

Installation instructions for contractors

VIESMANN


Vitorondens 200-T
Type J2RA, 67.6 to 107.3 kW
Oil Unit condensing boiler




VITORONDENS 200-T



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.

-  **Please note**
This symbol warns against the risk of material losses and environmental pollution.

Target group

These instructions are exclusively intended for authorised contractors.

- Work on electrical equipment must only be carried out by a qualified electrician.

Regulations to be observed

- National installation regulations
- Statutory regulations for the prevention of accidents
- Statutory regulations for environmental protection
- Codes of practice of the relevant trade associations
- Relevant country-specific safety regulations

Working on the system

- Isolate the system from the power supply, e.g. by removing the separate fuse or by means of a mains isolator, and check that it is no longer live.
- Safeguard the system against reconnection.
- Wear suitable personal protective equipment when carrying out any work.



Danger

Hot surfaces and fluids can lead to burns or scalding.

- Before maintenance and service work, switch OFF the appliance and let it cool down.
- Never touch hot surfaces on the appliance, fittings or pipework.

- ! **Please note**
 - Electronic assemblies can be damaged by electrostatic discharge. Prior to commencing work, touch earthed objects such as heating or water pipes to discharge static loads.

Repair work

- ! **Please note**
 - Repairing components that fulfil a safety function can compromise the safe operation of the system. Replace faulty components only with genuine Viessmann spare parts.










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Disposal of packaging

Please dispose of packaging waste in line with statutory regulations.

Symbols

Symbol	Meaning
	Reference to other document containing further information
	Step in a diagram: The numbers correspond to the order in which the steps are carried out.
	Warning of material losses and environmental pollution
	Live electrical area
	Pay particular attention.
	<ul style="list-style-type: none"> ▪ Component must audibly click into place. or ▪ Acoustic signal
	<ul style="list-style-type: none"> ▪ Fit new component. or ▪ In conjunction with a tool: Clean the surface.
	Dispose of component correctly.
	Dispose of component at a suitable collection point. Do not dispose of component in domestic waste.

Intended use

The appliance is intended solely for installation and operation in sealed unvented heating systems that comply with EN 12828, with due attention paid to the associated installation, service and operating instructions. It is only designed for heating up heating water that is of potable water quality.

Intended use presupposes that a fixed installation in conjunction with permissible, system-specific components has been carried out.

Commercial or industrial usage for a purpose other than heating the building or DHW shall be deemed inappropriate.

Any usage beyond this must be approved by the manufacturer in each individual case.

Incorrect usage or operation of the appliance (e.g. the appliance being opened by the system user) is prohibited and will result in an exclusion of liability. Incorrect usage also occurs if the components in the heating system are modified from their intended use (e.g. if the flue gas and ventilation air paths are sealed).

Dimensions and weights

See page 24.

Siting

Clearance dimensions

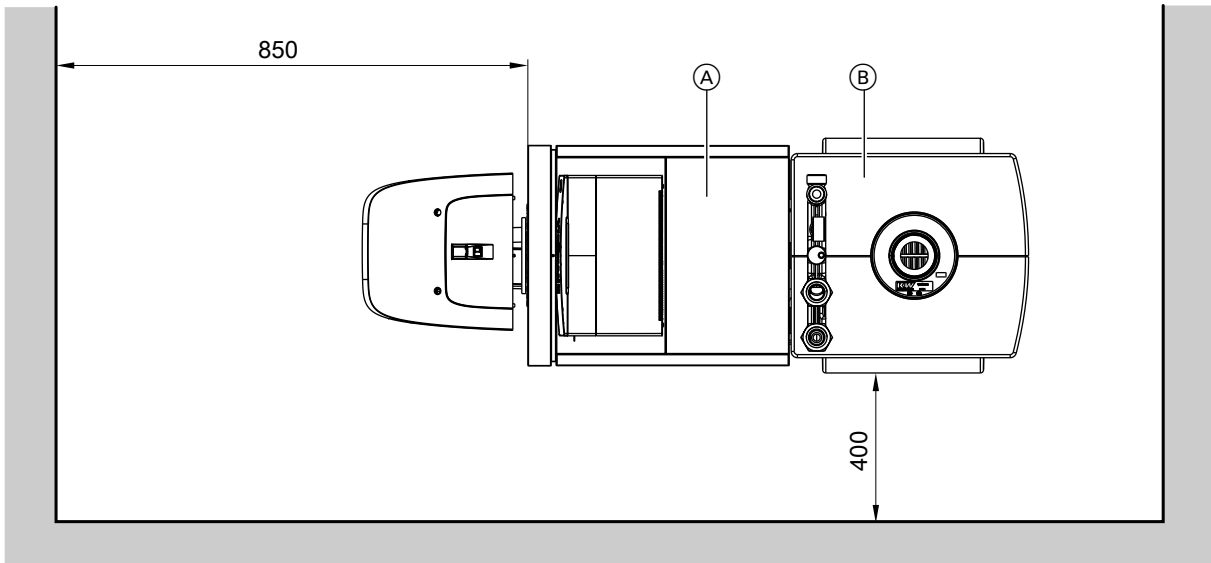


Fig. 1

- Ⓐ Boiler
- Ⓑ Heat exchanger

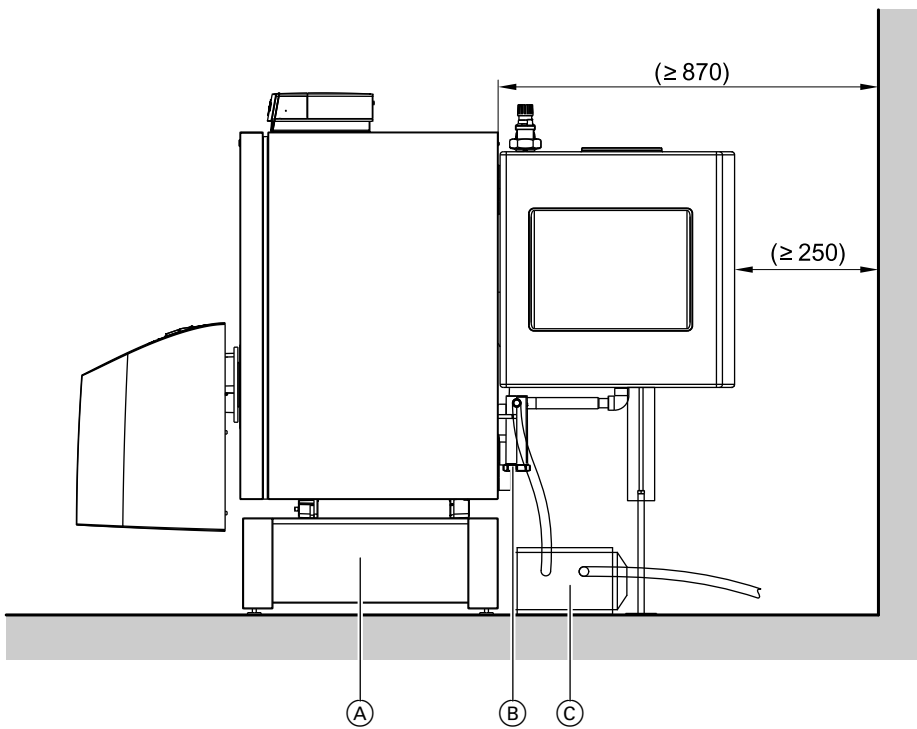


Fig. 2

- Ⓐ Plinth (accessories)
- Ⓑ Trap
- Ⓒ Neutralising system (accessories)

Overview of connections

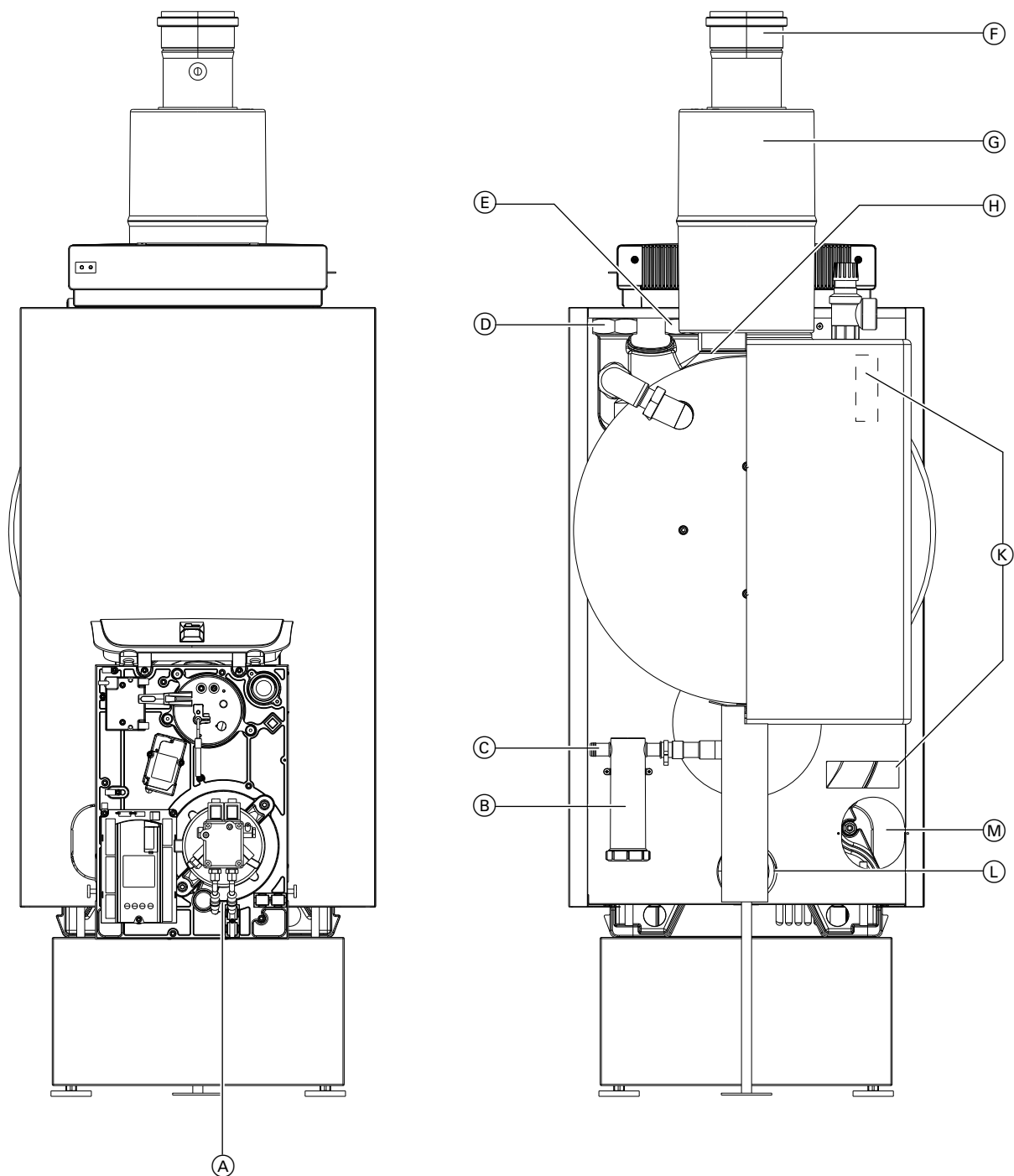


Fig. 3

- (A) Oil line connection
- (B) Trap
- (C) Condensate drain
- (D) Cylinder and heating return G 2
- (E) Cylinder and heating flow G 2
- (F) Boiler flue connection
- (G) Silencer (accessories)
- (H) Flue gas connection
- (K) Wiring area
- (L) Drain/filling/expansion vessel connection
- (M) Supply air connector (sound insulation set accessory)

Siting and levelling the boiler

Note

Remove and retain the bag containing the boiler type plate. The type plate is later affixed to the side panel.

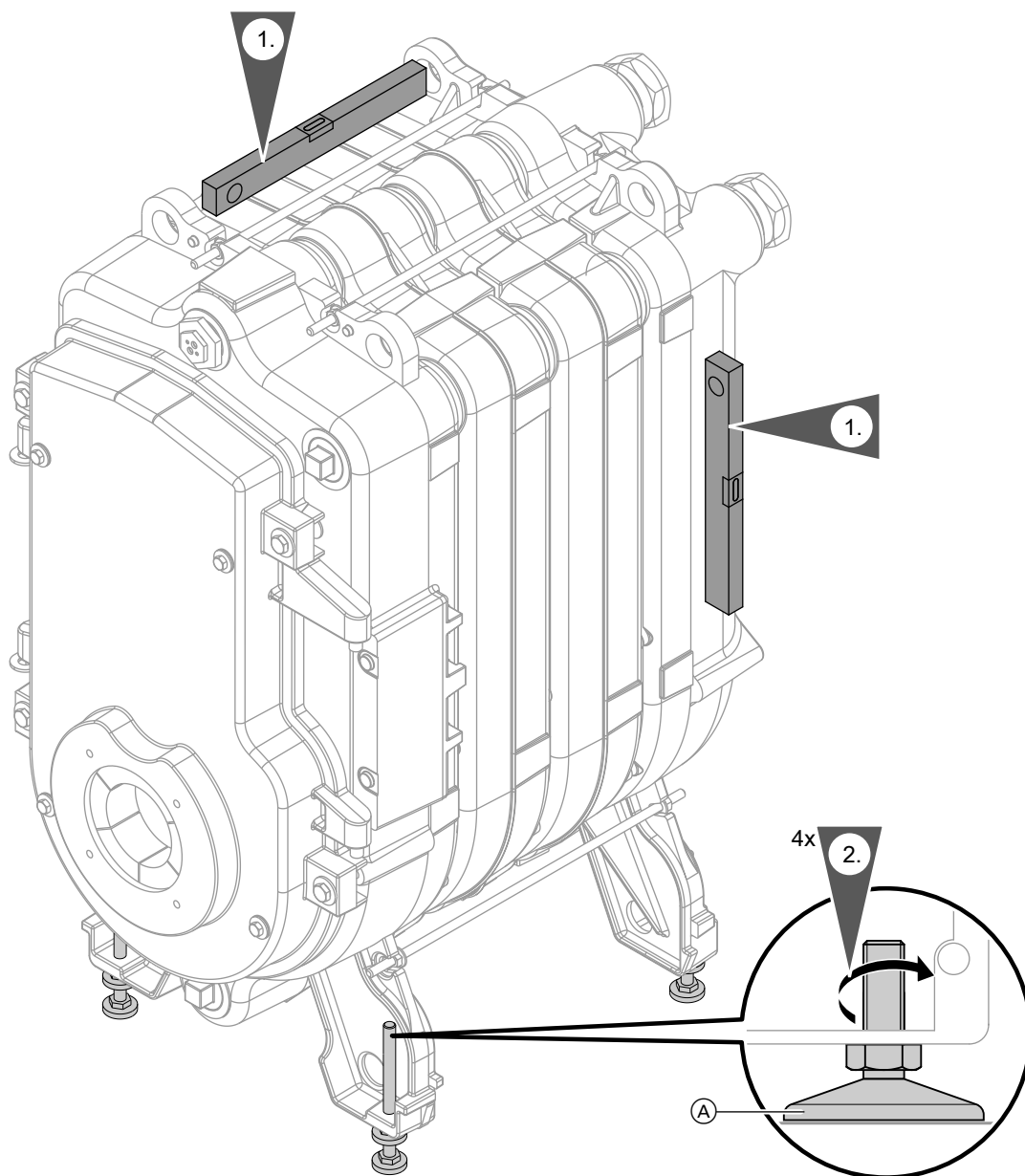


Fig. 4

Positioning without a plinth

Wind adjustable feet (A) approx. 85 mm out of the boiler.


Note

The adjustable feet height of **85 mm is essential** for mounting the pressure-jet oil burner later.

Siting and levelling the boiler (cont.)

Siting on a plinth

Replace adjustable feet (A) with hexagon screws supplied.

 Installation instructions on the plinth packaging

Fitting the thermal insulation

Note

All components required for mounting can be found in the thermal insulation box.

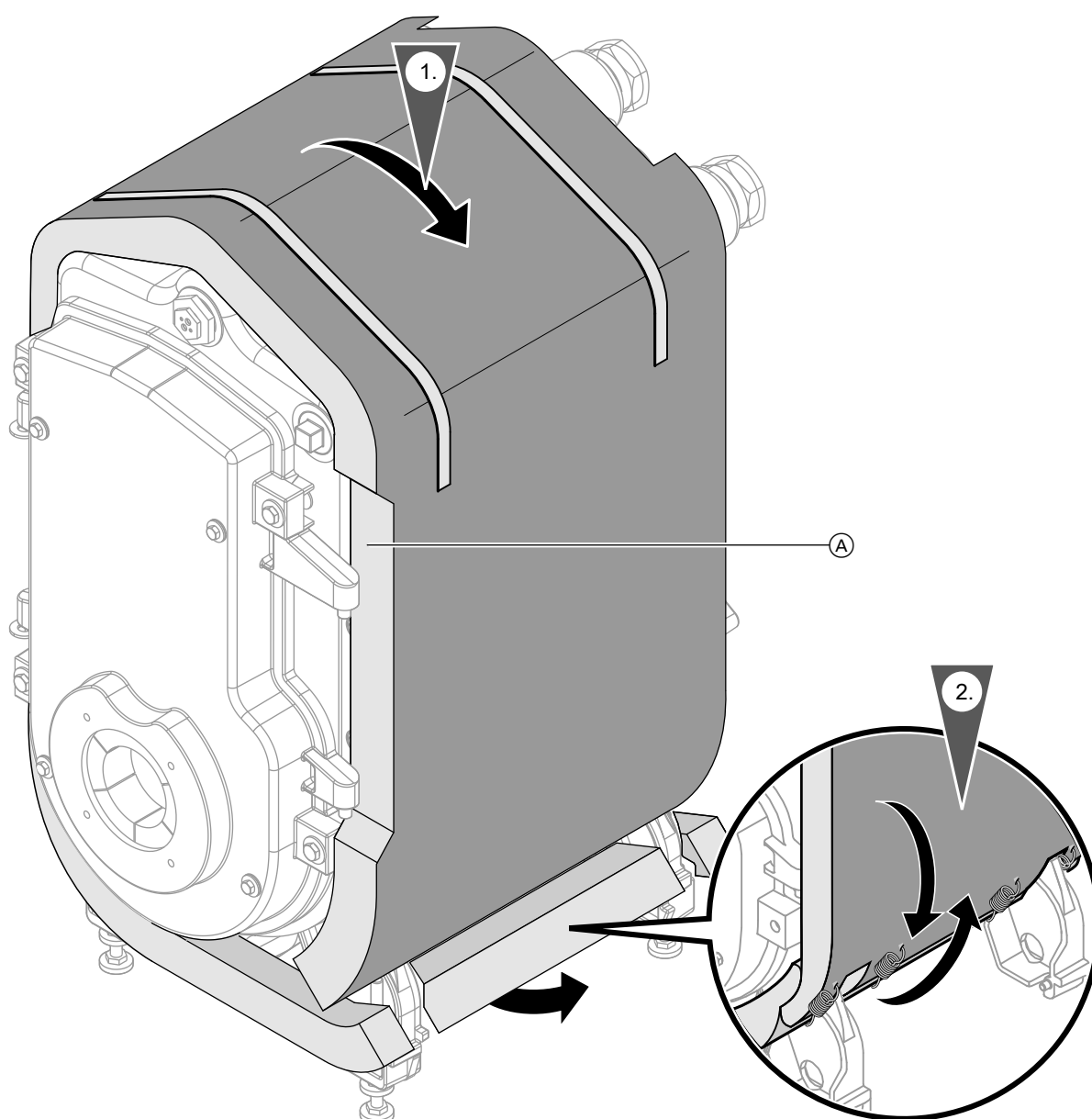


Fig. 5

(A) Notch should face the front

Secure the thermal insulation jacket with 4 spring hooks.

Fitting the thermal insulation (cont.)

Note

- Burner cable **41** is supplied in the thermal insulation pack.
- Adaptor for two-stage/modulating burner with cable **90** is packed separately.

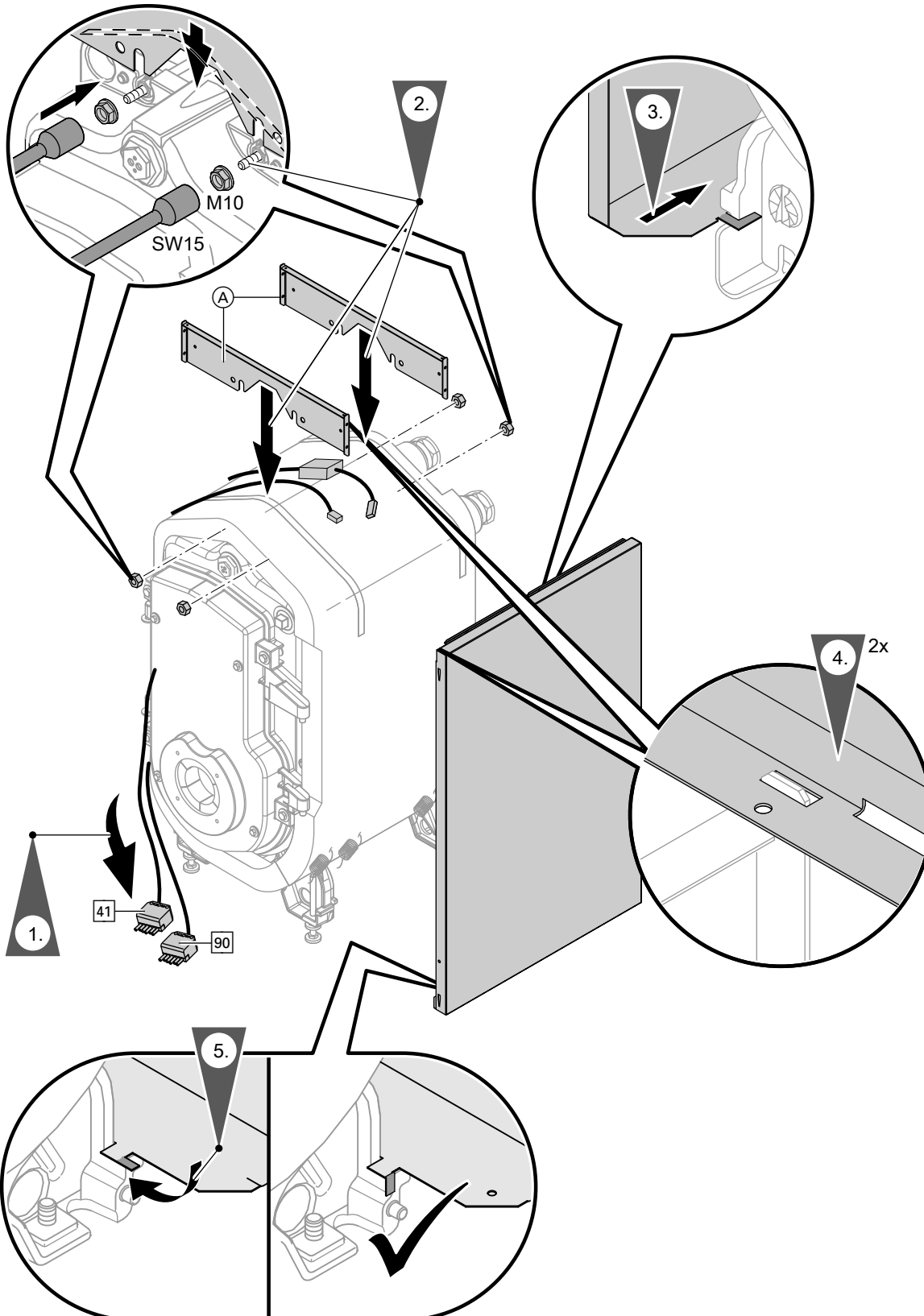


Fig. 6

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(A) Folded edge should face the front

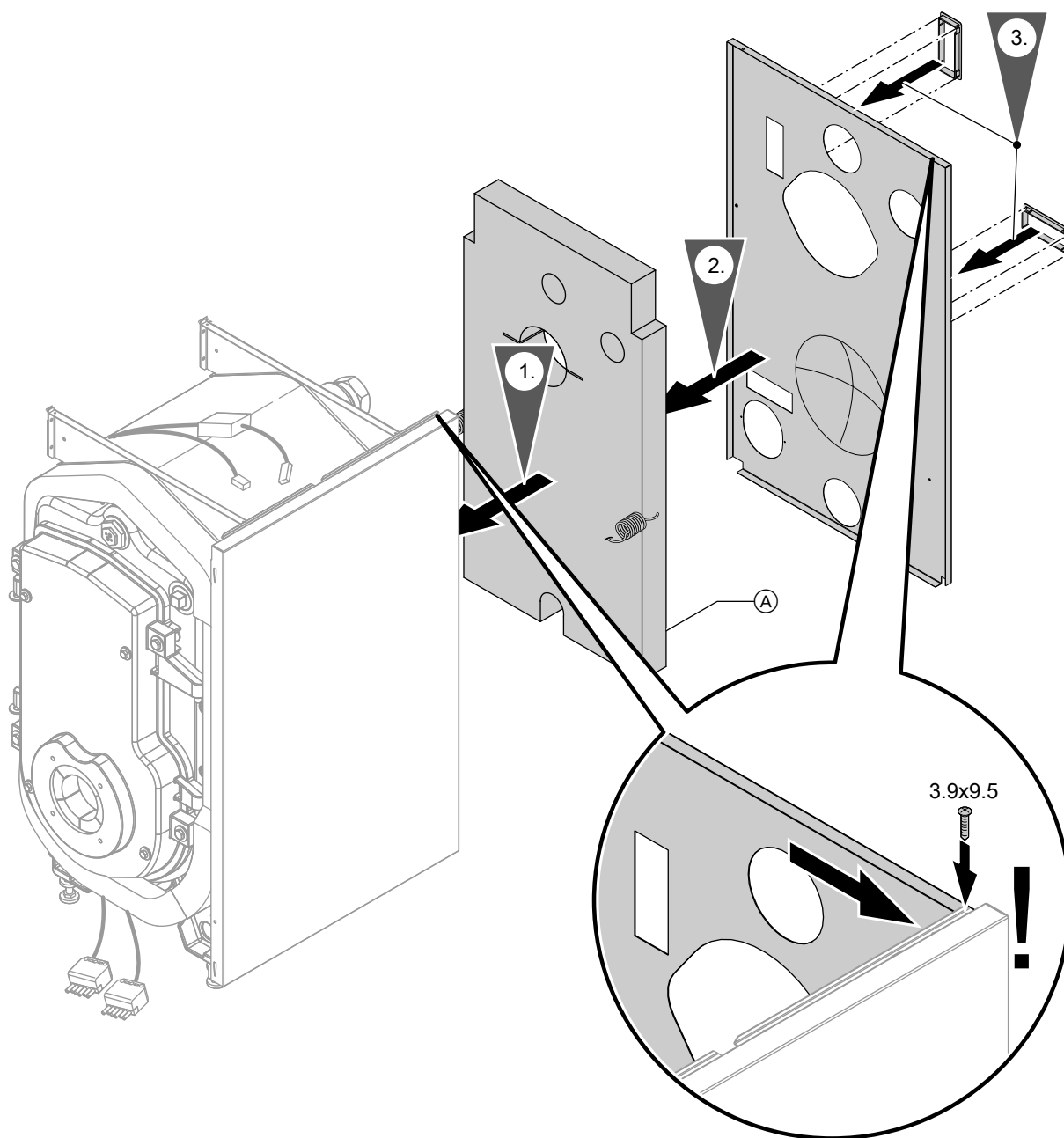


Fig. 7

Ⓐ Black side should face outwards

Mounting the sound insulation set (if available)

If a sound insulation set (accessories) has also been ordered, install it before attaching the left-hand side panel.



"Sound insulation set" installation and service instructions

Fitting the thermal insulation (cont.)

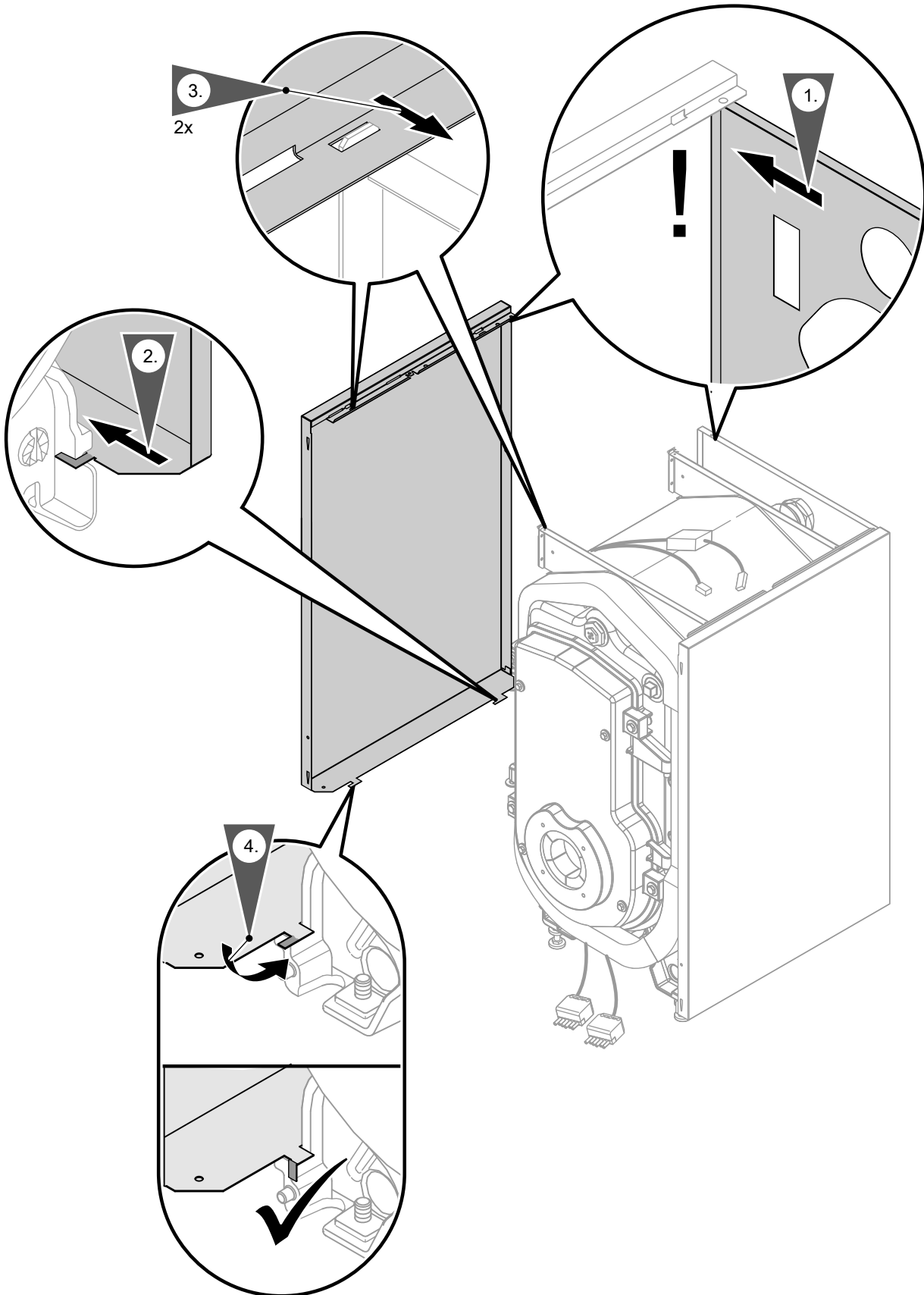


Fig. 8

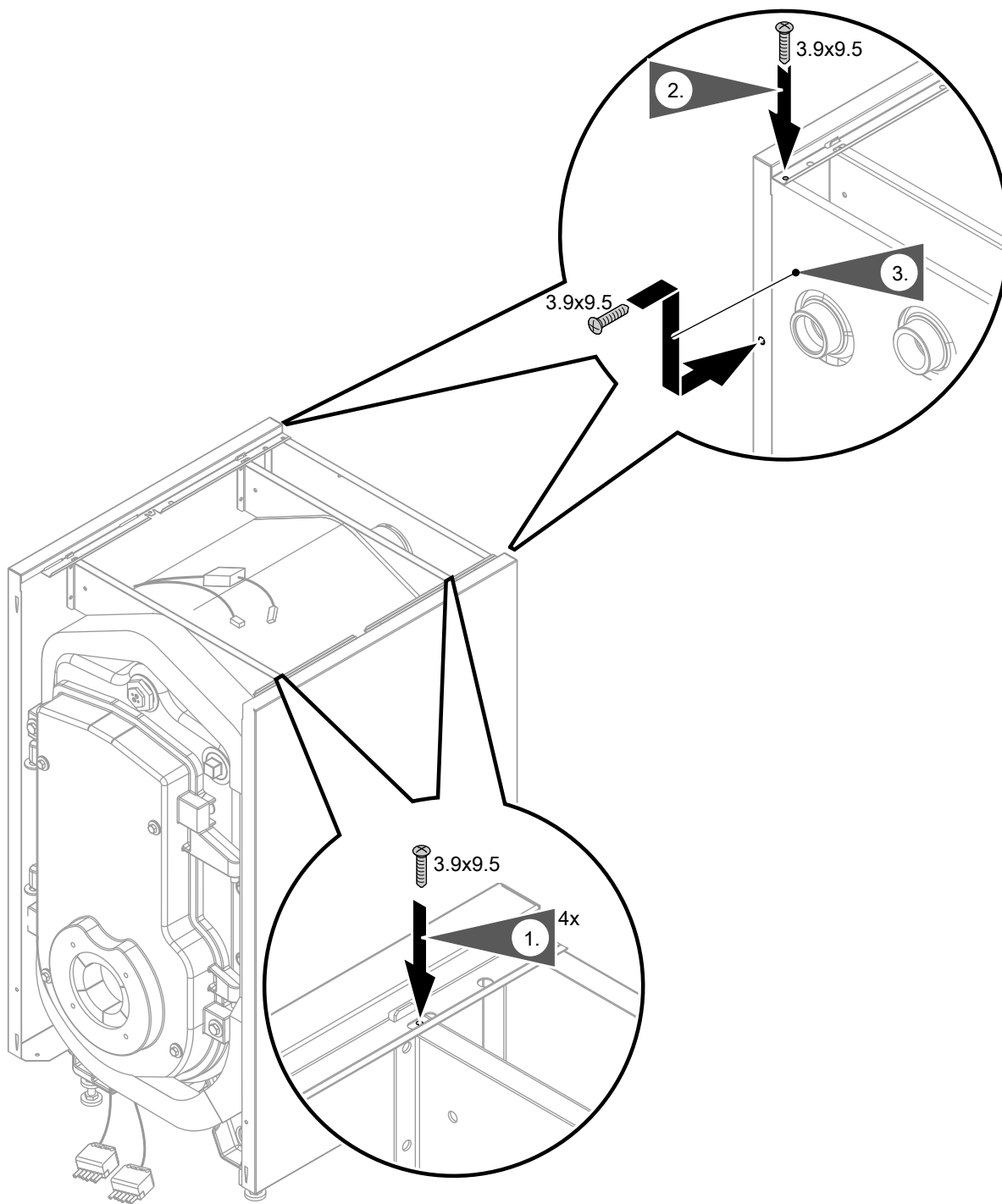



Fig. 9

Opening the control unit and connections to the control unit:

 Boiler control unit installation instructions

! **Please note**
 Damaged capillary tubes will result in faulty sensor function.
Never kink the capillary tubes.

Note

- The boiler water temperature sensor [3], power supply plug [40] plus the outside temperature sensor are supplied in the control unit pack.
- Insert probes and boiler water temperature sensor [3] into the sensor well as far as they will go.

Fitting the thermal insulation (cont.)

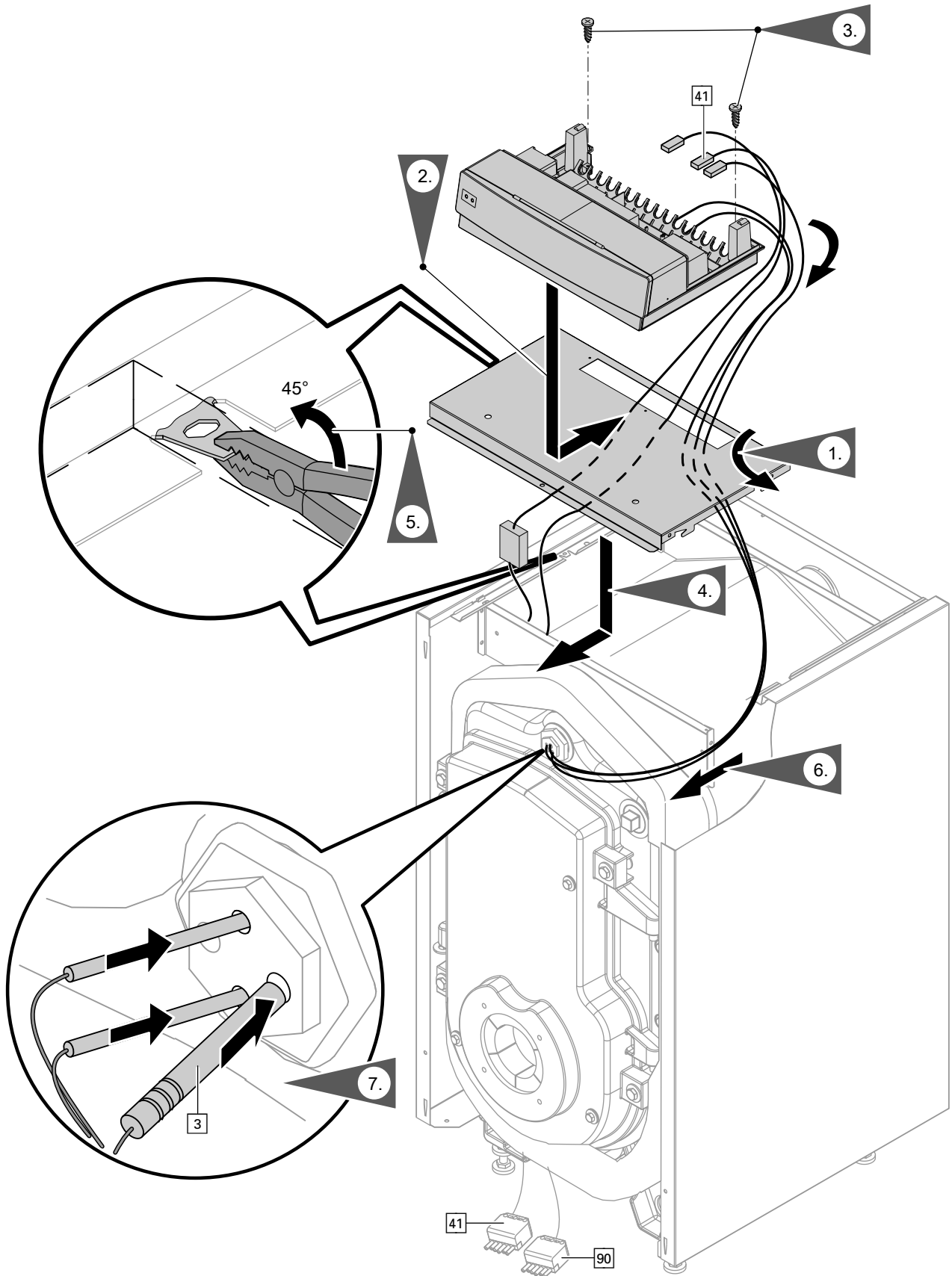


Fig. 10

Fitting the heat exchanger to the boiler

Mounting the BF/BR distributor

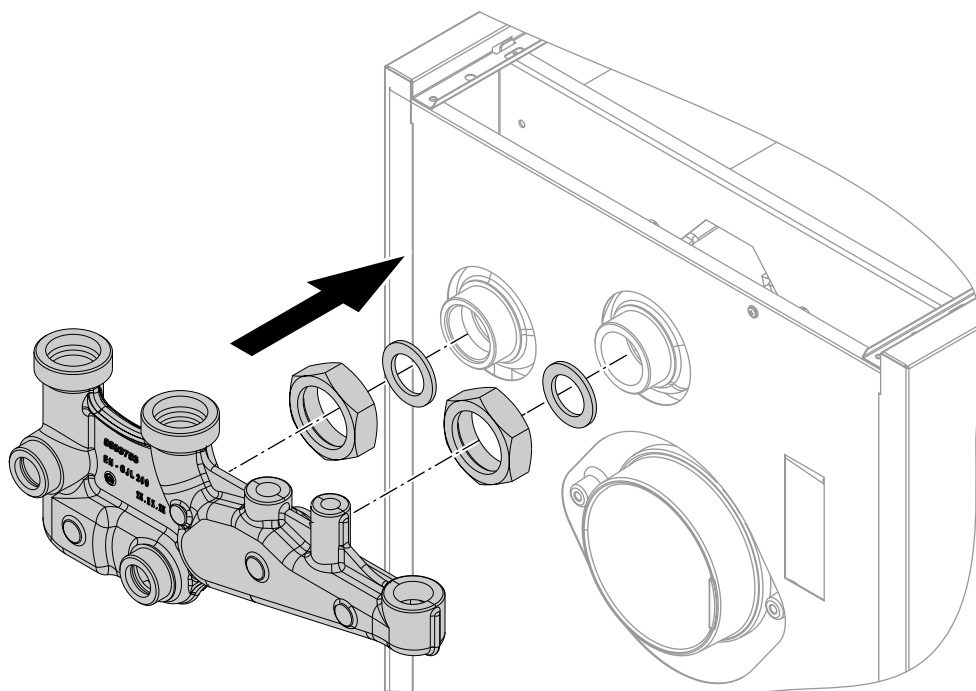


Fig. 11

Note

On delivery, the return injector nozzle must be fitted in the boiler return.

Preparing for mounting the heat exchanger

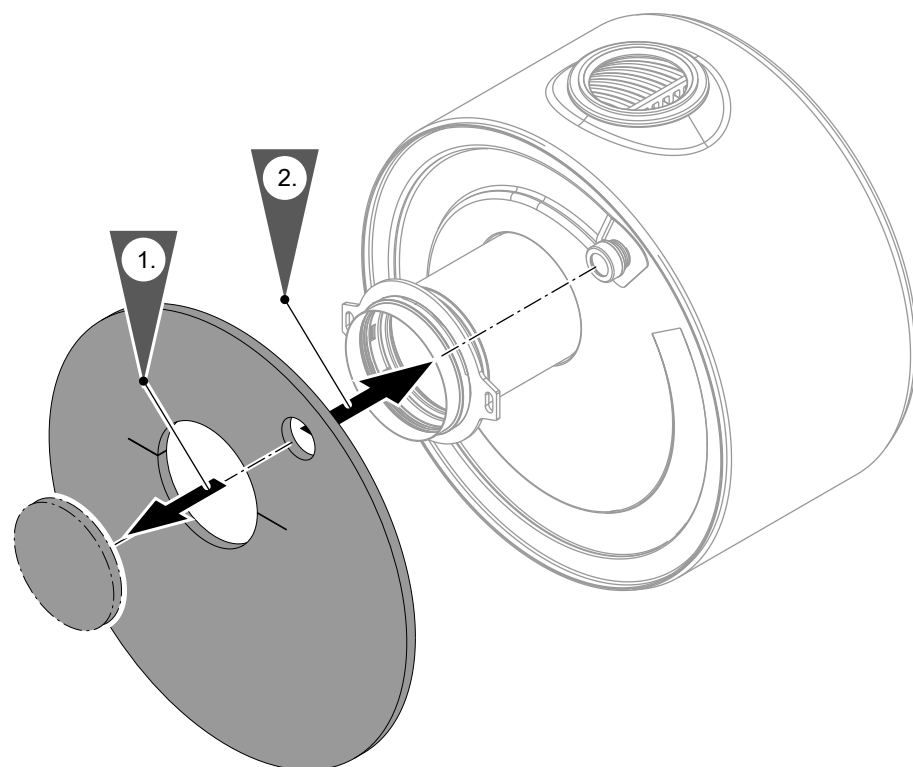


Fig. 12

Mounting the heat exchanger

Note

The flue gas connection flange can be turned.

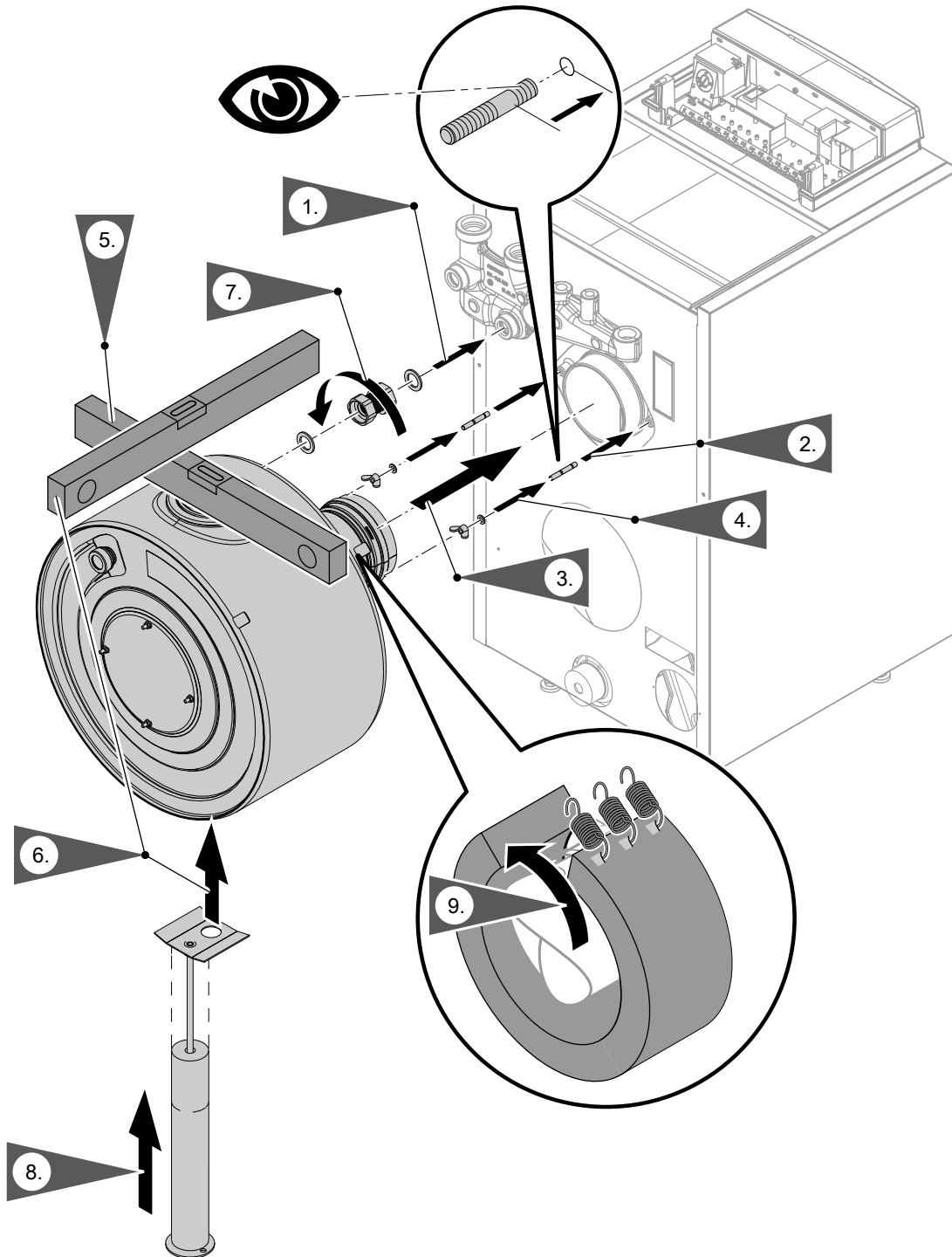


Fig. 13

- Align the heat exchanger with the support.
- Secure the support to the floor, if necessary.
- Push the hose upwards.

Fitting the pipework and trap

Note

- The trap and connection hose are supplied in the heat exchanger pack.
- Never grease or oil the trap fitting and gaskets.

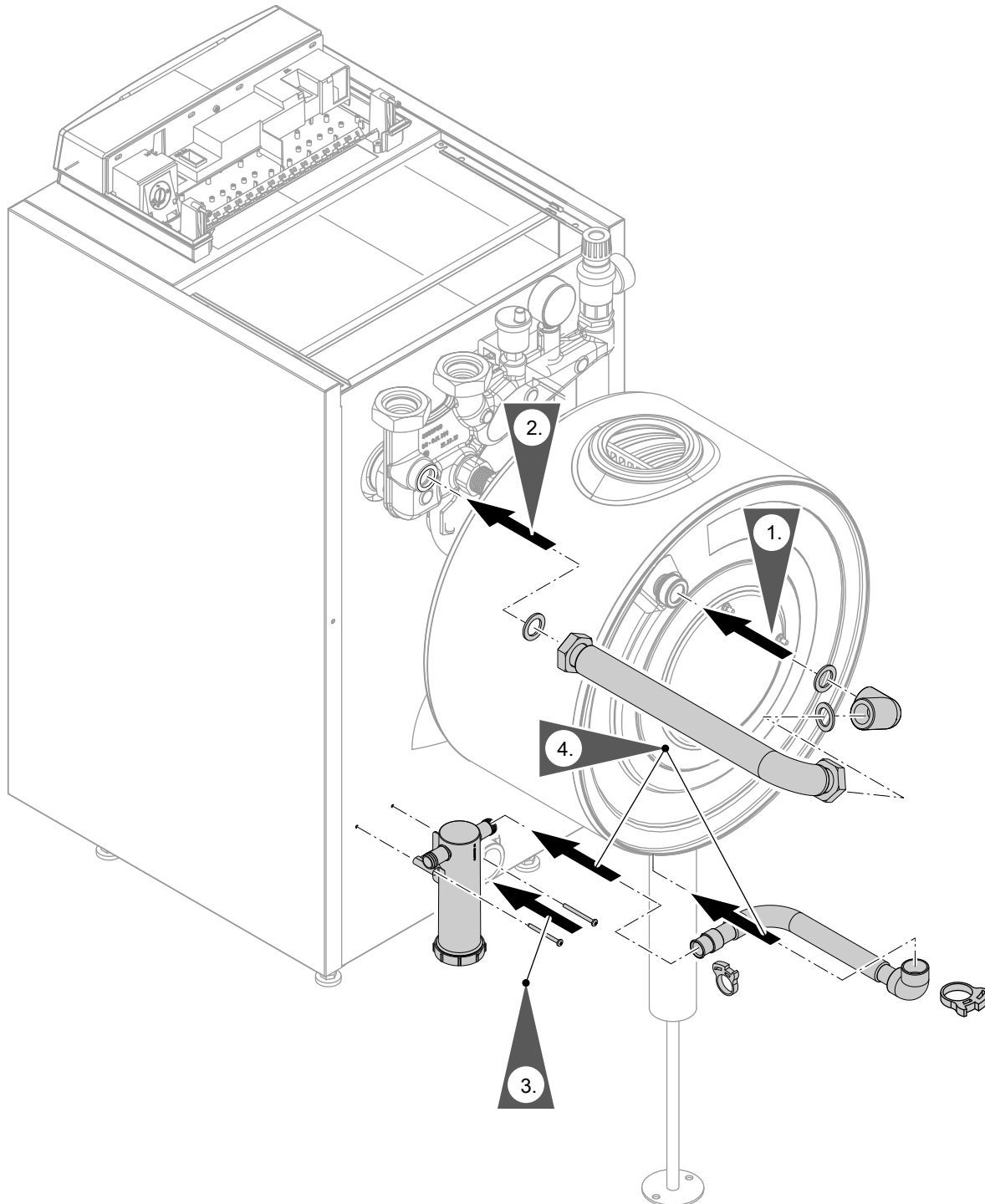


Fig. 14

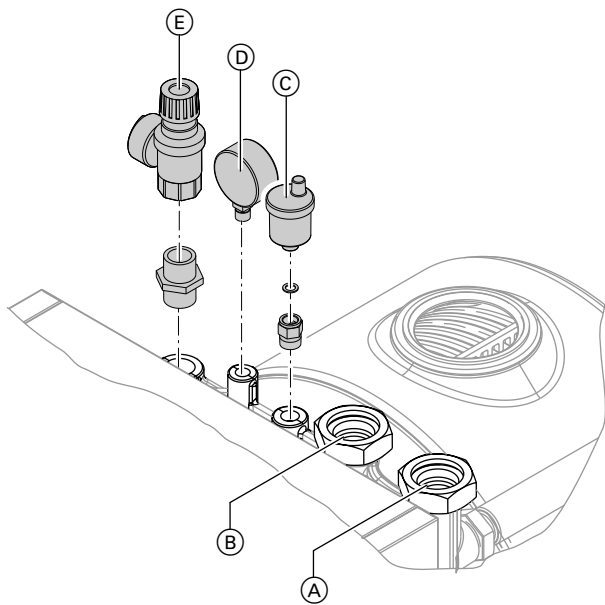
- Manually bend the flexible pipe into the required shape.
- Fit all connections on the heating water side with suitable flat gaskets.

- Tighten threaded fittings to a torque of 75 to 80 Nm.



Trap installation instructions

Connections on the heating water side



- Ⓐ Cylinder and central heating return
- Ⓑ Cylinder and central heating flow
- Ⓒ Quick-action air vent valve
- Ⓓ Pressure gauge
- Ⓔ Safety valve

During the installation, align pressure gauge Ⓓ so that it is clearly visible.

Fig. 15

Flow and return

Note

The flow and return pipes with the heat exchanger connection are fitted to the boiler.
Connect all consumers so that the heat exchanger will receive a heating water flow in any operating situation.

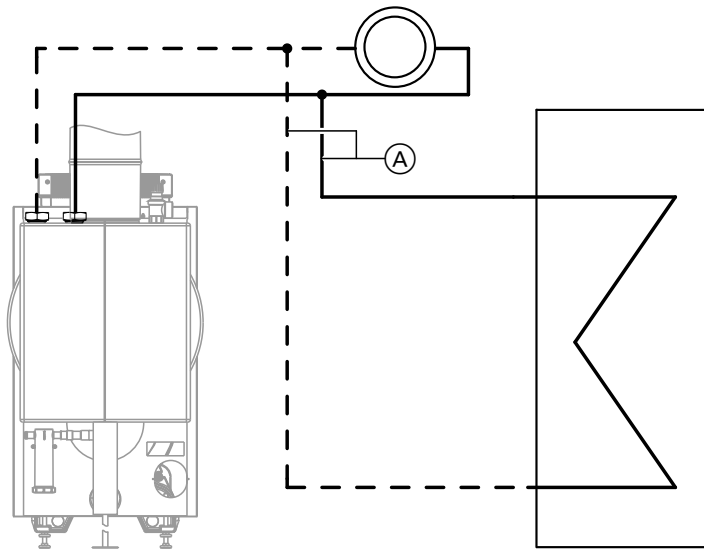


Fig. 16

Connect the heating circuits and DHW cylinder to the common flow and return on the BF/BR distributor.
Make connection Ⓐ on site.

Making the safety connections

Permiss. operating pressure: 3 bar (0.3 MPa)
Test pressure: 4 bar (0.4 MPa)

Making the safety connections (cont.)

Minimum cross-sections

- Safety valve inlet connection
67.6 to 107.3 kW: DN 15 (R ½)
- Safety valve discharge pipe
67.6 to 107.3 kW: DN 20 (R ¾)
- Pipe to the expansion vessel
67.6 kW: DN 12 (R ½)
85.8 to 107.3 kW: DN 20 (R ¾)

Low water indicator

Tests have verified that the low water indicator specified by EN 12828 is not required.

Note

Equip boilers with a safety valve that is type-tested to TRD 721 [or local regulations] and is marked according to the system version.

Fitting the thermal insulation to the heat exchanger

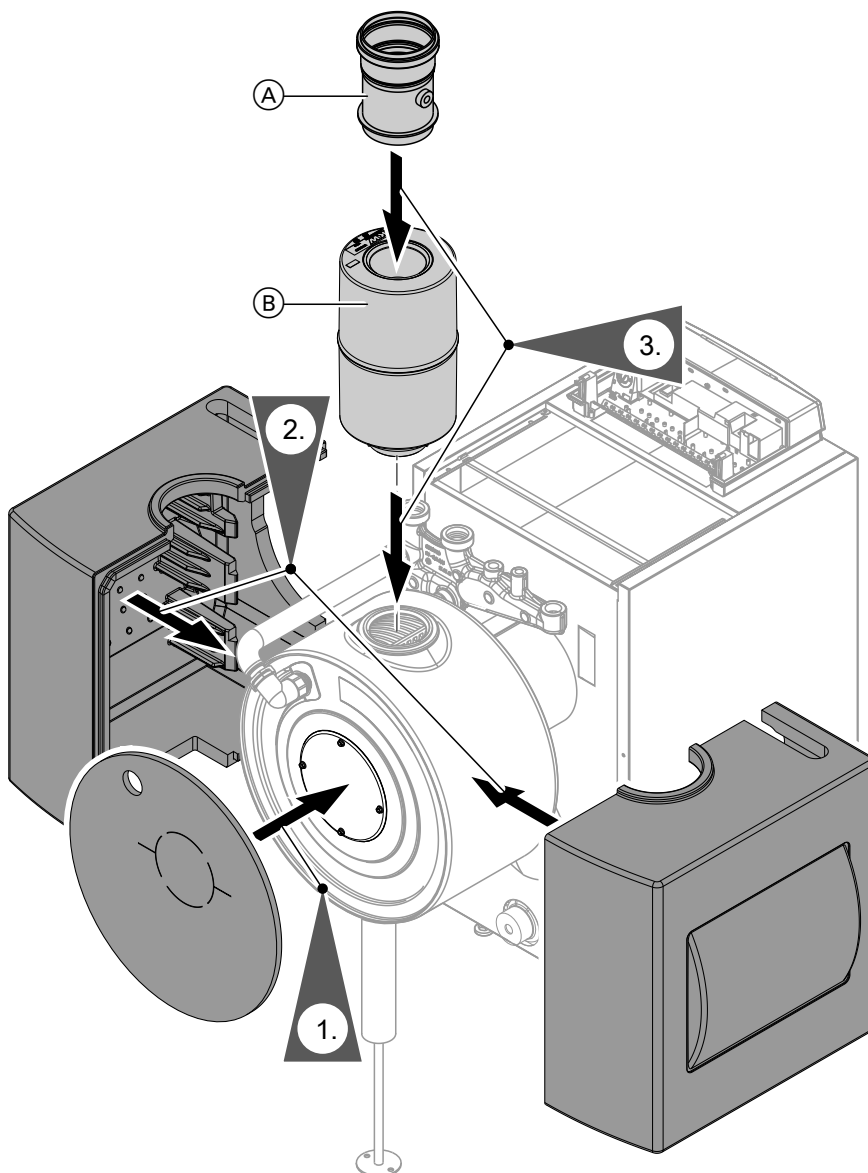


Fig. 17

- (A) Boiler flue connection
- (B) Silencer (accessories)

Condensate connection

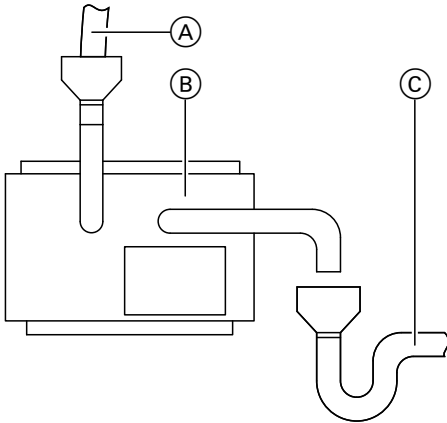


Fig. 18

- (A) Inlet from the boiler
- (B) Neutralising system or active charcoal filter
- (C) Drain to drain network

Connect the condensate pipe to the drain network by the shortest route, with a constant fall and a pipe vent. Install a neutralising system if required.

Note

DWA-A 251 permits boiler use without a neutralising system when operating with low sulphur fuel oil DIN 51605-EL-1 (sulphur content ≤ 50 mg/kg).

Electrical connections

! **Please note**
Damaged capillary tubes will result in faulty sensor function.
Never kink the capillary tubes.

Opening and closing the control unit and connections to the control unit:



Boiler control unit installation instructions

! **Please note**
Cables/leads can be damaged by hot components.
Cables/leads must not come into contact with any hot components once installation work has been completed.

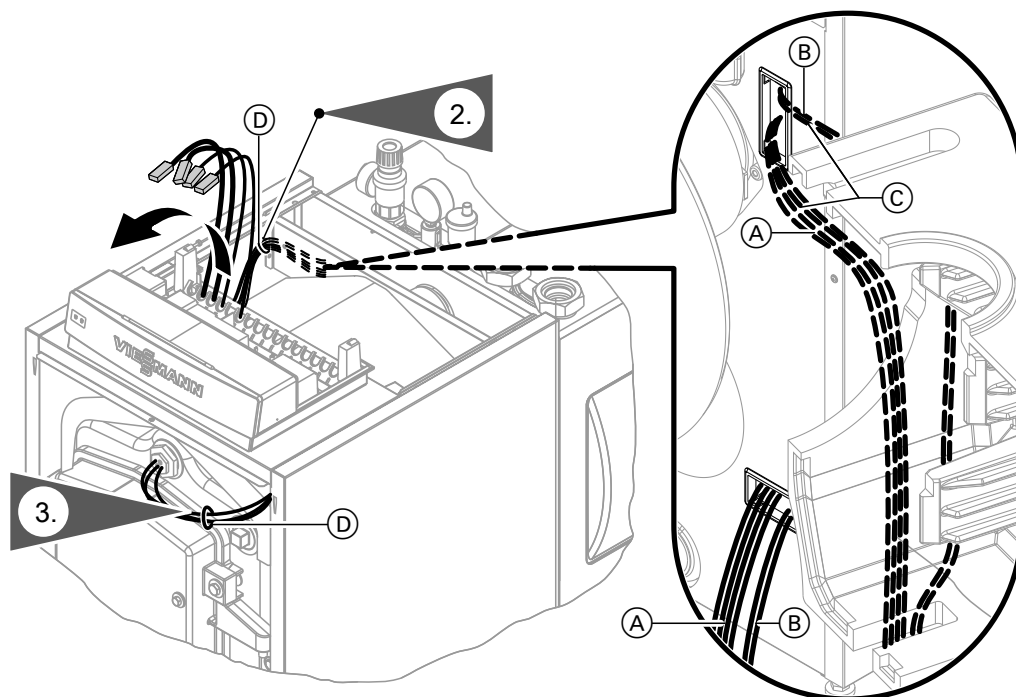




Fig. 19

- C Alternative cable routing to the upper aperture through the heat exchanger thermal insulation
- Route all LV leads A and 230 V cables B to the control unit through the rear **lower aperture** in the back panel. If necessary, alternative cable routing path C to the upper aperture can be chosen.
 - Bundle and route 230 V cables and LV leads **separately**.
 - **Secure** all 230 V cables and the LV leads with the cable ties D supplied.

Mounting the top and the front panels

- Mount the burner prior to fitting the front panel:
 -  "Vitoflame" installation instructions
 - Use cable ties (snap hooks) to secure the burner cable at hole A on the **inside** of the side panel; which side panel depends on whether the burner is mounted on the right or left.
 - If the sound insulation set (accessories) has been installed, replace the air intake cover on the burner and connect the air supply hose of the sound insulation set.
 -  "Sound insulation set" installation and service instructions

Mounting the top and the front panels (cont.)

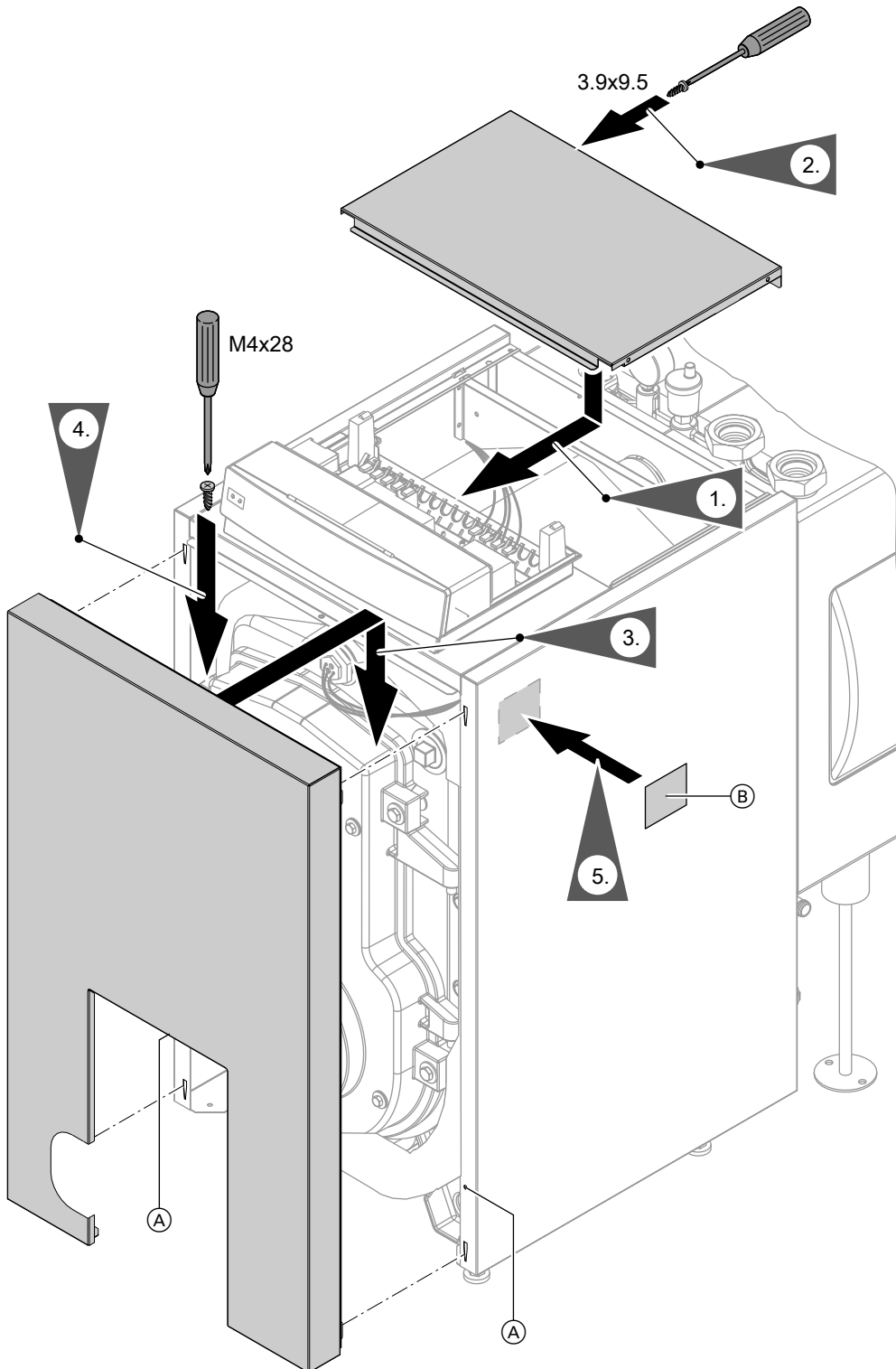



Fig. 20

- (A) Fixing holes for burner cable
- (B) Type plate

Commissioning and adjustment

-  "Vitorondens" service instructions
- "Vitoflame" service instructions
- "Vitoltronic" service instructions

Specification

Rated heating output				
$T_F/T_R = 50/30\text{ °C}$	kW	67.6	85.8	107.3
$T_F/T_R = 80/60\text{ °C}$	kW	63	80	100
Transport dimensions				
Length	mm	694	694	694
Width	mm	480	480	480
Height	mm	935	935	935
Overall dimensions				
Total length (incl. heat exchanger and thermal insulation)	mm	1704	1704	1704
Total width	mm	600	600	600
Total height	mm	1149	1149	1149
Plinth height	mm	250	250	250
Weight (boiler body)	kg	237	237	237
Total weight (boiler incl. thermal insulation, heat exchanger, burner and boiler control unit)	kg	348	348	348



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