# **AQUABLEND SQX THERMOSTATIC MIXERS**

# **Installation Instructions**

ATM606 Models

ATM607 Models



ATM6082L



ATM610X / ATM611 Models



# product descriptions







AQUABLEND SQX THERMOSTATIC BASIN MIXER with EXTENDED LEVER HANDLE **ATM606D** 





AQUABLEND SQX THERMOSTATIC SINK MIXER with 100MM LEVER HANDLE ATM607L

AQUABLEND SQX THERMOSTATIC SINK MIXER with 100MM LEVER HANDLE with REMOVABLE SPOUT ATM607LX



AQUABLEND SQX THERMOSTATIC SINK MIXER with EXTENDED LEVER HANDLE ATM607D

AQUABLEND SQX THERMOSTATIC SINK MIXER with EXTENDED LEVER HANDLE with REMOVABLE SPOUT ATM607DX



AQUABLEND SQX THERMOSTATIC RECESSED WALL SHOWER MIXER with 100mm HANDLE ATM6082L



AQUABLEND SQX THERMOSTATIC EXPOSED WALL SURGEON MIXER **ATM611** 

AQUABLEND SQX THERMOSTATIC EXPOSED WALL SURGEON MIXER with REMOVABLE SPOUT

**ATM610X** 

AQUABLEND SQX THERMOSTATIC EXPOSED WALL SURGEON MIXER with REMOVABLE SPOUT, 215mm CENTRES

ATM610X-215

# contents

Product Descriptions		2
Technical Data		4
Installation Compliance		4
	ATM606	5
Components	ATM607	6
& Spare Parts	ATM6082L	7
	ATM610 / ATM611	8
	ATM606 ATM607	9
	ATM6082L	10-11
Installation	ATM610X / ATM611	12-13
Instructions	Handle Assembly & Positioning	14-15
	Temperature Adjustment	16
	Swivel Spout Assembly	17-18
Maintenance		19
Commissioning		19
In Service Tests		20
Servicing		21-23
Thermal Flush Disinfection Procedure		24
Troubleshooting		25
Commissioning Report		26-27
Warranty		28

### technical data

Hot Temperature Supply Range	55°C - 85°C	Operating Thermostatic Temp. Range*	full cold - 45°C
Cold Temperature Supply Range	5°C - 25°C	Factory Set Thermostatic Temp. Range	39°C - 41°C
Adjustable Temperature	35°C - 45°C	Maximum Thermostatic Temperature	45°C
Operating Working Pressure	20 - 500* kPa	Minimum Flow Rate	2 L/minute
Maximum Outlet Pressure*	500 kPa	Maximum Flow Rate	15.5 L/minute
Permitted Supply Pressure Variation^	10%		

<sup>^</sup>AS3500.4 clause 1.9.4.2 - The dynamic pressure differential between hot and cold supplies when mixed at a thermostatic mixing valve shall not exceed 10%.



### installation compliance

\*Enware products are to be installed in accordance with the Plumbing Code of Australia (PCA), AS/NZS3500 and the manufacturer's instructions. Installations not complying with PCA, AS/NZS 3500 and the manufacturer's instructions may void the product and performance warranty provisions.

To effectively control microbial hazards during system design, installation, commissioning and maintenance, the requirements outlined in AS/NZS3666 and local legislation shall be adhered to

**AQUABLEND SQX THERMOSTATIC MIXERS are WaterMark approved to AS4032.1** and should be installed using the appropriate Standard, Code of Practice and legislation applicable to each state.

Thermostatic mixing valves must be installed by a qualified plumber.

Prior to installation the system must be checked to ensure the system operating conditions fall within the recommended operating range specified in above Technical Data. If the valve is not installed correctly it will not function correctly and may put users in danger and valve warranty may also be void.

To ensure the Thermostatic mixer operates correctly it is necessary that pipework be thoroughly flushed with clean water before installation as per AS/NZS 3500.1. This will remove any physical contaminants from pipework, ensuring trouble-free operation.

Before installation ensure all operating and dimensional specifications are suitable for the intended installation.

If debris is an ongoing problem, the use of strainers (40

mesh) is recommended. A Pressure reduction valve may be required to comply with recommended maximum supply pressure.

THE FOLLOWING CLAUSES MUST BE OBSERVED FOR A COMPLIANT INSTALLATION AND CORRECT OPERATION:

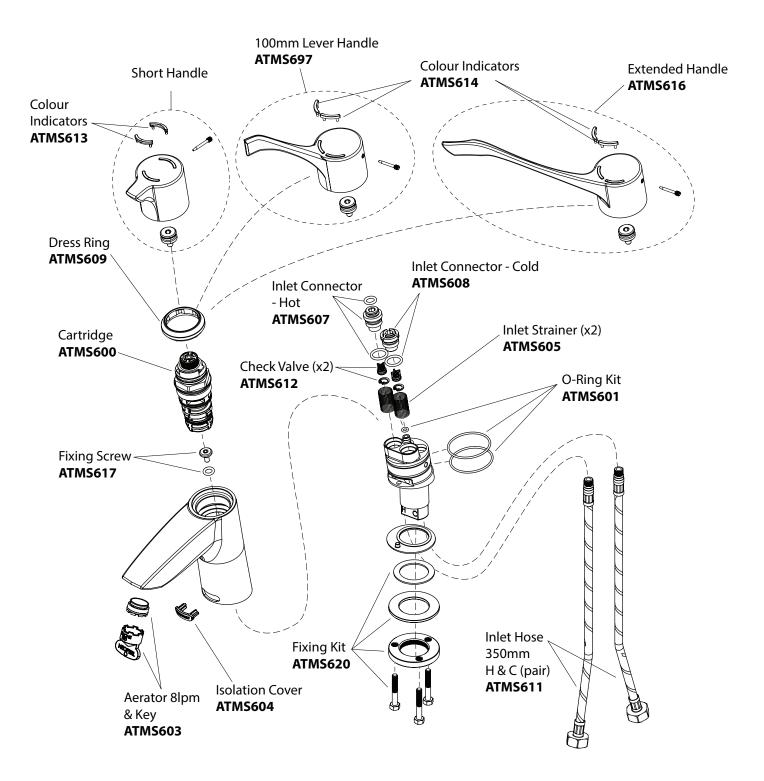
# Plumbing Code of Australia: Part B1 Cold Water Services AS/NZS 3500.1-2003 Water Services;

- Section 1.6(a) Facilities for people with Disabilities
- Section 3.3.2 Pressure at outlets (min 50kPa)
- Section 3.3.4 Maximum pressure within buildings (500kPa static)
- Section 3.4 Velocity Requirement (Max 3.0m/s)
- Section 16 Testing and Commissioning; Flushing, Hydrostatic testing, cleaning and disinfection of water services.

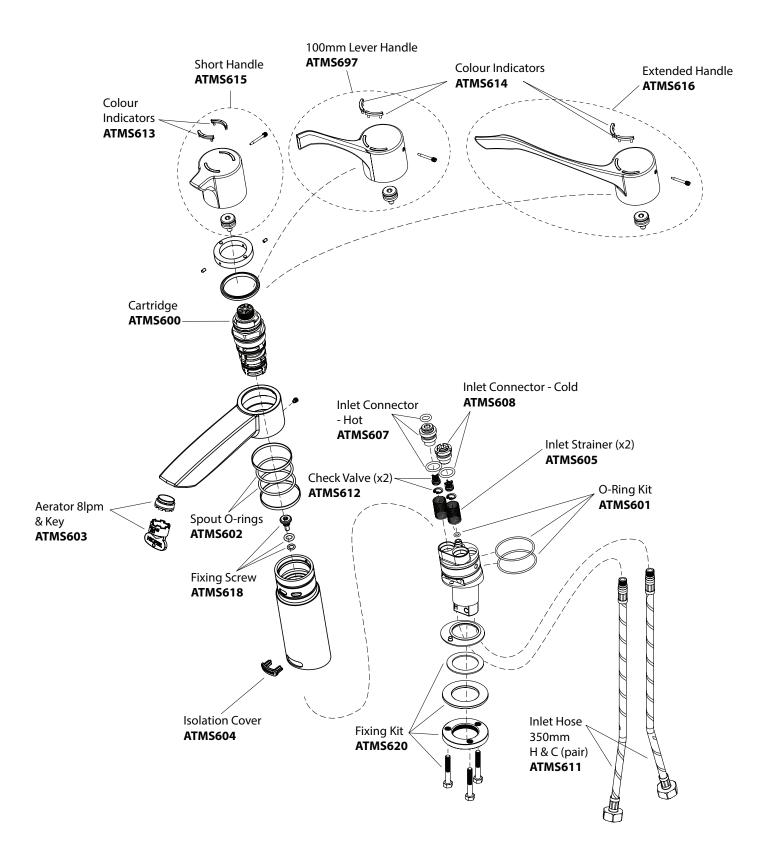
# Plumbing Code of Australia: Part B2 Heated Water Services AS/NZS 3500.4-2003 Heated Water Services;

- Section 1.9 Water Temperature
  - 1.9.1 Storage Temperature
  - 1.9.2 Sanitary fixtures delivery temperature
  - 1.9.3 Acceptable solutions for control of delivery temperatures
- Section 10 Heated Water Services for People with Disabilities
- Section 11 Testing and Commissioning

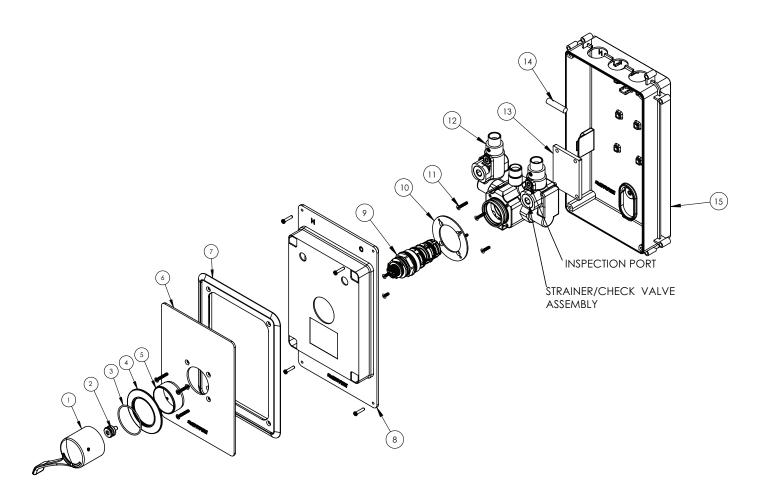
# components & spare parts

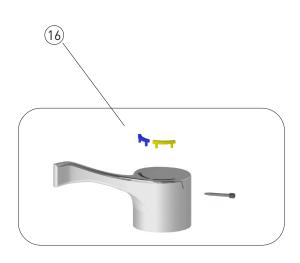


### ATM607 models



# components & spare parts

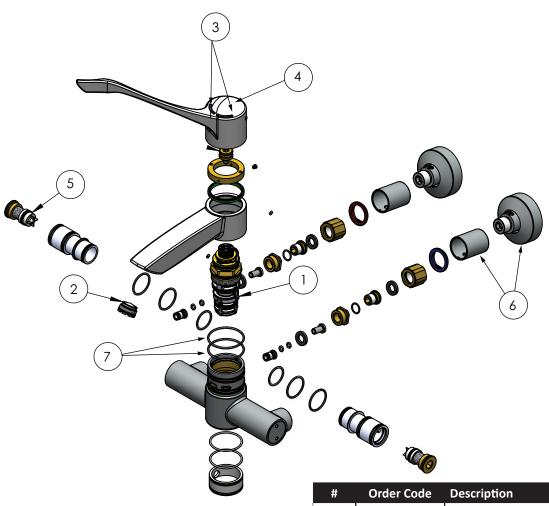




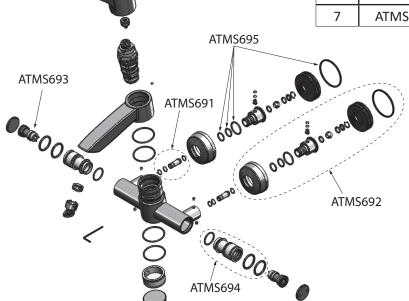
#	Order Code	Description
1	ATMS697	SQX Handle Complete Assembly - 100mm Lever Handle
2		Spline Connector SQX
	ATMS693	Strainer / Check Valve Assembly (1 Pair)
3		O-ring
4		Flange
5		Dress Sleeve
6		Face Plate
7		Bracket
8		In-Wall Box Front Cover
9	ATMS600	Aquablend SQX Cartridge Replacement (5 Year Service)
10		Fixing Base Ring for Front Plate
11		Fixing Screws for Mixer Body
12		Mixer Body
13		Spacer
14		Spirit Level
15		In-Wall Box
16	ATMS613	Indicator Kit

# components & spare parts

### ATM610X / ATM611



#	Order Code	Description		
1	ATMS600	Aquablend SQX Cartridge Replacement		
2	ATMS603	Aerator and Key SQX 8lpm		
3	ATMS614	Indicator Kit - SQX Extended Handle		
4	ATMS616	SQX Handle Complete Assembly Extended Handle		
5	ATMS693	Strainer with Check Valve x2 SQX Surgeon Model		
6	ATMS696	Wall Union Connector (Each)		
7	ATMS602	Swivel Spout O-rings		



ATM611 (Obsolete model)

### installation instructions

### ATM606 ATM607

- 1. Prepare a tap hole on basin/sink. Tap hole can be between 33-35mm in diameter, maximum bench thickness is 20mm. IMAGE 1
- 2. Remove brass locking nut and washers from tap base. Fit base washer and plastic sealing washer on the tap body. Fit the tap assembly through basin hole, and from the underside of the basin/sink, fit fibre washer, metal washer, then brass locking nut. Hand tighten the brass locking nut. IMAGE 2
  - Check that the mixer is facing straight forward, then use a spanner to tighten 3 bolts evenly on the brass nut. Do not overtighten. IMAGE 3

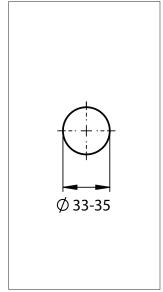
Note: Over-tightening brass locking nut may cause ceramic basins to crack.

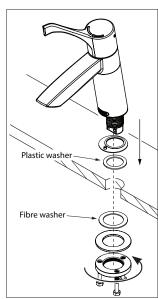
- 4. Thread each flexi-hose into the base of tap body. Ensure the COLD (Blue) hose is connected to the side marked 'C' or side with a 'Blue' label and the HOT (Red) hose into the side marked 'H' or 'Red' label, IMAGE 4 Hand tighten until flexi-hose comes to a firm stop and do not over tighten as hose may kink.
- 5. Connect the SPEX hoses to the water supply outlets making sure that the hot water supply is connected to the hot water hose.

NOTE: It is a requirement of AS/NZS 3500 that the SPEX hoses are connected directly to isolation valves installed at this position.

- 6. Using a small flat screw driver or Allen Key, ensure **both** Isolation Valves within the SQX mixer are turned off with their slot in the horizontal position. IMAGE 5
  - Turn the hot and cold water supplies on and check for leaks.
- 7. Loosely fit handle over SQX cartridge spline and ensure mixer is in full 'OPEN' position by rotating anti clockwise (see IMAGE 32 on page 15 for correct handle positions). **IMAGE 6** 
  - Open both hot & cold side isolation valves separately by rotating clockwise 90 degrees. IMAGE 7
- 8. While the mixer is running, rotate handle in a clockwise motion and test water temperature from the outlet to ensure the water temperature changes with the motion of the handle. IMAGE 8
- 9. Continue to turn handle in clockwise motion to a full CLOSED position and test for leaks while the mixer is closed and pressurised.
- 10. Commission mixer as per page 19 and complete the commissioning report pages 26-27.

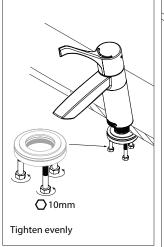
Note: Isolation Valves can be accessed via the front recess on Mixer body. When tested for leaks & calibrated, use SQX Isolation Cover to cover valves from tampering. See IMAGE **55** on page 20.

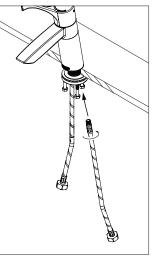




**IMAGE 1** 

**IMAGE 2** 





**IMAGE 3** 

**IMAGE 4** 





**IMAGE 5** 

**IMAGE 6** 





**IMAGE 7** 

- Determine desired location with relation to the handle height off finished floor. Recommended height from finished floor to cartridge centre for a standard installation is 1100mm.
- 2. Determine box position in relation to wall depth, considering the thickness of the finished wall. Plastic box may be cut down smaller if required **SEE IMAGE 9**.
- Mark out fixing point locations while ensuring the box is level. The spirit level inside the box can be seen through the top access hole. The mixer must be installed with the inlets and outlet pointing up, to ensure the front-of-wall components face the correct direction. SEE IMAGE 10
- 4. Secure the Shower Box to the internal cavity within the wall. The Shower Box can be fixed to a masonry wall or nogging within a wall frame, by using the fixing lugs on the side of the box and four suitable screws.
  - If installing within a frame wall, fit mounting timber in desired location for box support. 13mm plywood fixed between two vertical in-wall studs is recommended Important: The depth of box from finished wall to the back of the box must be between 77mm 92mm
- Remove and keep the 4 screws located on the outer edge of the in-wall box, remove and keep front box cover at hand.
- 6. Purge hot and cold supply lines ensuring all debris has been cleared. Then, connect water supply to inlet fittings using 1/2" BSP fittings.

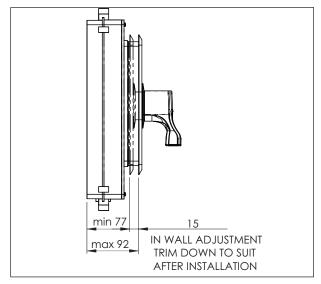
Note: Hot and Cold water connections should use unions or loose-nut connectors to facilitate future servicing or repairs.

Warning: Heat must not be applied to the inlets and outlet of the mixer while connected to the shower body, as this may result in damage to the internal components and void warranty. If hot works are required, disconnect the loose nuts from the body before commencing.

- 7. Connect mixer outlet to riser leading to shower outlet.
- 8. Turn ON hot and cold water supplies and check for leaks in the 1/2" threaded joints.

# Important: Maximum Static Pressure for testing and commissioning purposes is 1000 kPa

- Ensure Hot and Cold isolation valves are in the closed position. SEE IMAGE 10. Use a 3mm Allen key or flat head screw driver to rotate the isolation valve so that the slot within its head is horizontal (closed position).
- 10. Place the box front cover back over the mixer and fix it in place using the supplied screws previously removed.
- 11. The wall is ready to be sheeted. Make sure sheeting is finished hard up against the protruding section of box. Box cut-out size: 166 mm wide x 222 mm high



WALL DEPTH: Max. 92mm, Min. 77mm

**IMAGE 9** 

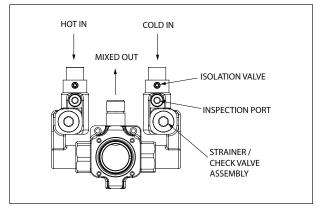


IMAGE 10

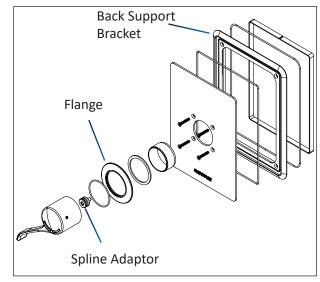
#### AFTER THE WALL IS FINISHED

- 1. Once the finished wall is complete, the protruding section of the box needs to be trimmed so it finishes flush with the front of the wall face. Discard the cover.
- 2. Fit the chrome back support bracket.
- Take the chrome cylindrical dress sleeve and push it onto the mixer body ensuring the O-rings on the mixer body are greased.
- 4. Fit the face plate over the chrome sleeve and secure using 4 x M4 screws supplied.
- 5. Take the chrome flange, lightly grease the O-ring and push over the chrome dress sleeve until it is hard up against the face plate.
- 6. Screw the brass spline connector into the top of the mixer cartridge
- 7. Fit the handle over the spline connector.
- 8. Insert the M5 fixing pin into the side of the handle and tighten making sure you are left with no movement in the handle. If the pin does not screw in all the way or the handle has movement, remove the handle and adjust the spline connector, then re-fit the M5 fixing pin.
- The valve can now be commissioned.
   Commission the valve as per the instructions on page 19, and complete commissioning report on page 26.

### Extra Components Supplied:

- 1x Large Plug for Body (in place of SQX Thermostatic Cartridge during servicing)
- 2x Small Plugs for inlets (in place check valve strainer assemblies during servicing)





**IMAGE 11** 

11

### installation instructions

### ATM610X / ATM611

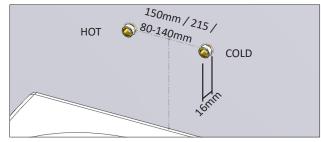
TOOLS REQUIRED: Thread sealing tape or equivalent, 3/8" Allen key, spanner, flat head screw driver, 3mm Allen key

### **SETTING OUT/ROUGH IN**

- Determine set out height from finished floor level. Recommended height for water points is 1120mm when coupled with basin at a height of 865mm.
- \* Recommended spout height (point of water discharge) for Type A and B Clinical Hand Washing Bay is 1120mm off finished floor level when combined with basin at a height of 865mm, according to Australasian Health Facility Guidelines.
- 2. Secure the hot and cold 15mm (1/2" BSP) male threaded inlet points with the centres 150mm apart (215mm for -215 model, 80 - 140mm for -ADJ models), and level, making sure enough thread is left to protrude a minimum of 16mm past finished wall. (HOT on the left, COLD on the right when facing the wall, as per standard set out) SEE IMAGE 12



- 1. When finished wall is complete make sure thread is at a length of 16mm. Cut if needed.
- 2. Flush the hot and cold supply lines. Purge hot and cold supply lines to make sure all debris has been cleared.
- 3. Apply thread tape or an equivalent approved thread sealing product to exposed 15mm water points. Seal any gaps between thread and wall with silicone.
- Place chrome dress flange over supply inlets making sure base o-ring is contained in its correct position within the dress flange. See IMAGE 13 and 14
- 5. Install isolation valve connector onto 1/2" BSP thread of water supply inlets, and tighten using a 3/8" Allen key until flange is held FIRMLY against wall. See IMAGE 15
- 6. Close the isolating ball valves using a 3mm Allen key or a flathead screw driver. The line of the slot on the control should be positioned cross-wise to the direction of water flow. See IMAGE 16 and 17
- 7. The hot and cold water supplies can now be turned on for testing. Check for leaks.
- 8. Before connecting the main tap frame, flush the lines again to ensure all debris has been cleared.
- 9. Place the chrome sleeves over each of the isolation connectors and push them back until they come to a stop and they are positioned within the wall flange. Note the orientation of the sleeve – the access hole should be closer to the user, so that when pushed all the way back, the hole can line up with the isolation valve. The sleeve is free to spin right around. See IMAGE 18 and 19
- 10. On the main mixer body, place rubber washers inside fixing nuts as shown (if not installed already) IMAGE 20.



**IMAGE 12** 



**IMAGE 13** 

**IMAGE 14** 











**IMAGE 18 IMAGE 17** 





**IMAGE 19** IMAGE 20

- 13. Take the main mixer body and screw the loose nut connectors to each isolation valve, making sure to tighten hot and cold sides simultaneously. Use a spanner to tighten, but hold against yourself by inserting a 3mm Allen key or flat head screw driver into the isolation valve control. See **IMAGE 21** and **22. Do not over-tighten.**
- 14.Place the lever handle on the cartridge spline and turn anti clockwise until it stops the valve is now in its open position. See **IMAGE 23**
- 15. Turn on water supply, by slowly turning the hot and cold isolation valves to on position (valve slot in line with the flow of water) using a 3mm Allen key or a flat head screw driver. Once water flow from the outlet is observed, turn off the tap by turning the lever handle in the clockwise direction until the flow of water stops. Check for leaks. See IMAGE 24 and 25
- 16. Pull the chrome sleeves over the isolation valves so that they come into contact with the colour temperature indicator rings. To do this, rotate the sleeve so that the key slot on the sleeve lines up with that on the colour indicator. When the key slot clicks into place there should be no gap between the sleeve and the indicator, and the access hole faces down. See **IMAGE 26** and **27**
- 17.The SQX Thermostatic mixer is now ready for commissioning. Follow the testing and commissioning procedure on page 19.



IMAGE 21





IMAGE 22

IMAGE 23





IMAGE 24

IMAGE 25





IMAGE 26

IMAGE 27

13

### handle assembly & positioning

The short Lever handle or extended lever handle will be found packed in a separate box with the overall product package, with all necessary assembly tools for each model.

- Take the Spline Connector out of the plastic bag found within the handle box and screw it onto the SQX cartridge spline until it comes to a firm stop.
- Loosely place the handle over the SQX cartridge spline and rotate handle in a clockwise motion to fully close the mixer and determine the 'OFF' position.
   See next page for correct handle positions
- Carefully lift the handle off the spline in its 'OFF' position and align the short handle lever to the front centre location, or for the extended lever, align handle so that the 2 temperature colour indicators are facing symmetrical to the centre of the spout. IMAGES 28 and 29
- 4. Take the Handle Locking Pin (found within the clear plastic bag within the handle box), and insert into the back of the handle to secure it to the mixer. Use Allen key to tighten Handle locking pin. **IMAGES 30 & 31**

If handle is loose or rocks after this process, remove handle and repeat steps 1-4 above again after you have wound the up Spline connector enough so it provides a tight fit with the Handle Locking pin.

14

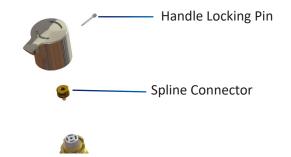






IMAGE 28

IMAGE 29





IMAGE 30 IMAGE 31

### **HANDLE POSITIONS**

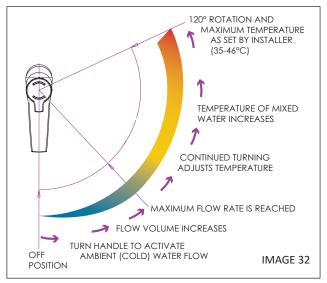
**CLOSED (OFF) LIMIT** Limiting ring to be installed on cartridge during assembly, after closing the spindle to 2.0Nm. **Not intended to be removed or adjusted once factory set.** 

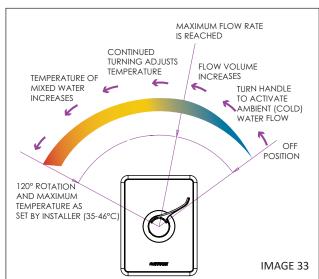
**UPPER TEMPERATURE LIMIT** Limiting ring to be installed on cartridge during assembly to limit allowable upper temperature to 45°C - as per AS 3500.4.

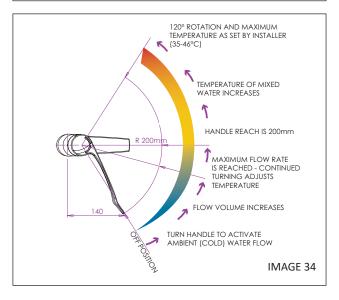
**RANGE OF MOVEMENT** The spindle rotates from CLOSED to the Factory Set temperature (39° - 41°C) through an angle of approx 120 - 160 degrees.

**INSTALLATION TORQUE** Cartridge must be assembled into tapware using suitable tooling that applies a torque not exceeding 10Nm to the hexagonal flats on the brass cap ONLY.

Anti-clockwise rotation of spindle from closed position - adjustment sequence. (ATM606, ATM6082L, ATM606D)







### temperature adjustment

The ENWARE AQUABLEND SQX Thermostatic Mixers are supplied factory set at a maximum of 41°C +/- 2°C. To alter this temperature adopt the following procedure:

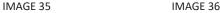
Note: Changing the maximum set temperature will change the amount of rotation of the handle. Increasing the temperature will mean extra rotation, while decreasing the temperature will result in less rotation.

- 1 Ensure the mixer is in the 'OFF' position (refer to **IMAGE 32-34** on page 15). Using a 3mm Allen Key, remove the Handle locking pin and lift the handle vertically off the mixer Cartridge (refer to **IMAGES 35 and 36**).
- With the top of the mixer and cartridge now exposed, remove the upper temperature ring away from the cartridge spline IMAGE 37 - take care not to remove the lower temperature ring. Loosely re-fit the handle in this 'OFF' position IMAGE 38
- 3 Turn the tap on and check the temperature of the water with a hand held digital thermometer. With the thermometer gauge held within the flow stream, continue to move the handle until the desired (Maximum) temperature is achieved.
- 4 Once desired temperature is achieved, remove handle without changing spindle position. Re-fit the upper Temperature cam so the lug can form a stop against the brass shoulder on the cartridge **IMAGE 39**.
- 5 Loosely re-fit handle and turn to 'OFF' position. Re-fit handle in its correct 'off' position orientation as seen in **IMAGE 20** on page 12.
- 6 Secure Handle again using the handle locking pin and 3mm Allen Key **IMAGE 40**

16











37 IMAGE 38





IMAGE 40

### swivel spout assembly notes

### LOCKING THE SPOUT IN A FIXED POSITION

The ATM607, ATM610X and ATM611 models come assembled with the Spout in a Swivel orientation where it can be rotated 120 degrees over the basin.

To fix the spout in the straight position:

- Rotate the spout so it is positioned straight out over the basin. IMAGE 41 and 42
- 2. Tighten the M5 grub screw located on the back of the Swivel spout so it can engage within the locator groove on body. Wind in the grub screw until it comes to a light stop and the head of the grub screw is close to being flush with the surface of the swivel spout. **IMAGE 43**

Note: the spout might be required to be rotated a little while winding in the grub screw to find the correct central location groove.

CAREFUL: Do not over tighten grub screw as it can cause the spout to leak.

- 3. Use the 1.5mm Allen key to loosen the 2x M3 grub screws located on the spout locking nut. **IMAGE 44**
- 4. Using the SQX prong tool tighten the Spout locking nut to further secure the swivel spout. **IMAGE 45**
- Use the 1.5mm Allen key to again tighten both M3 grub screws and test the spout is centrally located and secure. IMAGE 46
- Test operation and check for leaks. If leaks occur around the spout, loosen off M5 grub screw slightly.







IMAGE 42





IMAGE 43

IMAGE 43





IMAGE 45

IMAGE 46

#### **CHANGING THE SEALING O-RINGS & SWIVEL BUSHES**

The Swivel spout O-rings and swivel bushes can be checked/replaced without isolating the hot and cold water supplies. Ensure the mixer is turned off (see IMAGE 34 on page 15).

- With the handle fully rotated to the clockwise direction, remove handle by unscrewing the locking pin and carefully lifting without rotating the mixer's spindle spline. Once the handle is removed, leave to one side and keep at hand.
- 2. Use the 1.5mm Allen key and loosen the 2 x M3 grub screws located on the Spout Locking nut. **IMAGE 47**
- 3. Unwind the Spout locking nut and remove from Cartridge. **IMAGE 48**
- Remove the M5 grub screw located on the back of the Swivel spout and lift spout up and off mixer body. IMAGE 49
- Inspect O-rings and bushes for debris/damage. To remove, carefully slide bush up off the mixer body.
   IMAGE 50
- 6. Remove both O-rings from the mixer body and slide off the lower bush. **IMAGE 51**
- Re-install a new Swivel Bush first and carefully slide it over the mixer body until it comes to rest at the base of the swivel spout mounting area. IMAGE 52 and 53
- 8. Re-install 2 x new O-rings and the upper bush. Ensure the upper bush comes to rest on the top O-ring and sit below the swivel spout rotation groove. **IMAGE 54**
- Grease O-rings and swivel bushes. Reinstall swivel spout by carefully pushing it firmly over the mixer body.
- 10. Thread on the Swivel spout locking nut until it comes to rest against the spout and secure in position by tightening the 2 x M3 grub screws.
- 11. Assemble the handle and test operation for leaks.







IMAGE 48





**IMAGE 49** 

IMAGE 50





IMAGE 51

IMAGE 52





**IMAGE 53** 

IMAGE 54

### maintenance

The ENWARE AQUABLEND SQX Thermostatic Mixing Valve will only require minimal preventative maintenance work to ensure it operates at its optimum level of performance. The valve should be commissioned and serviced annually, unless the installed conditions dictate more frequent servicing is necessary.

### **ANNUAL MAINTENANCE PROCEDURE**

Every 12 months the ENWARE AQUABLEND SQX thermostatic Mixer should be inspected and tested. The valve should be given a light wipe down of the external surface. The valve and surrounding area should be inspected for leaks or water damage and appropriate action taken if required.

Ensure a clean dry work area is available. Firstly isolate the hot and cold supplies to the AQUABLEND SQX THERMOSTATIC mixing valve by closing the inlet ball valves found at the base of the mixer. During the annual service the SQX Check valve/mesh strainer assemblies need to be removed and cleaned, as directed in Servicing the Mixer Steps 1-3 below.

A thermal shut down test is performed and the temperature is reset as required. If the valve fails to shut down or fails to maintain its set temperature then refer to Troubleshooting section on page 24.

#### **FIVE YEAR MAINTENANCE PROCEDURE**

Every five years the ENWARE AQUABLEND SQX thermostatic Mixer needs to have a full service carried out. This service consists of the same procedure as the 'Annual maintenance procedure', and in addition the AQUABLEND SQX THERMOSTATIC mixer Cartridge must be replaced, as directed in the section below - **Servicing the Mixer**.

After replacing the thermostatic mixer Cartridge, a thermal shut down test is performed and the temperature re set as required. If the valve fails to shut down or fails to maintain its set temperature then refer to Troubleshooting section on page 24.

Once the 5 yearly maintenance procedure is complete, the ENWARE AQUABLEND SQX thermostatic Mixer should then be commissioned as per instructions below.

# commissioning & in-service tests

Since the installed supply conditions are likely to be different from those applied in the laboratory tests, a simple test should be carry out on each mixer at commissioning to provide a performance reference point for future in-service tests. Check the following in all cases to ensure the correct performance of the thermostatic mixer:

- the designation of the thermostatic tap matches the intended application.
- the supply pressures and temperatures are within the range of operating pressures and temperatures for the designation of the valve.
- the supply temperatures are within the range permitted for the tap and by guidance information on the prevention of Legionella etc.

It is important to record the testing done during the commissioning and also to record the temperature of the hot and cold water supplies and the temperature of the mixed water at the maximum setting.

Upon completion of the installation, the valve should be tested and commissioned as per the procedure outlined below or as specified by the local authority. The entire procedure should be read through thoroughly prior to the commissioning of the valve. A calibrated digital thermometer having rapid response time with maximum temperature hold will be required to check and set the outlet mixed temperature of the mixer.

To test the temperature, open the valve and allow mixed heated water to flow for at least 60 seconds to stabilise temperature before taking a reading at outlet with a digital thermometer. The flow rate should be at least 2L/min.

The temperature should be taken close to the mixer's outlet and if the outlet temperature requires adjustment then follow the Temperature Adjustment steps outlined on page 16.

#### **SHUT DOWN TEST**

Once the correct outlet temperature has been achieved, the valve's internal mechanism should be exercised at least 3 times by alternately shutting off the hot and cold supplies while the mixer is set in the full warm position, do this at the outlet using the mixer's separate Hot and Cold isolation Valves. This will cause the piston inside the cartridge to travel its full stroke and ensure that it is moving freely so the valve can operate correctly.

#### TEST 1

- 1. Open mixer to the full warm position and with both supplies turned fully on and the system's temperatures, allow the mixed water temperature to stabilise and note the outlet temperature.
- 2. While holding a digital thermometer in the outlet water flow, quickly isolate the cold water supply to the valve. The outlet flow should quickly cease flowing. As a rule of thumb the flow should be less than 0.1L/min following the isolation.

The temperature should not exceed that allowed by the applicable standard or code of practice for each state.

3. Restore the cold water supply to the valve. After the mixed water temperature has stabilised note the outlet temperature ensuring the outlet temperature has re-established.

### TEST 2

20

- Repeat the above test, except this time quickly isolate the hot water supply to the valve. The outlet flow should quickly slow to a trickle. As a rule of thumb the trickle should typically be less than 0.4L/ min@500kPa down to less than 0.1L/min@100kPa following the isolation.
- 2. Restore the hot water supply to the valve and measure and record the outlet temperature after the mixed water temperature has stabilised ensuring the outlet temperature has re-established.

Ensure that all details of the Commissioning Report (Page 26) are completed and signed by the relevant signatories, and a copy is kept with the installer and owner of the premises.

The valve is now commissioned and it can be used within the technical limits of operation.

#### **IN-SERVICE TESTING**

Enware Australia recommends that Thermostatic Mixing Valves have monthly temperature checks and adjustments as needed during the life of the valves.

The purpose of the in-service tests is to regularly monitor and record the performance of the thermostatic taps. Deterioration in performance can indicate the need for service work on the valve and/or the water supplies.

#### **TESTING PROCEDURE:**

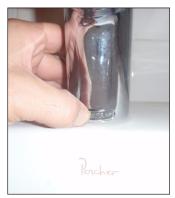
Using the same measuring equipment or equipment to the same specification as used in the commissioning of the valve, carry out the following sequence:

- 1. Record the temperature of the mixed water outlet.
- 2. Conduct Shut Down Test 1 Isolate the cold water supply to the tap to witness the flow slow to a slight drip.
- 3. Conduct Shut Down Test 2 Isolate the hot water supply to the tap to witness the flow slow to slight drip.

If the mixed water temperature has changed +/- 2°C from the previous test results, then this could indicate the need for the tap to be serviced.

### ATM606/607 ISOLATION COVER FITTING

Once commissioning of mixer is complete, insert the Chromed plastic isolation cover by firmly pressing it within the Isolation Access Cavity within the Basin Body to ensure isolation valves are not tampered with after commissioning - IMAGE 55



**IMAGE 55** 

### servicing the mixer

Prior to servicing the mixer, turn off both hot and cold water supply via Isolation valve found at the base of the mixer.

### REMOVING SQX THERMOSTATIC CARTRIDGE

**ALL MODELS** 

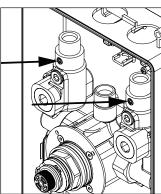
Only remove cartridge to replace, or to access strainer/check valve components for ATM606 and ATM607 models. **Do not disassemble cartridge.** 

- 1. Ensure both the Hot and Cold water supplies have been isolated by turning both Isolation valves 90 degrees into the 'OFF' position. SEE **IMAGES 56 57**.
- 2. Open the mixer to ensure water supplies have been isolated correctly and no water flows from the outlet prior to servicing mixer.
- 3. Remove handle by unscrewing the Allen key locking pin on the side of the handle. Once the locking pin is removed, carefully lift the handle straight up out of position off the cartridge spline.
- Using the supplied cartridge socket on the brass headwork, turn the cartridge counter-clockwise until it reaches the end of its threads and then pull it out of the mixer body. IMAGE 58 & 59

IMPORTANT: DO NOT TAKE CARTRIDGE APART



ATM606/607 ISOLATION VALVE IMAGE 56



ATM6082L ISOLATION VALVE IMAGE 57



IMAGE 58



IMAGE 59

### REMOVING MIXER BODY FROM BASIN HOB

ATM606/607 MODELS

- Using a small Allen key or screw driver, carefully prise out the plastic chromed isolation cover by levering the end of the Allen key within the small cut-outs found on each side of the cover. Be careful not to damage the chrome surface on the mixer body. IMAGE 55 page 20
- 2. Ensure both the Hot and Cold water supplies have been isolated by turning both Isolation valves 90 degrees into their 'OFF' position refer to **IMAGES 56**.
- Open the mixer to ensure water supplies have been isolated correctly and no water flows from the outlet prior to servicing mixer.

The SQX ATM606 strainers and check valves can be found within the Basin Mount. Access to the Strainers can be obtained after the SQX thermostatic cartridge is removed and the basin spout is lifted off the Basin hob.

### **IMPORTANT: DO NOT TAKE CARTRIDGE APART**

 Using a long M5 Allen key unwind the internal basin mount fixing screw found in lower cavity of the mixer.
 Once loose carefully lift basin spout off basin Hob.
 IMAGES 60 and 61



**IMAGE 60** 



IMAGE 61

21

# STRAINERS, CHECK VALVES AND HOB MOUNT O-RINGS ATM 606/607 MODELS

- Ensure both Hot and Cold water supplies have been isolated by turning both Isolation valves 90 degrees to 'OFF' position - refer to IMAGES 56 (page 21). Open mixer to ensure water supplies have been isolated correctly and no water flows from outlet prior to servicing mixer. Remove basin Body as per instructions on previous page.
- 2. Using an M6 Allen key, unscrew hot and cold inlet fittings to gain access to the internal cavities within basin mount **SEE IMAGE 62**.
- 3. Once removed, check sealing O-rings for damage or debris and replace if needed.
- Remove strainers from within cavity SEE IMAGE 63.
   Strainers should be cleaned with a diluted de-scaling solvent (such as CLR), checked for physical damage and thoroughly rinsed with clean water.
- The check valves are located within both the hot and cold inlet fittings SEE IMAGE 64 Using circlip pliers, remove circlips from both fittings
- 6. Using a small Allen key, gently push out check valves. The Check Valves should be cleaned with a dilute water solution of suitable de-scaling solvent (such as CLR), checked for physical damage and then thoroughly rinsed with clean water.
- 7. The Hob Mount O-rings are found around the base of the Hob mount. While the Mixer body is removed from Basin Mount, it is possible to check these O-rings for damage or debris. Additionally it is possible to check that the Hot inlet Fitting O-ring and Central mount O-ring for damage. SEE IMAGE 65
- Re-fit strainers and inlet fittings, ensuring the taller 'HOT' inlet fitting is screwed into the correct Hot supply cavity SEE IMAGE 62.
- Check each fittings location within hob mount corresponds to Hot and Cold markings on base of hob mount SEE PAGE 5 & 6 for details for ATM606/607 models.
- 10. Re-fit mixer body over Basin mount, ensuring O-rings do not pinch or get caught on isolation valve access cavity. Using M5 Allen key, thread in basin mount fixing screw, until the basin body is firm against the basin top ensuring both O-rings are correctly positioned and lightly greased.
- 11. When service is complete, slowly open the cold water isolation valve and inspect mixer body for leaks. Repeat with Hot water isolation valves. Open mixer by rotating handle anti clockwise and check operation and flow.
- 12. Commence commissioning as per instructions on page 19.

22



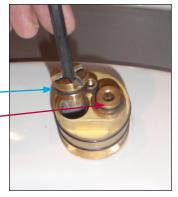


IMAGE 62



**IMAGE 63** 



IMAGE 64



**IMAGE 65** 

- ① Ensure all O-rings are slightly greased before re-fitting basin body.
- ② Ensure fittings are wound down flat against hob mount

#### **SWIVEL SPOUT SEALING O-RINGS**

ATM607 / 610X / 611 MODELS

- Swivel Spout O-rings seals can be checked/replaced without isolating the water supply. Ensure the mixer is turned off SEE IMAGE 34 on page 15 with the handle fully rotated in the clockwise direction.
- Remove handle by unscrewing the Allen key locking pin on the side of the handle. Once the locking pin is removed, carefully lift the handle straight up out of position off the cartridge spline.
   SEE IMAGE 28 on page 14.
- Loosen the head grub screw, located at the back of the swivel spout, use an M5 Allen key SEE IMAGE 66
- 4. The swivel spout can then be removed by pulling off vertically, however rotating the spout may assist in this process. **SEE IMAGE 67**
- 5. Once removed O-rings can be checked for wear, damage or debris and replaced if required.
- 6. Re-install Swivel Spout over mixer body ensuring O-rings have been re-greased. Wind in M5 grub screw until it is flush with back surface of Swivel Spout.

### CAUTION: Do not wind grub screw in too far

7. Turn mixer on to test for leaks and swivel operation of spout.

#### STRAINER & CHECK VALVE ASSEMBLY

ATM610X / ATM611 Models

- The Strainers and Check Valves within the body can be easily accessed via the removal of the Strainer covers at each end of the mixer's breech once both Hot and Cold water supplies have been isolated.
- 2. Ensure both the Hot and Cold water supplies have been isolated by turning both Isolation valves 90 degrees into their 'OFF' position. Open the mixer to ensure water supplies have been isolated correctly and no water flows from the outlet prior to servicing mixer.
- Using the SQX prong tool, unwind the Strainer covers and remove to one side, being careful not to scratch Chrome surface SEE IMAGE 68.
- 4. Use an M10 Allen key, unscrew the strainer/check valve assembly and remove from mixer SEE IMAGE 69.

  Once removed check sealing O-rings for damage or debris and replace if needed. The strainer/check valve assembly should be cleaned with a dilute water solution of suitable descaling solvent (such as CLR), checked for physical damage and then thoroughly rinsed with clean water.
- 5. Re-fit strainer/check valve assembly ensuring the O-rings have been lightly greased and then fit Strainer covers. Turn on water supplies and test for leaks. Commence commissioning as stated on page 19.



**IMAGE 66** 



IMAGE 67



IMAGE 68



**IMAGE 69** 

23

# thermal flush disinfection procedure

The Aquablend SQX Thermosatic Mixer includes a built-in Thermal Flush feature allowing the facility's maintenance team or licensed service contractors to perform a controlled thermal flush to the Thermostatic Mixer.

NOTE: The thermal flush procedure is optional and does not form part of commissioning and service requirements set out in AS4032.3

Before commencing the thermal flush, a site-specific procedure must be implemented to control the risk of scalding. Hot water will run directly from the Thermostatic Mixer, and precautions shall be taken to prevent the chance of injury.

- 1. Remove handle by unscrewing the Allen key locking pin on the side of the handle. Once the locking pin is removed, lift the handle straight up off the cartridge spline. SEE IMAGES 29 & 28.
- 2. Isolate the Cold water supply by turning the Isolation valve 90 degrees into the 'OFF' position. **SEE IMAGES 56, 24 & 57.**
- 3. Remove Top Temperature Limiter Ring from the cartridge spline. SEE IMAGE 37.
- 4. Using the handle, turn the spline all the way to hot. **SEE IMAGE 6**

Warning: Full temperature hot water will flow out of outlet. Care must be taken to prevent scalding. Maximum hot water temperature allowed for the valve is 70°C for hot water flush, due to limitation of the spout aerator.

- 5. Once the required time set in the facility's Thermal Flush procedure has passed, turn the handle / spline back to warm water temperature. SEE IMAGE 8
- 6. Turn ON Cold water supply at the Isolation valve.
- 7. Set the outlet temperature as required, and fit the Top Temperature Limiter Ring back on. SEE TEMPERATURE **ADJUSTMENT ON PAGE 16**
- 8. Re-install handle.



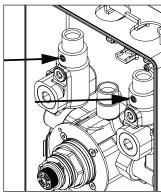
**IMAGE 29** 



**IMAGE 28** 



ATM606/607 ISOLATION VALVE IMAGE 56 ATM6082L ISOLATION VALVE IMAGE 57

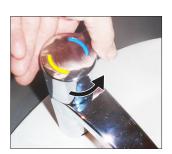




ATM610/611 ISOLATION VALVE IMAGE 24



**IMAGE 37** 



**IMAGE 6** 



24

# troubleshooting

25

Refer to the following troubleshooting /fault-finding chart for specific problems and solutions. Service instructions are supplied with spare part kits

	FAULT / SYMPTOM	CAUSE	RECTIFICATION
1	The desired mixed water temperature cannot be obtained or valve is difficult to set.	<ul> <li>Hot and cold supplies are fitted to wrong connections</li> <li>Thermostatic cartridge contains debris or damaged</li> <li>Strainers contain debris</li> <li>Non-return devices are damaged</li> </ul>	<ul> <li>Refit the valve with Hot/Cold supplies fitted to the correct connections</li> <li>Replace cartridge</li> <li>Clean strainers ensuring debris is removed</li> <li>Check non-return device is not jammed Clean or replace it if necessary</li> </ul>
2	The thermostatic mixing valve will not thermally shut down	<ul> <li>Hot to mix temperature differential is not 10°C or greater</li> <li>Thermostatic cartridge contains debris or damaged</li> <li>Non-return devices are damaged</li> </ul>	<ul> <li>Raise hot water temperature</li> <li>Replace cartridge</li> <li>Check non-return device is not jammed</li> <li>Clean or replace it if necessary</li> </ul>
3	Mix temperature unstable	<ul> <li>Flow rate below 2L/min.</li> <li>Thermostatic cartridge contains debris or damaged</li> <li>Strainers contain debris</li> <li>Non-return devices are damaged</li> </ul>	<ul> <li>Rectify any pressure deterioration</li> <li>Replace cartridge</li> <li>Clean strainers ensuring debris is removed</li> <li>Check non-return device is not jammed Clean or replace it if necessary</li> </ul>
4	Mix temperature changing over time	<ul> <li>Inlet conditions (pressures or temperatures) are fluctuating</li> <li>Strainers contain debris</li> </ul>	<ul> <li>Install suitable pressure control valves to ensure inlet conditions are within those stated on page 4</li> <li>Clean strainers ensuring debris is removed</li> </ul>
5	Water is leaking from mixer body	Mixer body O-rings are worn or damaged or contain debris.	<ul> <li>Replace strainer body O-rings (ATM611)</li> <li>Replace Swivel Spout sealing O-rings (ATM607/610X / 611)</li> <li>Replace basin hob sealing O-ring (ATM606/607)</li> </ul>
6	Either full hot or cold flowing from outlet fixture	<ul> <li>Upper temperature ring incorrectly set.</li> <li>Hot/Cold water has migrated to other inlet</li> <li>Damaged check valves</li> <li>Refer also to fault/symptom 1 &amp; 2</li> </ul>	<ul> <li>Re-set temperature as per instructions on page 16 to between 35 - 46°C as required</li> <li>Replace faulty check valves</li> </ul>
7	Water is not flowing from outlet	Hot or cold water failure.     Thermostatic cartridge contains debris or damaged     Strainers contain debris	Remove aerator and clean then reinstall     Restore inlet supplies and check mix temperature     Replace cartridge     Clean strainers
8	Flow rate reduced or fluctuating	<ul> <li>Thermostatic cartridge, strainers or inlet fittings fouled by debris</li> <li>Dynamic inlet pressures are not within recommended limits</li> </ul>	<ul> <li>Check Thermostatic cartridge, strainers and inlet fittings for blockages</li> <li>Ensure operating conditions are within specified limits and the dynamic inlet pressures are balanced to within +/- 10%</li> </ul>
9	Mixed water temperature too hot or cold	Upper temperature ring is incorrectly set or tampered with     Inlet temperatures are not within specified limits	<ul> <li>Re-set temperature as stated on page 16 to between 35 - 45°C as required</li> <li>Ensure inlet temperatures are within the specified limits of 55 - 85°C for Hot; and 5 - 25°C for Cold.</li> </ul>
10	Mixed water temperature doesn't change when the handle is rotated.	Thermostatic cartridge contains debris, has failed or is damaged.	Clean the Cartridge ensuring that all debris is removed and components are not damaged. Replace if necessary
11	Leaking from outlet	<ul> <li>Cartridge is damaged or O- rings split.</li> <li>Supply pressures too high</li> <li>Cartridge has come loose in mixer body.</li> <li>Thermostatic cartridge contains debris or damaged.</li> </ul>	Check pressure & install a pressure reduction valve     Ensure Thermostatic cartridge is tightened to 10nm in mixer body     Replace cartridge
12	Water comes on when handle is in closed position	Mixer has been installed incorrectly or not tightened to a firm stop.	Re-install or replace cartridge. Refer to service instructions on page 21

# **Aquablend SQX** Thermostatic Mixing Valve Commissioning and/or Maintenance Report

### PRINT ALL DETAILS OF MARK WITH AN $\otimes$ IN BOXES IN BOXES TO INDICATE CHOICE

- 1. In all cases the Licensee is to submit this report within seven working days after commissioning and/or servicing the valve.
- 2. Use a separate form for each valve.

26

- 3. The original report is to be given to the owner/occupier and retained on site for a minimum of 7 years.
- 4. All details are to be filled in. Incomplete reports will not be accepted.

Name of Establishme	ent						
Street Address							
Suburb			State			Post Code	
Phone #			Contact Nam	е			
Date			Work Order No.				
Make & Model of Ho	t Water Unit						
Make of Mixing Valve			Model No				
iviake of iviixing valvi	=		Size				
Valve ID No.			Total No. of Mixing Valves on Site/Building				
Valve Location / Buil	ding						
Area serviced by valve							
Outlet Type mark with	⊗ Bath		Basin			Shower	
Valve installed to rec	juirements of	 f:					
1. The local water s			manufacturer		3. The Australian Standards		andards
		/supplier r	requirements f		for Plumbing and Drainage		
☐ YES ☐ NO ☐ YES ☐ NO				☐ YES ☐ NO			
If NO, give details and action taken:							

Hat Water	Pressure	kPa	Cald Make a	Pressure	kPa	
Hot Water	ot Water  Temp  Cold Water		Temp	°C		
Cold Water Supply via			Pressure Reducing Valve Fitted	□ YES □	□ YES □ NO	
Details of work carried out (mark with ✓)  List of items replaced and part numbers		Serviced  Visually inspected & clean valve components  Replaced o-rings and lubricate  Set temperature  Service Kit No.	Chec non return Reas	missioned ked function of valve ssemble mantle mal shut down test		
during this visit  Temperature range of	of warm wate	er at outlet (pleas	Other Parts se ✓)	°C Set		
Neonatal and child	dren 38-40°C	Adult 40.5-4	3.5°C	Temperatu	re	
Date of this service /commissioning:			Date of next due servic	e		
Date of Previous ser	of Previous service		Carried out by			
Date Valve Installed	Valve Installed		Valve installed by			
It is hereby certified that all the commissioning work has been carried out by the undersigned in accordance with local plumbing requirements for Thermostatic Mixing Valves						
Contractor Business	Name					
Contractor Name (please print)			Contra	ctor Lic/Cert No		
Licensed Plumber (Si	gnature)					
Contractors Phone N	No			Date		
Owner/Occupier Sig	nature			Date		

A duplicate copy of this report is to be retained at the site for any inspection by authorised persons

### product warranty statement - watts Australia

### EFFECTIVE FROM 20 November 2023

This Warranty Statement applies to products supplied by Australian Valve Group Pty Ltd (ACN 068 227 270) (**AVG**) or Enware Pty Ltd (ACN 662 302 767) (**Enware**) (each of AVG and Enware, a Supplier) and installed within Australia.

Subject to the terms and conditions outlined in this Warranty Statement, each Supplier warrants to its customers that a product supplied by it (**Product**) will be free from all defects in material and workmanship under normal usage for the applicable Warranty Period (as set out in the Warranty Table below). The Warranty Period commences from the date of delivery of the relevant Product.

#### 1. Conditions

The warranty provided under this Warranty Statement will not apply in respect of a Product (or any Product defect, fault or resulting damage) if:

- (a) the Product is not installed and maintained in accordance with the requirements of the applicable laws, standards and codes (including, without limitation to, the National Construction Code Volume Three Plumbing Code of Australia, associated reference standards as applicable at the time and AS/NZS 3500);
- (b) the Product is not installed and maintained by a qualified technician in accordance with the relevant installation and operation manual and instructions; and
- (c) any Product defect, faulty or resulting damage arises from:
  - (i) failure by you or any other person to follow the relevant manual or instructions (relating to the handling, storage, installation, fitting, connection, adjustment, maintenance or repair of the Product) published or provided by the Supplier;
  - (ii) failure by you or any other person responsible for the fitting, installation, or other work on the Product to follow or conform to applicable laws, standards and codes (including, without limitation to, the AS/NZ 3500 set of Standards, all applicable State and Territory Plumbing Codes, the Plumbing Code of Australia and directions and requirements of local and other statutory authorities);
  - (iii) any parts or components not manufactured by the Supplier (or otherwise not authorised by the Supplier) are installed or combined with the Product, without the prior authorisation of the Supplier; or
  - (iv) any act or circumstance beyond our control including, without limitation to, accident, abnormal use, vandalism, fouling caused by foreign material, damage from adverse water conditions, chemical, acts of God, damage to buildings, other structures and infrastructure and loss or damage during transit or transportation of the Product, or any abuse, misuse, misapplication, improper installation or connection, or improper maintenance or alteration of the Product.

### 2. Make a claim

To make a claim under this Warranty Statement, you must notify the relevant Supplier in writing within 7 days of any alleged defect in the Product coming to your attention and provide the Supplier with proof of your purchase of the Product to the relevant Supplier:

- (a) If the Product is supplied by **AVG**, please contact AVG by telephone at 1800 284 287, or by email via its online portal https://www.wattsau.com.au/support.
- (b) If the Product is supplied by **Enware**, please complete the Product Service Request form (ENF091), which is available on request from our office (see contact details below), or online via https://www.enware.com.au/warranty-service-form/. All notifications and accompanying forms must be sent to Enware marked for the attention of Enware, 9 Endeavour Road, Caringbah NSW 2229. Enware can also be contacted by telephone (1300 369 273) or by email (info@enware.com.au).

On receipt of a notification from you of a claim under this Warranty Statement, the relevant Supplier may contact you requesting you provide reasonably additional evidence, information or details about your claim, or requiring that the relevant Product should be returned to the Supplier (in accordance with the Supplier's instructions) for inspection and testing.

Your failure to comply with any such request within a reasonable amount of time may result in your claim under this Warranty Statement being rejected.

#### 3. Our responsibilities

- (a) In the event that the Supplier is reasonably satisfied that there is a defect in the relevant Product within the applicable Warranty Period, the Supplier will, at its option, replace the Product, supply an equivalent product or repair the Product, free of charge. Your costs in making a warranty claim under this Warranty Statement, including any costs in relation to freight, collection, delivery and installation, are to be borne and paid by you. However, if in respect of a Product, it is indicated in the Warranty Table that labour support will be provided, and the Supplier is reasonably satisfied that a defect in the Product takes place during the period that labour support will be provided as indicated in the Warranty Table, the Supplier will bear the costs for delivery, repair and installation of the replacement Product (as applicable).
- (b) TO THE EXTENT PERMITTED BY LAW AND SUBJECT TO PARAGRAPH 4 BELOW AND THE OPERATION OF THE AUSTRALIAN CONSUMER LAW:
  - (i) THE WARRANTY SET OUT IN THIS WARRANTY STATEMENT IS GIVEN EXPRESSLY AND IS THE ONLY WARRANTY GIVEN BY THE SUPPLIER WITH RESPECT TO THE RELEVANT PRODUCT;
  - (ii) THE SUPPLIER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED;
  - (iii) THE SUPPLIER HEREBY SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE; AND
  - (iv) THE REMEDY DESCRIBED IN THIS WARRANTY STATEMENT SHALL CONSTITUTE THE SOLE AND EXCLUSIVE REMEDY FOR BREACH OF WARRANTY, AND THE SUPPLIER SHALL NOT BE RESPONSIBLE FOR ANY INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES, OR LOST PROFITS OR THE COST OF REPAIRING OR REPLACING OTHER PROPERTY WHICH IS DAMAGED IF THE PRODUCT DOES NOT WORK PROPERLY.

#### 4. Australian Consumer Law

This paragraph 4 applies if you are a 'Consumer' (as defined in section 3 of the Australian Consumer Law (ACL)) and the Product or services supplied to you falls within the goods or services which, for the purposes of the ACL, are of a kind ordinarily acquired for personal, domestic or household use or consumption.

The Products and services provided by the Supplier come with guarantees that cannot be excluded under the ACL, and noting in this Warranty Statement should be interpreted as attempting to exclude, restrict or modify such guarantees or your rights under the ACL. For major failures with any services, you are entitled:

- (c) to cancel your service contract with us; and
- (d) to a refund for the unused portion, or to compensation for its reduced value.

You are also entitled to choose a refund or replacement for major failures with Products. If a failure with the Product or a service does not amount to a major failure, you are entitled to have the failure rectified in a reasonable time. If this is not done you are entitled to a refund for the Products and to cancel the contract for the service and obtain a refund of any unused portion. You are also entitled to be compensated for any other reasonably foreseeable loss or damage from a failure in the Products or service'.

#### 5. Warranty table

\*the applicable period commences on the date of delivery of the Product.

PRODUCT GROUP	PRODUCT SERIES	WARRANTY	LABOUR SUPPORT
	CODES	PERIOD (YEARS)*	(YEARS)*
Aquablend Thermostatic Mixing Valves and Spare Parts	ATM	5	5

