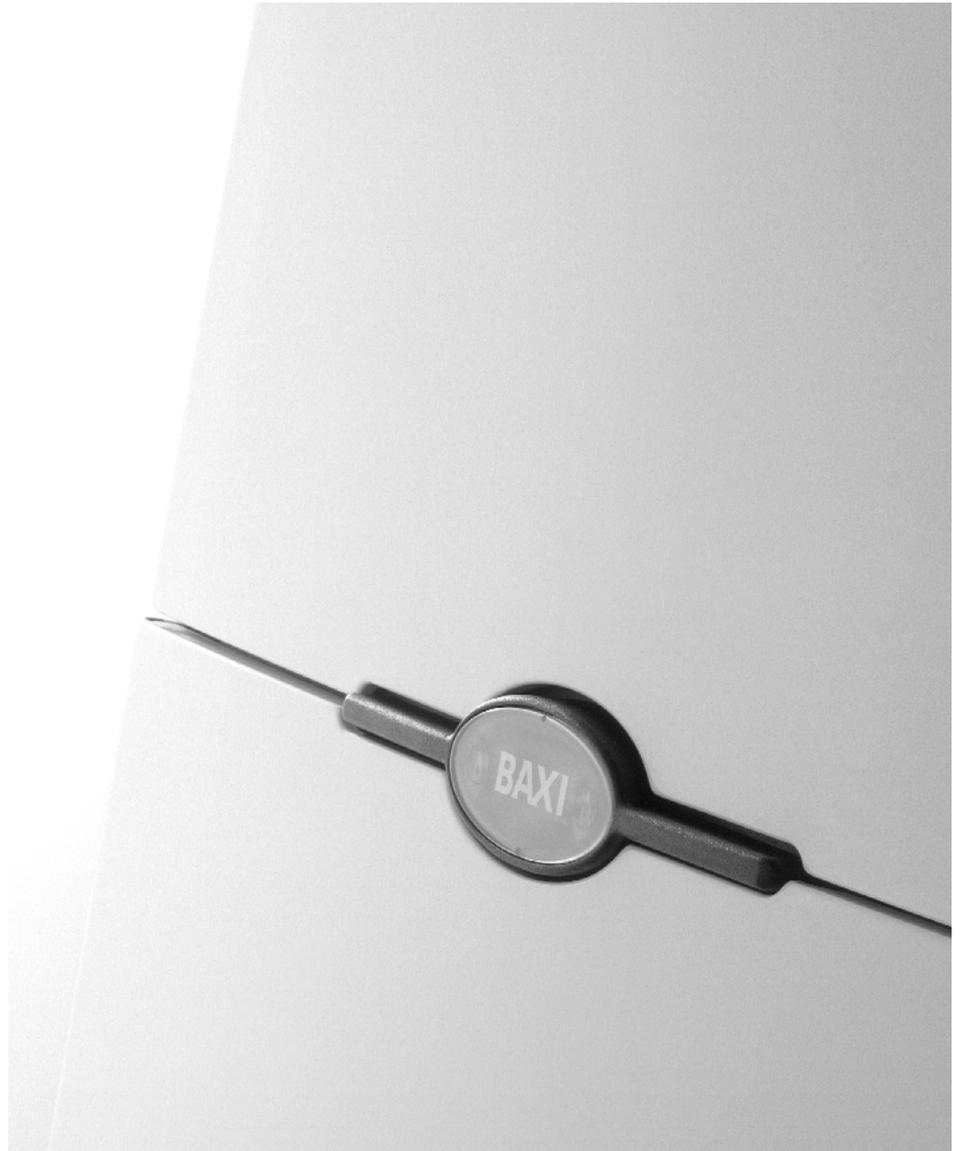


# BAXI

## User's Operating Instructions



### **Baxi System 100 HE Plus**

Wall Mounted Powered Flue Condensing  
Gas Fired Central Heating Boiler

Please keep these instructions safe.  
Should you move house, please hand  
them over to the next occupier.

## Natural Gas

Baxi System 100 HE Plus  
G.C.N° 41 075 43

Baxi is one of the leading manufacturers of domestic heating products in the UK.

Our first priority is to give a high quality service to our customers. Quality is designed into every Baxi product - products which fulfil the demands and needs of customers, offering choice, efficiency and reliability.

To keep ahead of changing trends, we have made a commitment to develop new ideas using the latest technology - with the aim of continuing to make the products that customers want to buy.

Everyone who works at Baxi has a commitment to quality because we know that satisfied customers mean continued success.

We hope you get a satisfactory service from Baxi. If not, please let us know.



This product has an energy rating (A) on a scale of A to G.  
For more information see [www.boilers.org.uk](http://www.boilers.org.uk). This is a certification mark.

**Codes of Practice**, most recent version should be used

**In GB the following Codes of Practice apply:**

Standard	Scope
BS 6891	Gas Installation.
BS 5546	Installation of hot water supplies for domestic purposes.
BS 5449	Forced circulation hot water systems.
BS 6798	Installation of gas fired hot water boilers.
BS 5440 Part 1	Flues.
BS 5440 Part 2	Ventilation.
BS 7074	Expansion vessels and ancillary equipment for sealed water systems.
BS 7593	Treatment of water in domestic hot water central heating systems.

**In IE the following Codes of Practice apply:**

Standard	Scope
I.S. 813	Domestic Gas Installations.
The following BS standards give valuable additional information;	
BS 5546	Installation of hot water supplies for domestic purposes.
BS 5449	Forced circulation hot water systems.
BS 7074	Expansion vessels and ancillary equipment for sealed water systems.
BS 7593	Treatment of water in domestic hot water central heating systems.

The boiler meets the requirements of Statutory Instrument "The Boiler (Efficiency) Regulations 1993 N° 3083" and is deemed to meet the requirements of Directive 92/42/EEC on the energy efficiency requirements for new hot water boilers fired with liquid or gaseous fuels:-

Type test for purpose of Regulation 5 certified by:  
Notified Body 0087.

Product/Production certified by:  
Notified Body 0086.

For GB/IE only.

Baxi is a BS-EN ISO 9001  
Accredited Company

## 1.0 Legislation

### **IMPORTANT** - Installation, Commissioning, Service & Repair

This appliance must be installed in accordance with the manufacturer's instructions and the regulations in force. Read the instructions fully before installing or using the appliance.

In GB, this must be carried out by a competent person as stated in the Gas Safety (Installation & Use) Regulations.

**Definition of competence:** A person who works for a CORGI registered company and holding current certificates in the relevant ACS modules, or valid ACoP equivalents, is deemed competent.

In IE, this must be carried out by a competent person as stated in I.S. 813 "Domestic Gas Installations".

**Lifting** - This product should be lifted and handled by two people. Stooping should be avoided and protective equipment worn where necessary. Carrying & lifting equipment should be used as required' e.g. when installing in a loft space.

The addition of anything that may interfere with the normal operation of the appliance without express written permission from the manufacturer or his agent could invalidate the appliance warranty. In GB this could also infringe the Gas Safety (Installation and Use) Regulations.

**Warning** - Check the information on the data plate is compatible with local supply conditions.

### "Benchmark"

#### Installation, Commissioning and Service Record Log Book

Please ensure that your installer has completed the Installation and Commissioning sections of the Log Book and hands the Log Book over. The details of the Log Book will be required in the event of any warranty work. Keep the Log Book in a safe place and ensure that the relevant sections are completed at each subsequent regular service visit.

All CORGI registered installers carry a CORGI identification card and have a registration number. Both should be recorded in your boiler Log Book. You can check your installer is registered by telephoning +44 (0)1256 372300 or writing to:-

1 Elmwood,  
Chineham Business Park,  
Crockford Lane,  
Basingstoke. RG24 8WG

### 1.1 Safe Installation

**Baxi declare that no substances harmful to health are contained in the appliance or used during appliance manufacture.**

**The appliance is suitable only for installation in GB and IE and should be installed in accordance with the rules in force, and only used in a suitably ventilated location.**

In GB, the installation must be carried out by a CORGI Registered Installer. It must be carried out in accordance with the relevant requirements of the:

- Gas Safety (Installation & Use) Regulations.
- The appropriate Building Regulations either The Building Regulations, The Building Regulations (Scotland), Building Regulations (Northern Ireland).
- The Water Fittings Regulations or Water Byelaws in Scotland.
- The Current I.E.E. Wiring Regulations.

Where no specific instructions are given, reference should be made to the relevant British Standard Code of Practice.

In IE, the installation must be carried out by a competent Person and installed in accordance with the current edition of I.S. 813 'Domestic Gas Installations', the current Building Regulations and reference should be made to the current ETCL rules for electrical installation.

**All systems must be thoroughly flushed and treated with inhibitor.**

**WARNING: Never hang clothes or other items over the appliance.**

### 1.2 In case of gas leaks

1. **If a gas leak is found or suspected**, turn off the gas supply at the meter immediately and at the isolating valve on the boiler if possible. Contact your Gas Supplier immediately.

### 1.3 Servicing your Appliance

1. For reasons of safety and economy your appliance should be serviced annually. Your Installer or Service Engineer will be able to advise you.

2. Any purpose provided ventilation should be checked periodically to ensure that it is free from obstruction.

### 1.4 Electricity Supply

1. **THIS APPLIANCE MUST BE EARTHED.**

2. A standard 230V ~ 50Hz supply is required. The appliance must be protected by a 3 amp fuse.

## 2.0 Introduction

### 2.1 Introduction

1. Your Baxi System 100 HE Plus is a high efficiency condensing boiler, providing central heating for your home and domestic hot water.

2. Due to the high efficiency and the resulting low flue gas temperature a white plume of condensate will be emitted from the flue outlet terminal. This will be particularly evident during periods of low outdoor temperatures.

3. The very high efficiency of these boilers also results in the flue gasses cooling to the point where part of their moisture content condenses inside the boiler, giving up further heat as it does so. The condensate is drained to a suitable disposal point through the plastic waste pipe at the bottom left of the boiler. This must not be modified or blocked.

### 2.2 Operating the Boiler

1. To access the control panel, hinge down the lower door panel (Fig. 1).

2. Turn on the main gas and electricity supplies to the appliance.

3. Set the flow temperature control knob to the required setting (Fig. 1). (The optimum boiler setting depends upon type of system, external controls and your requirements. Your installer will be able to advise you on this matter.)

4. The fan will start to run and after a short period the ignition spark will commence. Sparking will continue until the flame is established then stop automatically. Check that both the Mains ON light (ON) and Burner ON light (🔥) are on (Fig. 1).

### 2.3 To shut down the Boiler

1. Isolate the electricity supply to the appliance at the Fused Spur.

2. Turn off the gas supply at either the appliance gas cock or the meter.

### 2.4 Frost Protection

1. The boiler does not have integral frost protection. It is recommended that the installer fits a suitable protection device to the system controls if required. For frost protection the boiler must not be switched off at the isolation switch on the wall.

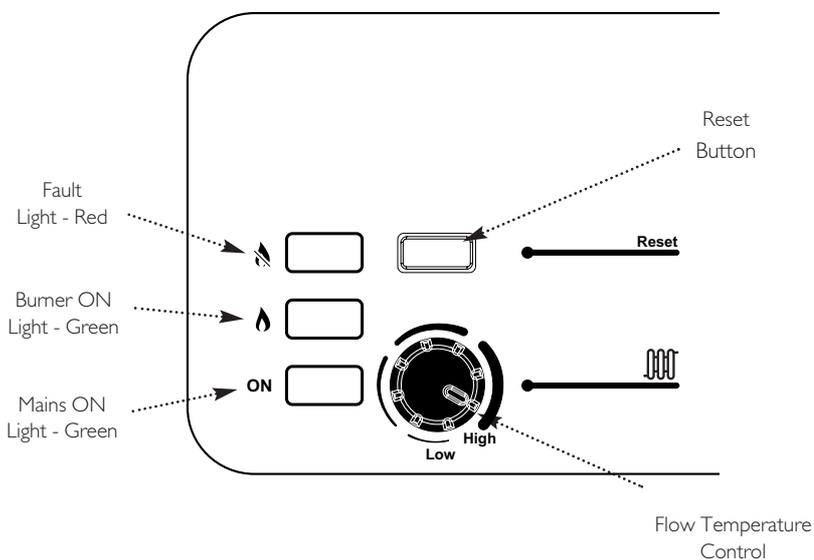
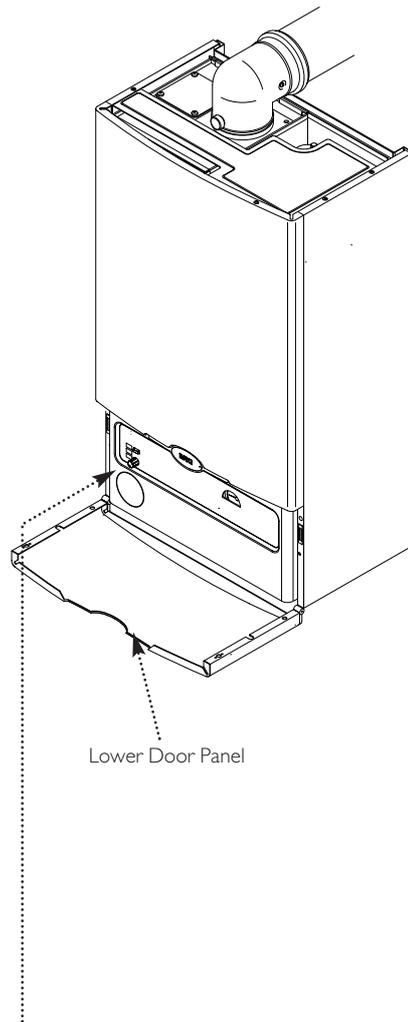


Fig. 1

## 3.0 Boiler Controls

### 3.1 Temperature Control

#### Central Heating

1. The lower the flow temperature is set to, the higher the efficiency the boiler will operate at. The flow temperature can be adjusted between approx 55 °C minimum and approx 82 °C maximum by turning the Flow Temperature Control Knob (Fig. 2).

2. The boiler will light automatically on demand and the Green 'Bumer ON' light will be lit whilst water is being heated (Fig. 2).

3. The boiler control system has an automatic time delay built in. It is normal that following a shutdown by the boiler thermostat, timer or other heating control, there is a delay of around 3 minutes, before re-lighting.

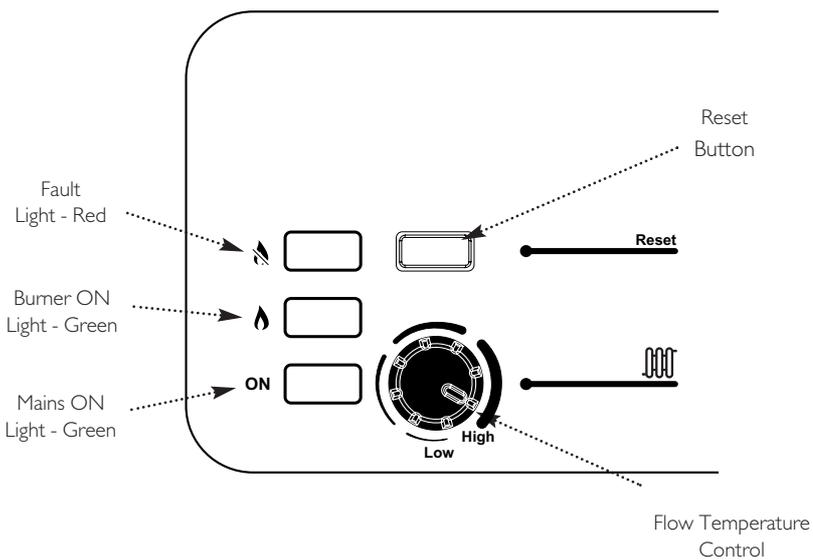
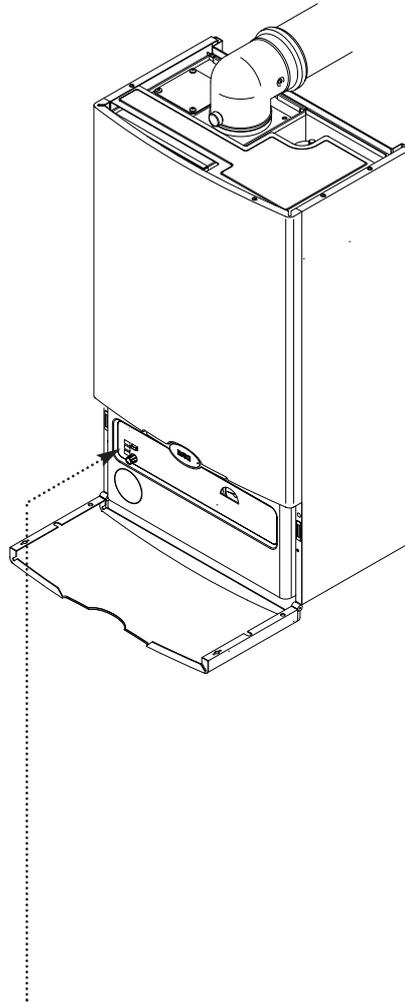


Fig. 2

## 4.0 Care of the Boiler

### 4.1 Central Heating System Pressure

1. The water pressure in the central heating system is indicated by the pressure gauge.
2. The normal operating pressure is in the range between 1 and 2.5 bar.
3. A pressure of 3 bar or greater indicates a fault. The safety pressure relief valve will operate at a pressure of 3 bar and very hot water or steam will be discharged through the pipe on the right hand side of the boiler, out of the property and usually into a nearby drain. It is important that a Competent Person is contacted as soon as possible.
4. If the pressure falls below 1 bar it may indicate a leak on the central heating system.

The system must be re-pressurised by a Competent Person.

### 4.2 Protection & Precautions

1. If a system frost thermostat has been fitted (your Installer should have advised you), then to operate correctly and protect your system, the gas and electricity must be left on.

### 4.3 Cleaning the Outercase

The painted panels should be wiped with a damp cloth and then dried completely. **DO NOT USE ABRASIVE CLEANING AGENTS.**

### 4.4 Spare Parts

1. Any repairs to the boiler will usually be the responsibility of the Installer during the guarantee period after which spare parts may be obtained through approved Baxi stockists if required.
2. Quote the appliance name, model number and where possible the part number when ordering spares. A short parts list is included in the Installation and Servicing Instructions.

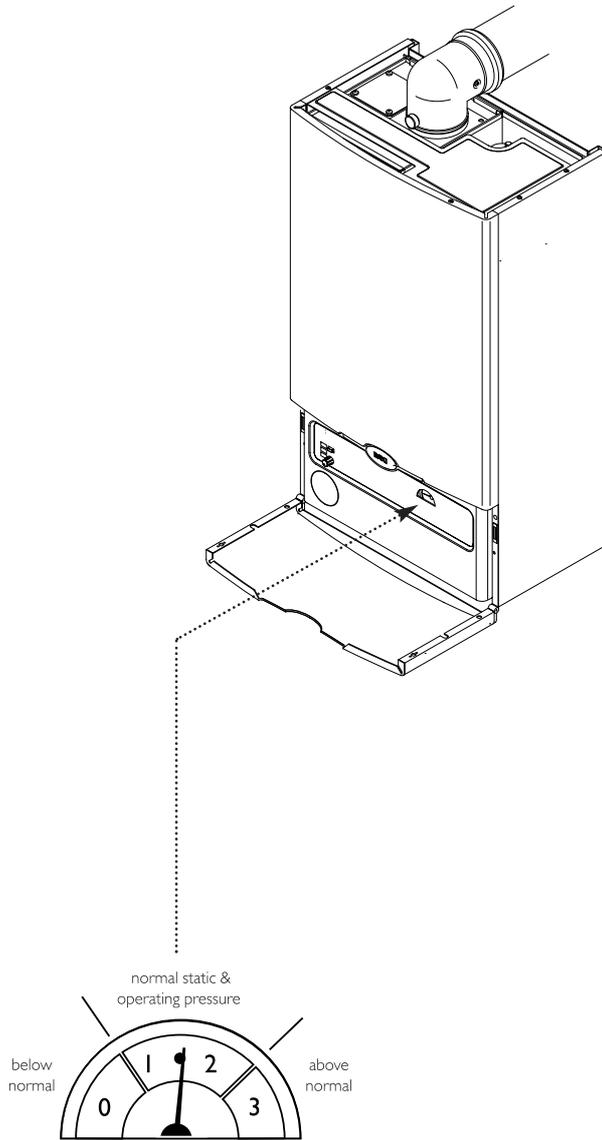


Fig. 3 Pressure Gauge

Refer to Page 3 for the definition of a Competent Person.

## 4.0 Care of the Boiler

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### 4.5 Guarantee

1. Your Baxi System 100 HE Plus is designed and produced to meet all the relevant Standards.
2. Baxi provide a 12 month guarantee on the boiler. The guarantee operates from the date installation is completed for the customer who is the original user.
3. To maximise the benefit from our guarantee we urge you to return the reply-paid guarantee registration.
4. This does not in any way prejudice your rights at Common Law. Such rights between the customer and the installer or supplier from whom the unit was purchased remain intact.

**Any component or part which becomes defective during the guarantee period as a result of faulty workmanship or material whilst in normal use will be repaired or replaced free of charge.**

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### 4.6 Servicing your Appliance

For reasons of safety and economy your boiler should be serviced annually. Servicing must be performed by a competent person.

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Refer to Page 3 for the definition  
of a Competent Person.

## 5.0 Safety Devices

### 5.1 Operation of Safety Devices

1. Your Baxi System 100 HE Plus is fitted with safety devices which shut down the appliance if:
  - a) the system overheats.
  - b) the condensate drain is blocked.
  - c) there is no gas to the boiler.
2. The fault light - red (  ) will be either flashing or permanently illuminated and the boiler will need resetting (Fig. 4).

**NOTE:** In the case of persistent operation of the devices, turn off the boiler and consult your service engineer as an appliance or system fault is indicated.

### 5.2 Resetting (Fig. 4)

1. Check that the gas, water and electricity supplies to the appliance have not been inadvertently turned off.
2. Check the condensate drain outlet has not been blocked.

**WARNING:** The condensate outlet must not be blocked or modified.

3. Allow the boiler to cool if hot.
4. Hinge down the lower door panel.
5. Press the Reset Button.

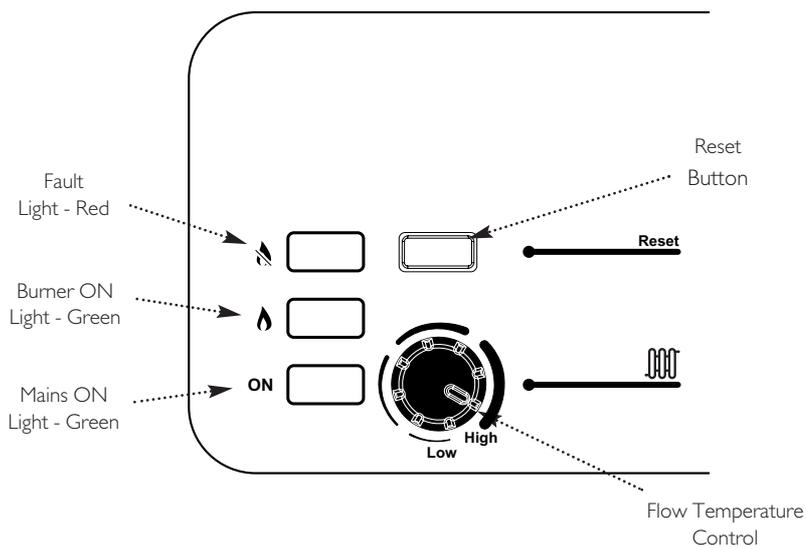
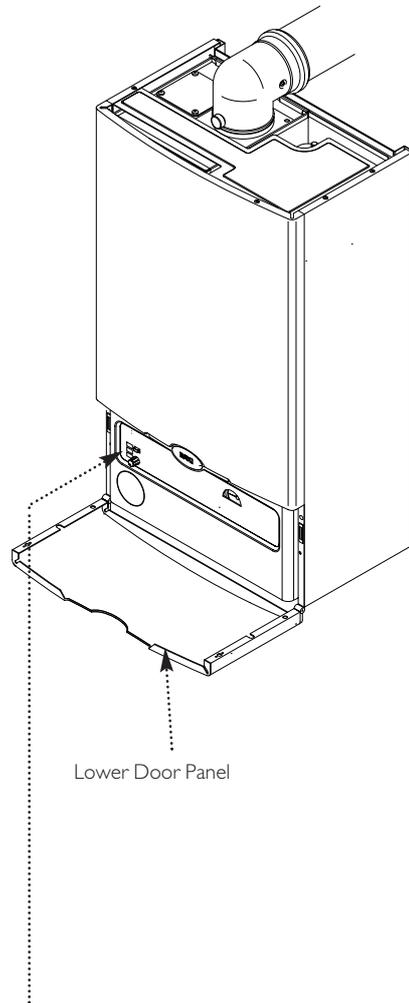


Fig. 4

## 6.0 Clearances

### 6.1 Clearances around the Boiler

1. The minimum clear spaces needed around the boiler measured from the casing are as follows:

Top	-	200mm	
Bottom	-	200mm	
Both sides	-	5mm	
Front	-	500mm	(For Servicing)
	-	5mm	(In Operation)

2. **These areas must not be obstructed in any way. Blocking the clearance spaces may result in the boiler overheating and damage may occur.**

3. The gas burning compartment of your boiler is completely sealed from the room in which it is fitted. Products from the combustion of gas are vented to the outside through the flue terminal which must be kept free from obstruction as this would interfere with the correct operation of the boiler.

4. **Where the appliance is installed in a cupboard or compartment no air vents are required.** The label affixed to the front of the boiler must not be removed. The information will be required by service engineers in the future. The compartment should be large enough to house the boiler and ancillary equipment only.

5. **IT SHOULD NOT BE USED AS A STORAGE CUPBOARD.**

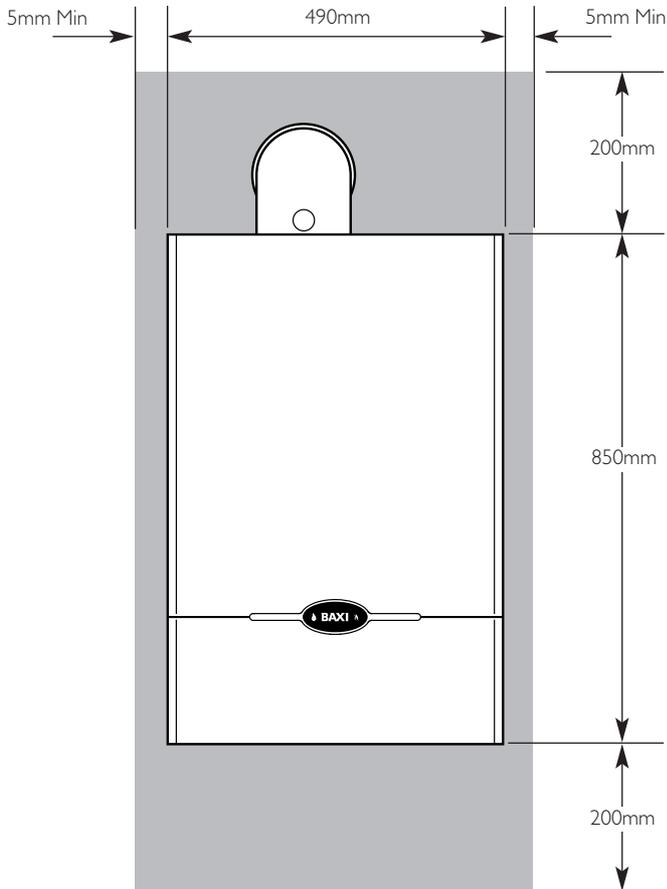


Fig. 5

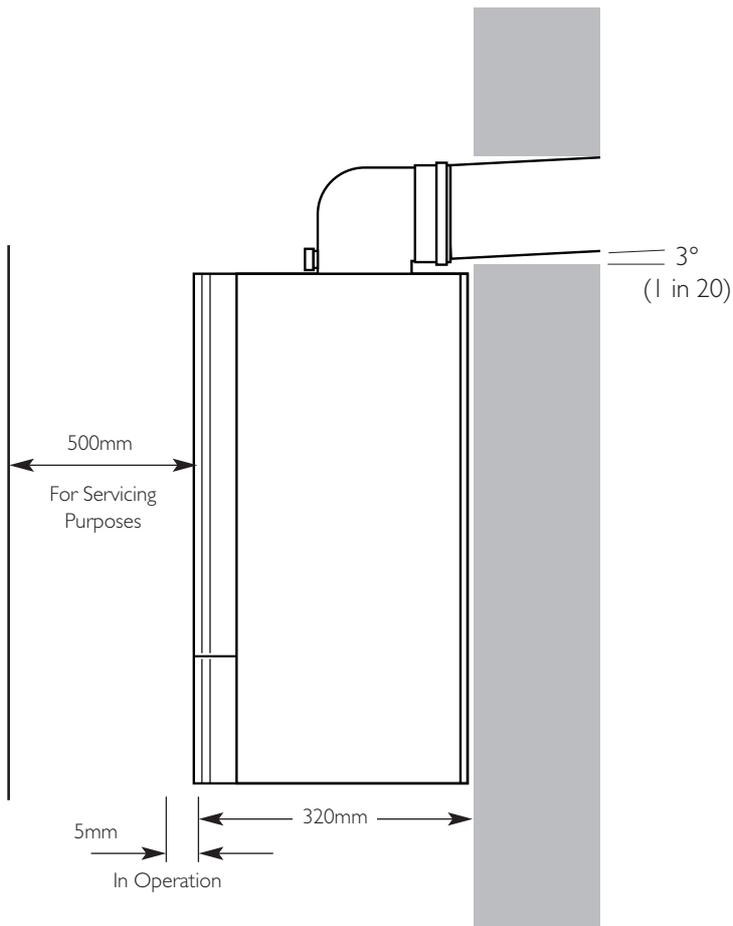


Fig. 6

**Never Hang Any Items Over The Appliance**

## 7.0 Fault Finding/Emergency

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### 7.1 Check List

1. If a fault develops, or is suspected, call a Competent Person as soon as possible.
  2. Go through the following check list before you make contact.
    - a) Is the electricity supply on ?
    - c) Is the Red "Fault" light illuminated ?  
If the boiler fails to light or the boiler is running and the gas is turned off, the light will start to flash red. Press the reset button (Do Not use excessive pressure), the light will stop flashing and the boiler will attempt to relight. If the boiler will not light it should be attended to by a competent person.
    - d) Is the gas supply on ?
    - e) Is the boiler temperature control set high enough ?
    - f) Is the time clock (if fitted) on ?
    - g) Is the room thermostat (if fitted) set high enough ?
    - h) Are the radiator valves open ?
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### 7.2 IN AN EMERGENCY

If a water or gas leak occurs or is suspected, the boiler can be isolated at the inlet valves as follows;

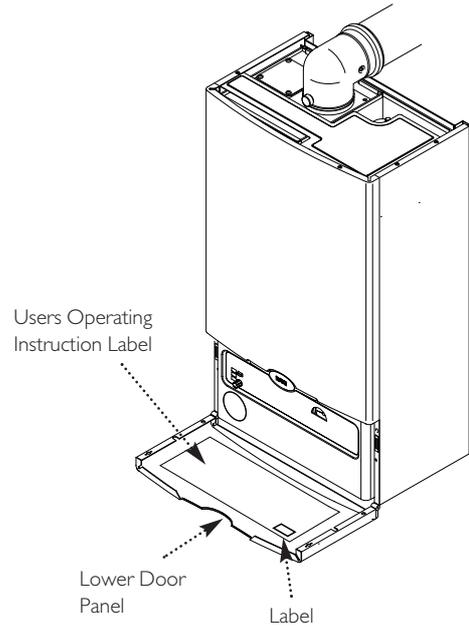
1. Turn off the electrical supply.
  2. The isolating valves are positioned under the boiler and can be closed using either a flat headed screwdriver or a 7mm open ended spanner across the flats.
  3. Turn the gas tap clockwise to the stop position to isolate the gas supply at the boiler.
  4. To isolate the water system, close the four valves fully by turning clockwise.
  5. Call a Competent Person as soon as possible.
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When contacting Baxi Potterton please have the following information to hand:

Appliance Name  
Model Number  
Serial Number

A label giving these details is situated on the rear of the lower door panel attached to the users operating instruction label.



**BAXI POTTERTON**

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