

# **Expansion Vessel Sealed System Control Kit**

# **Installation and Maintenance**

# Instructions



The Expansion Vessel Sealed System Control Kit is designed to control the expansion of water in a sealed heating system.

The kit includes: Filling Loop with 2 x 15mm compression fittings 3 Bar Safety Relief Valve & Gauge 3/4" Manifold Red Safety Valve Cap





#### Installation

## 1.1

Select where the Sealed System Kit will be fitted, ideally it should be fitted at a neutral point in the system but practically fig 1 can be used as a guide.

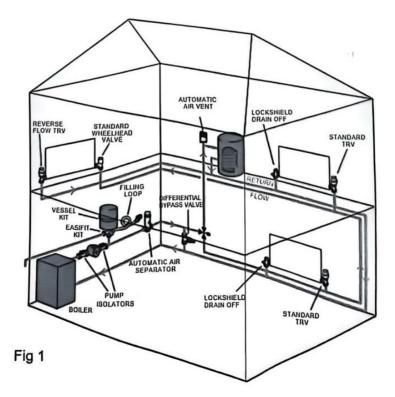
#### 1.2

Mount the vessel to the wall using the bracket supplied, then following the instructions supplied with the expansion vessel, adjust the pressure in the vessel to 0.2 bar or 0.3 bar above the static pressure.

### 1.3

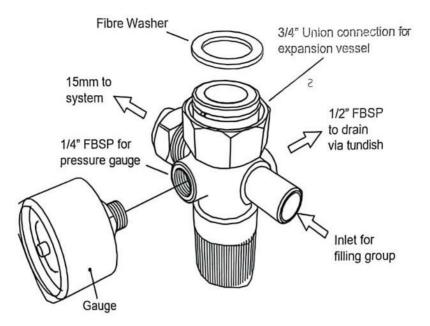
Connect the 3/4" union connection on the manifold to the expansion vessel.

NOTE: The system can be installed in any orientation as long as the seat of the pressure relief valve is drained and access can be gained to the charging part of the vessel. The recommended installation is as shown below.









#### 1.4

Connect the pressure relief drain ½" FBSP connection so it take's any discharged water to a safe outlet via a tundish.

### 1.5

Connect the single isolator on the filling loop to the spigot on the manifold.

### 1.6

Connect the 15mm compression outlet connection of the manifold to the heating system.

# 1.7

Connect the pressure gauge to the 1/4" FBSP connection on the manifold.





## 1.8

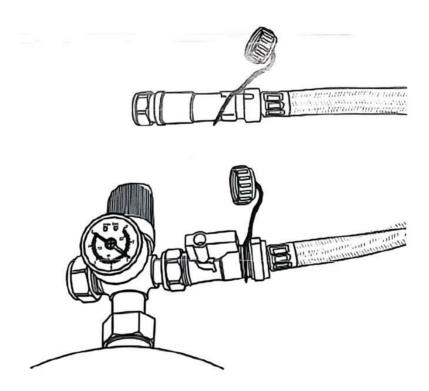
Fit the <sup>1</sup>/<sub>4</sub> turn ball valve ( incorporates double check valve) to the mains supply and using the flexible hose connect the mains to the single isolator.

# 1.9

Turn the water supply on and slowly open the quarter turn valve until the system starts to fill. Check for leaks and if there are none continue to fill the system up, until 0.2 bar below the charge pressure of the expansion vessel. Check that no air is trapped in the system and if not disconnect the flexible hose.

#### 2.0

The system can now be commissioned.



**Completed Installation** 



Cert No: RS 30178

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#### **Working Parameters and Specifications**

Maximum pressure:	3 bar
Maximum operating temperature, check valve and hose:	65°C

#### **Troubleshooting:**

- 1. If the pressure gauge reads higher than the desired setting, check for leaks at all connections and tighten as necessary.
- 2. If the pressure gauge reads lower than the desired setting, use the filling loop to add water to the system.

#### Maintenance:

- 1. Periodically check the pressure gauge and adjust as necessary.
- 2. Check all connections for leaks and tighten as necessary.
- 3. If the Expansion Vessel Sealed System Control Kit needs to be replaced, follow the installation instructions above.

#### **Conclusion:**

The Expansion Vessel Sealed System Control Kit is an essential component of any sealed heating system. By following the installation and operation instructions, you can ensure that your system remains safe and efficient. Regular maintenance and troubleshooting will help to extend the life of the kit and prevent potential problems.

