

IDX 20 D / IDX 31 D / IDX 50 D

EN

INSTRUCTIONS
OIL HEATER



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Notes regarding the instructions


Symbols

 **Warning of electrical voltage**
This symbol indicates dangers to the life and health of persons due to electrical voltage.


 **Warning of flammable substances**
This symbol indicates dangers to the life and health of persons due to flammable substances.

 **Warning of hot surface**
This symbol indicates dangers to the life and health of persons due to hot surface.

 **Warning**
This signal word indicates a hazard with an average risk level which, if not avoided, can result in serious injury or death.

 **Caution**
This signal word indicates a hazard with a low risk level which, if not avoided, can result in minor or moderate injury.

Note
This signal word indicates important information (e.g. material damage), but does not indicate hazards.

 **Info**
Information marked with this symbol helps you to carry out your tasks quickly and safely.



Follow the manual

Information marked with this symbol indicates that the instructions must be observed.



Wear hearing protection

Information marked with this symbol indicates that you should wear hearing protection.

You can download the current version of the instructions and the EU declaration of conformity via the following link:

IDX 20 D



<https://hub.trotec.com/?id=45250>

IDX 31 D



<https://hub.trotec.com/?id=43845>

IDX 50 D



<https://hub.trotec.com/?id=45251>



Safety

Read this manual carefully before starting or using the device. Always store the manual in the immediate vicinity of the device or its site of use.



Warning

Read all safety warnings and all instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

This device must not be used by children and persons under 16 years of age.

Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children under 16 years.



Warning

Do not use the device in rooms if persons are present who cannot leave the room independently and who are not under constant supervision.

- Do not use the device in potentially explosive rooms or areas and do not install it there.
- Do not use the device in aggressive atmosphere.
- Only put up the device in an upright, stable position on firm ground.
- Let the device dry out after a wet clean. Do not operate it when wet.
- Do not use the device with wet or damp hands.
- Do not expose the device to directly squirting water.
- Never insert any objects or limbs into the device.
- Do not cover the device during operation.
- Do not remove any safety signs, stickers or labels from the device. Keep all safety signs, stickers and labels in legible condition.
- Attention: In Germany, the Federal Emission Protection Directive applies. Do not operate the device for more than 3 months at the same place. Prior to planning the flue gas system, gather information about the national legislation and contact a responsible specialist.
- Do not sit on the device.
- This appliance is not a toy. Keep away from children and animals.
- Check accessories and connection parts for possible damage prior to every use of the device. Do not use any defective devices or device parts.
- Ensure that all electric cables outside of the device are protected from damage (e.g. caused by animals). Never use the device if electric cables or the power connection are damaged!
- The mains connection must correspond to the specifications in the Technical annex.
- Insert the mains plug into a properly fused mains socket.
- Observe the device's power input, cable length and intended use when selecting extensions to the power cable. Completely unroll extension cables. Avoid electrical overload.
- Before carrying out maintenance, care or repair work on the device, remove the mains plug from the mains socket. Hold onto the mains plug while doing so.
- Switch the device off and disconnect the power cable from the mains socket when the device is not in use.
- Do not under any circumstances use the device if you detect damages on the mains plug or power cable. If the power cable is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard. Defective power cables pose a serious health risk!
- When positioning the device, observe the minimum distances from walls and other objects as well as the storage and operating conditions specified in the Technical annex.
- Keep a safety distance of at least 3 m between the device's air outlet and all combustible materials such as textiles, curtains, beds and sofas.
- Make sure that the air inlet and outlet are not obstructed.
- Make sure that the suction side is kept free of dirt and loose objects.
- Do not place the device on combustible ground.
- Only transport the device in an upright position.
- Only use original spare parts, for otherwise safe and functional operation cannot be ensured.
- Do not use the heating device together with a programming device, a timer, a separate remote control system or any other device that automatically switches the heating device on, as there is a risk of fire if the heating device is covered or incorrectly positioned.

Intended use

The device was developed for the purpose of generating hot air and may only be used in roofed over outdoor areas or in well-ventilated interior spaces whilst adhering to the technical data.

The device is suited for heating large rooms such as tents, warehouses, workshops, construction sites, greenhouses or agricultural halls.

It is intended to be used without frequent site changes.

The device may only be used in rooms with sufficient fresh air supply and exhaust discharge.

The device must only be operated with EL (ultra-light) fuel oil and diesel, however not with petrol, heavy fuel oil etc.

Any use other than the intended use is regarded as misuse.

Reasonably foreseeable misuse

- Do not use the device in areas with a fire hazard or in potentially explosive areas.
- Do not place any objects, e.g. clothing, on the device.
- Do not use the device out of doors, unless under a roof.
- Do not operate the device in rooms without sufficient combustion air supply.
- Do not use the device in wet rooms (e.g. bathrooms or laundry rooms).
- Never immerse the device in water.
- Do not use this device in the vicinity of fuel, solvents, varnishes or other easily inflammable vapours or in rooms where these substances are stored.
- Do not make any unauthorised modifications, alterations or structural changes to the device.

Personnel qualifications

People who use this device must:

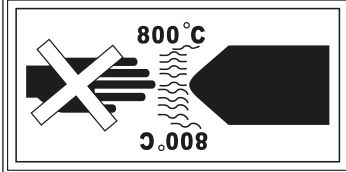
- be aware of the dangers resulting from heat, fire hazard and insufficient ventilation when working with oil heaters.
- be aware of the dangers that occur when handling fuels such as EL fuel oil, diesel or kerosene
- have read and understood the instructions, especially the Safety chapter.

Safety signs and labels on the device

Note

Do not remove any safety signs, stickers or labels from the device. Keep all safety signs, stickers and labels in legible condition.

The following safety signs and labels are attached to the device:

Symbols	Meaning
	<p>This symbol located on the device indicates dangers to the life and health of persons due to emitted hot air.</p>

Personal protective equipment



Wear hearing protection

Wear appropriate hearing protection when working with the device.

Residual risks



Warning of electrical voltage

Work on the electrical components must only be carried out by an authorised specialist company!



Warning of electrical voltage

Before any work on the device, remove the mains plug from the mains socket!

Do not touch the mains plug with wet or damp hands. Hold onto the mains plug while pulling the power cable out of the mains socket.



Warning of electrical voltage

Risk of electric shock!
The device must not come into contact with water, otherwise there is a risk of an electric shock!
Do not use this heating device in wet rooms!



Warning of flammable substances

Handling fuels entails a risk of fire.
Take sufficient precautions when handling fuels such as EL fuel oil, diesel or kerosene.
Do not spill any fuels! Do not inhale the vapours nor swallow any fuel! Avoid skin contact!



Warning of hot surface

Parts of the device, especially at the air outlet, become very hot during operation. There is a danger of burning and fire. Do not touch the device during operation!
During operation observe a safety distance of at least 2 m to the device front! Observe the minimum distance from walls or other objects according to the technical data!



Warning of hot surface

Parts of this appliance can become very hot and cause burns. Particular attention is to be paid when there are children or vulnerable persons present!



Warning of hot surface

Improper handling entails a risk of burning. Use this appliance only as described in this operating instructions.



Warning

Improper handling entails a risk of electric shock. Only use the device as intended!



Warning

Dangers can occur at the device when it is used by untrained people in an unprofessional or improper way! Observe the personnel qualifications!



Warning

The device is not a toy and does not belong in the hands of children.



Warning

Risk of suffocation!
Do not leave the packaging lying around. Children may use it as a dangerous toy.



Warning

Improper installation entails a risk of fire.
Do not place the device on combustible ground.
Do not place the device on high-pile carpets.



Warning

The device must not be covered, there is an imminent fire hazard!

Behaviour in the event of an emergency

1. In an emergency, immediately extinguish the pilot flame by setting the selector switch to position **0**.
2. In an emergency, disconnect the device from the mains feed-in: Switch the device off and disconnect it from the mains.
3. Remove persons from the danger area.
4. Do not reconnect a defective device to the mains.

Overheating protection

The device is provided with a safety thermostat which is activated by overheating of the device (when exceeding the operating temperature).

Investigate the cause of overheating.

If the safety thermostat does not switch in the event of overheating, the overheating protection will be tripped. In that case the device switches off completely. If so, please contact the customer service to have the overheating protection replaced.

Information about the device

Device description

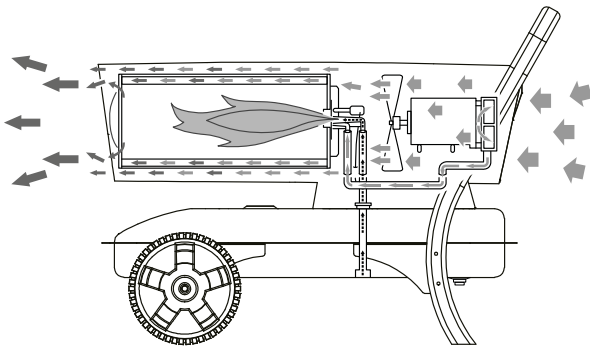
The directly fired oil heater serves the purpose of heating the room air so as to quickly heat large, well-ventilated rooms. The oil heater runs on EL fuel oil or diesel, it must not be used with petrol, heavy fuel oil etc.

It is an oil heater with direct combustion to be installed in roofed outdoor areas or in rooms with a sufficient fresh air supply.

Functional principle

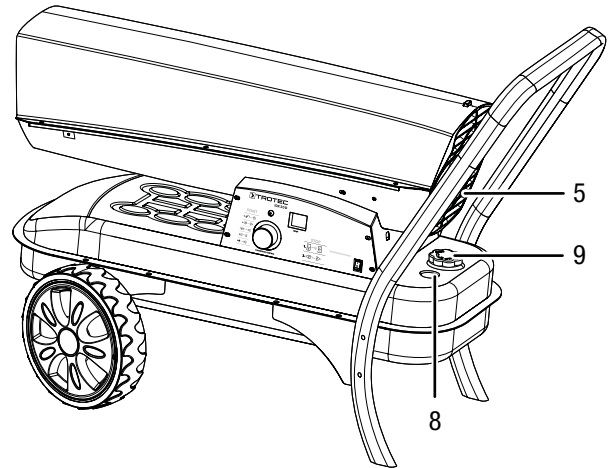
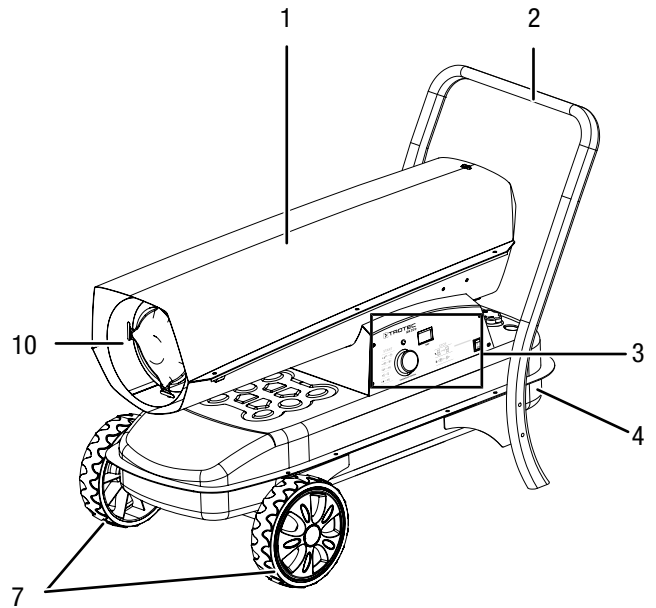
The device generates warmth by conveying the sucked-in, cold air past a combustion chamber. Inside the combustion chamber the fuel is burned. The sucked-in air is heated and fed back to the environment via the air outlet.

A part of the sucked-in air is compressed and conducted to the injection. The fuel is fed from the tank to the injection by the negative pressure thus created. An ignition contact at the injection ignites the fuel, which is then burned in a continuous flame.



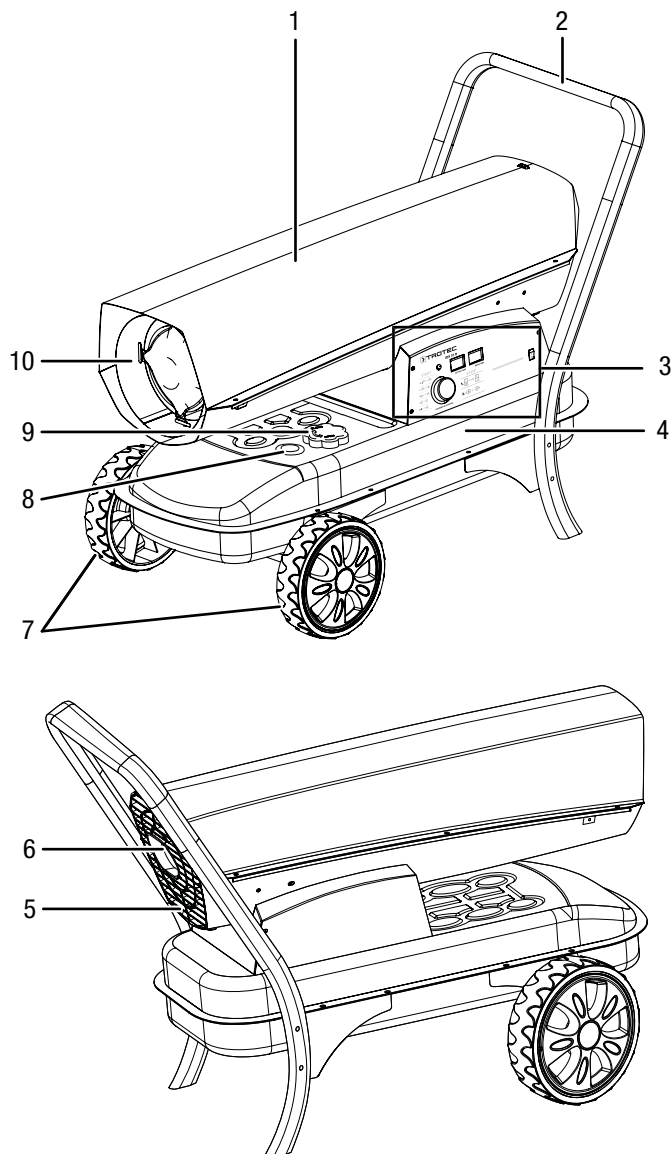
Device depiction

IDX 20 D



IDX 31 D / IDX 50 D

The illustrations feature the device IDX 31 D by way of example.



No.	Designation
1	Upper part of the housing
2	Transport handle
3	Control panel
4	Tank
5	Air inlet with protective grid
6	Pressure gauge
7	Wheel
8	Tank filling level indication
9	Fuel tank cap
10	Air outlet

Transport and storage

Note

If you store or transport the device improperly, the device may be damaged.

Note the information regarding transport and storage of the device.

Transport

To make the device easier to transport, it is fitted with a transport handle and wheels.

Before transporting the device, observe the following:

- Switch the device off.
- Hold onto the mains plug while pulling the power cable out of the mains socket.
- Do not use the power cable to drag the device.
- Allow the device to cool down sufficiently.

While transporting the device, observe the following:

- Slightly lift the device by the transport handle (2) until the rear support no longer touches the ground.
- Wheel the device to the desired position.

Storage

Before storing the device, proceed as follows:

- Switch off the device.
- Hold onto the mains plug while pulling the power cable out of the mains socket.
- Allow the device to cool down sufficiently.

When the device is not being used, observe the following storage conditions:

- Store the device in a dry location and protected from frost and heat.
- Store the device in an upright position where it is protected from dust and direct sunlight.
- If required, use a cover to protect the device from invasive dust.

Assembly and start-up

Scope of delivery

IDX 20 D

- 1 x Device
- 1 x Transport handle
- 2 x Wheel
- 1 x Axle
- 2 x Split pin
- 2 x Washer
- 2 x Support frame for wheels
- 2 x Support frame for transport handle
- 8 x Small screw
- 4 x Large screw
- 1 x Manual

IDX 31 D and IDX 50 D

- 1 x Device
- 1 x Transport handle
- 2 x Wheel
- 2 x Wheel cap
- 1 x Axle
- 2 x Split pin
- 2 x Washer
- 2 x Support frame for wheels
- 2 x Support frame for transport handle
- 8 x Small screw
- 4 x Large screw
- 1 x Manual

Unpacking the device

1. Open the cardboard box and take the device out.
2. Completely remove the packaging.
3. Fully unwind the power cable. Make sure that the power cable is not damaged and that you do not damage it during unwinding.

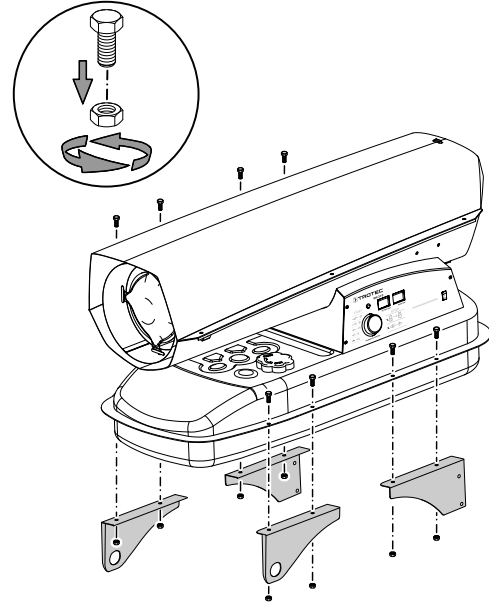
Assembly

Upon delivery the device is already partially preassembled. The support frames, wheels and transport handle still need to be mounted.

Assembling the support frames

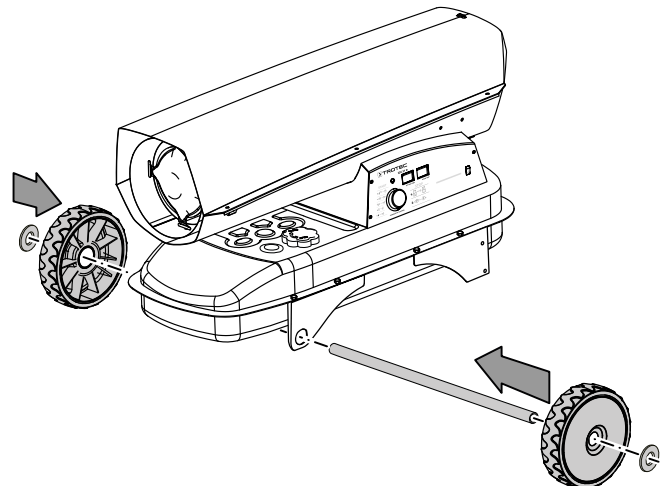
Use 2 small screws each to affix the two support frames for the wheels at the tank's front flanges.

Use 2 small screws each to affix the two support frames for the transport handle at the tank's rear flanges.

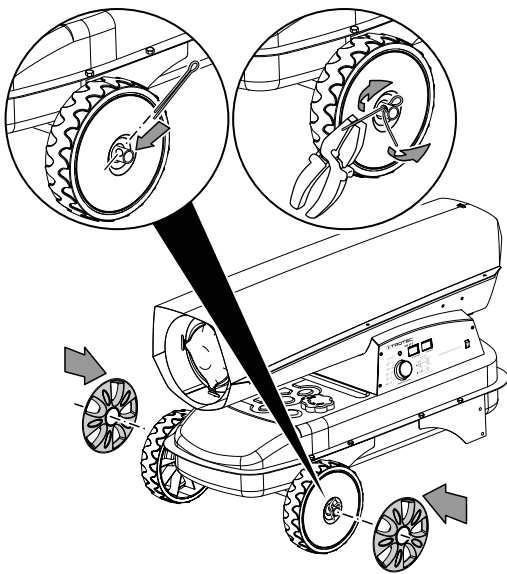


Assembling the wheels

1. Push the axle through the openings of the two support frames.
2. Attach both wheels to the axle.
3. Slide the washers onto the axle.



4. Secure the wheels on the axle by means of the split pins.



5. **The following step only applies to IDX 31 D und IDX 50 D:** Fasten the wheel caps to the wheels.

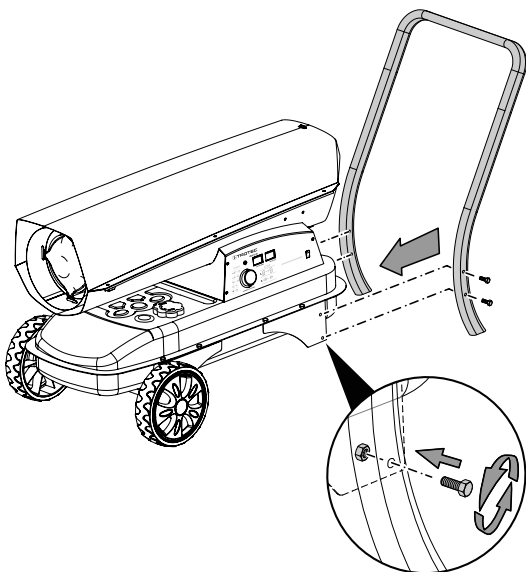


Info

If necessary, the device can be disassembled again (e.g. for storage). To remove the wheels from the axle, you can carefully loosen the wheel caps (if available) by means of a slotted screwdriver and then straighten the split pins using pliers.

Mounting the transport handle

1. Use 2 large screws each to affix the transport handle at the two support frames for the transport handle.



Positioning

A number of spatial and technical conditions have to be considered for the selection of the device's installation site. Non-observance may impair the proper functioning of the device or the accessories or can entail risks of personal injury and property damage.

The following is to be observed for positioning:

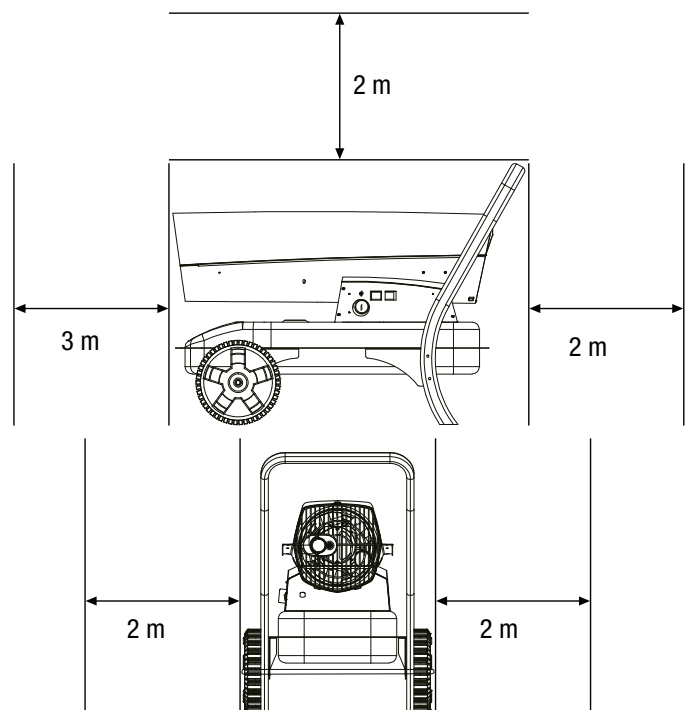
- Do not operate the device for more than 3 months at the same place. Prior to planning the flue gas system, gather information about the national legislation and contact a responsible specialist.
- The device may only be operated on roofed over surfaces.
- The device is to be set up in a stable position on incombustible ground.
- The device must be set up in close proximity to a chimney, an outer wall or on an open, ventilated surface.
- The device must be connected to a properly secured mains power socket.
- The room where the device is positioned must be sufficiently ventilated.

Ensure a sufficient fresh air supply, especially when there are people or animals in the same room with the device!

- The minimum distance between walls or other objects and the air inlet opening of the device must be at least 2 m (see figure).

There must be no walls or large objects near the device.

- The inlet and outlet openings must not be covered.
- There must be a sufficient number of fire extinguishers available.



Start-up

- Check the scope of delivery of your device for completeness. If an accessory part is missing, please contact the Trotec customer service or the specialist dealer where you purchased the device.
- Check the device and its connection parts for potential damage.
- Observe the conditions described in the chapter Positioning.
- Fill the tank with EL fuel oil or diesel as described in chapter Assembly.
- Check the device for its proper condition prior to start-up and at regular intervals during application.
- Make sure that the characteristics of the power grid conform to those on the nameplate.
- Each time before you plug the mains plug into the mains socket and switch on the device, make sure that the fan is moving freely.
- Connect the power cable to a properly secured socket. On construction sites, there must be a residual current device (RCD) installed upstream of the socket in accordance with national regulations (in Germany: VDE 0100/0105).

The device is now ready for operation.

Filling the tank

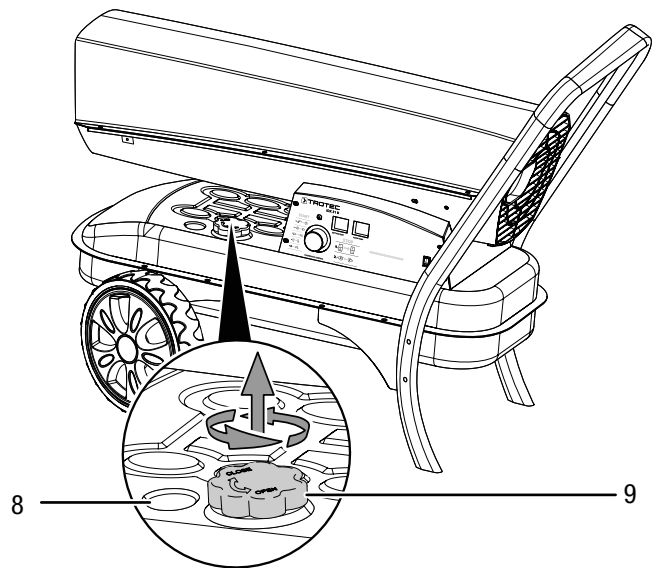
IDX 20 D: The fuel tank cap and the filling level indication are located under the transport handle.

IDX 31 D and 50: The fuel tank cap and the filling level indication are located to the left of the control panel.

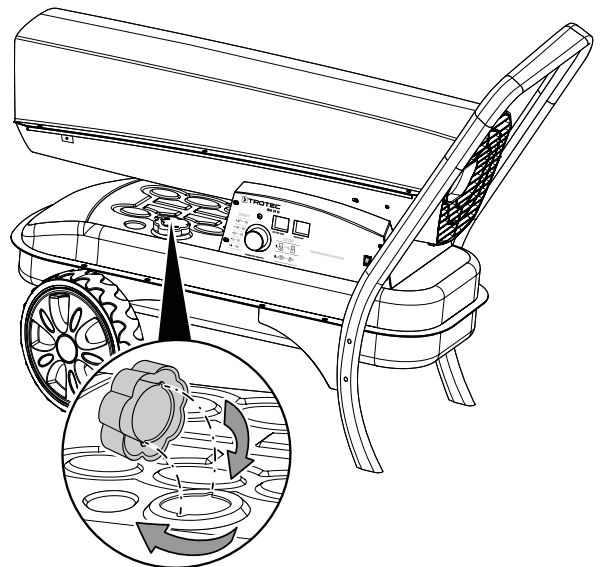
The action Filling the tank is explained by means of the device IDX 31 D which serves as an example.

- ✓ Before attempting to fill the tank, wait until the device has cooled down completely.
 - ✓ Only use fuel suitable for the device (see technical data).
1. Position the device on firm, level and incombustible ground.

2. Unscrew the fuel tank cap (9).



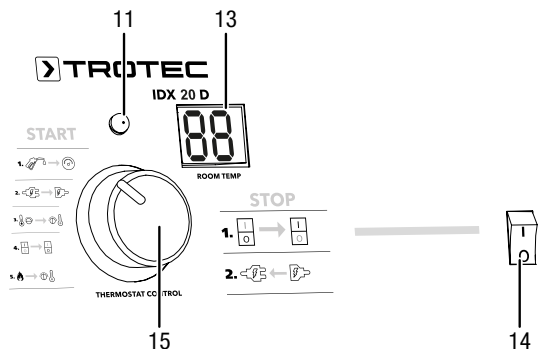
3. Fill the tank. In doing so, observe the filling level indication (8). Stop filling the tank just before the red range.
4. Screw the fuel tank cap (9) back onto the tank. Observe the recesses at the tank opening and the protrusions at the fuel tank cap. They must be aligned when attaching the fuel tank cap. Make sure that the fuel tank cap is firmly attached to avoid leakage.



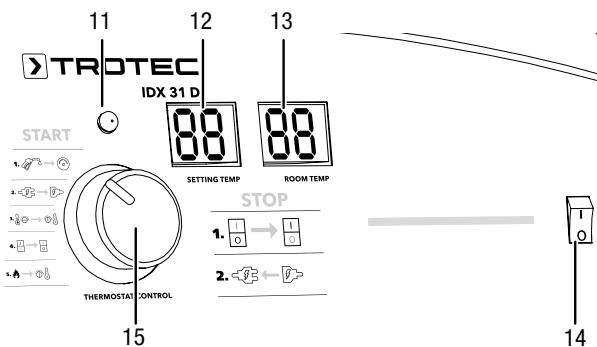
Operation

The device may only be used by accordingly instructed persons.

Operating elements IDX 20 D



Operating elements IDX 31 D and IDX 50 D



No.	Designation
11	Operating light
12	<i>Desired room temperature</i> indication
13	<i>Room temperature</i> indication
14	On/off switch
15	Rotary control <i>thermostat</i>

Switching the device on



Wear hearing protection.

Excessive noise can lead to hearing loss.

The device continues to operate until the desired room temperature is reached.

1. Set the on/off switch (14) to position **I**.
⇒ The operating light (11) is illuminated.
2. Set the rotary control *thermostat* (15) to the desired room temperature. This set room temperature should be higher than the current room temperature.
⇒ **The following note only applies to IDX 31 D and IDX 50 D:** The set room temperature is displayed via the *desired room temperature* indication (12).
3. The current room temperature is displayed via the *room temperature* indication (13).
4. Ensure a successful ignition.

Shutdown



Warning of electrical voltage

Do not touch the mains plug with wet or damp hands.

Note

Damage to the device due to overheating!

Never switch off the device by pulling the mains plug.

This may lead to overheating!

Switch off the device properly. Only remove the mains plug from the device once the fan motor has stopped completely.

1. Switch off the device by setting the on/off switch (14) to position **0**.
⇒ The operating light (11) goes out.
2. Wait until the fan motor has come to a complete standstill.
3. Secure the device against inadvertent switch-on by pulling the mains plug.
4. Allow the device to cool down completely.

Restart after troubleshooting

During initial start-up and after the fuel oil circuit has been drained completely, the fuel oil supply to the nozzle may be insufficient. In this case, the flame monitoring system will respond and the device will be blocked. Please proceed as follows:

1. Wait for approx. 1 minute.
2. Switch on the device by setting the on/off switch (14) to position **I**.

If the device is still not starting, proceed as follows:

1. Make sure that there is fuel left in the tank.
2. Please refer to the chapters General safety warnings and Errors and faults.

Errors and faults



Warning of electrical voltage

Tasks which require the device to be opened must only be carried out by authorised specialist companies or by Trotec.



Warning

Risk of injury due to improper repair!

Never try to make any modifications or repairs on the device.

Unauthorised modifications can lead to serious injuries or death.

Have a certified specialist workshop perform the repair work.

Note

Wait for at least 3 minutes after maintenance and repair work. Only then switch the device back on.

The device has been checked for proper functioning several times during production. If malfunctions occur nonetheless, check the device according to the following list.

The device does not start:

The operating light is not illuminated:

- Check the power connection.
- Check the power cable and mains plug for damage. If you notice damages, do not try to take the device back into operation.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

- Check the on-site fusing.
- The safety thermostat might have tripped due to overheating. Switch the device off and let it cool down for at least 10 minutes.

The device starts running, but switches off again after a brief period:

- The pump pressure might be incorrect. Check the pressure at the pump and adjust it if necessary, see chapter Adjusting the air pressure for the pump.
- The air filter might be dirty. Clean the air filters, and replace them if necessary, see chapter Cleaning air filters and fan.

The fan is running, but the device does not start:

- There might be no fuel in the tank. Check the filling level of the tank. Refill fuel if the tank is empty (see chapter Filling the tank).
- The pump pressure might be incorrect. Check the pressure at the pump and adjust it if necessary, see chapter Adjusting the air pressure for the pump.

The fan does not start, even though the device is connected and switched on:

- The thermostat setting might be too low. Turn up the thermostat setting.

Unclean combustion:

- The air filters might be dirty. Clean or replace the air filters, see chapter Removing filters for cleaning or replacement.
- The fuel might be of poor quality. Completely drain the fuel, see chapter Draining the tank. Refill new fuel, see chapter Filling the tank.
- The pump pressure might be incorrect. Check the pressure at the pump and adjust it if necessary, see chapter Adjusting the air pressure for the pump.

Smoke and/or sparks are emitted during first use:

- This is not a fault. These phenomena disappear after a brief runtime.

Noise emission during ignition or cooling:

- This is not a fault. The metal parts of the device expand when heated and generate noise.

Sparks and/or flames are issued from the device's front or rear during ignition:

- This is not a fault. Air might have accumulated in the lines. Keep a safety distance to the openings of the device!

The flame in the combustion chamber does not ignite:

- Check the filling level of the tank. Refill fuel if the tank is empty (see Filling the tank).
- Check the fuel for contaminations, e.g. dirt or water. If required, drain the fuel completely and fill in new and clean fuel (see Filling the tank).
- Safety shutdown: if the flame dies during operation, the electronics and the oil pump will be switched off. Investigate the cause on the basis of the following criteria:
 - **For qualified personnel only!**
Check the ignition: The distance between the two ignition electrodes should be 4 to 5 mm.

The flame goes out during combustion:

- Make sure the air supply is unobstructed. If required, clean the air intake opening.
- Check the filling level of the tank. Refill fuel if the tank is empty (see Filling the tank).
- Moisture in tank or fuel. Please contact the customer service.
- Check the fuel for contaminations, e.g. dirt or water. If required, drain the fuel completely and fill in new and clean fuel (see Filling the tank).
- Power failure: In the event of a power failure the ignition is extinguished, the device switches off immediately. After a power failure the device will not restart automatically, it has to be started via the on/off switch.

The device emits smoke or dust:

- Check the fuel for contaminations, e.g. dirt or water. If required, drain the fuel completely and fill in new and clean fuel (see Filling the tank).

The flame emerges from the air outlet:

- Check the fuel for contaminations and replace it if required.
- Check the tank for contaminations and drain it if required (see chapter Maintenance). Refill with clean fuel.

The device still does not operate correctly after these checks:

Please contact the customer service. If necessary, bring the device to an authorised specialist electrical company or to Trotec for repair.

Maintenance

Maintenance intervals

Maintenance and care interval	before every start-up	as needed	at least every 2 weeks	at least every 4 weeks	at least every 6 months	at least annually
Check air inlets and outlets for dirt and foreign objects and clean if necessary	X					
Check air inlet grid(s) for dirt and foreign objects and clean if necessary	X		X			
Clean the exterior		X				X
Visually check the inside of the device for dirt		X		X		
Check for damage	X					
Check the attachment screws		X				X
Clean the fuel filter		X			X	
Test run						X

Maintenance and care log

Device type:

Device number:

Maintenance and care interval	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Check air inlets and outlets for dirt and foreign objects and clean if necessary																
Check air inlet grid(s) for dirt and foreign objects and clean if necessary																
Clean the exterior																
Visually check the inside of the device for dirt																
Check for damage																
Check the attachment screws																
Clean the fuel filter																
Test run																
Comments																

1. Date: Signature:	2. Date: Signature:	3. Date: Signature:	4. Date: Signature:
5. Date: Signature:	6. Date: Signature:	7. Date: Signature:	8. Date: Signature:
9. Date: Signature:	10. Date: Signature:	11. Date: Signature:	12. Date: Signature:
13. Date: Signature:	14. Date: Signature:	15. Date: Signature:	16. Date: Signature:

Activities required before starting maintenance



Warning of electrical voltage

Do not touch the mains plug with wet or damp hands.

- Switch the device off.
- Hold onto the mains plug while pulling the power cable out of the mains socket.
- Allow the device to cool down completely.



Warning of electrical voltage

Tasks which require the device to be opened must only be carried out by authorised specialist companies or by Trotec.

Cleaning the housing

In this chapter, the device IDX 31 D is shown by way of example.

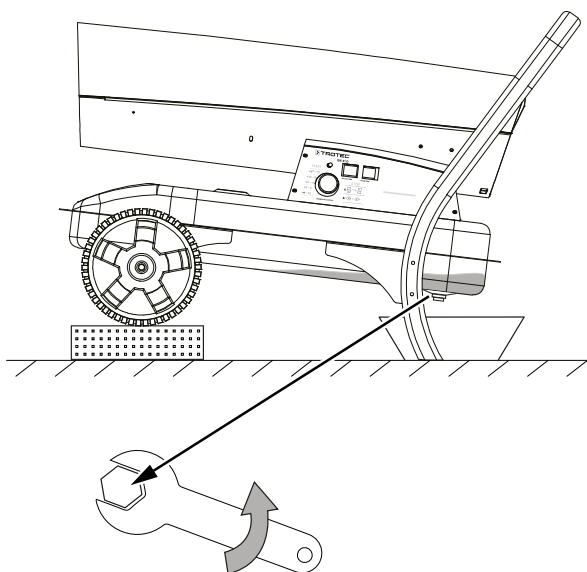
Clean the housing with a soft, damp and lint-free cloth. Make sure that no moisture enters the housing. Protect electrical components from moisture. Do not use any aggressive cleaning agents such as cleaning sprays, solvents, alcohol-based or abrasive cleaners to dampen the cloth.

Wipe the housing dry after cleaning.

Draining the tank

In the following, emptying of the tank is explained using the device IDX 31 D as an example.

1. Provide for a suitable collection container.
2. Move the device to an elevated position.
3. As indicated in the figure use a wrench to open the screw at the bottom of the tank.



5. When no more fuel is discharged, seal the drain hole again.
 - ⇒ Ensure the tight fit of the screw and, if required, replace the seal, for otherwise fuel might leak out uncontrollably.
6. Dispose of the fuel according to national regulations.

Cleaning air filters and fan

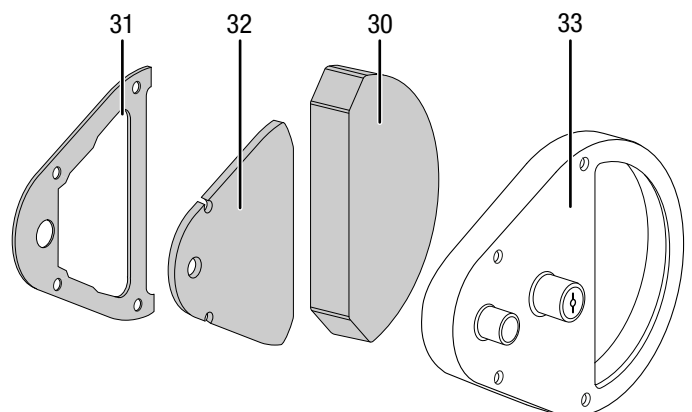
The two air filters should be checked, cleaned and possibly replaced approx. every 500 operating hours.

The fan ought to be checked for dirt at least once per heating season. This activity can be carried out along with the inspection of the air filters.

Overview of air filters

The filter housing consists of the following parts:

- filter seal (31)
- foam filter (30)
- prefilter (32)
- filter housing (33)

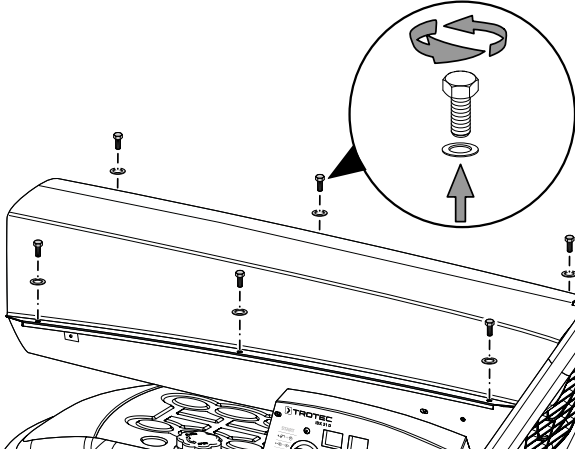


4. Drain the fuel into the collection container.

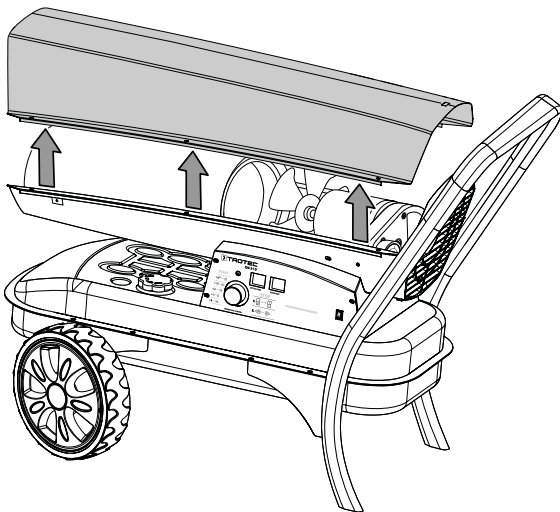
Opening the housing

To check the fan and the air filters you will first have to remove the upper part of the housing: To do so, please proceed as follows:

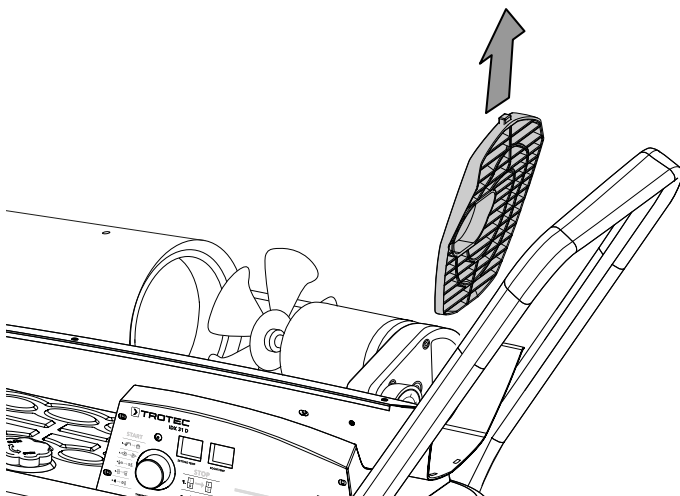
1. Loosen the 6 screws at the upper part of the housing.



2. Remove the upper part of the housing.

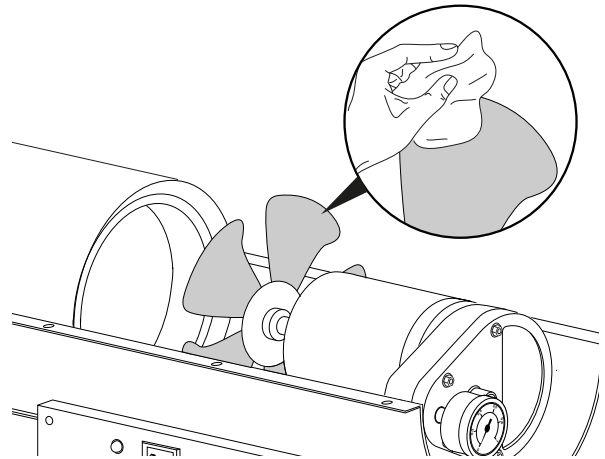


3. Remove the protective grid.



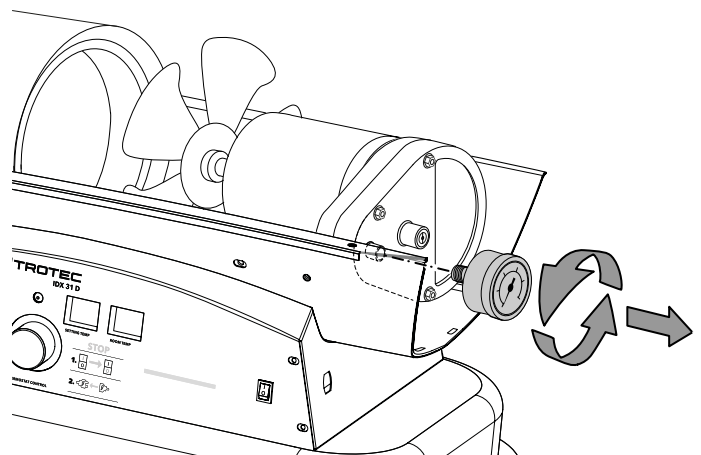
Cleaning the fan blades

1. Carefully clean the fan blades with a soft, damp and lint-free cloth. Ensure that no moisture enters the housing. Protect electrical components from moisture. Do not use any aggressive cleaning agents such as cleaning sprays, solvents, alcohol-based or abrasive cleaners to dampen the cloth.

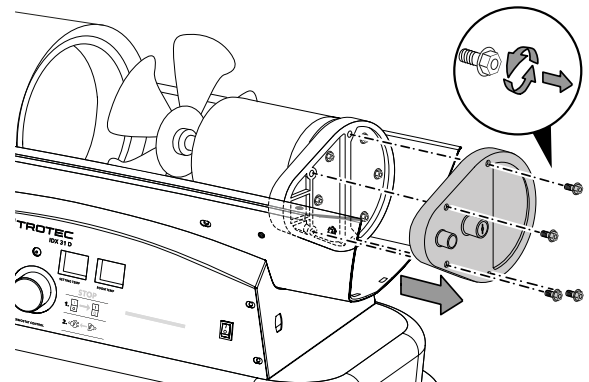


Opening the filter housing

1. Unscrew the pressure gauge.

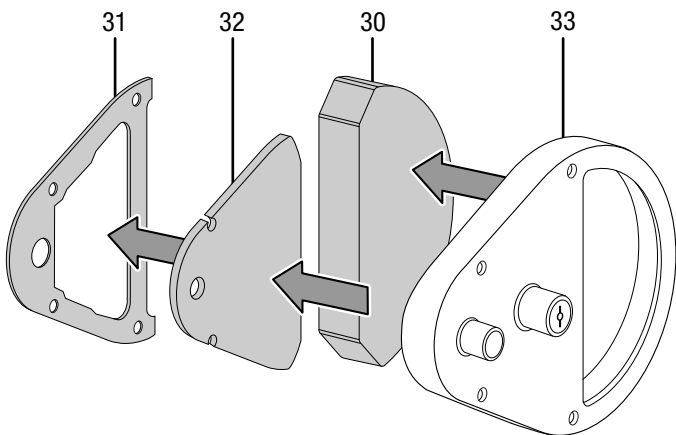


2. Loosen the hexagonal bolts at the filter housing.
3. Remove the filter housing with filters and sealing.

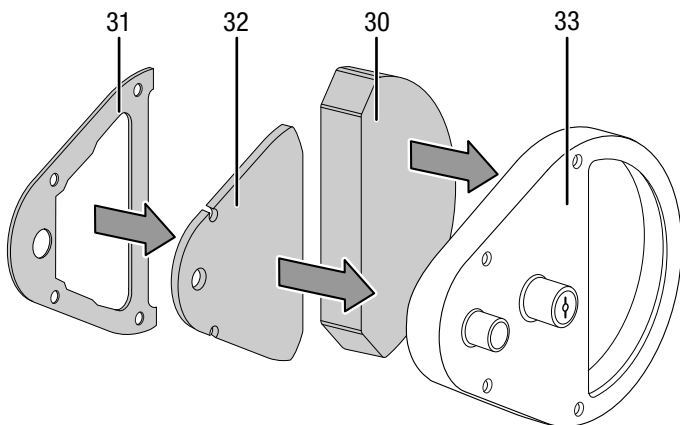


Removing filters for cleaning or replacement

1. Remove the two filters from the filter housing (33).

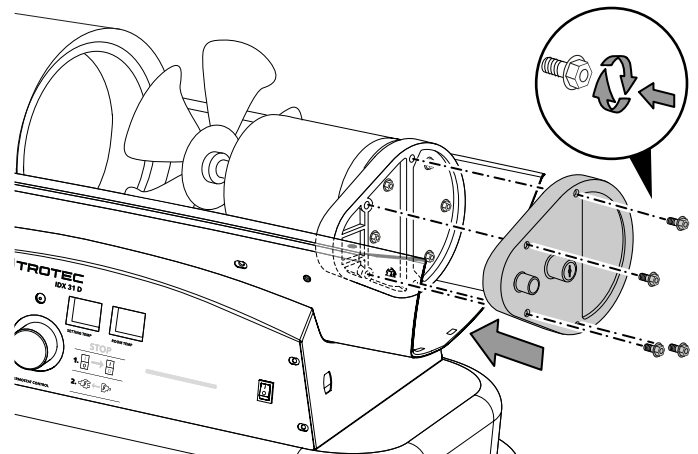


2. Check both filters for dirt or damage. Replace the prefilter (32) if needed. If required, clean the foam filter (30) using a slightly damp, soft, lint-free cloth. If the foam filter is heavily contaminated, clean it with warm water mixed with a neutral cleaning agent.
3. Allow the foam filter to dry completely. Do not put any wet filters into the device.
4. Insert both filters into the filter housing (33). Ensure the proper seating of the seal (31).

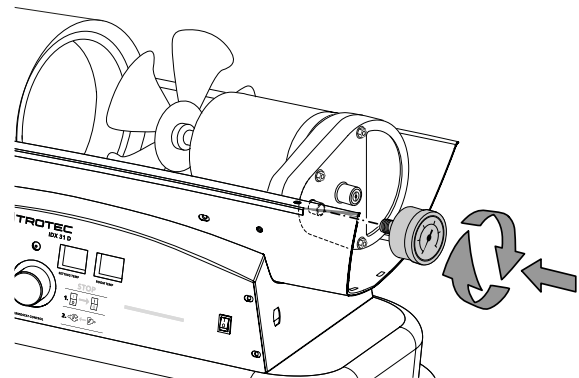


Assembling the filter housing

1. Attach the filter housing with filters and sealing.

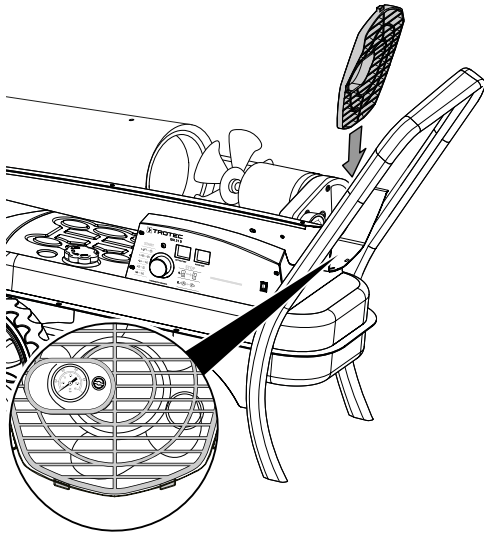


2. Tighten the hexagonal bolts at the filter housing.
3. Fasten the pressure gauge in place.

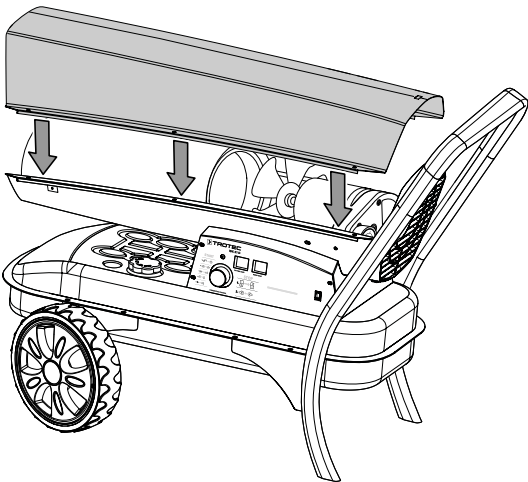


Assembling the upper part of the housing

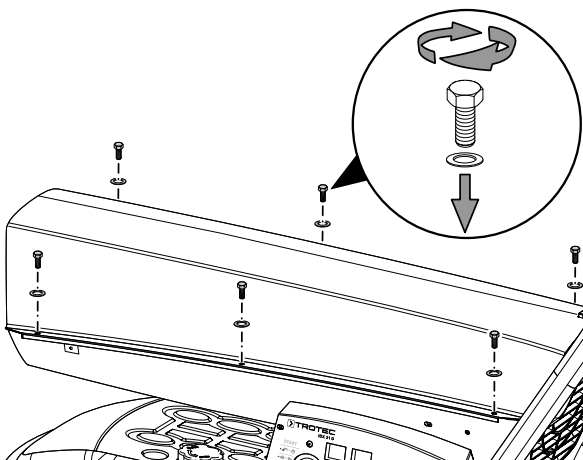
1. Attach the protective grid.



2. Place the upper part of the housing on the device.



3. Tighten the 6 screws at the upper part of the housing.



Adjusting the air pressure for the pump

Ideally, the air pressure should range between 0.32 bar and 0.36 bar. During operation, the air pressure can be read from the pressure gauge (16).

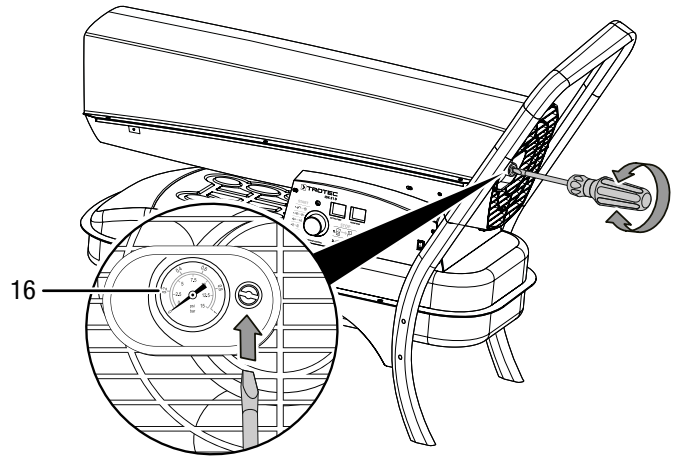


Info

If the air pressure exceeds 0.36 bar, a flame emerges from the air outlet of the device. The device then stops running.

If the pressure is lower than 0.32 bar, the device continues to operate, but with a reduced performance.

1. Adjust the air pressure during operation by means of a slotted screwdriver. For lowering turn the screw counter-clockwise; for increasing carefully turn it clockwise.



Technical annex
Technical data

Parameter	Value		
Model	IDX 20 D	IDX 31 D	IDX 50 D
Article number	1.430.000.051	1.430.000.067	1.430.000.071
Method of heating	direct	direct	direct
Air flow rate	450 m ³ /h	750 m ³ /h	1100 m ³ /h
Operating range	-40 °C to 45 °C	-40 °C to 45 °C	-40 °C to 45 °C
Mains connection	220–240 V / 50 Hz	220–240 V / 50 Hz	220–240 V / 50 Hz
Nominal heat output	20 kW (17,200 kcal)	30 kW (25,800 kcal)	55 kW (47,300 kcal)
Nominal current	0.61 A	1.27 A	1.36 A
Max. power consumption	140 W	290 W	310 W
Max. fuel consumption	1.9 l/h	3 l/h	4.8 l/h
Sound level (at a distance of 1m)	84 dB(A)	84 dB(A)	84 dB(A)
Dimensions (length x width x height)	920 x 425 x 618 mm	935 x 514 x 702 mm	1119 x 576 x 711 mm
Minimum distance to walls and other objects			
A: top	2 m	2 m	2 m
B: rear	2 m	2 m	2 m
C: side	2 m	2 m	2 m
D: front	3 m	3 m	3 m
Weight	17 kg	23 kg	26 kg


Wear hearing protection.

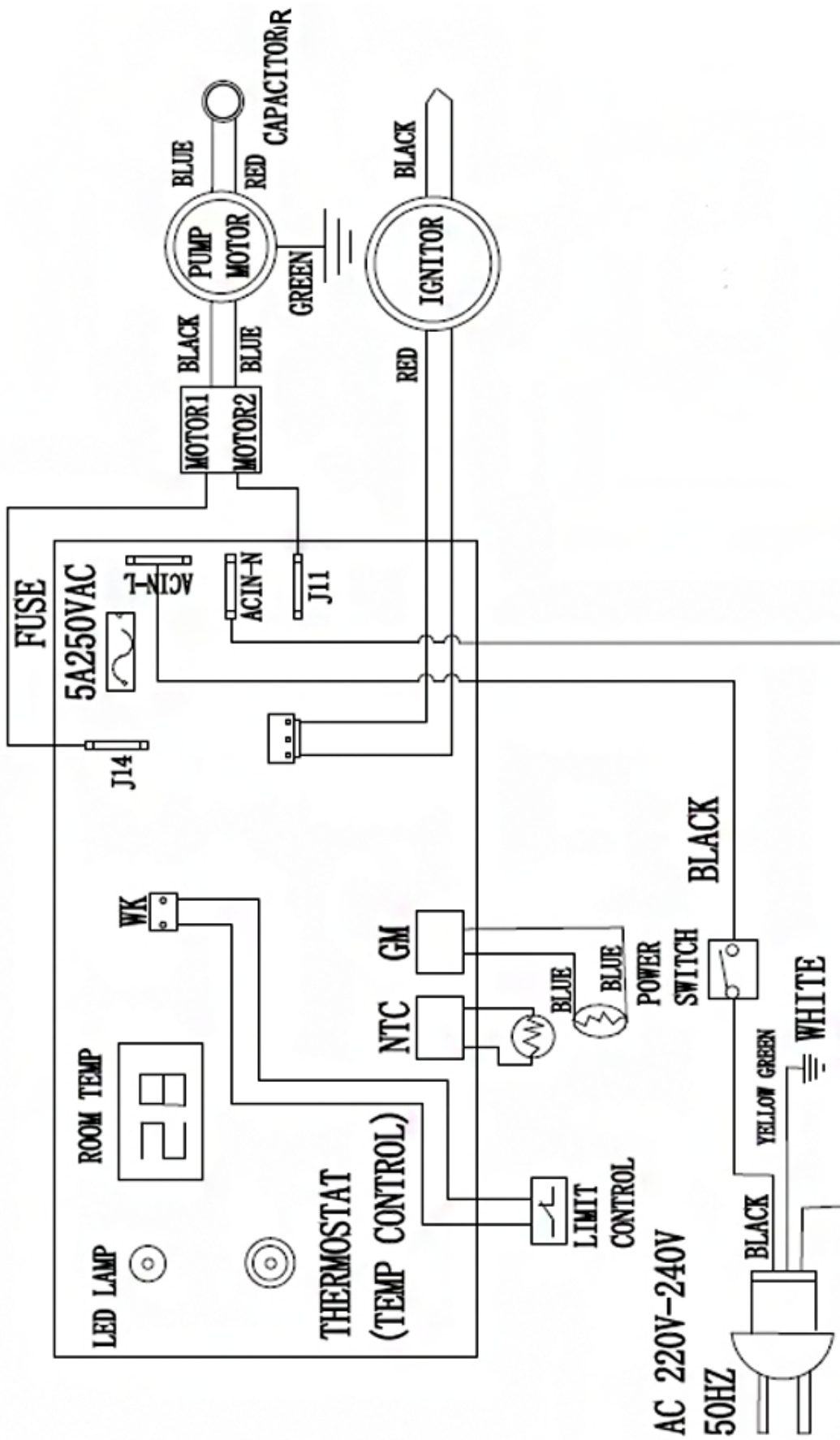
Excessive noise can lead to hearing loss.

Fuels

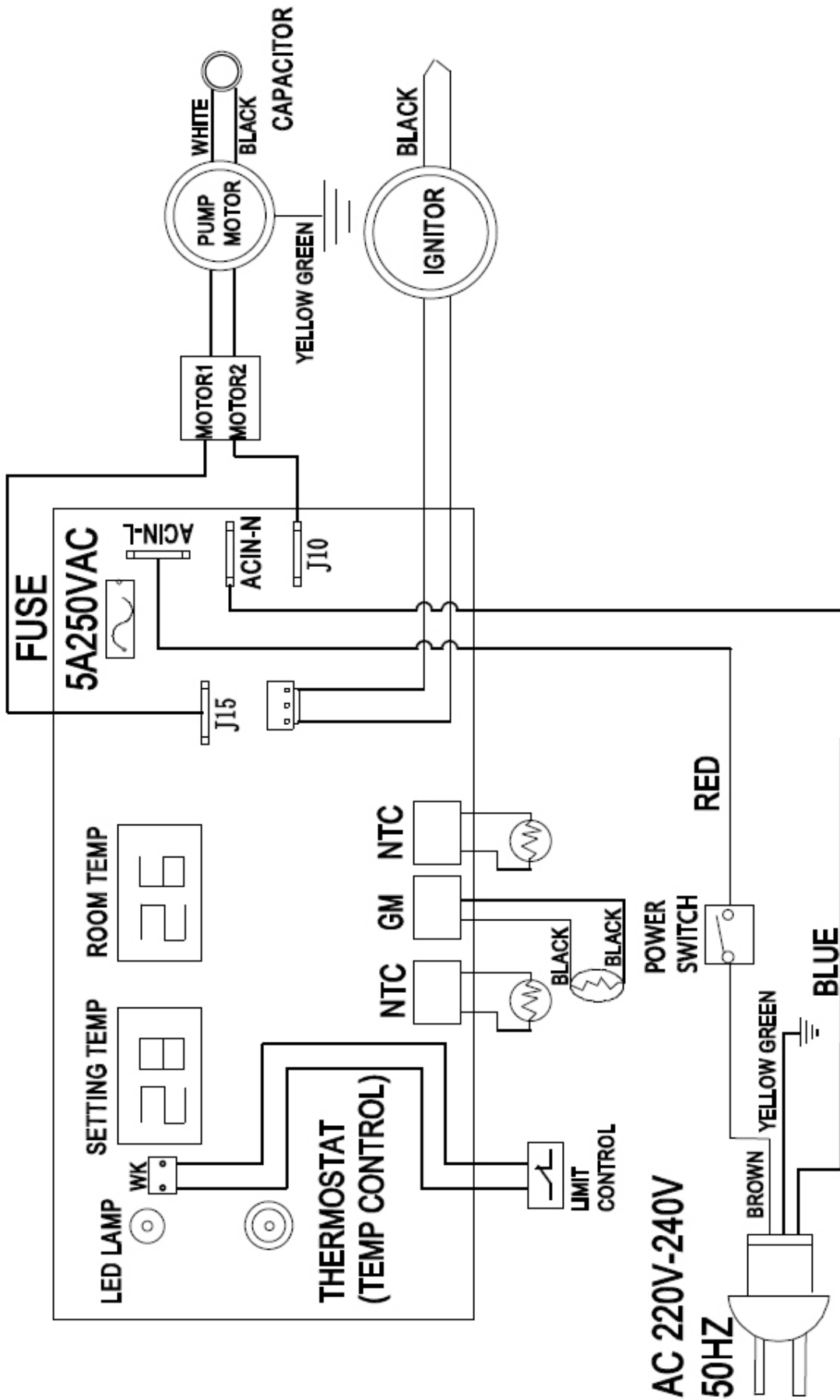
The following fuels are approved for the device:

- EL fuel oil
- Diesel

Wiring diagram IDX 20 D



Wiring diagram IDX 31 D / IDX 50 D

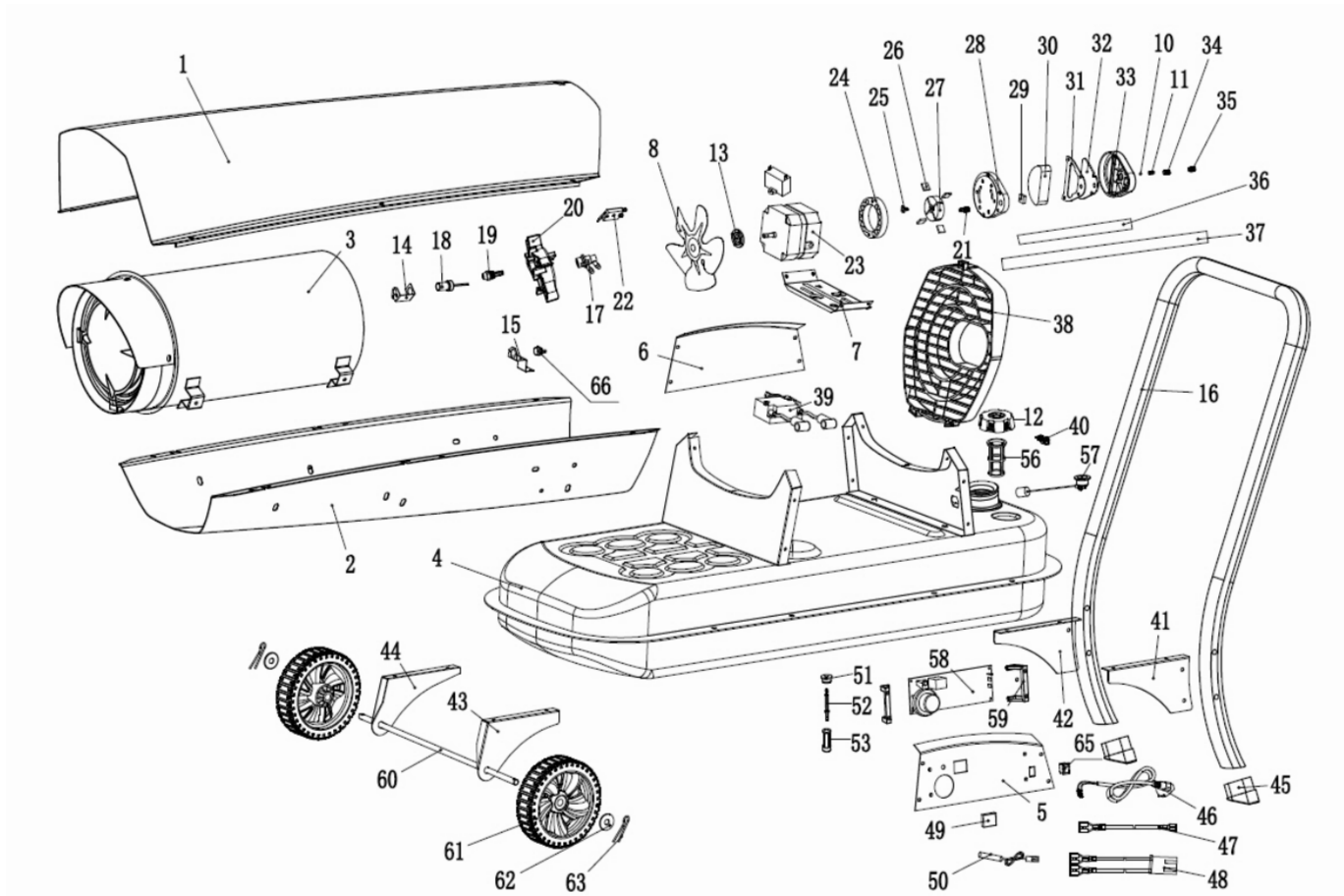


Overview of spare parts and spare parts list IDX 20 D



Info

The position numbers of the spare parts differ from those describing the positions of the components mentioned in these instructions.



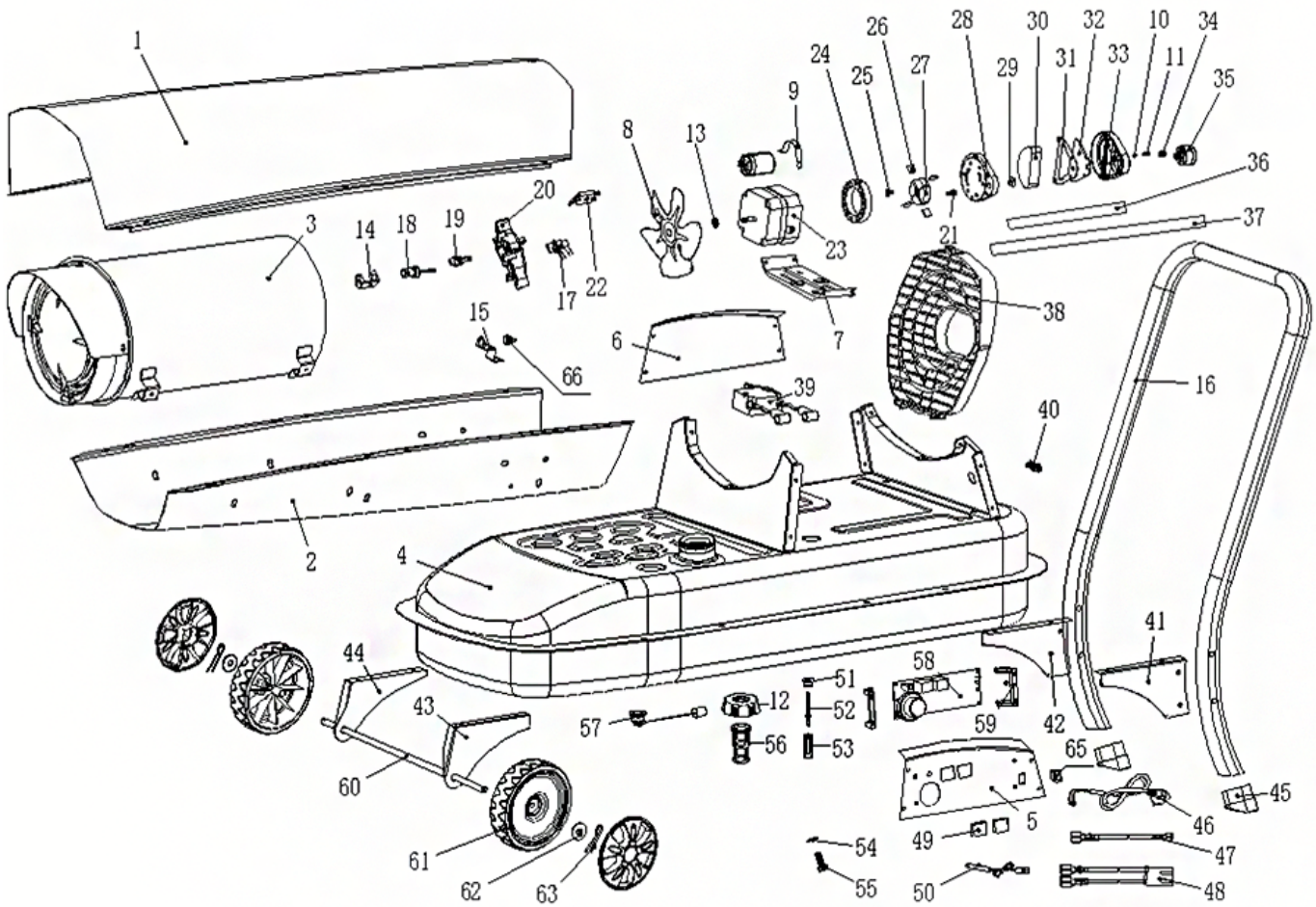
No.	Spare Part	No.	Spare Part	No.	Spare Part
1	Upper Shell	23	Motor	45	Push the frame Cover
2	Lower Shell	24	Pump Body	46	Power Cord
3	Combustion Chamber Assembly	25	Rotor Kit Insert	47	Connecting Line For Power Cord
4	Fuel Tank Assembly	26	Blade	48	Connecting Line For Thermostat
5	Left Side Cover	27	Rotor Kit	49	Windows Display
6	Right Side Cover	28	End Pump Cover	50	Temperature Sensor
7	Motor mounting bracket	29	Lint Filter	51	Seal Sleeve
8	Fan assembly	30	Filter Kit	52	Fuel Filter #2 Connecting Pipe
9	Fixed belt	31	Gasket Outlet Filter	53	Fuel Filter #2
10	Ball	32	Output Filter	54	Drain Spacer
11	Spring	33	End Filter Cover	55	Drain Screw
12	Fuel Cap	34	Adjustment Screw	56	Fuel Filter #1
13	Fan blade Aluminum base	35	Air pressure Guage /Pressure plug (PK80W)	57	Fuel Gauge
14	Photo Cell Bracket	36	Fuel Line	58	PCB
15	Thermostate Bracket	37	Air Line	59	Left PCB Bracket
16	Rear Handle	38	Fan Guard	60	Wheel Axle
17	Nozzle seat	39	Ignitor	61	Wheel
18	Photo Cell	40	Power Cord clip	62	Spacer
19	Nozzle	41	Left push Frame Fixing Plate	63	Split Pin
20	Burner Head	42	Right push Frame Fixing Plate	64	Handle
21	Nipple	43	Left Wheel retaining Plate	65	Power Switch
22	Spark Plug Kit	44	Right Wheel retaining Plate	66	Thermostat

Overview of spare parts and spare parts list IDX 31 D



Info

The position numbers of the spare parts differ from those describing the positions of the components mentioned in these instructions.



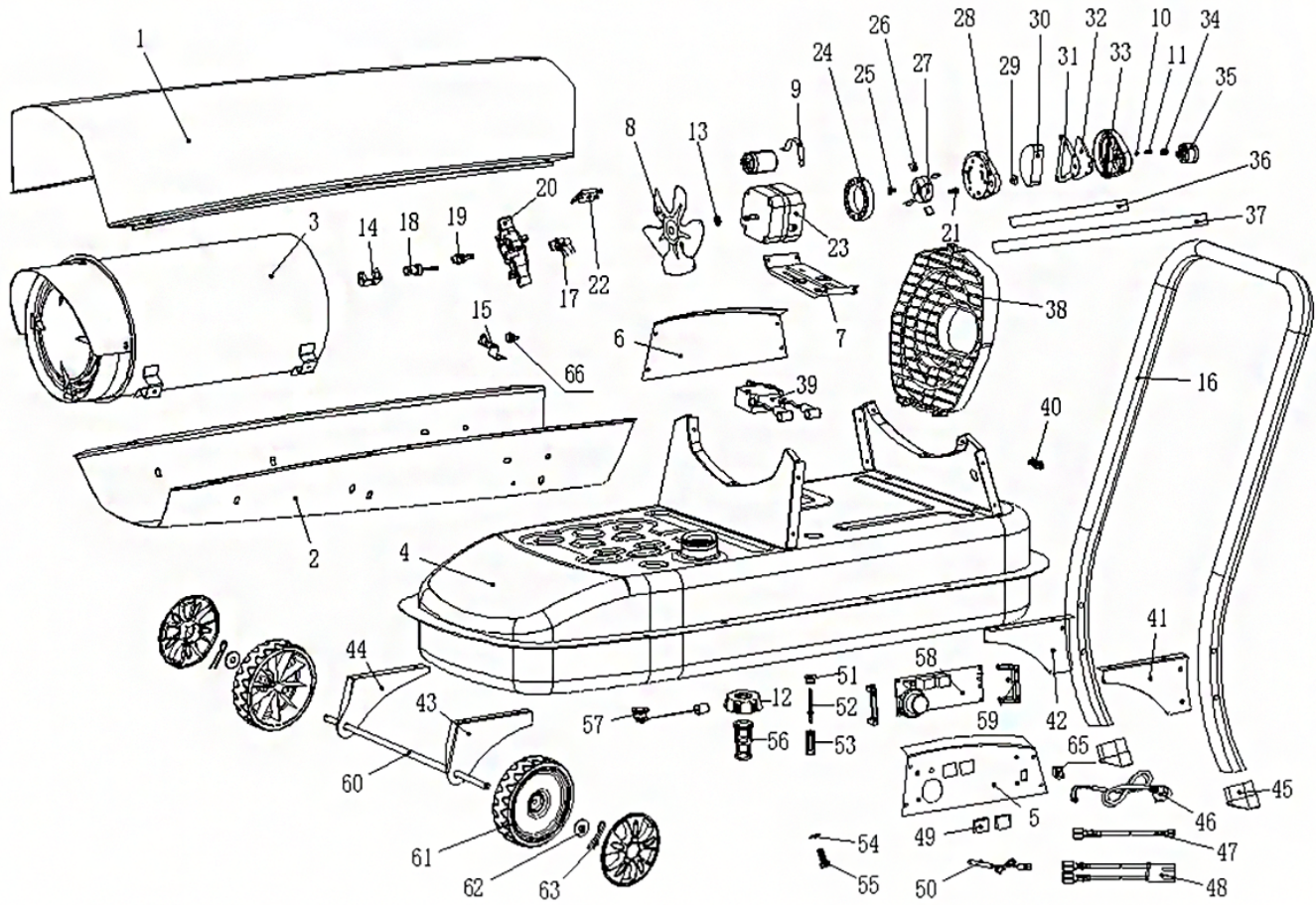
No.	Spare Part	No.	Spare Part	No.	Spare Part
1	Upper Shell	23	Motor	45	Push the frame Cover
2	Lower Shell	24	Pump Body	46	Power Cord
3	Combustion Chamber Assembly	25	Rotor Kit Insert	47	Connecting Line For Power Cord
4	Fuel Tank Assembly	26	Blade	48	Connecting Line For Thermostat
5	Left Side Cover	27	Rotor Kit	49	Windows Display
6	Right Side Cover	28	End Pump Cover	50	Temperature Sensor
7	Motor Mounting Bracket	29	Lint Filter	51	Seal Sleeve
8	Fan Assembly	30	Filter Kit	52	Fuel Filter #2 Connecting Pipe
9	Fixed Belt	31	Gasket Outlet Filter	53	Fuel Filter #2
10	Ball	32	Output Filter	54	Drain Spacer
11	Spring	33	End Filter Cover	55	Drain Screw
12	Fuel Cap	34	Adjustment Screw	56	Fuel Filter #1
13	Fan blade Aluminum base	35	Air Pressure Gauge	57	Fuel Gauge
14	Photo Cell Bracket	36	Fuel Line	58	PCB
15	Thermostate Bracket	37	Air Line	59	Left PCB Bracket
16	Rear Handle	38	Fan Guard	60	Wheel Axle
17	Nozzle seat	39	Ignitor	61	Wheel
18	Photo Cell	40	Power Cord clip	62	Spacer
19	Nozzle	41	Left push Frame Fixing Plate	63	Split Pin
20	Burner Head	42	Right push Frame Fixing Plate	64	Handle
21	Nipple	43	Left Wheel retaining Plate	65	Power Switch
22	Spark Plug Kit	44	Right Wheel retaining Plate	66	Thermostat

Overview of spare parts and spare parts list IDX 50 D



Info

The position numbers of the spare parts differ from those describing the positions of the components mentioned in these instructions.



No.	Spare Part	No.	Spare Part	No.	Spare Part
1	Upper Shell	23	Motor	45	Push the frame Cover
2	Lower Shell	24	Pump Body	46	Power Cord
3	Combustion Chamber Assembly	25	Rotor Kit Insert	47	Connecting Line For Power Cord
4	Fuel Tank Assembly	26	Blade	48	Connecting Line For Thermostat
5	Left Side Cover	27	Rotor Kit	49	Windows Display
6	Right Side Cover	28	End Pump Cover	50	Temperature Sensor
7	Motor mounting bracket	29	Lint Filter	51	Seal Sleeve
8	Fan assembly	30	Filter Kit	52	Fuel Filter #2 Connecting Pipe
9	Fixed belt	31	Gasket Outlet Filter	53	Fuel Filter #2
10	Ball	32	Output Filter	54	Drain Spacer
11	Spring	33	End Filter Cover	55	Drain Screw
12	Fuel Cap	34	Adjustment Screw	56	Fuel Filter #1
13	Fan blade Aluminum base	35	Air pressure Guage /Pressure plug	57	Fuel Gauge
14	Photo Cell Bracket	36	Fuel Line	58	PCB
15	Thermostate Bracket	37	Air Line	59	Left PCB Bracket
16	Rear Handle	38	Fan Guard	60	Wheel Axle
17	Nozzle seat	39	Ignitor	61	Wheel
18	Photo Cell	40	Power Cord clip	62	Spacer
19	Nozzle	41	Left push Frame Fixing Plate	63	Split Pin
20	Burner Head	42	Right push Frame Fixing Plate	64	Handle
21	Nipple	43	Left Wheel retaining Plate	65	Power Switch
22	Spark Plug Kit	44	Right Wheel retaining Plate	66	Thermostat

Disposal

Always dispose of packing materials in an environmentally friendly manner and in accordance with the applicable local disposal regulations.



The icon with the crossed-out waste bin on waste electrical or electronic equipment is taken from Directive 2012/19/EU. It states that this device must not be disposed of with the household waste at the end of its life. You will find collection points for free return of waste electrical and electronic equipment in your vicinity. The addresses can be obtained from your municipality or local administration. You can also find out about other return options that apply for many EU countries on the website <https://hub.trotec.com/?id=45090>. Otherwise, please contact an official recycling centre for electronic and electrical equipment authorised for your country.

The separate collection of waste electrical and electronic equipment aims to enable the re-use, recycling and other forms of recovery of waste equipment as well as to prevent negative effects for the environment and human health caused by the disposal of hazardous substances potentially contained in the equipment.

Fuel oil

The fuel oil must be drained from the device and collected.

Fuels are to be disposed of according to the national regulations.

Only for United Kingdom

According to Waste Electrical and Electronic Equipment Regulations 2013 (SI 2013/3113) (as amended) devices that are no longer usable must be collected separately and disposed of in an environmentally friendly manner.

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