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SHOWERFORCE

NewTeam Ltd.

Customer Service Dept.
Brunel Road
Earlstrees Industrial Estate
Corby
Northants
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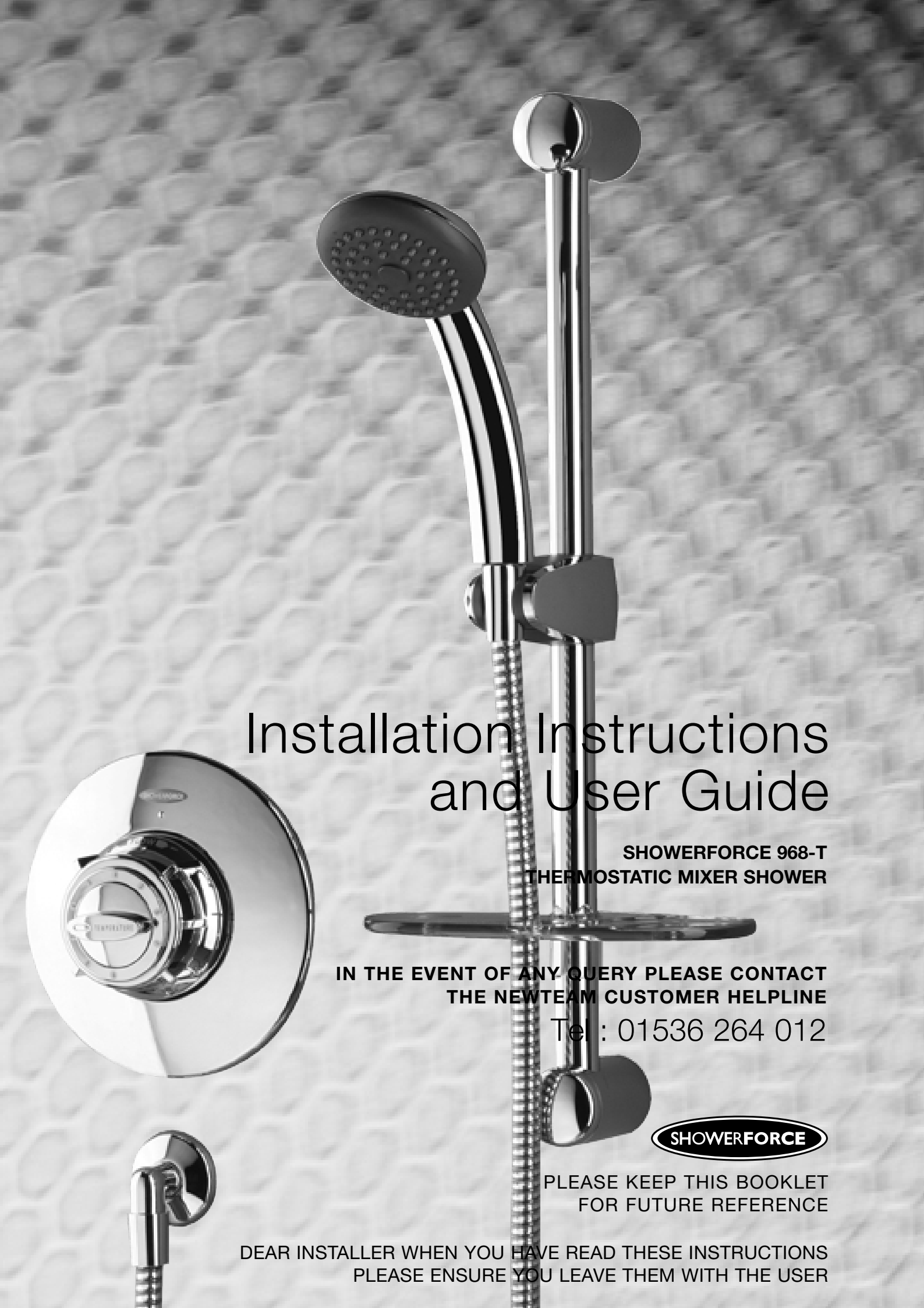


Installation Instructions and User Guide

SHOWERFORCE 968-T
THERMOSTATIC MIXER SHOWER

IN THE EVENT OF ANY QUERY PLEASE CONTACT
THE NEWTEAM CUSTOMER HELPLINE
Tel : 01536 264 012

SHOWERFORCE

PLEASE KEEP THIS BOOKLET
FOR FUTURE REFERENCE

DEAR INSTALLER WHEN YOU HAVE READ THESE INSTRUCTIONS
PLEASE ENSURE YOU LEAVE THEM WITH THE USER

ShowerForce 968-T

Contents

Installation and Operating Instructions
for ShowerForce Thermostatic Mixer Shower

• 968-T

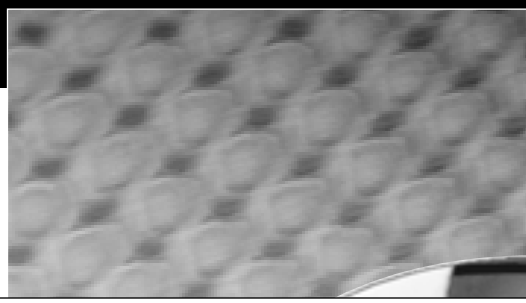
Please read this booklet carefully and ensure a competent person undertakes the installation.

Note: Following the headings in sequence will guide you through the installation and operation of your ShowerForce 968-T Mixer Shower

Refer to back cover for Guarantee, Customer Service and Replacement Parts Policy. In the event of any query regarding installation please contact the NewTeam Customer Service Department

Tel: 01536 264 012 • Fax: 01536 409 201
E-mail: service@newteam.co.uk • E-mail: spares@newteam.co.uk

In line with our policy of continual product development the specifications may be varied and product design altered. We reserve the right to depart from the details given in this manual without prior notice.



968-T Shower Valve

Installation and operating instructions for the 968-T Thermostatic Mixer Shower.

The valve is supplied with the hot inlet on the left and the cold inlet on the right when viewed from the front. The hot supply must be connected to the inlet port marked 'H'.

Please read these instructions carefully, and ensure the shower valve is installed to The Water Supply (Water Fittings) Regulations. If in doubt, contact a registered plumber or the Secretary of Institute of Plumbing, address as follows:

Institute of Plumbing
64 Station Lane
Hornchurch
Essex
RM12 6NB

Tel: 01708 472 791

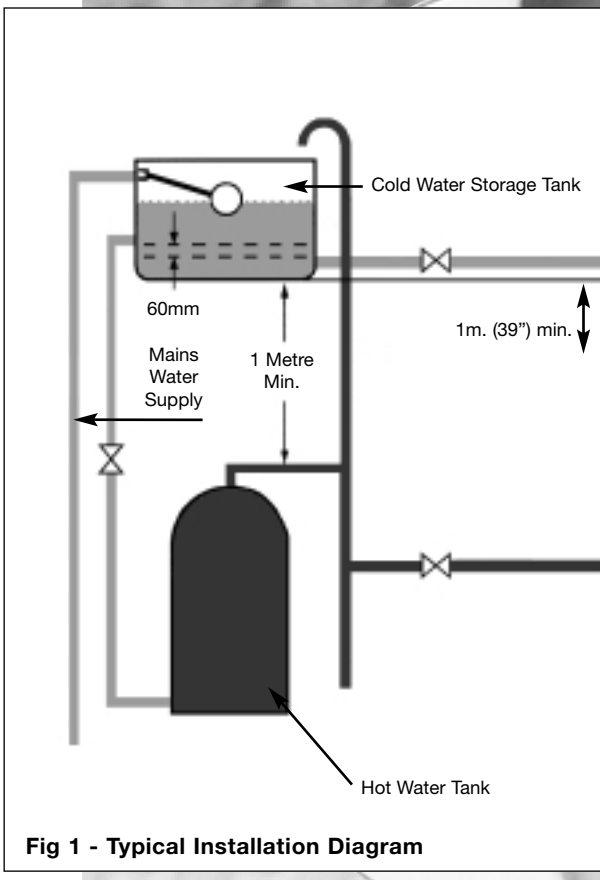


Fig 1 - Typical Installation Diagram

Site Requirements

To ensure the correct operation of your shower mixing valve it is important to fully understand your site installation. This thermostatic mixing valve will suit the following

High Pressure
Low Pressure
Mains Pressure
Pumped Pressure
Unequal Pressure
Gravity Pressure

The shower mixing valve may require slight adjustment, depending on your site installation the following may apply.

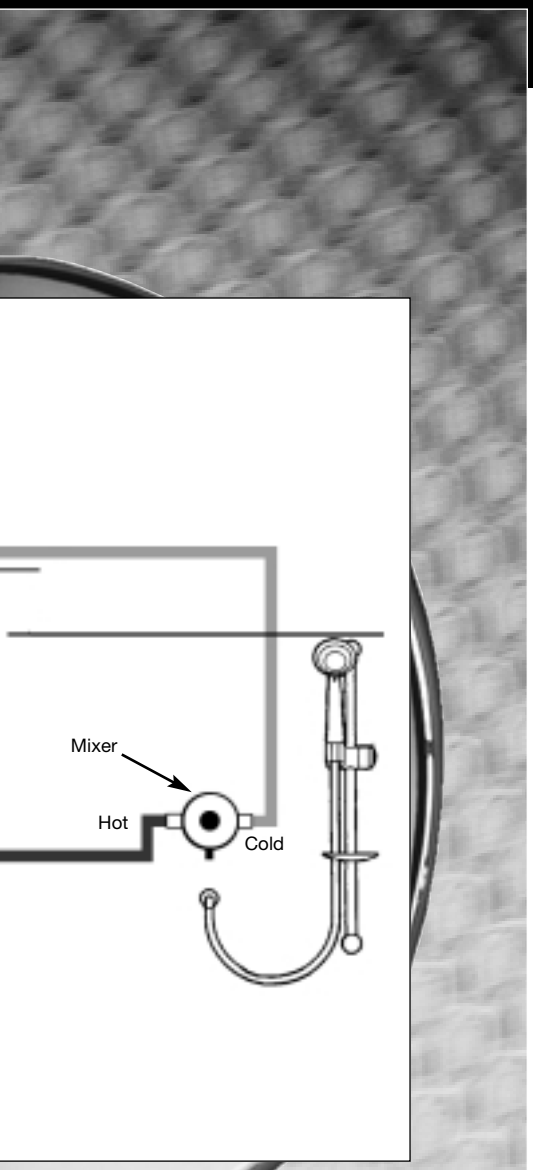
Gravity Fed

Fig 1 shows a typical layout. The distance between the bottom of the cold water tank and the shower head must be a minimum of 1 meter (0.1 bar).

Make the connection into the hot water supply pipe from the cylinder ensuring that it is the first draw off on the vertical pipe below the expansion pipe tee. If this is not possible a direct connection must be made from the hot water cylinder with an Essex flange.

The cold water supply should be taken directly from the cold water storage tank positioned 60mm below the cold connection which feeds the hot water cylinder.

The above installation is recommended for most showers, if however your cold supply is mains pressure then the following will be required.



Installation (Contd.)

MAINS COLD SUPPLY

A) *Hot supply between 1 to 4 metres (0.1-0.4 bar).
Mains cold supply up to 10 bar.
*Fit 7 litre (green) limiter into cold inlet elbow only.

B) 1. *Hot supply above 5 metre (0.5 bar).
2. Mains cold supply up to 10 bar.
3. *Fit 5 litre (yellow) limiter into hot inlet elbow.
4. *Fit 7 litre (green) limiter into cold inlet elbow.

C) 1. Hot supply below 2 metre (0.2 bar).
2. Mains cold supply up to 10 bar.
3. No limiter in hot inlet elbow.
4. White orifice disc into cold inlet elbow.

UNVENTED SYSTEM

Fit 5 litre (yellow) limiter into hot inlet elbow.
Fit 7 litre (green) limiter into cold inlet elbow.

(Cold supply to shower from same source as hot).

INSTANTANEOUS GAS WATER HEATER & COMBINATION BOILER (UNVENTED)

The hot supply from the heater is to be connected to the hot inlet elbow and cold inlet elbow connected to the cold supply. Fit 7 litre flow limiter (as supplied) into the cold inlet elbow.

INSTANTANEOUS (NON STORAGE) (Refer to manufacturers instructions regarding outlet conditions)

7-9kw Electric Water Heaters (Unvented)

This will require a 5 litre (yellow) flow limiter as supplied into Cold outlet only.

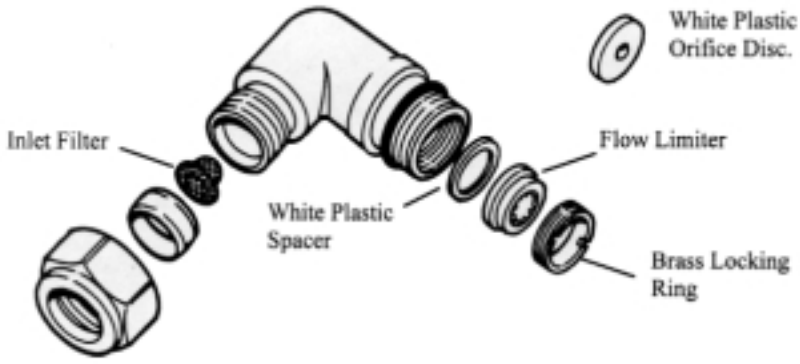
IMPORTANT: It is a requirement of Instantaneous Electric Water Heaters that a stable flow of water passes through the heater.

This requirement can be satisfied by using a Flow Stabilizer and should be adjusted to give a temperature of between 50 & 55°C from the heater.

Flow Stabilizers should be fitted prior to the heater.

PUMPED SHOWERS

Your thermostatic shower is also ideal for power shower installation and can be matched to the ShowerForce range of shower pumps.



Flow Limiter

General

1) Before commencing it is advisable to install isolating valves on both hot and cold supplies for flushing out and servicing purpose.

2) It is important that both supply pipes are flushed before connecting mixing valves to ensure no pipe/plumbing debris enters the mixing valve.

3) A simple way of flushing out the pipes is to fit the outlet adaptor to the pipe and secure with the compression nut and olive, fit the hose to the adaptor and flush out pipes to the waste.

4) We recommend fitting the strainers to ensure no debris enters the mixing valve.

5) In hard water areas the mixing valve may require more frequent cleaning and servicing.

6) The temperature of your stored water must not exceed 65ºC. A stored water temperature of 60ºC is considered sufficient to meet all normal requirements in line with the British Standard 6700.

Surface Mounting - Fig 2

IMPORTANT: The red security cap supplied attached to the mixing valve, must not be removed until fitting the temperature control knob assembly. When connecting pipework do not solder within 300mm (12") of the valve or expose parts to excessive heat. The valve can be connected to rising or falling pipes or those emerging from the wall surface, by simply rotating the inlet elbows to the desired position. Ensuring the hose connection is always at the bottom of the valve when surface mounted.

1. Select the mixer valve position to suit the end user, we recommend fixing the valve at chest height.
2. Place the (black) valve mounting bracket (10) against the wall, in the **diamond position**.* Mark the four fixing points, drill and fix using the screws and plugs provided.
3. Bring the pipework to the valve position at 138mm to 145mm centres.

   HOT ON THE LEFT, COLD ON THE RIGHT.
4. Flush out pipework before fixing the valve
5. Carefully prise off outer temperature control knob cover (1a) using a screwdriver in the slot provided.
6. Remove retaining screw (2) and pull off temperature control knob (1b)
7. Remove plastic starlock washer (D) and temperature indicator ring (3).
8. Remove circlip (E) and flow control knob (4) and pull off exposed shroud assembly (5).
9. Tighten in the hose nipple (8) using PTFE tape. The flat end of the nipple must be exposed. Remove and re-fit both inlet elbows (6) to the desired position using PTFE tape.
10. Tighten inlet elbows (9) fully clockwise in the valve body and unscrew up to $1^{1}/_{2}$ turns to desired position.
11. Push valve body (7) onto mounting bracket (10). Mark pipes appropriate to the position of the inlet elbows (9). Remove valve from bracket and cut off pipes at the marked level.

Installation

12. Hold pipes away from the wall. Fit valve onto pipework and then push over the mounting bracket. Tighten compressive nuts on the inlet elbows.
13. Using the two retaining screws (11) on the mounting bracket secure the valve, ensuring the pipe inlet trims (6) are in position.
14. Without moving the temperature control spindle remove the red security cap. Fit the flow control knob (4) loosely and turn to the full clockwise position.
15. Remove and align control knob stop (A) above shroud stop (B). Re-fit circlip (E).
16. Without moving the pre-set temperature spindle position, fit temperature indicator ring (3) with the marker uppermost. Retain with starlock washer (D).
17. Fit the temperature control knob (1b) with the indicator (C) to the immediate left of the stop within the temperature indicator ring (3). If the temperature spindle is accidentally moved the maximum temperature limit stop must be readjusted, please refer to page 7 - Setting the Temperature Limit Stop.
18. Replace control knob. Insert and tighten retaining screw (2) to secure temperature control knob.
19. Push on temperature control knob cover (1a).
20. Commission the mixer valve.

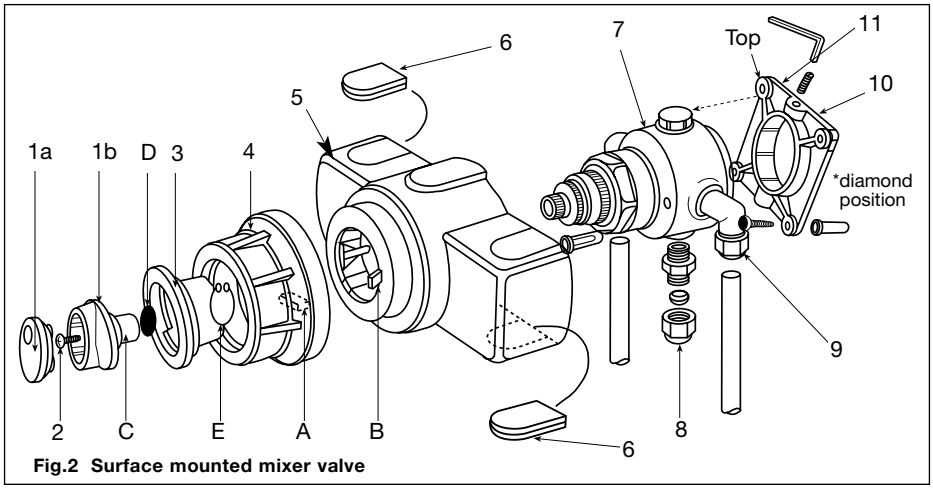


Fig.2 Surface mounted mixer valve

Recessed Mounting - Fig 3

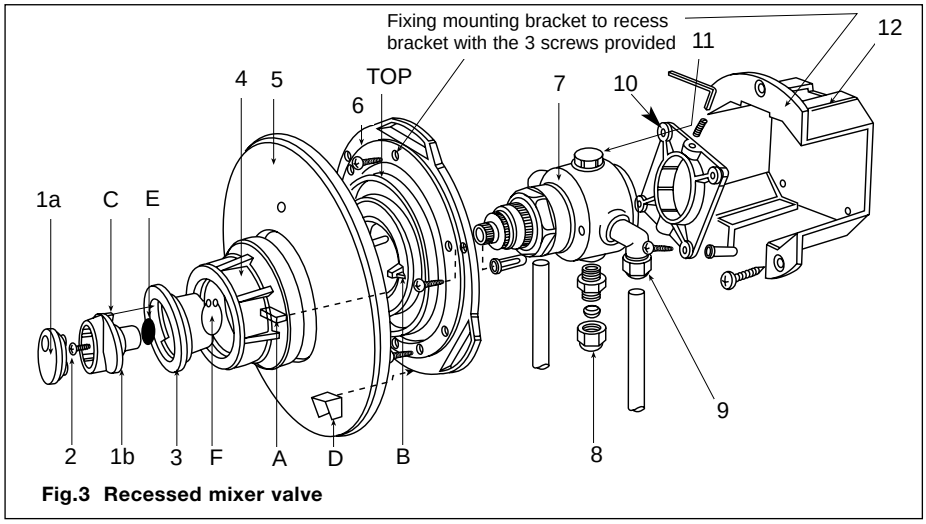


Fig.3 Recessed mixer valve

IMPORTANT: Before commencing installation, the position of the mixer valve, hose outlet and pipework should be decided. Channel the wall as necessary allowing a depth of 75mm for the valve body housing. When fixing to an unfinished wall (i.e. prior to tiling) the valve housing must be positioned so it will sit on the finished (tiled) surface, when installation is completed. It is essential when installing the recessed mixing valve full access can be achieved for servicing purposes. Rear access to the mixing valve is preferred where possible as this removes the need to disturb tiling or decoration at the front of the valve.

The red security cap supplied attached to the mixing valve, must not be removed until fitting the temperature control assembly.

1. Select the mixer valve position to suit the end user, we recommend fixing the valve at chest height.
2. Fit the (black) valve mounting bracket (11) on the inside rear face of the recessed valve housing (12) using the two retaining screws provided.
3. Bring the pipework to the valve position at 138mm to 145mm centres.

   HOT ON THE LEFT, COLD ON THE RIGHT.
4. Flush out pipework before fixing the valve
5. Carefully prise off outer temperature control knob cover (1a) using a screwdriver in the slot provided.
6. Remove retaining screw (2) and pull off temperature control knob (1b)
7. Remove plastic starlock washer (D) and temperature indicator ring (3).
8. Remove circlip (E) and flow control knob (4) and pull off exposed shroud assembly (5).
9. Tighten in the hose nipple (8) using PTFE tape. The nipple should be fitted with the chamfer exposed to accept a compression nut and olive. Remove and re-fit both inlet elbows (6) to the desired position using PTFE tape.
10. Tighten inlet elbows (9) fully clockwise in the valve body and unscrew up to $1^{1}/_{2}$ turns to desired position.
11. Push valve body (7) onto mounting bracket (10). inside housing. Insert retaining screw (11) into the hole on the mounting bracket and tighten to secure valve.

Installation

12. Place valve body housing into the recess and mark pipes appropriate to the position of the inlet elbows and cut off pipes at the marked level.
13. Whilst holding pipes clear of the recess fit valve on to pipework and tighten compression nuts on the inlet elbows. Fix pipework between mixer valve outlet nipple (8) and shower union elbow, making the connection with 15mm tube (1/2" F.I BSP x 15mm elbow) (not supplied).
14. Re-position in recess. Complete pipework and test installation.
15. After tiling the valve it can be secured to the wall.
16. Using the screws provided loosely secure the recess shroud clip (6), to the recessing bracket (12) with the 'top' indicator uppermost.
17. Offer the whole assembly to the tiles and mark the fixing points on the recess shroud clip (6). Remove clip, drill and insert plugs provided. Secure clip to tiles.
18. Push on the recessed shroud (5) ensuring the location point in (D) engages with the corresponding section on the clip.
19. Without moving the temperature control spindle remove the red security cap. Fit the flow control knob (4) loosely and turn to the full clockwise position.
20. Remove and align control stop (A) above shroud stop (B). Re-fit circlip (F).
21. Without moving the pre-set temperature spindle position, fit temperature indicator ring (3) with the marker uppermost. Retain with starlock washer (E).
22. Fit the temperature control knob (1b) with the indicator (C) to the immediate left of the stop within the temperature indicator ring (3). If the temperature spindle is accidentally moved the maximum temperature limit stop must be readjusted, please refer to page 7 - Setting the Temperature Limit Limit Stop.
23. Replace control knob. Insert and tighten retaining screw (2) to secure temperature control knob.
24. Push on temperature control knob cover (1a).
25. Commission the mixer valve.

Commissioning

- Ensuring the mixer valve is in the “off” position (see control features below), but do not connect the handset. Turn on the cold isolating valve, and run the shower on the cold setting for 2-3 minutes to clear any debris.
- Attach the handset to the hose and turn on mixer valve in full flow position and check temperature operation. Anti-clockwise movement should gradually increase temperature to full hot. If this is not correct then supplies have been connected to the wrong inlets on the mixer.
- Select temperature limit stop, see below.
- Demonstrate shower to user.

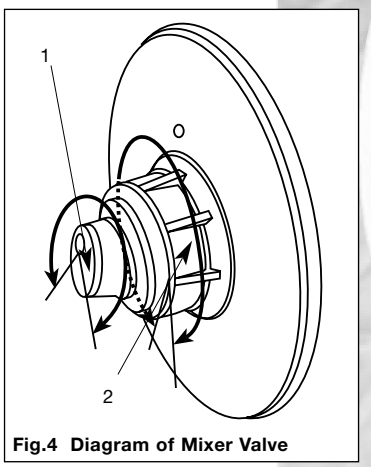


Fig.4 Diagram of Mixer Valve

Adjust the temperature control by rotating the front cover knob (1) clockwise to decrease, and anti-clockwise to increase, using the numeric dial as a guide.

Rotate the flow control knob (2) anti-clockwise to turn the shower on and to achieve full flow.

The handset holder can be positioned on the riser rail to your required height by twisting the grip ring clockwise. Select handset height and re-tighten.

The shower spray angle can be adjusted by moving the handset in its holder.

Temperature Setting

The mixer valve allows the showering temperatures to be set at a safe level, preventing accidental selection of high temperatures. This setting should be made during commissioning and will require that the hot cylinder is at its normal operating temperature.

Important:
The handset must be in spray mode. We recommend the reading of the ‘User Instructions’ before proceeding further.

Procedure:
The maximum mixed water temperature should be limited to ensure no undesirable temperature is obtained. If necessary, adjust as follows:

Note: Turn temperature spline clockwise for a cooler shower and anti-clockwise for a warmer shower.

1. Remove the temperature control knob cover (1).
2. Turn the flow control knob (6) to the full flow position.
3. Turn the temperature control knob (3) to the maximum temperature position.
4. Remove the temperature control knob screw (2) and pull off the control knob (3) ensuring that the temperature indicator ring (4) remains in position.
5. Adjust the temperature spindle (5) by using the temperature control knob (3), if necessary to alter the maximum temperature. When the desired maximum temperature is achieved, replace the temperature control knob (3) on the spline shaft (5) with the limiter (A) to the right hand side of the (B) inside the temperature indicator ring.
6. If the desired maximum temperature is correct, replace the temperature control knob screw (2) and knob cap (1).

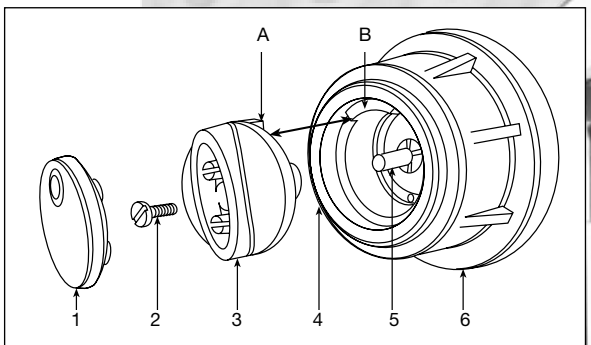


Fig 5 Adjusting the temperature limit stop

General

1) Soak all metal parts in descalent, wash off in clean water.

2) Examine all seals and replace if necessary.

3) Use silicon based grease on all seals (light smear only). A maintenance kit is available, which contains all seals and grease from your local stockist or manufacturer.

Re-Assembly

1) Replace the spring in the bottom of the valve followed by the piston and thermostat.

2) Screw the cartridge back into the shower valve and fully tighten.

3) Replace the sleeve and push the knob back into place, replace the screw and knob cap

NOTE: Do not adjust the bottom cap unless you are installing a new cartridge. If this is the case, screw the bottom cap fully clockwise until it stops, then unscrew anti-clockwise 3/4 turn only.

General Fault Diagnosis

If your Thermostatic Mixing Valve fails to operate either immediately upon installation or after a period of time, the following points should be checked;

1) Isolate supplies and ensure that both hot and cold supplies are reaching the valve body. You may need to dis-connect supply pipes to ensure this.

2) Ensure that there is no debris between the faces of the piston and it's mating faces, the bottom of the valve body and the cartridge.

3) Check that the valve has been installed correctly in accordance of its particular feed system (i.e use of flow limiters where necessary).

4) Check that the hot water temperature source is sufficient; preferred minimum of 60°C.

Spare Parts

Part No.	Description
SK 1500 - 1	Seals Kit
SK 1500 - 7 GP	Cartridge Kit
SK 1500 - 3	Thermostat and Piston Assembly
SK 1500 - 12	Flow Limiter Kit
SP-080-0033	Recessed Valve Housing
SP-070-0102	968 Service Pack
SP-070-0105	Wax Capsule
SP-070-0107	Temperature Knob Screw
SP-070-0109	Temperature Spindle
SP-080-0019	Union Elbow Chrome
SP-081-0009	Flow Limiter Pack
SP-081-0015	Recessed Shroud Rubber Seal

Part No.	Description
SP-087-1080	Piston Assembly
SP-135-0006	Wall Mounting Bracket
SP-135-0007	Recessed Shroud Clip
SP-135-0008-CP	Recessed Shroud Chrome
SP-135-0009-CP	Flow Control Knob White
SP-135-0011	Temperature Indicator Ring
SP-135-0014	Pipe Access Trim Chrome
SP-320-0304	Seating O Ring
SP-135-0015	Surface Shroud Chrome
SP-135-0101	Temp Control Assembly White
SP-135-0102	Complete Valve W/O Covers

Shower Rail Kit - Fig 6

Before proceeding with fitting the rail, identify each of the items supplied using the illustration.

No	Part Description
1	Rail end
2	Rail end caps
3 & 4	Rail with slider attached
5	Soap dish
	Rail fixing screws & wall plugs

The slider must not be removed from the rail during fitting. The top of the slider has a smooth profile, whereas the underside has a recess revealing the grooves on the handset holder.

Fit the rail through the friction sleeve on the soap/gel dish with the sleeve towards the lower end of the rail.

Fit the rail ends onto the ends of the rail.

Position the rail on the wall, bearing in mind the heights of people likely to use the shower, and mark the wall to indicate the upper and lower fixing screw positions. Drill the wall at one of the marked fixing positions using a 6 mm drill. Loosely fix the appropriate rail end and check that the other fixing screw mark is in the correct position.

Secure the rail to the wall. Ensure that the rail is vertical before finally tightening both fixing screws.

Fit the rail end caps.

When fitting the hose, it should pass through the centre hole of the soap dish.

NOTE - The hose nut, and not the handset handle, fits into the slider, and the slider moves more freely on the rail, if gripped next to the rail rather than at the handset.

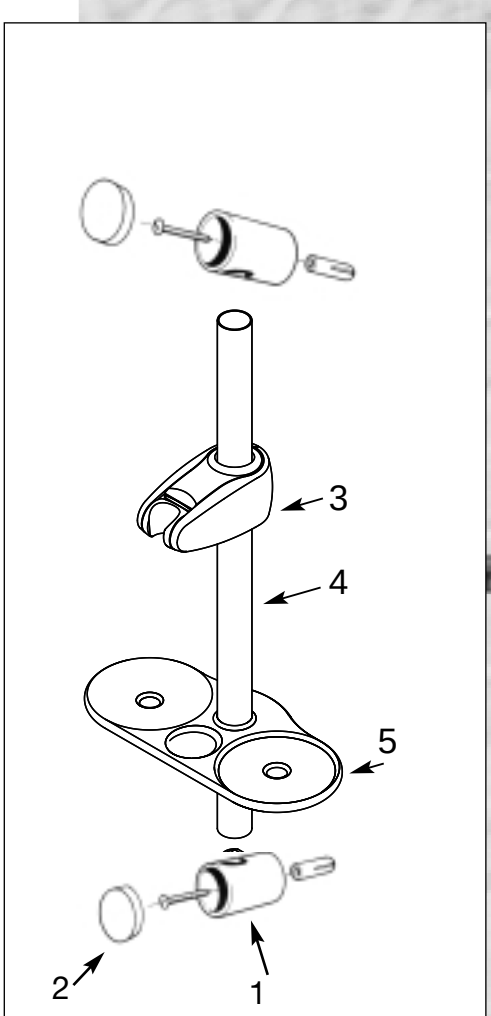


Fig 6

Cleaning

Do not at any time use bath cleaning liquids, powders or specified non-scratch cleaners on any surface finishes. In order to avoid surface wear or chemical attack on any of your shower fittings when cleaning, *always* use a damp cloth. For persistent stains or marks, you may use a domestic liquid or soap.

Trouble Shooting

In the unlikely event of a problem, consult the trouble shooting chart below and follow the order below. If you are unable to remedy the problem, CONTACT YOUR INSTALLER IN THE FIRST INSTANCE.

Do not attempt any plumbing work unless you are competent to do so.

Symptom	Likely Cause	Action
No water flow	Isolating valves turned off	Turn on isolating valves
Unstable showering Temperature	Hot & Cold supply reversed operation	Change pipework for correct operation
Poor performance	Poor hot & cold flow Blocked handset	Check hot and cold supplies Clean or replace handset

Spare Parts

Part No.	Description
SP-245-0001-CP	Rail ends
SP-280-0302-CP	Rail & Slider
SP-168-0211-CP	Zag Handset
SP-285-0820-CP	Hose

Guarantee

Thank you for purchasing a ShowerForce product, which has been designed, manufactured and tested, in the U.K., to the highest standards, by NewTeam Ltd.

Guarantee. 1 Year - Parts and Labour

This is provided that:

1. The guarantee registration card is completed and returned within ten days complete with a copy of proof of purchase.

2. The product is installed and operated in accordance with our instructions and has not been misused or damaged.

This in no way affects your statutory rights as a consumer.

The information on the Guarantee card helps ShowerForce to process any claims and contact you about your product and its maintenance if required. The registration of your personal details is purely for Showerforce use, and the other information helps us to make products for the future.

ShowerForce Shower products are designed, manufactured and tested to the highest standards.

Should a complaint arise, products are guaranteed against faulty workmanship and materials for a period of 12 months from the date of purchase, when in domestic use (second year guarantee is parts only). For your guarantee to be valid, your shower pump must be installed by a competent person, in accordance with the instruction manual.

ShowerForce will repair or replace (at our option), free of charge, any faulty components during the guarantee period, provided it has been maintained and operated in accordance with our instructions, and has not been misused or damaged.

Modification or repair of this product by person(s) not authorised by Showerforce will invalidate this guarantee.

This guarantee applies to products purchased within the United Kingdom or Republic of Ireland, but does not apply to products used commercially.

This guarantee does not affect your statutory rights.

Service Policy - **Replacement Parts Policy**

IMPORTANT:

In the event of product or component malfunction, DO NOT tamper with or remove the product from site. Telephone ShowerForce Customer Service Department on 01536 264 012 and be prepared with the date of purchase, model number and a description of the complaint.

Our service staff are fully qualified to advise on correct installation procedures and will be able to diagnose whether the fault will require a replacement part or a visit from a ShowerForce engineer.

If required, a service call will be booked, and either yourself or an appointed representative (who should be a person of 18 years or over) must be present during the visit.

All site visits to product within the guarantee period will be carried out free of any parts or labour charges provided the conditions of the guarantee have been adhered to. (Second year guarantee is parts only)

All site visits to product out of guarantee will be subject to charges for parts and labour which is payable by you or your appointed representative at the time of the visit. Charges will also be levied on cancelled appointments, unless advised to ShowerForce at least 24 hours in advance of the agreed date and time.

We reserve the right not to undertake work where payment cannot be made to our engineer at the time of the visit.

ShowerForce hold stocks of components for all their range of products and these will be maintained for the duration of their life.

Should a product be discontinued, spare parts stocks will be maintained, but in the event of a part becoming unavailable ShowerForce reserve the right to supply a substitute of equal quality.

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

By post, pre-payment of proforma invoice by cheque or postal order.

By telephone quoting credit card (Mastercard, Visa or Visa Delta) details.

REPLACEMENT PARTS:

Tel: 01536 409 222 • Fax: 01536 409 201 • E-Mail:spares@newteam.co.uk

CUSTOMER SERVICE HOTLINE:

Tel: 01536 264 012 • Fax: 01536 409 201 • E-Mail:service@newteam.co.uk

Part No. 404-0122 Issue 06/02

SHOWERFORCE

GUARANTEE*CARD*

Please post immediately enclosing a copy of proof of purchase

FOR SHOWERFORCE USE

AFFIX PRODUCT LABEL HERE

This label identifies your product and provides all the information needed

ShowerForce 968-T
Mixer Shower

Proof of purchase enclosed
YES ❒ **NO ❒**

NAME: _____

ADDRESS: _____

_____

POSTCODE: _____

DATE OF PURCHASE: _____

PRODUCT PURCHASED FROM: _____

TOWN: _____

ShowerForce/NewTeam's philosophy is to offer outstanding products with quality and integrity, please help us by taking the time to answer the following questions. Thank you.

MARKETING INFORMATION

1. Please state your profession: Plumber ❒ Builder ❒ Electrician ❒ Customer ❒ Other ❒ (please specify) _____

2. Please state the reason for purchasing a shower: New Build ❒ Replacement ❒ Renovation ❒ Other ❒ (please specify) _____

3. If the product is a replacement shower, please state the type and make of the shower it is replacing: _____

4. What influenced you to purchase the 968-T Mixer Shower? Advertisement ❒ Trade Press ❒ Recommendation from Stockist ❒ Recommendation from Installer ❒ Other ❒ (please specify) _____

5. Please state your main reason for purchasing the 968-T Mixer Shower: ShowerForce Product Knowledge ❒ Product Features ❒ Product Styling ❒ Price ❒ Other ❒ (please specify) _____

Please tick here if you do not require any further information or product updates from NewTeam ❒

POST BACK

FOLD AND TAPE AS INSTRUCTED OVERLEAF