ARH
Plumbing Services Ltd

Removing air from a central heating system

Air trapped in your central heating system can seriously reduce its efficiency resulting in a reduction of heat output at some radiators.
The action of the impeller pump in your system 'creates' air bubbles when operating (pushing the water around the system). The air bubbles rise in the water and collect at high points in the system. The most common area of trapped air is in radiators. Air reduces the amount of heat radiated from the radiator.
To check if there is air trapped in your system, switch your heating system ON. Wait until it reaches its normal operating temperature then feel the top and bottom of each radiator. If the top is noticeably cooler than the bottom, the chances are that there is air trapped inside the radiator.
To solve the problem we need to bleed the air from the radiator. This is a relatively simple job and can be carried out by almost anyone - all that is required is a radiator bleed valve key and an old cloth or paper towels.

Radiator bleed valve key

Radiator showing bleed valve

NOTE:
When bleeding air from a sealed central heating system (one which uses a combination condensing boiler), make sure you know how to re-pressurise the system before starting – if in doubt, consult a heating engineer.

To bleed air from a radiator;

1. Fully open all radiator valves including thermostatic valves and run your central heating system for about ten minutes until warm, switch your heating OFF, then wait a few minutes.

2. Fit the bleed valve key into the bleed valve, this is usually found at the top of one end of the radiator.

3. Loosely wrap or hold a piece of old cloth around the valve to catch any expelled water.

4. Open the bleed valve by turning the key anti-clockwise until the hissing of air being expelled is heard.

5. When water starts being expelled through the valve, close it by turning the key clockwise. DO NOT OVER TIGHTEN.

6. Repeat the process for all the radiators around your house. Often pockets of air will only occur in one or two of the radiators.

7. Switch your central heating on and check for any leaks. If the heating system is a sealed system, check the pressure dial on the boiler and if necessary, top up the pressure as required. The correct pressure value will be found in your user instruction manual.