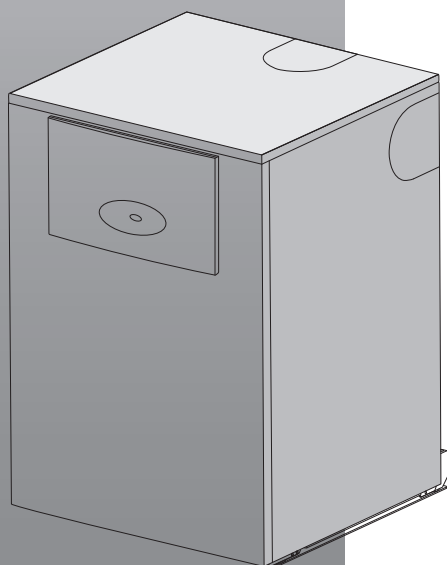


USER INSTRUCTIONS

FLOOR STANDING RSF GAS FIRED CONDENSING COMBINATION BOILER

GREENSTAR HIGHFLOW 440CDi^{ErP} & 550CDi^{ErP}

FOR SEALED CENTRAL HEATING SYSTEMS AND MAINS FED DOMESTIC HOT WATER



672084885-00_1W6

The appliances are for use with:
Natural Gas or L.P.G. (Cat. II 2H3P type C13, C33 & C53)

Natural Gas:
440CDi^{ErP}, GC number 47-406-85
550CDi^{ErP}, GC number 47-406-87

L.P.G.:
440CDi^{ErP}, GC number 47-406-86
550CDi^{ErP}, GC number 47-406-88

UK/IE

PREFACE

PLEASE READ THESE INSTRUCTIONS CAREFULLY

These instructions are applicable to the Worcester, Bosch Group boiler model stated on the front cover only.

These instructions apply in the UK/IE only and must be followed except for any statutory obligation.

After installation please leave this User instruction Manual, Installation, Commissioning and Servicing Instructions and completed Benchmark Checklist with the user.

DEDICATED TO HEATING COMFORT

Thank you for purchasing a Greenstar gas-fired condensing combination boiler manufactured by Worcester, Bosch Group. The company prides itself on manufacturing boilers to the

strictest quality control standards throughout every stage of production.

Worcester, Bosch group has led the field in innovative boiler design and performance for 50 years. This heritage means all our products are of exceptional quality and proven reliability.

The Greenstar range in particular is extremely energy efficient, offering you economical running costs and value for money. It sits in SEDBUK 2005 Band A, scoring highly in SEDBUK 2009, and is therefore amongst the top energy rated boilers available.

There is also the reassurance of our no-nonsense 2 years parts and labour guarantee - backed up by Worcester Total Cover, an optional complete maintenance scheme to keep your boiler operating at peak condition and efficiency.

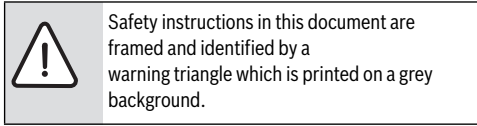
CONTENTS

1	Symbols and safety precautions	3	5	Clearances	11
1.1	Explanation of symbols	3	6	Maintaining your Boiler	12
1.2	safety precautions	3	7	Fault Finding	13
2	Product details	4	7.1	Error codes	14
2.1	General Information	4	7.2	Extreme cold weather	15
2.2	Product data on energy consumption	4	8	Fault or Breakdown	16
3	Controls	5	9	Tips on energy saving	17
3.1	Switching the boiler ON/OFF	6	10	Environment / disposal	18
3.1.1	Switching ON	6	11	Your guarantee	18
3.2	Setting the central heating temperature	6	12	Glossary	19
3.2.1	Controlling the central heating	6			
3.3	Frost protection (for the boiler)	7			
3.3.1	Frost protection (for the heating system)	7			
3.4	Setting the domestic hot water temperature	7			
3.5	ECO indicator	8			
3.6	Fault condition	9			
4	System Pressure	9			
4.1	Sealed heating systems	9			
4.2	Locating the integral filling link	10			

1 SYMBOLS AND SAFETY PRECAUTIONS

1.1 EXPLANATION OF SYMBOLS

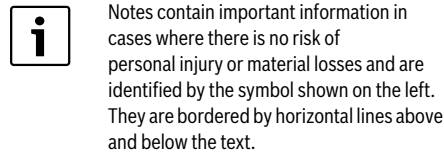
WARNING SYMBOLS




Signal words indicate the seriousness of the hazard in terms of the consequences of not following the safety instructions.

- **NOTICE** indicates possible damage to property or equipment, but where there is no risk of personal injury.
- **CAUTION** indicates possible personal injury.
- **WARNING** indicates possible severe personal injury.

IMPORTANT INFORMATION



ADDITIONAL SYMBOLS

Symbol	Meaning
1.	a numbered step in an action sequence
▶	a step in an action sequence
	a reference number to identify or refer to a part or item
•	a list entry
–	a list entry (second level)

1.2 SAFETY PRECAUTIONS

IF YOU SMELL GAS

A gas leak could potentially cause an explosion. If you smell gas, observe the following rules.

- ▶ Prevent flames or sparks:
 - Do not smoke, use a lighter or strike matches.
 - Do not operate any electrical switches or unplug any equipment.
 - Do not use the telephone or ring doorbells.
- ▶ Turn off the gas at the meter or regulator.
- ▶ Open windows and doors.
- ▶ Warn your neighbours and leave the building.
- ▶ Prevent anyone from entering the building.
- ▶ Well away from the building: call the National Gas Emergency Service on 0800 111 999.
- ▶ L.P.G. boilers: Call the supplier's number on the side of the gas tank.

BOILER OPERATION:

This boiler must only be operated by a responsible adult who has been instructed in, understands and is aware of the boiler's operating conditions and effects.

COMBUSTIBLE AND CORROSIVE MATERIALS:

Chemically aggressive substances can corrode the boiler and invalidate any guarantee.

- Do not store or use any combustible materials (paper, thinners, paints, propellants, cleaning agents etc.) inside the cupboard containing the boiler or within the vicinity of the appliance.

FITTINGS AND MODIFICATIONS:

Only a competent engineer can remove the boiler case and carry out any work, in accordance with the Gas Safety (Installation and Use) Regulations.

- Do not remove the boiler case.

Any misuse or unauthorised modifications to the boiler, flue or associated accessories and heating system will invalidate the guarantee.

- Do not modify the boiler or flue system in any way.

Worcester, Bosch Group accepts no liability arising from any such actions. This does not affect your statutory rights.

CLEANING THE BOILER CASE:

Use a damp, soft cloth to clean the outer painted metal case of the boiler, do not use chemicals or abrasive materials.

2 PRODUCT DETAILS

2.1 GENERAL INFORMATION

SERVICING



Ensure that the service engineer completes the Service Record in the Benchmark Checklist after each service. The Benchmark Checklist and service interval record can be found at the rear of the Installation, Commissioning and Servicing Instructions.

- The boiler must be serviced regularly by a competent, qualified person, such as a Worcester service engineer or other Gas Safe registered engineer.
- Always use original spares, to help maintain the efficiency, safety and reliability of the boiler and have the Service Record completed in the Benchmark Checklist.

The completed Benchmark Checklist will be required in the event of any guarantee work and may be required by the local Building Control Inspector.

BENCHMARK STANDARD



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 “checklist” is dispatched with every boiler and can be found towards the back of the Installation, Commissioning and Servicing Instructions. 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 manufacturer's instructions.

The log book provides space for the recording of regular servicing of the boiler/heating system and this can become a valuable document when, for example, you wish to sell the property. The log book will show a potential purchaser that the heating system has received regular professional maintenance and servicing during its lifetime.

The Benchmark initiative aims to:

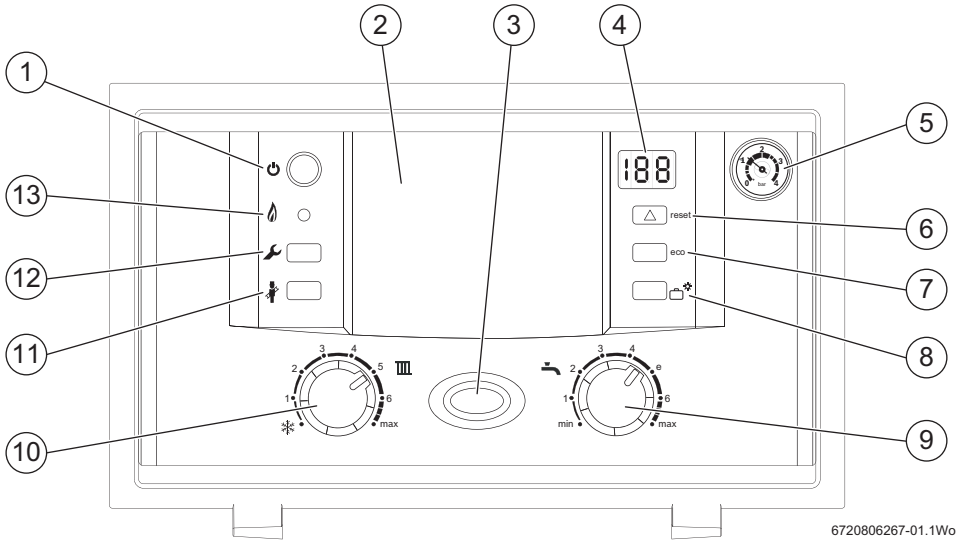
- Raise standards among professional installers
- Build and maintain high safety standards in the industry
- Improve customer satisfaction levels
- Make a contribution to the nation's commitment to climate change

2.2 PRODUCT DATA ON ENERGY CONSUMPTION

The product data on energy consumption can be found in the installation and maintenance instructions for contractors.

3 CONTROLS

► To gain access to the boiler controls pull the flap down.



6720806267-01.1Wo

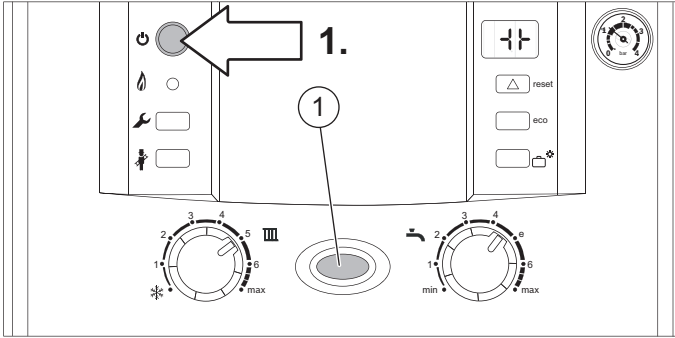
Fig. 1 Basic boiler controls

Boiler Controls	1	Master switch for ON/OFF	8	Not used
	2	Position for optional programmer	9	Hot water temperature control
	3	Power ON and fault indicator (blue)	10	Central heating temperature control
	4	Boiler display	11	Service Engineer button only
	5	System pressure gauge	12	Service Engineer button only
	6	Reset button	13	Burner ON indicator light (green)
	7	ECO button (Domestic Hot Water pre-heat control)		

3.1 SWITCHING THE BOILER ON/OFF

3.1.1 SWITCHING ON

1. Switch on the boiler by pressing the main power button.
The power indicator light shows blue [1].



67 20 806 267-02-1Wo

Fig. 2 Power button



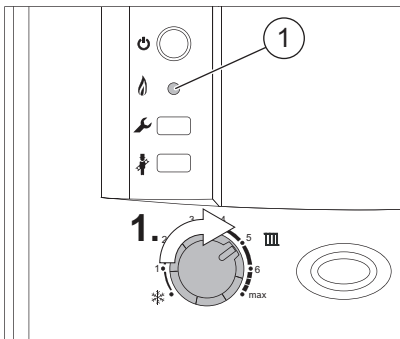
The boiler runs for 15 minutes at minimum heating output to fill the condensate trap. The display alternates between and the central heating flow temperature. This occurs every time the mains supply has been interrupted.

Switching off

- Switch off the boiler by pressing the main power button.
The blue power button light goes out.

3.2 SETTING THE CENTRAL HEATING TEMPERATURE

1. Turn the central heating temperature control to the desired level, between approx. 35°C and 90°C.
When the burner is lit, the green indicator light underneath the on/off switch is illuminated [1].



Min	---	40 °C
1	---	47 °C
2	---	53 °C
3	---	61 °C
4	---	68 °C
5	---	74 °C
6	---	80 °C
Max	---	82 °C

6720806267-03,1Wo

Fig. 3 Settings for the central heating temperature (with approximate temperatures)

3.2.1 CONTROLLING THE CENTRAL HEATING

Central heating systems must be controlled effectively using a programmer or timer and a room thermostat.

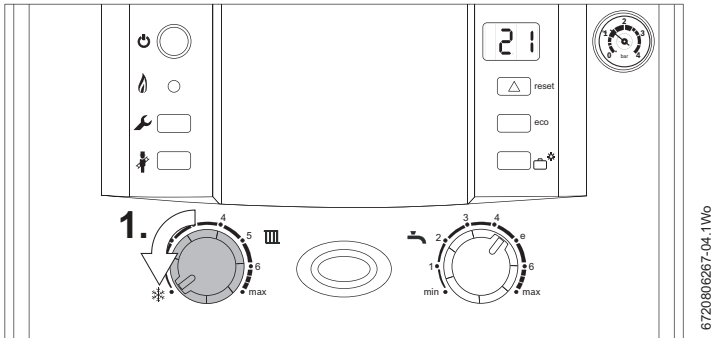
- For further information on how to control your central heating system please refer to the individual user guides for the programmer or timer installed in your home.

3.3 FROST PROTECTION (FOR THE BOILER)

Activating frost protection will turn off the central heating system.

Heating of domestic water will stay activated.

If the temperature within the boiler drops to 5°C the boiler will fire to avoid the possibility of freezing.



6720806267-04.1Wo

To activate frost protection:

- ▶ Leave master switch on.
- ▶ Turn the central heating control temperature control to ❄️.

3.3.1 FROST PROTECTION (FOR THE HEATING SYSTEM)

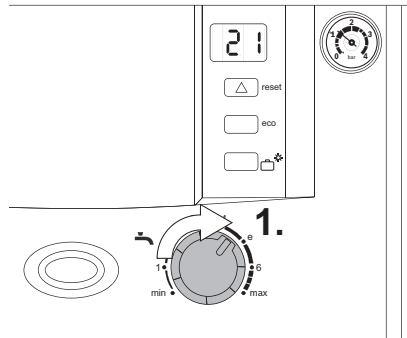
If remote pipework is likely to be subject to freezing conditions:

- ▶ Ensure the installer has fitted a frost thermostat in the area to protect the pipework from freezing.
- ▶ Ensure the installer has added a suitable anti-freeze fluid to the water in the central heating system.

3.4 SETTING THE DOMESTIC HOT WATER TEMPERATURE

1. Turn the domestic hot water temperature control to the desired level, between approximately 40°C and 60°C.

Min	---	45 °C
1	---	50 °C
2	---	52 °C
3	---	54 °C
4	---	56 °C
e	---	58 °C
6	---	60 °C
Max	---	65 °C



6720806267-05.1Wo

Fig. 4 Settings for domestic hot water temperature (with approximate temperatures)

3.5 ECO INDICATOR



If your boiler has an in-built fascia mounted programmer and the mains supply is interrupted, the ECO button will need to be reset by pressing and holding for three seconds.

You can choose to run your boiler in pre-heat mode or in ECO mode. Pre-heat reduces the time taken to produce hot water at the tap and is controlled by the ECO button. When the ECO button is illuminated, the boiler runs in ECO mode and pre-heat is not available.

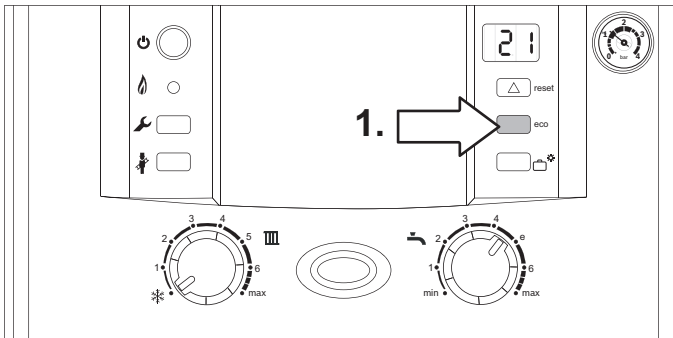
When the ECO button is lit the pre-heated tank of hot water is turned off, but the boiler will supply hot water as a normal Combi boiler.

It will take longer to obtain hot water at the tap in ECO mode as the boiler is not maintaining a supply of hot water for immediate use.

When the ECO button is NOT lit the boiler is in pre-heat mode for hot water.

Hot water will now be available at the tap almost immediately as the boiler constantly maintains a tank of hot water ready for use.

MANUALLY OPERATING THE PRE-HEAT MODE



6720806267-06.1W/o

To activate pre-heat mode:

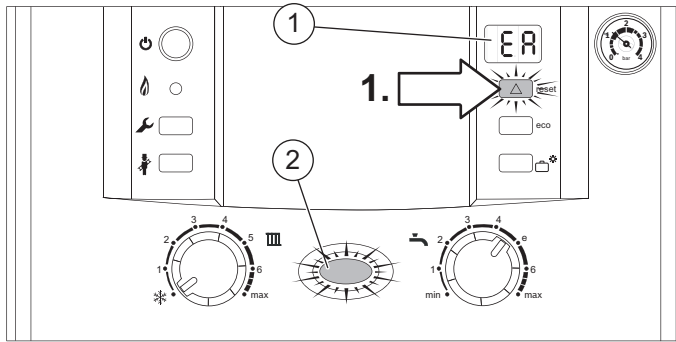
- ▶ Press the ECO button until it is no longer illuminated.

To activate ECO mode:

- ▶ Press the ECO button until it is illuminated.

3.6 FAULT CONDITION

In the unlikely event of a fault occurring while the boiler is in operation the reset button and the main power indicator will flash. The display will show a fault code.



To reset the boiler:

- ▶ Press the reset button for three seconds.
The reset button and the mains power indicator will stop flashing.
The boiler will function normally, dependent on programmer and room thermostat settings.



If the fault cannot be cleared by pressing the reset button:

- ▶ Refer to the fault finding section on page 15 of this user guide.
- ▶ Call Worcester, Bosch Group, giving a description of the fault and, if possible, the fault code from the seven segment display. Alternatively contact other Gas Safe registered personnel for assistance.

4 SYSTEM PRESSURE

4.1 SEALED HEATING SYSTEMS

This boiler is fitted to a sealed heating system which is pre-pressurised. Your installer will advise you of the minimum and maximum pressure indicated on the pressure gauge.

- ▶ Check regularly that the pressure is maintained.
- ▶ If the pressure gauge reads less than 1 bar then the system requires re-charging.
- ▶ Contact your installer or maintenance engineer if a permanent significant decrease or increase in pressure is indicated on the pressure gauge.

The filling method is a integral filling loop fitted valves and flexible hose.

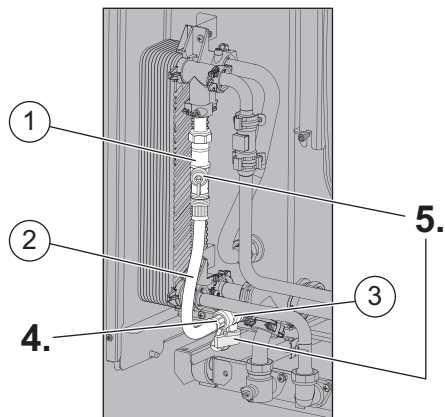
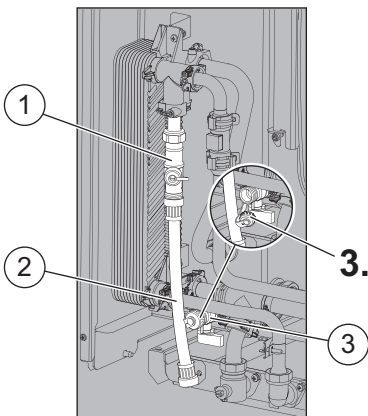
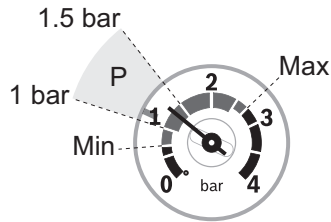
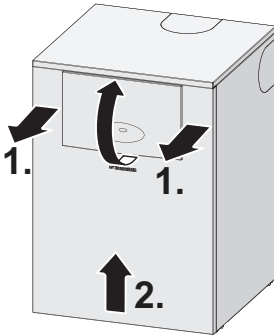
4.2 LOCATING THE INTEGRAL FILLING LINK

To access the filling loop connection:

1. Pull the upper edges of the front panel forwards.
2. Lift front panel.

Using the filling loop:

3. Unscrew the tank drain cap from the Tank drain valve.
4. Connect the integral filling loop from the Flow valve [1] using the hose [2] to the Tank drain valve [3].
5. Open the flow and tank drain valves.
 - ▶ Fill the system to a pressure up to 1.5 bar.
 - ▶ Close the flow valve.
 - ▶ Close the tank drain valve.
 - ▶ Disconnect the integral filling loop.
 - ▶ Refit tank drain cap.



6720806267-08-1W6

Fig. 5 Integral filling loop

5 CLEARANCES

Your installer will have provided adequate space around the boiler for safety and servicing access.

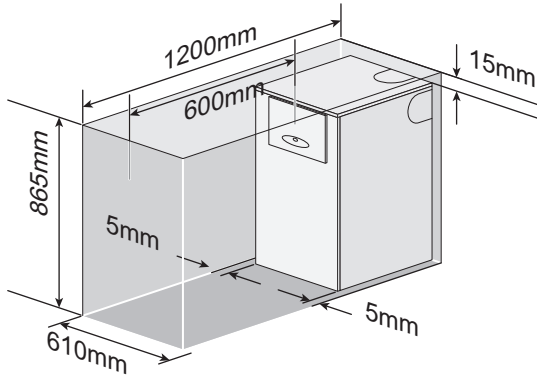


CAUTION: Restricted space.

The boiler may overheat.

▶ Do not restrict this space with the addition of cupboards, shelves etc. next to the boiler.

SERVICE CLEARANCES



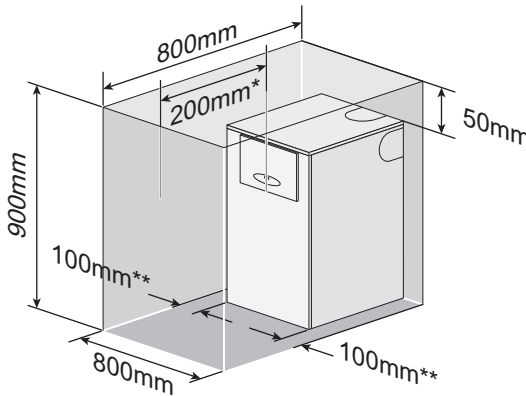
6720806267-09-1W6

Fig. 6 Service clearances

UNVENTILATED COMPARTMENT CLEARANCES

This is a room sealed boiler and does not require any air for combustion from inside the property.

In spite of the requirements of BS 6798 and BS 5440 there is no need for ventilation openings to be provided in the compartment because of the low heat loss from the boiler casing, if the clearances shown are maintained.



6720806267-10-1W6

Fig. 7 Unventilated compartment clearances

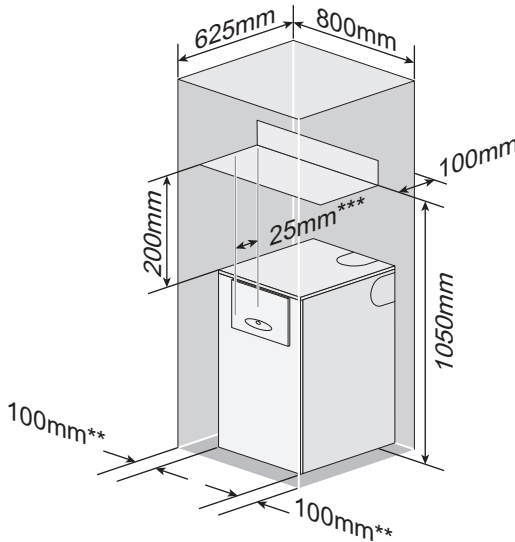
[*] Space required for unventilated areas with a removable door or panel, but 600mm to a fixed surface for servicing.

[**] This space can be reduced to 50mm for **one side only** as long as both side clearances add up to the total of both the side measurements shown, or more.

AIRING CUPBOARD CLEARANCES

If the boiler is fitted into an airing cupboard then the diagram opposite shows the minimum clearances required around the boiler and also the clearances for any shelf constructed above the boiler.

If a compartment is built around the boiler after installation, then the compartment must be separated from the boiler space by a noncombustible partition as described in BS 6798.



6720806267-11_1Wo

Fig. 8 Airing cupboard clearances

[**] This space can be reduced to 50mm for **one side only** as long as both side clearances add up to the total of both the side measurements shown, or more.

[***] Space required for airing cupboards with a removable door or panel, but 600mm to a fixed surface for servicing.

6 MAINTAINING YOUR BOILER

Your new gas-fired boiler represents a long term investment in a reliable, high quality product.

Wipe the boiler casing with a soft clean cloth. Please do not use chemical cleaning products which may damage the paint finish.

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 servicing and maintenance checks from a competent person beyond the initial two year guarantee period.

If your Greenstar gas-fired boiler should fail to operate correctly or requires servicing, please contact the Worcester, Bosch Group Appointments Team (see rear cover for details).

Details of the boiler including the Gas Council number can be found on the front cover of these User Instructions and on the boiler identification label on the boiler fascia.

The Gas Council number is also listed on the front cover of your Installation, Commissioning and Servicing Instructions.

7 FAULT FINDING

In the event that the boiler stops functioning or does not perform as expected, you can carry out a few simple checks. These checks are some of the most common causes and are listed in the table below. Should the problem persist or if other fault codes are displayed, then it will be necessary to contact the Worcester, Bosch Group.

This table gives information on basic operating system problems.

Problem	Cause	Remedy
EA fault code flashing on display	No gas supply/low gas supply pressure	▶ Contact your gas supplier.
	Condensate outlet blocked	▶ If it is safe to do so, check your condensate pipe outlet for blockages, such as ice or foreign objects.
	Flue blocked	▶ If it is safe to do so, check your flue outlet for damage or blockages.
Desired room temperature is not reached	Thermostatic radiator valve(s) set too low	▶ Increase thermostatic radiator valve setting(s)
	Temperature control for central heating flow on boiler set too low	▶ Increase central heating flow temperature control setting
	Air trapped in heating system	▶ Bleed radiators and recharge heating system
	Low system water pressure	▶ Re-pressurise the system, refer to pages 10
	Low temperature setting on the boiler controls	▶ Increase settings on boiler controls
Desired room temperature too high	Radiators are too hot	▶ Turn down thermostatic radiator valves/room thermostat
		▶ Reduce central heating temperature by turning down the Central Heating control on boiler
Heating stays on for too long	Clock is incorrectly set	▶ Check setting and adjust
ON/OFF Indicator is not illuminated	Momentary power failure	▶ Disconnect boiler supply, wait a few seconds then reconnect.
Hot water temperature too low	Temperature set too low on boiler controls	▶ Check setting and adjust
	Water flow at tap too high	▶ Reduce flow rate at tap
	Air trapped in heating system	▶ Bleed radiators and recharge heating system
	Low system water pressure	▶ Re-pressurise the system, refer to pages 10
Hot water temperature too high	Temperature set too high on boiler controls	▶ Check setting and adjust
	Water flow at tap too low	▶ Increase flow rate at tap

Table 1 Fault finding

7.1 ERROR CODES



When calling Worcester, Bosch Group, you may be asked for the error code. This Table is for you to help identify the possible cause of the fault.

- ▶ Do not try to rectify any of the faults listed below by yourself.
- ▶ Contact British Gas or a competent, qualified engineer (Gas Safe registered personnel).

Error code	Description
<i>A7</i>	A7 Hot water NTC sensor defective.
<i>A8</i>	A8 Break in communication to weather compensating clip-in control or Greenstar Comfort II RF
<i>b1</i>	b1 Code plug not detected.
<i>C6</i>	C6 Fan speed too low.
<i>E2</i>	E2 CH flow NTC sensor defective.
<i>E9</i>	E9 Safety temp. limiter in CH flow has tripped.
<i>EA</i>	EA Flame not detected. Check, if it safe to do so: <ul style="list-style-type: none"> • if gas is on in the house • for frozen condensate pipe • for blocked flue outlet
<i>F0</i>	F0 Internal error.
<i>F7</i>	F7 Flame detected even though boiler switched off.
<i>FA</i>	FA Flame detected after gas shut off.
<i>Fd</i>	Fd Reset button pressed by mistake.

7.2 EXTREME COLD WEATHER

In some instances where the condensate pipe work is run externally or in an unheated area, such as a garage, the condensate pipe work can be at risk of freezing, even if well insulated.

A frozen/blocked condensate pipe will cause the boiler to shut down.



WARNING: Falling hazard!

Failure to follow this guidance may result in personal injury.

- ▶ Only attempt to thaw a condensate pipe that is at ground level, and that is easily accessible.
- ▶ Never attempt to thaw a condensate pipe that is at height.



CAUTION: Pipe damage

- ▶ **DO NOT** use boiling water to thaw the condensate pipe!

If the condensate pipe has frozen:

- ▶ Locate the blockage.
It is likely that the pipe is frozen at the most exposed point outside the building or where there is an obstruction to flow. This could be the open end of the pipe, at a bend or elbow, or where there is a sag in the pipe in which condensate can collect. The location of the blockage should be identified as closely as possible before taking further action.
- ▶ Thaw the frozen pipe.
The pipe can be thawed by applying a hot water bottle, a microwaveable heating pack (the sort used for muscular aches and pains) or a cloth soaked in hot water to the exterior of the pipe, close to the point of blockage. Hot water, but not boiling, can also be poured onto the pipe from a watering can or similar container.
- ▶ Once the pipe has been thawed the boiler must be reset, press the reset button for five seconds and wait two to three minutes for the boiler to restart.
- ▶ If the boiler does not restart, contact Worcester, Bosch Group Appointments Team on: 0330 123 9339.
- ▶ Contact your installer in order to find a permanent solution to the problem.

8 FAULT OR BREAKDOWN

This boiler is supported in the UK and Eire by Worcester, Bosch Group.

Specialist service engineers are available to attend a breakdown occurring on this boiler.



Invoices for attendance and repair work carried out on this boiler by any third party will not be accepted.

-
- No charge will be made for parts and/or labour providing:
A boiler fault is found and the boiler is within the guarantee period. Reasonable evidence of this must be supplied on request. i.e. the Benchmark Checklist.
 - A call-out charge will be made where:
 - The boiler is outside the guarantee period.
 - Evidence cannot be provided that the first year service inspection has been carried out (i.e. an entry in the Benchmark Checklist).
 - Our Field Service Engineer finds no fault with the boiler.
 - The cause of breakdown is misuse or with other parts of your plumbing/heating system, or with equipment not supplied by Worcester, Bosch Group.

TECHNICAL SUPPORT



No boiler fault is found on over 30% of all service calls.

In the case of a suspected fault, refer to the fault finding section of this guide.

In the event of a boiler fault or breakdown please contact Worcester, Bosch Group appointments team on 0330 123 9339. Your advisor will arrange for an engineer to call with the minimum of delay; priority will be given to breakdown situations (no hot water and/or heating).

9 TIPS ON ENERGY SAVING

HEATING ECONOMICALLY

The boiler provides a high level of comfort whilst keeping gas consumption low and so minimising the environmental impact.

The gas supply to the boiler's burner is regulated according to the demand for heat. The boiler operates with a low flame if the demand for heat reduces. The technical term for this process is modulating control.

Modulating control reduces temperature fluctuations and provides an even distribution of heat throughout the home. This means that the boiler may stay on for relatively long periods of time but will use less gas than a boiler that continually switches on and off.

CENTRAL HEATING SYSTEMS WITH ROOM THERMOSTAT/THERMOSTATIC RADIATOR VALVES

With modern heating systems designed around a 20 °C heat loss across the system, the optimum setting for a condensing boiler will be approximately between the first and second segment on the central heating temperature control. The system must be balanced correctly and the radiators may need upgrading.

The temperature of each room can be set individually (except primary room with the room thermostat) using the thermostatic radiator valves.

ROOM THERMOSTATS

Reducing the setting of the room thermostat by 1 °C can reduce fuel consumption by up to 10%.

NEW CONTROL SYSTEMS

Upgrade your heating control system if necessary with the latest equipment available.

ROOF INSULATION

Around 30% of the heat loss from a property is through the roof. Replace any old insulation with new insulation, preferably of around 200mm thickness or more.

WINDOW FRAMES

Single glazed windows, particularly those with steel frames, can lose a great deal of heat. Consideration should be given to replacement with PVCu or wooden framed double glazed units.

RADIATORS

If a radiator is sited underneath a window, its performance will be affected if the curtains are allowed to drape over the radiator. Shelves fitted above or in front of the radiator should also be avoided.

It is advisable to manually adjust all thermostatic radiator valves every 2 - 3 months to prevent them sticking. Ensure radiator valves are correctly set and not damaged.

DRAUGHTS

Try to ensure that draughts around doors, windows, letter boxes and keyholes etc. are reduced by using a suitable draught excluder.



WARNING: Air vents

- ▶ Do not block or seal any air vents that are installed to ensure that the central heating boiler operates safely.

CURTAINS

Lined curtains, or heavier full length curtains can provide excellent insulation. However, always ensure that the curtains do not drape over radiators.

10 ENVIRONMENT / DISPOSAL

Environmental protection is a fundamental corporate strategy of the Bosch Group. The quality of our products, their economy and environmental safety are all of equal importance to us and all environmental protection legislation and regulations are strictly observed. We use the best possible technology and materials for protecting the environment taking account of economic considerations.

PACKAGING

We participate in the recycling programmes of the countries in which our products are sold to ensure optimum recycling. All of our packaging materials are environmentally compatible and can be recycled.



USED APPLIANCES

- ▶ All Greenstar gas boilers are 100% re-cycleable. The various assemblies can be easily dismantled and synthetic materials are marked accordingly. Assemblies can therefore be sorted by composition and passed on for recycling.

11 YOUR GUARANTEE

This boiler has a guarantee against faulty materials or workmanship for a period of two years from the date of installation subject to the following terms and conditions:

- During the period of this guarantee any components of the boiler which are proven to be faulty or defective in manufacture will be exchanged or repaired free of charge by Bosch Thermotechnology Ltd.
- The householder may be asked to prove the date of installation, that the boiler was correctly commissioned and, where appropriate, the first year's service has been carried out to the satisfaction of Bosch Thermotechnology Ltd., when requested. These should be documented as a part of the Benchmark Checklist.
- The boiler has been used only for the normal domestic purposes for which it was designed.

This guarantee does not affect your statutory rights.

GUARANTEE REGISTRATION

Your Greenstar boiler carries a two year guarantee against faulty material or manufacturer subject to Terms and Conditions. To read the full Terms & Conditions please visit us on-line at www.worcester-bosch.co.uk/guarantee. The Guarantee Registration form is available on this same page and can be completed and submitted electronically. Alternatively, please telephone one of our Guarantee Registration advisors on 0330 123 9559. Your statutory rights are not affected by the manufacturers guarantee.

FOR YOUR OWN RECORD:

Please ensure that the Benchmark Checklist has been completed by your installer or service engineer.

Model	
Serial No. ¹⁾	
Type/size	
Date of installation	
Name of Installer	
Telephone number of Installer	

Table 2

- 1) See boiler identification label on boiler fascia or Benchmark Checklist in the back of the Installation, Commissioning & Servicing Instructions.

12 GLOSSARY

Central heating systems

All radiators must be heated at an even rate. If the top of a radiator is at a lower temperature than the bottom then it should be bled by releasing air through the bleed screw at the top of the radiator.

Ask your installer to show you how this is done.

This boiler is fitted to a sealed system. Should water leaks be found or if excessive bleeding is required, then a service engineer must be contacted to inspect the installation and rectify any fault.

Only additives that are compatible with aluminium may be used in the system. Any incompatible additive used will invalidate the guarantee.

Plumbing and condensate drain

This is a condensing boiler and the flue terminal will, at times give out a plume of water vapour. This is quite normal.

The boiler produces condensate which is discharged regularly by a syphon within the boiler via a plastic pipe to a drain. This pipe must not be blocked or altered in any way.

Room thermostat / programmer

A room thermostat / programmer must be fitted to control the central heating. This controls the times and temperatures of the central heating, preventing the boiler from firing unnecessarily. Refer to the instructions supplied with the thermostat and programmer for further information.

Thermostatic radiator valves

Thermostatic radiator valves must be fitted in sleeping accommodation. It is recommended that this type of valve is fitted to all but one of the radiators. The remaining radiator, where the room thermostat is located, must be uncontrolled and left open.

Pump over run function

After the boiler has finished a demand for central heating or hot water, the pump may continue to run for a short while to dissipate the heat from within the boiler.

Pump anti-seizure

If there has been no heating demand for 24 hours, the boiler will run the system pump for a few seconds to reduce the possibility of pump seizure during long periods of inactivity.

SEDBUK

Seasonal Efficiency of Domestic Boilers in the UK.

Worcester, Bosch Group
Cotswold Way, Warndon, Worcester WR4 9SW.
Tel. 0330 123 9559
Worcester, Bosch Group is a brand name of
Bosch Thermotechnology Ltd.

worcester-bosch.co.uk

6 720 815 063

WORCESTER, BOSCH GROUP:

TECHNICAL SUPPORT:	0330 123 3366
APPOINTMENTS:	0330 123 9339
SPARES:	0330 123 9779
LITERATURE:	0330 123 9119
TRAINING:	0330 123 0166
SALES:	0330 123 9669



WORCESTER
Bosch Group