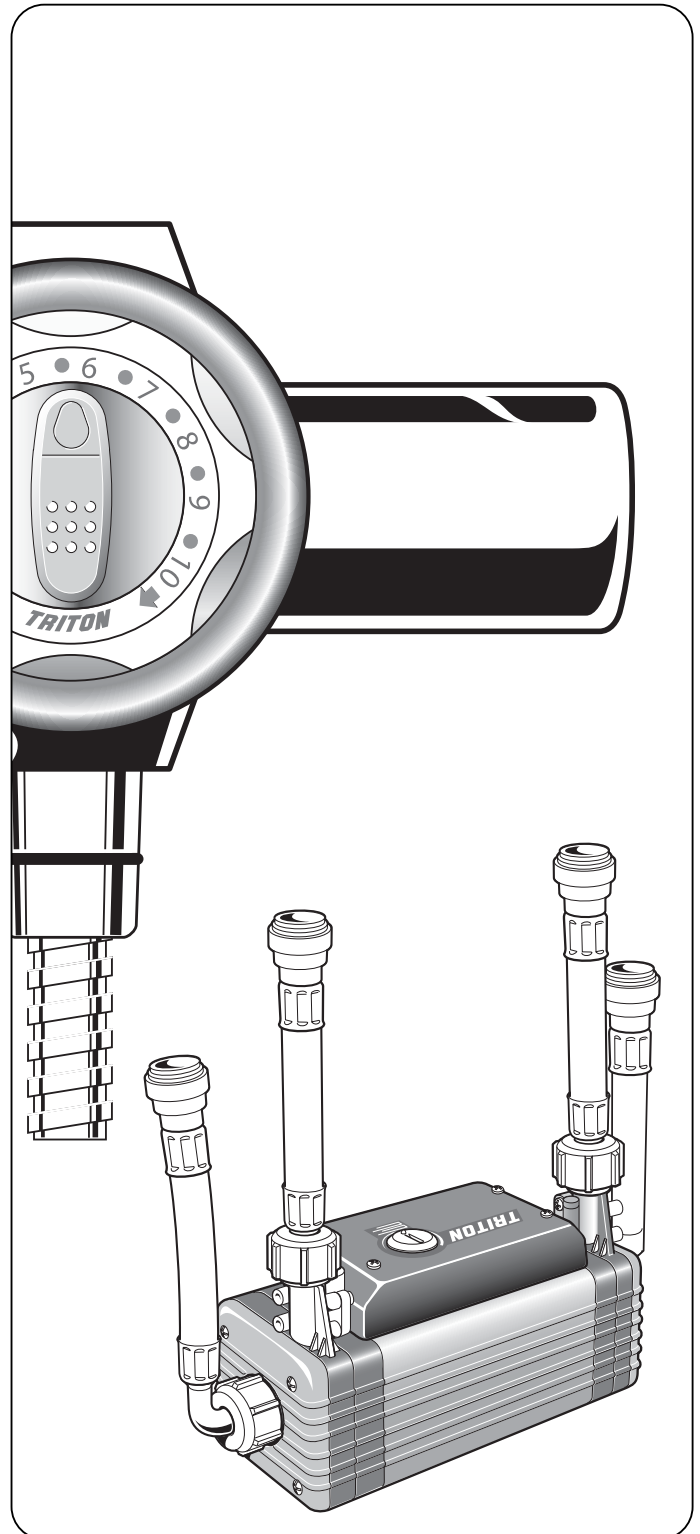


TRITON

***Aquasensation
thermostatic
power shower***



**Installation and
operating
instructions**

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

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

Telephone: (024) 7632 5491

Facsimile: (024) 7632 4564

E mail: technical@triton.plc.uk

1 PLUMBING NOTES

- 1.1** All installations must comply with the Local Water Regulations and Byelaws.
- 1.2** Supply pipes must be flushed thoroughly to clear debris before connecting to the pump and shower (Water Regulations).
- 1.3** DO NOT connect the pump unit to the mains cold water supply as it would damage the unit and also, the installation would be in breach of the guidance notes contained in '1' above.
- 1.4** DO NOT use excessive force when making connections to the flexible connector hoses.
- 1.5** DO NOT turn on the electrical supply to the pump until the plumbing connections and commissioning procedure have been completed. The pump must not be operated dry without water.
- 1.6** DO NOT solder pipes or fittings within 300mm of the pump, as heat transfer can damage the components.
- 1.7** A dedicated cold water supply must be taken directly from the cold water cistern to the pump. This draw-off must be on the opposite side of the cistern to the float operated valve.
- 1.8** The action of the pump is to increase the flow rate. If the supply pipework cannot handle the resulting flow rate then:
 - 1.8.1** The anticipated flow rate may not be achieved.
 - 1.8.2** Air may be drawn into the hot supply from the vent pipe causing spluttering and temperature fluctuations at the sprayhead.
- 1.9** A high level hot feed pipe run will result in air locking and must be avoided.
- 1.10** Standard gate valves MUST be fitted on the hot and cold water supplies to the pump as an independent means of isolating the water supplies should maintenance or servicing be necessary. DO NOT use stop taps or ball-o-fix type valves which restrict flow.

- 1.11** If the pump unit is installed on a common supply which feeds an adjacent tap, the maximum static inlet pressure for the unit will, under certain circumstances be exceeded. The action of closing the tap can cause a pulse in the supply pressure which may result in damage to the unit. This can be resolved by the installation of a suitably sized mini expansion vessel, sited as close as possible to the tap and pressurised to 0.5 bar.

2 ELECTRICAL NOTES

- 2.1** The installation must comply with BS 7671 'Requirements for electrical installations' (IEE wiring regulations) and Electrical Supply Company regulations. Make sure the incoming hot and cold water supplies to the pump are adequately earth bonded.
- 2.2** DO NOT turn on the electrical supply to the pump until the plumbing connections have been completed. The pump must not be operated dry without water.
- 2.3** The mains supply must be 230-240V, at 50Hz, connected to the pump via a double pole switched 3 Amp fused connection unit (not supplied) with a minimum 3mm contact separation gap in each pole.
- 2.4** In accordance with 'The Plugs and Sockets etc. (Safety) Regulations 1994', the pump is intended to be permanently connected to the fixed electrical wiring of the mains system.
- 2.5** Fuses do not give personal protection against electric shock.
- 2.6** It is strongly recommended to fit a 30mA residual current device (RCD). This may be part of the consumer unit or a separate unit.

INTRODUCTION

This book contains all the necessary fitting and operating instructions for your Triton thermostatic mixer shower and twin impeller power shower pump. Please read them carefully.

IMPORTANT: All plumbing connections must be completed before making the electrical connections to the pump.

Please 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 give a long and trouble free life from your shower.

This shower is designed to comply with the thermal performance requirement of BS 1415 part 2.

Thermostatic mixers will automatically maintain your chosen temperature, even if taps are turned on elsewhere in the house, and shut off if either the hot or cold water supply fails.

It will work on the traditional low pressure systems using a cold water cistern and hot water cylinder.

The valve **MUST NOT** be subjected to temperatures in excess of 80°C.

The pump is rated at:

15 minutes on / 60 minutes off.

In the interest of electrical safety a 30mA residual current device (RCD) should be installed in all UK electric and pumped shower circuits. This may be part of the consumer unit or a separate unit.

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 or pump could become frozen. DO NOT use if suspected of being frozen.
- c** The outlet of this appliance **MUST NOT** be connected to any form of tap or fitting not recommended by the manufacturer.
- d** The sprayhead cartridge **MUST** be cleaned regularly to remove scale and debris.
- e** Conveniently situated isolating valves **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.
- g** DO NOT operate the shower outside the guidelines as laid out in '*site requirements*'.
- h** Under no circumstances must the pump be connected to a mains cold water supply. Failure to comply will invalidate the guarantee.
- i** The pump **MUST** be earthed.
- j** Switch off immediately at isolating switch if water ceases to flow during use.
- k** This pump is to be used for providing water to a shower only.

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.

KEY TO MIXER VALVE COMPONENTS (fig.1)

- | | | |
|--------------------------------|---|-----------------------------------|
| 1 Inlet nuts and olives | 9 Temperature knob | 16 Flush mount plate |
| 2 Inlet elbows | 10 Knob trim | 17 Flush mount cover |
| 3 Valve housing | 11 Maximum temperature override button | 18 Trim ring |
| 4 Outlet adaptor | 12 Cover (surface mount) | 19 Cartridge fixing screws |
| 5 Outlet nut & olive | 13 Inlet trims | 20 Nut covers |
| 6 Outlet blanking plug | 14 Shroud (flush fit only) | 21 Pipe trims |
| 7 Cartridge assembly | 15 Outlet blanking trim | 22 Hexagonal nut |
| 8 Flow knob | | |

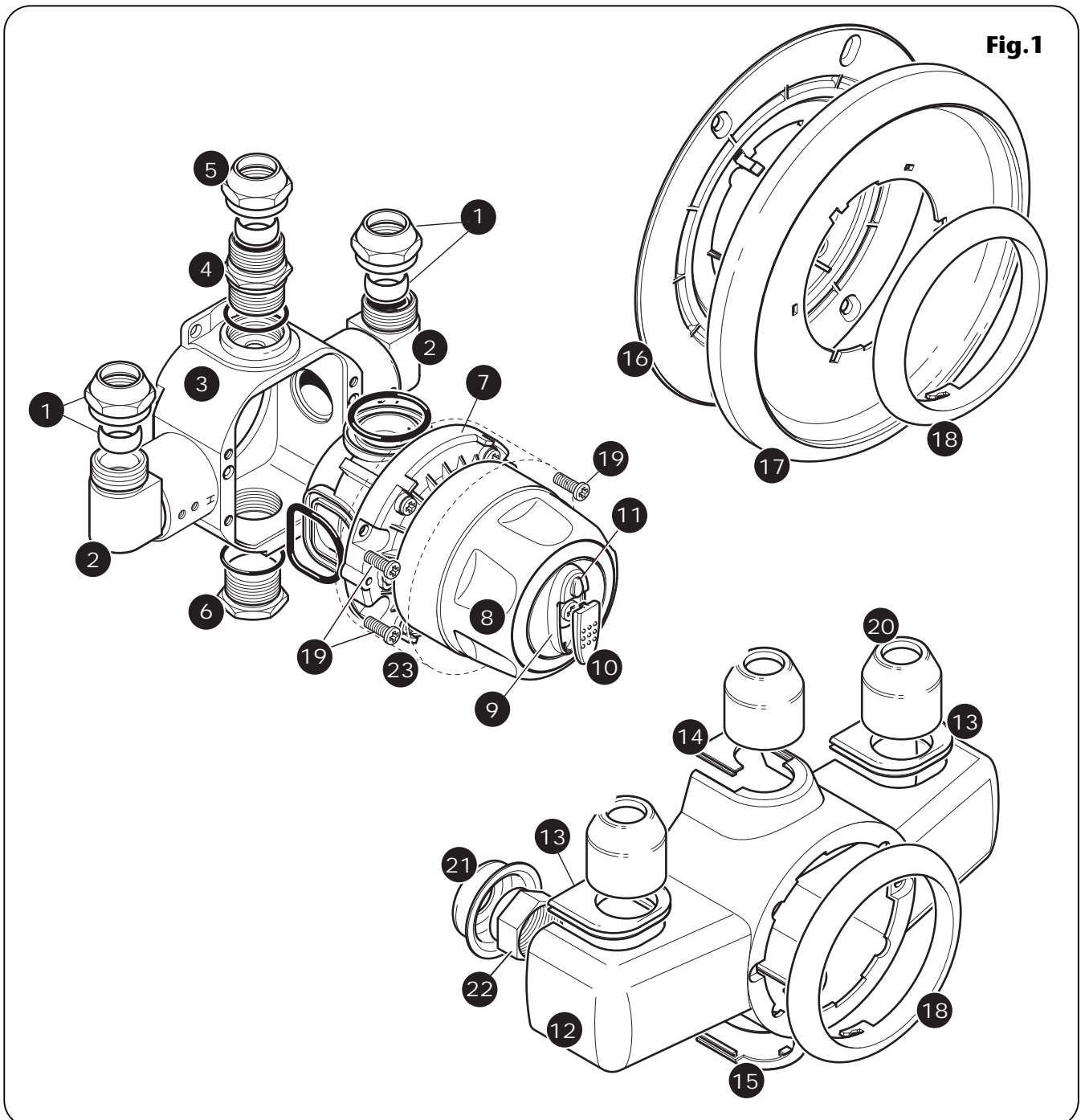
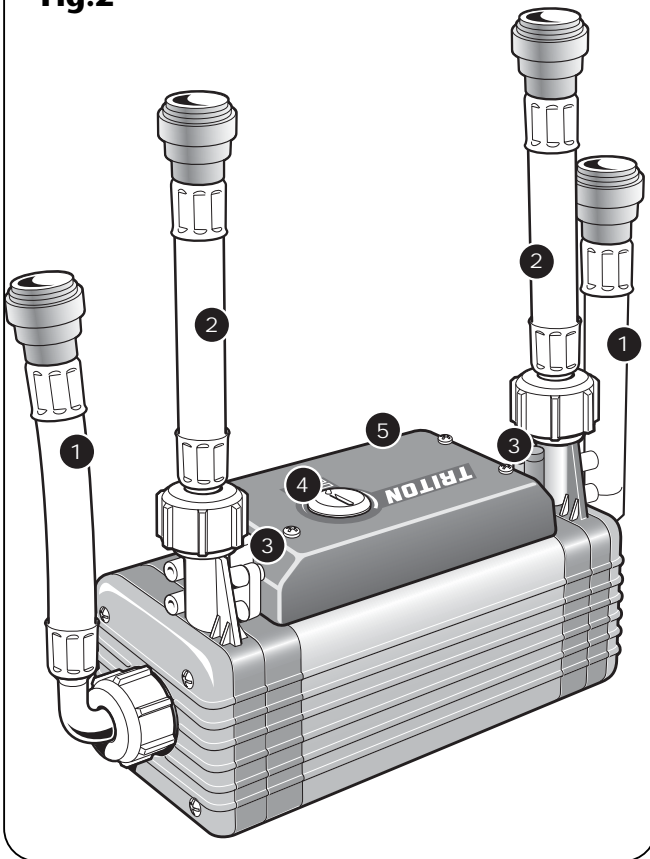


Fig.1

Fig.2



KEY TO PUMP COMPONENTS (fig.2)

- 1** Inlet connector hose
- 2** Outlet connector hose
- 3** Integral flow switch
- 4** Variable speed control
- 5** PCB cover

IMPORTANT: This pump is used for supplying water to a shower only.

SITE REQUIREMENTS

Water

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

For correct operation of this shower pump in conjunction with the shower unit, the water must be gravity fed at nominally equal pressures directly from the same cold water storage cistern (the hot water being fed to the pump via the hot water cylinder).

The cold water cistern and hot water cylinder must each have a minimum capacity of 114 litres (25 gallons). It is advisable to check that the infill rate from the float operated valve meets the output requirements.

Both hot and cold water supplies to the pump must be direct and not significantly affected by any other outlets or connections.

Fig.3 shows a recommended installation where the hot water supply for the shower is made via a tee connection on the underside of the rising horizontal section of pipework from the cylinder. Alternatively, the connection can be taken from the hot supply pipe to other outlets as long as it is the first draw-off below the ventilation pipe tee.

THE PUMP MUST NOT BE CONNECTED TO THE MAINS COLD WATER SUPPLY.

The pump must be positioned below the cold water cistern and not placed in areas where it will be subject to freezing conditions.

For the flow switches to operate correctly all pipework must be below the cold water cistern and the sprayhead must be at least 150mm below the bottom of the cold water cistern. In situations where this requirement cannot be met, contact Triton Customer Service for advice.

If used with a combination cylinder, the cold water cistern must have a capacity of at least 114 litres (25 galls) to avoid starvation of water to the pump, and a minimum head of water of 150mm.

Fig.3 shows an installation option that is acceptable.

DO NOT use jointing compounds on any pipe fittings.

Electrical

The pump installation should be fused at 3 amps. It is recommended that a suitable residual current device (RCD) is fitted in the electricity supply circuit to this appliance.

Note: The installation and wiring must comply with current IEE regulations.

When installed in any room containing a fixed bath or shower, the pump **MUST** be located and

Aquasensation thermostatic power shower

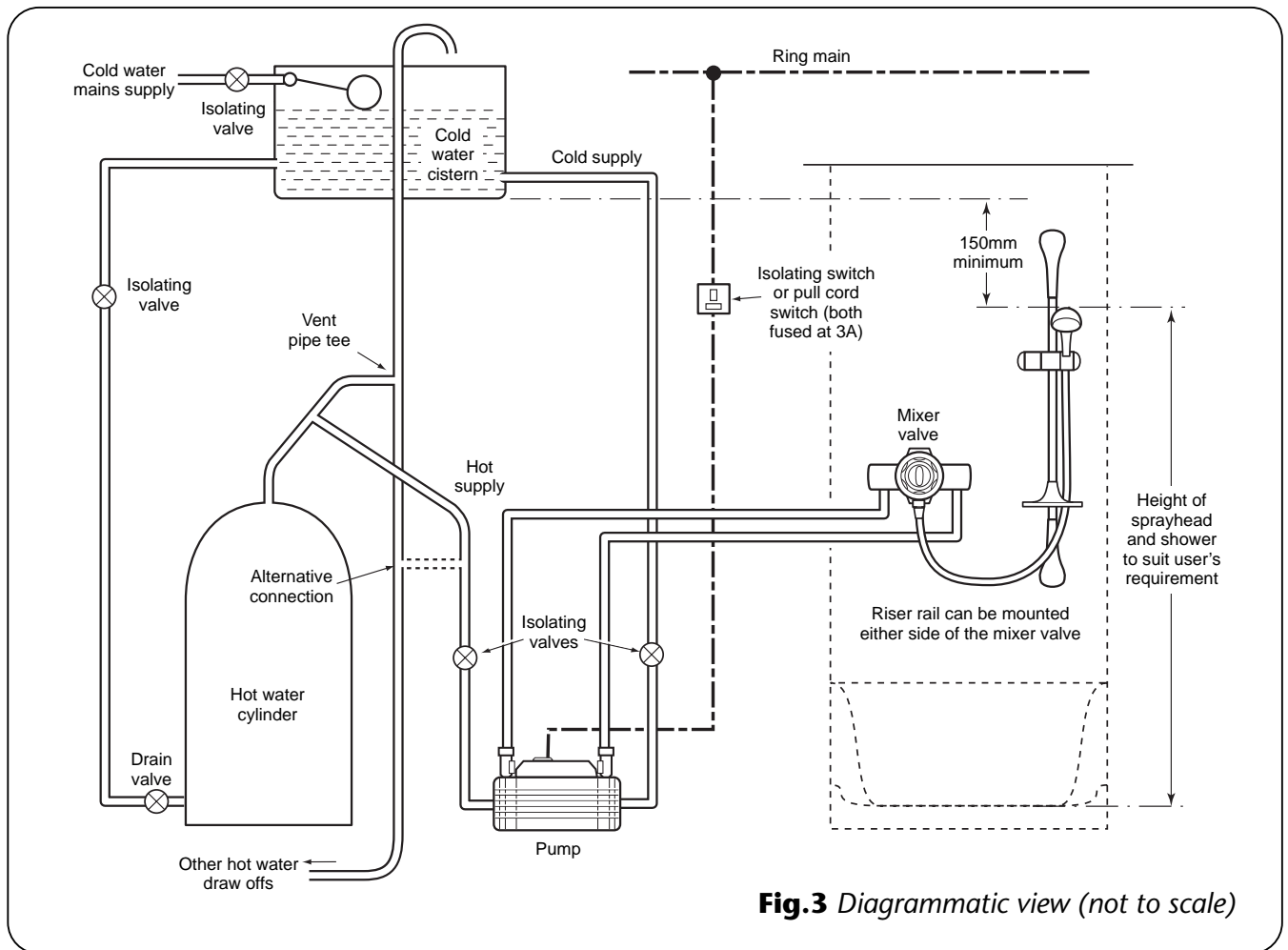


Fig.3 Diagrammatic view (not to scale)

WARNING!

THE PUMP MUST BE EARTHED. The pump must be connected to a 230-240V AC electrical supply, via a double pole switch with at least 3mm contact separation. This can be a ceiling mounted pull cord switch in the shower room, or a wall mounted switch in an adjacent room.

WARNING!

The unit must not be positioned where it will be subject to freezing conditions.

concealed inside a suitable cupboard, built-in unit or other enclosure, in order so the pump cannot be sprayed with water, and such that a person using a fixed bath or shower cannot touch the pump without using tools.

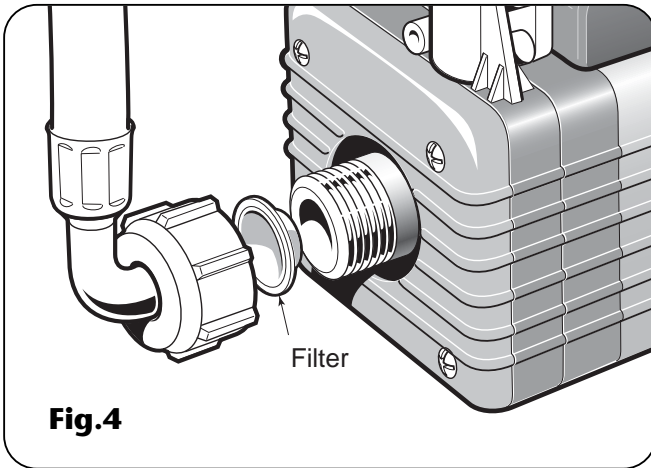
SITING OF THE PUMP

The pump MUST ALWAYS be positioned BELOW the cold water cistern and be situated as close as possible to the hot water cylinder. It is

recommended that the cold water supply is taken from the opposite side of the cistern to the float operated valve to prevent air entrapment in the supply.

Position the pump in a dry area and check it is accessible for any maintenance etc. that may be necessary.

IMPORTANT: Make sure the ventilation slots on the underside of the pump are free from obstructions. The hot water supply MUST NOT exceed 65°C (149°F).



FITTING THE PUMP

Before beginning the fitting of the pump, make sure the site recommendations have been complied with fully. Take note of the following:

- Pipework to be fitted before wiring.
- The pump **MUST** be positioned in a dry area, ideally in the linen/airing cupboard. It must be well ventilated and not covered with towels and sheets etc.
- **DO NOT** use with a combination water tank system unless the cold water storage tank has capacity of 114 litres (25 galls) or more.
- To assist in clearing air bubbles from the system avoid using sharp bends where possible. Flexible/swept fittings or formed pipework is recommended.
- Make sure that all water supplies are isolated before connection. Gate valves or full way lever valves **MUST** be fitted immediately before the pump. It is also advisable to fit a drain off point on the lowest part of the system.
- **NEVER** use any form of soldered fittings on the shower pump as this will damage the unit and invalidate the guarantee.
- **NEVER** use solder within 300mm of the pump or expose parts to a hot torch.
- Make sure mains electricity supply is **SWITCHED OFF** before fitting the electrical connections.
- **DO NOT OPERATE THE PUMP DRY.** This may cause damage to the seals and will invalidate the guarantee.

Note: The pump motor has automatically resetting thermal overload protection.

Procedure

- a.** Turn off the mains water and electrical supplies. Drain the cold water cistern and hot water cylinder and make suitable connections in the hot and cold water supplies.
- b.** Position the pump horizontally (with the outlet ports in the upright position) with the feet on a solid base so that it will not transmit vibration.

Note: The pump MUST ONLY be placed in the horizontal position.

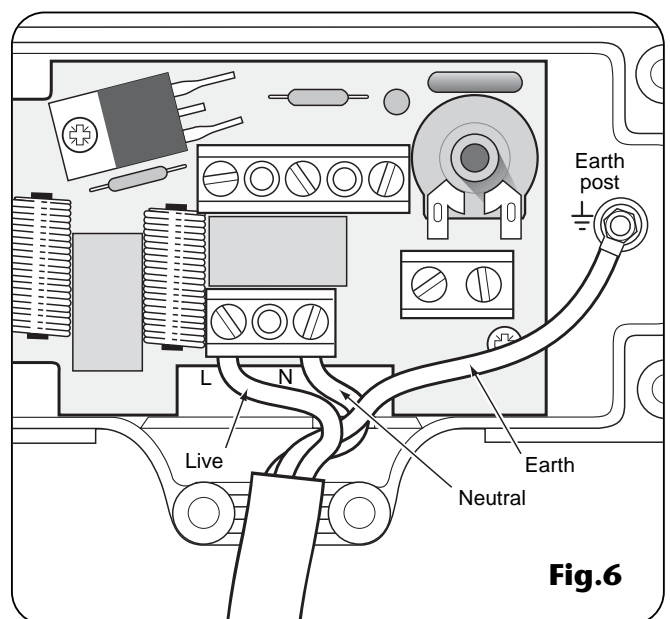
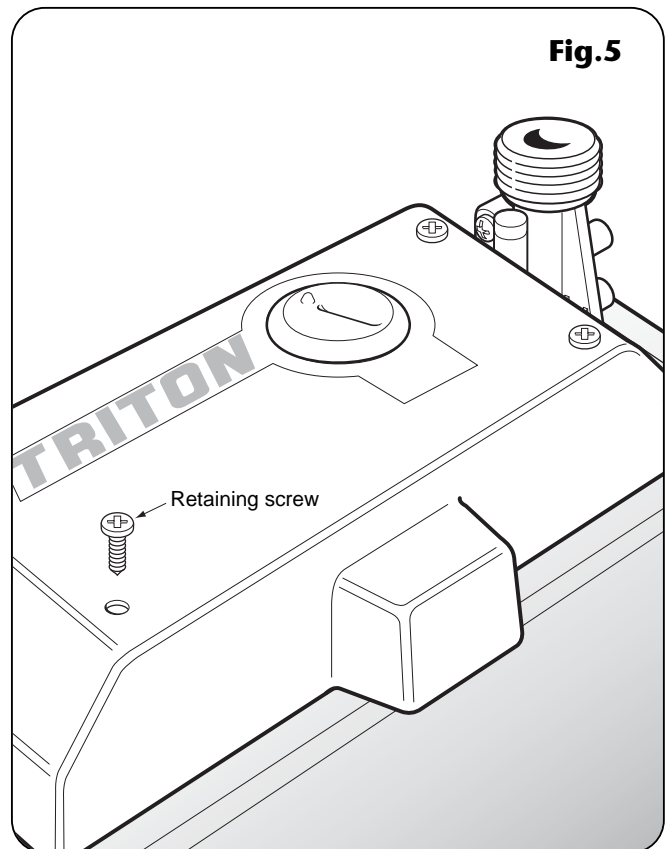
- c. Connect the inlet flexible connectors to the inlet ports of the pump making sure the filters are in position on the inlet sides **(fig.4)**.
 - d. Connect the outlet flexible connectors to the outlet ports of the pump.
 - e. Connect hot and cold feed pipes from the outlet flexible push-in connectors.
- Note:** DO NOT connect the pipes to the mixer valve at this stage.
- f. Before connecting the hot and cold water supplies from the cistern and cylinder to the pump inlet flexible push-in connectors, the system must be filled and flushed through. This operation must be carried out with the pump isolated from the electricity supply, and with the pump feed pipework from the cistern and cylinder directed to waste by connecting a suitable length of hose.
 - g. Make sure the isolating valves from the cistern and cylinder are closed.
 - h. Turn on the mains water supply to the storage cistern and allow the cylinder and system to fill.
 - i. Open both isolating valves and flush through thoroughly.
 - j. Allow water to flow to waste for two or three minutes to make sure that any debris and air is completely flushed from the system.
 - k. Check the system pipework for leaks.
 - l. Close both isolating valves. Remove the waste hoses and connect the cistern supply pipework and cylinder pipework to the pump inlet flexible push-in connectors.

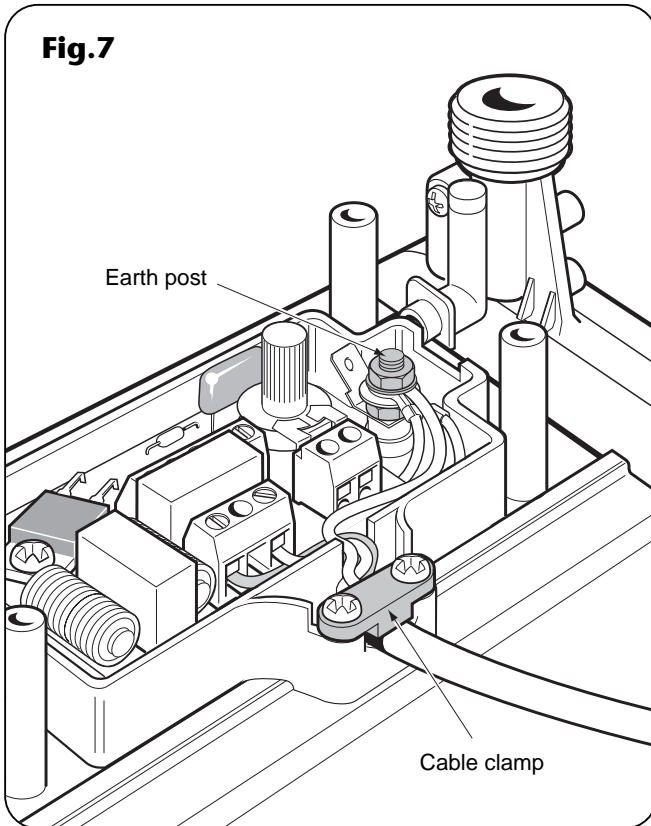
Note: DO NOT overtighten the connections on the pump ports and take care to prevent any system debris from entering the pump via the connectors.

Wiring

Remove the four retaining screws holding the PCB cover **(fig.5)**. Lift the cover together with the variable speed control from the pump body.

The 3-core cable from the mains electricity





supply can now be connected to the terminal block situated on the PCB (**fig.6**). The size of cable to use must be a minimum of 0.75mm. Make sure the terminal block screws are fully tightened and that no cable insulation is trapped under the screws.

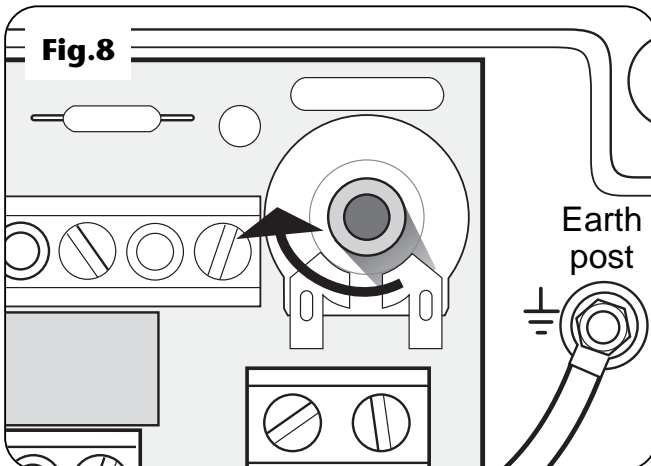
Note: When connecting the earth cable to the earth post, take care NOT to overtighten the securing nut.

IMPORTANT: Remove only the minimum amount of conductor insulation when wiring to the terminal block.

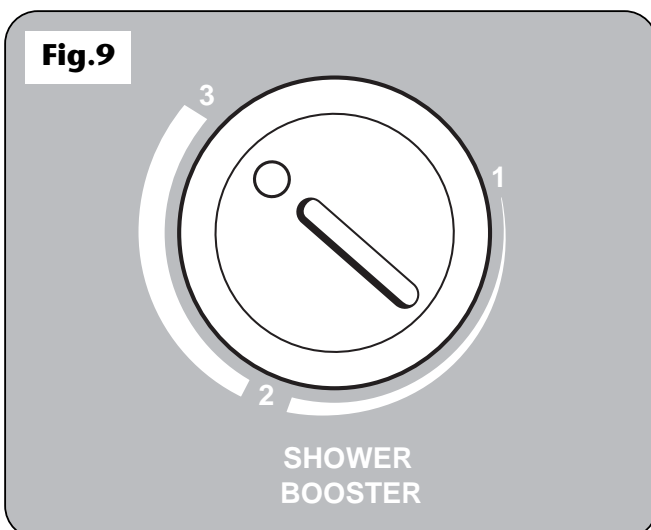
The cable clamp must be used to secure the cable (**fig.7**).

Note: Before replacing the cover, make sure the potentiometer is rotated fully clockwise (**fig.8**) until a 'stop' is felt. Then check that the speed control is turned to '3' on the cover (**fig.9**).

Replace the PCB cover and variable speed control. Should the control knob have been detached from the cover, make sure the 'O' ring (**fig.10**) is correctly seated before replacing the control knob.



WARNING!
Installation of the pump will break the earth continuity of the pipework installation. It is important that the earth be restored by cross bonding the pipework, to conform with current IEE regulations.



VARIABLE SPEED CONTROL

The variable speed control (**fig.11**) can be adjusted to select the best performance of the pump to suit personal preferences.

PREPARING AND SITING OF THE MIXER VALVE

WARNING!

The shower must not be positioned where it will be subjected to freezing conditions.

Before beginning the installation, make sure all the openings on the valve are carefully covered to prevent ingress of any debris etc.

Note: It is not necessary to remove the control knobs at any stage.

Refer to **fig.3** for correct siting of the shower.

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

Note: Pipe entry for both surface-mounted and flush-fitted valves can be from the top, bottom or rear. The hot entry port is on the left-hand side of the valve and is marked on the valve with a letter 'H' (**fig.12**).

FITTING THE SHOWER TO THE WALL – EXPOSED

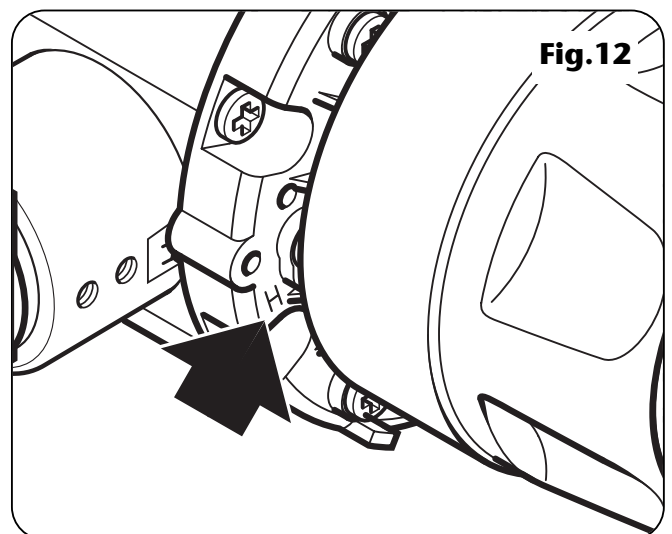
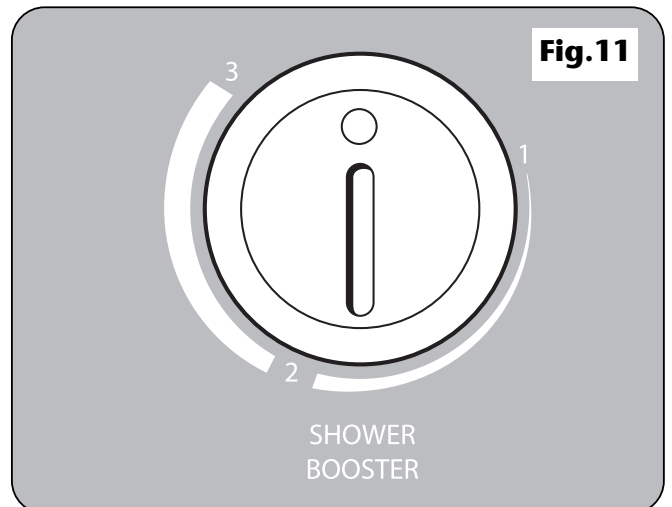
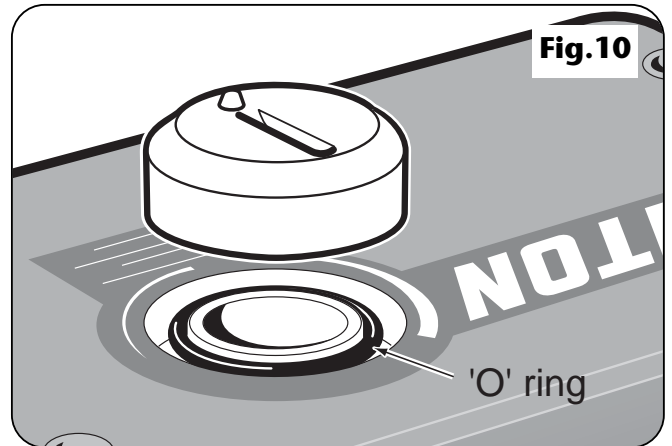
Note: The outlet of the shower must not be connected to anything other than the hose and sprayhead supplied.

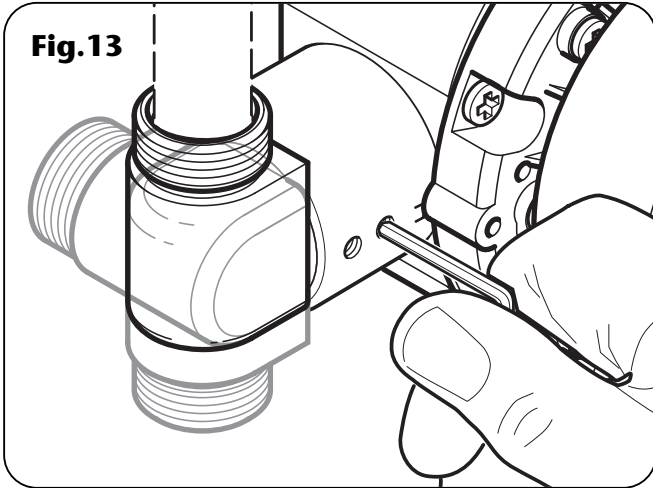
DO NOT use jointing compounds on any pipe fittings for the installation.

DO NOT solder fittings near the shower unit, as heat can transfer along the pipework and damage components.

Note: Suitable isolating valves (complying with Water Byelaws) MUST be fitted on the hot and cold water supplies to the pump 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 provide the best 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.

The hot water pipe entry must be on the left.

RISING AND FALLING SUPPLIES

Complete the pipework to the shower area having decided on the position of the shower and direction of pipe entry.

Note: The final separation between pipe centres needs to be about 153mm but absolute accuracy is not essential as the inlet elbows are adjustable between 146mm and 160mm.

At this point, open both isolating valves and let water flow under gravity via the pump to flush the pipework clear of debris and to check for leaks.

IMPORTANT: The inlet elbows contain check valves that may be damaged if debris is not flushed through prior to fitting. Where this is not possible refer to flushing procedure on page 24.

Close both isolating valves.

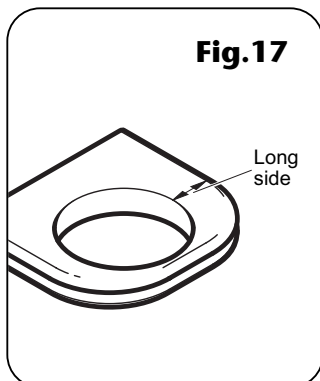
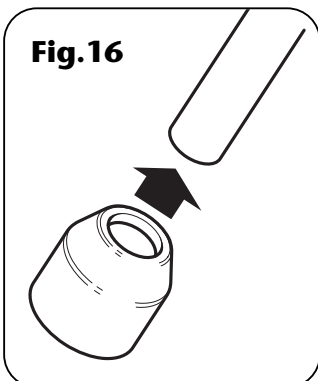
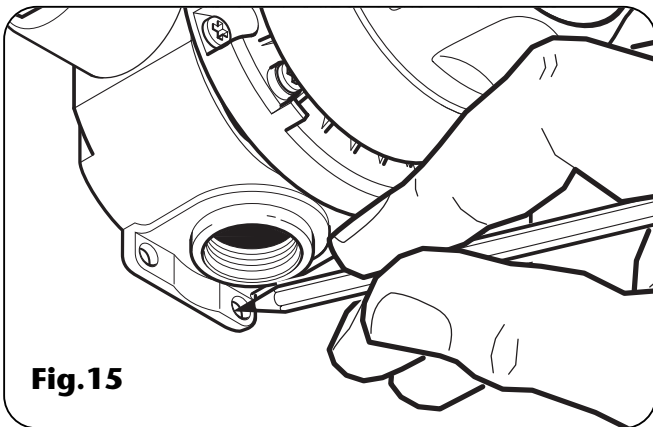
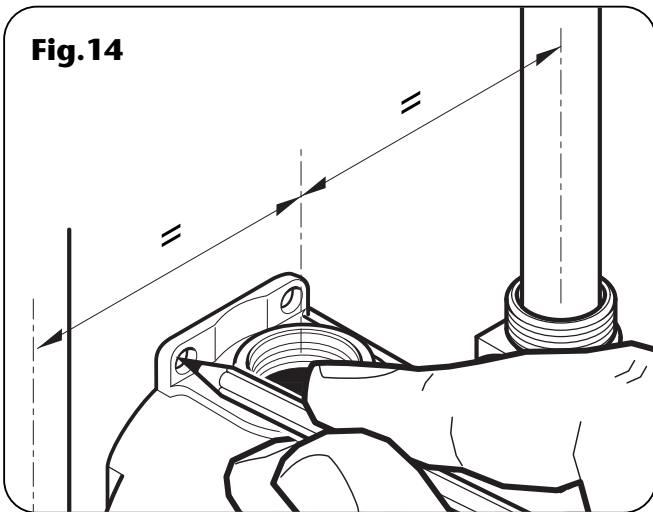
Clip the pipework to the wall surface so that the pipe centres are 21mm off the wall.

Offer the valve, together with the inlet elbows, to the pipework making sure the inlet elbow grub screws (**fig.13**) are slack allowing the inlet elbows to be rotated to the correct position and move freely in and out of the valve housing.

Make sure the valve housing is central between the two pipes then mark two diagonal fixing holes (**fig.14** and **fig.15**).

Remove the valve. Drill and plug the holes using the wall plugs provided.

Fit the nut covers on to the pipes (**fig.16**).



Note: Slide the pipes into the small diameter end of the nut cover. (It will not fit if inserted from the other end). Then slide the inlet nuts and olives onto the pipes, followed by the inlet trims.

Note: The holes in the inlet trims are offset to allow for adjustable inlet pipe separation widths. If the pipe centre separation is 153mm or less then have the short side of the inlet trims between the pipes. If the pipe separation gap is 153mm or greater then have the long side of the inlet trims between the pipes (**fig.17**).

If in any doubt try the cover to see if it fits properly (i.e. no visible gaps between the inlet trims and the cover (**fig.18**).

If there is a gap (**fig.19**) then reverse the trim. While trying the cover make sure that the inlet nuts are sitting in the holes in the inlet trim holes so that the inlet trims are at the correct separation.

Having positioned the inlet trims correctly, refit the valve to the pipework, making sure the hot inlet port (marked with the letter 'H' on the valve housing) is connected to the hot pipework which must be on the left.

Screw to the wall with the two screws supplied (**fig.20**). Tighten the inlet nuts and inlet elbow grub screws.

Fit the outlet adaptor into the bottom outlet hole in the valve housing (**fig.21**). The adaptor is sealed with an 'O' ring.

Make sure the adaptor is fitted with the pipe end in the valve housing (**fig.22**).

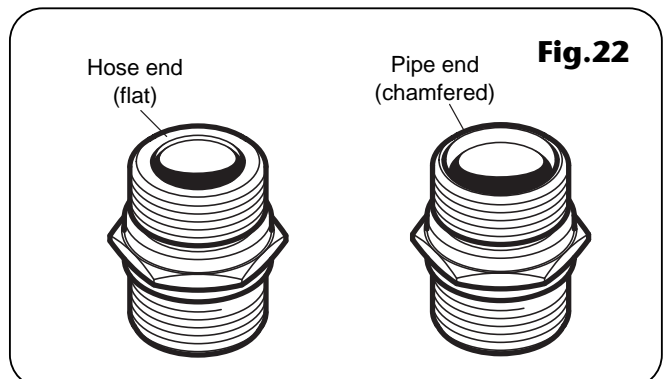
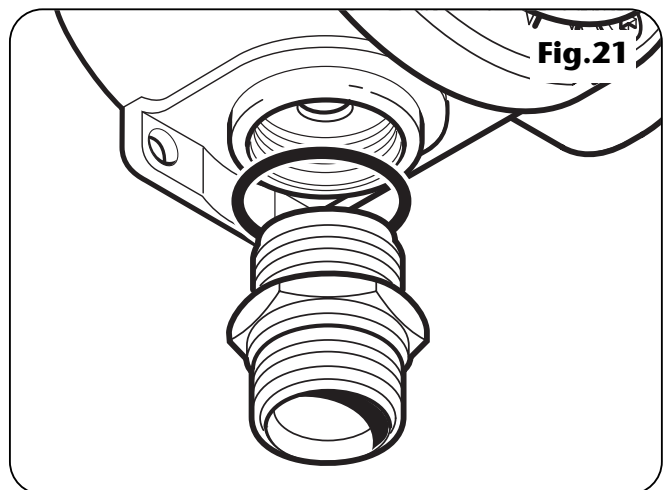
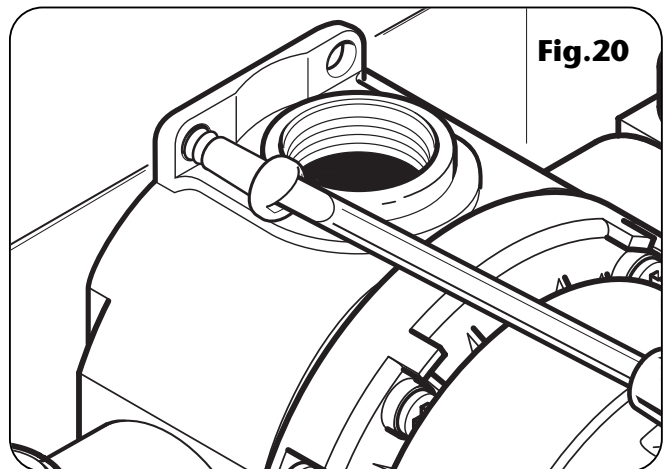
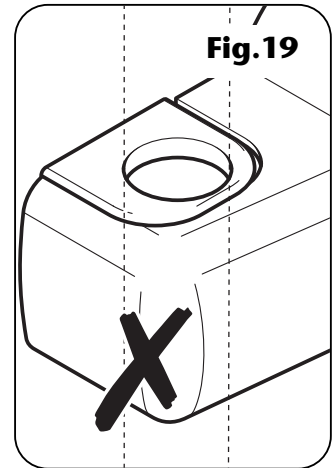
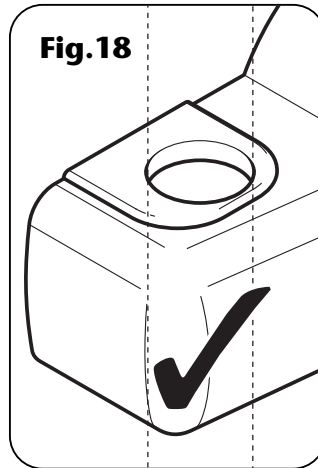
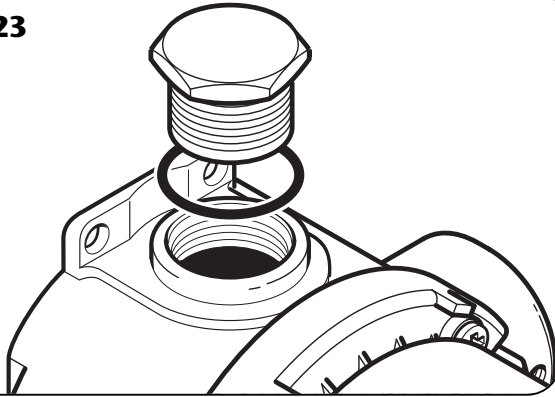


Fig.23



Fit the blanking plug into the top outlet hole using an 'O' ring to seal it (**fig.23**).

Remove the sprayhead from the flexible hose (if fitted). Connect the hose to the outlet adaptor and direct to waste.

Open both isolating valves and open the mixer valve fully.

Allow water to flow under gravity from the hose for a few minutes.

Stop the flow at the mixer valve.

Switch on the mains electricity supply to the shower pump.

Open the mixer valve. The pump will operate and water will flow under pressure. Turn the temperature control to HOT and then to COLD (if necessary depress the maximum temperature override button). Allow water to flow to waste for two or three minutes.

Check system pipework again for leaks.

Turn off the mixer valve – the pump will switch off and the water will cease to flow.

Switch off the electric supply to the pump and eliminate any leaks.

Slide the outlet blanking trim onto the cover top outlet (**fig.24**).

Fit the surface mount cover on and secure with two screws (**fig.25**).

Fit the trim ring by locating the lugs on the trim ring into the holes on the cover (**fig.26**) and then twist clockwise.

Finally, pull the nut covers over the nuts (**fig.27**).

Complete the fitting of the shower accessories by referring to the appropriate section.

REAR ENTRY SUPPLIES

Note: The final separation between pipe centres needs to be about 153mm (**fig.28**) but absolute accuracy is not essential as the inlet elbows are adjustable between 146mm and 160mm.

Using a spirit level, mark the route of incoming hot and cold water supply pipes at a distance of 153mm between centres.

Fig.24

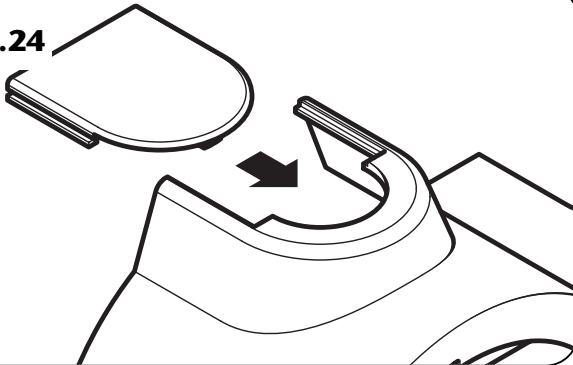


Fig.25

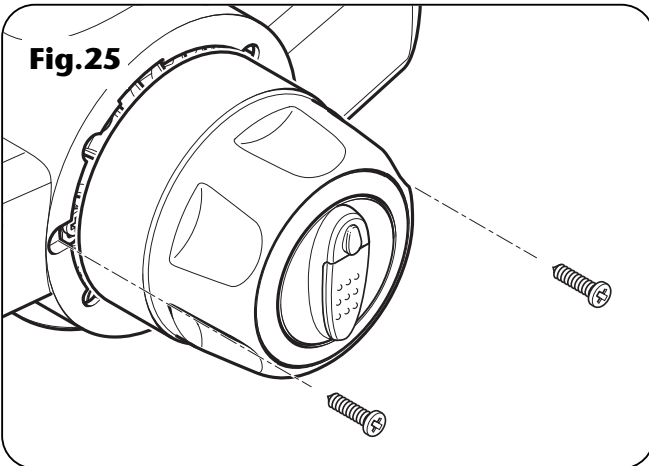
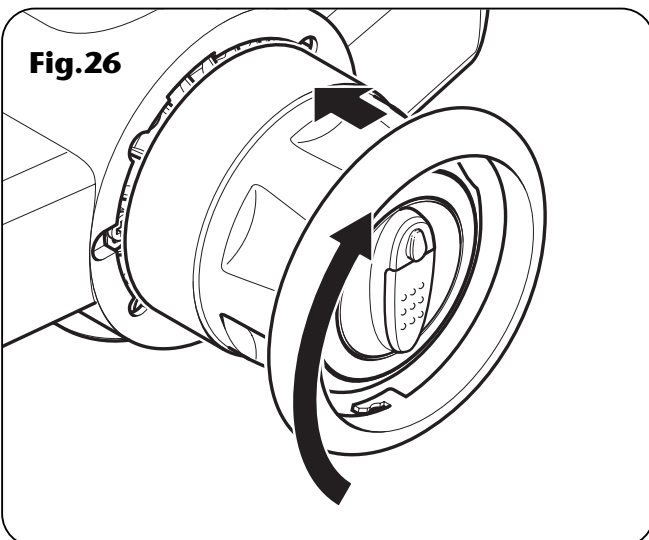


Fig.26



Remove the plaster and brickwork to the required depth to conceal the supply pipework.

Note: It is advisable that pipework installed in solid walls be provided with enough free play inside a cavity to allow entry into the inlet elbows for tightening, before fixing the valve to the finished wall surface

Install the hot and cold pipework (the hot pipe must enter from the left), making sure that the finished pipework projects from the front face of the tiled surface of the wall by 9.5mm (**fig.29**). Allow for two circular recesses measuring 32mm diameter by 14mm depth, to accept the rear entry pipe trims (**fig.28**).

At this point, open both isolating valves and let water flow under gravity via the pump to flush the pipework clear of debris and to check for leaks.

IMPORTANT: The inlet elbows contain check valves that may be damaged if debris is not flushed through prior to fitting. Where this is not possible refer to flushing procedure on page 24.

Close both isolating valves.

Make good the wall and complete the tiling making sure the rear entry pipe trims (**fig.29**) are sealed in with either silicon sealant or grouting.

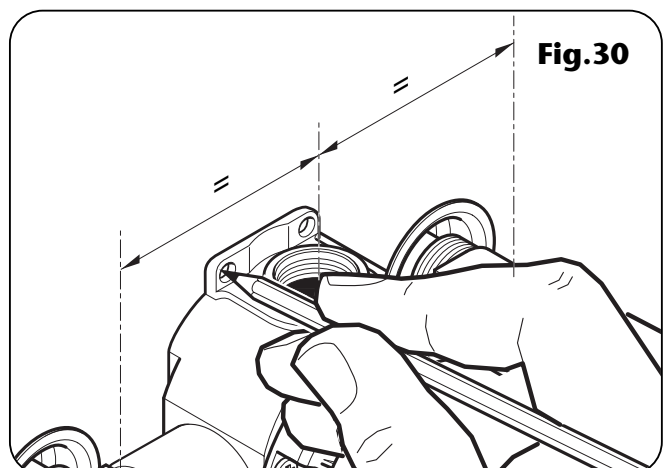
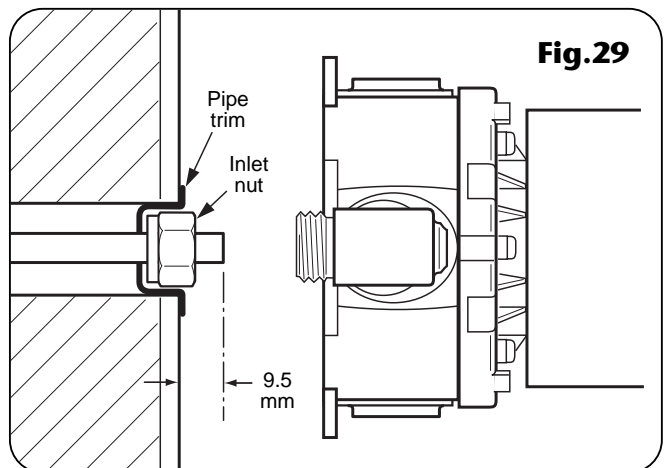
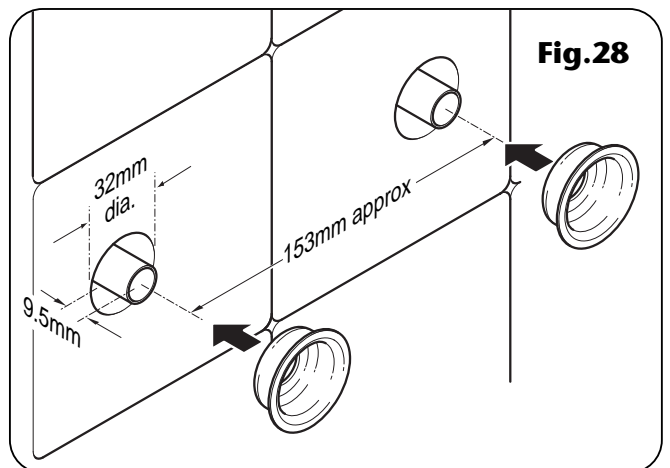
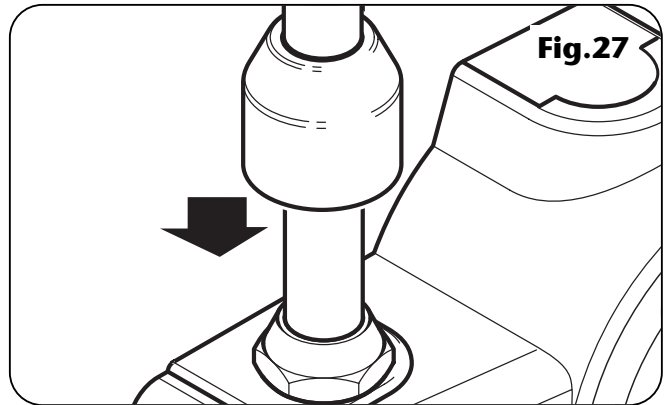
Note: Failure to fit the rear entry pipe trims could result in ingress of water into the wall cavity.

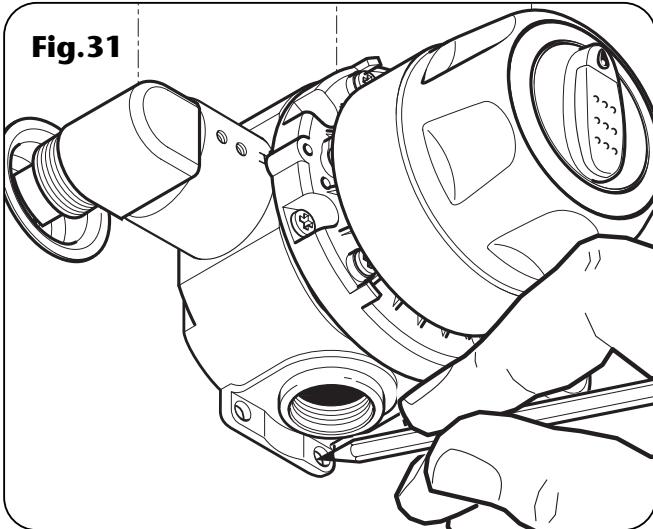
Offer the valve, together with the inlet elbows, to the pipework, making sure the inlet elbow grub screws (**fig.13**) are slack allowing the inlet elbows to be rotated to the correct position and move freely in and out of valve housing.

Check that the valve is central between the two pipes, mark two diagonal fixing holes (**fig.30** and **fig.31**).

Remove the valve. Drill and plug the holes using the wall plugs provided or if fitting into a hollow wall structure use suitable cavity wall fixings.

Using two hexagonal nuts (supplied), refit the valve to the pipework making sure the hot inlet port (marked with the letter 'H' on the valve housing) is connected to the hot pipework which must be on the left.





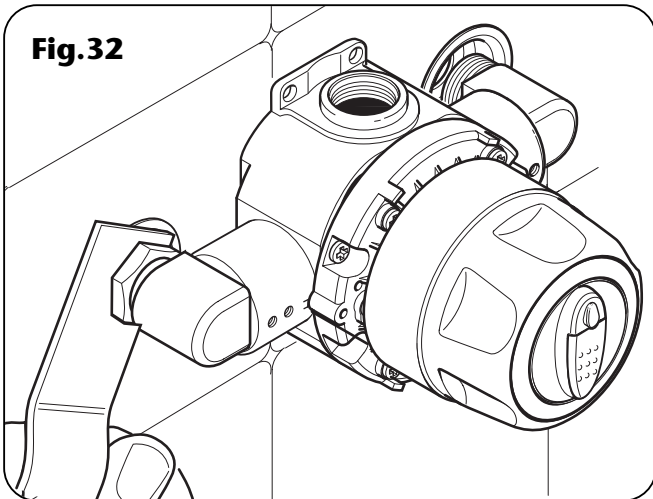
Tighten the inlet nuts with the spanner supplied (**fig.32**) then tighten the inlet elbow grub screws. Screw to the wall using the screws supplied.

Fit the outlet adaptor into the bottom outlet hole in the valve housing (**fig.21**). The adaptor is sealed with an 'O' ring.

Make sure the adaptor is fitted with the pipe end in the valve housing (**fig.22**).

Fit the blanking plug into the top outlet hole using an 'O' ring to seal it (**fig.23**).

Remove the sprayhead from the flexible hose (if fitted). Connect the hose to the outlet adaptor and direct to waste.



Open both isolating valves and open the mixer valve fully.

Allow water to flow under gravity from the hose for a few minutes.

Stop the flow at the mixer valve.

Switch on the mains electricity supply to the shower pump.

Open the mixer valve. The pump will operate and water will flow under pressure. Rotate the temperature control to HOT and then to COLD (if necessary depress the maximum temperature override button). Allow water to flow to waste for two or three minutes.

Check system pipework again for leaks.

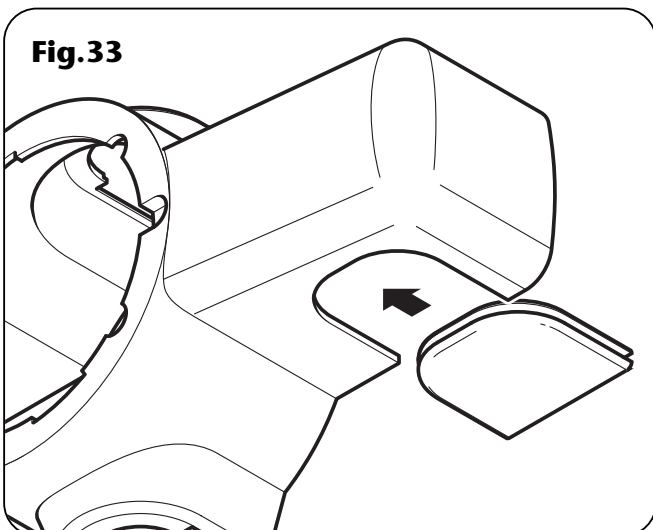
Turn off the mixer valve – the pump will switch off and the water will cease to flow.

Switch off the electric supply to the pump and eliminate any leaks.

Slide the outlet blanking trim onto the cover top outlet (**fig.24**).

Fit the inlet blanking trims on the underside of the cover (**fig.33**).

Fit the surface mount cover on and secure with two screws (**fig.25**). Fit the trim ring by locating the lugs on the trim ring into the holes on the cover (**fig.26**) and twist clockwise.



FITTING THE SHOWER TO THE WALL – BUILT-IN

Note: The outlet of the shower must not be connected to anything other than the hose, sprayhead or fixed sprayhead supplied.

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

DO NOT solder fittings near the shower unit, as heat transfer can damage components.

Note: Suitable isolating valves (complying with Water 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 give the best 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 the specification of the valve.

The hot water pipe entry must be on the left.

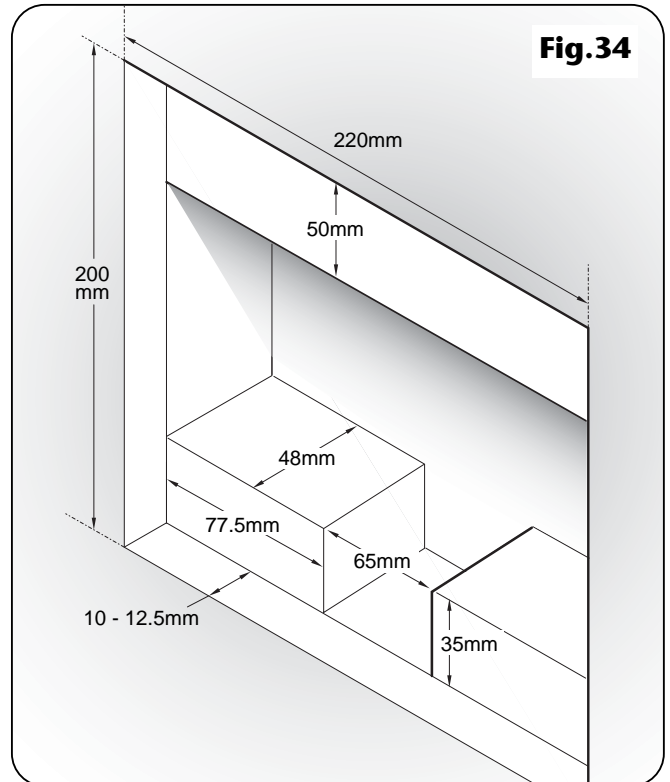
The mixer valve includes a wall bracket which allows the installer to mount the shower into a solid, stud partition or other hollow wall structures. The bracket can also be used for fitting in a shower cubicle providing the back of the cubicle is accessible.

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

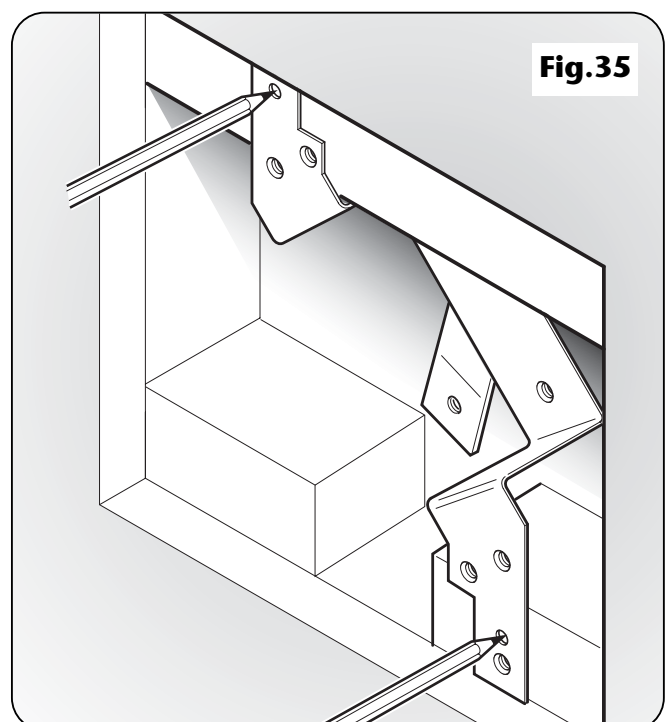
SOLID WALL

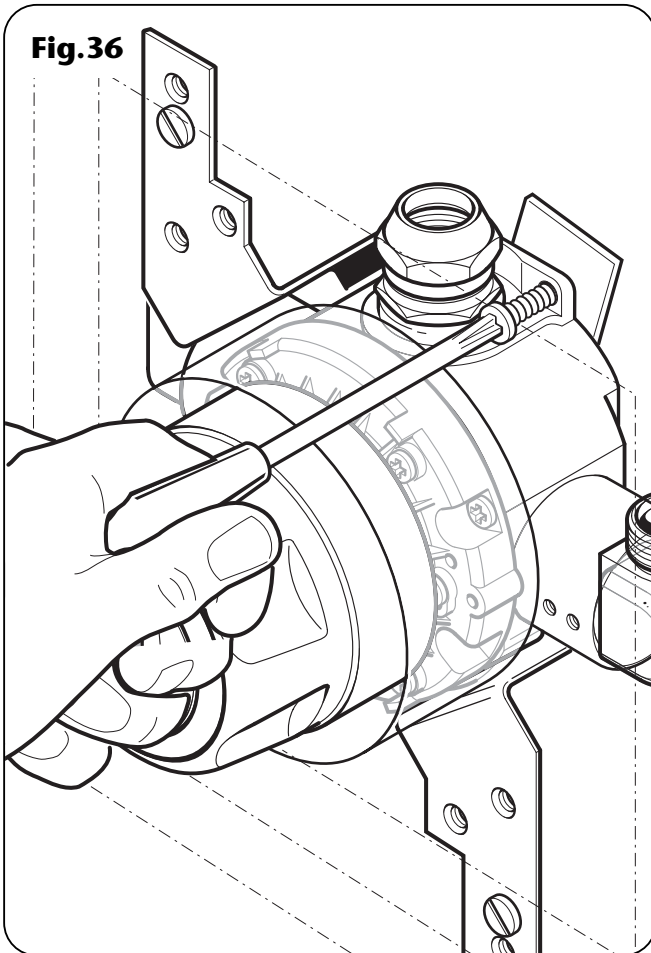
The building depth for the shower into a solid wall is between 57mm and 66mm. The building in depth calculation must include the thickness of the plaster and tiles. This dimension determines how much of the shower control is visible through the concealing plate when the installation is completed.

Decide on the shower position and determine



Note: The flush-fitted shower valve comes complete with a built-in PVC shroud. Do not remove it. It is important when making good the wall after installation, that the plastering and sealing must be made tight up to the shroud in order to prevent ingress of water.





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

Mark the route of the incoming and outgoing pipework.

Note: The final separation between pipe centres needs to be about 153mm but absolute accuracy is not essential as the inlet elbows are adjustable between 146mm and 160mm.

Remove the plaster and brickwork to the depth shown (**fig.34**) and chase out any additional areas of wall for any pipework to and from the valve.

Offer the mounting bracket up to the wall and mark the two plain fixing holes (**fig.35**). Drill and plug then screw the bracket to the wall.

Note: The valve can be fitted to the mounting bracket if required or secured directly to the wall with the screws supplied.

Fit the outlet adaptor into the bottom outlet hole in the valve housing (**fig.21**). Make sure the adaptor is fitted with the hose end in the valve housing (**fig.22**). The adaptor is sealed with an 'O' ring.

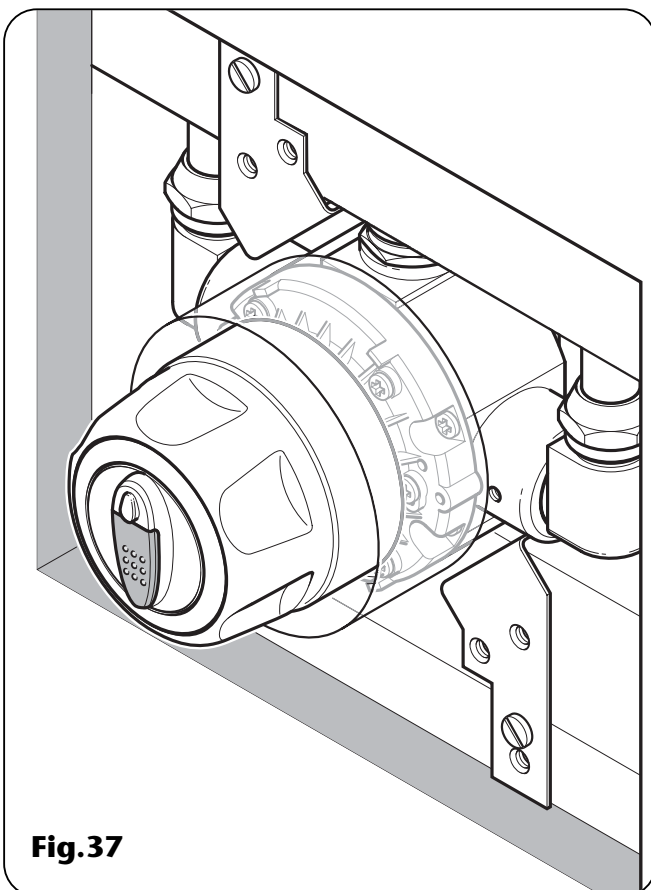
Fit the blanking plug into the top outlet hole (**fig.23**) using an 'O' ring to seal it.

Check that the inlet elbows are positioned the correct way. Offer the valve up to the mounting bracket (**fig.36**) or wall surface, and secure using the screws provided.

Complete the pipework to the shower marking off the length to enter the elbows. Remove the valve and cut the pipes to length.

At this point, open both isolating valves and let water flow under gravity via the pump to flush the pipework clear of debris and to check for leaks.

IMPORTANT: The inlet elbows contain check valves that may be damaged if debris is not flushed through prior to fitting. Where this is not possible refer to flushing procedure on page 24.



Close both isolating valves.

Refit the valve to the mounting bracket/wall surface and pipework (**fig.37**). Tighten the inlet nuts and inlet elbow grub screws.

Refer to 'Fitting the bulkhead' and complete the outlet pipework.

Before fitting the bulkhead to the wall, remove the sprayhead from the flexible hose (if fitted). Connect the hose to the bulkhead outlet and direct to waste.

Open both isolating valves and open the mixer valve fully.

Allow water to flow under gravity from the hose for a few minutes.

Stop the flow at the mixer valve.

Switch on the mains electricity supply to the shower pump.

Open the mixer valve. The pump will operate and water will flow under pressure. Rotate the temperature control to HOT and then to COLD (if necessary depress the maximum temperature override button). Allow water to flow to waste for two or three minutes.

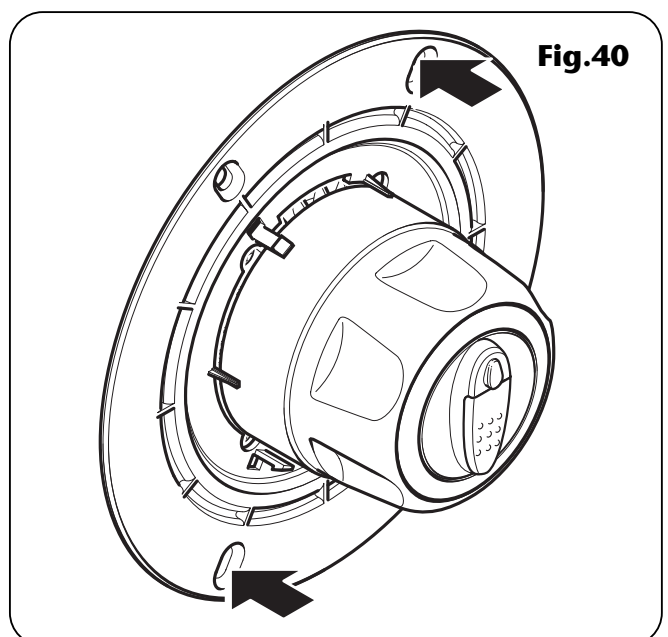
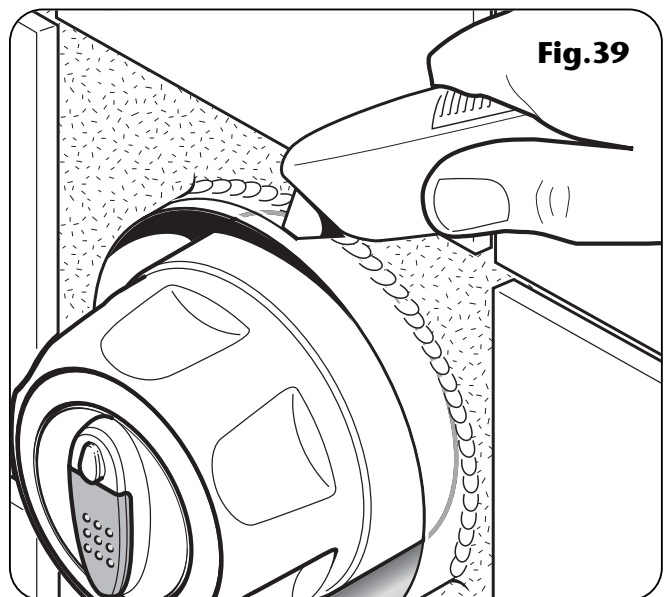
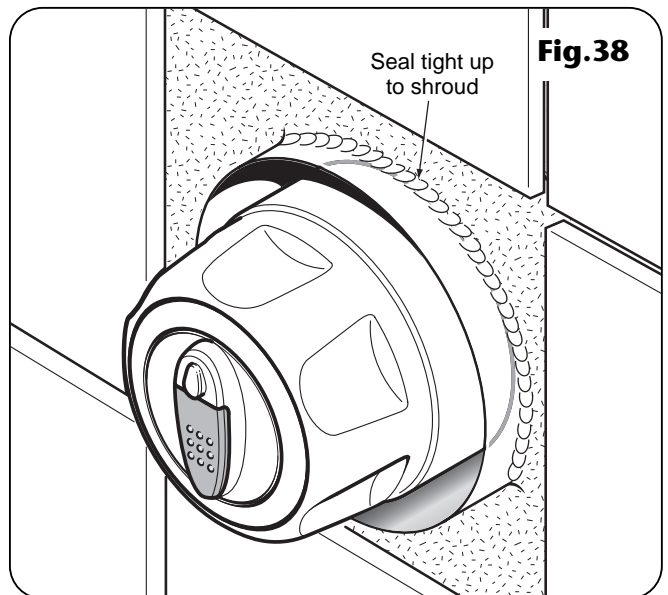
Check system pipework again for leaks.

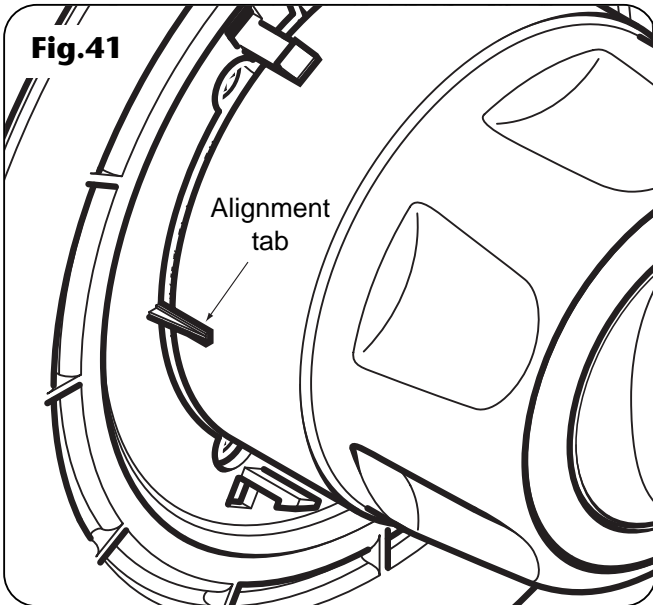
Turn off the mixer valve – the pump will switch off and the water will cease to flow.

Switch off the electric supply to the pump and eliminate any leaks.

Make good the wall surface and make sure the plastering/sealing is taken tight to the PVC shroud (**fig.38**). Should the shroud protrude beyond the wall surface, trim flush with a sharp knife (**fig.39**).

Offer the flush mount plate up to the finished tile surface and, making sure that the valve and the plate are aligned, mark the 'arrowed' fixing holes (**fig.40**). Remove the flush mount plate then drill and plug holes.

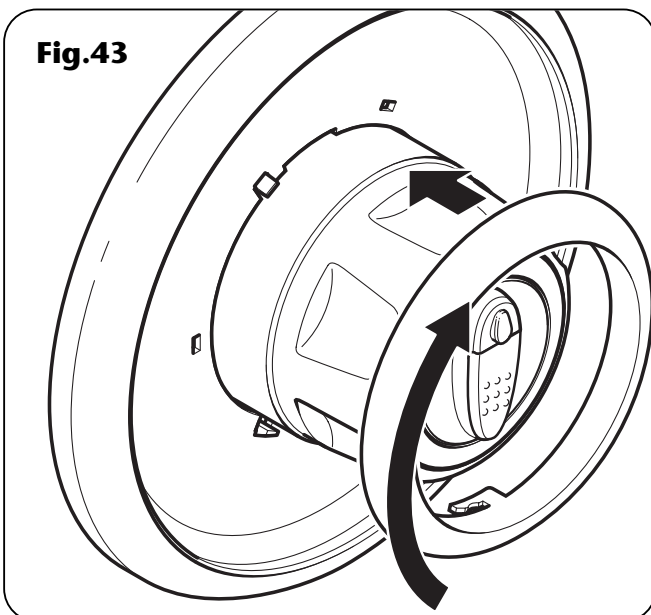
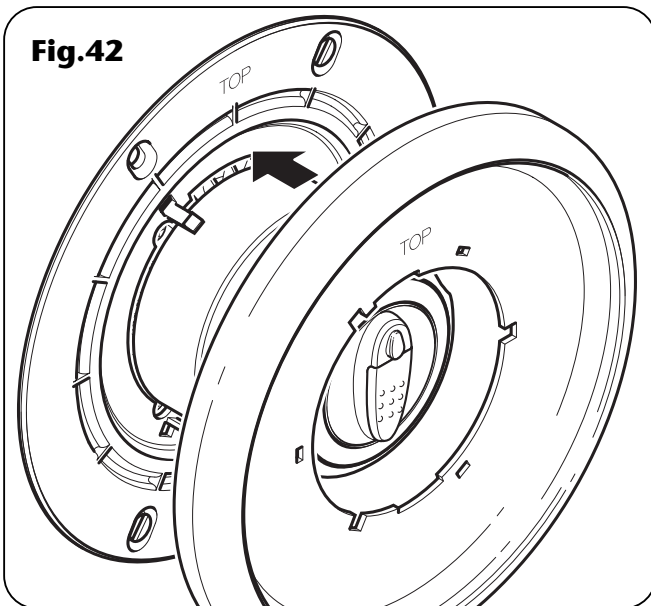




Break off the alignment tabs on the flush mount plate (**fig.41**). Place a ring of silicon sealant round the plate so that the plate seals against the wall. Fix the plate to the wall using the screws provided. Wipe off any excess sealant.

Fit the flush mount cover (**fig.42**). Locate the lugs on the trim ring into the holes on the cover (**fig.43**) and twist clockwise.

Complete the fitting of your shower accessories by referring to the appropriate section.



HOLLOW WALL

The wall mounting bracket supplied with the shower is suitable for use on a plasterboard wall of 9.5mm or 12.5mm in thickness.

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

Mark an opening as shown (**fig.44**) plus the route of inlet and outlet pipework.

Note: The final separation between pipe centres needs to be about 153mm but absolute accuracy is not essential as the inlet elbows are adjustable between 146mm and 160mm.

Take out the plasterboard and offer the mounting bracket up to the wall (**fig.45**). Mark the outer fixing holes and drill. Insert the wall bracket into wall cavity and fix using the bolts and washers provided (**fig.46**).

Fit the outlet adaptor into the bottom outlet hole in the valve housing (**fig.21**). Make sure the adaptor is fitted with the hose end in the valve housing (**fig.22**). The adaptor is sealed with an 'O' ring.

Fit the blanking plug into the top outlet hole (**fig.23**) using an 'O' ring to seal it.

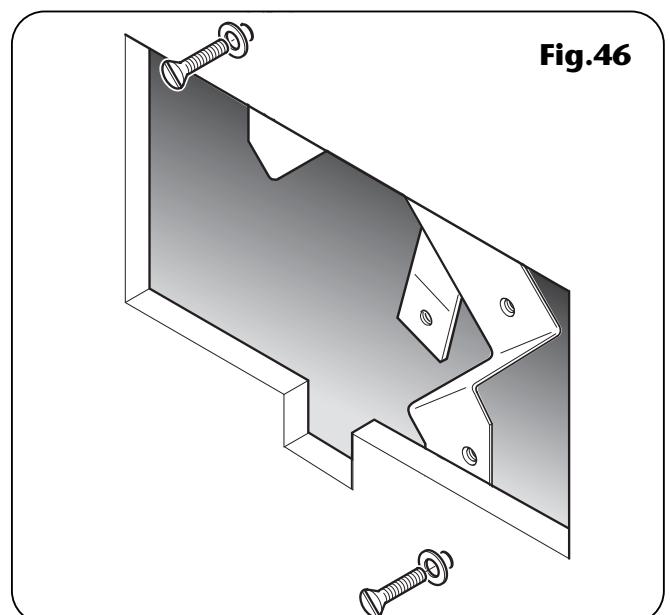
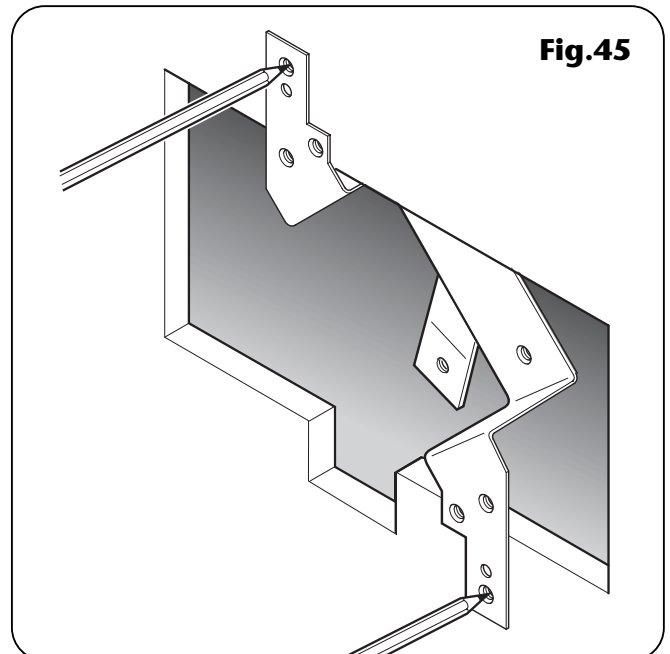
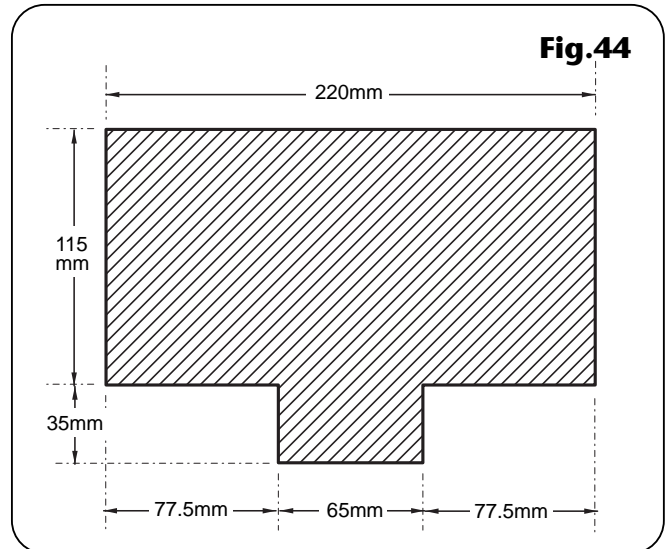
Make sure the inlet elbows are positioned the correct way. Offer the valve up to the mounting bracket and secure using the screws provided (**fig.47**).

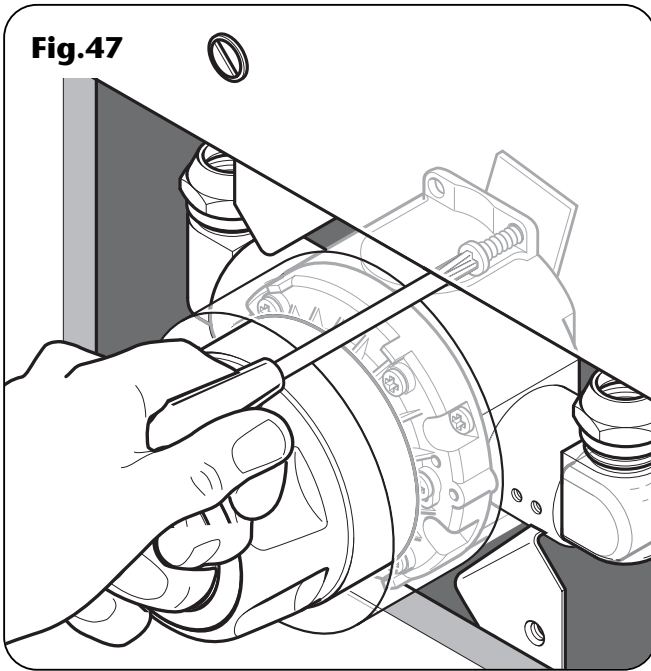
Complete the pipework to the shower marking off the length to enter the elbows. Remove the valve and cut the pipes to length.

At this point, open both isolating valves and let water flow under gravity via the pump to flush the pipework clear of debris and to check for leaks.

IMPORTANT: The inlet elbows contain check valves that may be damaged if debris is not flushed through prior to fitting. Where this is not possible refer to flushing procedure on page 24.

Refit the valve to the mounting bracket and pipework. Tighten the inlet nuts and inlet elbow grub screws.





Refer to 'Fitting the bulkhead' and complete the outlet pipework.

Before fitting the bulkhead to the wall, remove the sprayhead from the flexible hose (if fitted). Connect the hose to the bulkhead outlet and direct to waste.

Open both isolating valves and open the mixer valve fully. Allow water to flow under gravity from the hose for a few minutes.

Stop the flow at the mixer valve.

Switch on the mains electricity supply to the shower pump.

Open the mixer valve. The pump will operate and water will flow under pressure. Rotate the temperature control to HOT and then to COLD (if necessary depress the maximum temperature override button). Allow water to flow to waste for two or three minutes.

Check system pipework again for leaks.

Turn off the mixer valve – the pump will switch off and the water will cease to flow.

Switch off the electric supply to the pump and eliminate any leaks.

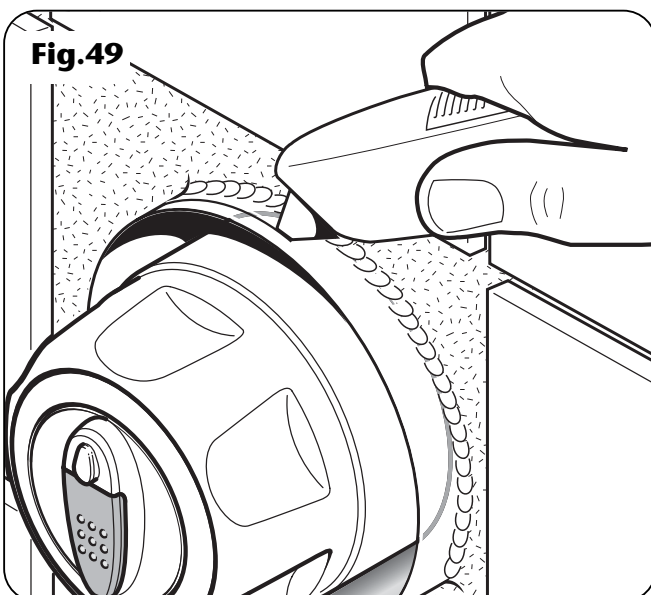
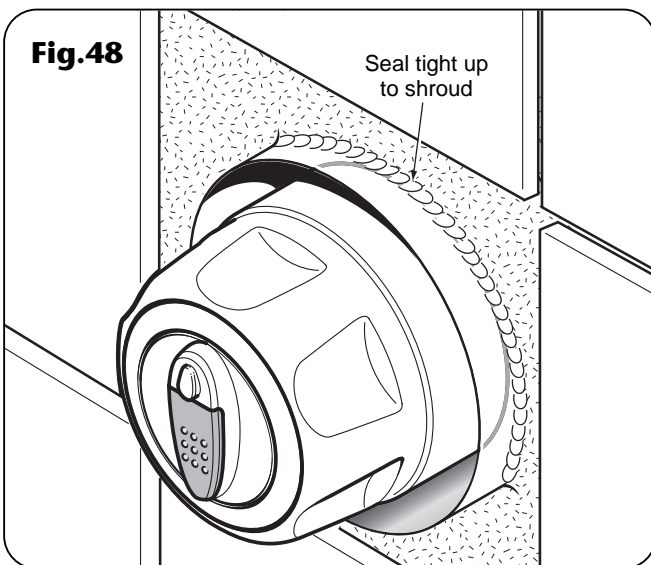
Make good the wall surface and make sure the plastering/sealing is taken tight to the PVC shroud (**fig.48**). Should the shroud protrude beyond the wall surface, trim flush with a sharp knife (**fig.49**).

Offer the flush mount plate up to the finished surface and checking that the valve and the plate are aligned, mark the 'arrowed' fixing holes (**fig.40**). Remove the flush mount plate then drill and plug the holes.

Break off the alignment tabs on the flush mount plate (**fig.41**). Place a ring of silicon sealant round the plate so that the plate seals against the wall. Fix the plate to the wall using the screws provided. Wipe off any excess sealant.

Fit the flush mount cover (**fig.42**). Locate the lugs on the trim ring in the holes on the plate (**fig.43**) and twist clockwise.

Complete the fitting of your shower accessories by referring to the appropriate section.



SHOWER CUBICLE OR PANEL

To use the wall mounting bracket supplied with a shower cubicle or a laminated panel, wooden blocks are required to increase the depth of the bracket. These blocks need to increase the depth of the bracket to between 56mm and 67mm from the finished surface (**fig.50**).

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

Mark the wall for an opening of about 93mm diameter (**fig.51**).

Cut the opening and offer the mounting bracket up to the back of the panel (**fig.52**). Mark the inner fixing holes and drill the panel and wooden support blocks.

Fit the outlet adaptor into the bottom outlet hole in the valve housing (**fig.21**). Make sure the adaptor is fitted with the hose end in the valve housing (**fig.22**). The adaptor is sealed with an 'O' ring.

Fit the blanking plug into the top outlet hole (**fig.23**) using an 'O' ring to seal it.

Make sure that the inlet elbows are facing the correct way. Offer the valve up to the mounting bracket and secure using the screws provided.

Fix the mounting bracket together with the valve to the panel using two bolts in the innermost fixing holes (**fig.53**).

Complete the pipework to the shower marking off the length to enter the elbows. Remove the valve and mounting bracket and cut the pipes to length.

At this point, open both isolating valves and let water flow under gravity via the pump to flush the pipework clear of debris and to check for leaks.

IMPORTANT: The inlet elbows contain check valves that may be damaged if debris is not flushed through prior to fitting. Where this is not possible refer to flushing procedure on page 24.

Close both isolating valves.

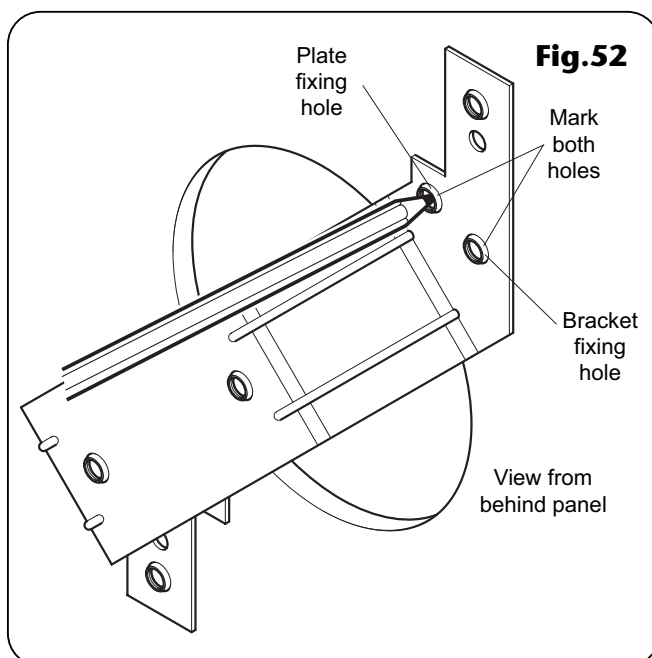
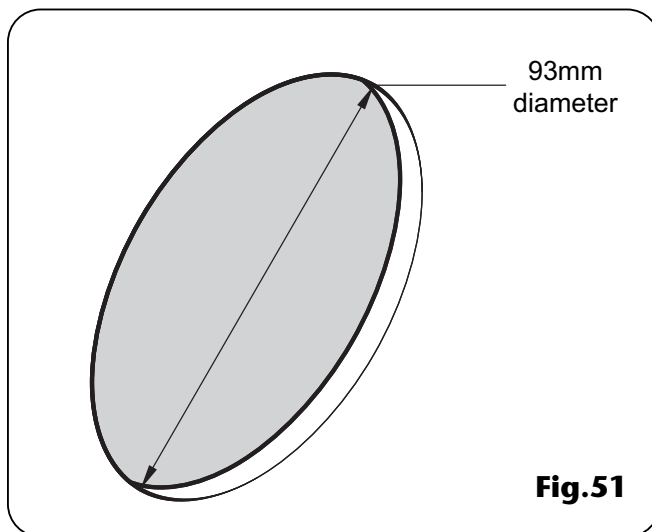
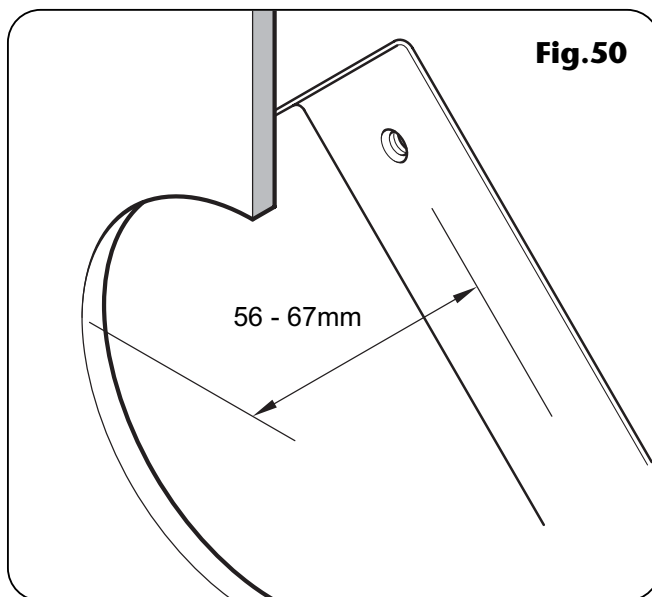
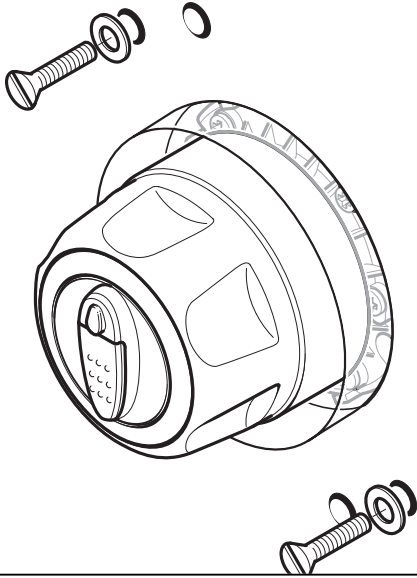


Fig.53



Refit the valve and mounting bracket and connect the pipework. Tighten the inlet nuts and inlet elbow grub screws.

Refer to 'Fitting the bulkhead' and complete the outlet pipework.

Before fitting the bulkhead to the wall, remove the sprayhead from the flexible hose (if fitted). Connect the hose to the bulkhead outlet and direct to waste.

Open both isolating valves and open the mixer valve fully .

Allow water to flow under gravity from the hose for a few minutes.

Stop the flow at the mixer valve.

Switch on the mains electricity supply to the shower pump.

Open the mixer valve. The pump will operate and water will flow under pressure. Rotate the temperature control to HOT and then to COLD (if necessary depress the maximum temperature override button). Allow water to flow to waste for two or three minutes.

Check the system pipework again for leaks.

Turn off the mixer valve – the pump will switch off and the water will cease to flow.

Switch off the electric supply to the pump and eliminate any leaks.

Seal tight around the shroud.

Should the PVC shroud protrude beyond the panel surface, trim flush with a sharp knife **(fig.54)**.

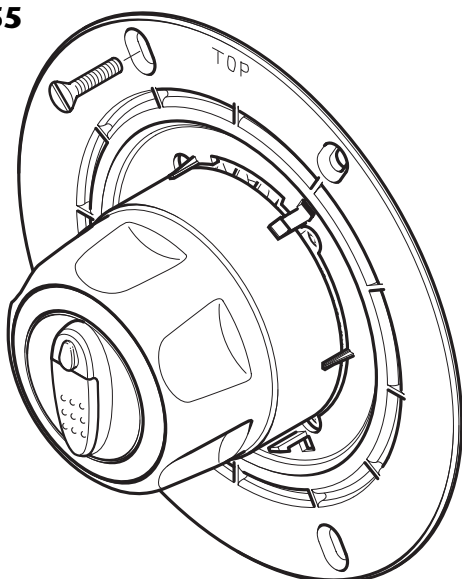
Place a ring of silicon sealant round the flush mount plate so that the plate seals against the wall. Offer the flush mount plate up to the finished surface and checking that the valve and the plate are aligned, secure using the two bolts provided in the outer fixing holes **(fig.55)**.

Break off the alignment tabs on the flush mount plate **(fig.41)** and fit the flush mount cover **(fig.42)**. Locate the lugs on the trim ring in the holes on the plate **(fig.43)** and twist clockwise.

Fig.54



Fig.55



Note: If care has been taken to prevent any obvious debris entering the system, the flushing procedure as described on the preceding pages should be adequate for normal operating conditions of the pump and shower. However, it may be advisable to also clean the filters in the inlet ports of the pump as an extra precaution.

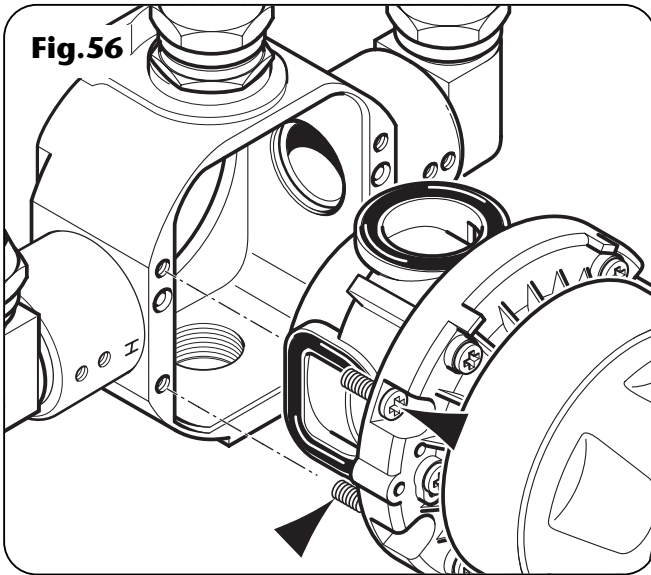


Fig. 56

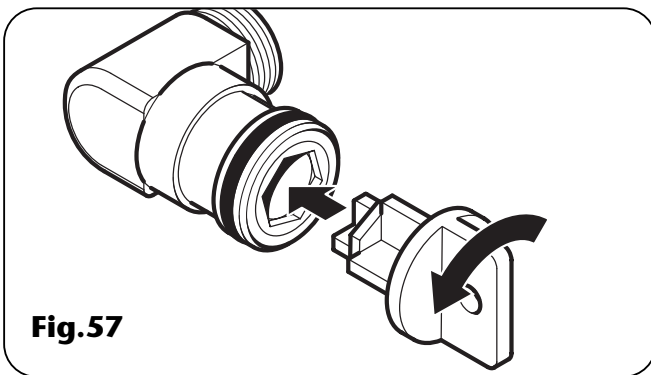


Fig. 57

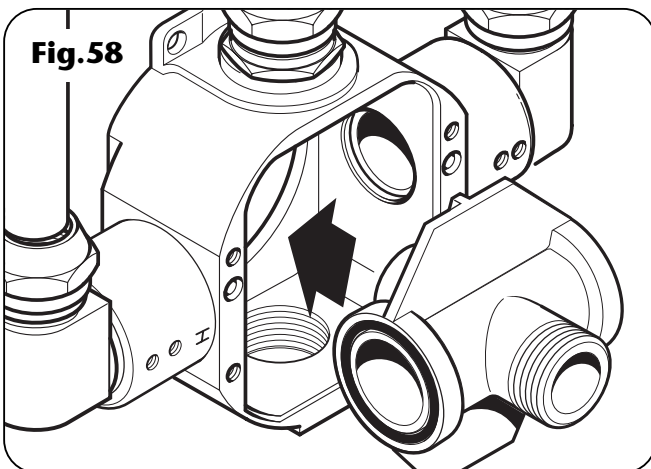


Fig. 58

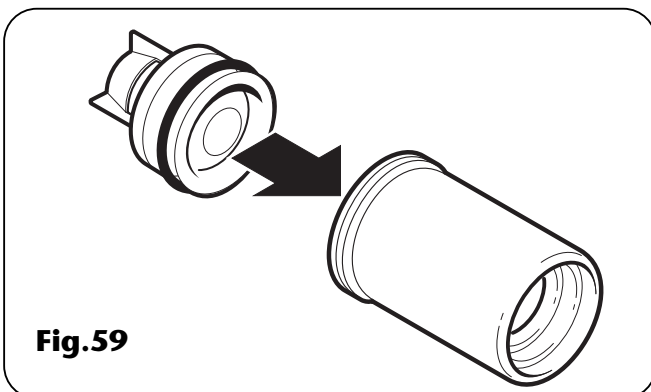


Fig. 59

FLUSHING PROCEDURE

Removal and/or fitting of check valves for maintenance

IMPORTANT. It is preferable to flush the pipework before installing the valve. Where this is not possible, the procedure using a flushing cartridge should be followed.

- a. Isolate the supplies.
- b. Remove the trim ring by twisting anti-clockwise.
- c. Remove the valve cover.
- d. Remove the four screws (**fig.47**) holding the valve cartridge, and carefully remove the cartridge assembly from housing.
- e. Insert the plastic tool provided into the inner sleeve located inside the elbow and twist anti-clockwise (**fig.48**). Take care not to damage the check valve.

Note: The sleeve may stick, in which case it must be carefully hooked out using a suitable tool such as an Allen key.

- f. Push the flushing cartridge into the housing (**fig.49**). Attach a hose to the flushing cartridge outlet and make sure it is directed to waste. Flush the pipes clean.
- g. Wash out the sleeve and check valve. Take care not to damage them.
- h. Replace the check valve into the sleeve, making sure it is in the correct way (**fig.50**).
- i. Refit sleeve into the elbow. Carefully replace the valve cartridge and refit the cover.
- j. Reinstall supplies and test the valve operation.

Note: It may be necessary to service the check valves at regular intervals to prevent cross flow of water.

Note: Flushing cartridges and replacement check valve tools are available from Triton Customer Service.

Flush the pipework to clear system of debris and check for leaks.

FITTING THE BULKHEAD

Complete the outlet pipework ending in a ½" x 15mm female thread fitting (**fig.60**).

Note: This fitting is not supplied as variations in installations needs the selection of the most suitable fitting.

Screw the supplied male-thread connector into the female fitting (**fig.61**) using PTFE tape to make sure of a watertight joint.

Note: The supplied male-thread connector has a nutted shoulder. If fitting to a flush wall, make an additional 8mm allowance for this shoulder at the finished surface. The connector can be cut to size if required.

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

Make good the wall.

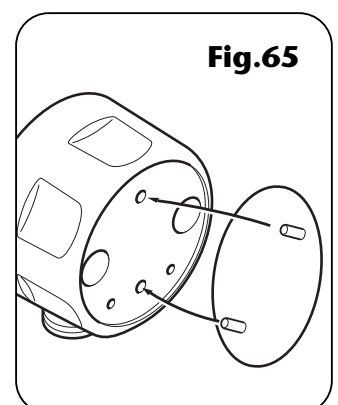
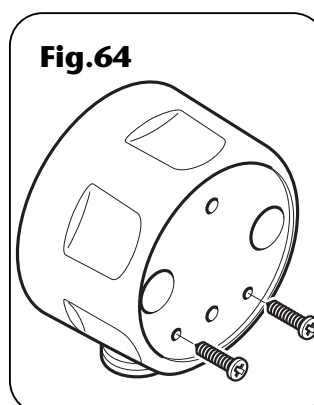
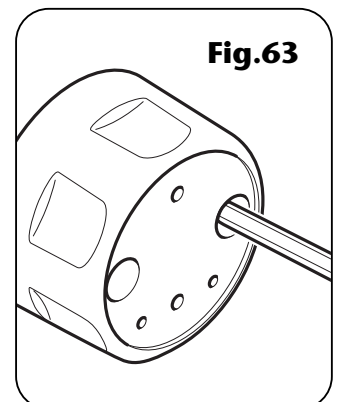
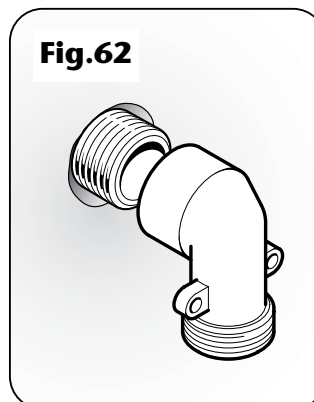
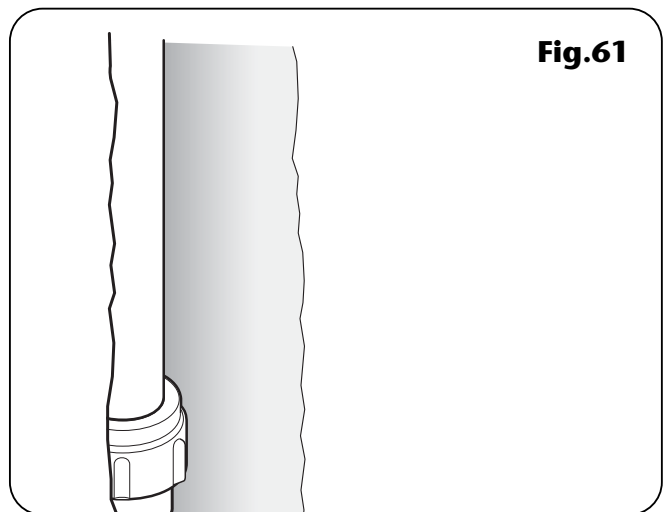
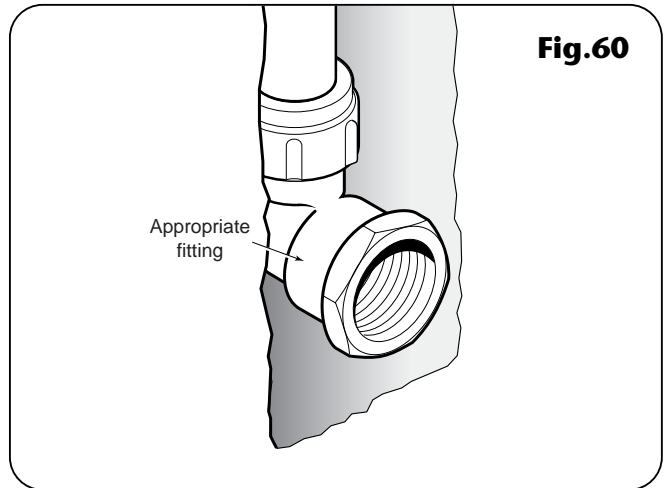
Screw the bulkhead elbow to the threaded connector (**fig.62**) using PTFE tape to seal the thread.

Slide the bulkhead over the elbow, offer up to the wall and mark the two fixing holes (**fig.63**) for securing the bulkhead to the wall.

Remove the bulkhead then drill and plug the holes using the plugs supplied.

Refit the bulkhead and secure to the elbow using two screws (**fig.64**).

Secure the bulkhead to the wall using the two fixing screws supplied. Push on the trim disc making sure the two location lugs locate in the small holes as shown (**fig.65**).



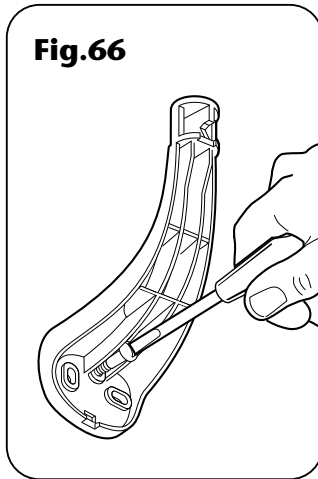


Fig.66

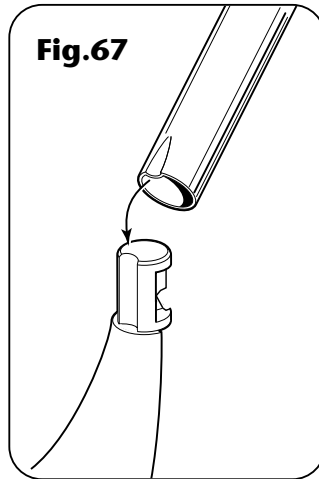


Fig.67

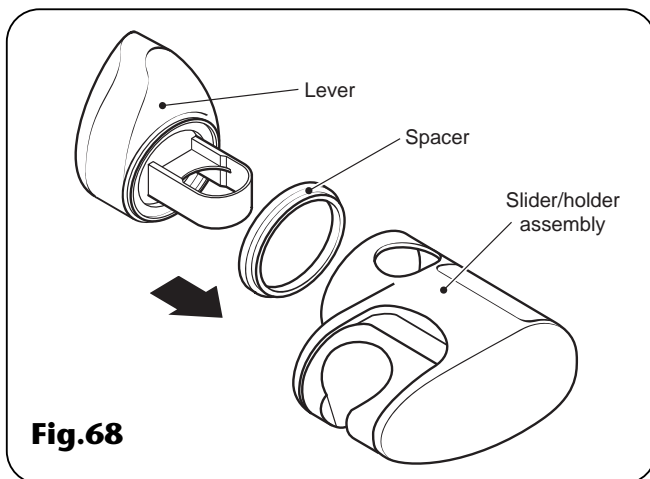


Fig.68

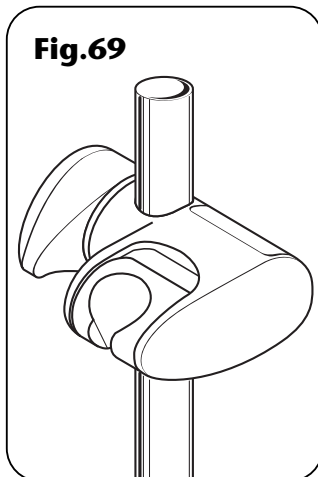


Fig.69

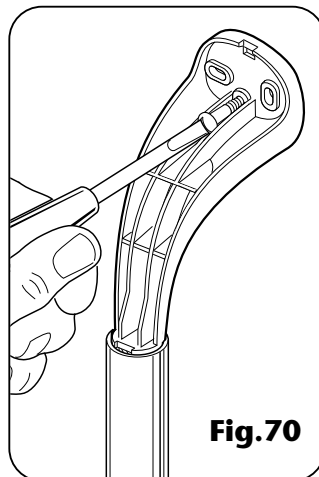


Fig.70

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:

Offer one of the brackets to the wall for the lower position only. Note there are three holes in the brackets but two screws will usually be enough. Mark the centre hole and one of the other two.

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, you must use special wallplugs and a suitable drill bit).*

Replace the bracket to the wall and secure to the wall with the screws supplied (**fig.66**).

Locate the rail onto this lower bracket, making sure the rail engages fully on the bracket. Check that the indent in the riser rail engages into the cut-out on the bracket end (**fig.67**).

Locate the second bracket on top of the rail. Check the rail is vertical then mark the centre hole and of the other two holes. Remove the bracket and rail. Drill and plug the wall.

Fit the lever/saddle assembly, spacer and slider/holder assembly together (**fig.68**). **Make sure the lever is pointing upwards and the holes align.**

Slide onto the rail (**fig.69**) and tighten to the rail by turning the lever. When tight, the lever should be facing forwards and not pointing to the wall. If not, slacken off and remove from the rail. Rotate the saddle and lever 180° within the slider/holder assembly then replace onto the rail and tighten.

IMPORTANT: The sprayhead holder will only fit one way.

Place the rail onto the installed lower bracket. Replace the upper bracket onto the rail and secure the bracket to the wall with the screws supplied (**fig.70**).

Place a trim cover onto each bracket. Make sure the large tab at the narrow end of the trim cover engages into the slot between the rail and bracket (**fig.71**) before pushing and clicking the other end into place.

Should the need arise, the trim covers can be removed by inserting a screwdriver into the slot and carefully levering off the trim.

Snap the soap dish onto the rail (**fig.72**) below the holder assembly. Prise open the soap dish collar and fit onto the rail (**fig.73**) below the dish. The collar is slightly tapered and should be fitted 'thinner section' uppermost. Make sure it locates firmly in the soap dish so it holds the dish at the required height on the rail.

FITTING THE HOSE AND SPRAYHEAD

Feed the flexible hose through the appropriate soap dish opening (**fig.74**) so that the dish acts as a retaining ring (Water Regulations).

Screw the flexible hose to the shower outlet and sprayhead (**fig.75**), making sure the supplied washers are in place at both ends of the flexible hose.

Place the sprayhead into the holder (**fig.76**) and check that it fits correctly.

Note: The holder is slightly tapered and the sprayhead and hose will only fit from one direction.

Note: The holder ratchet system will not move until the sprayhead is in place.

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. At this stage, disconnect the sprayhead and lay aside until the shower unit has been commissioned.

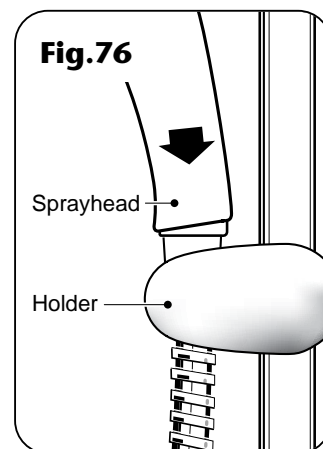
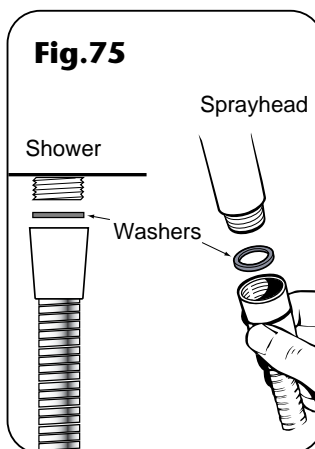
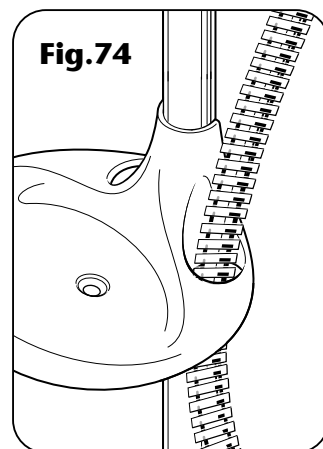
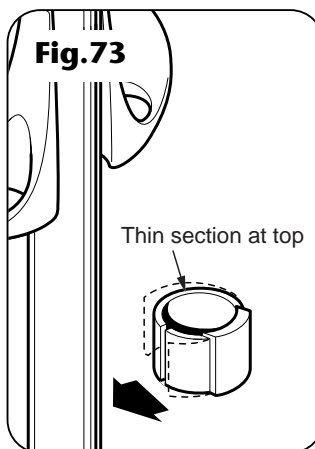
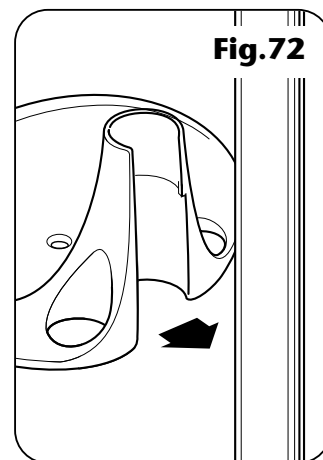
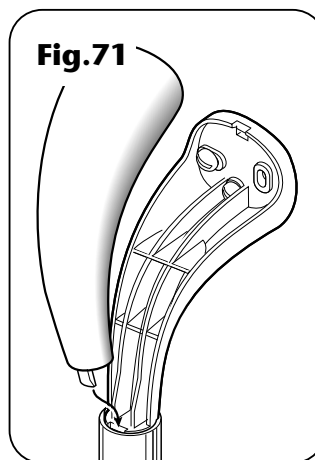
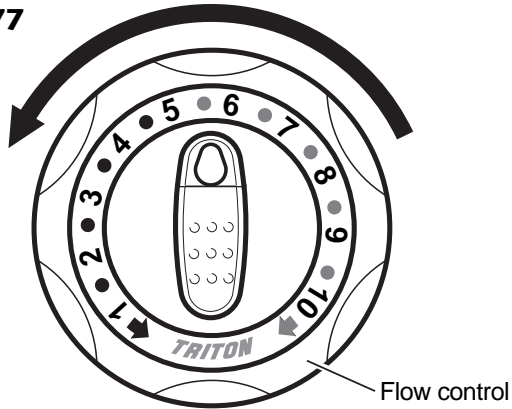
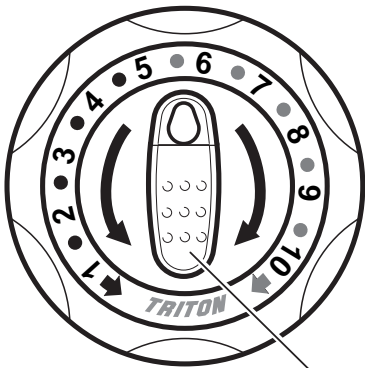


Fig.77



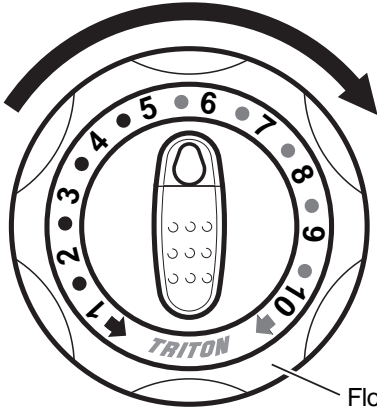
Flow control

Fig.78



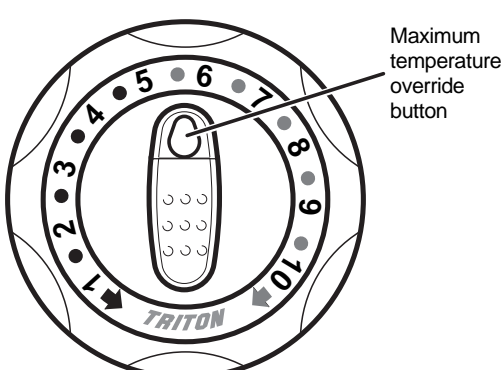
Temperature control

Fig.79



Flow control

Fig.80



Maximum temperature override button

OPERATING THE SHOWER

Make sure all plumbing supplies are connected and turned on.

Procedure

To start the shower, turn the outer knob (flow control) anti-clockwise (**fig.77**).

To adjust the temperature, turn the inner knob, temperature control (**fig.78**).

The temperature disc is numbered for ease of use. The temperature disc ranges from 1 (fully cold) to 10 (fully hot).

Once at the preferred temperature, no further adjustment is needed, providing the hot and cold water supplies remain constant.

To stop the shower, turn the flow control clockwise to the stop position (**fig.79**). This automatically stops the water flow.

As a safety measure the shower has a built-in maximum temperature stop to prevent accidentally exceeding the highest desired temperature. The stop comes in a factory set position. (If adjustment is required see '*Adjusting the maximum temperature stop*').

To override this stop, depress the button (**fig.80**) and turn the control clockwise to the higher settings. To return to the normal temperature range just turn the temperature control anti-clockwise until it is past the maximum temperature stop.

Make sure that the temperature control is in the normal temperature range when the shower is turned off.

ADJUSTING THE SPRAYHEAD

Five sprayhead patterns are available (**fig.81**).
Adjust the spray pattern by turning the bezel on
the sprayhead in either direction until the
desired pattern is obtained.

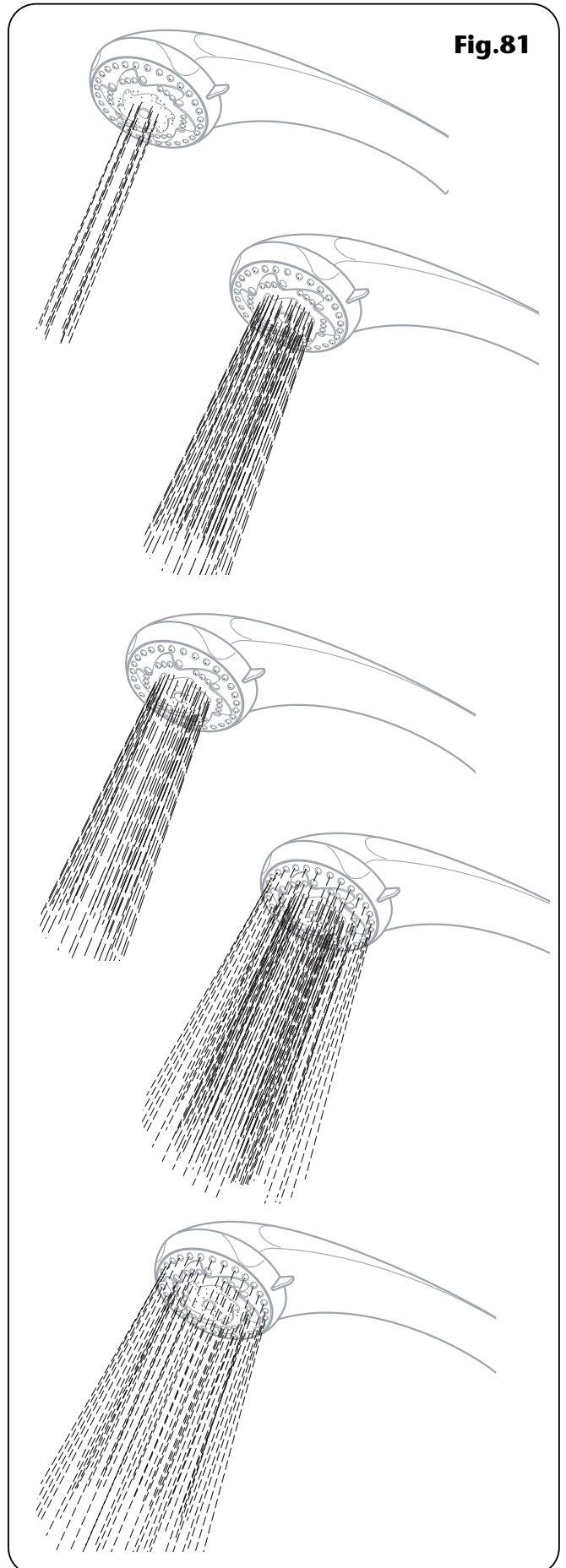


Fig.82

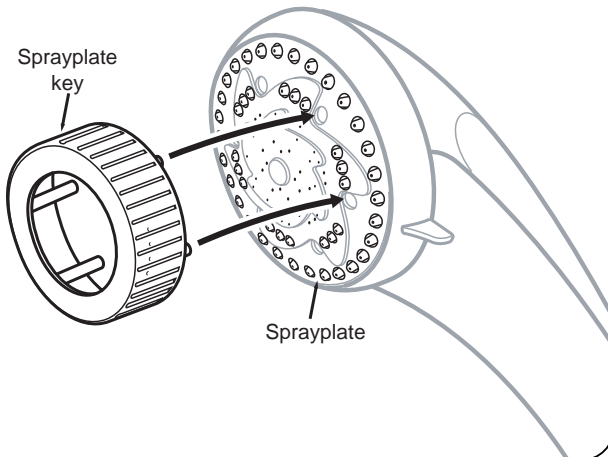
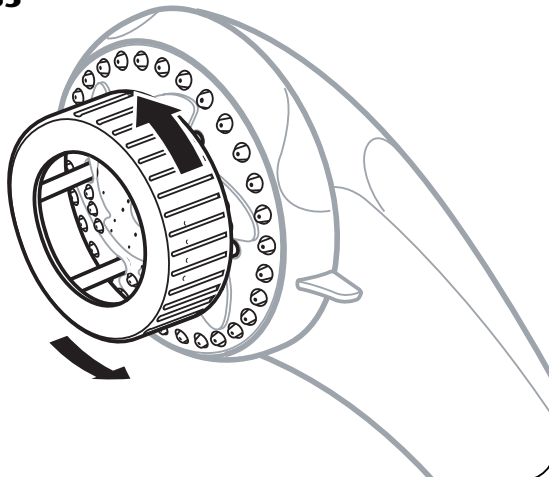


Fig.83



CLEANING

WARNING!

DO NOT use 'powerful' abrasive or solvent cleaning fluids when cleaning the shower as they may damage the plastic fittings.

Before cleaning, turn off the pump unit at the isolation switch to avoid the shower being accidentally switched on.

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.82**), locate the raised 'bosses' into the recesses in the sprayplate. Hold in firmly and twist anti-clockwise (**fig.83**). 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, it can be unscrewed and removed completely.

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

Before replacing the sprayplate, turn the pump unit on at the isolation switch then direct the hose and sprayhead to waste.

Turn the temperature control fully anti-clockwise to the cold position.

Turn the flow control fully anti-clockwise. This operation will flush out any loose scale deposits in the unit and sprayhead. Stop after about thirty seconds.

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

ADJUSTING THE MAXIMUM TEMPERATURE STOP

As a safety measure the shower has a built-in maximum temperature stop to prevent you accidentally exceeding your highest desired temperature. This is set in the factory to provide a maximum temperature of 42°C based on the hot and cold water supplies being 65°C and 15°C respectively at nominally equal pressures.

Procedure

To adjust the maximum temperature stop, first rotate the temperature knob to the 12 o'clock position.

Remove the temperature knob trim using a thin bladed screwdriver (**fig.84**).

Unscrew the central fixing screw (**fig.85**) and remove the temperature control knob (**fig.85**). Then remove the temperature control disc (**fig.85**) together with the wavy washer.

The control disc houses the maximum temperature stop mechanism (**fig.86**).

To increase the temperature stop setting, reposition the temperature stop mechanism clockwise within the arc of the grooves (**fig.86**).

To decrease the temperature stop setting, reposition the stop mechanism anti-clockwise within the arc of the grooves.

When the stop mechanism is set at the preferred position, refit the temperature control disc making sure the name 'Triton' is at the bottom.

Replace the wavy washer, then refit the temperature control knob, making sure it is replaced in the same position as when removed (i.e. 12 o'clock position).

Refit the central screw and replace the knob trim.

IMPORTANT: Only adjust the maximum temperature stop when the hot water is at its usual supply temperature.

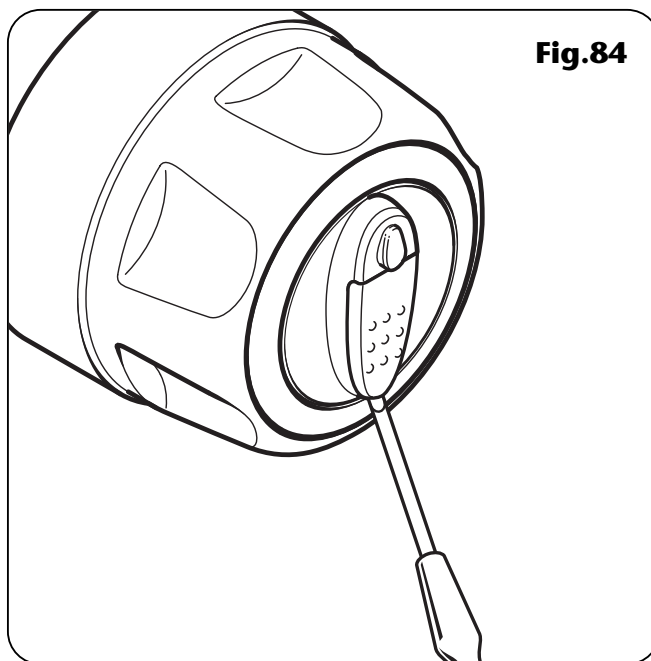


Fig.84

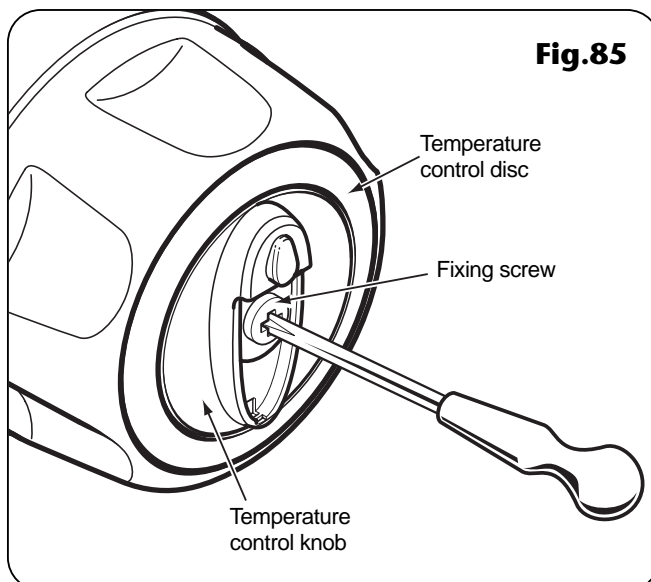


Fig.85

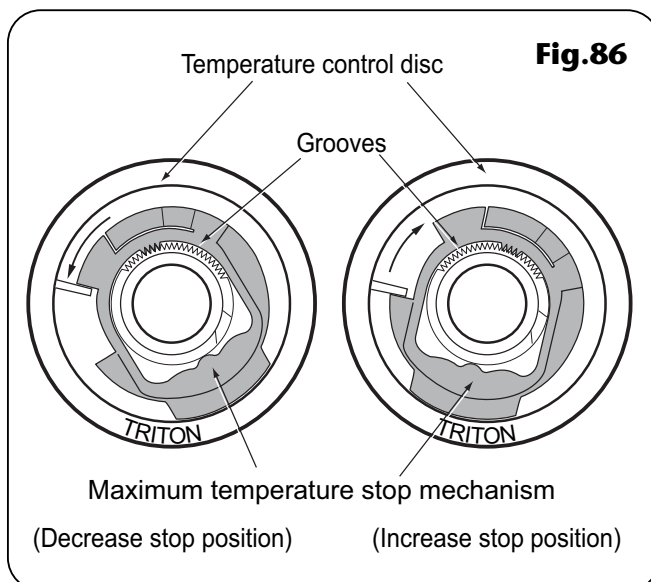
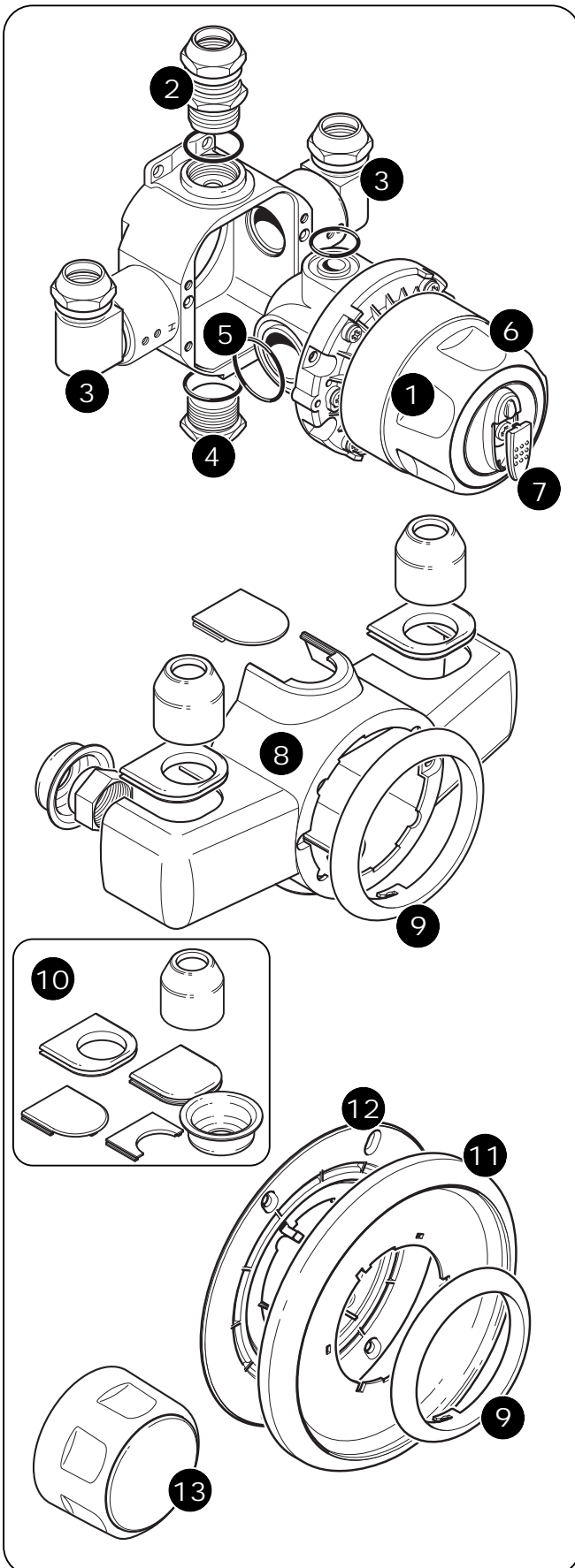


Fig.86

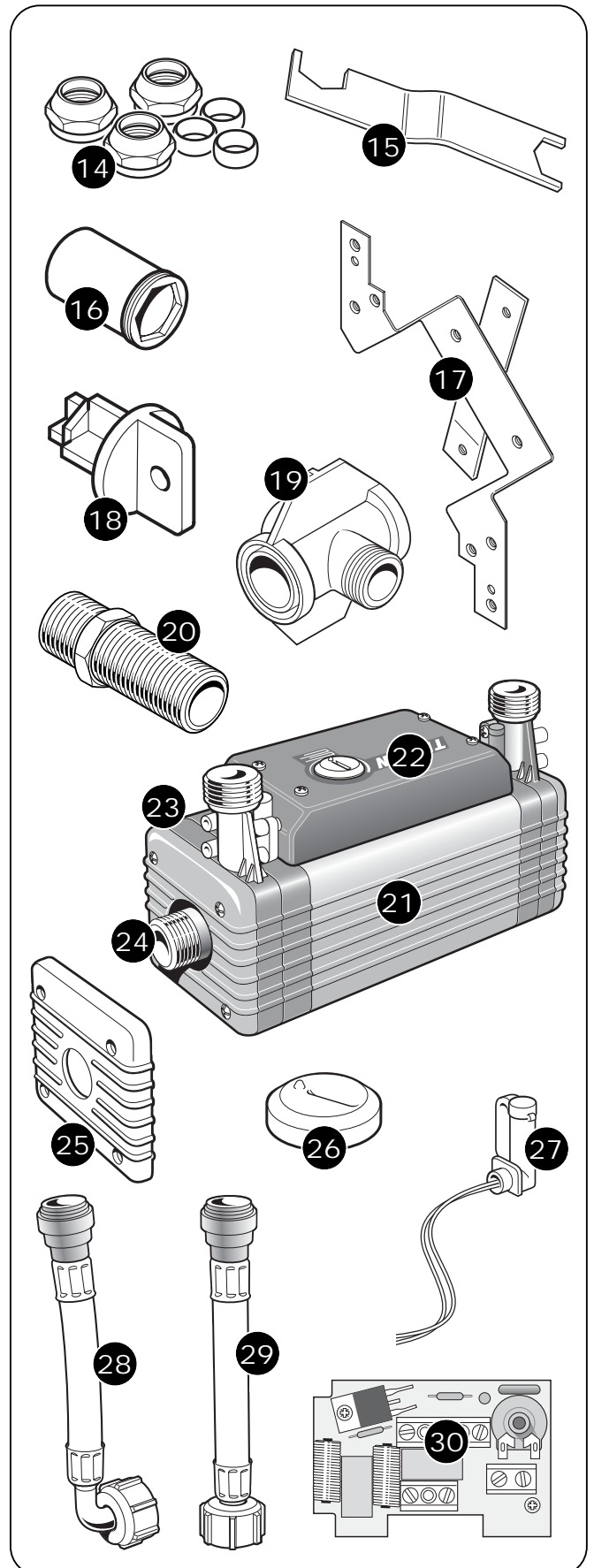
SPARE PARTS

Ref.	Description	Part No.
1	Cartridge assy. (AS6000) Cartridge assy. (AS7000)	83305100 83305110
2	Outlet adaptor – chrome effect	83303840
3	Inlet elbow assembly	83303830
4	Outlet blanking plug	83303870
5	Cartridge 'O' rings	83304830
6	Knob set – white	83304810
7	Knob trim	7051466
8	Cover shroud – chrome effect	7051445
9	Trim ring – white – chrome effect	7051441 7051442
10	Trim sets – chrome effect	83303670
11	Cover plate – chrome effect	7051449
12	Mounting plate	7051447
13	Bulkhead assembly – chrome effect	83303770

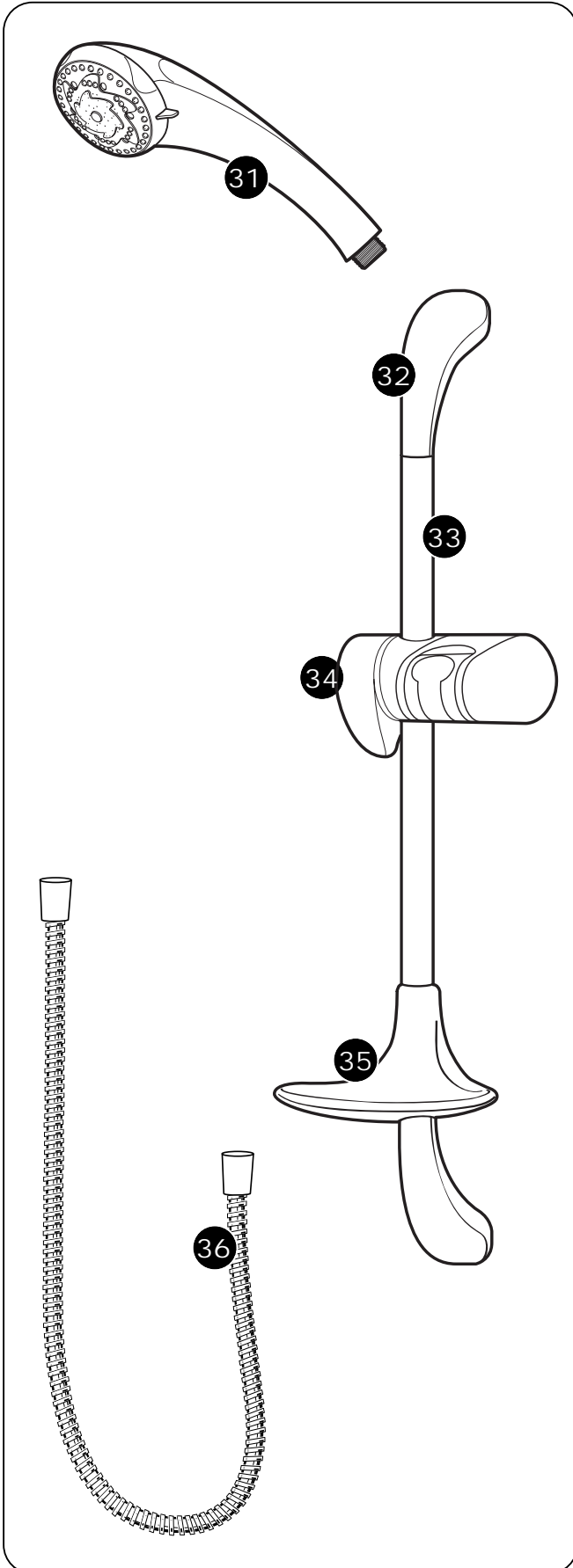


SPARE PARTS

Ref.	Description	Part No.
14	Inlet and outlet nuts	83304810
15	Spanner	7051442
16	Check valve/sleeve assembly	7051445
17	Wall bracket	7051447
18	Check valve tool	7051449
19	Flushing cartridge (available on request)	7051466
20	Nutted male thread fitting	83303660
21	Pump assembly	T550i00M
22	Cover	7052286
23	Impeller housing	7051544
24	Pump inlet	7051543
25	End cap	7052310
26	Speed control knob	7051552
27	Flow switch assembly	82300700
28	Flexible connector inlet c/w filter	22004500
29	Flexible connector outlet c/w filter	22004510
30	PCB assembly	7072314
-	PVC shroud (flush fit only)	7052165
-	Screw pack	83303800
-	Extended control lever (which can be fitted easily to make the controls easier to use. Available on request from Triton Customer Service).	



SPARE PARTS



Ref. Description

Part No.

31	5 mode sprayhead	22010980
32	Brackets (pair)	83306160
33	Riser rail	7042409
34	Sprayhead holder	83306190
35	Soap dish	22008960
36	Flexible hose	28100000

FAULT FINDING – pump

Problem/Symptom	Cause	Action/cure
1 Pump motor does not operate.	1.1 Pump motor thermal overload protection activated.	1.1.1 Allow the pump motor to cool and automatically reset. 1.1.2 Check the pump is adequately ventilated.
	1.2 Mains electricity supply fault.	1.2.1 Blown fuse. Check supply, and renew or reset fuse. If it fails again, contact Customer Service. 1.2.2 Power cut? Check other appliances and if necessary contact local Electricity Company.
	1.3 Loose wiring connections.	1.3.1 Check all connections and secure where necessary.
	1.4 Not enough flow to operate flow switch.	1.4.1 Check isolating valve is fully open. 1.4.2 Check head of water. 1.4.3 Make sure the inlet filter is clean.
	1.5 Faulty flow switch.	1.5.1 Replace switch. Contact Triton Customer Service for advice.
	1.6 Failed pump motor.	1.6.1 Replace the pump unit. Contact Triton Customer Service.
2 Poor or no water flow.	2.1 Pump motor not running.	2.1.1 See causes 1.1, 1.2, 1.3, 1.4, 1.5, and 1.6.
	2.2 Pump or shower unit frozen.	2.2.1 Check for evidence of freezing. Contact Triton Customer Service for advice.
	2.3 Water turned off.	2.3.1 Check isolation valves and water supply.
	2.4 No water in cold storage cistern.	2.4.1 See 2.3.1.
	2.5 System blockage.	2.5.1 Isolate supplies and inspect inlet filter, pump outlet and sprayhead.
	2.6 Blocked sprayhead on shower unit.	2.6.1 Clean the sprayhead. Refer to appropriate page.
	2.7 Blocked filter.	2.7.1 Clean filter.
3 Pump does not switch off.	3.1 Faulty flow switches.	3.1.1 Replace flow switches. Disconnect the electric supply to the pump before attempting any fault finding on the unit. Contact Triton Customer Service for advice.

FAULT FINDING – mixer valve

Problem/symptom	Cause	Action/cure
1 Water too hot.	1.1 Not enough cold water flowing through shower.	1.1.1 Turn the temperature control anti-clockwise.
	1.2 Increase in the ambient cold water temperature.	1.2.1 Turn the temperature control anti-clockwise.
	1.3 Cold water supply blocked or cut off.	1.3.1 Turn shower off and consult a competent plumber or contact Triton Customer Service.
	1.4 High volume of cold water drawn off elsewhere.	1.4.1 Reduce the simultaneous demand from supply – make sure there is a dedicated supply to mixer.
	1.5 Excessive flow rate.	1.5.1 Contact Customer Service for advice on flow limiters.
	1.6 Dirty check valves.	1.6.1 Clean – refer to page 24.
2 Water too cold.	2.1 Not enough hot water flowing through shower.	2.1.1 Turn the temperature control clockwise. (Override the max. temperature stop if necessary).
	2.2 Decrease in ambient cold water temperature.	2.2.1 Turn the temperature control clockwise. (Override the max. temperature stop if necessary).
	2.3 Insufficient hot water supplies from heating appliance.	2.3.1 Make sure heating cylinder is set to maximum hot water output.
	2.4 Hot water supply blocked or restricted.	2.4.1 Turn shower off and consult a competent plumber or contact Triton Customer Service.
	2.5 Excessive flow rate.	2.5.1 Contact Customer Service for advice on flow limiters.
	2.6 Dirty check valves.	2.6.1 Clean – refer to page 24.

Any maintenance or repair to the shower must be carried out by a suitably qualified person.

FAULT FINDING – mixer valve

Problem/symptom	Cause	Action/cure
3 Water does not flow or shower pattern collapses when another outlet is turned on.	3.1 Water supplies cut off.	3.1.1 Check water elsewhere in house and if necessary contact local water company.
	3.2 Shower unit blocked.	3.2.1 Inspect flow limiters (if fitted) and check valves – refer to page 24. Clean if necessary.
	3.3 Blockage in pipework.	3.3.1 Turn the shower off and consult a suitably competent plumber.
	3.4 Sprayhead blocked.	3.4.1 Clean sprayhead.
	3.5 Reduced flow rate when other outlets in use.	3.5.1 Reduce the simultaneous demand – make sure of a dedicated supply to mixer. 3.5.2 Make sure service valves are fully open.
4 Shower will not shut off.	4.1 Pipework not flushed before connecting the unit ('O' rings damaged).	4.1.1 Renew cartridge (internal seals are not serviceable).



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, pressure relief device operation, electrical 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 STANDARD GUARANTEE

Triton guarantee this product against all mechanical and electrical defects arising from faulty workmanship or materials for a period of three years (one year for the pump) for domestic use only, from the date of purchase, provided that it has been installed by a competent person in full accordance with the fitting 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. 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 electricity, 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 appliance.
- 6 The cost of repair or replacement of pressure relief devices, sprayheads, hoses, riser rails and/or wall brackets, isolating switches, electrical cable, fuses and/or circuit breakers 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, limescale, system debris or frost.

Customer Service: ☎ (024) 7637 2222

**Scottish and Northern Ireland
Customer Service:** ☎ 08457 626591

Trade Installer Hotline: ☎ (024) 7632 5491
Fax: (024) 7632 4564

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