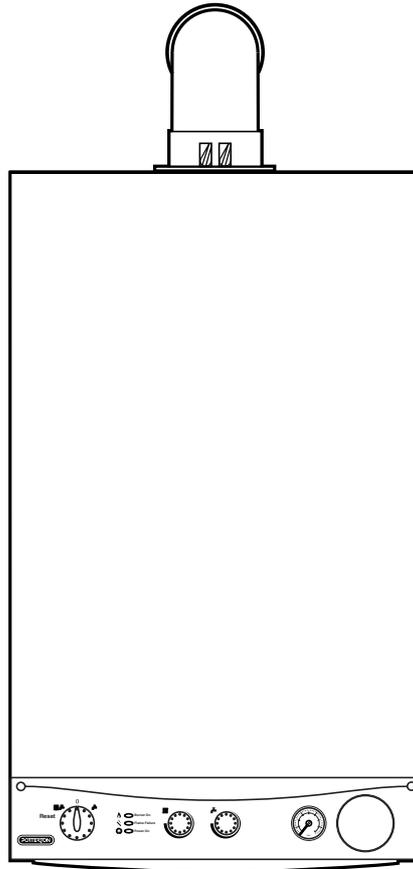




User's Guide

Performa 24 Eco HE



This is a Wall Mounted Powered Flue Condensing Combination Boiler Gas Fired Central Heating Unit.

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 0051.

Product/Production certified by:
Notified Body 0051.

For use in GB/IE only.

Natural Gas

Potterton Performa 24 Eco HE
G.C.N° 47 393 11

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" Log Book

As part of the industry-wide "Benchmark" initiative all Potterton boilers now include an Installation, Commissioning and Service Record Log Book. Please read the Log Book carefully and complete all sections relevant to the appliance and installation. These include sections on the type of controls employed, flushing the system, burner operating pressure etc. The details of the Log Book will be required in the event of any warranty work. Also, there is a section to be completed at each subsequent regular service visit. The Log Book must be left with the user.

CORGI

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

Where fitted, user label for optional timer to be applied here.



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

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 and turn the selector switch on the fascia box to the OFF position.
2. Using a suitable open ended spanner or screwdriver turn the square on the gas tap to the left to isolate the gas supply at the boiler (Fig. 1).
3. The isolating valves are positioned under the boiler and can be closed by turning their taps to the right towards the wall (Fig. 2).
4. Call your Installer or Service Engineer as soon as possible.

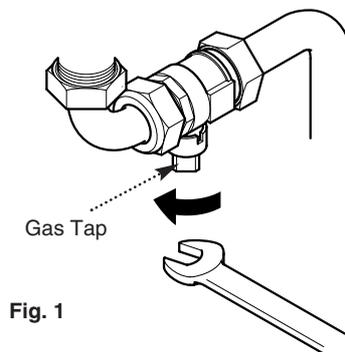


Fig. 1

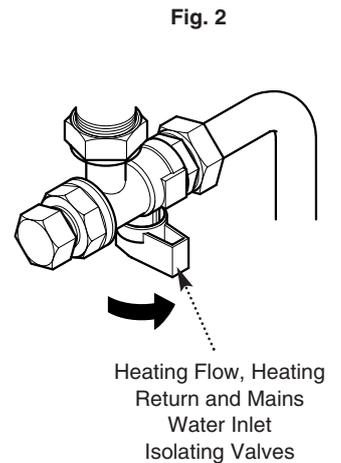


Fig. 2

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.

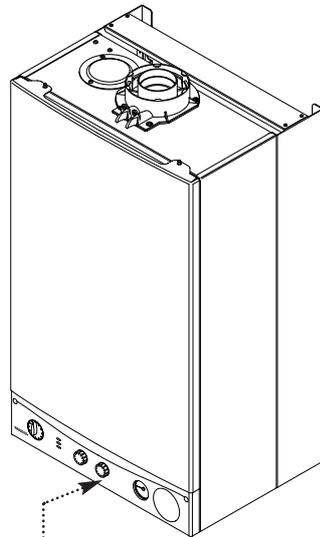
Servicing your Appliance

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

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.

Never Hang Flammable Items Over The Appliance



1. On/Off/Reset Selector Switch
2. Burner On & Fault Indicator Neon
3. Power Neon
4. Flame Failure & Fault Indicator Neon
5. Central Heating Temperature Control
6. Hot Water Temperature Control
7. Central Heating System Pressure Gauge
8. Optional Integral Timer Position

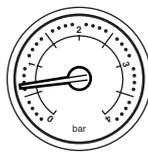


Fig. 3

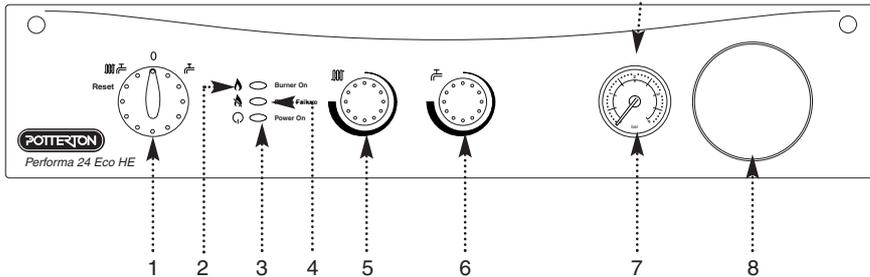


Fig. 4

Introduction

1. Your Potterton Performa 24 Eco HE is a gas fired, room sealed, powered flue condensing combination boiler, providing central heating for your home and mains fed domestic hot water to taps and shower. It is fully automatic and does not have a pilot light.

2. Priority is given to the hot water mode - when a hot water tap is turned on the supply of heat to the central heating circuit is interrupted.

3. Due to the high efficiency and resultant low flue gas temperature when in condensing mode a white plume of condensate will be emitted from the terminal. This will be particularly evident during periods of low outside temperature.

Operating the Boiler

1. Ensure that the electricity and gas supplies are turned on. Check that the central heating pressure is between 0.5 and 1.0 bar (Fig. 3).

2. Turn the On/Off/Reset selector switch either anti-clockwise from the off position (Fig. 5) to both central heating and domestic hot water or clockwise to domestic hot water only.

3. In either position the green "power" neon (Ⓚ) will illuminate (Fig. 4).

4. **Position (i)** In this position the central heating will operate according to demand or provide domestic hot water when a tap or shower is turned on (Fig. 6). Priority is given to domestic hot water.

5. **Position (ii)** In this position hot water will be provided when a tap or shower is turned on (Fig. 7).

6. The boiler will light automatically on demand.

7. The orange "burner" neon (Ⓛ) will illuminate when the boiler is operating and the main burner is on (Fig. 4).

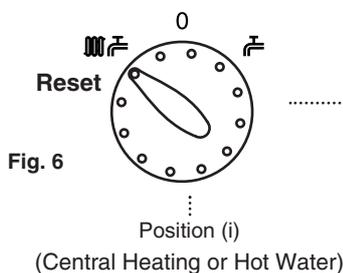


Fig. 6

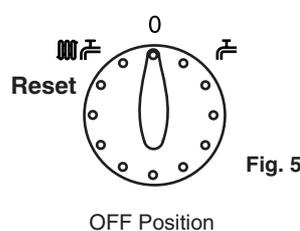


Fig. 5

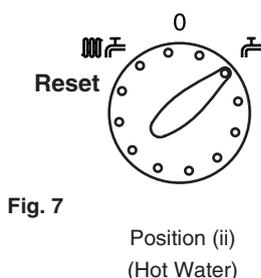


Fig. 7

IMPORTANT: When the selector switch is in the '0' (Off) position the electrical supply to the boiler is isolated. The boiler will not operate and the integral timer (if fitted) will require resetting once the selector switch is set to either Position (i) or Position (ii).

Fault Indication

1. Your Potterton Performa 24 Eco HE has three neon indicators. The upper two function as boiler on and fault indicators.

2. Depending on the nature of the fault the upper two neons will illuminate, go off or flash.

3. There are five possible combinations, each indicating one or more fault conditions. These are described below.

A

The flue or flue terminal is blocked or obstructed in some way, or there is an internal fault.

If there is no external blockage of the flue that can be easily removed contact your Installer or Service Engineer.

B

The circulating pump is faulty or the system pressure has dropped. Check the system pressure (see page 7). If the pressure is in the normal range a pump fault is indicated. Contact your Installer or Service Engineer.

C

A fault on the boiler temperature sensor is indicated. Contact your Installer or Service Engineer.

D

The primary system or the boiler has overheated. Allow the boiler to cool. Turn the selector switch fully anti-clockwise against the spring pressure to the 'Reset' position and hold for at least 2 seconds.

If this occurs repeatedly contact your Installer or Service Engineer.

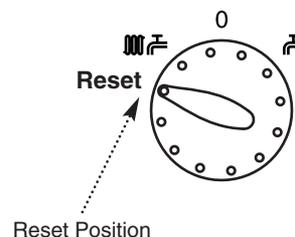
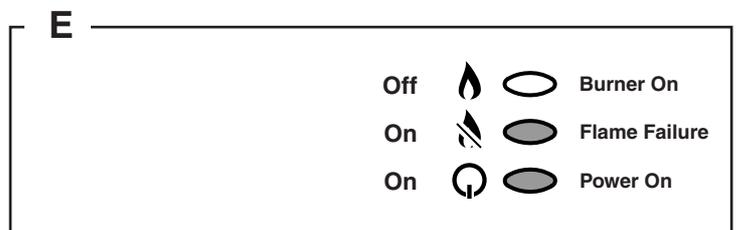
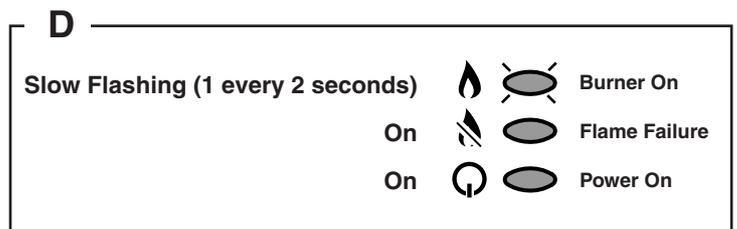
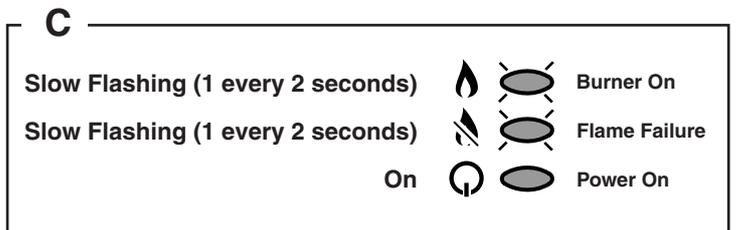
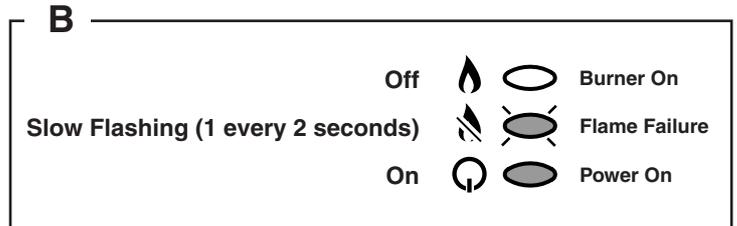
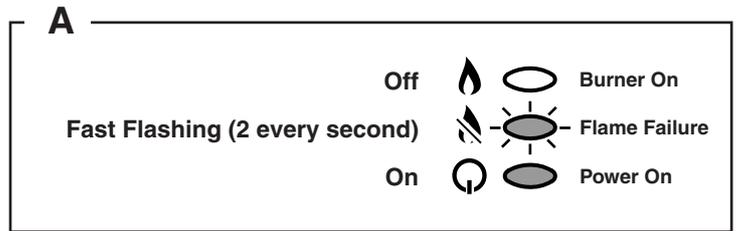
If the boiler does not relight after resetting it is possible that the flue has overheated. Contact your Installer or Service Engineer.

E

The burner has failed to light, or incomplete lighting of the burner has occurred. Turn the selector switch fully anti-clockwise against the spring pressure to the 'Reset' position and hold for at least 2 seconds.

If this occurs repeatedly contact your Installer or Service Engineer.

If the boiler does not relight after resetting blockage of the condensate drain or trap has occurred. Contact your Installer or Service Engineer.



Temperature Control

1. **Central Heating:** The central heating hot water flow temperature can be adjusted between 30° C (\pm 5° C) minimum and 85° C (\pm 5° C) maximum.

2. Turn the control knob clockwise to increase the temperature (Fig. 8).

3. In normal winter usage we recommend that the central heating temperature be set at maximum.

4. **Domestic Hot Water:** The temperature of the domestic hot water can be adjusted by turning the control knob clockwise to increase up to a maximum of 65° C (Fig. 9).

5. The temperature of the water is also dependent on the water flow rate and the temperature of the mains water coming into the house.

6. By slightly reducing the flow from the tap the temperature will increase up to the maximum if required.

7. The flow rate can be reduced down to as low as 2.5 litre/min. The boiler will still recognise the need to heat the water.

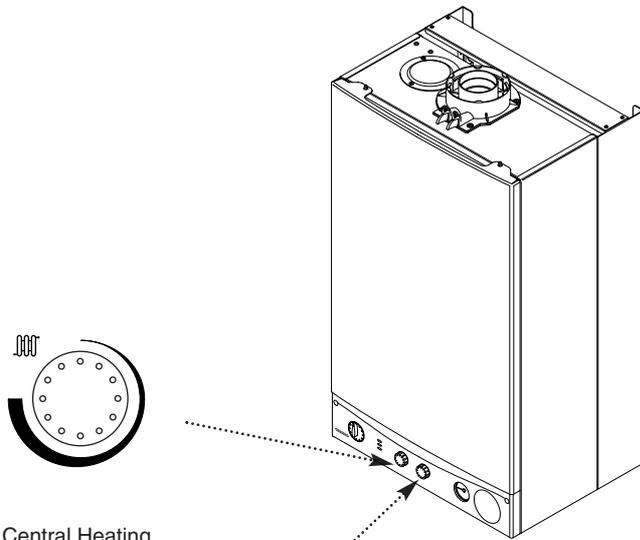


Fig. 8
Central Heating
Temperature Control

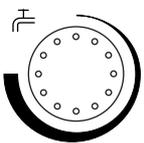


Fig. 9
Domestic Hot Water
Temperature Control

Central Heating System Pressure

1. The water pressure in the central heating system is indicated by the pressure gauge.
2. With the system cold and the boiler not operating the pressure should be between 0.5 and 1.0 bar. During operation the pressure should not exceed 2.5 bar, and will normally be between 1.0 and 2.0 (Figs. 10 & 11).
3. A pressure of 3 or greater indicates a fault. The safety pressure relief valve will operate, at a pressure of 3 (Fig. 12). **It is important that your Installer or Service Engineer is contacted as soon as possible.**
4. The minimum pressure for correct operation is 0.5. If the pressure falls below 0.5, this may indicate a leak on the central heating system (Fig. 13).

To Shut Off the Boiler

1. **For short periods:** Turn the selector switch to the OFF position (Fig. 14).
2. **For long periods:** Turn off the selector switch (Fig. 14), electricity and gas supplies.

If your home is to be left unoccupied for long periods during cold weather the boiler and whole system should be drained unless equipped with frost protection.

3. Your installer will advise you about frost protection and draining the system.

IMPORTANT: When the selector switch is in the '0' (Off) position the electrical supply to the boiler is isolated. The boiler will not operate and the integral timer (if fitted) will require resetting once the selector switch is set to either Position (i) or Position (ii).

Pressure Gauge

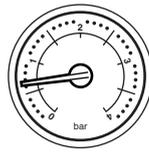


Fig. 10
Normal Pressure (when cold)

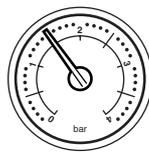


Fig. 11
Normal Pressure (operating)

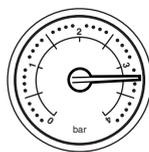


Fig. 12
Fault



Fig. 13
Below Minimum

ON/OFF/RESET Selector Switch

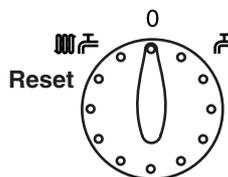
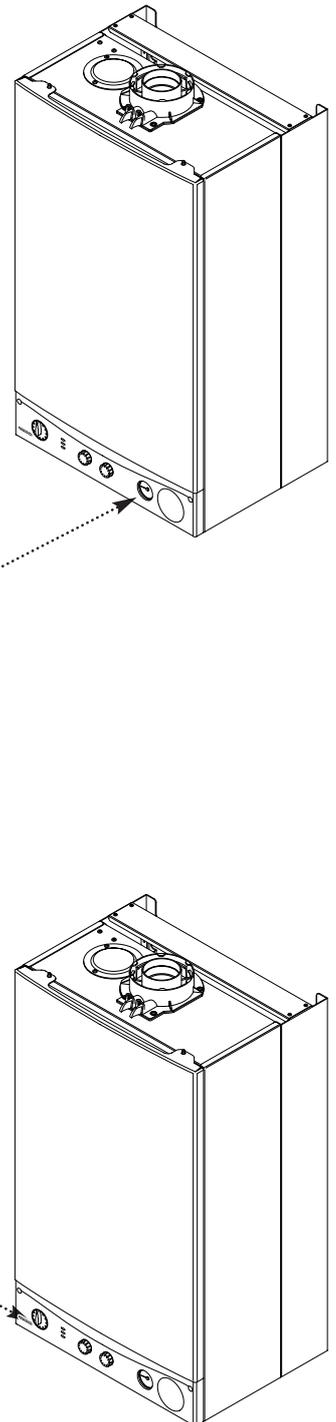


Fig. 14
OFF Position



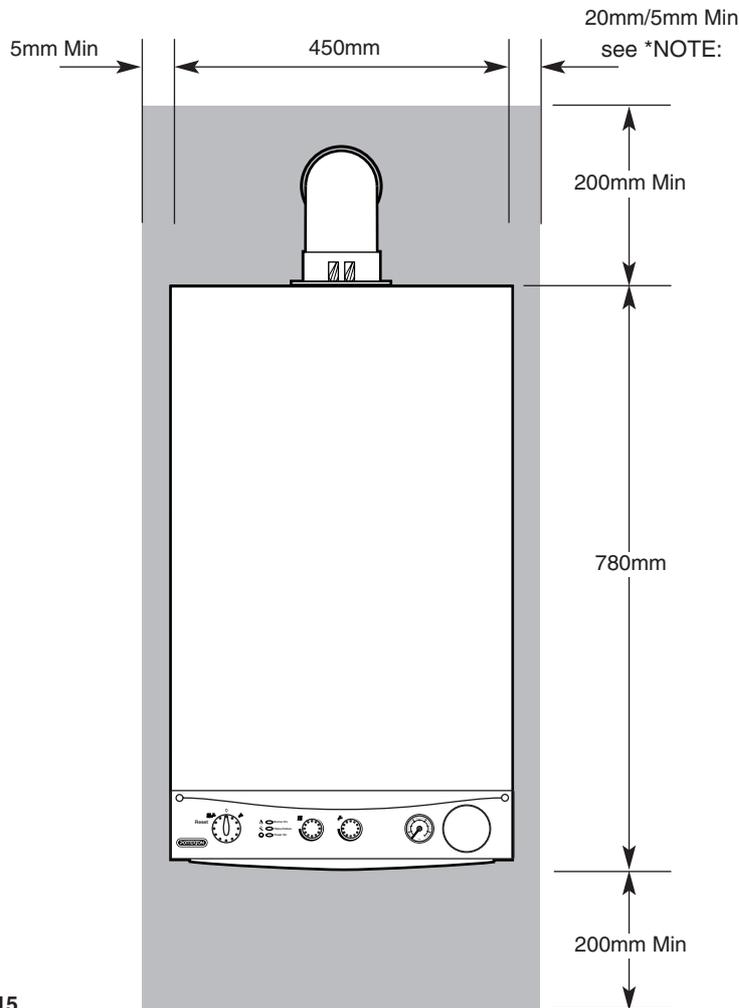


Fig. 15

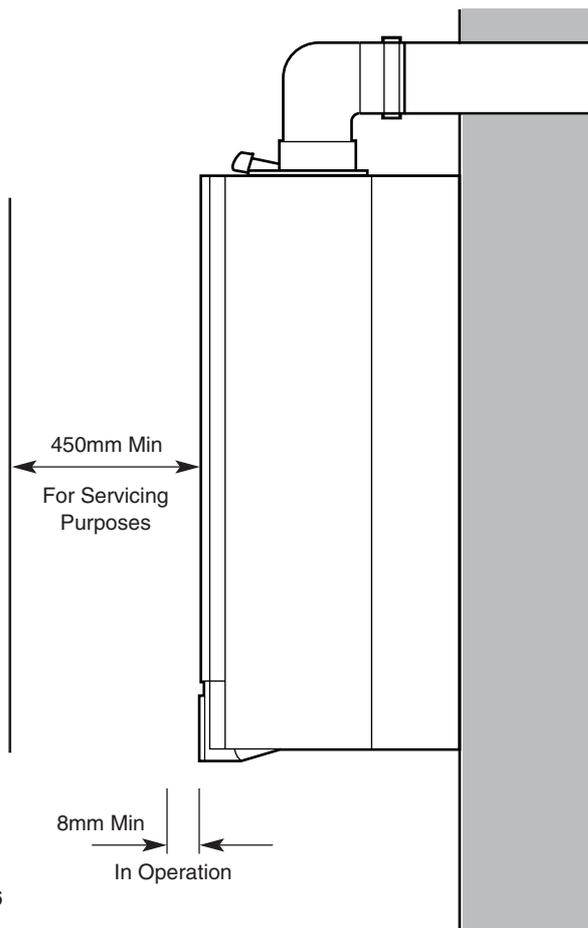


Fig. 16

Clearances around the Boiler (Figs. 15 & 16)

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

Top	-	200mm	
Bottom	-	200mm	
Left side	-	5mm	
Right Side	-	20mm/5mm	
Front	-	5mm	(In Operation)
	-	450mm	(For Servicing)

*** NOTE:** The boiler can be operated with a clearance of 5mm at the right. This is also sufficient for routine maintenance. However a clearance of 20mm is required if it is necessary to remove the secondary heat exchanger. This should be considered when siting the appliance and in the event of any subsequent alteration in the area of installation.

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. The boiler may be installed in a cupboard if these minimum clearances are kept. The compartment should be large enough to house the boiler and ancillary equipment only.

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

Check List

1. If a fault develops, or is suspected, call your Installer or Service Engineer as soon as possible.
2. Go through the following check list before you make contact.
 - a) Is the electricity supply on ?
 - b) Is the selector switch on (giving a green "Power ON" light) and set for both Central Heating and Domestic Hot Water ?
 - c) Is the red "Flame Failure" indicator lit ? Turn the On/Off/Reset selector fully anti-clockwise.
 - d) Is the gas supply on ?
 - e) Is the mains water supply turned on ?
 - f) Is the system pressure correct ?
 - g) Are the boiler temperature controls set high enough?
 - h) Is the time clock (if fitted) calling for central heating ?
 - i) Is the room thermostat (if fitted) set high enough ?
 - j) Are the radiator valves open ?

Cleaning the Outercase

The painted panels should be wiped with a damp cloth and then dried completely. Do not use abrasive cleaning agents.

Spare Parts

IMPORTANT - Only a competent person should be used to service or repair this boiler.

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 Potterton stockists if required.

2. Quote the appliance name, model number and where possible the part number when ordering spares. A parts list is included in the Installation and Servicing Instructions.

3. The name, model number, and serial number can be found on a label on the inner face of the lower right hand case panel (see back page).

Legislation

Potterton 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 ETCI rules for electrical installation.

All systems must be thoroughly flushed and treated with inhibitor.

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.

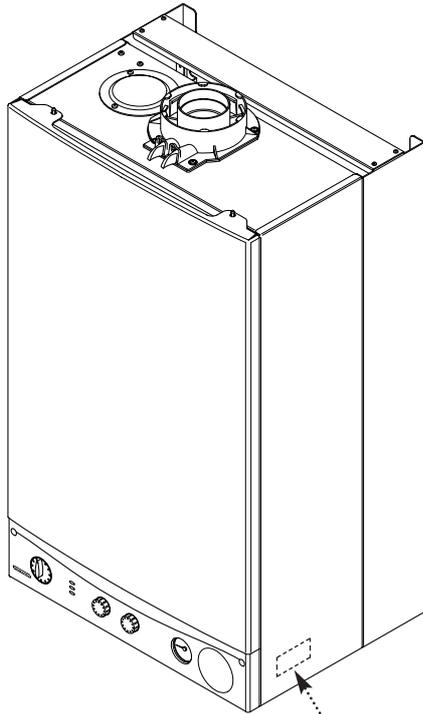
In IE the following Codes of Practice apply:

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.

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 inner face of the lower right hand case panel.



Information Label

General Enquiries (GB)

Tel. **08706 060 780**

Technical (GB)

Tel. **08706 049 049**

Service (GB)

Tel. **08706 096 096**

Fax. **01926 410 006**

Literature Request (GB)

Tel. **08706 060 623**

Technical (IE)

Tel. **1850 560570**

All descriptions and illustrations provided in this leaflet have been carefully prepared but we reserve the right to make changes and improvements in our products which may affect the accuracy of the information contained in this leaflet. All goods are sold subject to our standard Conditions of Sale which are available on request.

BAXI POTTERTON

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Website www.potterton.co.uk