

BASIC INSTRUCTIONS

PRESSURISING YOUR SYSTEM AND EXPELLING EXCESS AIR

How to re-pressurise a sealed central heating system:

To keep your boiler working efficiently, it is essential that it is operated at the correct pressure and any air that has found its way into the system be removed or "bled" from the radiators. Common symptoms of excess air are:

1. cold / cool radiators at the top or bottom
2. Noise from the boiler, pump or system

You will first need to establish if you have a pressurised central heating system. All combination boilers are pressurised as are some conventional systems. A pressurised system will have a pressure gauge which is usually located on the boiler fascia (**Fig1**), however some models have the pressure gauge on the underside of the boiler and some of the latest generation boilers have a digital pressure indicator (**Fig2**) built in as part of the boiler control system. This gauge will be graduated in "bars" and should read between 0.8 and 1.8 bar (usually around 1.5 bar) when the system is cold. Gradual loss of pressure is normal.



(Fig1) Pressure Gauge

(Fig2) Digital Pressure Gauge



If your system is conventional and you have a feed and expansion tank (central heating header tank) your system will be topped up automatically and you will only need to bleed the radiators as detailed below.

(Fig3) External Filling Loop



If your system is pressurised, you should regularly check the pressure gauge and top up if necessary.

Pressure is increased by adding water from your cold water main. There will be a device called a filling loop somewhere on the system. The filling loop will usually be a flexible connection below the boiler (**see fig3**). In some cases this is an integral part of the boiler. The filling loop can also be located behind the washing machine, in an airing cupboard or under the kitchen sink. If in doubt, consult your boiler installation instructions or your installer.

Open the valve or valves (usually small black handles on the filling loop whilst watching the pressure gauge. Alternatively you may need to use a flat headed screwdriver to open the the filling loop if no black handles are present.

Water can usually be heard moving into the system – be very careful not to over pressurise.

When the gauge shows the correct pressure, turn off the valve or valves and bleed air from the radiators as described below. Constantly check the pressure level at the gauge and top up as necessary until all radiators have been bled of excess air.

To Bleed a Radiator:

You will need a **bleed key** (available from any hardware store) and an absorbent cloth/tissue.

If the central heating is on, turn it off and wait until it has cooled down enough. A central heating system is filled with hot and sometimes extremely dirty water so precautions should be taken to protect floor coverings and decorations.

Radiator Bleed Key



Start with the lowest radiator on the system and work towards the highest. **Holding a cloth to catch any water spillage, slowly loosen the bleed screw on the radiator (do NOT remove the bleed screw)** until air starts to hiss out. When all air has been removed from the system water will start to come out. Close the bleed screw immediately – do not over tighten.

Bleeding a Radiator



Finally, ensure that the pressure reading is correct and that the filling loop valve/valves are closed.

Regularly check the pressure level at the gauge and top up when necessary.

This routine maintenance is not covered under the terms of your warranty.