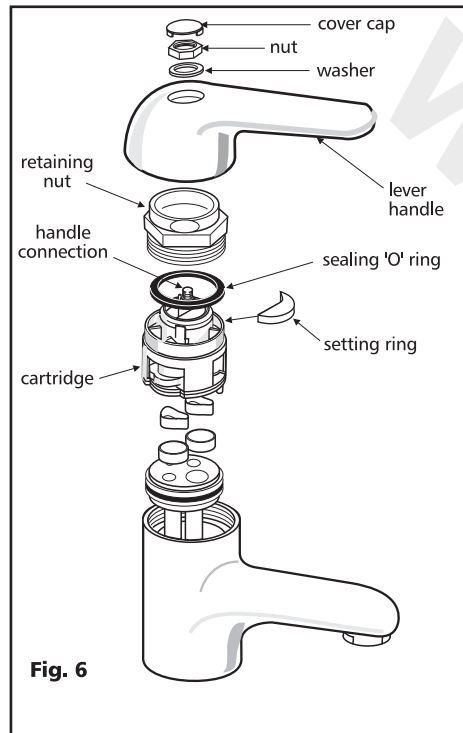


7 CARTRIDGE REPLACEMENT



CARTRIDGE REPLACEMENT

1. Shut off the hot and cold water supplies.
2. Lift off the lever handle by removing cap, nut and washer. The cap can be removed by pulling upwards. Unscrew the nut by using a 10A/F hexagonal socket wrench.
3. Remove cartridge retaining nut by turning anti-clockwise.
4. Lift out the cartridge.
5. When replacing the cartridge ensure that the peg at the bottom of the cartridge mates with the recess in the body of the fitting.
6. Replace cartridge retaining nut.
7. Replace the lever handle onto the lever connection. The lever handle is located correctly by the lug on the cartridge spindle.
8. Add the washer and nut and tighten.
DO NOT OVER TIGHTEN
9. Place the cap onto the lever handle.

TRATTO SINGLE LEVER BRASSWARE



Installation Instructions



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HU5 4HS
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0870 1296085
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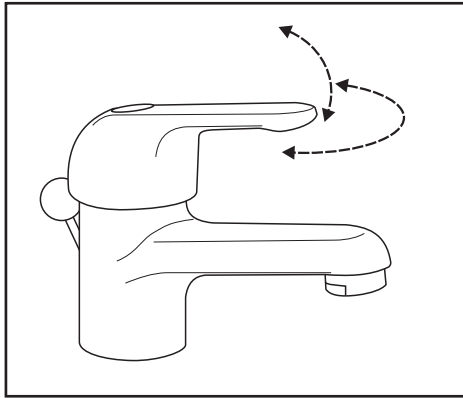
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TRATTO BRASSWARE

Euro Code	Product
A1395	Tratto Basin Mixer
A1397	Tratto Bidet Mixer
A1359	Tratto Bath Filler
A1358	Tratto Bath/Shower Mixer

Please read these instructions carefully before commencing installation. On completion of the installation, hand these instructions to the user for future reference.

A single lever gives easier control of flow and mix of water.



The cold supply **MUST** be on the **LEFT** and the **HOT** supply on the **RIGHT** for correct operation of the mixer.

BASIN AND BIDET MIXERS

Connections for hot and cold supplies are in 10mm copper tube which can be bent to suit the installation and 10mm/15mm connectors are used to connect 15mm supply pipework.

BATH FILLER AND BATH/SHOWER MIXER

Connections for hot and cold supplies are in 15mm copper tube which can be bent to suit the installation and 15mm/22mm connections are used to connect to 22mm supply pipework. Tratto single lever brassware incorporates a multiport ceramic disc cartridge which, because of an increased lever travel arc from cold to hot, gives a greater sensitivity to temperature control. A temperature blend control, which can be pre-set at 5 different settings to restrict the movement of the lever handle is also incorporated and is a major safety feature.

WATER SUPPLIES

Tratto single lever basin, bidet, bath and bath/shower mixers are designed for installation on normal UK low pressure storage tank fed systems or unvented high pressure systems. It is recommended that the hot and cold supply pressures are reasonably balanced for both low pressure and unvented high pressure systems for optimum performance. Tratto basin and bidet fittings are designed to operate on supply pressures from 0.1 Bar minimum to 5 Bar maximum. The Tratto bath and bath/shower fittings should not be installed on pressures greater than 3 Bar. In order to achieve this on a high pressure (above 3 Bar), pressure reducing valves

		COLD SUPPLY TEMPERATURE																			
		5°C					10°C					15°C					20°C				
		BLEND CONTROL SETTING	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4	0	1	2	3
HOT SUPPLY TEMPERATURE	50°C	50	44	39	33	28	50	45	40	35	30	50	46	41	37	33	50	46	43	39	35
	55°C	55	49	43	36	30	55	49	44	38	33	55	50	45	40	35	55	51	46	42	38
	60°C	60	53	46	39	33	60	54	48	41	35	60	54	49	43	38	60	55	50	45	40
	65°C	65	58	50	43	35	65	58	51	44	38	65	59	53	46	40	65	59	54	48	43
	70°C	70	62	54	46	38	70	63	55	48	40	70	63	56	49	43	70	64	58	51	45
	75°C	75	66	58	49	40	75	67	59	51	43	75	68	60	53	45	75	68	61	54	48
	80°C	80	77	61	52	43	80	71	63	54	45	80	72	64	56	48	80	73	65	58	50

Fig. 5 NOTE **Bold Type** indicates output temperatures of 40°C and below

Fig. 5 gives an approximate mixed water temperature from the fitting, assuming that the inlet temperatures of hot and cold supplies are constant and at equal flow pressures. These figures are given as a guide only. For accurate temperature setting it is recommended that the selection of the setting number be carried out

when both hot and cold water supplies are available. Replace the lever handle, washer, nut and cap after setting is complete.

The cartridge retaining nut MUST be assembled to a torque of 3-4Nm.

MAINTENANCE

The unique ceramic disc cartridge contains ultra smooth ceramic discs. They are so hard that they always remain sealed together polishing one another in use, and sand, sediment and other waste borne matter cannot get between them or damage them. Even the hardest water has no effect and this means that the Tratto brassware should give many years of efficient,

trouble free service without the drip and liming up problems associated with traditional taps.

However, in the unlikely event of a failure or any problem, simply exchange the cartridge. First check the outlet nozzle for possible blockage due to a build up of debris etc. from the pipework.

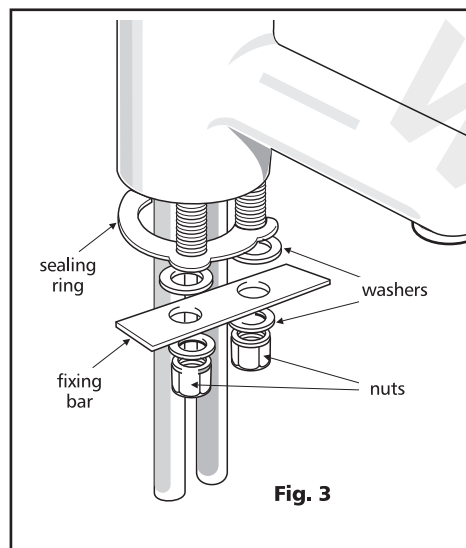


Fig. 3

5. Fit the waste and overflow.

6. Attach the shower hose and shower head in the case of the bath/shower mixer.

SET TEMPERATURE BLEND CONTROL

With the Tratto fittings a temperature blend control is incorporated in the ceramic disc cartridge which can be pre-set at five different settings to restrict the movement of the lever handle and so control the volume of hot water from the fitting. Fig. 4 illustrates the top of the cartridge and the setting insert which can be moved from position 0 to 4 in the setting ring. The cartridge is factory set at position 0 which allows the lever to move through an arc of 120° with a maximum delivery of hot water, as the setting number increases, so the lever travel arc and volume of hot water is reduced.

The setting number can be selected on site to suit the needs of the user as follows:-

Prise out the setting insert using a small screwdriver in the groove and move it to the position 1, 2, 3 or 4. The setting insert can be moved with the handle connection in any position.

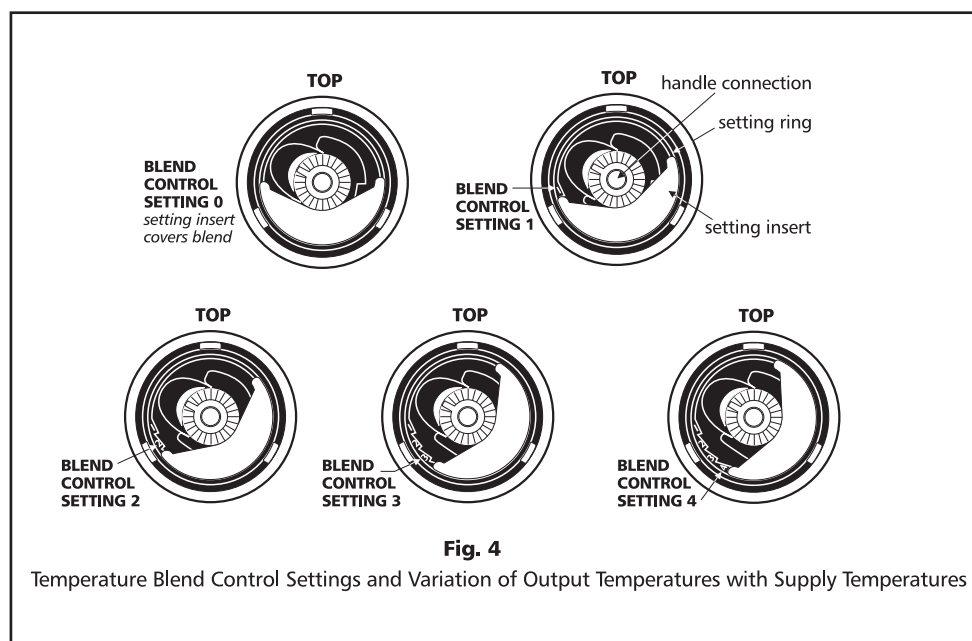


Fig. 4

Temperature Blend Control Settings and Variation of Output Temperatures with Supply Temperatures

will need to be fitted onto the hot and cold water supplies. A flow straightener is fitted in the spout and a Neoperl aerator/flow restrictor (not supplied), should be fitted when the supply pressure is greater than 3 Bar. A Neoperl aerator/flow restrictor is available from Ideal-Standard if required.

WARNING

The ceramic disc cartridge in this fitting is secured by a retaining nut which is factory assembled to a torque of 3-4Nm. The removal or adjustment of the retaining nut is not advised for any purpose unless equipment is available to re-set it to the correct torque. If the torque is incorrectly re-set, damage to the cartridge may result and no liability will be accepted by Ideal-Standard. If it is necessary to release the cartridge, see section on maintenance.

WATER REGULATIONS INSTALLATION REQUIREMENTS

As the incorrect installation of water fittings may result in contravention of Water Regulations Requirements, the following "Installation Requirements and Notes" (IRN's), are intended as guides for water undertakers, consumers, installers and their customers. These IRN's relate to the Regulations implemented by the water undertakers from 1st January 1989.

The following IRN's apply to the Tratto fittings listed:

A1395 - Tratto basin mixer IRN No. 101

A1359 - Tratto bath filler IRN No. 101

IRN 101 - REGULATION 25

Water supplies shall be at reasonable balanced pressures and taken from a common source (both from storage by gravity or both from the supply pipe). Where the fitting is installed in domestic premises, supplies may be taken from

separate sources provided a 'listed' single check valve or some other no less effective back flow prevention device is fitted immediately upstream of both hot and cold water inlets.

A1358 - Tratto bath/shower mixer

IRN No. 103, IRN No. 104, IRN No. 109, IRN No. 111

IRN 103 - REGULATION 17

Multiple inlet fittings installed in domestic premises shall be installed in domestic premises, shall be installed in accordance with IRN 101, and with a double check valve assembly or some other no less effective backflow prevention device fitted at the connection to the shower hose pipe.

A single check valve or vacuum breaker may be fitted in place of the double check valve if single check valves are fitted at each inlet fitting. Alternatively, the fitting shall be supplied in accordance with IRN 109 unless the shower head is constrained above the spill-over level of the bath, washbasin or shower tray.

IRN 104 - REGULATION 17

Multiple inlet fittings incorporating a self cancelling diverter, acceptable as a backflow prevention device shall be installed in accordance with IRN 101, and unless the shower head is constrained above the spill-over level of the bath, washbasin or shower tray shall be installed either:-

- A. with a single check valve or some other no less effective backflow prevention device immediately upstream of each inlet, or
- B. with a single check valve or vacuum breaker fitted between the diverter and the shower head, or
- C. so that it draws water by gravity only from a

cistern, cylinder or tank having a permanently open vent, the vertical distance between the point at which the pipe or pipes supplying water to the fittings is or are connected to the supply and the spill-over level of a fixed appliance, is not less than 25mm, and the pipe or pipes supplying no other fitting (other than the draining tap) at a lower level.

IRN 109 - REGULATIONS 16 & 18

The fitting shall be installed so that its outlets discharges above the spill-over level of any fixed appliance as indicated in the following table:

Size of tap or combination fitting	Vertical distance of point of outlet above spill-over level
1. not exceeding 1/2"	20mm
2. exceeding 1/2" but not exceeding 3/4"	25mm
3. exceeding 3/4"	70mm

If the fitting cannot be installed as indicated in the table, it shall be installed:

- A** with a 'listed' double check valve assembly or some other no less effective backflow prevention device immediately upstream of the inlet, or:
- B** so that it draws water by gravity only from a cistern, cylinder or tank having a permanently open vent pipe, the vertical distance between the point at which the pipe or pipes, supply water to the fittings, are connected to the supply and the spill-over level of any fixed appliance, is not less than 25mm, and the pipe or pipes supply(ies) no other fitting, (other than a drain tap) at a lower point.

A1397 - Tratto bidet mixer IRN No. 140

IRN 111 - REGULATIONS 29, 58 & 73

The fitting is to be installed as to be readily accessible for examination, repair, replacement or operation.

IRN 140 - REGULATIONS 19, 20 & 21

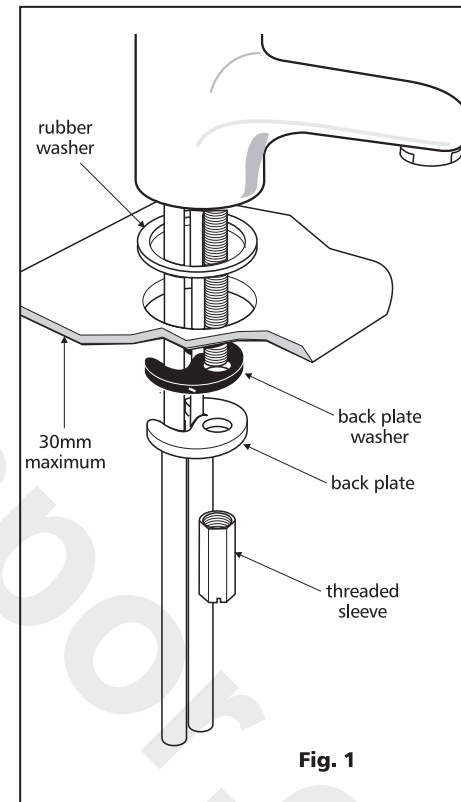
Regulation 19 precludes the connection of rim fed or ascending spray type bidets, or bidets with hand held spray attachments to any supply pipe and Regulation 20 covers the use of over rim type feeds, specifically air gap requirements. Regulation 21 (1) lay down restrictions concerning supplies to bidets and other points of draw-off, with Regulation 21 (2) permitting certain exceptions. In the case of a bidet equipped with a single outlet mixing tap and site verification confirms the air gap is in accordance with the table in Regulation 16 (2), hot and cold supplies can be provided by distributing pipes or direct from the supply supply pipe. If the water pressures are unbalanced, single check valves MUST be provided in the pipe supplying the mixer taps.

BACKFLOW PREVENTION DEVICES means either a Type A or Type B air gap, a check valve, a double check valve assembly, a combination of check valve and vacuum breaker, a pipe interrupter, or some other water fitting or arrangement of water fittings designed to prevent backflow of back siphonage of water.

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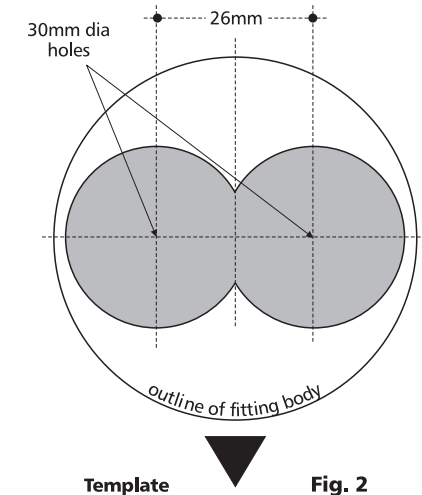
BASIN AND BIDET INSTALLATION

1. Flush water through pipework to remove debris etc. before connecting the fitting to the pipework.
2. Connect the fitting to the pottery as per Fig. 1 and connect the waste system.



BATH FILLER AND BATH/SHOWER MIXER INSTALLATION

The Tratto monoblock bath filler and bath/shower mixer requires a bath without tap holes and two 30mm diameter holes need to be drilled in the rim as per the template in Fig. 2. Before drilling the holes in the rim of the bath, the following should be considered:-



1. The fittings should not be fitted directly in line with the overflow of the bath as the pop-up waste and overflow assembly may foul the fitting.
2. Ideal-Standard baths have additional reinforcement on the underside of the bath, located in all recommended tap positions. This reinforcement is necessary, as it is possible that the bath fitting could be used as a handle and leverage could cause damage.
3. Select the tap position carefully if a shower screen is to be fitted, or if the fitting is to be installed near to a wall.

FITTING TO THE BATH RIM

1. Fix the template (supplied) to the bath rim with the arrow pointing into the bath in the required direction of the spout.
2. Drill the two 30mm holes in the positions as indicated on the template.
3. Flush water through the pipework to remove debris from the pipework.
4. Insert the fitting into the holes and connect as in Fig. 3.