9. Guarantee & Registration

9.1 Guarantee

All products are manufactured to the highest standards and 5-year guarantee covers any defect in manufacture.

Any part found to be defective during the above guarantee period will be replaced without charge providing that the product has been installed in accordance with our instructions, used as intended and maintained/serviced as recommended.
In the unlikely event that any problems are encountered with this product's performance on installation, you must obtain guidance/authorisation from our Customer Service Department before any remedial action is taken and be able to supply proof and date of purchase.

The guarantee excludes damage caused by accident, misuse or neglect and does not cover the following:
Those components subject to wear and tear such as 'O' rings and washers etc,

- Damage caused by faulty installation,
- Damage caused by any waterborne debris,
- Damage caused by improper cleaning products,
- Damage caused by the use of non-Bristan parts,
- The product being used for a purpose other than intended.

The company reserves the right, in the event of a claim not covered by the guarantee, to charge the claimant for parts and labour at current rates. This guarantee is given in addition to and does not affect your statutory rights.

In the interests of continuous product development Bristan Limited reserve the right to alter the specification as necessary.

9.2 Registration

To register your product with us please complete and return the enclosed registration card.

PRODUCT CODE: TY CSHXDIV C

TELEPHONE HELP LINE! +44 (0)870 442 5553

Bristan Group Limited
Birch Coppice Business Park
Dordon
Tamworth
Staffordshire
B78 1SG
UK
A Masco Company
Web Site: www.bristan.com
Telephone: +44 (0)870 442 5556
Facsimile: +44 (0)870 442 5554
Email: enquire@bristan.com

(FI TY CSHW) (Rev.D1) (MZ)

BRISTAN

Trinity Thermostatic Shower Mixer With Diverter

Fitting Instructions & Contents List

Before starting any installation project, consider "Safety" first. Look for the "safety note" sign and read the safety advice.

Prior to drilling into walls, check there are no hidden electrical wires, cables or water supply pipes with the aid of an electronic detector. If you use power tools do not forget:

- Wear eye protection
- Unplug equipment after use

Please Keep These Instructions for Future Reference and Request of Replacement Parts.

Contents

8.7.1 With the handles and filters removed. Unscrew the valves (13) with the maintenance tool (29) or a 10mm hexagonal key (Not Supplied).

8.7.2 Clean the valve seating washers, check that the valves are moving freely and reassemble.

8.8 Resetting the Maximum Temperature (See Fig. 6)

8.8.1 Turn on the water supplies and fully open the flow control, let the water run long enough to ensure that the hot water supply is at its maximum temperature.

8.8.2 Remove the temperature control handle and shroud (43 & 42) by removing the indice (45, 46 & 47), remove the screw (44) and pulling the handle and shroud (43 & 42) off the spindle (A).

8.8.3 Turn the spindle (A) anti-clockwise to increase the temperature and clockwise to reduce it and set to preferred maximum temperature setting.

8.8.4 Refit the handle and shroud (43 & 42) so that the stop pin is at the maximum position then refit the screw (44) and indice (45, 46 & 47).

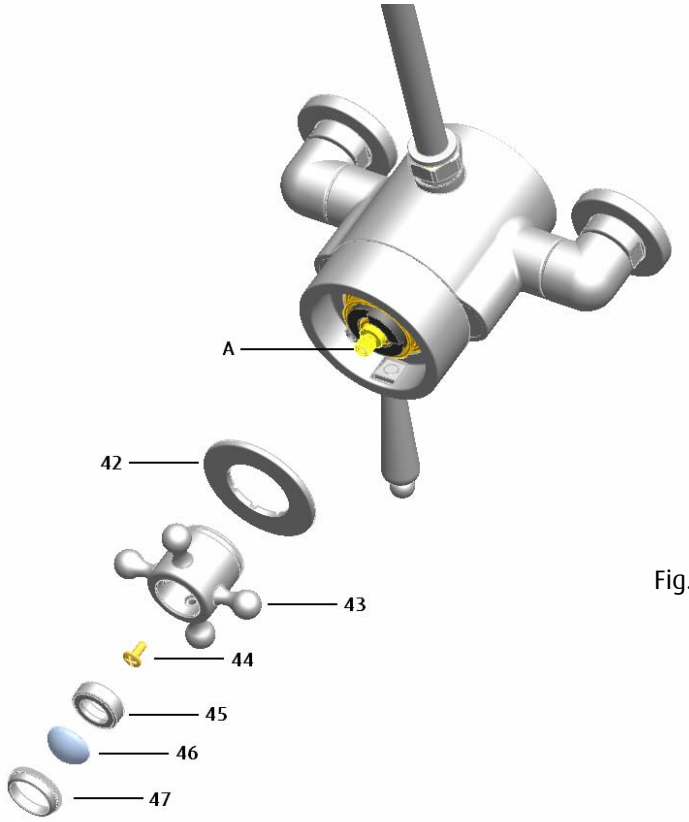

Fig. 6

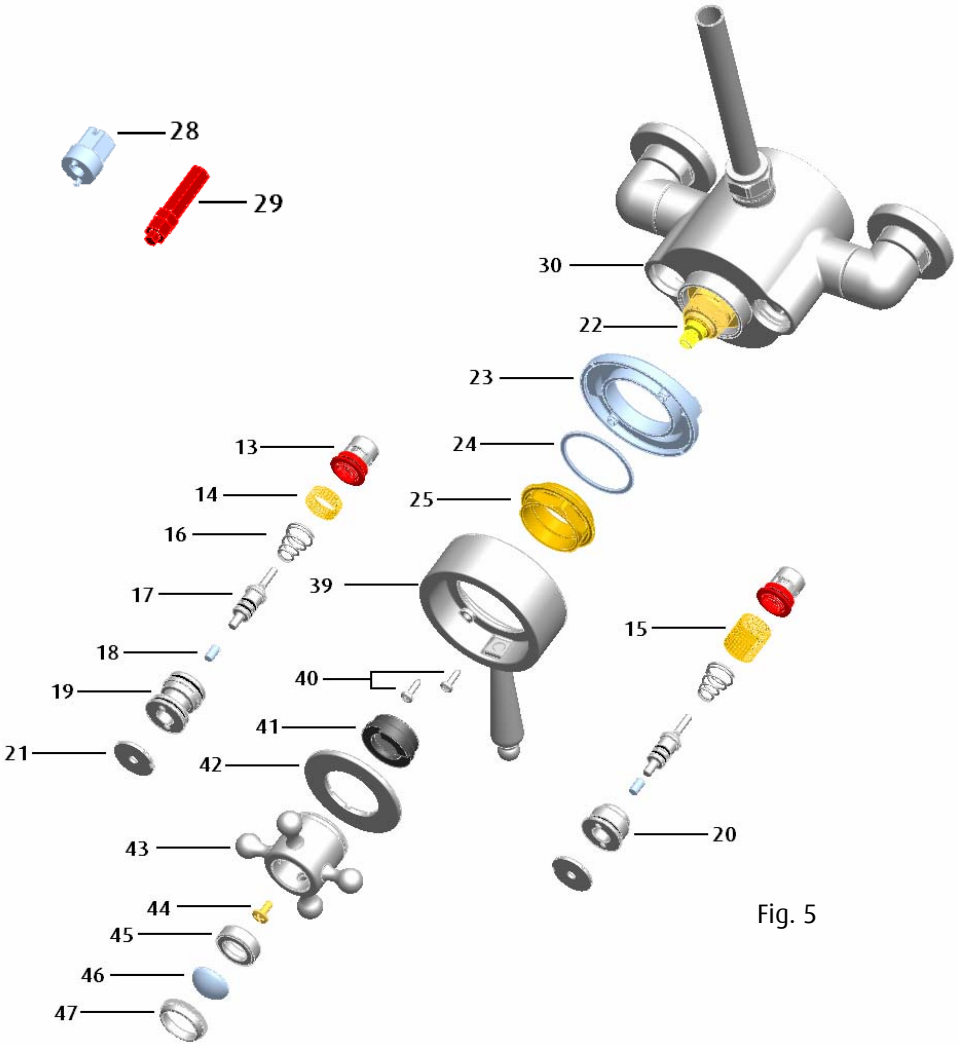

Fig. 5

8.6 Cleaning the Filters (See Fig. 5)

8.6.1 With the handles and cam removed, prise out the chrome caps (21) and unscrew the pin guides (19 & 20) with the maintenance tool (28). Remove the pins (17) and the caps (18), springs (16) and the filters (14 & 15).

8.6.2 Clean the filters and reassemble ensuring any debris is flushed from the body.

8.7 Flow Valve Maintenance (See Fig. 5)

IMPORTANT NOTE: ISOLATE THE WATER SUPPLY TO THE SHOWER VALVE TO CARRY OUT THIS PROCEDURE.

1. Introduction

Your Bristan dual control shower fitting is a thermostatic mixer incorporating a wax capsule thermostat to ensure constant showering temperatures.

This valve has been designed & tested to comply with BS EN 1287:1999 & BS EN1111:1999. Manufactured to the highest quality standards.

These instructions are for your guidance to a safe and successful installation and should be left with the user.

All products manufactured and supplied by Bristan are safe provided they are installed, used correctly and receive regular maintenance in accordance with these instructions.

2. Specification

Inlet Connections: 15mm compression with 150mm between centres.

Water Pressures: Min. 0.2 bar Max. 5 bar Maximum recommended imbalance between hot and cold supply should not exceed 5:1

Maximum Outlet Temp: Factory Set to 42°C (can be re-set to suit site conditions).

Hot & Cold Supply Temperature

Maximum Cold Supply:	25°C
Minimum Recommended Hot Supply:	60°C
Maximum Hot Supply:	80°C

Note: the inlet hot water temperature must be at least 10°C above the required blend temperature.

3. Pack Contents Check List For Trinity Shower With Diverter (TY CSHXDIV C)

1 x Shower Valve
2 x Elbows
2 x Elbow Concealing Plates
1 x Surface Mounted Wall Fixing Plate
2 x Maintenance Tools
1 x Shower Arm & Fixing Plate
1 x Long 15mm Rigid Riser Tube
1 x Shower Rose & Swivel Connection
1 x Short 15mm Rigid Riser Tube
1 x Shower Diverter
1 x Cradle
1 x Soap Basket
1 x Handset
1 x Hose
1 x Shower Fixing Pack
1 x Arm Fixing Pack

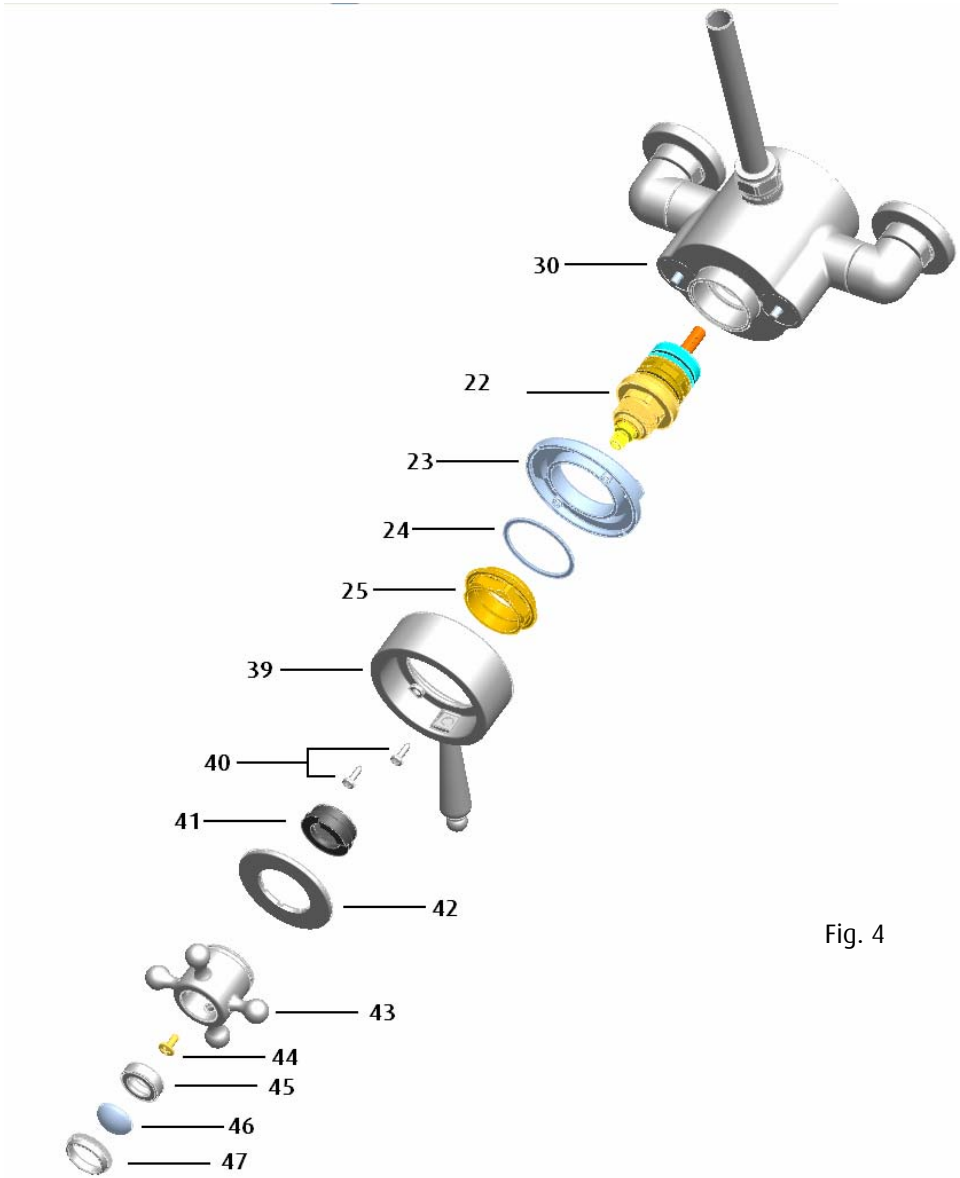

Fig. 4

8. Cleaning & Maintenance

8.1 Cleaning

Your fitting has a high quality finish and should be treated with care to preserve the visible surfaces.

All surface finishes will wear if not cleaned correctly, the only safe way to clean your mixer is to wipe with a soft damp cloth. Stains can be removed using washing up liquid. All bath cleaning powders and liquids will damage the surface of your fitting, even the non-scratch cleaners.

8.2 Regular Maintenance

We advise that the valve is regularly serviced, particularly in hard water areas. It is also important to clean the handset regularly in hard water areas to maintain an even spray/flow of water.

Please Note: The maintenance procedures detailed in sections 8.3, 8.4, 8.5, 8.6 and 8.8 can be done without isolating the water supplies to the shower.

8.3 Cartridge Removal (See Fig. 4).

8.3.1 Remove the temperature control handle and shroud (43 & 42) by removing the indice (45, 46 & 47) and the screw (44) and pulling the handle and shroud off the spindle of the cartridge (22).

8.3.2 Unscrew the two handle retaining screws (40) and pull the flow control handle (39) off the valve.

8.3.3 Unscrew the retaining nut (25) and remove the slip ring (24), cam (23) and the temperature stop ring (41).

8.3.4 Unscrew the cartridge (22) anticlockwise to remove from the shower body (30).

8.4 Cartridge Maintenance

8.4.1 Place the cartridge (22) in a bowl and carefully add some hot water (just off the boil) and vinegar to de-scale the cartridge. Leave until the water has cooled.

8.4.2 Then remove the cartridge and rinse with clean water.

8.5 Refitting the Cartridge

8.5.1 Grease the seals with silicon grease and carefully refit the cartridge into the body.

8.5.2 Refit the cam (23) slip ring (24) and the retaining nut (25). Refit the temperature stop (41) with the raised section between 9 O'clock and 12 O'clock.

8.5.3 Refit the flow control handle (39) to the cam (23) and secure with the 2 screws (40).

8.5.4 Reset the maximum temperature and refit temperature control handle (see 8.8 on Page 14)

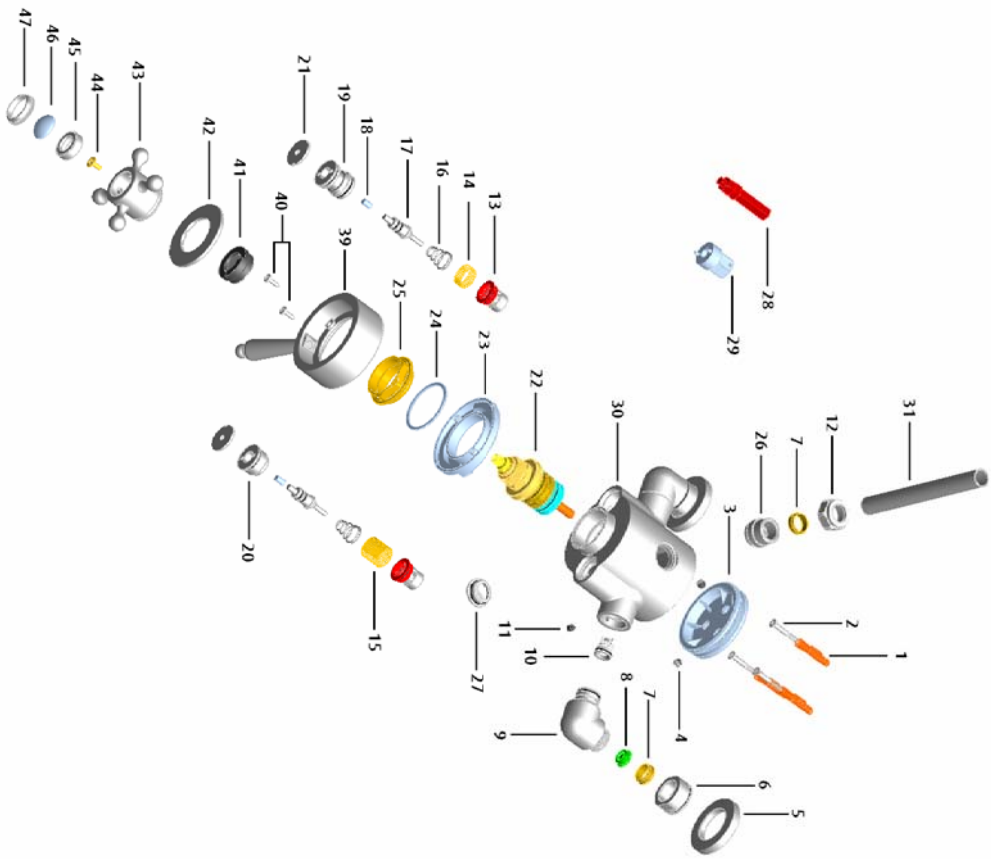

Fig. 1

4. Installation

4.1 Pre-Installation (See Fig.1)

4.1.1 Identify all components and check for completeness, particularly before arranging fitting.

4.1.2 This mixer should be installed in compliance with Water Regulations. For further details contact your Local Water Authority.

4.1.3 This mixing valve is suitable for use with the following systems:

Gravity Fed Hot & Cold (Equal Pressure)
Gravity Fed Hot & Mains Cold (Differential Pressure)
Un-vented Systems
Thermal Store Systems
Gas Combination Boiler
Pumped System

PLEASE NOTE:

On gravity systems the minimum distance from the underside of the cold-water storage tank to the showerhead must be at least 2 metres.

Prior to installation identify the supply system and the approximate supply pressures, and using the following table determine if flow limiters have to be fitted to the inlet elbows:

Pressure / Supply	Cold Pressure (bar)	Hot Pressure (bar)	Cold Elbow	Hot Elbow
Low Balanced or Unbalanced	0.1 to 1	0.1 to 1	No	No
Unbalanced	Above 1	0.1 to 1	Yes	No
High Balanced	Above 1	Above 1	Yes	Yes

4.1.4 To fit the flow limiter(s) (8) into the elbows (9), unscrew the inlet nut (6) and remove the olive (7). Install the flow limiter (8) (small diameter first) into the elbow inlet.

4.1.5 To fit the elbows (9) push the elbows in to the body and position the elbow in the direction that the water feed will be coming from. Lock the elbow in position with the grub screw (11) using the 2.5mm hexagonal key.

4.1.6 Before connecting the mixer, water should be flushed through the system to remove all debris.

6. Operation (See Fig. 3).

6.1 On/Off - Flow Control

It is important to note that the flow control handle (39, Fig 3) turns through approximately 170 degrees to achieve full and maximum flow anticlockwise on, clockwise off .

Important:- Do not attempt to force the handle past this position as this may cause damage to the valve.

6.2 Temperature Control

The small cross handle (43, Fig 3) controls the temperature. This control stays stationary when the flow control handle is turned.

To adjust the temperature, turn the control anti-clockwise to increase the temperature and clockwise to reduce it.

The valve automatically adjusts for changes in supply temperature and maintains the outlet at the set temperature.

7. General Fault Diagnosis

7.1 If your valve fails to function correctly, the following should be checked:

7.1.1 Check that the hot and cold connections are the correct way around. Hot on the left, cold on the right when viewed from the front.

7.1.2 Ensure that the hot water temperature is adequate. The recommended minimum temperature is 60°C.

7.2 If your shower will not turn off:

7.2.1 Check hot and cold inlet valves (13 fig. 5 Page 13) are free of debris (See 8.7 on page 13).

7.3 If your shower has a low flow rate:

7.3.1 Check that the filters (14 & 15, fig. 5 Page 13) are not blocked (See 8.6 on page 13).

5. Setting

5.1 Turn on the water supplies and fully open the flow control, let the water run long enough to ensure that the hot water supply is at its maximum temperature.

5.2 Turn the temperature control anti-clockwise to its maximum position and check the outlet temperature. This has been factory set at 42ºC at balanced supply pressures (0.5 bar).

5.3 The maximum temperature can be adjusted to suit site conditions or user preference. To adjust this, follow this procedure:

5.4 See Fig. 5 below, remove the temperature control handle and shroud (43 & 42) by removing the indice (45, 46 & 47), remove the screw (44) and pulling the handle and shroud (43 & 42) off the spindle (A).

5.5 Turn the spindle (A) anti-clockwise to increase the temperature and clockwise to reduce it.

5.6 Refit the handle and shroud (43 & 42) so that the stop pin is at the maximum position then refit the screw (44) and replace indice (45, 46 & 47).

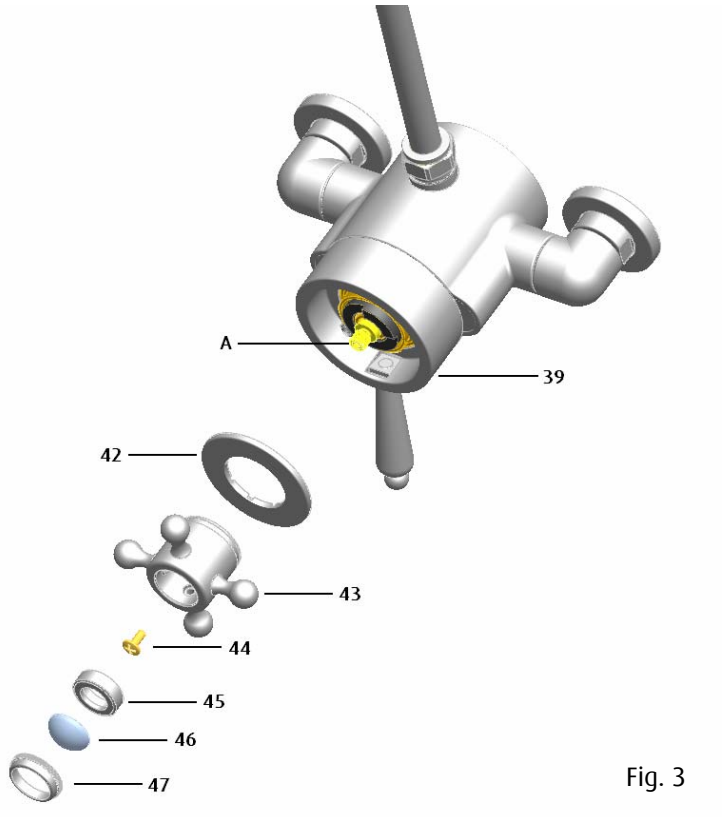

Fig. 3

4.2 Installation

Prior to drilling into walls, check there are no hidden electrical wires, cables or water supply pipes with the aid of an electronic detector. If you use power tools do not forget:

- Wear eye protection
- Unplug equipment after use

4.2.1 Screw the backplate (3) to the wall with screws (2) and wall plugs (1). If the wall is tiled, to avoid the possibility of cracking we recommend that the end of the plug (1) be sunk below the tile and the gap filled with silicon sealant.

With hot supply on the left, cold on the right, when viewed from the front. (A removable red label indicates hot inlet and the 'Bristan' logo should be on the top of the valve body after installation).

4.2.2 Position the elbow concealing plates (5) onto the inlet nut (6) and place the nuts (6) and olives (7) onto the exposed 15mm supply pipes.

4.2.3 Fit the body (30) onto the backplate (3) engaging the 15mm pipes into the elbows (9) and tighten the nuts (6). Lock the body in position by tightening the grub screws (4) using the 3mm hexagonal key.

4.3 Shower kit Installation (See Fig. 2)

SAFETY NOTE !

Prior to drilling into walls, check there are no hidden electrical wires, cables or water supply pipes with the aid of an electronic detector. If you use power tools do not forget:

- Wear eye protection
- Unplug equipment after use

4.3.1 Loosely fit the nuts (12) and olives (7) to the shower valve outlet (26), the inlet and outlet of the diverter (32) and the shower arm (49). Screw the fixing plate (48) onto the shower arm (49).

4.3.2 Fit the long 15mm rigid riser tube (33) to the diverter outlet (32) (the outlet of the diverter is the top connection when the side connection is to the right hand side when viewed from the front) and tighten the nut (12) to hold and seal the tube in position. Fit the short 15mm tube (31) to the inlet of the diverter and tighten the nut (12) to hold and seal the tube in position.

4.3.3 Connect the free end of the short 15mm tube to the outlet of the shower valve (26) and tighten the nut (12) to hold and seal the tube in position.

4.3.4 place the shower arm (49) on to the top of the long 15mm tube (33) and mark the positions of the fixing holes through the fixing plate (48) this may need to be unscrewed slightly to allow the three screws to be fitted. The tube (33) may be cut down if the head of the shower is too high. Drill holes to suit the wall plugs (1) if required.

4.3.5 Secure the shower arm (49) and the wall fixing plate (48) to the wall and tighten up the two compression nuts (12).

4.3.6 Fit the swivel connection (53) onto the shower arm using the small black rubber washer (50), and screw the shower rose (54) onto the arm

4.3.7 To attached the soap basket (36) to the rigid riser tube (33) unscrew the two screws (35), place the plastic bush (34) in an appropriate position and cover with the soap basket (36) and tighten up both the screws (35) evenly.

4.3.8 Attach the handset cradle (38) to the long 15mm tube (33) by removing the screw (37) and sliding the cradle over the tube and clamp the cradle into position with the screw (37).

4.3.9 Connect the conical end of the hose (51) to the handset (52), using a small sealing washer (50). Connect the other end of the hose to outlet of the diverter (32) using the second small sealing washer (50).

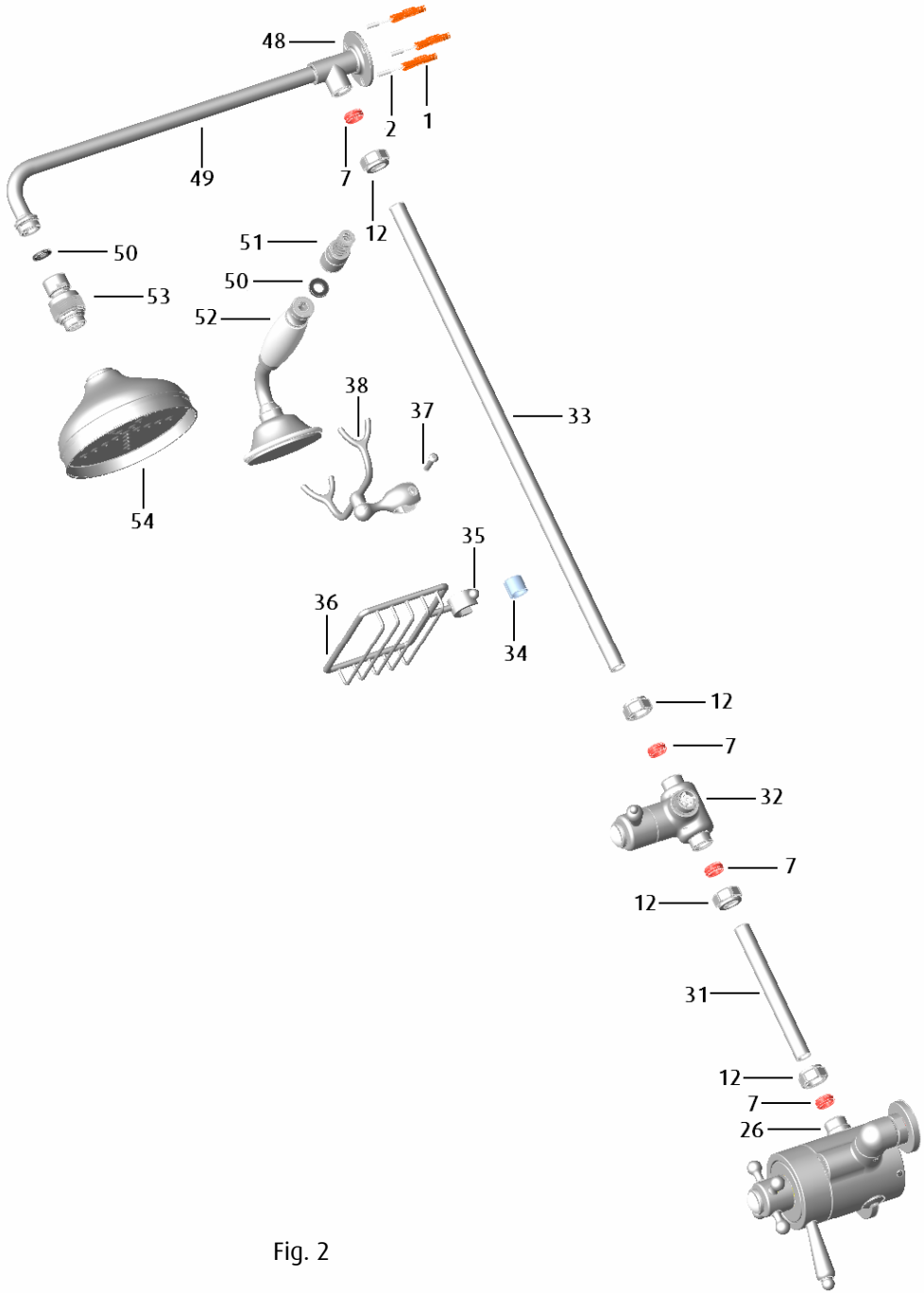

Fig. 2