Avon 21 Self-closing mixer (Push button)

INSTALLATION INSTRUCTIONS

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

B0993AA Self closing basin monobloc mixer – push button with variable temperature & flexible inlet hoses
Avon 21 Self closing basin monobloc mixer

B0993AA fitted with flexible inlet hoses.

This Avon 21 product is a self-closing mixer designed for water economy. The product is fitted with a simple press down handle for easy actuation. Rotation of the handle permits water temperature adjustment. The run-time until automatic shut off is adjustable.

This product is fitted with an anti-vandal outlet & flexible inlet hoses. The inlet connectors include check-valves & filters.
1 PRODUCT BOX CONTENTS

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.

2x check valves, 2x filters & 2x housings (G3/8" thread both ends)

2x inlet connectors: G3/8" male thread to G1/2" male thread.

Run time adjustment key

Outlet key

2x flexible inlet hoses. M8 male to G3/8" female

Self-closing mixer

Basin seal moulding

Stud type fixing kit

1x 2.5mm hexagonal key
Note for installer: fit the most suitable colour of index pin into the handle of the basin mixer. Blue for cold water & either red or yellow for warm water. See sect.1
Supply temperatures:
Avoid supplying scalding water to the HOT inlet. Hot water temperature supply should be controlled to circa 40°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 mixer.

Supply pressures:
This product should be plumbed to balanced pressure water supplies for best mixing performance.

The recommended working pressure for self-closing taps is 100 to 500 KPa. Exceeding this pressure will adversely affect the operation of the taps. 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.
1. Before connection, flush water through pipe-work to remove all debris etc. to prevent damage to the valve mechanism.

2. ENSURE WATER SUPPLIES HAVE BEEN ISOLATED.

3. Remove the fixing kit parts if already assembled to the fixing stud. Fit the flexible hoses into the mixer body (if not already fitted). Ensure the basin seal is in place & orientated as shown. The larger diameter of the seal should locate into the base recess of the mixer. Offer the mixer towards the basin hole.

   This product (with flexible hoses) will require hoses to be manipulated into the basin hole one at a time.

4. Attach the rubber gasket to the clamping plate. With the gasket uppermost slide this assembly onto the fixing stud using the hole in the gasket & plate.

5. Hand tighten the nut against the clamping plate until the rubber gasket makes contact with the underside of the basin.

   Ensure the mixer spout is positioned correctly, & then tighten the nut securely with a 13mm A/F socket (or spanner).

   **Remember** to fit isolating valves*.

*Isolation valves should be fitted to permit future maintenance of this product.

   The cartridge mechanism includes a strainer.

**DO NOT** apply heat near this product. Heat generated by soldering could damage plastic parts and seals.
6. Orientate the CV housings & inlet adaptors as shown below. The parts should be assembled in this sequence.

7. Check valves (CV) & filters (with integral seals) should be located within the CV-housings as shown. No need to separate these assemblies.

8. Tighten the CV-housings onto the inlet connectors. Ensure the filter is in place as this also provides the sealing method for this joint. Use a 19mm A/F spanner on the CV housing & hold the inlet connector steady with 22mm A/F spanner.

9. Fit the flexible hoses to the top of the CV-housings & tighten the flexible hose nuts using 19mm A/F spanner. Again hold the inlet connector steady with 22mm A/F spanner. A seal is captivated within the nut of the flexible hose.

10. Connect supply pipes (DN15, Ø12.7mm) to the inlet connectors. Alternatively, flexible hoses (not supplied) can be used which have G1/2" female end connections.

Ensure LEFT inlet flexible hose is connected to the HOT water supply & conversely the RIGHT inlet to the COLD.

SEE SECTION.6 FOR GUIDE-LINES ON INSTALLING FLEXIBLE HOSES

Excessive force is not necessary to achieve a good seal between these parts.

RESTORE SUPPLIES & CHECK ALL JOINTS FOR LEAKS
Flexible hoses fitted are hand tightened into the mixer. Tightening with tools to achieve a good seal is not necessary. Avoid sharp bends, twisting, kinking & stretching these hoses as this may result in damage. Hold the flexi hose steady whilst tightening the nut.

7  TAP OPERATION

To operate this product, simply press the handle downwards & then release. Water will flow for the pre-set time (adjustable in seconds) & then the tap will self close. To adjust the water temperature, rotate the handle as shown. Clockwise rotation will increase the water temperature.
8 OUTLET DETAILS

This product is factory fitted with a laminar PCA regulated outlet which is secured with an anti-vandal (AV) housing.

Table 3 shows the flow rate performance for the flow regulator outlet.

| Q | 300KPa | 3.8 L/min |

Table 3 Flow rate data (Q=flow rate)

To replace/clean/service the outlet, use the outlet key supplied with the product to unscrew the AV housing. 1. Using the side of the key marked “junior” locate the key into the inner ring of the housing. 2. Unscrew housing. Change the outlet & re-secure the housing with the key, ensuring the seal is in place. Ensure the outlet housing is adequately tightened to prevent leaks & run back.

9 RUNTIME ADJUSTMENT

This is a water saving product & is supplied set with a short run time. A run time of typically 5 to 15 seconds will suit most applications. The run time can be adjusted as detailed below; first the handle must be removed.

1 & 2 Handle removal
To remove the handle prise out the small grommet located at the rear of the handle. Insert the 2.5mm hexagon key (supplied) into the hole & undo the grub screw a few turns. The handle should lift off from the tap body.
3. Adjustment
With the handle removed, engage the “run time adjustment key” (provided) into the cut-outs in 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).

4. Check run time
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.

10 MAINTENANCE (CLEARING PILOT HOLE)
In the event that the tap 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 9.
ENSURE WATER SUPPLIES HAVE BEEN ISOLATED.
Remove the cartridge from the tap body as detailed in section 11.

To access the cartridge assembly, first remove the brass housing shown. The lobe on the brass housing will prevent rotation when secured gently in a vice. Use 22mm spanner to unscrew the cartridge from the housing.

TAKE CARE TO AVOID DAMAGING BRASS HOUSING
Complete cartridge sub assembly

Filter screen

Gently pull off lower cartridge cap

Press the spring a few times with a finger. This will exercise the pilot pin (integral to spring) and clear the pilot hole.

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 into the tap, reset the run-time & fit the handle
11 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 see section 10.
After cleaning, refit the cartridge & recheck the product.

Handle removal: Firstly remove the handle as detailed in section 9.
ENSURE WATER SUPPLIES HAVE BEEN ISOLATED.

3. With the handle removed, use a 41mm A/F spanner to unscrew the chrome shroud. Lift off the chrome shroud complete with brass adjusting ring.

4. The cartridge & brass housing assembly can now be lifted out of the mixer body.

5. The cup seal can be lifted out of the mixer if necessary.

To remove the cartridge from the brass housing, see section 10. 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. Ensure the lobe on the brass housing is towards the rear of the mixer as shown.

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

Adjust the run time as detailed in section 9. Finally refit the handle.

TAKES CARE NOT TO DAMAGE CHROMED SURFACES.
12 SPARE PARTS

12.1 (ABOVE THE BASIN ITEMS)

B 960602 NU
With adjustment key

B 960627 AA

A 960611 NU

S 960171 AA
Cartridge only

A 861044 NU
Cartridge plus housing

A 961810 NU
O-ring (pair)

A 860970 AA
with AV key
12.2 Below the basin items:

A 963680 NU
Single

B 964894 NU

A 861042 NU

A 861043 NU
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.

Outlet cleaning. On a regular basis the outlet should be inspected & cleaned. To unscrew and remove the outlet, see section 9.

In areas where lime scale build-up is prevalent this should be avoided by regular cleaning. If it should build up, it will have to be removed. An inhibited proprietary scale solvent can be used such as a kettle de-scaling solvent but it is important to follow the manufacturer’s guidelines. After de-scaling it is important to rinse the parts thoroughly in clean water.

Clean carefully and do not use abrasive materials or scrapers.
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.

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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.

Don’t risk it, use a licensed plumber.”™