

# THE WHITE BOILER COMPANY

## HIGH EFFICIENT CONDENSING COMBINATION BOILER

# USER'S GUIDE

## WH 100 / 130 (T)

(with or without built in timer)

**It is the law that all gas appliances are installed by a competent person, in accordance with the gas safety installation and to the current Gas Safety (Installation and Use) Regulations B.S.5440:2-(2000).**

All registered installers carry a Gas Safe Register ID card and have a registration number. Both should be recorded in your boiler Log book. You can check your installer on the Gas Safe Register.



### ESCAPE OF GAS

**Should a gas leak be suspected, contact your gas supplier without delay.**

**GAS EMERGENCY NUMBER: 0800111999**

**Do NOT search for gas leaks with a naked flame.**

**WARNING:** This appliance must be earthed.

### 1 INTRODUCTION

**1.1** Please carefully read the information given in this booklet to help you gain maximum control from your appliance with minimum trouble and cost.

**1.2** Your White Boiler Company Condensing Low Nox combination boiler has been designed to supply your Central Heating and Domestic Hot Water directly from one unit. When Central Heating is operating, the circulation will be interrupted when Domestic Hot Water is being drawn off. This will normally not affect the level of Heating.

#### PLEASE NOTE:

Due to the high efficiency and resulting low flue gas exhaust temperature a white plume of condensation vapour (cool steam) will be emitted from the flue outlet terminal, this is quite normal. It will be particularly evident during periods of low outdoor temperature or when the boiler is working at its optimum performance (Plume Management kit is available on request).

#### IMPORTANT:

in the event of the exhaust flue gases exceeding the overheat temperature setting, the boiler operation will be stopped to prevent damage to the appliance.

### 1.3 CLEARANCES AROUND THE BOILER

Above 125 mm  
Below 75 mm min. recommended 150 mm  
Front 450 mm  
Sides 5 mm min. recommended 50 mm right side  
25 mm in front when installed in a cupboard.

**1.3.1** Minimum clearances are required for safety and maintenance. Do NOT obstruct any purpose made ventilation opening if boiler has been fitted in a compartment. Never hang clothes, etc, over the appliance.

### 1.4 USER CONTROLS (Fig.1)

**1.4.1** This appliance is designed to operate with the minimum of attention by the User. All the controls are to be found on the control panel.

### 1.5 OPERATING SAFETY CHECKS TO PROTECT YOUR APPLIANCE

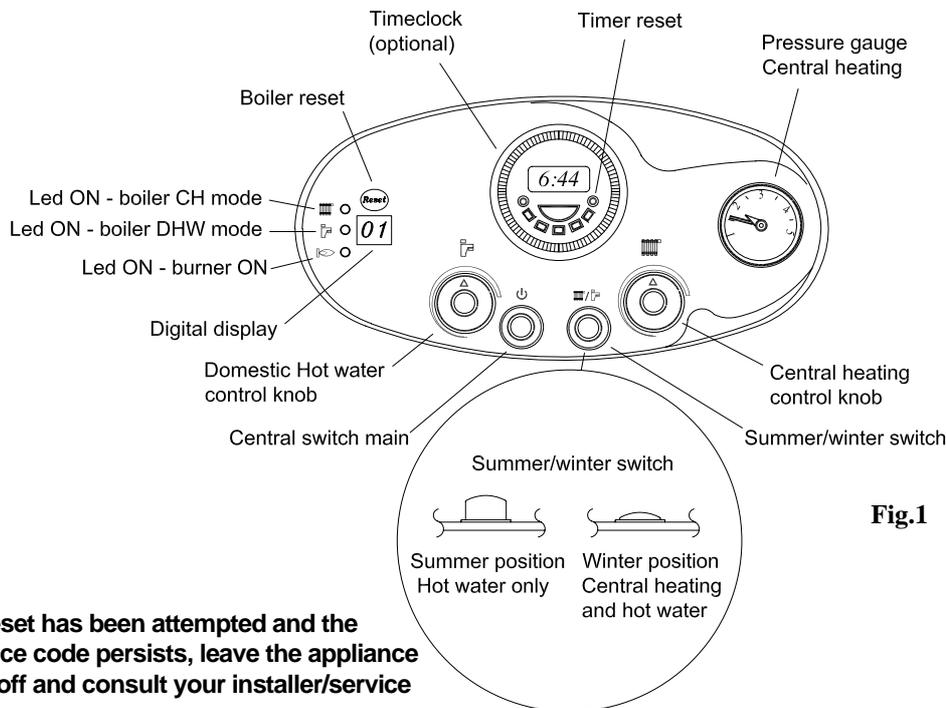
**1.5.1** Before lighting the appliance check Central Heating system pressure (pressure gauge fig.1) is not less than 1 bar. If it is below, it will be necessary to repressurise the system, as the appliance requires system pressure to be maintained between 1 and 1.5 bar to allow the boiler to operate. A filling device (filling loop) will have been fitted on the system. This will be usually on pipework near to the boiler. If you are unsure of its position, or cannot identify it, consult the installer who fitted the boiler.

The filling loop consists of two taps and a separate silver coloured braided flexible pipe with connection fittings. Only when repressuring should the braided flexible pipe be connected between the two taps. Ensure that the nuts or the pipe ends are tightened onto the taps.

Fully open one of the taps first and then while watching the pressure gauge, carefully open the second tap. When the needle on the gauge is indicating above 1 with a maximum of 1.5 bar turn both taps off.

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

**1.5.2** In the event of an error display at in the appliance there will be a sequence code (Table of sequence codes page 4) displayed on the Digital Display of the control panel (fig. 1). By pressing the "RESET" button (fig. 1) for 1 to 3 seconds it is possible to relight the boiler.



**Fig.1**

**If the reset has been attempted and the sequence code persists, leave the appliance turned off and consult your installer/service engineer.**

## 1.6 SEQUENCES CODES

The boiler may display a sequence code if a fault as occurred (Table of sequence codes page 4).

## 2 OPERATING DOMESTIC HOT WATER

- 2.1 Select Summer / Winter switch on summer position.
- 2.2 Open hot water tap. After about 3 seconds burner will always operate.
- 2.3 Temperature of Domestic Hot Water can be varied by adjusting the water flow rate at the Domestic Hot water control knob (Fig. 1).  
The temperature can be set between minimum (40°C) and maximum (60°C) by rotating the control knob as the control is rotated the temperature display flashes. For maximum temperature of Domestic Hot Water leave the control knob on maximum position.

## 3 OPERATING HEATING AND HOT WATER

- 3.1 TO SET AND ADJUST BUILT-IN TIMER MODEL FOLLOW TIMER INSTRUCTIONS ON PAGE 3.
- 3.2 Select Summer/Winter Switch on Winter position.
- 3.3 Switch on the timeclock, adjust the room thermostat and/or thermostatic radiator valves to high settings.
- 3.4 Burner will operate, temperature output of Central Heating can be adjusted by Central Heating Control Knob (Fig.1). The knob can be set between minimum (40°C) and maximum (85°C), as the control knob is rotated the temperature display flashes. While the appliance is being used to provide Domestic Hot Water, the Central Heating will not operate. When Domestic Hot Water is no longer required, the appliance will automatically revert to Central Heating and should not noticeably affect the level of central heating. Adjust external controls to required settings.

**NOTE:** An Anti-cycling device is fitted to the Heating Function. When the boiler reaches its set maximum temperature it will not operate on heating for about 10 minutes, but if the heating temperature return goes 20°C below the set point, the burner will restart immediately. The Domestic Hot Water Function will always operate on demand.

## 4 TO SHUT DOWN THE APPLIANCE

For short periods, switch Summer/Winter switch to Summer and turn off all hot taps.  
For long periods switch off the on/off switch (Fig.1). If the appliance is to be shut down for long periods when there is a risk of freezing, the appliance should be drained. Refilling must be done by a competent person, as set out in installation manual.

## 5 CLEANING OF APPLIANCE OUTER CASING

Use a clean damp cloth. Do not use any abrasive cleaners and with a dry cloth lightly polish to protect painted surfaces.  
Control Panel can be wiped with damp cloth and dried. Spray polishes must not be used on control panel surfaces or switches.  
Care must be taken in preventing any liquids entering the appliance.

## 6 CARE OF YOUR APPLIANCE AND SYSTEM

Annual servicing of your appliance is required to maintain safety and efficiency of its operation. Therefore, it is recommended that **the appliance is serviced at least once a year** and that the whole of the Heating System be checked at the same time by a competent person. 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 **COMPETENT PERSON**. It is essential that the Instructions in this booklet are strictly followed for safe and economic operation of the boiler.

**SERVICING SHOULD BE CARRIED OUT BY A QUALIFIED GAS SAFE REGISTERED INSTALLER**

**The White Boiler Company  
Chartists Way , Morley , Leeds  
LS27 9ET**

PROGRAMMABLE TIMECLOCK  
INSTRUCTIONS FOR USE

If your boiler comes complete with optional digital programmer.

**7. TO PROGRAMME TIMECLOCK**

The timeclock is supplied with a cover to prevent accidental loss of programme, or children tampering with pre-set programmes.

To access programming buttons remove clear cover. Press reset key with a pencil before setting or reprogramming times.

**7.1.1 TO SET TIME AND DAY OF THE WEEK:**

**7.1.1.1 SET DAY OF WEEK:**

- Press clock button and hold in.  
Press day button to desired day.
- Release both buttons.  
The day of the week will be set.

**7.1.1.2 SET HOUR:**

- Press clock button and hold in.  
Press hour button to desired time.
- Release both buttons.  
The hour will be set.

**7.1.1.3 SET MINUTE:**

- Press clock button and hold in.  
Press minute button to desired time.
- Release both buttons.  
The minute will be set.

**NOTE:** When setting time holding in the hour/minute button will rapidly advance the display.

**7.1.2 TO SET PROGRAMMES:**

**7.1.2.1** Press timer button and release to enter into programme mode.

**7.1.2.2** Programme "1 ON" will show in lower left hand corner.

**7.1.2.3** Press DAY key to select the programme period. There are 10 day settings for your choice.  
(1) Mo to Su (2) Mo (3) Tu (4) We (5) Th (6) Fr (7) Sa (8) Su (9) Mo+Tu+We+Th+Fr (10) Sa+Su.

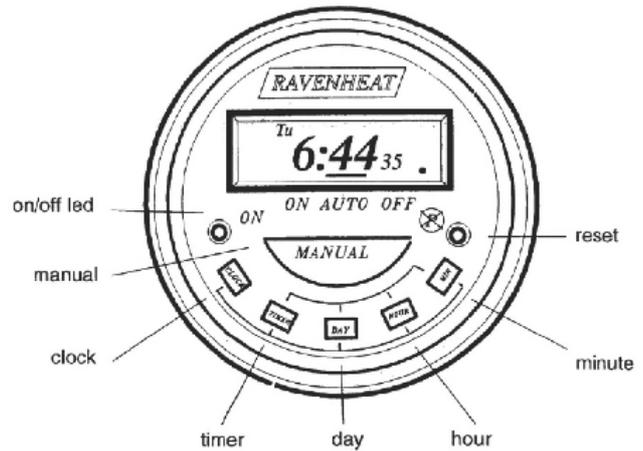
You now have a choice of setting up to 6 programmes.

**7.1.2.4** Press hour button to set the required hour.

**7.1.2.5** Press minute button to set minute.

**7.1.2.6** After setting the programme press the TIMER key again "1 OFF" will appear.

N. B.: When the clock is either "programmed" on, or is on constant, the red indicator will illuminate.



Repeat procedure 5.1.2.3 through to 5.1.2.5 to set programme "1 OFF" required settings.

For each programme the days OFF setting must be input the same as the ON setting (see 5.1.2.3).

**7.1.2.7** After setting programme 1 ON/OFF TIME repeat step 2.1 to 2.7 to set programmes 2 through to 6 if required.

**7.1.2.8** Your timer gives you up to 6 different ON and 6 different OFF settings over the programme periods as defined in 5.1.2.3.

**NOTE: You have a choice of 6 ON - 6 OFF programmes max.**

**7.1.2.8.1 REVIEW YOUR PROGRAMMES:**

- Press the TIMER key to advance display to each subsequent ON or OFF setting.
- Check days and times displayed.
- To make a change, follow instructions under "TO SET PROGRAMMES".

**NOTE:** on completion of programming operations press the clock button to show current time/day and replace the clear tamper proof cover.

**7.1.2.8.2 MANUAL KEY**

- Press MANUAL key to select ON / AUTO / OFF mode.
- ON mode is to turn on the timer, OFF mode is to turn off the timer.
- AUTO mode is to set the timer to programme mode. It will turn on or turn off according to the programmes you set.
- From ON to AUTO mode it will turn on until next OFF programme.
- From OFF to AUTO mode it will turn off until next ON programme.

**7.1.2.8.3 LED INDICATOR**

The red LED light is on when the timer is operating in heating mode.

**7.1.3 TO RESET TIMER:**

Press reset button to reset the timer unit.

**NOTE:** Once the reset button is pressed, the stored time and programme will be cleared to initial state.

## **BOILER FROST PROTECTION**

The appliance has a built in frost protection device that protects the boiler from freezing. With the gas and electric supplies ON and irrespective of any room thermostat setting, the frost protection device will operate the pump when the temperature falls below 10°C and will operate the burner when the temperature falls below 5°C. The burner will switch off when the temperature reaches 27°C. When the frost protection device operates "AF" is displayed on the digital display.

### **IMPORTANT NOTE:**

The system should be protected by incorporating a system frost thermostat.

### **Table of sequence codes**

- 01: Interruption of gas supply or flame failure**
- 04: Over operating temperature CH/DHW probe or system requires correctly setting on boiler**
- 06: Domestic Hot Water NTC sensor or NTC sensor wiring fault**
- 12: Central Heating NTC sensor or NTC sensor wiring fault**
- 17: Fan or fan wiring fault**
- 28: Water pressure system too low (see sect. 1.4.1) or circulation fault**
- 30: Flue overheat temperature**
- 31: Flue NTC sensor or flue NTC sensor wiring fault**

### **IMPORTANT:**

If the reset has been attempted and the sequence code persists leave the appliance turn off and consult your installer/service engineer immediately quoting the sequence code numbers.

## **THE WHITE BOILER COMPANY**

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