Carbon Monoxide

As with any fossil fuel burning appliance, poor or inadequate servicing can cause the generation of carbon monoxide. Therefore, it is absolutely vital that your oil boiler is checked and serviced at least annually.

Carbon monoxide is a highly toxic poisonous gas. It is odourless, colourless and tasteless and therefore difficult to detect. Some symptoms of carbon monoxide poisoning are: • Tiredness • Nausea • Headaches • Vomiting • Dizziness

It is advisable to fit an audible carbon monoxide detector. You can purchase these online at OFTEC Direct **www.oftecdirect.com**

Peace of Mind

For safety, peace of mind, to minimise fuel costs and reduce the risk of unexpected breakdowns, OFTEC would recommend that oil users contract the services of local OFTEC Registered Technicians to service their oil installations at least annually. The OFTEC website enables you to locate your nearest Registered Technician. They are appropriately qualified and insured to work in your home and can also advise on energy efficiency.

You can find your local OFTEC Registered Technician at **www.oftec.org/Consumers/FindTechnician**

For further information on oil heating and cooking, please see **www.oftec.org**

About OFTEC

OFTEC plays a leading role in raising standards within the heating industries of the UK and Republic of Ireland.

Our trade association represents the interests of oil storage, appliance and supply equipment manufacturers and we develop course and assessment material for training providers. We also operate a UKAS accredited competent person registration scheme for over 8,000 technicians involved in the installation and maintenance of oil, solid fuel, and renewable heating equipment and Part P electrical work. Our online shop, OFTEC Direct, supplies a range of technical books, equipment and clothing products for heating technicians.

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Why an oil fired boiler should be serviced regularly

www.oftec.org

Why an oil fired boiler should be serviced regularly

Having an oil fired boiler serviced regularly can keep it operating at its most efficient. This reduces fuel bills and saves money on costly call out fees for unexpected breakdowns. It is recommended that oil fired appliances and equipment are serviced at least once a year or as recommended by the manufacturer.

There are many reasons why the efficiency of an oil fired boiler could be reduced. Here are a few:

- Excessive smoke and partially burnt fuel deposits can cause soot to form within the boiler heat exchanger, restricting the amount of heat that can be transferred into the heating system water. The cleaner the heat exchanger, the more efficient the boiler will be.
- Oil nozzles regulate how much oil passes through the burner. The nozzles are consumable items that wear over time affecting combustion and lowering boiler efficiency. If they are not replaced, they could cause “sooting up” of the heat exchanger due to too much fuel passing through the burner.
- Fuel pumps contaminated with debris and/or water leads to decreased boiler efficiency and can cause premature failure.
- Photocells can glaze over with deposits. Photocells are an important safety feature which detect whether the boiler has lit. If a photocell is dirty it may not be able to detect the burner flame correctly and could cause the boiler to shut down randomly. Boilers frequently switching on and off will be less efficient than those running for longer periods.
- Electrodes can wear and attract soot and deposits. Electrodes produce a spark to light the fuel, if they are worn or in poor condition the boiler may not light. Again, causing inconvenience, inefficiency and increasing fuel cost.

Don’t forget the oil tank and supply

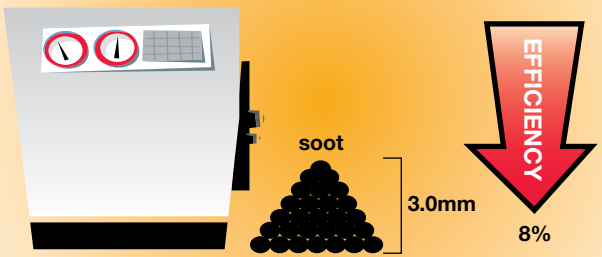
Failures such as boiler lockout, intermittent running and fuel pump seizure can be a direct result of poor maintenance of the oil supply system. The primary reasons for such failures are:

- Water in the oil tank from condensation and/or water ingress.
- Bacterial growth/sludge build up within the tank.
- Leaking joints, rusting components and system debris.

The condition of the oil storage tank, oil supply pipework and all oil supply components (filter, de-aerators, etc.) should always be visually inspected and observations reported during service intervention visits so action can be taken to replace or repair equipment as required.

The oil condition inside the tank should also be inspected (dip test/drain sample) to determine if any water contamination is present.

Soot build up within a heat exchanger can reduce boiler efficiency.



Long term damage can occur if your boiler is not serviced regularly

The Service

Appliances should be inspected, cleaned and components replaced as required when the boiler is being serviced. If your boiler is not serviced annually, it is at higher risk of breaking down and costing you more money.

Cleaning the boiler provides a chance to look for other tell tale signs that parts of the boiler may need replacing and an opportunity to inspect the combustion chamber for the condition of the material and welds. Old steel heat exchangers will often leave rust marks, which can give a warning that the boiler will soon need to be replaced. This approach can limit the possibility of water damage occurring and enables replacement work to be planned rather than having the inconvenience of trying to arrange a boiler replacement at short notice when a heat exchanger unexpectedly fails.

Long term damage can also occur if the boiler is not serviced regularly. During the combustion process, deposits will build up on the internal surfaces of the heat exchanger and the baffles which can decrease boiler efficiency. If left for a number of years, these deposits harden and with some designs of heat exchanger render it impossible to remove the baffles without destroying them. A replacement baffle will come at a significant cost on top of the routine service charge.