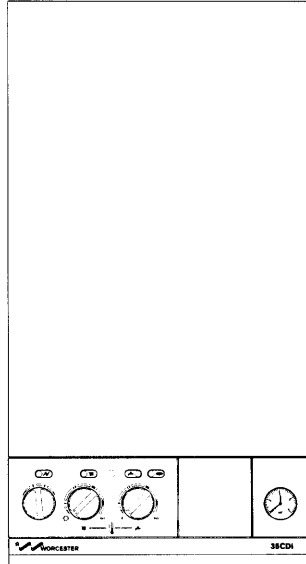


 **WORCESTER**

Bosch Group



35CDi COMBI



*Worcester Bosch supports the
Benchmark code of practice*

GC NUMBER 47 311 39 (N.G.)

GC NUMBER 47 311 40 (L.P.G.)

USER INSTRUCTIONS & CUSTOMER CARE GUIDE



EXCELLENCE COMES AS STANDARD

Thank you for purchasing a Worcester gas-fired combination appliance.

Worcester appliances are made by Worcester Heat Systems and the strictest quality control standards are demanded throughout every stage of production.

Indeed, Worcester Heat Systems have led the field in innovative appliance design and performance for more than 30 years.

The result is that your new Worcester 35CDi appliance 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 1 year parts and labour guarantee.

And, to keep your boiler operating at peak condition and efficiency, an optional maintenance scheme is available from Worcester Heat Systems Ltd. Contact our Service Contracts Team on 01905 754624 for further details.



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GENERAL INFORMATION

GAS SAFETY (INSTALLATION AND USE) REGULATIONS 1998

It is the law that all gas appliances must be installed by a competent person in accordance with the above regulations. Failure to install appliances correctly could lead to prosecution. It is in your interest and that of safety to ensure compliance with the law. The manufacturers notes must not be taken, in any way, as over riding statutory obligations.

WARNING: This appliance must be earthed and protected by a 3 amp fuse.

ELECTRICITY SUPPLY: 230V ~ 50Hz

IMPORTANT: To get the best from your Worcester appliance please read these instructions carefully.

NOTE: In the event of a fault the appliance should not be used until the fault has been corrected by a competent person.

BENCHMARK

The Benchmark initiative is a code of practice to encourage the correct installation, commissioning and servicing of domestic central heating boilers and system equipment.

A 'log book' is dispatched with every appliance. **This is a vital document that needs to be completed by the installer at the time of installation. It confirms that the boiler has been installed and commissioned according to the manufacturers instructions.**

All CORGI Registered Installers carry a CORGI ID card and have a registration number. Both should be recorded in your central heating log book. You can check that your installer is CORGI registered by calling CORGI on 01256 372300.

Without the completion of the log book, manufacturers may refuse to respond to a call-out request. It is important that your installer has given you the fully completed log book.

GENERAL DESCRIPTION

The Worcester 35CDi is a combined domestic hot water and central heating appliance. It consists of a gas fired boiler having a varying output of between 9 kW – Natural Gas G20 or 12.9 kW – LPG, Propane G31 to 25 kW in the central heating mode and upto 35.2 kW in the hot water mode and all the controls to provide mains fed domestic hot water and central heating safely and efficiently.

The appliances are supplied as standard with a manual operating switch. Alternatively a fascia mounted programmer may have been fitted.

HOT WATER MODE

When a demand is made by opening a tap or shower the hot water will be available almost immediately. The boiler will light to maintain the discharge temperature upto the preset maximum depending upon the rate of flow through the tap or shower. The maximum rate of flow is limited to 12.6 +/-15% litres/minute giving a temperature rise of about 40°C. The maximum domestic hot water delivery temperature is 62°C. The actual delivery temperature can be set, between 50 and 62°C, by the user at the control panel on the appliance. Optional mixing valves are available should these temperatures be too extreme.

CENTRAL HEATING MODE

When a demand is made for heating by the system the pump will start and the burner will light. The boiler heats up in a controlled manner which ensures that the appliance operates for as long as possible in the most efficient mode by matching the output to the system requirement and maintain the radiators at the temperature set by the user at the control panel on the appliance.

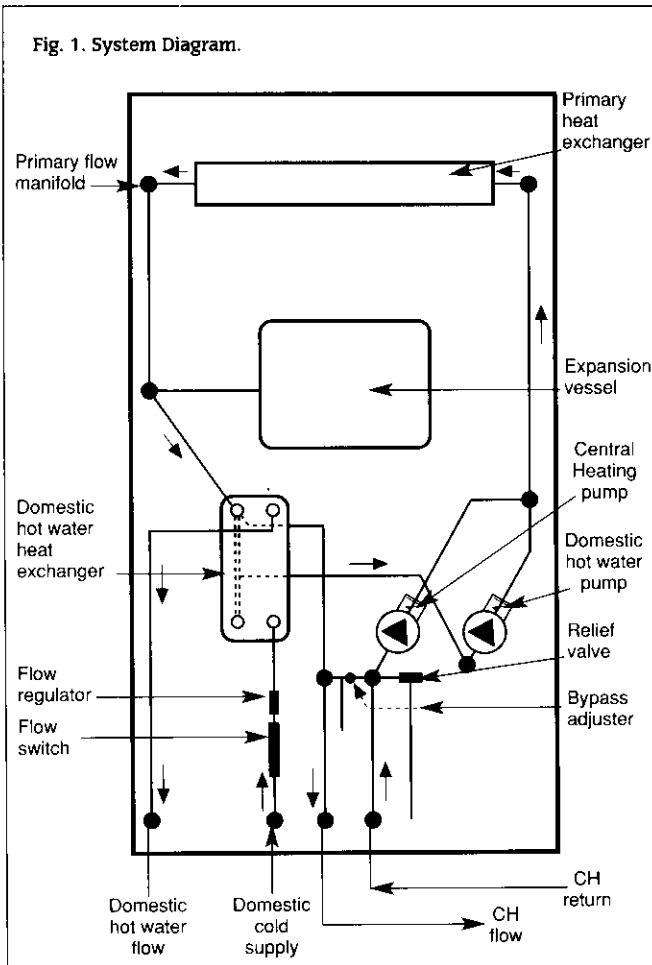
If the system no longer requires even the lowest output to maintain the radiator temperature then the burner will extinguish. The pump or fan will continue to run for a short time to remove the residual heat from the appliance.

The appliance will supply heat to the system as required.

The flow temperature, maximum 82°C, may be set by the user at the control panel on the appliance.

A demand for hot water at a tap or shower will override the central heating function for the time of the hot water demand.

It is not possible to set the controls to operate the appliance in the heating only mode.





GENERAL NOTES

CENTRAL HEATING SYSTEM

During the first few hours of operation of the central heating system, check that all radiators are being heated at an even rate. Should the upper area of a radiator be at a lower temperature than the base of the radiator, it should be vented by releasing air through the venting screw at the top of each radiator. Make sure your installer shows you how to carry out the operation. Repeated venting will reduce the quantity of water in the system and this must be replenished for safe and satisfactory operation of the appliance. Should water leaks be found in the system or excessive venting be required from any radiator, your installer or heating engineer should be contacted and the system corrected.

SEALED HEATING SYSTEM

The appliance will be fitted to a sealed heating system which is pre-pressurised. Your installer will advise you on the minimum and maximum pressure that should be indicated on the pressure gauge. See Fig. 2. Check regularly that this pressure is maintained and contact your installer or maintenance engineer if there is a permanent significant drop in pressure indicated on the gauge. If the system loses pressure it should be re-pressurised as instructed by the installer (N.B. Maximum operating pressure 2.5 bar).

CLEARANCES

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

*Note: If a side flue is used then the space at that side must not be less than 25mm.

| | mm |
|-----------------|-----|
| Left-hand side | 5 * |
| Right-hand side | 5 * |
| In Front | 600 |
| Above | 35 |
| Below | 200 |

Note: If the appliance is built into a compartment after installation then leave a gap of 75mm between the appliance casing front and the inner face of the compartment door. The 'In Front' dimension of 600mm must still be achieved with the compartment door open.

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 BS2767:10. 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 must be suitable for operating at the available mains pressure. Thermostatically controlled or pressure equalising shower valves will guard against the flow of water at too high a temperature.

Hot and cold mains fed water can be supplied directly to an overrim flushing bidet subject to local water company requirements. With all mains fed systems the flow of water from 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 Services on 08705 266241.

HOT AND COLD FLOW

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.

USE IN HARD WATER AREAS

Normally there is no need for scale protection. However, in areas of exceptionally hard water supply it is recommended that an in line scale inhibitor.

Installation of a scale inhibitor assembly should be in accordance with the requirements of the local water company. An isolating valve should be fitted to allow servicing.

The water hardness can be determined by reference to the local water company.

VENTILATION OF THE APPLIANCE

This is a room sealed appliance, any ventilation openings in a wall or door must not be obstructed. Do not allow the flue terminal fitted on the outside wall to become obstructed or damaged.

If the appliance is fitted in a compartment do not use the compartment for storage purposes unless it conforms to the requirements of BS 6798:1987: Section 6 and the requirements of Section 6. Air Supply in the Installation Instructions. It is essential that the airing space is separated from the boiler space by a perforated non-combustible partition as described in BS 6798:1987.

NOTE: Do not place anything on top of the appliance.

CIRCULATING PUMP

This may be fitted with a speed adjuster. If so it will be factory set at maximum and should not be changed.

FROST PRECAUTIONS

Your installer, or any competent service engineer will advise you on suitable frost precautions.

For short periods the built-in frost protection of the appliance will be adequate.

If the appliance is not to be used for a long period of time and there is a likelihood of freezing, then the appliance should be drained.

SERVICE

Annual servicing is important to ensure continuing high efficiency and long life of your appliance. Suitable servicing arrangements should be made with a competent third party. In the event of any difficulty in making suitable service arrangements, Worcester Heat Systems Ltd. will be happy to discuss regular servicing and offer a comprehensive maintenance contract.

WARNING

If a gas leak exists, or is suspected, turn off the gas supply to the appliance at the service cock and consult your local British Gas Engineer or service engineer.

Do not touch any electrical switches to turn them either on or off. Open all windows and doors. Do not smoke. Extinguish all naked lights.

CLEANING

Do not use abrasive cleaners on the outer casing. Use a damp cloth and a little detergent.

FAULT CONDITION

A fault condition will be indicated by a flashing light display on the control panel. In this event press the reset button on the panel in an attempt to restart the appliance. If the appliance does not return to normal operation then contact your installer/engineer or Worcester Heat Systems advising of the appliance serial number and the flashing light sequence, i.e. which lights flash and at what speed.



OPERATION OF CONTROLS

(See also label on inside of appliance front panel)

The appliance is fitted with a power switch and domestic hot water and central heating temperature controls. A facia mounted programmer may also be fitted.

It is not possible to set the controls to operate the appliance in a heating only mode.

POWER SWITCH

This controls the electricity supply to the appliance. Do not switch off as this will prevent the operation of the automatic frost protection and pump anti-jamming device from working.

DOMESTIC HOT WATER TEMPERATURE

The position of this knob will determine the temperature of the water delivered to the domestic hot water supply between the 'MIN' and 'MAX' position.

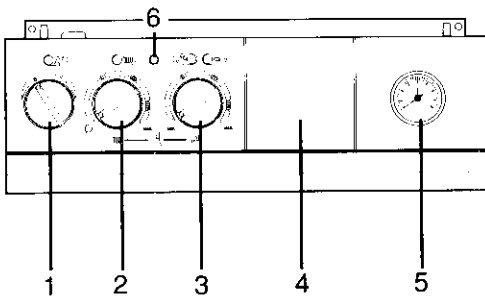
CENTRAL HEATING TEMPERATURE

The position of this knob will determine the temperature of the water delivered to the radiators between the 'I' and 'MAX' position.

FACIA MOUNTED PROGRAMMER (if fitted)

Your installer may have fitted a mechanical programmer into the facia of your appliance. Operating instructions are supplied with the programmer.

Fig. 2. 35CDi Facia Controls



1. Mains ON/OFF Control Knob
2. Central Heating Temperature Control Knob and ON/OFF Control
3. Domestic Hot Water Temperature Control Knob
4. Programmer /Clock Position - (Optional)
5. System Pressure Gauge
6. Reset Button

SYSTEM PRESSURE GAUGE

The red needle has been set to show the sealed system pressure which is required for the appliance to operate effectively. The grey needle will show the actual pressure in the system.

ELECTRICAL SUPPLY FAILURE

The appliance will not operate without electricity. Normal operation of the appliance will usually resume after the supply is restored. It may be occasionally necessary to press the reset button to restart the appliance.

OVERHEAT PROTECTION

Overheat protection is provided within the control system which interrupts the electricity supply in the event of overheating. Press the reset button to restart the appliance.



TO LIGHT AND STOP THE APPLIANCE

INDICATOR LIGHTS

Mains Supply Light (1):

- OFF** : No mains electricity to the appliance
- ON** : Mains electricity is connected to the appliance

Central Heating Demand Light (2):

- OFF** : No demand for heat to the central heating circuit
- ON** : Central heating demand
- FLASHING SLOW** : Ignition lockout
(once per second)
- FLASHING FAST** : Appliance fault (other than ignition lockout)
(five times per second)

Domestic Hot Water Demand Light (4):

- OFF** : No demand for domestic hot water
- ON** : Domestic hot water demand
- FLASHING FAST** : Air flow fault
(five times per second)

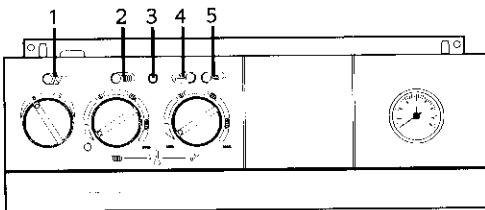
Central Heating and Domestic Hot Water Demand Lights (2 and 4):

- BOTH FLASHING SLOW** : Overheat cut-off
(once per second)

Burner On Light (5):

- OFF** : Burner off
- ON** : Burner on

Fig 3- 35CDi Indicator Lights



- | | |
|---------------------------------|------------------------------------|
| 1. Mains Supply Light | 4. Domestic Hot Water Demand Light |
| 2. Central Heating Demand Light | 5. Burner On Light |
| 3. Reset Button | |

TO LIGHT THE APPLIANCE

Check that the water valves to the central heating circuit are open. Check that the grey needle on the pressure gauge is not below the required pressure.


Switch on the gas supply to the appliance. Switch on the mains electricity. The green power on indicator will light. Set the room thermostat, if fitted, to maximum. Turn the central heating temperature control knob to 'MAX'. The red central heating demand indicator will light.

The burner will light and the red Burner On indicator will light.

Set the central heating and hot water temperature control knobs and the room thermostat, if fitted, to the desired temperature.

TO STOP THE APPLIANCE

For Short Periods

Turn the central heating temperature control knob fully anti-clockwise to the  position.

For Long Periods

Turn the operating switch to the 'O' position. Switch off the mains electricity and gas supplies. **Note:** This will stop the automatic (internal) frost protection and pump protection sequences from operating.

In periods of very cold weather, leave the electricity and gas supplies on to maintain the (internal) autofrost and pump protection features.

If the appliance is to be left for long periods of freezing weather, turn off the gas and electricity supplies and drain the appliance and system.

A fascia mounted electronic programmer will retain its settings for about two weeks, after which it will return to the factory set programme. The display will disappear after approximately 12 hours.

A fascia mounted mechanical programmer will require resetting once the operating switch has been set to 'O' or the mains supply has been disconnected.

ELECTRICITY SUPPLY FAILURE

If the electricity supply fails the appliance will not operate. Once the supply is restored the appliance will return to normal operation. If a programmer is fitted, check that the settings have been maintained.

OVERHEAT CUT-OFF THERMOSTAT

The appliance will enter a lockout condition in the event of overheating.

An overheat cut-off thermostat is fitted to the appliance which will interrupt the electricity supply to the gas valve.

If the overheat cut-off has operated, both the central heating and the hot water demand indicators will flash together.

IGNITION LOCKOUT

The appliance will enter a lockout condition in the event of the burner failing to ignite.

If the burner fails to light within a preset time of 10 seconds the electricity supply to the gas valve will be interrupted.

Check that the gas supply has not been interrupted.

Press the reset button.

If this condition continues to occur, then call a service engineer.

AIR FLOW DEVICE

The appliance will enter a lockout condition in the event of an air flow fault.

If the controls fail to detect the correct air flow through the appliance the electricity supply to the gas valve will be interrupted.

The appliance will try to re-light once the air-flow signal is re-established. Check that the flue terminal has not been obstructed or damaged, and that the fan and air pressure switch are in good order.

If this condition continues to occur, then call a service engineer.



APPLIANCE FAILS TO OPERATE

A diagnostic system is provided which gives a flashing light display on the fascia panel. Press the reset button to attempt to restart the appliance. If the appliance does not return to normal operation then contact your installer or Worcester Heat Systems.

More than 30% of all calls made to Worcester Heat Systems to report appliance 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 – please refer to the General Information, Notes and Lighting Instructions ensuring all controls are set correctly.

If, after following the instructions the appliance still fails to operate correctly call the Worcester Heat Systems Service Centre on 08457 256206. Arrangements will be made for an engineer to call as soon as possible.

CALL-OUT CHARGES

All of our field service engineers are factory trained.

If you request a visit from an engineer and your appliance has been installed within the last 12 months, no charge will be made for parts and/or labour, providing:

- The appliance was commissioned correctly on installation.
- An appliance fault is found and the appliance has been installed within the past 12 months.

A call-out charge will be made where:

- The appliance has been installed for over 12 months, or
- Our Field Service Engineer finds no fault with the appliance (see note), or
- The cause of breakdown is 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 appliance by any third party will not be accepted.

MAINTAINING YOUR APPLIANCE

Your new Worcester 35CDi gas-fired appliance represents a long-term investment in an efficient reliable, high quality product. In order to realise its maximum working life, and to ensure that 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 12 months 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 Contracts Department on **01905 754624** for help.



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



YOUR WORCESTER 35CDi COMBI GUARANTEE

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

1. That during the period 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 Ltd.
2. That the householder may be asked to prove the date of installation, that the appliance 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.
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.

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 appliance 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.

IMPORTANT: SERIAL NUMBER. Copy the number off the Guarantee Card.

FOR YOUR OWN RECORD


MODEL

SERIAL NUMBER

(See identity label inside appliance casing)

TYPE/SIZE

DATE OF INSTALLATION

Do not forget to keep the  Log book in a safe place.

CORGI CONTACT

All **CORGI Registered** installers carry a **CORGI ID** card and have a registration number. Both should be recorded in your central heating log book. You can check your installer is **CORGI Registered** by calling **CORGI** on **01256 372300**



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EXCELLENCE COMES AS STANDARD

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