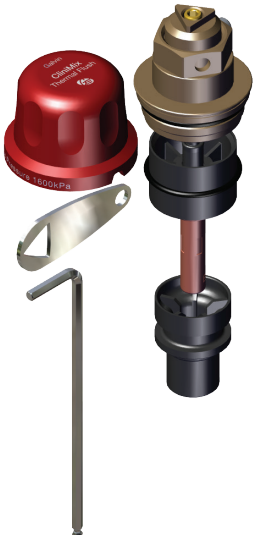
GalvinEngineering
the mark of reliability

Installation Instructions

CliniMix® Lead Safe™ TMV 5-Year Upgrade/Service Kit

Product Code: 201.79.10.09



**This kit is suitable for CliniMix® and existing TMV valves in the market marked with WMKA1593 (1000, 1500 and 2000 models), and can be used for your 5-Year Service or Thermal Flush Option. The kit is covered under AS 4032.1 WMKA1593, ensuring its compliance. As an integral component of the thermostatic mixing valve the kit it is not separately listed on the WaterMark product database but rather included under the valve's respective item code.*

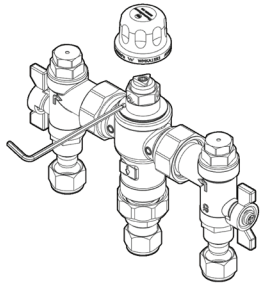
AUSTRALIAN MADE AND OWNED

POWERED BY RMC™

Galvin Clear® LEAD SAFE™

5-Year Service Procedure

1. Ensure the general working area is clean and dry. 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 to OFF.
3. Clean the strainers and check non-return valve operation as per the original valve maintenance procedures.
4. Proceed to take out old components from the valve body:
   - **a.** Red 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)
5. 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.
6. 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
   - **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. If the grub screw is not in an easily accessible position (see image below), 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.
8. Proceed to temperature Adjustment and Shut-Down Test, as per the original maintenance / commissioning procedure.
9. Once the valve has passed the tests and the outlet temperature is set, tighten the temperature adjustment locking grub screw. (see image below).
10. Push the Red 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 and signed, and a copy of this report should be kept with the service technician and 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 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, outlet pipework & fixtures during critical decontamination / maintenance procedures. This function is beneficial towards controlling Legionella.

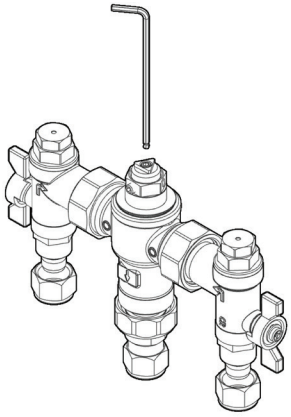
NOTE: The thermal flush procedure is optional and does not form part of commissioning and service requirements set out in AS4032.3

WARNING: SCALDING DANGER! 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 must be taken to prevent the chance of injury.

Thermal Flush Option Procedure

1. Isolate both hot and cold ball valves to the TMV valve.
2. Remove the TMV valve's Red Protective Cover.
3. Check that the temperature adjustment spindle locking grub screw on the side of the top cap is tight (see image below)
4. Using the 3mm Allen key provided with each valve, insert into the thermal disinfection sub-spindle on top of the valve and turn counter-clockwise until it stops/ As the thermal flush feature is unwound, the red indicator will become visible, indicating that when the hot water isolating valve is opened, the thermal flush is activated and hence full stored temperature hot water will flow to the outlet pipework and fixtures.
5. Open the hot water isolating valve on the inlet to the TMV valve.
6. Open the tap fixtures on the outlet pipework system.
   SAFETY NOTE: Full temperature hot water will be flowing at this point and extreme care must be exercised to prevent scalding.
7. Once the required flushing time has elapsed (refer to the facility's in-house protocol) turn the hot water isolating valve on the TMV valve inlet to the OFF Position.
8. Leave the tap fixtures on the outlet pipework system open, turn the cold water isolating valve on the TMV valve inlet valve to the ON position.
9. Using the 3mm Allen key, wind the Thermal Flush activation screw clockwise until the top of the red section sub-spindle is level with the top surface of the temperature adjusting spindle. It is normal to have some cold water ejected through the outlet fixtures as this procedure is conducted.
10. Turn the hot water isolating valve on the TMV valve inlet to the ON position.
11. Check the mixed water flow temperature at the closest outlet fixture to the TMV valve using a calibrated digital thermometer making sure it is within the required temperature range, and adjust the TMV valve setting as necessary
12. Isolate the outlet fixtures.
13. Refit the Red Protective Cover onto the TMV Valve.

NOTE: If the Red Protective Cover does not snap back on, this indicates that the thermal flush has not been disengaged. Repeat Steps 8-13.

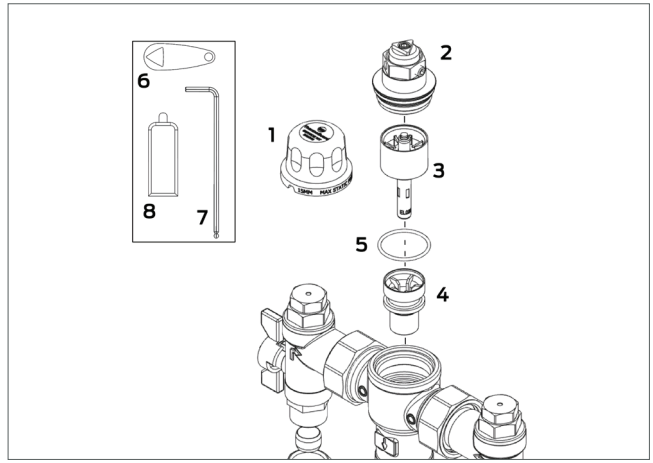


Warranty

Galvin Engineering products are covered under our Manufacturer's Warranty. Galvin Engineering products must be installed in accordance with the installation instructions and in accordance with AS 3500 and NCC Volume Three, relevant Australian Standards and local authorities applicable to product being installed. Water and electrical supply conditions must also comply to the applicable national and/or state standards, failing to comply with these provisions may void the product warranty and affect performance of the product.

Please visit www.galvinengineering.com.au to view the full warranty, our Installation Compliance and Maintenance & Cleaning information as well as any other additional information.

Kit Includes



1. Red Protective Cover
2. Top Cap Assembly
3. Element & Piston Assembly
4. Mixing Tube
5. O-Ring (Body O-Ring)
6. Temperature Adjustment Key
7. Allen Key
8. Grease

For water supply use only. Do not use on steam supplied systems

Recommended Pressures & Temperatures

MIXED OUTLET TEMPERATURE		
Temperature Adjustment Range		38°C - 50°C
INLET TEMPERATURES		
Cold Supply	Min-Max	5°C - 25°C
Hot Supply	Min-Max	55°C - 90°C
Hot to Mix Temp Differential	Minimum	10°C
Cold to Mix Temp Differential	Minimum	5°C
FLOW RATES - TO ENSURE STABLE CONDITIONS		
Minimum - 4 litres/minute minimum to ensure stable operation		
Maximum - 39 litres/min @ 300kPa Pressure loss		
DYNAMIC INLET PRESSURES		
Hot & Cold Inlet Pressures	Min-Max	20kPa - 550kPa
STATIC INLET PRESSURES		
Hot & Cold Inlet Pressures	Maximum	1600kPa
INLET PRESSURE RATIO		
Recommended Supply Pressure Variation (HOT:COLD, COLD:HOT) +/- 10%		
Supply Pressure Loss Ratio MAX 10:1		

Note: *For optimum operation it is recommended that the hot & cold water supply pressures are balanced to within +/- 10%. Compliance with AS3500 must be maintained.*

Galvin Engineering Pty Ltd.

Within Australia: 1300 514 074 | Outside Australia: +61 (0)8 9338 2344

sales@galvinengineering.com.au | www.galvinengineering.com.au

ABN: 78 008 719 382

Revision 1.1, 07 March 2024