Baxi Combi 80e & 105e
Gas Fired Wall Mounted Combination Boiler

User’s Operating Instructions
Baxi UK Limited 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.

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.
1. Warnings

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 the express written permission of Baxi UK Limited 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. **Introduction**

1. Your Baxi Combi 80e or 105e is a gas fired, room sealed, powered flue 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.

2.2 **Facia Panel**

1. The facia panel is behind the hinged lower door. As well as the on/off/reset selector switch, temperature control knobs and pressure gauge, the facia incorporates ten neon indicator lights.

2. Neons 12 to 15 indicate the operational status of the boiler. Neons 6 to 11 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.

**KEY TO FACIA PANEL** (Fig. 3)

1. On/Off/Reset Selector Switch
2. Central Heating Temperature Control
3. Hot Water Temperature Control
4. Central Heating System Pressure Gauge
5. Optional Integral Timer Position
6. Flame Failure
7. Safety Thermostat Activated
8. Fault on Fan or Flue
9. Fault on Pump or Low System Pressure
10. Fault on Hot Water Sensor
11. Fault on Central Heating Sensor
12. Power On
13. Domestic Hot Water Mode
14. Central Heating Mode
15. Burner On

When neons 6 to 11 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 0.5 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 domestic 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 central heating will operate according to demand or provide domestic hot water when a tap or shower is turned on (Fig. 7). Priority is given to domestic hot water. The central heating/hot water neon (       ) will illuminate (Fig. 5). Neons 6 to 11 will illuminate as the temperature rises.

5. **Position (ii)** In this position hot water will be provided when a tap or shower is turned on (Fig. 8). The hot water neon (       ) will illuminate (Fig. 5).

6. The boiler will light automatically on demand.

7. 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 and the integral timer (if fitted) will require resetting once the selector switch is set to either Position (i) or Position (ii).
3.0 Operating the Boiler

3.2 Temperature Control

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

2. Turn the control knob clockwise to increase the temperature (Fig. 9).

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. 10).

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

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. 11).

2. Turn the selector switch fully anti-clockwise against the spring pressure to the reset position (R) and release (Fig. 12). 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.

3.4 Safety Thermostat

1. Your Baxi Combi 80e or 105e 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. 11).

2. **To reset**: Turn the selector fully anti-clockwise against the spring pressure to the reset position (R) and release (Fig. 12). Set the selector to the required position to light the boiler.

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

3.5 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).

3.6 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.

3.7 Sensor Fault

1. When the ( ) or ( ) neon is illuminated a fault on the hot water or central heating temperature sensor is indicated (Fig. 12). Contact your Service Engineer.

3.8 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.
3.0 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 0.5 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. 15 & 16).

3. A pressure of 3 or greater indicates a fault. The safety pressure relief valve will operate, at a pressure of 3 (Fig. 17). It is important that your 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. 18).

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. 19).

2. For long periods: Turn off the selector switch (Fig. 19), 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 and the integral timer (if fitted) will require resetting once the selector switch is set to either Position (i) or Position (ii).

3.11 Frost Protection Mode

1. The frost protection feature will operate when the selector switch is in the central heating and domestic hot water mode. The gas and electrical supplies to the boiler must be on and the system pressure must 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.
4.0 Clearances and Check List

4.1 Clearances around the Boiler
(Figs. 20 & 21)

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 on (giving a green “Power ON” neon) and set for both Central Heating and Domestic Hot Water?
   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 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?
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 Baxi 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. 22).

5.3 Guarantee

1. Your Baxi Combi 80e or 105e is designed and produced to meet all the relevant Standards.

2. Baxi UK Limited 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.**
Baxi UK Limited manufacture a comprehensive range of products for the domestic heating market.

Gas Central Heating Boilers
(Wall, Floor and Fireside models).

Independent Gas Fires.

Renewal Firefronts.

Gas Wall Heaters.

Solid Fuel Fires.

If you require information on any of these products, please write, telephone or fax to the Sales Department.