



SERVICE POLICY

In the event of you needing to contact the Galaxy Customer Service Department, the following procedure should be followed:-

- 1** Before telephoning the Galaxy Customer Service Department you should ensure that you have the model number, serial number and date of purchase.
- 2** The Galaxy Customer Service Department will be able to inform you whether the fault can be rectified by the provision of a replacement part or an on site visit by a Qualified Service Engineer.
- 3** If a service call is booked, you or a representative must be present during the Engineers visit.
- 4** A charge will be made where a call under the terms of the guarantee has been booked and a failure was not product related, or an engineer arrives and is not able to gain access.
- 5** If the product is no longer covered by the Guarantee, a charge will be made for the site visit and for any parts supplied.

Customer Service Department

Telephone: 02476 637635 Fax: 02476 637306

9.00 am - 5.00 pm Monday to Friday

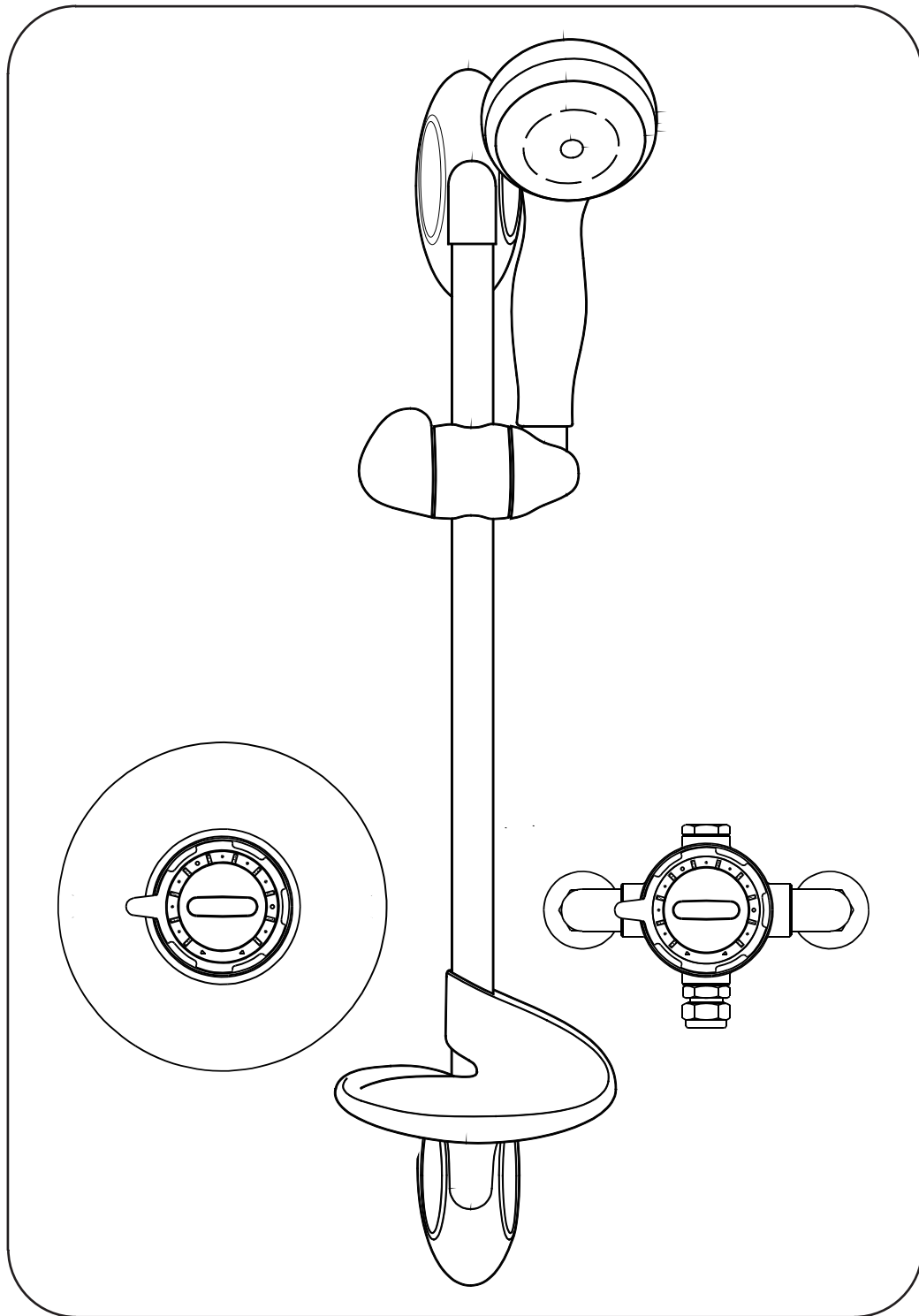


Nova

**Dual Control Thermostatic Mixer
Shower Valve
Installation Instructions**

IMPORTANT!

This Step-by-Step guide should be given to the customer after installation and demonstration.



SECTION 1

PACKING CONTENTS

- Shower Valve
- Showerhead
- Showerhead Key
- Flexible Hose
- Slider Rail Tube
- Slider Rail Brackets
- Slider Rail Showerhead Holder
- Soap Dish
- Screw Pack

(Concealed models Only)

- Concealed Surround
- Wall Elbow Outlet

SECTION 2

INTRODUCTION

Installation and operating instructions for the Galaxy 'Nova' Thermostatic Shower Mixer Valve.

The valve is supplied with the **HOT** inlet on left and **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 local Water Authority regulations. If in doubt, contact a registered plumber or the Secretary, Institute of Plumbing, 64 Station Lane, Hornchurch, Essex. Rm12 6NB. Telephone: 01708 47279.

SECTION 3

SITE REQUIREMENTS

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

- 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.

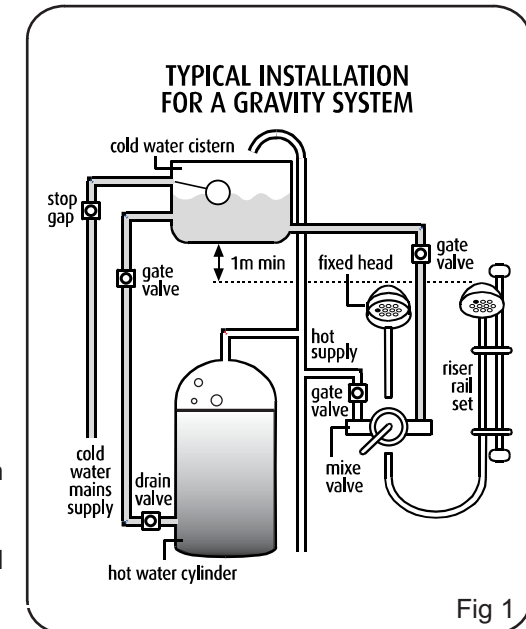


Fig 1

1. GRAVITY FED

Fig. 1 shows a typical layout. The distance between the bottom of the **COLD** water tank and the showerhead must be a minimum of 1 metre (0.1 bar).

The **COLD** water supply for the valve must be connected directly to the **COLD** water tank and the **HOT** water supply connected to a Essex or Sussex Flange in the side of the cylinder or to the vent and draw off pipe of the **HOT** water cylinder, as close to the top of the cylinder as possible.

The Fig. 1 installation is recommended for most showers, if however your **COLD** supply is mains pressure then the following will be required:-

2. SITE INSTALLATION DETAILS

- a). Low pressure **HOT** supply between 1 and 2 metres (0.1 - 0.2 bar)
Mains **COLD** supply between 2 and 5 bar.

* fit white orifice disc Part No. 460192 (item 48) into **COLD** inlet elbow, follow the same fitting instructions as for flow limiter.....**DO NOT USE THE FLOW LIMITERS.** (Fig.2)

- b). **HOT** supply between 2 and 4 metres (0.2 - 0.4 bar)
Mains **COLD** supply up to 5 bar.
* fit 7 litre (green) limiter into **COLD** inlet elbow only. (item 35 - Fig .2)

- c). **HOT** supply above 5 metres (0.5 bar)
Mains **COLD** supply up to 5 bar.
* fit 5 litre (yellow) limiter into **HOT** inlet elbow. (item 35 - Fig .2)
* fit 7 litre (green) limiter into **COLD** inlet elbow. (item 35 - Fig .2)

UNVENTED SYSTEM

Fit 5 litre (yellow) limiter into **HOT** inlet elbow.
Fit 7 litre (green) limiter into **COLD** inlet elbow.

This will give a shower outlet flow of about 10 litres/min. (2.2 gallons per min).
(**COLD** supply to shower from same source as **HOT**).

3. INSTANTANEOUS GAS WATER HEATERS & COMBINATION BOILERS (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 limiter (green as supplied) into **COLD** inlet elbow as shown in Fig. 2. With certain permutations of Combination Boiler and mains pressure it may be necessary to fit a 5 litre (yellow) flow limiter into the **HOT** elbow.

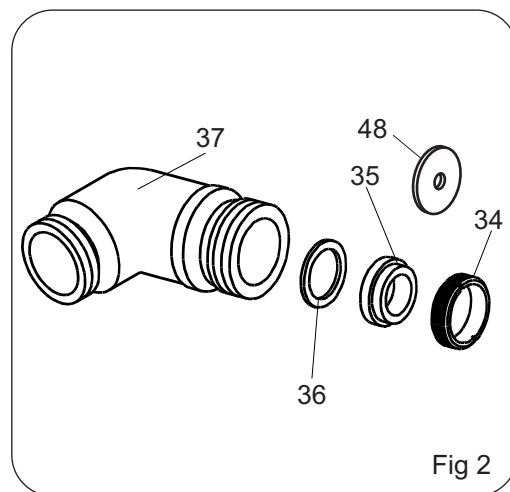


Fig 2

NOTE: Fit white orifice disc (Key No. 48) only on **COLD** and low pressure **HOT**, see gravity fed installation requirements '2a'.

4. INSTANTANEOUS (NON STORAGE) - 7-9kW Electric Water Heaters (Unvented)

This will require a 5 litre (yellow) flow limiter (item 35 - Fig. 2) into **COLD** inlet elbow.

IMPORTANT:-

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

Flow Stabilisers should be fitted prior to the heater, and are available from:-
A&J Gummers. Tel: 0121 706 2241.

5. PUMPED SHOWERS

Your Thermostatic shower is also ideal for Power Shower installations and can be matched to most makes of booster pump.

6. NOTE WATER BYELAWS

When connecting a mixing valve to gravity **HOT** supplies and mains **COLD** water that byelaw 30 (2) will apply.

SECTION 4 PLUMBING CONNECTION

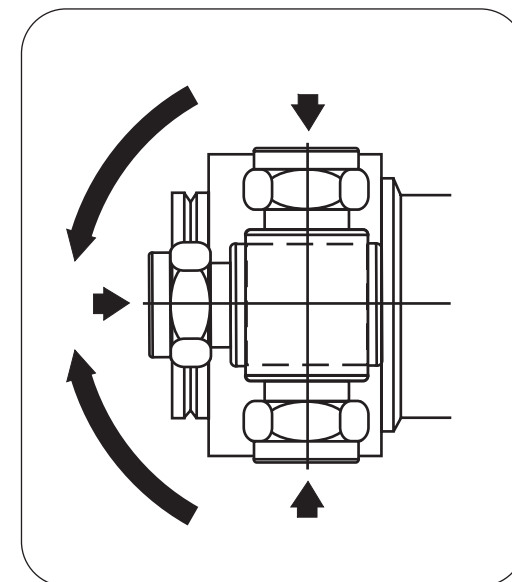
GENERAL

- Before commencing it is advisable to install isolating valves on both **HOT** and **COLD** supplies for flushing out and servicing purposes.
- It is important that both supply pipes are flushed before connecting mixing valves to ensure no pipe/plumbing debris enters the mixing valve.
- A simple way of flushing both supply pipes is to fit the outlet adaptor (Key No.31) to both pipes and secure with compression nut (Key No.33) and olive (Key No.32), then fit hose to the adaptor and flush out pipe to waste.
- We strongly recommend fitting strainers (Key No.38) to ensure no debris enters mixing valve.
- In hard water areas the mixing valve may require more frequent cleaning and servicing.

PIPE POSITION

Before mounting the valve to the wall, the position for pipework should be decided.

Three inlet positions - **TOP**, **BOTTOM** and **REAR** are possible simply by rotating the elbows in the valve body (see Fig.3 below). With the elbow screwed fully against the valve body it can be unscrewed a maximum of 1½ turns to allow for lateral tolerance.



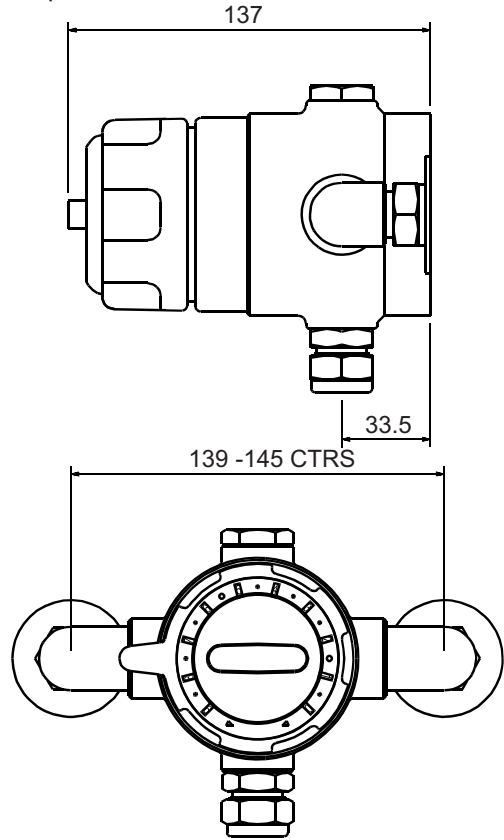
SECTION 5 INSTALLATIONS

EXPOSED MOUNTING

- Please refer to Section 4 (this page) To ensure the GENERAL installation requirements are met.
- Use the exposed backplate (Key No.39) as a template for the fixing holes.
- Drill and plug wall to suit screws provided.
- Fit grubscrews (Key No.40) loosely to backplate and secure backplate to wall.

e). Locate the valve body to the wall and lock with grubscrews. Fit outlet adaptor (Key No.31) to valve - exchange with blanking plug (Key No.30) for top outlet.

f). Connect inlet pipes to valve with compression fittings, please ensure the **HOT** supply is connected to the inlet port 'H'.

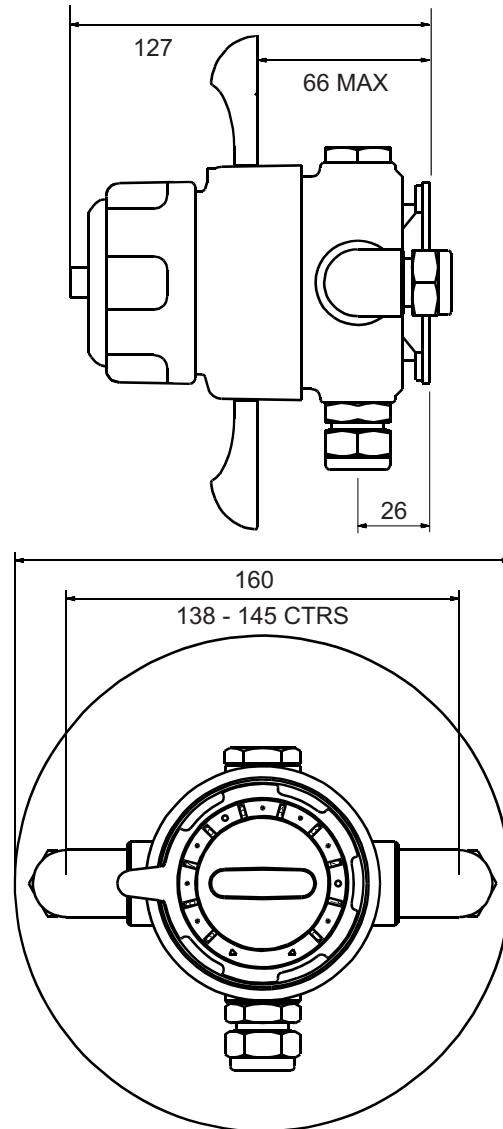


CONCEALED FIXING

Please refer to Section 4 (previous page) to ensure GENERAL installation requirements are met.

It is essential that when installing a concealed mixing valve, that full access to the valve can be achieved for servicing purposes. Isolating valves - fitted on both supplies - should be accessible and located near the valve for this purpose.

Rear access to the mixing valve is always preferred wherever possible eg. An airing cupboard or panelled wall), as this removes the need to disturb any tiling or decorative features at the front of the valve. If this is not possible, removable access panel of 300mm square minimum fitted to a wooden framework could be installed to allow and removal of the valve if necessary. Such a panel could, for example, be tiled over and secured with



mirror screws in each corner and the screws capped. Removal of a valve installed in this manner would mean only disturbing only a few tiles. Fig.5 show overall dimensions of the concealed valve.

Once the valve is installed and tiling complete, fasten Wall Plate (Key No.43) to tiled surface with seal (Key No. 44) in between. Locate Surround (Key No. 42) on the wall Plate by hooking under Knob Lever and rotating to catch on the Wall Plate lugs.

SECTION 6

RISER RAIL & SOAP DISH FITTING INSTRUCTIONS

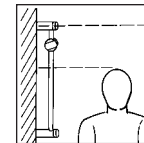
TIPS

A piece of insulating or masking tape applied to the wall before marking out the fixing holes will help stop the drill from wandering, particularly on tiled surfaces. When working near a basin or bath, insert the plug in the waste fitting so that small parts cannot be lost.

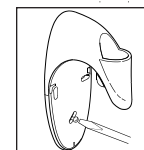
Take care not to drop accessories or tools into basin or bath.

CAUTION

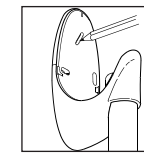
Check there are no hidden cables or pipes before drilling holes for wall plugs. Exercise great care when using power tools near water. The use of a residual current device (RCD) is recommended.



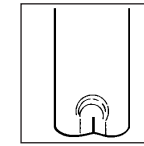
1. Establish position for the riser rail, and mark the wall for the lower mounting bracket. Make allowances for the tallest person likely to use the shower regularly.



2. Use a No 10/5.5mm masonry drill to make a hole 35mm deep, and fit the wall plug. (NB some wall constructions may require the use of alternative types of wall fixings). Screw the lower bracket base to the wall.



3. Locate the crimped end of the riser rail (Figure 4) into the mounting bracket, then fit the upper bracket. Ensure the rail is vertical, then mark the wall for the fixing.

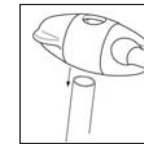


4. The crimped end of the riser rail. NOTE If it is necessary to shorten the rail, use a junior hacksaw to cut the excess material from the plain end of the rail.

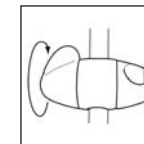


5. The three components that comprise the Handset Height Adjuster assembly are produced with alphabetical 'A's and 'B's moulded into the end section of each part. Simply just match the

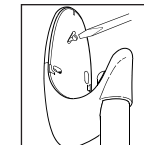
letter identification of each part with the central piece i.e. 'A' to 'A' and 'B' to 'B' for correct assembly.



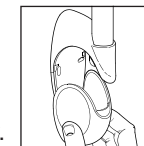
6. With the showerhead height adjuster lever set a 3 o'clock and the showerhead holder in the upright position, slide the assembly onto the rail. Tighten to the rail by turning the lever.



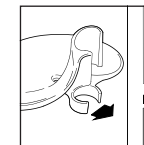
7. To lock the Handset Height Adjuster at your chosen position on the rail. Turn the lever up right. This action is also used for holding the showerhead at the angle required.



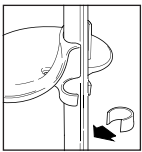
8. Re-assemble the rail and screw the upper mounting bracket in place.



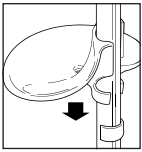
9. Slide the end cap onto the mounting brackets.



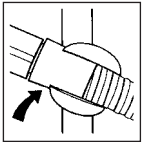
10. Snap the soap dish onto the rail below the holder assembly.



11. Prise open the soap dish collar and fit onto rail below the dish. NOTE the collar is slightly tapered and should be fitted 'thinner section' uppermost.



12. Ensure the soap dish locates firmly onto the collar, so that it holds the dish at the required height on the rail.



13. Firmly attach flexible hose to the showerhead making sure sealing washer is in place. NOTE the adjustable slider grips the conical end of the hose, not the handle of the showerhead.

Maintenance:

Clean regularly with a non-abrasive liquid bathroom cleaner.

SECTION 7 SHOWER VALVE OPERATION

The large knob (Key No.6) controls water flow and the small central knob (Key No.3) controls the mixed water temperature.

Turn the Flow Knob anti-clockwise to progressively increase water flow up to a maximum at about ½ a turn. Turn the Temperature Knob anti-clockwise to increase water temperature up to a maximum at No.9 position (factory set at 43 degrees C).

The maximum temperature setting may require adjustment due to your site installation (see Maximum Temperature Setting).

SECTION 8 MAXIMUM TEMPERATURE SETTING

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

- a). Remove the Temperature Knob Cap (Key No.1).
- b). Turn the knob (Key No.6) to maximum flow position (see Section 7).
- c). Turn the Temperature Knob (Key No.3) to maximum temperature (see Section 7).
- d). Remove the Temperature Knob Screw (Key No.2) and remove the Temperature Knob ensuring that the Temperature Indicator Ring (Key No.4) remains in position.
- e). Adjust the Temperature Spindle (Key No.20) by using the Temperature Knob - (partially replaced on splines) to alter maximum temperature.
- f). When the desired maximum temperature is obtained, replace the Temperature Knob on its splined shaft at the No.9 position - against the maximum temperature end stop. Replace Knob Screw and Cap.

SECTION 9 WATER BYELAWS

"Shower installations in all respects must meet with the requirements of Water Byelaws". If in doubt you should contact your Local Water Authority for advice or a registered member of the Institute of Plumbers Tel: 01708 472791 for a list of your nearest plumbers.

Here are two byelaws to which we bring your attention to:

"a). All Shower Installations

Byelaw 17 (2)b the showerhead of any Shower Hosepipe is connected by a fixed or sliding attachment so that it can only discharge water at a point not less than 25mm above the spill-over level of the relevant bath, shower tray or other fixed appliance.

b). Showers connected to mains COLD supply mixed with HOT stored water:

Byelaw 30 (2) cisterns storing water for domestic purposes.

Where the shower valve is supplied with **HOT** water from a storage cistern and **COLD** water from the mains supply pipe a **COLD** storage cistern that complies to byelaw 30 (2) must be used.

SECTION 10 SERVICING/MAINTENANCE

If your Thermostatic mixing valve fails to operate it could be the result of incorrect installation. Please refer to installation and site requirements.

- a). Isolate **HOT** and **COLD** supplies.
- b). Prise of Knob Cap (Key No.1), remove spindle screw (Key No.2) and pull off Temperature Knob and Temperature Indicator Ring (Key No.4).
- c). For concealed models, remove Concealing Surround (Key No.42) by rotating.
- d). Remove Circlip (Key No.5) by using circlip pliers and remove Flow Knob (Key No.6).
- e). Pull off Sleeve (Key No.7) or (No.41) and then unscrew Head (Key No.9) using a spanner.

f). Remove Thermostat (Key No.24), Distributor Assembly (Key No.25 & 49) and Spring (Key No.27).

g). Unscrew Half Cartridge (Key No.23).

h). Remove Circlip (Key No.8) and (Key No.14) and then push out Flow Head (Key No.17) and Spindle Assembly.

CLEANING AND LUBRICATION

- a). Soak all metal parts in descalent, wash off in clean water.
- b). Examine all seals and replace if necessary.
- c). Use silicon based grease on all seals (lightly smear only), and on thread of Spindle Housing (Key No.22) and Flow Nut (Key No.12).

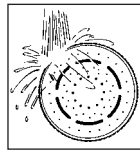
A maintenance kit is available, which contains all seals and grease.

RE-ASSEMBLY

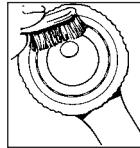
- a). Assemble Spindle (Key No.20) and P.T.F.E. Washer (Key No.19) (from the spindle end) then the 'O' seal (Key No.18). This assembly is screwed into the Spindle Housing (Key No.22).
- b). Locate the Spindle and Housing assembly into Flow Head (Key No.17) and fit Circlip (Key No.14). Screw Half Cartridge (Key No.23) to Flow Head assembly.
- c). Take Flow Head assembly as 'b' and screw on Flow Nut (Key No.12) - Left Hand Thread. Place Flow Nut Washer (Key No.11) over Flow Nut spindle and locate the complete assembly with in the Fixed Head (Key No.9) - fit Circlip (Key No.8).

d). Place Spring (Key No.27), Distributor Assembly (Key No.25 & 49) and Thermostat (Key No.24) within Valve Body (Key No.28) and screw the whole Head Assembly into the Body.

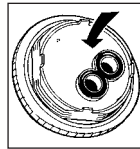
e). Replace Sleeve (Key No.7) or (No.41), Knob (Key No.6), Circlip (Key No.5) and refer to para Section 8 **Maximum Temperature Setting** to complete.



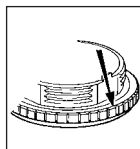
5. Ensure all traces of limescale and limescale remover are rinsed off.



6. Thoroughly clean and rinse the inside of the showerhead.



7. Replace the two black 'O' rings on the rear of the spray cartridge. A light smear of petroleum jelly will ensure an easy location into the grooves.



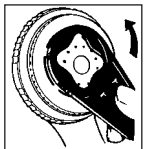
8. Refit outer rubber spray ring ensuring that the bevelled edge is situated as per fig 8.



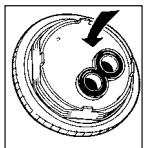
9. Refit cartridge to the showerhead and tighten with the spray key.

SECTION 11 SHOWERHEAD CLEANING INSTRUCTIONS

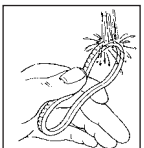
The showerhead should be cleaned periodically to remove limescale or debris which will reduce the performance of the shower. The frequency of cleaning will vary according to local water quality. In hard water areas cleaning will be needed more often than in soft water areas. A liquid non-abrasive bathroom cleaner may be used on external surfaces of the handset.



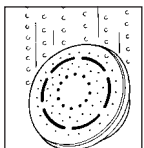
1. Engage the key into the spray cartridge recesses and turn anti-clockwise to unscrew.



2. Remove the two small black 'O' rings from the rear of the spray cartridge, and rinse 'O' rings clean.



3. Remove outer rubber spray ring, wash and rinse under running water.



4. If deposits are stubborn, immerse and soak the spray cartridge for several hours in a proprietary limescale remover. Then with a small stiff bristled brush scrub the spray cartridge.

SECTION 12 GENERAL FAULT DIAGNOSIS

If your Thermostatic mixing valve fails to operate correctly either immediately upon installation or after a period of time, the following important points should be checked:-

1. Isolate supplies and ensure that both **HOT** and **COLD** water 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 (Key No.25) and it's mating faces; bottom of Valve Body

(Key No.28) and Half Cartridge (No.23).

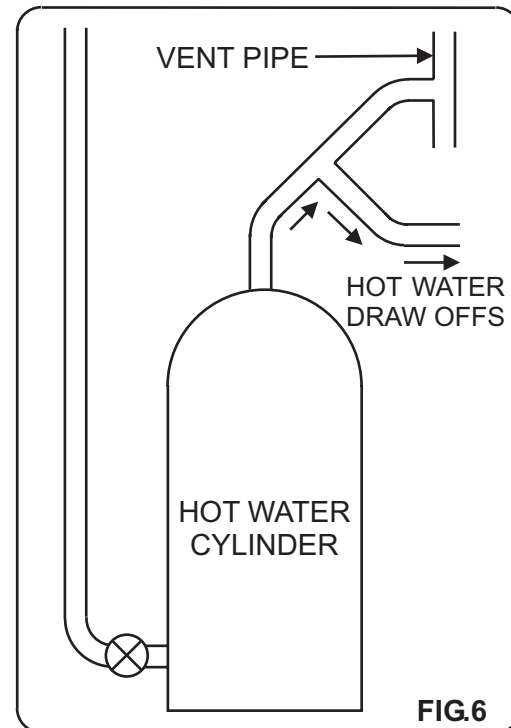
3. Check that the valve has been installed correctly in accordance of its particular feed system (ie. Use of flow limiters where necessary).

4. Common problems with pumped systems include:

a. Insufficient head pressure to initiate pump; (check with pump supplier/manufacturer).

b. Airlocks within the pump impellers. Fig.6 shows the preferred Tee-Off configuration of the **HOT** water supply. Any air bubbles formed by the **HOT** water will tend to cling to the top surface of the pipe and dissipate to atmosphere through the vent pipe.

5. That the **HOT** water temperature source is sufficient; preferred minimum of 60 degrees C.



GUARANTEE

Galaxy Showers Limited guarantee this product for a period of one year, from date of purchase, against mechanical and defects arising from faulty materials or from poor workmanship, providing the product has been installed by a competent person in accordance with the fitting instructions.

Galaxy Showers Limited undertake to repair or replace, at their discretion, without charge, provided the product has been properly maintained and operated in accordance with the operating instructions. Any component found to be defective during this period, as the result of misuse or damage, or the effects of scaling, will not be covered by this guarantee.

This product must not be modified, repaired or taken apart except by a person authorised by Galaxy Showers Limited.

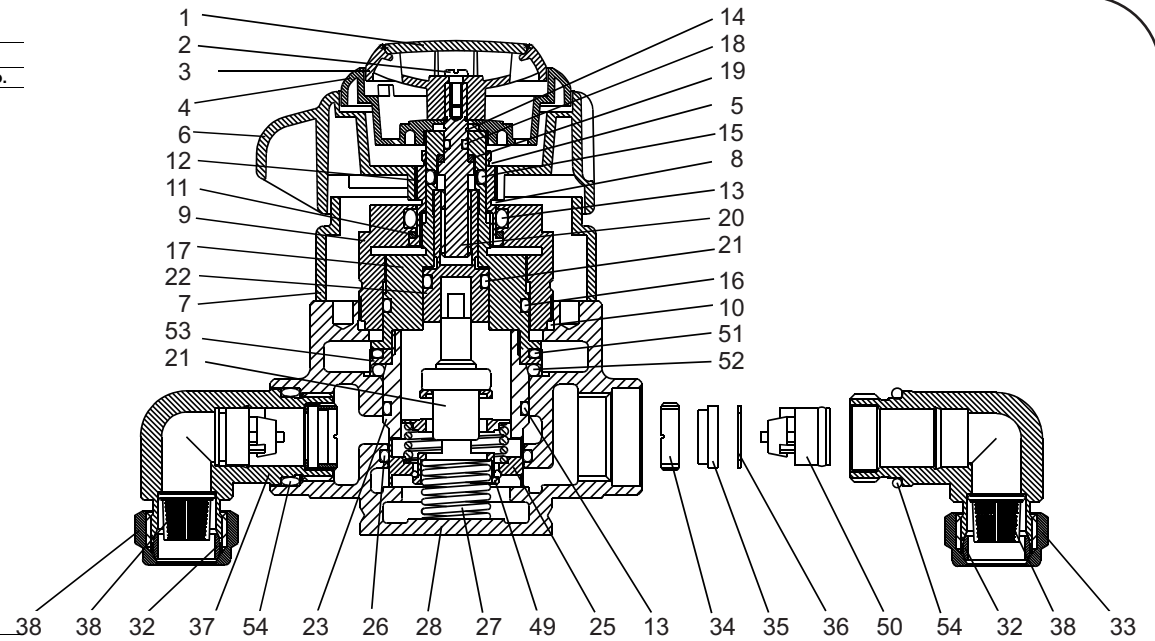
This Guarantee is only valid within the United Kingdom and does not cover product used commercially.

This Guarantee does not affect your statutory rights.

Galaxy Showers Ltd., Unit 1,
Holbrook Park Estate
(Off Kingswood Close)
Holbrooks, Coventry Cv6 4AB
Telephone: 02476 637635
Fax: 02476 637306.

PARTS LIST

KEY No.	DESCRIPTION	PARTS No.	KEY No.	DESCRIPTION	PARTS No.
1	KNOB CAP	780283WF	28	VALVEBODY	150300
2	SCREW	5600323	29	'O' RING	480017
3	TEMPERATURE KNOB	780282WS	30	OUTLET PLUG	780190
4	INDICATOR RING	780281WA	31	OUTLET ADAPTOR	9214-4
5	CIRCLIP	360082	32	COMPRESSION RING	9500-C2
6	FLOWCONTROL KNOB	780280W	33	COMPRESSION NUT	9500-C1
7	SIVALL SLEEVE	780274W	34	RETAINER RING	780033
7A	LARGE SLEEVE	780275W	35	FLOWLIMITER 7 LITRE GREEN	760101
8	CIRCLIP	360082	36	WASHER	300315
9	FIXED VALVE HEAD	680349	37	ELBOW	150060
10	'O' RING	480247	38	FILTER	780621
11	FLOWNUT WASHER	460181	39	BACKPLATE	220037
12	FLOWNUT	320057	40	BACKPLATE GRUB SCREW	540586
13	'O' RING	480211	41	FLOWLIMITER 5 LITRE YELLOW	760090
14	CIRCLIP	360081	42	ROUND HEAD SCREWS	560609
15	'O' RING	480014	43	WALL PLATE	220075
16	'O' RING	480233	44	WALL SEAL	460250
17	FLOWADJUST HEAD	680345	45	CONCEALING BACKPLATE	220015
18	'O' RING	480010	46	ALLEN KEY	760072
19	WASHER	460182	47	FILTER	780320
20	SPINDLE	520001A	48	ORIFICE PLATE	460192
21	'O' RING	480012	49	DISTRIBUTOR	320153
22	SPINDLE HOUSING	560639	50	CHECK VALVE	970010
23	HALF CARTRIDGE	320019	51	'O' RING	480128
24	THERMOSTAT	740012	52	'O' RING	480222
25	PISTON	320064	53	SHUT OFF PLATE	320014
26	'O' RING	480190	54	'O' RING	480117
27	SPRING	360121	55	CONCEALING SURROUND	220070



PARTS LIST AND ASSEMBLY SEQUENCE

