

Maximiser SE

USER'S INSTRUCTIONS Natural gas only

INSTALLER:

TELEPHONE:

INTRODUCTION

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

Gas Safety (Installation & Use) Regulations 1994, amendments 1996, or the rules in force.

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

The installation of the boiler MUST also be in accordance with the latest I.E.E. Wiring Regulations, local building regulations, byelaws of the local water authority, the building regulations and the Building Standards (Scotland) and any relevant requirements of the local authority.

ELECTRICITY SUPPLY

This appliance must be efficiently earthed

Supply: 230 V \sim 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, or a plug and socket, serving only the boiler and system controls. The means of isolation must be accessible to the user after installation.

IMPORTANT NOTES

- a. This appliance must not be operated without the casing correctly fitted and forming an adequate seal.
- b. If the boiler is installed in a compartment then the compartment MUST NOT be used for storage purposes.
- c. The ventilation provided for the boiler during installation MUST NOT be blocked, and a check should be made periodically that the ventilation areas are free from any obstruction.
- d. 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.
- e. Inflammable 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.
- f. Under NO circumstances should any of the sealed components on this appliance be used incorrectly or tampered with.

CLEANING

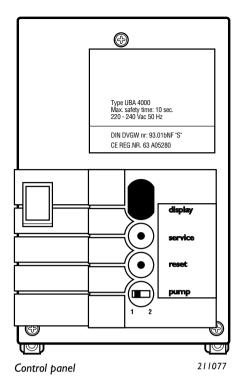
For normal cleaning simply dust with a dry cloth.

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.



DISPLAY

The code on the display indicates the operating condition of the boiler. It enables you to make an initial diagnosis. During normal operation, one of the following codes is displayed:

- 0 Unit is ready for operation
- Unit is heating the central heating installation
- =. Unit is heating the hot water tank

See table I for further explanation of other display codes that may be displayed.

DISPLAY CODES

The code in the display indicates the operating condition of the boiler. Pressing the service button, will make a second code appear. The combination of both codes provides detailed information about the operating condition of the boiler.

With respect to the behaviour of the unit and the corresponding codes, two situations can be distinguished:

I. Normal operating condition

The code is not flashing: no malfunction. The boiler is standby or operational. The meaning of the codes that can appear during normal operation, can be found in table 1.

2. Malfunction with inoperative unit

The display code flashes: a malfunction has occurred and the boiler is inoperative.

Write down the display code and the corresponding service code.

Press the reset button. If the malfunction remains, consult your installer.

Table 2 gives you more information about the cause of the malfunction.

SERVICE

When this button is pressed, the display shows an additional service code in the form of a capital letter. This letter provides additional information about the cause of the current malfunction. Together, the display and service code are the key to the malfunction diagnosis.

Report both codes when requesting help from an installer, if a malfunction has occurred. See table I for further explanation of the display and service codes.

RESET

Pressing the reset button restarts the boiler. Note that a reset will remove the display and service codes. Therefore write them down before pressing the reset button.

Occasional malfunctions and flashing codes can often be remedied by pressing the reset button for one second.

PUMP

This switch is used to set the finishing time of the pump.

Position I: finishing time is 4 minutes (only for central heating). This position is recommended during summer and when using a room thermostat.

Position II: finishing time is 24 hours (only for central heating). This position is recommended when using a weather dependant control or when part of the installation is in danger of freezing.

TABLE I. CODES NORMAL OPERATING CONDITION

displaycode service-code	operating condition of the boiler
P	Start-up of the boiler
	Restart of boiler after reset
	Check unit data at start-up
d	Check unit data
	Anti fast-cycle program operative
	Waiting for switching of three-way valve
	Standby: no heat demand
	Ignition
	Purging for 15 sec.
<u>0</u>	Central heating water temperature is higher than set; boiler is waiting
	Code remains briefly; boiler is adapting
<u>–</u>	Boiler is operative for central heating
	Boiler is operative for hot water
TABLE 2. MALFUNCTION CODES WITH INOPERATIVE BOILER	
display code	cause of the malfunction
2	Central heating water temperature or flow is not correct
4	Temperature safety device is switched on
b	Burner does not ignite or has failed
7	Control panel possibly defective
B	Defective cable connection
9	IRT 30 Room Thermostat possibly defective
E	Control panel possibly defective
BLANK	Power supply malfunction

STARTING THE BOILER

To achieve this, perform the following actions:

- Check the reading of the pressure gauge. If the pressure is below I bar, the installation has to be refilled first.
- Open the gas cock on the gas pipe below the unit. De-aerate the gas pipe first, if any air is present.
- 3. Turn power on to the boiler.
- **4.** Set the room thermostat to a higher setting than the ambient room temperature.
- 5. The unit will initiate the start procedure after 30 seconds. If air is still present in the gas pipe, the unit will indicate an ionisation malfunction. Restart the unit using the reset button. Repeat this action several times, if necessary.
- **6.** Set the room thermostat to the desired room temperature.

When finished, the boiler will operate automatically for both the central heating installation and the hot water supply.

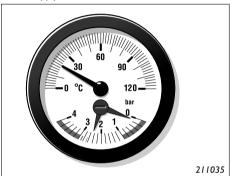


Figure 1 Pressure/temperature gauge

Shutting down the boiler

It is recommended to keep the boiler in operation, especially during danger of freezing. If the premises are left for a considerable period of time, you should set the room thermostat in the lowest position.

To completely put the boiler out of operation, carry out the following:

- I. Close the gas valve under the unit.
- 2. Turn of the power to the boiler.

If the boiler is completely shut down when there is danger of freezing, the installation must be totally drained.

Refer to the corresponding section or consult your installer.

Maximiser condensing boilers

The boilers are equipped with a unique heat exchanger, that ensures that the gases released after combustion give off as much heat as possible. Because of this the condensing boilers have an efficiency of more than 90%. The combustion gases condense in the heat exchanger; therefore a condense drain is required.

The completely pre-mixed burner construction ensures a very low NOx- and CO-emission.

Modulating burner

The boilers have a modulating burner construction. This means that the temperature of the central heating water can be accurately controlled by adapting the capacity of the boiler to the desired temperature.

If a lot of heat is required, the unit starts up to heat the central heating water. In the unit, a sensor is installed that measures the central heating water temperature. As soon as this temperature has reached the required value, the burner will start burning at a lower level, thus the desired temperature is maintained. When heat is no longer required, the unit switches off, while the pump keeps running for a certain period of time.

Control panel

The operation of the boiler is completely controlled and checked by a built-in micro-computer: in the control panel. As well as ensuring an optimal reaction of the unit to a heat demand, the control panel also registers when a malfunction occurs, in order to switch off the unit.

A display on the control unit indicates what is happening at any given moment. If a malfunction occurs, the control panel will first try to solve the malfunction by itself. If the control panel is unable to do so, the unit will be switched off and a code will appear on the display, indicating the problem. Based on this code, the installer can find the cause of the malfunction and solve it.

The control panel is equipped with a number of push buttons and adjustments. Their function is described in the relevant sections of this user's instructions.

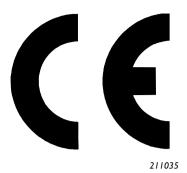
Room thermostat

The unit can operate with all common volt free or 24V room (clock) thermostats.

Option kits available:

- · Remote indication alarm kit.
- Cascade control (MBC 5) for multiple boiler installations.

Ask your installer for details of the above options!



705.276A-3233 11-2000

Customer Care & Technical Support

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