

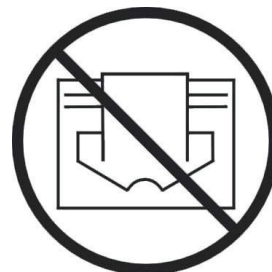
# ROMUS®

HOT AIR CANNON «K-37» - DIESEL  
REF 93444

## INSTRUCTION BOOKLET - EN



NL	Dit symbool op uw apparaat betekent: niet afdekken!
EN	This symbol on your device means: do not cover!
DE	Dieses Symbol auf Ihrem Gerät bedeutet: Nicht abdecken!
FR	Ce symbole sur votre appareil signifie : ne pas couvrir !
DA	Dette symbol betyder: Må ikke tildækkes!
SV	Den här symbolen betyder: får ej övertäckas!
NO	Dette symbolet på apparatet betyr: Må ikke dekkes til!
FI	Tämä laitteessa oleva symboli tarkoittaa: ei saa peittää!
HU	A készüléken lévő szimbólum jelentése: ne takarja le!
CS	Tento symbol na vašem zařízení znamená: nezakrývejte!
PL	Ten symbol na urządzeniu oznacza: nie zakrywać!
SK	Tento symbol na vašom zariadení znamená: nezakrývajte!
RO	acest simbol ce apare pe aparatul dumneavoastră înseamnă: nu acoperiți
RU	Этот символ на вашем устройстве означает: не накрывать!
IT	Questo simbolo sul dispositivo indica: non coprire!



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## Safety instructions

**Important:** Read and follow these instructions carefully before assembling the heater and using it. Failing to follow the safety instructions could lead to serious personal injury or even death and/or damage being caused to the heater. When using the heater, basic safety measures must always be taken in order to prevent the risk of fire, electrical shock, personal injury and/or the heater becoming damaged. Keep all instructions in a safe place so that they can be consulted in the future.

**Above all: always ensure there is adequate ventilation.** The heater uses oxygen. If this is not supplied in sufficient measure, it will produce carbon monoxide. Inadequate ventilation can therefore cause carbon monoxide poisoning and this can lead to serious illness or death. Always ensure that the heater and the working area are supplied with continual fresh air from outdoors. Make sure there is a 2,800 cm<sup>2</sup> (so 70 x 40 cm) opening to the outside for every 100,000 Btu/hour. The first signs of carbon monoxide poisoning are flu-like symptoms: headaches, dizziness and nausea. If you are aware of these symptoms, your heater may not be working correctly or there is inadequate ventilation. You must ensure that fresh air is provided immediately! Have the heater checked and/or ensure that there is adequate ventilation. One person may be more sensitive to carbon monoxide than another. Pregnant women, people with heart or lung problems or anaemia, the elderly and people under the influence of alcohol are at an increased risk. Never use the heater in living or sleeping areas!

**Know your heater:** ensure that you understand the instruction booklet and the labels on the heater. This will ensure you are aware of where it can be used, its limitations and any potential hazards.

**Never use the heater in a dangerous environment:** do not use in the rain or in damp/wet locations. Do not use in places where flammable liquids, gases, substances or other flammable items can be found: this may pose an explosion risk! Always ensure there is sufficient safe space around the heater.

**Keep children and inexperienced persons out of the vicinity of the workplace:** all visitors must be kept at a safe distance from the heater.

**Store the heater safely when it is not in use:** keep it in a dry, locked cupboard, out of the reach of children.

**Stay alert:** always be aware of what you are doing and use your common sense. Do not use or operate the heater if you are tired or under the influence of alcohol, drugs, or medicines that impact upon your response times.

**Make sure that you remove the plug from the socket:** always remove the plug when the heater is not being used, before you carry out maintenance or replenish fuel.

**Prevent unexpected starting:** check that the switch is **OFF** before you insert the plug into the socket.

**Use the heater for its intended purpose only.** Do not make any changes or connect anything to it. If you are not sure of whether the heater can be used, contact your supplier or the importer.

**Only have your heater repaired by a qualified person:** the heater fulfils safety requirements. That is why repairs must only be carried out by a suitable, qualified individual, using original parts. Deviations from this regulation will invalidate the guarantee and the supplier and manufacturer will no longer be liable for any consequences.

**And also:**

- Every time you use it, check that the heater is in good condition and is working properly. Have damaged parts repaired or replaced immediately.
- Only connect the heater to a socket which corresponds to the voltage and frequency that is stated on the heater's specification plate. Only use an earthed, 3-pin socket. If you have to use an extension cable, make sure it is of the appropriate thickness!
- Only use paraffin or diesel in your heater, in accordance with the instructions in this booklet.
- Keep the front of the heater at least 2.5 metres from any flammable materials such as wood, plastic, paper, tent cloth, etc and the back and upper sides at least 125 cm from this type of material.
- Always position the heater on a flat, stable and horizontal surface.
- Do not use the heater in the vicinity of flammable materials, liquids, gases or pressurised gas pipes.
- Do not use the heater in an enclosed space, living area, ground floor, cellar or space under ground level.
- If using in locations with (too) little ventilation, too much moisture etc, special measures must be taken in relation to the supply and removal of air, soot, extinguishing etc. Consult a qualified expert in this instance.
- Do not allow untrained, inexperienced people to operate the heater and do not allow it to be operated unless all covers, lids and so on have been correctly installed.
- Never move the heater and do not touch if it is in operation or is still hot. Unplug and then leave to cool.
- Never transport the heater with fuel in the tank!
- Do not damage the electrical cable. Do not tilt the heater using the cable and do not pull on the cable to remove the plug from the socket. Keep the cable away from heat, oil and sharp edges. Do not use the heater if the cable is damaged but make sure it is replaced by your supplier or a recognised electrician in order to prevent risks.
- Never leave a working heater unsupervised; unplug the device when leaving the workspace. Do not switch the heater off by removing the plug from the socket;

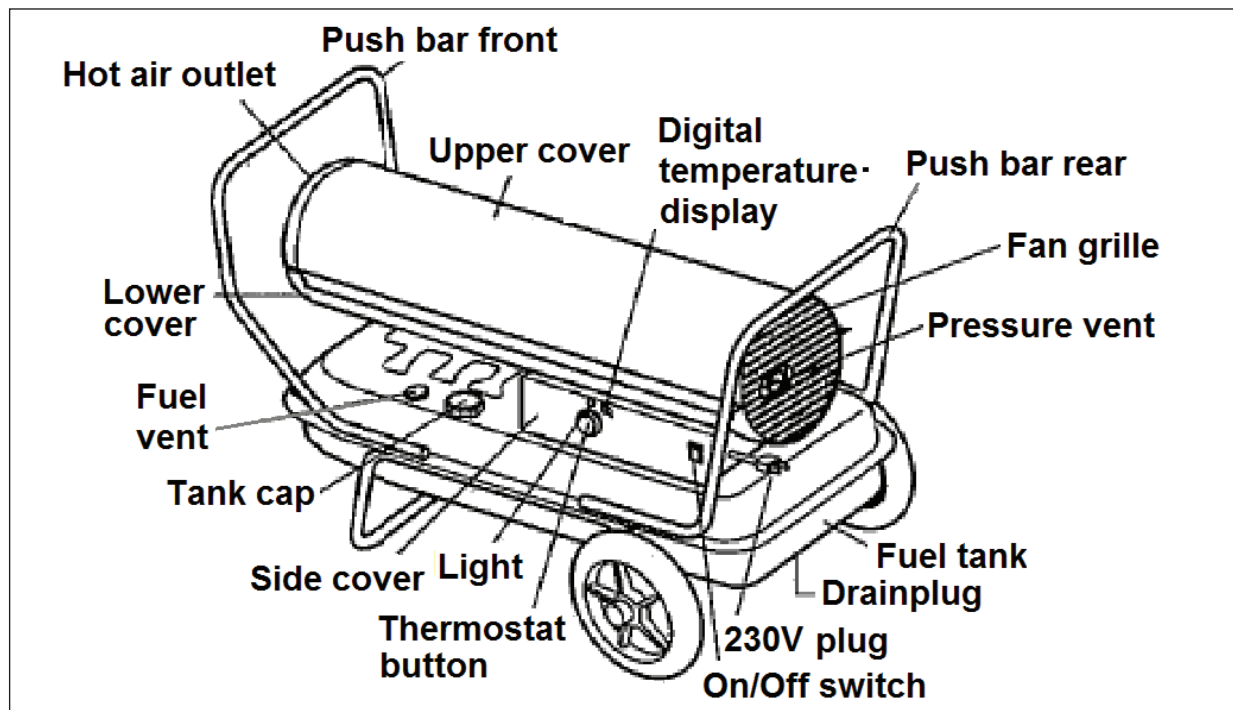
always use the on/off switch. Always remove the plug from the socket if the heater is not in use.

- Do not replenish the fuel when the heater is working or is still hot. Switch it off, remove the plug from the socket and leave to cool. The heater becomes extremely hot during use!
- Do not overfill the fuel tank and remove any spilt fluid immediately.
- Never block the heater's inlet and outlet openings!
- Do not use a pipe or similar on the front or back of the heater.
- Do not allow children or animals in the vicinity of the heater, particularly if it is on or still hot.
- **WARNING!** Never expose the heater to water, rain, drips or moisture of any variety. This could lead to an electrical shock!
- The heater (and cap and blower opening) become extremely hot. Never touch the heater during or shortly after operation but leave to cool and wear protective gloves.
- Make sure, after use, that the heater has been switched off properly and store it in a safe and dry environment out of the reach of children.
- Be aware that heaters that are equipped with a thermostat may turn on at any moment.
- People with respiratory problems must first consult a doctor before using the heater.
- NEVER use fuel such as petrol, benzene, paint thinners or other oil compounds in the heater. This may lead to a risk of explosion.

### **WARNING!**

The warnings and regulations provided in this booklet are only general instructions; they do not cover all of the specific situations that may occur. That it why common sense and prudence are vital when using this heater!

## Description



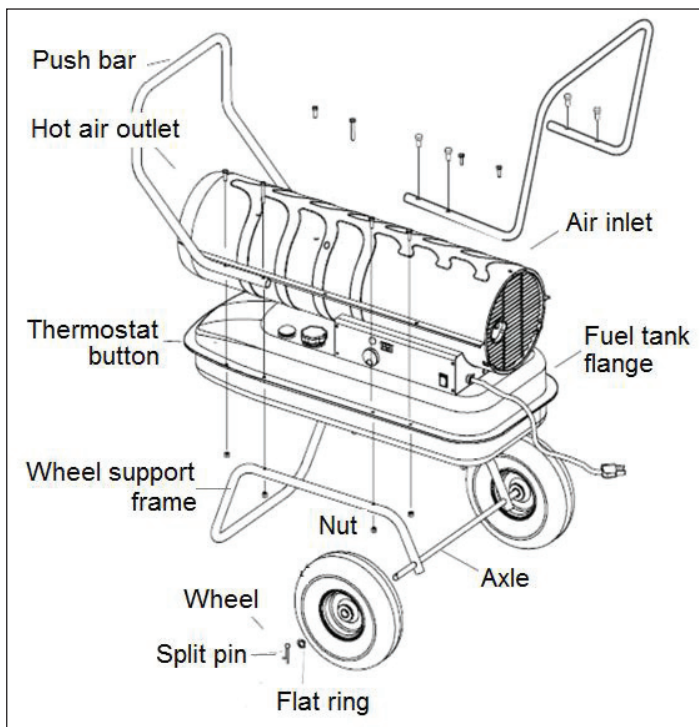
## Technical specifications

Capacity	BTU	125 000
	kW	36,625
Connected power	V/Hz	230/50
Fuse	A	5
Max. heated area	m³	900
Fuel	Diesel and Paraffin	
Capacity of fuel tank	L	40
Fuel consumption	L/h	± 4
Max. working pressure per tank	h	10
Dimensions	cm	98 x 39 x 61,5
Weight	kg	24,5

## Assembly

This model is equipped with wheels and push-bars. Wheels, push-bars and assembly materials can be found in the packaging.

- Slide the axle through the wheel support-frame.
- Secure the wheels to the axle, so that the wheels' bulged hubs face towards the frame.
- Place the flat rings over the axle ends, push the split pins with the long ends through the hole in the axle and push them tight.
- Place the heater on the wheel support-frame so that the air inlet (at the back) is positioned over the wheels.
- Line up the holes in the fuel tank flange with the holes in the frame.
- Place the push bars over the fuel tank flange.
- Stick the screws through the push bar, the fuel tank flange and the wheel support-frame (see diagram) and hand-tighten a nut under each screw.
- Once all screws are in place, tighten all nuts with a spanner.



## Working principle

**Fuel system:** The heater is fitted with an electric air pump that pushes air through the air pipes along the fuel inlet and forces the fuel from the tank into the fuel nozzle. This mixture of fuel and air is then sprayed into the combustion chamber as a fine mist.

**Ignition mechanism:** The electronic ignition creates a charge on a specially developed electrode/sparkplug. This uses a spark to ignite the mixture of fuel and air, as described above.

**Air system:** The heavy motor drives a ventilator that sends air into and around the combustion chamber. The air is then heated up and driven out of the front of the heater.

### Safety devices:

**Temperature limiter:** This heater is fitted with a temperature limiter that switches the heater off if the internal temperature rises to an unsafe level. If this safety device is triggered, it may mean that your heater needs to be serviced.

If the temperature has dropped to under the reset-temperature, the heater can be used again.

**Electrical system safeguard:** The heater's electrical system is protected by a safety fuse that is attached to the PCB system. The fuse safeguards the PCB system and other electrical components against damage. If the heater does not work, first check the fuse and replace it with a similar fuse if necessary.

**Flame control:** The heater uses a photoelectric cell to keep an eye on the combustion chamber when the heater is operating. It will switch the heater off if the flame goes out and will send an error message to the display.

## Fuel

OK-heaters work with paraffin or diesel; paraffin gives the cleanest combustion. Be aware that the more dust and dirt that is contained in the fuel, the more ventilation will be required! Use the cleanest fuel possible.

**Note:** paraffin may only be stored in blue containers; red containers are associated with petrol!

- NEVER use other fuels such as petrol, alcohol, oil compounds or similar in this heater; this could lead to fire or explosion!
- NEVER store paraffin in direct sunlight or near a source of heat.
- Do not store paraffin in living/work areas but in a well-ventilated area such as a shed, storage area or similar.
- NEVER use paraffin from the previous season. Paraffin deteriorates in quality and will not burn properly as a result.

- If you can, use 1-K paraffin in this heater. Other premium quality paraffin may also be used.

## Electrical connection

Before use, check the device and the electrical cable, plug and socket for any damage or wear and tear and do not use if you discover any problems.

This heater is fitted with a standard 230V - 13A plug. Choose an impact-resistant type if it ever needs replacing. The electricity network to which the heater is connected must be equipped with an earth leakage circuit breaker (30 mA) and the socket must be earthed.

Repairs to the electrical system must always be carried out by a qualified electrician!

- Before use, always check that the socket is of the correct voltage, is earthed, has an adequate fuse (5A) and forms part of a mains network with an earth leakage circuit breaker.
- If you have to use an extension cable, make sure that the cable is of a suitable width which is appropriate for the voltage and amperage.

## Instructions for use

### Starting the heater:

- Place the heater on a stable, flat and horizontal surface.
- Remove the tank cap.
- Fill the tank with paraffin or diesel.
- Replace the cap on the tank.

**Note:** Never replenish fuel if the heater is on or is still hot. Always wait until the heater has cooled down before topping up the fuel.

Never fill up the fuel in an enclosed area; always do it outdoors.

Do not overfill the heater and remove any spilt fuel immediately, before using the heater.

- Now insert the plug into the socket.
- Set the thermostat to the desired setting.
- Press the ON/OFF switch to ON. The light will come on and the heater will start.

**Important:** Ignite the heater for the first time outdoors and then let it run for at least 10 minutes. Oil and similar substances used during the manufacturing process will be burnt off and may produce toxic gases.

If the heater won't start, the thermostat regulator may be set too low. Turn the thermostat button up and try again. If it still doesn't start, set the switch to OFF and then switch back to ON.

**Note:** the heater's most important electrical components are protected by a fuse. If the display and the light fail to come on even though there is power to the heater, check the fuse before anything else.

**Stopping the heater:**

- Press the ON/OFF switch to OFF and remove the plug from the socket.

**Restarting the heater:**

- Wait at least 10 seconds after you have switched the heater off.
- Repeat the steps set out under: 'Starting the heater'.

**ALWAYS ENSURE THERE IS ADEQUATE VENTILATION!**

**At least 2,800 cm<sup>2</sup> per 100,000 BTU/hr**

## Maintenance

**Warning!** Air pollution that is sucked into the heater can impact upon the heat if gives off, damage the heater and lead to health problems.

For example: plaster dust or paint chips can damage the engine bearings or block the filters and contaminate the combustion chamber; this will lead to an irregular flame and could pose a risk to health. This type of damage is not covered by the guarantee and any costs for cleaning the heater will have to be paid in full.

**Warning!** Never carry out maintenance work if the plug is in the socket or if the heater is still on!

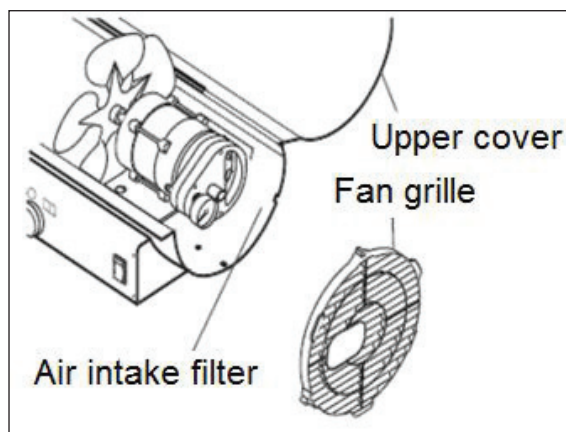
The degree of maintenance work that has to be carried out is largely dependent on the level of contamination in the area in which the heater is used. The frequency indicated is calculated on the basis of a clean room; if the heater is used in a dusty environment, maintenance should be carried out more frequently in order to extend the lifetime of the heater.

If parts have to be replaced, always ensure that original parts are used!

### Air intake filter

After a maximum of 500 operational hours, wash in a mild, soapy solution and dry thoroughly or replace. Do so more often if used in dusty environments!

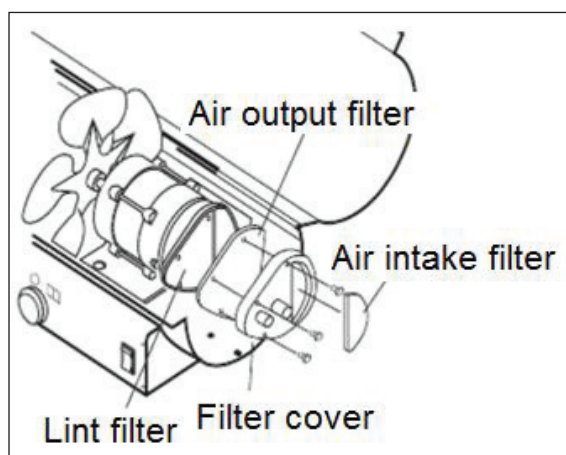
- Remove the screws from the sides of the heater
- Lift the upper cover
- Remove the fan grille
- Wash/dry or replace the air inlet filter
- Replace the grille and cover in their usual positions.



### Air intake filter/lint filter

Replace after a maximum of 500 operational hours or once a year if used in a dusty environment.

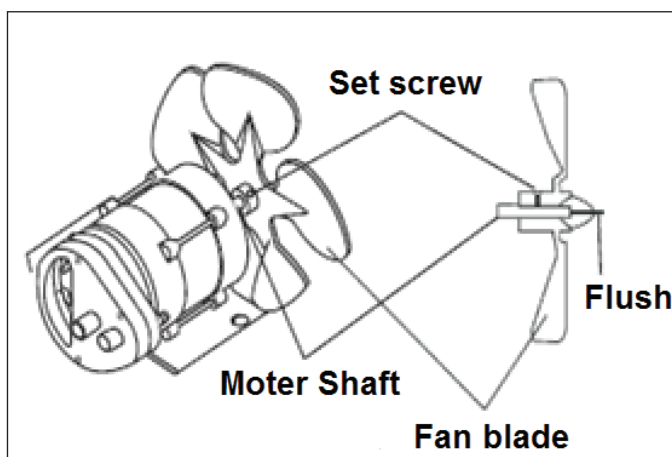
- Remove upper cover and fan grille
- Remove the screws and the filter cover
- Remove the filter cover
- Replace the air inlet filter and lint filter
- Replace filter cover, fan grille and upper cover in their usual positions.



### Fan blades

Clean at least once a season or whenever necessary.

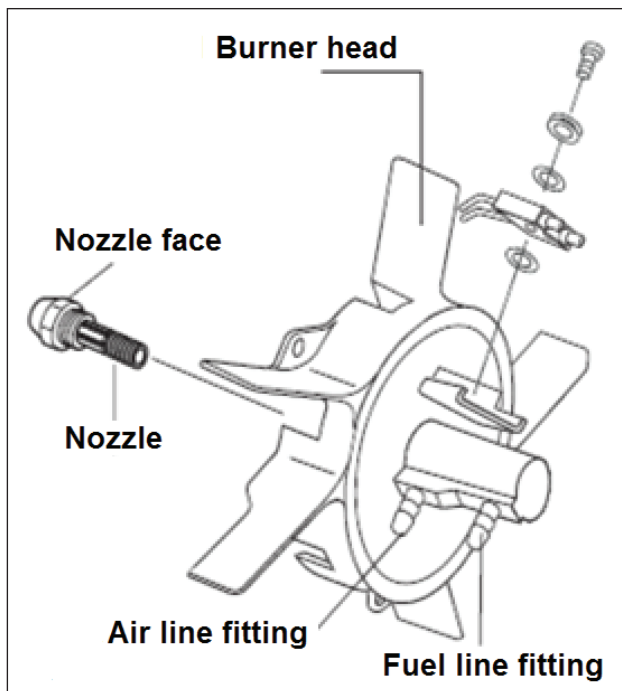
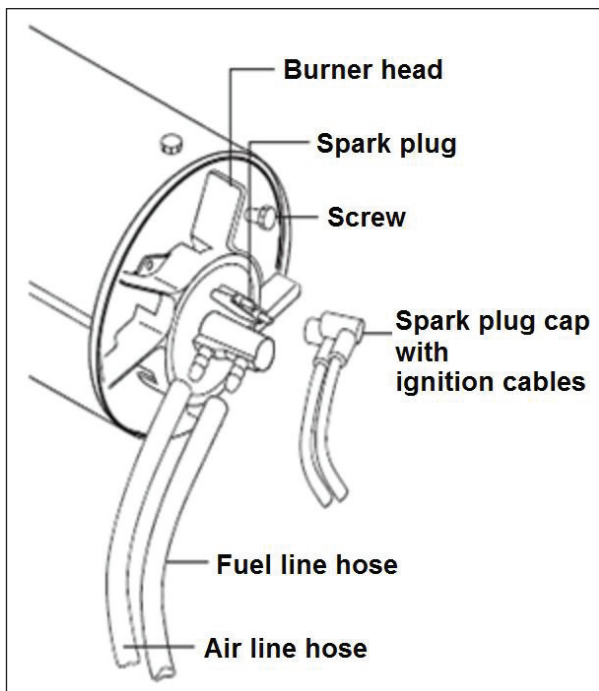
- Remove upper cover
- Use an Allen key to remove the screws that secure the fan blades to the engine axle
- Slide the fan off the motor axle
- Clean the fan with a soft cloth, slightly moistened with a gentle soapy solution. Be careful not to move the blades out of position!
- Let the fan dry thoroughly
- Secure the fan to the motor axle
- Place the outlet from the hub on the end of the motor axle
- Secure the screws that hold the fan blades on the motor axle.
- Secure the screws tightly (4.5-5.6 Nm)
- Put the upper cover back in position.



## Nozzle

Clean the nozzle as often as required.

- Remove upper cover
- Remove fan
- Disconnect the fuel and air hoses from the burner head
- Take sparkplug caps (with the ignition cables) off the sparkplugs
- Loosen the three screws and remove the burner head from the combustion chamber
- Remove the sparkplug from the burner head
- Carefully remove the nozzle from the burner head
- Blow compressed air through the front of the nozzle – this will remove the dirt.
- Replace the nozzle in its usual position in the burner head and screw it in place (9-11 Nm).
- Place the sparkplug back in the burner head
- Secure the burner head on the combustion chamber
- Replace the sparkplug caps with the ignition cables on the sparkplug
- Secure the fuel and air hoses on the burner head
- Replace the fan and upper cover in their usual positions.

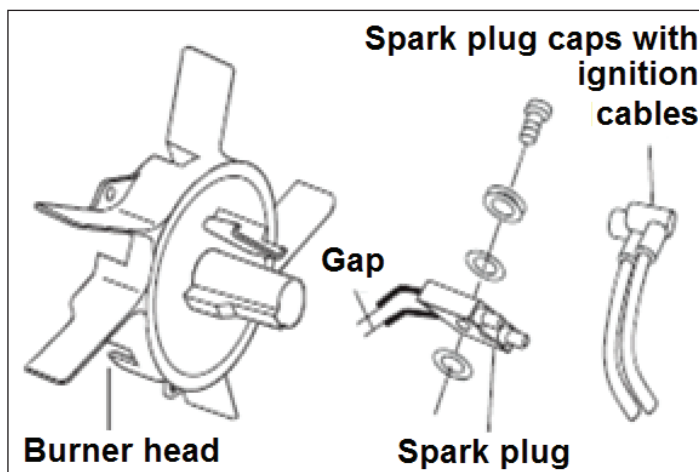


## Spark plug

Clean and adjust or replace the sparkplug after a maximum of 600 operational hours.

- Remove upper cover
- Remove fan
- Take sparkplug caps and the ignition cables off the sparkplugs
- Remove the sparkplug from the burner head

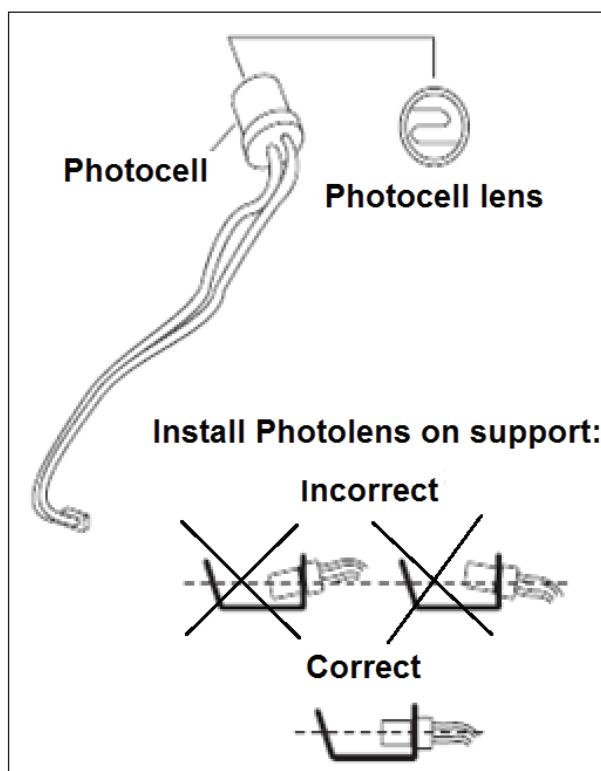
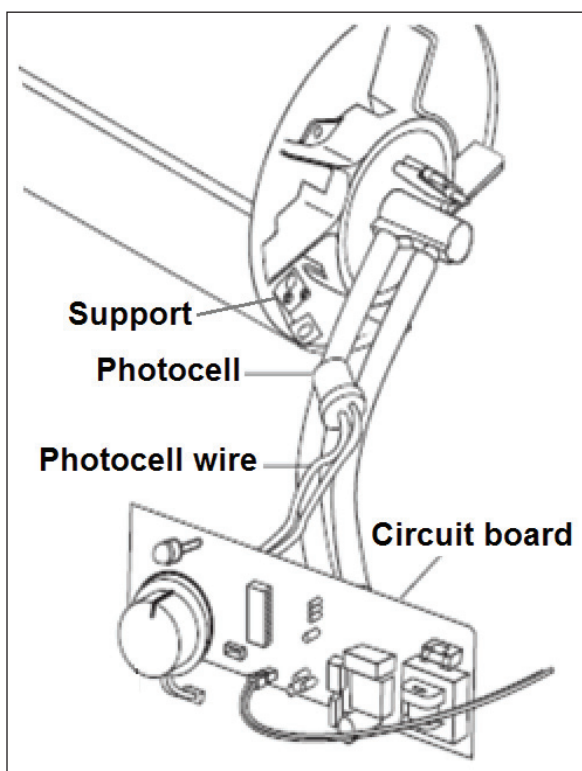
- Clean and adjust the sparkplug; the opening must be 3.5 mm.
- Secure the sparkplug in the burner head
- Reposition the sparkplug caps with the ignition cables on the sparkplug
- Replace the fan and upper cover in their usual positions.



### Photoelectric cell

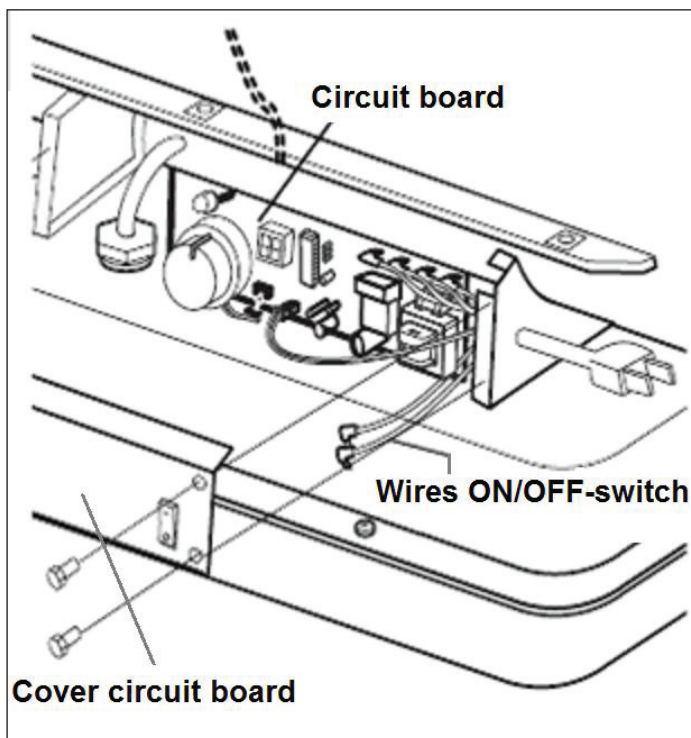
Clean the photoelectric cell as often as required but at least once a year.

- Remove upper cover
- Remove fan
- Disconnect the photoelectric cell and its attachment bracket
- Clean the lens with a cotton swab.
- Replace the photoelectric cell in its usual position
- Replace the fan and upper cover in their usual positions.



In order to replace the photoelectric cell follow the previous instructions and:

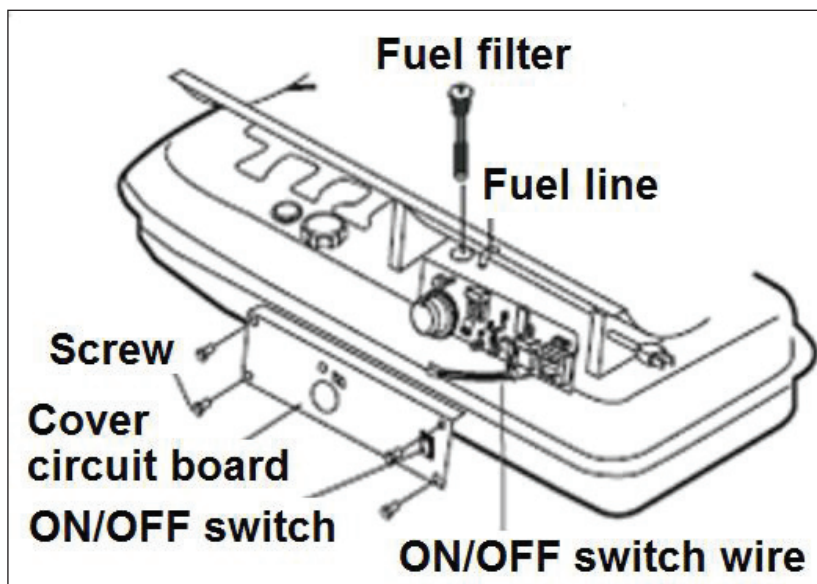
- Remove the cover from the operating panel
- Disconnect the wiring from the ON/OFF switch (does not apply to all models)
- Disconnect the photoelectric cell wiring from the operating panel and remove the photoelectric cell
- Install the new photoelectric cell and connect the wiring with the operating panel
- If necessary, connect the wiring to the ON/OFF switch
- Secure the cover on the operating panel
- Replace the fan and upper cover in their usual positions.



### Fuel filter

Clean or replace at least twice a season and more frequently if necessary.

- Remove the cover from the operating panel
- Disconnect the wiring from the ON/OFF switch (does not apply to all models)
- Pull the fuel pipe from the neck of the fuel filter
- Turn the fuel filter 90° anti-clockwise then pull and remove from the tank.
- You may clean the fuel filter with clean fuel but you are advised to replace the old filter with a new one.
- Replace the filter in the tank
- Slide the fuel pipe over the neck of the filter
- If necessary, reconnect the wiring to the ON/OFF switch
- Secure the cover on the operating panel and screw tight.



### **Adjusting pressure on compressor pump**

A pressure meter must first be installed in order to adjust the compressor pump pressure. Order an original from your dealer.

- Remove upper cover and fan grille
  - Remove the manometer plug on top of the filter lid
  - Install the manometer
  - Start the heater
  - Let the motor run at full power
  - Adjust the pressure with a screwdriver (flat head)
  - Turn the valve in a clockwise direction in order to add pressure; turn anti-clockwise to reduce pressure
  - Set the right pressure for your heater model: 5.0 psi
- 
- Turn the heater off
  - Remove the manometer and replace the plug
  - Replace the fan grille and upper cover in their usual positions.

### **Long-term storage**

- Undo the tank cap on the tank
- Use a siphon or similar pump that is suitable for fuel to suck all of the fuel out of the tank
- Pour a little clean diesel or paraffin into the tank and rinse out
- Empty the tank completely
- Never mix water through the fuel as this will rust the tank!
- Never leave fuel sitting in the tank if the heater is to be out of use for a while; old fuel can damage the heater!
- Store the heater in a safe, dry and well-ventilated location, outside the reach of children.
- Make sure that the storage area is not dusty and does not contain any corrosive vapours
- Store the heater in the original packing
- Store the instruction booklet in an accessible place

## Problems and solutions

### Error message E1

<ul style="list-style-type: none"> <li>No fuel in the tank</li> <li>Photoelectric cell lens dirty</li> <li>Filters dirty</li> <li>Nozzle dirty</li> <li>Contaminated fuel</li> <li>Ignition defective</li> <li>Incorrect pump pressure</li> <li>Photoelectric cell defective</li> <li>Bad electrical connection between ignition and PCB</li> <li>Ignition wire not connected to sparkplug</li> </ul>	<ul style="list-style-type: none"> <li>Fill the tank</li> <li>Clean the lens</li> <li>Clean/replace filter(s)</li> <li>Clean/replace nozzle</li> <li>Clean out tank with clean diesel</li> <li>Repair/replace ignition</li> <li>Check pump pressure and adjust if necessary</li> <li>Check and replace photoelectric cell if necessary</li> <li>Check electrical connection and repair where necessary</li> <li>Check the connections</li> </ul>
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### Error message E2

<ul style="list-style-type: none"> <li>Bad electrical connection between temperature sensors and PCB</li> <li>Defective temperature sensors</li> <li>Thermostat settings too low</li> </ul>	<ul style="list-style-type: none"> <li>Check and repair electrical connections if necessary</li> <li>Check and replace sensor if necessary</li> <li>Set thermostat higher</li> </ul>
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### Error message LO

<ul style="list-style-type: none"> <li>Temperature is less than -9°C</li> </ul>	<ul style="list-style-type: none"> <li>Normal. Wait until temperature rises to working temperature</li> </ul>
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### Error message HI

<ul style="list-style-type: none"> <li>Temperature is above 50°C</li> </ul>	<ul style="list-style-type: none"> <li>Normal. Wait until temperature drops to working temperature</li> </ul>
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### Light flickers

<ul style="list-style-type: none"> <li>Electrical error</li> </ul>	<ul style="list-style-type: none"> <li>Reset and start again</li> </ul>
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## Onderdelen – Teile - Components - Pièces

