Slide both decorative rings over the previously installed covers.

HANDSPRAY HOLDER INSTALLATION



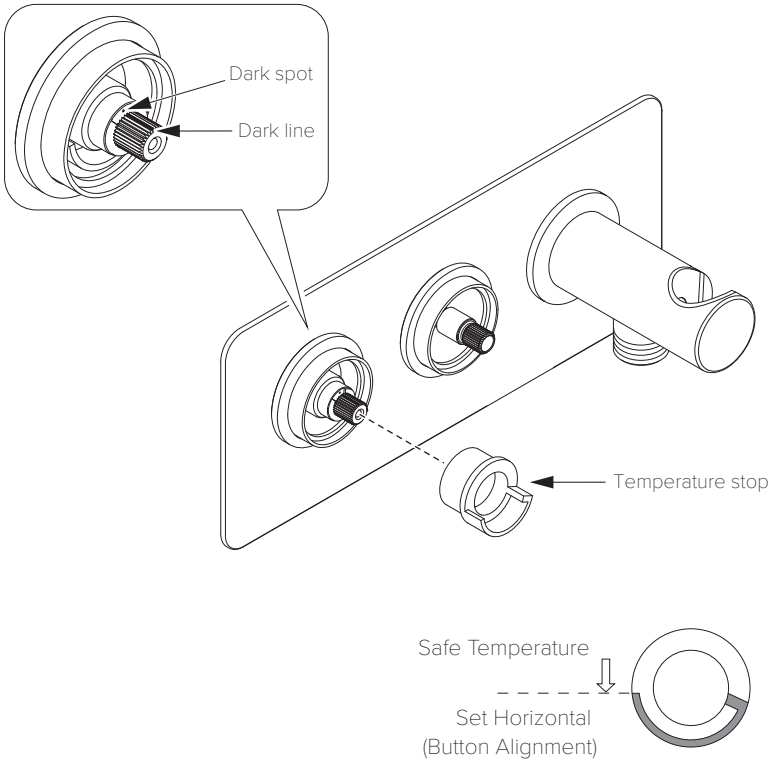
1. After removing the handspray holder from its packaging, unscrew and remove the two grub screws from the underside using a suitable hexagonal key. Pull the handspray connector from the handspray holder (A).

2. Ensure that an 'O' ring is located into the rear recess of the handspray plate. Locate the handspray plate over the threaded tail of the handspray connector (B).

3. Apply suitable sealant or sealing tape to the threaded tail of the handspray connector. Screw the threaded tail of the connector into the valve body (C). To aid in this, the end of the threaded tail has a hexagonal recess. Be careful not to over tighten the threaded tail.

4. Locate the handspray holder onto the handspray connector. Ensure that it is aligned correctly, then secure in place using the two grub screws previously removed and a suitable hexagonal key (D).

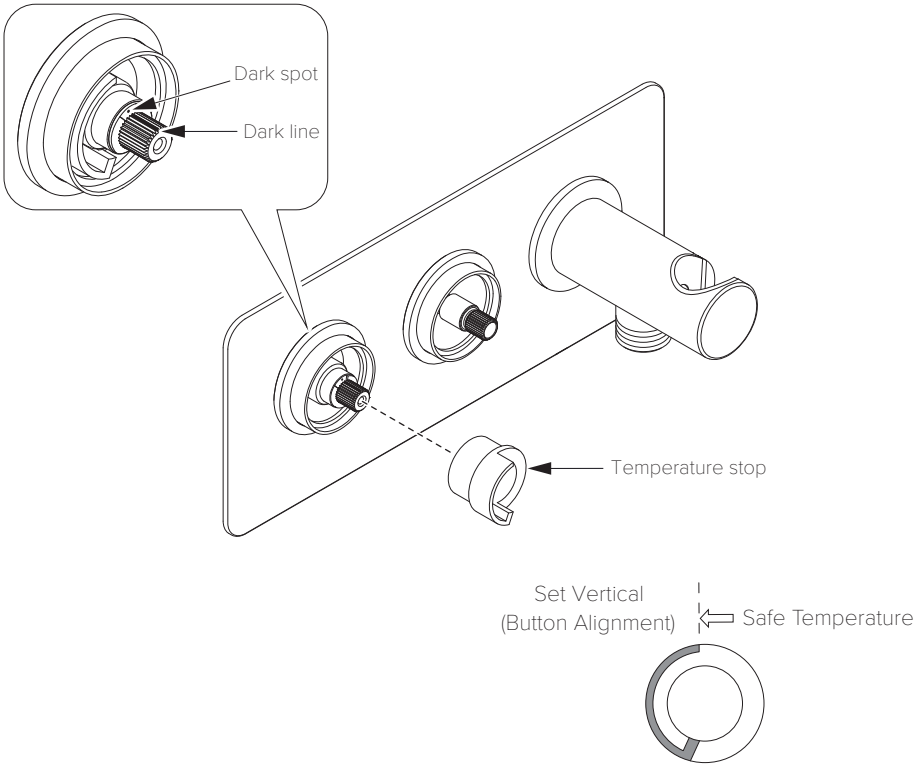
SETTING THE THERMOSTATIC CARTRIDGE & TEMPERATURE STOP (BANK & DECCA MODELS)



1. The valve is supplied with the temperature stop fitted. Before fitting the thermostatic control handle, the temperature stop must be correctly assembled onto the thermostatic cartridge. Turn the spindle on the thermostatic cartridge (by hand only) until the water temperature reaches 38°C. This should be set as the 'Safe temperature'. Turning the spindle to the end of its travel and forcing it beyond this point will cause internal damage to the thermostatic cartridge.
   For guidance there is a dark line on the cartridge spindle and a dark spot on the cartridge body. When aligned these give an approximate 38°C setting.

2. Remove and rotate the temperature stop as shown above. Locate the temperature stop onto the thermostatic cartridge with the safe temperature locator in a horizontal position.

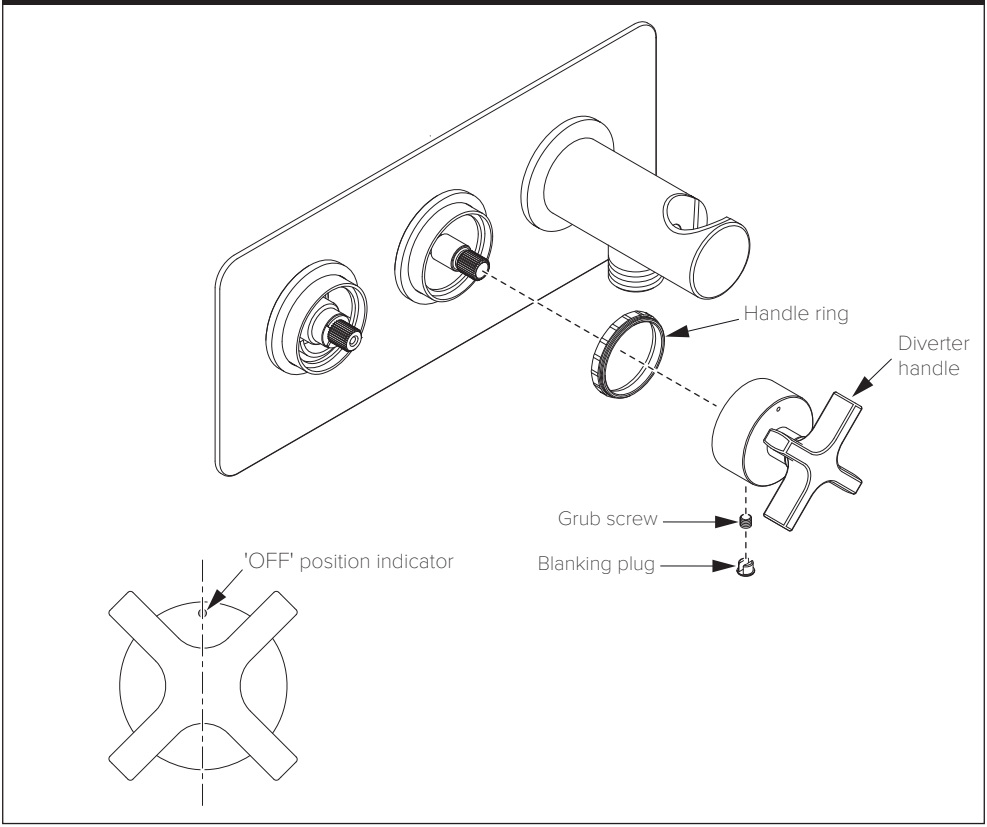
SETTING THE THERMOSTATIC CARTRIDGE & TEMPERATURE STOP (DOMO MODEL)



1. The valve is supplied with the temperature stop fitted. Before fitting the thermostatic control handle, the temperature stop must be correctly assembled onto the thermostatic cartridge. Turn the spindle on the thermostatic cartridge (by hand only) until the water temperature reaches 38°C. This should be set as the 'Safe temperature'. Turning the spindle to the end of its travel and forcing it beyond this point will cause internal damage to the thermostatic cartridge.
   For guidance there is a dark line on the cartridge spindle and a dark spot on the cartridge body. When aligned these give an approximate 38°C setting.

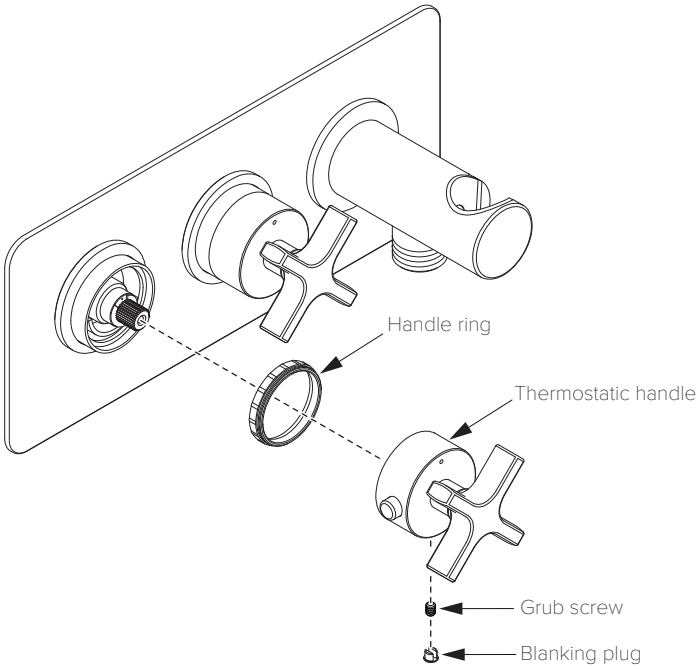
2. Remove and rotate the temperature stop as shown above. Locate the temperature stop onto the thermostatic cartridge with the safe temperature locator in a vertical position.

BANK DIVERTER HANDLE INSTALLATION



1. Align the 'Off' position indicator and handle as shown above. This will ensure that the 'Off' position indicator remains visible.
2. Locate the handle ring into the diverter handle.
3. Locate the diverter handle onto the splines of the diverter cartridge.
4. Secure the diverter handle using the grub screw and a suitable hexagonal key.
5. Check that the handle is secure then conceal the grub screw by gently pushing the blanking plug into the grub screw hole.

BANK THERMOSTATIC HANDLE INSTALLATION



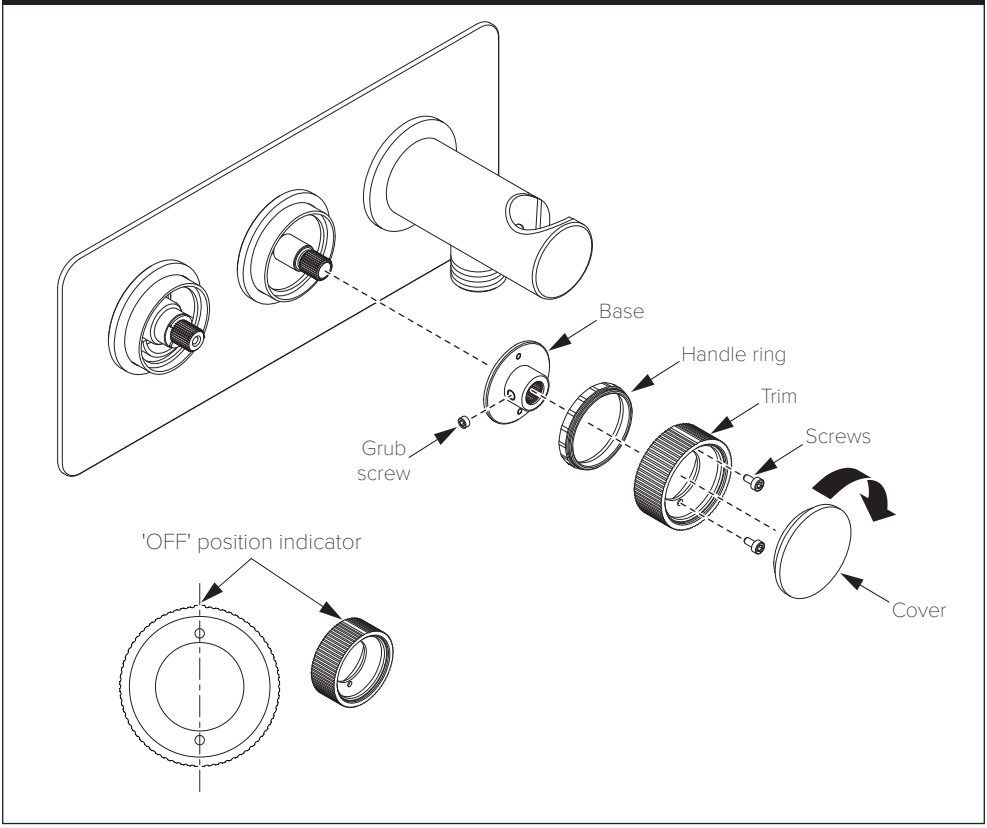
1. Locate the handle ring into the thermostatic handle.

2. Locate the thermostatic control handle assembly onto the thermostatic cartridge splines. Ensure the button is set horizontally at the safe temperature position as shown.

3. Secure the thermostatic handle using the grub screw and a suitable hexagonal key.

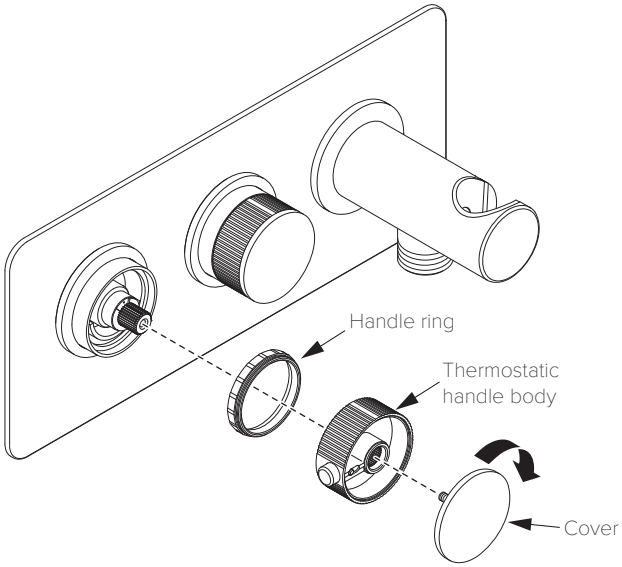
4. Check that the handle is secure then conceal the grub screw by gently pushing the blanking plug into the grub screw hole.

DECCA DIVERTER HANDLE INSTALLATION



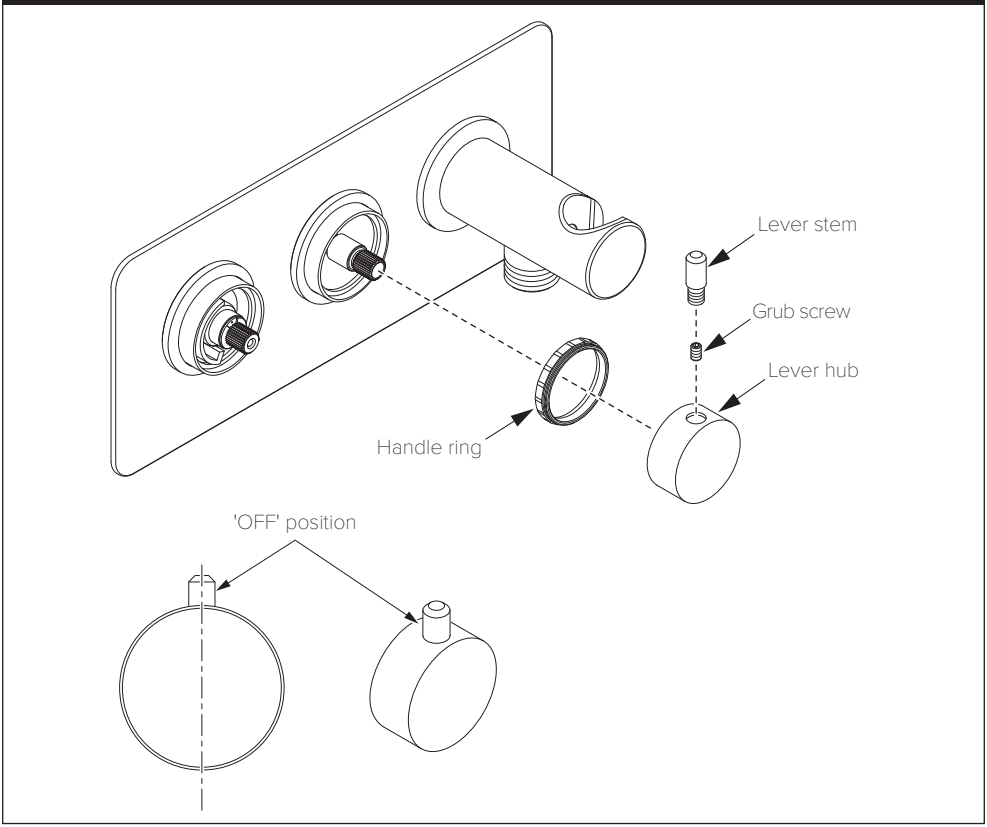
1. Align the 'Off' position indicator as shown above.
2. Rotate the handle base until the two small holes are vertical. Locate the handle base onto the diverter control splines and secure using the grub screw and a suitable hexagonal key.
3. Locate the handle ring into the handle trim.
4. Secure the handle trim to the base using the two screws provided.
5. Screw the cover onto the trim.

DECCA THERMOSTATIC HANDLE INSTALLATION



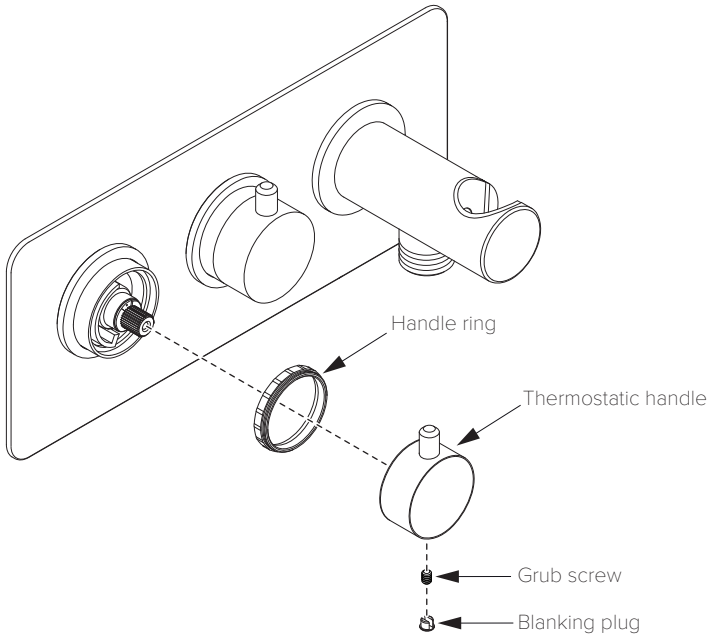
1. Locate the handle ring into the thermostatic handle body.
2. Locate the thermostatic handle body onto the thermostatic cartridge splines. Ensure that the lever is set horizontally at the safe temperature position as shown.
3. Screw the cover onto the thermostatic handle.

DOMO DIVERTER HANDLE INSTALLATION



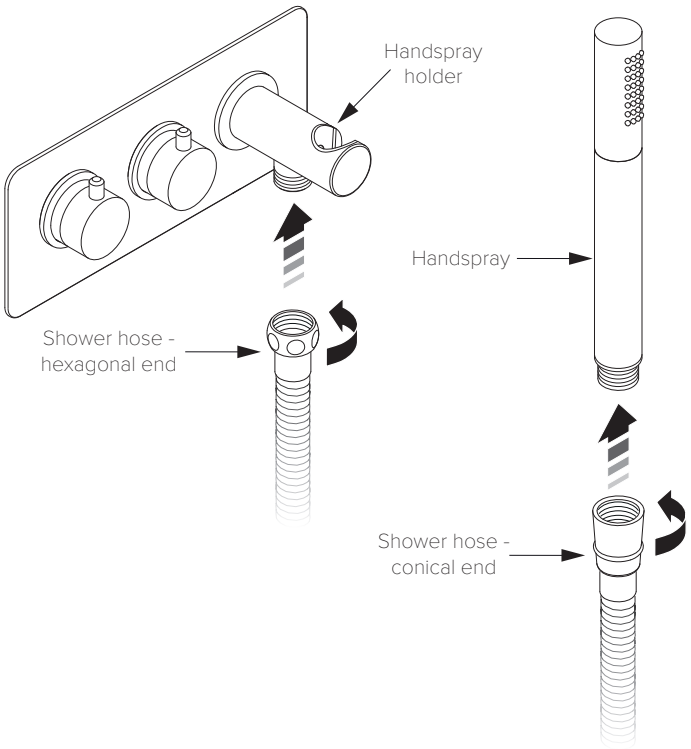
1. Locate the handle ring into the lever hub.
2. Align the lever hole in the lever hub vertically as shown above.
3. Locate the lever hub onto the splines of the diverter cartridge and secure using the grub screw and a suitable hexagonal key.
4. Screw the lever stem into the lever hub.

DOMO THERMOSTATIC HANDLE INSTALLATION



1. Locate the handle ring into the thermostatic handle body.
2. Locate the thermostatic handle onto the thermostatic cartridge splines. Ensure the lever is set vertically at the safe temperature position.
3. Secure the thermostatic handle using the grub screw and a suitable hexagonal key.
4. Check that the handle is secure then conceal the grub screw by gently pushing the blanking plug into the grub screw hole.

HOSE CONNECTION



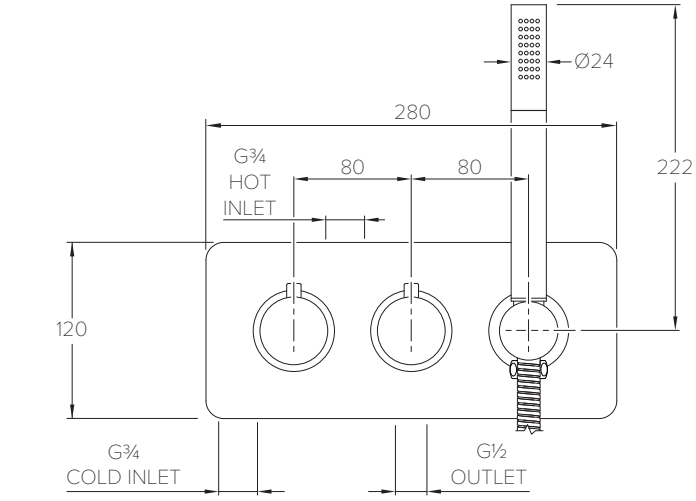
1. Use the provided shower hose to connect the handspray to the shower valve and handspray. The conical end of the hose should be screwed onto the threaded end of the handspray. Screw the hexagonal end of the shower hose onto the outlet port on the handspray holder.

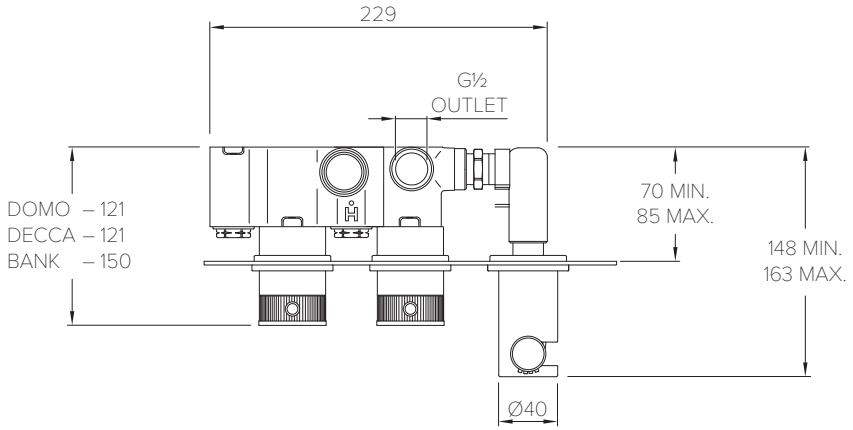
2. Check the operation of the shower valve and handspray.

3. Check for leaks.

SPECIFICATION DIAGRAM (mm)

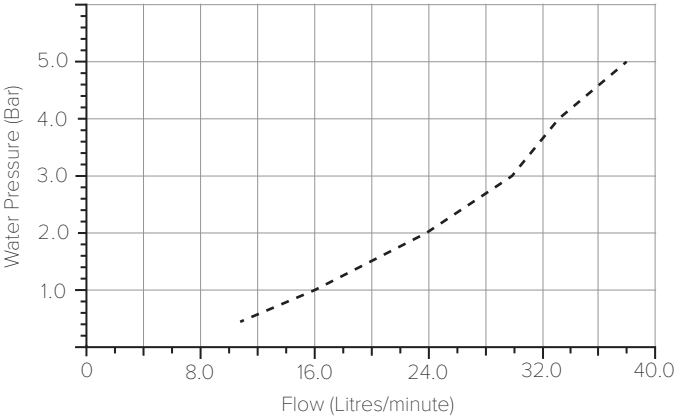
Shown with Domo handles





TYPICAL FLOW RATES (SINGLE OUTLET)

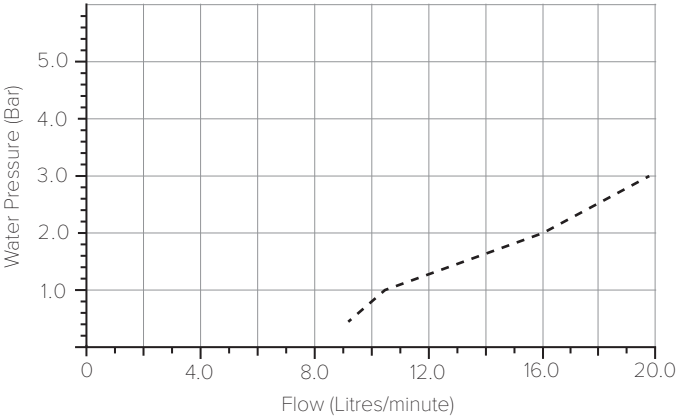
Flow rates shown are free-flowing and may vary subject to restrictions created by installation, pipework layout or application.



Water Pressure (Bar)	Outlet (Litres/minute)
0.5	10.7
1.0	16.0
2.0	23.9
3.0	29.0
4.0	33.2
5.0	38.0

TYPICAL FLOW RATES (HANDSPRAY)

Flow rates shown are free-flowing and may vary subject to restrictions created by installation, pipework layout or application.

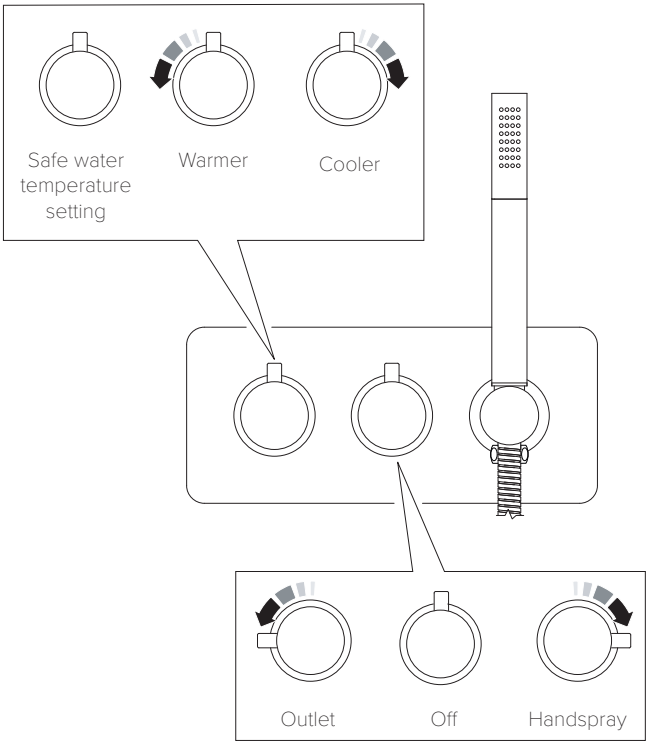


Water Pressure (Bar)	Handspray (Litres/minute)
0.5	9.2
1.0	10.4
2.0	16.0
3.0	19.8
4.0	–
5.0	–

OPERATING THE SHOWER (DOMO MODEL)

Shown with Domo handles

Press the button to increase water temperature above the 'safe temperature'. Important: Always return the button to the 'safe water temperature' setting after use.

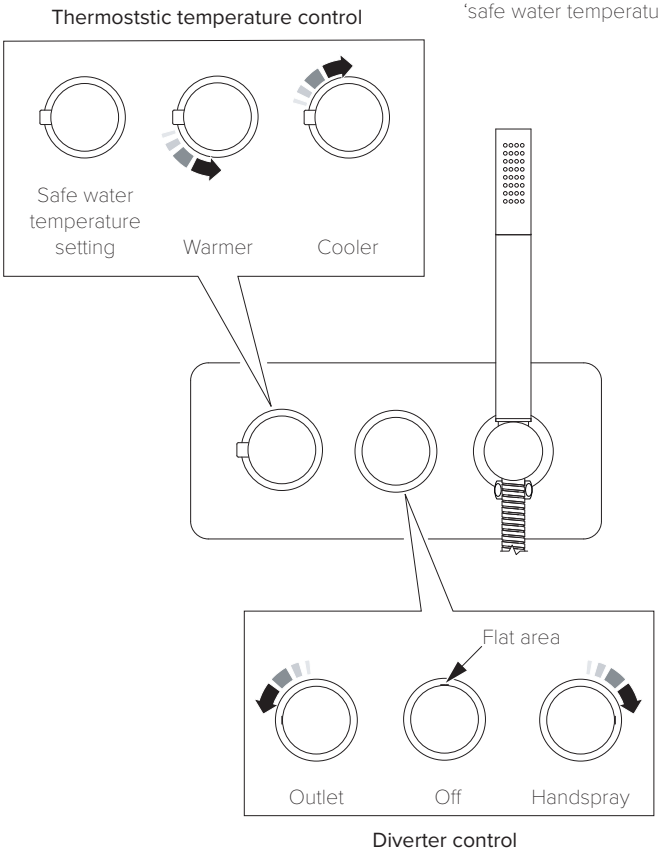


Diverter control

OPERATING THE SHOWER (BANK & DECCA MODEL)

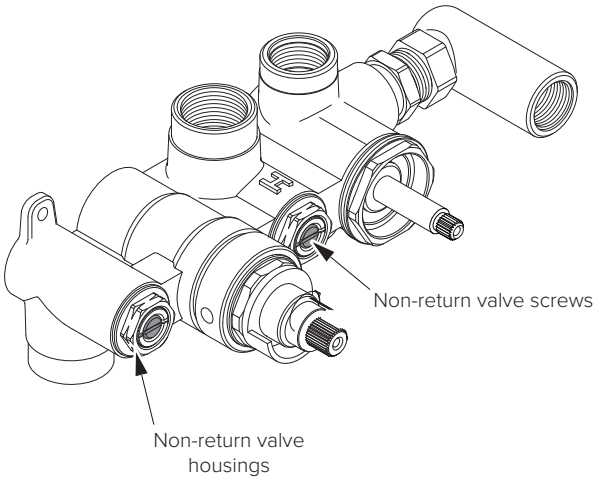
Shown with Decca handles

Press the button to increase water temperature above the 'safe temperature'. Important: Always return the button to the 'safe water temperature' setting after use.



Diverter control

SERVICING – WATER ISOLATION

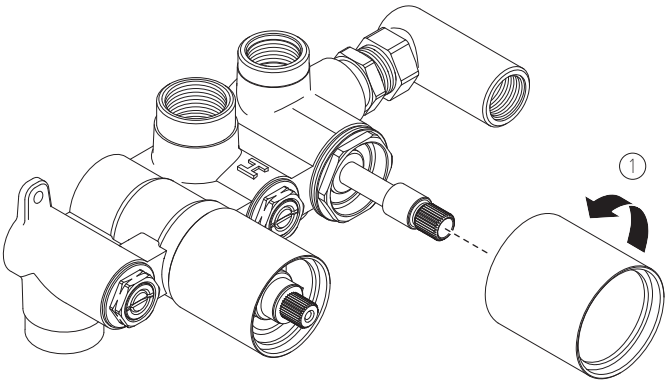


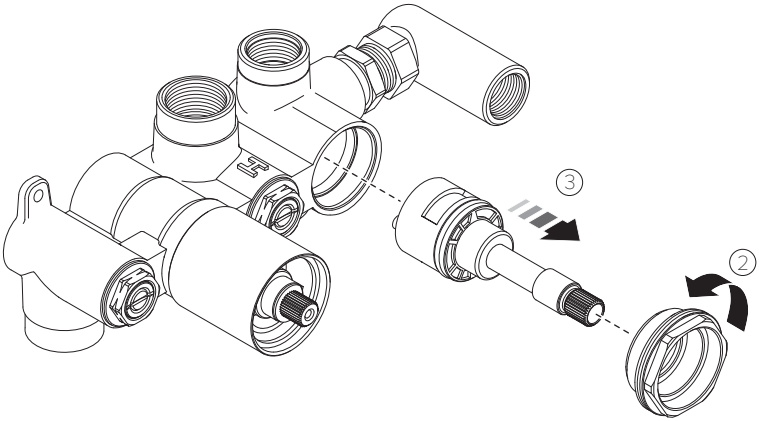
1. The shower valve has two non-return/check valves. They are both factory set in the open position.

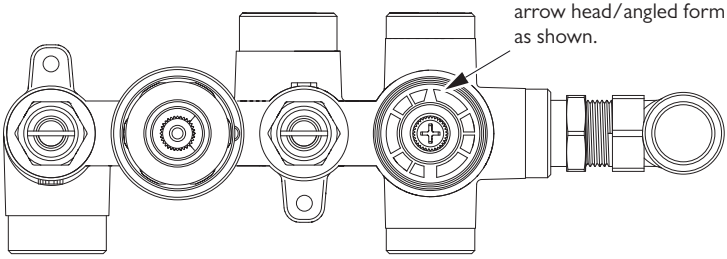
2. When servicing the shower valve the water supplies must be isolated. The non-return valve housings have a screw in the centre. Use a flat bladed screwdriver to turn the screws in a clockwise direction until they reach their stop. This will isolate the water supplies. Do not over tighten the screws as this may damage the non-return valves.

3. After servicing, unscrew the screws until they are level with the hexagonal surroundings. Do not unscrew any further than this.

SERVICING – DIVERTER CARTRIDGE REMOVAL

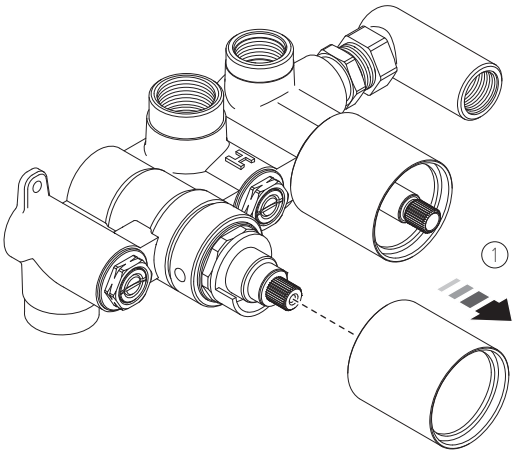


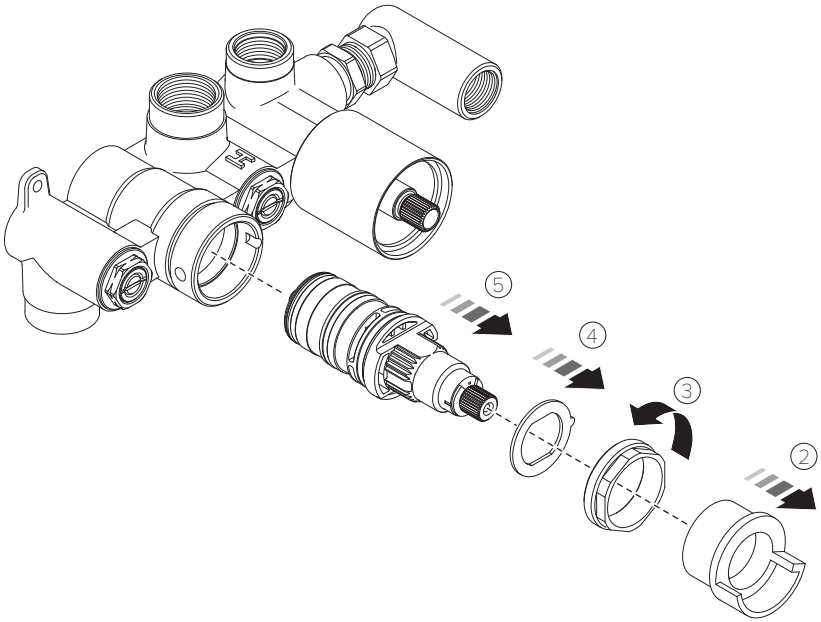




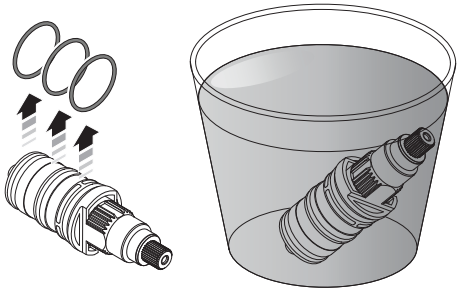
When fitting the diverter cartridge the arrow head/angled form should be located as shown.

SERVICING – THERMOSTATIC CARTRIDGE REMOVAL





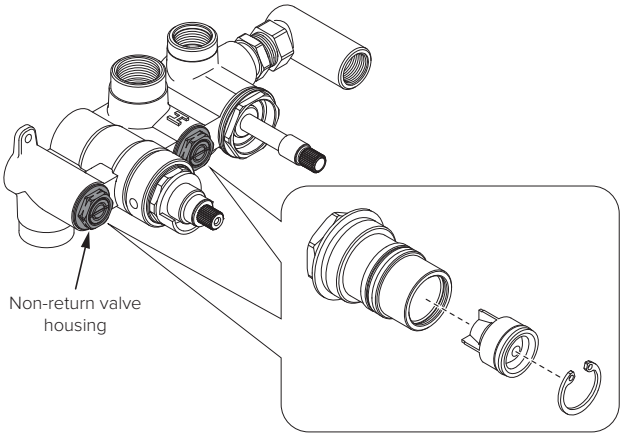
SERVICING – DE-SCALING THE THERMOSTATIC CARTRIDGE



1. After removing the thermostatic cartridge check the 'O' rings for damage (i.e. cuts or tears). Gently remove the 'O' rings before soaking the cartridge in de-scaling fluid. Soak the cartridge according to the instructions on the de-scaling fluid packaging. Rinse under cold water.

2. Carefully replace the 'O' rings before fitting the cartridge.

SERVICING – NON-RETURN VALVE REMOVAL



1. The thermostatic shower valve has two non-return valves/check valves. These can be removed for replacement or cleaning.
2. Isolate the hot and cold mains water supplies before the shower valve.
3. Unscrew and remove the non-return valve housing.
4. Remove the circlip from the rear of the housing.
5. Remove the non-return valve from the housing.
6. After cleaning/replacement, fit in the reverse order.

COALBROOK

V3.0925

COALBROOK

www.coalbrookuk.co.uk | info@coalbrookuk.co.uk