

Operating instructions

Sealed combustion boiler Logano GA124 SC and atmospheric boiler Logano G124X II/SP

WARNING!

If these instructions are not followed exactly, a fire or explosion may be caused with serious property damage or loss of life and serious injury.

- Do not store or use gasoline or any other flammable vapors or liquids in the vicinity of this system or any other heating system.

IF A SMELL OF GAS IS DETECTED:

- Do not switch on any electrical appliances.
- Do not operate electrical switches; do not use a telephone in the building.
- Call gas company immediately from outside the building. Follow these instructions.
- If you cannot reach your gas company, call the fire department.
- The heating system must only be installed and serviced by a qualified service company, a qualified service or gas supply company.



NOTE! Please keep these instructions for future reference.

Please read carefully before use.

Buderus

1 For your safety

The Logano GA124 SC and Logano G124X II/SP gas-fired boilers are designed and manufactured in accordance with in state of the art in technology and safety. Particular emphasis is placed on ease of operation. We recommend reading and following the safety instructions and operating manual for safe, economical and environmentally responsible operation of the heating system.

1.1 Correct use

The Logano GA124 SC and Logano G124X II/SP gas-fired boilers are designed to heat water using indirect domestic hot water tanks and space for heating single or multi family buildings.

1.2 Notes structure

Additional symbols for identification of dangers and user instructions.



WARNING!

RISK TO LIFE

Identifies possible dangers emanating from a product, which might lead to serious injury or death if appropriate care is not taken.



CAUTION!

RISK OF INJURY/ SYSTEM DAMAGE

Identifies potentially dangerous situations, which might lead to medium or slight injuries or to property losses.



USER NOTE

Information on optimum utilization and setting of the control(s) plus other useful information.

1.3 Please observe these safety instructions

Improper operation of the boiler may cause property damage.

- Only use the boiler for the intended purpose and only if it is in perfect working order.
- Have the heating system installed by a heating contractor.
- The contractor must give detailed instructions on the operation of the heating system.
- Please read these operating instructions carefully.



WARNING!

RISK TO LIFE

due to neglecting your own safety in case of emergency, such in case of a fire.

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

1.3.1 Boiler room



CAUTION!

BOILER DAMAGE AND OPERATING DEFECTS

due to missing or inadequate openings for combustion air and venting of the boiler room.

- Make sure that inlets and outlets are not obstructed or blocked off.
- If defects are not corrected immediately, the boiler must not be operated.



WARNING!

FIRE DANGER

due to flammable material or liquids.

- Do not store flammable material or liquids in the immediate vicinity of the heat generator.



CAUTION!

SYSTEM DAMAGE

through frost.

- Make sure that the boiler room is protected from freezing.

1.3.2 Working on the heating system



WARNING!

RISK TO LIFE

from explosion of flammable gases.

- Make sure that a qualified company installs the boiler, connects gas, oil and flue connections, places the boiler in operation, connects the electrical power, and maintains and repairs the boiler.
- Make sure that a licensed contractor carries out all work on gas transmission parts.

Additional important system

- Do not operate if any part is under water. Contact a qualified customer service technician immediately to have the unit checked and to replace the parts of the control and gas fittings that were under water.
- If the system overheats or the gas supply does not shut off, do not switch off or interrupt the power to the pump. Instead shut off the gas supply at a point outside the heating system.
- The flue system must be inspected and cleaned once a year. All parts that show any signs of damage by corrosion or other causes must be replaced.
- The boiler must be serviced by qualified boiler service company once a year. The inspection must include the main burner, ignition burner, fan shroud, combustion air tube, the complete flue system and the venting openings or venting equipment. All parts that show any signs of damage from corrosion or other causes must be replaced.

2 Product description

The boilers are low temperature gas-fired boilers.



USER NOTE

The boilers are fully functional with the factory-installed aquastats. A Logamatic 2107 control can be installed in addition to the factory-installed aquastat.

The boilers consist of:

- Automatic ignition module (GA124 SC/G124X II only) and aquastat
- Logamatic 2107 control (OPTIONAL)
- Boiler jacket and front panel
- Boiler block with insulation
- Burner

The automatic ignition, the aquastat and, if applicable, the Logamatic 2107 monitor and control all electrical components of the boiler.

The boiler jacket and insulation prevent energy loss and provide soundproofing.

The boiler block transfers the heat generated by the burner to the boiler water.

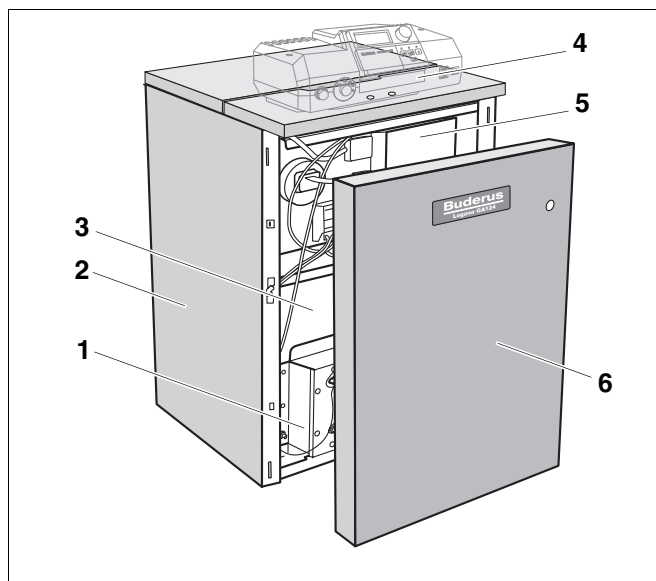


Fig. 3 Logano GA124 boiler

- 1 Burner
- 2 Boiler jacket
- 3 Boiler block with insulation
- 4 Logamatic 2107 control (optional)
- 5 Aquastat (control unit)
- 6 Boiler front panel

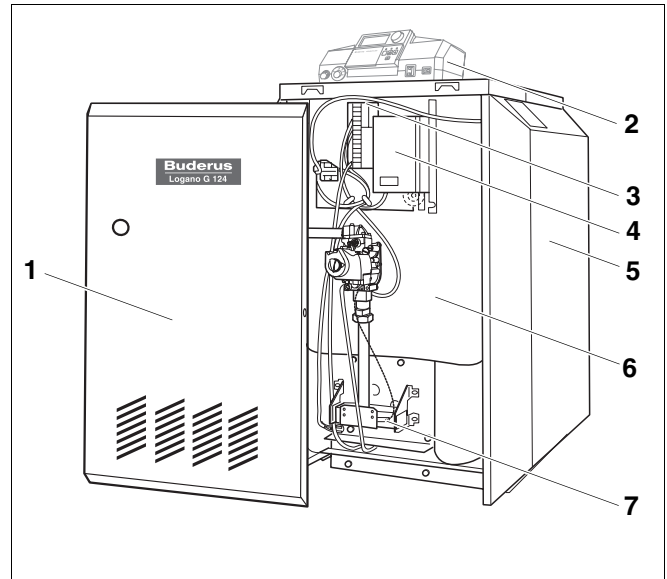


Fig. 1 Logano G124X II boiler

- 1 Boiler front panel
- 2 Logamatic 2107 control (optional)
- 3 Ignition module
- 4 Aquastat (control unit)
- 5 Boiler jacket
- 6 Boiler block with insulation
- 7 Burner

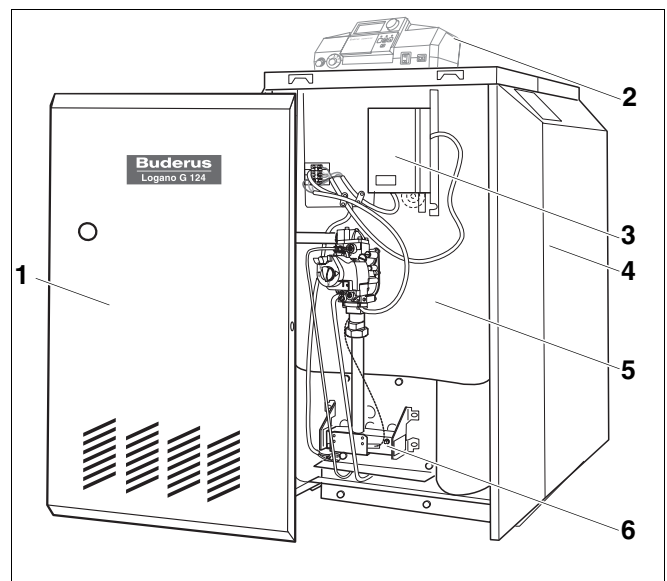


Fig. 2 Logano G124X SP boiler

- 1 Boiler front panel
- 2 Logamatic 2107 control (optional)
- 3 Aquastat
- 4 Boiler jacket
- 5 Boiler block with insulation
- 6 Burner

3 Start-up instructions

For your own safety read the instructions before start-up.



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.



WARNING!

DANGER OF EXPLOSION

If you smell gas, there is a danger of explosion.

- No open flame. No smoking.
- Prevent spark generation. Do not operate electrical switches, telephones, plugs or door bells.
- Close main gas valve.
- Open doors and windows.
- Warn other occupants of the building.
- Evacuate the building.
- Call gas company, heating service company or fire department from outside the building.

A For GA124 SC and G124X II

This unit is with an ignition system that automatically starts the burner. Do not attempt to ignite it manually.


G124X SP only:

This unit is equipped with a burner that must be ignited manually. Follow the instructions below to ignite the burner.

- B** *Check for an odor of gas around the heating system. This test must also be conducted at floor level, because some types of gas are heavier than air and may accumulate at floor level.*
- C** *Switch on the ON/OFF switch on the gas valve by hand only. Never use a tool as assistance. If you cannot actuate the ON/OFF switch on the gas valve by hand, do not attempt to repair it. Contact a qualified technician. Any attempt to use force or to repair the switch may cause a fire or explosion.*
- D** *Do not operate the unit if any part is under water. Contact a qualified customer service technician immediately to have the unit checked and to replace the parts of the control and gas valve that were under water.*

3.1 Operating instructions for GA124 SC and G124X II

STOP! First read the safety instructions on → page 5 of these instructions.

1. Set thermostat to the lowest value.
 2. Disconnect the heating system from the power supply.
 3. Shut off main gas supply valve.
 4. Remove screws from the left and right side panels, then lift the front panel off the boiler and pull it forward.
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5. Turn gas valve ON/OFF button clockwise to OFF position. Do not use force.
 6. Wait five (5) minutes until all gas residues have dissipated. Check whether there is still any smell of gas, including at floor level. If there is a gas odor: STOP! Follow instructions in section "B" of the safety instructions in (→ Chapter 3, page 5). If there is no sign of a gas odor, continue with the next step.
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USER NOTE

This unit is fitted with an ignition system that automatically starts the pilot burner. Do not attempt to ignite it manually.
7. Turn gas valve ON/OFF switch counterclockwise to ON position. Do not use force.
 8. Attach front panel of boiler (→ Fig. 4).
 9. Open main gas supply shut-off.
 10. Switch on electric power to heating system.
 11. Set thermostat to desired room temperature.
 12. If the heating system does not start operating, follow the instructions for "switching off gas supply to boiler" (→ Chapter 3.3, page 10) and inform your service technician or your gas supply company.

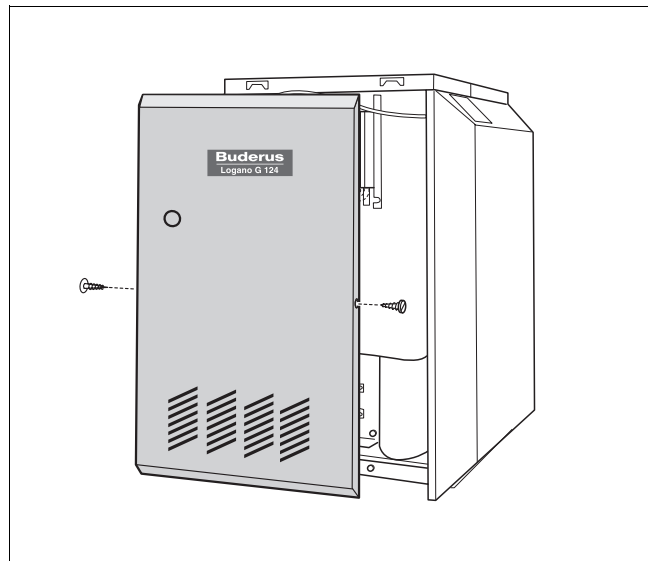


Fig. 4 Removing front panel of boiler (G124X II)

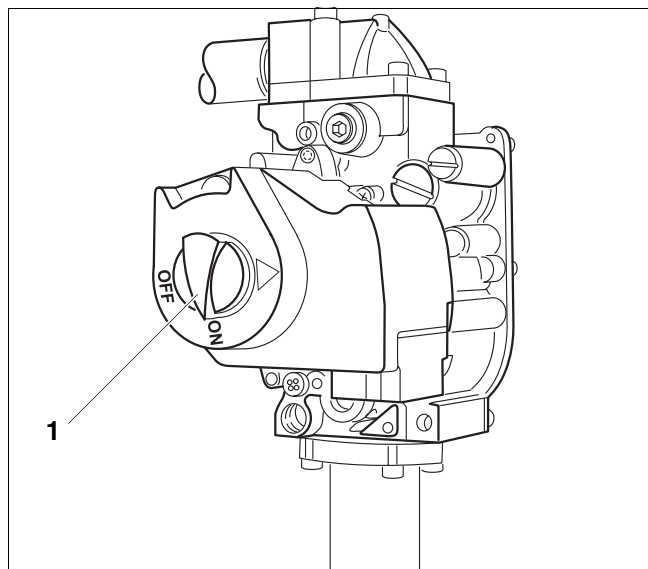


Fig. 5 Gas valve

1 ON/OFF button on gas valve

3.2 Operating instructions for G124X SP:

STOP! First read the safety instructions on → page 5 of these instructions.

1. Set thermostat to the lowest value.
2. Disconnect the heating system from the power supply.
3. Shut off main gas supply shut-off.
4. Remove screws from the left and right side panels, then lift the front panel off the boiler and pull it forward.

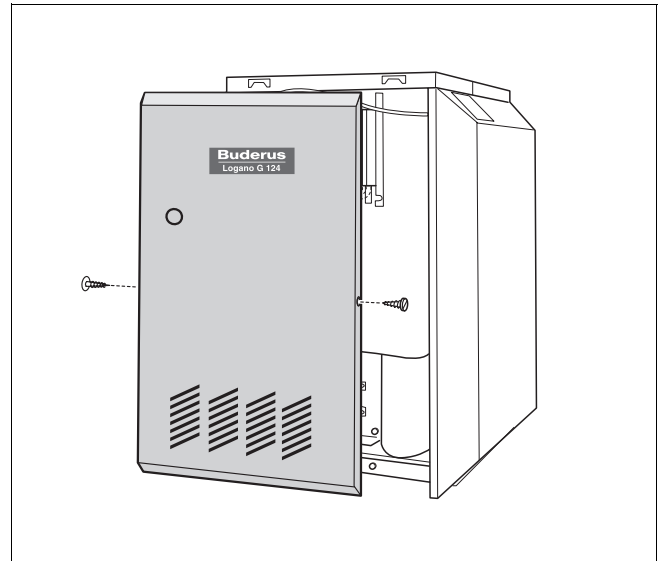


Fig. 6 Removing front panel of boiler

5. Turn gas valve ON/OFF button clockwise to OFF position. Do not use force.
6. Wait five (5) minutes until all gas residues have dissipated. Check whether there is still any smell of gas, including at floor level. If there is a gas odor: STOP! Follow instructions in section "B" of the safety instructions in (→ Chapter 3, page 5). If there is no sign of a gas odor, continue with the next step.



USER NOTE

This unit is equipped with an pilot burner that must be ignited manually. Follow the instructions below to ignite the burner.

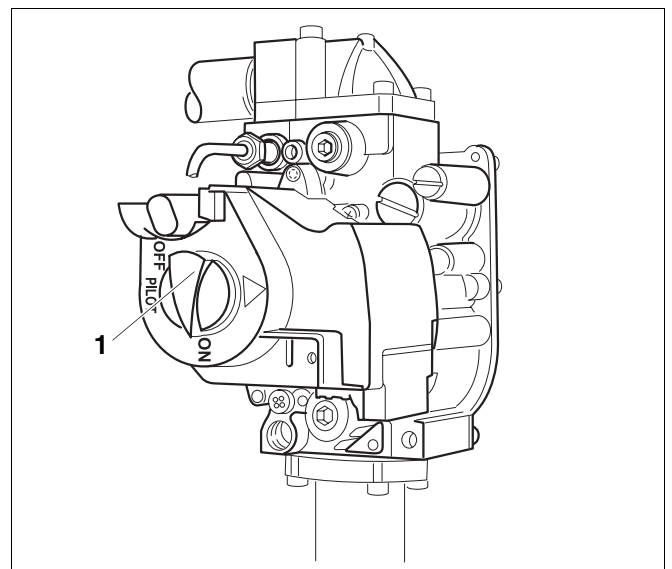


Fig. 7 G124X SP gas valve

1 ON/OFF button (at ON position)

7. Look at the igniter through the viewing glass in the burner housing.

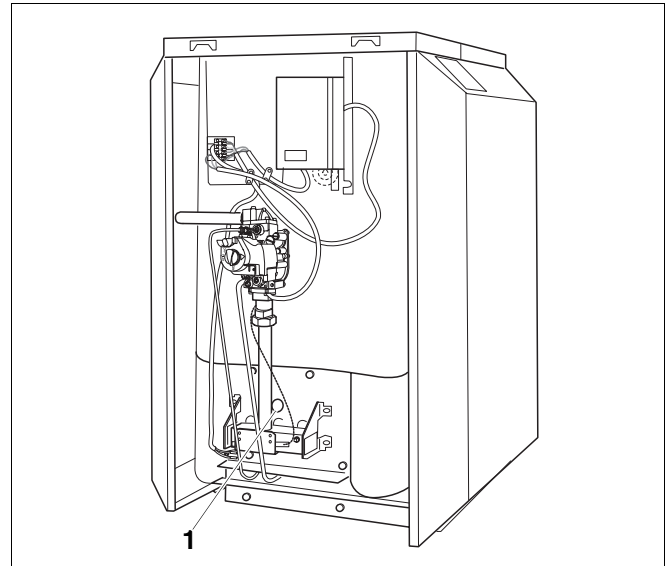


Fig. 8 G124X SP boiler

1 Viewing glass

8. Turn gas valve ON/OFF switch counterclockwise to PILOT position.
9. Press reset button in all the way and hold.
10. Ignite the pilot burner with the supplied match holder and a burning match through the viewing glass in the burner housing.
11. When the pilot burner is burning, continue to hold the red reset button for about a minute.
12. Release red reset button. The red reset button must pop up and the pilot burner must continue burning. If the pilot burner goes out, turn gas fitting ON/OFF button clockwise to OFF position.

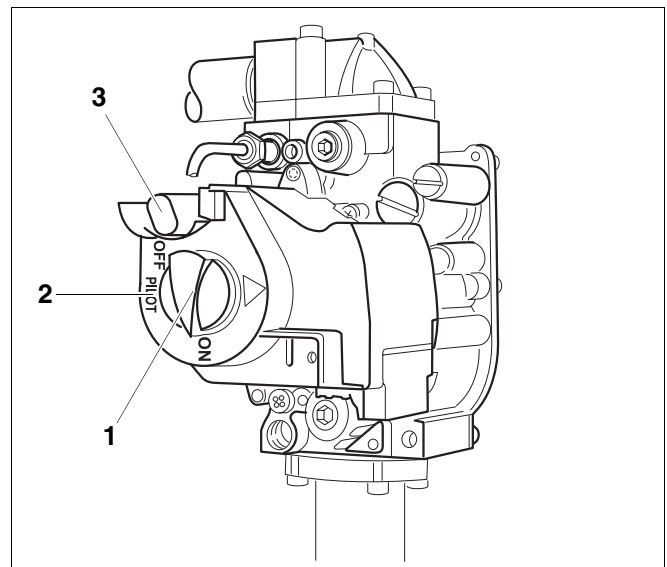


Fig. 9 G124X SP gas valve

1 ON/OFF button (at ON position)

2 "PILOT" position

3 Reset button



WARNING!

RISK TO LIFE

due to poisoning by leaking gas.

If the red reset button does not pop up when you release it, **STOP**.

- Close main gas shut-off immediately to prevent gas from leaking.
- Contact your service technician or gas supplier immediately and have the fault repaired.
- If the pilot burner continues to go out after several attempts, turn the ON/OFF button on the gas valve to OFF immediately to prevent gas from leaking.

13. Turn gas valve ON/OFF switch (→ Fig. 9 page 8) counterclockwise to ON position. The gas valve ON/OFF switch can only be set to ON if the red reset button is out.
14. Attach front panel of boiler (→ Fig. 6 page 7).
15. Open main gas supply shut-off.
16. Switch on electric power to heating system.
17. Set thermostat to desired room temperature.
18. If the heating system does not start operating, follow the instructions for "switching off gas supply to boiler" (→ Chapter 3.3, page 10) and inform your customer service technician or your gas company.

3.3 Shutting off gas supply to boiler

1. Set thermostat to the lowest value.
2. Disconnect heating system from the power supply before carrying out maintenance work.
3. Remove front panel of boiler

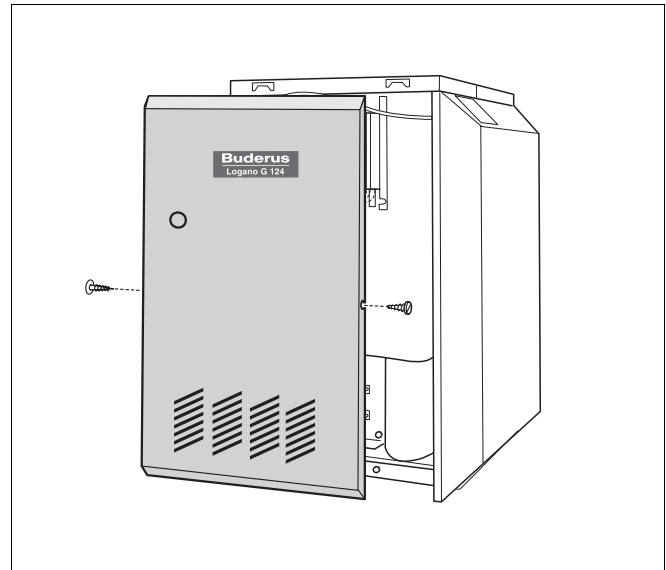


Fig. 10 Remove front panel of boiler

4. Turn gas valve ON/OFF button clockwise to OFF position. Do not use force.
5. If necessary, shut off main gas supply shut-off.
6. Replace front panel of boiler.

Flame roll-out switch

The boiler is equipped with a flame roll-out switch. If the flue duct in the boiler is blocked, the flame roll-out switch responds. Do not try to switch on the boiler. Inform a qualified service company. The flue duct in the boiler must be checked for blockage and the flame roll-out switch replaced. The flame roll-out switch is for one-time use only, and cannot be reused.

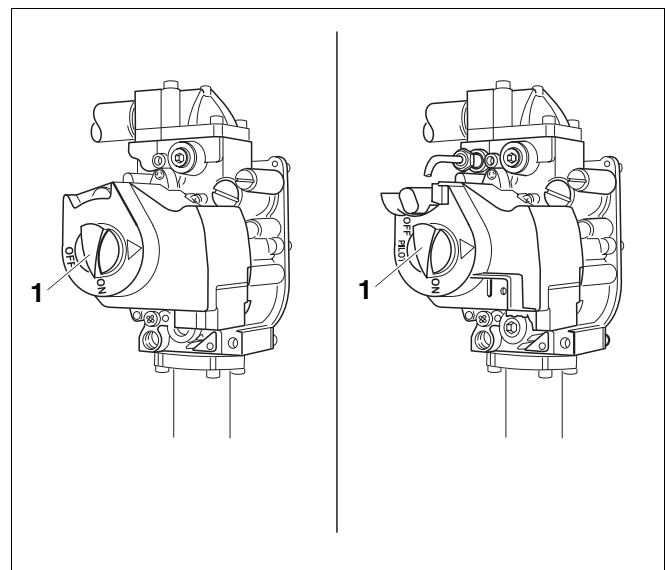


Fig. 11 Gas valve (GA124 SC/G124X II left, G124X SP right)
1 ON/OFF button (at ON position)

4 Shutting down of the boiler

4.1 Normal boiler shut-down

1. With the aquastats:

Switch off ON/OFF switch ("OFF" position). This shuts down the boiler with all components (e.g. burner).
2. Additional shut-down procedure → follow the directions for the aquastat.

3. Logamatic 2107 control (accessory):

Switch off ON/OFF switch on control ("0" position). This shuts down the boiler with all components (e.g. burner).
4. Shut off main fuel supply valve.



SYSTEM DAMAGE

through frost.

CAUTION!

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 heater and water pipes at the lowest point.

4.2 Emergency shut-down

Inform your customer of the procedure in case of emergency, such as a fire.

1. Never put yourself at risk. Your own safety must always take priority.
2. Shut off main fuel supply valve.
3. Shut down the heating system with the heater emergency switch or the corresponding circuit-breaker.

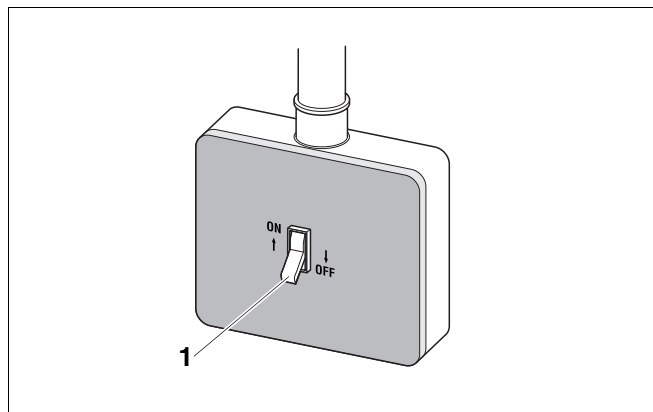


Fig. 12 Shutting down heating system (with aquastat)

1 ON/OFF switch (main switch)

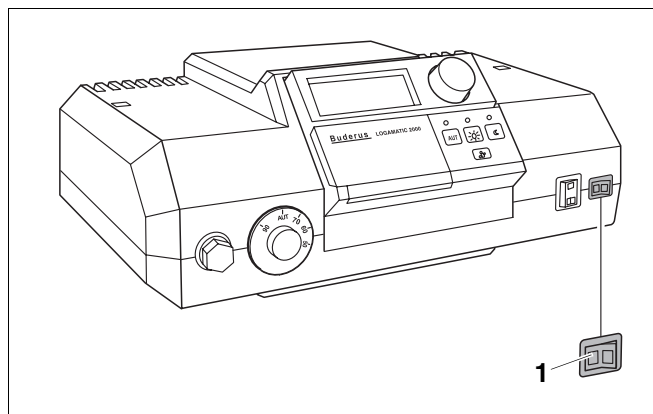


Fig. 13 Shutting down heating system (with Logamatic 2107 control)

1 ON/OFF switch

Heating Contractor:

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