

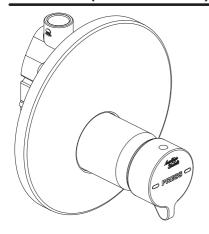






Avon 21 Self-closing showers (Push button)

INSTALLATION INSTRUCTIONS





B0994AA Self closing built-in shower mixer – push button with variable temperature



B0995AA Self closing built-in shower – push button (Non-mixing)

IMPORTANT

BEFORE CONNECTION, FLUSH WATER THROUGH PIPEWORK TO REMOVE ALL DEBRIS ETC. WHICH COULD DAMAGE THE VALVE MECHANISM

INSTALLER: After installation please pass this instruction booklet to user



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Avon 21 Self-closing closing built-in Showers - push button

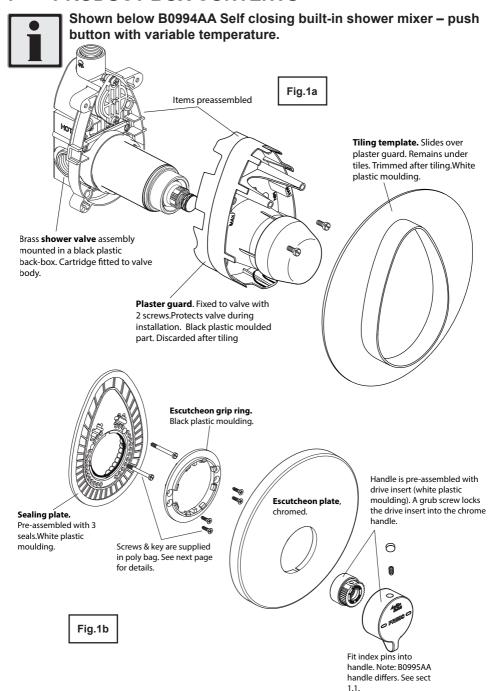
B0994AA with variable temperature **B0995AA** non-mixing (premixed temperature)

These Avon 21 products are self-closing taps designed for water economy. These products are fitted with simple press down handles for easy actuation. The run-time until automatic shut off is adjustable.

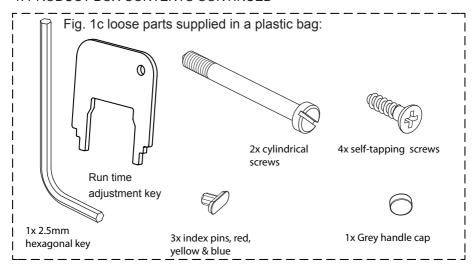
On B0994AA rotation of the handle permits water temperature adjustment. B0995AA can be plumbed with premixed water supply via a tempering device such as a thermostatic mixing valve or supplied with cold water.

These products include built-in check-valves, filters & an 8 LPM flow regulator. Outlet to shower can be plumbed above or below these showering products. These showers can be installed into a wall or onto the rear of a panel.

1 PRODUCT BOX CONTENTS



1. PRODUCT BOX CONTENTS CONTINUED

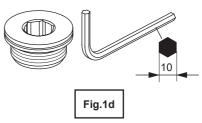


G1/2" brass blanking plug

NOTE:

B0994AA is supplied with one G1/2" brass blanking plug.

B0995AA is supplied with two G1/2" brass blanking plugs.



1.1 Fitting handle index pin(s)

Fig1.1a B0994AA Mixing shower



Coloured index pins to be fitted into the handle as shown. Fit blue pin into the slot on the right.

Depending on local requirements, fit either red or yellow pin into the second slot. Discard the extra pin.

Fig1.1b B0995AA Non-mixing shower



Fit blue index pin for cold water. Fit either red or yellow for warm water (premixed).

2 PRODUCT DIMENSIONS

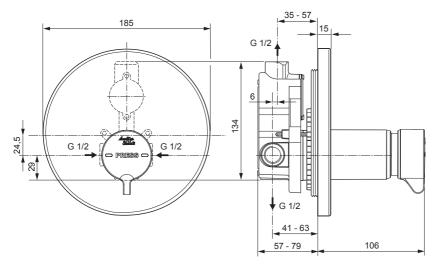


Fig.2a B0994AA Self closing built-in shower mixer – push button with variable temperature

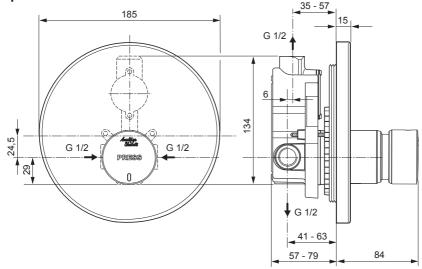
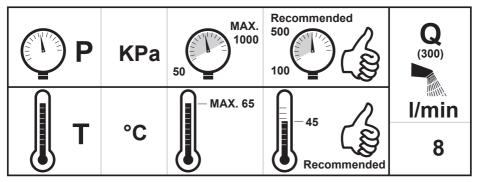


Fig.2b B0995AA Self closing built-in shower – push button (Non-mixing)



Note for installer: Fig.2a side view shows escutcheon plate at furthest **back** position, exposing **more** of the shower valve body. Fig.2b side view shows escutcheon plate at furthest forward position, exposing **less** of the shower valve body

3 SUPPLY CONDITIONS



Supply temperatures:

Temperatures shown above are for the HOT inlet water supply. Avoid supplying scalding water to the HOT inlet. Hot water temperature supply should be controlled to circa 45°C.

In order to maintain water quality, the hot supply should be stored & distributed at a temperature greater than 55°C.

Use of an appropriate temperature reduction device (i.e. tee pattern thermostat) is recommended to ensure delivery of safe hot water temperatures from the shower.

Product B0994AA permits water temperature adjustment; therefore both hot & cold water supplies are required for mixing.

B0995AA can be plumbed with either a premixed water supply (via a tempering device such as a thermostatic mixing valve) or be supplied with cold water only.

Supply pressures:

Product B0994AA should be plumbed to balanced pressure water supplies for best mixing performance.

The recommended working pressure for these products is 100 to 500 KPa.

Exceeding this pressure will adversely affect the operation of the shower.

This adverse effect can be overcome by using PRV to reduce the pressure accordingly.

4 NATIONAL PLUMBING & DRAINAGE CODE

The products covered by this installation and maintenance instruction must be installed in accordance with the provisions of AS/NZS 3500 & any relevant local regulations.

Installations not complying with AS/NZS 3500 may void the product performance & warranty.

Armitage Shanks strongly recommends that this product is fitted by a professional installer.

4.1 Water supply controlling devices (external)

Pressure & temperature ranges of the incoming water supplies should comply with the limits specified above.

NOTE: Maximum recommended static pressure in AS 3500.1.2 is 500 Kpa.

To avoid exceeding this pressure, install a suitable pressure reducing valve - PRV (or pressure limiting valve - PLV) on both hot & cold incoming water supply systems. A suitable location for a PRV on the hot supply may be on the cold inlet to the heating appliance.

Similarly, if the water supply temperature ranges do not conform as above, then suitable temperature controlling devices should be installed to achieve this.

5 PRE-INSTALLATION NOTES

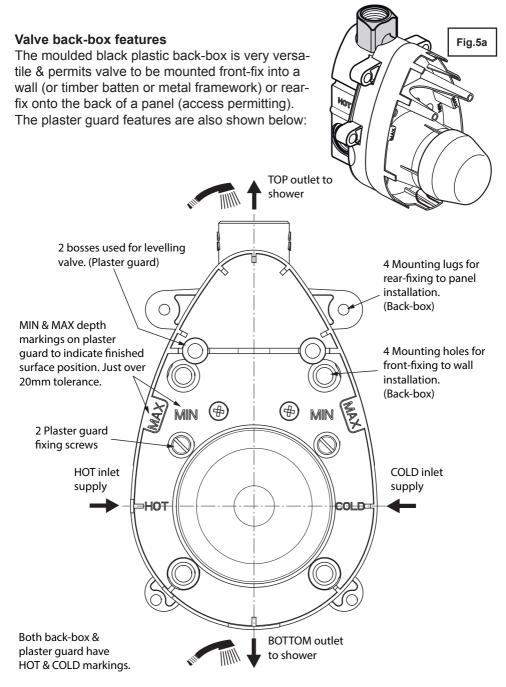


Fig.5b B0994AA Mixing shower

5. PRE-INSTALLATION NOTES CONTINUED...

In-line service valves

IMPORTANT: Inline service valve(s) should be fitted upstream of these products into the supply pipes. Consider a suitable location for the service valves. Orientate the service valve(s) such that the isolating screw(s) are easily accessible for future maintenance.

Mounting information

Decide on a suitable location for mounting the shower valve on the wall. Give consideration to the mounting depth. Note the following:

- The plaster guard (black moulding) is marked with MINIMUM & MAXIMUM to help the installer achieve the correct depth. Dimensions shown in sect.2 are from the rear of the back-box to the finished surface (which could be tiles).
- Two bosses are provided on the plaster guard to act as a levelling aid. Balance a small spirit level on these bosses for accuracy.

• Ideally secure the back-box to a suitable surface using the holes shown in fig.5b. Ensure it is level.

The pipe-work alone may not sufficiently support the valve. Running pipe-work & making connections will be easier if the valve is securely mounted.

 The profile of either the tiling template or the plaster guard can be used as a guide for marking out the size & shape of the aperture required in the finished wall for the sealing the trim kit.

Valve has two shower outlets. One outlet should be blocked off with G1/2" brass plug supplied.

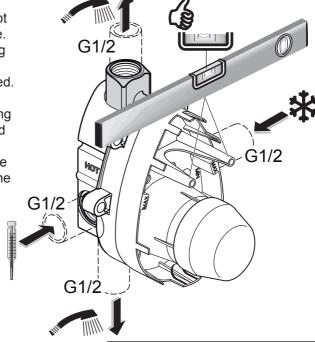


Fig.5c B0994AA Mixing shower

5. PRE-INSTALLATION NOTES CONTINUED...

Port details:

All 4 ports on these valves are threaded G½" female.

Inlet ports

B0994AA: The HOT water supply to the valve should be on the left & COLD water supply on the right. Both supplies are required.

B0995AA: The premixed water supply (warm) should be on the left & the COLD port can be blanked off. Alternatively, COLD water supply can be on the right & the HOT port can be blanked off. Only one supply is required.

Outlet ports

The valve has two outlet ports. The installer can decide which port to use & fit the supplied $G\frac{1}{2}$ " plug into the other port.

Purchase 2 (for B0995AA) or 3 (for B0994AA) $G\frac{1}{2}$ " male connectors suitable for the type of pipe being used to plumb the installation. Use an appropriate approved thread sealing medium.

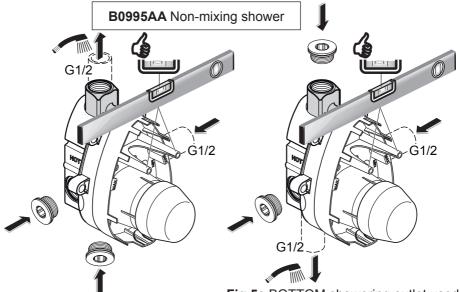


Fig.5d TOP showering outlet used

Fig.5e BOTTOM showering outlet used.

Examples above are non-mixing shower valves supplied with COLD water only. The HOT port is being blanked off with a brass plug.



NOTE: B0995AA is supplied with two G1/2" brass blanking plugs.

6 INSTALLATION GUIDE Kit-1 or "rough" parts.



Before connection, flush water through pipe-work to remove all debris etc. to prevent damage to the valve mechanism.

THEN ENSURE WATER SUPPLIES HAVE BEEN ISOLATED.

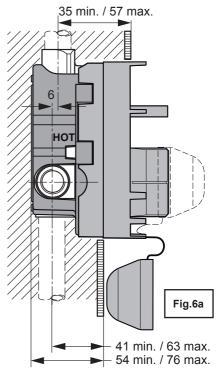


Installer should become familiar with the product by reading sect.5 first.

- Mount the shower valve assembly at the desired location, give consideration to mounting depth from finished surface.
- If the valve assembly is being fitted into a wall or onto a timber batten, secure the back-box using a least two suitable screws (4 screws better). Screw heads should go through clearance holes in the plaster guard, so there is no need to disassemble the plaster guard from the back-box.



- · Ensure the back-box is level.
- Fit blanking plug to one of the shower outlets.
- Fit G½" male connectors (suitable for the type of pipe being used) to the remaining ports of the shower valve. Use an appropriate approved thread sealing medium.
- Fit inline service valve(s) upstream of these products into the supply pipe(s). Service valve(s) should be easily accessible; allowing product to be isolated for future maintenance
- Run pipework to the shower valve & connect.
 Run pipe work to shower outlet.
- At this stage the pipework can be tested for leaks. Restore water supply pipe(s), direct the shower outlet water into a vessel. The cap on the plaster guard can be removed allowing the shower valve spindle to be accessed.
- Finally make good the wall, apply plaster up to the profile of the plaster guard.





Check that all joints are securely tightened, test for leaks.

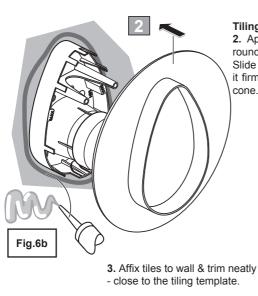
DO NOT apply heat near this product. Heat generated by soldering could damage plastic parts and seals.



INSTALLATION GUIDE CONTINUED... KIT-2 OR "TRIM" PARTS

1. When the plaster work has dried, the wall can be tiled if required.

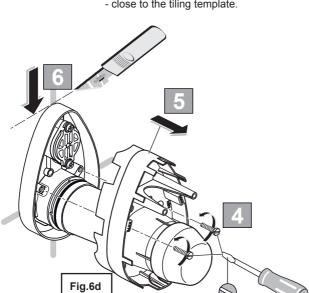
A tiling template is supplied to help produce a good finished appearance.

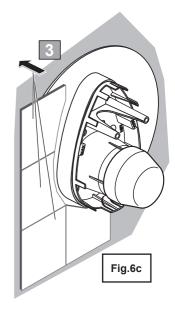


Tiling

2. Apply a thin layer of silicon sealant on the wall surrounding the plaster guard as shown.

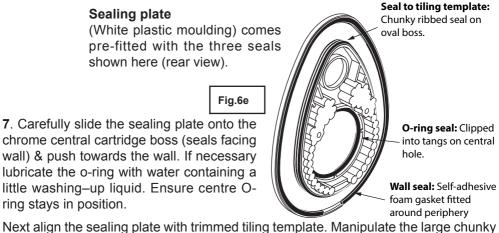
Slide the tiling template over the plaster guard & press it firmly against the wall. Wipe away any excess silicone. Allow silicone time to set.



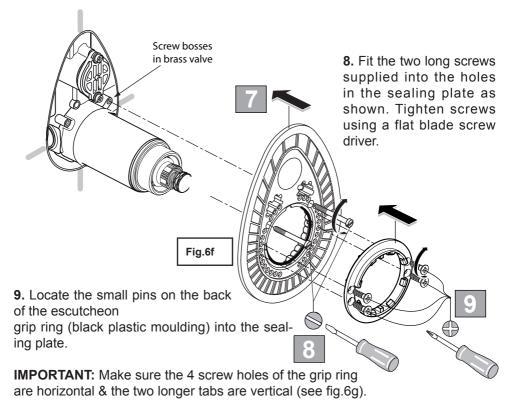


- 4. Undo the two screws retaining the plaster guard. Use a "long reach" flat blade screw driver.
- 5. To remove the plaster guard gently pull it away from the wall. The plaster guard & the two small screws can be discarded.
- 6. Carefully trim away the tiling template "flush" with the finished tiled surface using a sharp craft knife.

6. INSTALLATION GUIDE CONTINUED... FITTING TRIM KIT

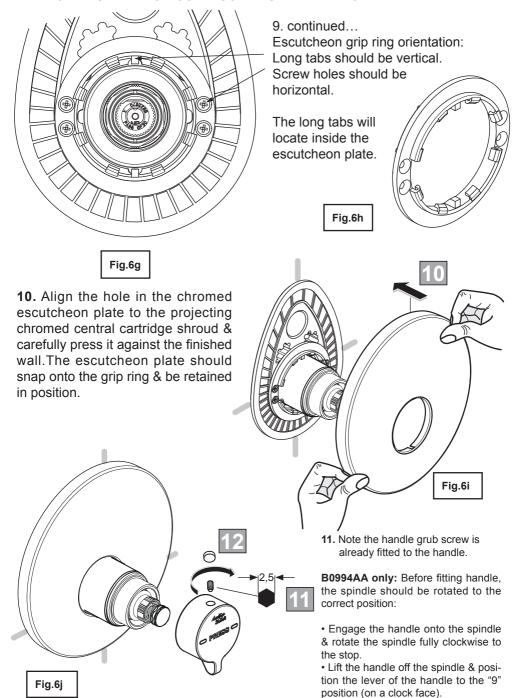


Next align the sealing plate with trimmed tiling template. Manipulate the large chunky ribbed seal into the tiling template. Press the sealing plate until the foam gasket touches the wall or finished surface.



Tighten the 4 self-tapping screws using a positive drive screw driver.

INSTALLATION GUIDE CONTINUED... FITTING TRIM KIT.



6. INSTALLATION GUIDE CONTINUED...

11. Continued...

• Engage the handle onto the spindle & rotate the spindle anti-clockwise to the "6" position. The spindle is now in the correct position to supply mid-mixed water.

B0995AA: simply position the handle onto the spindle with the text horizontal. Spindle does not rotate on this product.

Using the 2.5mm hexagonal key, tighten the grub screw visible from the top surface of the handle.

12. Press the grey cap into the hole in the handle



7 SHOWER OPERATION



To operate these products, simply press the handle horizontally & then release. Water will flow for the pre-set time (adjustable in seconds) & then the shower will self-close.

B0994AA only: To adjust the water temperature, rotate the handle as shown. From the mid-mix position, the handle can rotate 90° in either direction.

Clockwise rotation will increase the water temperature. Note on **B0995AA** the handle is locked & will not rotate.

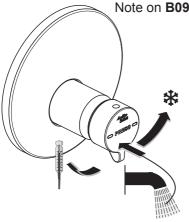


Fig.7a **B0994AA** Mixing shower

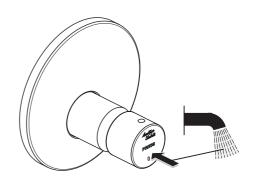
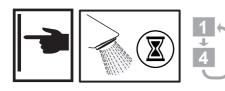


Fig.7b **B0995AA** Non-mixing shower

RUN TIME ADJUSTMENT 8



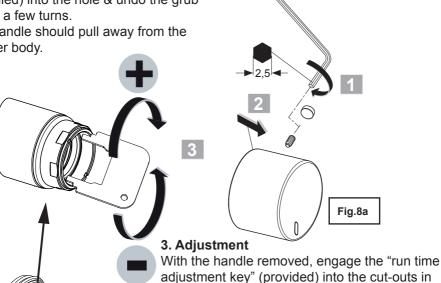
This is a water saving product & is supplied set with a short run time. A run time of typically 35 to 80 seconds will suit most applications.

The run time can below; first the handle must be removed

1 & 2 Handle removal

To remove the handle prise out the small grey grommet located at the top of the handle. Insert the 2.5mm hexagonal key (supplied) into the hole & undo the grub screw a few turns.

The handle should pull away from the shower body.



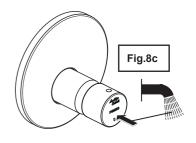
the brass adjusting ring.

Clockwise rotation will provide longer run time, & conversely anti-clockwise rotation will provide shorter run time. (Cartridge not shown for clarity, no need to isolate water supplies).

4. Check run time

Fig.8b

Replace the handle temporarily & press it to check the run time. If the run time is satisfactory secure the handle (reverse sequence above). Otherwise remove the handle & make further adjustments.



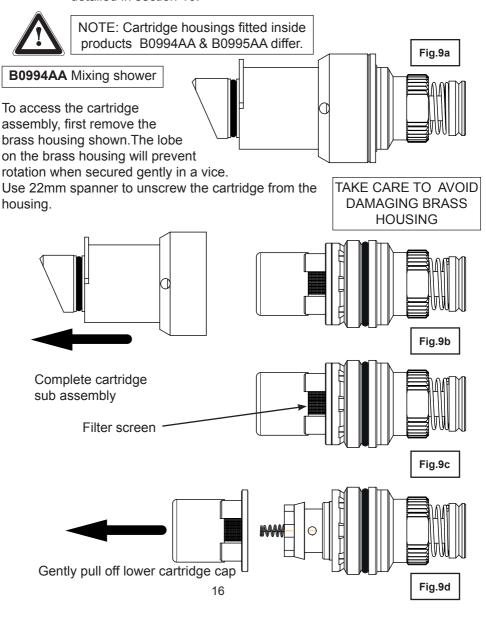
MAINTENANCE (cleaning pilot hole)



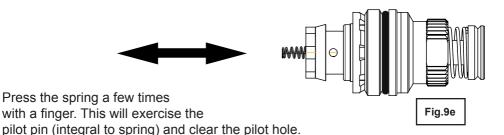
9

In the event that the shower begins to run continuously, it will be necessary to manually clear the pilot hole inside the cartridge.

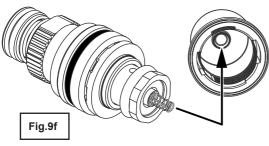
Handle removal: Firstly remove the handle as detailed in section 8. ENSURE WATER SUPPLIES HAVE BEEN ISOLATED. Remove the cartridge assembly from the shower valve body as detailed in section 10.



9. MAINTENANCE (CLEANING PILOT HOLE) CONTINUED...



Before reassembling the cartridge cap, make sure that the filter screen is clean (slides out from inside of cap). When reassembling, take care to ensure the spring is straight & locates correctly into the boss at the bottom of the cap moulding.



Finally refit the cartridge back into the brass housing, & refit into mixer.

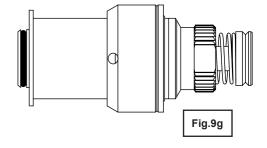
Restore water supplies & check for leaks. Reset the run-time & fit the handle.

B0995AA Non-mixing shower

Torque cartridge into housing to 15Nm.

The brass housing for the mon-mixing version of this shower valve (fig.9g) differs slightly compared to the mixing version (fig.9a).

The same method should be adopted for clearing the pilot hole as the mixing version



10 | CARTRIDGE REPLACEMENT





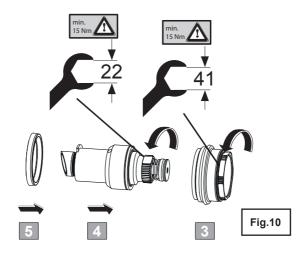
Before replacing the cartridge make sure:

- **1.**The cartridge filter is not blocked with debris. If debris is found, clean the filter.
- 2. Check the pilot hole in the cartridge is clear.

For more details regarding 1 & 2, see section 9. After cleaning, refit the cartridge & recheck the product.

FOR INLET FILTERS, SEE SECTION 12

Handle removal: Firstly remove the handle as detailed in section 8. ENSURE WATER SUPPLIES HAVE BEEN ISOLATED.



- 3. With the handle removed, use a 41mm A/F spanner to unscrew the chrome locking nut. Hold the chromed cartridge boss with a strap wrench to prevent it rotating. Lift off the chrome shroud complete (with brass adjusting ring).
- The cartridge & brass housing assembly can now be pulled out of the shower mixer body.
- 5. The cup seal can be lifted out of the shower mixer body, if necessary.

To remove the cartridge from the brass housing, see section 9. A 22mm A/F spanner is required.

To reassemble

Fit a new cartridge into the brass housing & tighten to 15Nm. Use a vice if necessary (taking care not to damage parts).

With cup seal in position, slide cartridge & brass housing assembly into the mixer body.



NOTE: Cartridge housings fitted inside products B0994AA & B0995AA differ.

10. CARTRIDGE REPLACEMENT CONTINUED...

B0994AA only: Ensure the lobe on the brass housing is upper most. Otherwise this lobe will foul on the grub screw fitted to the manifold. Thus preventing the cartridge assembly from being seating down to the correct depth.

B0995AA only: Ensure the small cut-out in the flange on the brass housing is facing downwards. Align this cut-out with the grub screw fitted to the manifold. Otherwise this flange will foul on the grub screw fitted to the manifold. Thus preventing the cartridge assembly from being seating down to the correct depth.

Replace the chrome lock nut with adjusting ring & tighten to 15Nm.

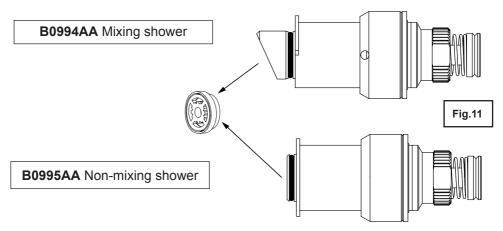
Restore water supplies & check for leaks.

Adjust the run time as detailed in section 8. Finally refit the handle.



11 FLOW REGULATOR INFORMATION

These showering products are fitted with an 8 litres per minute (LPM) flow regulator. The regulators are located in the water inlet of the brass housing of the cartridge assembly.



To gain access to the flow regulator, it will be necessary to remove the cartridge assembly from the shower valve. Follow the instructions detailed in section.10.

To avoid damaging the regulator, it is best to remove the cartridge from the brass housing. The regulator can then be pushed out of the housing from the inside. Use the back of a pen or pencil to push regulator out.

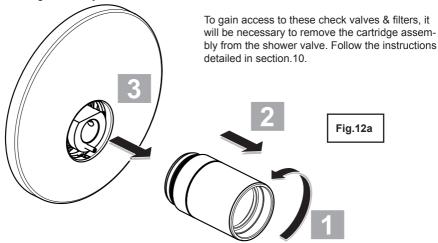


ENSURE THE REGULATOR IS RE-FITTED CORRECTLY AS SHOWN

12 CHECK VALVES & FILTERS

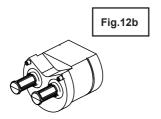
These showering products are fitted with a pair of check valves & filters.

The check valves & filters are located in the water inlets of the brass manifold which is located under the cartridge assembly.



- **1.** With the cartridge removed, unscrew the chromed cartridge boss using a strap wrench.
- 2. Remove the chromed cartridge boss.
- 3. Lift out the brass manifold from the shower valve body.

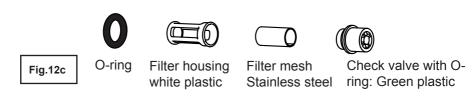
NOTE: In some cases it may be necessary to remove the chromed escutcheon & sealing plates to undo the chromed cartridge boss, this depends on how deep the back-box has been mounted in the wall.



Rear view of complete brass manifold assembly with both filter assemblies attached.

Note orientation for reassembly: Flat & cut out are at the top. Two location pin are on the front face just above the filters.

To clean the filers, simply pull off the white plastic filter housings from the back of the check valves. Slide out the stainless steel filter mesh from the filter housings. Wash the mesh in clean water & reassemble.



12 CHECK VALVES & FILTERS CONTINUED...

The check valves will be retained within the face of the brass manifold. To remove the check valves, use long nose pliers to extract these from the manifold bores.



THESE PRODUCTS MUST BE FITTED WITH CHECK VALVES.

IF CHECK VALVES BECOME FAULTY, THEY MUST BE REPLACED.

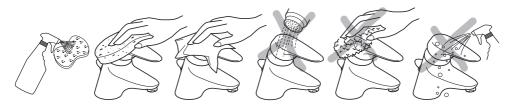
Once maintenance work has been completed, the product can be reassembled. Reverse the dismantling sequence.

NOTE: The cartridge is protected with its own filter, see section 9. This filter should also be cleaned periodically



ENSURE THE MANIFOLD IS ORIENTATED CORRECTLY BEFORE REFITTING INTO THE SHOWER VALVE. SEE FIGS 12a & 12b.

13 CLEANING CHROME SURFACES

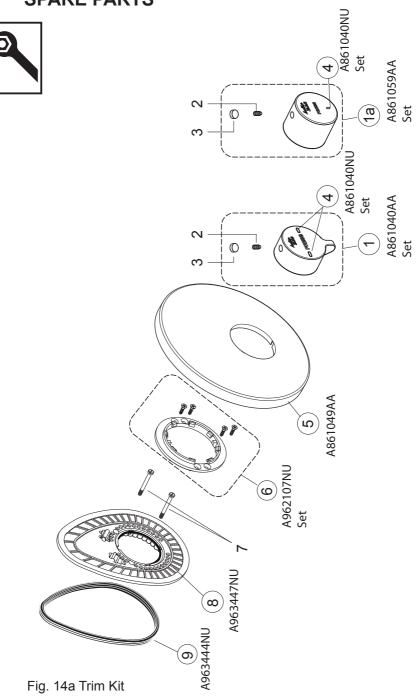




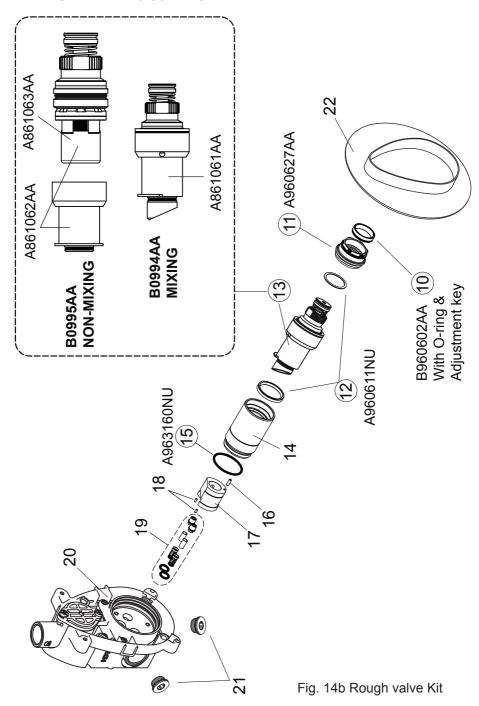
When cleaning chromed products use only a mild detergent, rinse & wipe dry with a soft cloth. Ideally clean after each use to maintain appearance.

Never use abrasive, scouring powders or scrapers. Never use cleaning agents containing alcohol, ammonia, hydrochloric acid, sulphuric acid, nitric acid, phosphoric acid or organic solvents. Use of incorrect cleaning products / methods may result in chrome damage which is not covered by the manufacturer's guarantee

14 SPARE PARTS



14 SPARE PARTS CONTINUED...









CUSTOMER CARE HELPLINE

+44 (0)844 543 6170

CUSTOMER CARE FAX

+44 (0)844 543 6171

E-MAIL

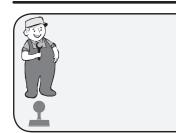
aftersalesnonresidential@armitageshanks.co.uk

Armitage Shanks pursues a policy of continuing improvement in design and performance of its products.

This right is therefore reserved to vary specification without notice.

Armitage Shanks limited Armitage Near Rugeley Staffordshire WS15 4BT England

+44 (0)870 122 8822





0316 / A 868 110 Made in Germany



REECE PRODUCT QUALITY GUARANTEE

You have purchased a product from Reece Australia Pty Ltd ABN 84 004 097 090 ("Reece"). This product is covered by a 5 year replacement product warranty and a 12 month warranty over spare parts and labour.

5 YEAR PRODUCT WARRANTY

This warranty covers faults in the construction, material and assembly of finished products. Products which are within 5 years from the date of purchase, found upon inspection by an authorised Reece representative to be defective in construction, material or assembly, will be repaired or exchanged with an equivalent product free of charge. Replaced items become Reece's property.

This warranty also covers any spare parts included under "Manufacturer's Provisions" below.

Manufacturer's Provisions

The following spare parts are covered by a 10 year warranty:

Mixer Cartridge

ONE YEAR SPARE PARTS WARRANTY

Spare parts other than those listed in the Manufacturer's Provisions above which are within 1 year from the date of purchase found upon inspection by an authorised Reece representative to be defective in construction, material or assembly will be replaced free of charge. Replaced items become Reece's property.

AVAILABILITY OF REPLACEMENT PRODUCTS AND SPARE PARTS

All replacement products and spare parts will be available for collection without charge to the customer at the nearest Reece branch to the customer's location, or elsewhere as agreed between the customer and Reece.

LABOUR

The labour for the replacement of products that are within one year from the date of purchase found upon inspection by an authorised Reece representative to be defective in construction, material or assembly, and in relation to all spare parts to which this warranty applies, will be supplied by Reece or the relevant supplier using licensed plumbers engaged by Reece or the relevant supplier

WARRANTY CONDITIONS

This warranty will apply only under all of the following conditions:

- The item has been installed by a licensed plumber
- Failure is due to a fault in the manufacture of the product
- Proof of purchase (including the date of purchase) is provided
- The installation of the product is in accordance with the instructions provided
- The product has been installed in valid applications as stated in accordance with the recommended use

This warranty does not cover products purchased as an ex-display without being fully checked and tested for sale by the manufacturer.

This warranty does not include faults caused by:

- Unsuitable or improper use
- Incorrect installation or installation not in accordance with the instructions provided
- Installation or part installation by any person other than a LICENSED PLUMBER who is suitably qualified to install the product, or a Licensed Electrician where applicable.
- Normal wear and tear
- Inadequate or complete lack of maintenance
- Chemical, electrochemical or electrical influences
- Harsh detergents or abrasive cleaners used on product finishes

EXCLUSIONS

To the fullest extent permitted by law, Reece excludes all liability for damage or injury to any person, damage to any property, and any indirect consequential or other loss or damage.

CLAIM PROCEDURE

For all warranty queries customers are to contact the branch where the product was purchased. These details can be found on your purchase invoice.

General contact details for Reece are as follows:

Reece Australia Pty Ltd 118 Burwood Hwy Burwood VIC 3125 +61 3 9274 0000 admin@reece.com.au

The benefits given by this warranty are in addition to the other rights and remedies that consumers may have under the Australian Consumer Law and any other applicable laws.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

