



# User manual Logano GC 144 II

6 720 808 895 (2014/04) US/CA

Read carefully prior to installation and maintenance.

**Buderus**

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## 1 Safety considerations

### 1.1 Key to symbols

#### Warnings



Warnings in this document are identified by a warning triangle printed against a grey background. Keywords at the start of a warning indicate the type and seriousness of the ensuing risk if measures to prevent the risk are not taken.

The following keywords are defined and can be used in this document:

- **NOTICE** indicates a situation that could result in damage to property or equipment.
- **CAUTION** indicates a situation that could result in minor to medium injury.
- **WARNING** indicates a situation that could result in severe injury or death.
- **DANGER** indicates a situation that will result in severe injury or death.

#### Important information



This symbol indicates important information where there is no risk to people or property.

#### Additional symbols

Symbol	Explanation
▶	Step in an action sequence
→	Cross-reference to another part of the document
•	List entry
–	List entry (second level)

Table 1

### 1.2 Safety instructions

#### Risk of fatal injury from explosion of flammable gases

- ▶ If you smell gas there is a danger of explosion.
- ▶ No open flame! No smoking.
- ▶ Prevent spark formation. Do not operate electrical switches, including telephones, plugs or door bells.
- ▶ Close main gas valve.
- ▶ Open doors and windows.
- ▶ Warn other occupants of the building, but do not use door bells.
- ▶ Leave the building.
- ▶ Call gas company and fire department from outside the building.
- ▶ Make sure that a qualified company installs the boiler, connects gas and venting connections, places the boiler in operation, connects the electrical power, and maintains and repairs the boiler.

#### Risk of fatal injury from neglecting your own safety in case of emergency, such as with a fire

- ▶ Never put yourself at risk. Your own safety must always take priority.

#### Risk of fatal injury from flue gas poisoning

- ▶ Make sure that inlets and outlets are not reduced in size or closed.
- ▶ If faults are not corrected immediately, the boiler must not be operated until all faults have been corrected.

**Risk to life due to water damage**

- ▶ Do not use the boiler if any part has been submerged in water.
- ▶ Contact a qualified service technician to check and replace any components submerged in water.

**Fire danger due to flammable materials or liquids**

- ▶ Make sure that there are no flammable materials or liquids in the immediate vicinity of the boiler.
- ▶ Maintain a minimum distance of 15 inches from the boiler.

**System damage**

- ▶ Make sure the boiler room stays above freezing.
- ▶ Do not operate the boiler if damage is present.
- ▶ Have the heating system installed by a qualified installer, service agency or gas supplier.
- ▶ Have the installer explain the operation of the heating system.
- ▶ Read this user manual thoroughly.

**Other important information!**

- ▶ Should overheating occur or the gas supply fail to shut off, do not turn off or disconnect the electrical supply to the pump. Instead shut off the gas supply at a location external to the boiler.
- ▶ The venting system must be inspected yearly. Replace any parts that show signs of deterioration from corrosion or any other sources.
- ▶ The boiler must be inspected yearly by a qualified service agency. The inspection must include the main burners, pilot burner, boiler flue, vent collector and venting system. Replace any parts that show signs of deformation from corrosion or other sources.

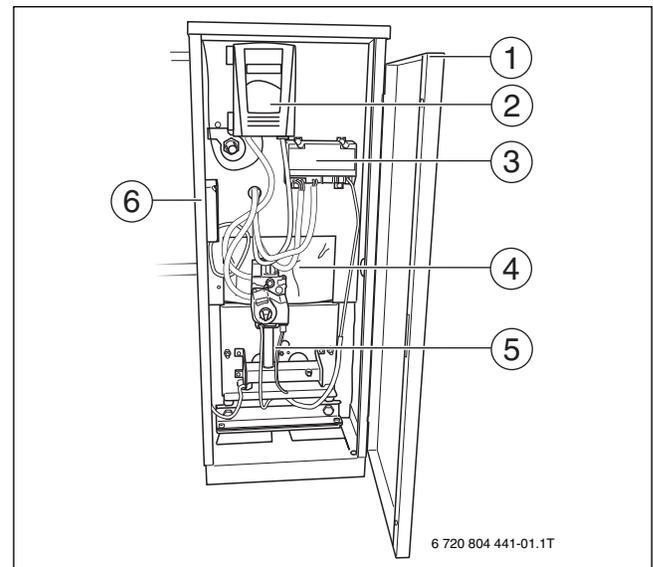


Fig. 1 Logano GC 144 II

- [1] Boiler front door
- [2] Boiler temperature control
- [3] Ignition module
- [4] Boiler block with insulation
- [5] Gas burner
- [6] Boiler jacket

## 2 Product Information

### 2.1 Correct use

The Logano GC 144 II atmospheric gas boiler is designed to heat water for a hot water heating system and for heating single or multi-family buildings.

### 2.2 Product description

The GC 144 II model boiler is a low temperature atmospheric gas-fired boiler.

The boiler consists of:

- Ignition module and boiler temperature controller
- Boiler jacket and front door
- Boiler block with insulation
- Gas burner

The ignition module and boiler temperature controller monitor and control all electrical components of the boiler.

The boiler jacket prevents energy loss and acts as soundproofing.

The boiler block transfers the heat generated by the burner to the boiler water. The insulation prevents energy loss.

## 3 Start-up instructions

Read the instructions and warnings on page 2 before start-up for your safety.



**WARNING:** Risk to life due to not observing the start-up instructions and resulting incorrect operation.

- ▶ If these instructions are not followed exactly, a fire or explosion may be caused with serious property damage or loss of life or serious injury.
- ▶ Observe the start-up instructions.



This boiler is equipped with an electronic ignition system which automatically will light the pilot burner. Do not try to manually light the pilot burner.

### 3.1 Operating instructions

**STOP!** First read the safety instructions on page 2 and the start-up warnings on this page of these instructions.

- ▶ Set thermostat to the lowest value.
- ▶ Disconnect the heating system from the power supply.
- ▶ Shut off main gas supply.
- ▶ Open the boiler front door.



**WARNING:** Risk to life due to fire or explosion.

- ▶ Never use excessive force, when adjusting the gas control knob (→ figure 3).
- ▶ Adjust the gas control knob only by hand.
- ▶ Never use a tool for adjusting the gas control knob.
- ▶ If you can not turn the gas control knob by hand, do NOT try to repair it.
- ▶ Contact a qualified service organization at this point.

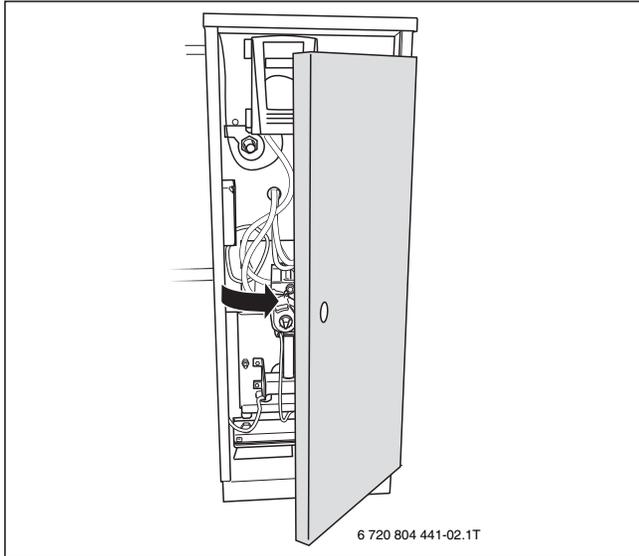


Fig. 2 Open boiler front door

- ▶ Turn the gas control knob clockwise in the "OFF" position. Do not use excessive force.

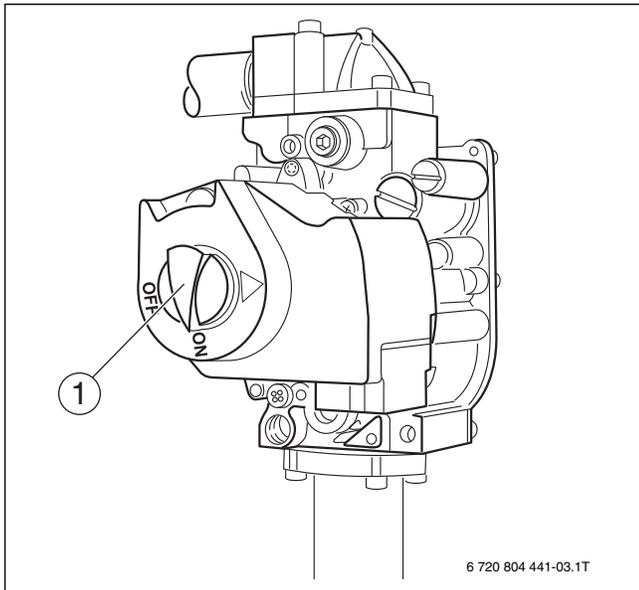


Fig. 3 Gas valve

- [1] Gas control knob (shown in the "ON" position)



**WARNING:** Risk to life due to ignition of flammable gases.

- ▶ Wait 5 (five) minutes until all gas odors have disappeared. Check to see if any gas odors remain, also at floor level. In case gas odors are still present, shut off gas supply, shut off electrical power to the boiler and inform the boiler technician or local gas utility company.

- ▶ If you do not smell gas, proceed to the next step.



This unit is equipped with an automatic ignition system which automatically starts the pilot burner. Do not attempt to ignite it manually.

- ▶ Turn gas control knob counterclockwise to ON position. Do not use force.
- ▶ Close boiler front door.
- ▶ Open main gas supply.
- ▶ Turn on electric power to heating system.
- ▶ Set thermostat to desired room temperature.
- ▶ If the heating system does not start operating, follow the instructions for turning off gas supply to boiler (→ chapter 3.2) and inform your boiler technician or your gas company.

### 3.2 Shutting off gas supply to boiler

- ▶ Set thermostat (optional) to the lowest value.
- ▶ Disconnect heating system from the power supply by shutting off the emergency shut-off switch outside the boiler room or by disengaging the heating system circuit breaker.
- ▶ Open boiler front door (→ figure 2).
- ▶ Turn gas control knob clockwise to the OFF position. Do not use excessive force.

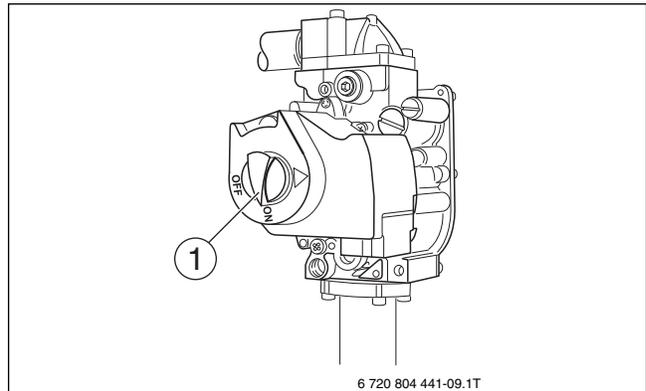


Fig. 4 Gas valve

- [1] Gas control knob (shown in the "ON" position)

- ▶ If necessary, shut off main gas supply.
- ▶ Close boiler front door.

### Flame roll-out switch

The boiler is equipped with a flame roll-out switch. If the venting system of the boiler is blocked, the flame roll-out switch will respond. Do not try to turn on the boiler. Inform a qualified service company. The venting system of the boiler must be checked for blockage and the flame roll-out switch must be replaced. The flame roll-out switch is for one-time use only. Do not try to reuse it.

## 4 Taking the heating system out of operation

### 4.1 Normal system shut-down

- ▶ Turn ON/OFF switch (emergency shutoff switch) to OFF position. This shuts off power to the boiler and all of its components (e.g. burner, aquastat).
- ▶ Close gas shut off-valve.



**NOTICE:** System damage due to freezing.  
The heating system can freeze up in cold weather if it is shut down.

- ▶ Leave the heating system switched ON constantly as much as possible.
- ▶ Protect the heating system from freezing by draining the boiler and water pipes at the lowest point.

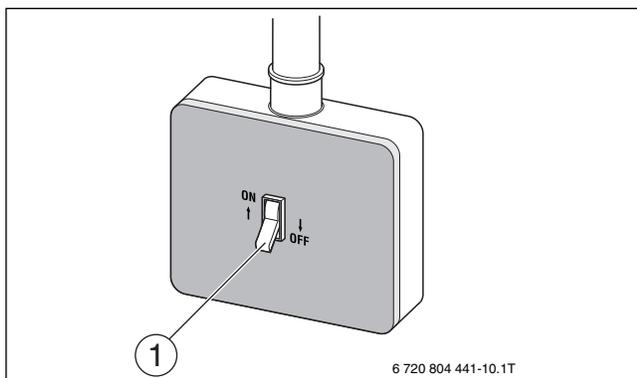


Fig. 5 System shut-down

[1] ON/OFF switch (emergency shut off switch)

### 4.2 Emergency shut-down procedures

Perform this procedure in case of emergency:

- ▶ Never put yourself at risk. Your own safety must always take priority.
- ▶ Shut off main gas supply.
- ▶ Shut down the heating system using the boiler emergency shutoff switch or the corresponding circuit-breaker.

## Notes

## Notes

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