



HEATSLAVE

12/14, 15/19, 20/25, 26/32

FLOOR-STANDING OIL-FIRED COMBINATION BOILERS FOR
CENTRAL HEATING AND MAINS-FED DOMESTIC HOT WATER

USER INSTRUCTIONS & CUSTOMER CARE GUIDE

 **WORCESTER**
Bosch Group



EXCELLENCE COMES AS STANDARD

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

Heatslave 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 Heatslave 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 Heatslave.



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GENERAL INFORMATION

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

The Worcester Heatslave is a combination boiler which provides mains-fed domestic hot water and full central heating. It utilises a Heatslave tank and a heat exchanger, which ensure that whenever a tap is turned on there is an instantaneous output of hot water.

The boilers control system gives priority to the domestic hot water supply. This means that during hot water draw-off and Heatslave tank recovery periods, the total output of the boiler is directed to the Heatslave tank. If the central heating is switched on during this period, the circulation of hot water to the radiators will be temporarily interrupted but will resume as soon as the Heatslave tank has been recharged to the temperature set on the hot water control thermostat.

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 a label on top of the electrical control box cover plate, and access can be gained by removing the top panel of the boiler casing.

FUEL

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

PLEASE NOTE: Appliances fitted with a low-level discharge flue **MUST NOT** be used with 35-second gas oil.

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.

ELECTRICAL SUPPLY

The mains supply for your Heatslave boiler is 230/240 volts AC-50Hz. The internal fuse is a 3- amp, 20mm quick-blow fuse.

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.

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

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.



ADDITIONAL FITTINGS & CONTROLS

When considering additional controls or fittings for your new Heatslave hot water and central heating system, please note the following:

ROOM THERMOSTAT

It is recommended that a mains voltage room thermostat is fitted, as this will improve your control of room temperatures.

THERMOSTATIC RADIATOR VALVES

Any thermostatic radiator valves fitted to your central heating system must conform to BS 2767/10.

SHOWERS, BIDETS, TAPS AND MIXERS

Any taps and mixers used with your system must be suitable for operating at mains pressure.

For a shower it is recommended that you fit a thermostatically-controlled shower valve, as this will give added safety by protecting against excessive water temperatures.

Mains-fed hot and cold water can be supplied direct to an over-rim flushing bidet, subject to local water bye laws.

If a loose shower head with a flexible hose is to be used over the bath, the hose must be fixed so that the head cannot fall closer than 25mm (1 inch) above the top edge of the bath, so preventing its immersion in bath water. Alternatively, the shower must incorporate or be fitted with an anti-syphonage device at the point of the flexible hose connections.

HOT AND COLD FLOW

The flow of water from your hot and cold taps depends on the mains water pressure, and in some homes it might not be possible to operate several taps simultaneously. To ensure an even distribution of water to all outlets in the home, you can fit individual flow regulators to the supply pipes.



YOUR HEATSLAVE SYSTEM CONTROLS

USER OPERATING SWITCH

Your boiler fascia panel is supplied with a user operating switch as standard, although this may have been replaced with the optional fascia mounted electronic programmer or a remote programmer.

If 'HOT WATER' only is selected

The boiler will keep the Heatslave tank at the temperature set on the hot water control thermostat.

Whenever a tap or shower is turned on, the burner will ignite and water will be pumped through the water to water heat exchanger to provide hot water.

CLEARANCES

Your installer will have provided adequate space around the appliance for safety and servicing. Do not restrict this space by the addition of cupboards, shelves etc. close to the appliance.

	RSF
Left-hand side	10
Right-hand side	10
In Front	600
Above the casing	180
Below	200

Minimum clearances in millimetres.

NOTE: If the appliance is to be enclosed after the installation then the instructions given in Section 6, Air Supply, of the Installation Book MUST be followed.

ROOM THERMOSTAT

A room thermostat may be fitted for control of the central heating temperature. It will be located in one room of the home. The method of setting a room thermostat varies with the type and manufacture. Refer to the instructions supplied with the room thermostat.

THERMOSTATIC RADIATOR VALVES

If thermostatic radiator valves are to be fitted to the system then they must conform to the requirements of BS2767:1972. It is advisable to leave one valve permanently set at maximum to prevent the boiler short cycling.

SHOWERS, BIDETS, TAPS AND MIXING VALVES

Standard hot and cold taps and mixing valves used with the appliance must be suitable for operating at mains pressure. Thermostatically controlled shower valves will guard against the flow of water at too high a temperature.

If using a pressure equalising valve, set the Domestic Hot Water temperature control knob to the 'MAX' position.

Hot and cold mains fed water can be supplied direct to an overrim flushing bidet subject to local water company requirements.

With all mains fed systems the flow of water from the individual taps will vary with the number of outlets operated simultaneously and the cold water mains supply pressure to the property. Flow balancing using 'Ball-o-Fix' type valves is recommended to avoid an excessive reduction in flow to individual outlets.

For further information contact Worcester Heat Systems Technical Helpline.

HOT AND COLD FLOW

If the flow of water demanded from both hot and cold service outlets is dependent upon mains supply, it may not be possible in some installations to operate all outlets simultaneously.

WATER MAINS FAILURE

It is important to note that in the event of a mains water supply failure, no tap water will be available until the mains supply is restored. The appliance can still be used for heating provided that the system is of the sealed system type.

EXTERNAL PROGRAMMER

You may opt to have a programmer sited away from the boiler, in which case your installer will provide setting and operating instructions.

CENTRAL HEATING TEMPERATURE CONTROL

The central heating temperature control knob on the boiler facia panel enables you to control the temperature of the water in your radiators. A low temperature is indicated by a single horizontal bar, and the control knob can be set anywhere between this and the maximum temperature, which is indicated by five horizontal bars. (As shown in Fig. 1.)

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

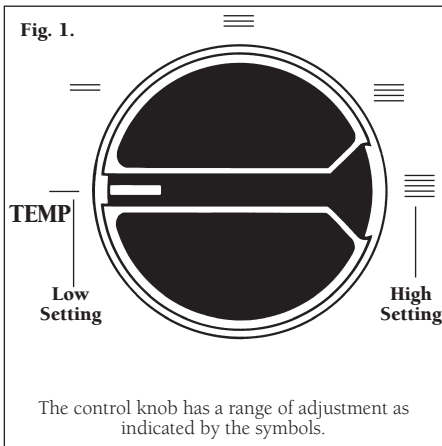
HOT WATER TEMPERATURE CONTROL

The hot water control temperature knob on the boiler facia panel controls the temperature of the primary hot water stored in the Heatslave tank. The temperature control settings are as for the

central heating control thermostat (described above). A high setting will give higher hot water temperatures and greater quantities of hot water.

The temperature of your hot water can also be controlled at the tap by varying the flow rate; increasing the flow rate will decrease the temperature, and vice versa.

WARNING. Care should be taken when washing your hands as the combination of low water flow rate and a high setting of the hot water control thermostat can result in very hot water at the tap.



INDICATION LIGHTS

There are two indicator lights on the facia panel — POWER ON and LOCKOUT.

The POWER ON light shows that there is an electrical power supply to the electrical control panel. This will remain on at all times provided there is an external electrical supply and the internal fuse has not blown.

The LOCKOUT light illuminates if a burner ignition failure occurs. The burner can be reset after two minutes by pressing the illuminated lockout reset button located on the burner control box.

PLEASE NOTE: Do not attempt to repeatedly restart the boiler as persistent lockout indicates a fault and you should consult a service engineer.

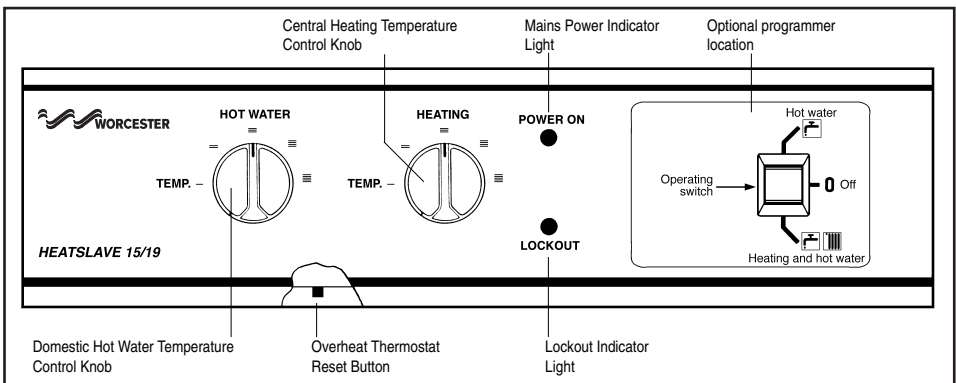
OVERHEAT THERMOSTAT

Your boiler is fitted with a manual reset overheat thermostat. If the burner fails to operate and the LOCKOUT indicator light is not illuminated, check the overheat thermostat by pressing the reset button. The thermostat is located on the underside of the electrical panel and is accessible by removing the boiler casing front panel. If the problem continues after pressing the reset button, consult a service engineer.

HOW TO OPERATE YOUR BOILER

If your boiler is being operated for the very first time following the installation your installer should have commissioned the system as specified in the Installation Instructions.

Fig. 2. Control Facia



TO START YOUR BOILER

First ensure that the oil supply is turned on.

Now switch on the mains electricity and turn the hot water and central heating temperature control knobs to maximum. Set the user operating switch (or programmer) so that both HEATING & HOT WATER ARE ON.

The burner should now ignite.

Set the user operating switch (or programmer) to suit your own requirements, and if a room thermostat is fitted set the desired temperature.

Similarly, set the hot water and central heating temperature control knobs to the desired temperature level.

TO SWITCH YOUR BOILER OFF FOR SHORT PERIODS

Set the programmer to OFF.

TO SWITCH YOUR BOILER OFF FOR LONG PERIODS

Set the user operating switch (or programmer) to OFF and switch off the mains electricity at the isolator switch. The facia-mounted programmer (where fitted) will retain its settings for about four weeks, after which it will revert to the factory-set programme, but the display will disappear after approximately twelve hours.

CENTRAL HEATING SYSTEM OPERATION

During the first operation of the central heating system, check that all radiators are heated evenly. If the top of a radiator is at a lower temperature than the bottom, vent it by releasing air through the vent screw at the top of each radiator. Your installer should show you how to carry out this simple procedure, and give you the special key required to do it.

Should you find any leaks in the system, or find that any radiator requires excessive venting, ask the installer or a service engineer to rectify the system.

SEALED SYSTEM OPERATION

If your boiler has been fitted to a sealed primary water system, a minimum water operating pressure must be maintained. This minimum pressure is indicated by the pre-set pointer located on the pressure gauge, which can be viewed by removing the front panel of the boiler casing.

If the pressure falls below this minimum level, the system must be re-pressurised using the method described by your installer.

To ensure that the boiler and system are full of water and pressurised, check the pressure gauge indicator needle. Consult your installer or service engineer if the system continues to lose pressure, as this could indicate a leak.

MAINS SERVICE INTERRUPTIONS

In the event of mains water supply failure, no hot water will be available from the boiler. However, the central heating system will continue to operate.

If the electricity supply fails, the boiler will not operate. When the supply is restored, the boiler will return to normal operation, but you should check that the programmer has maintained your required settings.



LOOKING AFTER YOUR BOILER AND SYSTEM

It is essential that your boiler is serviced by a competent engineer, as previously described on page 4. These notes will also be helpful in maintaining your boiler's efficiency and performance.

CLEANING

Use a damp cloth and a small amount of detergent to clean the boiler casing. Never use abrasive cleaners.

FROST PRECAUTIONS

To protect your central heating system from freezing, your installer may have fitted a mains voltage frost thermostat. If so, your boiler should only be switched OFF at the user operating switch (or programmer), otherwise the burner will not operate when there is a demand via the frost thermostat.

If your boiler has not been fitted with a frost thermostat and is not to be used during a long period of cold weather, the boiler and the system should be drained to prevent freezing. If your boiler is not to be used during short periods of cold weather, leave it on a low temperature setting.

HARD-WATER AREAS

If you live in an area where the mains water is exceptionally hard, it is recommended that an in-line scale inhibitor is used in your boiler and system, in strict accordance with the requirements of your local water company and bye laws. An isolating valve, to facilitate servicing, should also be incorporated.

Water hardness can be determined by reference to your local water company. Further information can be obtained from Worcester Heat Systems.



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 12.

If, after checking through the points suggested, there is still a fault, you should call your 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 Heatslave 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
Red 'Power On' Indicator is not illuminated.	There is no electricity supply to the boiler. Boiler internal fuse has blown.	<ul style="list-style-type: none"> • Power supply is switched on. • Check the fuse has not blown. • Check Fuse F1 on boiler PCB Board.
'Power On' Indicator illuminated only.	There is no demand requiring the boiler to operate. Boiler overheat thermostat has operated.	<ul style="list-style-type: none"> • Check boiler thermostat is set on medium to high. • Check operating switch (or programmer) is set for hot water and/or central heating and re-set if necessary. (If programmer is fitted see operating instructions). • If the boiler is programmed for central heating, check the room thermostat is turned on. • Check the pressure gauge indicator needle and re-pressurise if necessary. (See section "Sealed System Operation".) • Press overheat thermostat reset button. (See section "Overheat Thermostat".)
'Power On' & 'Lockout' indicators both illuminated.	The boiler has attempted to ignite, but has gone to lockout.	<ul style="list-style-type: none"> • Check the level in your oil tank & replenish if necessary. Remove the appliance front cover and depress the lockout reset button on the burner. (See section "Indication Lights".)



MAINTAINING YOUR BOILER'S EFFICIENCY & PERFORMANCE

Your new Worcester Heatslave 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.



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 HEATSLAVE 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 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 Heatslave 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.
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