

# Boiler buddy

**Designed to complement Fernox's extensive range of chemical water treatment products, the Boiler Buddy is a premium quality in-line, high efficiency magnetic filter with patented flux plates developed for use in Formula 1 motor racing. Unlike other conventional or magnetic filters, Boiler Buddy not only traps magnetite to sub-micron levels, it does so without restricting the water flow, even when full.**

Boiler Buddy also offers a unique opportunity for condition monitoring of the system. Its transparent housing enables the build-up of debris to be observed; acting as an early warning sign of inherent problems which might result in pumps or valves seizing and ultimate system failure.



## Application

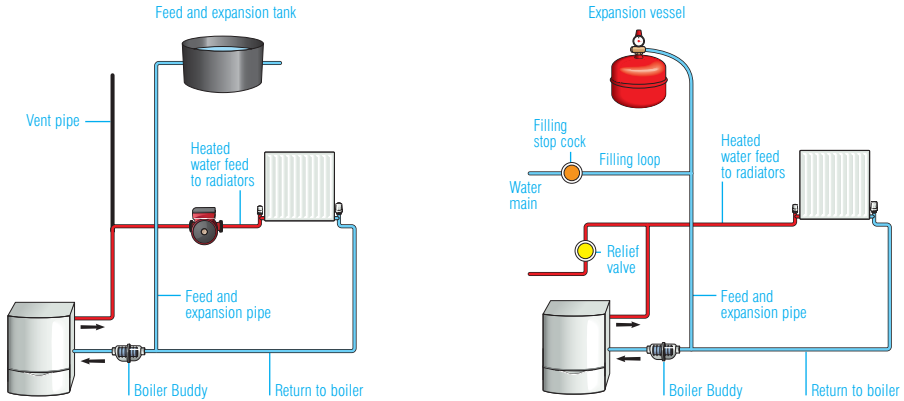
The Boiler Buddy can be connected directly to **22 mm** copper pipework using conventional pump connectors (it is also compatible with **15 mm** with the appropriate adapter). It is not recommended for 28 mm systems, as it will restrict the water flow) Boiler Buddy can be installed vertically or horizontally. The unit is designed to slot into the space provided after removing a circulator pump when fitting a condensing boiler into

an existing system (ideally it should be fitted on the return close to the boiler itself.) The off-set inlet and outlet ports enable Boiler Buddy to be fitted flush against a wall in existing pipework. System cleaning can be undertaken when a Boiler Buddy is installed by simply isolating and removing the unit at the connection points and powerflushing across the connections.

# How to install a Boiler Buddy

Boiler Buddy has a transparent body casing so that the build-up of contamination on the core can be observed in service. It has been designed to be fitted where it can be inspected and removed for cleaning and should be installed in the central heating return line as close to the boiler as possible.

There are a variety of installations but in general the open-vented system and the sealed system are typical.



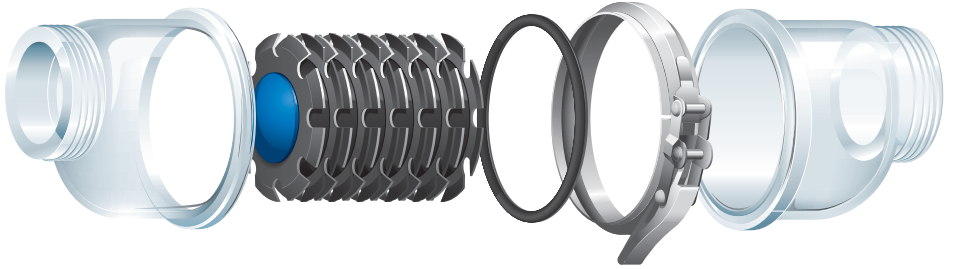
## Points to consider

- When selecting a position to install a Boiler Buddy beware of electrical connections in the vicinity, as these will be hazardous if they come into contact with water.
- Install the Boiler Buddy with both an upstream and downstream servicing valve.
- Boiler Buddy is designed for use with standard 1½" BSP x 22 mm pump servicing valves (on a 15 mm system we recommend fitting 22 to 15 mm reducing sets instead of three 22 mm olive in the pump servicing valves).
- Boiler Buddy has a face-to-face dimension of 130 mm.
- If standard pump servicing valves are used, a total space of 250 mm is required for installation.
- During installation ensure that all copper or plastic swarf is removed from joints and does not enter the water pipework. If soldered joints are being used to construct the pipework, ensure solder or flux is wiped away to avoid corroding plastic parts. Do **NOT** undertake any soldering while the Boiler Buddy is in the pipework. Boiler Buddy **MUST** be removed before soldering any joints.
- Once installed, secure the tamper-proof tag to avoid accidental opening. The tag must be replaced after cleaning the core.
- Complete the Boiler Buddy installation sticker and apply to the boiler.
- Run the system and check for leaks.

## After installation

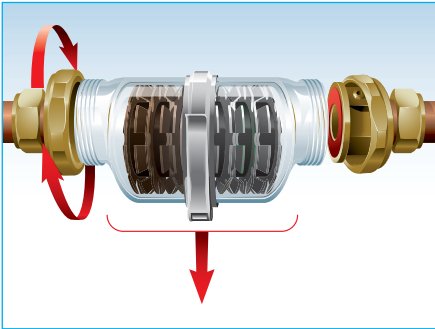
- The Boiler Buddy has no moving parts and needs no adjustment once in service.
- The body casing is transparent so that build-up of contamination can be observed.
- It is normal for the magnet nearest the inlet of the Boiler Buddy to become full first. Once this is full the next magnet will clog up followed by the next and so on. The Boiler Buddy has six magnets, we recommend cleaning the core when three magnets become full.
- It is recommended the Boiler Buddy is inspected and cleaned annually.
- Boiler Buddy is designed to last the life of the central heating system. More frequent cleaning of the core is an indication that the system has not been treated correctly with Fernox Protectors, Restorers and cleansers.

# How to **service** and **clean** a Boiler Buddy



**Before removing the Boiler Buddy, place a container underneath the pipework to retain any water that may drip.**

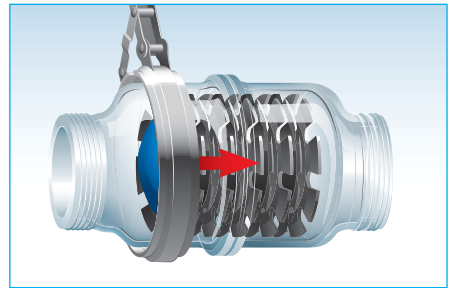
- 1 Isolate the Boiler Buddy from the system, by simply closing the quarter turn valves on the pump service connector
- 2 Once the Boiler Buddy has been isolated it can be removed. Undo the two 1 1/2" BSP union nuts. Once these have been fully unscrewed the Boiler Buddy can be pulled out between the two flat faces. The two fibre washers may stick to the flat surface and tear on removal of the Boiler Buddy, this is normal



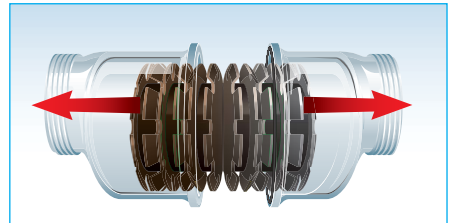
**WARNING: Under no circumstances attempt to remove the Boiler Buddy from the system by removing the body clamp.**

**Once the Boiler Buddy has been safely removed from the system it can be disassembled. Fernox recommends that waterproof gloves are worn when cleaning the Boiler Buddy.**

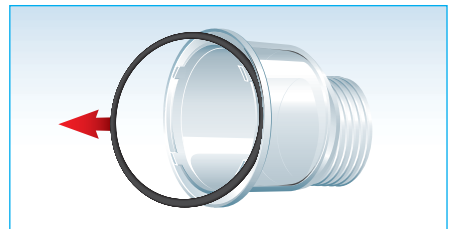
- 3 Cut off the tamper-proof tag
- 4 Open the latch on the body clamp and slide off the complete clamp over one end of the body



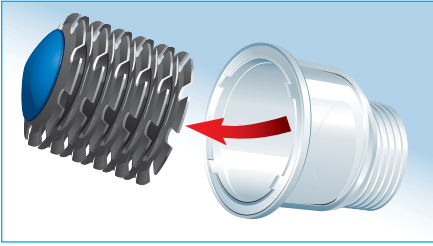
- 5 Pull the two halves apart



- 6 Remove the 'o' ring



7 Remove the complete core



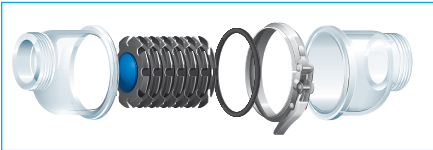
8 To clean the core either use a stiff brush or hold under running water perpendicular to the core (ensure that any magnetite is disposed of safely)



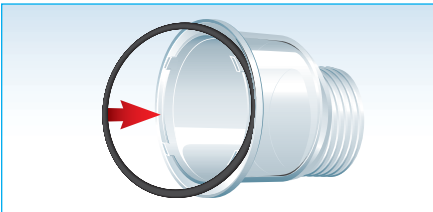
9 Wipe clean the inside surface of each half of the body casing

**Once the core has been cleaned the Boiler Buddy can be reassembled.**

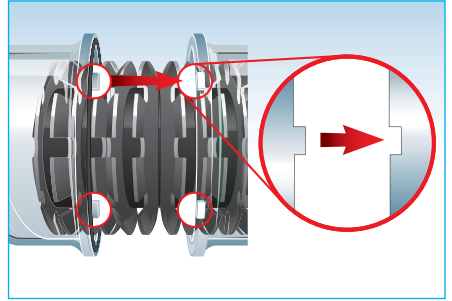
10 Place the clean core into the cleaned body casing



11 Place the new 'o' ring into position in the groove



12 Place the other body half over the 'o' ring; there are locator pins to help the correct alignment of the two parts



13 Once the body is assembled, place the body clamp over the flange and push the lever on the latch to the secured position

14 Pass the replacement tamper-proof tag through the slot in the latch ensuring that it also passes through the bridge on the latch. This will guard against accidental opening of the clamp

15 Using two new fibre washers place the Boiler Buddy back into the pipework between the two (pump) servicing valves

16 Tighten the union nuts until finger tight, after which use a spanner to tighten 1.8th of a turn or until secure. CAUTION: The body casing is a plastic part and will fail if excessive force is used

17 The servicing valves can be opened and flow of water will be observed through the Boiler Buddy

18 Run the heating system and check for leaks

## Spare parts

The Boiler Buddy is designed to last the life of the heating system. The following spare parts are available from Fernox:

- ✓ 'O' ring
- ✓ Spare clamp
- ✓ Tamper-proof tag
- ✓ Spare core



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