

## **DANESMOR** FRONT SERVICE (FS) 12-18, 18-25

FLOOR-STANDING OIL-FIRED PRESSURE-JET BOILERS

# **USER INSTRUCTIONS & CUSTOMER CARE GUIDE**





Thank you for purchasing a Danesmoor Front Servicing (FS) oil-fired central heating boiler.

Danesmoor FS oil boilers are made by Worcester Heat Systems and the strictest quality control standards ever demanded are applied throughout every stage of production.

Indeed, Worcester Heat Systems have led the field in



innovative boiler design and performance for more than 40 years.

The result is that your new Danesmoor FS boiler offers you the very best of everything - quality, efficiency, economical running costs, proven reliability and value for money.

What's more, you also have the assurance of our nononsense 2 year parts and labour guarantee.

And it's backed up by Worcester Care Call - a complete maintenance scheme to keep your boiler operating at peak condition and efficiency.

No wonder that more and more people are agreeing that when it has to be oil, it has to be Danesmoor.

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#### **ELECTRICAL CONNECTION**

A mains cable should be connected to a double pole isolator with a contact separation of 3 mm on all poles and supplying the appliance and controls only.

The mains supply for your Danesmoor FS boiler is 230 volts AC-50Hz.

Your boiler must be earthed and protected by a 5-amp fuse.

#### **FLUE OPTIONS**

The Danesmoor FS may be installed onto a Conventional open flue or a factory made Room sealed balanced flue, the decision is made by the installing engineer and is dictated mainly by boiler location.

#### **OPEN-FLUED BOILERS**

Your installer will create airways (in walls or doors) to ensure an adequate supply of fresh air to the boiler for combustion. Do not block these airways, and never hang clothes or other combustible materials over the boiler or against the flue pipe.

Never place anything on top of the boiler.

#### ROOM-SEALED BALANCED FLUE BOILERS

Air for this type of boiler is supplied via the balanced flue terminal, and no other air supply is required, except for ventilation if the boiler is installed in a cupboard or compartment.

#### **ROUTINE MAINTENANCE**

It is essential that your boiler is installed, commissioned and serviced by a competent heating engineer, and Worcester Heat Systems will be pleased to arrange regular servicing and a comprehensive maintenance contract.

Alternatively OFTEC will gladly advise you of engineers trained by and registered with them.

#### Who are OFTEC?:

OFTEC are the Oil Fired Technical Association for the Petroleum industry. OFTEC are recognised by the Government, its agencies, the major oil companies, oil distributors and manufacturers of heating appliances, equipment and oil storage tanks. For the domestic heating, oil distribution and commercial oil firing industry, OFTEC are the accepted trade body in terms of regulations, training and assessment. For the Oil industry, OFTEC registered technicians are the only people defined as 'competent' and able to self certify their work without the need to inform the local building control department.

They can be contacted at: Oil Fired Technical Association, Foxwood House, Dobbs lane, Kesgrave, Ipswich, IP5 2QQ. Tel. 0845 658 5080 or: www.oftec.org

Servicing should be carried out at least once a year for boilers which burn 28-second kerosene, and twice a year for boilers which burn 35-second gas oil.



#### FUEL

Your Danesmoor FS boiler is factory set to burn 28-second Kerosene fuel. This fuel is permitted for use with a Conventional flue or Room sealed balanced flue arrangements across all output ranges.

35-second Gas Oil can only be used on conventional flue appliances which discharge at more than 2 metres above ground level. Both the 12/18 and 18/25 may be used in conjunction with Gas Oil on Conventional flue arrangements, however the 12/18 model may only be used with Gas Oil when commissioned to outputs of 15kW and above. Advice should be sought from the commissioning or Service engineer.

Conventional flue appliances which burn 35 second Gas Oil should terminate at a height of 2 metres or greater from the outside ground level.

Room sealed balanced flue appliances must not be used in conjunction with 35 second Gas Oil.

#### SERIAL NUMBER

Your boiler serial number and model number should always be quoted in any contact with Worcester Heat Systems. This will help identify your boiler accurately avoiding confusion and delays when placing a service call or ordering spare parts. The boiler serial number and model number are printed on a data label which is located behind the front white panel as shown in Fig. 1. To access this data label you must remove the front white panel, as shown in Fig. 4.

For Service Engineers there is a more comprehensive data label on top of the appliances control box underneath the top white panel. Please make reference to the Installation and Servicing manual to gain access.



(See Fig. 2.)

- (a) Turn on oil supply.
- (b) Switch on the electrical mains supply to the boiler.
- (c) Ensure that any external controls connected to the boiler, such as a room thermostat, are on a high setting.
- (d) Set the programmer to the correct time of day and position the selectors to ON. The demand lamp in the control fascia will light up.
- (e) Turn the thermostat control knob to the desired position (See Fig. 3: temperature control).
- (f) Your boiler will now commence a start sequence, in which a pre-ignition period of approximately 15 seconds is followed by a supply of atomised oil being introduced into the combustion chamber. Ignition then occurs, followed by a post-ignition period of approximately 20 seconds.
- (g) Your boiler is now in a steady run condition and will remain so until the water temperature reaches the temperature set on the control thermostat. At this point the burner will stop and the boiler will shut down. The sequence will continue until the boiler is programmed for a period shutdown.





The temperature control knob gives you control over the water temperature in your central heating radiators, and you can adjust it to any position within the indicated range (as shown in Fig. 3).

Higher settings obviously mean hotter radiators and rooms will reach the required temperature quicker. The ideal setting varies from property to property, and can only be established by trial and error and experience: a setting of medium to high should serve as a good initial guide.





A fascia mounted programmer is available and replaces the small square blanking plate within the boiler fascia panel. Full instructions on how to install and operate this optional programmer are included in the programmer kit.



#### LOCKOUT

A flame failure device is incorporated into the control system of your boiler. So, should the flame fail for any reason, or should ignition fail to initiate a satisfactory start, the boiler is automatically locked out for safety. This lockout condition is indicated by the red lockout light illuminating on the fascia, as shown in Fig. 2.

To cancel the burner lockout condition, remove the boiler front cover, as shown in Fig. 4. and press the lockout reset button, which is mounted on the under side of the boiler fascia, indicated as button 'A' in Fig. 5. Provided the system is still calling for heat, the burner will then operate and commence another start cycle.

Persistent lockout indicates a fault and an engineer should be called, so do not attempt to repeatedly restart the boiler.

#### **TEMPERATURE SAFETY**

Your boiler is fitted with two safety thermostats which are designed to protect your system in the event of the boiler running beyond a normal temperature level due to a control malfunction.

### AUTO RESET THERMOSTAT

This thermostat will turn the boiler off and the demand indicator will go out if an excessive operating temperature is reached. This thermostat will reset automatically once the appliance has cooled down. If this thermostat persistently operates then please contact your service engineer.

## MANUAL RESET THERMOSTAT

This thermostat will stop the appliance in the same manner as the auto reset thermostat above, but operates at a higher temperature and will not reset automatically. This thermostat has a reset button located on the under side of the boiler fascia, indicated as button 'B' in Fig. 5. To remove the front white panel see Fig. 4. If this thermostat persistanly operates then please contact your service engineer.



Fig. 4. Removal of front panel

**REMOVE FRONT PANEL TO** 

ACCESS RESET BUTTONS

PULL BOTTOM OF FRONT PANEL





Many calls made to Worcester Heat Systems to report boiler faults or breakdowns prove to be false alarms, as there is often a simple explanation for the apparent malfunction.

So, to help you save time and money - not to mention frustration and inconvenience - a quick-reference fault finder is included on page 10.

If, after checking through the points suggested, there is still a fault you should call your installer, service engineer or local Worcester Heat Systems Service Centre. Arrangements will be made for an engineer to call as soon as possible.

#### **CALL-OUT CHARGES**

All of Worcester Heat Systems' field service engineers are factory trained.

If you request a visit from an engineer and your boiler has been installed within the last 24 months, no charge will be made for parts and/or labour providing:

- The appliance was commissioned correctly on installation and a completed Guarantee Registration Card returned to Worcester Heat Systems.
- An appliance fault is found and the appliance has been installed within the past 24 months, provided that the first annual service has been carried out on a boiler which is more than 12 months old. Reasonable evidence of this must be supplied on request.

A call out charge will be made where:

- The appliance has been installed for over 24 months
- The appliance has been installed for more than 1 year but less than 2 years and has not had a first annual service by an approved company.

OR

• Our Field Service Engineer finds no fault with the appliance (see note).

OR

• The cause of breakdown is misuse or with other parts of your plumbing/heating system, or with equipment not supplied by Worcester.

NOTE: Invoices for attendance and/or repair work carried out on your Worcester Danesmoor boiler by any third party will not be accepted.



If your boiler is not operating, it is suggested that you go through the following simple checks before either calling your installer or Worcester Heat Systems.

SYMPTOM	POSSIBLE CAUSE	CHECK/REMEDY
Red demand Indicator is not illuminated.	There is no electricity supply to the boiler.	<ul><li>Power supply is switched on.</li><li>Check the fuse has not blown.</li></ul>
	Boiler overheat thermostat has operated	• If self resetting, allow time to reset.
		• If manual reset, press reset button. (See section "Temperature Safety".)
Demand Indicator illuminated only.	There is no demand requiring the boiler to operate.	• Check boiler thermostat is set on medium to high.
		<ul> <li>Check the programmer is programmed for hot water and/or central heating and re-programme if necessary. (See programmer operating instructions.)</li> </ul>
		<ul> <li>If the boiler is programmed for central heating, check the room thermostat is turned on.</li> </ul>
Demand & 'Lockout' indicators both illuminated.	The boiler has attempted to ignite, but has gone to lockout.	<ul> <li>Remove the appliance front cover and depress the lockout reset button on under side of the fascia. (See section "Lockout".)</li> <li>Check the level in your oil tank and replenish if necessary.</li> </ul>

# MAINTAINING YOUR BOILER'S EFFICIENCY & PERFORMANCE

Your new Worcester Danesmoor FS oil-fired boiler represents a long-term investment in a reliable, high quality product.

In order to realise its maximum working life, and to ensure it continues to operate at peak efficiency and performance, it is essential that your boiler receives regular, competent servicing and annual maintenance checks beyond the initial 24 month guarantee period.



Regular service contracts can be arranged with your installer however if you have difficulty making a satisfactory arrangement simply contact Worcester Heat Systems on

08457 256206 for help.

If you would like to know more about Worcester's extended warranty options please tick the appropriate box on your Guarantee Registration Card.



This appliance is guaranteed against faulty materials or workmanship for a period of twenty four calendar months from the date of installation subject to the following conditions and exceptions.

- That during the currency of this guarantee any components of the unit which are proved to be faulty or defective in manufacture will be exchanged or repaired free of material charges and free of labour charges by Worcester Heat Systems Limited.
- That the householder may be asked to prove the date of installation, that the boiler was correctly commissioned and, where appropriate, the first 12 month service has been carried out to the satisfaction of Worcester Heat Systems Limited when requested.
- That any product or part thereof returned for servicing under the guarantee must be accompanied by a claim stating the Model, Serial Number, Date of Installation, proof

of commissioning, proof where appropriate of the first 12 month service and the address of the householder.

- 4. That Worcester Heat Systems Limited will not accept responsibility for damage caused by faulty installation, neglect, misuse or accidental damage, the non-observance of the instructions contained in the installation and Operating Instructions Leaflets.
- That the appliance has been used only for normal domestic purposes for which it was designed.
- That this guarantee applies only to equipment purchased and used in mainland Great Britain and Northern Ireland.

This guarantee is given in addition to all your normal statutory rights.



You should complete and return the postpaid Guarantee Registration Card within 14 days of purchase.

The card will register you as the owner of your new Worcester Danesmoor boiler and, while this will not affect your statutory rights in any way, it will assist us to maintain an effective and efficient customer service by establishing a reference and permanent record for your boiler.

#### FOR YOUR OWN RECORD

MODEL

SERIAL NUMBER

(See identity label inside appliance casing)

TYPE/SIZE

DATE OF INSTALLATION



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