

unichrome

TRITON

SEVERN (Built-in)

Thermostatic concentric mixer shower



THAMES (Built-in)

Thermostatic concentric mixer shower



Installation and Operating Instructions

INSTALLERS PLEASE NOTE THESE INSTRUCTIONS ARE TO BE LEFT WITH THE USER

CONTENTS	Page
Introduction	1
Safety warnings	1
Main components	2
Site requirements	3
Typical suitable installations	4 - 5
Getting started	6
Siting of the shower	6
Installation – general	6 - 7
Building in depth	8
Solid wall, hollow wall and panel mounting	8 - 9
Fitting the bulkhead pipework	10
Leak testing	10
Making good	10
Fitting the face plate	11
Bulkhead assembly	11
Fitting the riser rail	12 - 13
Commissioning	14
Adjusting the maximum temperature setting	14
Adjusting the sprayhead	15 - 16
Spare parts	17
Fault finding	18 - 19
Guarantee, service policy, etc.	rear cover



INTRODUCTION

This book contains all the necessary fitting and operating instructions for your Triton Severn or Thames concentric mixer shower. Please read them carefully. Read through the whole of this book before beginning your installation.

The shower installation must be carried out by a suitably competent person and in sequence of this instruction book.

Care taken during the installation will ensure a long and trouble free life from your shower.

For optimum performance within the specified running pressure range a minimum flow of 8 litres per minute should be available to both inlets.

The mixer shower MUST NOT be subjected to water temperatures above 80°C. This mixer shower is designed for use with traditional low pressure 'gravity' water systems, using a cold water cistern and hot water cylinder as well as for the higher pressure systems found in the U.K. up to a maximum of 5 bar running pressure.

Important: When installing this mixer with a combi boiler or multipoint water heaters, the supplied flow limiters must be installed in the inlet elbows.

This mixer shower is suitable for fully modulating type combination boilers and multipoint hot water heaters. Also suitable for thermal storage, unvented systems and pumped gravity systems.

Important: Before installing with a gas instantaneous water heater, ensure it is capable of delivering hot water at a minimum switch-on flow rate of 3 litres per minute. At flow rates between 3 and 8 litres per minute, the appliance must be capable of raising the water temperature to a minimum of 52°C. Water temperature at the mixer inlet must remain relatively constant when flowrate adjustments are made (*refer to the water heater operating manual to confirm compatibility with this mixer shower*).

This mixer shower is supplied with an integral large area filter in each inlet elbow. Inlet connections are by compression fittings for 15mm copper pipe.

SAFETY WARNINGS

- a** Layout and sizing of pipework must be such that when other services are used, pressures at the shower control inlets do not fall below the recommended minimum.
- b** DO NOT choose a position where the shower could become frozen.
- c** DO NOT connect this mixer shower to any form of tap or fitting not recommended by the manufacturer.
- d** The sprayhead must be regularly cleaned to remove scale and debris.
- e** Conveniently situated isolating valves in each inlet supply must be fitted as an independent method of isolating the shower should maintenance or servicing be necessary.
- f** If it is intended to operate the shower in areas of hard water (above 200 ppm temporary hardness), a scale inhibitor may have to be fitted. For advice on the Triton scale inhibitor, please contact Customer Service.
- g** Do not operate the shower outside the guidelines as laid out in 'site requirements'.

Replacement parts can be ordered from Triton Customer Service. See 'spare parts' for details and part numbers.

Due to continuous improvement and updating, specification may be altered without prior notice.

To ensure the product suitability for commercial and multiple installations, please contact Triton's specification advisory service prior to installation.

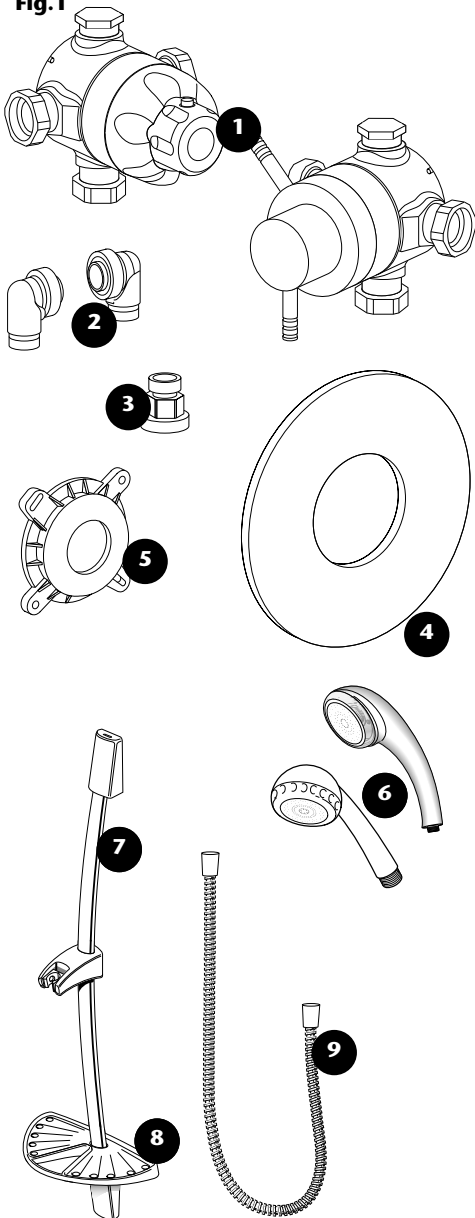
Telephone: (024) 7632 5491

Facsimile: (024) 7632 4564

E mail: technical@triton.plc.uk

MAIN COMPONENTS

Fig.1



- 1** Mixer shower body
- 2** Inlet elbow
 - Flow limiters (HP systems only)
 - Spacer
 - Water filter
- 3** Outlet pipe connector
- 4** Face plate
- 5** Fixing bracket
- 6** Sprayhead
- 7** Riser rail kit
- 8** Soap dish
- 9** Shower hose
 - Sprayplate key
 - Lengthened fitting
 - Bulkhead fitting

SITE REQUIREMENTS

The installation must be in accordance with Water Regulations and Byelaws.

Running water pressure:

- Gravity fed – 0.1 bar min.
1.0 bar max.
- Mains fed – 1.0 bar min.
5.0 bar max.

Maximum static water pressure:

- Gravity and mains – 10 bar

DO NOT connect the mixer shower to a gravity hot supply and a mains cold supply (or vice versa).

For optimum performance within the specified running pressure range a minimum flow of eight litres per minute should be available to both inlets.

While the mixer shower is operational (open outlet), inlet pressures must not be capable of exceeding 7 bar. For effective operation of the internal seals, the maximum static pressure must not be exceeded.

NOTE: On sites where the running pressure is above 5 bar, the use of a suitably sized pressure reducing valve fitted in the cold mains supply pipework can provide nominally equal pressures at the mixer shower.

The pipework should be installed such that the flow is not significantly affected by other taps and appliances being operated elsewhere on the premises.

NOTE: Where thermal store systems and instantaneous gas water heaters are used, if excessive draw offs take place the boiler may not be able to maintain an adequate output temperature. This could result in the shower temperature becoming noticeably cooler.

Water temperature requirements

Maximum hot water temperature = 80°C

Recommended maximum = 65°C

Minimum hot water temperature = 52°C

Maximum cold water temperature = 20°C

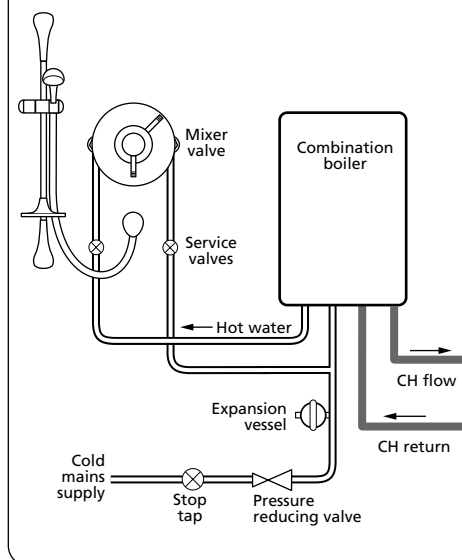
BS6700 recommends that the temperature of stored water should never exceed 65°C.

A stored water temperature of 60°C is considered sufficient to meet all normal requirements and will minimise the effects of scale in hard water areas.

Temperature adjustment range

The mixed water temperature can be adjusted from cold through to a top limit which must be pre-set during installation with full anti-scald protection throughout the range (35°C to 40°C) providing the hot water temperature at the inlet remains 10°C above the outlet temperature.

Fig.2 (diagrammatic view – not to scale)



TYPICAL SUITABLE INSTALLATIONS

a) Instantaneous gas-heated systems, e.g. combination boilers (fig.2).

The shower control must be installed with a multipoint gas water heater or combination boiler of a fully modulating design (i.e. to maintain relatively stable hot water temperatures).

A drop tight pressure reducing valve must be fitted if the supply pressures exceed 5 bar running.

An expansion vessel, shown in (fig.2), MUST be fitted, and regularly maintained, to ensure the shower mixer is not damaged by excess pressures. This may already be installed within the boiler (check with manufacturer) and is in addition to the normally larger central heating expansion vessel.

The layout and sizing of pipework MUST be such that nominally equal inlet supply pressures are achieved and the effects of other draw-offs are minimised. The hot supply temperature MUST remain a minimum of 10°C hotter than the required blend temperature for optimum performance.

b) Unvented mains pressure systems (fig.3).

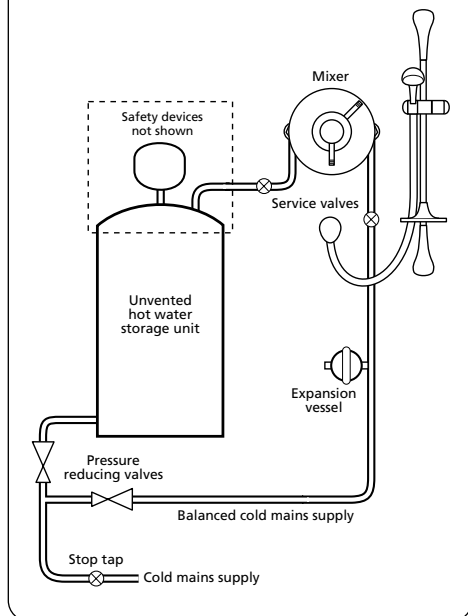
The shower control can be installed with an unvented, stored hot water cylinder.

For systems with no cold water take off after the appliance reducing valve, it will be necessary to fit an additional drop tight pressure reducing valve when the mains pressure is over 5 bar. The drop tight pressure reducing valve must be set at the same value as the unvented package pressure reducing valve.

NOTE: An additional expansion vessel (fig.3) may be required if a second pressure reducing valve is installed. This does not apply to packages with a cold take off after the pressure reducing valve to the cylinder.

The layout and sizing of pipework MUST be such that nominally equal inlet supply pressures are achieved and the effects of other draw-offs are minimised.

Fig.3 (diagrammatic view – not to scale)



c) Mains pressurised thermal store systems (fig.4).

Packages of this type, fitted with a tempering valve (blender valve) can be used. A drop tight pressure reducing valve must be fitted if the supply pressures exceed 5 bar running.

An expansion vessel, shown in **(fig.4)**, MUST be fitted, and regularly maintained, to ensure the unit is not damaged by excess pressures. This may already be installed externally or internally within the thermal store (check with thermal store manufacturer).

d) Gravity fed systems (fig.5).

The shower control MUST be fed from a cold water cistern and hot water cylinder providing nominally equal pressures. There must be a minimum of one metre head of water. The minimum head distance is measured from the base of the cold water cistern to top of the shower head.

e) Pumped gravity fed systems (fig.6).

The shower control can be used with a gravity fed system in conjunction with a pump to boost pressures as shown **(fig.6)**.

Fig.4 (diagrammatic view – not to scale)

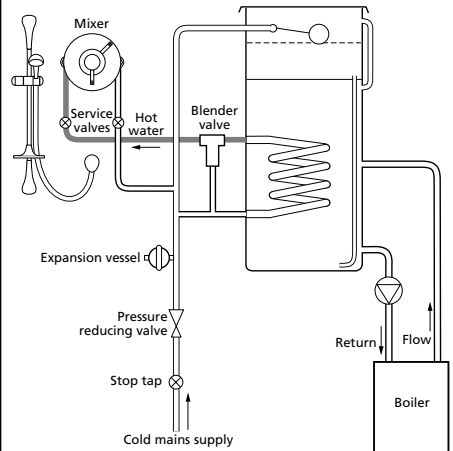


Fig.5 (diagrammatic view – not to scale)

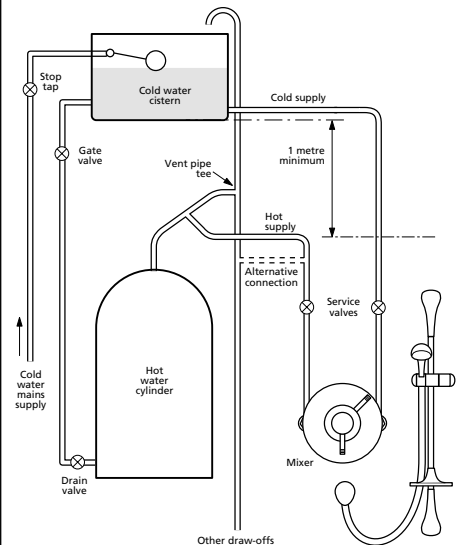


Fig.6 (diagrammatic view - not to scale)

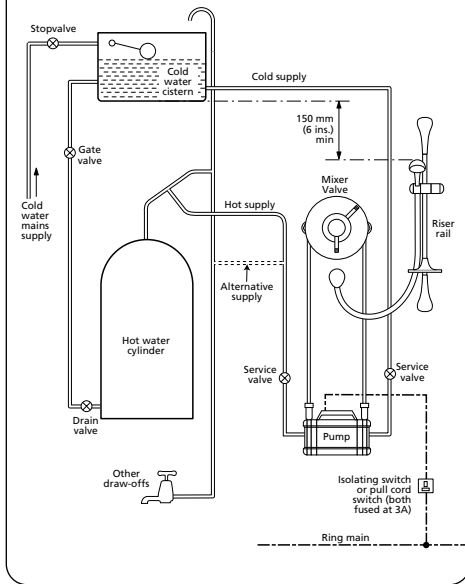
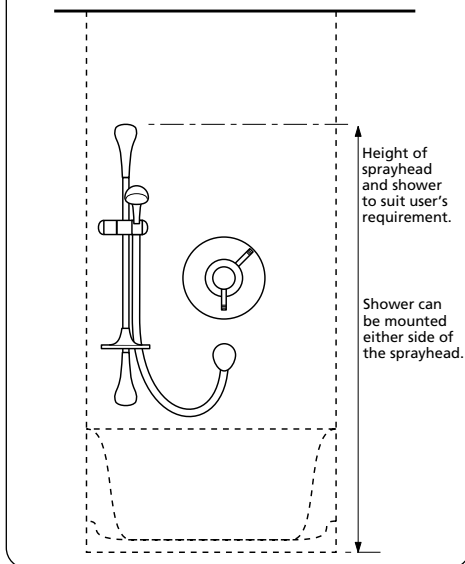


Fig.7 (diagrammatic view – not to scale)



GETTING STARTED

Check the contents to ensure all parts are present.

Before commencing the installation, ensure all the apertures on the mixer are carefully covered to prevent ingress of any debris etc. The mixer body is supplied with caps in the inlet and outlet apertures. It is advised that these are left in place during building work, etc. and removed only when the final connection is required.

The hot and cold water pipes should not be permanently attached to the wall closer than 2m from the mixer prior to installation to allow final adjustment of the mixer unit position.

SITING OF THE SHOWER

WARNING: THE SHOWER MUST NOT BE POSITIONED WHERE IT WILL BE SUBJECT TO FREEZING CONDITIONS.

Refer to **fig.7** for correct siting of the shower.

Position the shower and sprayhead on the wall so that all controls can be comfortably reached whilst using the shower. The sprayhead and riser rail can be positioned either side of the shower.

It is advised to position the bulkhead about 150mm to 250mm below the mixer and in line with the outlet port. When planning the bulkhead position, ensure the hose will not restrict the full vertical movement of the sprayhead on the riser rail.

Important: The hot entry port is on the left side of the mixer body (**fig.8**) marked in red.

INSTALLATION

General conditions

NOTE: The outlet of the shower must not be connected to anything other than the hose and sprayhead supplied.

DO NOT use jointing compounds on any pipe fittings for the installation.

Use only the compression fittings supplied.

DO NOT solder fittings within the vicinity of the mixer unit as heat transfer can damage the seals

and thermostatic components.

NOTE: Suitable isolating valves (complying with Water Regulations and Byelaws) **MUST** be fitted on the hot and cold water supplies to the shower as an independent means of isolating the water supplies should maintenance or servicing be necessary.

When connecting pipework avoid using tight 90° elbows. Swept or formed bends will ensure optimum performance.

Important: The water circuit should be installed such that the flow is not significantly affected by other taps and appliances being operated elsewhere on the premises. Water pressure must not fall below specification of the shower.

Hot water pipe entry must be made to the left-hand side inlet.

Important: The inlet elbows contain filters that may become blocked if debris is not flushed through prior to fitting.

The inlet elbows allow for either rising, falling or rear entry hot and cold water supplies. The elbows have water filter inserts, complete with seals (**fig.9**), and do not require PTFE tape or other means of sealing.

High Pressure Systems

If installing the mixer with a combi boiler or multipoint water heater, the two flow limiters supplied **MUST** be inserted into the inlet elbows. To fit, insert the flow limiter and washer into the mixer body inlet (**fig.10**). Carefully screw the elbow in place, ensuring that the water filter is fitted correctly.

Instantaneous Gas Water Heaters

In order to ensure the optimum performance from the shower when connected to an instantaneous water heater, the appliance must be capable of raising the temperature of the incoming water to a minimum of 52°C (125°F) and delivering a flow rate of not less than eight litres per minute.

With the flow limiters fitted and when the system is in use, the on/off flow control should be turned fully anti-clockwise to full flow setting.

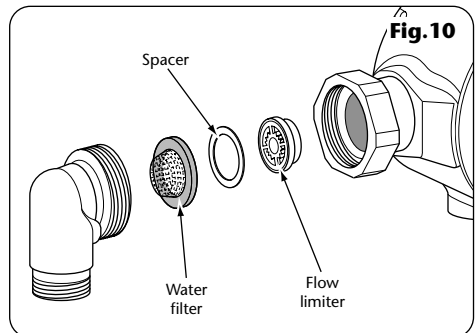
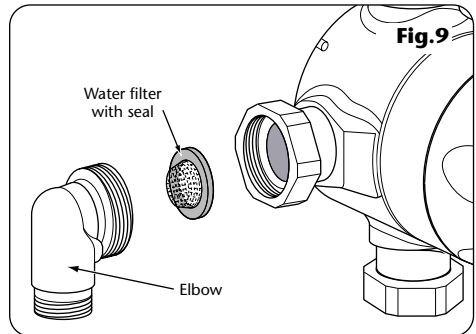
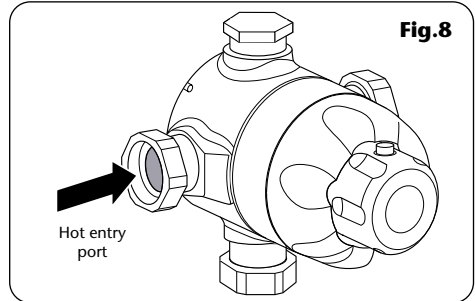
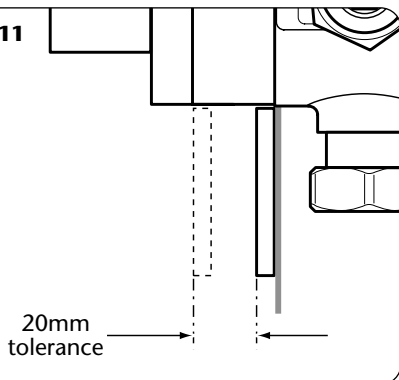


Fig.11



BUILDING IN DEPTH

The allowance for varying thicknesses of tiles up to 10mm is accommodated by the front trim plate (**fig 11**). The maximum tolerance between the trim plate and mixer body is 20mm.

The following are typical thicknesses and are given as a guide only:

Tile	6 - 10mm
Adhesive	2 - 3mm
Plasterboard	9.5 - 12.5mm
Plaster finish	2 - 3mm

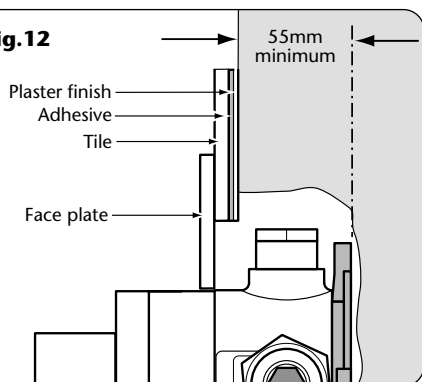
Maximum tile thickness to be 10mm.

When installing into a stud partition or other hollow wall structure, the installer may wish to consider fabricating rear supports or other options for fitting the fixing bracket. Such options are beyond the scope of this guide.

Use the supplied tiling shroud as a template when cutting the aperture for installing the shower into a solid wall, stud partition or hollow wall structure.

If using the fixing bracket in a solid wall (**fig.12**), ensure the available building in depth is at least 55mm measured from the face of the wall upon which the mounting bracket is screwed.

Fig.12



SOLID WALL, HOLLOW WALL AND PANEL MOUNTING

The building in depth for the fixing bracket is typically 55mm from plaster finish but this is dependant upon tile and adhesive thicknesses.

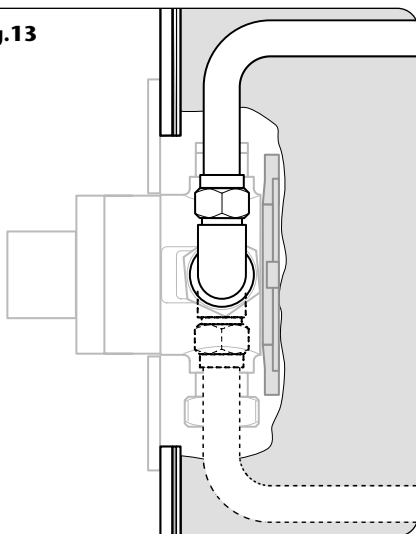
Decide upon the shower position and determine whether the hot and cold water supplies will enter from the top (falling), bottom (rising) or rear.

NOTE: For the rear entry supplies, in order to access the inlet elbow compression fitting (**fig.13**), it is advisable to have the pipework rising or falling from the elbows before routing to the rear.

Using the template supplied, mark the hole outline position onto the wall.

Remove the plaster and brickwork (or plasterboard) to the depth required and chase out the additional areas of wall to facilitate

Fig.13



incoming pipework and access to the mixer and the outlet pipework to the bulkhead.

The final separation between pipe centres needs to be 160mm (**fig.14**).

Offer the fixing bracket up to the wall.

Centralise and mark the four holes. Drill and plug the holes using the wall plugs provided (the wallplugs provided are suitable for most brick walls – use an appropriate masonry drill, but if the wall is plasterboard or a soft building block, use special wallplugs and an appropriate drill bit obtainable from most hardware stores).

TIP: When drilling tiles, use a slow speed and not a hammer action. Stick masking tape on the tile to prevent the drill bit wandering.

IT IS PREFERABLE TO FLUSH THE PIPEWORK (fig.15) TO CLEAR THE SYSTEM OF DEBRIS AND CHECK FOR LEAKS BEFORE CONNECTING TO THE MIXER.

Important: The inlet elbows contain water filters that may become blocked if debris is not flushed through prior to fitting.

Remove the plugs from the mixer valve inlets and outlet. Fit the outlet adaptor for connection to the bulkhead.

Make sure the inlet elbows are facing the correct way. Offer the mixer up to the fixing bracket, fit and secure using the grub screws provided.

Complete the pipework to the mixer valve marking off the length to enter the elbows.

NOTE: Sufficient free play must be left in the pipework to allow withdrawal from the compression fittings.

DO NOT secure the incoming pipes within one metre of the shower mixer.

Remove the mixer and cut the pipes to length.

Refit the mixer to the fixing bracket and pipework. Tighten the inlet nuts and valve body grub screws.

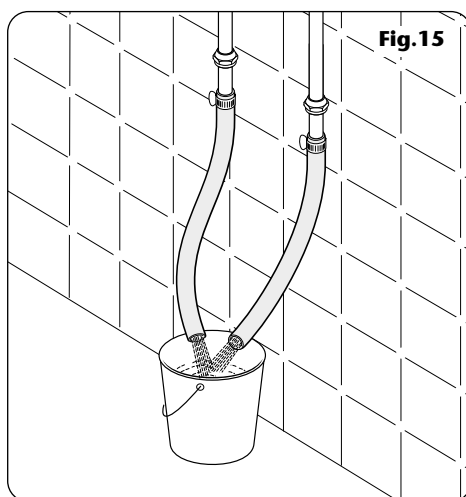
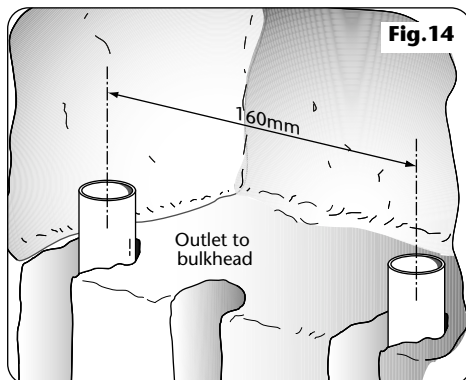


Fig.16

Appropriate fitting

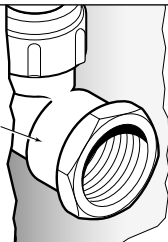
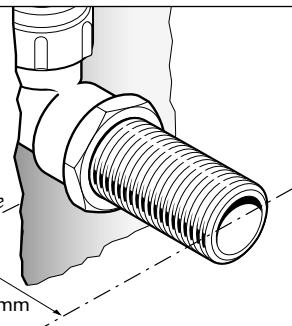


Fig.17

Finished surface

8mm - 13mm



FITTING THE BULKHEAD PIPEWORK

Complete the outlet pipework ending in a 15mm x 1/2" BSP female thread elbow (**fig.16**).

NOTE: This fitting is not supplied as variations in installations necessitate a selection of an appropriate solder or compression fitting.

Screw the supplied male-thread connector into the female fitting (**fig.17**) using PTFE tape to ensure a watertight joint.

The threaded connector should protrude from the finished wall surface between 8mm and 13mm.

LEAK TESTING

Fit a hose to the bulkhead threaded connector and direct it to waste.

Turn the flow control fully clockwise to close it. Open the isolating valves to the shower. Open the flow control by turning fully anti-clockwise and flush through.

Turn the temperature control fully anti-clockwise (HOT) and then fully clockwise (COLD).

Turn the flow control fully clockwise to close off the water supply.

Check for any leaks and remedy if necessary.

TURN OFF the water supplies.

MAKING GOOD

Place the tiling shroud over the shower mixer and secure temporarily. Make good the incoming and outlet pipe channelling and around the bulkhead outlet. Plaster or tile up to the edge of the shroud.

NOTE: The tiles must be accurately cut to match the profile of the shroud. The outer cover will then accurately seal the hole, and enable the mixer unit to be removed from the mounting bracket without the need to break any tiles.

Ensure the grout lines are flush with the tiles in order to provide a smooth sealing surface for the outer cover. When complete, remove the tiling shroud.

FITTING THE FACE PLATE

Fit the face plate over the protruding controls and slide tight to the wall. Ensure the seal in the aperture stays in place as it slides over the valve body. A smear of liquid soap on the seal will ease this procedure.

The face plate incorporates a silicon sponge backing that seals against a smooth wall.

On the **Thames** model remove the control levers before attempting to fit the face plate. Refit once the face plate is in place.

BULKHEAD ASSEMBLY

Screw the bulkhead elbow to the bulkhead body with the three screws supplied.

Screw the completed assembly onto the threaded connector temporarily to mark the position of the two fixing holes (**fig.18**) for securing the bulkhead to the wall.

NOTE: If screw thread protrudes too far out of the wall, it can be cut to the correct length using a hacksaw.

Unscrew and remove the bulkhead assembly. Check the location of the pipe in the wall before drilling. Drill and plug the holes using the wall plugs supplied.

(The wallplugs provided are suitable for most brick walls – use an appropriate masonry drill, but if the wall is plasterboard or soft building block, you must use special wallplugs and an appropriate drill bit obtainable from most hardware stores).

If fitting to a hollow wall structure, it may be preferable to secure the bulkhead by applying a bead of silicon seal to the back of the bulkhead.

Apply PTFE tape to the threaded connector.

Screw the bulkhead assembly onto the threaded connector until tight to the wall and the two fixing holes are aligned. Secure to the wall with the two screws supplied (**fig.19**).

Finally, finish by clipping the cover onto the bulkhead ensuring the protruding legs locate in the bulkhead body.

At this point, refer to the 'commissioning procedure' in order to establish the correct maximum shower temperature.

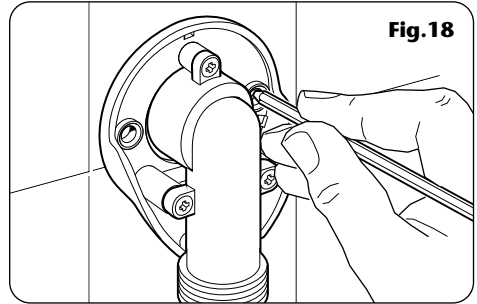


Fig.18

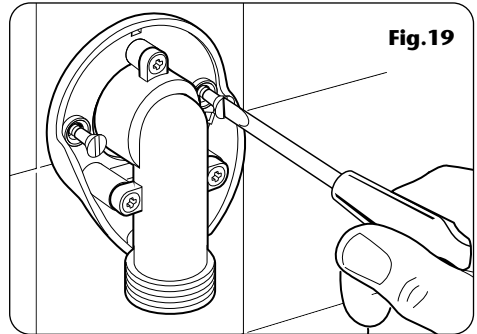


Fig.19

Fig.20

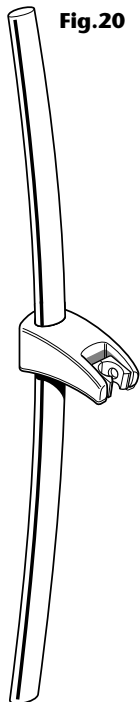


Fig.21

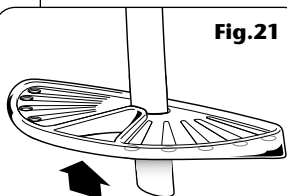


Fig.22

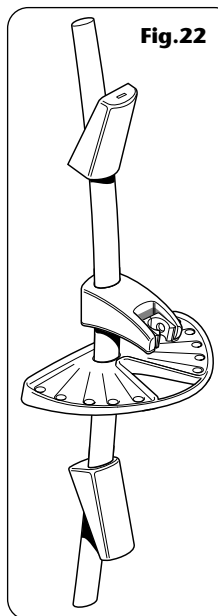


Fig.24

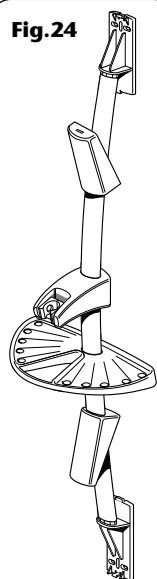
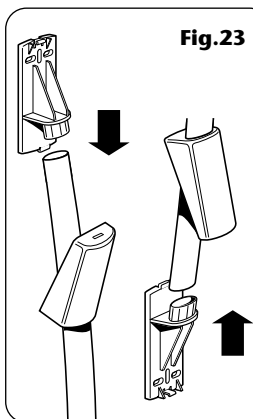


Fig.23



FITTING THE RISER RAIL

WARNING: Check there are no hidden cables or pipes before drilling holes for wall plugs. Use great care when using power tools near water. The use of a residual current device (RCD) is recommended.

Decide the position for the rail on the wall within the shower area. Proceed as follows: The sprayhead holder is supplied already attached to the riser rail unit and the angle of the holder dictates the rail top and bottom. The correct orientation of the rail is when the sprayhead holder is sloping **DOWN (fig.20)**.

Slide the supplied soap dish onto the riser rail below the sprayhead holder **(fig.21)**.

Slide the top and bottom finishing trims onto the riser rail **(fig.22)**.

Push the two fixing brackets into the ends of the riser rail **(fig.23)**.

Offer the rail assembly to the wall **(fig.24)**. Using the brackets as templates, mark two upper holes and two lower holes. Note there are four provisions for screws per bracket – select the two most suitable for your requirements. Ensure the rail is aligned vertically.

Drill and plug the wall.

(The wallplugs provided are suitable for most brick walls – use an appropriate masonry drill, but if the wall is plasterboard or a soft building block, use special wallplugs and an appropriate drill bit obtainable from most hardware stores).

Screw to the wall with the fixing screws supplied.

Slide the finishing trims onto the brackets. Ensure the lug on each rail bracket end engages into the slot on the fatter end of each trim before push fitting the thinner ends in place (**fig.25**).

To remove a trim, push a small screwdriver or similar through the slot in the trim end and carefully pull away from the wall bracket.

Slide the soap dish down the rail so that its bracket engages on top of the lower finishing trim.

Adjusting the sprayhead holder

The holder is supplied already attached to the rail unit. To adjust the height, press the button underneath the holder to release the locking mechanism (**fig.26**). Still pressing the button, move the holder up or down to suit user's requirement.

Hose and sprayhead

Feed the flexible hose through the soap dish aperture (**fig.27**) so the dish acts as a retaining ring (Water Regulations).

Screw the flexible hose to the bulkhead and sprayhead ensuring the supplied washers are in place at both ends of the flexible hose (**fig.28**).

Place the sprayhead into the holder and check that it fits correctly (**fig.29**).

Important: It is the conical end of the hose which grips into the holder. The sprayhead will not fit in the holder without the hose attached.

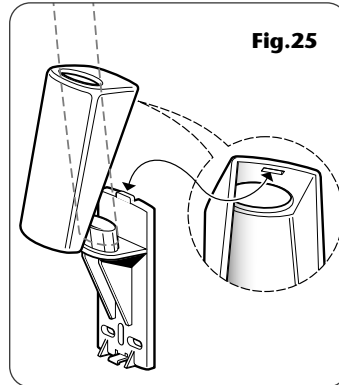


Fig.25

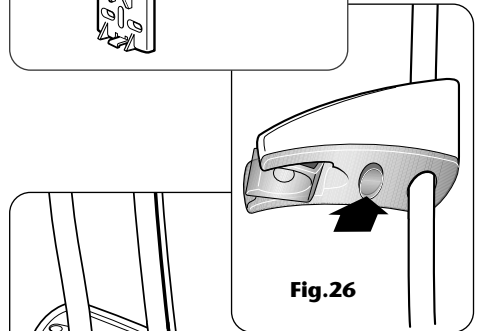


Fig.26

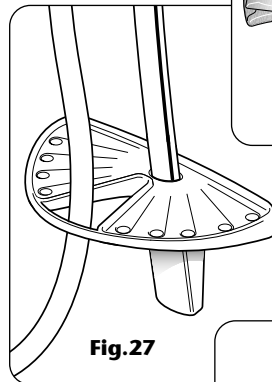


Fig.27

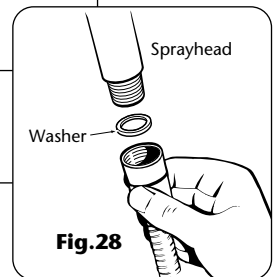


Fig.28

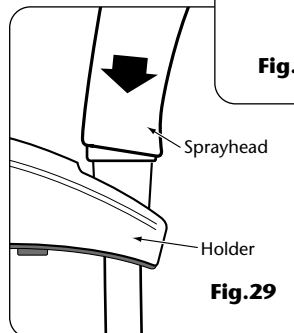


Fig.29

COMMISSIONING

Ensure that all supply pipework has been flushed through prior to commissioning.

Ensure that both hot and cold water supplies are fully open and at (or near to) their design temperature and pressures are within the requirements as stated.

Make sure the temperature control is at the maximum temperature setting, i.e. rotated fully anti-clockwise and ensure the sprayhead is directed to waste.

Start the water flow by turning the flow control anti-clockwise. Allow the shower to run at the maximum temperature setting until the water temperature has stabilised. Rotate the temperature control knob anti-clockwise until the desired maximum showering temperature is reached.

The mixers have a temperature stop to prevent accidental rotation to higher water temperatures. This is adjustable to provide a maximum temperature of 35°C - 45°C.

ADJUSTING THE MAXIMUM TEMPERATURE SETTING (Thames)

Remove the temperature control by unscrewing the temperature lever and then loosening the grub screws (**fig.30**).

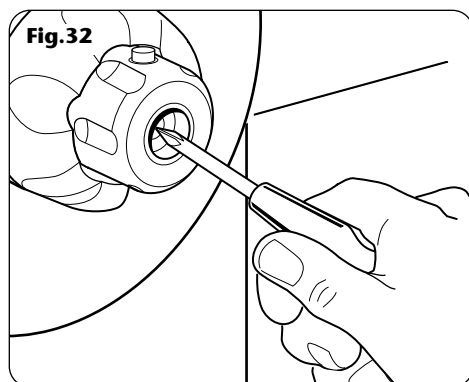
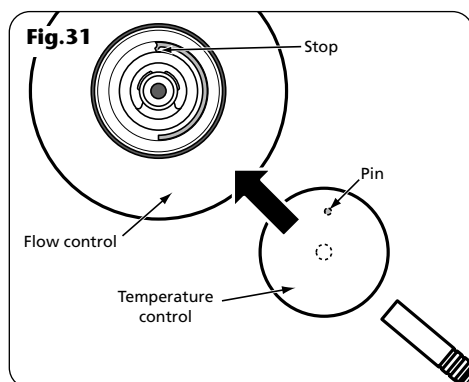
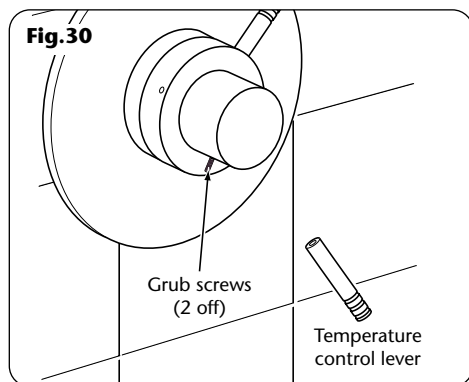
Turn the flow control fully anti-clockwise. With a steady flow running, adjust the temperature valve spindle by hand until the temperature is at the desired setting (turn left for cold and right for warm).

Carefully refit the temperature control so that the pin on the inside of the control butts up to the stop on the valve itself (**fig.31**). Secure with the grub screws and replace the control lever.

ADJUSTING THE MAXIMUM TEMPERATURE SETTING (Severn)

Remove the temperature control by removing the end cap and unscrewing the retaining screw (**fig.32**).

Turn the flow control fully anti-clockwise. With a steady flow running, adjust the spindle on the temperature valve by hand until the temperature is at the desired setting (clockwise for cooler and anti-clockwise for hotter).



When you are satisfied with the temperature turn the flow control off. Refit the temperature control, ensuring the temperature stop aligns to the 12 O'clock position. Secure with the screw and replace the end cap.

The **Severn** mixer valve is fitted with a maximum temperature stop set at 38°C.

ADJUSTING THE SPRAYHEAD (Thames)

Four sprayhead patterns are available (**fig.33**). Adjustment is by turning the bezel on the sprayhead in either direction until the desired pattern is obtained.

MAXI: A full spray perfect for a relaxing shower.

ULTRA: A focused spray for a refreshing, satisfying shower.

NEEDLE: A tingling, fine spray for a highly invigorating shower.

JET: A concentrated spray for an exhilarating shower.

Cleaning

Do not use abrasive or solvent cleaning fluids. The shower unit, riser rail, hose, etc. should be cleaned using a soft cloth and warm water.

IT IS IMPORTANT TO KEEP THE SPRAYHEAD CLEAN TO MAINTAIN THE PERFORMANCE OF THE SHOWER. The hardness of the water will determine the frequency of cleaning. For example, if the shower is used every day in a very hard water area, it may be necessary to clean the sprayhead on a weekly basis.

Sprayplate removal

There is no need to remove the sprayhead from the hose.

Using the removal tool supplied (**fig.34**), locate the three raised 'bosses' into the three recesses in the sprayplate. Hold in firmly and twist anti-clockwise (**fig.35**). This movement may turn the cartridge assembly as well until it reaches a 'stop'.

Hold the cartridge firmly and continue to twist anti-clockwise. Having loosened the sprayplate sufficiently, it can be unscrewed and removed completely (**fig.36**).

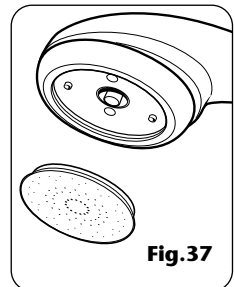
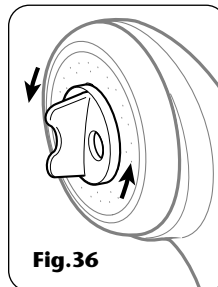
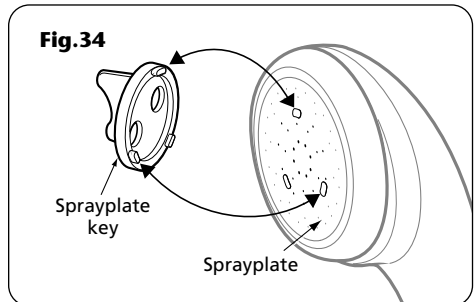
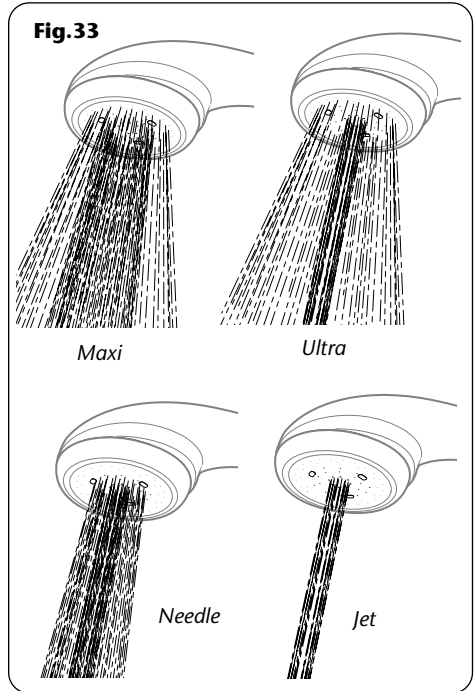
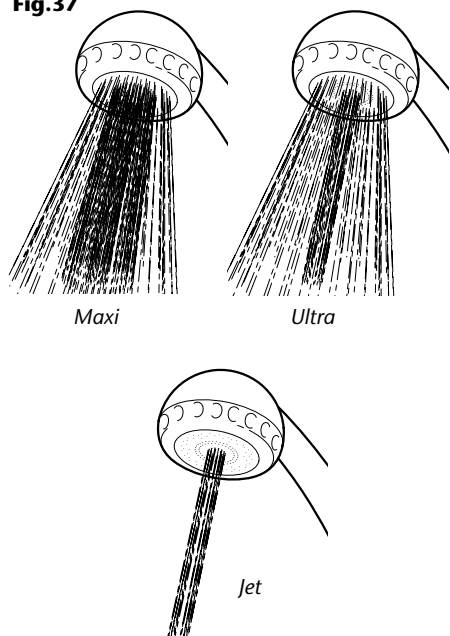


Fig.37



Clean the sprayplate with a suitable brush or preferably leave it to soak overnight in a mild proprietary descalant. Ensure all traces of scale are removed and thoroughly rinse in clean water afterwards.

Refit the sprayplate by screwing clockwise. Use the tool to screw the sprayplate tight.

ADJUSTING THE SPRAYHEAD (Severn)

Three sprayhead patterns are available (**fig.37**). Adjustment is by turning the bezel on the sprayhead in either direction until the desired pattern is obtained.

MAXI: A full spray perfect for a relaxing shower.

ULTRA: A focused spray for a refreshing, satisfying shower.

JET: A concentrated spray for an exhilarating shower.

Cleaning

Do not use abrasive or solvent cleaning fluids. The shower unit, riser rail, hose, etc. should be cleaned using a soft cloth and warm water.

IT IS IMPORTANT TO KEEP THE SPRAYHEAD CLEAN TO MAINTAIN THE PERFORMANCE OF THE SHOWER. The hardness of the water will determine the frequency of cleaning. For example, if the shower is used every day in a very hard water area, it may be necessary to clean the sprayhead on a weekly basis.

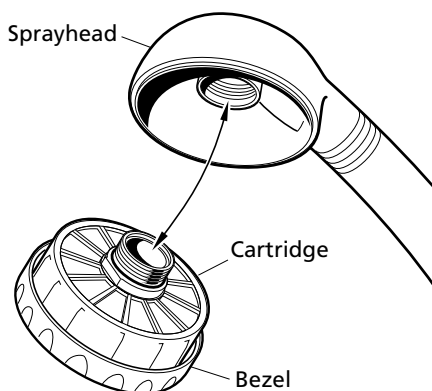
Sprayhead removal procedure

Remove the sprayhead from the hose. Remove the sprayhead cartridge (**fig.38**) by turning the bezel anti-clockwise until a 'stop' is felt. Overcome the 'stop' by continuing to turn anti-clockwise until the cartridge and bezel come out.

Clean the cartridge with a suitable brush or preferably leave to soak overnight in a mild proprietary descalant. Ensure all traces of scale are removed and thoroughly rinse in clean water afterwards.

Refit the cartridge by screwing in clockwise until tight and replace the sprayhead on the hose.

Fig.38



SPARE PARTS

Ref.	Description	Part No.
1	Valve body	83307720
2	Elbow	83307730
3	Slide valve	83307780
4	Upper flange	83307790
5	Outlet connector	83307740

Severn control set

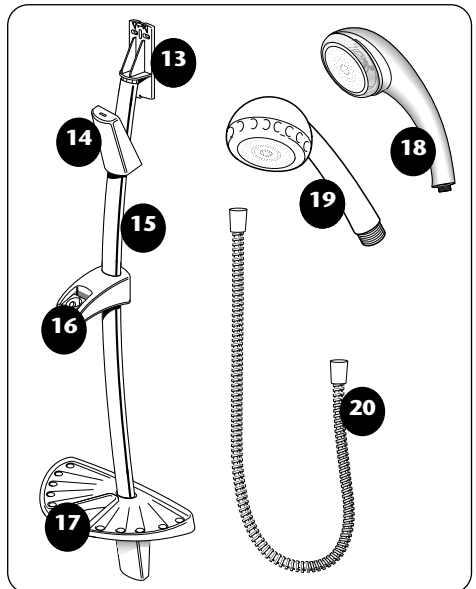
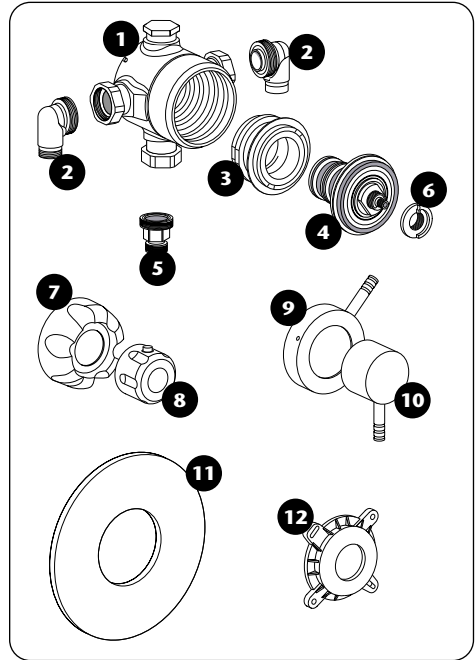
6	Nylon temperature stop	83307800
7	Flow control	83307820
8	Temperature control	83307830
-	Teflon ring	83307810

Thames control set

6	Brass temperature stop	83307840
9	Flow control	83307850
10	Temperature control	83307860
11	Trim plate	83307750
12	Fixing bracket	83307710
-	Flow limiter	22003530

Shower rail kit

13	Brackets (pr)	22010430
14	Trims - Severn	22010440
	- Thames	22010740
15	Riser rail	22010750
16	Sprayhead holder - Severn	22010460
	- Thames	22010730
17	Soap dish	83307240
18	Sprayhead - Severn	22010680
19	Sprayhead - Thames	22410040
20	Shower hose	22003970
-	Bulkhead fitting	85500230
-	Long thread connector	7032915



FAULT FINDING

The following can be carried out by a competent person

<i>Problem/Symptom</i>	<i>Cause</i>	<i>Action/Cure</i>
1 Water too hot.	1.1 Temperature control incorrectly commissioned. 1.2 Not enough cold water flowing through shower. 1.3 Increase in the ambient cold water temperature. 1.4 Cold water supply blocked. 1.5 High volume of cold water drawn off elsewhere.	1.1.1 Refer to commissioning section. 1.2.1 Turn temperature control anti-clockwise. 1.3.1 Turn temperature control anti-clockwise. 1.4.1 Turn shower off and consult a competent plumber or contact Triton Customer Service. 1.5.1 Reduce the simultaneous demand from the mains supply.
2 Water too cold	2.1 Temperature control incorrectly commissioned. 2.2 Not enough hot water flowing through shower. 2.3 Decrease in the ambient cold water temperature. 2.4 Insufficient hot water supplies from the heating system. 2.5 Hot water supply blocked or restricted. 2.6 Flow limiter not fitted (HP systems only).	2.1.1 Refer to commissioning section. 2.2.1 Turn the temperature control clockwise. (Override max. temperature stop if necessary). 2.3.1 Turn the temperature control clockwise. (Override the maximum temperature stop if necessary). 2.4.1 Ensure heating appliance is set to maximum or has sufficient stored hot water. 2.4.2 Ensure heating appliance is igniting by trying a hot water tap elsewhere. 2.5.1 Turn shower off and consult a competent plumber or contact Triton Customer Service. 2.6.1 Fit the supplied flow limiter in the sprayhead (see 'instantaneous gas water heaters' on page 8).
3 High water flow and/or poor performance on a mains fed system.	3.1 Restricters not fitted.	3.1.1 Fit the supplied restricters in the inlet elbows (see 'high pressure systems' on page 7).
4 Water does not flow or shower pattern collapses when another outlet is turned on.	4.1 Water supplies cut off. 4.2 Shower unit blocked. 4.3 Blockage in pipework. 4.4 Sprayhead blocked. 4.5 System not capable of supplying multiple outlets at the same time.	4.1.1 Check water elsewhere in house and if necessary contact local water company. 4.2.1 Inspect the filters. Clean if necessary. 4.3.1 Turn the shower off and consult a suitably competent plumber. 4.4.1 Clean sprayhead. 4.5.1 Reduce the simultaneous demand. 4.5.2 Ensure stop or service valve is fully open. 4.5.3 Check if sufficient water pressure.

FAULT FINDING

The following is recommended for a professional qualified installer only

<i>Problem/Symptom</i>	<i>Cause</i>	<i>Action/Cure</i>
5 Water too cold	5.1 Running pressure in excess of maximum recommended.	5.1.1 Fit a pressure reducing valve.
6 Shower controls noisy whilst in use.	6.1 Running pressure in excess of maximum recommended.	6.1.1 Fit a pressure reducing valve
7 Shower will not shut off	7.1 Pipework not flushed before connecting the unit (seals damaged). 7.2 Worn seals.	7.1.1 Renew flow control seals.

Triton Plc guarantee this product against all mechanical defects arising from faulty workmanship or materials for a period of five years for domestic use only, from the date of purchase, provided that it has been installed by a competent person in full accordance with the installation and operating instructions.

Any part found to be defective during this guarantee period we undertake to repair or replace at our option without charge so long as it has been properly maintained and operated in accordance with the operating instructions, and has not been subject to misuse or damage.

This product must not be taken apart, modified or repaired except by a person authorised by Triton Plc. This guarantee applies only to products installed within the United Kingdom and does not apply to products used commercially.

This guarantee does not affect your statutory rights.

What is not covered:

- 1** Breakdown due to: **a)** use other than domestic use by you or your resident family; **b)** wilful act or neglect; **c)** any malfunction resulting from the incorrect use or quality of gas or water or incorrect setting of controls; **d)** faulty installation.
- 2** Repair costs for damage caused by foreign objects or substances.
- 3** Total loss of the product due to non-availability of parts.
- 4** Compensation for loss of use of the product or consequential loss of any kind.
- 5** Call out charges where no fault has been found with the unit.
- 6** The cost of repair or replacement of sprayheads, hoses, riser rails and/or wall brackets, or any other accessories installed at the same time.
- 7** The cost of routine maintenance, adjustments, overhaul modifications or loss or damage arising therefrom, including the cost of repairing damage, breakdown, malfunction caused by corrosion, furring, pipe scaling, lime scale, system debris or frost.

Service Policy

In the event of a complaint occurring, the following procedure should be followed:

1 Telephone Customer Service on (024) 7637 2222 (08457 626591 in Scotland and in Northern Ireland), having available the model number and power rating of the product, together with the date of purchase.

2 Triton Customer Service will be able to confirm whether the fault can be rectified by either the provision of a replacement part or a site visit from a qualified Triton service engineer.

3 If a service call is required it will be booked and the date of call confirmed. In order to expedite your request, please have your postcode available when booking a service call.

4 It is essential that you or an appointed representative (who must be a person of 18 years of age or more) is present during the service engineer's visit and receipt of purchase is shown.

5 A charge will be made in the event of an aborted service call by you but not by us, or where a call under the terms of guarantee has been booked and the failure is not product related (i.e. scaling and furring, incorrect water pressure, installation faults).

6 If the product is no longer covered by the guarantee, a charge will be made for the site visit and for any parts supplied.

7 Service charges are based on the account being settled when work is complete, the engineer will then request payment for the invoice. If this is not made to the service engineer or settled within ten working days, an administration charge will be added.

Replacement Parts Policy

Availability: It is the policy of Triton to maintain availability of parts for the current range of products for supply after the guarantee has expired. Stocks of spare parts will be maintained for the duration of the product's manufacture and for a period of five years thereafter.

In the event of a spare part not being available a substitute part will be supplied.

Payment: The following payment methods can be used to obtain spare parts:

- 1** By post, pre-payment of pro forma invoice by cheque or money order.
- 2** By telephone, quoting credit card (MasterCard or Visa) details.
- 3** By website order, www.tritonshowers.co.uk

Triton Plc, Shepperton Park, Caldwell Road,
Nuneaton, Warwickshire. CV11 4NR

Customer Service
☎ (024) 7637 2222

Scottish and Northern Ireland
Customer Service
☎ 08457 626591

Trade Installer Hotline
☎ (024) 7632 5491

Fax: (024) 7632 4564

www.tritonshowers.co.uk

E mail: technical@triton.plc.uk