



Installation Guide

Air Bluetooth



ECE 122R - 000056
ECE 10R - 025849

Welcome to the Nordkapp® Air diesel air heater. This guide will walk you through the safe and proper installation and operation of your unit.

Please read all instructions carefully before beginning installation or use.

Important Safety Instructions

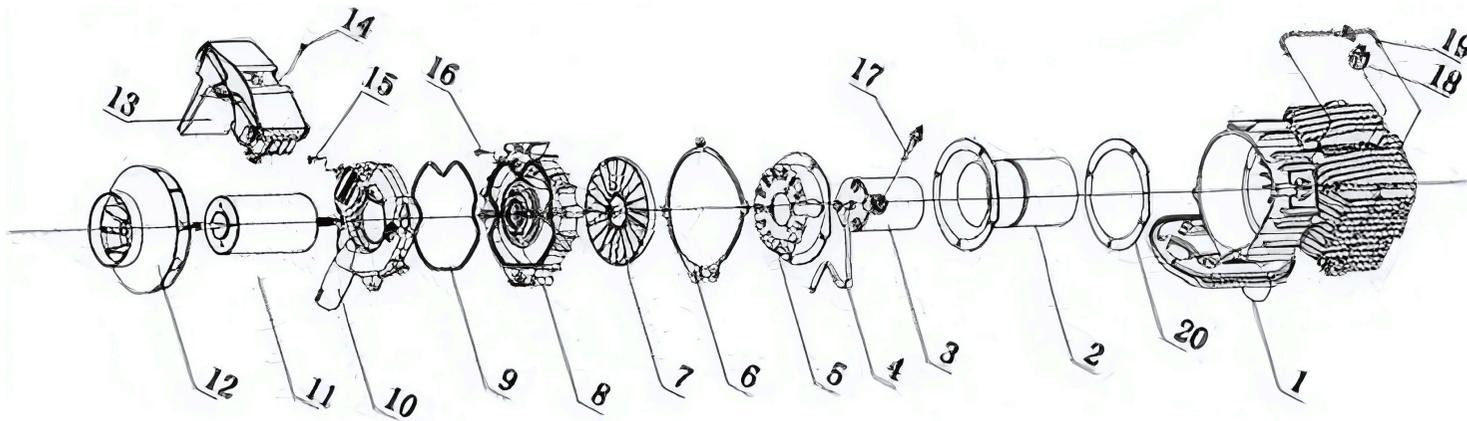
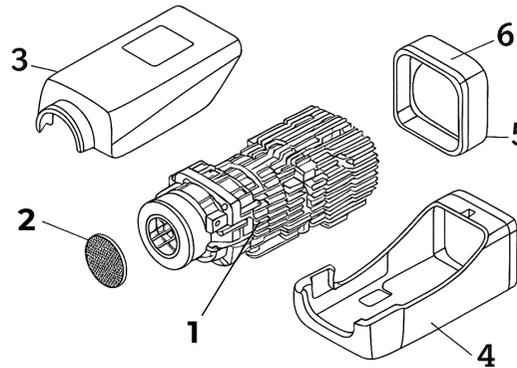
 Follow these precautions to avoid injury or damage:

- Do not use biofuels. Use only EN590 standard diesel.
- Do not use the heater to dry people or animals.
- Do not cover the heater, air intake, or air outlet.
- Exhaust pipe gets hot. Do not install near flammable materials or fuel system components.
- Turn off the heater before refueling or maintenance.
- Do not use the heater in areas with flammable vapors or materials (e.g., gas stations, storage sheds).
- Ensure proper ventilation at the installation site.
- A fire extinguisher must be present in the vehicle.
- Disconnect the heater from the battery before repairs or welding.
- Never connect or disconnect plugs while the device is operating.
- Use only parts and accessories approved by the manufacturer.
- This heater is not intended for uninterrupted, continuous use.

NORDKAPP™ Air-Heater Installation

Structure Overview

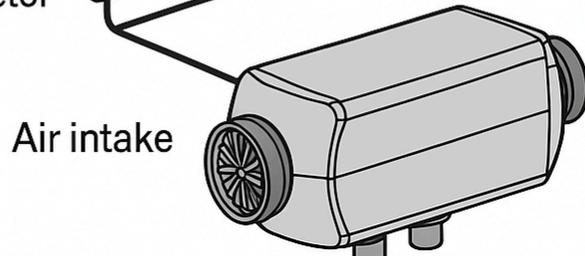
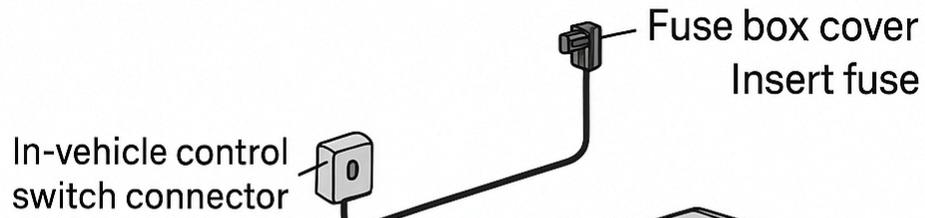
- 1.Engine
- 2.Air intake
- 3.Upper protective cover
- 4.Lower protective cover
- 5.Air outlet
- 6.Rear protection cover



- | | | |
|---------------------------|----------------------------------------|------------------------|
| 1.Exhaust pipe | 7. Fan blades | 14. Adjustment screws |
| 2.Combustion chamber pipe | 8. Fan housing | 15. Adjustment screws |
| 3.Combustion chamber | 9. Gasket | 16. Adjustment screws |
| 4.Fuel line | 10. Combustion chamber air intake pipe | 17. Igniter |
| 5.Air intake guide | 11. Fan motor | 18. Temperature sensor |
| 6.Gasket | 12. Hot air fan | 19. Sensor bracket |
| | 13. Control panel | |

Fuse box cover
Insert fuse

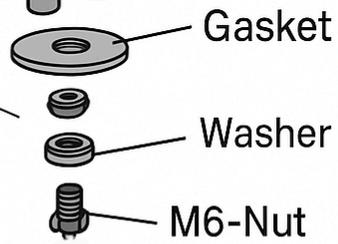
In-vehicle control
switch connector



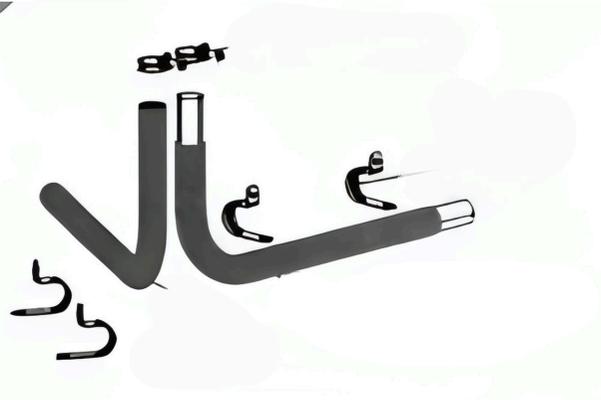
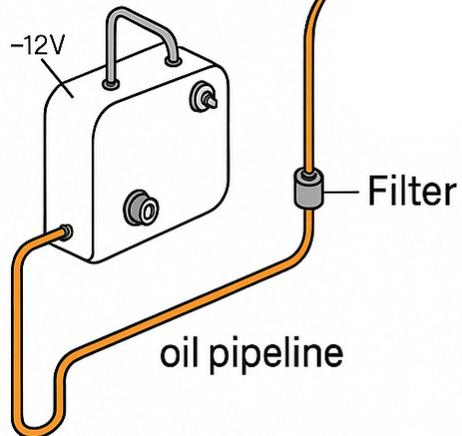
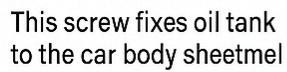
Gasket

Washer

M6-Nut



This screw fixes oil tank
to the car body sheetmetal



Site Selection

Choose an installation location with:

- At least 50 mm clearance for air intake
- At least 150 mm clearance for air outlet
- Protection from water, impact, and excessive heat
- Splash protection if installed outside
- Unobstructed airflow if installed inside
- Proper exhaust placement in boats to avoid water ingress during tilt

Required Tools and Materials

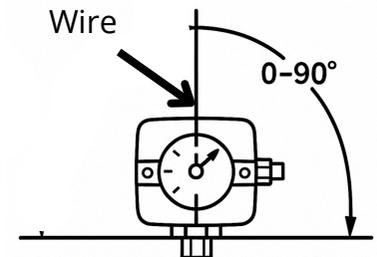
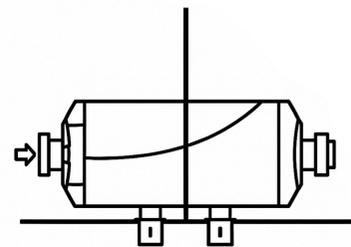
- Drill and M6 drill bit
- Screwdriver or socket wrench for M6 screws
- Wire cutters
- Fire extinguisher (mandatory in vehicles)

Mounting the Heater

1: Choose the Location

- Flat, dry, unobstructed
- Not exposed to luggage or the elements
- Flat mounting surface (max deviation 1 mm)
- The recommended mounting position for the heater is with the pipes pointing downwards.
- However, if you wish to mount the heater on its side, the line coming from the motherboard should be on top. Please note that mounting on its side makes the heater more susceptible to fuel leaks.

Recommended installation position



2: Prepare the Surface

- Clean of grease and dust
- Place the included gasket between the mounting surface and heater

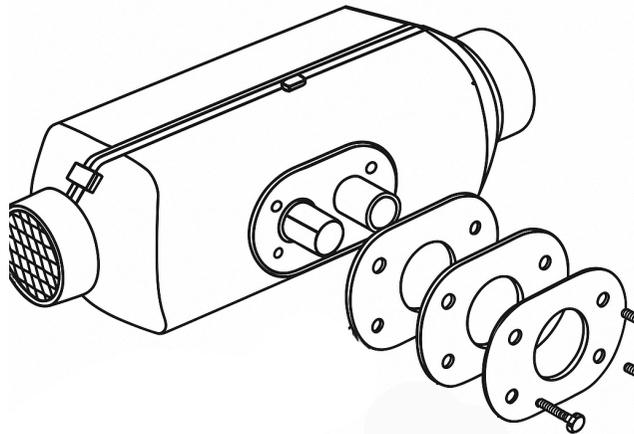
3: Drill Mounting Holes

Aseta mukana toimitettu pohjalevy asennuspinnalle ja merkitse ruuvien paikat.

- Use the supplied base plate to mark hole positions
- Drill four holes for M6 screws or use existing holes

4: Secure the Heater:

- Place heater on the base plate
- Tighten screws evenly
- Ensure fan blades spin freely (test manually)



Fuel System Installation

1: Select Fuel Tank

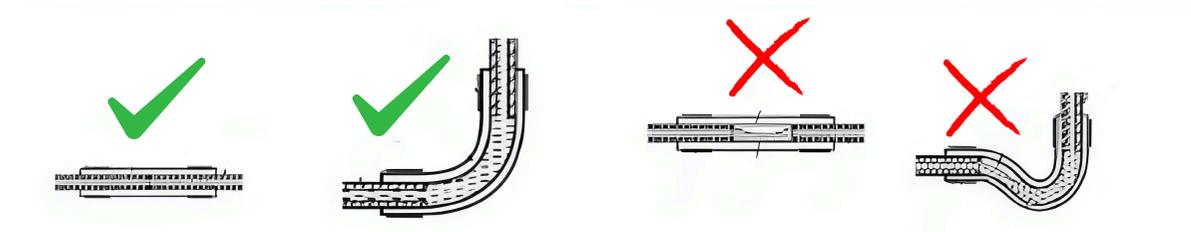
- Use the included intake pipe to connect to the vehicle's fuel tank (preferred method)
- If using a separate tank (not included, sold separately), install it outside or in a protected, non-cabin area

2: Install Suction Pipe

- Insert pipe into tank, 30–40 mm from bottom to avoid sediment
- Seal connection properly

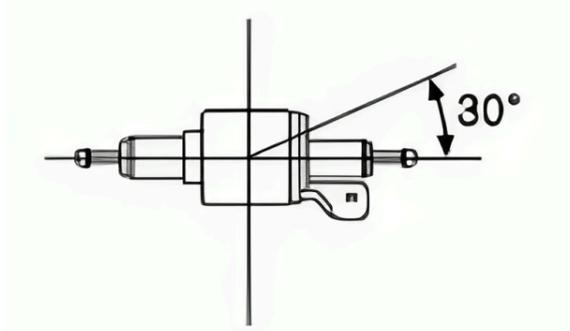
3: Route Fuel Line

- Use included fuel-resistant tubing
- Max 1 m from tank to pump, 4 m from pump to heater
- Avoid sharp bends and air pockets



4: Install Fuel Pump

- Mount at 15–35° angle (arrow indicates flow direction)
- Use vibration-damping bracket
- Place fuel filter on pump's inlet side
- Keep away from heat and water



5: Connect and Secure Lines

Use rubber seals and clamps at all joints:

- Tank → Line
- Line → Filter
- Filter → Pump
- Pump → Heater

Insert line deep into connectors and tighten clamps



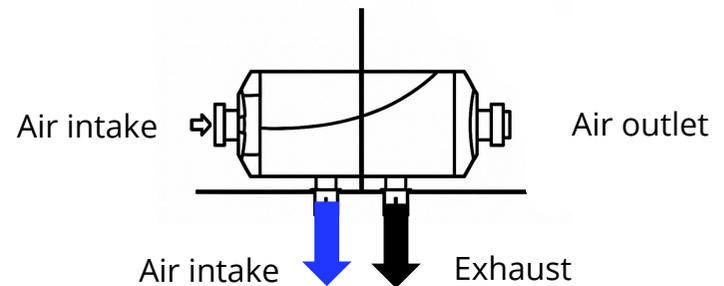
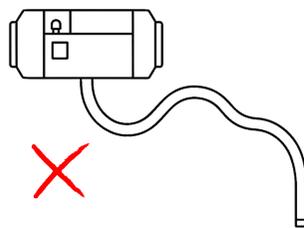
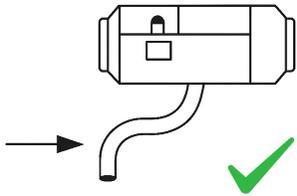
Air Intake and Exhaust Installation

1: General Guidelines

- Intake supplies combustion air; exhaust vents gases
- Both must exit the vehicle
- Ensure no blockages or low ground clearance

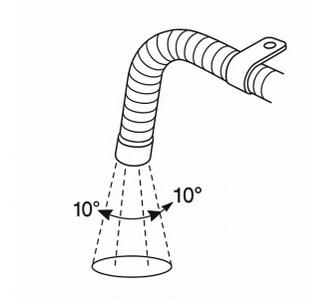
2: Air Intake Hose

- Made of aluminum, connects to heater intake
- Avoid exposure to water, dirt, direct rain
- Route downward or horizontally, secure with clamps



3: Exhaust Pipe

- Stainless steel, gets very hot during use
- Route against driving direction at 90° downward angle
- Keep intake and exhaust ends at least 20 cm apart
- Direct both ends downward to avoid water ingress
- Minimum bend radius: 50 mm
- Optional 4 mm drain holes for condensation
- Use heat shields if exposed or accessible

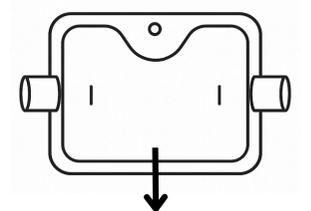


! 4: Safety Notes

- Do not allow exhaust pipe to touch fuel lines, wiring, or vehicle body
- Use only fireproof insulation through walls/doors
- Avoid flammable materials (e.g., foam, plastic)
- Consult a professional installer if unsure

5: Install Muffler (exhaust pipe)

- Reduces external noise
- Install near exhaust outlet
- Ensure condensation drain faces downward
- Optional: pre-drill condensation hole before muffler
- Use clamps or hose clips to secure



Air Duct Instalation

1: Overview

- Ducts direct heated air to desired areas
- Connect to heater's warm air outlet
- Use included duct or purchase splitter for multiple areas

2: Routing the Duct

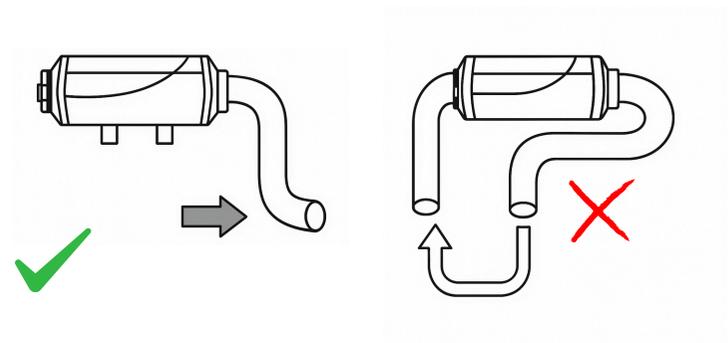
- First 1 meter should be straight
- Avoid sharp bends or crushing
- Do not step on ducts
- Avoid 90° angles

3: Outlet Placement

- Avoid blowing hot air directly at people or sensitive surfaces
- Use grilles or adjustable nozzles to direct airflow

4: Safety

- Never recycle hot air into heater intake
- Do not connect to vehicle HVAC system
- Use heat-resistant ducts (min. 130°C)



Nordkapp™ Air Share Kit (optional, sold separately)

If necessary, you can install an air distribution kit on the heater to distribute the heat to multiple separate spaces.

You can find the Air Share Kit in the Nordkapp online store.



- Use only simple configurations to avoid airflow restriction
- Excessive complexity can cause overheating and loss of efficiency
- Keep first meter of duct straight
- Do not use 90° bends in the first meter

Electrical Wiring

1: General Notes

- Compatible with 12V or 24V systems (check model)
- Power from vehicle battery or external AC-DC adapter (230V/220V → 12V/24V)
- Always use correct polarity and fuse

2: Battery Connection

- Red wire to positive, black to negative terminal
- Use 15A fuse close to battery on positive wire
- Never connect/disconnect while heater is on
- Avoid routing wires near metal without protection

3: AC Operation (Optional)

- Use Nordkapp™ AC adapter in dry, protected area
- Check all wires and connections before starting
- UPS (uninterruptible power supply) recommended for outages

⚠ If operating on AC without UPS

If the heater is used via a mains power adapter without a UPS device, the power supply will be suddenly interrupted in the event of a power outage.

This may lead to the following issues:

- Fuel remaining in the combustion chamber can cause sooting or malfunction during the next start-up
- The heater does not have time to complete the automatic cooling process
- The control unit may lose settings or remain in an error state
- The heater must always be turned off from the control panel and the power must only be disconnected when the fan has stopped.

⚠ It is the user's responsibility to ensure that the heater is turned off as instructed. Do not leave the heater on unattended when connected to the mains if the UPS is not in use.

4: Wire Protection and Finishing

- Route wires neatly and secure with clips
- Keep away from moving or hot parts
- Check all connections are tight and safe from being pulled

Startup and Shutdown

1: First Startup

- Ensure all installations are correctly and securely completed.
- Check fuel lines for leaks or air bubbles.
- Initial use may produce smoke and strong odor (normal).
- Odors typically fade after a few hours at full power.
- Ensure good ventilation during initial operation.
- Heater begins with a glow plug preheating cycle (up to 2 minutes, no visible signs).

2: Shutdown

- Always turn off using the control panel or power switch.
- Never disconnect power during operation.
- Heater performs an automatic cooling cycle with low-speed fan.
- Wait until the fan fully stops before cutting power.

3: Restarting the Heater

- If the heater fails to start, wait 5–10 seconds before retrying.
- Check for error codes on the display (refer to control panel manual).

Maintenance and Service

⚠ Warranty is void if the following maintenance is neglected.

Regular maintenance improves the reliability of the heater, prevents sooting and extends its service life. Below are instructions that will keep the device in good condition.

Monthly Maintenance:

- Run the heater at full power for 20 minutes monthly.
- Burns off potential deposits and ensures fuel circulation.

Annual Inspection:

- Check all fuel line and connector seals.
- Inspect electrical wiring and signs of corrosion.
- Clean and inspect air intake and exhaust systems.
- Remove debris or soot from exhaust outlet.

Fuel System Maintenance:

- If unused for long periods, drain tank and lines (for separate tanks).
- Flush with clean diesel (never use gasoline).
- If using kerosene, ensure system is completely dry before switching back to diesel.

Storage

- Disconnect from battery or power supply.
- Store in a dry, clean location.

Bluetooth-Control Panel Manual

Display

In standby mode, the display shows:

- Ambient temperature
- Altitude
- Voltage level
- Fault status (if any)



Overview

Used to set temperature, clock, ventilation, and manual fuel pumping. Features four buttons and multiple display modes. Bluetooth enables mobile app control.

Buttons and Functions:

Button:

Power: Short press = ON, long press = OFF

Up(+): Increase temp / navigate up

Down (-): Decrease temp / navigate down

Settings: Enter or confirm settings.

Switching Modes

Mode

Switching

**Manual/
Thermostat**

Hold Up + Down for 3 sec to toggle manual/thermostat mode. In other modes:
hold ON or Power button for 3 sec

Usage Instructions

Temperature Unit

- Hold Up for 2 sec to toggle °C/°F

Ventilation Mode

- Hold Power 9 sec, adjust speed with Up/Down, confirm with Power

Clock Settings

- Navigate to clock menu
- Press Settings to enter
- Adjust with Up/Down, confirm with Power, hold Power 3 sec to save

Timer Setting

- Navigate to timer menu with Up/Down
- Short press Power to switch between parameters
- Adjust with Up/Down
- Hold Power 3 sec to save and exit

Start-stop Setting

- Set shutdown temperature
- Heater restarts when temp drops 5°C below set point
- Instructional video available at nord-kapp.com (Documents section)

To enter parameters menu: hold Settings for ~3 sec, navigate with Up/Down, short press Settings to select

Setting	Description
Unit	°C ↔ °F, default °C, toggle with Up
Language selection	Choose in Language settings-menu, confirm with Power 3 sec
Manual fuel pumping	Select the fuel pumping display screen, the display shows 20P, use the up/down buttons to adjust the pumping duration. Press the power button to start/stop pumping
Password	Enter the password mode by pressing the setup button. Press the power button to get started. The password is 1234, use the up/down buttons to select the correct numbers. Press the power button to confirm the selection and move to the next number.
Operating mode	By default, the display shows MT, using the up/down buttons you can select MT (manual) / AT (constant temperature) / ST (start-stop)
Voltage	You can choose 12V / 24V / auto
Power level	2kW, 5kW, 8kW – scroll with the up/down button, confirm selection with the power button (select power depending on which heater you have purchased)
Fuel Pump Volume	22ML, 28ML etc. (The Nordkapp heater has a 22ml pump, so 22ml is selected in the settings)

⚠ Hold Power for 3 sec to save and exit settings.

Pairing the Remote Control

1. Long press the setting button, enter the setting menu, and use the up/down button to find the remote control icon, press the setting button
2. Press the ON button on the remote control for 3 seconds.
3. A confirmation will appear on the screen. If it does not work, repeat the steps.

NOTE! You can find an instructional video on connecting the heater and remote control at nord-kapp.com, in the Documents section.

Audio Prompts

- Sound plays when switching functions
- Voice prompt if idle in settings >1.5 sec
- Hold Down 3 sec to mute quickly

Mobile App Usage

1. Download "HeatGenie" app (QR codes for Android/iOS)
2. Open the app and scan the QR code on the panel or press Automatically Link
3. If you want to disconnect, select "Device Management" > "Unbind the device" (if previously connected) or press the Setting + Power button on the control panel for 3s, the program will notify you that the Bluetooth connection is lost.

NOTE! The HeatGenie app has a separate Settings button. If you try to access the settings, the app will ask for a password. These settings should not be changed, as changing them may damage the heater or impair its performance. For this reason, the settings are password protected.

Display Sleep Mode

- After 3 min inactivity: dims > turns off
- Press any button to wake up



IOS APP



Android APP

Code	Description
E01	Low voltage: 24V <18V, 12V <10V
E02	High voltage: 24V >32V, 12V >17V
E03/F2	Glow plug short/open circuit
E04/F1	Fuel pump short circuit
E05	Overheat > 260°C (check airflow)
E06/F1-3	Fan or hall sensor error
E07	Communication cable fault
E08	Fuel flow issue (check air bubbles/blockage)
E09/F2	Housing temp sensor fault
E10	Ignition failed twice (check fuel circulation)
E11	Ambient temp sensor fault
E12	ECU or ventilation issue (controller >100°C)

Important safety and manufacturer information

Common Mistakes to Avoid

- Cutting power before cooling fan finishes
- Passing exhaust through wall without fireproof insulation
- Intake and exhaust too close together
- Installing muffler upside-down
- Leaving heater unattended on AC without UPS
- Overcomplicated or blocked air ducts

Safety Reminder

- Always follow this guide
- Never use heater if fuel leaks, electrical faults, or abnormal noises occur
- Do not use continuously without breaks
- For concerns, consult the control panel troubleshooting guide or contact support
- Ignoring the instructions can lead to damage to the heater or a safety risk.

Note! We reserve the right to change the manuals. The latest and updated versions can always be found on our website: www.nord-kapp.com/pages/documents

Manufacturer



Arctic Spot Oy
Kalasatamankatu 9 A
00580 Helsinki
Finland



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