KERNLOCHBOHRER®
PROFESSIONAL POWER TOOLS

Operating instructions

Soft impact core drilling machine
DKS-132/DC-H

BA-01-000010-02-EN

Scope of application

These Operating instructions only apply to the machine labelled on the cover sheet.

Check the machine model using the machine's rating plate.

Original instructions / translation of the original instructions

In accordance with the EU Machinery Directive, the German copy of these Operating instructions is the original instructions.

Copies in other languages are translations of the original instructions.

Kernlochbohrer GmbH

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1 Information and support

1.1 Thanks to the buyer

Thank you for purchasing a machine from Kernlochbohrer GmbH.

Please read the Operating instructions carefully and observe the safety instructions. By following the Operating instructions, you will be able to fully utilise the outstanding performance of our product.

If you have any questions regarding the operation of the machine, please contact Kernlochbohrer GmbH directly. We are available to answer your questions at any time.

1.2 Using the Operating instructions

The machine is intended for professional use and may only be operated by trained personnel. Strictly adhere to the instructions in the Operating instructions.

Our company declines all responsibility in the event of non-compliance with the Operating instructions, which may result in injury or damage to the machine.

The Operating instructions are indispensable for using the machine. The Operating instructions must therefore always be kept close to the machine and be accessible to the intended personnel at all times.

In addition to the Operating instructions, the generally applicable and local regulations for accident prevention and environmental protection must be provided; compliance with these regulations must be checked regularly.

1.3 Changes

Kernlochbohrer GmbH reserves the right to change the design and appearance of the products and their Operating instructions. Future changes to the Operating instructions will be made without prior notice.

1.4 Explanation of symbols

The symbol draws your attention to dangers that you must be aware of when carrying out the following work in order to avoid damage to yourself, other persons or property.

📖 Cross-reference to another point in the Operating instructions.

☑ Prerequisite for an action.

☒ Action to be performed.

↳ Behaviour of the machine that is to be expected as a result of the preceding action.

ⓘ Background information or reference to special features.

1.5 Guarantee

In accordance with Kernlochbohrer GmbH's general terms of delivery, a warranty period of 12 months applies for material defects in business transactions with companies (proof by invoice or delivery note).

Damage caused by natural wear and tear, overloading or improper handling is excluded.

Damage caused by material or manufacturer defects will be rectified free of charge by repair or replacement. Complaints can only be recognised if the device is sent to Kernlochbohrer GmbH unassembled

Wear parts are excluded from the warranty.

1.6 Environmental protection

1.6.1 Disposal of the product

Follow national regulations on environmentally friendly disposal and recycling of used machines and accessories.

For EU countries only:

Do not dispose of the machine with household waste! In accordance with European Directive 2012/19/EU on waste electrical and electronic equipment and its transposition into national law, used power tools must be collected separately and recycled in an environmentally friendly manner.

1.6.2 Disposal of the packaging

The packaging is made from recyclable materials. They must be disposed of in accordance with their labelling and municipal guidelines.

1.7 Service

Precise information and specific questions allow faults to be rectified quickly, make it easier to order spare parts and prevent incorrect deliveries.

Before contacting the service, please collect the following data first.

The model designation must be stated in all enquiries and orders. This information can be found on the rating plate of the machine.

In the event of malfunctions, further information is required: type and extent of the malfunction, accompanying circumstances, suspected cause.

When ordering spare parts, the following is required: Quantity and item number in the exploded drawing in these Operating instructions.

ⓘ You are welcome to send us photos when ordering spare parts or videos in the event of faults.

Contact details:

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2 Security

2.1 General information

The machine was built according to the state of the art and in compliance with the applicable laws, standards and safety regulations. Use of the machine may nevertheless result in hazards for the user or third parties and damage to the machine and other property.

The machine may only be used if it is in perfect working order and in accordance with its intended use and in a safe and hazard-conscious manner.

If the machine is damaged or malfunctions, switch it off immediately, secure it against being switched on again and repair it or arrange for it to be repaired.

2.2 Intended use

The machine is designed exclusively for drilling concrete, reinforced concrete, stone, masonry and similar materials with the appropriate core bits. The machine is used for dry drilling and manual operation.

It is important to always use a drill bit that is suitable for the drilling technique and the material to be drilled.

To optimise the service life of the core bit, the machine should be connected to a dust extraction system. When using the machine in soft-impact drilling mode and with a soft-impact dry core bit, the machine must be connected to a dust extraction system.

The machine may only be used within the limits of its technical data. This information, for example performance data and ambient conditions, can be found in the "Technical data" chapter.

Any other use or use beyond this is considered improper use - risk of accident! Kernlochbohrer GmbH is not liable for any resulting damage. The risk is borne solely by the operator. In the event of damage, overload conditions are permanently recorded by the machine in order to determine whether the damage was caused by improper use.

Intended use also includes observing the operating instructions and complying with the prescribed maintenance intervals.

2.3 Safety regulations for the operator

2.3.1 Organisational safety measures

The Operating instructions must always be available for the operating and maintenance personnel. It must therefore always be kept at the machine's place of use.

The regulations on accident prevention and environmental protection applicable at the machine's place of use must also be available. The operator of the machine must regularly check compliance with these regulations.

The use of sound-emitting machines may be limited in time by national or local regulations.

The machine must not be operated in potentially explosive atmospheres or in the vicinity of flammable liquids, gases or combustible dust.

All safety and danger notices on the machine must be legible and must not be removed.

The protective equipment required to operate the machine must be provided by the operator. The operator must ensure that the protective equipment is used properly by the personnel.

Operating and auxiliary materials, such as lubricants or cleaning agents, must be selected in such a way that the limit values for hazardous substances applicable at the place of use are complied with. The regulations for environmental protection and disposal applicable at the place of use must be complied with.

2.3.2 Changes to the machine

The operator may not make any modifications to the machine without written authorisation from Kernlochbohrer GmbH. If the operator carries out modifications without authorisation, the warranty becomes void. Kernlochbohrer GmbH is not liable for damage caused by unauthorised modifications.

2.3.3 Spare parts

Spare parts must comply with the properties defined by Kernlochbohrer GmbH. This is always guaranteed for spare parts supplied by Kernlochbohrer GmbH. Kernlochbohrer GmbH is not liable for damage caused by the use of unsuitable spare parts.

2.3.4 Personnel

All persons who are authorised to commission, operate and maintain the machine must have read and understood the Operating instructions beforehand.

The machine may only be operated by persons who have been adequately instructed beforehand.

The machine may only be serviced by persons who have completed the appropriate specialised training for this activity.

Minors are not permitted to work with the machine. Young people over the age of 16 who are trained under supervision are exempt from this regulation.

2.4 Safety regulations for staff

2.4.1 Safe behaviour

All persons responsible for commissioning, operating and maintaining the machine must have read and understood the Operating instructions beforehand.

The machine may only be operated by persons who have been adequately instructed beforehand.

The machine may only be serviced by persons who have completed the appropriate specialised training for this activity.

Minors are not permitted to work with the machine. Young people over the age of 16 who are trained under supervision are exempt from this regulation.

Any work on and with the machine that could jeopardise safety must be avoided.

All safety and danger notices on the machine must be legible and must not be removed.

2.4.2 Safe operation

Operating the machine requires the full concentration and ability of the personnel. Persons who are overtired, unable to concentrate or under the influence of alcohol, drugs or medication must not work on or with the machine.

Persons who are not directly required to operate the machine must maintain a sufficient safety distance from the machine.

Before using the machine, check that it is in perfect condition. If the machine is damaged, it must not be used. Then secure the machine against use and repair it or arrange for it to be repaired.

In order not to jeopardise the functionality and safety of the machine, covers or other components of the machine must not be removed.

Before starting or starting up the machine, ensure that persons are not endangered by the starting machine.

Operating elements must not be operated thoughtlessly or wilfully. This could result in personal injury or damage to the machine.

When using the machine, personnel must ensure that they stand securely and adopt an ergonomic posture.

The machine must always be held firmly with both hands during the drilling process.

The machine must not be left unattended during use.

Stopping the machine during operation with a heavy load must be avoided. This could lead to damage due to overheating.

Air inlet and outlet openings must not be covered during use.

The machine must not be exposed to rain or moisture and must never be immersed in water. Water entering the machine increases the risk of electric shock.

The machine must be cleaned regularly so that dirt does not accumulate. All operating elements and handles must be kept clean, dry and free of grease.

When the machine is not in use, it must be parked in such a way that nobody is endangered. Secure the machine against unauthorised use.

2.4.3 Protective equipment

Persons using the machine are obliged to wear the following protective equipment:

- Safety goggles according to standard EN 166 or face protection.
- If the noise emissions generated when using the machine exceed the limit values applicable to this workplace, suitable hearing protection must be worn.

ⓘ The following applies in Germany: The wearing of hearing protection is mandatory from a daily noise exposure level of 85 dB(A) or a peak sound pressure level of 137 dB(C).

The formation of harmful drilling dust should be prevented by means of appropriate dust extraction. If this is not possible, the operating personnel and bystanders must always wear a respirator approved for the material being worked on.

Wearing additional protective equipment reduces the risk of injury:

- Safety shoes with non-slip sole and protective toe cap.
- Cut-resistant and non-slip gloves.
- Safety helmet

Loose-fitting clothing, long hair or body jewellery can get caught on moving parts of the machine!

Persons carrying out maintenance work on the machine are obliged to wear the appropriate protective equipment required for this work.

2.5 Safety during maintenance

2.5.1 General information

The machine may only be serviced by persons who have completed the appropriate specialised training for this activity.

The maintenance activities and intervals specified in the Operating instructions must be observed.

Workshop equipment appropriate to the type of work is required to carry out maintenance activities.

The following safety precautions must be taken before starting maintenance work:

- Position the machine so that the access point is easily accessible.
- Set the machine to the appropriate operating status.

After completion of maintenance activities:

- Assemble the machine completely.
- If operating elements or safety devices have been removed, they must be refitted and their function checked.
- Retighten any screw connections that have been loosened. Re-attach the screw locks.

Persons carrying out maintenance work on the machine are obliged to wear the appropriate protective equipment required for this work.

2.5.2 Cleaning

Do not use any corrosive, harmful or environmentally damaging substances to clean the machine. Dispose of cleaning agents in an environmentally friendly manner.

Under no circumstances should high-pressure cleaners, water jets or compressed air be used to clean the machine.

3 Technical data

Article number	6193	
Power consumption	1500 W	
Tension	230 V± 5% / 50 Hz	
Power consumption	10 A	
Spindle thread	M18 & additional adapter M16 + SPS-Plus	
	Aisle 1	Aisle 2
Speed	1500 1/min	3000 1/min
Number of strokes ①	24000 1/min	48000 1/min
Max. Drill-Ø	132 mm	72 mm
Weight	3.7 kg	
Permissible ambient temperature	5°C to 40°C	
Permissible relative humidity	30% to 80%	
Protection class	IP 20	
Connector plug	Type F (CEE 7/4)	
Mains cable: Insulation | Length	TPU or rubber | 4 m	
Vibration value	2.5 m/s²	
Dimensions	430 x 150 x 90 mm	
Storage case dimensions	530 x 370 x 150 mm	

① In soft-impact drilling mode

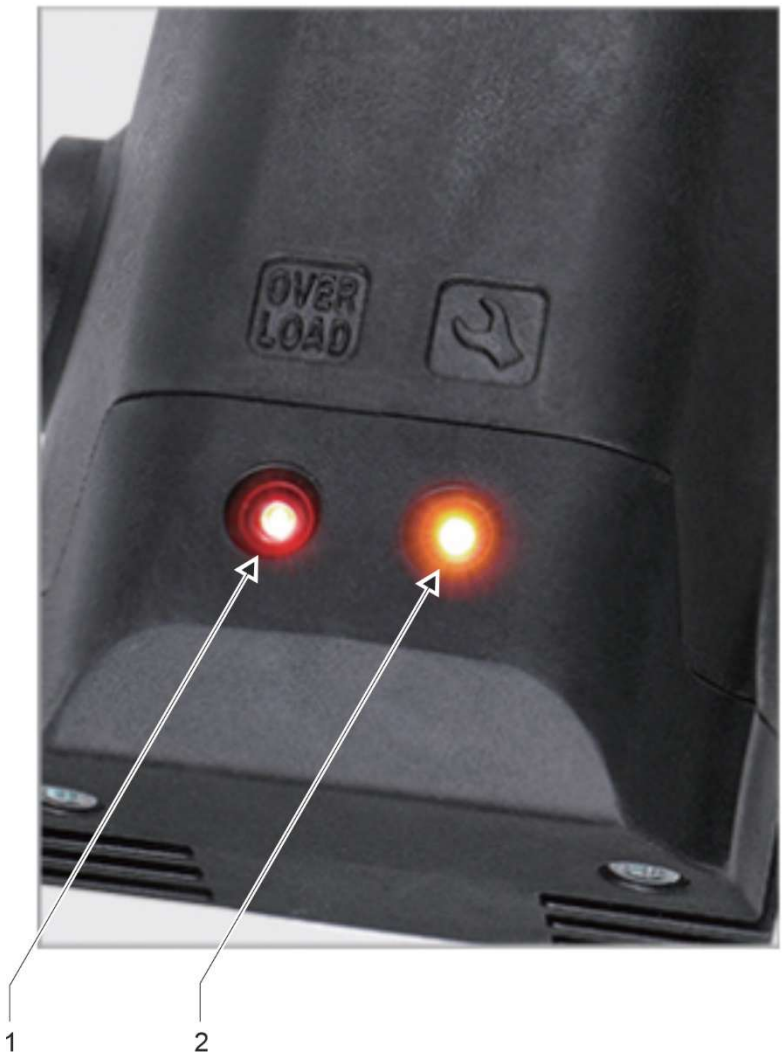
4 Machine description

4.1 Machine components and operating elements

1 Adapter for spindle thread to M16
2 Drill spindle
3 Gearbox housing
4 Switch for drilling mode
5 Motor housing
6 LED displays
7 Spindle neck handle
8 Gear selector switch
9 Switches
10 Switch interlock
11 Main handle
12 Mains cable

Setting drilling mode
Normal drilling mode

Soft impact drilling mode



LED indicators on the top of the motor housing

1 Overload" LED

2 LED "🛠 " (overheating protection)

4.2 Protective devices

4.2.1 Mechanical overload protection

This machine is equipped with a mechanical slip clutch to protect the operator and the machine from excessive torque forces. If the drill bit suddenly jams in the hole, the safety clutch is triggered and the drill spindle stops

The slipping clutch must not be loaded for longer than 3 to 4 seconds. If the slipping clutch is activated during the drilling process, the feed pressure must be reduced immediately. Otherwise, the safety clutch may be destroyed due to the high level of wear. Once the drill bit has returned to normal speed, the drilling process can be continued.

Risk of injury!

A worn slipping clutch must be replaced immediately in a specialised workshop.

4.2.2 Overvoltage protection

The machine can absorb short-term voltage peaks of up to a maximum of 260 volts. Higher voltages can cause irreparable damage, which is why the machine switches off for its own protection.

Please note that if the machine is operated with a generator, it must not exceed the maximum specified value.

If the overvoltage protection trips during operation of the machine, the power supply must be checked and replaced if necessary.

4.2.3 Electronic overload protection

There are 2 LED indicators on the top of the motor housing.

If the machine is in an overload state, the red LED labelled "Overload" lights up. This signals to the operator that the maximum power supply has been reached. The feed pressure must then be reduced immediately until the red LED goes out.

If the machine is operated in an overload state for a longer period of time, the machine switches off for its own protection and the red LED lights up permanently. This switch-off of the machine due to overload constitutes improper use, which may lead to a limitation of the warranty for the machine.

After switching off the machine due to overload, disconnect the machine from the mains and carry out the following checks:

- Drill bit not jammed in the hole?
- Gear selector engaged in the desired position?
- Can the drill bit rotate normally?

The machine can then be restarted.

4.2.4 Overheating protection

If the temperature of the machine's motor becomes too high, the built-in thermal circuit breaker is triggered and the machine switches off to protect itself. At the same time, the yellow LED light labelled "🛠 " lights up.

If the overheating protection is triggered during operation of the machine, the machine must not be restarted immediately. The machine must first cool down for approximately 2 to 3 minutes.

4.2.5 Backflow prevention (kickback function)

The machine is equipped with a backflow prevention system (kickback function).

If the drill bit becomes jammed and generates a sudden reverse torque (kickback), or if the operator unexpectedly loses their grip, the system detects the loss of control and immediately cuts off the power supply. This significantly reduces the risk of the machine whipping out of control and injuring the operator or people nearby.

This feature is designed to enhance safety, but does not replace correct operating procedures or personal protective equipment.

Do not deliberately trigger this function, and do not rely on it to perform tasks that pose a danger.

4.3 Scope of delivery

The scope of delivery of the machine includes the following components:

- Soft impact core drilling machine DKS-132/DC-H
- Spindle neck handle
- Adapter with M16 external thread and SDS-Plus mount
- SDS-Plus centre drill Ø8 x 150 mm
- Drilling depth gauge
- Open-end spanner SW 24/22
- Storage case
- Operating instructions

Notes:

The DKS-132/DC-H Soft impact core drilling machine may only be used for dry drilling.

When selecting the core bit, make sure that it is suitable for the dry drilling method. If the Soft impact core drilling machine is to be used, the core bit must also be suitable for this.

The Core drilling machine can be connected to an industrial hoover via optionally available dust extractors, for example dust extractor for M16 can countersink (article number 6315) or dust extractor with adapter to 1 1/4 UNC (article number 6319).

ⓘ Kernlochbohrer GmbH offers an extensive range of tools and accessories for the machine:

- Core bits
- Adapter for core bits
- Quick-change systems for core bits
- Dust extraction systems

The webshop http://www.kernlochbohrer.com is available for information and ordering.

5 Utilisation of the machine

5.1 Specific precautions

Risk of injury!

When operating the machine, persons must always keep a sufficient distance.

Rotating parts of the machine and falling or splashing particles can cause injuries.

Danger of electric shock!

The machine does not have the appropriate degree of protection and must therefore not be operated in the rain or in wet rooms (e.g. bathrooms or laundry rooms).

Only use core bits whose cutting segments are sharp and undamaged. Sharp drill bits do not tilt as quickly when drilling and are easier to guide.

Before starting the drilling process, the intended exit point of the drill bit must be inspected. The exit point must be secured and shut off. It must be ensured that no personal injury or material damage is caused by the escaping drill bit.

If a fault occurs during operation of the machine (e.g. smell of burning), switch off the machine immediately and disconnect the mains cable from the plug. Otherwise a fire, electric shock or other incident could occur. The machine must not be switched on again until the fault has been rectified and the machine is functioning correctly.

5.2 Transport of the machine

Before transporting the machine:

- Switch off the machine.
- Remove the mains cable from the socket.
- If necessary, disconnect the dust extraction system.

5.3 Working with the machine

5.3.1 Visual inspection of the machine

Before working with the machine, it must be visually inspected:

- Check the general condition and cleanliness of the machine.
- Check that all covers and machine components are present.
- Check that all screws are tight.
- Air inlet and outlet openings must not be dirty or covered.
- The mains cable and mains plug must not be damaged.

5.3.2 Prepare machine

The machine may only be used in manual mode. Operation with a Core drilling rig is not permitted.

Before operating the machine, the spindle neck handle must be attached to the machine.

Only use the machine with the spindle neck handle fitted!

Always hold the machine firmly with both hands during drilling!

Procedure:

☑ Machine not connected to the power supply.

☑ Visual inspection of the machine carried out.

🕮 See chapter 5.3.1 "Visual inspection of the machine".

☒ Attach the spindle neck handle to the machine and secure it with the clamping screw.

5.3.3 Establish dust extraction of the machine

ⓘ The machine may only be used for dry drilling.

To optimise the service life of the drill bit, the machine should be connected to a dust extraction system.

When using the machine in soft-impact drilling mode and with a soft-impact dry core bit, the machine must be connected to a dust extraction system.

Auxiliary means:

Dust extractor with adapter to 1 1/4 UNC (article number 6319) or dust extractor for M16 can countersink (article number 6315)

Procedure:

☑ Machine not connected to the power supply.

☒ Screw the dust extraction unit onto the drill spindle of the machine.

☒ Connect the industrial hoover to the dust extraction system.

5.3.4 Attach drill bit to machine

A drill bit is a cylindrical tool that is fitted with soldered or laser-welded cutting segments.

The machine may only be used hand-held and in dry drilling mode.

When selecting the core bit, make sure that it is suitable for the dry drilling method. If the Soft impact core drilling machine is to be used, the core bit must also be suitable for this.

The drill spindle is equipped with an M18 external thread for mounting the drill bit on the machine

- ⓘ For core bits with M16 internal thread, the supplied adapter (M16 external thread and SDS-Plus holder for centre drill) can be attached to the drill spindle.
- ⓘ Appropriate adapters are available for drill bits with different threads.
- ⓘ To prevent corrosion and to facilitate disassembly of the core bit, a water-resistant grease can be applied to both threads before assembly.
- ⓘ A quick-change system can be used to change drill bits quickly and easily.

  Alternatively, a copper ring can be used to easily detach the drill bit from the drill spindle.

Risk of injury from sharp-edged cutting segments of the drill bit!

Wear cut-resistant gloves!

<u>Auxiliary means:</u>

Water-resistant lubricating grease

Open-end spanner with width across flats SW 24 and SW 22

Procedure:

☑ Machine not connected to the power supply.

☑ Visual inspection of the machine carried out.

🕮 See chapter 5.3.1 "Visual inspection of the machine".

☒ Screw the drill bit onto the drill spindle of the machine and tighten hand-tight.

☒ Tighten the drill bit with an open-end spanner SW 24 and hold the drill spindle of the machine with an open-end spanner SW 22.

5.3.5 Establish electrical connection of the machine

Please note the following points:

- Observe the electrical connection values of the machine.
  📖 See chapter 3 "Technical data".
- Before connecting the machine to the power supply, ensure that the machine is switched off.
- The mains cable and mains plug must not be damaged.
- Damaged mains plugs may only be replaced by Kernlochbohrer GmbH or a qualified electrician.
- The machine is equipped with a type F mains plug (CEE 7/4). The machine may only be operated from an earthed socket (CEE 7/3) that is appropriately earthed.
- Never touch the mains plug with wet hands.
- The mains plug and socket must be clean and dust-free.
- The supplied electrical voltage must not deviate by more than 5% from the nominal value. Excessive voltages can lead to irreparable damage to the machine.
- Voltage peaks must not occur when operating the Core drolling machine with power generators.
- When using extension cables, the cable cross-section must be suitable for the power consumption of the machine.
- When using a cable reel, the cable must always be unrolled completely.
- If the machine is used outdoors with an extension cable, the extension cable must be approved for outdoor use.
- Grasp the mains plug to remove the mains cable from the socket. Do not pull on the mains cable.
- Do not use the mains cable to pull or transport the machine and keep it away from heat, solvents and oils, sharp edges and moving parts.
- If the machine is not to be used for a longer period of time, switch off the machine and remove the mains plug from the socket.

5.3.6 Using the machine

Before starting or starting up the machine, ensure that tools used to mount the drill bit have been removed from the drill spindle.

Only use the machine with the spindle neck handle fitted!

Always hold the machine firmly with both hands during drilling!

Auxiliary means:

Open-end spanner with width across flats SW 32

Procedure:

☑ Visual inspection of the machine carried out.

☑ Machine prepared.

🕮 See chapter 5.3.2. "Prepare machine".

☑ Dust extraction installed on the machine.

🕮 See chapter 5.3.3 "Establish dust extraction of the machine".

☑ Drill bit mounted on the machine.

🕮 See chapter 5.3.4 "Attach drill bit to machine".

☑ Electrical connection of the machine established.

🕮 See chapter 5.3.5 "Establish electrical connection of the machine".

☒ Set the desired speed on the machine's gear selector switch according to the drilling diameter.

🕮 See chapter 3 "Technical data".

ⓘ The specified drilling diameters and speeds of the machine are based on an average concrete hardness.

A lower gear should be selected for reinforced concrete in order to reduce the speed.

ⓘ The gear selector switch may only be operated when the machine is switched off.

If the gear selector switch is stiff, turn the drill spindle slightly using a 22 mm open-end spanner to enable gear selection.

☒ Set the desired drilling mode on the drilling mode switch:

Normal drilling mode or soft impact drilling mode

☒ Switch on the machine at the switch and let it run briefly: Check the concentricity of the drill bit.

☒ Switch on the machine at the switch without load.

ⓘ With the switch lock, the machine can be operated without having to operate the switch manually.

☒ If the machine is to be used with dust extraction:

☒ Switch on the hoover.

☒ When the hoover has built up the maximum vacuum: Carefully start drilling.

☒ Start the drilling process with a first cut by not placing the full cutting surface of the drill bit on the surface: Position the machine at an angle so that the surface is drilled with a V-notch cut.

☒ As soon as there is a V-notch cut on the surface: Align the machine and drill bit perpendicular to the surface and increase the feed pressure.

☒ When the cutting depth has reached 10 mm, the feed pressure can be increased.

ⓘ If you are drilling at too high a speed or too high a feed pressure, this can cause the drill bit to jam.

☒ Continuously monitor the speed of the machine during the drilling process:

If the speed drops, reduce the feed pressure.

☒ During the drilling process, continuously monitor the LED indicators on the top of the motor housing:

If the red "Overload" LED lights up: Reduce the feed pressure immediately.

☒ If wooden beams, thick asphalt or bitumen are cut through, the machine's power supply increases. Then reduce the feed pressure.

☒ If it is necessary to drill deeper than the usable length of the drill bit allows, an optional drill extension can be used.

☒ Continuously monitor the machine during the drilling process:

If light smoke appears or the odour of an overloaded electric motor can be detected, relieve the machine and withdraw it from the hole.

Then continue drilling slowly and carefully.

☒ When the end of the through-hole is almost reached:

Reduce the feed pressure until the core bit emerges on the opposite side.

☒ Trigger the core ejection mechanism to release a stuck core:

- ☒ Switch off the machine's motor at the switch.
- ☒ Switch off the hoover.
- ☒ Hold the machine so that the drill bit is pointing downwards and the drill core does not cause any damage after being ejected.
- ☒ Press the machine's switch three times in quick succession:
  - ↳ The machine's drill spindle makes a brief left-right movement to release the drill core.

    The function stops automatically after 8 seconds.

    Alternatively, the function can also be stopped by pressing the switch again.

Do not trigger the core ejection more than three times in a row!

Excessive use can cause the engine to overheat, shortening its service life or, in severe cases, causing permanent damage to the engine!

5.3.7 Switch off the machine

Procedure:

☒ Switch off the machine motor at the switch.

☒ Switch off the hoover and disconnect the dust extraction system

☒ Remove the mains plug from the socket.

☒ Remove the drill bit and, if necessary, the dust extractor from the machine.

☒ Check the machine for soiling.
Clean the machine if necessary.
🕮 See chapter 6.3.1 "Clean machine and check".

5.3.8 Store the machine

Procedure:

☑ Machine switched off.
🕮 See chapter 5.3.7 "Switch off the machine".

☒ Clean the machine and allow to dry completely.
🕮 See chapter 6.3.1 "Clean machine and check".

☒ Store the machine in a dry, cool place protected from moisture and direct sunlight.

☒ Secure the machine against unauthorised use.

6 Maintenance

6.1 Notes on proper maintenance

Insufficient or improper maintenance can cause malfunctions and impair the operational safety and service life of the machine. Regular inspection and maintenance is therefore essential. We recommend that maintenance work is only carried out by trained personnel.

The contractually agreed warranty does not release the operator of the machine from the obligation to maintain the machine in accordance with the manufacturer's instructions from the time of commissioning. Kernlochbohrer GmbH is not liable for damage caused by a lack of maintenance.

6.2 Maintenance and inspection plan

The interval specifications refer to normal operating conditions. In more difficult conditions (heavy dust accumulation, etc.) and longer daily working times, the specified intervals must be shortened accordingly by the operator.

Only use the maintenance and inspection schedule as a guide! Be sure to follow the cross-references to the other chapters! They describe in detail how to carry out the individual tasks correctly and safely.

Interval	Category	Component	Activity	Chapter
1 day	Real time	Machine	Cleaning and testing	6.3.1

6.3 Inspection and maintenance

6.3.1 Clean machine and check

Do not use sharp sponges or metal objects to clean the machine. These could damage the surface of the machine.

Do not use high-pressure cleaners, water jets or compressed air to clean the machine. The sharp water or air jet could damage the machine.

Do not use any corrosive, harmful or environmentally damaging substances to clean the machine.

Interval:

1 day real time

Auxiliary means:

- Container with a mixture of water and mild detergent (e.g. washing-up liquid).
- Cloth and brush
- Water-resistant lubricating grease

Procedure:

☑ Switch off the machine and remove the mains plug from the socket.
📖 See chapter 5.3.7 "Switch off the machine".

☒ Clean the machine to remove dust and dirt.
- Use a damp cloth dipped in water mixed with a mild detergent.
- No water may enter the interior of the machine via the air inlet and outlet openings.

☒ Clean the air inlet and outlet openings with a brush and damp cloth.

☒ Allow the machine to dry completely.

☒ Check the tightness of all bolts and nuts on the machine. If necessary, tighten the screws and nuts.

- ☒ Check the gearbox housing for grease leakage. If grease escapes from the gearbox, contact Kernlochbohrer GmbH.
- ☒ Check the mains plug and mains cable for damage. Have damaged parts replaced by a qualified electrician.
- ☒ Apply a thin layer of water-resistant grease to the external thread of the machine's drilling spindle.

7 Troubleshooting

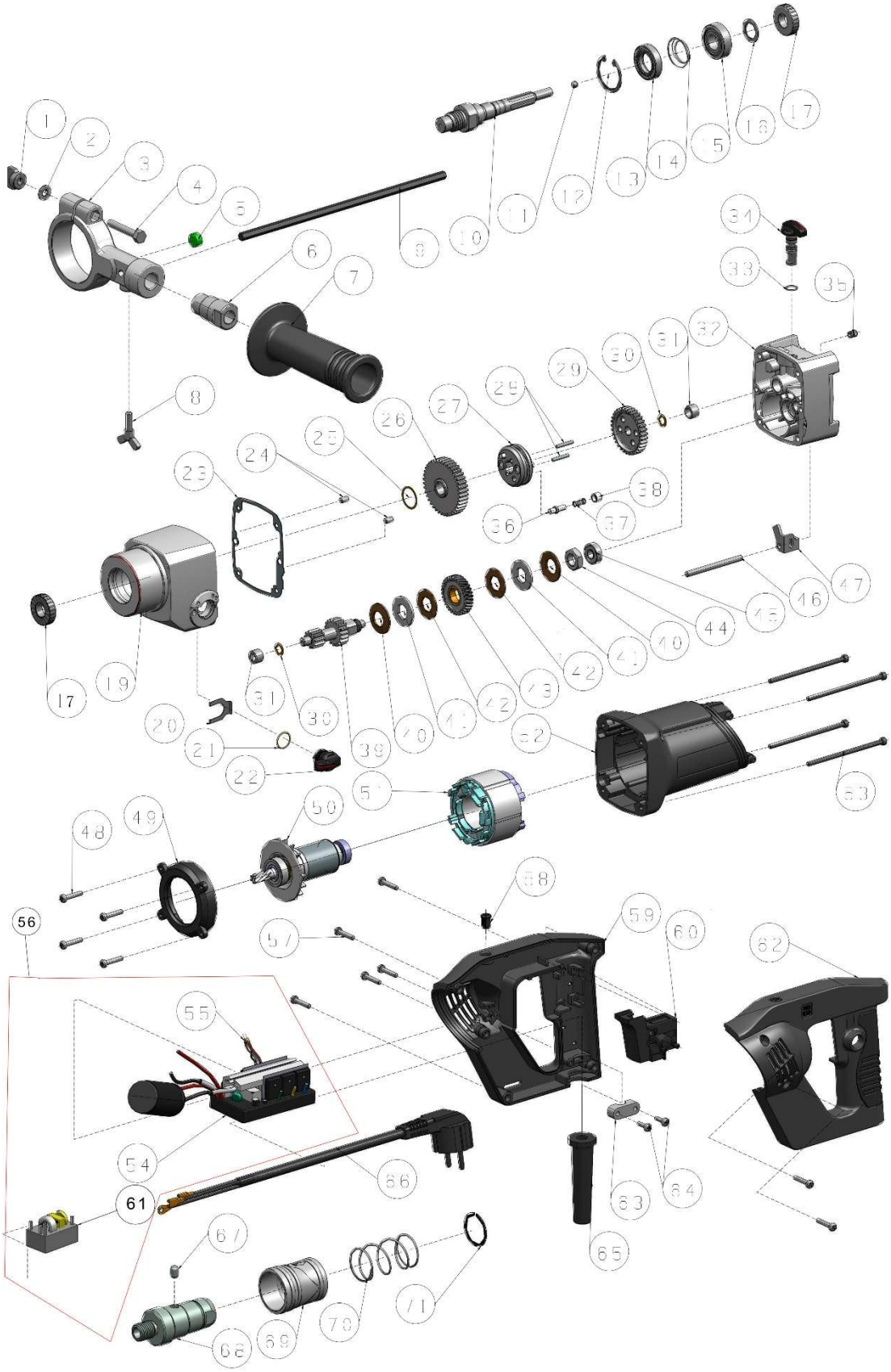
If a fault occurs during operation of the machine, please first try to rectify the fault yourself using the following information.

If you are unable to rectify the fault yourself, please contact Kernlochbohrer GmbH.

Malfunction	Possible cause	Troubleshooting
Machine does not start	Power supply interrupted	Plug in another electrical appliance and check the function of the power supply
	Mains plug not plugged in correctly.	Insert the mains plug correctly
	Power cable or switch damaged	Have the mains cable or switch replaced by a qualified electrician
	Rotor or stator damaged	Have it checked by a qualified electrician and replaced if necessary
Drill bit is stuck or jammed	Gear is not properly engaged	Turn the gear selector to the desired gear and let it engage
	Slipping clutch worn	Have the slipping clutch replaced
	High steel content in concrete or very hard material	After switching off the machine, adjust the position of the core bit slightly using a spanner and tap the tube of the core bit carefully and gently with a wooden hammer handle until the stuck core bit comes loose. Slowly pull out the core bit and restart the machine
	Gearbox damaged	Have the gearbox replaced

Malfunction	Possible cause	Troubleshooting
Drilling speed too slow	End of service life of drill bit reached or cutting segments broken off	Check drill bit and replace if necessary
	Blunt drill bit	Resharpen cutting segments
	High steel content in concrete or very hard material	Reduce the feed pressure to cut through steel or hard material. Then increase again
	Drilling angle adjusted	Realign the drilling angle so that the drill bit is perpendicular to the cutting surface
Drill spindle wobbles	Drill spindle worn	Have the drill spindle replaced
Flying sparks at the collector	Short circuit or interruption on the rotor coil	Have the rotor replaced
	Commutator worn	Have the rotor replaced

8 Spare parts



No.	Designation	No.
1	T-nut M6, plastic	1
2	Washer 12x6.2x1.5	1
3	Mounting the front handle clamp	1
4	Hexagon head screw M6x45	1
5	Spirit level Φ12	1
6	Connecting rod of the front handle	1
7	Front handle, plastic	1
8	Wing screw M6x16	1
9	Depth gauge measuring rod	1
10	Spindle shaft	1
11	Steel ball 15/64" (Φ5.9531)	1
12	Inner circlip Φ32	1
13	Rotary shaft seal TC 19x32x8	1
14	Mikro-Schlagfeder (Φ23-Φ28.3xΦ1.5x14)	1
15	Deep groove ball bearing 6002V	1
16	Ultra-thin washer M15x21x0.3 SUS304	1
17	Pawl wheel Z16 DB-132	2
19	Gearbox housing	1
20	Flat spring of the transmission shifter	1
21	O-ring (Φ16xΦ1)	1
22	Gear shift lever DB-132	1
23	Paper gasket DB-132	1
24	Parallel pin Φ5x8	2
25	Washer M18x25x0.3	1
26	Gear wheel M1.25-Z40	1
27	Driving disc	1
28	Parallel pin Φ3x22	2
29	Gear wheel M1.25-Z33	1
30	Ultra-thin washer M8x12x0.3 SUS304	2
31	Drawn cup needle roller HK0808	2
32	Gearbox cover plate	1
33	O-ring (Φ8xΦ1.2)	1
34	Function selector switch DB-132	1
35	Grub screw with hexagon socket M6x8	1
36	Drive plate pin	4

No.	Designation	No.
37	Spring of the drive plate (Φ5.8*Φ0.6*10)	4
38	Sleeve for drive plate pin	4
39	Ritzelwelle M1.25/Z11-M1.25/Z18	1
40*	Disc spring	2
41*	Clutch disc	2
42*	Copper friction disc	2
43*	Helical gearing M1-Z32	1
44	Hexagon nut M12xP1.25 T=6mm	1
45	Deep groove ball bearing 607Z	1
46	Expanding pin Φ5x60	1
47*	Gear stick	1
48	Phillips head screw with round head and self-tapping thread M4x20	4
49	Wind deflector	1
50*	Brushless motor rotor cpl. W6330 (incl. bearing)	1
51*	Brushless motor stator cpl. W6330 (Φ63mm)	1
52	Motor housing DB-132	1
53	Hexagon head screw M4x65	4
54*	Control board	1
55	LED cable YELLOW/ RED	1
57	Cross-head tapping screw M4x16	7
58	LED socket	2
59	D-shaped handle, right cover	1
60*	Release switch	1
61	EMC board	1
62	D-shaped handle, left cover	1
63	Cable clamp	1
64	Self-tapping Phillips screw with flat shoulder M3.5x12	2
65	Mains cable gland	1
66	Mains plug	1
67	Capsule-shaped pin	1
68	M18-M16 adapter	1
69	Outer housing of the adapter	1
70	Spring of the adapter	1
71	Bearing stop ring M28	1

9 EU Declaration of Conformity

The manufacturer/distributor

Kernlochbohrer GmbH
Geigersbühlweg 52
72663 Großbettlingen
Germany

hereby declares that the following product

Product description:	**Soft impact core drilling machine**
Type:	**DKS-132/DC-H**

complies with all relevant provisions of the applicable legal regulations (hereinafter) - including their amendments valid at the time of the declaration. This declaration of conformity is issued under the sole responsibility of the manufacturer. This declaration relates only to the machine in the state in which it was placed on the market; parts and/or modifications subsequently fitted by the end user are not taken into account.

The following legal provisions were applied:

Machinery Directive 2006/42/EU (for delivery until 2027-01-19)

Machinery Regulation (EU) 2023/1230 (for delivery from 2027-01-20)

Electromagnetic Compatibility Directive 2014/30/EU

The following harmonised standards were applied:

EN ISO 12100:2010

EN ISO 60745-1:2015

EN ISO 60745-2-1:2010

EN 55014-1:2006 + A2:2011

EN 55014-2:1997

EN 61000-3-2:2014

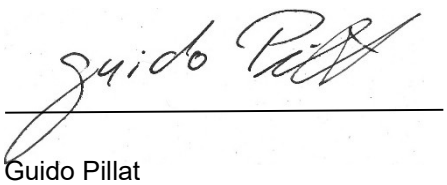
EN 61000-3-3:2013

Name and address of the person authorised to compile the technical documentation:

Kernlochbohrer GmbH
Geigersbühlweg 52
72663 Großbettlingen
Germany

Großbettlingen 2025-03-28

Kernlochbohrer GmbH



Guido Pillat

Managing Director / Chief Executive Officer