

Operating instructions

_____ Miter saw

_____ KGZ 305 EI



KGZ 305 EI

KGZ 305 EI

imprint

Product identification

Miter saw	Article number
KGZ 305 EI	5702306

Manufacturer

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Information on the operating instructions

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Technical changes and errors excepted.

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1 introduction

By purchasing the HOLZ-STAR miter saw, you have made a good choice.

Please read the operating instructions carefully before commissioning.

This will inform you about the proper commissioning, the intended use as well as the safe and efficient operation and maintenance of your miter saw.

This operating manual is an integral part of the miter saw. Always keep this operating manual at the location where your miter saw is used. Please also observe the local accident prevention regulations and general safety regulations applicable to the area of use of the miter saw.

1.1 Copyright

The contents of this manual are protected by copyright and the sole property of Stürmer Maschinen GmbH. Their use is permitted within the scope of the device's operation.

Any other use is prohibited without the written permission of the manufacturer. Distribution, reproduction, and exploitation of this document, as well as communication of its contents, are prohibited unless expressly permitted.

Violations will result in compensation for damages.

We register trademark, patent, and design rights to protect our products, where possible in individual cases. We vigorously oppose any infringement of our intellectual property.

1.2 Customer service

If you have any questions about your miter saw or require technical information, please contact your authorized dealer. They will be happy to provide you with expert advice and information.

Germany:

Stürmer Maschinen GmbH
Dr.-Robert-Pfleger-Str. 26
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Repair service:

Fax: 0049(0)951 96555-111
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Internet: www.holzstar.de

Ordering spare parts:

Fax: 0049(0)951 96555-119
E-mail: ersatzteile@stuermer-maschinen.de

We are always interested in information and experiences that arise from use and can be valuable for improving our products.

1.3 Limitation of liability

All information and instructions in this manual have been compiled taking into account the applicable standards and regulations, the state of the art and our many years of knowledge and experience.

The manufacturer assumes no liability for damages in the following cases:

- Failure to follow these instructions
- Improper use
- Use of non-qualified and unprofessional personnel
- Unauthorized modifications
- Technical changes
- Use of unauthorized spare parts

The actual scope of delivery may differ from the explanations and illustrations described here in the case of special designs, the use of additional ordering options or due to the latest technical changes.

The obligations agreed in the supply contract, the general terms and conditions as well as the delivery conditions of the manufacturer and the legal regulations valid at the time the contract is concluded apply.

2 Security

This section provides an overview of all important safety packages for the protection of personnel and for safe and trouble-free operation. Further task-specific safety instructions are included in the individual chapters.

2.1 Explanation of symbols

Safety instructions

Safety instructions in this manual are marked with symbols. The safety instructions are introduced by signal words that express the extent of the hazard.



DANGER!

This combination of symbol and signal word indicates an immediately dangerous situation which, if not avoided, will result in death or serious injury.

WARNING!

This combination of symbol and signal word indicates a potentially dangerous situation which, if not avoided, will result in death or serious injury.

CAUTION!

This combination of symbol and signal word indicates a potentially dangerous situation which, if not avoided, may result in minor or light injuries.

DANGER!

This combination of symbol and signal word indicates a potentially dangerous situation which, if not avoided, could result in property damage and environmental damage.



A NOTICE!

This combination of symbol and signal word indicates a potentially dangerous situation which, if not avoided, could result in property damage and environmental damage.

Tips and recommendations



Tips and recommendations

This symbol highlights useful tips and recommendations as well as information for efficient and trouble-free operation.

To reduce the risk of personal injury and property damage and to avoid dangerous situations, the safety instructions contained in this operating manual must be observed.

2.2 Personal protective equipment

Personal protective equipment is designed to protect people from risks to their safety and health at work. Personnel must wear personal protective equipment while performing various tasks on and with the machine, as specifically indicated in the individual sections of this manual.

The following section explains personal protective equipment:



Hearing protection

Hearing protection protects against hearing damage caused by noise.



Head protection

The industrial helmet protects the head against falling objects and collisions with stationary objects.



Safety glasses

The safety goggles are used to protect the eyes from flying debris.



protective gloves

The protective gloves are designed to protect your hands from sharp-edged components, as well as from friction, abrasions or deeper injuries.



Safety shoes

The safety shoes protect the feet from crushing, falling objects and slipping on slippery surfaces.



protective work clothing

Protective work clothing is tight-fitting work clothing, without protruding parts, with low tear resistance.

2.3 General safety instructions

- The mitre saw may only be operated and maintained by persons who have read and understood these operating instructions. The operator must be adequately trained in application, adjustment and operation.
- Only switch on the machine immediately before starting work. Do not leave the machine unattended while it is running.
- Never open the protective covers while the miter saw is in operation.
- Keep the work area and the floor around the miter saw free of any objects that could endanger your stability or pose a tripping hazard.

- When laying the power cable, make sure that it is not crushed, bent, or wet.
- If the power cable is damaged, stop using the machine immediately and have it replaced by a qualified electrician.
- Protect the machine from moisture and humidity to avoid the risk of short circuits or electric shock.
- Do not use the machine near flammable gases, liquids, or solids. Flying sparks may cause explosions or fires.
- Only use the machine in dry rooms or in dry environments and ensure that the work area is sufficiently lit.
- Only operate the machine with all safety devices fully and correctly installed and do not modify the machine in any way.
- Always wear hearing and eye protection when operating the miter saw. Loose clothing (ties, scarves, open jackets, and loose-fitting clothing) is prohibited. If you have long hair, wear a hairnet.
- Remove any adjusting tools or wrenches before turning on the saw.
- Keep handles and gripping surfaces dry, clean and free from oil and grease.
- Unplug the saw before making any adjustments, replacing parts, or storing it.
- Use only original spare parts.
- Before operation, check all workpieces for foreign objects such as nails and screws.
- Keep children and other people away while using the miter saw.

Safety instructions when using the saw

- Use clamps to support the workpiece wherever possible. When holding the workpiece by hand, always maintain a minimum distance of 100 mm on either side of the sawblade. Do not use this saw to cut workpieces that are too small to be securely clamped or held by hand.
- Only use saw blades from the manufacturer and if they comply with the EN 847-1 standard.
- The workpiece must be fixed and clamped or held against both the stop and the table. Do not insert the workpiece into the sawblade and do not cut "freehand."
- Never cross your hand over the intended cutting line, neither in front of nor behind the saw blade.

- Do not reach behind the stop while the saw blade is rotating. Never leave a safety distance of less than 100 mm between your hand and the rotating saw blade (applies on both sides of the saw blade, e.g., when removing wood waste).
- Check the workpiece before cutting. If the workpiece is bent or warped, clamp it against the stop with the curved side facing outward. Always ensure that there is no gap between the workpiece, stop, and table along the cutting line.
- For workpieces that are wider or longer than the top of the table, ensure adequate support, e.g. with table extensions or sawhorses.
- The cut piece must not be pressed against the rotating saw blade.
- Always use a clamp or suitable device to properly support round material such as rods or pipes.
- Never remove cutting debris, chips, etc. from the cutting area while the machine is running. Always return the tool arm to the neutral position first and then turn off the machine.
- Allow the saw blade to reach its full speed before cutting into the workpiece.
- After cutting, release the switch, hold the saw head down and wait until the saw blade has come to a stop before removing the cut piece.
- Allow the saw blade to reach its full speed before cutting into the workpiece.
- Avoid overheating the saw teeth.
- Note the direction of rotation of the saw blade.
- Do not use damaged or deformed saw blades.

2.4 Safety markings on the mitre saw

The following safety markings are attached to the mitre saw (Fig. 1), which must be observed and followed.

The safety markings attached to the saw must not be removed. Damaged or missing safety markings can lead to incorrect handling, personal injury, and property damage. They must be replaced immediately.

If the safety markings are not immediately visible and understandable, the saw must be taken out of service until new safety markings have been applied.



Fig. 1: Safety markings
 1-6 Mandatory signs: Follow instructions for use, use eye protection, use foot protection, unplug, use hearing protection, use hand protection |
 7-10 warning signs: Warning of dangerous electrical voltage, general warning sign, warning of laser beams, warning of danger from rotating saw blade

2.5 Safety data sheets

Safety data sheets for hazardous goods are available from your specialist dealer or by calling +49 (0)951/96555-0. Specialist dealers can find safety data sheets in the download area of the partner portal.

3 Intended use

The miter saw is used for making crosscuts, miters, double miters, and bevel cuts in boards and strips. It can also be used to create grooves and process solid wood, chipboard, and panels.

Proper use also includes compliance with all information in this manual.

3.1 Reasonably foreseeable misuse

Any use beyond the intended use or any use other than that intended is considered misuse.

Possible misuses may include:

- Use of the miter saw on materials other than wood (e.g. processing metal).
- Use of the miter saw with parameters that are not permitted for processing wood.
- Operating the miter saw without the provided safety devices functioning.

- Bridging or modifying the protective devices.
- Failure to comply with maintenance instructions.
- Failure to observe signs of wear and damage.
- Service work by untrained or unauthorized personnel.
- Maintenance work on an unsecured machine.
- Careless handling of the miter saw during operation.
- Installation of spare parts and use of accessories and operating materials not approved by the manufacturer.
- Processing several workpieces simultaneously in one work step.
- Machining of oversized workpieces.
- Modifications to the machine or the use of modified tool systems.

Misuse of the miter saw can lead to dangerous situations. Stürmer Maschinen GmbH assumes no liability for design and technical modifications to the miter saw. Claims of any kind for damages resulting from improper use are excluded.

3.2 Residual risks

Even if all safety regulations are observed and the machine is used correctly, there are still residual risks, which are listed below.

- Hearing impairments when working for long periods without hearing protection or if the protection is inadequate.
- Electrical hazards due to contact with parts and high voltage (direct contact) or with parts that are under high voltage due to a defect in the device (indirect contact).
- Heat development on components can lead to burns and other injuries.
- Risk of injury to fingers and hands from the tool or workpiece, e.g. when changing tools.
- Injuries caused by a defective saw blade.
- Danger of inhaling wood dust (if necessary, an extraction system must be used in accordance with legal regulations).
- Risk of eye injury from flying debris, even when wearing protective goggles.

4 Technical data

Model	KGZ 305 EI
Connection voltage / Mains frequency / current type	230 V / 50 Hz / AC
Drive motor power	2000 W
Connection cable length	approx. 2 m
Saw blade speed	5000 rpm
Suction nozzle diameter (Indoor/Outdoor)	33 / 37 mm
Ø saw blade	305 mm
Dimensions (LxWxH)	800x710x640 mm
Weight	20.3 kg
Sound pressure level (LpA)	96.6 dB(A)
Sound power (LwA)	110.9 dB(A)
Cutting capacity	
at 0° inclination / 0° mitre	340*90 mm
at -45° inclination / 0° miter	235*90 mm
at +45° inclination / 0° mitre	340*38 mm
at 0° inclination / -45° mitre	340*25 mm
at -45° inclination / -45° mitre	235*38 mm
at +45° inclination / +45° mitre	235*25 mm

4.1 Type plate KGZ 305 EI



Fig. 2: Nameplate

5 Device description

Illustrations in this operating manual may differ from the original.

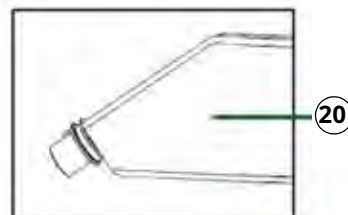
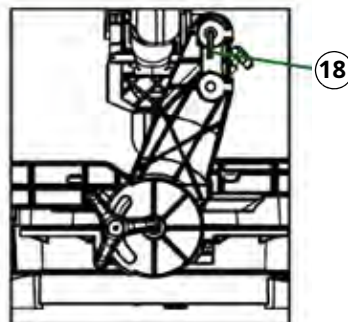
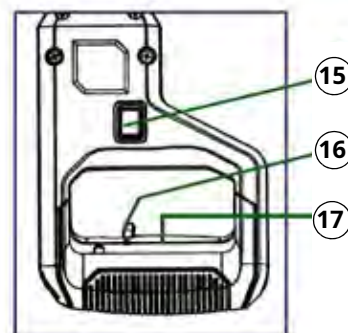
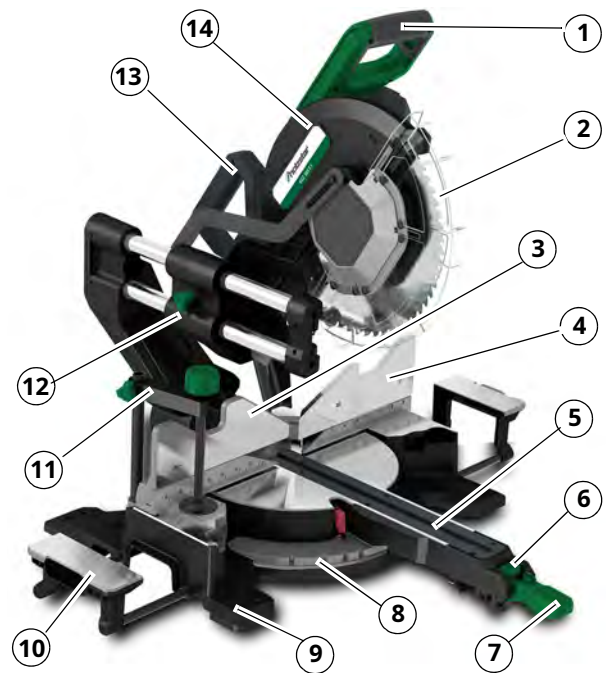


Fig. 3: Mitre saw KGZ 305 EI

- 1 saw head handle
- 2 pendulum protective hood
- 3 Movable stop
- 4 stop
- 5 Table insert
- 6 Miter locking knob 7 Miter locking handle 8 Turntable support
- 9 Mounting hole
- 10th edition
- 11 bracket
- 12 Slide locking knob 13 Carrying handle
- 14 Saw blade guard
- 15 On/Off switch LED light 16 On/Off switch
- 17 Locking lever
- 18 hexagon keys

6 Transport, packaging and storage

6.1 Delivery and transport

Delivery of the miter saw

Upon delivery, inspect the miter saw for visible transport damage. If you discover any damage to the miter saw, report it immediately to the shipping company or dealer.

transport



CAUTION!

Risk of injury due to equipment tipping over or falling from a forklift, pallet truck or transport vehicle.

Only use transport equipment and load-slinging devices that can support the total weight.

Improper transport of individual devices, packaged or unpacked, unsecured devices that are stacked on top of each other or next to each other is prone to accidents and can cause damage or malfunctions for which we assume no liability or guarantee.

Transport the scope of delivery to the installation site using a sufficiently dimensioned industrial truck, ensuring that it cannot be moved or tipped over.

General hazards during internal transport



CAUTION: RISK OF TIPPING

The device may be lifted unsecured by a maximum of 2 cm.

Employees must be outside the danger zone, the reach of the load.

Warn employees and inform them of the hazard.

Transport may only be carried out by authorized and qualified personnel. Act responsibly during transport and always consider the consequences. Avoid daring and risky actions.

Particularly dangerous are inclines and declines (e.g., driveways, ramps, etc.). If driving on such sections is unavoidable, special caution is required.

Before starting transport, check the transport route for possible hazards, unevenness and faults as well as for sufficient strength and load-bearing capacity.

Hazardous areas, unevenness, and disruptions must be inspected before transport. The removal of hazardous areas, unevenness, and disruptions by other employees during transport poses significant risks.

Careful planning of internal transport is therefore essential.

When transporting the saw by vehicle, there is a risk of injury and property damage due to inadequate or missing transport locks for the saw! Before starting the journey, be sure to check that the transport locks are properly and securely in place.

Please note the saw's dimensions. The saw should always be transported by two people. The saw should be transported or stored with the saw head lowered.

6.2 Packaging

All packaging materials and packaging aids used for the miter saw are recyclable and must be recycled.

Cardboard packaging components should be shredded and disposed of with your waste paper collection. The film is made of polyethylene (PE), and the padding is made of polystyrene (PS). These materials should be taken to a recycling center or to your local waste disposal company.

6.3 Storage

The miter saw must be thoroughly cleaned and stored in a dry, clean, and frost-free environment. Cover the saw with a protective tarpaulin.

7 Installation and connection

7.1 Setting up the miter saw

The miter saw must be securely positioned on a level and solid surface. Ensure that there is sufficient freedom of movement for working.

The installation location must have sufficient lighting (see Workplace Ordinance and DIN EN 12464).

Requirements for the installation location:

- Dry, dust-free,
- Cool, well ventilated, frost-protected,
- Flat, solid surface,
- Low dust concentration in the air.



CAUTION!

Risk of injury from an insufficiently secured saw!
Check the stability of the saw after securing it to a stable surface.

For secure mounting of the saw, the four saw feet have holes for mounting screws. Secure the saw to a workbench, base, or similar surface using four screws through the holes.

There are two holes of different sizes to accommodate different screw sizes.

It is not necessary to use both holes (Fig. 4).

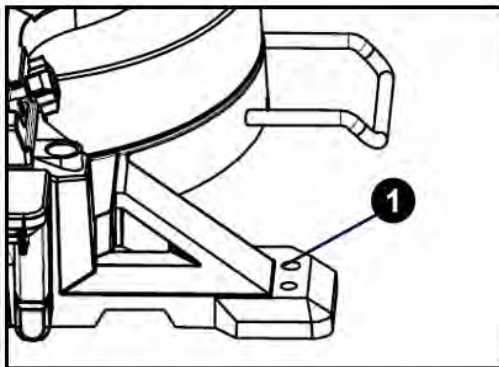


Fig. 4: Mounting holes

Only lift the saw when the saw arm is locked in the lower position, the saw is switched off and the plug is removed from the socket.

Only lift the saw by the carrying handle (item 13, Fig. 3) or by the outer parts. Do not lift the saw by the guards.

7.2 Installation of the workpiece clamp

There are two mounting holes for the work clamp. These are located directly behind the stop on the left and right sides of the base.

Step 1: Loosen the locking knob and insert
Insert the clamp into the corresponding hole behind the stop.

Step 2: Turn the clamp in the direction of the side of the miter saw.

Step 3: Tighten the locking knob to secure the to hold the workpiece clamp.

Step 4: Lift the clamp handle (Pos.1, Fig. 5) to move the clamp up or down as needed. Lower the workpiece clamp handle to lock the workpiece.

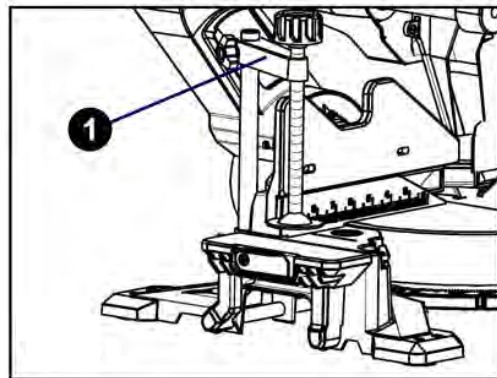


Fig. 5: Mounting the clamp

7.3 Installation of the movable stop

Step 1: Loosen the locking knob (Pos. 1, Fig. 6) to release the columns at the stop.

Step 2: Install the stop. Lower the Stop into the stop slot and slide it inward from the fixed stop side.

Step 3: Pull the fence locking knob firmly.

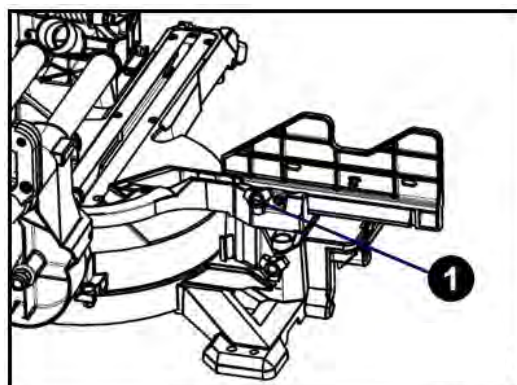


Fig. 6: Mounting the movable stop

7.4 Assembly of the extension table

Extension tables are provided for both the left and right side of the saw.

- Step 1: Remove the screw (Pos. 1, Fig. 7) on the table extension (pos. 2, fig. 7).
- Step 2: Unlock the locking button of the extension table.
- Step 3: Insert the ends of the table extension rods into the holes on the sides of the base.
- Step 4: Reinsert the screw and tighten. Tighten them to secure the table extension rods.
- Step 5: Align the extension table to the desired position.
- Step 6: Attach the locking knob for the extension table again.
- Step 7: Repeat the process for the other version extension rod.

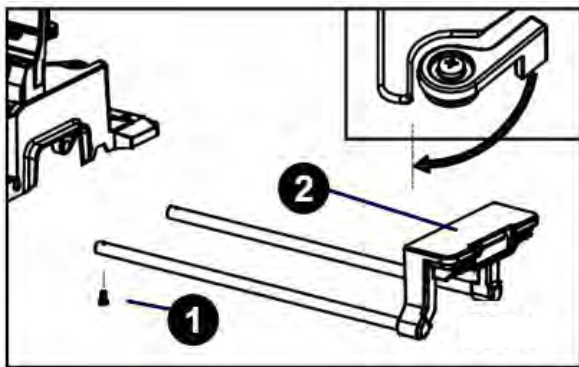


Fig. 7: Mounting the extension table

7.5 Removing and installing the saw blade

Removing the saw blade

- Step 1: Disconnect the saw from the power source.
- Step 2: Adjust the locking pin to secure the cutting head and raise the lower guard (pos. 2, fig. 8) as far as possible.
- Step 3: Loosen the screw of the protection (pos. 1, Fig. 8) approximately 4 turns with a Phillips screwdriver. Do not remove this screw from the device. The lower guard remains raised due to the position of the guard bracket screw.
- Step 4: Hold the spindle lock button (pos. 4, Fig. 8) and at the same time turn the saw blade until it is locked in position.

Step 5: Continue holding the spindle lock button- while turning the threaded screw (item 3, Fig. 8) clockwise with the Allen key to remove the threaded screw.

Step 6: Remove the outer flange (pos. 5, Fig. 8) and the saw blade (item 6, Fig. 8). Wipe the flanges and spindle to remove dust and dirt.

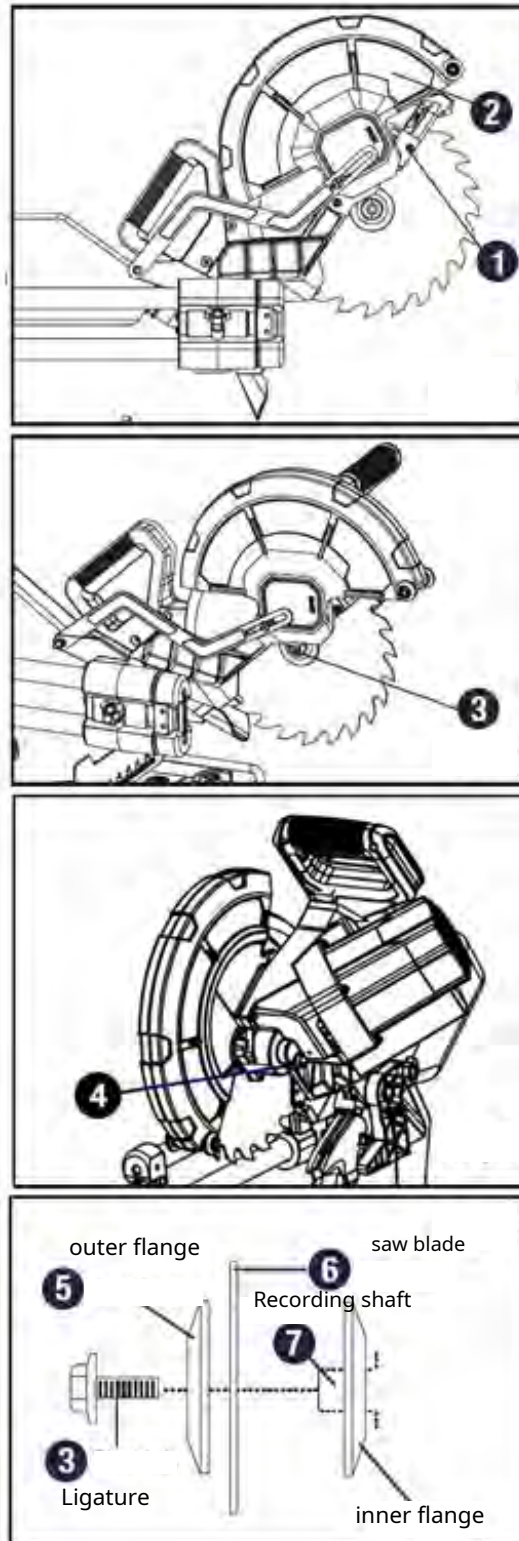


Fig. 8: Removing and installing the saw blade

Installing the saw blade



DANGER!

Only use saw blades with a diameter of 305 mm and designed for a speed of at least 5000 rpm.

- Step 1: Disconnect the saw from the power source.
- Step 2: Place the saw blade with the lifted
Place the arm onto the arbor with the lower guard raised (Item 7, Fig. 8). Align the arrow on the blade with the arrow on the upper blade guard. Make sure the saw blade teeth are facing downward.
- Step 3: Place the outer flange against the
Saw blade and onto the mounting shaft. Screw the saw blade screw counterclockwise onto the mounting shaft.
- Step 4: Insert the hex key into the saw blade screw.
- Step 5: Press the spindle lock and hold
Hold it firmly while turning the blade counterclockwise. When the spindle lock clicks into place, continue pressing it while tightening the blade screw.
- Step 6: Attach the protective bracket (Pos.1, Fig. 8)
Return it to its original position and tighten the guard screw firmly to secure the guard in place. Make sure the guard is not jammed or blocked.
- Step 7: Make sure that the spindle lock
The locking device is loosened so that the saw blade can rotate freely before operating the saw.

7.6 Connecting the dust bag

Place the dust bag (1) onto the miter saw's dust extraction nozzle (2). Assemble the connecting tube of the dust bag and the dust extraction nozzle (Fig. 9).

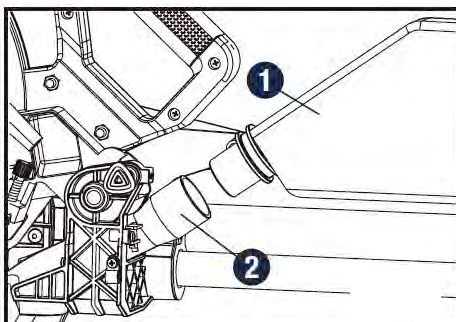


Fig. 9: Connecting the dust bag

7.7 Adjusting the cutting depth

The depth stop limits the downward movement of the saw blade when cutting grooves and other non-through cuts.

- Step 1: Disconnect the saw from the power source.
- Step 2: If the saw is in storage or transport
port position, loosen the cutting head locking pin (pull it out) and allow the head unit to lift completely.
- Step 3: Hold the handle firmly and press the
head assembly down while observing the depth of cut screw contact the top of the depth stop (Fig. 10A).
- Step 4: Turn the head of the cutting depth screw
(Pos. 1, Fig. 10B) (so that the thread contacts the depth stop) and check the movement of the lower part of the blade. This setting defines the cutting depth.

If a normal full depth cut is to be made, adjust the cutting depth screw so that it does not touch the depth stop when the head unit is fully lowered.

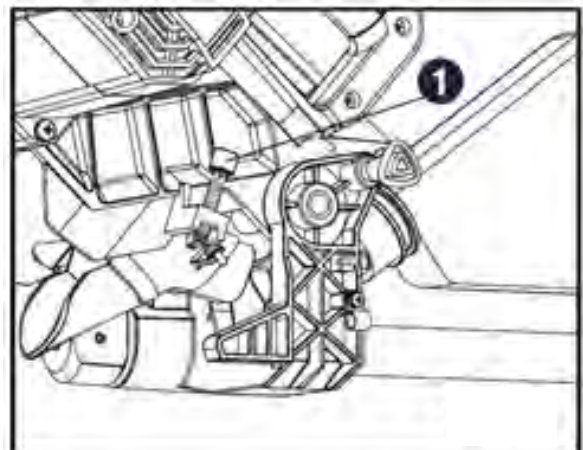
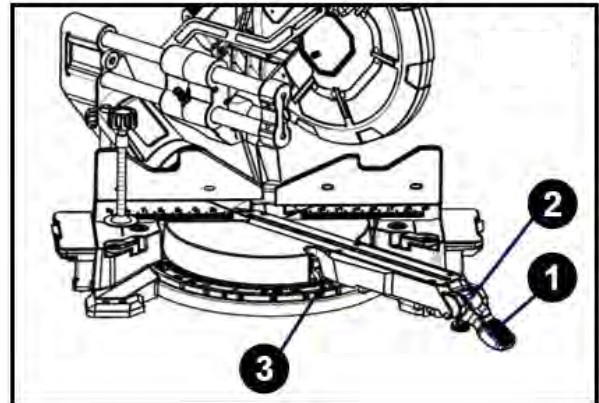


Fig. 10: Adjusting the cutting depth

7.8 Unlocking and locking the cutting head

Unlock

Press and hold the cutting head gently. Pull out the locking pin (Item 1, Fig. 11) to unlock the cutting head. The cutting head should move upward freely.

Lock

Move the cutting head to the lowest position. Secure the position and push the locking pin into the locked position. Please note that the locking mechanism may not work if the cutting depth is adjusted. Release the cutting depth limiter and lock the cutting head.

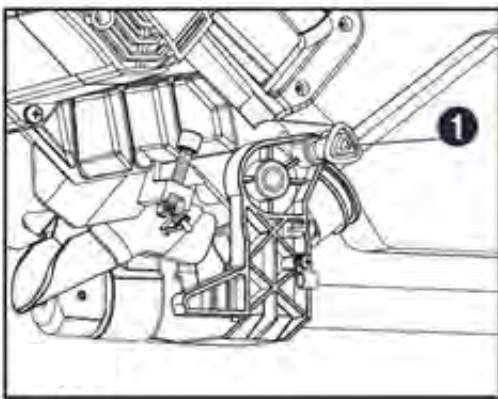


Fig. 11: Unlocking and locking the cutting head

7.9 Electrical connection



DANGER!

Danger of death from electric shock!

- Contact with live components is life-threatening. Live electrical components can move uncontrollably and cause serious injuries.

Before making any adjustments to the machine, unplug the power cord

- All work on the electrical installation may only be carried out by a qualified electrician.
- Avoid direct contact with the power plug's terminals when connecting or disconnecting the power plug. Contact with the power plug's terminals may cause an electric shock.

Make sure that

- the specifications (voltage, mains frequency, and fuse) match the specifications on the rating plate and the motor. Use the saw only in dry environments.

8 Operating the miter saw



WARNING!

- The miter saw may only be operated by a trained and experienced person. Other persons must stay away from the work area during operation.
- Improper use of the saw may result in injury to the upper limbs.

The following personal protective equipment must always be worn when working with the belt and disc sander:



8.1 LED cutting guide

The miter saw must be connected to a power source for the LED cutting guide to work.

The LED cutting guide is equipped with a push-button switch (item 15, Fig. 3) on the main handle. The LED cutting guide operates independently of the miter saw's ON/OFF switch. The light does not need to be turned on to operate the saw. When turned on, the LED cutting guide casts the shadow of the saw blade onto the workpiece, resulting in better cutting accuracy and requiring no calibration.

Do not look into the LED light source!

Step 1: Mark a line with a pencil where which you want to cut the workpiece.

Step 2: Place the workpiece on the miter tical.

Step 3: Turn on the LED switch on the main handle and then pull the main handle down to bring the saw blade close to the wood. Adjust the pencil line so that it aligns with the projected shadow line.

Step 4: Clamp the workpiece if necessary with the Workpiece clamp.

Step 5: Follow all cutting instructions for the Type of material to be cut.



A NOTICE!

For safe operation, it is important to know where the saw blade will contact the workpiece during the cutting process. Always perform the simulated cutting process with the switch off to check and understand the projected path of the saw blade. Adjust the workpiece clamps and stops to prevent contact with the lower guard and the cutting process.

8.2 Setting the miter angle (miter cut)



A NOTICE!

For a vertical cross-section (90° section) select a miter angle of 0°!

In addition to the continuously adjustable miter angle, there are fixed angle positions at 0°, 15°, 22.5°, 30° and 45°.

The angle adjustment for the miter cut is done on the angle scale of the saw table as follows:

- Step 1: To make a miter cut, unlock the table by lifting the mitre locking handle (item 1, fig. 12).
- Step 2: Press the miter lock knob (pos. 2, fig. 12) and turn the table to the right or left using the miter handle.
- Step 3: When the table is in the desired position position indicated on the miter scale (Item 3, Fig. 12), push the locking handle down to lock the saw table. The table is now locked at the desired angle.

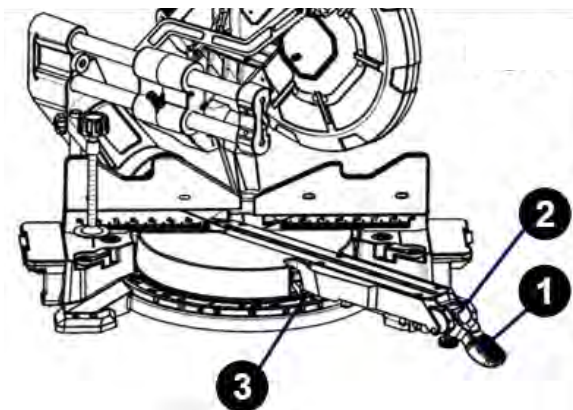


Fig. 12: Setting the miter angle

8.3 Tilting the saw head (bevel cut)

If a bevel cut is required, loosen the bevel cut locking knob (Item 1, Fig. 13) by turning it counterclockwise.

Step 1: Pull the stop pin (Pos. 2, Fig. 13) out of here.

Step 2: Tilt the cutting head to the desired angle as indicated on the angle scale.

Step 3: The saw blade can be used at any angle. The cutting head can be positioned from a straight cut of 90° (0° on the scale) to a left-hand bevel of 45°. Tighten the bevel locking knob to lock the cutting head in position. The stops are fixed at 0° and 45°.

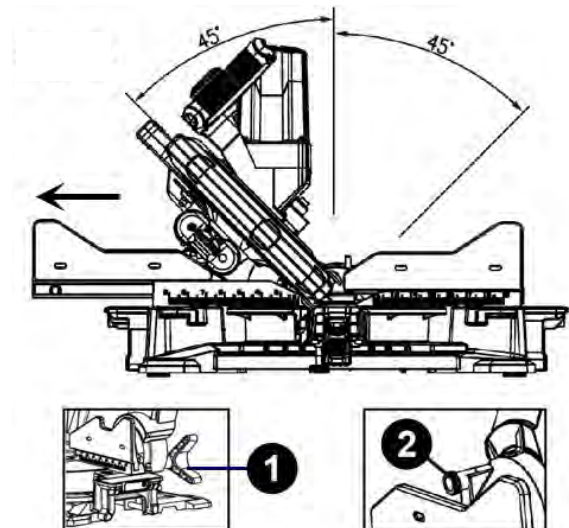


Fig. 13: Adjusting the tilt angle



A NOTICE!

It may be necessary to adjust or remove the movable stop to ensure the correct distance (saw blade distance approx. 5-8 mm) before making the miter cut and the bevel cut.

Always tighten the miter lock knob and lock the miter lock handle and miter grip before making a cut.

8.4 Cross cut

A cross cut is the combination of a miter cut and a bevel cut in one operation.

Step 1: Loosen the locking knob for the bevel position (Item 1, Fig. 14) and position the cutting head at the desired angle. Lock the miter lock knob.

Step 2: Lift the miter lock handle, Press the miter lock button and set the desired miter angle on the miter scale. Push the locking handle down to lock the saw table.

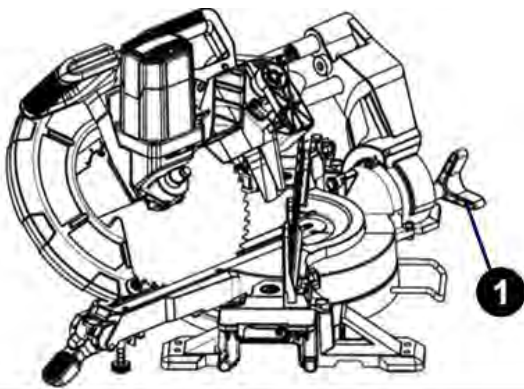


Fig. 14: Cross section

8.5 Sawing panels up to a width of 34 cm

To avoid injuries:

- Allow the saw blade to reach full speed before cutting. This reduces the risk of the workpiece being ejected.
- Do not make cross cuts by lowering the saw blade and pulling the cutting head through the wood towards you.

8.5.1 Sawing wide panels

- Step 1: Unlock the locking knob of the slide least and allow the cutting head unit to move freely.
- Step 2: Set the desired slope and/or Set the miter angle and lock it.
- Step 3: Secure the workpiece (Pos. 2, Fig. 15) with a workpiece clamp (item 1, Fig. 15).
- Step 4: Grasp the gear lever (Pos. 3, Fig. 15) and pull it forward until the center of the saw blade is over the front of the workpiece.

- Step 5: Turn on the saw by pressing the switch on. Once the saw has reached full speed, slowly push the trigger down, cutting through the front edge of the workpiece.

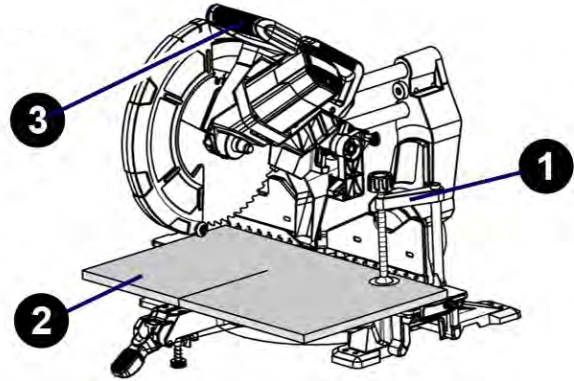


Fig. 15: Sawing wide panels

8.6 Stop of the extension table

The extension table stop is used to limit the cutting length of the workpiece. Simply lift it up to use.

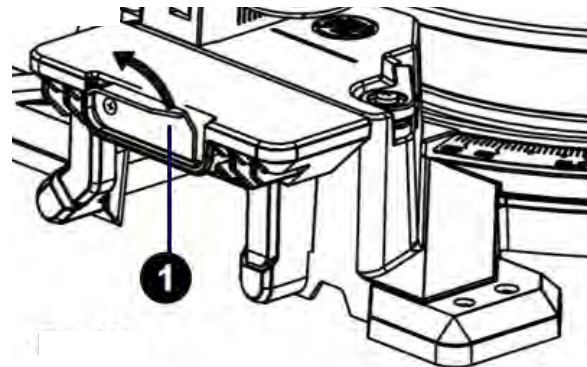


Fig. 16: Stop of the extension table

8.7 Special cutting angles

Special cutting angle mitre 31.6°(31.62°), bevel cut 33.9°(33.86°) for the production of 52° right-angled cornices (Fig.17).

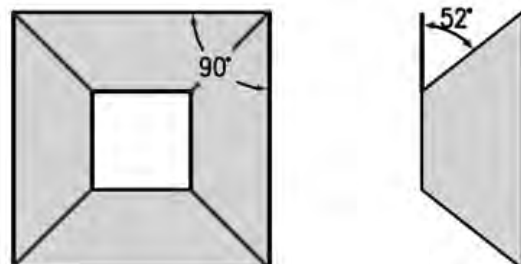


Fig. 17: Cutting angle

9 Care, maintenance and repair



DANGER!

Danger of death from electric shock!

Contact with live components is life-threatening. Live electrical components can perform uncontrolled movements and cause serious injuries.

- Unplug the power cord before starting any cleaning or maintenance work.

9.1 Care after work



Wear protective gloves!

Never use harsh cleaning agents for any cleaning work. This may damage or destroy the device.

The ventilation openings of the device must always be kept clean and free from dirt.

Check regularly for dust or foreign matter getting into the motor covers and switch. Remove accumulated dust with a soft brush. Wear safety goggles to protect your eyes when cleaning.

Lubricate all moving parts at regular intervals.

9.2 Maintenance and repair

After each use

Step 1: Unplug the power cord from the can.

Step 2: Empty and clean the dust bag

phone

Step 3: Clean the saw from sawdust and Sawdust.

Step 4: Check the saw for damage to the safety devices and the saw blade. If necessary, carry out repairs or arrange for them to be carried out in accordance with the safety instructions.

Step 5: Check regularly that all fastening screws are tightened, especially the outer flange.

The lubricant in the gear box must be replaced after frequent use of the saw. Please contact an authorized service center for this procedure.

Maintenance and repair work may only be carried out by qualified personnel.

If the miter saw is not functioning properly, contact a specialist dealer or our customer service. You can find the contact details in Chapter 1.2 Customer Service.

All protective and safety devices must be reinstalled immediately after repair and maintenance work has been completed.

10 Disposal and recycling of old equipment

In your own interest and in the interest of the environment, please ensure that all components of the machine are disposed of only via the designated and approved methods.

10.1 Decommissioning

Obsolete equipment must be professionally taken out of service immediately to prevent future misuse and danger to the environment or people.

Step 1: Remove all environmentally hazardous operating materials from remove from the old device.

Step 2: If necessary, convert the machine into manageable and dismantle reusable assemblies and components.

Step 3: The machine components and operating materials to the designated disposal routes.

10.2 Disposal of electrical equipment

Please note that electrical devices contain a variety of recyclable materials as well as environmentally harmful components. Please help ensure that these components are separated and disposed of properly. If in doubt, please contact your local waste disposal authority. If necessary, you may need to seek the assistance of a specialized waste disposal company for recycling.

10.3 Disposal via municipal collection points

Disposal of used electrical and electronic equipment (Applicable in the countries of the European Union and other European countries with a separate collection system for these devices).



The symbol on the product or its packaging indicates that this product should not be treated as normal household waste.

, but must be handed over to a collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help protect the environment and the health of others. Incorrect disposal of this product endangers the environment and human health. Recycling materials helps reduce the consumption of raw materials. For more information about recycling this product, please contact your local council, your household waste disposal service, or the shop where you purchased the product.

11 Troubleshooting

Mistake	Possible causes	Fix
Engine does not start	<ol style="list-style-type: none"> 1. No mains voltage 2. Motor, cable or plug defective, mains fuses blown. 	<ol style="list-style-type: none"> 1. Have the power connection checked by qualified personnel. 2. Replace the fuse or cable. Contact customer service.
Engine gets hot	<ol style="list-style-type: none"> 1. Motor short circuit 2. Motor overload 	<ol style="list-style-type: none"> 1. Unplug the saw and have it repaired by qualified personnel. 2. Check whether the saw blade is suitable for the material to be cut. Check whether the saw blade is still sufficiently sharp Take a break from work and let the engine cool down.
Saw blade speed too low	<ol style="list-style-type: none"> 1. Motor defective 2. Mains voltage too low 	<ol style="list-style-type: none"> 1. Have the engine checked by qualified personnel. 2. Have the mains voltage checked by qualified personnel
Saw vibrates, saw blade hits	<ol style="list-style-type: none"> 1. Saw blade does not meet the specifications 2. Saw blade not sufficiently secured 3. Saw blade defective 	<ol style="list-style-type: none"> 1. Check whether the saw blade is suitable for installation based on the specifications in the technical data. 2. Tighten the fastening screw. 3. Check the saw blade for mechanical damage and replace it if necessary.
Cutting angle not maintained	Saw positions not properly fixed.	Check that the saw is fixed in the appropriate position so that the angle cannot change during sawing.
Turntable is difficult to move	Sawdust in the turning area	Remove the sawdust.

12 spare parts



DANGER!

Risk of injury due to the use of incorrect spare parts!

The use of incorrect or faulty spare parts may endanger the operator and cause damage and malfunctions.

- Only original spare parts from the manufacturer or spare parts approved by the manufacturer may be used.

- If you have any questions, please always contact the manufacturer.



Tips and recommendations

The use of unauthorized spare parts will void the manufacturer's warranty.

12.1 Ordering spare parts

Spare parts can be obtained from authorized dealers or directly from the manufacturer. Contact details can be found in Chapter 1.2 Customer Service.

Please provide the following key information when making inquiries or ordering spare parts:

- Device type
- Item number
- Position number
- Year of construction
- Crowd
- desired shipping method (mail, freight, sea, air, express)
- Shipping address

Spare parts orders without the above information cannot be considered. If the shipping method is not specified, shipping will be at the supplier's discretion.

Information about the device type, article number and year of manufacture can be found on the type plate attached to the device.

Example

The dust bag assembly for the KGZ 305 EI miter saw must be ordered. The dust bag assembly is numbered 7 in spare parts drawing 1.

When ordering spare parts, send a copy of the spare parts drawing (1) with the marked component (dust bag assembly) and marked position number (7) to the authorized dealer or spare parts department and provide the following information:

Device type:	Miter saw KGZ 305 EI
Item number:	5702305
Drawing number:	1
Position number:	7

The following drawings are intended to help identify necessary spare parts in the event of service.

12.2 Spare parts drawings KGZ 305 EI

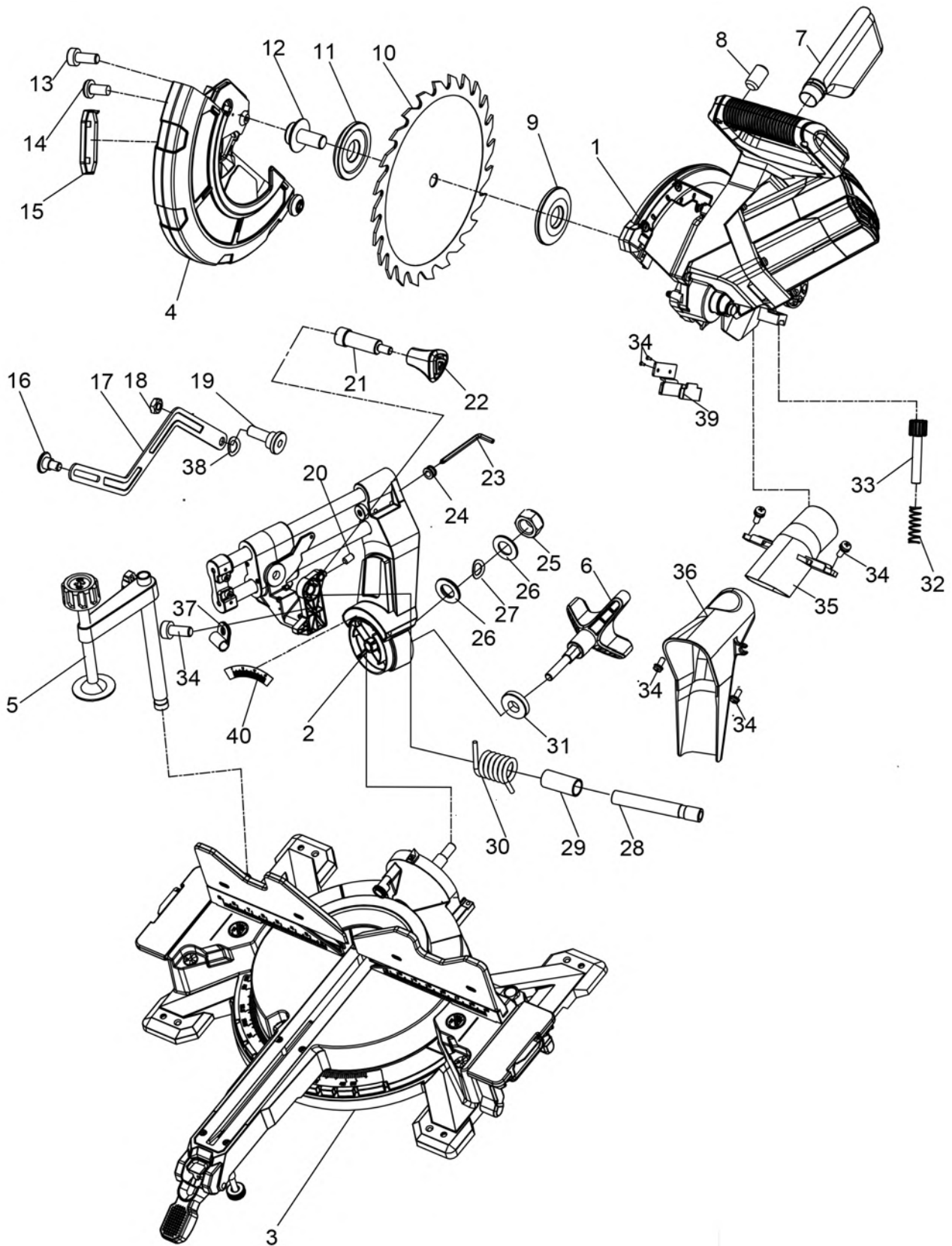


Fig. 18: Spare parts drawing KGZ 305 EI

Spare parts drawing 2

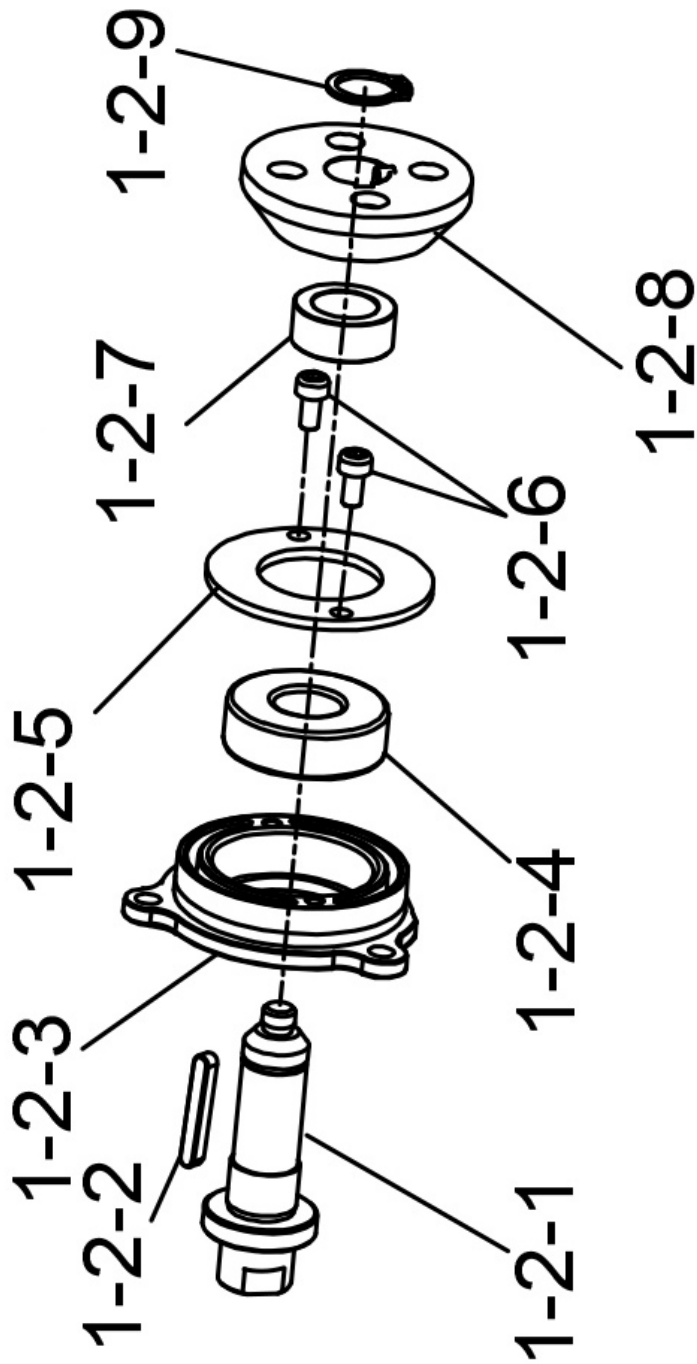


Fig. 19: Spare parts drawing 2 KGZ 305 EI

Spare parts drawing 3

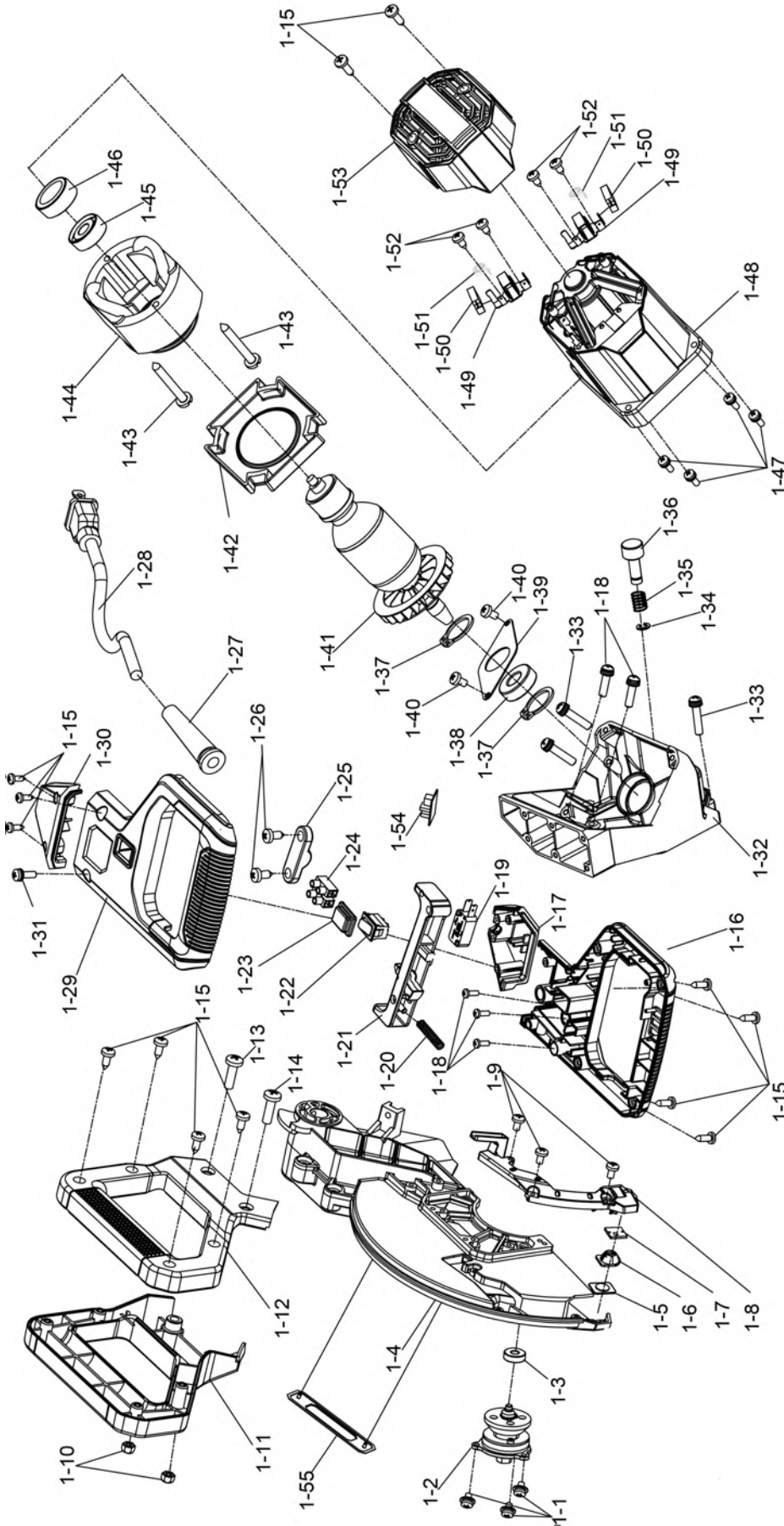


Fig. 20: Spare parts drawing 3 KGZ 305 EI

Spare parts drawing 4

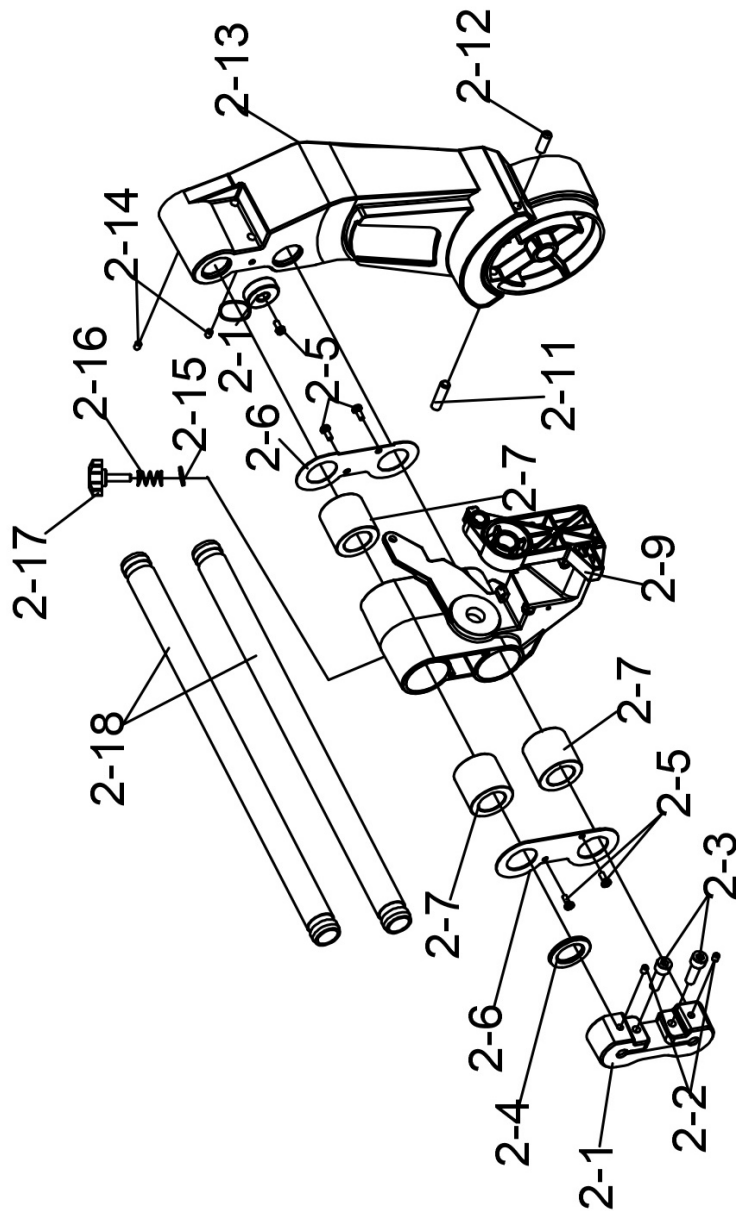


Fig. 21: Spare parts drawing 5 KGZ 305 EI

Spare parts drawing 5

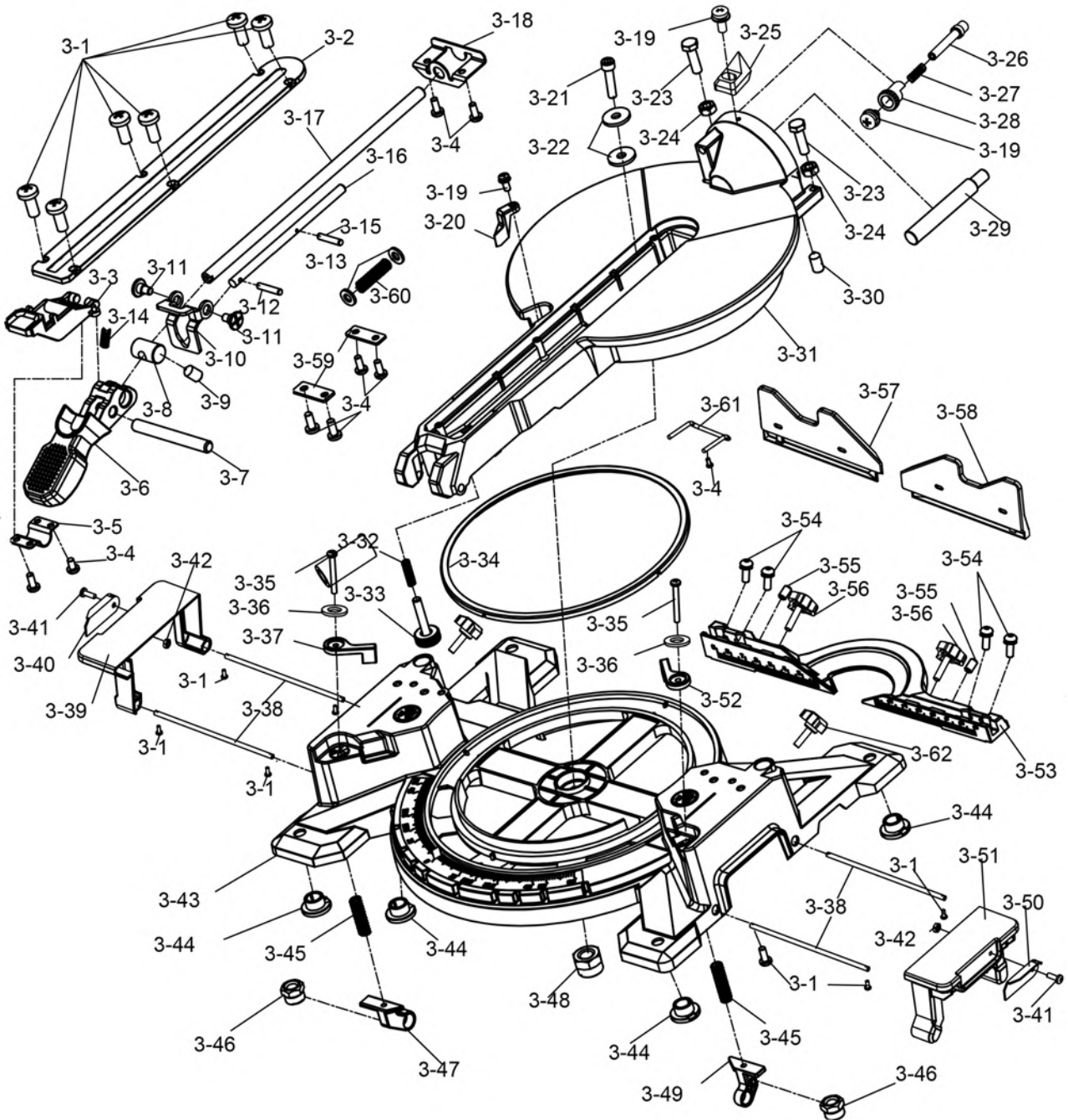
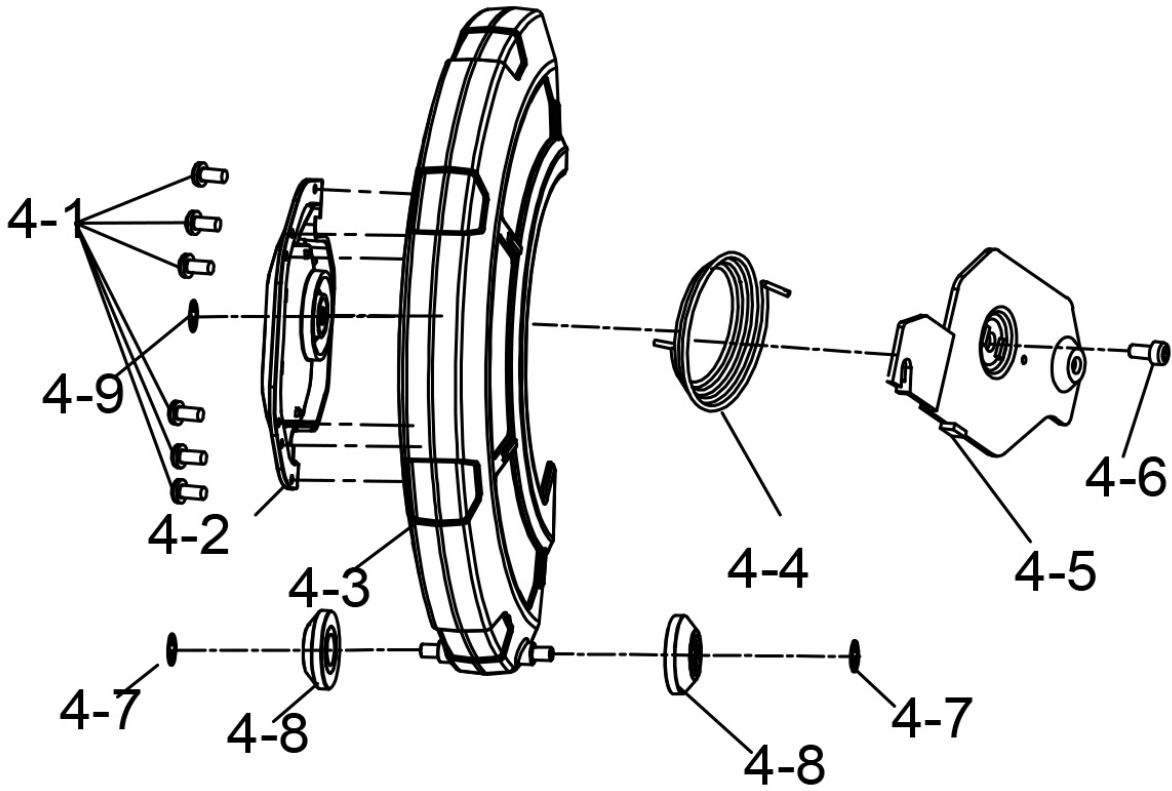


Fig. 22: Spare parts drawing 5 KGZ 305 EI

Spare parts drawing 6



Spare parts drawing 7

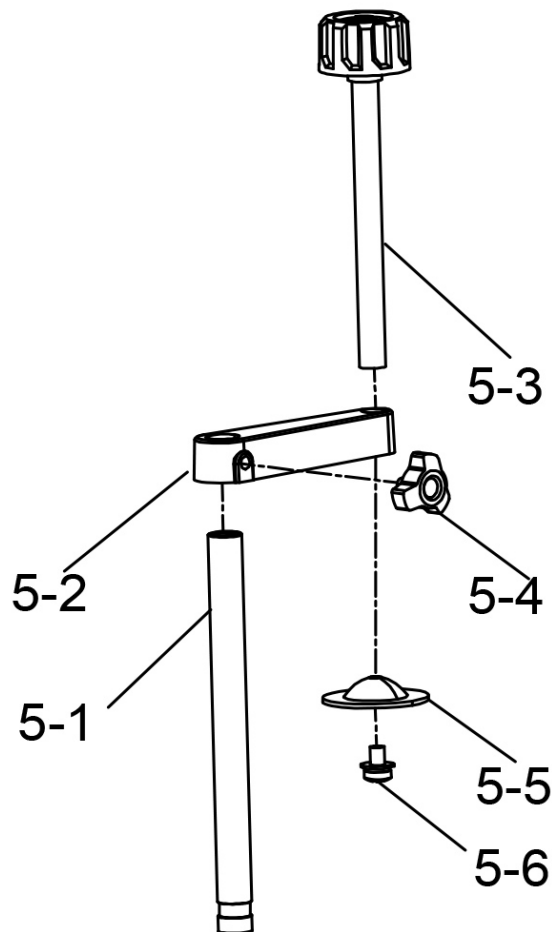
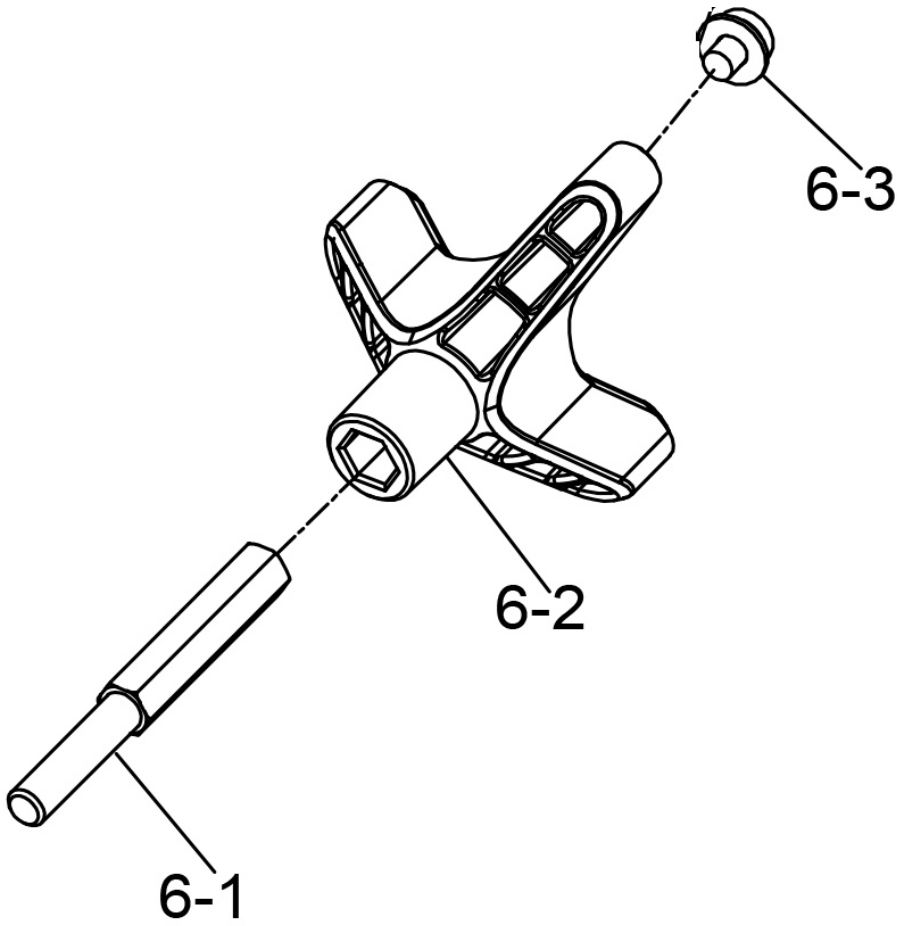


Fig. 23: Spare parts drawing 6 and spare parts drawing 7 KGZ 305 EI

Spare parts drawing 8



Spare parts drawing 9

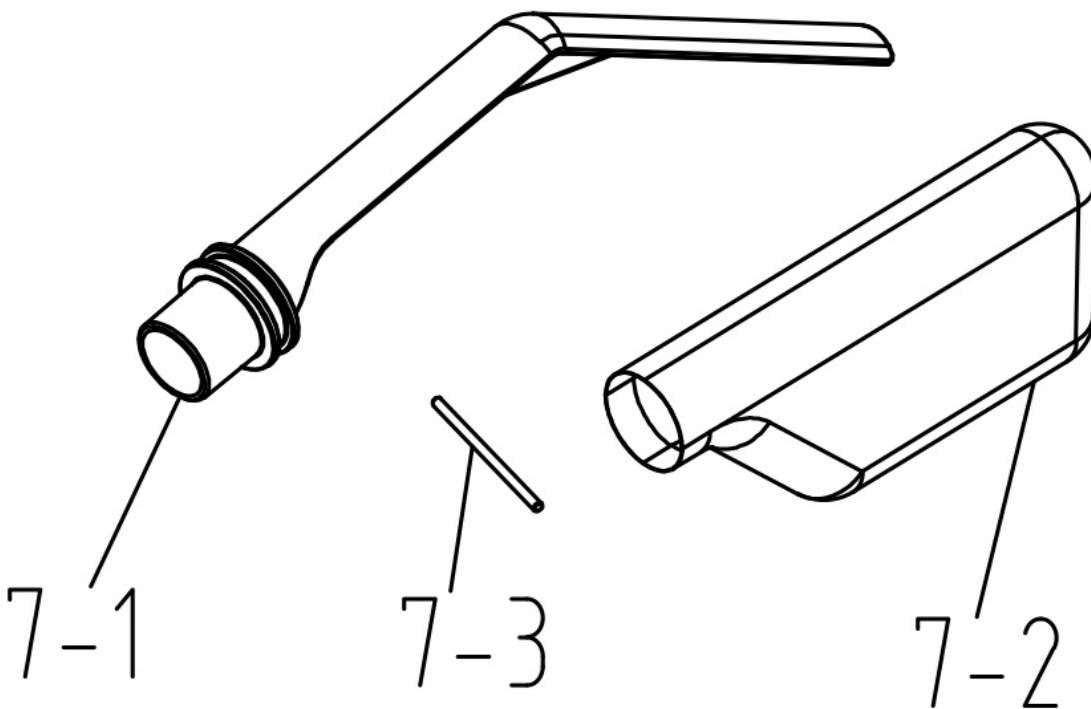


Fig. 24: Spare parts drawing 8 and spare parts drawing 9

Spare parts list

Pos.	Designation	Designation	Size	Crowd
			Size	Qty.
1	Motor assembly	Engine assembly	220V	1
2	Pivot pin assembly	Pivot assembly		1
3	Base-table assembly	Base&table assembly		1
4	Saw blade guard	Blade guard assembly		1
5	Clamping device assembly	Working clamping assembly		1
6	bevel cut-Locking handle	Bevel lock handle assembly		1
7	Vacuum cleaner bag assembly	Dust bag assembly		1
8	Adjusting screws	Set screws	M6X10	1
9	inner flange	Inner flange	S20C	1
10	saw blade	Blade	12"*25.4*60T	1
11	outer flange	Outer flange	S20C	1
12	screw	Screw	M8X16	1
13	fitting screw	Shoulder screw	M5X10	
14	screw	Screw	M5X12	1
15	Protective cover below	Lower blade guard cover	PA6	1
16	screws	Screw	M5X14 (4mm)	1
17	rod	Linkage	Q235	1
18	Lock nut	Lock nut	M6	1
19	screw	Screw	M6*15	1
20	Adjusting screw	Set Screw	34G255_5*10	1
21	Head locking pin	Head lock-down pin	S45C	1
22	knob	Knob	PA6	1
23	Hexagon wrench	Hex wrench	6*40*120mm	1
24	key holder	Wrench holder		1
25	Lock nut	Lock nut	M12_galvanized Whitney	1
26	washer	Washer	12.5*22*1.5_black	2
27	butterfly feather	Butterfly spring	12*24*1.2*2_black	1
28	Wave	Shaft	S20C	1
29	Torsion spring bushing	Torsion Spring Bushing	PA6	1
30	torsion spring	Torsion Spring	65 minutes	1
31	washer	Washer	¢10*25*5_3G185	1
32	Feather	Spring	65MN	1
33	Depth adjustment knob	Depth adjustment knob	M6X33	1

34	Phillips screws	Cross head screws	M4X12	7
35	Rear suction nozzle	Rear dust collection port	PA6+GF30	1
36	Front suction nozzle	Front dust vent	PA6+GF30+TPE	1
37	cable clamp	Cord clip	PA6	1
38	seal	Gasket	10	1
39	cover	Fenders	Q235	1
MOTOR ASSEMBLY				
1-1	Phillips screws	Cross head screws	M5X16	3
1-2	Recording shaft	Arbor assembly		1
1-3	warehouse	Bearing	607 Z_CHL	1
1-4	Protective cover above	Upper blade guard	ADC12	1
1-5	LED cover	LED cover	3G185Li	1
1-6	light	Lamp shade		1
1-7	LED lamp	LED lamp	39G255 L303mm	1
1-8	LED lamp cover	LED lamp cover	PA6	1
1-9	screw	Screw	M4X10	3
1-10	hexagon nut	Hex nut	M6	2
1-11	Carrying handle left	Left carry handle	PP+30	1
1-12	Carrying handle right	Right carry handle	PP+31	1
1-13	Phillips screws	Cross head screws	M6X36	1
1-14	Phillips screws	Cross head screws	M6X26	1
1-15	Sheet metal screws	Self-tapping screws	ST4.2*16	13
1-16	Lower handle	Lower handle	PA6+GF30+TPE	1
1-17	Handle connector below	Lower handle interface	PA6+GF30	1
1-18	screw	Screw	M5X20	5
1-19	Switch	Switch	MSB-1215A_15(15)A	1
1-20	Toggle switch spring	Switch trigger spring	<small>65 minutes</small>	1
1-21	Toggle switch assembly	Switch trigger assembly	PA6+GF30	1
1-22	LED switch	LED switch	KND1-6/1_6(6A)_2 Pin_OFF+LED	1
1-23	LED switch cover	LED switch cover		1
1-24	terminal	terminal		1
1-25	cable clamp	Cable Clamp	PA6-GF30	1
1-26	screw	Screw	ST4.2*13_black	2
1-27	Cable kink protection	Cable sheath	PVC	1
1-28	Power cable	Power cord		1
1-29	Upper handle	Upper handle	PA6-GF30	1

1-30	Handle connector above	Upper handle interface	PA6-GF30	1
1-31	screws	Screw	M5X50	1
1-32	Gearbox	Gearbox	ADC12	1
1-33	screw	Screw	M5X25	3
1-34	E-ring	E-ring	φ6	1
1-35	Feather	Spring	φ0.8*φ9.0*12.8*4-36G255	1
1-36	spindle lock	Spindle Lock	S45C	1
1-37	C-ring	C-ring	φ14	2
1-38	warehouse	Bearing	6202 2RS_CHL	1
1-39	Bearing cover	Bearing cover	q235	1
1-40	screw	Screw	M5x10	2
1-41	High-voltage fitting	High voltage armature		1
1-42	baffle	Baffle	PA6-GF30	1
1-43	screw	Screw	ST5*60_galvanized	2
1-44	High-voltage stator	High-voltage stator		1
1-45	warehouse	Bearing	608	1
1-46	bearing sleeve	Bearing sleeve	nylon (loanword)	1
1-47	screw	Screw	M5X35	4
1-48	engine housing	Motor house	PA6-GF30	1
1-49	brush	Brush	6.5*13.5 galvanized_G-K1935T	2
1-50	Heavy-duty brush holder	High-voltage brush holder		2
1-51	Feather	Spring	65 minutes	2
1-52	screw	Screw	ST4X10	4
1-53	Motor end cap	Engine end cap	PA6-GF30	1
1-54	Power source	High-frequency electric source		1
Pickup shaft assembly				
1-2-1	Recording shaft	Arbor	40Cr	1
1-2-2	Flat key	Flat key	4X4X12	1
1-2-3	Gearbox cover	Gearbox cover	ADC12	1
1-2-4	warehouse	Bearing	6202	1
1-2-5	bearing cover	Bearing cover	Q235	1
1-2-6	hexagon socket screw	Socket screws	M4x10	2
1-2-7	ring	ring	Q235	1
1-2-8	Gearbox	Gear		1
1-2-9	C-ring	C-ring	Φ14	1

CRANK ARM & SLIDING RAIL				
2-1	Slide rail cover	Slide bar cover	ADC12	1
2-2	Adjusting screws	Set screws	M6X10	2
2-3	screw	screw	M6X25	2
2-4	Feather	Spring	PVC	1
2-5	screw	Screw	M4x10	4
2-6	bearing cover	Bearing cover	Q235	2
2-7	plain bearings	liner bearing	ø25*ø40*35	2
2-9	bracket	Bracket	ADC12	1
2-10	bumper block	Bumper block	PVC	1
2-11	Adjusting screws	Set screws	M8X35	1
2-12	Adjusting screws	Set screws	M8X25	1
2-13	Crank arm	Crank arm	ADC12	1
2-14	Adjusting screws	Set screws	M6X12	2
2-15	washer	Washer	6*12*1.5	1
2-16	Feather	Spring	65 minutes	1
2-17	knob	Knob	M6X33	1
2-18	slider	Slide bar	S45C	2
BASE & TABLE				
3-1	screw	screw	M4*10_black	14
3-2	Table insert	Table insert	ABS	1
3-3	Switch	Switch	PA6-GF30	1
3-4	screw	Screw	M4X10	9
3-5	bracket	Button press plate	Q235	1
3-6	Handle for miter lock	Miter angle locking lever	PA6-GF30	1
3-7	Pen	Pin	c8*68_black	1
3-8	sleeve	Adjust the block	φ13x20_M8	1
3-9	Adjusting screws	Set screws	M6X6	1
3-10			Q235	1
3-11	screw	Screw	M5*1	2
3-12	Pen	Pin	3x18	1
3-13	washer	Washer	6*12*1.5	2
3-14	Feather	Spring	65 minutes	1
3-15	Pen	Pin	2*10	1
3-16	Miter stop bar	Miter hold bar	s20c	1
3-17	Miter lock strip	Miter lock bar	s20c	1

3-18	Connection plate	Lock Plates	SK5	1
3-19	screw	Screw	M4X14	3
3-20	Tilt indicator	Bevel Indicator	PA6	1
3-21	hexagon socket screw	Socket screws	M8X35	1
3-22	washer	Washer	ø8*22*1.2	2
3-23	hexagon socket screw	Socket screws	M6x30	2
3-24	hexagon nut	Hex nut	M6	2
3-25	Miter display	Miter Indicator	PA6	1
3-26	Pen	Pin	S20C	1
3-27	Feather	Spring	65 minutes	1
3-28	knob	Knob	PA6-GF30	1
3-29	tapered shaft	Bevel shaft	S20C	1
3-30	Adjusting screws	Set screws	M8x10	1
3-31	Table	Table	ADC12	1
3-32	Feather	Spring	65 minutes	1
3-33	Support foot	Support foot	PA6-GF30	1
3-34	protective sleeve	Wear sleeve	PA6	1
3-35	Phillips screws	Cross head screws	M5X50	2
3-36	washer	Washer	ø5*12_black	2
3-37	Locking lever (lifting)	Extension bar lock trigger	PA6-GF30	1
3-38	Extension rod	Extension bar	Q235	4
3-39	Transport table left	Left Extrusion table	ADC12	1
3-40	Sliding stop left	Left Slide Stop	Q235	1
3-41	screw	Screw	M5*20_black	2
3-42	Lock nut	Lock nut	M5	2
3-43	base	base	ADC12	1
3-44	Foot	Ruber foot		4
3-45	Feather	Spring	φ1*φ8*30.5*10_11G30 5	2
3-46	hexagon nut	Hex nut	M5*8*4	2
3-47	Extension rod lock holder left	Left extension bar lock holder	PA6-GF30	1
3-48	Lock nut	Lock nut	M8	1
3-49	Locking handle (right)	Lock handle (Right)	PA6-GF30	1
3-50	Sliding stop (left, right)	Right Left Slide Stop	Q235	1
3-51	Transport table right	Right Extrusion table	ADC12	1
3-52	Locking lever (lifting)	Extension bar lock trigger	PA6-GF30	1
3-53	stop	Fence	ADC12	1

3-54	Half-round Allen screws	Half-round socket screws	M6X20	4
3-55	screw	Screw	M6X10	2
3-56	knob	Knob	PA6-GF30	2
3-57	Sliding stop left	Left sliding fence	ADC12	1
3-58	Sliding stop right	Right sliding fence	ADC12	1
3-59	crucible	Platen	Q235	2
3-60	Feather	Spring	65 minutes	1
3-61	Rear support feet	Rear support feet	Q235	1
LOWER SAW BLADE GUARD				
4-1	rivet	Rivet	4*12_semi-hollow	6
4-2	Covering the shield	Shield cover	ADC12	1
4-3	Lower blade guard	Lower blade guard	PC Gray	1
4-4	torsion spring	Torsional spring	65 minutes	1
4-5	Saw blade guard holder	Blade guard support	Q235	1
4-6	fitting screw	Shoulder screws	M6X14 (6.5)	1
4-7	Internal toothed washer	Inner tooth washer	Bore Φ 5	2
4-8	wheel	Wheel	PVC	2
4-9	Lock nut	Lock nut	M6	1
CLAMPING DEVICE				
5-1	Support pillars	Support pole	S20C	1
5-2	boom	Clamp arm	ADC12	1
5-3	knob	Knob	M12X135	1
5-4	knob	Knob	M6X10	1
5-5	crucible	Platen	Q235	1
5-6	screw	Screw	M4*14_ç9_black	1
Handle assembly with tilt lock				
6-1	hexagon screw	Hex bolt	M10*92.5_12K216SK	1
6-2	Angled locking handle	Bevel lock handle	PA6-GF30	1
6-3	screw	Screw	M4X14	1
Dust bag assembly				
7-1	Vacuum cleaner bag holder	Dust bag support	PP	1
7-2	vacuum cleaner bags	Dust bag assembly	PA6-GF30	1
7-3	plate	tile		1

13 Circuit diagram

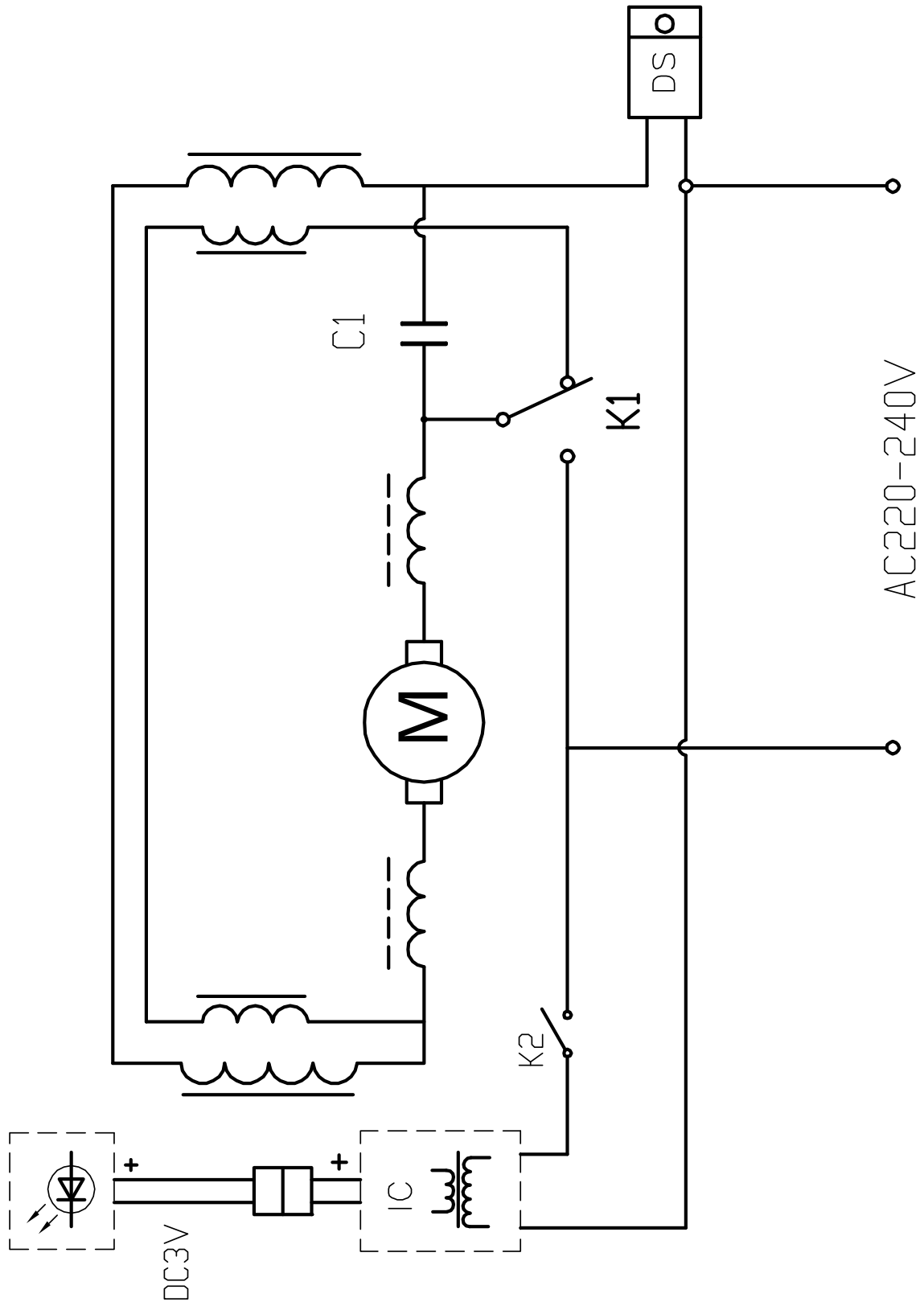


Fig. 25: Electrical diagram KGZ 305 EI

14 EU Declaration of Conformity

According to Machinery Directive 2006/42/EC Annex II 1.A

Manufacturer/distributor: Stürmer Maschinen GmbH
 Dr.-Robert-Pfleger-Str. 26
 D-96103 Hallstadt

hereby declares that the following product

Product group: Wooden star®Woodworking machines
Machine type: Miter saw
Name of the machine: KGZ 305 EI
Item number: 5702306
Serial number: _____

Year of construction: 20____

* Fill in these fields according to the information on the type plate

complies with all relevant provisions of the above-mentioned Directive and the other applicable Directives (hereinafter) – including any amendments thereto in force at the time of the declaration.

Other applicable EU directives: 2014/30/EU EMC Directive
 2011/65/EU RoHS Directive

The following harmonized standards were applied:

- EN ISO 12100:2010 Safety of machinery - General principles for design - Risk assessment and risk reduction
 - EN 60204-1:2018 Safety of machinery - Electrical equipment of machines - Part 1: General requirements
 - EN IEC 55014-1:2021 Electromagnetic compatibility - Requirements for household appliances, electric tools and similar equipment - Part 1: Emission
 - EN IEC 55014-2:2021 Electromagnetic compatibility - Requirements for household appliances, electric tools and similar equipment - Part 2: Immunity - Product family standard
 - EN IEC 61000-3-2:2019 + A1:2021 EMC - Part 3-2: Limits - Limits for harmonic currents (equipment input current <= 16 A per phase)
 - EN 61000-3-3:2013 + A1:2019 + A2:2021 + A2:2021/AC:2022 EMC - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems for equipment with a rated current <= 16 A per phase not subject to special connection conditions
 - EN IEC 61000-3-11:2019 EMC - Part 3-11: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems for equipment with a rated current ≤ 75 A per phase and subject to special connection conditions
 - EN 62841-1:2015 + AC:2015 + A11:2022 Electric motor-operated hand-held tools, portable tools and lawn and garden machinery - Safety - Part 1: General requirements
 - EN IEC 62841-3-9:2020 + A11:2020 Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3-9: Particular requirements for transportable mitre saws
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Notes



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