



KERNLOCHBOHRER[®]
PROFESSIONAL POWER TOOLS



Operating instructions

Core drill rig KBS-252/Light-K

BA-01-000002-01-EN

Scope of application

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

Check the model using the rating plate on the appliance.

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.

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The function of the machine is limited to the functions described in the associated technical documentation.

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1 Information and support

1.1 Thanks to the buyer

Thank you for purchasing a device 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 device, please contact Kernlochbohrer GmbH directly. We are available to answer your questions at any time.

1.2 Using the Operating instructions

The appliance 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 if the Operating instructions are not observed, which may result in injury or damage to property.

The Operating instructions are indispensable for using the appliance. The Operating instructions must therefore always be kept close to the appliance 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 injury to yourself, other persons or damage to property.



Cross-reference to another point in the Operating instructions.



Prerequisite for an action.



Action to be performed.



Behaviour of the device 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 to 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 undismantled.

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 appliances and accessories.

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 for all questions and orders. This information can be found on the rating plate of the appliance.

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.

Contact details:

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2 Security

2.1 General information

The appliance has been built according to the state of the art and in compliance with the applicable laws, standards and safety regulations. Nevertheless, the use of the appliance may pose a risk to the user or third parties and cause damage to the appliance and other property.

The appliance 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 appliance is damaged or malfunctions, take it out of operation immediately, secure it against use and repair it or arrange for it to be repaired.

2.2 Intended use

The device is intended exclusively for drilling concrete, reinforced concrete, stone, masonry and similar materials using a suitable core drill.

The appliance may only be used within the limits of its technical data. This information, for example power specifications 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.

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 to operating and maintenance personnel. They must therefore always be kept at the place of use of the appliance.

The regulations on accident prevention and environmental protection applicable at the place of use of the appliance must also be available. The operator of the appliance must regularly check that they are complied with.

The appliance 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 appliance must be legible and must not be removed.

The protective equipment required to operate the appliance 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 device

The operator may not make any modifications to the device 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 tasked with commissioning, operating and maintaining the appliance must have read and understood the Operating instructions beforehand.

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

Maintenance of the appliance may only be carried out by persons who have completed the appropriate specialised training for this activity.

Minors are not permitted to work with the device. 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 appliance must have read and understood the Operating instructions beforehand.

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

Maintenance of the appliance may only be carried out by persons who have completed the appropriate specialised training for this activity.

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

Any work on or with the appliance that could jeopardise safety must be avoided.

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

2.4.2 Safe operation

Operating the appliance 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 appliance.

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

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

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

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

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

The appliance must not be left unattended during use.

Never immerse the appliance in water.

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

2.4.3 Protective equipment

Wearing protective equipment reduces the risk of injury:

- Safety shoes with non-slip sole and protective toe cap.
- Cut-resistant and non-slip gloves.
- Safety goggles according to standard EN 166 or face protection
- Safety helmet

If the noise emissions generated when using the appliance exceed the limits applicable to this workplace, suitable hearing protection must be worn.

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

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

2.5 Safety during maintenance

2.5.1 General information

The appliance 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 device so that the surgical site is easily accessible.
- Set the device to the corresponding operating status.

After completion of maintenance activities:

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

Persons carrying out maintenance work on the appliance 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 appliance. 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 appliance.

3 Technical data

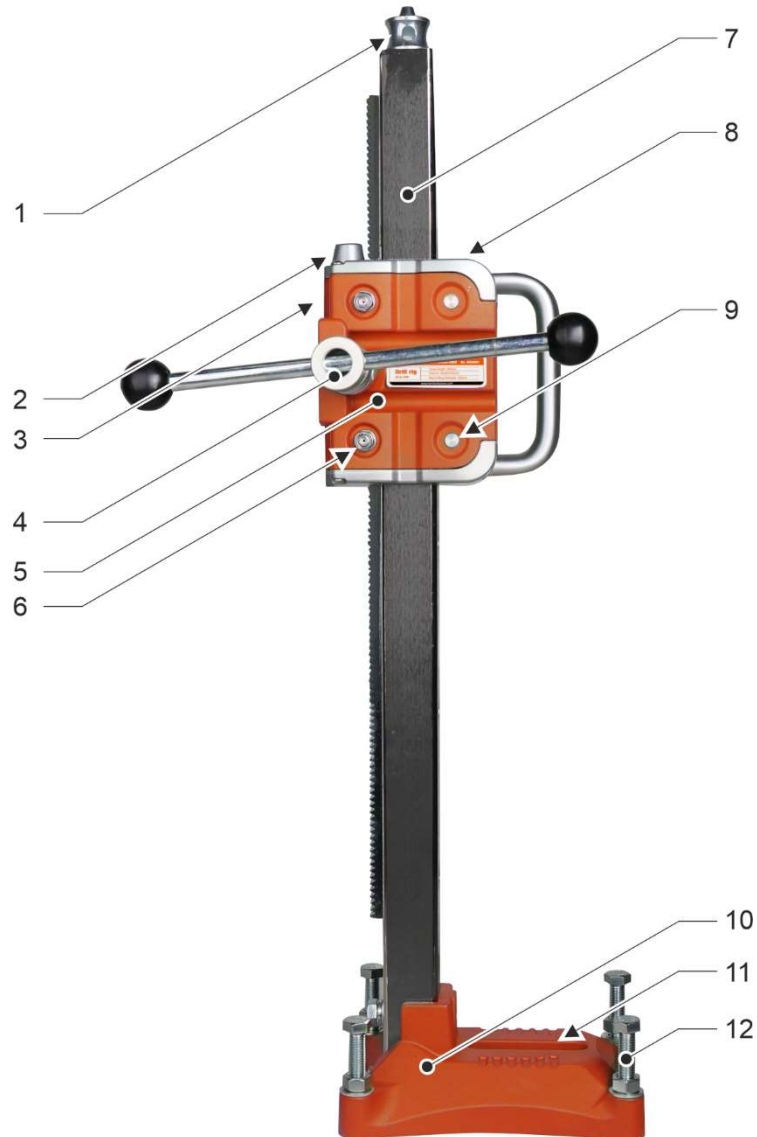
Article number	6195
Maximum drilling diameter	252 mm
Maximum feed length	500 mm
Dimensions of the guide stand	40 x 40 x 750 mm
Weight	8.5 kg
Permissible ambient temperature	5°C to 40°C
Permissible relative humidity	30% to 80%
Compatible core drill	DKB-252/Xtrem ① ②

Footnotes:

- ① Or another core drill with a suitable holder:
4x M8 thread with hole spacing 79 x 41 mm and keyway width 10 mm.
- ② When using the Ø 60 mm clamp holder supplied:
Core drill with mounting collar Ø 60 mm

4 Device description

4.1 Device components



- 1 Clamping screw
- 2 Locking lever of the feed carriage
- 3 Spirit level for horizontal mounting
- 4 Feed lever (attachable on both sides)
- 5 Feed slide
- 6 Adjustable rollers of the feed carriage (4 pieces)
- 7 Guide stand with toothed rack
- 8 Spirit level for vertical mounting
- 9 Fixed rollers of the feed carriage (4 pieces)
- 10 Foot
- 11 Slotted hole for fastening the core drill rig
- 12 Levelling screws with lock nuts (4 pieces)

Not shown in the picture:

- 4x Cylinder head screw M8x35
- 1x Feather key 10x8x100
- 1x Clamp holder Ø 60 mm

4.2 Scope of delivery

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

- Core drill rig
- Clamp holder Ø 60 mm

① The accessories required to use the device, such as mounting kits etc., must be purchased separately.

Kernlochbohrer GmbH offers an extensive range of tools and accessories for the device. The webshop <http://www.kernlochbohrer.com> is available for information and ordering.

5 Use of the device

5.1 Specific precautions

- ① In these Operating instructions, the term drilling system is used for a core drill rig on which a core drilling machine is mounted.

Before mounting the core drill on the core drill rig, make sure that the core drill rig is properly secured.


The core drill rig must be secured to a level and firm surface. Drilling work with a loose or wobbling core drill rig can lead to dangerous situations.

When using the drilling system for drilling vertically upwards, a functional water collection ring must be used on the core drill. No water may get into the core drill.

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.

5.2 Optical inspection

Before working with the core drill rig, it must be visually inspected:

- Check general condition and cleanliness.
 - Check that all covers and components are present.
 - Check the tightness of all screws.
 - Feed carriage secured.
-  See chapter 5.3 "Secure the feed carriage on the guide stand".

5.3 Secure the feed carriage on the guide stand



Danger due to unintentional movement of the feed carriage!

The feed carriage must always be secured against unintentional movement (locking lever in "Tight" position).

If the feed carriage lock is cancelled (locking lever in the "Loose" position), the feed carriage can move downwards in an uncontrolled manner due to gravity and cause personal injury or damage to property.

Before releasing the feed carriage: Hold the feed carriage and core drill firmly and secure against falling!

The locking lever can be used to prevent the feed carriage from moving on the guide stand. This is achieved by means of a locking knob that engages with the splines of the toothed shaft and thus prevents movement.

If the locking lever is in the "Loose" position, the feed carriage can be moved using the feed lever.

If the locking lever is in the "Tight" position, the feed carriage is braked. This prevents the feed carriage and mounted core drill from falling due to gravity, even when the guide stand is in the vertical position.



If the locking lever is in the "Tight" position, the feed carriage must not be moved using the feed lever!

This would damage the locking mechanism and the gear rack on the guide stand.

5.4 Fastening the core drill rig



Risk of unintentional movement of the feed carriage due to gravity!

The feed carriage must always be secured against unintentional movement (locking lever in "Tight" position).

The core drill rig must be fixed in the desired position using a metal dowel and a threaded rod or a suitable fixing set. To do this, a fixing hole of a suitable size must be drilled using a hammer drill.

When fastening the core drill rig to a brick wall, a special masonry anchor must be used. The use of a concrete hammer-in anchor on a brick wall could lead to brick breakage and loosening of the anchor!

To fasten the core drill rig, place the base with the slotted hole over the threaded rod or the screw of the fastening set and secure the core drill rig with the nut of the fastening set.



Alternatively, the core drill rig can also be attached to the top of the guide stand with the clamping screw using struts, without using dowels.

Ensure that the core drill rig is securely fastened!



Fastening the core drill rig to the ceiling harbours particular risks due to gravity!



Kernlochbohrer GmbH recommends the use of the TBS-3000PRO telescopic drill rig for ceiling drilling.

5.5 Aligning the core drill rig

To bring the core drill rig into the correct drilling position, align the core drill rig by turning the four levelling screws.

The levelling of the core drill rig can be checked using the two spirit levels.

Then tighten all the lock nuts on the levelling screws.

5.6 Attaching the core drill to the core drill rig

Prerequisites:

- Visual inspection of the core drill rig carried out.
- Core drill rig securely fastened and aligned.
- Power cable of the core drill not connected to the power supply.

Procedure:



Risk of unintentional movement of the feed carriage due to gravity!

The feed carriage must always be secured against unintentional movement (locking lever in "Tight" position).

- Set the feed carriage to an upper or rear position so that there is sufficient space for mounting the core drill.
- Secure the feed carriage on the guide stand using the locking lever. To do this, move the locking lever of the feed carriage to the "Tight" position.
- Attach the core drill to the core drill rig using 4 hexagon socket screws M8x35 and feather key 10 x 8 x 100.

- ① Alternatively, the clamp holder included in the scope of delivery can be used to mount a core drill on the core drill rig:
 - ☒ Attach the clamp holder to the core drill rig.
 - ☒ Insert the core drill into the clamp holder and clamp.
- ☒ Check that the core drill is securely attached to the core drill rig.
- ↪ Core drill can now be used on the core drill rig.
- ① The force required for the feed movement of the core drill is applied by manually turning the feed lever on the toothed shaft engaging in the toothed rack.

To do this, move the locking lever of the feed carriage to the "Loose" position.
- 📖 For detailed information on using the core drill, see the operating instructions for the core drill.

5.7 Storing the core drill rig

Procedure:

- ☑ Core drill separated from the core drill rig.
- ☑ Core drill rig dismantled.
- ☒ Clean the core drill rig and allow to dry completely.
 - 📖 See chapter 6.3.1 "Clean core drill rig and check".
- ☒ Set the core drill rig down vertically and secure it against falling over.
- ☒ Store the core drill rig in a dry, cool place protected from moisture and direct sunlight.
- ☒ Secure the core drill rig 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 appliance. 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 device from the obligation to maintain the device 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	Core drill rig	Cleaning and testing	6.3.1

6.3 Inspection and maintenance

6.3.1 Clean core drill rig and check



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

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

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

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:

- Clean the core drill rig to remove dust and dirt.
Use a damp cloth dipped in water mixed with a mild detergent.
- Allow the core drill rig to dry completely.



Risk of unintentional movement of the feed carriage due to gravity!

The feed carriage must always be secured against unintentional movement (locking lever in "Tight" position).

- ☒ Check the function of the locking lever for securing the feed carriage on the guide stand.



See chapter 5.3 "Secure the feed carriage on the guide stand".



If the locking lever is in the "Tight" position, the feed carriage must not be moved using the feed lever!

This would damage the locking mechanism and the gear rack on the guide stand.

- ☒ Check the play of the feed carriage on the guide stand:

To do this, move the locking lever to the "Loose" position.

If the feed carriage has play on the guide stand, adjust the four adjustable rollers one after the other:

- ☒ Secure the eccentric shaft (item 25 in the spare parts drawing) against turning using an Allen key.
- ☒ Tighten the hexagon nut (item 28 in the spare parts drawing) of the adjustable roller by turning it clockwise.
- ↵ Adjustable castor rests against the running surface of the guide upright again.

Then check the play of the feed carriage on the guide stand again.

- ☒ Check that all screws and nuts on the core drill rig are tight. If necessary, tighten the screws and nuts.
- ☒ Apply a thin layer of water-resistant grease to the rack of the guide stand.

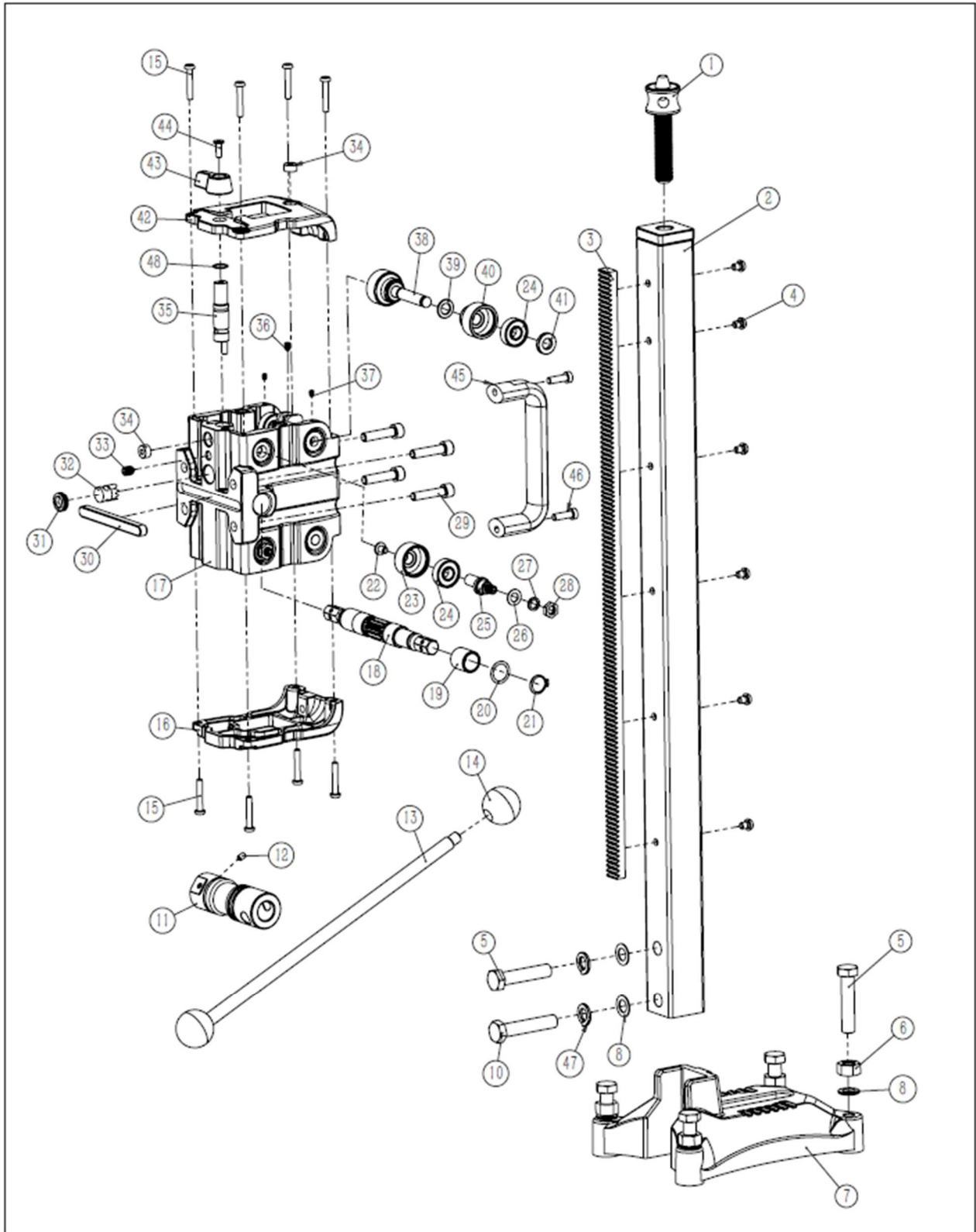
7 Troubleshooting

If a fault occurs during operation of the appliance, 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
Feed carriage wobbles	Wear and tear	Adjustable castors
Splined shaft is firmly seated	Fixed castors worn out	Replacing fixed castors
Splined shaft can be rotated freely	Toothed shaft and gear rack worn	Replace toothed shaft and gear rack
Locking lever cannot secure feed carriage	Locking mechanism defective	Replacing the locking mechanism
After replacing all rollers, the movement of the feed carriage is always unreliable	Worn guide stand	Replacing the guide stand

8 Spare parts



Pos.	Article name	No.
1	Clamping screw	1
2	Guide stand	1
3	Toothed rack	1
4	Cylinder head screw M6x8	6
5	Cylinder head screw M12x55	5
6	Hexagon nut M12	4
7	Foot	1
8	Disc 12x20x1	2
10	Cylinder head screw M12x55	1
11	Adjusting sleeve	1
12	Grub screw M5x8	1
13	Lever	1
14	Rubber ball	2
15	Cylinder head screw M5x30	8
16	Lower part of housing	1
17	Feed slide	1
18	Splined shaft	1
19	Bronze bush 16x20x20	2
20	Shaft seal 16x27x0.8	2
21	Circlip Ø16	2
22	Cylinder head screw M6x8	4
23	Eccentric roller	4
24	Deep groove ball bearing 6000-2RZ	4
25	Eccentric shaft	4

Pos.	Article name	No.
26	Disc 15x8.6x1	4
27	Spring washer Ø8	4
28	Hexagon nut M8	4
29	Cylinder head screw M8x35	4
30	Parallel key 10x8x100	1
31	Screw plug M18x1.5	1
32	Locking knob	1
33	Grub screw M8x10	1
34	Dragonfly	2
35	Locking shaft	1
36	Grub screw M5x8	2
37	Grub screw M4x6	4
38	Roller shaft	2
39	Disc 10x18x1.5	4
40	Track roller	4
41	Spacer	4
42	Upper part of housing	1
43	Locking button	1
44	Cylinder head screw M5x14	1
45	Handle	1
46	Cylinder head screw M6x20	2
47	Spring washer Ø12	2
48	O-ring 14x1	1

9 EU Declaration of Conformity

The manufacturer/distributor

Kernlochbohrer GmbH
Geigersbühlweg 52
72663 Großbettlingen
Germany

hereby declares that the following product

Product description: **Core drill rig**
Type: **KBS-252/Light-K**

was designed in accordance with Directive 2006/42/EU.

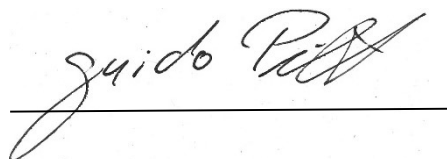
It is necessary that the core drilling machine to be operated with this core drill rig meets the requirements described in the Operating instructions of the core drill rig (e.g. drilling diameter, machine mount).

The drilling system may not be put into operation until it has been established that the core drilling rig to be connected to the core drill rig complies with the provisions of Directive 2006/42/EU (recognisable by the CE mark on the core drilling rig).

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

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Geigersbühlweg 52
72663 Großbettlingen
Germany

Großbettlingen 2024-03-25
Kernlochbohrer GmbH



Guido Pillat
Managing Director / Chief Executive Officer