

# Operating instructions

Water heater

Thermo Top Pro 120

Thermo Top Pro 150



# 1 About this document

## 1.1 Purpose of the document

This operating instructions are part of the product and provides the user with information on the safe operation of the Thermo Top Pro 120 | 150.

## 1.2 Using this document

- ▶ Before operating the Thermo Top Pro 120 | 150, carefully read these operating instructions as well as the operating instructions for the control element.
- ▶ Keep this operating instruction ready to hand.
- ▶ Hand these operating instructions on to the following owner or user of the Thermo Top Pro 120 | 150.
- ▶ When working on the heater, the Installation Instructions and the Workshop manual and the important information and legal provisions contained therein should also be read and observed.

## 1.3 Use of symbols and highlighting

Texts with the symbol  refer to separate documents which are enclosed or can be requested from Webasto.

Texts with the symbol  refer to technical features. Texts with the symbol  or  refer to possible material damage, risk of accident or injury. Text with the symbol  describes a necessary action. Text with the symbol  describes an action or requirement.

## 1.4 Warranty and liability

Webasto shall not assume liability for defects or damage that are the result of the installation and operating instructions being disregarded.

This liability exclusion particularly applies for:

- improper use
- repairs not carried out by a Webasto service workshop
- use of non-genuine parts
- Conversion of the Thermo Top Pro 120 | 150 without permission from Webasto

## 2 Safety

### 2.1 Intended use

The heater Thermo Top Pro 120 | 150 is currently approved for the following applications:

- Trucks, buses in vehicle classes M, N and O
- Construction machines
- Agriculture and forestry machines
- Earth-moving machinery
- Industrial trucks
- Caravans, motor homes, boats, pleasure craft
- Vehicles that can be used in residential, commercial, light-industrial and industrial environments

### 2.2 Regulations and legal requirements

- ▶ Regulations in the Installation Instructions must be observed.

### 2.3 Safety precautions



#### **WARNING**

#### **Risk of explosion in environments with combustible vapours, flammable dust and hazardous goods**

- ▶ Do not switch on or operate the heater in environments such as petrol stations, tank facilities, fuel stores, coal bunkers, timber yards or grain warehouses.

#### **Risk of poisoning and suffocation from exhaust fumes in closed rooms**

- ▶ Do not switch on or operate the heater in closed rooms.

#### **Risk of explosion from explosive and flammable hazardous goods**

For hazardous material vehicles, restriction of the heater operation (ADR) is required to prevent severe burns.

- ▶ Do not operate the heater at hazardous material loading points.
- ▶ Do not operate the heater when loading and unloading hazardous materials.



#### **CAUTION**

##### **Risk of injury from the defective unit**

- ▶ Do not operate a defective Thermo Top Pro 120 | 150.
- ▶ Contact a Webasto service workshop.



#### **ATTENTION**

##### **Overheating caused by insufficient coolant or defective coolant flow**

- ▶ Check coolant system (heater and vehicle).
- ▶ Contact a Webasto service workshop.



#### **ATTENTION**

##### **Incorrect handling**

- ▶ Protect the Thermo Top Pro 120 | 150 against mechanical stress (e.g. dropping, impacts and knocks).

##### **Switching off incorrectly, without after-run**

The fan of the heater keeps running for approx. 60 seconds after switching off via the control element (40 s for ADR). Switching off incorrectly, without after-run, can cause damage to the Thermo Top Pro 120 | 150.

- ▶ Always switch off the Thermo Top Pro 120 | 150 via the control element.

## **3 General**

Regular use of the heater provides the following advantages:

- Improved safety thanks to clear all-round vision from the moment you move off.
- Reduced wear and cold-start emissions thanks to engine preheating.
- Achieving the comfort temperature even with engines with low waste heat thanks to the Heating during Travel option.
- Comfort temperature is reached automatically and in an energy-saving way.



### Note

In the event of an interruption to the heating function that lasts for an extended period, the heater can no longer guarantee the benefits described.

## 4 Operation

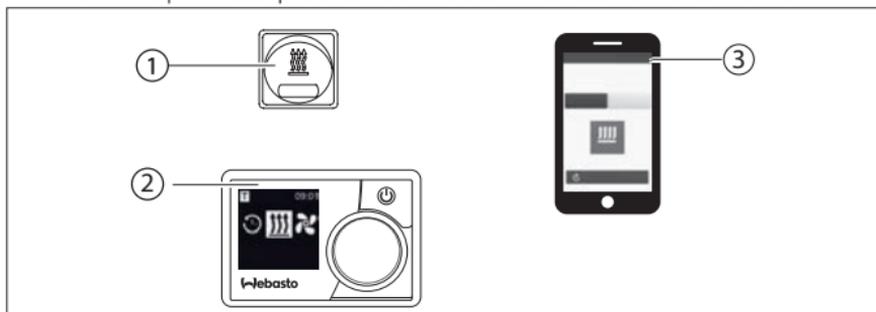


### Note

Hazardous material vehicles (ADR) must not be switched on or off using a timer control or remote control.

### 4.1 Control elements

The Thermo Top Pro 120 | 150 can be fitted with various control elements:



① Rocker switch

② MultiControl or SmartControl

③ ThermoCall TC4

A combination of control elements is also possible.

► Observe the Operating instructions for the control element.

### 4.2 Setting up a vehicle heating system

► Before switching on the heater (with the ignition on), set the vehicle heating system to “warm”.

► Set the vehicle blower to the slowest setting (lower power consumption).

**Note**

Depending on the type of vehicle, the air-conditioning system can perform these settings automatically or partly autonomously. Ask your specialist dealer to explain the optimum settings.

### 4.3 Switching the heater on and off

**ATTENTION****Overheating possible**

A battery disconnecter (emergency off switch) may only be actuated in the event of danger since the heater will be switched off without after-running period.

► Always switch the heater on and off via the control element.

### 4.4 Heater operation

The coolant temperature is controlled automatically throughout operation. The heater can also be switched on while travelling.

The vehicle blower is only switched on when the coolant temperature is at around 30°C, avoiding unnecessary energy consumption. The vehicle blower can thus be started with a time delay, depending on the temperature. When switching off the heater, a cooling afterrunning period is initiated; this can last up to 60 seconds.

**Note**

In order to ensure that the batteries are recharged while travelling, follow this rule of thumb: the travelling time should be greater than or equal to the preheating time. In order to protect the batteries, the heater has an undervoltage trip.

### 4.5 Using the heater in hazardous material vehicles (ADR)

It is not possible to set a preselection time in hazardous material vehicles (ADR). The SmartControl (if present) shows how much heater operation time is left (remaining operation time).



### Note

An ADR after-running period takes place if:

- — the generator signal (D+) is discontinued, or
- — the pumping device (auxiliary drive) belonging to the vehicle is put into operation.

After the end of the ADR after-running period, the heater is in ADR locking mode.



### Note

The ADR locking mode can only be unlocked if:

- — the pumping device belonging to the vehicle is put out of operation and
- — the heater is restarted by switching it off and on again using the control element.

## 4.6 Switching the heater on after automatic switch-off



### ATTENTION

#### Possible loss of heating function

Following an automatic switch-off, the heater may need to be manually switched back on in some circumstances.

The heater can be restarted by switching it off and on again using the control element.

## 4.7 Use of residual heat

### – Activation:

Use of residual heat is only activated when the heater is switched on. This is a fully automatic function that is activated when the engine is warm; it is used to conserve energy. Every time it is switched on, the heater checks the coolant temperature before starting the heating process. If the coolant temperature is above a limit value, residual heat utilisation is activated automatically. When use of residual heat is activated, the coolant pump for the heater and the vehicle blower are automatically actuated.

### – Deactivation:

Deactivation of the use of residual heat is carried out automatically by the heater control unit.

## 5 Fuel

The heater is connected to the fuel tank of the vehicle or to a separate fuel tank.

- ▶ Use suitable fuels (diesel / biodiesel DIN EN 590).

### 5.1 Converting from operation with summer diesel to winter diesel

- ✓ The tank is filled up with winter diesel (cold-resistant fuel). However, the fuel system for the heater may still contain residues of summer diesel.
- ▶ Switch on the heater for approx. 15 minutes (the fuel system is completely filled with cold-resistant fuel).

## 6 Cleaning

Carefully clean the heater using water and a cleaning agent suitable for cleaning vehicles.

## 7 Malfunctions

In the event of a malfunction, the control element can indicate a malfunction.

- In the case of control elements with display, the malfunction is shown on the display in the form of a fault code made up of a combination of digits and letters.
- For control elements with operating indicator, the malfunction is indicated in the form of a flash code. After 5 fast flash pulses, the fault code is output by a sequence of long flash pulses. The long flash pulses by the operating indicator must be counted. This number (fault code) provides information to the workshop about the type of malfunction on the heater.
- ▶ Please contact your authorised Webasto dealer.



### Notes

- If there is a malfunction, in certain circumstances the fuel supply to the Thermo Top Pro 120 | 150 will be switched off for safety reasons.
- The heater may only be repaired by trained personnel.
- For control elements with display: the control element can display specific fault codes. See the operating instruction of the control element.

## 8 Service signal

In the event of service information, the service signal is shown via the control element when the heater is switched on.

- In the case of the MultiControl / SmartControl control element, a service symbol is displayed.

- On control elements without display: operating indicator flashes: on for 1 second, off for 1 second
- ▶ Have the heater checked by a professional.

The heater can continue to be used with limited operation.

## **9 Maintenance**

- ▶ Put the heater into operation every 4 weeks in order to prevent mechanical parts from seizing.
- ▶ At the beginning of the heating period, have the heater checked by a professional.

## **10 Disposal**

The Thermo Top Pro 120 | 150 must not be disposed of in domestic waste.

- ▶ Observe the regional regulations for disposal of electronic products.

## **11 Service and customer services**

Do you have any technical queries or a problem with your heater? Country-specific telephone numbers for our branches can be found on the Webasto service point flyer or under [webasto.com](http://webasto.com).

In multilingual versions the German language is binding. You can request your language if it is missing.

The telephone number of each country can be found in the Webasto service centre leaflet or the website of the respective Webasto representative of your country.

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