



Important steps to carry out during a boiler service include checking the CO₂ settings, as well as the condensate trap and flue position

Top tips to provide a good service

Worcester, Bosch Group offers heating engineers a step-by-step guide to keep handy when servicing a typical condensing boiler

Before carrying out a boiler service, it is always worthwhile taking a moment to speak to the homeowner to establish if there are any problems with the boiler which you may need to focus on during the service.

Some condensing boiler manufacturers also suggest that an air pressure test should be taken across the heat exchanger to determine whether the heatcell 'fireside' has contamination.

If this is needed, we would always recommend that the test is carried out before you complete the following steps.

CHECK THE CO₂ SETTINGS

The first step should be to check the CO₂ settings.



Always give the service log to the customer

The nature of the combustion that takes place inside a boiler means that the carbon monoxide/carbon dioxide ratio (CO/CO₂) needs to be monitored to ensure the appliance is working as efficiently and as safely as possible.

It is mandatory for all heating engineers to be able to correctly operate a flue gas analyser, as taught in the CPA1 course, and so checking CO₂ settings and the consequential flue gas levels should be a relatively simple procedure.

CHECK THE CONDENSATE TRAP

One of the by-products of a condensing boiler is the condensate fluid, which has to be discharged from the boiler itself.

Therefore, installers should also check to ensure that the condensate trap is accessible and clean. This part of the service is especially important during the winter months because, in recent years, periods

of sub-zero temperatures at these times have caused frozen condensate to build up in the condensate pipe and trap, eventually causing the boiler to shut down.

Ensuring that the condensate is being effectively disposed of is an important part of a regular servicing procedure.

CHECK AND CLEAN THE FLUE

The flue should be checked to ensure safe positioning, and that it will continue to provide a clean passage for the safe removal of waste gases.

Giving the flue a regular clean should make sure there are no problems with the disposal of CO and CO₂ gases, which can be harmful if not extracted correctly.

TEMPERATURE AND FLOW RATE

Installers should then remember to check that the hot water temperature is correct. All boilers will differ, however most manufacturers work on a 35°C or 40°C temperature rise to the mains water inlet temperature.

Consequently, the mains

water needs to be checked, along with the flow rate and the temperature rise.

In the absence of any specific manufacturers information on this, the following calculation can be used to ascertain the correct temperature rise: output of boiler (in kw/hour) x 14.3, ÷ DHW flowrate.

For example: 28kw x 14.3 ÷ 10 litres/min = 40.04°C.

FULL SERVICE HISTORY

Once each of these steps has been completed, the final process should be a general check of the boiler to make sure all elements are operating properly.

When the full service is finished, a log of the service should be left with the customer. This will not only maintain any manufacturer's warranty, but is also likely to act as an annual service reminder the following year.

Please note this is only a general guide as all manufacturers' instructions will differ slightly. We would always recommend that you follow the appropriate instructions for the boiler at all times.