

users

BOXER

C24 & C28

Combination boiler

Your users guide

When replacing any part on this appliance, use only spare parts that you can be assured conform to the safety and performance specification we require. Do not use reconditioned or copy parts that have not been clearly authorised by the manufacturer.

BOXER C 24/28 (Natural Gas Only)

G.C. Appliance No.	BOXER C 24	47-348-22
	BOXER C 28	47-348-23

Destination Countries: GB, IE

Introduction

The **BOXER** is a wall mounted, room sealed, combination boiler, featuring full sequence automatic spark ignition.

The **BOXER** is a combination boiler providing both central heating and instantaneous domestic hot water.

Safety

Current Gas Safety (Installation & Use) Regulations or rules in force.

In your own interest, and that of safety, it is the law that this boiler must be installed by a CORGI registered installer, in accordance with the above regulations.

It is essential that the instructions in this booklet are strictly followed, for safe and economical operation of the boiler.

Electricity Supply

This appliance must be earthed.

Supply: 230 V ~ 50 Hz. The fusing should be 3A.

Connection must be made in a way that allows complete isolation of the electrical supply such as a double-pole switch, having a 3mm (1/8") contact separation in both poles, serving only the boiler and system controls.

Important Notes

- This appliance must not be operated without the casing correctly fitted and forming an adequate seal.
- If the boiler is installed in a compartment then the compartment **MUST NOT** be used for storage purposes.
- If it is known or suspected that a fault exists on the boiler then it **MUST NOT BE USED** until the fault has been corrected by a CORGI registered installer.
- Flammable materials must not be placed in close proximity to the appliance. Materials giving off flammable vapours must not be stored in the same room as the appliance.
- Under **NO** circumstances should any of the sealed components on this appliance be used incorrectly or tampered with.

All CORGI Registered Installers carry a CORGI ID card, and have a registration number. Both should be recorded in your **Benchmark** Log Book. You can check your installer by calling CORGI direct on 0156 372 300.

In cases of repeated or continuous shutdown a CORGI registered installer should be called to investigate and rectify the condition causing this and carry out an operational test. Only the manufacturers original parts should be used for replacement.

Minimum Clearances

Clearances of **165 mm (6 1/2")** above, **150 mm (6")** below, **15 mm (5/8")** at the sides and **450 mm (17 3/4")** at the front of the boiler casing must be allowed for servicing.

The minimum front and bottom clearance allowed when built into a cupboard is 5 mm.

To light the boiler. Refer to Frame 1

Refer to instructions for setting the programmer before continuing.

1. CHECK THAT THE ELECTRICITY SUPPLY TO THE BOILER IS OFF.
2. Set the mains ON/OFF switch (I) to OFF and the DHW thermostat knob (G) and CH thermostat knob (F) to maximum.
3. Ensure that all DHW taps are turned off.
4. Switch ON the electricity supply to the boiler and check that all external controls, e.g., room thermostat and internal programmer etc., are ON.
5. Set the mains ON/OFF switch to ON.

The mains on led (E) and the CH led (D) will illuminate and the boiler will commence the ignition sequence in central heating mode.

During normal running the CH led (D) will remain illuminated.

Note. *If the boiler fails to light after 10 seconds the fault led (B) will illuminate.*

Press the reset button (A) for 2 seconds then release. The boiler will repeat the ignition sequence. If the boiler still fails to light consult a CORGI registered installer.

THE LOG BOOK SHOULD BE COMPLETED AFTER EACH SERVICE AND KEPT WITH THESE INSTRUCTIONS.



Operation

Winter conditions - i.e. CH and DHW required.

The boiler will fire and supply heat to the radiators but will give priority to DHW on demand.

Summer conditions - i.e. DHW only required.

Set the CH external controls to OFF and turn the CH thermostat knob (F) to minimum ☀.

The boiler will fire when there is a demand for DHW.

Note. The pump will operate briefly as a self-check once every 24 hours, regardless of system demand.

Control of water temperature

Domestic Hot Water

The DHW temperature is limited by the boiler controls to 62°C

maximum at low draw-off rate, adjustable via the DHW thermostat knob (G).

Additionally, the temperature can be controlled by the user via the draw-off tap: the lower the rate the higher the temperature, and vice versa.

Central Heating

The boiler controls the central heating radiator temperature to a maximum of 82°C, adjustable via the CH thermostat knob (F).

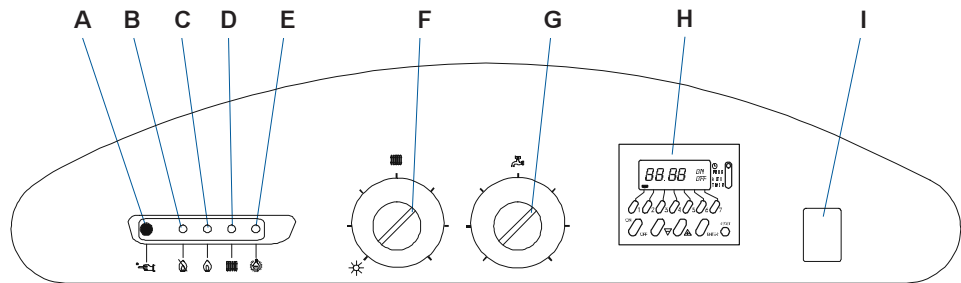
Approx. flow temperatures for the boiler thermostat settings are:

Knob Setting	Flow Temperature	
	°C	°F
Minimum	45	113
Maximum	82	180

1 BOILER CONTROLS

LEGEND

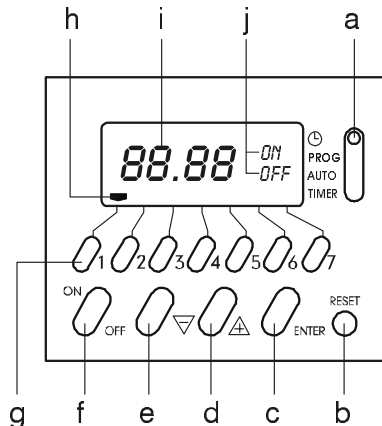
- A. Reset button
- B. Fault led
- C. Flame led
- D. CH mode led
- E. Mains On led
- F. CH thermostat knob
- G. DHW thermostat knob
- H. Programmer
- I. Boiler On/Off switch



2 PROGRAMMER CONTROLS

LEGEND

- a. Mode selector switch
- b. Reset button
- c. Enter button
- d. Increase "+" setting button
- e. Decrease "-" setting button
- f. On - Off button
- g. Day selection buttons
- h. Day display
- i. Time display
- j. On - Off display



#1 Setting the clock

- 1.1 Set the selector switch (a) to ⌚ . The display will flash 12:00.
- 1.2 Set the correct time using ▽▲ buttons (d/e) (24hr format)
- 1.3 Press the day selection button 1 to 7 (g) to set the correct day 1 = Mon etc. (When the day is selected a symbol (h) appears above the button)
- 1.4 Move the selector switch (a) to AUTO to start the clock

Note. In AUTO mode, for the time to be displayed, the mains electricity must be connected.

#2 Setting the ON and OFF times and DAYS

- 2.1 Set the selector switch (a) to PROG and set the first ON time using ▽▲ buttons (d/e)

- 2.2 Set the days of operation by pressing buttons 1 to 7 (g) and press ENTER (c) to confirm
- 2.3 Set the OFF time using ▽▲ buttons (d/e) and press ENTER (c) to confirm
- 2.4 To set further ON OFF periods for the days set in 2.3 select the required times using ▽▲ buttons (d/e), pressing ENTER (c) to confirm each time. Maximum 20 time settings
- 2.5 To set ON and OFF periods for different days repeat steps 2.2 to 2.4
- 2.6 To activate the timed settings set the selector switch (a) to AUTO

#3 Reviewing and changing settings

- 3.1 Set the selector (a) to PROG and press ENTER (c) to show the setting. Adjust the time using ▽▲ buttons (d/e)
- 3.2 To change the selected day press the corresponding button 1 to 7 (g)
- 3.3 To confirm the new setting or review the next setting, press ENTER (c)
- 3.4 To activate the timed settings set the selector switch (a) to AUTO

#4 Timer override

- 4.1 Set the selector (a) to TIMER. To switch the boiler ON or OFF press the ON/OFF button (f)
- 4.2 The boiler remains ON or OFF until the selector (a) is set to AUTO or the boiler is switched manually

#5 To switch ON or OFF for a set time

- 5.1 Set the selector (a) to TIMER
- 5.2 Press the ▲ button (d) to select the required time (Up to 23 hours or up to 27 days)
- 5.3 Select ON or OFF using the ON/OFF button (f)
- 5.4 Set the selector (a) to AUTO. After the set delay period the boiler will operate in accordance with the previously set program

#6 Resetting

To completely reset the timer, press the RES button (b) with a pencil tip. This will fully reset the timer and all data will need to be entered including day and time

CAUTION. To avoid the possibility of injury during the installation, servicing or cleaning of this appliance care should be taken when handling edges of sheet steel components.

To shut down the boiler

1. For short periods

Set the mains ON/OFF switch (I) to OFF

2. For longer periods

Set the mains ON/OFF switch (I) to OFF, and switch the electricity supply to OFF. For longer periods the entire system should be drained.

To relight the boiler

Repeat the procedure detailed in 'To light the boiler'.

Frost protection

The boiler is provided with a built-in frost protection system: It is necessary the mains switch is kept in ON position. For longer periods, the entire system should be drained.

If the system includes a frost thermostat then, during cold weather, the boiler should be turned OFF at the time switch (if fitted) ONLY. The mains supply should be left switched ON, with the boiler thermostat left in the normal running position.

Boiler overheat thermostat

This thermostat will shut down the boiler in the event of overheating. The fault led (B) is illuminated. Press the reset button (A) and the boiler will relight.

If the fault recurs, turn off the boiler and consult a CORGI registered installer.

Flame failure

The fault led (B) is illuminated. Press the reset button (A) and the boiler will relight.

If the fault recurs, turns off the boiler and consult a CORGI registered installer.

Loss of system water pressure

The gauge indicates the central heating system pressure. If the pressure is seen to fall below the original installation pressure of 1-2 bar over a period of time then a water leak is indicated.

In this event a CORGI registered installer should be consulted.

DO NOT FIRE THE BOILER IF THE PRESSURE HAS REDUCED TO ZERO FROM THE ORIGINAL SETTING.

Escape of gas

Should a gas leak or fault be suspected contact your local gas supplier without delay.

Do NOT search for gas leaks with a naked flame.

Cleaning

For normal cleaning simply dust with a dry cloth.

To remove stubborn marks and stains, wipe with a damp cloth and finish off with a dry cloth.

DO NOT use abrasive cleaning materials.

Maintenance

The appliance should be serviced at least once a year by a CORGI registered installer.



*The code of practice for the installation,
commissioning & servicing of central heating systems*

Caradon Plumbing Ltd. is a member of the Benchmark initiative and fully supports the aims of the programme. Benchmark has been introduced to improve the standards of installation and commissioning of central heating systems in the UK and to encourage the regular servicing of all central heating systems to ensure safety and efficiency.

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BOXER Consumer Helpline: 01482 498 660