

# **Ceratherm 60 Exposed Thermostatic Bar Shower Mixers**



# INSTALLATION INSTRUCTIONS







A6935AA Ceratherm 60 Exposed Thermostatic Bar

Shower Mixer – supplied without wall mounts.

A6936AA Ceratherm 60 Exposed Thermostatic Bar

Shower Mixer – supplied with fast fix wall mounts.

#### **IMPORTANT**

BEFORE CONNECTION, FLUSH WATER THROUGH PIPEWORK TO REMOVE ALL DEBRIS ETC. WHICH COULD DAMAGE THE VALVE MECHANISMS

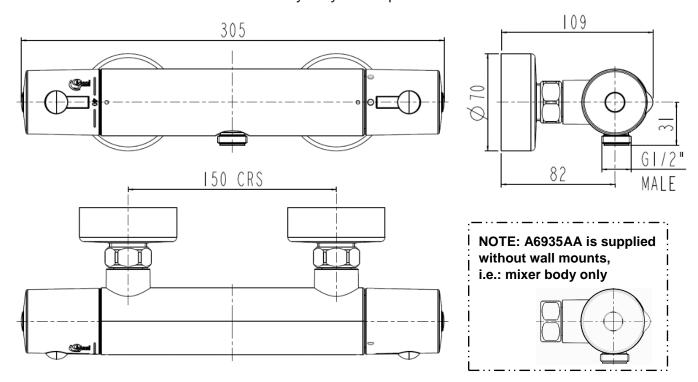
INSTALLER: After installation, please pass this instruction booklet to user

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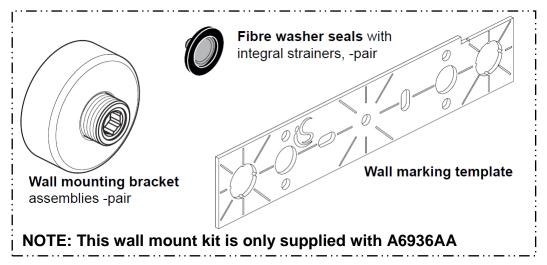
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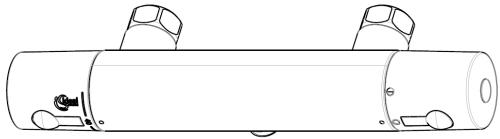
#### 1. PRODUCT DIMENSIONS: A6935AA & A6936AA

Dimensions are in millimetres & may vary within permitted tolerances



#### 2. PRODUCT BOX CONTENTS: A6935AA & A6936AA





NOTE: A6935AA is supplied without wall mounts, as shown here. A6936AA includes the wall mount kit shown above.

**Ceratherm 60 Exposed Thermostatic Bar Shower Mixer Body** 

**Note:** These shower mixers are supplied **without** a shower kit, therefore end user should select a suitable kit.

#### 3. INTRODUCTION

The fittings covered by these instructions should be installed in accordance with the Water Regulations published in 1999\*.

Ideal Standard strongly recommends that these fittings are installed by a professional fitter.

\*A guide to the Water Supply (Water Fittings) Regulations 1999 and the Water Byelaws 2000, Scotland is published by WRAS (Water Regulations Advisory Scheme) Unit 13, Willow Road, Pen-y-Fan Industrial Estate, Crumlin, Gwent, NP11 4EG. ISBN 0-9539708-0-9

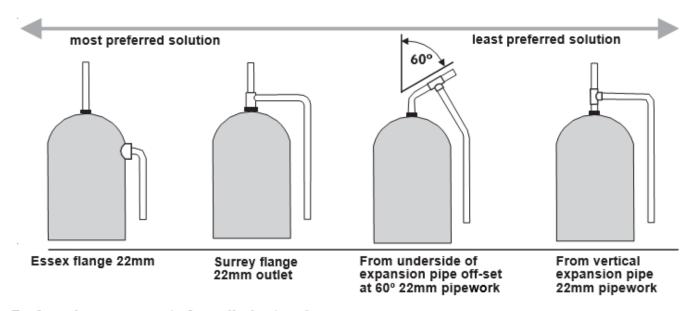
#### WATER REGULATIONS

Hot and cold water supply pressures must be reasonably balanced and from a common source - both from storage or both from a supply pipe. (IRN 101). The mixers will function within specification on unequal pressures up to a ratio of 5:1, but it is not recommended that the cold supply be connected to the rising main and hot to the tank fed supply as the pressure differential is likely to exceed the 5:1 ratio. (See table 1) The minimum pressure for correct operation is 1.0 bar. Pressure head is measured as the vertical distance between the bottom of the cold water storage tank which feeds the hot water system and the highest point on the shower spray plate. When installing with a shower pump the use of a secondary tapping from the cylinder is highly recommended.

The picture below shows the various methods of connecting the hot water pipe to the cylinder - the most preferred on the left and the least preferred on the right.

The fitting should be so installed as to be readily accessible for examination, repair, replacement or operation. (IRN 111).

The temperature of the hot water must not exceed 85°C but the installer's attention is drawn to code of practice BS 6700 which recommends that stored hot water should normally never exceed 65°C. For correct operation of the valve, a minimum of 55°C is required



#### Preferred arrangements for cylinder tapping

**Note:** If water supply is fed by gravity then supply pressures should be verified to ensure the conditions of use are appropriate for the valve.

In accordance to BSEN1111 the valve has approval for the following application:

A6935AA & A6936AA High pressure HP-S

#### 4. WATER SUPPLY CONDITIONS

#### INTRODUCTION

This thermostatic shower mixer is manufactured to the highest standards & has approval to TMV2. The mixer is intended to be installed on high pressure systems (1.0 bar or greater). The mixer has safety features such as cool body technolgy and temperature limit stop. To make installation easier, fast fix wall mounts are supplied (with A6936AA only). Ø15mm water supply pipes should be installed at 150mm horizontal centres in the wall, behind a shower panel or tiled duct wall.

**Table.1 Conditions of use** 

Operating pressure range:	High Pressure
Maximum static pressure	10 bar
Flow pressure hot and cold	1 to 5.0 bar
Hot supply temperature	55 to 65 °C
Cold supply temperature	5 to 20 °C

#### Note:

Fittings operating outside these conditions cannot be guaranteed by the scheme to operate as **TMV2**Approval only applies when mixer is installed without the flow regulators.

#### MODULATING COMBI BOILER

These thermostatic mixers are designed for use with modulating combination boilers.

When installing on a modulating combination boiler it is sometimes possible for the interaction of a thermostatic valve with the combi to cause the boiler to cut out and cut in again, with the result that the water will become alternatively cold and hot. To overcome this, a 4 L/min flow regulator should be fitted upstream of the thermostatic valve.

flow direction through flow regulator

It should be fitted in any 15mm compression fitting in the dedicated cold supply pipe.

It is important to choose a compression fitting located in a position which is accessible after installation and it must be fitted the correct way round for the direction of flow. The regulator can be fitted in either the inlet or outlet side of the compression fitting. If fitting in an outlet side, ensure the o-ring is seated fully in the visible rebate around the edge of the regulator. Use the tip of a small screwdriver or similar to achieve this. Ensure the tail of the pipe is not fouling the regulator (shorten if required) and do up the compression fitting as normal. In a minority of cases, where the boiler is of a type which stores a small quantity of very hot water, it may also be necessary to fit a 4 l/min flow regulator in the hot supply.

These regulators, spares code A962570NU, can be obtained by contacting Ideal Standard Customer Care or www.idealstandard.co.uk

#### **EXCESSIVE FLOWRATE**

To remedy an excessive flowrate issue, where the above inlet regulators have not been fitted, we recommend the use of a "shower outlet flow regulator". This is suitable for installations which exceed 2 bar dynamic pressure.

A 9 litres per minute outlet regulator is available, quote spares code L6749AA.

This regulator can be easily fitted between the shower valve outlet and the shower hose.

- A pair of service valves (for isolating both water supplies) MUST be fitted to permit future maintenance of this product, **see section 19.** These should be fitted as close as practicable to the water supply inlets of the mixer & in an easily accessible location.
- A6936AA includes mesh filters (strainer-washers) and check valves are fitted inside the inlets of this product, see section 17.
- A6935AA is supplied without the wall mounts so does not include strainer washers or check valves. IT IS ESSENTIAL THE INSTALLER TAKES CARE OF BACK FLOW PREVENTION FOR A6935AA.

#### 5. WATER REGULATIONS

#### CATEGORIES OF RISK

The water regulations published in 1999\* take a new approach to backflow in that they look at different categories of risk. The installer must assess the risk from the various categories of fluid in adjacent appliances before determining the level of backflow protection required for a particular installation. **Figures 3 & 4** describe the protection required in various installations.

#### CATEGORY 3 RISK

Water in a shower tray, basin or bathtub is considered to be a fluid category 3 risk which is a fluid which represents a slight health hazard if it were to find it's way back into the supply pipe. For this reason it must not be possible for any flexible shower head to be able to enter any adjacent washbasin, bath or shower tray unless appropriate protection is employed. (See Figure 3). If it is desired to allow the hand spray to be used inside say a bathtub or a basin it is essential that double check valves be fitted to the inlet on both hot and cold supplies to the thermostatic

valve. Alternatively single check valves can be fitted at the inlets and an additional check valve should be fitted in the valve outlet.

No check valves need be fitted if the hand spray is prevented from reaching closer than 25mm of the spill over level of any such fixture

#### **CATEGORY 5 RISK**

Water in a Sink, WC or Bidet is considered to be a fluid category 5 risk which is a fluid which represents a serious health hazard if it were to find it's way back into the supply pipe. For this reason it must not be possible for any flexible shower head to be able to enter any adjacent Sink, WC or Bidet. If the flexible hose to be fitted could reach into any such vessel, the requirements to the system design are so onerous it is better not to fit a flexible. Rather, a fixed overhead showerhead should be considered. (See Figure 4).

It will also be seen that this risk could change should the hose be taken out of the restraining device or should a longer replacement hose be fitted at a later date. Installers and householders are advised to take account of these factors when fitting replacement hoses.

For pumped applications the pipe supplying the pump must not in addition supply an ascending spray bidet.

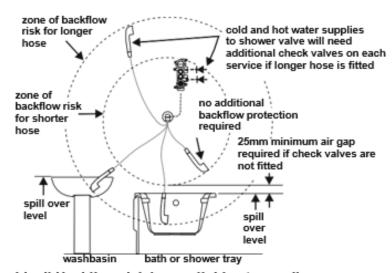


Fig. 3 Backflow risk from a fluid category 3

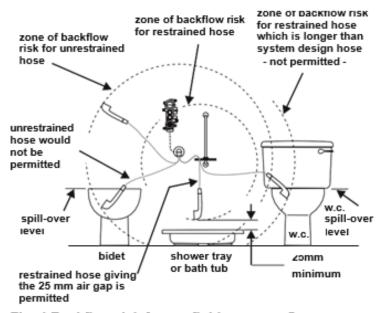


Fig. 4 Backflow risk from a fluid category 5

#### 6. PRE-INSTALLATION NOTES

The thermostatic mixing valve must be installed in such a position that maintenance of the TMV, its valves and the commissioning and testing of the TMV can be undertaken. Ceratherm 60 is an exposed two hole thermostatically controlled shower mixer. This product is designed to provide water from ambient cold up to a safe maximum temperature for bathing.

**Mounting.** Product **A6936AA** is supplied with a pair of wall mount escutcheons. Mixer is intended to be installed on a wall or panel arrangement. **A6935AA** is not supplied with wall mounts

**Flow regulation.** There are no flow regulators fitted inside these products.

**Mesh filters A6936AA only** (strainers) integral to the inlet seals are intended to protect the check valves from water borne debris. These are fitted inside the inlets of the product, **see section 17.** 

**Thermostatic cartridge.** Additional mesh filters (strainers) are fitted to the thermostatic cartridge to protect it from water borne debris, **see section 15.** 

**Product dimensions.** Check the dimensions shown in **section 1**, ensuring the mixer will fit on the intended wall. Plan position of proposed shower kit.

Product box contents. Ensure you have all the parts shown in section 2.

**Service Valves.** A pair of service valves (for isolating both water supplies) MUST be fitted to permit future maintenance of this product. These should be fitted as close as practicable to the water supply inlets of the mixer & in an easily accessible location. Service valves are not supplied with this product, **see section 19.** 

**Shower Kit.** This product is not supplied with a shower kit, a suitable kit should be purchased. The flexible shower hose from a shower kit can be screwed onto the G1/2" shower outlet nipple located on the underside of the mixer body. Ensure adequate steps are taken to secure the shower hand set and the arrangements comply with water regulations.

**Mixer Controls.** The mixers have dual control handles, the left handle allows temperature adjustment of the water, the right handle permits flow control of the mixed water.

**Water Supply Pipes.** Both hot & cold water supply pipes should be securely attached to a wall using suitable fixing clips. Supply pipes must Ø15 to fit inside the A6936AA wall mount brackets.



**DO NOT** apply heat near this product. Heat generated by soldering could damage plastic parts and seals



IMPORTANT: Ensure that any old / existing thermostatic mixing valves (TMVs) that may be fitted in the supply pipes are removed.

#### 7. INSTALLATION A6936AA ONLY

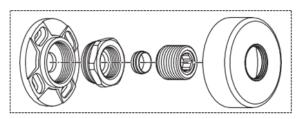


Note: for A6935AA, the installer must use provide suitable wall mount brackets, as these are not supplied with this product.

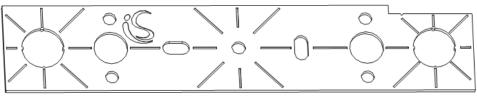


# IMPORTANT BEFORE CONNECTION, FLUSH WATER THROUGH PIPEWORK TO REMOVE ALL DEBRIS ETC. WHICH COULD DAMAGE THE VALVE MECHANISM

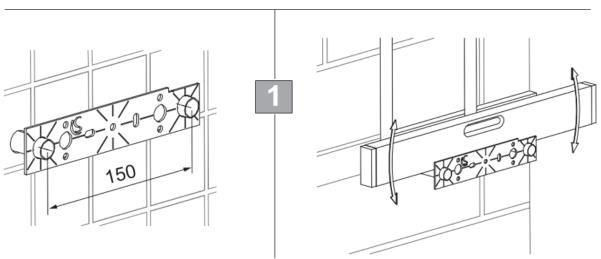
#### WALL MOUNTING BRACKETS FOR A6936AA ONLY



Bracket with Adaptor x2

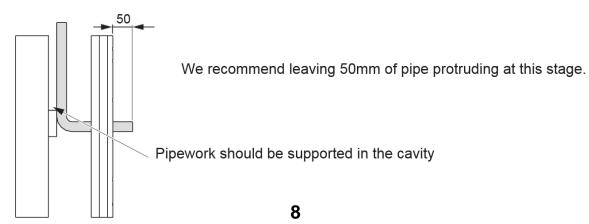


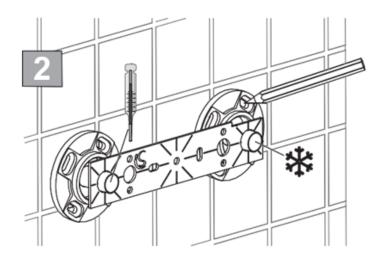
Template x1



Ø15mm copper supply pipes should be run within the wall cavity. Hot supply pipe should be on the left hand side and the cold on the right.

Ensure that the hot and cold pipes are positioned 150mm apart and are level. Use the template provided to obtain the correct spacing.

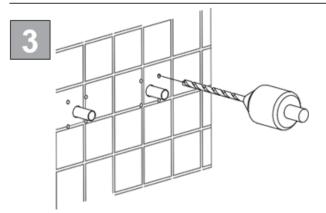




Place the brackets over the exposed pipes and use the template provided to position them 150mm apart.

Mark the hole positions for the fixings onto the mounting surface.

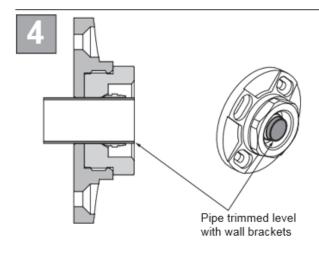
Ensure that the positions of the holes will not result in damage to the pipework inside the wall cavity during drilling.



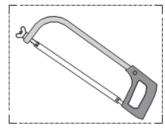
Drill holes appropriate for your choice of fixings into the wall.

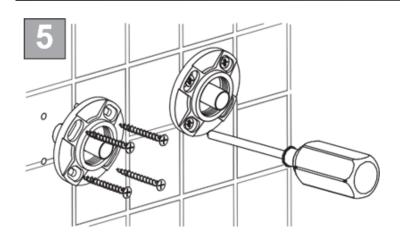
We recommend a minimum of two fixings per bracket diametrically opposed.

Drill carefully to avoid damaging concealed pipework.



The pipes should be trimmed level to the wall bracket. If using a pipe cutter it will be necessary to mark the pipes and then remove the bracket before trimming to its correct length.



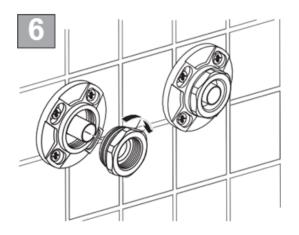


Apply a smear of silicone sealant to the rear of the assembled brackets and push them over the pipework.

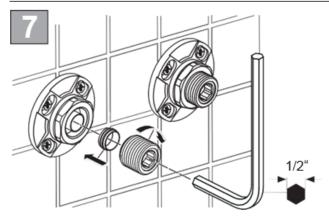
Screw both brackets to the wall.

The template can be used to check that the correct pipe spacing of 150mm has been maintained.

Clean off excess sealant and flush the pipes to remove any trapped debris.

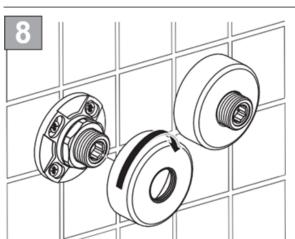


Screw the brass adaptors over the pipes into the plastic brackets. 36mm A/F Spanner flats are provided, hand tightness is adequate.



Fit the olives to the pipes prior to screwing the two 3/4" connectors into the wall mount plate using a 1/2" allen key. The connectors will have to be securely screwed in to form the necessary compression joint between the olive, wall plate and connector.

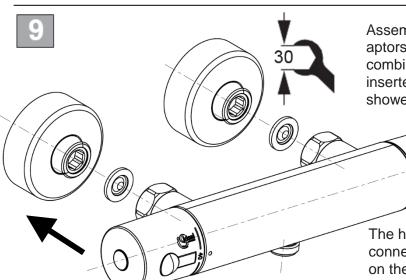
Retain the brass adaptors with a spanner when making the compression joints.



NOTE FOR IRELAND: 15mm olives are supplied with this product. Use 1/2" olives if 1/2" supply pipes are fitted.

When the sealant has set, fit the covers by screwing them onto the adaptors until they are flush with the wall.

The covers only need to be hand tight.

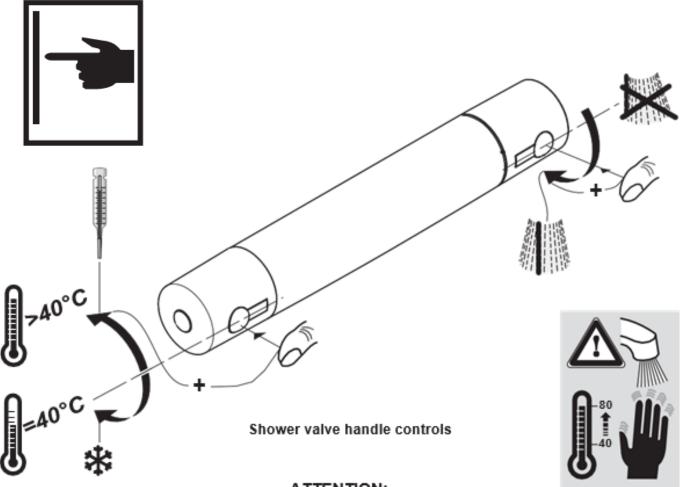


Assemble the shower valve to the adaptors remembering to ensure that the combined sealing washers/ filters are inserted between the adaptors and the shower valve inlets.

The hose from the shower kit should be connected to the shower outlet located on the underside mixer body. Ensure hose seal is in place.

Turn on the water supplies, ensure that there are no leaks. The installation is complete.

#### 8. OPERATING THE MIXER



ATTENTION: TEMPERATURES HIGHER 40°C CAN BE HARMFUL TO YOUR HEALTH.

#### Right handle controls water flow rate.

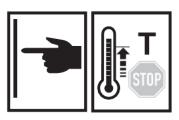
- This handle is shown above parked in the off position.
- Rotating this handle downwards commences water flow. By rotating the handle 90° from the off position the user will encounter economy flow "stop" delivering about 50% of the maximum flow rate achievable through this product.
- To obtain greater flow rate, press the right button and rotate this handle further downwards.
   The handle will rotate a further 90° from the economy stop to the maximum flow.

#### Left handle controls water temperature.

- This handle is shown above parked in the 40°C temperature "stop" position.
- At this temperature "stop" position mixed water is delivered up-to about 40°C.
- To obtain cooler water rotate handle downwards.
- · To obtain higher water temperature, press the left button and then rotate this handle upwards.

DO NOT FORCE HANDLES BEYOND THE DESCRIBED MOVEMENT RANGES OTHERWISE THIS MAY RESULT IN DAMAGE TO BOTH VALVES AND HANDLES.

#### 9. MAXIMUM TEMPERATURE STOP

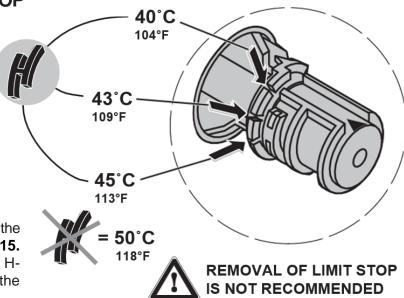


The water temperature up to the parked position on the handle is set at 40°C. The maxium mixed water temperature is factory set at 43°C.

To change this temperature remove the temperature control handle see section 15. Remove the temperature limit stop (black Hshaped plasic part) and reinsert it in the appropirate recess on the handle carrier.

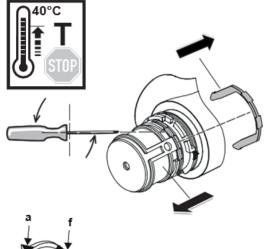
Four different settings are possible: 40°C, 43°C, 45°C & 50°C

At last refit the temperature handle again.



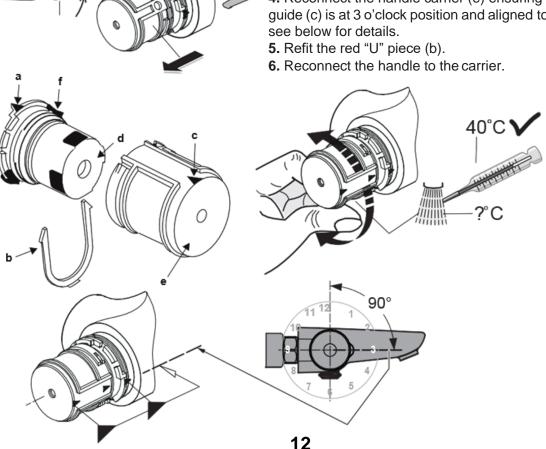
IMPORTANT NOTE: Settings of 45°C & 50°C are not recommended for showering. See section 11 for safe & comfortable bathing temperatures.

#### 10. CALIBRATION OF THERMOSTAT



In the event of the thermostatic cartridge requiring recalibration the following procedure should under-taken:

- 1. Remove temperature control handle, see section 15.
- 2. Slide out the red "U" piece (b) exposing temperature control mechanism (d).
- 3. Turn on the shower, position a thermometer in the running water and when the temperature settles rotate the temperature control mechanism until 40°C is achieved.
- 4. Reconnect the handle carrier (e) ensuring the arrow quide (c) is at 3 o'clock position and aligned to marker (a)



#### 11. COMMISSIONING & PERIODIC CHECKS

The following procedures should be carried out after installation and every 12 months after to ensure that the valve is functioning correctly.

#### Check that:

- The application of the thermostatic valve matches the approved designation.
- 2. The supply pressures are within the recommended range for the application.
- The supply temperatures are within the permitted range for the application and comply with the guidance for prevention of Legionella.
- The mixed temperature is as required for the application.

#### Record:

- 5. Each hot and cold supply. (Make a note of the measuring device used).
- The mixed water temperature at the outlet device.

#### Isolate:

7. The cold supply to the mixing valve and record the mixed water temperature after about 5 seconds. The temperature should not exceed the value given in table (2) below.

Table 2 A guide to maximum temperature sets

Application	Mixed water temperature	Permitted maximum temperature rise during site testing
Shower	41°C	43°C

**Note:** 46°C is the maximum mixed water temperature from a bath tap. The maximum temperature takes account of the allowable temperature tolerances inherent thermostatic mixing valves and temperature loss in metal baths. **It is not a safe bathing temperature for adults and children.** 

The British Burns Association recommends 37°C-37.5°C as a comfortable bathing temperature for Children.

In premises covered by the Care Standards Act 2000, the maximum mixed water temperature is 43°C

#### 12. FREQUENCY OF REGULAR SERVICING

The purpose of servicing regularly is to monitor the performance of changes in system and valve set up. This may require the need to adjust either the supply system or the valve. The product should be checked and tested 12 months after commissioning.

Firstly measure the water temperature at the shower outlet.

Carry out the cold water supply isolation test by isolating the cold water supply to the TMV, wait for 5 seconds if water is still flowing check that the temperature is below 46C. If there is no significant change to the set outlet temperature (+/-2°C or less change from the original settings) and the fail-safe shut off is functioning, then the valve is working correctly and no further service work is required.

#### Notes:

A residual flow is permitted during the commissioning or the annual verification (cold water supply isolation test), then this is acceptable providing the water temperature is no more than 2°C above the designated outlet temperature.

Temperature readings should be taken at the normal flow rate after allowing for the system to stabilize.

The sensing part of the thermometer probe must be fully submerged in the water that is to be tested.

Any TMV that has been adjusted or serviced must be re-commissioned and retested in accordance with the instructions detailed above.

#### 13. MAINTENANCE NOTES

The fitting of isolation valves and strainers is required as close as is practicable to the water supply inlets of the thermostatic mixing valve. The thermostatic cartridge seldom fails and the possibility of blocked filters should be investigated before contemplating replacing it. Small particles of debris may still find their way past the strainers and onto the filter screens on the thermostatic cartridge. These should be cleaned and re-fitted. See section on cartridge replacement.

#### THERMOSTATIC CARTRIDGE AGEING

Following many years of normal service you may notice the following:

- 1. The need to carry out more frequent adjustment of mixed temperature.
- 2. The thermostatic element may not pass the CWI test.

These issues could be due to the ageing of the thermostat which loses some expansion capability over time.

These are the principle objectives of testing, as they serve to indicate to maintenance staff the declining performance capability of the thermostatic cartridge.

For this reason the audit testing flow chart highlights that 2nd Instance CWI test failure or 2nd instance mixed deviation even with stable 'as commissioned' supply conditions and correct inlet supply  $\Delta t$ 's, is potentially the first indication of the need to replace the cartridge.

#### HANDY MAINTENANCE TIPS



Here are a few handy tips which may be helpful when dismantling the mixer for maintenance or repair:

- · Isolate both HOT & COLD water supplies first. Use inline service valves if fitted.
- •Fully open the flow handle, to confirm water is switched off. Unscrew the shower hose from the underside of the mixer. This will permit trapped water to drain down & release water pressure from the outlet.
- •To access cartridges, it will be necessary to remove handles first.
- Use correct size tools. Avoid damaging chromed surfaces, use a strap wrench if possible.
- When unscrewing cartridges, expect some trapped water to escape from the mixer body.
- · Wash all parts (strainer meshes etc....) in clean water before re-assembly.
- Ensure parts are re-assembled in the correct 'reverse' sequence.
- Observe torque settings, where specified.
- Restore both water supplies. Refit shower hose.
- · Check all joints for leaks upon completion.

Finally, run water through the mixer for a few seconds to purge-out any trapped air.

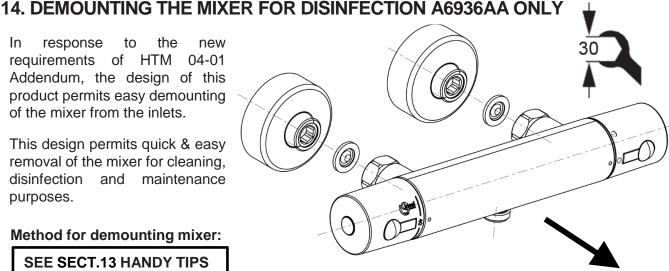
#### response to the In new requirements of HTM 04-01 Addendum, the design of this product permits easy demounting

of the mixer from the inlets.

This design permits quick & easy removal of the mixer for cleaning, disinfection and maintenance purposes.



#### **SEE SECT.13 HANDY TIPS**



- 1. Isolate the hot and cold water supplies using the inline service valves (see section 19). Operate flow handle to confirm water supplies are closed off.
- 2. Undo the two securing nuts located at the rear of the mixer (see fig above). (Take care not to lose the two mesh washers).
  - 3. Lift the mixer body off from the wall mount brackets, by gently pulling away as shown. Expect a little trapped water to escape.
- 4. The mixer body can be further dismantled for cleaning protocols. Do not leave the wall mount brackets uncovered for long periods, protect from environmental contamination.
  - 5. To refit the mixer body; reverse this procedure. Tighten the nuts at the rear of the mixer securely.

Take care to avoid damaging the inlet seals. See section 20 for replacements mesh seals.

#### Disinfection method

Disinfection by full immersion in an appropriate bactericidal solution is recommended for this assembly. Prior to immersion, the mixer body should be clean and dismantled to a level that prevents air locking.

The level of dismantling should be established as a result of practice and will be largely dependent upon the water quality and service life. As a minimum we recommend removal both handles, thermostatic cartridge & flow-control cartridge. Cleaning the cartridge strainer screens is important. All components can be immersed together unassembled.

Disinfected mixers should be promptly replaced or stored using an appropriate method until required.

#### Disinfection frequency

The frequency of such disinfection actions will be derived from regular sampling carried out under the regime of the Responsible Person (Water). We would not expect to need greater than 6 monthly frequencies, hopefully considerably less.

The need for excessive use of this procedure would be indicative of the need for some root cause analysis as there could be some system or behavioural problems that need addressing.

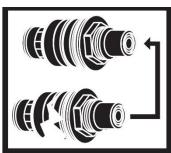
#### **Recommended Disinfection Solutions**

For immersion we recommend the use of a 70% Ethanol solution for 10 minutes.

NB: counter intuitively, greater than recommended concentrations are less effective not more effective; take care to get the recommended concentration in line with the manufactures recommendation.

#### 15. THERMOSTATIC CARTRIDGE REPLACEMENT



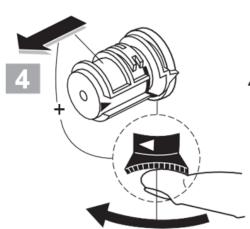


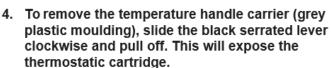
This thermostatic cartridge is protected from water borne debris by mesh filter screens. These should be checked and cleaned before contemplating replacing the cartridge.

To replace the thermostatic cartridge: (REMEMBER TO TURN OFF WATER SUPPLIES)

#### **SEE SECT.13 HANDY TIPS**

- 1. Prise out the index button.
- 2. Remove handle screw.
- 3. Pull off the temperature control handle.





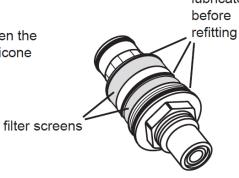
Unscrew cartridge with 24mm A/F spanner and replace if necessary.

ENSURE PARTS ARE REASSEMBLED IN THE CORRECT SEQUENCE.



o-rings lubricate before

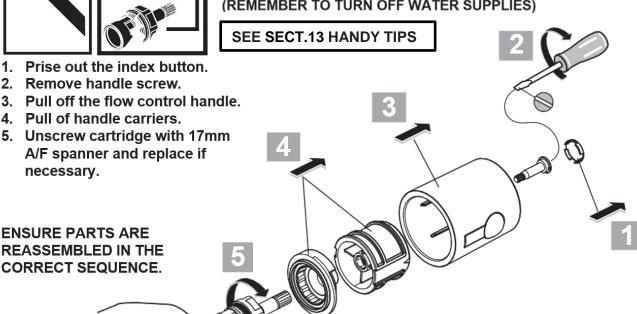
To clean the screens remove the o-rings shown The screens will then slide off. When clean replace the screens then the o-rings which should be lightly greased with a WRAS approved silicone grease (e.g. Klueber Unisilikon GBU2).



#### 16. FLOW CARTRIDGE REPLACEMENT



To replace the flow control cartridge: (REMEMBER TO TURN OFF WATER SUPPLIES)



#### 17. CHECK VALVES REPLACEMENT - A6936AA ONLY





To replace the check valves cartridges: (REMEMBER TO TURN OFF WATER SUPPLIES)

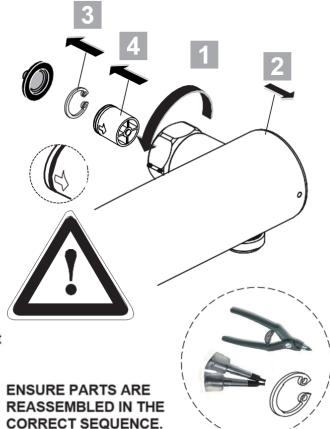
#### **SEE SECT.13 HANDY TIPS**

- Seperate the shower valve from the wall bracket by undoing the captive nuts. See Section 14. Use 30mm A/F spanner.
- Remove shower valve from wall, and keep sealing washers safe.
- 3. The check valves are housed inside the retaining inserts within the inlet bores.

  Looking closely at the rear of the product, note circlips hold the check valves in place.

  Using circlip pliers, squeeze the circlip & lift it away from the bore.
- 4. Gently pull out the check valves:
  check & clean or replace if necessary.
  Observe the flow direction arrow on the body
  of the check valve. Refit the circlips.

  ENSURE PARTS ARE
  REASSEMBLED IN THE
  CORRECT SEQUENCE.



**IMPORTANT:** Although the check valves can be replaced, they **must not be removed** completely. Do not operate the mixer without BOTH the check valves correctly fitted.

#### 18. COLD WATER ISOLATION (CWI) TEST

CWI test is a guide to showing the performance of the thermostat. Prior to CWI test

- Make sure that the Black H Clip is positioned in the 40°C slot on the temperature adjustment carrier (see section 9) Remove temperature handle to check. If this has been removed then the fail-safe will not work.
- Make sure the supply temperatures are within the ranges 55 to 65°C for hot, & 5 to 20°C for cold. To perform a CWI test:
- Turn the product on using the flow handle, override the 50% economy flow stop on the handle & rotate handle to max, giving 100% flow.
- The temperature handle button should be positioned at the front (parked at the 40°C nominal stop).
- 1. Record the steady state temperature of both hot and cold water supplies. Note the  $\Delta t$ .
- 2. Record the temperature of the mixed water at the outlet (preferably unscrew the shower hand set) should be within range 40±1°C.
- 3. Isolate the cold water supply

If the flow ceases, CWI test passed. An ongoing reduced fine flow of water (pencil stream) from the mixed water outlet is also acceptable as a pass.

Restore the cold supply & recheck the temperature at the mixed water outlet once stabilised.

If the flow has not reduced, the product has failed the CWI test. Product requires maintenance, cartridge should be removed, cleaned & retested.

Additionally, clean all filters, ensure check valves are working, and make sure all isolating valves are fully open.

NOTE: In order to isolate the cold water & to perform the CWI test, service valves must be fitted (as close as practicable to the mixer's inlets).

Volumetric guidance in the case of "ongoing reduced discharge of water" during CWI test

Acceptance criteria is as follows, isolate the cold water supply then:

- 1) Collect the water discharged from the shower outlet for 5 seconds.
- 2) Continue to collect the water discharged from the shower outlet in a second vessel for a further period of 30 seconds.

The volume collected in the first period of 5 s shall not exceed 200 ml.

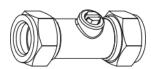
The volume collected in the second period of 30 s shall not exceed an additional 300 ml.

After restoration of the cold water supply (30 s) the mixed water outlet temperature shall not differ by more than 2°C from the initial set mixed water temperature.

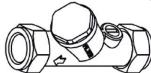
#### 19. INLINE SERVICE VALVES

Inline service valves (not supplied with this product) MUST be fitted to permit future maintenance of the cartridges. It also facilitates the cold water isolation test.

These should be fitted as close as is practicable to the water supply inlets of the thermostatic shower valve. Service valves should be installed in an easily accessible location.



Basic valve with isolating only feature is available under spares code **S9005AA**.
15mm compression fittings at both ends & plated finish.



**E960086NU.** Brass valve with isolating & filter only features. 15mm compression fittings at both ends. Supplied in pairs.

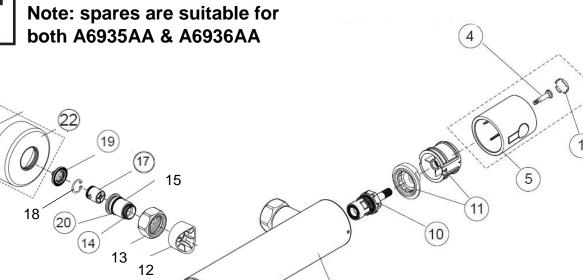


Spares code **E960613NU** contains a pair of combined service valves. Include a flow regulator, check valve, strainer mesh (filter) & isolating valve. The flow regulator and check valve can be removed if not required.

Service valve can be purchased by contacting Customer Care or www.idealstandard.co.uk

## **20. SPARE PARTS**

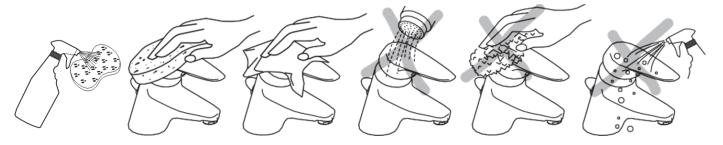




Pos.	Description	Part- Number	Qty.
1	Cap for handle	A 962 361 LJ	1 Set
2	Screw Ejot PT KB50x10		
3	Handle for Temperature	A 861 006 AA	1 Set
4	Screw M4 L=23,5	A 962 998 NU	2 pcs
5	Handle for Volume control	A 861 005 AA	1 Set
6	Temp. adjustment compl.	A 963 427 NU	1 Set
7	Thermostatic Cartridge	A 962 229 NU	1 pcs
8	Repair-Set Cartridge	A 962 230 NU	1 Set
9	Body for Shower		
10	Headwork ( Cartridge )	A 963 400 NU	1 pcs
11	Handle insert + stopring	A 963 432 NU	1 Set
12	Escutcheon		
13	Coupling nut G3/4 - SW30		
14	O - Ring Ø 14 x 1,78	A 962 605 NU	2 pcs

Pos.	Description	Part- Number	Qty.
15	Seat M17 x 1 left thread		
17 18	Check valve DW15 Circlip	N 042 977 NU	1 pcs
19 20 21	Strainer (screen) O-ring Ø17x2 Nipple complete	A 962 595 NU A 961 810 NU A 963 651 NU	2 pcs 2 pcs 1 Set
22 23	Escutcheon Wall mount complete	B 960 242 AA B 961 042 AA	1 pcs

#### 21. CLEANING CHROME SURFACES





When cleaning chromed products use only a mild detergent, rinse & wipe dry with a soft cloth. Ideally clean after each use to maintain appearance.

Never use abrasive, scouring powders or scrapers. Never use cleaning agents containing alcohol, ammonia, hydrochloric acid, sulphuric acid, nitric acid, phosphoric acid or organic solvents. Use of incorrect cleaning products / methods may result in chrome damage which is not covered by the manufacturer's guarantee.

For more information about our products & spares visit our website:

## www.idealstandard.co.uk



CUSTOMER CARE HELP LINE **0870 129 6085**CUSTOMER CARE FAX **01482 499611** 

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