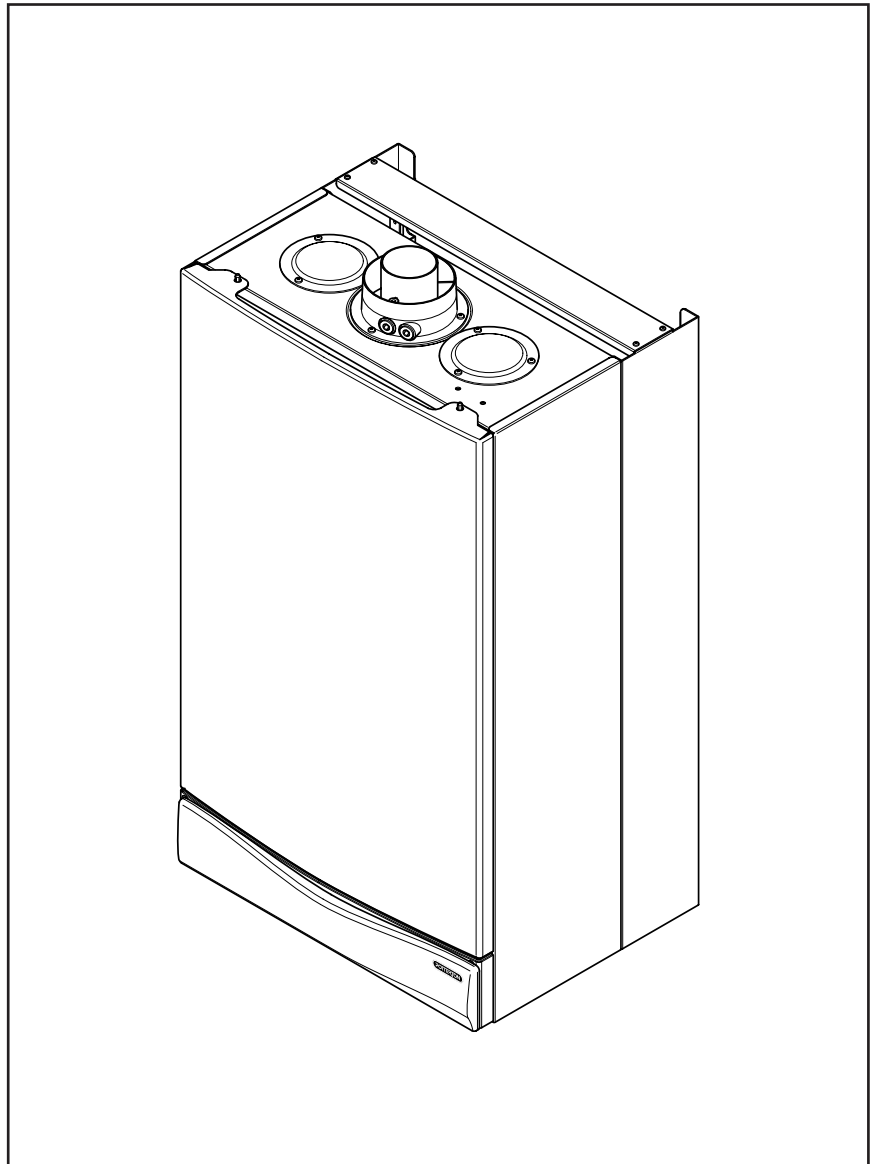


POTTERTON

Performa System 12e, 18e, 24e & 28e

Gas Fired Wall Mounted System Boilers

User's Operating Instructions



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

Natural Gas

Potterton Performa System 12e

G.C.N° 41 590 88

Potterton Performa System 18e

G.C.N° 41 590 89

Potterton Performa System 24e

G.C.N° 41 590 90

Potterton Performa System 28e

G.C.N° 41 590 91

Guarantee

Your Potterton Performa System 12e, 18e, 24e and 28e are designed and produced to meet all the relevant Standards.

Potterton provide a 12 month guarantee on the boilers. The guarantee operates from the date installation is completed for the customer who is the original user.

To maximise the benefit from our guarantee we urge you to return the reply-paid guarantee registration.

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.



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 GB/IE only.

STANDARD	SCOPE
B.S. 6891	Gas Installation.
B.S. 5440: Pt 1	Flues.
B.S. 5440: Pt 2	Air Supply.
B.S. 5546	Installation of hot water supplies for domestic purposes.
B.S. 7074	Expansion vessels and ancillary equipment for sealed water systems.
B.S. 5449	Forced circulation hot water systems.
B.S. 6798	Installation of gas fired hot water boilers.

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

1.0 Warnings

“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 01256 372300 or writing to:-

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

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 Service Engineer as soon as possible.

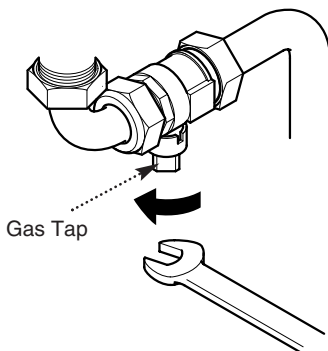


Fig. 1

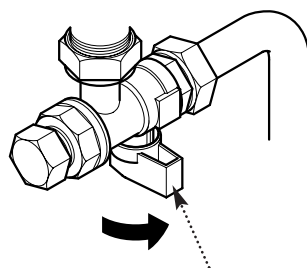


Fig. 2

Heating Flow and
Heating Return
Isolating Valves

1.1 Safe Installation

1. The appliance is suitable for installation only in G.B. and I.E. and should be installed in accordance with the rules in force. For Ireland install in accordance with I.S.813 “**INSTALLATION OF GAS APPLIANCES**”. The installation must be carried out by a CORGI Registered Installer or other registered competent person and be in accordance with the relevant requirements of **Gas Safety** (Installation and Use) **REGULATIONS** most recent edition, the **BUILDING REGULATIONS** issued by the Department of the Environment, **BUILDING STANDARDS** (Scotland) (Consolidation) **REGULATIONS** issued by the Scottish Development Department and the **LOCAL BUILDING REGULATIONS**. Where no specific instructions are given, reference should be made to the relevant **BRITISH STANDARD CODES OF PRACTICE and INSTALLATION SPECIFICATIONS**.

2. **This appliance must be installed in accordance with the manufacturer’s instructions and the rules in force, and only used in a suitably ventilated location.**

3. **Read the instructions before installing or using this appliance.**

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

IMPORTANT - The addition of anything that may interfere with the normal operation of the appliance without express written permission could invalidate the appliance warranty and infringe the **Gas Safety** (Installation and Use) **REGULATIONS**.

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 Installer or Transco (under 'Gas' in the phone directory).

1.3 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 British Gas Service will be able to advise you.

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.

Never Hang Flammable Items Over The Appliance

2.0 Introduction

2.1 Introduction

1. Your Potterton Performa System is a gas fired, room sealed, powered flue boiler, providing central heating and hot water for your home. It is fully automatic and does not have a pilot light.

2.2 Facia Panel

1. The facia panel is behind the hinged lower door. As well as the On/Off/Reset selector knob, central heating temperature control knob and pressure gauge, the facia incorporates ten neon indicator lights.

2. Neons 10 to 13 indicate the operational status of the boiler. Neons 4 to 9 have a dual function, indicating the temperature of the central heating water when constantly illuminated. If a fault develops the appropriate neon will begin to flash. Refer to Sections 3.3 to 3.7.

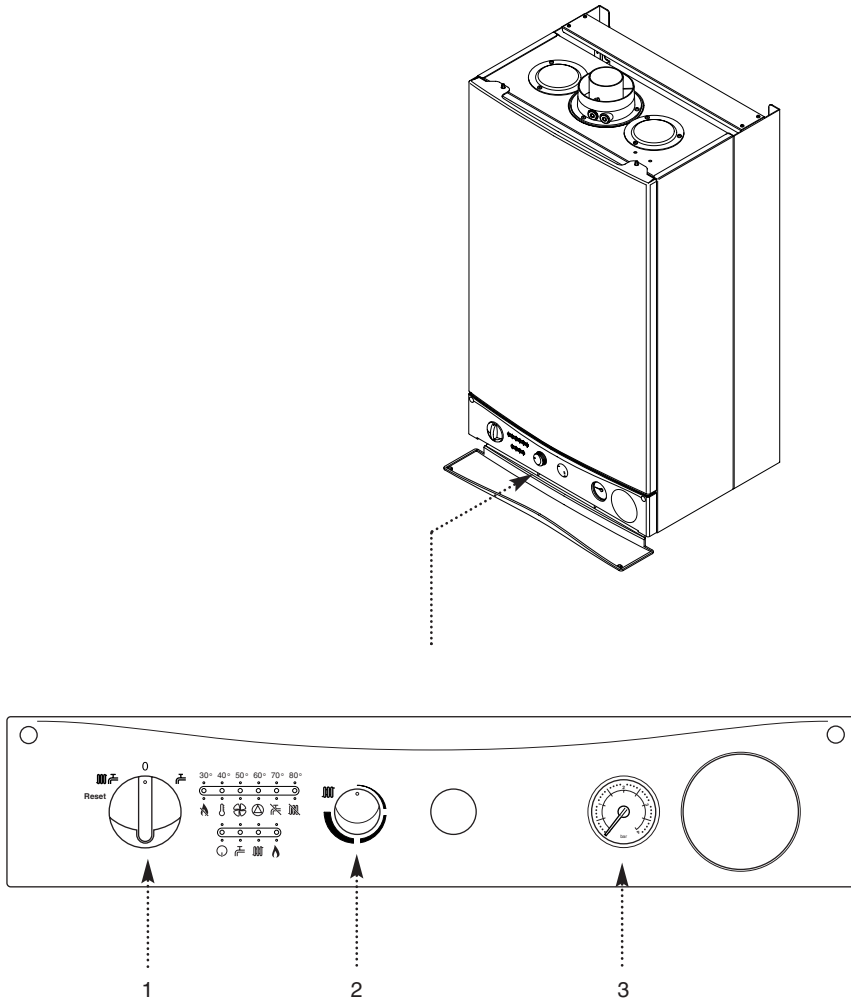
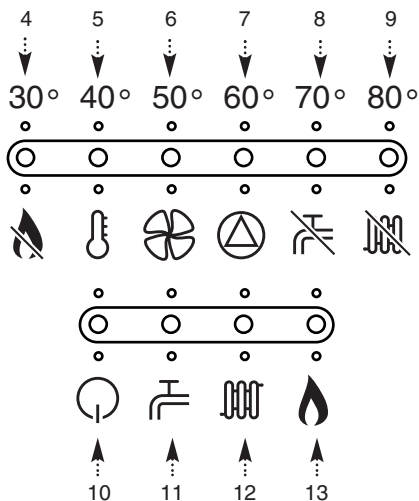


Fig. 3



KEY TO FACIA PANEL (Fig. 3)

1. On/Off/Reset Selector Switch
2. Central Heating Temperature Control
3. Central Heating System Pressure Gauge

Neon Indicators

4. Flame Failure
5. Safety Thermostat Activated
6. Fault on Fan or Flue
7. Fault on Pump or Low System Pressure
8. Fault on Hot Water Sensor
9. Fault on Central Heating Sensor
10. Power On
11. Hot Water Mode
12. Central Heating Mode
13. Burner On

When neons 4 to 9 are constantly illuminated, they indicate the temperature of the central heating water.

3.0 Operating the Boiler

3.1 Operating the Boiler

1. Ensure that the electricity and gas supplies are turned on. Check that the central heating pressure is between 0.2 and 1.0 bar (Fig. 4).

2. Turn the On/Off/Reset selector switch either anti-clockwise from the off position (Fig. 6) to both central heating and hot water or clockwise to domestic hot water only.

3. In either position the green power on indicator (Ⓞ) will illuminate (Fig. 5).

4. **Position (i)** In this position the boiler will provide central heating or domestic hot water according to demand (Fig. 7). The central heating (🔥) or hot water neon (🔧) will illuminate (Fig. 5). Neons 4 to 9 will illuminate as the temperature rises.

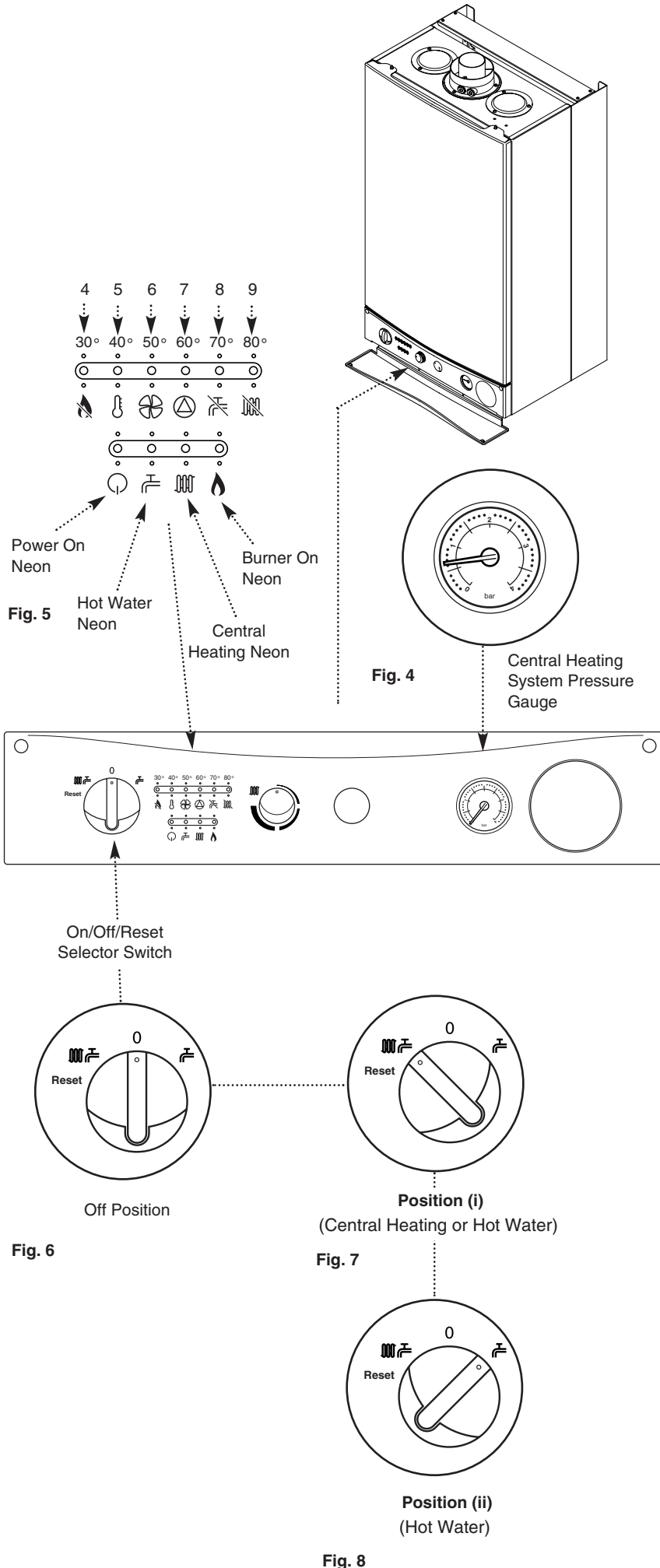
5. **Position (ii)** In this position the domestic hot water will be heated as demanded (Fig. 8). The hot water neon will illuminate (🔧). The central heating will not operate even if timers, room thermostat etc. are calling for heat.

6. Depending upon the system, domestic hot water may be given priority when the selector switch is in Position (i).

7. The boiler will light automatically on demand.

8. The orange burner on neon (🔥) will illuminate when the boiler is operating and the main burner is on (Fig. 5).

IMPORTANT: When the selector switch is in the '0' (Off) position the electrical supply to the boiler is isolated. The boiler will not operate.




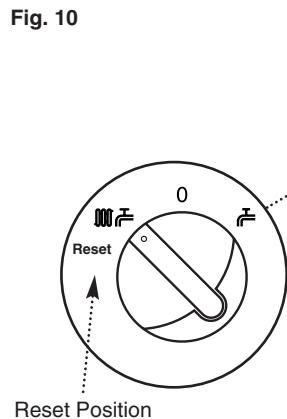
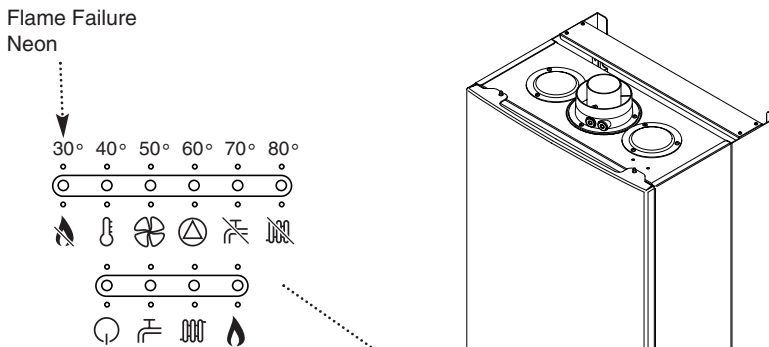
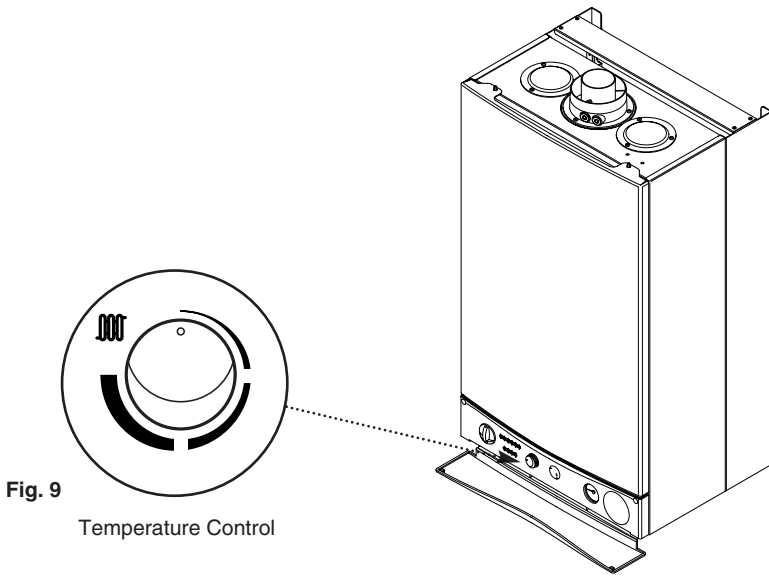
3.0 Operating the Boiler

3.2 Temperature Control

1. The water flow temperature can be adjusted between 30° C ($\pm 5^\circ$ C) minimum and 85° C ($\pm 5^\circ$ C) maximum.
2. Turn the control knob clockwise to increase the temperature (Fig. 9).
3. In normal winter usage we recommend that the temperature be set at maximum.

3.3 Flame Failure Reset

1. The red flame failure neon () will illuminate in the event of the burner failing to light, or when incomplete lighting of the burner occurs (Fig. 10).
2. Turn the selector switch fully anti-clockwise against the spring pressure to the reset position (R) and release (Fig. 11). Set the selector to the required position to light the boiler.
3. If the flame failure light illuminates repeatedly a fault is indicated. Your Service Engineer should be contacted as soon as possible.



3.0 Operating the Boiler

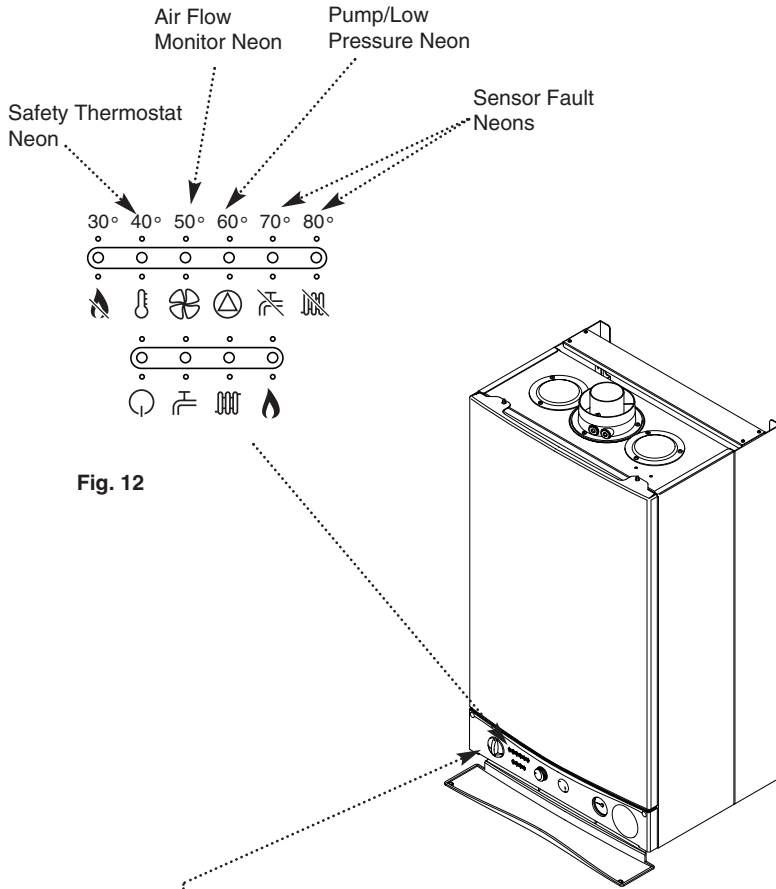


Fig. 12

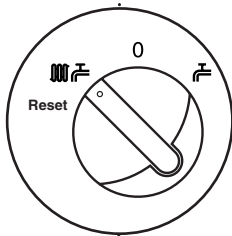


Fig. 13

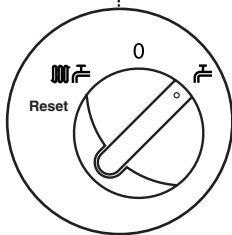




Fig. 14

3.4 Air Flow Monitor

1. The boiler is fitted with an air pressure sensing device. This monitors the flue system.



2. If the () neon illuminates it indicates that the flue or flue terminal is blocked or obstructed in some way, or that there is an internal fault. If there is no external blockage of the flue terminal that can be easily removed contact your Service Engineer (Fig. 12).

3.5 Pump Fault or Low Pressure

1. The neon () will illuminate if the circulating pump is faulty or the system pressure drops below the minimum requirement (Fig. 12).

2. Check the pressure gauge as described in Section 3.9. If the pressure is in the normal range, a pump fault is indicated. Contact your Service Engineer to determine the nature of the fault.


3.6 Sensor Fault

1. When the () or () neon is illuminated a fault on the central heating or hot water temperature sensor is indicated (Fig. 11). Contact your Service Engineer.

3.7 Pump Protection

1. With the selector switch in either Position (i) or Position (ii) (Figs. 13 & 14) the pump will automatically operate for 1 minute in every 24 hours to prevent sticking.

3.8 Safety Thermostat

1. Your Potterton Performa System is fitted with an additional safety device, which shuts down the boiler in the event of the system or the boiler overheating. The safety thermostat neon () will light in this instance (Fig. 12).

2. **To reset:** Turn the selector fully anti-clockwise against the spring pressure to the reset position (R) and release (Fig. 13).

3. If the safety thermostat operates repeatedly, causing boiler shutdown, a fault is indicated. Your Service Engineer should be contacted as soon as possible.

3.0 Operating the Boiler

3.9 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 0.2 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. 14 & 15).

3. A pressure of 3 or greater indicates a fault. The safety pressure relief valve will operate, at a pressure of 3 (Fig. 16). **It is important that your Service Engineer is contacted as soon as possible.**

4. The minimum pressure for correct operation is 0.2. If the pressure falls below 0.2, this may indicate a leak on the central heating system (Fig. 17).

5. The system must be re-pressurised by your Service Engineer.

3.10 To Shut Off the Boiler

1. For short periods: Turn the selector switch to the Off position (Fig. 18).

2. For long periods: Turn off the selector switch (Fig. 18), 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 there is additional 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.

3.11 Frost Protection Mode

1. The frost protection feature will operate when the selector switch is in Position (i). The gas and electrical supplies to the boiler must be on and then system pressure be within the range described in Section 3.9.

2. If the system temperature falls below 5°C, then the boiler will fire until the water temperature has been raised.

3. Further frost protection can be incorporated by using a frost thermostat to protect the whole system.

Pressure Gauge

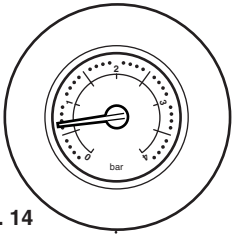


Fig. 14
Normal Pressure (when cold)

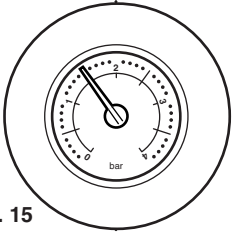


Fig. 15
Normal Pressure (operating)

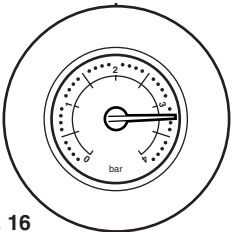


Fig. 16
Fault

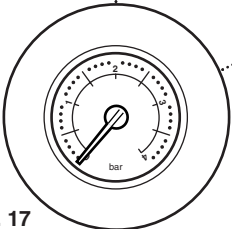


Fig. 17
Below Minimum

On/Off
Selector Switch

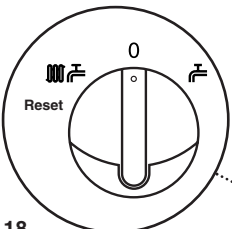
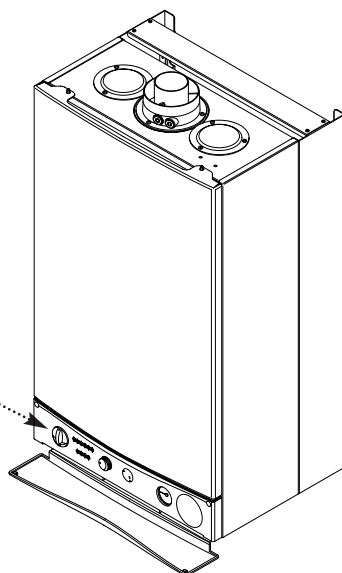
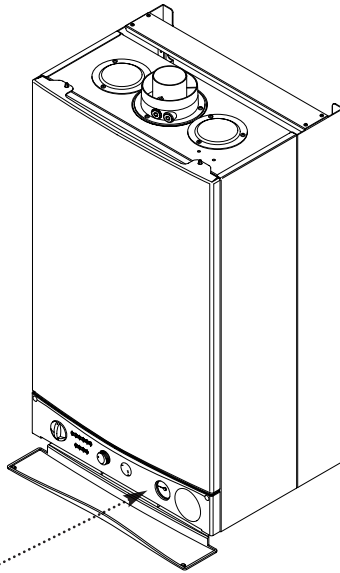


Fig. 18
Off Position



4.0 Clearances and Check List

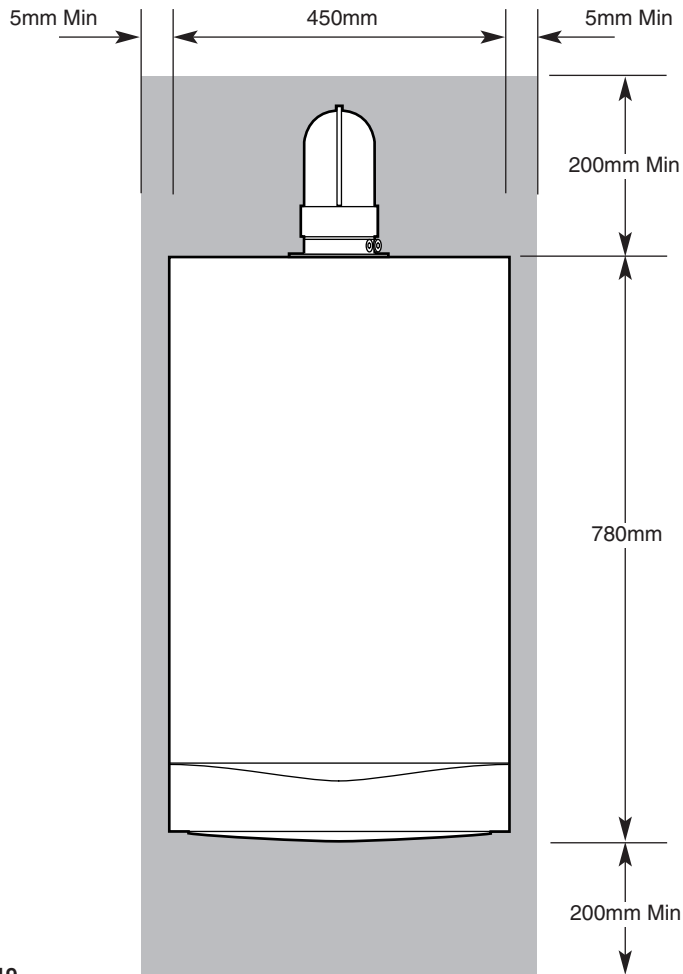


Fig. 19

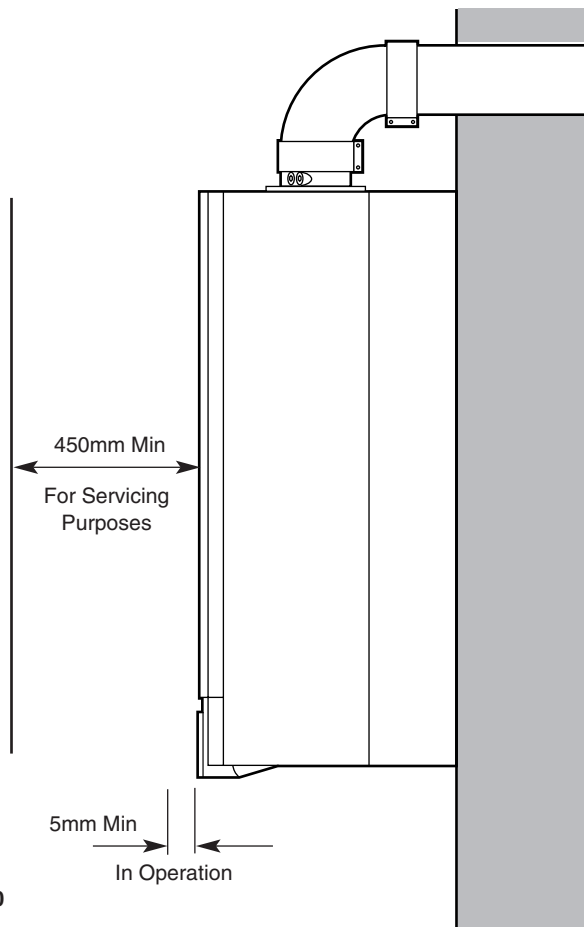


Fig. 20

4.1 Clearances around the Boiler (Figs. 19 & 20)

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

Top	-	200mm	
Bottom	-	200mm	
Both sides	-	5mm	
Front	-	5mm	(In Operation)
	-	450mm	(For Servicing)

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.**

4.2 Check List

1. If a fault develops, or is suspected, call your 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 in the On Position (giving a green "Power On" neon) ?
 - c) Is the red "Flame Failure" neon lit ?
Turn the On/Off/Reset selector fully anti-clockwise.
 - d) Is the gas supply on ?
 - e) Is the system pressure correct ?
 - f) Is the boiler temperature control set high enough ?
 - g) Is the time clock (if fitted) calling for heat ?
 - h) Is the room thermostat (if fitted) set high enough ?
 - i) Are the radiator valves open ?

5.0 Cleaning, Spares & Guarantee

5.1 Cleaning the Outercase

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

5.2 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 the information label on the back of the hinged lower door (Fig. 20).

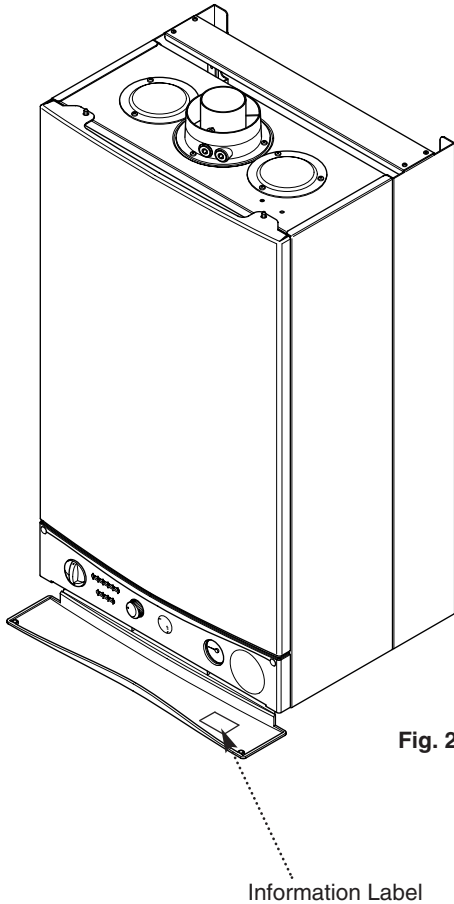


Fig. 20

Information Label

POTTERTON

Potterton, Baxi UK Limited, Brownedge Road, Bamber Bridge, Preston, Lancashire. PR5 6SN
After Sales Service 08706 096 096
www.baxi.com