



# Boiler Elektro

**GB** Installation instructions

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## Installation instructions

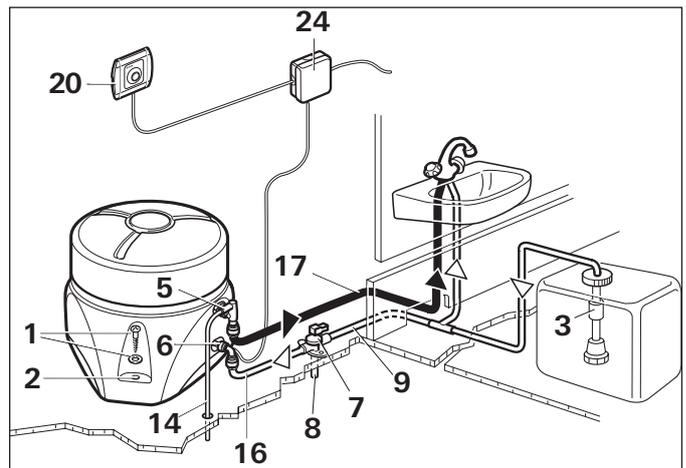


Fig. A

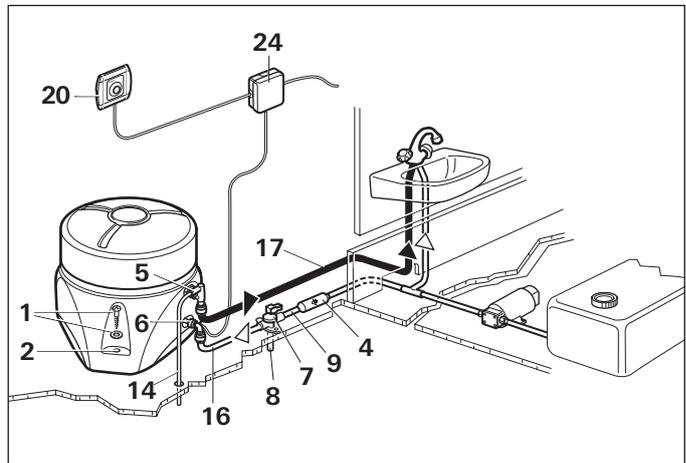


Fig. B

## Symbols used



The unit must only be installed and repaired by an expert.



Symbol indicates a possible hazard.



Note containing information and tips.

## Model

Boiler Elektro (electric boiler) (BE 14)



**The unit must only be installed and repaired by an expert.** Read the installation instructions carefully before commencing the work, and then comply with them.

**The year when the equipment was first put into operation must be indicated with a cross on the type plate.**

## Site selection and installation

Select an installation site (not in installation compartment behind heater) that makes the hot water pipes as short as possible. The boiler must be easily accessible at all times for service work and be easy to remove and install.

Securely bolt the boiler to a suitable surface (laminated wood panel, laminated wooden batten or metal surface) on floor of vehicle with B 5.5 x 70 screws and washers (1). Always use the insertion sleeves (2) that are preinstalled in the factory to reinforce the insulating jacket.

## Water connection

Any pressure or immersion pump up to 2.8 bar can be used to operate the boiler. Any mixing battery with or without an electric switch can also be used.

### Fig. A

If using immersion pumps, a non-return valve (3, not included in scope of delivery) must be installed between the pump and the first branch (arrow indicates flow direction).

### Fig. B

When pressure pumps with a large switching hysteresis are being used, hot water may flow back via the cold water valve. We recommend installing a non-return valve (4, not included in scope of delivery) between the outlet to the hot water tap and the drain valve as a return flow inhibitor.

Hoses with an inner diameter of 10 mm that are pressure-resistant (up to 3.5 bar) and hot water-resistant must be used for connecting to the boiler and the safety/drain valve.

For rigid pipe installations (e.g. John Guest System) Truma can supply the water connections (5 + 6), the safety/drain valve (7) and a non-return valve (3 + 4) with a 12 mm diameter inner connection as accessories.

If the boiler is connected to a central water supply (rural or urban connection) or if powerful pumps are being used, a pressure reducer must be used, which will prevent pressures higher than 2.8 bar from occurring.

**!** Water hoses must be as short as possible and free of kinks. All hose rubber connections must be secured with hose clamps (including the cold water connection)! Before the pressure relief valve triggers, warming of the water and its resulting expansion may cause pressure of up to 4.5 bar to occur (also possible with immersion pumps). The water lines for connecting to the boiler and the safety/drain valve must be drinking water safe, pressure resistant (up to 4.5 bar) and hot water resistant up to +80 °C.

**i** We recommend the use of hose clips (part no. 40712-01) to attach the hoses to walls or the floor. If a gas heater has been installed, the water hoses can be routed on the warm air ducts using the hose clips to protect them from frost.

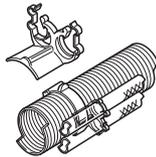


Figure 1

**!** In order to ensure that all of the water in the boiler is drained, the provided elbow fitting with aeration valve (5) must always be used at the hot water connection!

**!** Route all water lines so they slope downwards to the safety/drain valve. No claims may be made under the warranty for damage caused by frost!

## Installing the safety/drain valve

### Figs. A + B

Fit safety/drain valve (7) in an easily accessible location in the vicinity of the boiler. Drill hole with diameter of 18 mm and insert the drainage socket with hose (8). Secure the safety/drain valve in place with 2 screws. Water removal can take place directly to the outside in a splash-protected location (fit splash guards if necessary).

## Water line routing

### 1. Figs. A + B

Connect the cold water supply (9) to the safety/drain valve (7). The direction of flow is irrelevant.

2. Attach elbow fitting (5) with integrated aeration valve (15) to hot water connecting pipe (top pipe) as far as it will go. Pull in opposite direction to check that the elbow fitting is securely attached.

Attach elbow fitting without aeration valve (6) to cold water connection pipe (bottom pipe) as far as it will go. Pull in opposite direction to check that the elbow fitting is securely attached.

Slide venting hose with outer diameter of 11 mm (14) onto hose nozzle of aeration valve (15) and route to the outside. Radius of arc must not be less than 40 mm.

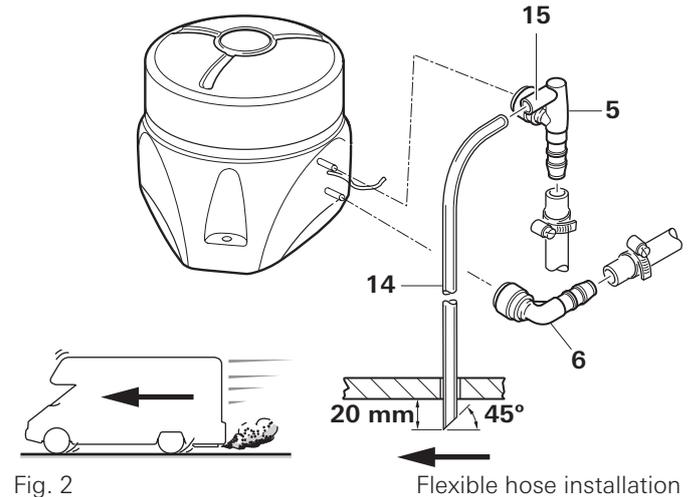


Fig. 2

Flexible hose installation

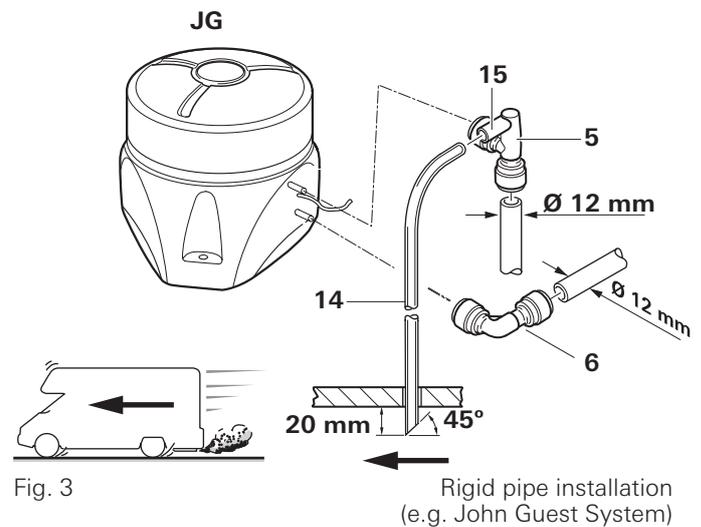


Fig. 3

Rigid pipe installation  
(e.g. John Guest System)

Cut off the venting hose about 20 mm below the vehicle floor at a 45° angle relative to the direction of travel.

### 3. Figs. A + B

Manufacture a hose connection (16) for the cold water supply between safety/drain valve (7) and elbow fitting (6 – lower pipe) at the boiler.

4. Route hot water supply line (17) from elbow fitting with built-in aeration valve (5 – upper pipe) to hot water consumption points.

## Control panel installation

**!** When using vehicle-specific or manufacturer-specific control panels, the electrical connection must be made according to the Truma interface description.

Any modifications to the associated Truma parts will invalidate the warranty and preclude any liability claims. The installer (manufacturer) is responsible for providing the user with operating instructions and the information that is printed on the control panels.

When choosing a location, please note that the control panel (20) must not be subjected to direct heat radiation. Length of connector cable 2.5 m.

**i** If the control panel cannot be flush-mounted, Truma can provide an on-surface frame (18 – part no. 40000-52600) as an accessory if required.

Drill hole with diameter of 55 mm. Guide through the cable (19) towards the rear and secure the control panel (20) with 4 screws (21). Then clip on the cover frame (22) and route cable (19) to boiler.

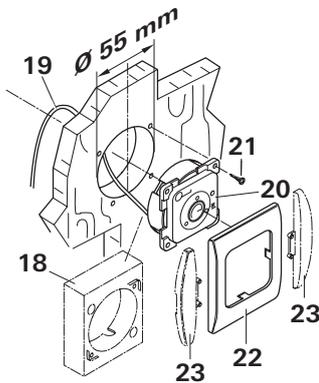


Figure 4

Truma supplies side parts (23) as accessories to improve the appearance of the cover frame (22). Please contact your dealer.

## 230 V electrical connection

**!** The electrical connection must always be made by an expert (in accordance with VDE 0100, part 721 or IEC 60364-7-721 in Germany).

The power connection is made using a 3 x 1.5 mm<sup>2</sup> cable (e.g. hose line H05VV-F) to a distribution socket (figs. A + B: 24 – not included in scope of delivery). A connector cable with a plug is not permitted.

It is imperative that connection is carried out with care while observing the correct colours!

**!** An insulating device for providing all-pole insulation from the mains with contact clearance of at least 3.5 mm must be provided by the customer for carrying out maintenance and repair work.

### Figs. A + B

Attach the distribution socket (24) to floor or wall of vehicle near device (cable length 110 cm).

Connect control panel cable, 230 V supply cable and heating element cable in accordance with connection plan.

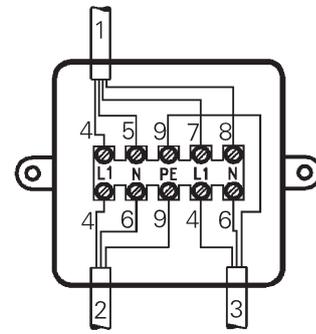


Figure 5

- 1 = Control panel cable
- 2 = Supply cable 3 x 1.5 mm<sup>2</sup>
- 3 = Heating element cable
- 4 = brown
- 5 = green
- 6 = blue
- 7 = yellow
- 8 = white
- 9 = yellow/green

**!** All cables must be secured with clamps.

## Function check

The water connections must be checked for leaks and all functions must be tested as described in the operating instructions after installation.

Then it must be ensured that all of the water (14 litres) drains when the system is emptied.

**No claims may be made under the warranty for damage caused by frost.**

## Warnings

The yellow sticker containing warning information that is enclosed with the appliance must be affixed by the installer or vehicle owner in a location in the vehicle where it is clearly visible to all users (e.g. on the wardrobe door)! Missing stickers can be requested from Truma.



Subject to technical changes.

**GB** Should problems occur, please contact the Truma Service Centre or one of our authorised service partners (see [www.truma.com](http://www.truma.com)).

In order to avoid delays, please have the unit model and serial number ready (see type plate).

## Service