

# users guide

## mini

Your Ideal users guide

## **C24,C28,C32** **S24,S28**

For installation and servicing guide see  
reverse of book

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

**i** BOILERS **Ideal**  
ENGINEERED FOR PEACE OF MIND

## Mini

Mini C24	G.C. appliance No. 47-348-18
Mini C28	G.C. appliance No. 47-348-19
Mini C32	G.C. appliance No. 47-348-25A
Mini S24	G.C. appliance No. 41-392-98
Mini S28	G.C. appliance No. 41-392-99

Destination countries: GB, IE

## INTRODUCTION

Mini are wall mounted, room sealed, non condensing boilers featuring full sequence automatic spark ignition and fan assisted combustion.

Mini C24, Mini C28 and Mini C32 are low water content combination gas boilers.

Mini S24 and Mini S28 are low water content system gas boilers.

## 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 CORGI registered installer or in IE a competent person, 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

The appliance must be efficiently earthed.

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

Connection must be made in a way that allows complete isolation of the electrical supply, such as a double pole switch, having a 3 mm (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

- 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.
- Under no circumstances should any of the sealed components on this appliance be used incorrectly or tampered with.
- If it is known or suspected that a fault exist on the boiler then it MUST NOT BE USED until the fault has been corrected by a CORGI registered installer or in IE a competent person.

## MINIMUM CLEARANCES

Clearances of 200 mm (7 7/8") above and below, 25 mm (1") at left, 50 mm (2") at right and 450 mm (17 3/4") at the front of the boiler case must be allowed for servicing.

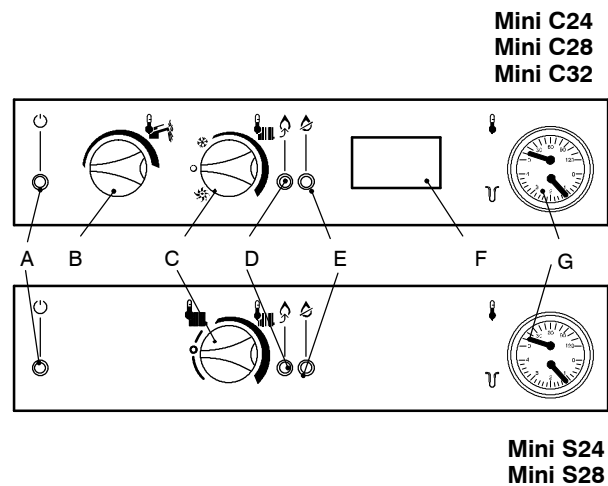
After installation the following clearances are allowable during use, providing the encasing parts are removeable for servicing:

The bottom clearance can be reduced to 20mm (3/4").

The front clearance can be reduced to 50mm (2").

All CORGI registered installers carry a CORGI ID card, and have a registration number. Both should be recorded in the **Benchmark** Commissioning Checklist. You can check your installer by calling CORGI direct on 01256 372300.

## BOILER CONTROLS



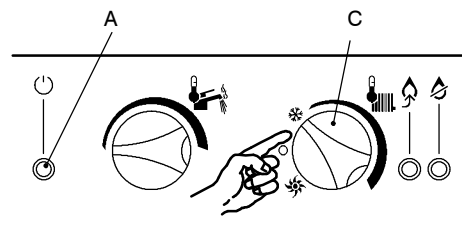
- A Appliance On lamp
- B Domestic hot water temperature control
- C Main switch and radiator temperature control
- D Boiler reset button
- E Lock-out signal lamp
- F Programmer (optional)
- G System pressure and temperature gauge

## TO LIGHT THE BOILER

- 1 Check that the valves located in the lower part of the boiler are open.
- 2 Switch the electricity supply on.  
The appliance On lamp A will flash every 4 seconds (stand-by condition).

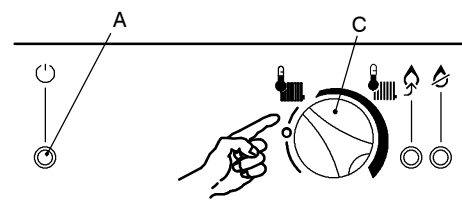
### For combination models Mini C24, Mini C28 and Mini C32

- 3 If the boiler is to be used for CH and DHW position the main switch as in the following illustration.  
The appliance On lamp A will flash every 2 seconds (operating boiler).



### For system models Mini S24 and Mini S28

- 4 To operate the boiler position the main switch as in the following illustration.  
The appliance On lamp A will flash every 2 seconds (operating boiler).



Caradon Ideal Limited 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.

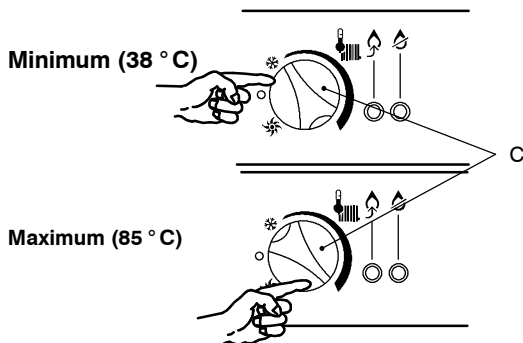


**THE BENCHMARK SERVICE INTERVAL RECORD MUST BE COMPLETED AFTER EACH SERVICE**

## CONTROL OF CH TEMPERATURE

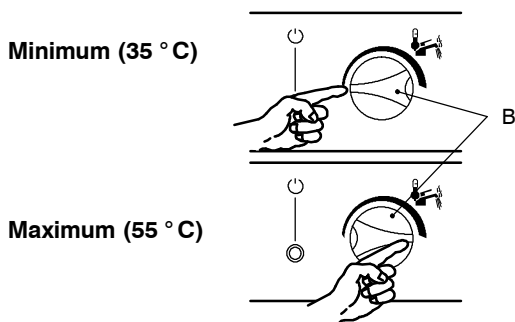
The output temperature of CH water is adjustable from a minimum of about 38°C to a maximum of about 85°C by turning the knob C.

Approx CH flow temperatures for the boiler thermostat settings:



## CONTROL OF DHW TEMPERATURE (Mini C24, Mini C28 and Mini C32)

The temperature of the DHW leaving the boiler can be varied from a minimum of about 35°C to a maximum of about 55°C (within the power limits of the appliance) by turning the temperature control knob B.



Adjustment of the DHW temperature is completely separate from that of the CH circuit.

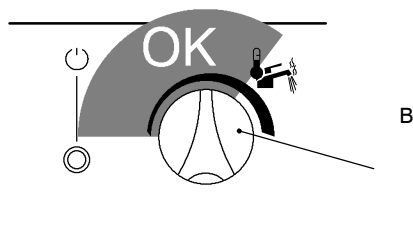
The adjustment system integrated within the boiler automatically controls the flow of gas to the burner in order to keep the temperature of DHW delivered constant, between the limits of maximum and minimum output.

Where the demand is at a low level or with the temperature set to the minimum, it is normal to see a cycle of lighting and extinguishing of the burner when running.

### Adjustment

It is advisable to adjust the DHW temperature to a level commensurate with the demand, minimising the need to mix with cold water. In this way, the automatic control facilities will be fully exploited.

Moreover, where the amount of limescale present in the water may be particularly great, not exceeding the position as shown in the following illustration (about 50 °C) minimises annoying incidences of scale deposits and clogging.



In these cases, however, it is advisable to install a small water treatment device or softener. With such a device you should avoid periodic descaling.

Consequently, the DHW heat exchanger will keep its performance consistent for a longer period of time with resulting gas savings.

## TO SHUT DOWN THE BOILER

### For short periods

To turn the boiler off set the function selector C to the O position. The appliance On lamp A will flash every 4 seconds.

### For long periods

When you do not expect to use the boiler for a long period:

- 1 Switch the electricity supply off.
- 2 Shut off the gas supply cock and the valves for the water circuits fitted under the boiler.
- 3 If necessary, empty the water circuits.

## FROST PROTECTION

Mini C24, Mini C28 and Mini C32 appliances are provided with a built in anti-freeze system that operates the boiler when the temperature is below 4 °C. Therefore, when the boiler is not lit and used in cold weather, with consequent risk of freezing **do not isolate the boiler from the electricity supply or close the gas inlet cock.**

## 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 use a damp cloth and mild detergent.

Do not use abrasive cleaning materials.

## MAINTENANCE

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

## FAULTS

### No heating or hot water

Check that gas and electricity are available at the boiler and that all switches are on.

Check that the system water pressure gauge G reads at least 0,5 bar.

Check the lock-out signal lamp E. If it is illuminated press the boiler reset button D to restart the ignition sequence.

### Hot water but no heating

Check that the programmer and room thermostat (if fitted) are both calling for heat.

### Heating but no hot water

Check that cold water flows out of the taps at a minimum rate of 3.5 litres per minute (or 1 pint in 10 seconds or less). If not, look for stop valves not fully open.

**If these simple checks fail to solve the problem, or the problem recurs, consult your service engineer.**

## Points for Boiler User

**Note.** In line with our current warranty policy we would ask that you check through the following guide to identify any problems external to the boiler prior to requesting a service engineers visit. Should the problem be found to be other than with the appliance we reserve the right to levy a charge for the visit, or for any pre-arranged visit where access is not gained by the engineer.

### Troubleshooting – Typical Non Product Faults

Problem	Solution
Boiler is not working for central heating or hot water	<ul style="list-style-type: none"> <li>● Is there power to the boiler i.e. is the left hand side green LED (A) alight and flashing every 4 seconds. If not this is not a boiler fault – contact the installer</li> <li>● Check pressure gauge on boiler shows a minimum of 1 bar. If not re-pressurise via the filling loop to 1 bar (if unsure contact your installer), turn off the tap on the filling loop and press the reset button (D) to reset the boiler. If unable to do so or if the pressure continues to drop after filling then contact your installer</li> <li>● Is the lockout signal lamp (E) alight – Press boiler reset button (D) – If boiler still does not fire contact the installer</li> </ul>
Boiler goes through ignition sequence but will not fire for either central heating or hot water and then goes to ignition lockout	<ul style="list-style-type: none"> <li>● Check gas supply (try another gas appliance cooker/fire etc) If no gas supply then this is not a boiler fault – Contact the gas supplier</li> </ul>
Fan & pump run continuously but there is no attempt at ignition	<ul style="list-style-type: none"> <li>● Check that the air pressure switch test caps, on top of the boiler, are fitted correctly.</li> </ul>
<b>Mini C Only</b>	
Operating for hot water but will not operate for central heating	<ul style="list-style-type: none"> <li>● Check that integral programmer is set to an “on” period and the function switch is set to “auto” – If it still does not operate contact your installer</li> <li>● If fitted with an external programmer check that the central heating channel is set at an “on” period – If it still does not operate contact your installer</li> <li>● Check the room thermostat is set at the required temperature – Test the room thermostat by turning fully up – If this does not respond contact your installer</li> <li>● Check the radiator temperature control (C) is set at the winter setting for central heating</li> </ul>

The nature of all combination boilers is to heat up water directly from the incoming mains water supply directly through the boiler to supply domestic hot water at the stated flow rates, (as shown in the boiler installation instructions), to achieve a 35° C temperature rise. As the ambient temperature of the cold main varies during the summer and winter months it is likely in the colder winter months that the flow rate will need to be reduced at the outlet taps to achieve the same temperatures achieved in the warmer summer months. **This is not a fault with the appliance but is relevant to the varying temperature of the incoming cold mains water supply.**

<b>Mini S Only</b>	
Operating for hot water but will not operate for central heating	<ul style="list-style-type: none"> <li>● If fitted with an external programmer check that the central heating channel is set at an “on” period – If it still does not operate contact your installer</li> <li>● Check the room thermostat is set at the required temperature – Test the room thermostat by turning fully up – If this does not respond contact your installer</li> </ul>
Operating for central heating but will not operate for hot water	<ul style="list-style-type: none"> <li>● If fitted with an external programmer check that the domestic hot water channel is set at an “on” period – If it still does not operate contact your installer</li> <li>● Check the cylinder thermostat is set at the required temperature – Test the cylinder thermostat by turning fully up – If this does not respond contact your installer</li> </ul>



**Ideal Consumer Helpline:**  
01482 498660  
[www.idealboilers.com](http://www.idealboilers.com)

Caradon Ideal limited pursues a policy of continuing improvement in the design and performance of its products. The right is therefore reserved to vary specification without notice.

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