

## VEVOR XMZ-D2

# VEVOR 12V 2KW Diesel Air Heater Instruction Manual - Model XMZ-D2

Brand: VEVOR

Model: XMZ-D2

## 1. PRODUCT OVERVIEW

This manual provides detailed instructions for the VEVOR 12V 2KW Diesel Air Heater, designed to provide efficient and reliable heating for various vehicles and spaces. Please read this manual thoroughly before installation and operation to ensure safe and optimal performance.

### Key Features:

- **Efficient Heating:** 2KW heater power, 12V rated voltage, applicable area 10-15m<sup>2</sup>. Rapid heat production and transfer with sandblasted aluminum heat exchanger, ensuring comfortable temperatures within 10 minutes.
- **Smart Control:** Upgraded Bluetooth control via app (up to 30m distance), 10m remote control, and LCD panel. Adjustable temperature from 8°C to 36°C to meet specific needs.
- **Automatic Altitude Compensation:** Suitable for altitudes up to 5500 meters, automatically adjusts operation based on altitude without manual intervention.
- **Low Energy Consumption:** Precision low-noise fuel pump consumes less than 3.9L per night (0.12L-0.26L/h). A 10L fuel tank provides up to 38 hours of continuous heat.
- **Safety Features:** Equipped with a high safety system including constant temperature control, timing function, voice broadcast, preheating, and overheating protection ( $\geq 270^{\circ}\text{C}$ ), ensuring a safe and comfortable experience.

## 2. SETUP (INSTALLATION)

### 2.1 Unboxing and Component Identification

The VEVOR 12V 2KW Diesel Air Heater comes with the main unit and a comprehensive set of accessories for installation. Carefully unpack all components and verify against the packing list.

# UNDER 1 GAL DIESEL FOR 1 NIGHT



Energy-efficient  
Fuel Pump



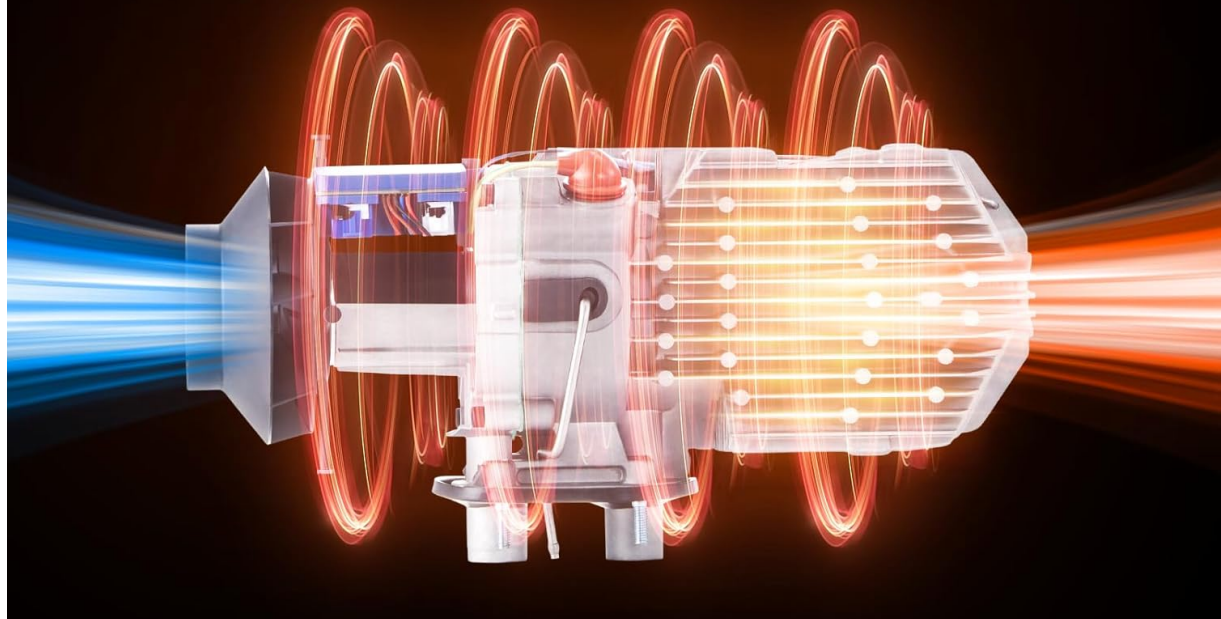
Aluminum  
Body



100%  
Combustion

VEVOR: 0.12L-0.26 (L/h)

Other: 0.26L-0.4 (L/h)



*Figure 1: Main unit and included accessories.*

The package includes the main heater unit, fuel tank, exhaust silencer, mounting plate, user manual, remote control, LCD panel, wire harness, fuel pump, fuel filter, air filter, inlet and outlet pipes, cable zip ties, installation kit, fuel hose, fuel pump clip, and air outlet grille.

## 2.2 Mounting the Heater

Locate a suitable installation position that is stable, level, and allows for proper air circulation and exhaust routing. Secure the heater unit using the provided mounting plate and screws.



Figure 2: Heater unit secured to a mounting plate.

## 2.3 Fuel System Connection

Connect the fuel hose from the fuel tank to the fuel pump, and then from the fuel pump to the heater unit. Ensure all connections are secure and leak-free. The fuel pump connector should be oriented towards the outlet for proper fuel flow.

# PACKAGE CONTENT



Figure 3: Fuel pump and lines connected to the heater.

**Important:** When connecting the fuel hose, ensure the fuel tank-to-pump hose does not exceed one meter in length. The pump-to-machine hose can be 2, 3, or 4 meters long. The fuel pump should be installed at a 45° angle with the discharge port facing upward.

## 2.4 Air Intake and Exhaust System

Install the air intake pipe with the air filter and the exhaust pipe with the silencer. Ensure the exhaust pipe is directed away from the vehicle's interior and is not excessively bent to prevent carbon buildup. The inlet and outlet pipes should face different directions to avoid exhaust gases being drawn back into the intake.





*Figure 4: Air intake and exhaust pipes attached to the heater.*

**Warning:** Avoid crushing, deforming, or excessively bending the inlet pipe, as this may limit oxygen intake and lead to carbon buildup. When installing the outlet pipe, ensure that the bend angle exceeds  $110^{\circ}$  to prevent residual fuel from trapping and causing carbon buildup. The outlet pipe outlet must be facing down. When installing the inlet pipe and outlet pipe, make sure they face different directions. Otherwise, exhaust gases expelled from the outlet pipe risk being drawn back into the inlet pipe, which can also lead to carbon buildup.

## 2.5 Electrical Connections

Connect the main power supply cable (red for positive, black for negative) to the battery. Connect the display cable and fuel pump cable to their respective ports on the heater unit. Ensure all electrical connections are tight and secure.

# Wide Application



Figure 5: Electrical wiring connected to the heater unit.

Video: Detailed installation guide for the 7kW Diesel Water Heater, including electrical connections and important considerations.

## 3. OPERATING INSTRUCTIONS

### 3.1 Initial Startup (Fuel Priming)

After completing all connections, do not immediately start the heater. It is crucial to prime the fuel system first to prevent startup failures and smoke emission.

1. Press and hold the first button on the LCD display to activate rapid oil pumping.
2. Continue this process until all air is purged from the fuel hose and the hose is filled with oil.
3. Once oil flows out of the outlet, connect the fuel hose to the machine.

### 3.2 Control Methods

The heater offers multiple convenient control options:

# 3 INTELLIGENT CONTROL METHODS



Figure 6: Various control methods for the diesel air heater.

- **Bluetooth App:** Download the dedicated app to control the heater from a distance of up to 30 meters. This allows for convenient preheating before entering your vehicle.
- **Remote Control:** Use the provided remote control for operation within a 10-meter range.
- **LCD Panel:** The integrated LCD panel on the unit allows for direct control and monitoring.

## 3.3 Temperature Adjustment

The heater features automatic temperature regulation. You can adjust the desired temperature between 8°C and 36°C using any of the control methods. The system will automatically maintain the set temperature, adjusting the heating output as needed.

## 3.4 Altitude Mode

When operating at altitudes above 1,500 meters, activate the plateau mode via the LCD display. Failure to use this mode at high altitudes may lead to carbon buildup and reduced efficiency. The automatic altitude compensation ensures efficient combustion and prevents issues in high-altitude environments.

## 3.5 Fuel-Saving Mode

The plateau mode button also functions as a fuel-saving mode for milder weather conditions. Using this mode can reduce fuel consumption by up to 45%, optimizing fuel efficiency when full heating power is not required.



## 4. MAINTENANCE

### 4.1 Regular Checks

Routine inspection and cleaning are essential for the longevity and safe operation of your diesel air heater.

- Regularly inspect all fuel lines, air intake, and exhaust pipes for any damage, blockages, or leaks.
- Ensure all electrical connections remain secure and free from corrosion.
- Clean the air filter periodically to maintain optimal airflow and prevent dust accumulation.

### 4.2 Carbon Deposit Cleaning

The heater has an automatic carbon deposit cleaning feature. If you notice reduced performance or unusual smoke, carbon buildup might be an issue. Refer to the troubleshooting section or consult customer support if the automatic cleaning does not resolve the problem.

## 5. TROUBLESHOOTING

### 5.1 Display Error Codes

The LCD display integrates the instruction manual, providing direct troubleshooting guidance for error codes. This allows you to diagnose and resolve common issues without needing to cross-reference external error code lists.

- For example, if a 'Sensor Error' occurs, the display will show step-by-step instructions to check the sensor contact or replace it.
- Similarly, for issues like low fuel or motor failure, the system will provide specific guidance on the display.

### 5.2 Voltage Drop Issues

Proper electrical connections are vital to prevent significant voltage drops that can impair heater performance.

- To determine if the power cable is excessively long or improperly connected, activate the display and record the voltage immediately upon power-on.
- Keep monitoring until fuel pumping starts, then check how much the voltage drops.
- A normal voltage drop is within 1 volt. If it exceeds 1.5 volts, it indicates that the wire connected to the negative terminal is either too long or not properly connected. This will affect the spark plug's power, leading to failed startup.

## 6. PRODUCT SPECIFICATIONS

Attribute	Specification
Brand	VEVOR
Model	XMZ-D2
Heater Power	2 KW
Rated Voltage	12 V
Applicable Area	10-15 m²



Fuel Consumption	0.12 L - 0.26 L/h
Fuel Tank Capacity	10 L
Temperature Adjustment Range	8°C - 36°C
Overheating Protection	≥270°C
Product Dimensions	34 x 11.5 x 14 cm
Item Weight	5 Kilograms
First Available Date	11 August 2023

## 7. WARRANTY AND SUPPORT

---

For warranty information, technical support, or service inquiries, please contact VEVOR customer service through their official website or the retailer where the product was purchased. Please have your model number (XMZ-D2) and purchase date available when contacting support.