

TECHNICAL BULLETIN

PRODUCT: ALL GAS AND OIL BOILERS

FLUSHING PRIMARY SYSTEMS:

Worcester boilers provide high energy efficiency in heating and domestic hot water modes and ensuring clean circulating water is essential for component lifespan and appliance overall performance .

- ▶ Contaminants in the circulating water can be one of the problems if the boiler simply stops working or the radiators are hot at the top and cold at the bottom. This can reduce operating efficiency and damage the heat exchanger, circulating pump and any associated components.
- ▶ To avoid this, flushing carried out in compliance with BS 7593, preferably with a proprietary flushing agent, is **absolutely** essential.

EXISTING PRIMARY SYSTEMS:

- ▶ Ensure system and pipe work are in good working order and condition.
- ▶ Where possible treat with chemicals or if required use a powerflusing machine with existing boiler / circulating pump still in place to aid cleansing of the system prior to the new boiler is installed.

FLUSHING (Central Heating):

- ▶ Once installed, fill the boiler and system with cold water check for any signs of leaks and drain immediately to assist in removing any loose debris, such as solder, flux, copper filings, ect...
- ▶ Close drain off points and refill and vent, adding a suitable flushing agent, then leave for at least 1 hour.
- ▶ The flushing agent must be suitable for the boiler and system and at the correct strength for the system condition in accordance with the manufacturer’s instructions. In exceptional cases use a power flushing machine to aid cleansing.
- ▶ Run the boiler / system at normal operating temperature for at least 3 hours, or as specified by the manufacturer of the flushing agent.
- ▶ Switch off the boiler
- ▶ Drain the system, and then thoroughly flush the system to remove all the flushing agent and debris.
- ▶ Close drain off points and refill with fresh water and a suitable inhibitor, see below.
- ▶ Vent any air from the boiler and system.

WATER TYPES:

Test the water to find the type:

- ▶ Hard water (with a calcium content of 200ppm or higher) can cause scaling. Fit a scale prevention device where necessary.
- ▶ Soft water can affect aluminium heat exchangers. Use non softened water to fill and replenish the system water.
- ▶ Artificially softened water will damage aluminium heat exchangers.

INHIBITOR (Central Heating):

Add a suitable inhibitor, (or combined inhibitor / anti-freeze if the system is exposed to freezing conditions) to the heating system in accordance with the DWTa Code of Practice and the manufacturer’s guidelines.

The inhibitor or combined inhibitor / anti-freeze must be suitable for the boiler and any other materials / components within the system.

SEALING AGENTS:

The addition of sealing agents to the system water is not permitted as this can cause problems with deposits left in the heat exchanger.



Fig. 1: water contaminants

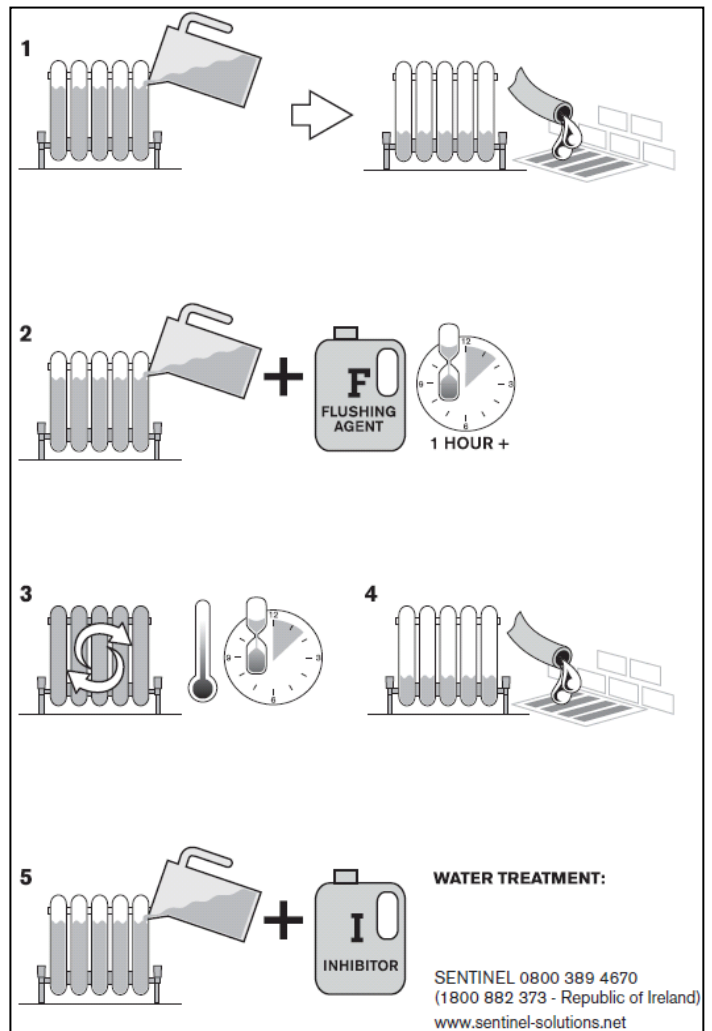


Fig. 2: Flushing the primary system

WATER TREATMENT:

SENTINEL 0800 389 4670
(1800 882 373 - Republic of Ireland)
www.sentinel-solutions.net