

GB

Super four

User instructions

benchmark™

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

CERTIFICAZIONE
DEL SISTEMA DI
QUALITÀ AZIENDALE

ISO 9001
registered by

GASTEC

 **sime®**

IGNITION AND OPERATING

BOILER IGNITION

To ignite the boiler, just turn the switching knob onto  SUMMER, and the boiler will start operating automatically upon demand for D.H.W. or heating. The green warning lamp will light up to indicate that electric power supply is reaching the switchboard (fig. 1).

- With the knob switched to the  SUMMER position, the burner will start operating to bring the temperature of the water in the boiler unit up to the value set on the electronic card. The temperature is controlled by an electronic sensor located on the D.H.W. storage boiler unit.
- With the knob switched to the  WINTER position, the burner will start operating to bring the D.H.W. temperature up to the value chosen. Then the boiler will set itself automatically for heating at the gas pressure set on the heating output trimmer. As the temperature approaches the value selected, the boiler will automatically start to modulate to supply the system with the actual heat output required. The room temperature or the time thermostat will open to stop boiler operation when the right temperature is reached.

CENTRAL HEATING TEMPERATURE ADJUSTMENT

The central heating temperature can be adjusted by turning the knob of the heating potentiometer (fig. 2), which has a setting range of between 40°C and 80°C.

To ensure optimal boiler efficiency at all times, we recommend not to drop below a minimum working temperature of 50°C.

LOCK OUT RESET OF ELECTRONIC EQUIPMENT

The "SUPER FOUR" version boilers are of the automatic ignition type (without pilot). As a result, they are equipped with a control and protection electronic programmer. When the switching knob is turned to  SUMMER or  WINTER, the boiler will start operating and will send, through the programmer, a discharge current to the ignition electrode and simultaneously open the gas valve. Ignition of the burner normally takes place within 2 or 3 seconds. In the event of burner ignition failure, the red warning lamp

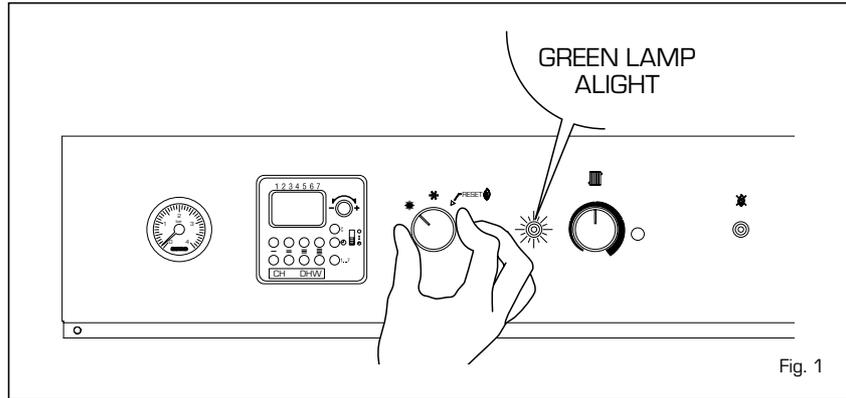


Fig. 1

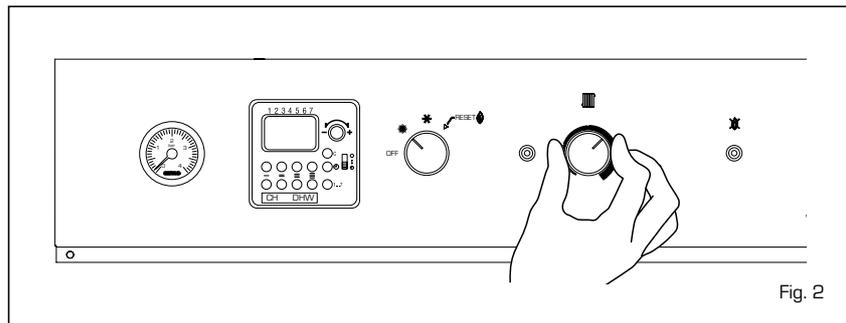


Fig. 2

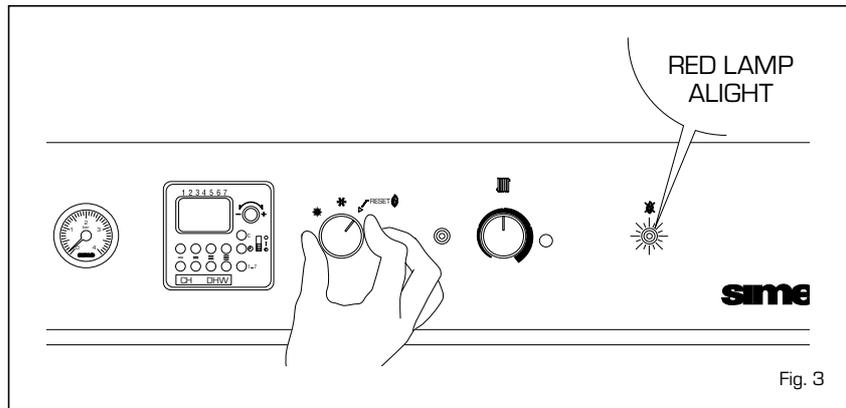


Fig. 3

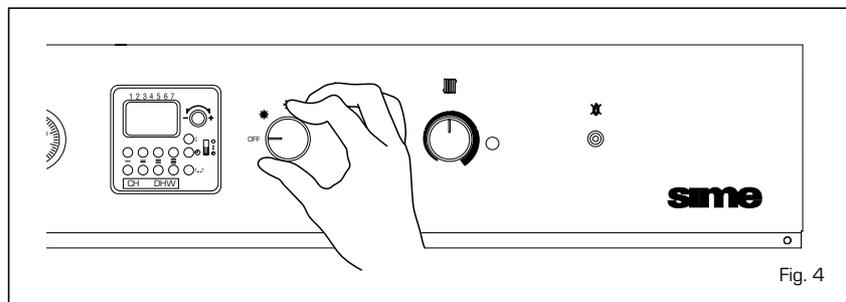


Fig. 4

will light up to indicate "lock-out" of the system (fig. 3).

To attempt boiler ignition again, switch the knob onto  RESET, and then release it immediately, and set it to either  SUMMER or  WINTER, as desired.

Should the boiler again "lock out", call

in the Authorized Technical Service Centre for them to carry out a check.

TURNING OFF BOILER

To turn off the boiler completely, just turn the switching OFF (fig. 4). Close

the gas-feed cock if the boiler remains inoperative for a long period.

FILLING UP SYSTEM

With the system cold, the charging pressure must be between 1 and 1.2 bar. During system filling, you are recommended to keep the switch knob turned OFF (fig. 4).

The system should be filled slowly, so that any air bubbles can be bled off through the air relief valves.

In the event of the pressure in the system dropping below 0.6 bar during operation (owing to elimination of gases dissolved in the water), the boiler will shut off automatically, and the warning light will start flashing (fig. 5). Bring the water filling pressure to 1-1.2 bar, which can be read on the hydrometer (fig. 5).

Once the correct pressure has been restored, the red warning light will turn off automatically and the boiler will start operating again.

Should the pressure have risen well above the limit envisaged, release the excess pressure by opening the relief valve on any radiator. Remember that during heating the pressure could rise on account of a temperature increase in the radiators. Should the pressure exceed 3 bar, causing the safety valve to open, call in the Authorized Technical Service Centre to carry out a check.

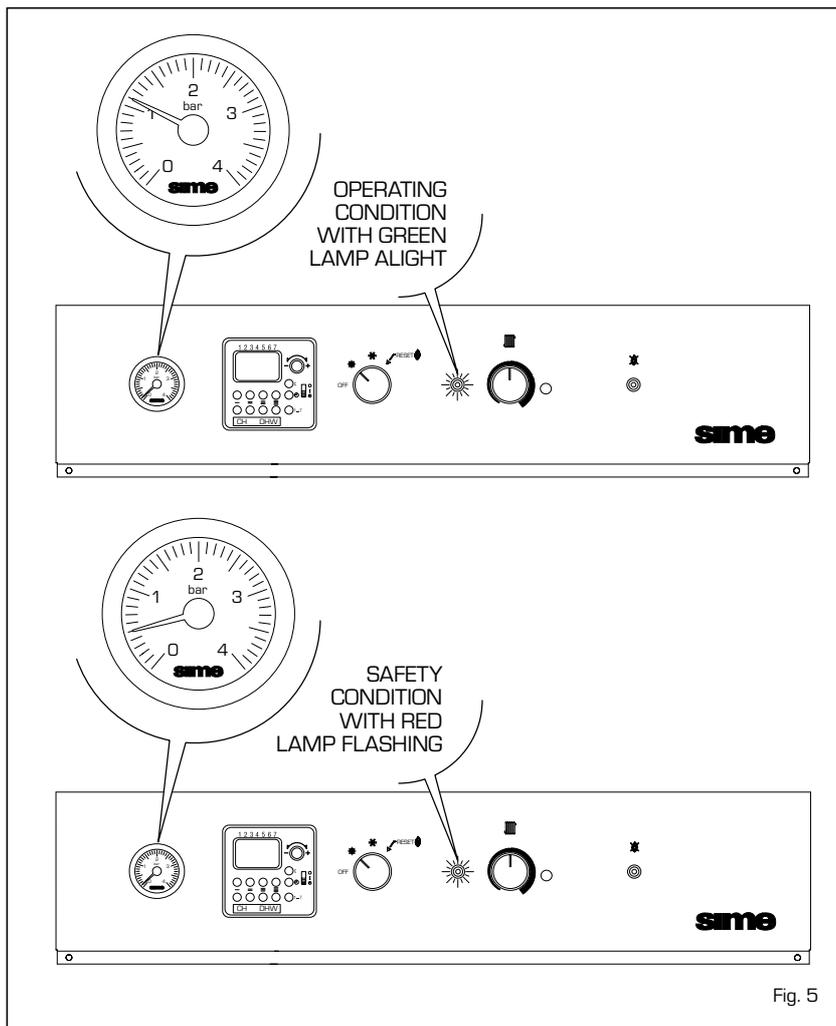


Fig. 5

WATER FAILURE SAFETY DEVICE

The boiler is provided with a water pressure switch set at 0.6 bar which trips, thus causing all parts of the system to "lock out", whenever the pressure inside the boiler drops below the setting value. The tripping of the pressure switch is indicated by a red warning light flashing on the instrument panel (fig. 5). **To restore operation of the burner, the User must bring the pressure back to a value between 1 and 1.2 bar.**

CONVERSION TO DIFFERENT GAS

The boilers can be fired by natural gas, or L.P.G. (G30 - G31).

Should it be necessary to convert to a different gas from that for which the boiler has been designed, get in touch exclusively with SIME authorized technical staff.

CLEANING AND MAINTENANCE

At the end of each heating season, it is compulsory to have the boiler thoroughly checked and cleaned out.

Preventive maintenance and checking of efficient operation of equipment and safety devices must be carried out exclusively by Authorized Technical Service Centres.

TIME PROGRAMMER

The inbuilt programmer allows independent control of C.H. and D.H.W. Either can be programmed to give 2 ON settings and 2 OFF settings per day. The 2 left hand, red buttons, and the left hand, blue buttons, marked — and = set the central heating programme. The 2 right hand, red buttons, and the 2 right hand, blue buttons, marked ≡ and ≡ programme the hot water (D.H.W.).

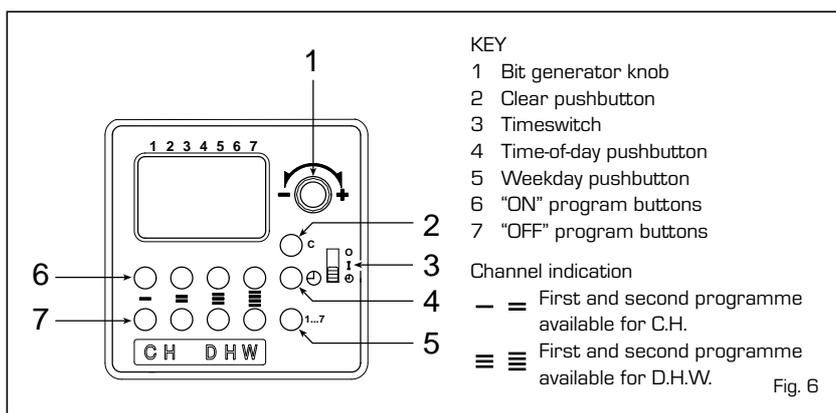
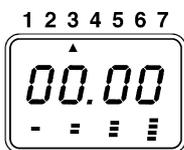


Fig. 6

Description of key functions (in programming sequence)

Clear pushbutton: pressing the C pushbutton causes clearing of time-of-day, weekday, and programmed switching times. Relay closes. The timer can be programmed.

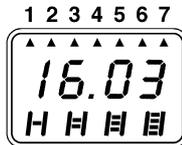
Weekday pushbutton (1...7): by pressing the weekday push-button and simultaneously rotating the bit-generator knob, the indicator "▲" can be set to the actual weekday. When the weekday button is released, the actual weekday is stored. The display will show:



Time-of-day pushbutton (⌚): the actual time of day can be set by pressing the time-of-day button and simultaneously rotating the bit-generator

knob either clockwise or counter-clockwise.

After the time-of-day button is released, all indicators and the symbols for ON and OFF times are illuminated:



Basic Programme: the programmer is pre-set with a basic programme, giving the following ON and OFF times: 06.00 hr ON, 22.00 hr OFF. This applies to both central heating and domestic hot water. If this basic programme is not required, procedure as below.

Setting daily programme:

- by pressing the weekday buttons (1...7) and rotating the bit generator knob, the indicator moves to the day required 1 to 7.
- by pressing the corresponding push button — to ≡ and rotating

the bit generator knob, the ON/OFF times for that particular day can be set.

Once these times are set, if they are acceptable for the remaining weekdays, no more is to be done and these will be set to this programme.

Setting other days:

push the weekday button (1...7) (as in "a") and rotate the bit generator knob until indicator moves to the day required. Set that day's programme as in "b" above.

Calling up the switching times:

when the desired weekday is selected and the ON or OFF button pressed, the programmed switching time is shown on the display. It disappears after the button has been released.

The shortest possible switching interval is 10 minutes.

When the programmed switching time is running out, the corresponding symbol is illuminated (e.g., switching time 2).



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