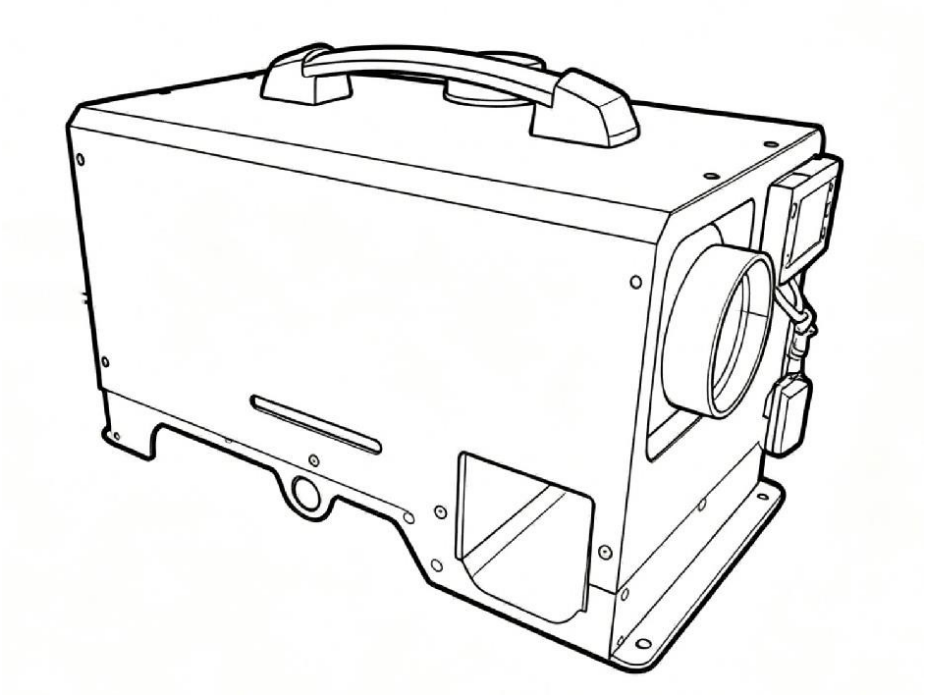
Pro-Tech TOOLS

Pro-Tech TOOLS 8kW 12/230V Battery-powered Diesel Heater



User manual

Translation of the original manual

Read the instructions carefully before use and use the product correctly. After reading, keep this user manual so that the operator can refer to it at any time.

WARNING!

1. Do not use the heater in areas where flammable vapours may be present. Using the heater in such conditions may cause a risk of explosion and fire.
2. During operation and maintenance of the appliance, it is forbidden to smoke cigarettes, approach hot or moving objects, or use tools that may cause sparks.
3. Ensure adequate ventilation in the room whilst the heater is in operation. The heater should only be used in a well-ventilated room with regular air exchange (at least twice an hour, or more frequently). Inadequate ventilation can lead to a lack of oxygen, resulting in poor combustion and the formation of carbon monoxide, which can cause serious or even fatal poisoning.
4. Minimum ventilation requirements: The minimum volume of the heated room must be at least 140 m^3. The minimum cross-sectional area of the ventilation duct must be at least 350 cm^2.
5. In the event of a fuel oil leak, switch off the power supply first. Then clean up the spill and take measures to prevent further leaks. Do not use any equipment that could cause sparks!

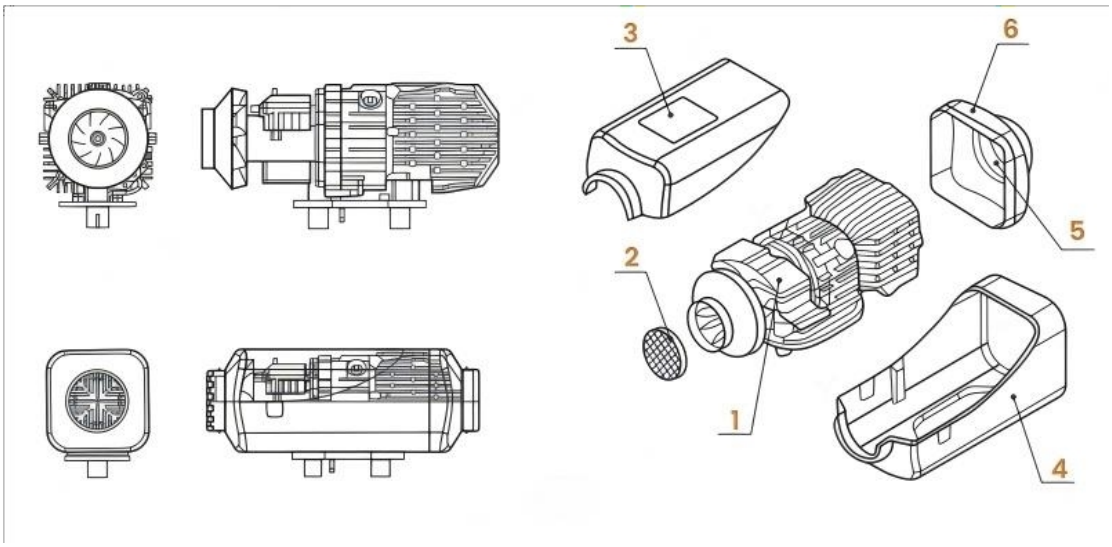
WARNING!

1. Do not fill the heater with fuel of unknown origin.
2. Do not use aerosol products in the room where the heater is located. Gas released from the aerosol during use may cause a fire or explosion.
3. Never use the heater in areas where flammable materials or combustible dust, such as paper particles, wood dust or fibrous waste, are present. Exposure of the heater to such materials may cause ignited particles to escape and cause a fire.
4. Do not cover the heater's air intake or outlet. Fire hazard.
5. Do not make unauthorised modifications to the unit's design, as this may cause a malfunction or even a fire.
6 Do not expose the appliance to rain or snow, and avoid using it in conditions of high humidity. Disconnect the appliance from the mains before carrying out maintenance or testing.

WARNING!

1. The use of heaters near flammable materials is prohibited. To prevent fires, keep a clear space around the appliance during operation. Minimum clearances: 3.5 m from the heater outlet (front), 2.5 m from the air intake (rear), 2 m on both sides and 2 m above the unit.
2. While the heater is in operation, ensure that the surface on which the appliance is placed does not overheat. Warning: Fire hazard.
3. Do not refuel the unit whilst it is in operation. Switch off the unit before refuelling. Refuelling whilst the heater is in operation may cause a fire.

Heater construction



1. Motor 2. Intake cover 3. Top cover 4. Bottom cover 5. Air outlet 6. Rear cover (casing/cover housing)

Installation

The heater should be installed inside the vehicle with sufficient space for air flow (particularly for the air intake) and with sufficient working space to allow for easy removal of the glow plug and control unit. The heater may be installed in the vehicle cabin provided the cabin height does not exceed 1.5 m. The fuel supply, combustion air intake and exhaust systems must be installed outside the vehicle cabin.

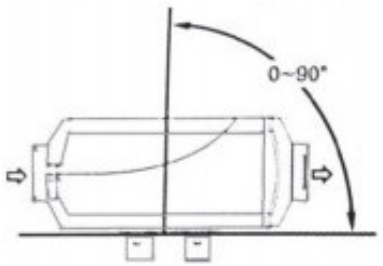
All assemblies must be secured to prevent components from becoming loose.

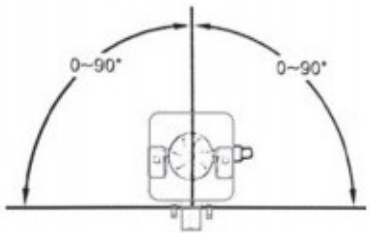
After installing the heater, check that the fan cover does not touch adjacent components. Use the gasket supplied in the kit during installation. Replace the gasket with a new one when re-installing. The recommended installation positions are shown in the diagrams below.

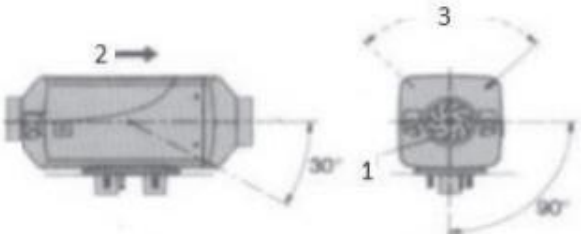
The surface on which the heater is to be installed should be flat and smooth (surface unevenness of up to 1

mm is permitted). The permitted angles of inclination for the heater are shown in the figure.

The unit should be tilted at an angle of 30° (the hot air flow should be directed downwards). If no other configuration is available, the heater may be positioned at a 90° angle along the longer axis (the exhaust pipe and spark plug should point upwards). For correct installation of the heater, use all the 4M6 screws supplied in the kit.





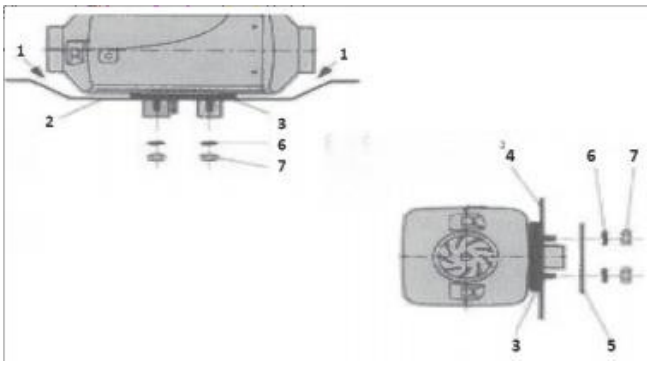


Correct heater configuration:

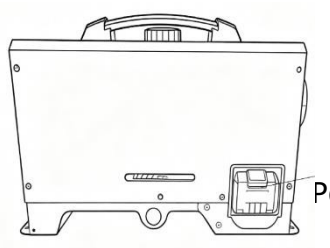
1. Air intake
2. Spark plug position
3. Airflow direction.

Heater installation instructions

1. Ensure there is sufficient space between the heater and the vehicle floor. Also check that the fan operates freely.
2. The mounting surface should be level
3. Sealant should be applied
4. The wall of the vehicle, or the room where the heater is installed, should be level
6. Mounting plate
7. Washer
8. M6 hex nut



Check the heater for any damage caused during transport. Place the unit in a suitable location with adequate ventilation. Ensure sufficient clearance. Connect the 21V battery.



Positioning the 21 V battery

Connecting the heater to a 21 V DC battery



Control panel



Switching on: Press the power button briefly to switch on the device; 'ON' will appear on the screen along with the gear position, indicating that the device has switched on normally.

Switching off: Briefly press the power button to switch the device off; 'OFF' will appear on the screen, indicating that the device has switched off normally.

Speed setting: When switched on, briefly press the up/down speed button to move to a higher/lower speed setting, P1–P5. The speed setting has a memory function and, the next time the device is switched on, it will automatically return to the speed setting that was last selected.

Mode switching: When switched on, briefly press the OK button or press and hold the on/off button to switch between speed and constant temperature modes (10 ℃ – 35 ℃).

Search function: When the unit is switched on, briefly press the settings button to cycle through the display of the cabinet temperature, voltage, fan speed and timer-off time. The altitude is displayed in the top left corner (used in conjunction with the Plateau base plate).

Timer function: When the unit is switched off, hold down the OK button for 2 seconds to enter the timer on/off function.

The first setting is to switch on after a few hours; press the up/down cogwheel button to set the time, press the OK button to confirm, and proceed to the second setting for the switch-off timer.

Set the device to switch off automatically after a few hours of operation; press the up/down cogwheel button to set the time and, after confirming with the OK button, a countdown to the switch-on time will appear on the screen.

At this point, press and hold the OK button again to cancel the previously set on/off time and reset it. When

switched on: Press and hold the OK button for 2 seconds to enter the timed switch-off function.

After setting the speed control button to a few hours, the appliance will switch off automatically. Confirm with the OK button.

Key shortcuts:
Remote control pairing: In the off state, press the speed down button for 3 seconds to enter remote control pairing (Y01); the countdown lasts 10 seconds; press any button on the remote control to complete pairing successfully.

Manual diesel refuelling:
When the machine is switched off, press the up and down buttons simultaneously for 5 seconds to enter the remote control diesel pumping mode (YAP). At this point, press the plus button on the remote control to start pumping diesel and press the minus button on remote control to stop fuel dispensing.

Function selection: When the unit is switched off, press and hold the power button for 2 seconds and the screen will alternately display

- --->on (normal start-up)
- --->AP (automatic fuel dispensing function)
- --->FAN (exhaust function)
- --->Y01 (remote control pairing)
- --->YAP (remote-controlled fuel pump)

- --->SET (configuration)
- --->on (normal start)

Automatic pump start (AP): AP appears on the display. Release the button, preheat the glow plug for 1 minute and start pumping diesel. Once the diesel line is full, the machine will automatically ignite and switch to normal combustion mode.

Exhaust function (FAN): FAN appears on the display. Release the button and Fn1 appears on the display. The fan starts independently and Fn1-Fn3 can be set. The exhaust function provides ventilation for the cab.

Remote control pairing (Y01): Y01 appears on the display. Release the button and a 10-second countdown appears on the display. Press any button on the remote control within 10 seconds and the remote control pairing is successful.

Diesel pump remote control (YAP): YAP appears on the display. Release the button and 666 appears on the display, meaning this function will switch off after 666 seconds.

Method 1: Press the plus button on the remote control to start fuel dispensing and press the minus button on the remote control to stop fuel dispensing.
Method 2: Press the up arrow button to start pumping diesel and press the down arrow button to stop pumping diesel.

Note: This function does not support ignition. Always monitor the fuel level in the fuel line and stop pumping when it is full.

SET function (SET): SET will appear on the screen; release the button, press the up and down buttons to adjust the setting, briefly press the SET button to confirm; 12U/24U will appear on the screen (voltage setting, switch between 12U and 24U using the up and down buttons, press the SET button briefly to confirm).

- -->16/20/22/24/28/32 (diesel pump configuration – switch using the up and down buttons, briefly press the SET button to confirm).
- --->P2.0/P3.0/P3.6/P4.0 (power supply configuration – switch using the up and down arrow keys, press the SET key briefly to confirm).
- --->SAV (press the Set button briefly to confirm; successful save; configuration takes effect).

Message code	Description	Message code	Description
F0	Main control board Fault/replacement	F9	Spark plug short circuit / replacement spark plug
F1	Ignition fault/check oil circuit	F10	Overheating of aluminium body/air duct check
F2	Flame extinguishing during operation/check oil circuit/check for air intake blockage	F11	Open circuit or short circuit in the aluminium temperature sensor
F3	Low voltage or overvoltage fault	F12	Ignition circuit open Spark plug/replace spark plug
F6	Circuit break or short circuit intake air temperature sensor, overheating	F13	Insufficient power supply power supply/check the power supply or inverter
F7	Open circuit in the oil pump, or short circuit	F16	Communication fault between the switch and the motherboard/troubleshooting cable harness faults
F8	Open circuit in the motor, or short circuit, fan blocked		

Technical specifications

Product code: PT41979
Model: WH-3.6F
Power: 8 kW
Tank capacity: 5L
Power supply: 12V DC / 230V~50Hz AC
Battery: 21V 4Ah 84Wh (optional)
Temperature control: YES
Protection rating: IPX0