

# Instructions for Use Installation and Servicing

To be left with the user

## Energysaver

50e 60e

Cat I<sub>2H</sub>

G.C. No.

41 319 94

Cat I<sub>2H</sub>

G.C. No.

41 319 95

*High Efficiency Boiler*

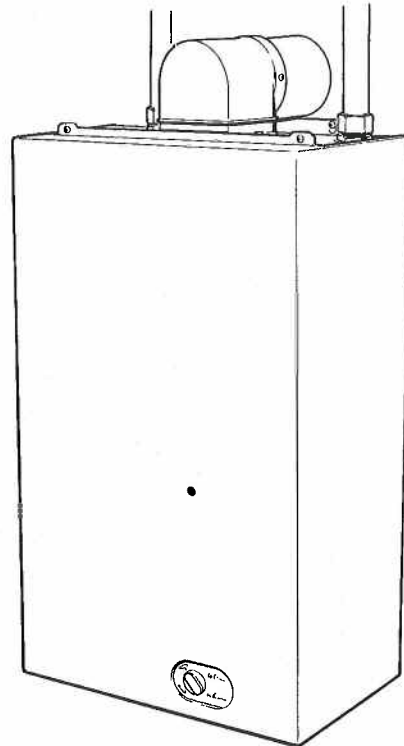


The mark of quality for domestic heating



PAS010

Reference in these instructions to British Standards and Statutory Regulations/Requirements apply only to the United Kingdom. For Ireland the rules in force must be used.



4340S

*The instructions consist of three parts, User, Installation and Servicing Instructions, which includes the Guarantee Registration Card. The instructions are an integral part of the appliance and must, to comply with the current issue of the Gas Safety (Installation and Use) Regulations, be handed to the user on completion of the installation.*

### Guarantee Registration

Thank you for installing a new Glow-worm appliance in your home.

Glow-worm appliances' are manufactured to the very highest standard so we are pleased to offer our customers' a Comprehensive First Year Guarantee.

In the centre pages are to be found your Guarantee Registration Card, which we recommend you complete and return as soon as possible.

If this card is missing you can obtain a copy or record your registration by telephoning the Heatcall Customer Service number 01773 828100.

Our Guarantee gives you peace of mind plus valuable protection against breakdown by covering the cost of:

- All replacement parts**
- All labour charges**
- All call-out charges**

**REGISTER YOUR GLOW-WORM APPLIANCE  
FOR 1ST YEAR GUARANTEE PROTECTION**

**CALL 0208 247 9857**

**HEATCALL**

Customer Services:

Tel: (01773) 828100

**One Contact Local Service** Fax: (01773) 828070

**Hepworth Heating Ltd.,**  
Nottingham Road, Belper, Derbyshire. DE56 1JT  
**General/Sales enquiries:**

Tel: (01773) 824141 Fax: (01773) 820569

## Important Information

### TESTING AND CERTIFICATION

This boiler is tested and certificated for safety and performance. It is therefore important that no alteration is made to the boiler, without permission, in writing, from Hepworth Heating Ltd.

Any alteration not approved by Hepworth Heating Ltd., could invalidate the certification, boiler warranty and may also infringe the current issue of the Statutory Requirements, see Section 1.2.

### CE MARK

This boiler meets the requirements of Statutory Instrument No. 3083 The boiler (Efficiency) Regulations, and therefore is deemed to meet the requirements of Directive 92/42/EEC on the efficiency requirements for new hot water boilers fired with liquid or gaseous fuels.

Type test for purposes of Regulation 5 certified by: Notified body 0086.

Product/production certified by: Notified body 0086.

The CE mark on this appliance shows compliance with:

1. Directive 90/396/EEC on the approximation of the laws of the Member States relating to appliances burning gaseous fuels.
2. Directive 73/23/EEC on the harmonization of the Laws of the Member States relating to the electrical equipment designed for use within certain voltage limits.
3. Directive 89/336/EEC on the approximation of the Laws of the Member States relating to electromagnetic compatibility.

### INFORMATION FOR THE INSTALLER AND SERVICE ENGINEER.

Under Section 6 of The Health and Safety at Work Act 1974, we are required to provide information on substances hazardous to health.

### Spare Parts

REMEMBER, When replacing a part on this appliance, use only spare parts that you can be assured conform to the safety and performance specification that we require. Do not use

reconditioned or copy parts that have not been clearly authorised by Hepworth Heating Ltd.

### CERAMIC FIBRE/INSULATION PADS, GLASSYARN.

These can cause irritation to skin, eyes and the respiratory tract. If you have a history of skin complaint you may be susceptible to irritation. High dust levels are usual only if the material is broken. Normal handling should not cause discomfort, but follow normal good hygiene and wash your hands before eating, drinking or going to the lavatory. If you do suffer irritation of the eyes or severe irritation to the skin seek medical attention.

### THERMOSTATS

These contain very small amounts of xylene in the sealed phial and capillary. If broken, under normal circumstances the fluid does not cause a problem, but in case of skin contact, wash with cold water. If swallowed drink plenty of water and seek medical attention.

### CUT OFF DEVICES

Cut off devices with copper phial/bulb only.

Bulb contains activated charcoal and very small amounts of chlorodifluoromethane in the sealed phial and capillary. If broken under normal circumstances the fluid does not cause a problem. If there is irritation to the eyes or skin then seek medical attention.

### FLUE SEALANT

This contains cyclohexylaminosilane.

It may cause irritation of skin of sensitive persons. Wash contact area with soap and water, if irritation occurs, seek medical advice.

It will cause irritation on contact with eyes. If so, wash eye with large amounts of fresh water for at least 15 minutes. If irritation occurs, seek medical advice.

If swallowed drink plenty of milk and seek medical advice.

CONTENTS	DESCRIPTION	SECTION	PAGE No.
<b>INSTRUCTIONS FOR USE</b>	Introduction		3
	Lighting the Boiler		4
<b>INSTALLATION INSTRUCTIONS</b>	General Data	1	5
	Water System	2	7
	Boiler Location	3	10
	Flue	4	11
	Preparation	5	13
	Water Connections	6	15
	Flue Installation	7	16
	Gas Connection	8	19
	Electrical Connection	9	19
	Commissioning	10	21
	User Information	11	22
<b>SERVICING INSTRUCTIONS</b>	Servicing	12	23
	Fault Finding	13	26
	Replacement Parts	14	33
	Spare Parts	15	39

# Instructions for Use

## Introduction

Please read these instructions and follow them carefully for the safe and economical use of your boiler.

This boiler is designed to provide central heating from a fully pumped open vented or sealed water system with a fully indirect domestic hot water cylinder.

The boiler is fully automatic in operation, with an "ON/OFF" control switch knob, see diagram 1.

## Important Notice

This boiler is for use only on G20 gas.

## Gas Safety (Installation and Use) Regulations

In your interests and that of gas safety it is the Law that ALL gas appliances are installed by a competent person in accordance with the current issue of the above regulations.

## Gas Leak or Fault

If a gas leak or fault exists, or is suspected, the boiler must be turned off, including the electrical supply and must not be used until the fault has been put right. Advice/help should be obtained from your installation or servicing company or local gas company.

## Maintenance and Servicing

To ensure the continued efficient and safe operation of the boiler it is recommended that it is checked and serviced as necessary at regular intervals. The frequency of servicing will depend upon the particular installation conditions and usage, but in general once a year should be enough.

If this appliance is installed in a rented property there is a duty of care imposed on the owner of the property by the current issue of the Gas Safety (Installation and Use) Regulations, Section 35.

It is the Law that any servicing is carried out by a competent person.

Please be advised that the 'Benchmark' logbook should be completed by the installation engineer on completion of commissioning and servicing.

All CORGI Registered Installers carry a CORGI ID card, and have a registration number. Both should be recorded in your boiler Logbook. You can check your installer is CORGI registered by calling CORGI direct on :- 01256 372300.

## Boiler Clearances

If fixtures are positioned close to the boiler, space must be left as shown in diagram 3. Enough space must also be left in front of the boiler to allow for servicing.

## Boilers Installed in Cupboard or Compartment

If the boiler is installed in a cupboard or compartment do not obstruct any ventilation openings.

Do not use the cupboard or compartment for storage.

Regularly make sure that the air vent openings are clear of obstructions.

## Cleaning

Warning. This appliance contains metal parts (components) and care should be taken when handling and cleaning, with particular regard to edges.

Clean the casing occasionally by wiping it over with a damp soapy cloth or dry polishing duster.

Do not use an abrasive cleaner.

## Protection Against Freezing

If the boiler is to be out of use for any long period of time during severe weather conditions we recommend that the whole system, including the boiler, be drained off to avoid the risk of freezing up. Make sure that, if fitted, the immersion heater in the cylinder is switched off.

If you have a sealed water system contact your installer or servicing company as draining, refilling and pressurising must be carried out by a competent person.

## Boiler Electrical Supply

Warning. This boiler must be earthed.

Connection of the boiler any system controls to the mains (230V~50Hz) must be by one unswitched shuttered socket outlet and fused 3A 3 pin plug.

Alternatively, a 3A fused double pole isolating switch may be used, having a minimum double pole contact separation of 3mm, serving only the boiler and system controls.


The colours of three core flexible cable are:-

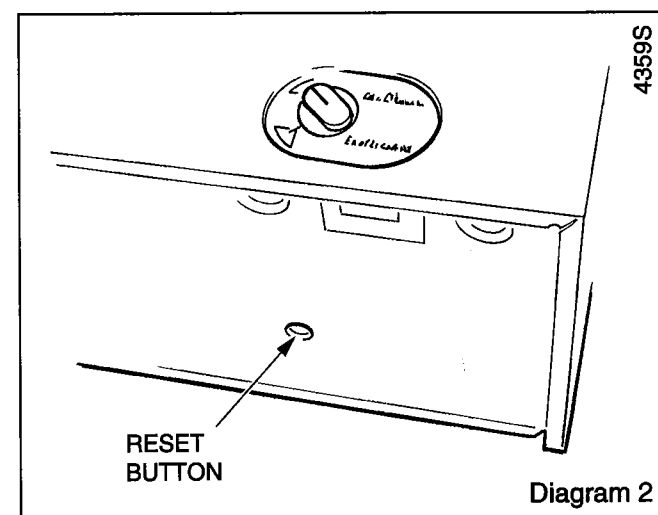
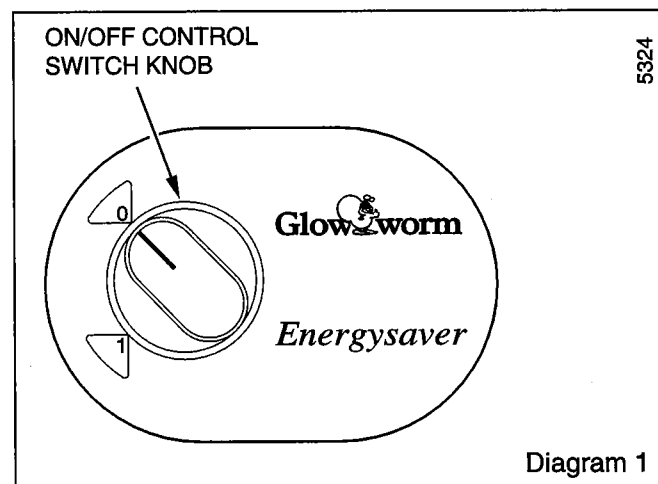
Brown - live, Blue - neutral, Green and Yellow - earth.

As the markings on your plug may not correspond with these colours continue as follows:-

The wire coloured brown must be connected to the terminal marked "L" or "Red".

The wire coloured blue must be connected to the terminal marked "N" or "Black".

The wire coloured green and yellow must be connected to the terminal marked "E" or "Green" or the earth symbol .



# Instructions for Use

## Electrical Supply Failure

Failure of the electrical supply will cause the burner to go out. Should this happen, operation of the boiler will normally resume after the electrical supply is restored.

If the burner does not relight after an electrical supply failure the overheat device may need resetting, pull the information panel forwards and push the reset button, see diagram 2.

## Overheat Safety Cutoff

If the cutoff operates on any other occasion than electrical failure, press the reset button as stated in "Electrical Supply Failure".

If the boiler fails to relight contact your installer or servicing company.

## To Turn the Boiler On

Sealed Water Systems only:

Caution. A sealed water system must be filled and pressurised by a competent person.

Only light the boiler when you are sure that the system and boiler have been filled and pressurised.

The pressure gauge should show at least 0.7bar, anything less than this figure could indicate a leak and you MUST contact your installation or servicing company.

If there is any doubt about the boiler and system being full of water consult your installation or servicing company.

All systems:-

Turn the electrical supply on to the boiler and check that any remote controls are set to your requirements, refer to manufacturer's instructions for these items.

Turn the "ON/OFF" switch to "I".

The boiler lighting operation is now automatic as follows:-

The fan operates, followed by an ignition spark until the burner lights.

The burner will stay alight until switched off by the control thermostat or other remote control.

If the "ON/OFF" switch is turned to "O", "Off" by hand, wait at least 30 seconds before turning on again.

When the boiler thermostat or external controls are satisfied the burner will go out.

The automatic lighting sequence will operate again when heat is required.

Should the boiler fail to come on at the required time, turn the boiler "OFF" and "ON" again. The ignition system will reset and the burner will light.

## To Turn the Boiler Off

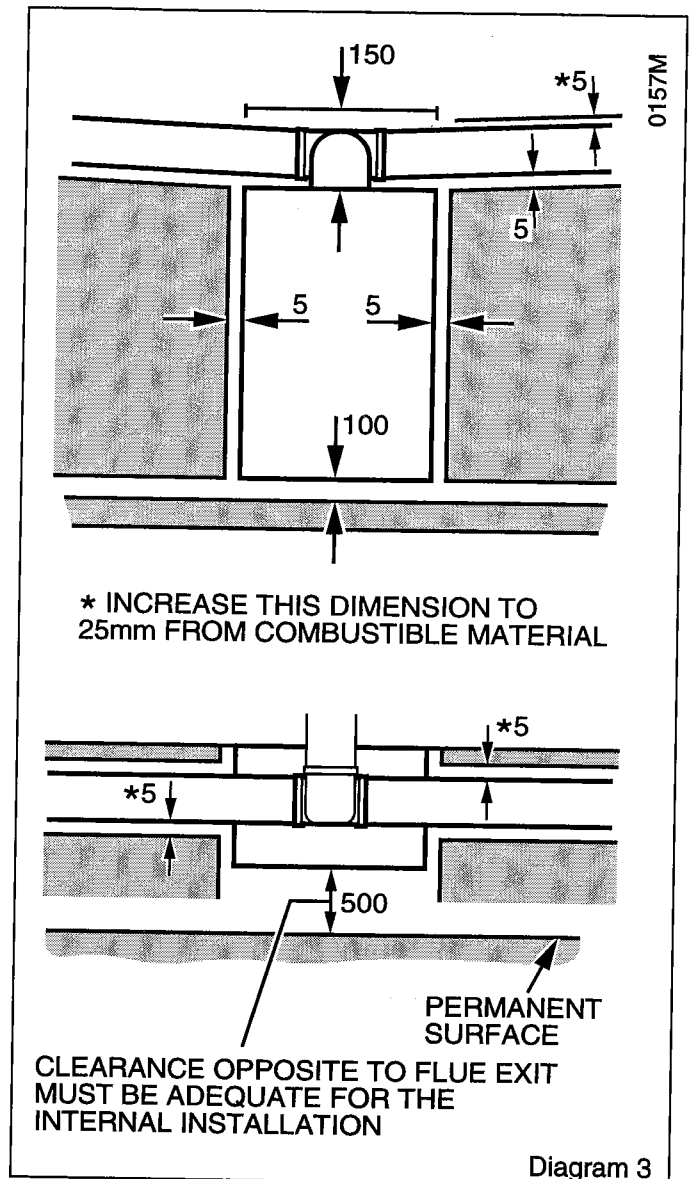
For short periods, turn "ON/OFF" switch to "O".

To relight the main burner, turn "ON/OFF" switch to "I".

For longer periods, turn "ON/OFF" switch to "O" and switch off the electrical supply.

To relight follow the sequence given above.

Note. If the burner goes out for any reason, wait 30 seconds before relighting.

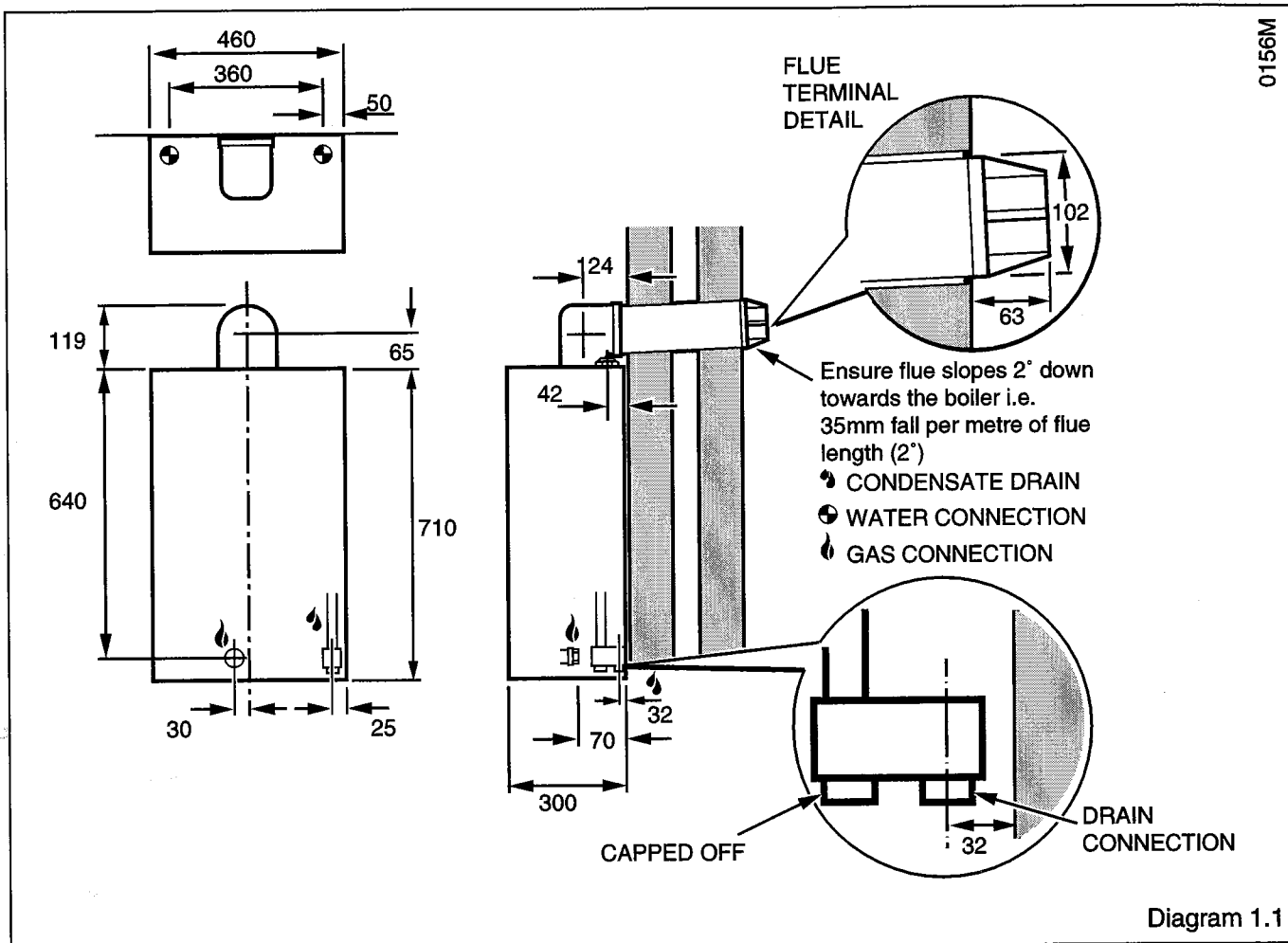


## Condensation Plumbing

Like all condensing boilers this appliance will produce a plume of condensation from the flue terminal in cool weather. This is due to the high efficiency and hence low flue gas temperature of the boiler.

# 1 General

0156M



## Important Notice

This boiler is for use only on G20 gas.

The boiler is delivered in one pack.

Wherever possible, all materials and components to be used shall comply with the requirements of applicable British Standards.

Where no British Standard exists, materials and equipment should be fit for their purpose and of suitable quality and workmanship.

This boiler must have fully pumped circuits, but is suitable for use with open vented or sealed water systems.

This boiler is not suitable for fitting out of doors.

### 1.1 Sheet Metal Parts

**WARNING.** When installing or servicing the boiler care should be taken when handling sheet metal parts to avoid any possibility of personal injury.

### 1.2 Statutory Requirements

The installation of the boiler **MUST** be carried out by a competent person in accordance with the relevant requirements of the current issue of:-

Manufacturer's instructions supplied.

The Gas Safety (Installation and Use) Regulations, The Building Regulations, The Building Standards (Scotland) Regulations, applicable in Scotland, local Water Company Byelaws, The Health and Safety at Work Act, The Control of Substances Hazardous to Health, The Electricity at Work Regulations and any applicable local regulations.

Detailed recommendations are contained in the current issue of the following British Standards and Codes of Practice:-

BS4814, BS5440 Part 1 and 2, BS5449, BS5546, BS6700, BS6891, BS7074 Part 1 and 2, BS7478, BS7593, BS7671.

We also suggest that you have to hand a copy of the British Gas publication, "Guidance Notes for Installation of Domestic Condensing Boilers".

Manufacturer's notes must not be taken as overriding statutory obligations.

### BSI Certification

The boiler is certificated to the current issue of PAS010 for performance and safety.

It is important that no alteration is made to the boiler, without permission, in writing, for Hepworth Heating Ltd.

Any alteration that is not approved by Hepworth Heating Ltd., could invalidate the warranty and could also infringe the current issue of the Statutory Requirements.

### 1.3 General Data

The data label is positioned on the inner case, visible when the outer case is removed.

All dimensions on diagrams, except as noted, are in millimetres.

The Seasonal Efficiency Domestic Boilers UK (SEDBUK) is 50e 86.8%, 60e 86.9%.

The value is used in the UK Government's Standard Assessment Procedure (SAP) for energy rating of dwellings. The test data from which it has been calculated have been certified by B.S.I.

