

Sunster TB10

Sunster TB10 8KW TOOLBOX Diesel Air Heater Instruction Manual

Model: TB10

1. PRODUCT OVERVIEW

The Sunster TB10 8KW TOOLBOX Diesel Air Heater is a portable heating solution designed for various environments including vehicles, RVs, campers, tents, garages, and homes. It features an integrated toolbox design for portability, dual power supply options (12/24V DC and 110-240V AC), quiet operation, smart APP control, and all-terrain adaptive performance with altitude compensation.

This manual provides essential information for the safe and efficient setup, operation, and maintenance of your diesel air heater.



Figure 1: Sunster TB10 Diesel Heater with key features.

2. SETUP AND INSTALLATION

2.1 Unpacking and Component Check

Upon receiving your Sunster TB10 Diesel Air Heater, carefully unpack all components and verify that all

accessories are present according to the packing list. Refer to the 'Product Information' section for a detailed list of included parts.



Figure 2: Included components for the Sunster TB10 Diesel Air Heater.

2.2 Power Supply Connection

The heater supports dual power options: 12/24V DC and 110-240V AC. Ensure the power cord is connected directly to the car battery for DC power. Do not connect it to main cable wires, cigar lighters, or fuse boxes, as this may lead to unstable power supply or machine malfunction.

- **DC Connection:** Connect the red wire (positive) and black wire (negative) directly to your vehicle's battery terminals.
- **AC Connection:** Use the provided AC-DC power adapter to connect the heater to a standard 110-240V AC power outlet.



Figure 3: Dual power supply options.

2.3 Exhaust and Intake Pipe Assembly

For safe operation, ensure the exhaust pipe is routed outdoors to prevent carbon monoxide buildup. The air intake and exhaust must be in different directions to avoid re-circulating exhausted air.

- **Exhaust Pipe:** Connect the flexible metal exhaust pipe to the heater's exhaust port. Secure it tightly with the provided clamp to prevent leakage.
- **Intake Pipe:** Connect the air intake pipe to the heater's intake vent. Secure it with a clamp.
- **Heat Protection:** Apply the heat protection sleeve to the exhaust pipe to reduce heat transfer.

RAPID ASSEMBLY FOR SAFER HEATING



1 No installation of intake pipe, fixed air filter at the bottom

2 Install exhaust pipes on the side, avoid the problem of exhaust pipe blockage

3 Exhaust pipe protective cover

Figure 4: Exhaust pipe and air filter assembly.

2.4 Hot Air Outlet Connection

Connect the hot air duct to the heater's air outlet. Fasten the joint securely with the iron loop (clamp).

2.5 Fuel Tank Filling

The integrated 6L fuel tank is located within the toolbox design. Open the fuel tank cap and carefully fill it with diesel fuel. Ensure the cap is securely closed after filling.

2.6 Control Panel Extension

The heater includes a 4-meter extension cable for the LCD control panel, allowing for indoor mounting and easier temperature monitoring and adjustment.

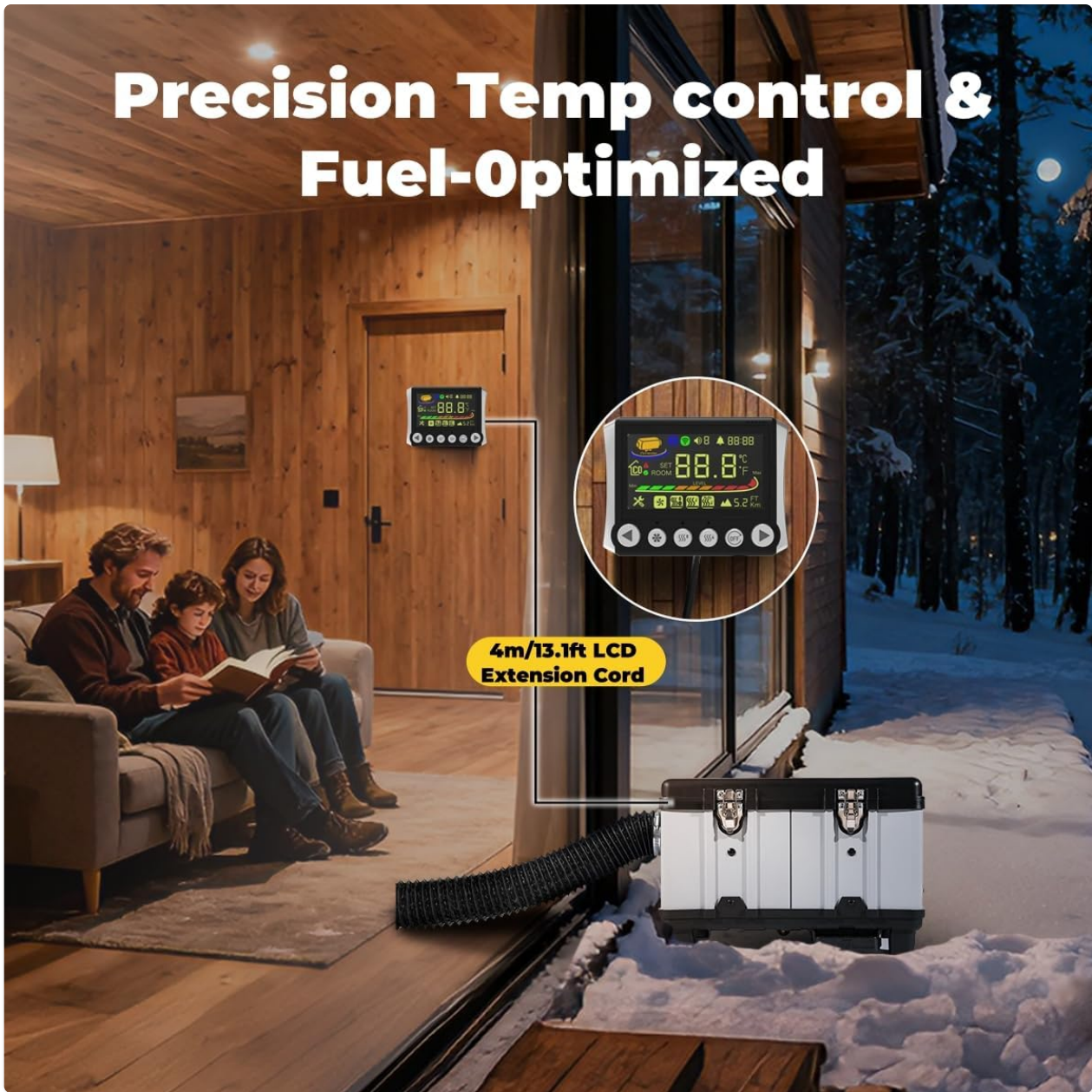


Figure 5: Extended LCD control panel for indoor climate control.

2.7 Installation Videos

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Video 1: HTB1 Installation Operation. This video demonstrates the installation process for a similar Sunster diesel heater model, covering pipe connections and initial setup.

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Video 2: Sunster Installation Operation. A general installation guide for Sunster diesel heaters, useful for understanding basic assembly steps.

3. OPERATING INSTRUCTIONS

3.1 Control Panel and APP Control

The Sunster TB10 Diesel Air Heater can be controlled via its integrated LCD display, a remote control, or a Bluetooth-enabled smartphone application. The smart app offers comprehensive control over temperature, timers, power levels, altitude mode, constant temperature, and ventilation mode settings.

THREE INTELLIGENT CONTROLS

Include adapter & power cable for wide applicability



Figure 6: Multiple control options for the heater.



Figure 7: LCD Monitor details and functions.

3.2 Automatic Start-Stop and Ventilation

The heater features an automatic start-stop function to maintain a constant temperature and optimize energy efficiency. The ventilation function helps keep fresh air circulating and maintains suitable temperature and air quality in enclosed spaces.

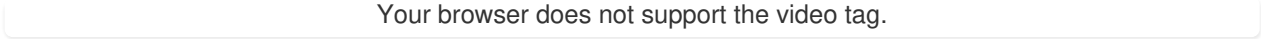
3.3 Adaptive Plateau Performance

The TB10 heater automatically adjusts its combustion for optimal performance at altitudes up to 5500 meters, ensuring full heat output and fuel economy in mountainous terrain.

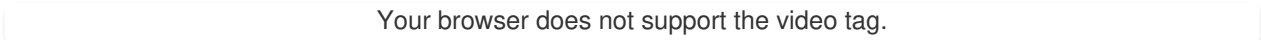


Figure 8: Smart APP control features.

3.4 Operating Videos



Video 3: Diesel Heater Display Video. This video demonstrates the functions and display of the diesel heater's control panel.



Video 4: A2302BH Switch operation video. This video provides detailed instructions on operating the heater's switch and various settings.

4. MAINTENANCE

Regular maintenance ensures the longevity and efficient operation of your diesel air heater. Always disconnect power before performing any maintenance.

- **Fuel Filter:** Periodically check and clean or replace the fuel filter to ensure clean fuel delivery.
- **Air Filter:** Inspect the air filter regularly and clean it as needed to maintain optimal airflow.
- **Exhaust System:** Ensure the exhaust pipe and muffler are free from blockages and leaks. Tighten all clamps.
- **General Cleaning:** Keep the exterior of the heater clean and free from dust and debris.

5. TROUBLESHOOTING

If you encounter issues with your Sunster TB10 Diesel Air Heater, refer to the following common troubleshooting tips:

- **Heater not starting:** Check power connections (DC/AC), ensure sufficient fuel in the tank, and verify the control panel settings.
- **No heat output:** Confirm the heater is in heating mode, check for fuel blockages, and ensure the air intake and exhaust are clear.
- **Excessive smoke:** This may indicate incomplete combustion. Check fuel quality, air intake, and exhaust for obstructions.
- **Unusual noises:** Inspect for loose components or obstructions in the fan or pump. The upgraded silent fuel pump should minimize ticking sounds.
- **Error codes:** Refer to the LCD monitor's fault display section (Figure 7) for specific error code meanings and solutions.

For persistent issues, contact Sunster customer support.

6. SPECIFICATIONS

Feature	Detail
Model	TB10 Diesel Air Heater

Power Output	8KW
Power Supply	AC110V, DC12V, 24V
Fuel Tank Capacity	6L
Fuel Consumption	0.16-0.45 liters per hour
Heating Area	20-25 square meters
Altitude Performance	Up to 5500 meters (adaptive)
Noise Level	35 dB (air duct outlet)
Special Features	Automatic start & stop, Dual Power Options, Toolbox Design, Upgraded Plateau motherboard, Ventilation function, Bluetooth APP control
Item Weight	9.84 kg
Parcel Dimensions	46.5 x 37 x 31.5 cm

7. WARRANTY AND SUPPORT

For warranty information, product support, or technical assistance, please contact Sunster direct. Refer to your purchase documentation for specific warranty terms and contact details.

Manufacturer: Sunster

Place of Business: RenQiuShiXinSiTeQiChePeiJian Co., Ltd CN-Dajiang Village, Liangzhao Town, Renqiu City, Hebei Province, China

Contact: sunster202@163.com