



WORCESTER BOSCH

50/70, 70/90 & 90/110

FLOOR-STANDING OIL-FIRED PRESSURE-JET BOILERS

USER INSTRUCTIONS & CUSTOMER CARE GUIDE

 **WORCESTER**
Bosch Group

EXCELLENCE COMES AS STANDARD

Thank you for purchasing a Worcester Bosch oil-fired central heating boiler.

Worcester Bosch 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 30 years.

The result is that your new Worcester Bosch 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 no-nonsense 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 Worcester Bosch.



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GENERAL INFORMATION

To ensure you get the very best from your new Worcester Bosch oil boiler, please read these notes and instructions carefully.

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 boiler is 230/240 volts AC-50Hz. Your boiler must be earthed and protected by a 5-amp fuse.

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.

ROUTINE MAINTENANCE

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

Alternatively, the Oil Firing Technical Association for the petroleum industry (OFTEC) will gladly advise you of engineers trained by and registered with OFTEC.

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.

SERIAL NUMBER

Your boiler serial number and model number should always be quoted in any contact with Worcester Heat Systems. This will help identify spare parts and also avoid confusion and delays during any service call-out. You will find these numbers on the front of the electrical control box fascia, and access can be gained by removing the front panel of the boiler casing. (See section “Accessing your boiler controls.”)

TECHNICAL INFORMATION

The Worcester Bosch range of oil-fired boilers can provide both domestic hot water and full central heating, with outputs ranging from 15kW to 32kW (50,000 to 109,000 Btu/h). Domestic hot water must be supplied via a conventional indirect hot-water system, utilising an indirect double-feed cylinder.

The appliance is supplied without a circulating pump, but there is provision to locate a pump within the boiler casing. For further details please consult your installer.



ACCESSING YOUR BOILER CONTROLS

The temperature control knob, overheat reset button and lockout reset button are all located behind the cabinet front panel.

To remove the front panel pull forwards at the bottom end to release the lower two ball studs and repeat the procedure at the top end to release the upper ones. Take care not to pull the bottom end too far forwards as this may damage the spring clips.



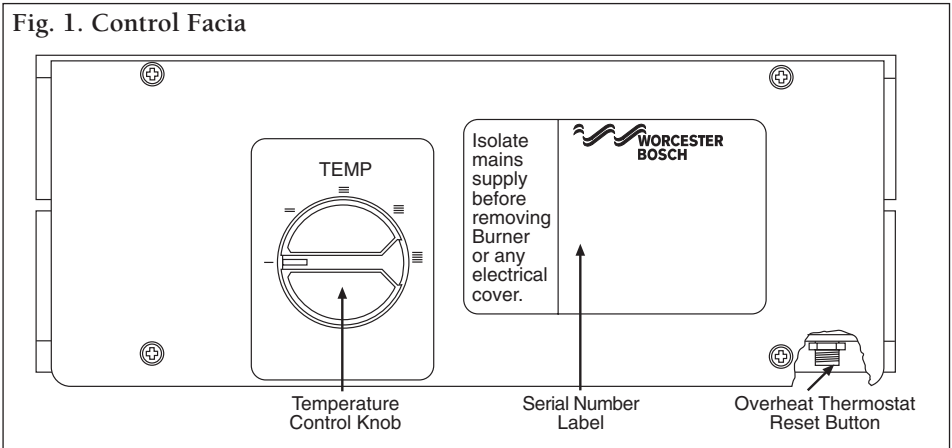
HOW TO START YOUR BOILER

TO START YOUR BOILER (See Fig. 1.)

- (a) Switch on the electrical mains supply to the boiler.
- (b) Ensure that any external controls connected to the boiler, such as a room thermostat, are on a high setting.
- (c) If a programmer is fitted, set it to the correct time of day and position the selectors to ON.
- (d) Turn the thermostat control knob to the desired position (see Fig. 2: temperature control).

- (e) 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.
- (f) 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 - either manually or by an automatic programmer - for a period of shutdown.

Fig. 1. Control Facia



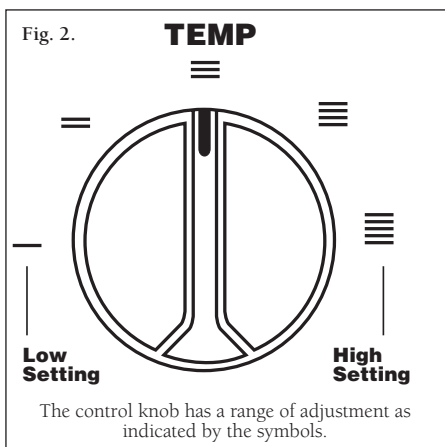
TO SWITCH OFF YOUR BOILER

During normal operation your boiler can be switched off at the programmer, where fitted, or at the control switch provided by your installer. When the heating system is not being used during the winter period your boiler should be protected by a frost thermostat. Consult your installer if you are unsure! If a frost thermostat is not fitted, set the temperature control knob to minimum and leave the boiler running on low output.

To switch off your boiler for long periods, turn off the mains electricity at the isolator switch and, during periods of cold weather, drain the heating system.



TEMPERATURE CONTROL



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. 2.).

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.

PLEASE NOTE: The control knob must not be set below the first indicating bar.



HIGH-LIMIT THERMOSTAT

Your boiler is fitted with two high limit thermostats to protect the appliance in the event of a control or system malfunction. The first overheat thermostat is designed to cut out at a lower temperature than the manual reset overheat thermostat, and will reset itself when the boiler cools to a safe operating level.

The manual reset thermostat will operate if the boiler reaches a dangerous temperature. This will have to be reset by pressing the button located underneath the control box. (See fig 1.)

If the overheat thermostat persistently cuts out then your boiler requires attention and you should call either your installer or a service engineer.



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 a signal lamp located on the burner control box.

To cancel the burner lockout condition, remove the boiler front cover and allow two minutes before pressing the illuminated lockout reset button, which is mounted on the burner control box.

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.



FUEL

Your Worcester Bosch pressure-jet boiler is set to burn 28-second kerosene fuel. Some appliances can be converted to burn 35-second gas oil. If this conversion has been made your installer will inform you.

PLEASE NOTE: Low-level discharge appliances MUST NOT be used with 35-second gas oil.



FAULTS & BREAKDOWNS

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 8.

If, after checking through the points suggested, there is still a fault you should call your 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 Bosch boiler by any third party will not be accepted.



FAULT FINDER

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
Boiler does not fire and burner lockout lamp is not illuminated	There is no demand for heat from external control equipment	<ul style="list-style-type: none"> • Check the programmer is programmed for hot water and/or central heating and re-programme if necessary. (see programmer operating instructions). • If the boiler is programmed for central heating, check the room thermostat is turned on. • Check any other control devices fitted.
	There is no demand for heat from the boiler temperature control thermostat.	<ul style="list-style-type: none"> • Turn the temperature control knob to maximum.
	The automatic reset overheat thermostat has operated.	<ul style="list-style-type: none"> • If the boiler is hot allow time to self reset.
	Manual reset overheat thermostat has operated.	<ul style="list-style-type: none"> • Press the reset button (see section 'High-limit thermostat'.)
	There is no electricity supply to the boiler.	<ul style="list-style-type: none"> • Check power supply is switched on. • Check the external power supply fuse.
Boiler does not fire and burner lockout lamp is illuminated	The boiler has attempted to fire, but has gone to lockout.	<ul style="list-style-type: none"> • Remove the appliance front cover and depress the lockout reset button on the burner. (See section 'Lockout'.) • Check the level in your oil tank and replenish if necessary.



MAINTAINING YOUR BOILER'S EFFICIENCY & PERFORMANCE



Your new Worcester Bosch 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 **0345 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.



SERVICE CENTRES

CONTACT NUMBERS:

UK Call Centre	Tel.	08457 256 206
UK Call Centre	Fax.	01905 757536
Scotland only	Fax.	01506 441 687

OPERATING HOURS:

Mon - Fri	8.00am to 6.00pm
Sat	8.30am to 1.00pm

Please contact our UK Call Centre number where our friendly operators will book your call with one of our team of nationwide engineers.

NOTE:

Sunday and Bank Holiday cover is not available

IMPORTANT

Do not touch or adjust any sealed component



YOUR WORCESTER BOSCH GUARANTEE

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.

1. 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.
2. 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.
3. 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.
5. That the appliance has been used only for normal domestic purposes for which it was designed.
6. 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.



GUARANTEE REGISTRATION

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 Bosch 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



Worcester Heat Systems Limited. Cotswold Way, Warndon, Worcester WR4 9SW.

Telephone: (01905) 754624. Fax: (01905) 754619.

Technical Service Helpline 08705 266241.

www.worcester-bosch.co.uk

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