

## CENTRAL HEATING Fact Sheet

### Installation and Maintenance

**Policy** - The DBF is entirely responsible for the servicing and maintenance of the central heating installation.

As the DBF pays the heating engineer for every visit made, it would be appreciated if minor faults, such as the odd thermostatic radiator valve (TRV) not fully closing, could be left until the annual service. A list should be kept of any defects, which require attention and notified to the heating engineer's office when making arrangements for the annual service.

#### **Nominated Heating Engineers**

First and foremost, ADM Plumbing & Heating hold the servicing contract for the installations whether gas or oil. The firm is "registered" and therefore fully up to date with training and regulations for gas installations.

#### **Exclusions from Central Heating Maintenance Scheme**

**Policy** - The DBF will not pay for the cost of any work which is deemed necessary as a result of any of the following items occurring: -

- a) running out of oil which causes an airlock in the oil pump and the system will have to be purged
- b) the incumbent/occupant arranging an appointment and access to the house with the heating engineer and then going out and leaving the house locked
- c) frost damage occurring due to neglect by the incumbent/occupant

Invoices received for such expenditure, incurred under the circumstances as set out above, will be passed to the incumbent/occupant for payment.

Some occupiers go away over the Christmas period without leaving the heating on or making any other provision for frost protection. As a result the houses and the occupiers' pockets have suffered damage.

The block insurance policy with the Ecclesiastical Insurance Office does **NOT** cover the cost of rectifying frost damage to the installation, although it may pay towards the expenses of consequential damage to the house **NOR does the DBF have to pay for repairs resulting from the occupiers' negligence.**

*Please refer to the section under **Winter Months** for helpful hints on checking for damage, protection of pipework and blocked fuel lines.*

### **Hints on the use of the Central Heating System**

There are various small jobs that most people can tackle to save the inconvenience and expense of breakdown visits.

Do not let the oil supply get too low or run out. Know how to read the oil sight gauge correctly. See paragraph on Exclusions to DBF responsibilities as stated above.

Make a point of being at home when the annual service takes place. Ask the engineer to show you how to use the boiler correctly, if you are in doubt.

Do you know the correct way to adjust the time-clock? It can be ruined if you turn it the wrong way. There is usually an arrow indicating the correct direction for turning.

Ensure you know where the re-start button is situated, if fitted.

Circulating pumps, if switched off throughout the summer months, may become jammed with deposits in the water. **Please remember to switch the pump on for five minutes at least once a week when the heating is not in use.**

### **The Boiler – Oil-fired**

If the boiler does not fire after switching on the controls, always check the following items before calling in the service engineer:-

- Is the main isolating switch 'ON'?
- Switch the programmer to 'CONSTANT' for both heating and domestic hot water or check the time-clock is set to the correct time and to an 'ON' period.
- If the circulating pump is running but the boiler has not fired press the 'RESTART' button.
- If the boiler starts the firing sequence and the stops without any flame appearing:-
  - check there is oil in the tank and that the stop valves on the oil level sight gauge and supply pipe have not been turned off.

### **The Boiler – Gas-fired**

If the boiler fails, ring up the heating engineer first and discuss the problem.

### **Radiators – when they do not heat**

After switching on and the boiler fires and the pump is running but the radiators and hot water cylinder remain cool (*the top 'flow' pipe from the boiler may be very hot but the bottom 'return' pipe is cold*) check there is water in the small header cistern. This is usually situated in the attic or roof space. If this is empty, lightly oil the pivot of the ball-valve and work the arm up and down gently several times.

Water should begin to flow as soon as the arm is depressed. Stay by the cistern until it has filled to ensure the valve shuts off.

Accumulation of air may cause individual radiators to remain cool. This is best cleared when the circulator pump is 'off'. With the radiator/bleed key provided, open the air vent until water flows freely on each radiator in turn. (If you don't have a key, one can be bought

quite cheaply from a hardware or DIY store).

Should one of the radiators be difficult to clear, shut off all other radiator valves leaving only the 'difficult' one open and switch the circulating pump on and off at half-minute intervals a few times; then try venting the air.

Air vents are sometimes fitted at high points on pipe runs and may be found at or just above first floor level. These can be vented in a similar manner to the radiators **with the pump off**, but will not normally require attention unless the system has been drained down recently.

**Do not open** the air vent too far as the little threaded plug will come out and is easily lost. If you do lose one, a sharpened piece of wood can be screwed into the socket and should hold until a new plug can be fitted. **Do not plug the socket with anything metallic as this will damage the thread.**

### **Thermostatic Radiator Valves (TRVs)**

Frequently Temset, Drayton, Honeywell or similar TRVs are fitted to radiators. The use of these should be understood. They are designed to sense the temperature of the room in which they are located. They do NOT determine the temperature of the radiator until the room has achieved the desired temperature.

If a valve allows heat into the radiator in mild weather and cannot be turned off, this is one point you can correct yourself.

Remove the valve head after loosening the clamp and using a pair of pliers grip the pin protruding from the valve end and gently turn and push in and out until it moves freely. Replace the valve head and clamp.

In general, TRVs should not be used as ON/OFF valves. They should be adjusted to give the optimum comfort level for each room. The following method is recommended:-

Set the valve to a midway position. If after 3 to 4 hours the room is at a comfortable temperature, leave the valve at that setting. If necessary make a note of the number for future reference. Theoretically, the valve should keep that room at an even temperature irrespective of external weather conditions.

If the temperature in the room is too low, set the valve half a division higher and again leave for 3 to 4 hours. Similarly, if the room is too hot adjust in the opposite direction, moving half a division on each occasion.

A little time spent on finding the correct temperature level is well rewarded by comfort and fuel economy. When the room has reached temperature you will probably find only the top half of the radiator is warm and the lower half is cold.

**The heating engineer should not be called in to repair the odd valve, which is not working correctly. This should be referred to him for attention at the next annual service inspection.**

If it is essential to shut off the radiator with a faulty TRV, this may be done by removing the plastic cap from the Lockshield valve at the opposite end of the radiator and turning the valve spindle in a clockwise direction (when viewed from above), making a note of the number of turns required to close it.

### **Heat Loss from Radiators**

This can be reduced with radiators on external walls by fixing a sheet of aluminium (kitchen) foil on the wall behind the radiator.

### **Fan Heaters**

Some houses are fitted with **Myson** power radiators, which incorporate an electric fan to circulate air over the heating element. However, the efficiency of these heaters will be restricted severely if the air filter is not kept clean. This is situated underneath the heater and is either held in place by two clips or slides out forwards. It should be taken out frequently and either vacuumed or washed in warm soapy water. If any problems occur with the heater, please notify this office.

### **Non-thermostatic Control Valves**

Contrary to what one would expect, a leak from a non-thermostatic radiator control valve can be reduced if the valve is kept in the fully-open position.

### **Summer Domestic Water Heating**

Generally, it is more economical to use your boiler for hot water rather than the immersion heater. You should set the time-clock to run say for an hour in the morning and evening at peak consumption times or to suit your requirements.

### **Hard Water Area**

In this Diocese most of the houses are in a hard water area and, in consequence, the shower head becomes clogged with lime-scale deposits. The cure is to immerse the shower head in a jar of vinegar or kettle descaler for a few hours every few weeks. If the shower has a flexible hose, there is no need to dismantle anything. However, do let the water drain from the hose before immersing it, otherwise the vinegar will become too diluted to dissolve the lime. A screw-topped jar (preferably with a plastic lid) half filled with vinegar will last years. Be certain to label the jar properly so that there is no confusion and keep it out of reach of children.

The kettle and steam iron should also be descaled regularly to improve efficiency.

### **Winter Months – Frost Damage and Heating Problems**

A spell of very cold weather can result in freezing of pipes in the roof space with consequent damage to the annular element in the hot water cylinder caused by the resulting pressure build-up.

About the only way of discovering this, is to listen for the constant trickle of water into a water storage tank (usually in the roof space) and a **continuous dribble from the overflow pipe**. If you believe your installation is doing this, **please telephone the Diocesan Surveyor**,

so that the system can be checked and any repairs necessary put in hand quickly. Corrosion damage may result if this fault is not discovered at an early date.

*Please note that it is not the normal refilling and eventual trickle associated with the normal use of domestic hot water that is important. It is the continuous trickling several hours after the last use – say first thing in the morning BEFORE any water is drawn off.*

### **Protection of Pipework**

The pipework in your roof space should be lagged and there should be fibreglass or micafil insulation laid. However, it is wise to check the pipework which may be running above the level of the insulation especially any bends where insulation is sometimes a little thin or the pipes are near to the eaves. Wrap any such section in fibreglass roof insulation taken from under the pipe run, a good layer of old rags or several newspapers tied in place. Pay particular attention to the open-ended vent pipes which usually curl over the top of the cold water cisterns. The cisterns should also be well lagged and covered. Any doubts please discuss with the Diocesan Surveyor.

### **Blocked Oil Fuel Lines**

There have been numerous reports of oil-fired pressure jet boilers failing due to blocked fuel lines. This is the result of wax being formed by the very low temperatures and blocking the line or the filter.

- It is advisable, if this has happened, to call in the heating engineer to rectify the problem.