ATMS242L Aquablend® 5-Year Upgrade Service Kit

Aquablend 5-Year Upgrade Service Kit For Aquablend Thermostatic Mixing Valve Models 1000*, 1500 and 2000*

For current models since 2008

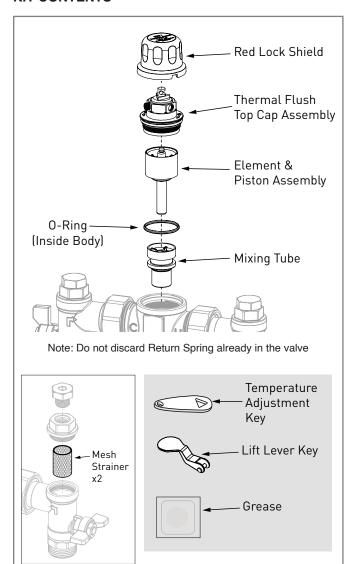
NOW WITH NEW FEATURES

Thermal Flush Activation Point with Lift Lever*
Locking Grub Screw for Temperature Adjustment Spindle
Red cap for easy Thermal Flush identification

*Thermal Flush is an added optional feature. The valve will function as normal with or without using the Thermal Flush.



KIT CONTENTS



Due to ongoing Research and Development, specifications may change without notice.. Refer to warranty statement for warranty details - www.enware.com.au/warranty

RECOMMENDED PRESSURES & TEMPERATURES

MIXED OUTLET TEMPERATURE					
Temperature Adjustment Range					35 - 48°C
Set during installation/commissioning Factory set at 40°C					(+/- 2 °C)
INLET TEMPERATURES					
Cold Supply				Minimum	5°C
				Maximum	30°C^
Hot Supply				Minimum	55°C
				Maximum	90°C
Hot to Mix Temperature Differential for Stable Operation				Minimum	10°C
Cold to Mix Temperature Differential for Stable Operation				Minimum	5°C
FLOW RATES					
Minimum	2 L/min (4 L/min recommended for optimum performance)				
Maximum	15mm	38 L/min (31L/min @200kPa pressure loss)			
	20mm	nm 45 L/min (39L/min @200kPa pressure loss)			
DYNAMIC INLET PRESSURES					
Hot & Cold Inlet Pressures				Minimum	20kPa
For optimum operation it is recommended that the hot and cold water supply pressures be balanced within +/- 10% for both static and dynamic pressures.				Maximum	500kPa
STATIC INLET PRESSURES					
Hot & Cold Inlet Pressures For testing purposes/ system commissioning				Maximum	1600kPa
INLET PRESSURE RATIO					
$H - PL = H^{1}$ $C - PL = C^{1}$ $H^{1} : C^{1} = Max \ 10:1$ $C^{1} : H^{1} = Max \ 10:1$			H = Hot inlet pressure (dynamic) C = Cold inlet pressure (dynamic) PL = Pressure Loss		

 $^{\wedge}$ Where cold inlet temperature may exceed recommended range due to seasonal variation, a 5°C temperature differential between the inlet cold supply and outlet mixed temperature setting must be maintained.

NOTE: Notwithstanding the above, compliance with the Plumbing Code of Australia (PCA) and AS/NZS 3500 must be maintained.



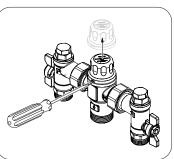
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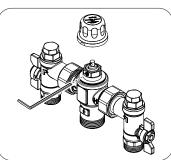
5 -YEAR SERVICE PROCEDURE

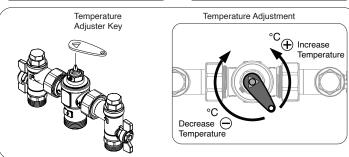
- Ensure a clean, dry work area is available. Inspect the valve and the surrounding area for leaks or water damage. Clean the external surfaces of the valve.
- 2. Turn both cold & hot inlet valves OFF
- Replace the strainers, and check non-return valve operation as per the annual maintenance procedure*.
- 4. Proceed to take out old components from the valve body:
 - a. Lock Shield (protective cover) use a small flat bladed screw
 driver to lever off the valve body
 - b. Top Cap Assembly
 - c. Element Piston Assembly
 - d. Mixing Tube
 - e. O-ring (Body O-ring)

Note: DO NOT DISCARD RETURN SPRING

- Check for any debris or grease build up inside the valve body, and ensure the internal surface of the body is clean and free from debris.
- Proceed to install the new components from the Service Kit, in the following order:
 - a. Body O-ring (lightly grease before installing)
 - b. Mixing Tube
 - c. Element Piston Assembly







*Annual maintenance procedure can be found in any of Aquablend Thermostatic Mixing Valve Installation Instructions, which is available online at www.enware.com.au/products/thermostatics

- d. Top Cap Assembly (lightly grease before installing)
- 7. Note the location of the temperature adjustment locking grub screw located on the hex of the Top Cap. SEE IMAGE ▼ If the grub screw is not in an easily accessible position, relocate it to the most accessible one of the 3 screw holes provided. Leave the grub screw loose. If the grub screw is tight, loosen the grub screw.
- Proceed to Temperature
 Adjustment and Shut-Down Test, as per the annual maintenance / commissioning procedure.
- Once the valve has passed the tests and the outlet temperature is set, tighten the temperature adjustment locking grub screw. SEE IMAGE ▼
- 10.Push the Red Lock Shield (protective cover) firmly onto the top of the valve until it 'snaps' into place
- 11. Ensure that all details of the Servicing Report are completed & signed, and a copy of this report should be kept with the service technician & owner of the premises.
- 12.The 5-Year Upgrade Service is now complete and the valve can be used within the technical limits of operation.

THERMAL FLUSH OPTION

This service kit has a new Thermal Flush feature, which is an added optional procedure that allows hot water to pass through the valve and perform a controlled thermal flush to the TMV and warm water plumbing system during critical decontamination/ maintenance procedures - a major step forward in Legionella control.

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 to the outlets fed by the Thermostatic Mixing Valve, and precautions shall be taken to prevent the chance of injury.

THERMAL FLUSH PROCEDURE

- 1. Isolate both hot and cold inlet valves to the TMV.
- 2. Remove the TMV's Red Lock Shield (protective cover).
- Check that the temperature adjustment locking grub screw (located on the hex of the top cap) is tight. SEE IMAGE ▶
- Hook the Lift Lever Key onto the thermal flush activation point located in the centre of the temperature adjustment screw on the valve's top cap.
 SEF IMAGE ▼
- Lift the lever up and over all the way until it comes to a stop. SEE IMAGE ◀
- 6. Turn the hot water TMV inlet valve to the ON position.
- 7. Turn the tapware outlet to the ON position.

WARNING: full temperature hot water will flow from the tapware. Care must be taken to prevent scalding.

- Once the required time set in the facility's Thermal Flush procedure has passed, turn the hot water TMV inlet valve to the OFF position.
- Leaving the tapware outlet in the ON position, turn the cold water TMV inlet valve to the ON position.
- 10. Slowly pull the Lift Lever Key back to the original position. (Note: Spurts of cold water will discharge from the tapware outlet during this process.)
- 11. Turn the hot water TMV inlet valve to the ON position.
- 12. Check the outlet flow, making sure it is within the required temperature range.
- 13. Turn the tapware outlet off.
- 14. Re-fit the Red Lock Shield to the TMV

NOTE: If the Red Lock Shield does not securely fit back to the top cap this indicates the thermal flush has not been disengaged. Repeat Steps 9-13

The Lockshield cannot be securely replaced while the Lift Lever Key is in place.

