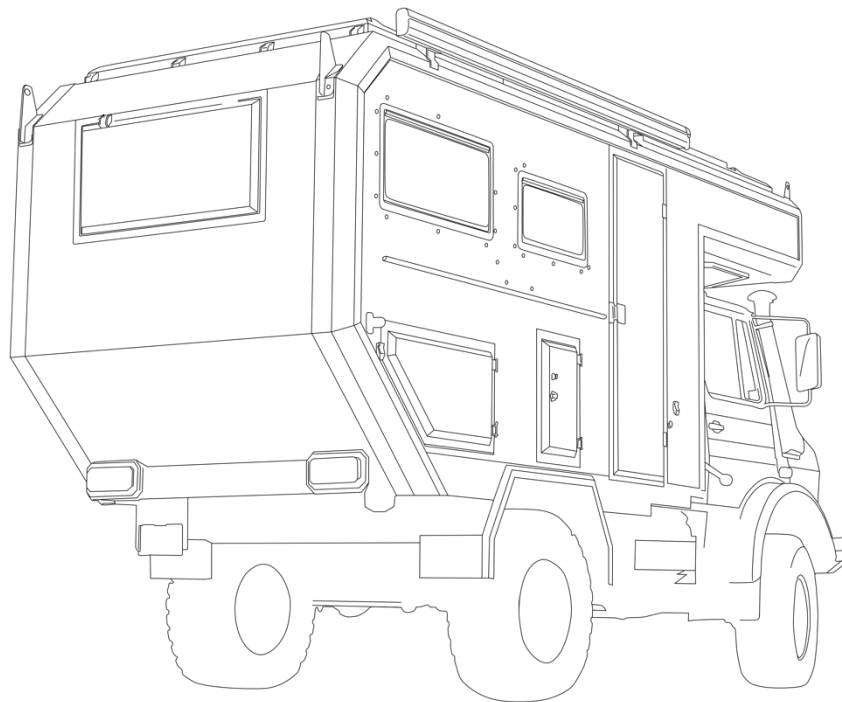


# OTAG385



**User Guide**

**EN**

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## Foreword

Use the user guide to access specific information and familiarize yourself with **OTAG 385**'s functions. In addition to standard equipment, this manual also describes optional equipment or accessories. This user manual helps you to enjoy your **OTAG 385** as best as possible. It also contains important information that concerns the safety of you and other users.

Thanks for choosing **CRAWLER**!

*\* Certain countries may have legal requirements that affect the level of equipment.*

*\* CRAWLER continues its continuous product development efforts to provide a better experience. Features, designs and illustrations in the user manual are not binding. CRAWLER reserves the right to make changes without prior notice.*

## Basic Warnings

### Things to check before setting off;

- Make sure the upper awnings are closed and locked.
- Make sure doors and cabinets are locked.
- Fragile items should be placed inside the cabinets.
- Make sure the battery is full.
- Make sure the entrance step is off and placed inside.
- Electrical inlets and outlets should be checked.
- Do not keep flammable and explosive materials in OTAG 385.
- Make sure the diesel heater is off.
- Make sure the lightning is off.

### Things to consider while traveling;

- Do not exceed the specified speed limit for truck-level vehicles.
- When descending long and steep slopes, the brake is loaded more than normal. Shift to a lower gear and adjust your speed accordingly.
- Do not travel while inside OTAG 385.
- Do not keep flammable and explosive materials in OTAG 385.
- Make sure breakable items are secured inside OTAG 385.
- Attention should be paid to the height of, OTAG 385 at the parking garage and garage entrances.

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**Things to consider while camping;**

- Thanks to the automatic gas cut-off safety system, the stove turns itself off in case of emergency.
- Make sure the curtains are closed to prevent heat loss inside during cold weather.
- Be careful when opening and closing the top awning while staying inside the OTAG 385.
- Make sure the fuel tank is full when using diesel heaters.

**Things to consider while parked;**

- Make sure doors, windows and cabinets are closed and locked.
- Make sure the upper awning is closed.
- In case of long-term parking, keep the main switch off.
- Do not leave flammable or explosive materials inside OTAG 385.
- Make sure the gas valve is closed.
- It is recommended to ventilate the inside of OTAG 385 at regular intervals.
- Provide external cleaning of OTAG 385 at regular intervals.
- Make sure there are no mosquito nets or curtains left outside when upper awning is closed.

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## **Safety**

### **Passenger Transportation**

Since there is no seat belt in OTAG 385 and in order to balance the weight distribution, you should not travel in OTAG 385 while driving.

### **Tire Safety**

Properly maintained tires improve handling and stopping.

### **Tools and Equipment**

Appliances (stove, refrigerator, etc.) and equipment (hot water heater, oven, etc.) typically run on LPG. LPG is flammable and is under high pressure. Misuse may cause fire and/or explosion. Be sure to follow all instructions and warnings in the manual, as well as in the device and equipment specific user manuals.

### **Mold**

Mold and mildew spores are present in indoor and outdoor environments. In order to keep all mold and mildew spores under control, check humidity and ventilate your caravan regularly. A healthy ventilation should be provided to control humidity.

### **Chemical Sensitivity**

Immediately after the OTAG 385 is purchased, and sometimes after a long period of inactivity, a strong odor and/or chemical sensitivity may be experienced. It is not a fault of OTAG 385.

As in homes, many different products are used in the construction of OTAG 385, such as carpet, linoleum, plywood, insulation, flooring. In the use of different materials, odor sensitivity is more obvious. Since OTAG 385 has a small living space, the air exchange inside is significantly less than the house. These products can outgas different chemicals, including formaldehyde, when new or when exposed to high temperatures and/or humidity. This outgassing, along with minimal air exchange, can cause irritation of the eyes, nose, and throat, and sometimes headaches, nausea, and various asthma-like symptoms. The elderly and young children, as well as anyone with asthma, allergies or lung problems, may be more sensitive to the effects of gassing.

### **Ventilation**

It is very important to ventilate the OTAG 385 to reduce exposure to chemicals from outgassing. Ventilation should be done frequently after purchase and when temperatures and humidity rise. Note that gas output is accelerated by heat and humidity. Open windows, vents and doors. Use natural ventilation or a fan to expel stale air. Reducing airflow by sealing the OTAG 385 increases the formaldehyde level of the vehicle.

### **Do not smoke**

Smoking inside the OTAG 385 will damage the caravan and release formaldehyde and other toxic chemicals.

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## Medical Advice

Questions about the effects of formaldehyde on your health should be addressed to your doctor or local health department.

### Long-Term Use Effects

- In long-term use of OTAG 385, it is necessary to be prepared for condensation and humid conditions that may be encountered.
- In cold weather, when the relative humidity of the indoor air is high, moisture may condense on the inner surfaces of OTAG 385. This is exacerbated by the fact that OTAG 385' insulated walls are much thinner than house walls.
- The relatively small volume and tight, compact nature of the OTAG 385 mean that even a few passengers' normal living activities will lead to rapid moisture saturation.
- Water vapor will condense as moisture inside windows and walls, or as frost or ice in cold weather, unless it is carried outside by ventilation or condensed with a dehumidifier.
- Inside the walls or ceiling, warped or stained panels can also condense out of sight.
- The appearance of these conditions can indicate a serious problem. When signs of excessive humidity and condensation appear on the OTAG 385 it is important to take action to minimize their effects.

## Tips for Checking Condensation

Uses where it is important to let excess moisture out:

- Bathroom
- Washing dishes
- Hair drying
- Cooking

### Avoid dead air spaces as shown!

- Use of a fan to ensure air circulation.
- Leaving cabinets and cabinet doors partially open.
- Keep the temperature as reasonably cool as possible to help alleviate condensation in the environment.
- OTAG 385 needs to breathe. It will smell when airtight.
- Let some warm air out and outside air in.
- Do not allow humid indoor air to be recycled from use and provide reasonable ventilation.

### **Mold**

Molds are microscopic organisms that occur naturally, indoors and out, in almost any environment. Mold formation in OTAG 385 occurs due to negative reasons. Molds that are not controlled and tackled can degrade materials such as aluminum and fabric. Therefore, color changes due to mold may occur. It is necessary to analyze the potential risks posed by mold.

### **Factors Contributing to Mold Growth**

For mold growth to occur, indoor or outdoor temperatures must be between 4° and 33°C, and it must also have a source of moisture such as humidity, stagnant water, moist materials. The fastest growth inside OTAG 385 is due to its hot and humid condition.

### **Inhibition of Mold Growth**

- Checking relative humidity can prevent mold and mildew growth.
- The use of air conditioners in hot climates will reduce the relative humidity.
- Ventilation is available in the kitchen area.
- To prevent mold growth, using vents when preparing food is an important factor, even in cold weather.
- Also, opening windows during these activities will help with (natural) ventilation.
- In extremely humid conditions, using a dehumidifier may help.
- Regular cleaning of mold, which is caused by frequent use of KMP190 and/or growing, is an important preventive measure.

- Any spills should be wiped up quickly and dried as soon as possible.
- Avoid leaving damp items lying around.
- On safe surfaces use mold or mildew-killing cleaning products.
- Check the sealing wicks regularly and reseal as necessary to prevent water leaks.
- Maintenance of the OTAG 385 and its accessories, as described in both this manual and accompanying literature, will provide the best protection for the OTAG 385.

### **Winter Travel**

Traveling in sub-freezing temperatures will require certain precautions to protect the plumbing system and personal belongings from damage by freezing.

It is necessary to clear the snow accumulations on the pop-up. Whenever possible, the heat should be kept at a constant temperature. It is easier for the heater to keep the room temperature constant than to let the OTAG 385 temperature drop to 10°C and then try to raise it to room temperature.

When parking in temperatures below freezing, be sure to have a full supply of LPG or diesel available and plug into a 220V power source whenever possible.

Leave cabinet doors, wardrobes, and bedroom doors partially open to allow warm air to circulate around plumbing lines and fixtures.



## Equipment List

### Exterior Design

- Windows with Mosquito Nets and Curtains
- Was Side Track Lights \*
- Was Side Horn Lamps \*
- Rear Rectangle Reflector
- Yellow Reflector
- LED Outdoor Lighting
- External Storage Cabinets
- Exterior Wardrobe Lightings
- Chrome Cylinder Locks
- Chrome Cabinet Hinges
- Chrome Cabinet Door Stoppers
- Rear View Cover
- Sleeping Area Roof Pop-up System with Openable Window
- Seating Area Roof Pop-up System with Openable Windows

### Interior Design

- Electrostatic Powder Coating (Cabinet and Interior Walls)
- Compact Laminate Flooring
- Ceramic Based Internal Heat Insulation
- Inner Storage Cabinets

- Lockers
- Cabinet Doors Fixing Pistons
- Fabric Pocket Set
- USB Charge Inputs
- 12v Cigarette Lighter Input
- LED Lighting

### Living and Sleeping Area

- 6 Person Seating Area
- Seat and Back Cushions
- Underarm Wardrobes
- Height Adjustable Movable Aluminum Table
- 24" Smart TV
- Lockable Back Cover
- Convertible Seating Group (220x150 cm)
- Wardrobe

### Bedroom

- Bed Area with Pop-up Roof (200x160 cm)
- Storage Cabinets

### Kitchen Area

- Chrome Kitchen Countertops
- Kitchen Ware Drawers

- Under Counter Kitchen Wardrobes
- Over Counter Kitchen Wardrobes
- Thetford 3 Burner Stove and Triplex Oven \*
- Fixed Chrome Kitchen Sink
- Hot & Cold Adjustable Battery
- Thetford 152 L Refrigerator \*

## **Bathroom/ Toilet**

- Accordion Bathroom Door
- Laminate Flooring
- Thetford Cassette Toilet System \*
- Folding Sink
- Chrome Hot & Cold Adjustable Battery
- Hot & Cold Adjustable Shower Head
- Shower Curtain

## **Electrical/ Control Installation**

- Crawler Smart Panel
- Schmid Solar Panel 380W \*
- Inverter 600W \*
- Victron Energy 220 Ah AGM Battery (2 Pieces) \*
- Victron Blue Smart Charger(20 A)\*
- 220 V Charge Input
- Charging Cable and Bag
- Lighting Dimmers
- Vehicle Electric Charging System (Cyrx)

## **Water Pipe System**

- Water Pump (19L/Min.)
- Water Filling Jack
- Chrome White Water Tank
- Chrome Gray Water Tank
- Black Water Tank (17 L)
- Water Drain Valves

## **Systems**

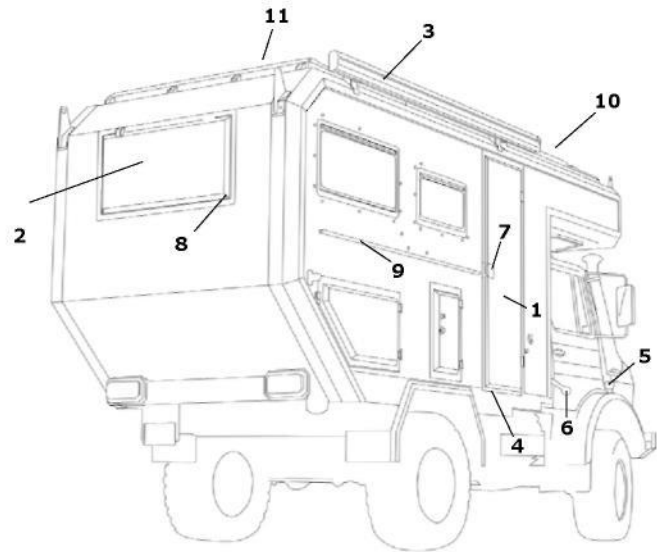
- Truma Combi 6 (Ambient and Water Heater System)
- Hot Air Outlet Grilles
- Truma Duo Control Panel \*
- Truma Gas Antifreeze \*
- Truma Gas Valve \*
- Truma Collision Sensor \*
- Gas Filter
- Gas Regulator
- Gas Detector
- Copper Gas Installation
- Ventilated Roof Hex Glass

## Optional Features

- Schmid Solar Panel 325 W & Regulator
- Solara Solar Panel 160 W & Solara Regulator
- Plan and Interior Design
- Hydraulic Rear Carry Lift (ATV, UTV, etc.)
- Roll Bar
- Thule Awning (3 Meters)
- Fishing rod holder
- Weaponry
- Victron Energy 220 Ah Battery (Extra)
- Neta Portable Satellite
- Truma Aventa Compact Plus Ceiling Air Conditioner
- Water Freeze Protection Unit
- Front Land Winch 24 V (18000lb)

## Schematic Explanation

1. Side Entry Door
2. Rear Pop-up Window
3. Outer Awning
4. Entrance Ladder
5. Side Track Lights
6. Side Horn Lamps
7. Chrome Cylinder Locks
8. Rear View Cover
9. LED Outdoor Lighting
10. Sleeping Area Roof Pop-up System with Openable Window
11. Seating Area Roof Pop-up System with Openable Windows



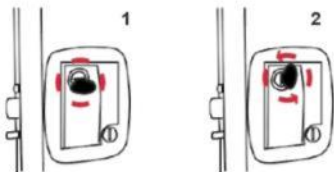
## Use of OTAG 385

### Opening the Entry Door

Top Lock;



Turn the upper lock entry in the horizontal position (1) counter-clockwise to the vertical position and remove it. (2)



**Bottom Lock;**

(3) Turn the vertical lower lock hub clockwise.

(4) After the lock bolt is in, turn the key back to the vertical position and remove it.

### Using the Stairs

After opening the entrance door, pull the handle located under the door towards you. Slowly pull the ladder at the bottom and lower it to a flat surface.

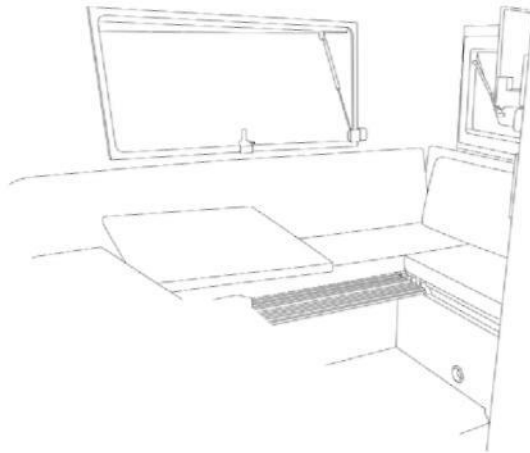
### Use of the Kitchen Area

To use the Kitchen Area, first remove the sink. Then lift the stove cover.



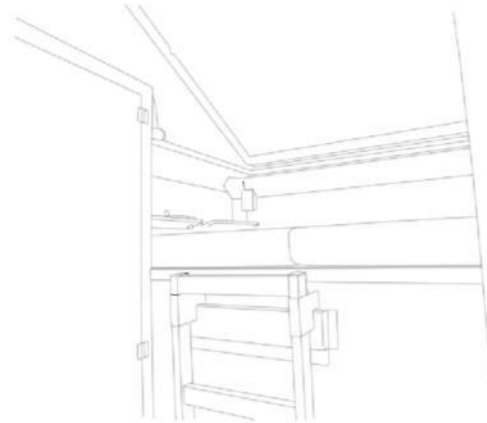
## Use of Living Area (Converting to Secondary Bedroom)

Set the table horizontally to use the seating area. Raise the top awning. Turn the seating area into a bed area thanks to the iron bars in the middle of the seating area.



## Use of Main Sleeping Area

To use the sleeping area, first use the ladder. Then open the pop-up within usage.



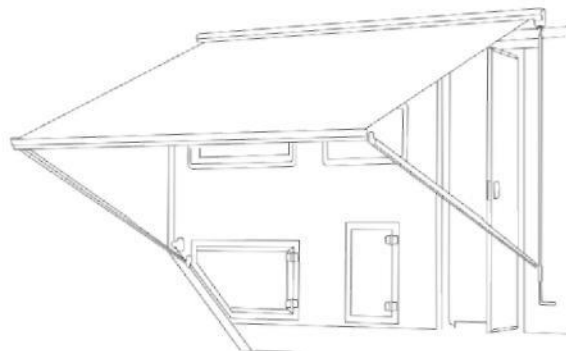
## Using the Inner Upper Awning

Open the pop-up to use the seating area with high ceiling comfort. Provide more convenient access to storage areas near the top awning.



## Using the Outer Awning

Remove the swivel mechanism from its fixation on the side of the refrigerator to use the outer awning area. Then move the awning to the desired position by attaching the hook part to the upper right mechanism of the awning.

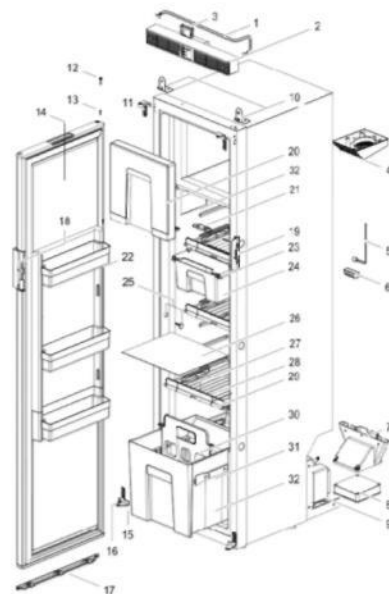


## Use of the Storage Area

Storage areas are planned according to the user's own needs. There are two drawers and two upper and two lower cabinets.



## Interior Equipment Refrigerator Usage



1. Power cord
2. Control housing
3. Control PCB
4. Built-in fan
5. Thermistor



6. Thermistor cover
7. Condenser fan cover
8. Condenser fan
9. Control module
10. Control housing bracket (2x)
11. Hinge plate top
12. Upper hinge pin
13. Hinge spring
14. Cabin door
15. Hinge plate base
16. Lower hinge pin
17. Bottom panel holder
18. Door handle
19. Door lock plate
20. Freezer door
21. Built-in lamp cover
22. By Bin (3x)
23. Lid slide box
24. Slide out
25. Diameter (4x) and screw (4x)
26. Plate
27. Clip shelf
28. Rack
29. Shelf food holder
30. Drawer divider
31. Drawer guide L + R
32. Drawer
33. Identification tag

## Battery/ Sink Usage

1. To put it into use, first check the clean water level in the tank.
2. Turn on the booster before using the battery.
3. You can use the battery according to your needs thanks to its rotating head.
4. When the battery is not in use, it can be kept closed thanks to its foldable feature.

## What if the battery does not work?

- Attention is paid to the water level indicator on the Crawler Smart Panel or control panel.
- The booster is checked.
- Battery level is checked.
- If there is a problem with the battery, the user manual of your battery brand is checked.

## Using the Cassette Toilet

### Thetford Cassette Toilet

**Dimensions:** H 534 / W 394 / D 580 mm

**Seating Height:** 492 mm

**Waste Tank Capacity:** 18 Liters

**Weight:** 7.2 Kg

**Energy:** 12 V

1. Open the toilet seat for use.
2. The seat of the toilet has a 90° swivel feature.
3. Liquids called "caravan toilet chemicals" are poured onto the tape to break up waste and prevent odor. Pour the toilet chemical into the tank (3) at scale before use.
4. During use, open the drain by turning the latch (1) in front of the toilet to the left. Close the drain by turning it to the right after use.
5. In order not to have to carry the waste tank cassette, it can be transported more simply with the wheel system and pull handle (2).
6. The unloading process is done by sliding and dismounting, thanks to the cover on the front left cabinet of caravan.
7. Do not forget to turn off the lock after emptying and cleaning.



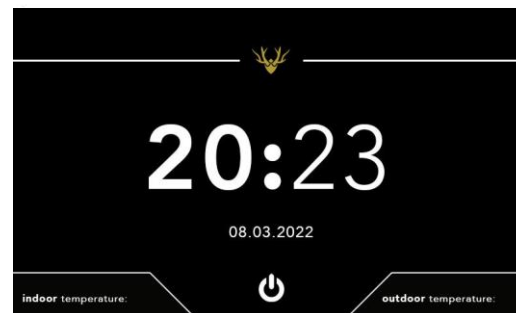
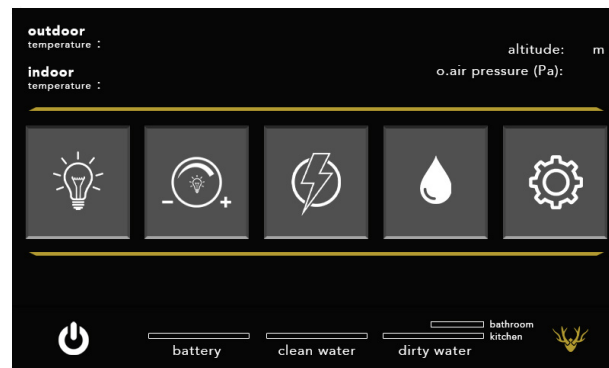
## Crawler Smart Panel

Crawler Smart Panel is opened by pressing the physical unlock button at the bottom of its screen once. Each time the physical button is pressed, the system is restarted. When the screen is opened for the first time, a visual like the illustration below will appear on the screen.



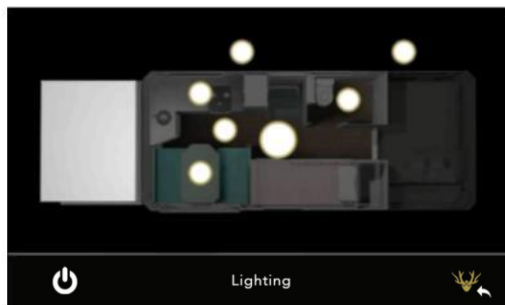
The first button from the left and the **"Light"** symbol on it allows you to control the entire lighting system connected to the panel inside and outside the caravan. The button second from the left and with the **"± Light"** symbol on it provides access to the menu where the light intensity (dimmer) of the lightings in the caravan is adjusted. The third button from the left with the **"Lightning"** symbol provides access to the menu with information about the electric and solar panel of the caravan. The fourth button from the left and the **"Water Drop"** button on it provides access to the menu where the status of clean /dirty water tanks of the caravan, booster, frost protection operations are managed and displayed.

The button on the far right with the **"Wheel"** symbol provides access to the battery capacity, time and date adjustment menu, and the menu that provides access to the screen brightness controls.

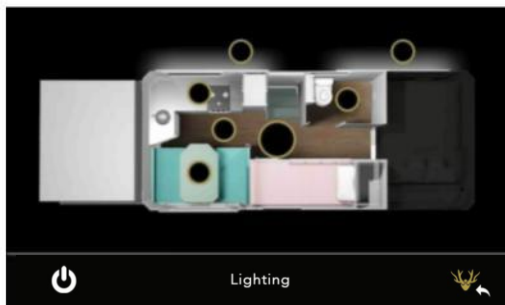


## Lighting Menu

The lighting menu is accessed by pressing the button with the "**Light**" symbol on the main screen. The following menu will appear on the screen when the screen is first opened.

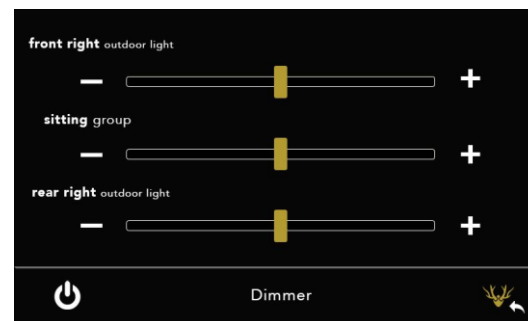


Circular buttons indicate the position of the lights inside the caravan. The white button means "**Light Off**" and the black button means "**Light On**".



## Dimmer Menu

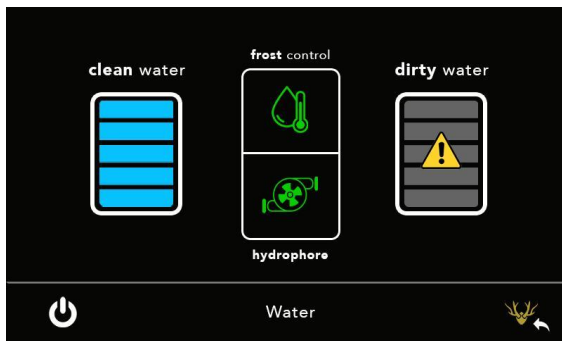
The dimmer control menu is accessed by pressing the button with the "**+/- Light**" symbol on the main screen. There are three zones in the dimmer menu. There are two buttons "**+**" and "**-**" for each zone. The control of the light intensity of the zones is done from this menu.



It is used to decrease and increase the brightness of the lighting system of the relevant area.

## Water Menu

The Water Control menu is accessed by pressing the button with the "**Water Drop**" symbol on the main screen. When you enter the menu, a page appears as seen in the image below.



As shown in the image, there is information about clean water on the left side of the screen, and information about dirty water on the right.

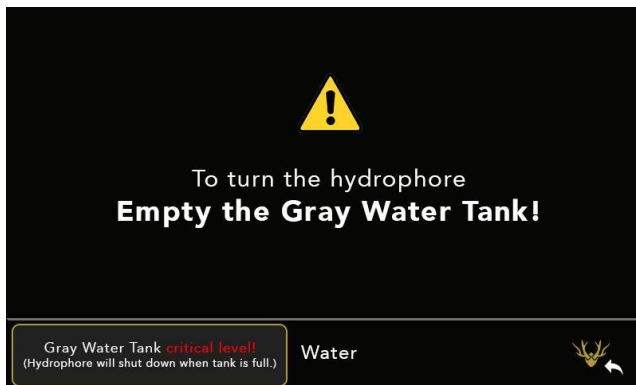
There are two buttons in the middle of the screen. The button at the top provides **"Frost Protection"** and the button at the bottom provides the **"Booster"** control.

In winter, the frost protection system must be active at temperatures of 4°C and below. Otherwise, if the tank is full, the water in the tank will freeze and increase in volume, and the tank or the plumbing system may be damaged depending on the increased water volume. Being half full of the tank can prevent damage caused by freezing, but if the water freezes, the system will become unusable. In cases of freezing, the booster should be turned off.

If the caravan is not going to be used, it is recommended that the tanks be completely emptied and parked in winter, otherwise, there may be damage to the tanks due to freezing. CRAWLER Company is not responsible for malfunctions and damages that may occur due to freezing.

When the buttons in the Water Menu are active, they will appear in **"green"** color, while inactive, they will appear as **"white"**. The booster is not active when the system is first turned on. In order to be able to use the water system in the caravan, the booster is activated after the system is turned on, if the system is completely turned off and opened or reset, the booster will become passive again, in which case it is necessary to reactivate the booster.

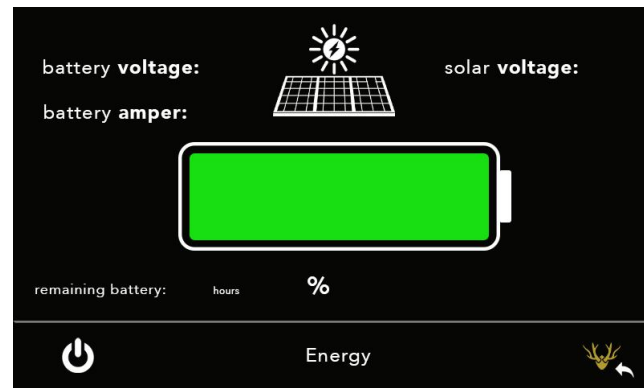
After the booster is activated, even if all the taps are closed, the booster can continue to work for a while, this is due to the balancing of the pressure in the pipe in the water system. If the boiler tank is empty, this will take a little longer. After the booster is activated, when any faucet connected to the caravan is opened, water will automatically start flowing. When the dirty water tank is full, the booster will automatically turn off in order to prevent overflow. In this way, any overflow situation that may arise from the caravan installation is prevented. When the dirty water tank reaches 75% level, the warning shown in the picture below appears at the top of the water page, informing that the tank is full and the booster will stop when the tank level reaches 100%. When the dirty water tank reaches 100% full, the booster will shut down. In this case, in order to restart the booster, the dirty water tank must be properly emptied by opening the discharge valve.



### Electric Menu

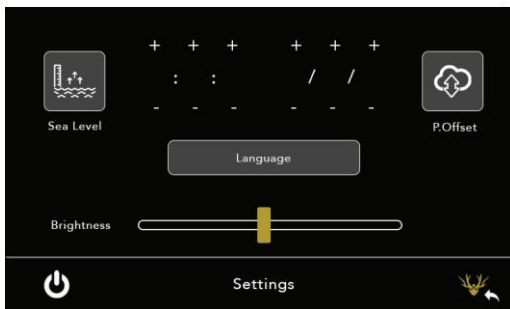
The Electric Control menu is accessed by pressing the button with the "Lightning" symbol on the main screen. The electricity page has a battery icon and a solar panel icon. The battery icon represents the battery on the caravan and shows the battery status as a percentage by coloring the inside of the battery. In addition to the electricity menu, the instantaneous voltage of the battery and the average current drawn per minute are shown. Values are updated on average every minute.

As the amount of current drawn per minute increases, the remaining time decreases, and as the current drawn decreases, the remaining time increases. The electrical page is shown in the image below.



### Settings Menu

The Electric control menu is accessed by pressing the button with the "Wheel" symbol on the main screen. In the settings menu, there are time and date information and a group of buttons to set this information. In order to set the time and date, there are two buttons for each number, plus and minus. It can be brought to the desired value by using the digital plus and minus buttons to be adjusted. The settings page is shown in the image below.

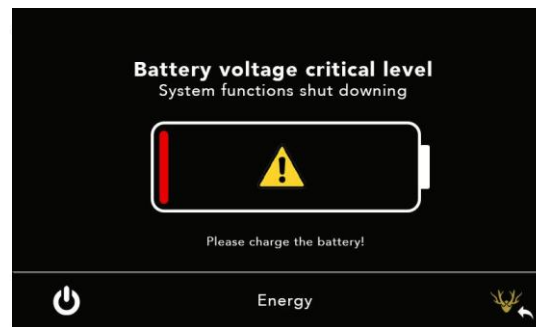


At the bottom of the screen there is a slider where the brightness of the screen can be adjusted. The screen brightness can be brought to the desired value by sliding the slider to the right and left.

The sensor on the Crawler Smart Panel measures the atmospheric pressure instantly. These values can be accessed from the Settings Menu.

### Low Voltage Mode and Warning

Crawler Smart Panel constantly monitors the battery status, performs various measurements and ensures long-lasting and efficient use of the battery. Low voltage protection is activated when the battery voltage drops below 10.5 voltage and the smart panel switches to battery protection mode. In this mode, the power of all systems connected to the smart panel is cut off and the warning in the image below appears on the screen. This warning stays on the screen for 10 seconds and then the smart panel turns itself off.



In this case, the battery should be charged as soon as possible. If the battery charge at the critical energy level drops further, the battery may be damaged completely by chemical degradation or its lifespan may be shortened. Devices connected to the caravan should not be used while there is this warning on the screen. If there is a working device, it should be turned off or the caravan should be connected to the charger using the charging cable. Otherwise, the product is out of warranty.

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## **Diesel Heater**

### **Heating Mode**

The air circulated by the fan motor is heated in the boiler and transmitted to the caravan. Working integrated with the diesel heater control unit, the heat sensors inside the caravan detect the temperature of the intake air. If the temperature of the intake air is below the temperature set in the control unit, the heater continues to operate.

### **Setting Mode**

In the setting mode, the fan motor speed and the fuel delivery capacity of the dosing pump depend on the heating capacity. In the meantime, the spark plug is deactivated.

### **Thermostat Range**

In case of approaching the temperature set on the operating switch, the heating capacity is reduced by the control unit. The speed of the fan motor and the fuel delivery capacity of the dosing pump are reduced in direct proportion. If the temperature set at a minimum heating capacity is reached, the fuel pumping process of the dosing pump is terminated and the combustion process ends with the heater blowing its last.

### **Note**

Throughout the thermostat range, the heater fan motor operates at idle speed, providing indoor air circulation. In addition, a change to be made on the operating switch is evaluated by the control unit and then activated.

## **What to do when smelling gas?**

Avoid ignition sources! E.g. extinguish all open flames, do not use any electrical switches, mobile phones or radios in the vehicle, do not start the engine of the vehicle, operate devices, do not smoke in the vehicle.

Open windows and doors.

Evacuate all persons from the vehicle.

Shut off gas cylinders or turn off gas supply from outside. The entire gas system must be checked and repaired by qualified personnel!

Restart the gas system only after inspection and repair!

### **OTAG 385 Owner's Obligations**

The owner of the caravan is responsible for using the device in accordance with the rules.

Hoses should be checked regularly and replaced if worn.

When a new appliance is put into operation for the first time, smoke and odor may develop for a short time. When the appliance is put into operation after a particularly long standstill period, a slight smoke and odor may occur due to dust or dirt.

It is recommended to run the appliance for a few minutes at the highest power level and then to ensure that the room is well ventilated for self-cleaning.

The air temperature should always be checked before adjusting the hot air outlets.

Hot water can be dangerous if misused and can cause burns. Check the water temperature before each shower or bath.

The waste gas double pipe should be checked regularly, especially after long trips, for damage and the soundness of the connections, as well as the device and chimney connections.

In order not to cause any damage due to splashing water while washing the vehicle, water should not be poured directly into the chimney.



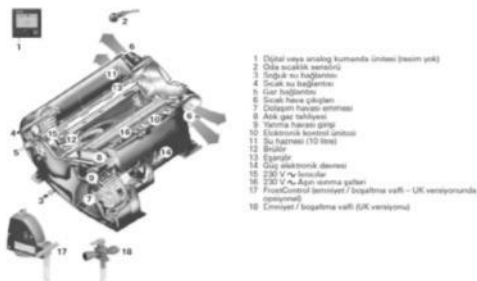
## Truma Combi

Liquid gas heater The Truma Combi is a hot air heater with an integrated hot water tank (10 liter). The burner works with fan support. In this way, it is ensured that it works flawlessly while cruising. By activating the heating water operation with the heater, both the space can be heated and the water can be heated. If only hot water is needed, hot water operation can be activated. During hot water operation, the water in the tank is heated with the lowest burner stage. The burner turns off when the water temperature is reached. In heating operation, the device automatically selects the required power level depending on the operating mode and the temperature difference between the current room temperature set in the control unit and the current room temperature. When the boiler is full, the water is automatically heated together. The water temperature depends on the selected operating mode and the heating power output.

If the temperature at the FrostControl automatic safety/drain valve is about 3 degrees, the valve opens and the boiler empties.

## 2.1 Safety Warnings

For safe and proper use, carefully read and observe the instructions for use and save them for future use. Relevant applicable laws, directives and norms must be observed. Non-observance of the regulations in the operating and installation instructions can result in serious material damage or seriously injure the health of persons. The user of the device is solely responsible for the resulting damage. Only qualified and trained personnel (qualified personnel) may install, commission or repair the product, following the installation and operating instructions and the current accepted technical rules of the Truma product. Specialized personnel are those who can perform the necessary studies correctly and recognize possible hazards with the knowledge and experience they have about Truma products and related standards due to expert education and training.



## 2.2 What to do when smelling gas?

Avoid ignition sources! For example extinguish all open flames, do not use any electrical switches, mobile phones or radios in the vehicle, do not start the engine of the vehicle, operate devices, do not smoke in the vehicle.

Open windows and doors.

Evacuate all persons from the vehicle.

Shut off gas cylinders or turn off gas supply from outside.

The entire gas system must be checked and repaired by qualified personnel!

You can only put the gas system back into operation after inspection and repair.

## 2.4 Actions in Case of Failure

In case of abnormal noise or odor, turn off the gas supply and switch off the Truma Combi.

There is a risk of fire / explosion when attempting to operate a Truma Combi that is damaged due to the vehicle being involved in an accident (e.g. drinks, flooding leaks). A damaged Truma Combi must be repaired or replaced by qualified personnel.

Have faults rectified immediately by qualified personnel.

After flashing (misfire), have the device and the exhaust gas system checked by a specialist.

## 2.5 Maintenance/Repair/Cleaning

Equipment repair and cleaning should only be done by qualified personnel.

Maintenance, repair and cleaning by children is prohibited.

In the following cases, the warranty right and the right to claim liability are eliminated.

- Modifications to the device (including accessories),
- Changes made in the flue gas installation and chimney,
- Using spare parts and accessories other than Truma original parts,
- Failure to comply with the assembly and operating instructions.
- Rinse a new combi and all hot/cold water hoses with potable water before use, whether it is new or not used for a long time.

## 2.6 Heating Operation

In heating operation, the device automatically selects the required power level depending on the temperature difference between the current room temperature set in the control unit and the current room temperature. When the boiler is full, the water is automatically heated together. The water temperature depends on the selected operating mode and the heating power output.

It can be used in 3 different types of energy specified in use. During gas operation, the device automatically selects the required power level.

For electrical operation, 900 W (3.9 A) or 1800 W (7.8 A) can be manually preselected for power, depending on the campsite protection fuse. When the power requirement is higher (e.g. when heating or the outside temperature is very low), gas or mixed operation should be selected to ensure sufficient heating power.

230 V electrical operation is preferred when the power demand is low during mixed operation (eg to maintain room temperature). The gas burner only switches on at high power demand, ie it turns off before heating.

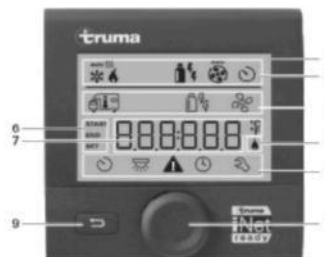
## 2.7 Hot Water Operation (Only when the boiler is full)

Gas operation or electric operation 230 V is used for the hot water pipes. The water temperature is set as ECO for 40 °C and HOT for 60 °C. During gas operation, the water in the chamber is heated with the lowest burner stage. The burner turns off when the water temperature is reached.

For electrical operation, the power can be manually selected as 900 W (3.9 A) or 1800 W (7.8 A) according to the protection fuse in the campsite. Mixed operation is not possible. In this setting, the device automatically selects electrical operation. If the voltage supply to 230 V is limited or interrupted, the heater automatically switches to gas operation.

## 2.8 Operating Instructions

Before commissioning, carefully read the safety warnings and operating instructions and strictly follow the instructions!



### 2.8.1 Display and Control Elements

#### Truma Plus VarioHeat

- 1= Indicator
- 2= Status line
- 3= Menu line (top)
- 4= Menu line (bottom)
- 5= 230 V mains voltage display (current used in the country)
- 6= Timer display
- 7= Settings / Values
- 8= Rotary/ push button
- 9= Back key

With the rotary push button indicated with number 8, you can navigate between the menus on lines 3 and 4, make selections and make various settings.

The button indicated with the number 9 can be used to return from any menu. Target values and parameters can be selected, changed and saved by pressing the rotary push button, indicated by the number 8. The selected menu items flash.

Pressing button 8 for a long time enables the main control function to be turned on and off.



#### Counter-clockwise rotation

- The menu moves from right to left.
- Values are decremented (-).



#### Touching

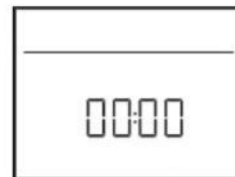
- A selected value is inherited (saved).
- Selection of menu item, change to setting level.

### Back button

When the back button 9 is pressed, it returns from a menu and the settings made in that menu are cancelled. In other words, previously valid values are preserved.

### First commissioning

A few seconds after the Truma CP plus VarioHeat control unit is connected to the power supply, a start screen appears.



The time information and the set room temperature are displayed alternately on the screen.

### Turning On / Off

Touch button 8 to open. The previously set values/operating parameters are reactivated after the device is switched on.

Press button 8 for more than 4 seconds to turn it off. Shutdown of the Truma CP plus VarioHeat control unit may be delayed by several minutes due to the internal subsequent operation of the heating or air conditioning system ("OFF" is displayed during this time period).

## Activating APP mode

Press button 8 for about 2 seconds until "APP" appears on the screen.  
Let go of the rotary/push button.  
The previously set values are saved.

## Turning off APP mode

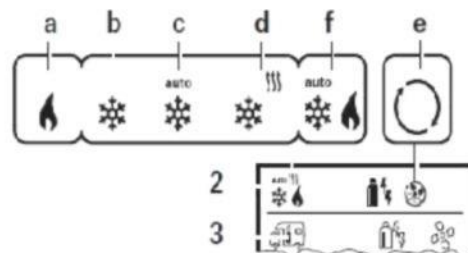
If new values are transferred via the Truma App or the infrared remote control of the air conditioning system, the APP mode is switched off.  
If the Truma CP plus VarioHeat control unit is activated by pressing the rotary / push button. The previously set values are taken over for the new operation, the APP mode is turned off.

## Changing the room temperature

Select the room temperature setting icon in the menu line number 3 with the button number 8.



Press button 8 to switch to the setting level.  
Select between heating (HEATER), air conditioning system (AC) with the rotary / push button depending on the device connected.  
Click on button 8 to confirm the selection.  
Bring the button number 8 to the desired temperature by turning it to the right and left.  
Click on button 8 to confirm the value.



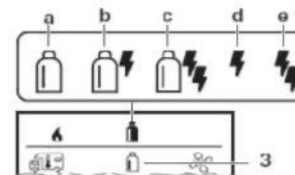
**Heater** Adjustable temperature range 5 – 30 °C (steps of 1 °C) a= Heater on – symbol illuminated, symbol flashes if room temperature is not yet reached. It is essential that the temperature range is selected below 5 °C (OFF) in order to turn off the heater.

### Choosing the energy type

Select the energy setting icon on the 3rd menu line with the 8 numbered button.



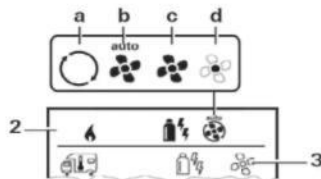
Press button 8 to switch to the setting level.  
Bring the button number 8 to the desired setting level by turning it to the right and left.  
Click on button 8 to confirm the selection.



a = GAS = Truma VarioHeat heats in gas operation.  
b=MIX 1=Truma VarioHeat heats in gas operation. Truma E-Kit heats with 900 W.  
c=MIX 2=Truma VarioHeat heats in gas operation. The Truma E-Kit heats with a maximum of 1800 W.  
d= EL 1= Truma E-Kit heats with 900 W.  
e= EL 2= Truma E-Kit heats with a maximum of 1800 W.

### Selecting the fan stage

Select the fan icon on the 3rd menu line with the 8 numbered button.  
Press button 8 to switch to the setting level.  
Bring the button number 8 to the desired setting level by turning it to the right and left. Click on button 8 to confirm the selection.



- = OFF= Fan Off (Can only be selected if there is no device running.)

a= VENT1= Circulated air, if no device is running. The number of cycles can be selected in 10 steps.

b= AUTO= Automatic adjustment of the fan is adjusted depending on the heating power optimized to the current heating demand.

c= BOOST2= Fast room heating Can be used if the difference between the selected and current room temperature is greater than 10 °C. Not available in electronic operation (EL1, EL2).

d= NIGHT= Very quiet fan operation. The heater only works at partial load, it may not reach the set room temperature if necessary (depending on vehicle size and outside temperature). Only available in gas operation (GAS).

May cause higher engine wear depending on frequency of use. A quick step change (on the stand-by display) is possible via button 8.

Electric current, noise level and engine wear are higher in the "BOOST" fan stage.

When the Combi is switched on, the fan level selected in the previous heating operation is displayed in the 2nd status line of the room temperature setting.

The default setting is "AUTO".

## 2.8.2 Setting the timer

### Danger of poisoning by exhaust gases

The activated timer also starts the heater when the vehicle is parked. Exhaust gas from the heater can cause poisoning in closed spaces (e.g. garage, workshop).

#### If the vehicle is parked indoors:

Cut off the fuel supply (gas) to the heater.

Switch off the Truma CP plus VarioHeat control unit (see "On / Off") to prevent the heater from being reactivated by the Truma App or the timer. Only use the timer of the Truma CP plus VarioHeat control unit to precisely set the start and end time of the desired range when operating air conditioning systems.

If the timer is ON, it is necessary to deactivate the timer first. If the timer is not active (OFF), it is shown in the menu.

Select the timer setting symbol in the 4th menu line with the 8 button.

Switch to the setting level by touching it.



After confirming the time, the minute segment will flash.

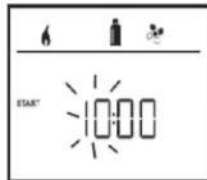
Set the minute value to the desired value by using the button number 8.

When the minute value reaches the desired value, confirm the minute by clicking the 8 button.

### Entering the start time

Set the hour and then the minute with the number 8 button.

#### 24 hour mode



#### 12 hour mode



A = a. m.  
P = p. m.

The hour is flashing when the screen is first turned on. Swipe left and right using button 8 and set the clock to the desired value.

When the time reaches the desired value, confirm the time by clicking on the 8 button.

#### 24 hour mode



#### 12 hour mode



A = a. m.  
P = p. m.

If the start / end time has passed at the time of entry, the operating parameters will only be valid when the next start / end time is reached. Until then, the operating parameters set apart from the timer are valid.



## Setting the room temperature

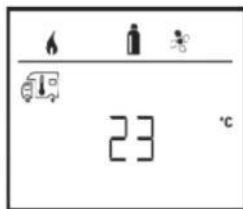
Depending on the device connected, use button 8 to choose between heating (HEATER), air conditioning system (AC) or automatic air conditioning (AUTO) (see fig. "Changing the room temperature" on page 18). Click on button 8 to confirm the selection.

Select the room temperature you want with the button 8. Click on button 8 to confirm the value.



## Selecting the fan stage

Select the desired fan level with the 8 button. Click on button 8 to confirm the selection.



## Select energy type (HEATER only)

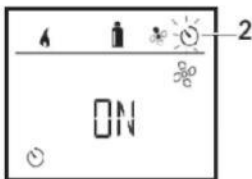
For detailed information, see "Selecting the energy type", page 19, select the energy type you want with the button number 8.

Click on button 8 to confirm the selection.



### Activating the timer (ON)

Select the desired fan level with the 8 button. Click on button 8 to confirm the selection.



The timer remains active (OFF) for days until deactivated. If the timer is programmed and active, the timer symbol will flash.

### Deactivating the timer (OFF)

Press button 8 to switch to setting level.  
Deactivate the timer with button 8. (OFF)  
Click on button 8 to confirm the selection.



### 2.8.3 Service menu

It is located on the right side of menu number 4.

The menu is selected by clicking the 8 button.

You can navigate between the settings shown below in the menu by using the 8 button.

When the desired setting is reached, it can be selected by clicking the 8 button. While in the selected setting, the selected setting is brought to the desired value by sliding it to the right and left with the 8 button. You can go back with the button number 9.

### Calibration of the room temperature sensor of the heater (OFFSET)

The room temperature sensor of the connected heater can be adapted to the installation situation of the sensor. Adjustment can be made in 0.5 °C steps in the range of 5 °C to -5 °C.

Example:

Set room temperature 23 °C OFFSET= -1 °C

Nominal value for heater = 22 °C

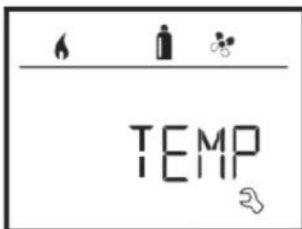


Standard setting: 0 °C (Celsius). °C/°F temperature display  
Selection of °C (Celsius) or °F (Fahrenheit) temperature display.



### 12/ 24 hour mode

Display of time in 12 hour (a.m., p.m.) / 24 hour modes.



Standard setting: °C (Celsius).

### Changing the backlight

Changing the backlighting of the Truma CP plus VarioHeat control unit in 10 steps.



Standard setting: 24 hour mode.

### Changing the language

Selection of the desired language (German, English, French, Italian).



Standard setting: English

### Displaying the version number

Display the version number of the heater, air conditioning system, Truma iNet Box and Truma CP plus VarioHeat control unit.

Example:

H 1.20.01== Device; 1.20.01= Version number



### Device

P=Truma CP plus VarioHeat control unit  
 L=Truma CP plus VarioHeat CI-Bus control unit  
 A= Air conditioning system  
 H= Truma VarioHeat  
 T= Truma iNet Box  
 E= Truma E-Kit

### Standard setting (RESET)

The reset function resets the Truma CP plus VarioHeat control unit to factory settings. All settings are deleted. Newly connected devices are detected and stored in the control unit.

Turn on the voltage supply.

12 V= for Truma CP plus VarioHeat, Truma VarioHeat and Truma E-Kit control unit and for 230 V air conditioning systems and Truma E-Kit.

### Resetting

Select "RESET" with the 8 button.

Click on button number 8.

"PR SET" appears on the screen.

Click on button 8 to confirm.

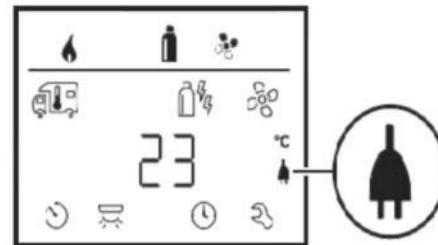


After confirming, the Truma CP plus VarioHeat control unit is started. During this process, "INIT." is displayed on the screen.

### Special indicators

#### Mains voltage 230 V available

The symbol indicates that the connected heating and/or air conditioning system has a mains voltage of 230 V (the current used in the country).



### Infrared (ER) remote control (Air conditioning system)

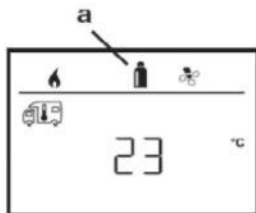
When a command is received from the infrared remote control of the air conditioning system, "ER" is displayed on the screen. Truma App with iNet Box, "APP" is displayed on the screen when a command is received from a mobile device with Truma APP application on it.

### External control unit (CI-BUS)

When a command is received from an external control unit with CI-BUS, "CI" is displayed on the screen. The Truma CP plus VarioHeat CI-BUS control unit is only a special model fitted at the factory.

### Energy type indicator

Energy type in heating operation e.g. gas (a) is displayed (see "Selecting the energy type" on page 19)



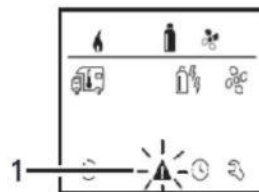
## 2.8.4 Warning / Fault Warning

If the operating parameter is found outside of my target range, the Truma CP plus VarioHeat control unit immediately switches to the "Warning/Fault" menu level and the fault code of the fault is displayed. With the help of troubleshooting instructions, the cause of the warning in question can be determined and eliminated. Error and malfunction codes are shown at the end of the Truma combi document under the topic Truma CP plus VarioHeat Error and malfunction codes.

### Returning to the setting level

Click button number 8 or press backspace. If the screen is in Stand-by mode tapping activates the backlight and the warning can be confirmed by clicking the screen again.

The device concerned remains in operation, if possible. If the operating parameter is again within the target range, the symbol turns off automatically.



### Reading the warning error code



The error code can be called again after the warning is acknowledged:

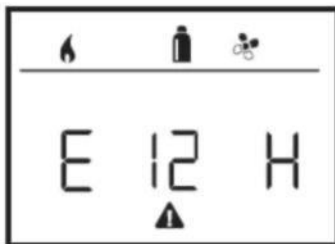
- Select the number one symbol seen in the picture with the number 8 button.
- Click on the symbol with the number 8 button. The error code of the alert will be displayed.

W= Warning 42= Error code  
H= Device  
H= Truma VarioHeat  
A= Air conditioning system  
E= Truma E-Kit

### Fault

In the event of a fault, the Truma CP plus VarioHeat control unit immediately switches to the "Warning / Fault" menu level and the fault code of the fault is displayed:

With the help of fault finding instructions, the said fault can be detected and rectified. Error and malfunction codes are shown at the end of the Truma combi document under the topic Truma CP plus VarioHeat Error and malfunction codes.



E= Error 12= Error code  
H= Device  
H= Truma VarioHeat  
A= Air conditioning system  
E= Truma E-Kit

### **Cause fixed / Back to setting level**

Click on button number 8. If the screen is in- mode tapping activates the backlight and the fault must be confirmed by tapping the screen again. If necessary, the relevant device will be restarted automatically.

This process may take several minutes due to the internal after-work of the connected devices.

If the cause of the fault is not remedied, the fault will reappear and the control unit will switch back to the "Warning / Fault" menu level.

### **Cause not fixed / Back to setting level**

Press the back button.

In this case, the fault in the Truma CP plus VarioHeat control unit is not acknowledged and the warning symbol remains. The device remains in the fault state. Other connected devices can be controlled.

### **Reading the fault error code**

After the fault has been acknowledged, the fault code can be recalled:

- Select the warning symbol with the 8 button.
- Click on button 8 and the current state of the fault is read.

### **Maintenance**

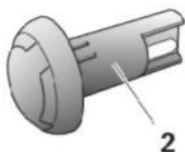
The Truma CP plus VarioHeat control unit is maintenance-free. To clean the front, use a non-scratching cloth dampened with water. If it cannot be cleaned in this way, use a neutral soap solution.

### **Disposal of waste**

The device must be disposed of in accordance with the administrative regulations applicable in the country of use. National legislation (e.g. Scrap Vehicles Regulation in Germany) must be observed.

## 2.9 Room temperature sensors

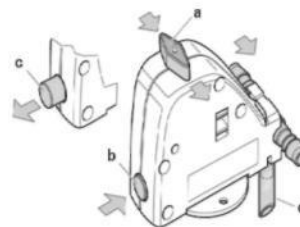
To measure the room temperature, the vehicle is equipped with an external room temperature sensor. The location of the sensor is determined by the vehicle manufacturer according to the vehicle type.



The temperature setting in the control unit depends on the individual heat requirement and the vehicle model and must be made individually.

## 2.10 Safety / relief valve

FrostControl  
(Safety / drain valve with integrated anti-freeze / optional in UK version)  
FrostControl is a non-electric safety / drain valve. When there is a danger of freezing, the boiler automatically empties the water in it via a drain port. When high pressure occurs in the system, pressure balancing is performed intermittently via the safety valve.



a= "operating" position of the rotary switch

b= Push button "off" position

c= Push button "dump" position

d= Drain opening (outward from the vehicle floor)

Opening the safety/relief valve

Turn the rotary switch 180° until it engages, the push button pops out (position c). The water in the boiler flows out via the discharge opening (d). To ensure a safe flow of water, dirt accumulation (snowy, mud, ice, brushwood, etc.) must be prevented at the discharge opening (d) of the FrostControl! No warranty can be claimed for damage caused by freezing!



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## Closing the safety/drain valve

Make sure that the rotary switch is in the "operation" (position a) position, parallel to the water supply and inside.

Close the safety/drain valve by pressing the push button. The push button (b) should go in on the "off" position.

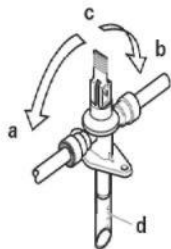
However, when the temperature at the safety/drain valve is above approx. 7 °C, the safety/drain valve can be closed manually using the push button (position b) and the boiler can be filled. Truma supplies a heating element (item no. 70070-01) which is fitted inside the FrostControl and fixed with a safety plate as an accessory. This heating element heats the FrostControl to approx. 10 °C when the Truma Combi is on. The boiler can thus be filled after a short time, regardless of the temperature at the installation site.

## Automatically opening the safety/relief valve

When the temperature at the safety/drain valve is below approx. 3 °C, the safety/drain valve opens automatically, the push button pops out (position c). The water in the boiler flows out via the discharge opening (d).

## Safety / relief valve

The safety/relief valve automatically compensates for pressure when high pressure builds up in the system. In this case, the water is discharged outwards intermittently via the discharge opening. This safety/drain valve does not protect the water tank from damage by freezing.



a= Lever in "Operating– off" position  
b= Lever in "Operating– off" position  
c= Lever in "Drain" position  
d= Drain opening (outward from the vehicle floor)

## Opening the safety/relief valve

Move the lever vertically to the (c) position. The water in the boiler flows out via the discharge opening (d). To ensure a safe flow of water, the accumulation of dirt (snowy, mud, ice, brushwood, etc.) must be prevented at the discharge port (d) of the safety / drain valve! No warranty can be claimed for damage caused by freezing!

## Closing the safety/drain valve

Move the lever horizontally to the (a) or (b) position.

## 2.11 Filling the boiler

Make sure that the safety / drain valve is closed (see section "Closing the safety / drain valve"). If the temperature in the FrostControl is below approx. 7 °C, first switch on the heater to warm up the installation space and the FrostControl. After a few minutes, when the temperature in the, FrostControl rises above 7 °C, the safety / drain valve can be closed.

Turn on the power to the water pump (main switch or pump switch).

Turn on the hot water taps in the kitchen and bathroom (set the water regulator or the single lever faucet to the "hot" position). Keep the faucets open until the air in the boiler is completely emptied and the water flows uninterruptedly.

Even if only the cold water installation will be operated without a boiler, the boiler will be filled with water. In order to prevent damage due to freezing, the boiler should be emptied via the safety / drain valve even if it is not used. In case of frost, the filling process may not take place because the water is frozen. The boiler can be defrosted by short-term operation (maximum 2 minutes). Frozen pipes can be thawed by heating the interior. When connecting to a central water supply (country or city connection), a pressure reducer must be used to prevent pressure above 2.8 bar in the boiler.

## 2.12 Emptying the boiler

Attention: If the motorhome / caravan will not be used during the frosty period, the boiler must be emptied!

Turn off the power to the water pump (main switch or pump switch).

Turn on the hot water taps in the kitchen and bathroom.

Place a suitable container (10 liters) under the drain port (d) of the safety/drain valve to control the flowing water.

Open the safety / drain valve (see section "Opening the safety / drain valve").

The boiler is emptied directly to the outside via the safety/drain valve. Check whether the water in the boiler (10 liters) is completely drained into the container via the safety / drain valve.

**No warranty can be claimed for damage caused by freezing!**

## 2.13 Commissioning

### Combi E

(in conjunction with the CP plus control unit) The interior can be heated with or without water in gas, electric and mixed operation, depending on the operating position.

Check whether the protection fuse of the electricity supply in the campsite is sufficient for the 900 W (3.9 A) or 1800 W (7.8 A) power set via the energy selection switch.

The cable reel must be fully opened to prevent the power supply cable from overheating.

Check if the chimney is unblocked. Be sure to take everything that will cover it, such as a lid.

Open the gas cylinder and the quick shut-off valve on the gas supply pipe.

If necessary, fill the boiler with water (see section "Filling the boiler").

Turn on the device with the control unit.

## **2.14 Turning off**

Turn off the heater with the control unit.

The shutdown process may be delayed by several minutes due to the internal after-runs of the heater.

If the device will not be used for a long time, close the quick shut-off valve on the gas supply pipe and the gas cylinder.

In cases where there is a risk of freezing, always drain the water!

## **2.15 Maintenance**

Maintenance, repair and cleaning by children is prohibited. Work to be done by specialists. Have the device checked by specialist for contamination and have it cleaned if necessary.

## **Efforts to be done by the user**

Clean the installation site at least once a year.

The safety/drain valve must be operated regularly (at least 2 times a year) to remove limescale deposits and ensure that it is not blocked.

## **Warnings for cleaning, build-up dirt and maintenance**

We recommend that you use the appropriate maintenance products available in the market for boiler cleaning, cleaning the dirt accumulated in the boiler and maintenance of the boiler. Chlorinated products should not be used.

The chemical method for combating microorganisms in the device can be supported by regularly heating the water in the boiler to 70 °C.

Only in conjunction with the Combi E, CP Plus control unit– select the "gas operation" operating mode on the CP plus control unit.

Set the water temperature to 60 °C.

Turn on the device.

The burner switches off when the water in the boiler reaches 60 °C. The device must remain in operation for at least 30 minutes and hot water should not be used. The residual heat in the heat exchanger heats the water up to 70 °C.

## 2.16 Fuses

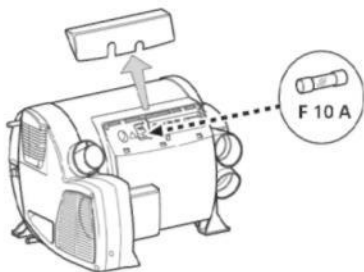
Electrostatic charge can cause damage to the electronic system. Equalize the potential before touching the electronic system!

Fuse and mains connection lines must only be replaced by a qualified person!

Before opening the electronic circuit cover, the device must be disconnected from the mains.

The fuse is located in the power electronic circuit (14) under the electronic circuit cover.

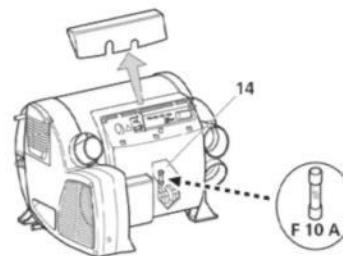
This sensitive fuse should only be replaced with a fuse of the same construction: 10A, fast, breaking capacity "H".



**Fuse 230 V**

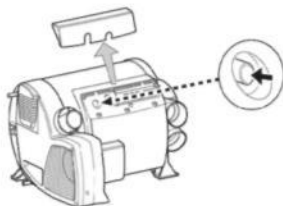
**(Combi E)**

**CAUTION: Danger to life due to electric shock when replacing the fuse or power supply lines.**



**Overheat protection 230 V (Combi E)**

The 230 V heating operation has a mechanical overheating switch. For example, if the 12 V voltage supply is interrupted during operation or during the following operation, temperatures in the device may cause the overheating protection to trip.



Resetting the overheating protection Wait for the heater to cool down, remove the connector cover and press the "Reset" button.

## 2.17 Troubleshooting instruction (Water supply)

Error	Cause / Solution method
Extremely Long Warm-up time	The water tank is chalky. / Descale the water system. (See the Maintenance section.)
Water is flowing. Boiler cannot be filled.	The safety/drain valve is open. / Close the safety / drain valve.
The boiler cannot be drained even though the safety/drain valve is open.	The discharge port of the safety / relief valve is closed. / Check the hole for dirt (snowy, mud, ice, brushwood, etc.) and clean if necessary.

Water is flowing / dripping from the discharge port of the safety / drain valve.	The water pressure is too high. / Check the pump pressure (maximum 2.8 bar). When connecting to a central water supply (country or city connection), a pressure reducer must be used to prevent pressure above 2.8 bar in the boiler.
FrostControl is turned on after the heater is turned off.	At temperatures below approx. 3 °C, FrostControl switches on automatically / Turn on the heating / If the heating operation is not activated, FrostControl can only be switched off at temperatures above approx. 7 °C / Use the heating element for FrostControl.
Unable to close FrostControl.	With FrostControl the temperature is below approx. 7 °C / Turn on the heating / If the heating mode is not activated, FrostControl can only be switched off at temperatures above approx. 7 °C. The rotary switch is not in the "Operation" position. / Turn the FrostControl rotary switch to "Operation" and then press the rocker switch until it engages.

## 2.18 Cases out of warranty

Warranty claims cannot be claimed in the following cases:

Using the device incorrectly, improperly, incorrectly, carelessly or contrary to its intended use.

Improper installation, assembly or commissioning contrary to the information described in the operating and assembly instructions.

Incorrect operation or use of the device contrary to the information described in the operating and assembly instructions, especially non-compliance with the maintenance and cleaning instructions and ignoring the warnings.

Installation, repair or necessary interventions are not performed by authorized business partners.

Consumables, wear parts and natural wear.

Equipping the device with spare and complementary parts or accessories that are not original parts manufactured by the manufacturer or not approved by the manufacturer. This is especially true in the device with a control system operating in the network if the control units and software are not approved by Truma or the Truma control unit (e.g. Truma CP plus, Truma iNet Box) is not used only for Truma devices or for Truma approved devices.

Foreign substances (e.g. oil, softeners in gas), damage caused by chemical or electrochemical effects in water, or contact with unsuitable substances (e.g. chemical products, flammable substances, unsuitable cleaning agents).

Damages caused by abnormal environment or operating conditions unfamiliar to the subject.

Damages caused by force majeure or natural disasters and other effects for which Truma cannot be held responsible.

Damages caused by incorrect transportation.

Changes made by the end customer or third parties to the device, especially to the waste gas installation and chimney, including spare and complementary parts or accessories and their installation.

## 2.19 Truma CP plus VarioHeat Error and fault codes Warnings

The crane is a very powerful machine. Be very careful and heed all warnings.

## Technical Specifications

**Body:** Aluminum

**Insulation:** Ceramic Based Internal Heat Insulation

**Cabin Length:** 3,250 mm

**Structure:** 3,850 mm

**Cabin Width:** 2,350 mm

**Cabin Height:** 1,900 mm





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## Care Instructions

### Cleaning

OTAG 385 should be washed as soon as it gets dirty, especially in winter when salt and moisture on the roads can easily start to rust.

OTAG 385 should be washed as follows.

Wash the entire OTAG 385 with plenty of water until the dirt is softened.

Do not spray the water directly on the locks.

Wash the vehicle with a sponge using plenty of water with or without detergent.

If the vehicle is very dirty, you can wash the vehicle first with a cold degreasing agent. However, you should only perform this operation in a place with a waste water separation feature. Take care not to expose cold oil directly to the sun and the paint to not get hot from the sun or the engine is still not hot. Sunlight and heat can cause permanent damage. Consult CRAWLER about this.

Dry the OTAG 385 with a clean and soft cloth. You can clean muddy areas with warm soapy water.

### Suitable detergent

Clean bird droppings from the paint as soon as possible. Chemical substances in bird droppings can affect and fade the paint in a very short time. It is not possible to restore the faded paint by polishing.

### Automatic Washing

The simplest and quickest way to wash OTAG 385 is to take it to an automatic washing facility. However, keep in mind that washing in an automatic washing facility cannot replace a thorough hand washing. The brushes of the automatic washing plant may not reach all parts of the OTAG 385 effectively. We recommend hand washing in the first months.

After washing OTAG 385: Always check the brakes so that moisture and corrosion do not affect or damage the brake pads!

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## **Cleaning the floor**

Removing stains on fabric upholstery

For soiled fabric upholstery, it is recommended to use a special cleaning agent, available from your CRAWLER dealer. Other chemicals may damage the fire resistance of the flooring.

Never try to remove the stain by scraping or rubbing.

Never use strong stain remover.

Wash with mild soap and warm water.

## **Repairing paint damage**

### **Paint**

The electrostatic paint on OTAG 385 is a scratch resistant paint. In order to repair the scratches that will occur over time, a retouching process is applied with paint with the same color code. Below are the most common types of paint damage you can repair:

- Minor stone, branch nicks and scratches.
- Damages around the outer shell.

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## Warranty Text

1. The warranty period starts from the OTAG 385 delivery date. The outer body warranty is five (5) years and the component warranty is two (2) years. Accessories and other options are under the manufacturer's warranty.

2. The entire OTAG 385, including all its parts, is under our company's warranty.

3. Failures caused by the use of OTAG 385 contrary to the terms in the user manual are not covered by the warranty.

4. You can apply to CRAWLER for any problems that may arise regarding the Warranty Certificate.

5. If OTAG 385 fails within the warranty period, the time spent in repair is added to the warranty period. OTAG 385's repair time is maximum 20 working days. This period starts on the delivery date of the vehicle to the service station or, in the absence of a service station, to one of the authorized dealer, dealer, agency, representative, importer or manufacturer of the vehicle.

6. Equipment and options used in OTAG 385 are covered by the manufacturer's or distributor's warranty.

7. In case of intervention to or modification of the vehicle and the equipment inside the vehicle other than the CRAWLER service, the related and affected equipment will not be covered by the warranty.

## CRAWLER

### WARRANTY FORM

Company: Crawler CARAVANS  
HQ Address: Holzheimer Str. 12, 73037 Göppingen, Germany  
Phone: **+49 71613047623**  
E-mail: info@crawlercavans.com

### VENDOR'S;

**Title:**  
**Address:**  
**Phone:**  
**Invoice Date and No:**  
**Sign (Seal):**

### VEHICLE'S;

**Model:** OTAG 385  
**Banderole and Serial No:**  
**Delivery Date and Place:**  
**Warranty Period:**  
**Maximum Repair Time:**  
20 Work Days

### VEHICLE OWNER'S;

**Name:**  
**Address:**  
**Phone:**  
**E-mail:**  
**Sign:**