

Operating Instructions

Air Top Evo 3900

Air Top Evo 5500



Feel the Drive

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Servicing and safety instructions

1. Caution: When heater is in use, the surface of the hot air outlet may become hot to the touch. Contact with skin may cause burns.
2. Product produces temperatures high enough to ignite surrounding combustible materials such as inflammable liquids, gases, vapor, and other combustible matter. The heater must be switched off when loading or unloading inflammable materials to prevent the risk of explosion.
3. The year in which the heater was used for the first time must be permanently displayed on the factory plate by deleting the inapplicable years from the plate.
4. **The heaters are not designed for heating hazardous substance transport compartments.**
5. Claims can only be made if it can be verified that the claimant has complied with the servicing and safety instructions.
6. **The heater must be switched off at filling stations and tank farms as a result of the risk of explosion.**
7. **The heater may not be operated in enclosed spaces (such as garages) as a result of the risk of poisoning and asphyxiation, even if a timer or Telestart remote is used.**
8. The heater must be checked by an expert at the latest at the start of the cold weather period.
9. In the event of long-lasting heavy smoke development, unusual combustion noises or a smell of fuel or if the heater suffers continuous fault cut-outs with error messages (flashing code), it must be shut down by removing the fuse and must not be reused until it has been inspected by Webasto-trained personnel.
10. **Wherever inflammable vapours or dust may form (for example in the vicinity of fuel, carbon, wood dust or cereal stores or the like), the heater must be switched off as a result of the risk of explosion.**

Servicing and safety instructions

- 11. The heat transfer unit on air heaters is exposed to very high thermal stress and must be replaced by a genuine Webasto spare part ten years after it is used for the first time.**

If exhaust lines pass through areas used by personnel, they must also be replaced by genuine spare parts after ten years.

12. The diesel fuel specified by the vessel manufacturer is suitable for use in the Air Top Evo 3900 D/Air Top Evo 5500 D. Class EL heating oil (not L heating oil) may also be used as long as it complies to the normal quality available on the German market pursuant to DIN 51603.

The Air Top Evo 3900 D/Air Top Evo 5500 D heaters are also licensed for use with PME (bio-diesel), which complies with DIN EN 14214.

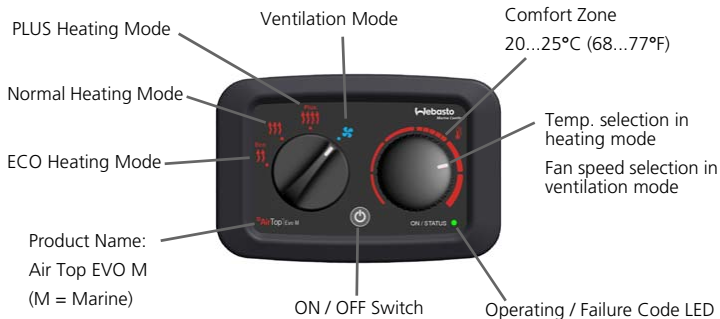
We know of no negative influences due to additives.

If fuel is extracted from the vessels tank, follow the additive instructions issued by the vehicle manufacturer.

If you change to low-temperature fuel, the heater must be operated for approx. 15 minutes so that the fuel system is filled with the new fuel.

13. The temperature in the area around the heater unit must not exceed 85 °C (storage temperature). If the temperature exceeds this level there is a risk of permanent damage to the electronics systems.
14. Non-compliance with the installation instructions and the warnings contained therein will lead to the exclusion of all liability by Webasto. The same applies if repairs are carried out incorrectly or with the use of parts other than genuine spare parts. This will result in the invalidation of the type approval for the heater unit, and therefore of its homologation/ EC type licence.
15. Keep the hot air inlet and hot air outlet free of dirt and foreign bodies. Soiled or blocked hot air lines may cause overheating, and therefore result in the overheating cut-out tripping.
16. To prevent mechanical parts seizing, the heater should be operated for approx. 10 minutes every four weeks.
17. Do not stand on the heater and do not place any heavy items on the heater or throw items at the heater.
18. Do not place any items of clothing, textiles or similar materials over the heater or in front of the hot air inlet and the hot air outlet.
19. The current of hot air in the heater must not be restricted or blocked by highly inflammable substances or materials such as rags, cleaning wool, etc.
20. The heater must not be cleaned with a high pressure cleaner.

Control Panel Air Top Evo MC04



General information

Using the Control Panel Air Top EVO MC04, The Air Top Evo heaters show their full functionality with the new user interface Air Top Evo M.

The control panel is to switch on/off, as well as to preselect the operation modes and the interior temperature. For technical data as well as references to the installation, see the installation instructions of the specific heater.

Operation

 Main switch ON / OFF

Switching on the heater

By pressing the main switch ON / OFF the heater is activated. After switching on, the main switch illuminates and the indicator "ON / Status" lights to confirm the heater operation.

Switching off the heater

By pressing the main switch ON / OFF again the heater operation is stopped.

After switching off, the lighting of the main switch is also off.

The indicator "ON / Status" goes off after approx. 3 minutes (cooling down of the heater).

Mode selector knob

With the mode selector knob you can select the desired functions of your heater by placing the index on the desired symbol.

- "Eco" mode reduces the electrical power consumption by reducing the max. heating power. Useful when saving the battery is more important than quick heating up.
- In the "Normal" heating the heater behaves like a standard heater.
- "Plus" increases the max. heating power by ~10%. It provides extra power for quicker heating up.
- In "Ventilation" mode the blower runs but the heater is off.

Temperature selector

You can adjust the desired interior temperature with the temperature selector. Preferably the temperature selector should be in the marked range of the scale (comfort range).

LED

The status LED lights green in normal heating mode. Blinking indicates failure code; see the following faults section.

Error code

Faultless operation:

The normal operation of the equipment is represented by the status indicator, illuminating green light.

After switching off the heater (main switch) the status indicator shows the normal cooling down process of the heater. After the heater has cooled down normally, the status indicator shuts off.

Fault:

During an operational fault a flashing code is displayed by the status indicator. This function enables a professional workshop to solve the fault in a fast way. In this case please visit a Webasto service station!

Actions in event of faults

If an error occurs, first check the fuse and plug connections to ensure that they are in proper condition and connected correctly.

If the actions described below do not rectify the error, have the heater checked by Webasto-trained personnel.

Heater unit cuts out automatically

Cause

No combustion after start and repeat start

Flame extinguishes during operation

Heater unit overheats and indicator flashes

Vehicle voltage too low

Remedy

Switch heater unit off (for at least 2 seconds) and then on again

Switch heater unit off (for at least 2 seconds) and then on again

Make sure that hot air can flow freely, allow heater unit to cool down, Switch heater unit off (for at least 2 seconds) and then on again

Charge battery
Switch heater unit off (for at least 2 seconds) and then on again

Heater unit emits black smoke

Cause

Combustion air and/or exhaust system blocked

Remedy

Check combustion air and exhaust system for blockage

Error code output on combination timer or control element

The error code is communicated by a series of flashes from the status LED in the bottom right corner of the bezel. After a sequence of 5 fast flashes the error code will be communicated by a series of long flashes; refer to the table below for code explanations.

Example:

F 03 =  Pause  Pause 

Error code	Meaning
F 00	Control unit error
F 01	No start (after 2 starting attempts)
F 02	Flame failure (at least > 3)
F 03	Undervoltage or overvoltage
F 04	Premature flame recognition
F 06	Temperature sensor interrupt or temperature sensor short circuit
F 07	Metering pump interrupt or metering pump short circuit
F 08	Fan motor interrupt or fan motor short circuit or fan motor overload or blocked
F 09	Glow plug interrupt or glow plug short circuit
F 10	Overheating
F 11	Overheating sensor interrupt or overheating sensor short circuit
F 12	Heater unit lock-out
F 14	Overheating sensor installed incorrectly
F 15	Setpoint generator short circuit

If serious faults, such as overheating or no start, occur frequently, the heater will be set to permanent fault lock-out (F 12) and cannot be restarted until it has been repaired by Webasto-trained personnel. See also heater lockout reset procedure below.

Heater Lockout Reset Procedure

Overview:

The control unit continuously monitors the heater operation. The control unit identifies errors on individual heater components and faults during operation. Should the control unit experience component errors and operational faults, the heater may be shut down.

Causes:

The heater is shut down (fault lock-out) if:

- No or incorrect start
- Temperature sensor defective
- Overheating sensor interrupt or short circuit
- Overheating sensor installed incorrectly
- Ceramic glow pin interrupt or short circuit
- Fan motor overload or blocked or short circuit or interrupt
- Error in the fuel metering pump or circuit
- Under voltage or over voltage for longer than 20 seconds.
- Control unit defective
- Overheating

Effects:

The fuel supply is stopped if the heater overheats.

The heater continues to run in the same way as if it is switched off manually.

After the heater stops the control unit may set in fault lock-out mode.

Heater Lock out Reset Procedure:

1. Using switch or standard timer control, turn heater on
2. Remove the main power connection to heater from battery or pull fuse for a minimum of 20 seconds.
3. Using switch or standard timer control, turn the heater off.
4. Reinstall main heater power connection where previously disconnected.

Rectify the cause of the fault.

IMPORTANT: Heater fault codes can be read using PC Diagnostics, however, the heater lockout reset must be manually performed using the procedure stated above.

If you have any questions, contact our technical support team at (800) 860-7866 or via email at: info-us@webasto.com



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