



Operating instructions

Core drill rig

KBS-352/M-PRO KBS-352/XL-PRO

KBS-502/M-PRO

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.

Further information is required in the event of faults:

Type and extent of the disorder, accompanying circumstances, suspected cause.

This is required when ordering spare parts:

Quantity and item number in the exploded view of these Operating instructions or item number (if known).

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 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 drilling machine.

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 or additional use 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

Maintenance of the appliance may only be carried out 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 appropriate 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.

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

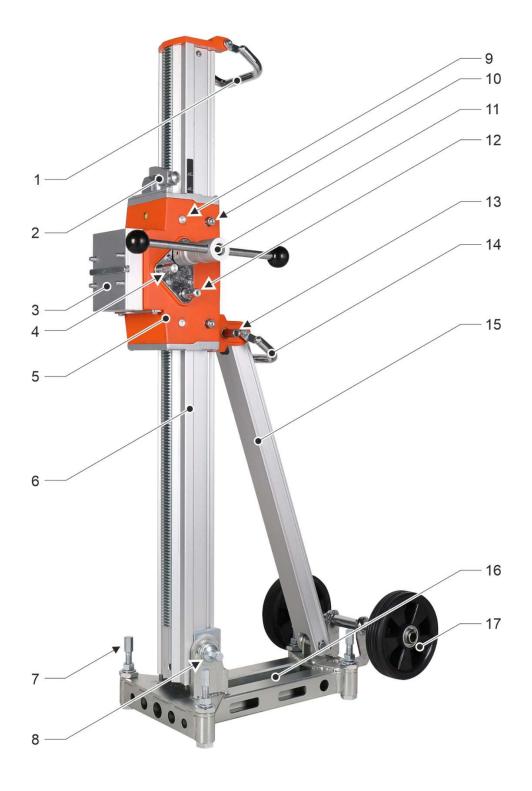
Model	Unit	KBS-352/ M-PRO	KBS-352/ XL-PRO	KBS-502/ M-PRO
Article number		6216	6299	6215
Core drilling machine atta- chment		M	ounting adapte	er
Height of mounting adapter	mm	60	60	110
Maximum drilling Ø	mm	402	352	502
Maximum drilling depth	mm	650	1600	650
Adjustable drilling angle	Degree	0 to 45		
Height	mm	1100	2170	1100
Width	mm	400	400	400
Depth	mm	470	470	470
Cross-section of guide upright	mm	80 x 75		
Length of guide upright	mm	1000	2000	1000
Weight	kg	18,5	25	19,5
Permissible temperature	°C	5 to 40		
Permissible humidity	%	30 to 80		
Compatible Core drilling machine ①		Kernlochbohrer (e.g. DKB-352/S-PRO), Eibenstock, WEKA, Husquarna		

① Or other Core drilling machine with 4x M8 thread with hole spacing 79 x 41 mm and keyway width 10 mm.



4 Device description

4.1 Device components



Wheel (2 pieces)

17

KBS-352/M-PRO | KBS-352/XL-PRO | KBS-502/M-PRO

1	Upper handle
2	Safety device of the feed carriage
3	Mounting adapter
4	Locking screw (2 pieces) of the mounting adapter
5	Feed slide
6	Guide stand with toothed rack
7	Levelling screws with lock nuts (4 pieces)
8	Clamping screw for base plate guide upright
9	Fixed rollers of the feed carriage (4 pieces)
10	Adjustable rollers of the feed carriage (4 pieces)
11	Feed lever (attachable on both sides); attached to toothed shaft for slow feed
12	Splined shaft for fast feed
13	Clamping screw of the support
14	Rear handle
15	Support
16	Base plate

The feed lever (SW 13) can also be used for levelling screws, locking screws and clamping screw of the clamp holder, clamping screw of the base plate guide stand and clamping screw of the support.

4.2 Scope of delivery

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

- Core drill rig
- Mounting adapter with mounting accessories
- Feed lever
- Chassis (two wheels and axle with retaining bracket)
- Double open-end spanner SW 17 and SW 19
- Allen key SW 6
- Operating instructions
- 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

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

Before mounting the Core drilling machine 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 drilling machine. No water may get into the Core drilling machine.

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 Commissioning

Before working with the core drill rig, the trolley supplied can be attached to it:

- Remove both cylinder screws with spring washers and washers from the back of the base plate.
- Attach the running gear (two wheels with axle and retaining bracket) to the base plate using the cylinder screws, spring washers and washers.
- The core drill rig can now be tilted backwards for transport and pushed on its wheels.

5.3 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 that all screws are tight.
- Feed carriage secured.
 - See chapter 5.4 "Secure the feed carriage on the guide stand".

5.4 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.

If the safety catch on the feed carriage is cancelled, the feed carriage may move downwards in an uncontrolled manner due to gravity and cause personal injury or damage to property.

Before unlocking the feed carriage: Hold the feed carriage and Core drilling machine firmly to prevent them from falling!

The safety device can be used to secure the feed carriage on the guide stand against movement.

It is secured by a toothed piece that engages in the toothed rack on the guide upright and thus prevents adjustment.

The toothed piece is actuated by a rotary bolt, which must be secured in its two end positions by engaging the spring bolt in the respective locating hole.





Feed carriage secured

1 Twist lock

- 2 Spring bolt
- 3 Mounting hole of the spring bolt

Feed slide unlocked

If the feed carriage is unlocked, the feed carriage can be moved using the feed lever attached to the toothed shaft.

If the feed carriage is secured, the feed carriage together with the mounted Core drilling machine cannot fall due to gravity even when the guide stand is in a vertical position.



If the feed carriage is secured, the feed carriage must not be moved using the feed lever!

This would damage the safety device and the rack on the guide stand.

5.5 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.

See chapter 5.4 "Secure the feed carriage on the guide stand".

Before securing the core drill rig, loosen the lock nuts on the levelling screws and turn the levelling screws all the way back.

The core drill rig must be securely fastened in the desired position. This can be done using a metal dowel and a threaded rod or a suitable fastening set, for example. To do this, a mounting 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, insert the groove of the base plate over the threaded rod or the screw of the fastening set and secure the core drill rig with the nut of the fastening set.



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

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

5.6 Attach the fastening adapter to the Core drilling machine

The following components must be used to mount the mounting adapter on the Core drilling machine (included in the scope of delivery of the core drill rig):

4 pieces M8x35 cheese head screw

(only for KBS-352/M-PRO or KBS-352/XL-PRO)

4 pieces Cheese head screw M8x45 (only for KBS-502/M-PRO)

4 pieces Spring washer Ø8

4 pieces Disc Ø8

1 piece Parallel key 10x8x100

5.7 Attaching the Core drilling machine to the core drill rig

Prerequisites:

- ☑ Visual inspection of the core drill rig carried out.
- ☑ Core drill rig securely fastened.
- ☑ Fastening adapter attached to the Core drilling machine.
- ☑ Core drilling machine power cable not connected to power supply.

Procedure:



Risk of unintentional movement of the feed carriage due to gravity! The feed carriage must always be secured against unintentional movement.

- See chapter 5.4 "Secure the feed carriage on the guide stand".
- Set the feed carriage to an upper or rear position so that there is sufficient space for mounting the Core drilling machine.
- Secure the feed carriage against unintentional movement with a safety device.
- Unscrew both locking screws until the fastening adapter can be inserted into the holder on the feed slide of the core drill rig.
- Insert the fastening adapter into the holder on the feed carriage and secure with both locking screws.
- Check that the Core drilling machine is securely attached to the core drill rig.

5.8 Align drilling system

Set the drilling position:

① It may be necessary to loosen the fastening of the core drill rig slightly to adjust the drilling position.



Do not loosen the fastening of the core drill rig too much, otherwise the core drill rig could fall down!

To bring the drilling system into the correct drilling position:

- Loosen the lock nuts of the four levelling screws.
- Align the position of the core drill rig by turning the levelling screws. The levelling can be checked using the two spirit levels.
- Tighten all lock nuts on the levelling screws.
- Check that the core drill rig is securely fastened again.

Set the drilling angle:

- Loosen the clamping screw of the support and the clamping screw of the base plate/guide stand.
- Set the angle of the core drill rig according to the scale on the guide stand.
- Tighten the clamping screw of the support and the clamping screw of the base plate/guide stand.



Do not overtighten the clamping screw of the support, otherwise the support and its bracket may be deformed.

5.9 Use drilling system

Prerequisites:

- ☑ Visual inspection of the drilling system carried out.
- ☑ Core drill rig securely fastened.
- Core drilling machine attached to the core drilling rig.
- ☑ Drilling system aligned.
- For detailed information on using the Core drilling machine, see the Operating instructions for the Core drilling machine.

Procedure:



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

The feed carriage must always be secured against unintentional

movement.

See chapter 5.4 "Secure the feed carriage on the guide

stand".

The upper splined shaft of the core drill rig has a gear ratio of 2:1 and is suitable for generating a slow feed speed.

The lower splined shaft has a ratio of 1:1. It can be used to quickly adjust the feed carriage.

- Place the feed lever on one of the two toothed shafts.
- The force required for the feed movement of the Core drilling machine is applied by manually turning the feed lever on the toothed shaft engaging in the toothed rack.

To do this, release the feed carriage lock.

5.10 Storing the core drill rig

Procedure:

- ☑ Core drilling machine separated from the core drilling rig.
- ☑ Disconnect the fastening adapter from the Core drilling machine.
- ☑ 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.



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

The feed carriage must always be secured against unintentional movement.

See chapter 5.4 "Secure the feed carriage on the guide stand".

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.
- ☑ Dry the core drill rig completely or allow it to dry.
- ☑ Check the function of the safety device of the feed carriage on the guide stand.
 - See chapter 5.4 "Secure the feed carriage on the guide stand".



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

This would damage the safety device and the rack on the guide stand.

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

To do this, release the feed carriage lock.

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

- Secure the eccentric shaft (item 39 in the spare parts drawing) against turning using an Allen key.
- ☑ Tighten the hexagon nut (item 36 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.

If the play of the feed carriage cannot be sufficiently reduced by adjusting the adjustable rollers, the four rollers must be replaced.

- ☑ Check that all screws and nuts on the core drill rig are tight. If necessary, tighten the screws and nuts.
- Apply a thin coat 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.

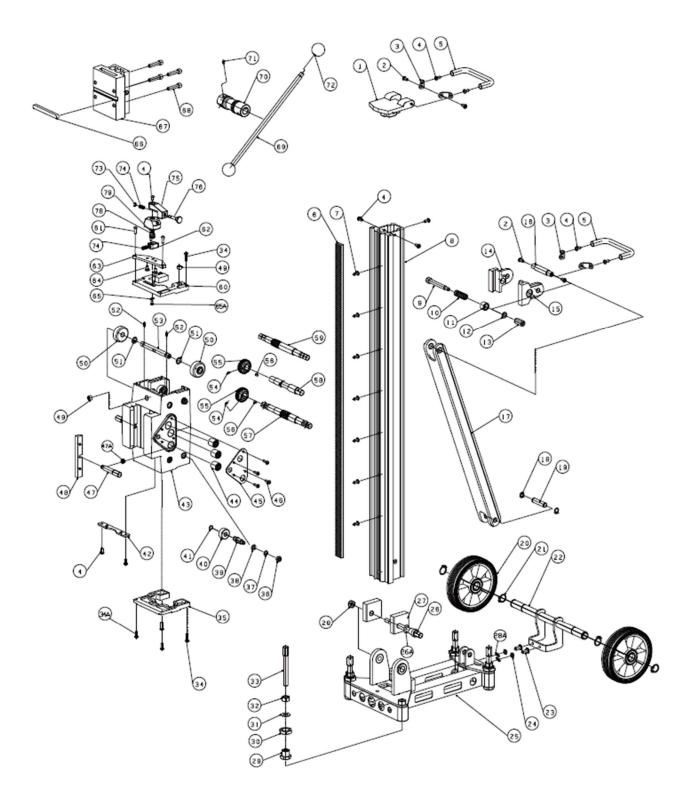
If you are unable to rectify the fault yourself, please contact Kernlochbohrer GmbH.

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
Safety device cannot secure feed slide	Safety device defective	Replacing the safety device
After replacing all the rollers, the movement of the feed carriage is still unreliable	Worn guide stand	Replacing the guide stand
Angle adjustment cannot be tightened	Clamping screw of the support too tight	Replace the support bracket at the rear of the feed carriage
Guide stand wobbles during the drilling process	Check connection be- tween base plate and guide upright	Tighten the clamping screw. If the weld seam on the base plate is torn, replace the base plate



8 Spare parts

8.1 KBS-352/M-PRO and KBS-502/M-PRO



KBS-352/M-PRO:

Pos.	Article name	No.
1	Top column guard	1
2	Hexagon socket screw M6x17	4
3 4	Handle connector	4
4	Flange head screw M6x10	10
5	Handle	2
6	Rack m 1.5 L=900	1
7	Flange head screw M6x10	7
8	Guide upright L=1000	1
9	Hexagon head screw M10x75	1
10	Spring Ф13xФ1.4x50	1
11	Spacer	1
12	Washer Φ16xΦ10.6x1.5	1
13	Hexagon nut M10x30	1
14	Right locking clip	1
15	Left locking clip	1
16	Positioning mandrel	1
17	Support 35x50x605	1
18	Circlip Ф15	2
19	Support shaft Φ15	1
20	6" wheel with bearing	2
21	Circlip Ф20	2
22	Wheelset holder	1
23	Hexagon socket screw M8x16	2
23A	Washer Φ8	2
24	Spring washer Φ8	1
25	Base plate	1
26	Column mounting	1
26A	Disc Φ16	1
27	Column block	2
28	Hexagon lock nut M10	1
29	Base insert	4
30	Hexagon nut M20xP1.5 S=30	4
31	Washer Φ12 T=2	4
32	Hexagon nut M12	4
33	Levelling screw M12x85	4
34	Flange head screw M5x20	4
34A	Flange head screw M5x16	2
35	Slide guard bottom	1
36	Hexagon nut M8	4
37	Spring washer Φ8	4
38	Disc Φ15x Φ8.6	4
39	Eccentric shaft	4

Pos.	Article name	No.
40	Eccentric clamp	4
41	Constant ring Φ10	4
42	disc	1
43	Feed slide	1
44	Copper sleeve	6
45	Cover plate	2
46	Flange head screw M5x10	8
47	Locking screw	2
47A	Wire thread insert M12x1.5x1x5D	2
48	Iron wedge	2
49	Spirit level	2
50	Positioning wheel	4
51	Washer Ф17.8xФ12.3x0.8	4
52	Grub screw with tapered tip M5x10	4
53	Front wheel shaft	2
54	Grub screw with conical tip M4x5	2
55	Gear m=1.5 z=23	2
56	Parallel key 4x4x8	2
57	Splined shaft for standard feed	1
58	Shaft	1
59	Splined shaft for reduced feed rate	1
60	Top slide guard	1
61	Cylinder head screw M5x25	2
62	Tooth piece	1
63	Locking base	1
64	Countersunk screw M6x10	2
65	Disc Ф6	1
65A	Cheese head screw M6x16	1
66	Parallel key 10x8x100	1
67	Mounting adapter	1
68	Cheese head screw M8x35	4
68A	Disc Ф8	4
68B	Spring washer Φ8	4
69	Crank handle	1
70	Feed crank body S=13	1
71	Ball plunger M5x8	3
72	Knob M10x35	2
73	Circlip Ф5	1
74	Spring Ф8хФ0.8х15	1
75	Locking tooth button	1
76	Spring bolt	1

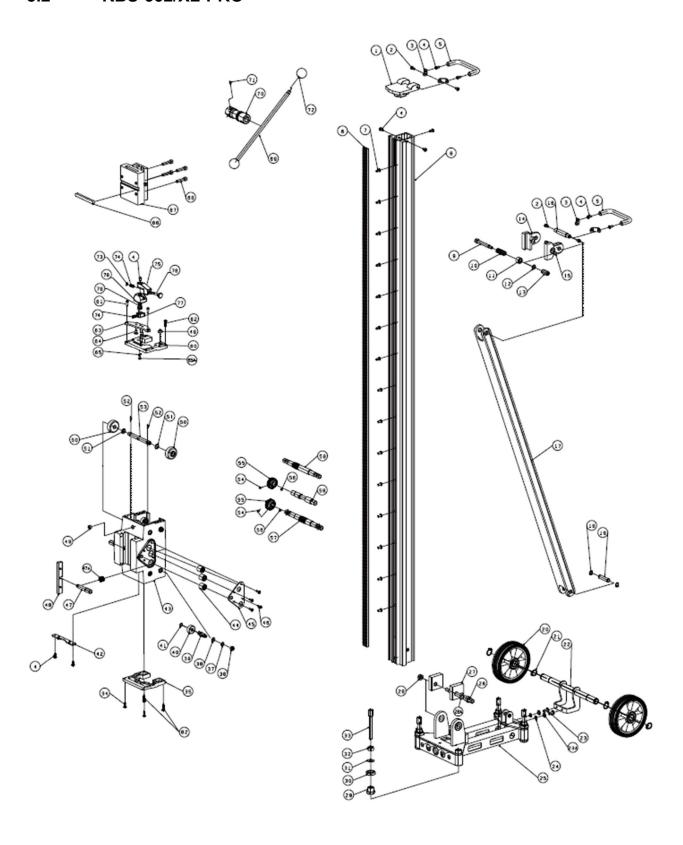
KBS-502/M-PRO:

Pos.	Article name	No.
1	Top column guard	1
2	Hexagon socket screw M6x17	4
3	Handle connector	4
	Flange head screw M6x10	10
5	Handle	1
6	Rack m 1.5 L=900	1
7	Flange head screw M6x10	7
8	Guide upright L=1000	1
9	Hexagon head screw M10x75	1
10	Spring Φ13xΦ1.4x50	1
11	Spacer	1
12	Washer Φ16xΦ10.6x1.5	1
13	Hexagon nut M10x30	1
14	Right locking clip	1
15	Left locking clip	1
16	Positioning mandrel	1
17	Support 35x50x605	1
18	Circlip Ф15	2
19	Support shaft Φ15	1
20	6" wheel with bearing	2
21	Circlip Φ20	2
22	Wheelset holder	1
23	Hexagon socket screw M8x16	2
23A	Washer Φ8	1
24	Spring washer Φ8	
25	Base plate	1
26	Column mounting	1
26A	Disc Φ16	1
27	Column block	2
28	Hexagon lock nut M10	1
29	Base insert	4
30	Hexagon nut M20xP1.5 S=30	4
31	Washer Φ12 T=2	4
32	Hexagon nut M12	4
33	Levelling screw M12x85	4
34	Flange head screw M5x16	2
35	Slide guard bottom	1
36	Hexagon nut M8	4
37	Spring washer Φ8	4
38	Disc Ф15х Ф8.6	4
39	Eccentric shaft	4
40	Eccentric clamp	4

41 Constant ring Φ10 4 42 disc 1 43 Feed slide 1 44 Copper sleeve 6 45 Cover plate 2 46 Flange head screw M5x10 8 47 Locking screw 2 47A Wire thread insert M12x1.5x1x5D 2 48 Iron wedge 2 49 Spirit level 2 50 Positioning wheel 4 51 Washer Φ17.8xΦ12.3x0.8 4 52 Grub screw with tapered tip M5x10 4 53 Front wheel shaft 2 54 Grub screw with conical tip M4x5 2 55 Gear m=1.5 z=23 2 56 Parallel key 4x4x8 2 57 Splined shaft for standard feed 1 58 Shaft 1 59 Splined shaft for reduced feed rate 1 60 Top slide guard 1 61 Cylinder head screw M		1	
42 disc 1 43 Feed slide 1 44 Copper sleeve 6 45 Cover plate 2 46 Flange head screw M5x10 8 47 Locking screw 2 47A Wire thread insert M12x1.5x1x5D 2 48 Iron wedge 2 49 Spirit level 2 50 Positioning wheel 4 51 Washer Φ17.8xΦ12.3x0.8 4 52 Grub screw with tapered tip M5x10 4 53 Front wheel shaft 2 54 Grub screw with conical tip M4x5 2 55 Gear m=1.5 z=23 2 56 Parallel key 4x4x8 2 57 Splined shaft for standard feed 1 58 Shaft 1 59 Splined shaft for reduced feed rate 1 60 Top slide guard 1 61 Cylinder head screw M5x25 2 62 Cylinder head	Pos.	Article name	No.
43 Feed slide 1 44 Copper sleeve 6 45 Cover plate 2 46 Flange head screw M5x10 8 47 Wire thread insert M12x1.5x1x5D 2 47A Wire thread insert M12x1.5x1x5D 2 48 Iron wedge 2 49 Spirit level 2 50 Positioning wheel 4 51 Washer Φ17.8xΦ12.3x0.8 4 52 Grub screw with tapered tip M5x10 4 53 Front wheel shaft 2 54 Grub screw with tapered tip M5x10 4 53 Front wheel shaft 2 54 Grub screw with conical tip M4x5 2 55 Gear m=1.5 z=23 2 56 Parallel key 4x4x8 2 57 Splined shaft for standard feed 1 58 Shaft 1 59 Splined shaft for reduced feed rate 1 60 Top slide guard 1		-	
44 Copper sleeve 6 45 Cover plate 2 46 Flange head screw M5x10 8 47 Locking screw 2 47A Wire thread insert M12x1.5x1x5D 2 48 Iron wedge 2 49 Spirit level 2 50 Positioning wheel 4 51 Washer Φ17.8xΦ12.3x0.8 4 52 Grub screw with tapered tip M5x10 4 53 Front wheel shaft 2 54 Grub screw with conical tip M4x5 2 55 Gear m=1.5 z=23 2 56 Parallel key 4x4x8 2 57 Splined shaft for standard feed 1 58 Shaft 1 59 Splined shaft for reduced feed rate 1 60 Top slide guard 1 61 Cylinder head screw M5x25 2 62 Cylinder head screw M5x20 4 63 Locking base 1 64			
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46 Flange head screw M5x10 8 47 Locking screw 2 47A Wire thread insert M12x1.5x1x5D 2 48 Iron wedge 2 49 Spirit level 2 50 Positioning wheel 4 51 Washer Φ17.8xΦ12.3x0.8 4 51 Washer Φ17.8xΦ12.3x0.8 4 52 Grub screw with tapered tip M5x10 4 53 Front wheel shaft 2 54 Grub screw with conical tip M4x5 2 55 Gear m=1.5 z=23 2 56 Parallel key 4x4x8 2 57 Splined shaft for standard feed 1 58 Shaft 1 59 Splined shaft for reduced feed rate 1 60 Top slide guard 1 61 Cylinder head screw M5x25 2 62 Cylinder head screw M5x20 4 63 Locking base 1 64 Countersunk screw M6x10 2	44	Copper sleeve	
47 Locking screw 2 47A Wire thread insert M12x1.5x1x5D 2 48 Iron wedge 2 49 Spirit level 2 50 Positioning wheel 4 51 Washer Φ17.8xΦ12.3x0.8 4 52 Grub screw with tapered tip M5x10 4 53 Front wheel shaft 2 54 Grub screw with conical tip M4x5 2 55 Gear m=1.5 z=23 2 56 Parallel key 4x4x8 2 57 Splined shaft for standard feed 1 58 Shaft 1 59 Splined shaft for reduced feed rate 1 60 Top slide guard 1 61 Cylinder head screw M5x25 2 62 Cylinder head screw M5x20 4 63 Locking base 1 64 Countersunk screw M6x10 2 65 Disc Φ6 1 65A Cheese head screw M8x45 4 68A	45		
47A Wire thread insert M12x1.5x1x5D 2 48 Iron wedge 2 49 Spirit level 2 50 Positioning wheel 4 51 Washer Φ17.8xΦ12.3x0.8 4 52 Grub screw with tapered tip M5x10 4 53 Front wheel shaft 2 54 Grub screw with conical tip M4x5 2 55 Gear m=1.5 z=23 2 56 Parallel key 4x4x8 2 57 Splined shaft for standard feed 1 58 Shaft 1 59 Splined shaft for reduced feed rate 1 60 Top slide guard 1 61 Cylinder head screw M5x25 2 62 Cylinder head screw M5x20 4 63 Locking base 1 64 Countersunk screw M6x10 2 65 Disc Φ6 1 65A Cheese head screw M8x45 4 68A Disc Φ8 4 68B	46	Flange head screw M5x10	
48 Iron wedge 2 49 Spirit level 2 50 Positioning wheel 4 51 Washer Φ17.8xΦ12.3x0.8 4 52 Grub screw with tapered tip M5x10 4 53 Front wheel shaft 2 54 Grub screw with conical tip M4x5 2 55 Gear m=1.5 z=23 2 56 Parallel key 4x4x8 2 57 Splined shaft for standard feed 1 58 Shaft 1 59 Splined shaft for reduced feed rate 1 60 Top slide guard 1 61 Cylinder head screw M5x25 2 62 Cylinder head screw M5x20 4 63 Locking base 1 64 Countersunk screw M6x10 2 65 Disc Φ6 1 65A Cheese head screw M8x10 1 67 Mounting adapter 1 68 Cheese head screw M8x45 4 68B	47	Locking screw	
49 Spirit level 2 50 Positioning wheel 4 51 Washer Φ17.8xΦ12.3x0.8 4 52 Grub screw with tapered tip M5x10 4 53 Front wheel shaft 2 54 Grub screw with conical tip M4x5 2 55 Gear m=1.5 z=23 2 56 Parallel key 4x4x8 2 57 Splined shaft for standard feed 1 58 Shaft 1 59 Splined shaft for reduced feed rate 1 60 Top slide guard 1 61 Cylinder head screw M5x25 2 62 Cylinder head screw M5x20 4 63 Locking base 1 64 Countersunk screw M6x10 2 65 Disc Φ6 1 65A Cheese head screw M6x16 1 66 Parallel key 10x8x100 1 67 Mounting adapter 1 68 Cheese head screw M8x45 4 <t< td=""><td>47A</td><td>Wire thread insert M12x1.5x1x5D</td><td>2</td></t<>	47A	Wire thread insert M12x1.5x1x5D	2
50 Positioning wheel 4 51 Washer Φ17.8xΦ12.3x0.8 4 52 Grub screw with tapered tip M5x10 4 53 Front wheel shaft 2 54 Grub screw with conical tip M4x5 2 55 Gear m=1.5 z=23 2 56 Parallel key 4x4x8 2 57 Splined shaft for standard feed 1 58 Shaft 1 59 Splined shaft for reduced feed rate 1 60 Top slide guard 1 61 Cylinder head screw M5x25 2 62 Cylinder head screw M5x20 4 63 Locking base 1 64 Countersunk screw M6x10 2 65 Disc Φ6 1 65A Cheese head screw M6x10 1 67 Mounting adapter 1 68 Cheese head screw M8x45 4 68A Disc Ф8 4 68B Spring washer Ф8 4 69 <td>48</td> <td>Iron wedge</td> <td>2</td>	48	Iron wedge	2
51 Washer Φ17.8xΦ12.3x0.8 4 52 Grub screw with tapered tip M5x10 4 53 Front wheel shaft 2 54 Grub screw with conical tip M4x5 2 55 Gear m=1.5 z=23 2 56 Parallel key 4x4x8 2 57 Splined shaft for standard feed 1 58 Shaft 1 59 Splined shaft for reduced feed rate 1 60 Top slide guard 1 61 Cylinder head screw M5x25 2 62 Cylinder head screw M5x20 4 63 Locking base 1 64 Countersunk screw M6x10 2 65 Disc Φ6 1 65A Cheese head screw M6x16 1 66 Parallel key 10x8x100 1 67 Mounting adapter 1 68 Cheese head screw M8x45 4 68A Disc Φ8 4 68B Spring washer Φ8 4 69	49	Spirit level	
52 Grub screw with tapered tip M5x10 4 53 Front wheel shaft 2 54 Grub screw with conical tip M4x5 2 55 Gear m=1.5 z=23 2 56 Parallel key 4x4x8 2 57 Splined shaft for standard feed 1 58 Shaft 1 59 Splined shaft for reduced feed rate 1 60 Top slide guard 1 61 Cylinder head screw M5x25 2 62 Cylinder head screw M5x20 4 63 Locking base 1 64 Countersunk screw M6x10 2 65 Disc Φ6 1 65A Cheese head screw M6x16 1 66 Parallel key 10x8x100 1 67 Mounting adapter 1 68 Cheese head screw M8x45 4 68A Disc Φ8 4 68B Spring washer Φ8 4 69 Crank handle 1 70	50	Positioning wheel	4
53 Front wheel shaft 2 54 Grub screw with conical tip M4x5 2 55 Gear m=1.5 z=23 2 56 Parallel key 4x4x8 2 57 Splined shaft for standard feed 1 58 Shaft 1 59 Splined shaft for reduced feed rate 1 60 Top slide guard 1 61 Cylinder head screw M5x25 2 62 Cylinder head screw M5x20 4 63 Locking base 1 64 Countersunk screw M6x10 2 65 Disc Φ6 1 65A Cheese head screw M6x16 1 66 Parallel key 10x8x100 1 67 Mounting adapter 1 68 Cheese head screw M8x45 4 68A Disc Φ8 4 68B Spring washer Φ8 4 69 Crank handle 1 70 Feed crank body S=13 1 71 Ball	51	Washer Ф17.8xФ12.3x0.8	4
54 Grub screw with conical tip M4x5 2 55 Gear m=1.5 z=23 2 56 Parallel key 4x4x8 2 57 Splined shaft for standard feed 1 58 Shaft 1 59 Splined shaft for reduced feed rate 1 60 Top slide guard 1 61 Cylinder head screw M5x25 2 62 Cylinder head screw M5x20 4 63 Locking base 1 64 Countersunk screw M6x10 2 65 Disc Φ6 1 65A Cheese head screw M6x16 1 66 Parallel key 10x8x100 1 67 Mounting adapter 1 68 Cheese head screw M8x45 4 68A Disc Φ8 4 68B Spring washer Φ8 4 69 Crank handle 1 70 Feed crank body S=13 1 71 Ball plunger M5x8 3 72 Knob	52	Grub screw with tapered tip M5x10	4
55 Gear m=1.5 z=23 2 56 Parallel key 4x4x8 2 57 Splined shaft for standard feed 1 58 Shaft 1 59 Splined shaft for reduced feed rate 1 60 Top slide guard 1 61 Cylinder head screw M5x25 2 62 Cylinder head screw M5x20 4 63 Locking base 1 64 Countersunk screw M6x10 2 65 Disc Φ6 1 65A Cheese head screw M6x16 1 66 Parallel key 10x8x100 1 67 Mounting adapter 1 68 Cheese head screw M8x45 4 68A Disc Φ8 4 68B Spring washer Φ8 4 69 Crank handle 1 70 Feed crank body S=13 1 71 Ball plunger M5x8 3 72 Knob M10x35 2 73 Circlip Φ5 <t< td=""><td>53</td><td>Front wheel shaft</td><td>2</td></t<>	53	Front wheel shaft	2
55 Gear m=1.5 z=23 2 56 Parallel key 4x4x8 2 57 Splined shaft for standard feed 1 58 Shaft 1 59 Splined shaft for reduced feed rate 1 60 Top slide guard 1 61 Cylinder head screw M5x25 2 62 Cylinder head screw M5x20 4 63 Locking base 1 64 Countersunk screw M6x10 2 65 Disc Φ6 1 65A Cheese head screw M6x16 1 66 Parallel key 10x8x100 1 67 Mounting adapter 1 68 Cheese head screw M8x45 4 68A Disc Φ8 4 68B Spring washer Φ8 4 69 Crank handle 1 70 Feed crank body S=13 1 71 Ball plunger M5x8 3 72 Knob M10x35 2 73 Circlip Φ5 <t< td=""><td>54</td><td>Grub screw with conical tip M4x5</td><td>2</td></t<>	54	Grub screw with conical tip M4x5	2
57 Splined shaft for standard feed 1 58 Shaft 1 59 Splined shaft for reduced feed rate 1 60 Top slide guard 1 61 Cylinder head screw M5x25 2 62 Cylinder head screw M5x20 4 63 Locking base 1 64 Countersunk screw M6x10 2 65 Disc Φ6 1 65A Cheese head screw M6x16 1 66 Parallel key 10x8x100 1 67 Mounting adapter 1 68 Cheese head screw M8x45 4 68A Disc Φ8 4 68B Spring washer Φ8 4 69 Crank handle 1 70 Feed crank body S=13 1 71 Ball plunger M5x8 3 72 Knob M10x35 2 73 Circlip Φ5 1 74 Spring Φ8xΦ0.8x15 1 75 Locking tooth button	55		2
58 Shaft 1 59 Splined shaft for reduced feed rate 1 60 Top slide guard 1 61 Cylinder head screw M5x25 2 62 Cylinder head screw M5x20 4 63 Locking base 1 64 Countersunk screw M6x10 2 65 Disc Φ6 1 65A Cheese head screw M6x16 1 66 Parallel key 10x8x100 1 67 Mounting adapter 1 68 Cheese head screw M8x45 4 68A Disc Φ8 4 68B Spring washer Φ8 4 69 Crank handle 1 70 Feed crank body S=13 1 71 Ball plunger M5x8 3 72 Knob M10x35 2 73 Circlip Φ5 1 74 Spring Φ8xΦ0.8x15 1 75 Locking tooth button 1 76 Spring bolt 1 <td>56</td> <td>Parallel key 4x4x8</td> <td>2</td>	56	Parallel key 4x4x8	2
59 Splined shaft for reduced feed rate 1 60 Top slide guard 1 61 Cylinder head screw M5x25 2 62 Cylinder head screw M5x20 4 63 Locking base 1 64 Countersunk screw M6x10 2 65 Disc Φ6 1 65A Cheese head screw M6x16 1 66 Parallel key 10x8x100 1 67 Mounting adapter 1 68 Cheese head screw M8x45 4 68A Disc Φ8 4 68B Spring washer Φ8 4 69 Crank handle 1 70 Feed crank body S=13 1 71 Ball plunger M5x8 3 72 Knob M10x35 2 73 Circlip Φ5 1 74 Spring Φ8xΦ0.8x15 1 75 Locking tooth button 1 76 Spring bolt 1	57	Splined shaft for standard feed	1
60 Top slide guard 1 61 Cylinder head screw M5x25 2 62 Cylinder head screw M5x20 4 63 Locking base 1 64 Countersunk screw M6x10 2 65 Disc Φ6 1 65A Cheese head screw M6x16 1 66 Parallel key 10x8x100 1 67 Mounting adapter 1 68 Cheese head screw M8x45 4 68A Disc Φ8 4 68B Spring washer Φ8 4 69 Crank handle 1 70 Feed crank body S=13 1 71 Ball plunger M5x8 3 72 Knob M10x35 2 73 Circlip Φ5 1 74 Spring Φ8xΦ0.8x15 1 75 Locking tooth button 1 76 Spring bolt 1	58		1
60 Top slide guard 1 61 Cylinder head screw M5x25 2 62 Cylinder head screw M5x20 4 63 Locking base 1 64 Countersunk screw M6x10 2 65 Disc Φ6 1 65A Cheese head screw M6x16 1 66 Parallel key 10x8x100 1 67 Mounting adapter 1 68 Cheese head screw M8x45 4 68A Disc Φ8 4 68B Spring washer Φ8 4 69 Crank handle 1 70 Feed crank body S=13 1 71 Ball plunger M5x8 3 72 Knob M10x35 2 73 Circlip Φ5 1 74 Spring Φ8xΦ0.8x15 1 75 Locking tooth button 1 76 Spring bolt 1	59	Splined shaft for reduced feed rate	1
61 Cylinder head screw M5x25 2 62 Cylinder head screw M5x20 4 63 Locking base 1 64 Countersunk screw M6x10 2 65 Disc Φ6 1 65A Cheese head screw M6x16 1 66 Parallel key 10x8x100 1 67 Mounting adapter 1 68 Cheese head screw M8x45 4 68A Disc Φ8 4 68B Spring washer Φ8 4 69 Crank handle 1 70 Feed crank body S=13 1 71 Ball plunger M5x8 3 72 Knob M10x35 2 73 Circlip Φ5 1 74 Spring Φ8xΦ0.8x15 1 75 Locking tooth button 1 76 Spring bolt 1		Top slide guard	1
63 Locking base 1 64 Countersunk screw M6x10 2 65 Disc Φ6 1 65A Cheese head screw M6x16 1 66 Parallel key 10x8x100 1 67 Mounting adapter 1 68 Cheese head screw M8x45 4 68A Disc Φ8 4 68B Spring washer Φ8 4 69 Crank handle 1 70 Feed crank body S=13 1 71 Ball plunger M5x8 3 72 Knob M10x35 2 73 Circlip Φ5 1 74 Spring Φ8xΦ0.8x15 1 75 Locking tooth button 1 76 Spring bolt 1	61		2
64 Countersunk screw M6x10 2 65 Disc Φ6 1 65A Cheese head screw M6x16 1 66 Parallel key 10x8x100 1 67 Mounting adapter 1 68 Cheese head screw M8x45 4 68A Disc Φ8 4 68B Spring washer Φ8 4 69 Crank handle 1 70 Feed crank body S=13 1 71 Ball plunger M5x8 3 72 Knob M10x35 2 73 Circlip Φ5 1 74 Spring Φ8xΦ0.8x15 1 75 Locking tooth button 1 76 Spring bolt 1	62	Cylinder head screw M5x20	4
65 Disc Φ6 1 65A Cheese head screw M6x16 1 66 Parallel key 10x8x100 1 67 Mounting adapter 1 68 Cheese head screw M8x45 4 68A Disc Φ8 4 68B Spring washer Φ8 4 69 Crank handle 1 70 Feed crank body S=13 1 71 Ball plunger M5x8 3 72 Knob M10x35 2 73 Circlip Φ5 1 74 Spring Φ8xΦ0.8x15 1 75 Locking tooth button 1 76 Spring bolt 1	63	Locking base	1
65A Cheese head screw M6x16 1 66 Parallel key 10x8x100 1 67 Mounting adapter 1 68 Cheese head screw M8x45 4 68A Disc Φ8 4 68B Spring washer Φ8 4 69 Crank handle 1 70 Feed crank body S=13 1 71 Ball plunger M5x8 3 72 Knob M10x35 2 73 Circlip Φ5 1 74 Spring Φ8xΦ0.8x15 1 75 Locking tooth button 1 76 Spring bolt 1	64	Countersunk screw M6x10	2
66 Parallel key 10x8x100 1 67 Mounting adapter 1 68 Cheese head screw M8x45 4 68A Disc Φ8 4 68B Spring washer Φ8 4 69 Crank handle 1 70 Feed crank body S=13 1 71 Ball plunger M5x8 3 72 Knob M10x35 2 73 Circlip Φ5 1 74 Spring Φ8xΦ0.8x15 1 75 Locking tooth button 1 76 Spring bolt 1	65	Disc Φ6	1
67 Mounting adapter 1 68 Cheese head screw M8x45 4 68A Disc Φ8 4 68B Spring washer Φ8 4 69 Crank handle 1 70 Feed crank body S=13 1 71 Ball plunger M5x8 3 72 Knob M10x35 2 73 Circlip Φ5 1 74 Spring Φ8xΦ0.8x15 1 75 Locking tooth button 1 76 Spring bolt 1	65A	Cheese head screw M6x16	1
67 Mounting adapter 1 68 Cheese head screw M8x45 4 68A Disc Φ8 4 68B Spring washer Φ8 4 69 Crank handle 1 70 Feed crank body S=13 1 71 Ball plunger M5x8 3 72 Knob M10x35 2 73 Circlip Φ5 1 74 Spring Φ8xΦ0.8x15 1 75 Locking tooth button 1 76 Spring bolt 1	66	Parallel key 10x8x100	1
68 Cheese head screw M8x45 4 68A Disc Φ8 4 68B Spring washer Φ8 4 69 Crank handle 1 70 Feed crank body S=13 1 71 Ball plunger M5x8 3 72 Knob M10x35 2 73 Circlip Φ5 1 74 Spring Φ8xΦ0.8x15 1 75 Locking tooth button 1 76 Spring bolt 1	67	Mounting adapter	1
68B Spring washer Φ8 4 69 Crank handle 1 70 Feed crank body S=13 1 71 Ball plunger M5x8 3 72 Knob M10x35 2 73 Circlip Φ5 1 74 Spring Φ8xΦ0.8x15 1 75 Locking tooth button 1 76 Spring bolt 1	68	Cheese head screw M8x45	4
69 Crank handle 1 70 Feed crank body S=13 1 71 Ball plunger M5x8 3 72 Knob M10x35 2 73 Circlip Φ5 1 74 Spring Φ8xΦ0.8x15 1 75 Locking tooth button 1 76 Spring bolt 1	68A	Disc Φ8	4
69 Crank handle 1 70 Feed crank body S=13 1 71 Ball plunger M5x8 3 72 Knob M10x35 2 73 Circlip Φ5 1 74 Spring Φ8xΦ0.8x15 1 75 Locking tooth button 1 76 Spring bolt 1	68B	Spring washer Φ8	4
70 Feed crank body S=13 1 71 Ball plunger M5x8 3 72 Knob M10x35 2 73 Circlip Φ5 1 74 Spring Φ8xΦ0.8x15 1 75 Locking tooth button 1 76 Spring bolt 1	69		1
71 Ball plunger M5x8 3 72 Knob M10x35 2 73 Circlip Φ5 1 74 Spring Φ8xΦ0.8x15 1 75 Locking tooth button 1 76 Spring bolt 1			1
72 Knob M10x35 2 73 Circlip Φ5 1 74 Spring Φ8xΦ0.8x15 1 75 Locking tooth button 1 76 Spring bolt 1	71		3
73 Circlip Φ5 1 74 Spring Φ8xΦ0.8x15 1 75 Locking tooth button 1 76 Spring bolt 1	72		2
74 Spring Φ8xΦ0.8x15 1 75 Locking tooth button 1 76 Spring bolt 1			
75 Locking tooth button 1 76 Spring bolt 1			1
76 Spring bolt 1			1
i y			
		Tooth piece	



8.2 KBS-352/XL-PRO





Operating instructions

Core drill rig

KBS-352/M-PRO | KBS-352/XL-PRO | KBS-502/M-PRO

Pos.	Article name	No.
1	Top column guard	1
2	Hexagon socket screw M6x17	4
3	Handle connector	4
4	Flange head screw M6x10	10
5	Handle	2
6	Toothed rack	1
7	Flange head screw M6x10	15
8	Guide upright L=2000	1
9	Hexagon head screw M10x75	1
10	Spring Φ13xΦ1.4x50	1
11	Spacer	1
12	Washer Φ16xΦ10.6x1.5	1
13	Hexagon nut M10x30	1
14	Right locking clip	1
15	Left locking clip	1
16	Positioning mandrel	1
17	Support 35x50x1187	1
18	Circlip Φ15	2
19	Support shaft Φ15	1
20	6" wheel with bearing	2
21	Circlip Φ20	4
22	Wheelset holder	1
23	Hexagon socket screw M8x16	2
23A	Washer Φ8	2
24	Spring washer Φ8	1
25	Base plate	1
26	Column mounting	1
26A	Disc Φ16	1
27	Column block	2
28	Hexagon lock nut M10	1
29	Base insert	4
30	Hexagon nut M20xP1.5 S=30	4
31	Washer Φ12 T=2	4
32	Hexagon nut M12	4
33	Levelling screw M12x85	4
34	Flange head screw M5x16	2
35	Slide guard bottom	1
36	Hexagon nut M8	4
37	Spring washer Φ8	4
38	Disc Ф15х Ф8.6	4
39	Eccentric shaft	4
40	Eccentric clamp	4
41	Constant ring Φ10	4

Pos.	Article name	No.
42	Plate	1
43	Feed slide	1
44	Copper sleeve	6
45	Cover plate	2
46	Flange head screw M5x10	8
47	Locking screw	2
47A	Wire thread insert M12x1.5x1x5D	2
48	Iron wedge	2
49	Spirit level	2
50	Positioning wheel	4
51	Washer Ф17.8xФ12.3x0.8	4
52	Grub screw with tapered tip M5x10	4
53	Front wheel shaft	2
54	Grub screw with conical tip M4x5	2
55	Gear m=1.5 z=23	2
56	Parallel key 4x4x8	2
57	Splined shaft for standard feed	1
58	Shaft	1
59	Splined shaft for reduced feed rate	1
60	Top slide guard	1
61	Cylinder head screw M5x20	2
62	Cylinder head screw M5x20	4
63	Locking base	1
64	Countersunk screw M6x10	2
65	Disc Ф6	1
65A	Cheese head screw M6x16	1
66	Parallel key 10x8x100	1
67	Mounting adapter	1
68	Cheese head screw M8x35	4
68A	Disc Ф8	4
68B	Spring washer Φ8	4
69	Crank handle	1
70	Feed crank body S=13	1
71	Ball plunger M5x8	3
72	Knob M10x35	2
73	Circlip Φ5	1
74	Spring Ф8хФ0.8x15	1
75	Locking tooth button	1
76	Spring bolt	1
77	Tooth piece	1
78	O-ring 14x1.9	1
79	Pawl	1



9 EU Declaration of Conformity

The manufacturer/distributor

Kernlochbohrer GmbH Geigersbühlweg 52 72663 Großbettlingen Germany

hereby declares that the following product

Product: Core drill rig

Type: KBS-352/M-PRO KBS-352/XL-PRO KBS-502/M-PRO

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 fulfils 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 machine 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 machine).

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

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