Installation instructions for contractors



Gas type conversion to G 31

for the Vitodens 100-W, type WB1B

Safety instructions



Please follow these safety instructions closely to prevent accidents and material losses.

Safety instructions explained



Danger

This symbol warns against the risk of injury.

Note

Details identified by the word "Note" contain additional information.

Installation, initial start-up, inspection, maintenance and repairs must only be carried out by a competent person (heating engineer/installation contractor).

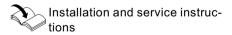
Before working on the equipment/ heating system, isolate the power supply (e.g. by removing a separate mains fuse or by means of a mains isolator) and safeguard against unauthorised reconnection.

When using gas as fuel, also close the main gas shut-off valve and safeguard against unauthorised reopening.

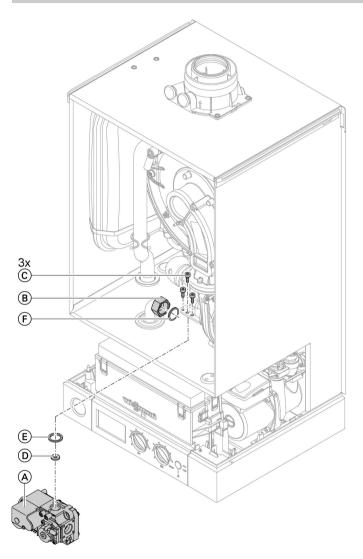
Repairing components which fulfil a safety function can compromise the safe operation of your heating system.

For replacements, use only original spare parts supplied or approved by Viessmann.

Opening the Vitodens



Replacing the gas restrictor



- **1.** Pull power cable from gas train (A).
- 2. Remove union nut (B).
- 3. Undo three screws \bigcirc and remove gas train \bigcirc .



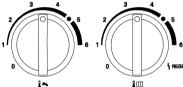
Replacing the gas restrictor (cont.)

- **4.** Remove gas restrictor ① (if fitted) from gas train (A) and insert new gas restrictor (D) with new gasket (E) into gas train (A).
- 5. Fit the gas train (A) with a new gasket (F).

Fixing screw torque ©: 3 Nm. Union nut torque (B): 22 Nm.

6. From the labels supplied, select the appropriate one in accordance with the details on the type plate (gas supply pressure). Affix this label next to the type plate on top of the boiler.

Converting gas type on the control unit

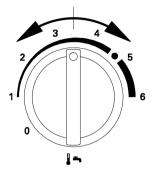


- - 1 RESET ш

- 1. Turn ON/OFF switch ON.
- 2. Simultaneously turn rotary selectors " and " I I to their central position.
 - "SERV" appears on the display.
- 3. Turn rotary selector "IIII 4" anticlockwise within 2 s. "|>" and the set value flash on the display.



Converting gas type on the control unit (cont.)

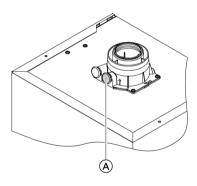


4. Adjust the control unit to natural gas or LPG by turning the rotary selector "\$\int_\infty".

The display shows:

- "0" for operation with natural gas or
- "1" for operation with LPG.
- Do not adjust the rotary selectors for 15 s. The set operating mode is then saved and the control unit returns to standard mode.

Adjusting the burner



- 1. Connect a flue gas analyser at flue gas port (A) on the boiler flue connection.
- **2.** Start up the boiler and check for tightness.



Installation and service instructions

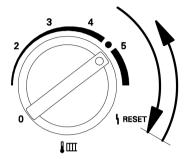


Danger

Escaping gas leads to a risk of explosion.
Check gas equipment for tightness.

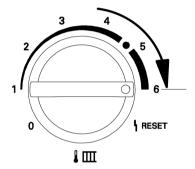


Adjusting the burner (cont.)



3. Turn rotary selector "" clockwise for less than 2 s and then anticlockwise back to the control range on the right.

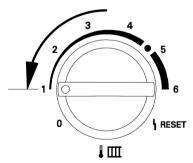
The display shows "SERV" and the boiler water temperature appears.



4. Adjust the upper output:

Turn rotary selector "▮∭" to the control range on the right.

The display shows 5 bars for upper output.

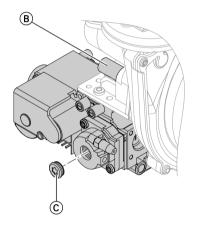


- Measure the CO₂ content for upper output.
 The CO₂ content must be between 10.0 and 12.0 %.
- 6. Adjust the lower output:

 Turn rotary selector "↓IIII" to the left control range.

 The display shows 1 bar for lower output.
- Test the CO₂ content for lower output.
 The CO₂ content must be between 10.0 and 12.0 %.
- 8. If the CO₂ content is within the given range, continue with point 15.
 - If the CO₂ content is **not** within the given range, check the flue gas/ventilation air system for tightness. Remedy any leaks.

Adjusting the burner (cont.)



 Test the CO₂ content for upper and lower output again.
 If the CO₂ content is still not within the given range, adjust the CO₂ content.

10. Adjusting the CO2 content

Adjust the upper output.

- **11.** With the adjusting screw (B), set the CO₂ content for upper output to 10.8 %.
- **12.** Adjust the lower output.
- 13. Remove cover © from gas train. With the adjusting screw below, set the CO₂ content for lower output to 10.5 %.
- **14.** Refit cover ©.
- **15.** Shut the boiler down, remove flue gas analyser and close flue gas port (A).
- **16.** Return rotary selectors "♣★" and "IIII ♣" to their original positions.
- 17. Select the appropriate label from "Gas type" labels supplied and affix next to the type plate on the top of the boiler.

Note

The delivered condition shown on the type plate then no longer applies.

18. Fit front panel and start the boiler. $^{\circ}$

Subject to technical modifications.

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