

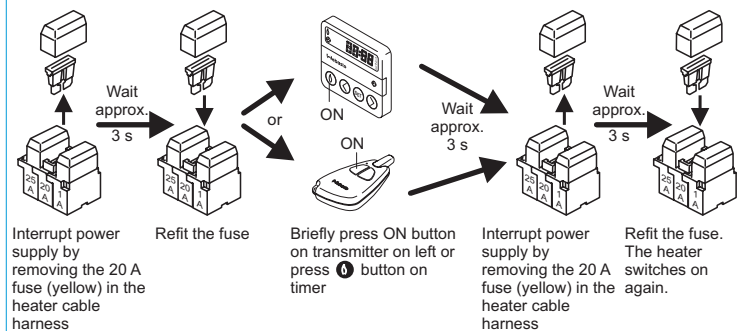
Action in the event of faults

If a fault occurs, check that the fuses and plug connections are in perfect condition and secure.
When a fault occurs, the heater switches to the fault interlock; an error is not indicated on the clock display.
Always try to cancel the fault interlock before calling a Webasto service centre.

The following faults can be remedied directly by the user:

Fault description	Possible cause	Remedy
Heater switches off automatically (= fault lock-out).	No combustion after starting and restarting. Flame goes out during operation.	Switch off heater and switch on again (not more than twice).
Heater does not switch on.	Heater is without electric power.	Check power supply to heater and ground connections.
Heater switches off during operation (= fault lock-out).	Heater has overheated due to lack of coolant.	Refill coolant as directed by manufacturer.

To cancel the fault interlock



Note:
The heater switches on again when the fuse is refitted.

Please contact a Webasto service centre if the fault cannot be remedied in this way.

Operating and maintenance instructions



Feel the drive

Webasto Thermosysteme International GmbH
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Hotfax (0395) 55 92-353 - <http://www.webasto.de>

General information

Dear Webasto user

We presume that the principle and mode of operation of your new heater has been explained to your complete satisfaction by the workshop / service centre which installed the heater. This manual summarizes the main points of importance for using the heaters Thermo Top C and Thermo Top E, as well as the handheld transmitter Telestart T70/T80.

Maintenance and safety instructions

The water heaters Thermo Top C and Thermo Top E have been type-tested and approved in accordance with Directives 2001/56/EC (heaters) and 72/245/EEC (EMC) within the territory governed by European Directive 70/156/EEC.

The units must be installed in accordance with the enclosed installation instructions.

The heater must not be operated:



Danger of explosion and suffocation!

- In filling stations and tank farms.
- In places where explosive vapours or dust may build up (e.g. near fuel, coal, wood dust or cereal stores).
- In enclosed rooms (e.g. garages), not even via the timer or Telestart.

The heater must not:



- be exposed to temperatures of more than 120 °C (storage temperature), otherwise the electronics may suffer permanent damage.
- be operated without at least 20% brandname anti-freeze in the water of the heating circuit.

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Ident-Nr. 9000814B

The heater must:



- be operated with the fuel specified on the rating plate and at the nominal voltage specified on the rating plate.
- be taken out of operation by removing the fuse if smoke develops, if unusual burning noises are heard or if there is a smell of fuel. The heater must not be restarted until the unit has been checked by personnel duly trained by Webasto.
- be operated for 10 minutes at least once per month, with the engine cold and the fan set to the minimum setting. The heater must be inspected by a specialist at the beginning of the heating season or earlier.

Liability:



- Non-compliance with the installation instructions and the warnings contained therein will lead to the exclusion of all liability by Webasto. The same also applies if repairs are not undertaken by professionals or without using genuine spare parts. This invalidates the type approval for the heater and its homologation / EC type permit.



Operation of the heater

The heater can be started via the timer or Telestart unit, depending on its configuration. Before switching on the heater, the vehicle heating must be set to "warm". The heater fan in the vehicle should be set to the 1st speed in the case of a 3-speed fan and to the 2nd speed in the case of a 4-speed fan. Fans with infinitely variable speed should be set to at least 1/3 of the fan performance.



NOTE:

We recommend that the heating time be set in accordance with the driving time.
 Heating time = driving time
 Example: For a journey lasting approx. 20 minutes (one way), the duty period should not exceed 20 minutes.

If the optional summer / winter switch has been installed for the heater, it must be set in accordance with the time of year. In this case, the heater will heat the interior of the vehicle when set to the winter position  and merely operate the vehicle fan to ventilate the interior of the vehicle when set to the summer position .

Setting the duty period

The next duty period is called up by pressing the OFF button.
 To save the setting:
 - No button pressed for 10 seconds or
 - press the ON button.



Restore default setting

Simultaneously press both the ON and the OFF button for approx. 10 seconds, until the LED goes out.

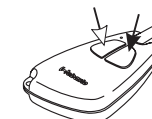
Default setting: Heating mode, 30 minutes.



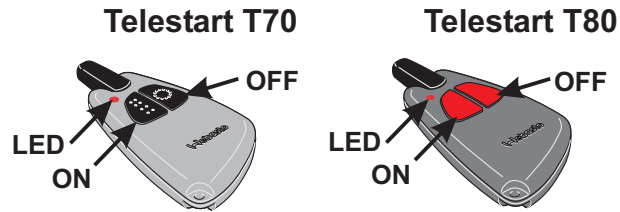
Check batteries

Press the ON or OFF button.

or



Batteries	LED	Action
OK	Lights up red (heating) or green (ventilation) for 0.5 seconds after 1 second	
Low	Flashes orange for 3 seconds after 1 second	- Heat batteries to over 0 °C - Replace batteries as soon as possible
Empty	Lights up orange for 5 seconds after 1 second	- Heat batteries to over 0 °C - Replace batteries



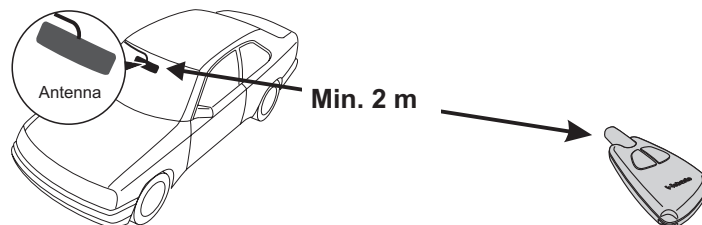
General

The Webasto heaters – Thermo Top, Thermo Top T, Thermo Top C and Thermo Top E – as well as the vehicle fan can be switched on and off under remote control from a distance of up to 600 metres with the Webasto Telestart T70/T80.

A mode change must be made on the transmitter in order to switch on the vehicle fan (ventilation of the vehicle).

The duty period after switching on via the transmitter is limited by the receiver. The maximum range can be reached in open country. A shorter range must be expected in built-up areas.

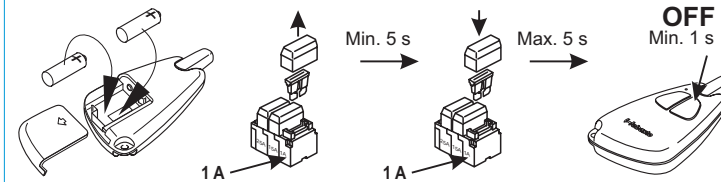
- NOTE:**
! A minimum distance of 2 metres must be maintained between the handheld Telestart transmitter and the vehicle antenna
 or
 the antenna on the handheld transmitter must be shielded with the other hand when
- learning the Telestart handheld transmitter,
 - switching the heater on and off,
 - switching the vehicle fan on and off.



Learning the Telestart transmitter

1. Place batteries in the battery compartment of the transmitter.
2. Remove 1 A fuse (black) from the heater fuse holder (interrupt power supply).
3. Wait for at least 5 seconds.
4. Refit fuse in heater fuse holder and press OFF button on transmitter for at least 1 second within the next 5 seconds.
5. Learning is complete.

A second or third handheld transmitter can be learned in the same way.



Check mode

Press and hold ON and OFF buttons simultaneously.

LED lights up:
red = Heating mode
green = Ventilation mode



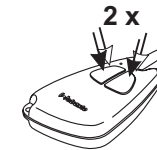
LED goes out:
 - when the buttons are released or
 - after 10 seconds.

Change mode

Simultaneously press ON and OFF buttons twice within one second.

The LED changes colour when the buttons are pressed for the second time and remains lit until the buttons are released.

The selected mode (heating or ventilation) is only set in the receiver when the next signal is transmitted.



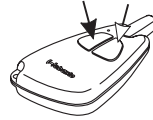
Switch heater or ventilation on

Hold handheld transmitter with antenna pointing straight upwards and press the ON button for 1 or 2 seconds.



NOTE:

In heating mode, the vehicle heating must be set to "warm" before leaving the vehicle.
In both heating and ventilation modes, the vehicle fan must be set to the 1st speed in the case of a 3-speed fan and to the 2nd speed in the case of a 4-speed fan. Fans with infinite adjustment must be set to at least 1/3 of the fan performance.



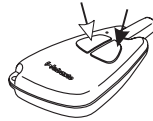
Switch heater or ventilation off

Via handheld transmitter:

Hold handheld transmitter with antenna pointing straight upwards and press the OFF button for 1 or 2 seconds.

Via timer:

Press the direct heating button twice.



Check and set duty period

The duty period of the heater or vehicle fan can be set on the transmitter in 10-minute increments. The duty period is set to 30 minutes as the manufacturer's default setting.



NOTE:

The duty period must be set to 20 or 30 minutes in heating mode for the Thermo Top and Thermo Top T heaters.
The heating time should correspond to the driving time for Thermo Top C and Thermo Top E heaters.
For instance, if the vehicle is used for driving to and from work.
We recommend that the duty period be set to 30 minutes for a journey lasting approx. 30 minutes (one way).

Check duty period

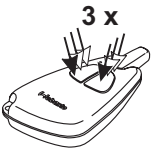
Simultaneously press the ON and OFF buttons three times briefly in succession within one second.



NOTE:

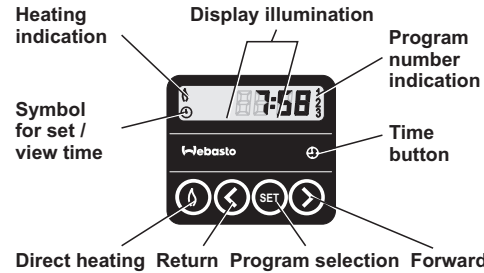
The first flashing pulse output simultaneously with the third actuation of the two buttons must also be counted.

The LED flashes in accordance with the set duty period.



Number of flashes	1	2	3	4	5	6
Duty period	10 min.	20 min.	30 min.	40 min.	50 min.	60 min.

3-program timer



**Note
changeover
from summer
to winter time
(and vice versa)**

General	The time at which heating starts can be set precisely between "1 minute" and "24 hours". Three switch-on times can be programmed, but only one can be activated at any one time. Maximum duty period: 60 minutes.
Switching on	Manually: by pressing the direct heating button ① Automatically: by preprogramming the time at which heating starts The program number appears in the display and the display lights up.
Switching off	Manually: by pressing the direct heating button ① Automatically: by limitation of the duty period. The display lighting goes out.
Set time	Press the time button ④ and then forward ⑤ or back ⑥.
View time	Press the time button ④.
Program start of heating	Press ⑤ button. Within 10 seconds, press either forward ⑤ or back ⑥ until the time at which heating is to start appears on the display. If a different program number is required, press the ⑤ button within 10 seconds in each case.
Delete program	Briefly press the ⑤ button.
Select programmed time	Press the ⑤ button within 10 seconds in each case until the program number with the required time is displayed.