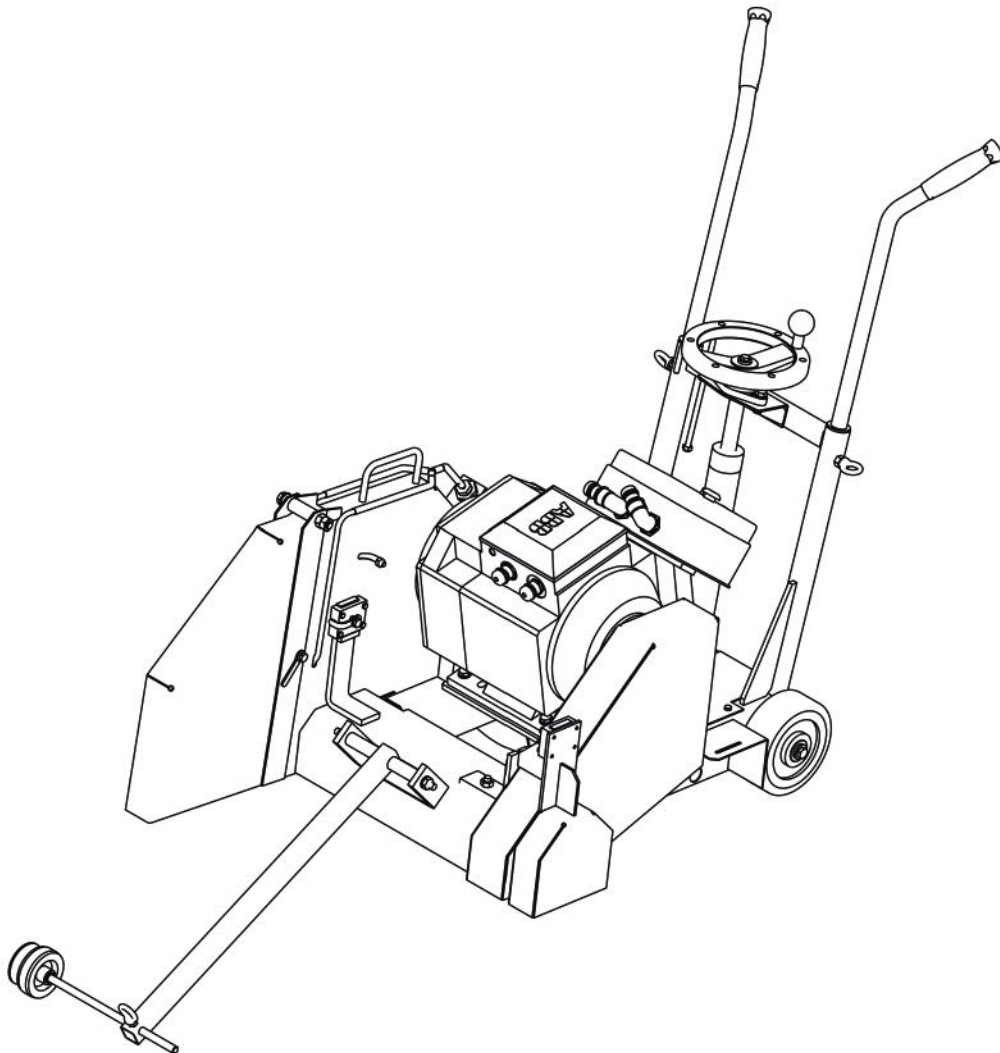


Floor saw

KDF 700-7,5E / KDF 800-7,5E



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Operating manual

Please read these instructions carefully before starting up the machine!



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2. Introduction

This floor saw KDF-700E is the result of permanent product development. What makes this product outstanding are reliable operation, easy handling and high mobility due to the application of new technologies and permanent improvement of quality. The complete operating manual should be kept close to the place of application. Particularly important details for the application of the floor saw are emphasised in this operating manual.

Therefore it is important, that the persons responsible should be familiar with the manual. We are not liable for any damage or interference caused by not observing the instructions.

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2.1 General Information

In the further text the operating manual is marked as BA. Besides this, the following abbreviations are used:

- Abb. - illustrations
- Tab. - table
- ND - not shown
- ETL - list of spare parts

This symbol will be found where special attention is to be paid, so that instructions, notices and the correct sequence of work is kept and also to prevent damage or destruction of the machine and other parts.



Text passages emphasised in this manner contain important information for safe machine operation. Nonobservance will result in damage to the machine!



This symbol will be found at all work- and safety instructions in this manual, where danger exists to body and life of person. Read these notice and take particular care in these cases.



This symbol indicates a specific process instruction or serves to structure process sequences.



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3. Work- and safety-instructions

The floor saw has been built corresponding to the latest techniques. Nevertheless dangers can appear in case of use by uninstructed personnel or improper application, not in accordance with the information laid out in this manual.

Each person using or maintaining the machine must have read and understood the complete operator's manual and especially the safety instructions. We recommend the user to confirm this in a written way.

A regulation concerning use also contains of the instructions of assembly and disassembly as well as the conditions of putting into operation and maintenance as given by the manufacturer.

The floor saw may be operated and maintained only by authorised, well instructed personnel. This personnel must be specially instructed about possible dangers.

Working methods, which affect the safety, are to be strictly avoided. The user also has to see that no unauthorised person uses the machine.

The operator is obliged to report any unusual change on the machine that could impair the safety.

The operator is also obliged to operate the floor saw only in an objectionable condition.

Arbitrary reconstruction's and changes which affect the safety of the floor saw are not allowed.

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Before commencing the job the operator should get acquainted with the surroundings of the site. This is to avoid putting other persons and/or objects in danger. Make sure the site has been secured and that notice has been given and received that you are about to commence.

All maintenance work must only be carried out when the mains plug is drawn.

Works on electrical facilities must only be executed by skilled workers or especially instructed persons under guidance and supervision of a skilled worker corresponding to the electrotechnic rules.

The ground should be thoroughly surveyed by qualified personal using a cable avoidance tool for the detection of underground cabling pipework.

For the operation of the floor saw the local regulations of safety and accident prevention must be absolutely noted.

The blade guard should only be put on or removed from the saw when the blade is absolutely still. Always check the floor saw before operating, make sure everything is in the right place and that you have gone through all the safety procedures and devices.

When operating the saw one should always use ear protectors, gloves, safety shoes and proper kind of clothing and goggles.

Before cleaning the machine with water, a vapour cleaner (high pressure cleaning machine) or other cleaners, all apertures must be covered for safety and to avoid water, vapour or cleaners entering it, especially electric motors, switch boxes and electric plugs.

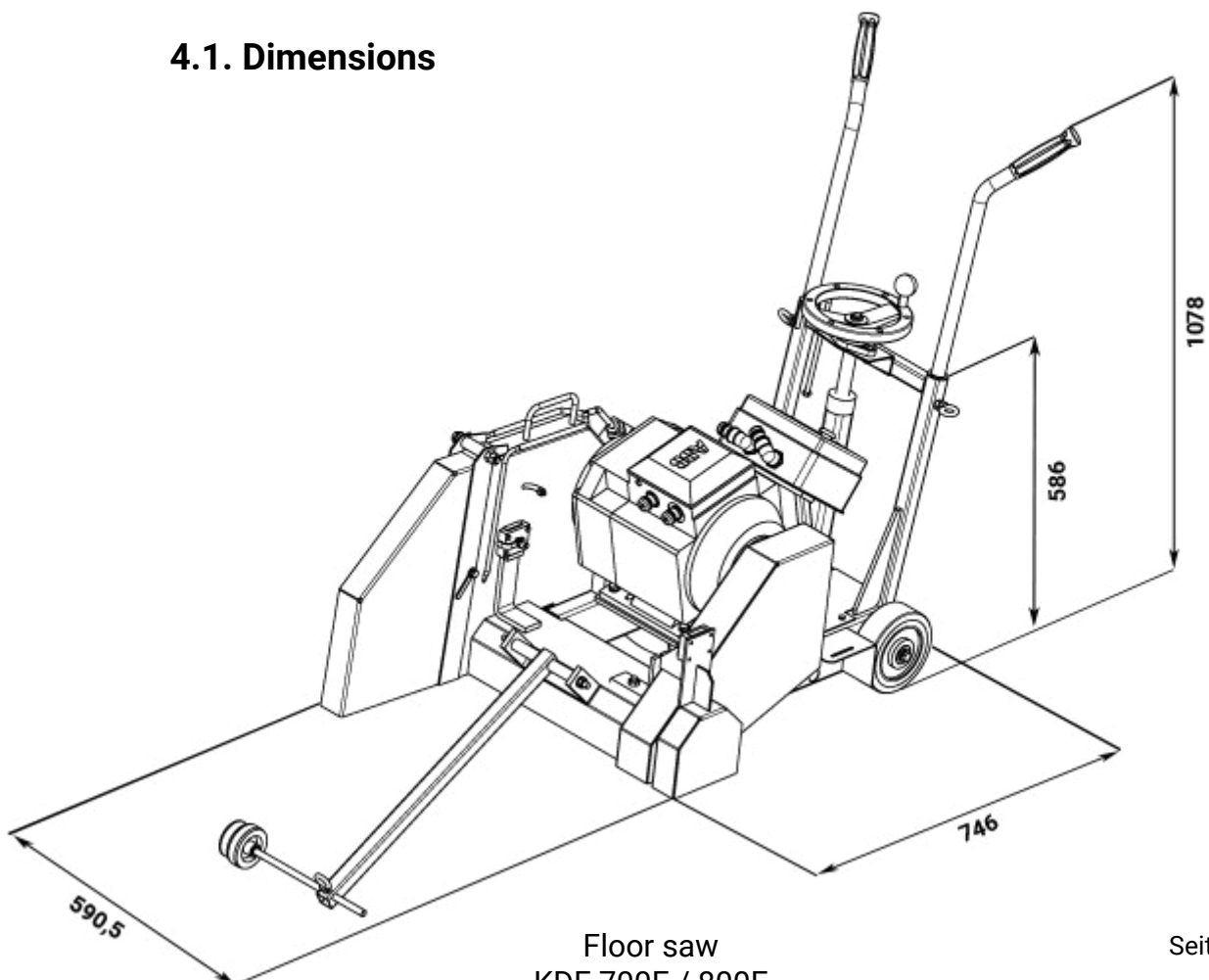
Covers and scotch tape must be removed after cleaning.

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4. Technical data

Machine description:	Floor saw	Floor saw
Machine type:	KDF-800E	KDF-700E
Machine-No.:		
Power:	7,5 kW	7,5 kW
Engine type:	400V-50Hz-16A	400V-50Hz-16A
Speed at the primary shaft:	1350 u/min	1500 u/min
Weight (without blade guard):	135kg / 297,6lbs	135kg / 297,6lbs
Blade diameter:	max. 800mm	max. 700mm
Cutting depth:	max. 340mm	max. 290mm
Weight blade guard	15kg / 33lbs	15kg / 33lbs
Sound pressure level at working area	86dB(A)	86dB(A)
Sound level	105dB(A)	105dB(A)

4.1. Dimensions

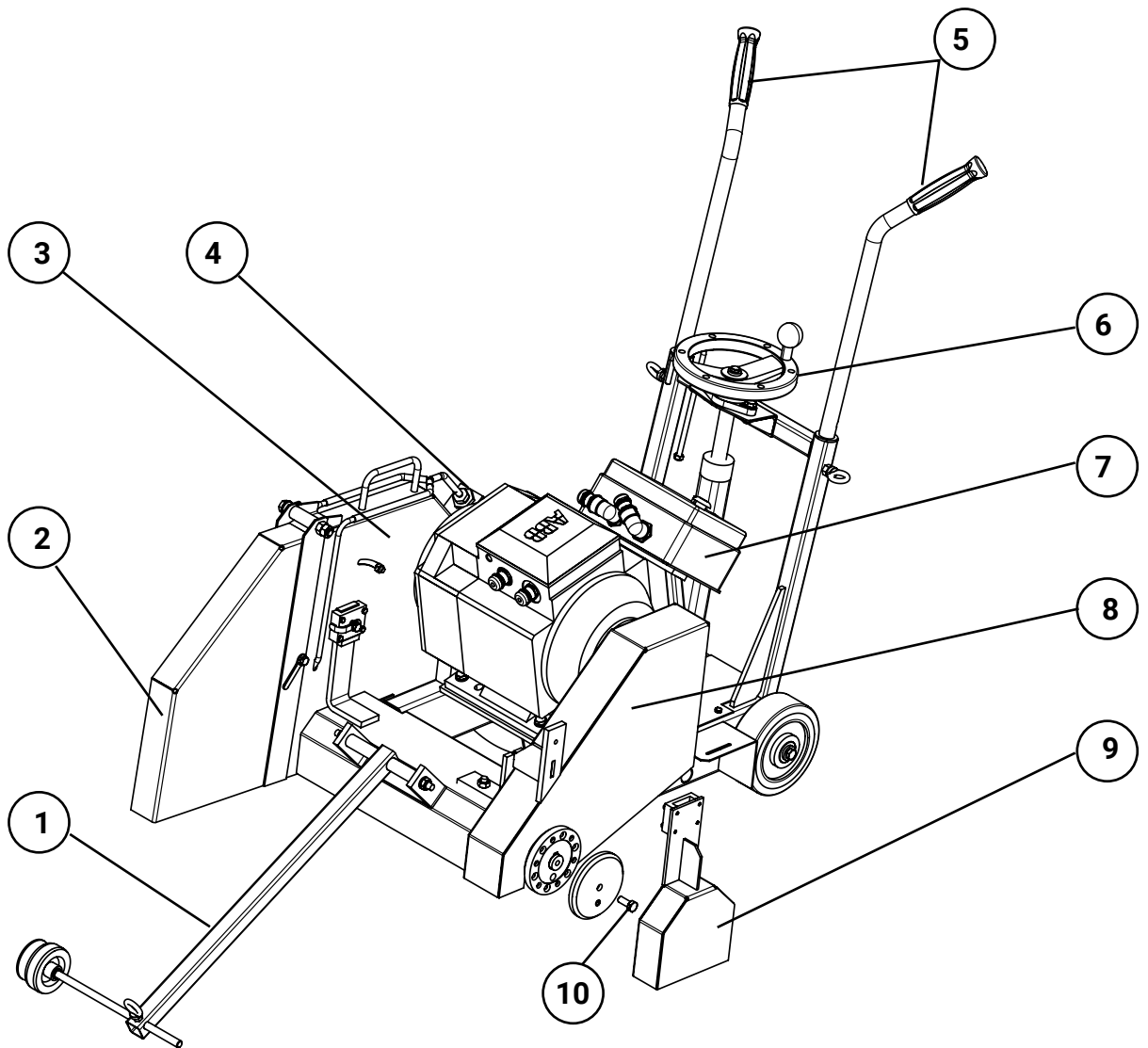


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4.2 General plan

Guiding device	1
Front blade guard	2
Rear blade guard	3
Water connection with tap	4
Handle bars	5
Depth adjustment	6
Switch box (16A)	7
Belt guard	8
Cover plate	9
Mounting saw blade	10



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5. Operative range and determined application

The floor saw KDF-800E was manufactured for the purpose of cutting to a maximum depth of 320 mm in concrete, brickwork or similar building materials. Any application other than the ones described are to be considered illicit.



According to illustrations and information given in this manual, we reserve the right of technical changes.

6. Transport

To push the floor saw use the telescoping handlebars, but before doing so make sure that the bars have been tightened with the help of the ring screws. For lifting with a crane use the jack rings.

(without blade) jack rings	a
(with mounted blade) jack rings	b
handlebars	c
ring screws	d

6.1 Removing the electric motor

Disconnect the connector of the belt guard by pulling it vertically upwards together with the cover cover. (A)

Loosen the nut on the threaded rod, which connects the console plate to the low feed. Now pull the threaded rod back out of the framing. (B)

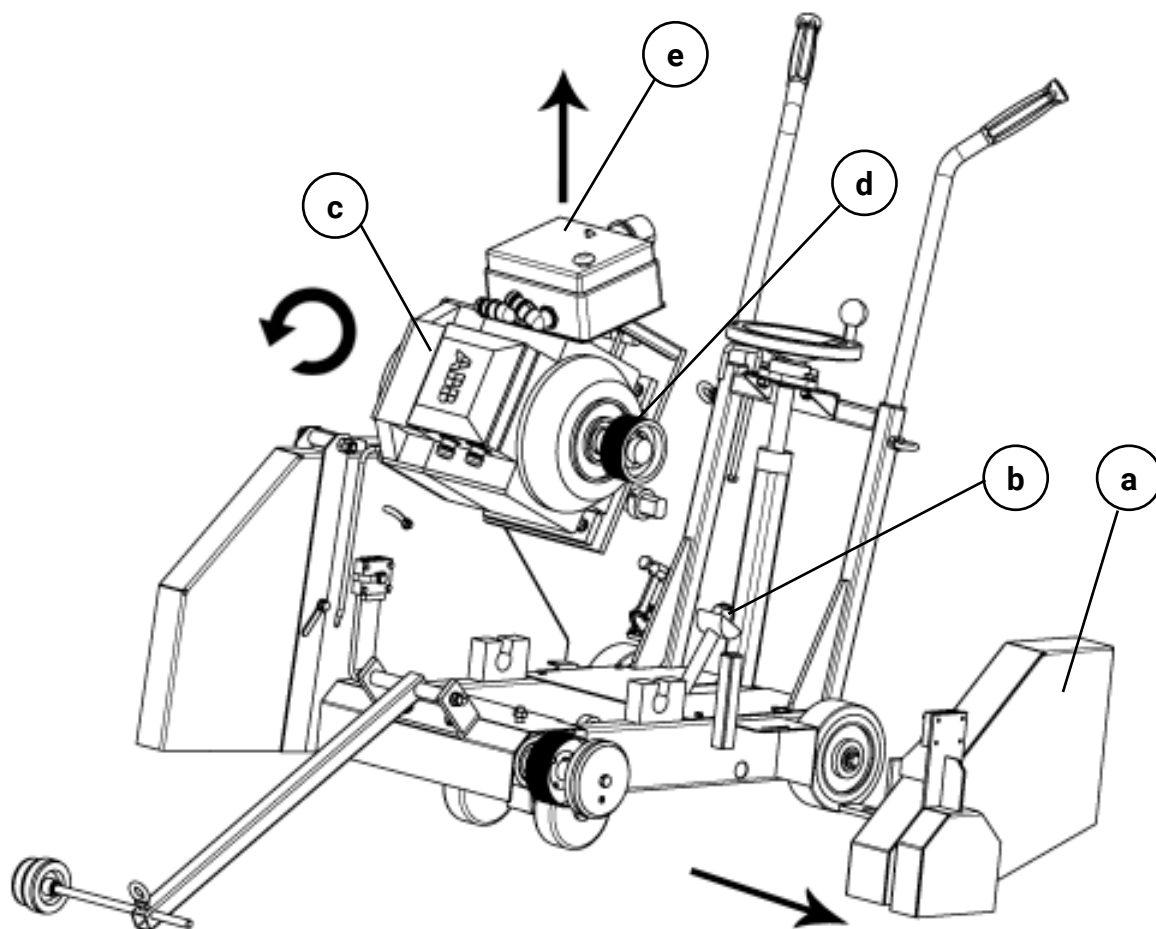
Tilt the motor with the console plate as far as it is possible. You should now be able to pull the drive belt from the belt pulley towards you. (C)

Lift the motor and the console plate out of the machine. (D)

The motor is installed in reverse order. (E)

To fill gasoline and oil at the engine read the corresponding chapter at the manual.

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7. Connection and Assembly

7.1 Connection of water hoses and cables

The cool water connection is done with a „Gardena“ connection.

Use clean water only!



For the electric connection you need a 16A CCE cable (min 5x2mm² / cable length 25m). Please make sure that all three phases are present.

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7.2 Mounting the saw blade

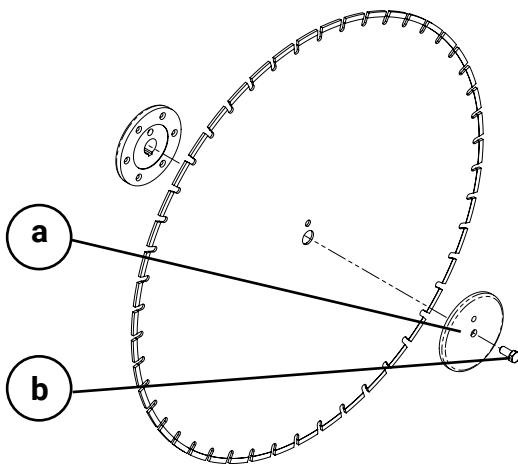
The saw blade should always be mounted to the floor saw by hexagonal screws. The blade can be mounted either to the right or left side of the floor saw. The Screw left from the belt guard is a lefthand screw.

outerflange

a

hexagonal screw

b



Make sure that the direction arrow on the blade and on the belt guard are pointing in the same direction.

Saw blades which show optical damage such as cracks or that due to heat have become blue or lost segments should never be used.



7.3 Mounting the blade guard/cover

Before commencing a job one should have both the blade guard and the cover of the blade free flange on tightened with the bolt.

Should a cut lead up to an obstacle (such as a wall), one can remove the front part of the blade guard which makes it possible to cut up to the desired point.

One should only remove the front part of the blade guard when it is no longer possible to cut with it. When cutting without the front part pay close attention to avoid any accident. Whenever doing any mounting or dismounting on the floor saw be sure to have it switched off and the blade is not running.



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8. Operation

8.1 Notice

After checking the guard has been lowered over the blade safely one can now engage the floor saw. Remember that only people, who have read the manual may work with this machine.

8.2 Marking the cutting line

Mark the cutting line with crayon or similar. Align the floorsaw with the blade and the guarding device to this line.

8.3 Start the engine

Be shure that the emergency stop is pulled out. Manipulate the lever of the brake that the floor saw cannot move. To start the engine read the corresponding chapter at the manual.

In case the direction is wrong, reverse the reversing Star Delta switch position, after the saw blade has come to a stop.



Open the ball valve and sure to have sufficient water flow to guarantee appropriated cooling. Never use the equipment without cooling water.



8.4 Adjusting the cutting depth

Lower the saw blade by using the handwheel. Fix the handwheel with the locking screw when the requisite depth ist reached.

Complete turn = ca.12 mm.

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8.5 Feed

Manipulate the lever of the brake that the floor saw can be pushed.



Move the floor saw by steady pushing.

High pushing let the floor saw mounting out of the cut.



In danger, activate the emergency switch immediately.

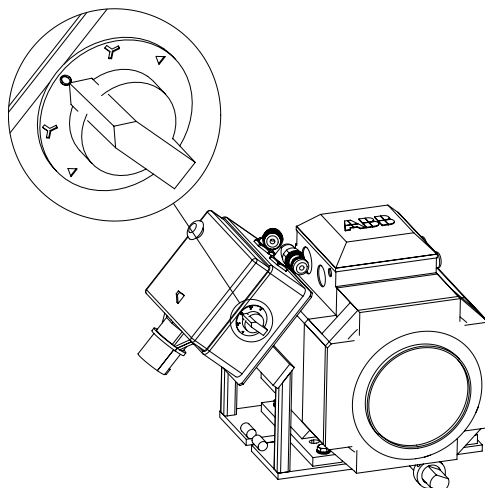


8.6 Stop cutting

Lift the saw blade out of the cut, close the ball valve at the water tank, activate the brake and turn the switch at the engine off. (read the corresponding chapter at the engine manual).

Never start the engine when the blade is in the cut.

The saw blade can keep turning over 1 minute after the power has been switched off. Assembling or disassembling should only be take place after the saw blade has come to a stop.



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9. Maintenance

Read operating safety instructions when carrying out maintenance work.

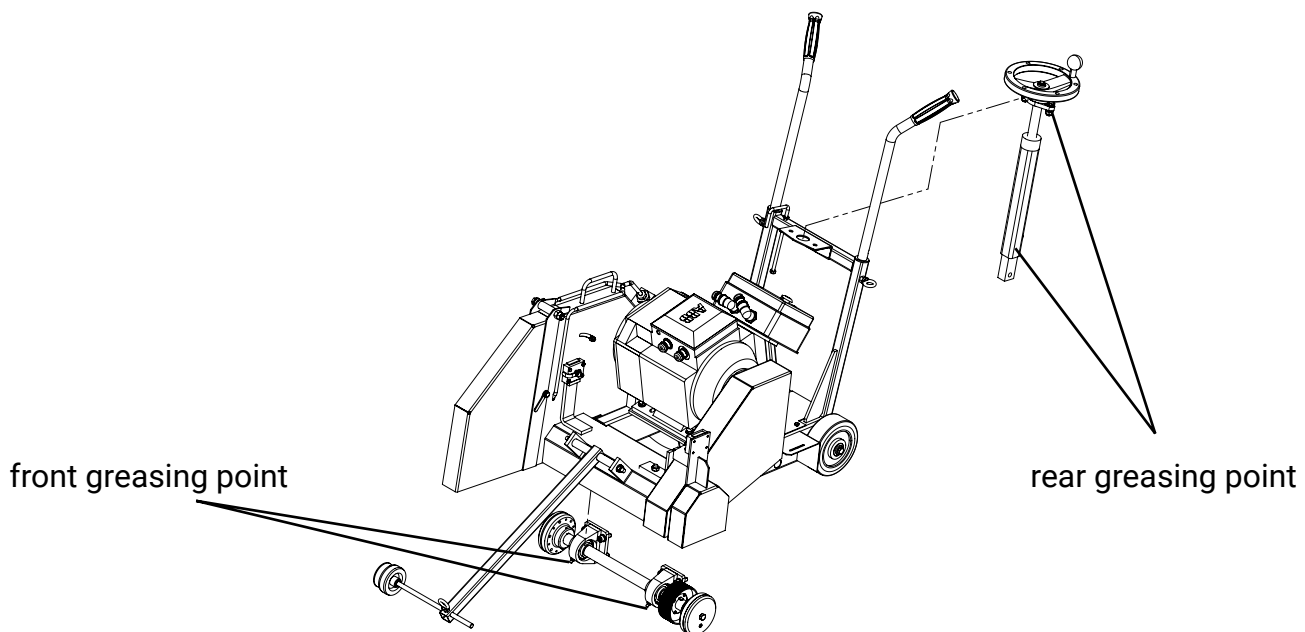
Disturbances caused by a insufficient or improper maintenance can lead to high repair costs. Regular maintenance is there for essential.

Disconnect tools before servicing. Be certain that the carriage cannot move down.



The following maintenance work should be held:

- Clean the floor saw after operation
- before each use control electric plug-in connections and cables for damages, exchange damaged parts
- before each use check Mounting bolts and flanges, replace damaged parts
- after 30 working hours, grease the marked bearings at the lower figure
- after 100 working hours exchange the driving belt



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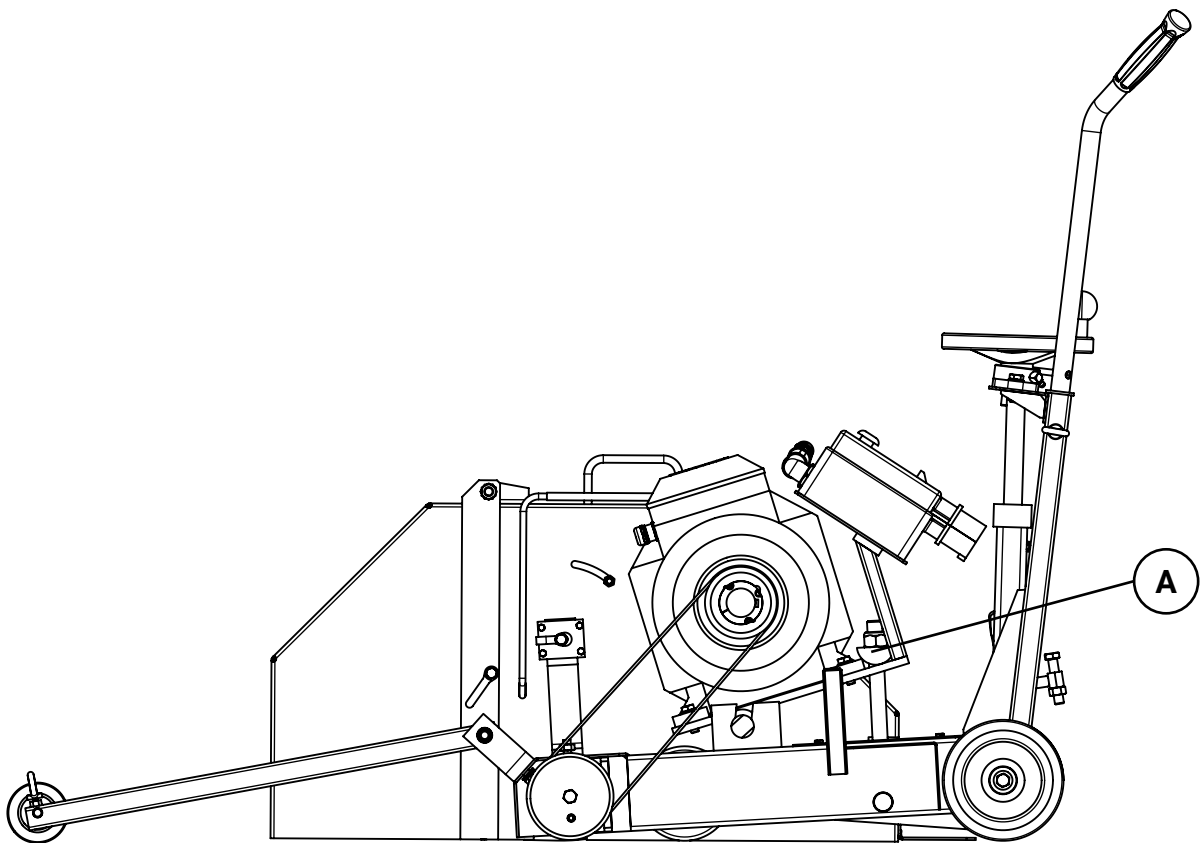
To tension or change the drive belt, the belt guard and the cover must first be removed. (See section 6.1)



Then, by loosening the hexagon nut on the threaded rod, the motor together with the console plate can be swiveled forward and the drive belt pulled from the pulleys.

After winding the new belt, the motor is brought into the starting position and the degree of tension on the belt is adjusted by tightening the nut on the threaded rod.

The belt guard is then reassembled in the reverse order.



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10. Trouble shooting

Go to the search systematically for an error occurring. Please use the following table and diagrams for electrical systems. If you can not fix the error yourself, you should contact our customer service

Note the following points:

- The more precise description of the error, the quicker and better we can help you.
- Keep the wiring diagram for electrics ready.
- Enter the serial number and the machine type

electric motor does not run:

- electric cable, or switch defect -> change defect part
- Fuse for the main power line defect -> change fuse
- Emergency stop is active -> Pull it out

Reversing-Star Delta switch is not in „0“ position -> Put the knob in „0“ position

- One phase is missing (undervoltage) -> Check the power supply

The electric motor switches off:

- Motor protection switch has released. -> Reduce the blade feed or its cutting depth

Floor saw does not lift or lower:

- Check the chassis, clean the spindle

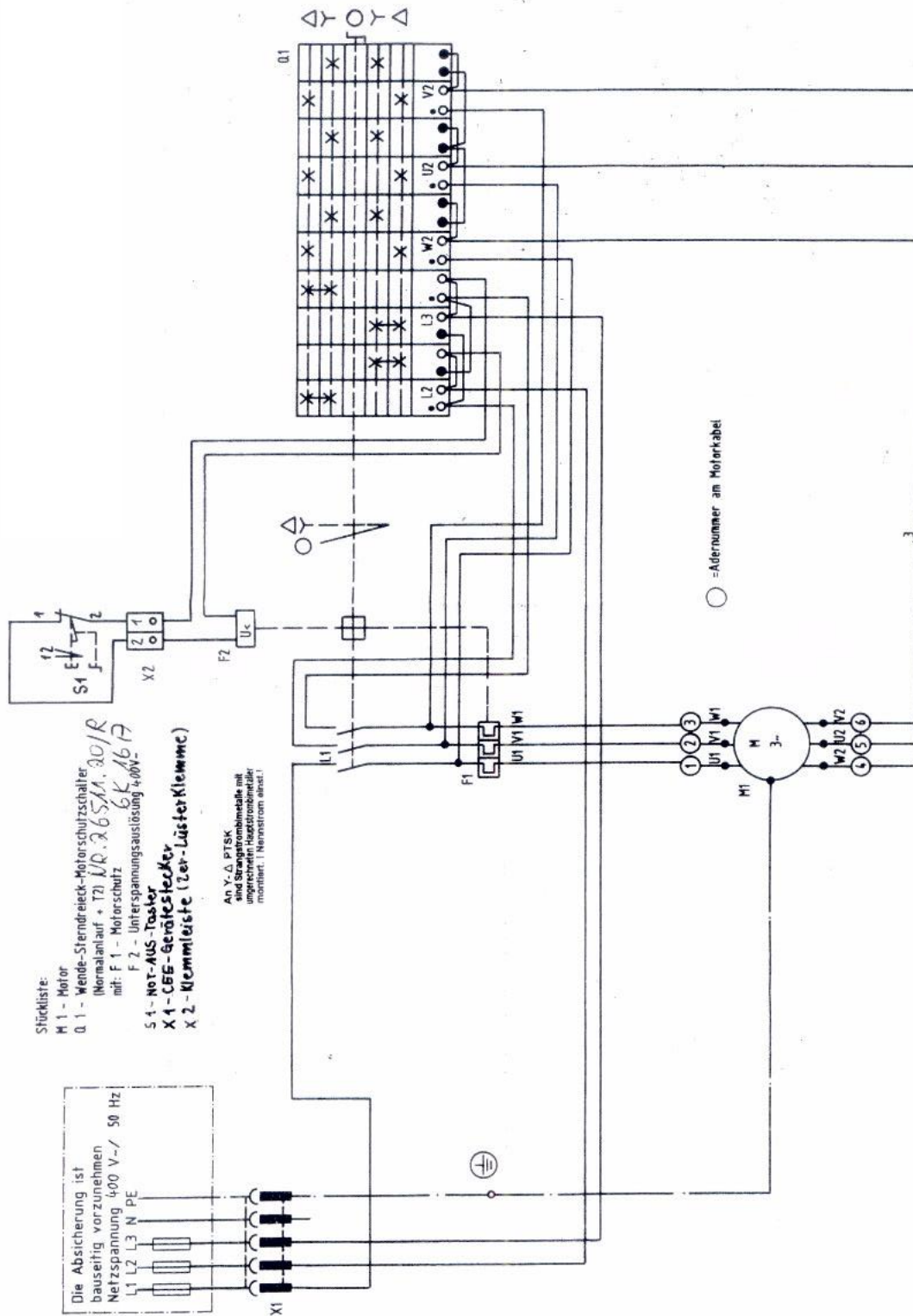
Noncircular wear of the saw blade:

- Check the flanged shaft.-> Check the bearings. Tighten them.

High wear of the segments:

- Small quantity of water. -> Open the ball valve. Hose is creased. Fix it
- Wrong specification. -> Use another typ of blade
- Reduce the cutting depth

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11. Customer Service

Eine regelmäßige Wartung und Pflege ist Voraussetzung für die ständige Funktion und Einsatzbereitschaft. Zur Bestellung von Ersatzteilen bedienen Sie sich bitte der nachfolgenden Ersatzteilliste. Zur weiteren Information dienen die dazugehörigen Zeichnungen listed in the parts list.

Der Einbau und/oder die Verwendung nicht durch uns gelieferter Ersatzteile kann unter Umständen konstruktiv vorgegebene Eigenschaften des Gerätes oder der Maschine verändern und dadurch die aktive und/oder passive Sicherheit beeinträchtigen.

Für Schäden, die durch die Verwendung selbst beschaffener Ersatzteile entstehen, ist jedoch die Haftung und Gewährleistung seitens der KERN-DEUDIAM Diamantwerkzeuge und Maschinen GmbH ausgeschlossen.

To guarantee a fast delivery of your order and avoidant wrong delivery, the following details are absolutely necessary with every order of spare parts.

1. Machine type according to data plate
2. Fabr.-Nr. according to data plate
3. Number of article according to spare parts list
4. desired quantity of spare parts

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12. Disassembling

In the event of deterioration and scrapping of the machine, the following items must be in accordance with the requirements of the legislation in force.



Main materials:

Motor: Aluminium (AL), Steel (AC), Copper (CU), Polyamid (PA)

Machine: Steel sheet (AC), Cast iron (FT), Aluminium (AL)

13. Declaration of conformity

We hereby declare that this machine conforms with the following standards.

Designation of the machine: floor saw KDF 800E

Regulations of directive: -2006/42/EG

Standards:
- EN13862
- EN12100-1
- EN12100-2

A handwritten signature in black ink, appearing to read 'Markus Wenz', written in a cursive style.

Geschäftsführer
Director

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