



Operating instructions

Telescopic Core Drilling Rig

TBS3000/PRO

Scope

These operating instructions apply only to the unit specified on the cover page.
Check the model using the device's type plate.

Original manual / Translation of the original manual

The German version of these operating instructions is the original version, in accordance with the EU Machinery Directive.

Copies in other languages are translations of the original manual.

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The machine's functionality is limited to the functions described in the accompanying technical documentation.

Table of Contents

1	Information and support	6
1.1	A word of thanks to the purchaser.....	6
1.2	Use of the operating instructions.....	6
1.3	Changes	6
1.4	Explanation of symbols	7
1.5	Warranty	7
1.6	Environmental protection.....	7
1.6.1	Disposal of the product.....	7
1.6.2	Disposal of packaging	8
1.7	Service	8
2	Safety	9
2.1	General.....	9
2.2	Intended use.....	9
2.3	Safety regulations for the operator	10
2.3.1	Organisational safety measures	10
2.3.2	Modifications to the equipment.....	10
2.3.3	Spare parts	11
2.3.4	Personnel.....	11
2.4	Safety regulations for staff.....	12
2.4.1	Safe behaviour.....	12
2.4.2	Safe operation	13
2.4.3	Protective equipment.....	14
2.5	Safety during maintenance.....	15
2.5.1	General	15
2.5.2	Cleaning.....	15
3	Technical data	16
4	Equipment description.....	18
4.1	Equipment components.....	18
4.2	Scope of supply.....	23
5	Use of the equipment	24

5.1	Specific precautions	24
5.2	Secure the drill carriage to prevent movement	24
5.2.1	Vertical drill carriage	25
5.2.2	Horizontal drilling carriage	27
5.3	Visual inspection	28
5.4	Setting up and using the core drilling rig	29
5.4.1	Vertical drilling.....	29
5.4.2	Horizontal or angled drilling	33
5.5	Dismantle and store the core drilling rig.....	43
6	Maintenance	44
6.1	Guidance on proper maintenance	44
6.2	Maintenance and Inspection Schedule	44
6.3	Inspection and maintenance	45
6.3.1	Cleaning and inspecting the core drilling rig.....	45
7	Troubleshooting.....	47
8	Spare parts	48
8.1	Base frame, telescopic support and vertical drilling carriage	48
8.2	Cross arm and horizontal drilling carriage.....	50
9	EU Declaration of Conformity	52

1 Information and support

1.1 A word of thanks to the purchaser

Thank you very much for purchasing a product from Kernlochbohrer GmbH.

Please read the operating instructions carefully and observe the safety instructions. By following the operating instructions, you will be able to make full use of our product's outstanding performance.

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

1.2 Use of the operating instructions

The device is intended for professional use and must only be operated by trained personnel. Strictly adhere to the operating instructions.

Our company accepts no liability for any injuries or damage to property resulting from failure to follow the operating instructions.

The operating instructions are essential for the use of the equipment. They must therefore always be kept near the equipment and be accessible to authorised personnel at all times.

In addition to the operating instructions, the generally applicable and local regulations on accident prevention and environmental protection must be made available; compliance with these 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



This symbol draws your attention to dangers that you must be aware of when carrying out the following tasks in order to avoid injury to yourself, other people or damage to property.



Cross-reference to another section in the operating instructions.



A prerequisite for an action.



Action to be carried out.



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



Background information or a note on special features.

1.5 Warranty

In accordance with the general terms and conditions of supply of Kernlochbohrer GmbH, a warranty period of 12 months applies to material defects in business dealings with other businesses (evidence to be provided by invoice or delivery note).

Damage attributable to natural wear and tear, overloading or improper handling is excluded from this warranty.

Damage caused by material or manufacturing defects will be rectified free of charge by repair or replacement. Claims can only be accepted if the device is sent to Kernlochbohrer GmbH without having been dismantled.

Wear parts are excluded from the warranty.

1.6 Environmental protection

1.6.1 Disposal of the product

Please follow national regulations on the environmentally sound disposal and recycling of end-of-life equipment and accessories.

1.6.2 Disposal of packaging

The packaging is made from recyclable materials. It must be disposed of in accordance with local authority guidelines, as indicated on the labelling.

1.7 Service

Providing precise details and specific questions enables rapid fault rectification, facilitates the ordering of spare parts and prevents incorrect deliveries.

Before contacting the service department, please gather the following information first.

Please state the model number for all enquiries and orders. You will find this information on the device's type plate.

In the event of a fault, further details are required:

Nature and extent of the fault, accompanying circumstances, suspected cause.

For spare parts orders, the following are required:

Quantity and part number as shown in the exploded view in the operating instructions, or the item number (if known).

- ① 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 Safety

2.1 General

The device has been manufactured in accordance with the state of the art and in compliance with applicable laws, standards and safety regulations. Nevertheless, the use of the device may pose dangers to the user or third parties, and may result in damage to the device or other property.

The device must only be used when in perfect working order, for its intended purpose, and with due regard for safety and potential hazards.

In the event of damage or faults to the device, take it out of service immediately, secure it against further 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 drilling machine.

The core drilling machine must not be operated in soft-hammer drilling mode!

The equipment must only be used within the limits specified in its technical data. This information, such as performance specifications and environmental conditions, can be found in the 'Technical Data' section.

Any other use or use beyond these limits is considered improper – risk of accident! Kernlochbohrer GmbH accepts no liability for any damage resulting therefrom. The operator bears the sole risk.

Proper use also includes following the operating instructions and adhering to the prescribed maintenance intervals.

2.3 Safety regulations for the operator

2.3.1 Organisational safety measures

The operating instructions must be available at all times to operating and maintenance personnel. They must therefore always be kept at the site where the equipment is in use.

The regulations on accident prevention and environmental protection applicable at the site where the equipment is in use must also be available. The operator of the equipment must regularly check that these are being complied with.

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

All safety and hazard warnings on the equipment must be legible and must not be removed.

The operator must provide the protective equipment required for operating the equipment. The operator must ensure that the protective equipment is used correctly by staff.

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

2.3.2 Modifications to the equipment

The operator must not make any modifications to the equipment without the written approval of Kernlochbohrer GmbH. If the operator carries out modifications without authorisation, the warranty shall lapse. Kernlochbohrer GmbH shall not be liable for damage caused by unauthorised modifications.

2.3.3 Spare parts

Spare parts must comply with the specifications defined by Kernlochbohrer GmbH. This is always guaranteed for spare parts supplied by Kernlochbohrer GmbH. Kernlochbohrer GmbH accepts no liability for damage resulting from the use of unsuitable spare parts.

2.3.4 Personnel

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

The equipment must only be operated by persons who have received adequate training beforehand.

Maintenance of the equipment must only be carried out by persons who have completed specialist training appropriate to this work.

Minors must not operate the equipment. This rule does not apply to young people aged 16 and over who are being trained under supervision.

2.4 Safety regulations for staff

2.4.1 Safe behaviour

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

The equipment must only be operated by persons who have received adequate training beforehand.

Maintenance of the equipment must only be carried out by persons who have completed specialist training appropriate to this activity.

Minors must not work with the equipment. This rule does not apply to young people over the age of 16 who are being trained under supervision.

Any method of working on or with the equipment that compromises safety must be avoided.

All safety and hazard warnings on the equipment must be legible and must not be removed.

2.4.2 Safe operation

Operating the equipment requires the full concentration and alertness 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 equipment.

Persons who are not directly required for the operation of the equipment must maintain a sufficient safety distance from it.

Check that the equipment is in good working order before use. If the equipment is damaged, it must not be used. In such cases, secure the equipment to prevent use and either repair it yourself or arrange for it to be repaired.

To avoid compromising the functionality and safety of the equipment, covers or other components must not be removed.

Controls must not be operated carelessly or deliberately. This could result in personal injury or damage to the equipment.

When using the device, staff must ensure they have a secure footing and maintain an ergonomic posture.

The device must not be left unattended whilst in use.

Never immerse the device in water.

The appliance must be cleaned regularly to prevent dirt from building up. All controls and handles must be kept clean, dry and free from grease.

When the machine is not in use, it must be parked in such a way that it does not pose a risk to anyone. Secure the machine to prevent unauthorised use.

2.4.3 Protective equipment

Wearing protective equipment reduces the risk of injury:

- Safety footwear with non-slip soles and steel toe caps
- Cut-resistant gloves with a good grip
- Safety goggles complying with standard EN 166 or face protection
- Safety helmet

Loose-fitting clothing, long hair or body jewellery may become caught in moving parts of the machine!

Persons carrying out maintenance work on the machine are required to wear suitable protective equipment as required for this activity.

2.5 Safety during maintenance

2.5.1 General

Maintenance of the machine must only be carried out by persons who have completed specialist training appropriate to this work.

The maintenance tasks and intervals specified in the operating instructions must be observed.

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

Before commencing any maintenance work, the following safety precautions must be taken:

- Position the equipment so that the area to be worked on is easily accessible.
- Set the equipment to the appropriate operating mode.

Once maintenance work has been completed:

- Reassemble the unit completely.
- If any controls or safety devices have been removed, they must be refitted and their function checked.

Persons carrying out maintenance work on the equipment are required to wear suitable protective equipment as necessary for the task.

2.5.2 Cleaning

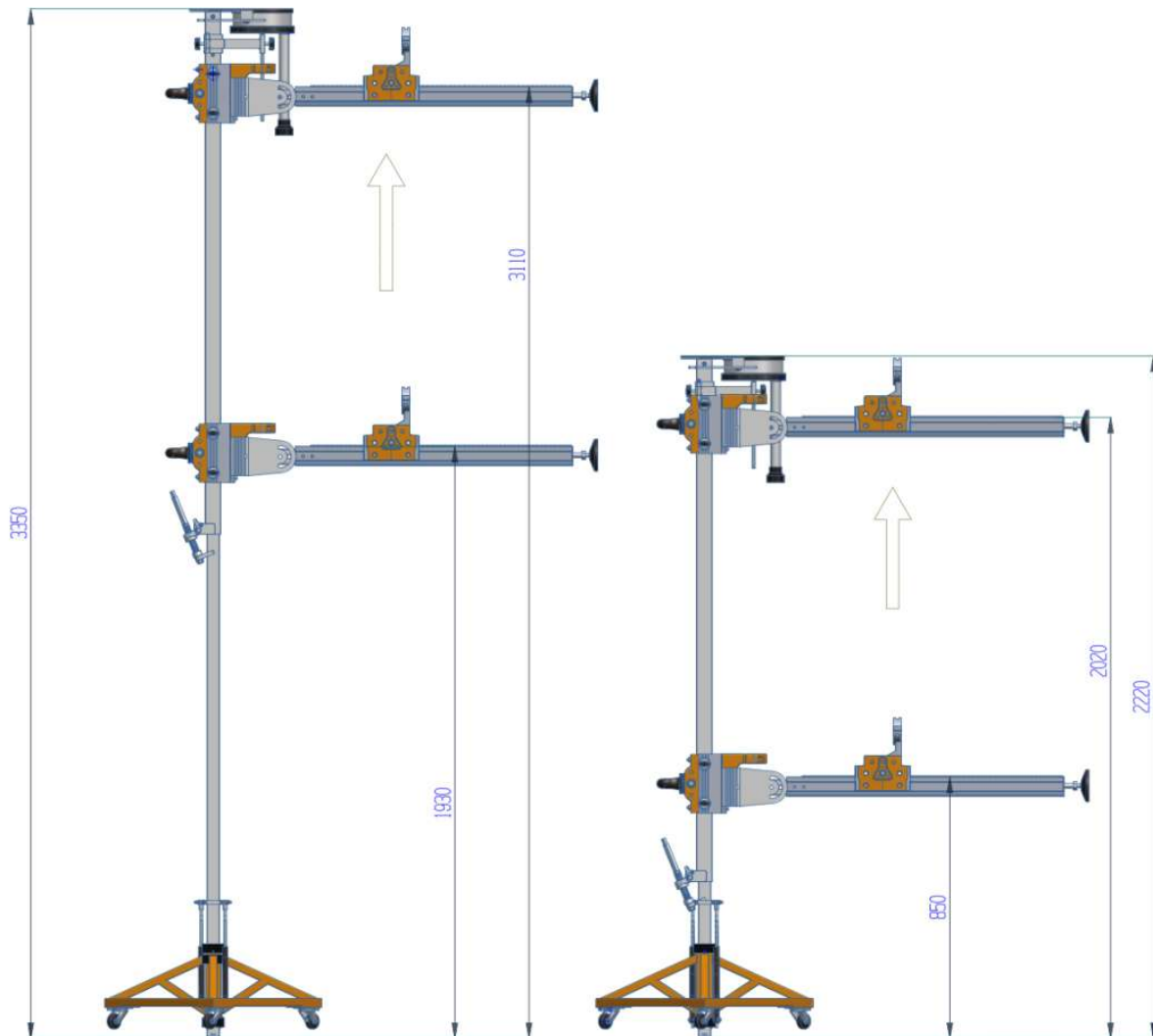
No corrosive, hazardous or environmentally harmful substances must be used to clean the unit. Dispose of cleaning agents in an environmentally responsible manner.

Under no circumstances must high-pressure washers, water jets or compressed air be used to clean the equipment.

3 Technical data

Model		TBS3000/PRO
Item number		6297
Mounting the core drilling machine on the horizontal drilling carriage	mm	Clamping holder Ø 60 or Mounting adapter (H=60)
Mounting the core drilling machine on the vertical drilling carriage	mm	Clamp holder Ø 60
Maximum drilling diameter	mm	202
Stroke	mm	Vertical 1180 Horizontal 700
Maximum weight on cross arm for horizontal drilling	kg	16
Height	mm	2200 – 3350
Weight	kg	47
Permissible temperature	°C	5 to 40
Permissible relative humidity	%	30 to 80
Compatible core drilling machines		①

- ① Core drilling machines from Kernlochbohrer:
 SID202/H-Xtrem
 SID202/P-Xtrem
 DKB202/H-PRO (equivalent to DKB-202/H-PRO)
 DKB202/P-PRO (equivalent to DKB-202/P-PRO)
 DKB182/P (equivalent to DKB-200/3SH)
 Eibenstock ETN 162 and EBM 352
 WEKA DK17 and DK32
 Husqvarna (DM340)
- Or other core drilling machines with an adapter:
 Clamping collar Ø 60 mm or
 Mounting with 4 x M8 threads spaced 79 x 41 mm apart and a key-way 10 mm wide.



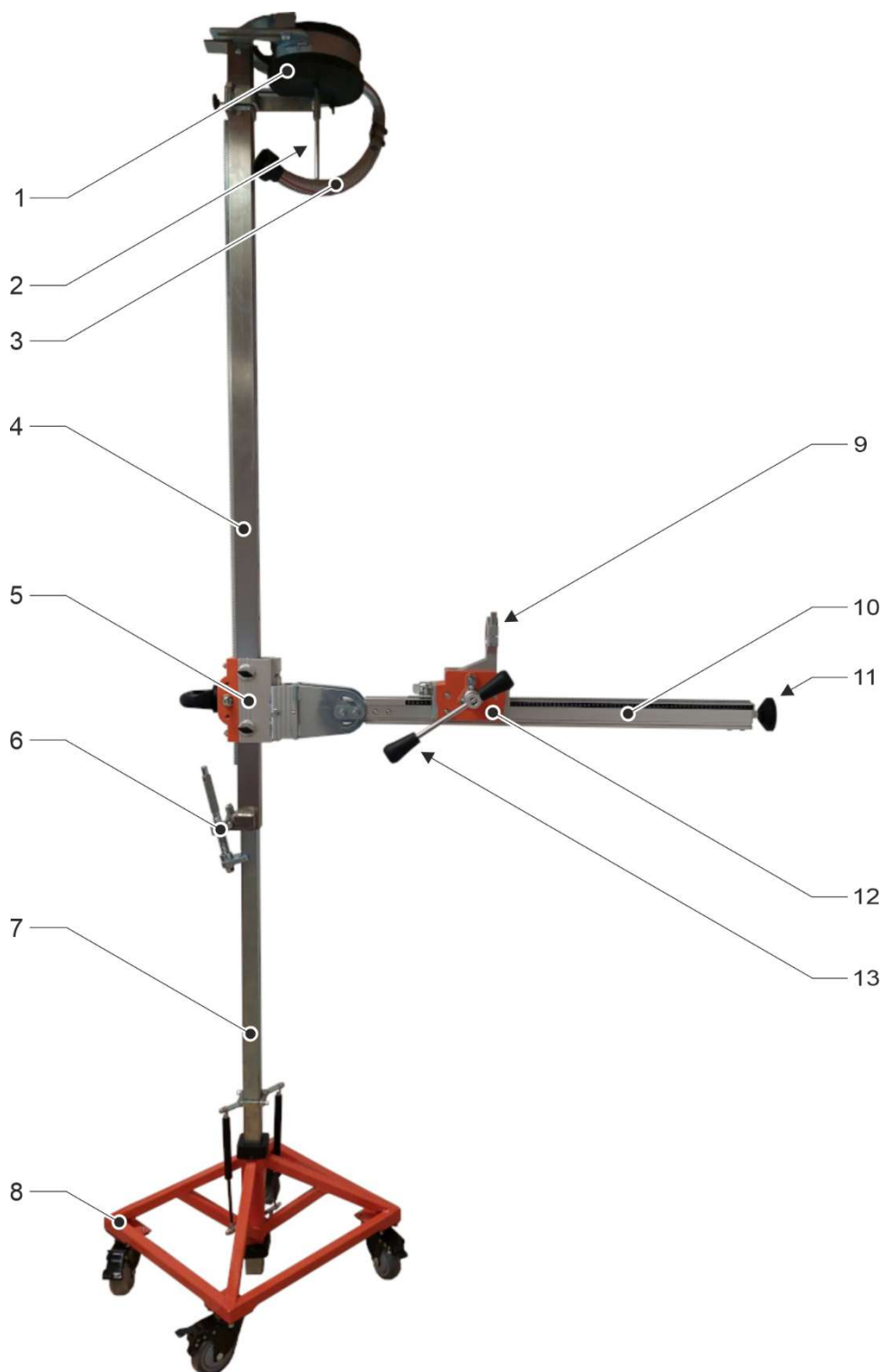
Total height of the telescopic core drilling rig
and possible height ranges of the cross arm

Left: Telescopic column fully extended

Right: Telescopic column fully retracted

4 Equipment description

4.1 Equipment components

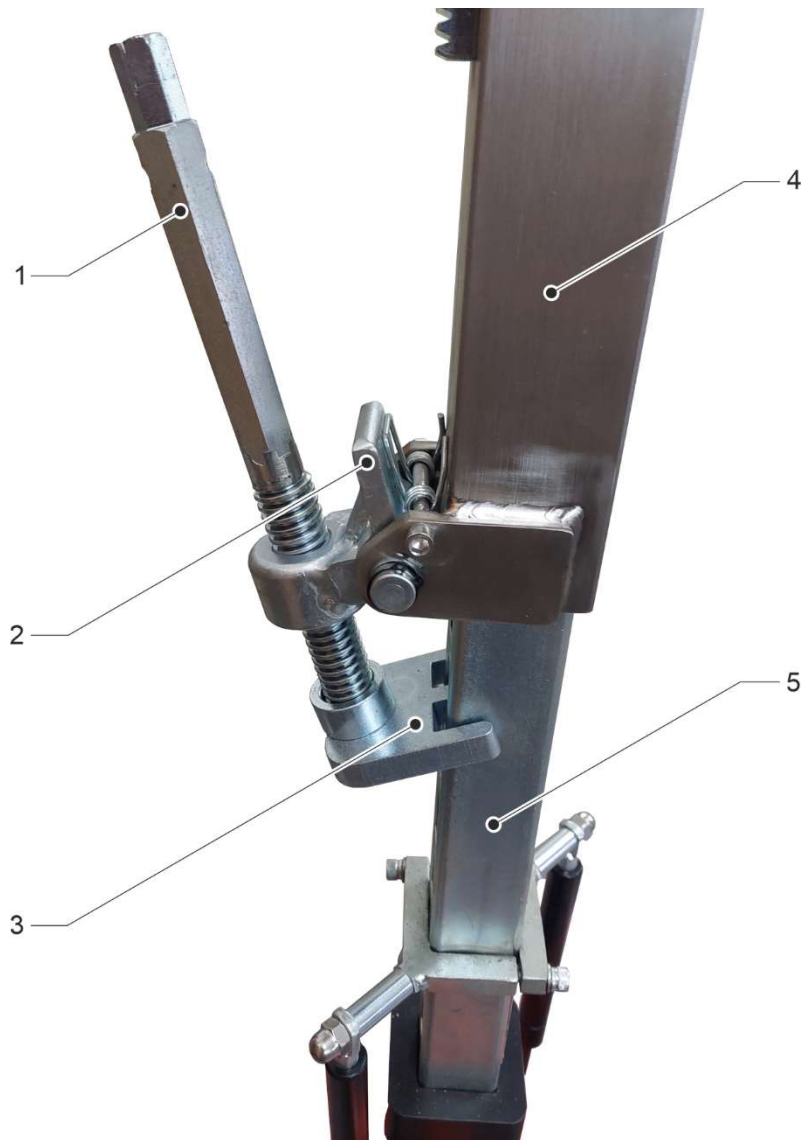


Components of the TBS3000/PRO telescopic core drilling rig

- 1 Water collection ring
- 2 Centring tip
- 3 Hose
- 4 Upper section of the telescopic column
- 5 Vertical drilling carriage
- 6 Quick-release lever for the telescopic column
- 7 Lower section of the telescopic column
- 8 Base frame with 4 lockable swivel castors
- 9 Clamp holder for Core drilling machine
- 10 Cross arm
- 11 Support leg of the cross-arm
- 12 Horizontal drilling carriage
- 13 Feed lever

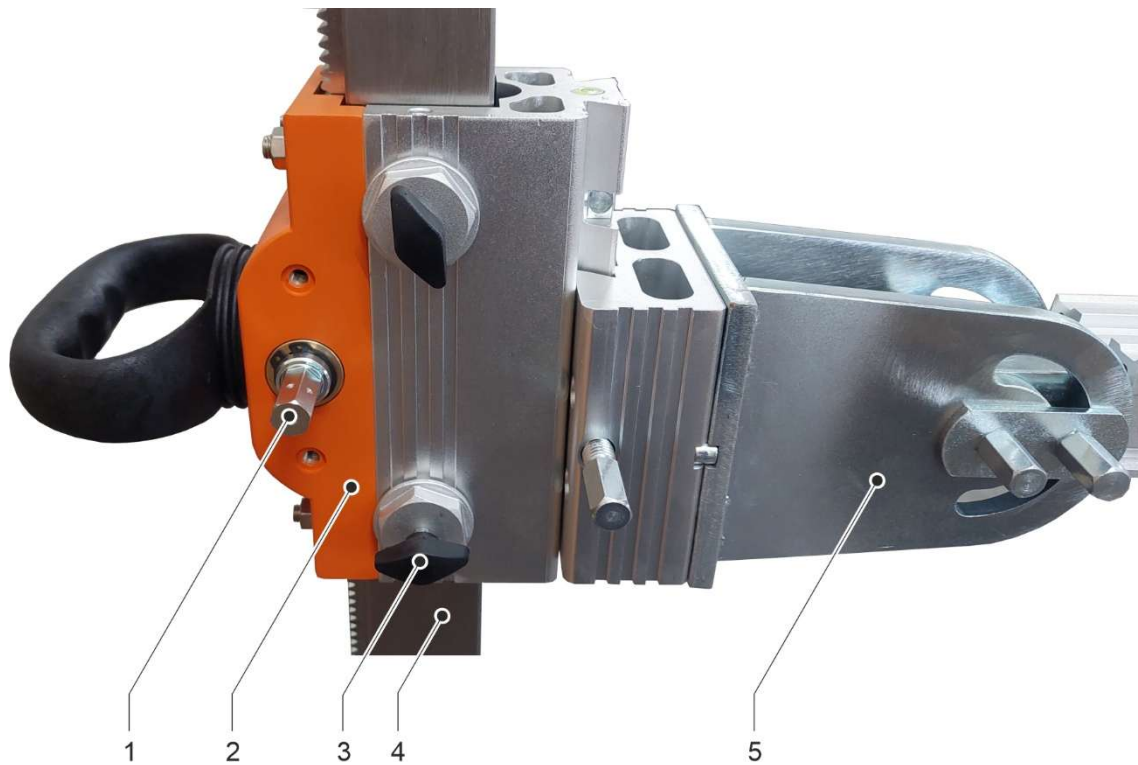
① The feed lever (SW 13) can be used for the following functions:

- Gear shafts of the vertical drilling carriage
- Gear shaft of the horizontal drilling carriage
- Spindle of the quick-action lever
- Locking screw for the cross-arm adapter
- Angle adjustment clamping screw
- Locking screws for the clamping brackets



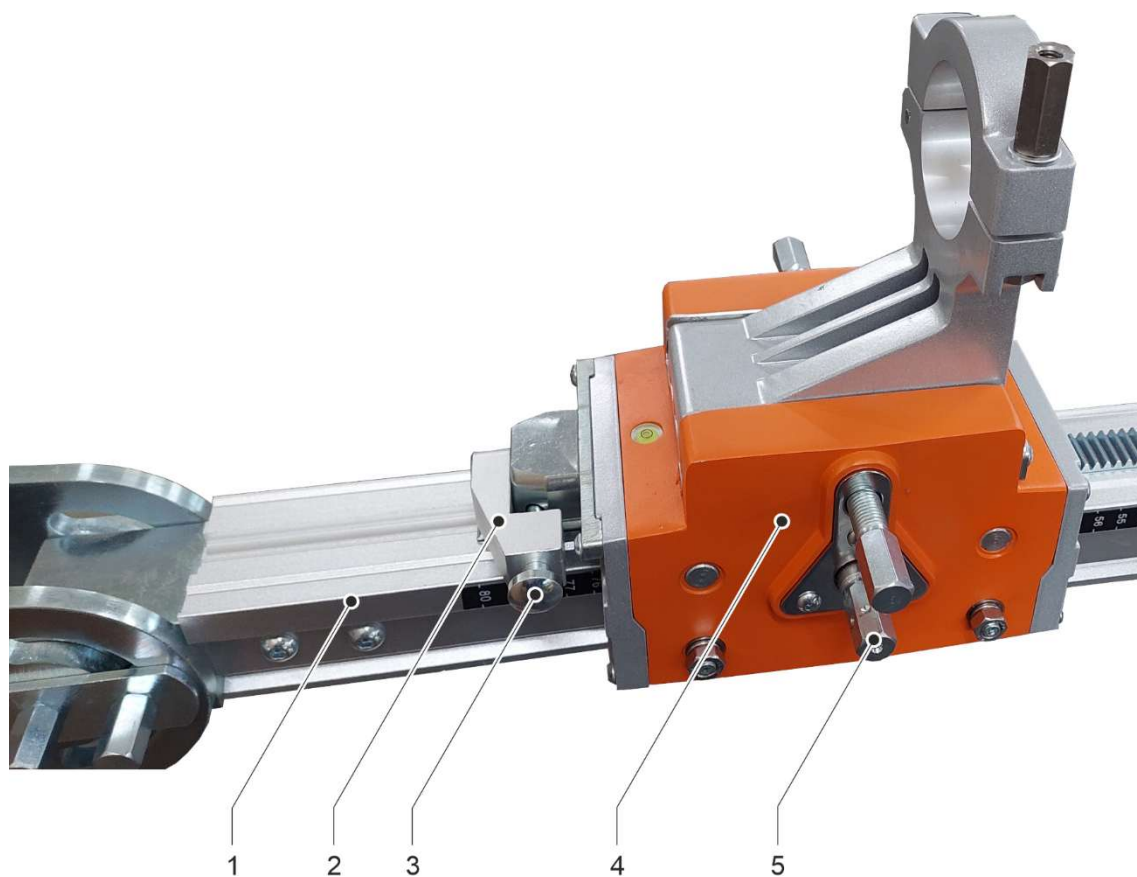
Quick-release lever on telescopic column

- 1 Spindle of the quick-release lever
- 2 Spring lever of the quick-release lever
- 3 Tooth section of the quick-release lever
- 4 Upper part of the telescopic column
- 5 Lower part of the telescopic column



Components of the vertical drilling slide and cross-arm clamping mechanism

- 1 Gear shaft
- 2 Vertical drilling carriage
- 3 Wing nut (4 pieces)
- 4 Telescopic column
- 5 Cross arm



Components of the horizontal drilling slide

- 1 Cross arm
- 2 Rotary bolt
- 3 Spring pin
- 4 Horizontal drilling carriage
- 5 Gear shaft

4.2 Scope of supply

The scope of delivery for the unit includes the following components:

- Telescopic core drilling rig
- Feed lever
- Mounting adapter with fitting accessories for the core drilling machine on the horizontal drilling carriage
- Clamping holder (Ø 60 mm | silver-painted) for the Core drilling machine on the horizontal drilling carriage
- Clamping holder (Ø 60 mm | orange finish) for core drilling machine on vertical drilling carriage
- Operating instructions

- ① The equipment required to use the machine, such as core drilling machines, drill bits, etc., must be procured separately.

Kernlochbohrer GmbH offers an extensive range of tools and accessories.

For further information and to place an order, please visit the online shop at <http://www.kernlochbohrer.com>.

5 Use of the equipment

5.1 Specific precautions

- ① In these operating instructions, the term 'drilling system' is used to refer to a core drilling rig to which a core drilling machine is mounted.

Before mounting the core drilling machine on the core drilling rig, ensure that the core drilling rig is securely fixed and that both drilling carriages are secured against movement.

The core drilling rig must be secured to level and stable surfaces. Drilling operations with a loose or wobbly core drilling rig can lead to DANGERS.

When using the drilling system for vertical upward drilling, a fully functional water collection ring must be fitted to the drilling system. No water must enter the Core drilling machine.

Before starting the drilling operation, the intended exit point of the drill bit must be inspected. The exit point must be secured and cordoned off. It must be ensured that the emerging drill bit does not cause any personal injury or damage to property.

The core drilling machine must not be operated in soft-hammer drilling mode!

5.2 Secure the drill carriage to prevent movement



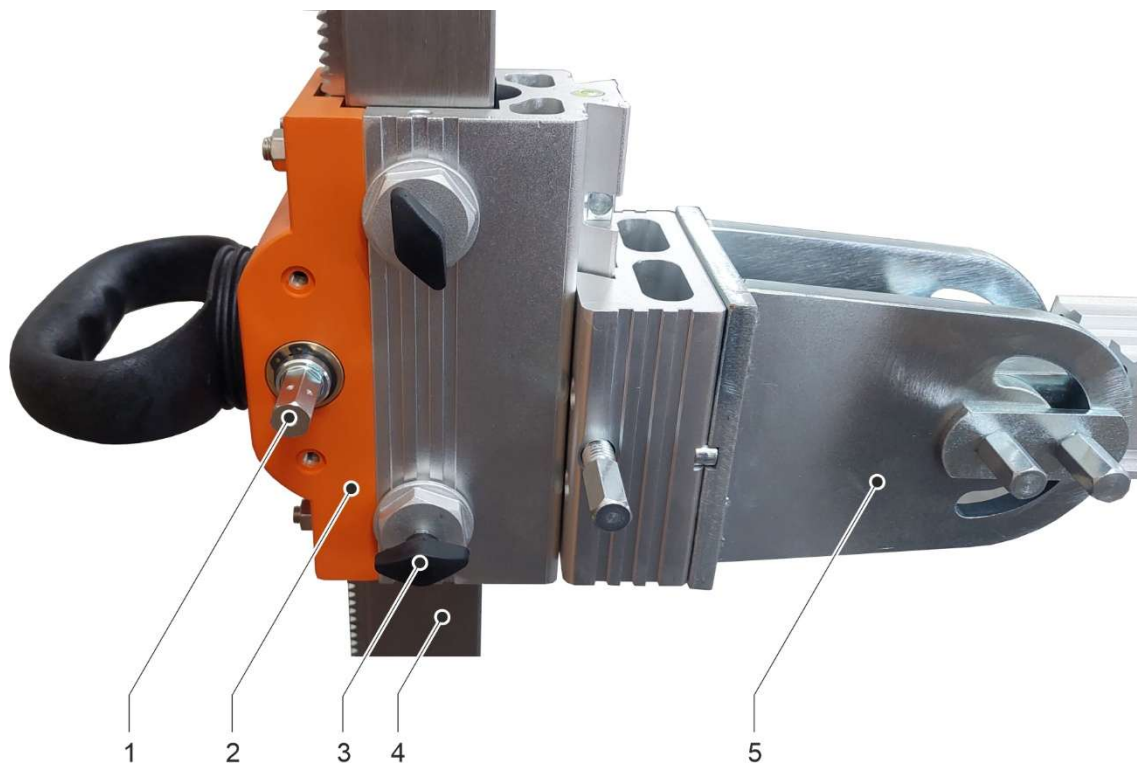
DANGER due to unintended movement of the drill carriages!

Except when being deliberately adjusted or during the drilling process, the drill carriages must always be secured against unintended movement.

If the safety catch on a drill carriage is released, it may move downwards uncontrollably due to gravity and cause personal injury or damage to property.

Before releasing the lock on a drill carriage: hold the drill carriage firmly to prevent it from dropping!

5.2.1 Vertical drill carriage



Securing the vertical drill carriage against movement

- 1 Toothed shaft
- 2 Vertical drilling carriage
- 3 Wing nut (4 pieces)
- 4 Telescopic column
- 5 Cross arm

The locking mechanism can be used to secure the vertical drilling carriage on the telescopic column to prevent movement.

The vertical drilling carriage is secured using two wing screws on each side. The vertical drilling carriage is clamped by turning the wing screws clockwise.

To release the lock, hold the vertical drilling carriage firmly and then loosen the wing screws by turning them anti-clockwise.

Once the vertical drilling carriage is unlocked, it can be moved using the feed lever fitted onto the toothed shaft.



Always tighten all four wing screws to secure the vertical drilling carriage!



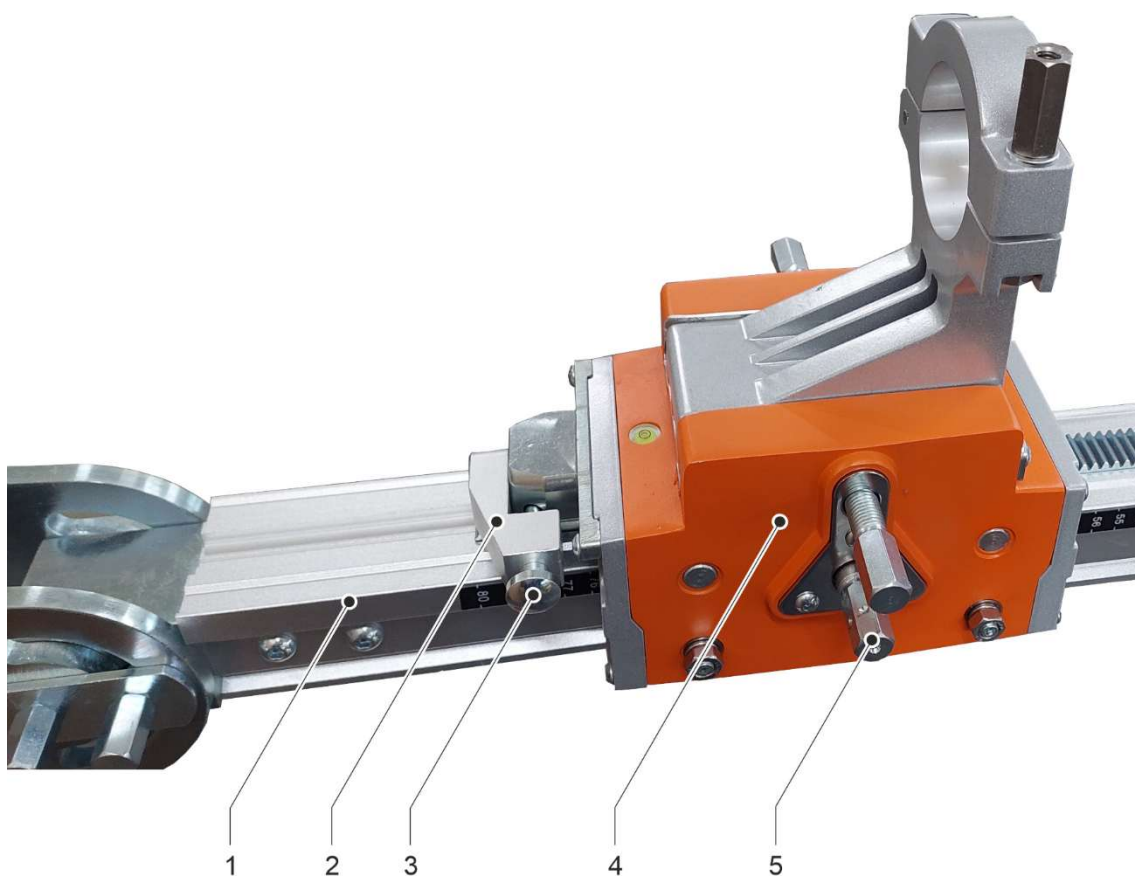
Once the vertical drilling carriage has been released, it may drop down on its own.

Hold the vertical drilling carriage firmly before loosening the wing screws to prevent it from dropping.



Once the vertical drilling carriage is secured, it must not be moved! This would damage the locking mechanism and the rack on the telescopic column.

5.2.2 Horizontal drilling carriage



Securing the horizontal drilling carriage against movement

- 1 Cross arm
- 2 Rotary bolt
- 3 Spring pin
- 4 Horizontal drilling carriage
- 5 Toothed shaft

The locking device can be used to secure the horizontal drilling carriage on the cross arm to prevent movement.

The locking is achieved by a toothed piece that engages with the rack on the cross arm, thereby preventing adjustment.

The toothed piece is operated by a rotary latch, which must be secured in both end positions by engaging the spring pin into the respective mounting hole.

Once the horizontal drilling carriage is unlocked, it can be moved using the feed lever fitted onto the toothed shaft.



If the horizontal drilling carriage is locked, it must not be moved using the feed lever!

This would damage the locking mechanism and the rack on the cross arm.

5.3 Visual inspection

Before working with the core drilling rig, a visual inspection must be carried out on it:

- Check the general condition and cleanliness.
- Check that all covers and components are present.
- Check that all screws are tight.
- Ensure that the vertical and horizontal drilling slides are secured against movement.



See chapter 5.2 “Secure the drill carriage to prevent movement”.

5.4 Setting up and using the core drilling rig



DANGER due to unintended movement of the drill slides caused by gravity!

Both drill carriages must always be secured against unintended movement.

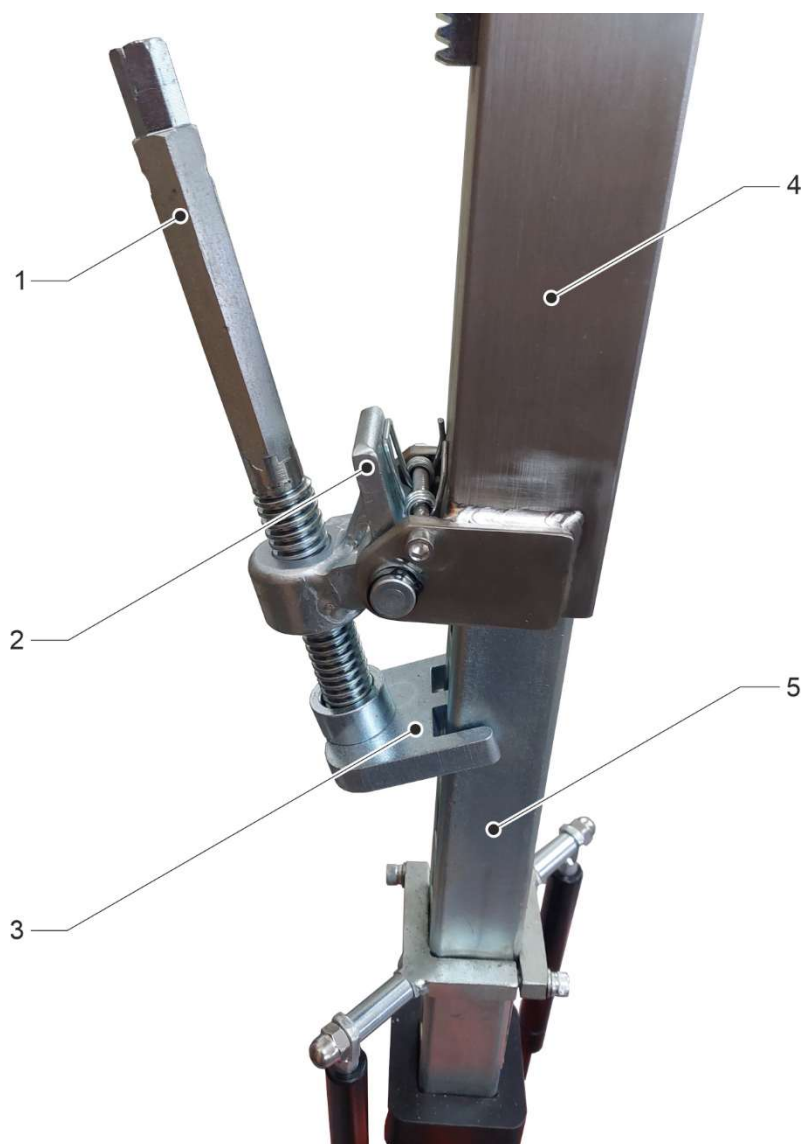


See chapter 5.2 “Secure the drill carriage to prevent movement”.

5.4.1 Vertical drilling

Prerequisites:

- ☑ A visual inspection of the core drilling rig has been carried out.
- ☑ The cross-beam of the core drilling rig is not attached to the telescopic column.
- ☑ Vertical drilling carriage secured against movement.

Procedure:

Quick-release lever on the telescopic column

- 1 Spindle of the quick-release lever
- 2 Spring lever of the quick-release lever
- 3 Tooth section of the quick-release lever
- 4 Upper section of the telescopic column
- 5 Lower section of the telescopic column

- ☒ Position the core drilling rig approximately at the intended mounting location and hold it steady to prevent it from tipping over.
- ☒ Apply the locking brakes on the four swivel castors of the base frame.
- ☒ Press and hold the spring-loaded lever on the quick-release lever.
 - ✎ The toothed piece at the end of the spindle is no longer engaged in any of the openings in the lower section of the telescopic column.
- ☒ Push the lower section of the telescopic column downwards until the front end rests securely on the floor.
- ☒ Pull the upper part of the telescopic column upwards until the end face is just below the ceiling.
- ☒ Release the spring-loaded lever of the quick-release mechanism and allow the toothed piece to engage in one of the openings in the lower part of the telescopic column.
- ☒ Determine the drilling centre using the centring tip at the top end of the telescopic column.

Position the core drilling rig accordingly.

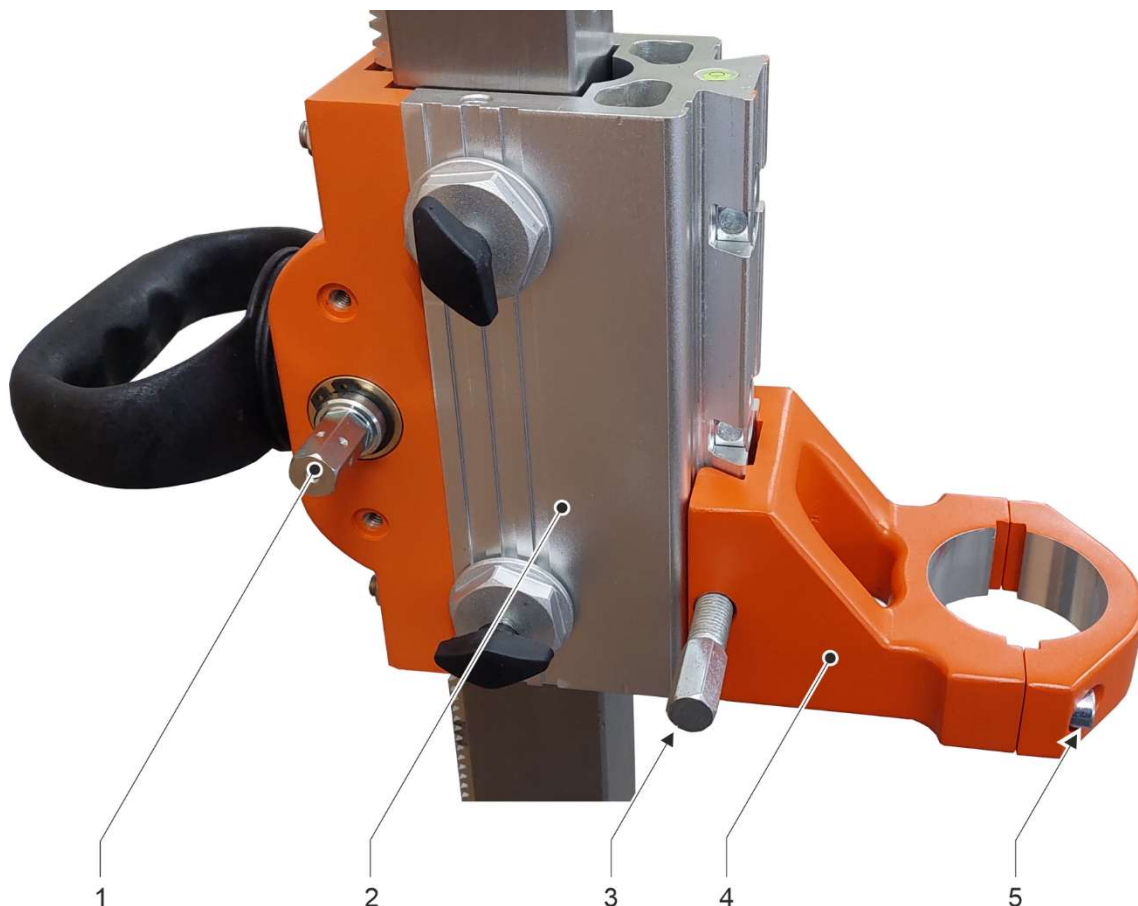
To do this, release the locking brakes on the swivel castors and then apply them again.
- ☒ Slide the feed lever onto the spindle of the quick-release lever.
- ☒ By turning the spindle, raise the upper part of the telescopic column further until its front face rests against the ceiling and the telescopic column is securely clamped between the floor and the ceiling.
- ① The precise vertical alignment of the telescopic column can be checked using the spirit level on the top of the vertical drilling carriage.
- ☒ Remove the feed lever.
- ☒ Check once again that the telescopic column is securely fastened between the floor and the ceiling.

If necessary, adjust the spindle of the quick-release lever until the telescopic column is securely fastened.



Drilling work with a loose or wobbly core drilling rig can lead to dangers.

- ☒ Release the lock securing the vertical drilling carriage against movement.
- ☒ Fit the feed lever onto the toothed shaft of the vertical drilling carriage.
- ☒ Move the vertical drilling carriage to a height suitable for fitting the clamping holder.
- ☒ Secure the vertical drilling carriage to prevent movement.
- ☒ Remove the feed lever.



Clamping holder fitted to the vertical drilling carriage

- 1 Gear shaft of the vertical drilling carriage
- 2 Vertical drilling carriage
- 3 Locking screw for the clamping holder
- 4 Clamping holder
- 5 Clamping screw of the clamping holder

- ☒ Unscrew the clamping holder's locking screw for the vertical drilling carriage far enough so that the clamping holder can be inserted into the mounting on the vertical drilling carriage.
- ☒ Insert the clamping holder into the mounting on the vertical drilling carriage and secure it with the locking screw.
- ☒ Check that the clamping holder is securely fitted to the vertical drilling carriage.
- ☒ Loosen the clamping screw on the clamping holder, insert the Core drilling machine into the clamping holder and secure it with the clamping screw.
- ☒ Check that the core drilling machine is securely fitted to the core drilling rig.
- ☒ For wet drilling, the water collection ring must be used.
For dry drilling, a dust extraction system must be connected.
- ☒ Place the feed lever onto the rack on the vertical drilling carriage.
- ① The force required to move the core drilling machine forward is applied by manually turning the feed lever on the toothed shaft, which meshes with the rack.

To do this, release the lock on the vertical drilling carriage.



Observe the maximum drilling diameter of 202 mm!

The core drilling machine must not be operated in soft-hammer drilling mode!

5.4.2 Horizontal or angled drilling



DANGER due to unintended movement of the drilling carriages caused by gravity!

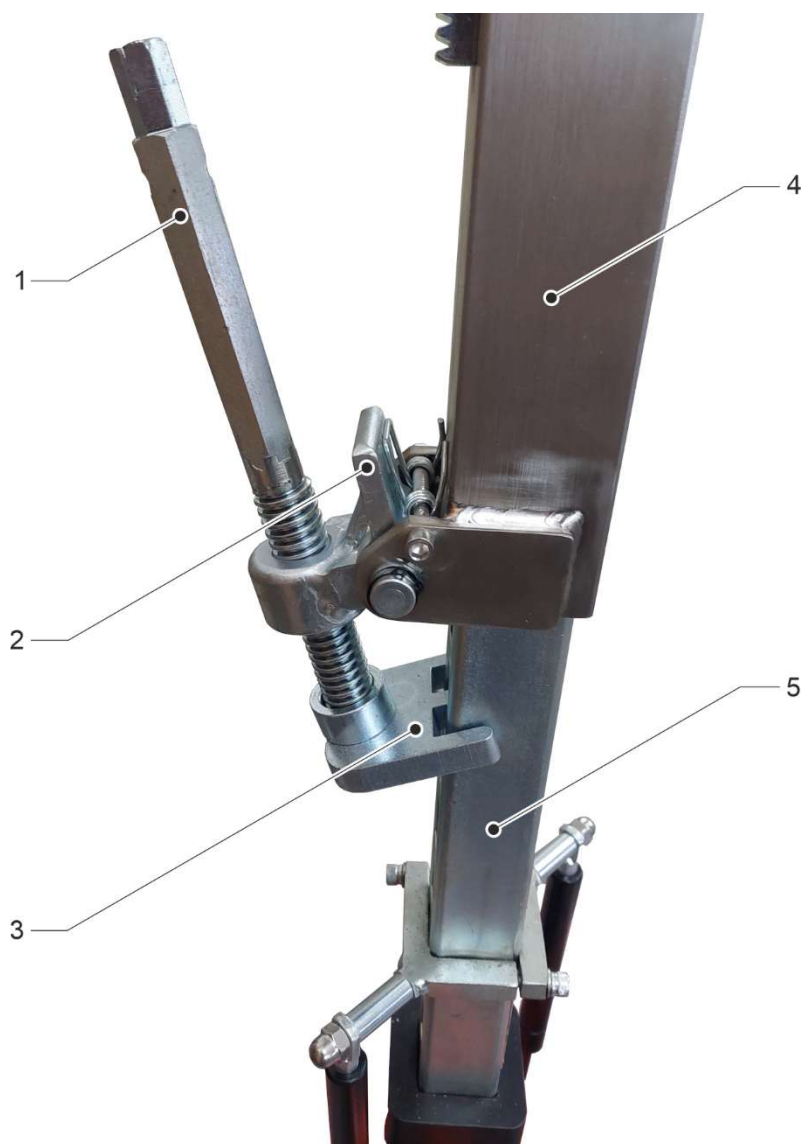
Both drilling carriages must always be secured against unintended movement.



See chapter 5.2 "Secure the drill carriage to prevent movement".

Prerequisite:

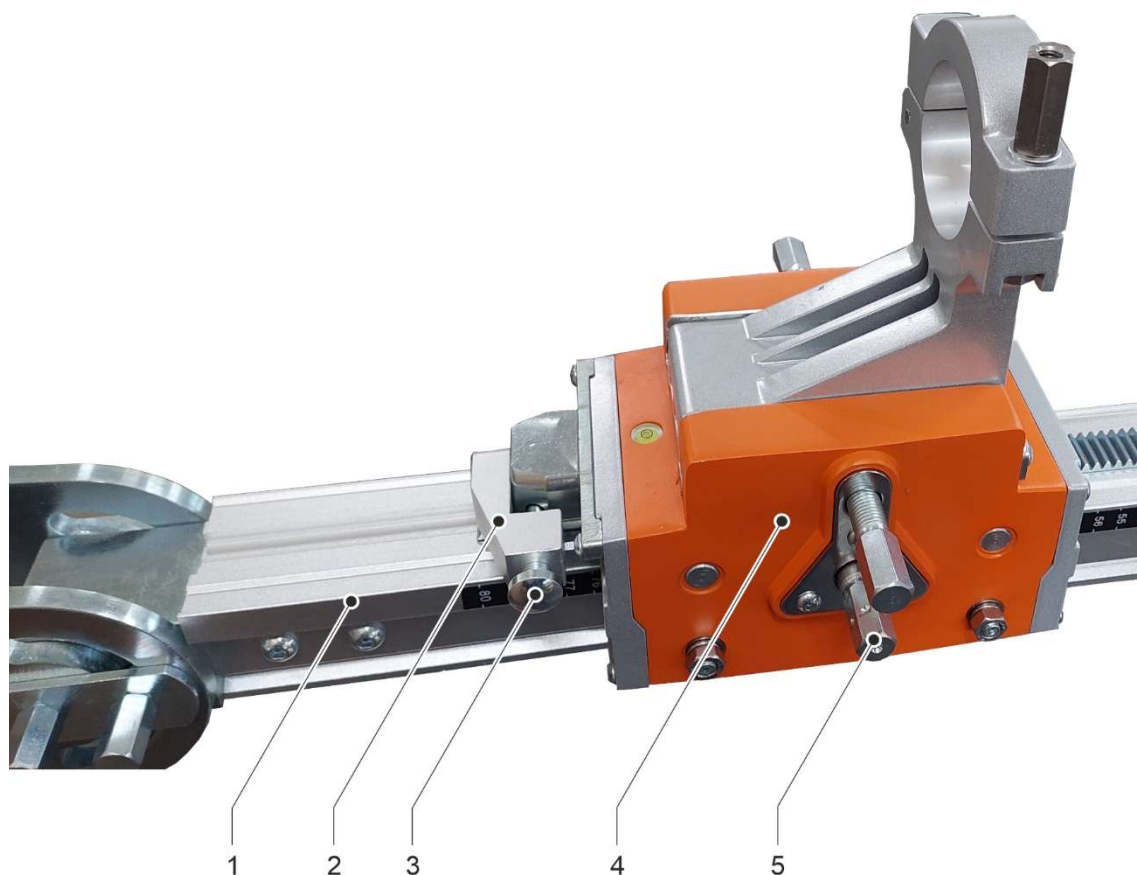
- ☒ A visual inspection of the core drilling rig has been carried out.
- ☒ The cross-beam of the core drilling rig is not attached to the telescopic column.
- ☒ Vertical drill carriage secured against movement.

Procedure:

Quick-release lever on the telescopic column

- 1 Spindle of the quick-release lever
- 2 Spring lever of the quick-release lever
- 3 Tooth section of the quick-release lever
- 4 Upper section of the telescopic column
- 5 Lower section of the telescopic column

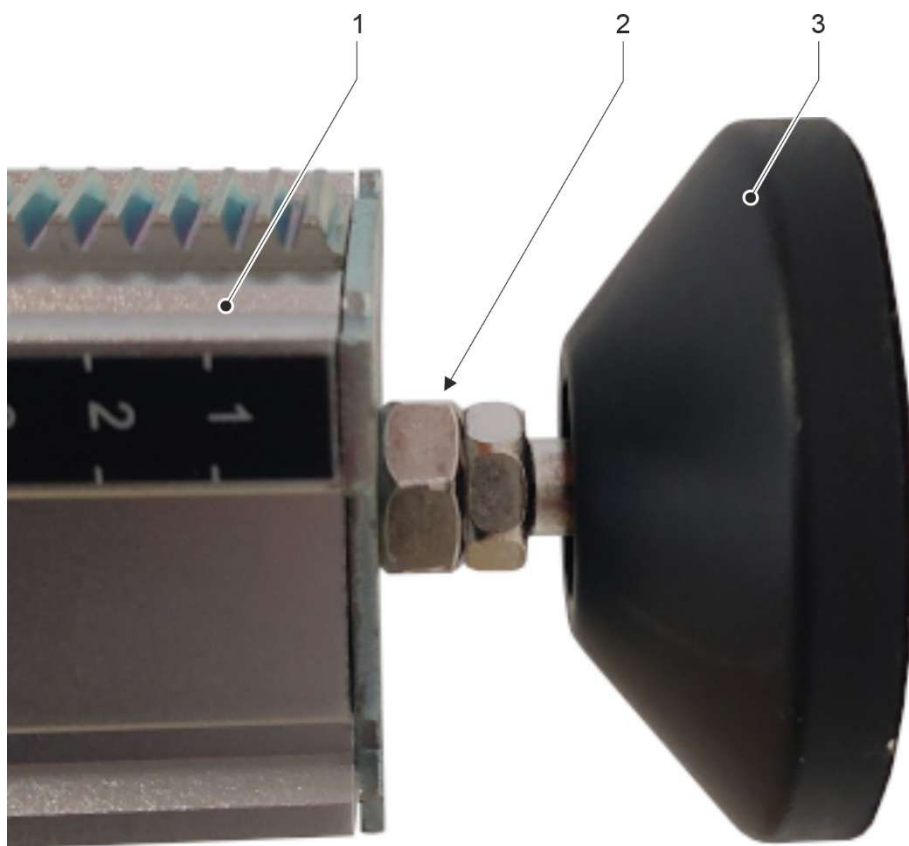
- ☒ Position the core drilling rig near the intended mounting location and ensure that the cross-arm can be fitted correctly.
Hold the core drilling rig steady to prevent it from tipping over.
- ☒ Apply the locking brakes on the four swivel castors of the base frame.
- ☒ Operate and hold the spring-loaded lever of the quick-release mechanism.
 - ☞ The tooth at the end of the spindle no longer engages with any of the openings in the lower part of the telescopic column.
- ☒ Push the lower section of the telescopic column downwards until its front end rests securely on the floor.
- ☒ Pull the upper part of the telescopic column upwards until the front end is just below the ceiling.
- ☒ Release the spring-loaded lever of the quick-release mechanism and allow the toothed piece to engage in one of the openings in the lower section of the telescopic column.
- ☒ Slide the feed lever onto the spindle of the quick-release lever.
- ☒ By turning the spindle, raise the upper part of the telescopic column further until the front end is flush with the ceiling and the telescopic column is securely clamped between the floor and the ceiling.
- ☒ Check once again that the telescopic column is securely fastened between the floor and the ceiling.
If necessary, adjust the spindle of the quick-release lever until the telescopic column is securely fastened.
- ① The precise vertical alignment of the telescopic column can be checked using the spirit level on the top of the vertical drilling carriage.
- ☒ Remove the feed lever.



Horizontal drilling carriage on cross arm

- 1 Cross arm
- 2 Rotary bolt
- 3 Spring pin
- 4 Horizontal drilling carriage
- 5 Gear shaft

- ☒ Release the lock on the horizontal drilling carriage of the cross arm.
- ☒ Place the feed lever onto the toothed shaft of the horizontal drilling carriage.
- ☒ Position the horizontal drilling carriage as far as possible towards the cross-arm adapter, but not beyond the rack.
- ☒ Secure the horizontal drilling carriage to prevent movement.
- ☒ Remove the feed lever.



Mount the horizontal drilling carriage on the cross arm

- 1 Cross arm
- 2 Lock nut
- 3 Support leg

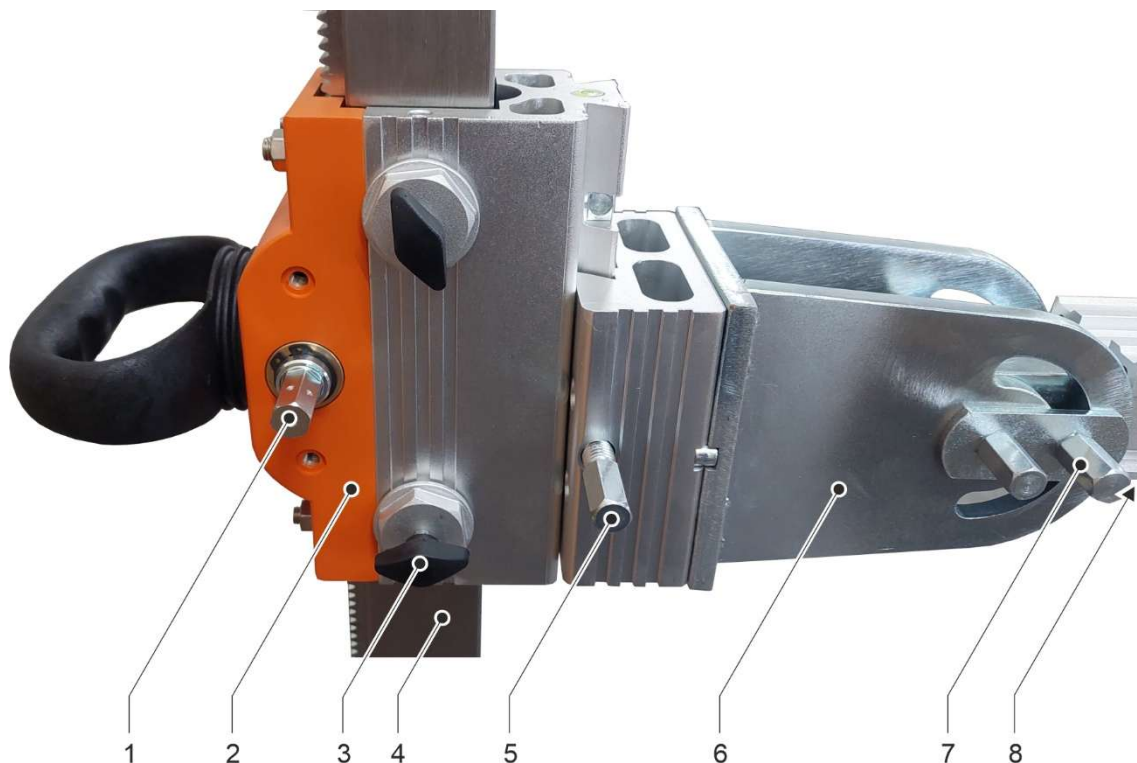
- ☒ Screw the support foot all the way into the cross arm.
To do this, unscrew the lock nut all the way back.



Mounting the cross arm on the vertical drilling carriage exerts an additional weight moment on the telescopic column.

The telescopic column must therefore be securely fastened.

- ☒ Check that the telescopic column is securely fastened between the floor and the ceiling.
If necessary, adjust the spindle of the quick-release lever until the telescopic column is securely fastened.



Cross arm fitted to the vertical drilling carriage

- 1 Gear shaft of the vertical drilling carriage
- 2 Vertical drilling carriage
- 3 Wing nut (4 pieces)
- 4 Telescopic column
- 5 Locking screw for the cross-arm adapter
- 6 Cross-arm adapter
- 7 Angle adjustment clamping screw
- 8 Cross arm

- ☒ Release the lock securing the vertical drilling carriage against movement.
- ☒ Fit the feed lever onto the toothed shaft of the vertical drilling carriage.
- ☒ Move the vertical drilling carriage to a height suitable for fitting the cross arm.
- ☒ Secure the vertical drilling carriage against movement.
- ☒ Remove the feed lever.

- ☒ Unscrew the locking screw on the cross-arm adapter far enough so that the adapter can be inserted into the mounting on the vertical drilling carriage.
- ☒ Insert the cross-arm adapter into the mounting on the vertical drilling carriage and secure it with the locking screw.
- ☒ Check that the cross arm is securely fitted to the vertical drilling carriage.
- ☒ Adjust the drilling angle if necessary:



Exercise the utmost caution when drilling at an angle!

Move the cross arm as little as possible from the horizontal position.

Where possible, carry out angled drilling at a greater angle to the horizontal using a core drilling rig with screw fastenings.

- ☒ Hold the cross arm firmly.
- ☒ Loosen the clamping screw for the cross-arm's angle adjustment.
- ☒ Adjust the cross arm to the desired drilling angle.
- ☒ Tighten the clamping screw for the angle adjustment.
- ☒ Position the core drilling rig at the fixing point:
 - ☒ Fit the feed lever onto the spindle of the quick-release lever.
 - ☒ Hold the telescopic column steady to prevent it from tipping over.



Risk of tipping!

Retract the telescopic column only far enough to allow the Core drilling rig to be moved freely.

- ☒ By turning the spindle, lower the upper part of the telescopic column slightly and raise the lower part slightly so that the telescopic column can be moved freely.
- ☒ Release the locking brakes on the four swivel castors of the base frame.
- ☒ Move the core drilling rig to the designated mounting location.
- ☒ Apply the locking brakes on the four swivel castors.
- ☒ Secure the core drilling rig:
 - ☒ Push the lower part of the telescopic column downwards until the front end rests securely on the floor.
 - ☒ By turning the spindle, raise the upper part of the telescopic column further until the front end rests against the ceiling and the telescopic column is securely braced between the floor and the ceiling.

- ☒ Position the vertical drilling carriage at the desired height:
 - ☒ Release the lock securing the vertical drilling carriage against movement.
 - ☒ Fit the feed lever onto the toothed shaft of the vertical drilling carriage.
 - ☒ Move the vertical drilling carriage to a height suitable for mounting the clamping holder.
 - ☒ Secure the vertical drilling carriage to prevent movement.
 - ☒ Remove the feed lever.
- ☒ Brace the cross arm against the wall using the support foot.

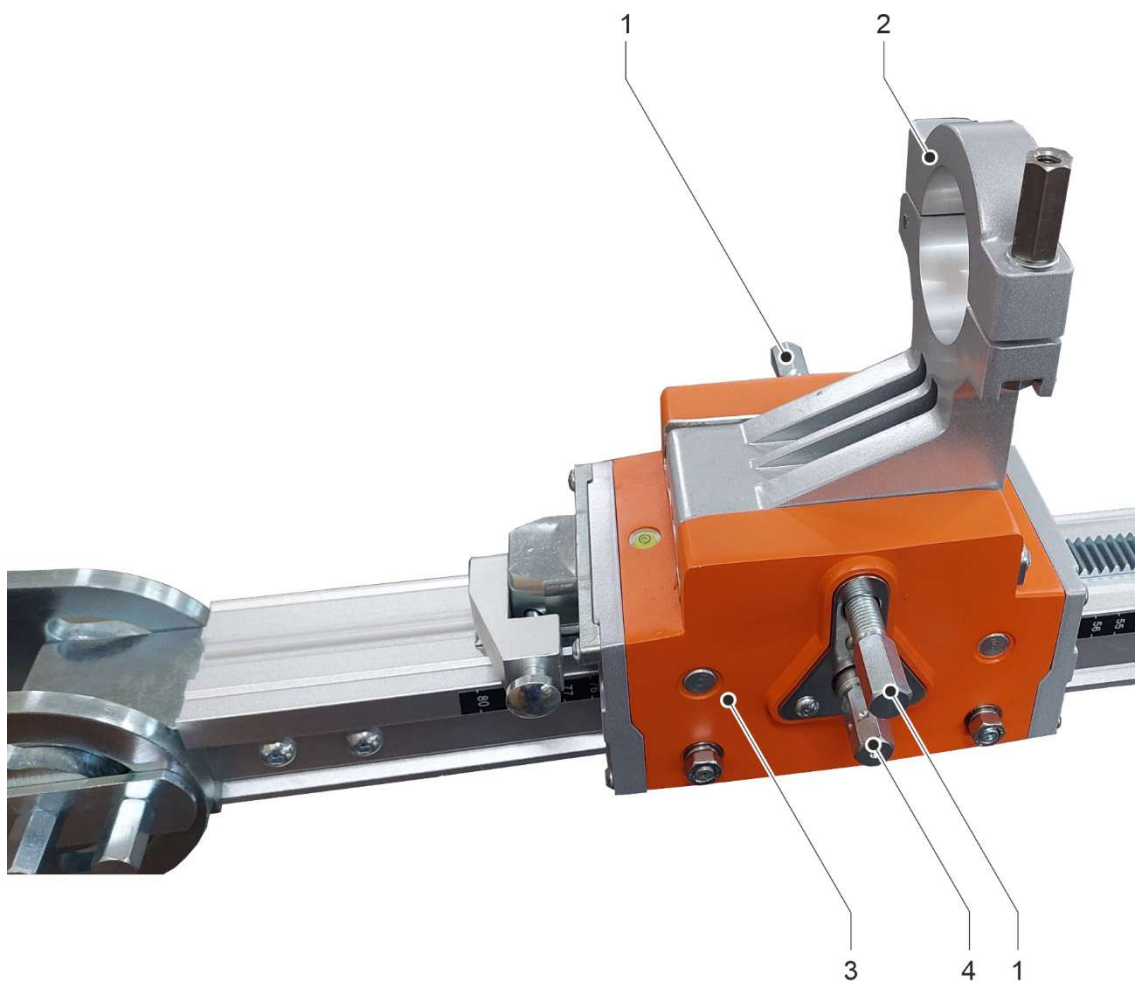
To do this, unscrew the support foot from the cross arm as far as necessary and secure it with the lock nut.
- ① If the cross arm cannot be braced sufficiently, the telescopic column must be positioned closer to the wall.
- ① The precise horizontal alignment of the cross-arm can be checked using the spirit level on the top of the horizontal drill carriage.
- ☒ Check that the core drilling rig is securely fastened.

If necessary, adjust the spindle of the quick-release lever until the telescopic column is securely fastened.

If necessary, adjust the support leg until the cross-arm is securely fastened



Drilling with a loose or wobbly core drilling rig can lead to dangerous situations.



Horizontal drilling carriage with clamping holder

- 1 Locking screws for clamping holder/mounting adapter (2 pieces)
- 2 Clamping holder
- 3 Spring pins
- 4 Toothed shaft



The maximum weight of the core drilling machine and drill bit must not exceed 16 kg!

- ☒ If the core drilling machine is to be mounted on the core drilling rig using the mounting adapter:

Attach the mounting adapter to the core drilling machine using four cylinder-head screws and a key.

- ☒ Unscrew the locking screws on the clamping holder/mounting adapter until the clamping holder or mounting adapter can be inserted into the mounting on the horizontal drilling carriage.
- ☒ Insert the clamping holder or core drilling machine with the mounting adapter into the mounting on the horizontal drilling carriage and secure it with both locking screws.
- ☒ Check that the clamping holder or Core drilling machine with mounting adapter is securely fitted to the horizontal drilling carriage.
- ☒ Place the feed lever onto the rack on the horizontal drilling carriage.
- ① The force required for the core drilling machine's feed movement is applied by manually turning the feed lever onto the toothed shaft, which engages with the rack.

To do this, release the lock on the horizontal drilling carriage.



Observe the maximum drilling diameter of 202 mm!

The core drilling machine must not be operated in soft-hammer drilling mode!

5.5 Dismantle and store the core drilling rig

Prerequisites:

- ☑ Core drilling machine disconnected from the core drilling rig.
- ☑ If necessary, detach the mounting adapter from the core drilling machine.

Procedure:



DANGER due to unintended movement of the drill carriages caused by gravity!

Both drill carriages must always be secured against unintended movement.



See chapter 5.2 "Secure the drill carriage to prevent movement".

- ☒ Dismantling the core drilling rig:
The core drilling rig is dismantled in the reverse order to that used for assembly.
 See the chapter at 5.4 "Setting up and using the core drilling rig".
- ☒ Clean the core drilling rig and allow it to dry completely.
 See the chapter at 6.3.1 "Cleaning and inspecting the core drilling rig".
- ☒ Place the core drilling rig horizontally or park it vertically and secure it to prevent it from toppling over.
- ☒ Store the core drilling rig in a dry, cool place, protected from moisture and direct sunlight.
- ☒ Secure the core drilling rig against unauthorised use.

6 Maintenance

6.1 Guidance on proper maintenance

Inadequate or improper maintenance can cause operational faults and impair the operational safety and service life of the equipment. Regular inspection and maintenance are therefore essential. We recommend that maintenance work be carried out only by trained personnel.

The contractually agreed warranty does not release the operator of the equipment from the obligation to maintain the equipment in accordance with the manufacturer's instructions from the time of commissioning. Kernlochbohrer GmbH accepts no liability for damage caused by a lack of maintenance.

6.2 Maintenance and Inspection Schedule

The intervals specified relate to normal operating conditions. In the event of more demanding conditions (heavy dust accumulation, etc.) and longer daily working hours, the operator must shorten the specified intervals accordingly.

Please use the maintenance and inspection schedule as a guide only! It is essential that you follow the cross-references to the other chapters! These describe in detail how to carry out the individual tasks correctly and safely.

Interval	Category	Component	Task	Chapter
1 day	Real-time	Core drilling rig	Cleaning and inspection	6.3.1

6.3 Inspection and maintenance

6.3.1 Cleaning and inspecting the core drilling rig



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

Do not use high-pressure washers, water jets or compressed air to clean the unit. The force of the water or air jet could damage the unit.

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



DANGER due to unintended movement of the drill slides caused by gravity!

Both drill slides must always be secured against unintended movement.



See chapter 5.2 “Secure the drill carriage to prevent movement”.

Interval:

1 day real time

Equipment:

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

Procedure:

- ☒ Clean the core drilling rig of dust and dirt.
To do this, use a damp cloth dipped in water mixed with a mild detergent.
- ☒ Dry the core drilling rig thoroughly or leave it to dry.
- ☒ Check that the feed carriage's safety device on the guide column is working correctly.
 See chapter 5.2 "Secure the drill carriage to prevent movement".



Once the drill carriages are locked, they must not be moved using the feed lever!

This would damage the locking mechanisms and the racks.

- ☒ Check the play of the horizontal drill carriage on the cross arm:
To do this, release the lock on the horizontal drill carriage.
If the horizontal drilling carriage has play on the cross arm, adjust the four adjustable rollers one after the other:
 - ☒ Secure the eccentric shaft (item 25 in the spare parts drawing of the cross arm and horizontal drilling carriage) against rotation using an Allen key.
 - ☒ Tighten the eccentric clamp (item 24 in the spare parts drawing of the cross arm and horizontal drilling carriage) of the adjustable roller by turning it clockwise.
 - ☞ The adjustable roller is now in contact with the running surface of the cross arm again.Then check the play in the horizontal drilling carriage on the cross arm again.
If the play in the horizontal drilling carriage cannot be sufficiently reduced by readjusting the adjustable rollers, the four rollers must be replaced.
- ☒ Check that all screws and nuts on the Core drilling rig are tight. Tighten the screws and nuts if necessary.
- ☒ Apply a thin coat of water-resistant grease to the racks on the telescopic column and cross arm.

7 Troubleshooting

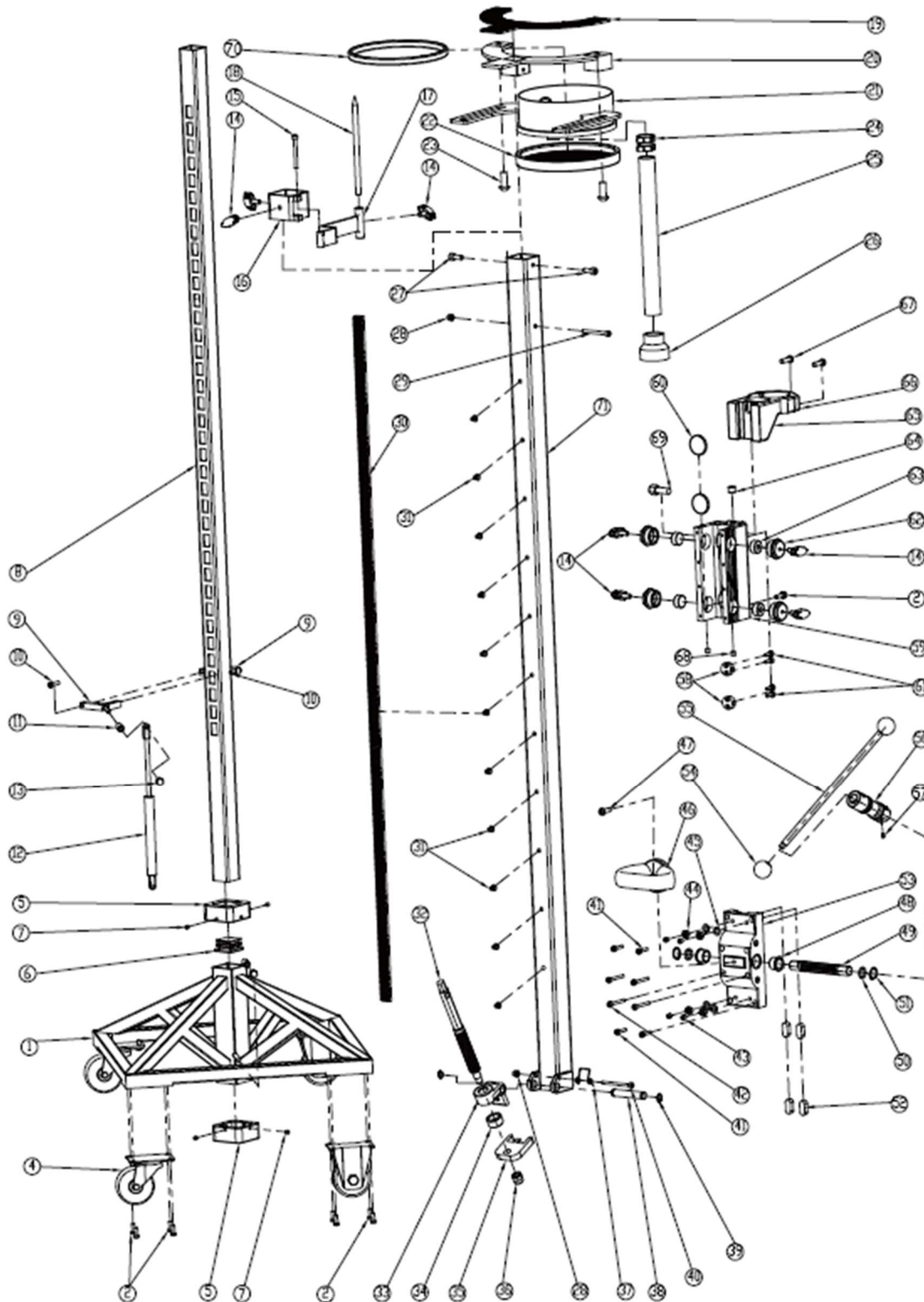
Should a fault occur whilst the machine is in operation, please first attempt to rectify the fault yourself using the information below.

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

Fault	Possible cause	Troubleshooting
Safety device cannot secure the feed carriage	Safety device defective	Replace the safety device
Horizontal drilling carriage wobbles	Wear	Readjust the adjustable rollers
After replacing all the rollers, the movement of the horizontal drilling carriage is still unreliable	Cross arm worn	Replace the cross arm
Gear shaft is seized	Worn, seized rollers	Replace the seized rollers
Gear shaft turns freely	Gear shaft and rack are worn	Replace the gear shaft and rack
Core drilling machine cannot be clamped	Wear on the clamping surface	Replace the clamping holder
Telescopic column wobbles during drilling	Check the connection between the base frame and the telescopic column	Tighten the clamping screw. If the weld on the base frame has cracked, replace the base frame

8 Spare parts

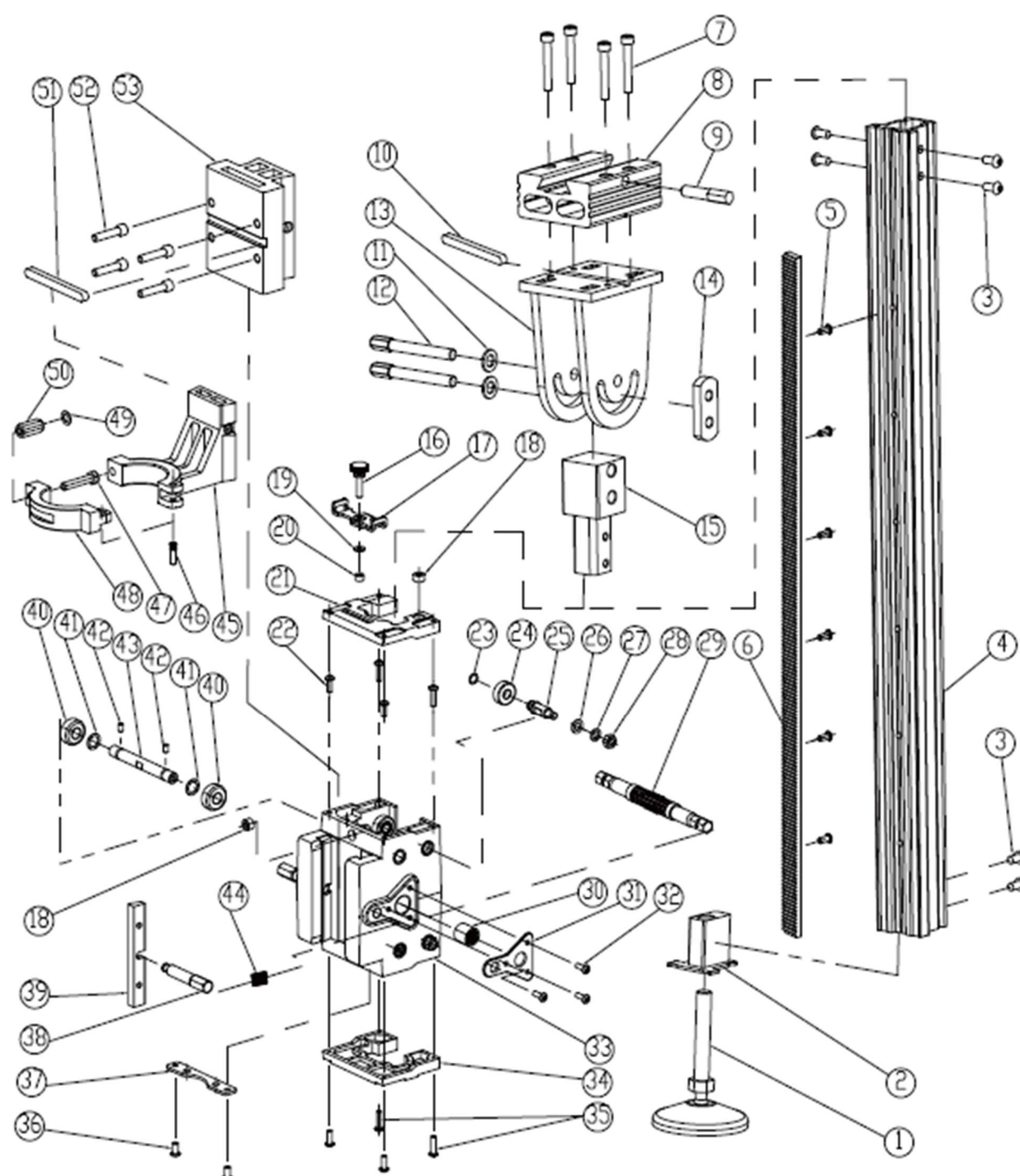
8.1 Base frame, telescopic support and vertical drilling carriage



Item	Item name	Qty
1	Telescopic column base	1
2	M8x16 hex socket screw	17
4	4" rubber wheel	4
5	Sleeve	2
6	Square tube end cap	1
7	Screw with point, M6x10	8
8	Inner tube of the telescopic column	1
9	Snap-fit connection for core drilling machine	2
10	M6x25 hex socket screws	2
11	Spacer sleeve	4
12	Gas spring L300	2
13	M8 cap nut	4
14	M8x20 plastic wing nut screw	7
15	M6x50 hex socket screw	1
16	Guide pin assembly	1
17	Probe connecting rod	1
18	Centre probe	1
19	Non-slip washer	1
20	Dust cover holder	1
21	Dust collection cover	1
22	Shaft	1
23	M12x25 hex socket screw	2
24	Stainless steel hose clamp Ø27–51	2
25	PVC hose	1
26	Vacuum hose coupling	1
27	Hexagon flat-head screw M8x20	2
28	Lock nut M	2
29	Allen screw	1
30	Rack M1.5 x 1400 = L 45	1
31	Hexagon socket screw with counter-sunk head M6x8	11
32	Adjustment screw rod	1
33	Adjustment base	1
34	Adjustment washer	1
35	Positioning block 65x58x12	1
36	Lock nut M12	1

Item	Item name	Qty
37	Spring	1
38	Positioning pin D14x78	1
39	Shaft washer Ø12	2
40	M6x75 hex socket screw	1
41	M6x25 flat-head hex socket screw	4
42	Hexagon flat-head screw M6x45	4
43	Hexagon flat-head adjusting screw M8x20	4
44	M8 hexagon head screw	4
45	Hexagon head screw Ø8	4
46	Rubber grip	1
47	Hexagon socket mushroom head screw	3
48	Copper sleeve	2
49	Shaft	1
50	Splined disc Ø25	2
51	Shaft washer Ø12	2
52	U-shaped washer R6X29X10	4
53	Rear assembly	1
54	Bakelite ball M10x35, black	2
55	Bracket for spanner connecting rod	1
56	Socket wrench, size 13	1
57	Stop screw M5x8	3
58	Positioning block	2
59	Slide	1
60	Nylon slide block	2
61	M5x16 hexagon socket screw	4
62	Hexagon screw, aluminium	4
63	Nylon slide block	4
64	Spirit level Ø 12x6	1
65	Clamping bracket Ø60	
66	Cover plate for clamping bracket	1
67	M8 hex socket screws	2
68	Hexagonal adjusting screw with flat head, M8x10	4
69	Lock screw	1
70	Sealing ring 12x6	1
71	Outer tube of the telescopic column	1

8.2 Cross arm and horizontal drilling carriage



Item	Item name	Qty
1	Adjustable support leg M12	1
2	Mounting plate for support leg	1
3	Hexagon half-round head screws M8x16	4
4	Cross-arm column	1
5	M6x10 flat-head hexagon socket screw	6
6	Rack	1
7	M8x65 hexagon cylinder head bolts	4
8	Spacer for cross-arm mounting	1
9	Locking screw	1
10	Key 10x8x100	1
11	Flat washer Ø12	2
12	Levelling bolt M12x85	2
13	Cross-coupling seat	2
14	Mounting block	1
15	Seat support reinforcement	1
16	Shoulder screw M6x25	1
17	Slide lever lock	1
18	Washer Ø12 x Ø6.2 x 1.5	2
19	Spirit level	2
20	Hexagon lock nut M6	1
21	Top carriage cover	1
22	M5x16 hexagon mushroom-head screw	4
23	Ring Ø6	4
24	Eccentric clamp	4
25	Eccentric shaft	4
26	Washer Ø15xØ8.6x10	4
27	Spring washer Ø5	4

Item	Item name	Qty
28	Clamping nut M8	4
29	Crank spindle M1.5x11T	1
30	Needle bearing HK152020	2
31	Cover plate	2
32	M5x10 hexagon socket flat-head screw	6
33	Carriage	1
34	Lower carriage cover	1
35	M5x20 hexagon socket mushroom head screw	4
36	M6x10 hexagon socket mushroom head screw	2
37	Mounting plate	1
38	Mounting locking bolt	2
39	Wedge	2
40	Positioning wheel	4
41	Washer Ø17.8 x Ø12.3 x 0.5	4
42	M5x10 conical tip adjusting screw	4
43	Front wheel axle	2
44	Wire-threaded bushing M12x1.5x1.5D	2
45	Clamp bracket Ø60	1
46	Knurled parallel pin, Ø6	1
47	M8x60 mounting clamp bolt	1
48	Clamping plate	1
49	Washer Ø8	1
50	Hex nut M8x30 S=13	1
51	Key 10x8x100	1
52	Spacer fixing bolt M8x35	4
53	Motor mounting spacer	1

9 EU Declaration of Conformity

The manufacturer/distributor

Kernlochbohrer GmbH
Geigersbühlweg 52
72663 Großbettlingen
Germany

hereby declares that the following product

Product: **Telescopic core drilling rig**

Type: **TBS3000/PRO**

has been designed in accordance with Directive 2006/42/EU and Regulation 2023/1230/EU.

It is essential that the core drilling machine to be used with this core drilling rig complies with the requirements described in the core drilling rig's operating instructions (e.g. drilling diameter, machine mounting).

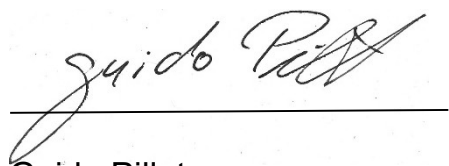
Commissioning of the drilling system is prohibited until it has been established that the Core drilling machine to be connected to the Core drilling rig complies with the provisions of Directive 2006/42/EU and Regulation 2023/1230/EU (as indicated by the CE marking on the Core drilling machine).

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

Kernlochbohrer GmbH
Geigersbühlweg 52
72663 Großbettlingen
Germany

Großbettlingen, 2026-08-14

Kernlochbohrer GmbH



Guido Pillat

Managing Director / Chief Executive Officer