THE OILTANK PACK

AN ESSENTIAL GUIDE TO OIL HEATING
In rural areas, homes and businesses often do not have access to the gas mains on the National Grid. Where this is the case, rather than gas powering the central heating, the building will rely on heating oil for warmth, hot water and often powering your stove/AGA. Properties with an oil heating system will have an oil tank located outside where the oil is stored and where the oil burner is fed from.
Introduction

UNDERSTANDING YOUR OIL TANK

Moving from a property with gas central heating to a property with an oil heating system is quite a big change and there a lot of new things to you need to know. There are a lot of environmental issues and legal requirements surrounding oil storage, as well as knowledge you need about your specific tank. It is therefore important that you are familiar with your tank and its workings, as well what to do to meet regulations and how to manage your fuel.

What is covered in this pack?
The Oil Tank Pack is an essential guide to your oil heating tank; a ‘must-read’ if you have recently had a tank installed, have moved to a location that has an existing oil tank, or simply need to refresh your knowledge.

It includes:

• Why it is important that you have all the information about your oil tank
• What you need to know about your tank - ‘The Basics’
• Ensuring that your tank is legally compliant
• How to inspect your tank and its surroundings and what to look for
• Ensuring that your oil tank is secure against theft
• Picking your supplier, ordering your fuel and having it delivered
• What you need to do in the event of an oil spill
• Servicing and repairing your oil tank
• How to maximise your energy efficiency
• Useful contacts and resources
Learning everything you need to know about your oil heating system can’t happen in a day. However there are a number of things that you should familiarise yourself with as soon as you move to a property that uses heating oil, or as soon as your new tank is installed. This is what we refer to as ‘The Basics’.

**Type of heating oil used**

In almost all circumstances, new domestic heating oil systems will utilise kerosene. However, older oil heating burners and commercial properties sometimes use gas oil and therefore if you are moving into a property with an old system you need to find out which fuel is used. This may be clearly labelled on the tank, so it is useful to check the tank for any stickers or markings. If after inspecting your tank you cannot see what type of oil your tank contains, contact an OFTEC engineer who will be able to tell you.

**Model of the tank**

Familiarise yourself with the model number and manufacturer of the tank, which should be written somewhere on the tank either engraved or on a sticker or plate. Should you have any problems with the tank or need to book a service, you may be required to state the type of tank you have in order to proceed.

**Using the contents gauge**

It is important that you straight away work out how to use the tank’s contents gauge, so that you are aware of when your oil supplies are running low and you need to arrange a delivery.

If you have moved to a new property with an existing oil tank, it is always a good idea to check how much fuel is currently in there. If the previous occupant has left it empty you may need to organise a delivery immediately.

**Your tank gauge is likely to be one of three types:**

- **Simple mechanical float gauge**
  Provides an automatic reading at the tank

- **Digital gauge**
  The display can be located away from tank for easy reading without having to walk outside to the tank eg: the display is in the home’s kitchen

- **Sight gauge**
  For bottom outlet tanks, where this is a pull to read valve or a push button
THE BASICS’ OF YOUR OIL TANK

Decide on your fuel supplier
You need to select a company as your oil supplier. In the summer, this may not be as urgent as you may not switch your heating on for months, and therefore have a while until you need to decide. However, if you have moved in during the colder seasons then looking for a fuel supplier should be done immediately to prevent any delays in your first oil delivery.

Check your insurance policy
Most home insurance policies do not as standard cover your heating oil tank. When you take out your policy you need to make sure that it covers your heating oil tank against loss of oil through theft or oil spills. Additionally, you should ensure that you are covered for environmental clean-up of your property and neighbouring land should there be a leak.

It is important to note here that there is a common clause in insurance policies regarding heating oil. If the leak has been gradual over a long period of time, the policy holder may not be covered as they would have had chance to stop the spill before it got to this extent of damage. It is therefore important that you inspect your tank regularly to stop a leak at the earliest possible point.

Ask for proof of last service
If you are moving to a property with an existing oil heating tank, it is a good idea to ask the previous owner for documentation regarding its last service. If they can’t provide it, it is a good idea to book a service in with a qualified engineer to check there hasn’t been any required repair work or advisories that were never carried out.

Find your local OFTEC Engineer
In the event of an issue with your oil tank or heating system, you will need to contact a qualified engineer. It is always a good idea that you are aware of who your local OFTEC technicians are in advance of needing one in order to prevent any unnecessary delays if you do find a problem. To find yourself an engineer, visit the OFTEC website where you can locate engineers by the Postcode they operate within.
ENSURING THAT YOUR TANK MEETS THE REGULATIONS

There are a number of documents enforcing regulations and providing guidance regarding oil tanks in the UK: The Control of Pollution (Oil Storage) England Regulations (2001), The Pollution Prevention Guidelines (PPG 2) and The Building Regulations Approved Document J.

The Oil Storage Regulations (2001) are minimum standards that apply only to commercial and industrial oil tanks, or those in private dwellings that have a capacity of over 3500 litres, as these are the tanks that generally provide more risk of pollution. Those found to be breaching the regulations will be guilty of a criminal offence and the penalty could be an unlimited fine.

Whilst most domestic oil tanks are not subject to these regulations, if you do cause an oil spill or pollute groundwater systems then you will be liable for the clean-up process. It is therefore recommended by the Pollution Prevention Guidelines that even if your tank is for domestic heating purposes, you should follow the regulations to ensure that you limit the risk of causing this damage to neighbouring land. It is also good practice as some home insurance policies may not pay out if the pollution has been caused by the tank owner not taking the necessary steps to look after their oil tank and ancillary equipment.

The Oil Storage Regulations (2001) state that the tank in which the oil is stored should be of “sufficient strength and structural integrity to ensure that it is unlikely to burst or leak in its ordinary use”. It also states that a tank must be situated within a secondary containment/bund, which has at least the capacity of 110% of the inner tank. Any filter, gauge, valve or ancillary equipment on the tank must be situated within this secondary containment. Check whether your tank’s fill pipe is within the bund, as if not a drip tray must be used. The regulations also state that an oil tank must be fitted with automatic overfill prevention if the filling occurs in a place where it is not “reasonably practical” to observe the contents of the tank.

TOP TIP
If you are unsure on whether your oil tank is compliant with The Oil Storage or Building Regulations, it is important that you contact a qualified oil fired heating technician to arrange an inspection.
ENSURING THAT YOUR TANK MEETS THE REGULATIONS

The Building Regulations state that all new fuel storage tanks over 2500 litres must have a bund or purpose built secondary containment of a minimum of 110% of the tank’s capacity. Oil tanks less than 2500 litres can be single skinned provided that it meets an individual site pollution risk assessment. This risk assessment should conclude that if there is some risk of the oil reaching water then a bund is still required. For example, if the tank is within 10m of a stream, river or lake, within 50m of a well, borehole or spring or is situated in a place where there is risk of collision eg: tank is near a road.

The Building Regulations Approved Document J states that as a minimum, all oil heating tanks must be installed on a flat, even, fire-resistant surface that can support the tank when full.

The regulations also state:

• The surface should extend at least 300mm beyond the widest points of the oil tank and integral bund
• If made of paving stones, the surface should be at least 42mm thick and if concrete 100mm thick
• The tank should be 1800mm away from doors and windows
• 1800mm away from any appliance flue terminals
• 1800mm away from a non-fire rated building or structure eg: garden shed
• 760mm away from non fire rated boundaries eg: wooden fence

GO TO OUR USEFUL CONTACTS AND RESOURCES SECTION to see where you can view these regulations and guides in full.
Whilst it is recommended that your heating oil tank has an annual service by an OFTEC registered engineer, there are a number of simple checks that you should regularly carry out in order to quickly detect any problems. This includes inspecting the wall of the tank itself, the individual components of the tank, and the surrounding area.

INsPECTING yOUr TANK AND ITS SURROUNDINGS

Please note: This oil tank illustration is designed to give you an indication of where you may find the parts of your tank you need to inspect. However, all oil tanks are designed differently depending upon the manufacturer, and therefore your tank may not appear exactly the same as in the diagram.
INSPECTING YOUR TANK AND ITS SURROUNDINGS

Examining the tank itself

Most simply, but perhaps most importantly, you should inspect your tank for any leaking oil. Pay particular notice to the pipework, valves and seams of the tank, as this is generally where gradual leaks occur that may not be completely obvious when giving the tank a quick once over. It is against the law to cause pollution, and therefore you will be liable for any ignored oil leak.

It is also vital to check for any obvious signs of corrosion or degradation. Common things to look out for are rust, cracks, splits, major dents, discoloration of the plastic and any areas of bulging. If left without repair, any of the above may result in serious leaks/oil spills or the tank needing to be completely replaced.

You should also inspect the bund for any large quantities of water, oil, rubbish or vegetation. With a bund being 110% of the contents of the inner tank, if there was more than 10% of existing water or debris in the bund, then it would still cause an overflow situation if there all of the contents leaked into the bund.

Inspecting the tank components

All oil tanks have a vent where vapour is released from the tank when it is being refilled, and air is drawn into the tank when fuel is dispensed from it. In order to allow the free movement of this air, it is important that the vent is regularly checked and cleared of any debris and leaves that may be blocking it.

Make sure the fill point, where the driver connects to the tank to deliver the fuel, and the inspection chamber, where you can see how much oil you have in the tank, are closed to prevent rainwater and debris from entering. Where possible, these components should also be locked to ensure that they cannot be tampered with.

As well as a tank contents gauge, some domestic oil tanks also have bund or tank level alarms that audibly alert the user when the tank is reaching high or low level status, or when fluid is entering the bund. Test that any gauges or alarms that are on your tank are working correctly by running through the process of reading your tank contents, and if you have a digital gauge, check that its batteries have power.
INSPECTING YOUR TANK AND ITS SURROUNDINGS

Inspecting the tank components
Check that all tank pipework that is above ground is fully supported by purpose-made clips. You should also make yourself aware of where any underground pipework runs in case of disturbing it when doing any groundwork or gardening. If you are unsure where this runs, contact an OFTEC registered engineer who should be able to tell you.

Checking over the surrounding area
Whilst oil leaks may not be immediately obvious from checking the tank itself, the ground around the tank may tell another story. You should therefore also examine the area surrounding the tank for oil staining, dead grass or plants, sodden ground and other signs of a leak. If you see anything you suspect to be a result of a leak, you should arrange for an engineer to come and out find the source and repair it.

You need to keep the access to your tank clear as to not hinder inspections, maintenance and deliveries. You should ensure that there are no plants or vegetation growing around the tank, or that there are any bushes or fences blocking access. There essentially needs to be enough room for someone to walk around the tank, which is why screens should be at least 600mm away from the tank.

As mentioned previously, it is important that your tank is on a level, sturdy surface that can easily support its weight at full capacity. Periodically you should check for any changes to the supporting structure for example cracks, erosion or it becoming uneven. Any findings of this sort should be dealt with.

TOP TIP
Periodically check for water in your tank using a tank sock or water finding paste. The presence of water can potentially cause damage to the oil heating system if passed through.
ENSURING YOUR TANK IS SECURE AGAINST FUEL THEFT

Every property with a heating oil tank is at risk of fuel theft, as its value is very attractive to a thief. However, some areas are specific targets perhaps due to the remoteness of the location, the busyness of the road the property is on and the distance to the next property. If you have recently moved to a new property with oil heating, make an effort to find out about any local theft activity that may have occurred.

**Did you know?**

- Today, the average cost of filling a 2,000 litre heating oil tank is £1150 - a lot of value to replace if stolen.
- Oil/diesel are the 3rd most commonly targeted items of theft in rural areas.
- Between 2007 and 2011 there was a 500% rise in cases of fuel theft in Wales.
- The potential cost of theft not only includes the loss of oil, but the tank repairs, the clean up and the inconvenience.

**Methods of preventing heating oil theft:**

**Tank locks**
Use specially made tank locks or general padlocks to lock any access points on the tank including the 2” fill point and the 4” inspect chamber. Whilst this will act as a deterrent as it makes access more difficult, locks alone aren’t necessarily enough to stop theft in all cases. They may be broken with enough force, and also this doesn’t stop a hole from being drilled into the side of the tank.

**Alarms**
There are alarms on the market that can be set off to alert if the fuel drains away quickly, which could indicate theft or a leak, or that alert when there has been some form of physical interference eg: drillings, shaking, stabbing etc.

**CCTV and security lights**
Implementing and making obvious that you have CCTV and sensor powered security lights focussing on the tank may scare off potential thieves in fear of being caught.

**Position of tank**
If possible, position the tank out of sight from the road. Although this is not as handy for your fuel delivery driver, it is less of a temptation for thieves. Some manufacturers are now making slimline tanks that can slotted between buildings out of sight.

**Restrict access**
Restrict access to getting anywhere near the tank by locking all gates and having bushes around the boundary of your land, and have some form of additional gate around your oil tank making sure make sure you are leaving the recommended distance of 600mm.

**Neighbourhood watch**
Be vigilant and discuss with your community about a neighbourhood watch programme, whereby everyone in forms everyone else of any suspicious goings on.

**TOP TIP**
If you aren’t present when your fuel is delivered make sure that you disable all security devices and leave access points unlocked so that the supplier can refill your tank. Enable them and lock them back up after the delivery has taken place!
There are a number of things to consider regarding the supply of your heating oil. When you first move to your property you will need to select a heating oil supplier. You also need to be aware of and what to do before and after you receive your fuel delivery.

**Selecting a fuel supplier**

Don’t be hasty in deciding on a supplier for your heating oil. There are lots of companies to select from so it is important that you do your research into those that supply to your area. As well as the obvious factor of price, there are other things to consider including reliability and quality of service. First things first, you need to identify the suppliers that deliver to your location. You can use the Federation of Petroleum Suppliers’ (FPS) directory to find local suppliers, or use websites such as the Heating Oil Shop who can give you a list of heating oil suppliers in your Postcode.

Once you have a choice of local fuel distributors, gather quotes from as many of these companies as possible to compare the prices. You usually are required to give an estimate of the number of litres for them to base their quotation around. It is a good idea for this to be about ¾ of your tank’s capacity to allow for any remaining stock of oil in your tank each time you receive your delivery. It is also important that you ask around the neighbours what the preferred suppliers are in the area to get an idea on reliability and quality of service.

Whilst worthwhile, obtaining a large number of quotes is time consuming. There are a number of heating oil price comparison sites for the online purchasing of heating oil eg: BoilerJuice.com and Weboil.co.uk. However, these sites don’t give the details of the supplier until the order is complete and therefore you don’t have the opportunity to find out about the supplier’s reputation.

Like with other energy bills and insurance, it is important that once you have appointed a supplier you should still monitor where and when the best prices are, or at least do an annual review.

**Managing your oil and orders**

On average a domestic tank owner buys heating oil about twice a year, ordering between 1,000 and 2,000 litres. However this depends on the size of tank and the property’s energy usage that can differ greatly depending on how large the house is, how many occupants there are and what times the heating is used. It is important that you monitor your tank’s contents to ensure that you know when you need to place an order for your oil to be delivered. If it is unlikely that you will remember to go to the tank to read the gauge, you should consider getting an ultrasonic gauge that has a display located inside your property.

Some fuel distributors employ an automatic ordering process through telemetry systems that inform them of when the tank’s contents have reached a set low level. If the property in question is a second home or a holiday cottage for example, this option is useful to consider as you may not be aware of when fuel is running low.
ORDERING YOUR OIL AND HAVING IT DELIVERED

Managing your oil and orders
It is important, particularly in winter, that you do not leave placing your oil order much beyond when you have ¼ of a tank of oil left, in case of any unforeseen circumstances that mean your fuel delivery is delayed and you are left without heating and hot water. As championed by the FPS through their “Buy oil early” campaign, you should stock up before the winter rush, as heating oil prices are lower in the summer due to demand and it will also help you avoid delivery problems caused by bad weather.

Before you place your order, you should check how much fuel you require. To avoid oil spills, a heating oil tank should only be filled up to around 80-90%. Also, most heating oil suppliers have a minimum order quantity (usually about 500 litres) so find out what your supplier’s is. Before you place your order, you should check how much fuel you require. To avoid oil spills, a heating oil tank should only be filled up to around 80-90%. Also, most heating oil suppliers have a minimum order quantity (usually about 500 litres) so find out what your supplier’s is.

Preparing for delivery and what to do after delivery
If you are unable to arrange a delivery date when you are at the property, ensure that there is easy access to your tank. Make sure:
• Any gates providing access to the tank are left open
• Disable any security devices such as alarms
• There is nothing in the way that may make it difficult to reach the tank
• Keys for any tank security locks are left in a safe place that the fuel company has been informed of
• Any pets or other animals are secured away

After delivery, remember to lock up any gates or tank locks and re-enable any security devices to ensure that your heating oil is safe. When doing this, it is worth making sure that if there is any oil residue or small spillages collecting in the fill cap from the delivery, you wipe it down with a cloth. You should also check the correct amount of fuel has been delivered by checking the content’s gauge. If there is a difference to what you were expecting, report this to your supplier immediately. It is also important that you don’t ever ignore any advice from your fuel supplier on the condition of the tank or the access; as if the issue isn’t resolved they may refuse to deliver.

TOP TIP
Consider joining your local collective oil buying scheme. The Citizens Advice Bureau estimates community bulk buy schemes can reduce heating oil bills by 10%. Find a club on the Citizen Advice Bureau website.
As previously discussed, negligent behaviour resulting in an oil spill or the pollution of groundwater will make you liable for the clean-up process, and in some cases you can be prosecuted with an unlimited fine. You should always be prepared for a leak or spillage in order to do what you can to prevent pollution. Make sure that you are aware of the below “do’s and don’ts” that are applicable in the event of an oil spill.

DEALING WITH AN OIL SPILL

**DO’s**
- Deal with the spill immediately.
- Always have an oil spill kit at the property containing sorbent materials, drain blockers and leak sealing putty to prevent it from spreading to neighbouring land and into drains. This needs to be easily accessible in order for you to react quickly.
- Stop the flow of oil, usually by shutting off the isolation valve. If the leak is coming from part of the pipework this may stop or minimise the spill.
- Try and identify the source of the leak so that the leak sealing putty can be applied to temporarily block the leak. This isn’t a permanent solution though, and you will need to arrange for an engineer to come out.
- If you are in an environmentally sensitive location i.e. near water supplies but oil is yet to reach it, ring the 24 hour UK pollution incident hotline on 0800 80 70 60 to gain advice on what to do next.
- If the oil has come into contact with controlled waters eg: streams, ponds, lakes, contact the Environment Agency immediately to get the clean-up process into action.
- Contact your insurance policy provider and inform them that a clean-up process may be required. You may be covered for this as well as the cost of your lost oil.

**DON'TS**
- Do not ignore the spill or leave the cleaning up until a later date. The initial leak may just be the start of the problem and may worsen rapidly causing a much greater clean-up to be required.
- Avoid using any chemicals, bleaches or detergents to try and clean up the oil spill. This is likely to cause more pollution.
- Do not try and hide the leak from the authorities if the spill has spread or gone into groundwater. If they find you to be the source, then the penalty may be worse if you have not informed.
- Do not use a hose to clean the spill as the pressure may in fact spread the oil further, causing it to enter the drainage system or cross neighbours boundaries.
- Do not use tissue or rags to permanently stop the leak. If a rag is all you have, only use it as a temporary measure whilst leak sealing putty is being sourced or whilst waiting for your tank engineer.

**TOP TIP**

Oil spill kits including sorbent granules, spill pads, drains blockers and leak sealing putty are readily available from most industrial supply companies and online. Your local fuel distributor may also sell them.
SERVICING AND REPAIRING YOUR TANK

Arranging a service for your tank

Whilst it is advised that you regularly inspect your tank and its components yourself, at least once a year you should have a full service by a qualified oil fired heating engineer as recommended by the Pollution Prevention Guidelines 2. It is probably best to do this just before the winter period when you are thinking of turning your heating on. That way, you know everything is tested and in full working order ready for when you will be using your oil heating system. It is also better if you arrange the service before you have a delivery, as sometimes a full tank may restrict the ability to inspect some pipes or components.

Throughout this pack you may have noticed that it is advised to use an OFTEC engineer to carry out inspections and maintenance work. Oil tank installations are required to comply with regional Building Regulations. In England and Wales, OFTEC registered engineers can self-certify their own work without involving the local authority. Whilst work can be carried out by any qualified oil heating engineer, if you choose to select one that isn’t registered with OFTEC, then you will have to acquire a Building Control Notice and organise an inspection which takes time and effort.

Maintenance and repairs

During a service the engineer will inspect your oil fired boiler, oil tank, all of the oil supply pipes, check the fittings for leaks, and may if agreed with the homeowner, remove any water from the tank and clean or replace the tank’s filter. Whilst things like leaks will be dealt with at the time of the service as these need immediate action, the engineer may make other recommendations to you eg: your contents gauge needs replacing.

It is important that any problems or concerns that the engineer report to you after your annual service are always acted upon. Likewise, if you spot anything during your own regular inspections or your fuel supplier mentions anything to you, you should follow these up. Firstly, not carrying out certain repairs may result in you not being left with a working heating system. Secondly, if routine maintenance is not undertaken, the issue may worsen and lead to even more expensive repairs in the future or costly oil spills.

TOP TIP

To find yourself an engineer for your tank installation, inspections and maintenance work, visit the OFTEC website where you can locate engineers by the Postcode they operate within.
MAXIMISING YOUR ENERGY EFFICIENCY

Heating is a large outgoing for many homes and businesses, and it is therefore important that energy efficiency is maximised. There are a number of ways to improve efficiency.

**Carry out annual services**

Like with your annual car service that maximises your vehicle’s performance and reduces the risk of breakdown, having an annual boiler/oil tank service ensures your heating system runs efficiently and reduces fuel bills and call out charges.

**Upgrade your boiler**

The age of your boiler has a large impact on energy efficiency. According to OFTEC, upgrading to a condensing boiler that has up to 97% efficiency can save you up to £200 per year. However, a new boiler can be costly so you have to weigh this up against the annual savings available. Similarly, if you currently have an old, domestic gas oil system you may want to change your system to one that utilises kerosene. Obviously this will incur new installation costs but it helps to achieve the long term gains of cleaner, higher efficiency burning.

**Consider using Premium Kerosene**

If you have an existing kerosene system you may want to consider using Premium Kerosene; a higher performance version of kerosene that stabilises the fuel, which keeps it fresher for longer and also reduces the carbon and sludge build up. Whilst there are slightly higher unit costs associated with this fuel, its improved efficiency extends the life of your heating system and has a lower pollution impact on the environment.

**The Green Deal**

The Green Deal is a government scheme that has been designed to help both homes and businesses make energy-saving improvements. The Green Deal is essentially a government loan, meaning that you are able to make certain changes to your property in order to improve efficiency without having to pay there and then.

**These changes include:**

- Wall and loft insulation
- Heating
- Draught-proofing
- Double glazing

If you would like to see whether the Green Deal would save you money, get a Green Deal assessor to come to your property to look at your energy use, what changes could be made and how much these changes would improve your energy bills by.

If any of the changes outlined in the Green Deal apply to you and you are in the financial position to do so, it would be a good idea to put them in place yourself to see energy savings straight away without the interest on loan repayments.

**TOP TIP**

Do not put your heating on for any periods longer than necessary by using the timer system on your boiler/burner. Also, make sure you keep building doors closed where possible to prevent heat escaping.
USEFUL CONTACTS AND RESOURCES

OIL FIRED TECHNICAL ASSOCIATION (OFTEC)
Foxwood House
Dobbs Lane
Kesgrave
Ipswich
IP5 2QQ
Tel: 0845 65 85 080
Fax: 0845 65 85 181
Web: http://www.oftec.org.uk/

FEDERATION OF PETROLEUM SUPPLIERS (FPS)
6 Royal Court,
Tatton Street,
Knutsford,
Cheshire,
WA16 6EN
Tel: 01565 631313
Fax: 01565 631314
Web: http://www.fpsonline.co.uk/

DEPARTMENT FOR ENVIRONMENT, FOOD & RURAL AFFAIRS (DEFRA)
Nobel House
17 Smith Square
London
SW1P 3JR
Tel: 08459 33 55 77
Web: http://www.defra.gov.uk/

ENVIRONMENT AGENCY
National Customer Contact Centre
PO Box 544
Rotherham
S60 1BY
Tel: 03708 506 506
Web: http://www.environment-agency.gov.uk/

Guidance note for the Control of Pollution (Oil Storage) (England) Regulations (2001)

Pollution Prevention Guidelines (2011) Above ground oil storage tanks: PPG
http://a0768b4a8a31e106d8b0-50dc802554eb38a24458b98ff72d550b.r19.cf3.rackcdn.com/pmho0811bucr-e-e.pdf

The Building Regulations (2000) Combustion appliances and fuel storage systems; Approved Document J

This document has been written by Centre Tank Services Ltd. www.centretank.com