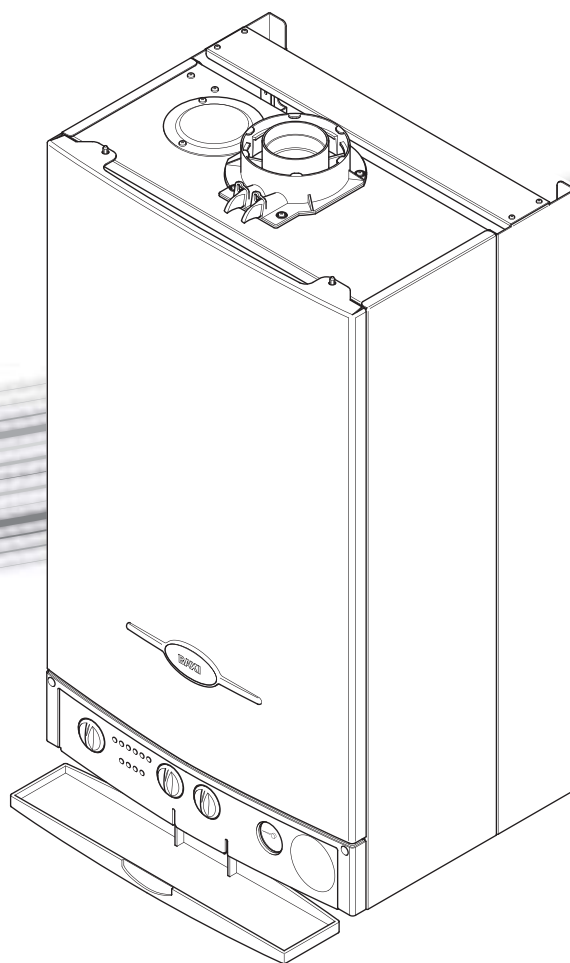


# BAXI

## User's Operating Instructions



### Baxi Combi 105 HE

Gas Fired Wall Mounted  
Condensing Boiler

Please keep these instructions in a safe place.  
If you move house, please hand them over to the next occupier.

## Natural Gas

Baxi Combi 105 HE  
G.C.N° 47 075 18

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

### The Benchmark Scheme

Baxi Heating UK Ltd is a licensed member of the Benchmark Scheme which aims to improve the standards of installation and commissioning of domestic heating and hot water systems in the UK and to encourage regular servicing to optimise safety, efficiency and performance.

Benchmark is managed and promoted by the Heating and Hotwater Industry Council. For more information visit [www.centralheating.co.uk](http://www.centralheating.co.uk)

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The Company Secretary, Baxi Heating UK Limited,  
Brooks House, Coventry Road, Warwick. CV34 4LL

Full acknowledgement of author and source must be given.

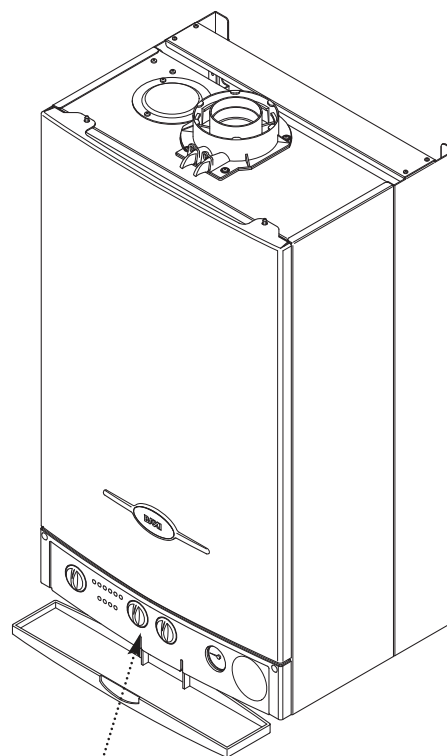
**WARNING:** Any person who does any unauthorised act in relation to a copyright work may be liable to criminal prosecution and civil claims for damages.



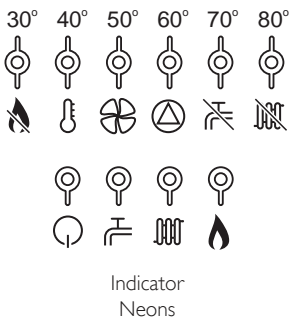
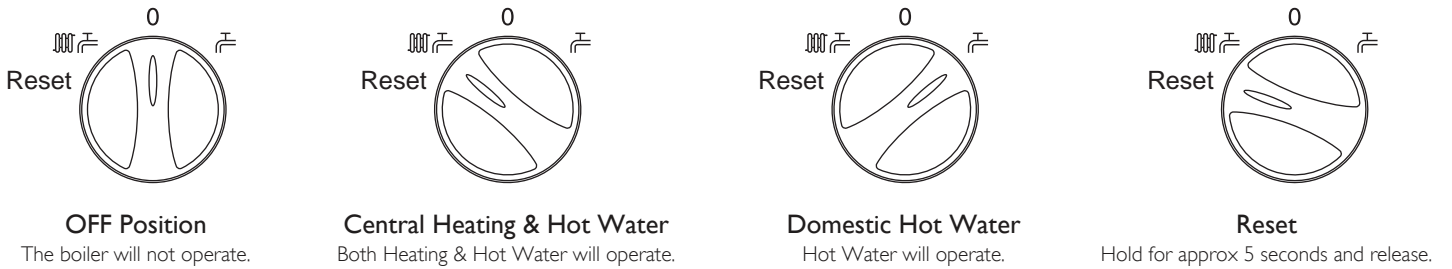
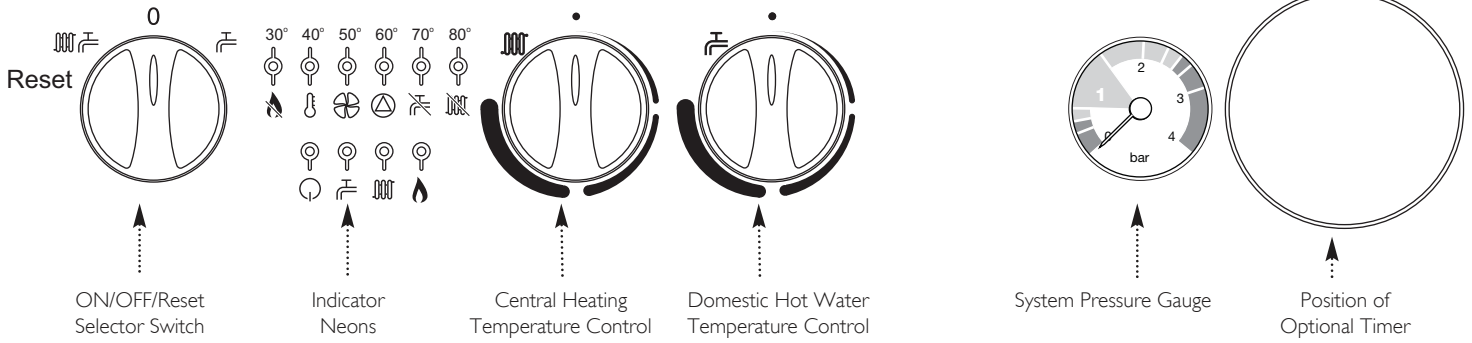
ISO 9001  
FM 00866





## Contents

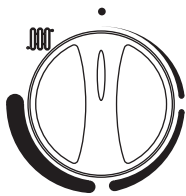
| Section                           | Page |
|-----------------------------------|------|
| 1.0 Quick Reference Guide         | 3    |
| 2.0 Troubleshooting               | 4    |
| 3.0 Fault Indication              | 6    |
| 4.0 System Pressure & Temperature | 7    |
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| 6.0 Care of the Boiler            | 9    |
| 7.0 Legislation                   | 10   |
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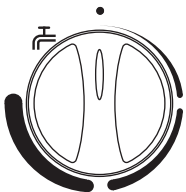
Boiler Controls - see opposite page  
for Operating Quick Reference Guide



-  **Power On Indicator** - The indicator will illuminate when there is power to the boiler.
-  **Domestic Hot Water Indicator** - The indicator will illuminate when hot water is being supplied to a tap or shower.
-  **Boiler On** - The indicator will illuminate when there is a demand for heat to the boiler.
-  **Burner On Indicator** - The indicator will illuminate when the burner has fired and is heating your central heating or domestic hot water.



**Central Heating Temperature Control**  
Turn the knob clockwise to increase or anticlockwise to decrease the temperature. Range 30 - 85° C.



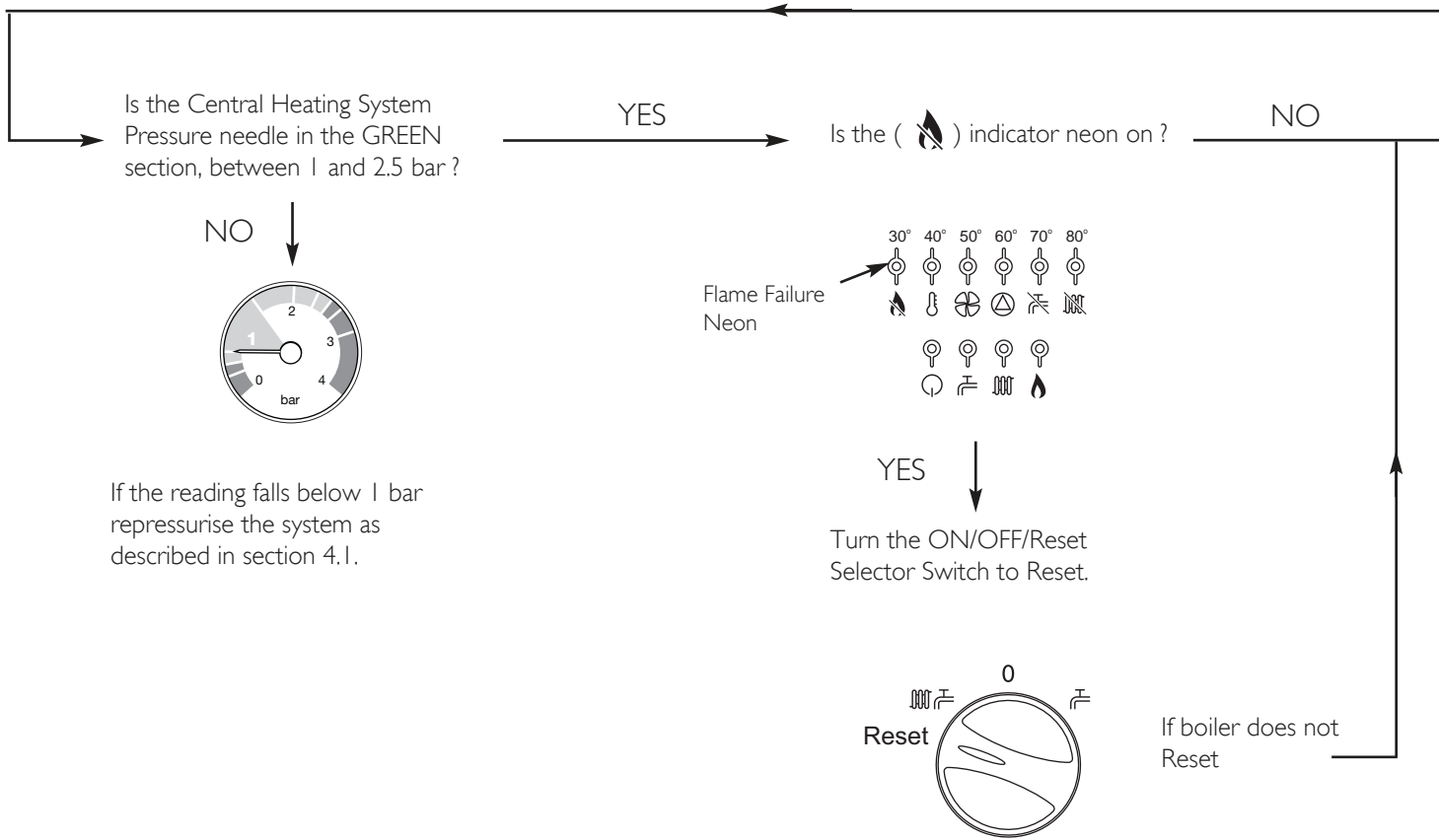
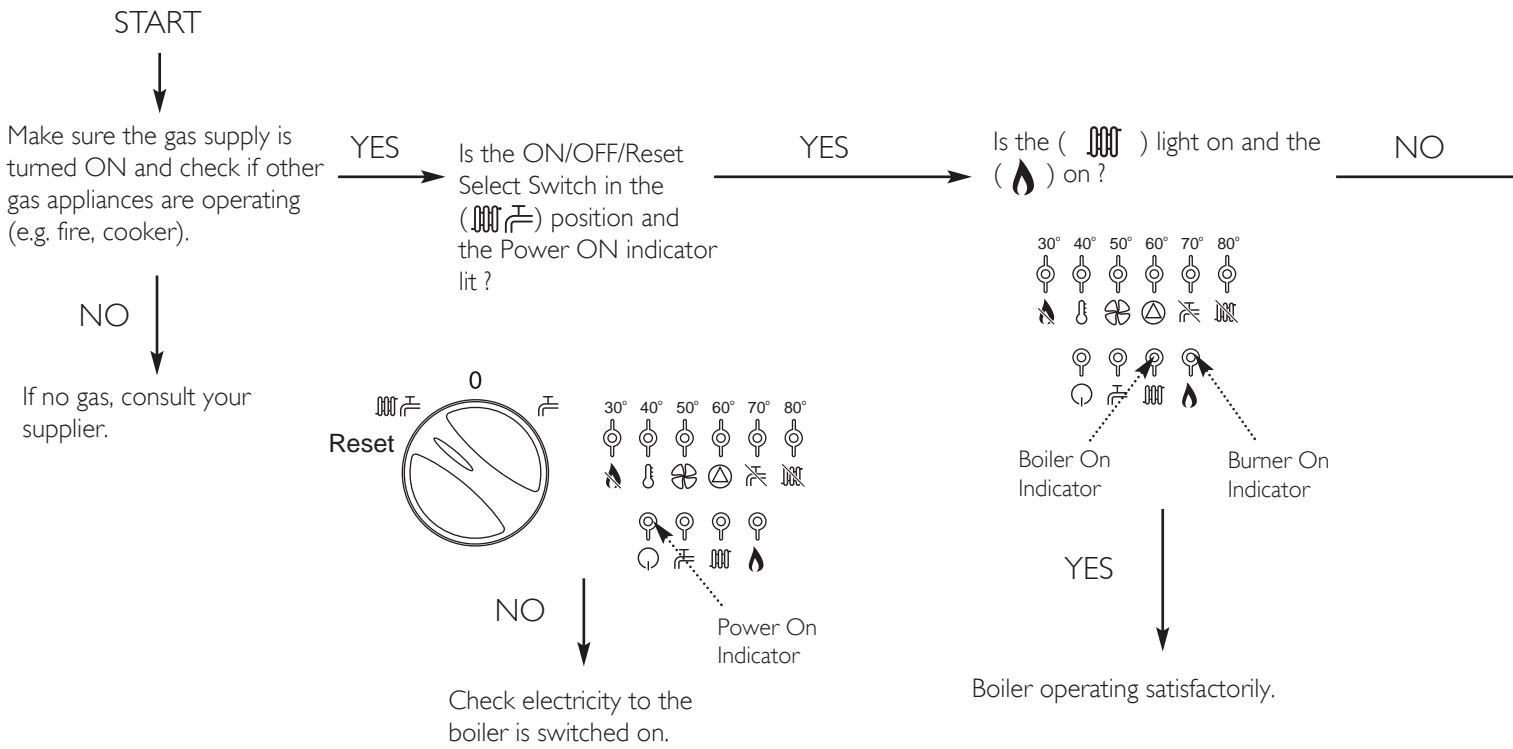
**Domestic Hot Water Pre-Heat Temperature Control**  
Turn the knob clockwise to increase or anticlockwise to decrease the temperature. Range 35 - 65° C.



**Central Heating System Pressure** - The normal operating water pressure is between 1 and 2.0 bar. If the pressure exceeds 3 bar the safety pressure valve will operate and a fault is indicated. Contact your Installer.

# Boiler not working

## 2.0 Troubleshooting



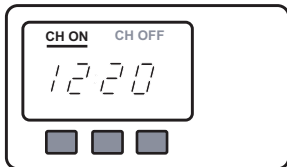
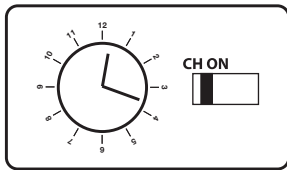
Is the Timer ON and calling for heat ?

YES

Is the Room Thermostat (if fitted) set high enough ?

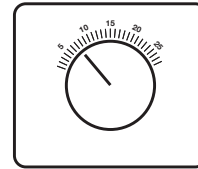
YES

Typical examples of external timer



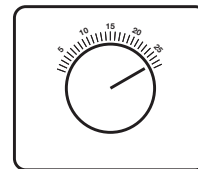
NO

Ensure timer is set for Central Heating ON (see any instructions supplied with timer).



NO

Turn Room Thermostat to maximum setting (typical example shown).



CONTACT YOUR INSTALLER OR SERVICE ENGINEER.

**If you don't know what you need to do to get the boiler to light, or need help with the system and controls, contact your installer as soon as possible.**

## 3.0 Fault Indication

**NOTE:** The neons annotated have a dual function, indicating the temperature of the central heating water when constantly illuminated or begin to flash to indicate a fault.

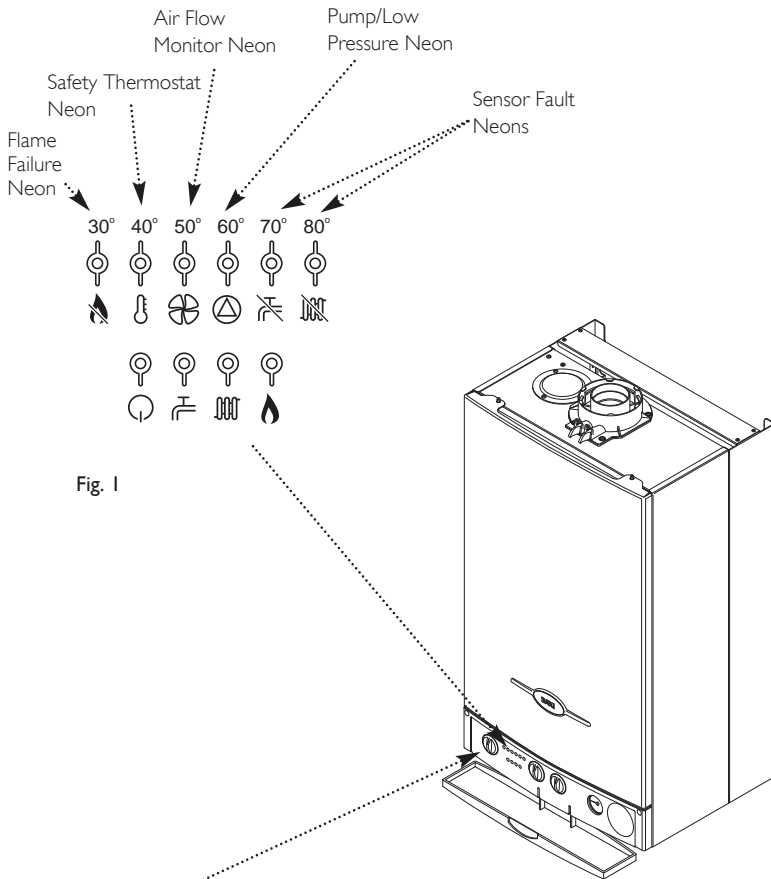


Fig. 1

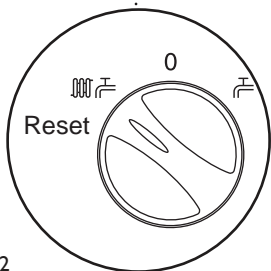


Fig. 2

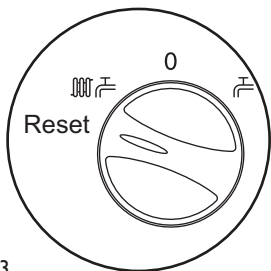




Fig. 3

### 3.1 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 Installer or Service Engineer (Fig. 1).

### 3.2 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. 1).

2. Check the pressure gauge as described on page 8. If the pressure is in the normal range, a pump fault is indicated. Contact your Installer or Service Engineer to determine the nature of the fault.


### 3.3 Sensor Fault

1. When either of the (  ) or (  ) neons is illuminated a fault on one of the temperature sensors is indicated (Fig. 1). Contact your Installer or Service Engineer.


### 3.4 Pump Protection

1. With the selector switch in the on position (Fig. 2) the pump will automatically operate for 1 minute in every 24 hours to prevent sticking.

### 3.5 Safety Thermostat

1. Your Baxi Combi HE is fitted with an additional safety devices, which shut down the boiler in the event of the system, boiler or flue overheating. The safety thermostat neon (  ) will light in this instance (Fig. 1).

### 3.6 Flame Failure

1. The red flame failure neon (  ) will illuminate in the event of the burner failing to light, when incomplete lighting of the burner occurs or blockage of the condensate drain (Fig. 1).

#### To Reset the Safety Thermostat or Flame Failure

1. To reset: Turn the selector fully anti-clockwise against the spring pressure to the 'Reset' position for at least two seconds and release (Fig. 3).

2. If after turning the selector to the 'Reset' position the boiler does not relight or the safety thermostat or flame failure operates repeatedly, causing boiler shutdown, a fault is indicated. Your Installer or Service Engineer should be contacted as soon as possible.

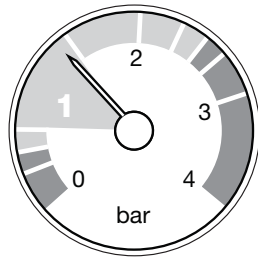


Fig. 4

Normal Pressure

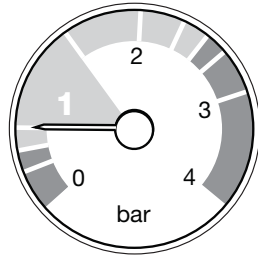


Fig. 5

Requires  
Repressurising

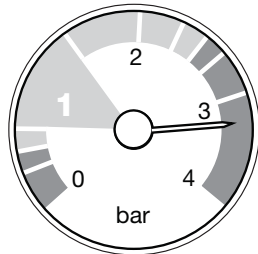


Fig. 6

Fault

### 4.1 Central Heating System Pressure

1. The normal operating water pressure is between 1 and 2.5 bar (Fig. 4). If the pressure exceeds 3 bar the safety pressure valve will operate and a fault is indicated (Fig. 6). Contact your installer.

2. It may be necessary to repressurise the system occasionally (Fig. 5). A filling device (the filling loop) will be fitted on the system. If you are unsure of its position, or cannot identify it, consult the installer who fitted the boiler.

3. The filling loop will probably consist of two taps and a separate metal braided hose with connection fittings.

4. Only when repressurising should the hose be connected between the two taps. Ensure that the nuts on the pipe ends are tightened onto the taps.

5. Fully open one of the taps first, and then while watching the pressure gauge, carefully open the second tap.

6. When the needle on the gauge is indicating 1 or more turn both taps off.

7. Disconnect the metal braided hose from the taps (a small amount of water may be present) and remove it. Keep the hose in a safe place for future use.

### 4.2 Temperature Control

1. **Central Heating:** The central heating hot 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. 7). In normal winter usage we recommend that the central heating temperature be set at maximum.

3. **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. 8).

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

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

6. 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.

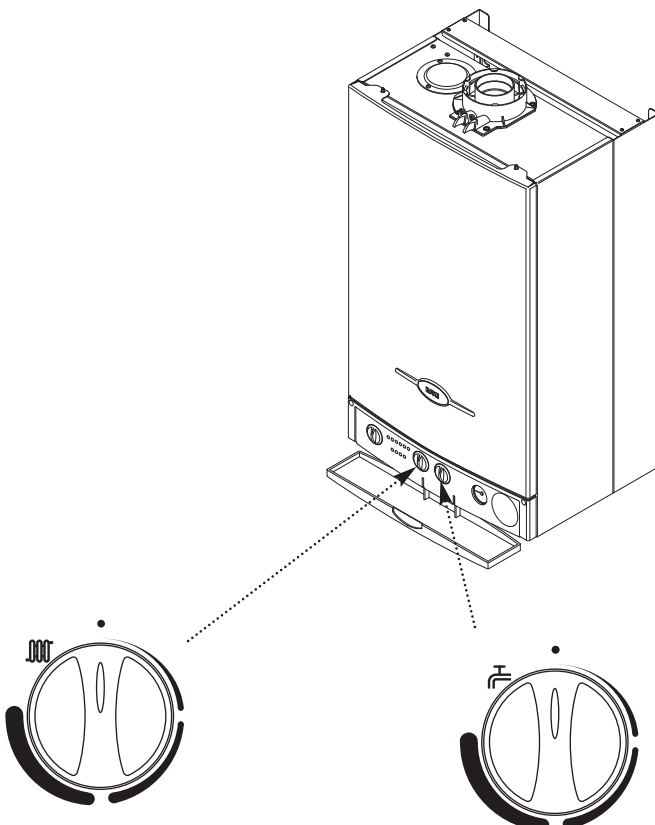
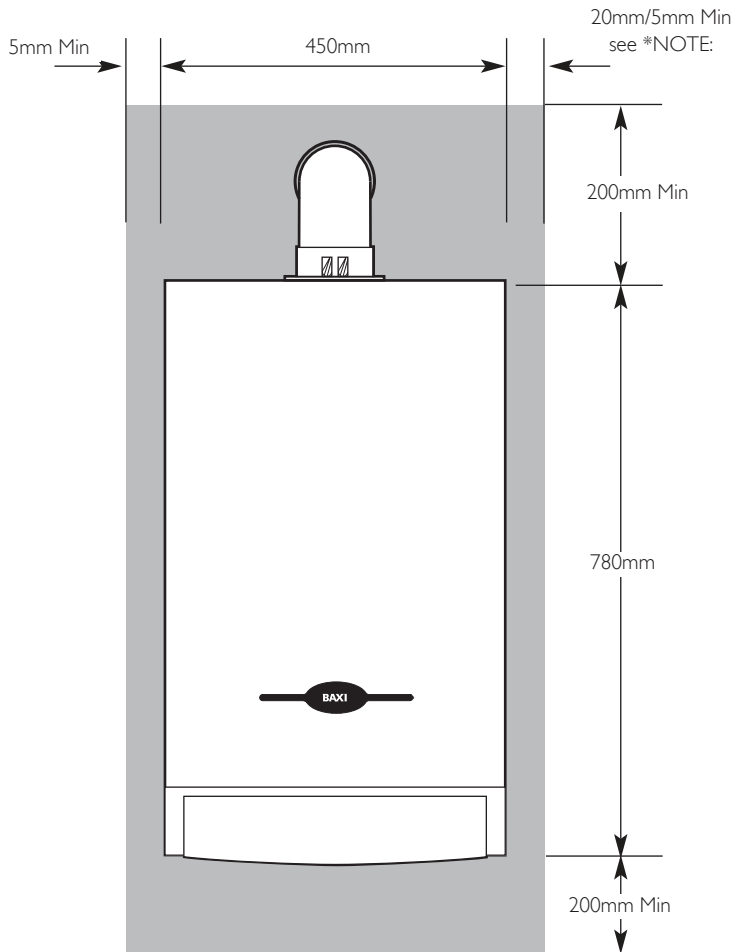


Fig. 7 Central Heating  
Temperature Control

Fig. 8 Domestic Hot Water  
Temperature Control

## 5.0 Clearances



### 5.1 For your Safety

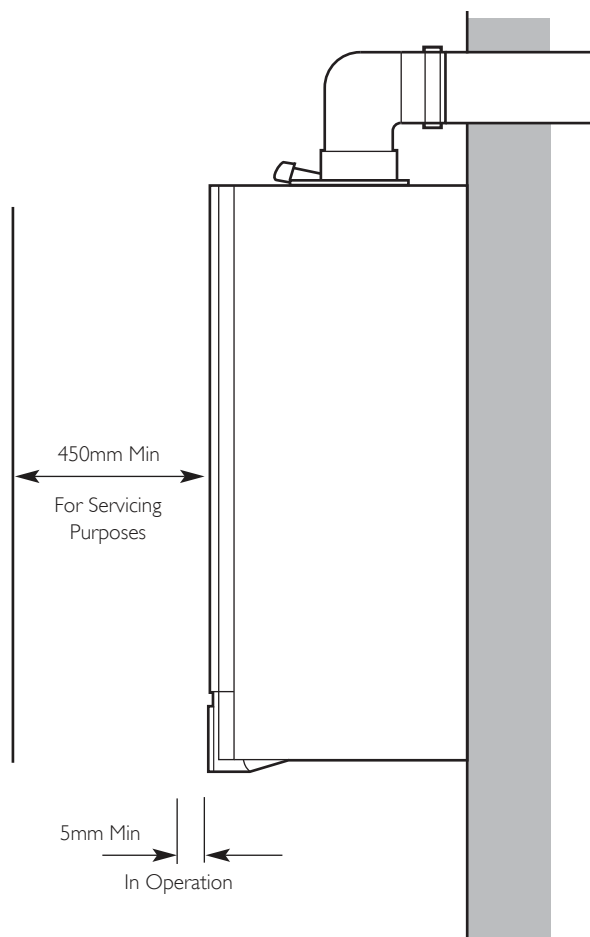
1. This appliance must have been installed in accordance with the manufacturer's instructions and the regulations in force.
2. Any modification that may interfere with the normal operation of the appliance without express written permission from the manufacturer or his agent could invalidate the appliance warranty. In GB this could also infringe the Gas Safety (Installation and Use) Regulations.

**GB** - Heating Industry definition meaning England, Scotland, Wales, Northern Ireland, Isle of Man and the Channel Isles

3. Your boiler must not be operated without the casing correctly fitted.
4. Do not interfere with any sealed components on this boiler.
5. Take note of any warning labels on your boiler.
6. Your boiler should have the following minimum clearances for Safety and Maintenance (Fig. 34):-

|            |                         |
|------------|-------------------------|
| Top        | - 200mm                 |
| Bottom     | - 200mm                 |
| Left side  | - 5mm                   |
| Right Side | - 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.



7. If your boiler is installed in a compartment, do not use it for storage purposes. Do not obstruct any purpose provided ventilation openings.
8. Flammable materials must not be stored in close proximity to your boiler.
9. Avoid skin contact when your boiler is in operation, as some surfaces may get hot e.g. pipework.
10. Ensure that the flue terminal, outside the house, does not become damaged or obstructed, particularly by foliage.
11. It is important that the condensate drain system is not blocked, modified or damaged in any way as this would affect the operation of your boiler. Your installer should have insulated any exposed pipework.




## 6.0 Care of the Boiler

### 6.1 Cleaning the Outer case

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

### 6.2 Protection & Precaution

1. The boiler incorporates an integral frost protection feature that will operate when the selector switch is in the (  ) position. If the boiler temperature falls below 5° C, then the boiler will operate until the water temperature has been raised.

2. If a system frost thermostat has been fitted (your installer will be able to advise you), then to operate correctly and protect your system, the gas and electricity must be left on and the appliance set in the central heating mode.

3. The boiler incorporates an integral pump protection feature which continually monitors the time since the pump last operated. To prevent seizure, the pump will operate for approximately 1 minute if it has not run in the last 24 hours.

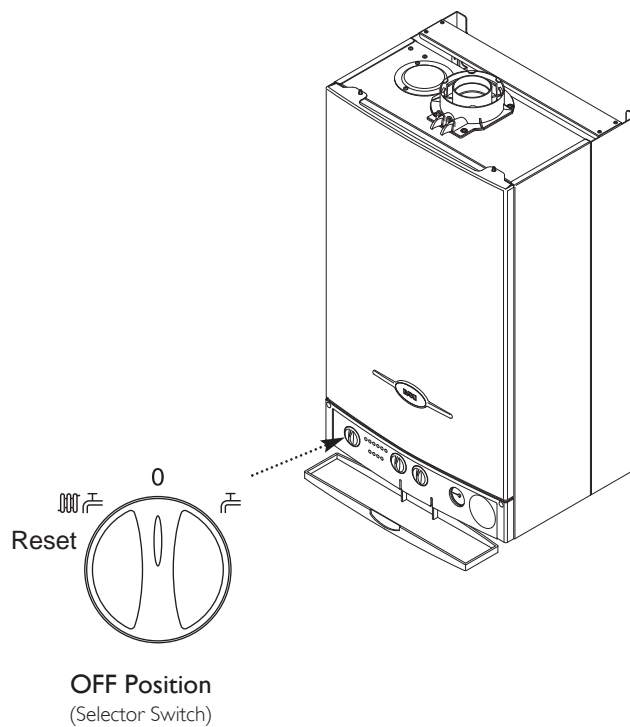


Fig. 9

### 6.3 To Shut Off the Boiler (Fig. 9)

1. **For short periods:** Turn the selector switch to the Off position.

2. **For long periods:** Turn off the selector switch, 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.

## 7.0 Legislation

### 7.1 Installation, Commissioning, Service & Repair

1. 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.
2. In GB, this must be carried out by a competent person as stated in the Gas Safety (Installation & Use) Regulations.
3. **Definition of competence:** A person who works for a Gas Safe registered company and holding current certificates in the relevant ACS modules, is deemed competent.
4. In IE (Eire), this must be carried out by a competent person as stated in I.S. 813 "Domestic Gas Installations".

---

All Gas Safe registered engineers carry an ID card with their licence number and a photograph. You can check your engineer is registered by telephoning 0800 408 5500 or online at [www.gassaferegister.co.uk](http://www.gassaferegister.co.uk)

---

The boiler meets the requirements of Statutory Instrument "The Boiler (Efficiency) Regulations 1993 No 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 Bodies 0051 & 0086.

For GB/IE only.

---

### 7.2 Benchmark Commissioning Checklist

1. Please ensure that the installer has fully completed the Benchmark Checklist on the inside back pages of the installation instructions supplied with the product and that you have signed it to say that you have received a full and clear explanation of its operation. The installer is legally required to complete a commissioning checklist as a means of complying with the appropriate Building Regulations (England and Wales).
  2. All installations must be notified to Local Area Building Control either directly or through a Competent Persons Scheme. A Building Regulations Compliance Certificate will then be issued to the customer who should, on receipt, write the Notification Number on the Benchmark Checklist.
  3. This product should be serviced regularly to optimise its safety, efficiency and performance. The service engineer should complete the relevant Service Record on the Benchmark Checklist after each service.
  4. The Benchmark Checklist may be required in the event of any warranty work and as supporting documentation relating to home improvements in the optional documents section of the Home Information Pack.
-

### Warning !

#### If you smell gas

- Do not operate light switches
- Do not operate any electrical equipment
- Do not use a telephone in the hazardous area
- Extinguish any naked flame and do not smoke
- Open windows and doors in the hazardous area
- Turn off the gas supply at the meter
- Warn any other occupants and vacate the premises
- Telephone the National Gas Emergency Service on:-  
0800 111 999

#### Faulty boiler

If it is known or suspected that a fault exists on the boiler, it must not be used until the fault has been corrected by a competent person.

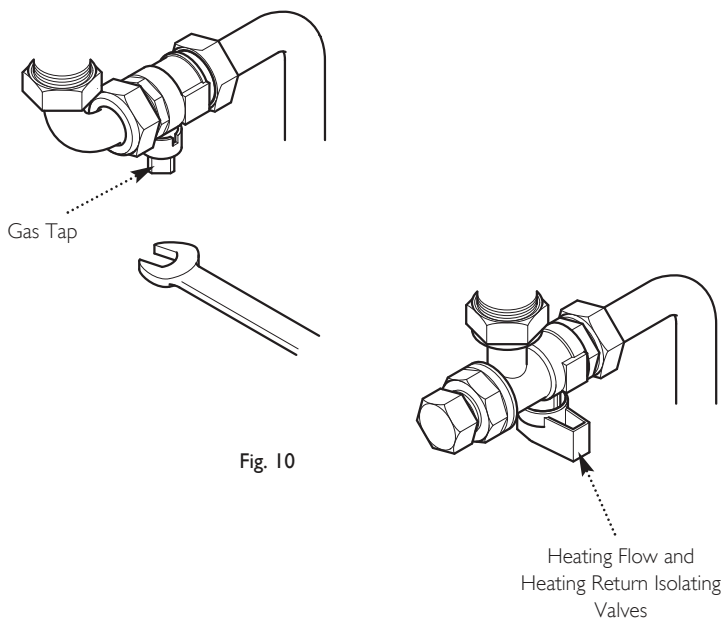


Fig. 10

#### 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. Using a suitable open ended spanner, turn the square nut on the gas tap through 90° (1/4 turn) to isolate the gas supply at the boiler (Fig. 10).
2. The water isolating valves are positioned under the boiler and can be closed by turning their taps to the right towards the wall (Fig. 10).
3. Call your Installer or Service Engineer as soon as possible.

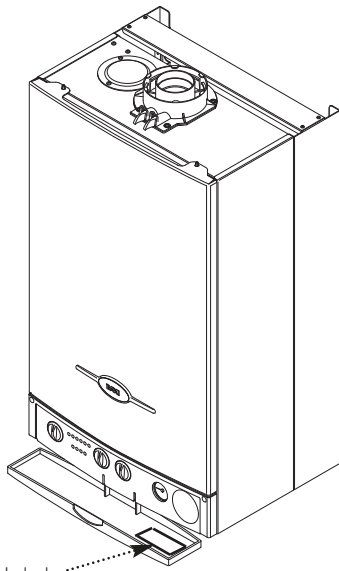
Please complete the boxes below

Serial Number

Date of Installation

|   |   |   |   |   |   |
|---|---|---|---|---|---|
|   |   |   |   |   |   |
| D | D | M | M | Y | Y |

Installer Details (name, address and contact number(s))



Information Label

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

A Trading Division of Baxi Heating UK Ltd (3879156)  
Brooks House, Coventry Road, Warwick. CV34 4LL  
After Sales Service 0844 871 1525 Technical Enquiries 0844 871 1555  
Website [www.baxi.co.uk](http://www.baxi.co.uk)  
e&oe

PART OF BDR THERMEA

© Baxi Heating UK Ltd 2011

## 9.0 Warranty & Service

### Standard Warranty Term & Conditions

#### 12 Months Free Warranty - register today

To receive your 12 months free warranty please complete the form supplied with the boiler or simply call **heateam**, the service of Baxi Heating UK Ltd on **08706 000 653**.

#### Our promise to you

If you experience a fault with your new boiler, we aim to provide a safe and high quality repair service supported by our dedicated national network of highly skilled engineers. If your installer can't resolve the problem for you, we will do everything we can to get an engineer out to you as quickly as possible. Nothing in this warranty will affect your statutory consumer rights.

#### What you need to do if you experience a problem with your heating system or the operation of the boiler

You should always contact your installer first, because the fault may not be related to the boiler. If your installer confirms that the fault is within the boiler itself and he/she can't repair it, our friendly customer service team is on hand to help. Simply call our service division **heateam** on **0844 871 1525** to book an engineer visit or for any general advice that you may need. Our contact centre is open Monday to Friday 8am - 6pm, weekends and Bank Holidays 8.30am - 2pm, excluding Christmas Day and New Years Day.

When calling **heateam** it would be helpful if you could have the following information to hand:-

- 1 boiler serial number (see opposite).
- 2 boiler make and model number.
- 3 Your installer name and address details.
- 4 Proof of purchase (if you do not have the boiler serial number).

#### What this warranty covers

Free of charge repair or replacement of components found to be faulty from manufacture.

Free of charge replacement of the complete unit provided always that the failure is related to a manufacturing fault that cannot be repaired or is uneconomic to repair.

The warranty runs for 12 months from the date your product is installed.

#### What this warranty does not cover

Repairs to boilers which haven't been installed and commissioned properly, and as set out in the installation instructions (this includes the need to flush the system effectively and add a suitable corrosion inhibitor).

Any damage caused by hard water scale deposits and/or aggressive water resulting from corrosion.

Any other defects or failures, either in the connected heating system or outside of the boiler itself.

Faults caused by inadequate supply of electricity, gas or water to the property.

Installations within commercial settings for which this boiler was not designed.

Reimbursement of any third party repair or replacement costs that we haven't been told about or agreed with you in advance.

Compensation for consequential losses (e.g. loss of earnings, business losses, stress and inconvenience) arising from a production breakdown, including repair delays caused by factors outside our reasonable control.

#### Annual Service

To ensure you receive the maximum efficiency from your boiler we recommend your boiler has an annual service so you and your family can continue to enjoy heating and hot water comfort. To arrange an annual service from one of our Baxi Heating UK Ltd heating experts, please call Tel. 0844 871 1545.