

# SHOWER THERMOSTATIC VALVE

## INSTALLATION AND MAINTENANCE INSTRUCTION MANUAL

### GUARANTEE

This product is covered by guarantee for one year from date of purchase, stated by cash receipt. Chrome plating is covered by guarantee for five years.

The guarantee does not cover faults or damages caused by incorrect installation and/or maintenance, ordinary wear and tear, water composition, i.e.:

- Incorrect installation, inversion of supply pipes;
- Pressures or temperatures exceeding specified limits;
- Improper manipulation, tampering, incorrect or missed maintenance;
- Foreign bodies and/or scale brought by water, ice, ordinary wear, water composition;
- Use of improper cleaning or maintenance products or substances.

**NON-COMPLIANCE WITH THE FOLLOWING INSTRUCTIONS WILL RENDER THE GUARANTEE INVALID**

### **To Installer:**

**Please read carefully this Instructions Manual before beginning to fit the product. After use, leave it to the End-User.**

### **To End-User:**

**Please do not throw this Instructions Manual away. Keep it as a maintenance guide for keeping your mixer as efficient as it is now.**

### HOT WATER SUPPLY

This Valve is suitable for any water heating system.

In case of instantaneous heaters, hot water flow has to meet at least the minimum flow required by the heater to start and go on burning (this minimum flow is specified by heater's manufacturer).

Instantaneous heaters of power equal or higher than 18 KW or 250 mth/min are suitable.

Generally, instantaneous water heaters having a lower power may not be suitable to work properly with any thermostatic Valve.

### OPERATING SPECIFICATIONS

#### **Hot Water Supply Temperature:**

maximum: 85°C

minimum: 10°C higher than maximum required mixed temperature from mixer

advisable: 65°C

Minimum difference between hot supply and mixed temperature delivered from the Valve is 10°C.

#### **Operating Pressure:**

maximum: 5 bar

minimum: 1 bar

recommended: 2 bar

Operating pressures (on hot and cold line) should be kept as balanced as possible, in order to assure the maximum efficiency of the mixer.

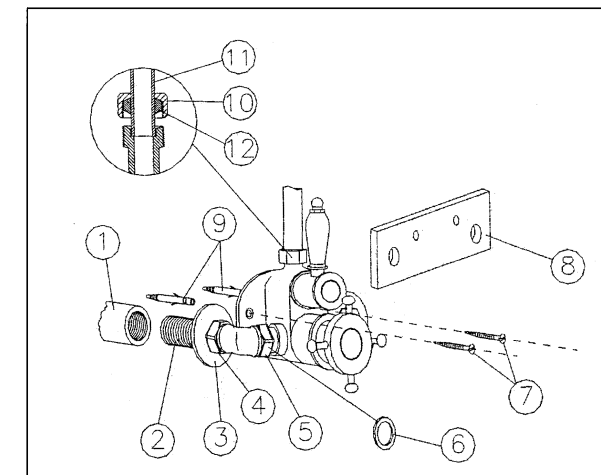
When pressure is higher than 5 bar a pressure reducer is required, to be fitted before the mixer.

### INSTALLATION

For an easy and fast fitting of the Valve, ends of pipes [1] must be threaded 1/2" female, with centre measurement 150mm.

To fit the valve to pipes, only use the 1/2" male connectors supplied [2].

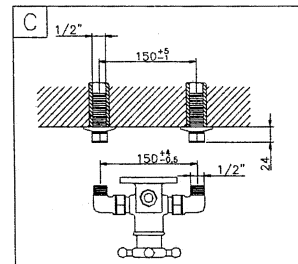
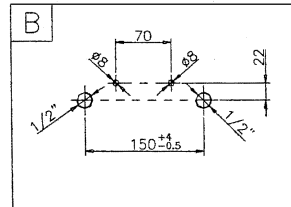
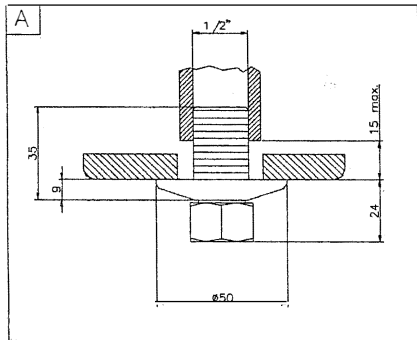
Ends of pipes must be recessed into the wall not more than 15mm from the outer surface of tiles.



### Setting and sealing of pipes.

**IMPORTANT:** In order to seal the pipes correctly into the wall and setting them in the suitable position for an easy fitting of the Valve, proceed as follows:

1. Introduce connectors [2] into the template [8]; place the template onto the wall and screw the connectors inside the pipes [1].  
Make sure to respect the maximum distance of 15mm from the outer surface of tiles (see Scheme A) to the end of pipes.
2. Make sure that the template position is horizontal, then seal the pipes into the wall.
3. When the sealing is dry, drill the 8mm diameter holes for the fixing of the valve.  
To drill, use the template again, or follow Scheme B. Then remove the template from the wall.
4. Remove connectors from the template, screw the rosettes [3] on connectors and put teflon tape or other plumbing sealing material on connectors.  
Now screw connectors inside the pipes, by using a 8mm Allen wrench. Take care to respect the required distance of 24mm between the outer surface of tiles and the outer top of the union nut, according to Scheme C.
5. Turn on the water supply and check the sealing of your installation. Then let water flow through the pipes for a long while in order to rinse pipes from any foreign particles.



### Fitting the Valve

1. Introduce expanders [9] inside the 8mm fixing holes.
2. Insert gaskets into union nuts [4].
3. Fit the Valve to the connectors [2], then screw alternatively the nuts and tighten them.
4. Screw the screws [7] inside expanders.

**ATTENTION:** In case of need, the 150mm standard centre measurement may be increased of 2 or 4mm, by introducing one more joint into one or both inlets of the Valve.

Unscrew union nut [5] and introduce the additional joint [6] which allows an adjustment of 2mm.

If you need a larger adjustment, then repeat same operation on the other inlet: the total adjustment will be of 4mm.

No adjustments are available for reducing the centre measurement.

### Connecting the Shower Tube

This Valve is provided with a 1/2" male outlet, which is suitable for both styles of available shower sets:

- A. 15mm rigid riser tube for fixed shower head
- B. flexible hose with female union nut 1/2"

In case you choose option A, suitable union nut [10] and compression olive [12] are supplied along with the Valve. Fit the rigid tube [11] as shown in the picture.

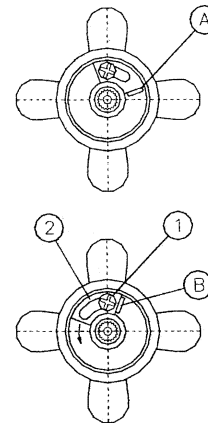
If you prefer option B, then screw directly the 1/2" female union nut of the flexible hose onto the male outlet of the Valve.

### SETTING THE MAXIMUM TEMPERATURE STOP DEVICE

The maximum temperature available from this thermostatic Valve depends on hot water supply temperature and on Pressure conditions.

Be aware that according to the above conditions, maximum temperature may reach 50-55°C.

The temperature control handle features a safety temperature restriction device, which you can adjust as you prefer between approx. 42°C and 50°C.



The handle is delivered from factory as shown in picture, with temperature stop in position A corresponding to approx. 42°C.

To adjust the temperature restriction device, loosen screw [1] and anti-clockwise part [2].

Then tighten the screw to secure the sliding part in the position required, until position B, corresponding to approx. 50°C.

#### ATTENTION:

It is not advisable to shower at temperatures higher than 42°C.

Injury to user may occur at higher temperatures.

Please ensure children and elderly people are properly supervised when showering.

### TEMPERATURE CALIBRATION (to be done only when necessary)

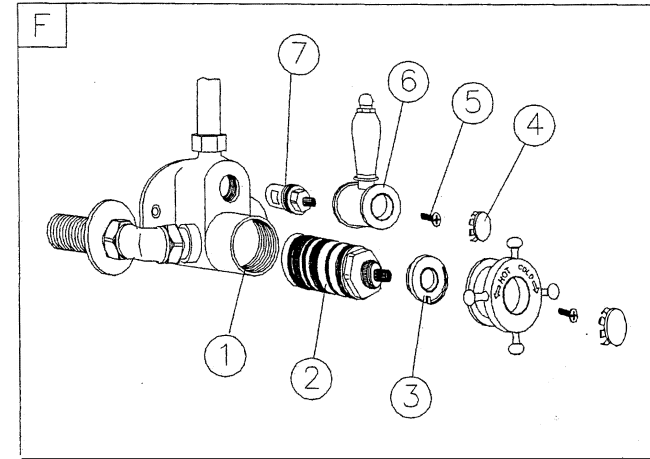
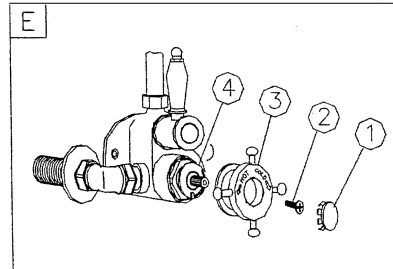
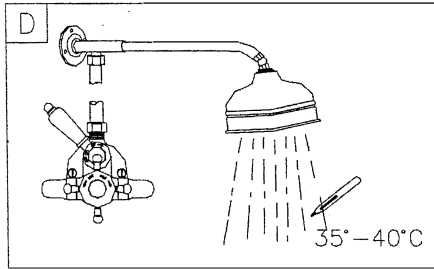
This Valve has been calibrated in factory under balanced pressures and hot water supply temperature at 65°C.

When your own operating conditions are too different from the above, the temperature of the mixed water delivered by the Valve may vary from the setting.

When difference is too great you can adjust the calibration of the Valve to suit the individual requirements of your own installation.

Follow carefully these instructions:

1. Put temperature control handle in the middle position, and check with a thermometer what is the temperature of water being delivered from the Valve (Picture D)  
Temperature should be between 35° and 40°C (comfort zone).
2. If temperature is out from this range, then turn the handle to adjust the temperature until you achieve 37-38°C at your thermometer.
3. Without moving the handle, remove the screw cover (1) on the top of it, then unscrew the fixing screw (2) - (Picture E).
4. Now remove the handle (3). Do not move the white plastic ring (4). Then, replace the handle in the middle position as shown in Picture D.  
The setting of Valve is now calibrated according to your own individual requirements.
5. Fit the handle with the screw and put on the screw cover.



## MAINTENANCE

### **Cleaning of filters and cartridge.**

This thermostatic Valve is provided with a filtering facility, preventing foreign particles to enter. Filters are fitted on the cartridge. According to water quality and composition, filters may become dirty, causing reduced flow and inefficient working of the Valve.

Same problems may be caused by scale brought by water inside the cartridge.

To clean filters and remove scale from the cartridge, just follow these instructions (PictureF):

1. Shut off water supply to both inlets.
2. Remove the temperature control handle as shown in chapter "TEMPERATURE CALIBRATION" (Picture E).
3. Unscrew (30mm spanner) and remove the thermostatic cartridge [2].
4. Clean filters and rinse under water flow.
5. In order to remove scale, leave the cartridge to soak into vinegar or a descaling solution for one night.  
Then rinse carefully under water flow
6. Before reassembling the cartridge into the Valve, clean its housing [1] with a wet cloth and grease the O-rings on the cartridge.
7. Reassemble the cartridge, then replace the white plastic ring [3] so that the red mark is upwards (as at 12 hours)
8. Turn on water supply.
9. Check by a thermometer the temperature delivered by the Valve.  
Now calibrate the temperature according to Chapter "TEMPERATURE CALIBRATION".

### **In case of leakage**

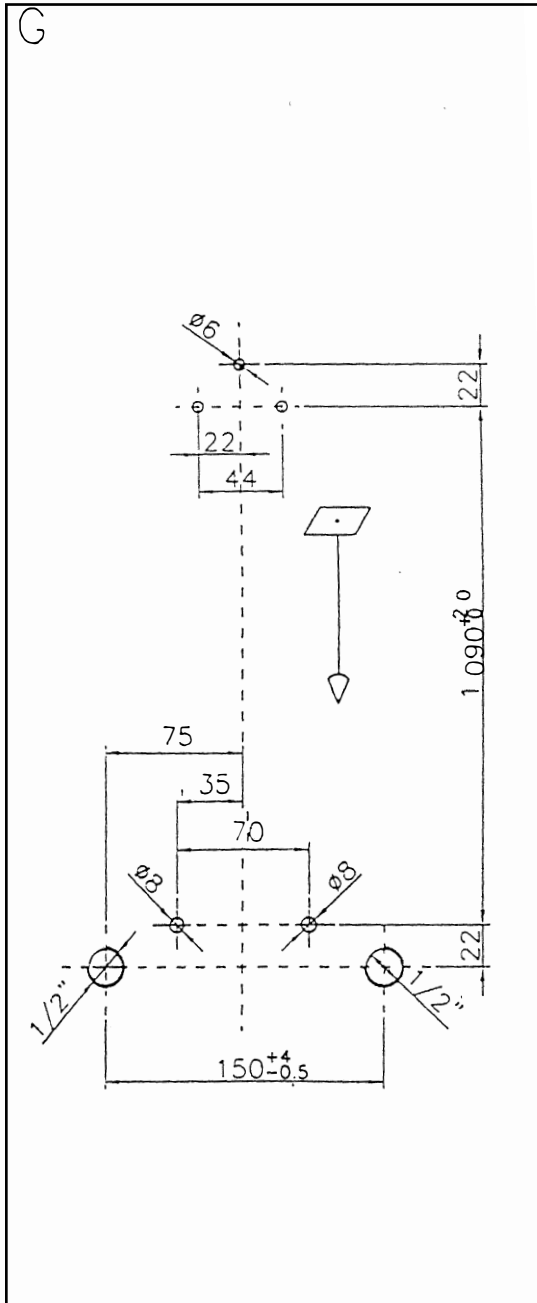
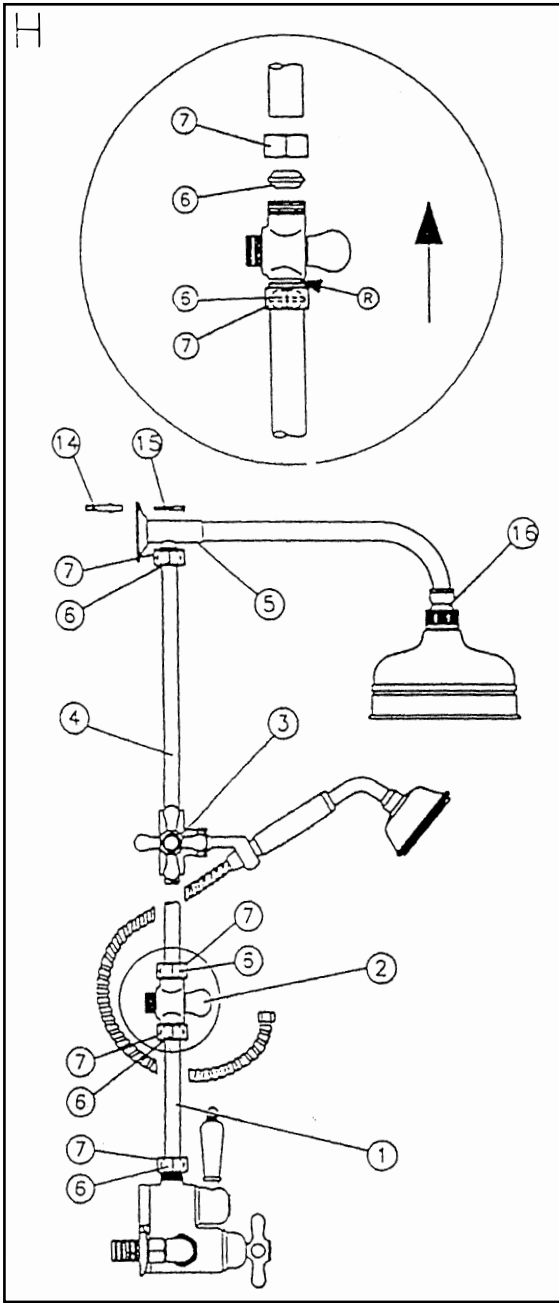
If water pours out from the mixer even when the handle is in "OFF" position, that means that the open/close headwork has to be replaced. Proceed as follows:

1. Shut off water supply to both inlets.
2. Remove the screw cover (4), unscrew the fixing screw (5) and remove the handle (6).
3. With a 17mm wrench, unscrew and remove the headwork (7).
4. Show your supplier the old headwork and ask for a new one of the same kind.

### SURFACE CLEANING

For surface cleaning of the Valve use water and soap only, and dry with a soft cloth. Any other cleaning product may damage the surface, and will render the guarantee invalid.

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**VERSION II**

After drilling the holes into the wall ( see scheme G ) and setting the Mixer in the right position ( see paragraph " Installation " ), proceed with the fitting of the shower set ( see schema H ).

1. Place the union nut (7) and the compression olive (6) on the short tube (1) with diverter (2).
2. Insert the tube into the outlet of the valve and screw the union nut.
3. Fit the sliding support of the shower (3) on the long tube (4).
4. Insert the union nut (7) and the compression olives (6) into the long tube (4).
5. Insert the tube (4) into the diverter (2) and insert the union nut too (7)
6. Insert the Shower arm (5) into the long tube (4)
7. Screw the union nut (7) by hand
8. Fix the Shower arm (5) with the screws (15) and expanders (14) supplied
9. Screw the union nuts (7) by using a wrench, set the diverter (2) with the knob and the outlet parallel to the wall, in order to connect the shower flexible hose correctly.
10. Screw the ball joint (16) onto the shower arm (5), after inserting the gasket and afterwards screw the shower head into the ball joint.