

Instruction Manual

Chop- and Mitre Saw

KGZ 2540 VARIO

KGZ 3050 VARIO



KGZ 2540 VARIO



KGZ 3050 VARIO

KGZ SERIES

Imprint

Product identification

| Chop- and Mitre Saw | Item number |
|---------------------|-------------|
| KGZ 2540 VARIO | 5701254 |
| KGZ 3050 VARIO | 5701315 |

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Information about the operating instructions

Genuine operating instructions

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Subject to technical modifications and changes.

Contents

| | |
|---|-----------|
| 1 Introduction | 3 |
| 1.1 Copyright | 3 |
| 1.2 Customer service | 3 |
| 1.3 Disclaimer | 3 |
| 2 Safety | 3 |
| 2.1 Legend of symbols | 3 |
| 2.2 Operator responsibility | 4 |
| 2.3 Requirements to staff | 4 |
| 2.4 Personal protective equipment | 5 |
| 2.5 Safety labels on the chop- and mitre saw | 6 |
| 2.6 General safety instruction for the electrical tools | 6 |
| 2.7 General safety rules | 7 |
| 2.8 Additional safety rules for the Chop- and Mitre Saw | 8 |
| 3 Intended use | 9 |
| 4 Technical Data | 10 |
| 4.1 Type plate 3050 VARIO | 10 |
| 5 Transport, packaging, storage | 10 |
| 5.1 Packaging | 11 |
| 5.2 Storage | 11 |
| 6 Device description | 11 |
| 6.1 Scope of delivery | 13 |
| 7 Assembly | 13 |
| 7.1 Saw head | 13 |
| 7.2 Attaching the dust bag (Fig. 8) | 14 |
| 7.3 Attaching the downholder (Fig. 9) | 14 |
| 7.4 Attaching the rear support rod (Fig. 10) | 15 |
| 7.5 Unlocking the sliding carriage (Fig. 11) | 15 |
| 7.6 Storage of the power cable (Fig. 12) | 15 |
| 7.7 Saw blade socket wrench (Fig. 13) | 16 |
| 7.8 Attaching and removing the sliding stop (Fig. 14) | 16 |
| 8 Operation of the chop and mitre saw | 17 |
| 8.1 Mounting the machine | 17 |
| 8.2 Connection to the power source | 18 |
| 8.3 Setting the tool | 19 |
| 8.4 The laser line | 24 |
| 8.5 Switching on the saw (Fig. 34) | 27 |
| 8.6 Sliding stop (Fig. 35) | 28 |
| 8.7 Sliding carriage system (Fig. 36) | 28 |
| 8.8 Quick cam table locking application (Fig. 37) | 28 |
| 8.9 Saw blade change | 33 |
| 9 Care, maintenance and repairs | 35 |
| 9.1 Care after end of work | 35 |
| 9.2 Maintenance and repair/repair | 35 |
| 10 Troubleshooting | 36 |
| 11 Disposal, reusing used machines | 36 |
| 11.1 Decommissioning | 36 |
| 11.2 Disposal of electrical equipment | 37 |
| 11.3 Disposal via municipal collection points | 37 |
| 12 Spare parts | 37 |
| 12.1 Spare parts orders | 37 |
| 12.2 Spare parts drawings from year of manufacture December 2019 | 38 |
| 12.3 Spare parts drawings valid until end of November 2019 | 42 |
| 13 Electrical circuit diagram | 46 |
| 14 EC-Declaration of Conformity | 47 |
| 15 List of recyclable materials | 48 |

1 Introduction

You have made an excellent choice in purchasing a HOLZKRAFT Chop- and Mitre Saw.

Carefully read the operating instructions prior to commissioning.

They describe correct commissioning, intended use and safe as well as efficient operation and maintenance of your chop- and mitre saw.

The operating instructions form part of the wood band saw. Keep these operating instructions at the installation location of your chop- and mitre saw. Also observe the local accident prevention regulations and general safety regulations for the use of the chop- and mitre saw.

1.1 Copyright

The contents of these operating instructions are protected by copyright. Their application is permitted within the context of the use of the chop- and mitre saw. Any further use shall not be permitted without written consent by the manufacturer. For the protection of our products, we shall register trademark, patent and design rights, as this is possible in individual cases. We strongly oppose any infringement of our intellectual property.

1.2 Customer service

Please contact your specialist retailer if you have any questions regarding your chop- and mitre saw or require any technical information. Your specialist retailer will be happy to support you with specialist advice and information.

Germany:

Stürmer Maschinen GmbH
Dr.-Robert-Pfleger-Str. 26
D-96103 Hallstadt
Germany

Repair service:

Fax: 0049 (0) 951 96555-111
Email: service@stuermer-maschinen.de

Spare parts orders:

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

We are always interested in valuable experience and knowledge gained from using the application, which then could be shared and be valuable to develop our products even further.

1.3 Disclaimer

All data in these operating instructions has been compiled on the basis of the state-of-the-art, valid standards and guidelines as well as our many years of expertise and experience.

The manufacturer shall not be liable for damage in the following cases:

- Non-observance of these operating instructions
- Unintended use
- Deployment of untrained staff
- Conversions at one's own responsibility
- Technical modifications
- Use of unauthorised spare parts

The actual scope of delivery may deviate from the descriptions and illustrations in this document as a result of special variants, optional extras or recent, technical modifications.

The obligations defined in the supply contract shall apply in addition to the general terms and conditions and the manufacturer's general terms and conditions as well as the statutory regulations valid at the time of the conclusion of the contract.

2 Safety

This section provides an overview of all important safety packages for personal protection as well as safe and reliable operation. The sections on individual service life phases contain additional, specifically applicable safety information.

2.1 Legend of symbols

Safety instructions

Safety instructions in these operating instructions have been highlighted with symbols. Safety instructions are indicated by signal terms that express the degree of risk involved.



DANGER!

This combination of symbol and signal term indicates a directly dangerous situation which may cause death or serious injury if not averted.



WARNING!

This combination of symbol and signal term indicates potentially hazardous situations which may cause death or serious injury if not averted.



ATTENTION!

This combination of symbol and signal term indicates a potentially hazardous situation which may cause minor or light injuries if it is not averted.



IMPORTANT!

This combination of symbol and signal term indicates a potentially dangerous situation which may cause material damage or harm the environment if it is not averted.



NOTE!

This combination of symbol and signal term indicates a potentially dangerous situation which may cause material damage or harm the environment if it is not averted.

Tips and recommendations



Tips and recommendations

This symbol highlights useful tips and recommendations as well as information for efficient and reliable operation.

Observe the safety information in these operating instructions to minimise the risk of personal injury as well as material damage and prevent hazardous situations..

2.2 Operator responsibility

Operators are defined as the persons who operate the machine for commercial or profit-based purposes or provide the machine to third parties for use or application and bear the legal product responsibility in terms of the protection of users, staff or third parties during operation.

Obligations of the operator:

If the machine is used for commercial purposes, operators are subject to the legal stipulations in terms of occupational safety. For this reason, the safety instructions in these operating instructions as well as the safety, accident prevention and environmental protection regulations valid at the installation location must be complied with. In this process, the following shall apply in particular:

- Operators shall obtain information about valid occupational safety regulations and determine additional hazards as part of a risk assessment which result from the specific operating conditions at the machine's installation location. Said risk assessment shall be reflected in operating instructions for machine operation.
- During the entire machine operating time operators must check whether the operating instructions they created meet current standards and adapt the operating instructions where necessary.
- Operators shall clearly manage and specify the responsibilities for installation, operation, troubleshooting, maintenance and cleaning.
- Operators must make sure that all persons handling the machine have read and understood these operating instructions. Operators must also regularly train staff and notify of the hazards.
- Operators shall provide staff with the required protective equipment and wearing the required protective equipment shall be mandatory.

Operators shall also be responsible for maintaining the machine in a technically perfect condition. For this reason, the following shall apply:

- Operators shall make sure that the maintenance intervals described in these operating instructions are complied with.
- Operators shall regularly check that the safety equipment is fully functional and complete.

2.3 Requirements to staff

Qualifications

The different tasks described in these operating instructions require different levels of skills in terms of the qualifications of operating staff working with the machine.



WARNING!

Risk from inadequately qualified persons!

Inadequately qualified persons are unable to assess the risks when handling the chop- and mitre saw, thus putting themselves and others at risk of severe or fatal injuries.

- All work must be carried out by qualified persons only.
- Keep inadequately qualified persons away from the work area.

Exclusively persons of whom it can be expected that they reliably complete assigned tasks shall be authorised to carry out any tasks. Persons whose reactions have been impaired shall not be authorized, e.g. drug users, users under the influence of alcohol or medication.

These operating instructions specify the following personal qualifications for the following tasks:

Operating staff:

Operating staff has undergone an induction by the operator about the entrusted tasks and potential hazards resulting from improper behaviour. Operating staff shall exclusively be permitted to carry out any tasks beyond operation in normal mode if this has been specified in the operating instructions and operators have explicitly entrusted operating staff with the task.

Qualified electrician:

Due to the electrician's specialised training, know-how, experience and knowledge of pertinent standards and regulations the electrician is in a position to work on the electrical systems, and autonomously identify and avoid potential hazards.

Specialist staff:

As a result of specialist training, expertise, experience and skills in terms of the relevant standards and regulations, specialist staff is able to complete the tasks they are entrusted with and independently identify hazards and avert risks.

Manufacturer

Certain work must be carried out by manufacturer specialist staff only. Other staff is not permitted to carry out this work. Contact our customer service to have the work carried out..

2.4 Personal protective equipment

Personal protective equipment is intended to protect the health and safety of persons at work. Staff must wear the personal protective equipment indicated in individual sections of these operating instructions when carrying out the different tasks on the machine.

The personal protective equipment is described in the following section:



Hearing protection

Hearing protection protects from hearing damage caused by noise.



Head protection

Industrial hard hats protect the head from falling objects and impact with fixed objects.



Protective eyewear

Protective goggles are intended to protect the eyes from flying parts.



Protective gloves

Protective gloves are intended to protect the hands from components with sharp objects as well as friction, abrasion, and deep-cut injuries.



Safety shoes

Safety shoes protect feet from pinching, falling parts and slipping on slippery surfaces.



Protective clothing

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

Symbol for the transportation position



2.5 Safety labels on the chop- and mitre saw

The following safety labels identifications are attached to the chop- and mitre saw (Fig. 1) and must be observed.



Fig. 1: Safety labels

If safety labels on the machine are damaged or missing, this can cause errors, personal injury and material damage. The safety symbols attached to the machine must not be removed. Damaged safety symbols must be replaced immediately.

As soon as the signs are not clearly visible and comprehensible at first glance, the machine must be stopped until new signs have been attached.

2.6 General safety instruction for the electrical tools



WARNING!

Read all safety instructions, pictures, illustrations, and technical data that accompany this electrical tool.

Failure to follow the instructions below may result in electric shock, fire and/or serious injury.

All safety instructions and instructions should be kept for the future.

1 Workplace safety

- a) **Keep your work area clean and well-lighted.** Disorder and poorly lit work areas can lead to serious injury.
- b) **Do not use the power tool in potentially explosive atmospheres containing flammable liquids, gases or dusts.** Electrical tools produce sparks that can ignite the dust or gases.

- c) **Keep children and other persons away while using the electrical tool.**
If you are distracted, you may lose control of the tool.

2 Electrical safety

- a) **The connector plug of the power tool must fit into the socket. The plug must not be changed in any way. Do not use adapter plugs together with earthed power tools.** Unchanged plugs and suitable sockets reduce the risk of electric shock.
- b) **Avoid direct body contact with grounded surfaces such as pipes, heaters, stoves and refrigerators.** There is an increased risk of electric shock if your body is grounded.
- c) **Keep power tools away from rain or humidity.** Entering of water into a electrical tool increases the risk of electric shock.
- d) **Do not misuse the connecting cable to carry or hang the power tool or to pull the plug out of the socket.** Keep the connecting cable away from heat, oil, sharp edges, or moving parts. Damaged or entangled connecting wires increase the risk of electric shock.
- e) **If you are working with a electrical tool outdoors, only use extension cords that are specifically constructed for outdoor use.** The use of an extension cable specifically constructed for outdoor use reduces the risk of electric shock.
- f) **If operation of the electrical tool in a humid environment is unavoidable, use a residual current circuit breaker.** The use of a residual current circuit breaker reduces the risk of electric shock.

3 Safety of the person

- a) **Be careful, consider what you're doing, and you go to work with a power tool with common sense. Do not use a electrical tool if you are tired or under the influence of drugs, alcohol or medication.** A second of inattention while using the electrical tool can lead to serious injury.
- b) **Wear personal protective equipment and safety goggles at all times.**
Wearing personal protective equipment such as a dust mask, non-slip safety shoes, safety helmet or ear protection, depending on the type and use of the electrical tool, will reduce the risk of injury.
- c) **Reduce the risk of accidental operation. Make sure the electrical tool is turned off before connecting, picking up or carrying it to the power supply and/or battery.** If you have your finger on the switch when carrying the electrical tool or connect the electrical tool to the power supply switched on, this may result in injury.

- d) **Remove adjusting keys and wrenches.** A tool or key located in a rotating part of the power tool may cause injury.
- e) **Ensure that you avoid abnormal posture. Make sure that you stand securely and keep your balance at all times.** This will allow you to better control the power tool in unexpected situations.
- f) **Wear appropriate clothing. Do not wear loose clothing or jewelry. Keep hair and clothing away from moving parts.** Loose clothing, jewellery or long hair may be caught by moving parts.
- g) **If dust extraction and collection equipment can be used, it must be connected and used correctly.** The use of a dust extractor may reduce the risk of dust.
- h) **Do not weigh yourself in false safety and do not overstep the safety rules for power tools, even if you are familiar with the electrical tool after many uses.** Careless action can lead to serious injuries within fractions of a second.

4 Use and handling of the electrical tool

- a) Do not overload electric tools. Use the right electric tool for your work. With the right tool, you work better and more secure in the specified power range.
- b) Do not use the electric tool with a defective switch. A electric tool that cannot be switched on or off is dangerous and must be repaired.
- c) **Disconnect the plug from the power outlet and/or remove a detachable battery before adjusting the unit, changing insert tool parts or putting the power tool away.** This precaution prevents the power tool from accidentally starting.
- d) **Store unused electrical tools out of the reach of children. Do not allow anyone to use the electrical tool who is not familiar with it or who has not read these instructions.** Power tools are dangerous if used by unauthorized persons.
- e) **Maintain the electrical tools and applied tools with the care. Check that moving parts function correctly and do not jam, that parts are broken or damaged in such a way that the function of the electrical tool is reduced. Have damaged parts repaired before using the electrical tool.** Many injuries are caused by poorly maintained power tools.
- f) **Hold cutting tools sharp and clean.** Carefully maintained cutting tools with sharp cutting edge are easier to operate.
- g) **Maintain the electrical tools and applied tools etc. according to these instructions. Take into account the working conditions and the activity to be performed.** The use of the electrical tools for applications other than those intended can lead to the dangerous situations.

- h) **Keep the handles and handle surfaces dry, clean and free of oil and grease.** A slippery grip does not allow safe operation and control of the electrical tool in unforeseen situations.

5 Service

- a) **Have repaired the electrical tool only by the qualified personnel and use only original spare parts.** This will ensure the safety of the electrical tool.

2.7 General safety rules



NOTE!

Read these instructions completely before operating your device. Keep these instructions for future use.

1. **Protection from the electrical shock.** Do not touch the grounded surfaces.
2. **Storage of the unused tool.** Keep tools that are not in use in a dry, enclosed place and out of the reach of children.
3. **Do not overload the electrical cable.** Never pull on the cable to pull the plug out of the socket. Keep the cable away from heat, oil and sharp edges
4. **Secure the workpiece.** If possible, hold the workpiece with clamps or a vice. This is safer than holding it by hand.
5. **Maintain the tools carefully.** Follow the instructions for lubricating and replacing accessories.
6. **Remove adjustment wrench and screw wrench.** Make sure that the adjustment and screw wrench are removed from the tool before switching on.
7. **Prevent the unintentional starting.** Make sure that the switch is in the "OFF" position when plugged in.
8. **Use an extension cord for outdoor use.** If the tool is used outdoors, use only extension cords that are marked for outdoor use.



WARNING!

Use of any accessories other than those recommended in this manual may result in personal injury.

2.8 Additional safety rules for the Chop- and Mitre Saw

1. Mitre saws are intended for cutting wood or wood-like products, they cannot be used with cut-off wheels for cutting ferrous materials such as bars, rods, bolts, etc. Let the saw blade reach full speed before touching the workpiece
2. Never use other saw blades that are not recommended in this manual.
3. Do not use saw blades made of high speed steel, (HSS) or if they are defective or deformed.
4. Do not operate the saw until the safety guard is fixed in place. The saw must be in good operating condition and properly maintained.
5. Replace the table insert if it is defective.
6. Do not use damaged, bent or deformed saw blades. Do not use this saw to cut parts that are too small to be securely clamped or held by hand. If your hand is too close to the saw blade, there is an increased risk of injury
7. Only use saw blades from the manufacturer and if they comply with the EN 847-1 directive.
8. Connect the crosscut saw to a suction device during the sawing process.
9. Use only saw blades that are suitable for the material to be sawn and not saw blades recommended for operation at less than 4,000 rpm.
10. Check the saw cut depth.
11. If you want to saw long workpieces, always use a support to achieve a stable hold. In addition, fasten the workpiece with a quick clamping device. Always use a clamp or a device designed to properly support round material such as bars or pipes.
12. If possible, wear appropriate personal protective clothing, if necessary, such as
 - hearing protection to prevent possible hearing loss.
 - protective goggles.
 - a respirator to prevent inhalation of harmful dust.
 - Protective gloves for handling saw blades (these saw blades must always be stored and worn in their protective holder if possible) and raw material.



WARNING!

This saw is designed for processing wood and wood-like workpieces. NEVER use this tool to cut metal or masonry.



WARNING!

- When chamfering, always ensure that the arm is securely and well fixed.
- The floor area around the machine must be level and free of loose material, e.g. chips and cut debris.
- If the workpiece or blade becomes jammed, turn off the miter saw. Wait until all moving parts have stopped and disconnect the plug from the power source. Then remove the jammed material. Continued sawing with a jammed workpiece may result in loss of control or damage to the miter saw.
- When you have finished cutting, release the switch, hold the saw head down and wait until the blade stops before removing the cut piece. Gripping the saw blade with your hand near it is dangerous.
- Ensure that the machine is always securely and well fixed to a workbench at all times.



WARNING!

Do not come into contact with the upper saw arm and never cross the intended cutting line.

13. The user of the machine should be well acquainted with the machine. Always ensure good lighting in the workplace
14. Plan your work. Whenever you change the chamfer or miter angle setting, make sure that the adjustable fence for supporting the workpiece is set correctly and does not interfere with the blade or the protection system. With the machine switched off and no workpiece on the table, move the saw blade through a fully simulated cut to ensure that there is no interference or danger when cutting the fence.
15. Check your workpiece before cutting. If the workpiece is bent or warped, clamp it with the bent outer side to the stop. Always make sure that there is no gap between the workpiece, fence and table along the cutting line. Bent or warped workpieces can twist or shift and may cause the workpiece to bind to the circular saw blade during cutting. There must be no nails or foreign objects in the workpiece.
16. Cut only one workpiece at a time. Stacked workpieces cannot be clamped sufficiently and may jam or shift on the saw blade during cutting.
17. Wait until the machine has stopped completely and the saw head is in its rest position before removing parts or chips from the machine.
18. Do not reach with both hands closer than 100 mm from either side of the saw blade behind the fence to remove wood debris or for any other reason while the blade is turning. The proximity of the rotating saw blade to your hand may not be obvious and you may be seriously injured.
19. Never operate the saw in the immediate vicinity of flammable liquids, vapors or gases.

20. Provide appropriate support, such as table extensions, for a workpiece that is wider or longer than the table top. Workpieces that are longer or wider than the miter saw table can tip if they are not securely clamped. If the cut-off part or workpiece is jammed, it may lift the lower guard or be thrown away from the saw blade.
21. Do not use the saw until the table is free of all tools, wood debris, etc., except the workpiece. Small debris, loose pieces of wood or other objects that come into contact with the saw blade can be hurled at high speed.
22. Keep the saw on a work bench with a good and safe load-bearing floor to minimize noise and vibration.
23. Do not pinch the cutting piece or press it against the circular saw blade by any means. If length stops are used, the cut-off piece could be clamped against the blade and thrown away..
24. Do not use this saw for cutting fibre cement boards and tree trunks.
25. Hold the handle when making an incomplete cut or releasing the switch before the saw head is fully down. The braking action of the saw can cause the saw head to be pulled down suddenly, which can cause injury.
26. The workpiece must be clamped stationary or held against the stop and the table. Do not insert the workpiece into the saw blade or cut "freehand". Unhindered or moving workpieces can be thrown away at high speed and cause injury.
27. Never cross the intended cutting line in front of or behind the saw blade. Holding the workpiece "cross-handed", i.e. holding the workpiece to the right of the saw blade with the left hand or vice versa, is very dangerous.

3 Intended use

The cross-cut and mitre saw is used to produce cross sections, mitre cuts, double mitre cuts and inclined cuts of boards and strips. In addition, the production of grooves is possible. The operating conditions for the saw blade used must be observed while observing the safety instructions.

The saw is suitable for both private and commercial use. Proper use also includes compliance with all the information in these instructions. Any use beyond the intended use or other use is considered misuse.



DANGER!

Certain types of wood and wood products produce harmful dust emissions during their processing. Therefore, use your machine only in a well-ventilated room and preferably use an extraction unit.



WARNING!

Danger in case of misuse!

Misuse of the Chop- and Mitre Saw can lead to dangerous situations..

- Only operate the chop and mitre saw within the performance range specified in the technical data.
- Never bypass or disable the safety devices.
- Never work on materials other than those specified in the intended use.
- Only operate the crosscut and mitre saw in a technically perfect condition.
- Never machine several workpieces at the same time.

Stürmer Maschinen GmbH accepts no liability for design and technical changes to the Chop- and Mitre Saw. Claims of any kind for damage due to improper use are excluded.

4 Technical Data

| Model | KGZ 2540 | KGZ 3050 |
|--|-------------------------------------|-------------------------------------|
| Length min. / max. | 595 - 1055 mm | 595 - 1055 mm |
| Width/depth | 825 mm | 800 mm |
| Height | 696 mm | 710 mm |
| Weight | 21,5 kg | 23 kg |
| Length cable | 3,4 m | 3,4 m |
| Drive motor power | 1,6 kW | 1,6 kW |
| Supply voltage | 230 V | 230 V |
| Sound pressure level (LpA) | 97,1 dB | 96,3 dB |
| Sound power level (LWA) | 110,1 dB | 109,3 dB |
| Speed of saw blade | 2000-4000 min ⁻¹ | 2000-4000 min ⁻¹ |
| Diameter of saw blade | 254 mm | 305 mm |
| Diameter of work bench | 279 mm | 279 mm |
| Max. Mitre area | -50° / +50° | -50° / +50° |
| Max. cutting capacity at 0° bevel / 0° miter | 64 x 318 mm | 100 x 310 mm |
| Max. cutting capacity at -45° bevel / 0° miter | 41 x 318 mm | 64 x 310 mm |
| Max. cutting capacity at +45° bevel / 0° miter | 25 x 318 mm | 45 x 310 mm |
| Max. cutting capacity at 0° bevel / 45° miter | 64 x 222 mm | 100 x 310 mm |
| Max. cutting capacity at 0° bevel / 45° miter | 64 x 222 mm | 100 x 310 mm |
| Max. bevel angle range | 0 bis -47° left 0 bis +45° right | 0 bis -47° left 0 bis +47° right |

The noise levels of this machine during sawing are as follows:

KGZ 2540 Vario:

Maximum sound pressure level: 97.1 dB(A)
Measurement uncertainty for noise: 3 dB(A)
Maximum sound power level: 110.1 dB(A)

KGZ 3050 Vario:

Maximum sound pressure level: 96.3 dB(A)
Measurement uncertainty for noise: 3 dB(A)
Maximum sound power level: 109.3 dB(A)



WARNING!

The vibration emission during the actual use of the power tool may vary from the total value indicated depending on the way the tool is used.

The need to identify safety measures to protect the operator, based on an exposure assessment under actual conditions of use (taking into account all parts of the operating cycle, e.g. when and when the tool is switched off) running at idle alongside the trip time)



WARNING!

- Noise can be harmful to health. If the noise exceeds 80 dB(A), noise protection must be used.
- Due to poor condition of the electrical supply network, voltage fluctuations can occur at short notice when the machine is started. This can affect other devices (e.g. a lamp lights up). If the line resistance Z_{max} is < 0.4 Ohm, such disturbances are not to be expected.

4.1 Type plate 3050 VARIO



| | | | |
|--|----------------|---|-----------------|
| Kapp- und Gehrungssäge Chop and mitre saw | |  | |
| Typ Type | KGZ 3050 Vario | | |
| Artikel-Nr. Item no. | 5701315 | Serien-Nr. Serial no. | |
| Netzanschluss Power supply | 230V~ 50Hz | Baujahr Year of manufacture | |
| Motorleistung Engine power | 1,6 kW | Abmessungen Sägeblatt Saw blade dimensions | 305 x 30 mm |
| Gewicht Weight | 23,0 kg | Sägeblattdrehzahl Saw blade rpm | 2000-4000 U/min |
|  | | Stürmer Maschinen GmbH Dr.-Robert-Pfleger-Str. 26, 96103 Hallstadt Deutschland / Germany Made in PRC | |

Fig. 2: Type plate KGZ 3050 VARIO

5 Transport, packaging, storage

Transport



CAUTION!

Injuries caused by parts falling over or off a forklift, pallet truck or transport vehicle.

Only use means of transport that can carry the total weight and are suitable for it.

Improper transport of individual devices, unsecured devices stacked on top of each other or next to each other in packed or already unpacked condition is accident-prone and can cause damage or malfunctions for which we do not grant any liability or guarantee.

Transport the scope of delivery secured against shifting or tilting with a sufficiently dimensioned industrial truck to the installation site.

General risks during internal transport



CAUTION: DANGER OF TIPPING!

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

Employees must be outside the danger zone, the reach of loads. Warn employees and, if necessary, advise employees of the hazard.

Devices may only be transported by authorized and qualified persons. Act responsibly during transport and always consider the consequences. Refrain from daring and risky actions.

Gradients and descents (e.g. driveways, ramps and the like) are particularly dangerous. If such passages are unavoidable, special caution is required.

Before starting the transport check the transport route for possible danger points, unevenness and disturbances as well as for sufficient strength and load capacity.

Danger points, unevenness and disturbance points must be inspected before transport. The removal of danger spots, disturbances and unevenness at the time of transport by other employees leads to considerable dangers.

Careful planning of internal transport is therefore essential.

To avoid damage, never carry the mitre saw by the switch handle, cutting arm or mitre handle. ALWAYS use the carrying handle provided (Pos. 17, fig. 3).

When transporting or storing the mitre saw, the cutting head should always be locked in the lower position.

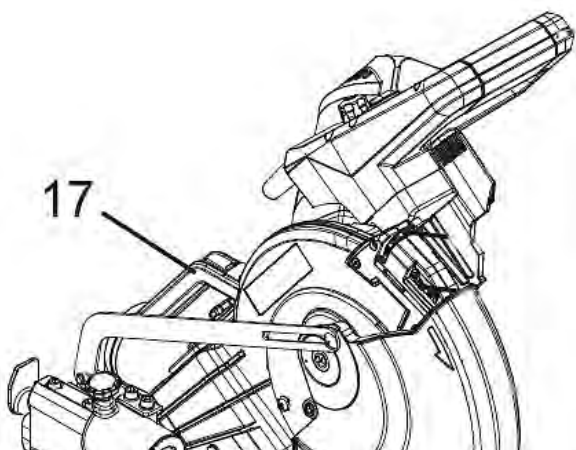


Fig. 3: Transport

Step 1: Push the cutting head to the lowest position.

Step 2: Press the hold-down latch (Item 19, Fig. 4) into the locking opening.



NOTE!

The mitre saw is heavy and it is recommended to transport it with the help of 2 persons.

5.1 Packaging

All packaging materials and packaging aids used by the Chop- and Mitre Saw are recyclable and must always be recycled.

Shredded cardboard packaging components should be sent to the waste paper collection.

The films are made of polyethylene (PE) and the padded parts of polystyrene (PS). These materials are to be handed in at a reusable material collection point or to your local waste disposal company.

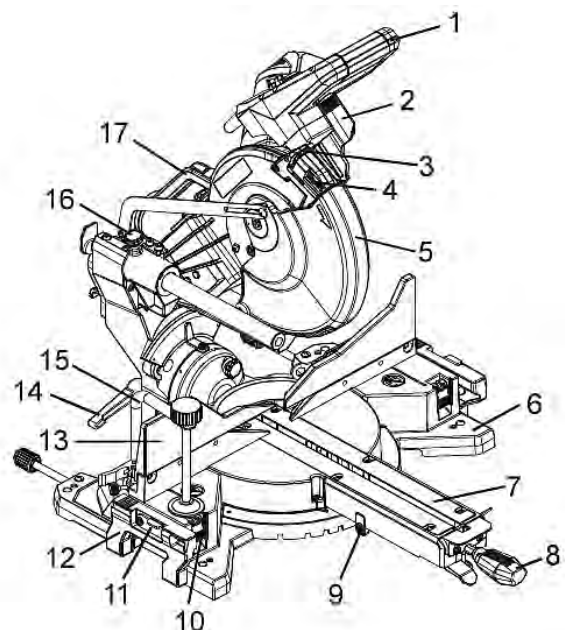
5.2 Storage

Store the chop and mitre saw thoroughly cleaned in a dry, clean and frost-free environment. Cover the machine with a protective sheet.

6 Device description

Illustrations in this operating manual may differ from the original.

KGZ 2540 VARIO



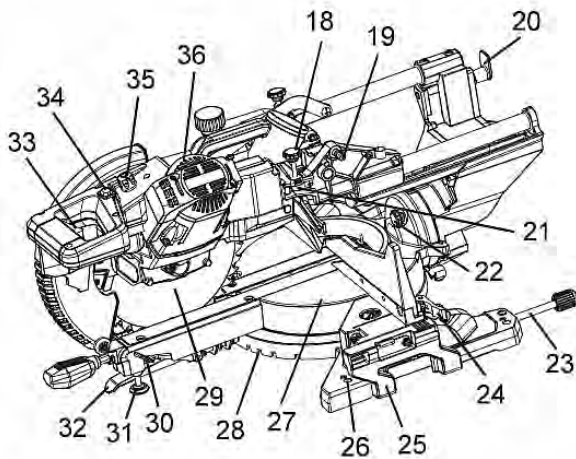


Fig. 4: Chop- and Mitre Saw KGZ 2540 Vario

1. Switch handle
2. Saw blade protection locking lever
3. Knob for vertical laser adjustment
4. Knob for horizontal laser adjustment
5. Lower saw blade guard
6. Basic frame
7. Table set
8. Handle for mitre angle adjustment
9. Bridging the mitre lock
10. Locking lever for the extension leaf
11. Stumbling block
12. Left extension wing
13. Adjustable stop
14. Tilt angle locking lever
15. Workpiece hold-down clamp
16. Sliding carriage Locking knob
17. Carrying handle
18. Adjustment handle for depth cut
19. Locking device for the hold-down device
20. Storage area for the power cord
21. Stop plate
22. Tilt angle locking pin
23. Rear support rod
24. Slide stop locking lever
25. Rights extension
26. Mounting hole
27. Table
28. Locking Positive stop
29. Saw blade
30. Quick release lever
31. Table support rod
32. Locking lever
33. On / off switch
34. Laser on/off switch
35. Speed controller
36. Engine

KGZ 3050 VARIO

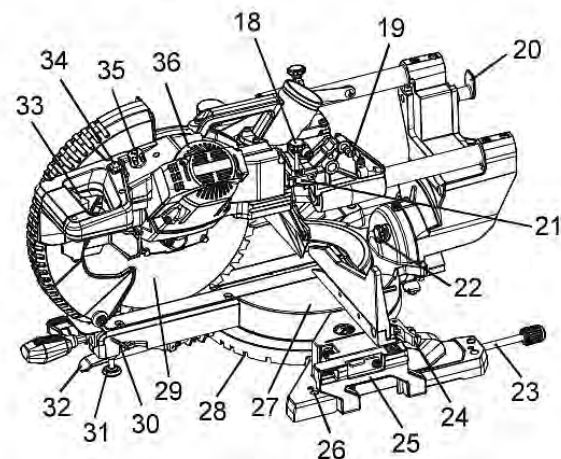
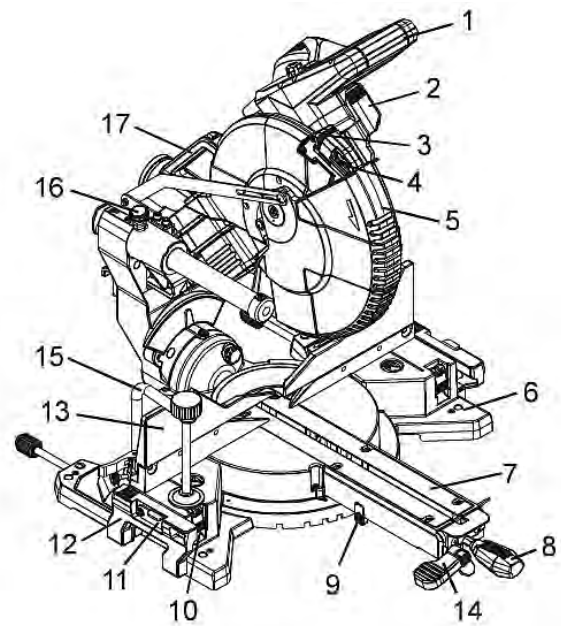


Fig. 5: Chop- and Mitre Saw KGZ 3050 Vario

1. Switch handle
2. Saw blade protection locking lever
3. Knob for vertical laser adjustment
4. Knob for horizontal laser adjustment
5. Lower saw blade guard
6. Basic frame
7. Table set
8. Handle for mitre angle adjustment
9. Bridging the mitre lock
10. Locking lever for the extension leaf
11. Stumbling block
12. Left extension wing
13. Adjustable stop
14. Tilt angle locking lever
15. Workpiece hold-down clamp
16. Sliding carriage Locking knob
17. Carrying handle
18. Adjustment handle for depth cut

19. Locking device for the hold-down device
20. Storage area for the power cord
21. Stop plate
22. Tilt angle locking pin
23. Rear support rod
24. Slide stop locking lever
25. Rights extension
26. Mounting hole
27. Table
28. Locking Positive stop
29. Saw blade
30. Quick release lever
31. Table support rod
32. Locking lever
33. On / off switch
34. Laser on/off switch
35. Speed controller
36. Engine

6.1 Scope of delivery

KGZ 3050 VARIO

- Material clamp
- Chip collection bag
- Tools
- HM saw blade 305 x 2.6 x 1.8 x 30 mm, Z60

KGZ 2540 VARIO

- Material clamp
- Chip collection bag
- Tools
- HM saw blade 254 x 2.6 x 1.8 x 30 mm, Z60

7 Assembly



WARNING!

For your own safety, never connect the power plug to a power source before you have completed all steps of the installation.



NOTE!

Move all parts to the desired workstation before assembling them. Follow the assembly instructions and assemble the tool with the help of a second person.



WARNING!

Always unplug the power cord from the wall outlet to prevent the unit from being inadvertently switched on.

7.1 Saw head



WARNING!

To avoid injury and damage to the saw, transport and store the mitre saw with the cutting head locked.

Never use the hold-down clamp to hold the cutting head in a down position for cutting operations.

Lifting the saw head (Fig.6)

Step 1: Press the switch handle (1) slightly down.

Step 2: Pull out the down holder (2).

Step 3: Lift the cutting head to the top position.

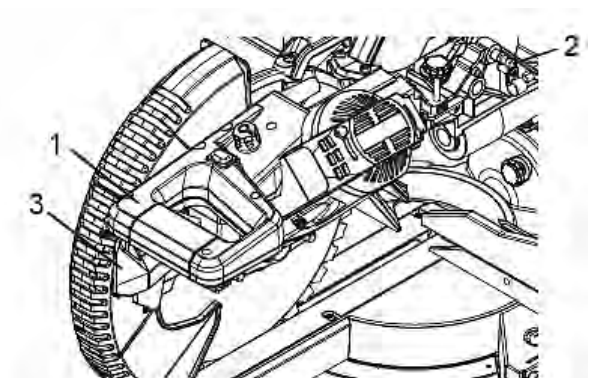


Fig. 6: Locking the saw head

Locking the saw head (Fig.6)

When transporting or storing the mitre saw, the cutting head should always be locked in the lower position.

Step 1: Press the locking lever of the lower saw blade guard (3) and pull the control lever (1) down to move the cutting head to the lowest position.

Step 2: Push the down-holder latch (2) into the locking hole (3).g.



NOTE!

To avoid damage, never carry the miter saw by the handle of the trigger switch or the cutting arm.

Attaching the inclination locking handle KGZ 3050 VARIO

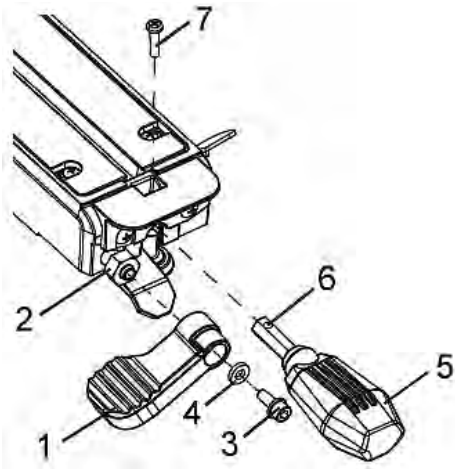


Fig. 7: Locking handle for the tilt angle

Step 1: Place the angle locking handle (1) on the shaft (2) at an angle of approx. 30° as shown in Fig. 7.

Step 2: Insert the hexagonal bolt (3) through the washer (4) into the miter locking handle (1).

Step 3: Tighten the screw (4) with the 5 mm Allen wrench.

Attaching the mitre lever (Fig. 7)

Step 1: Insert the mitre handle (5) into the hole in front of the mitre saw and align the hole (6) on the mitre handle (5) with the hole on the front of the table.

Step 2: Insert the screw (7) through the hole in the table into the hole (6) on the mitre handle (5).

Step 3: Tighten the screw (7) with a screwdriver.

7.2 Attaching the dust bag (Fig. 8)

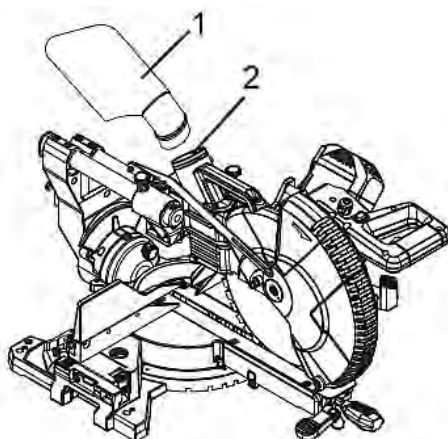


Fig. 8: Attaching the dust bag

Step 1: Mount the dust bag unit (1) on the extraction opening (2) of the mitre saw

Step 2: Connect the connecting tube of the dust bag unit and the outlet duct.



NOTE!

Note the following when using the dust bag:

- The dust bag unit should be angled to the right side of the saw for best results. This also avoids disturbances during the sawing process.
- To empty the dust bag, pull the dust bag out of the outlet duct. Open the zipper on the bottom of the bag and empty it into the waste container.

IMPORTANT: Check them regularly and empty the bag before it is full.



WARNING!

Do not use this saw for cutting and/or grinding metals. The hot chips or sparks can ignite sawdust from the bag.

7.3 Attaching the downholder (Fig. 9)

Step 1: Loosen the locking knob (1) from the back of the saw.

Step 2: Place the hold-down clamp (2) in one of the mounting holes (3).

Step 3: Tighten the locking knob (1).

Step 4: Loosen the knob (4) to move the clamp up or down to tighten the workpiece.

Step 5: The hold-down clamp (2) can be inserted into one of the mounting holes (3) behind the fence.

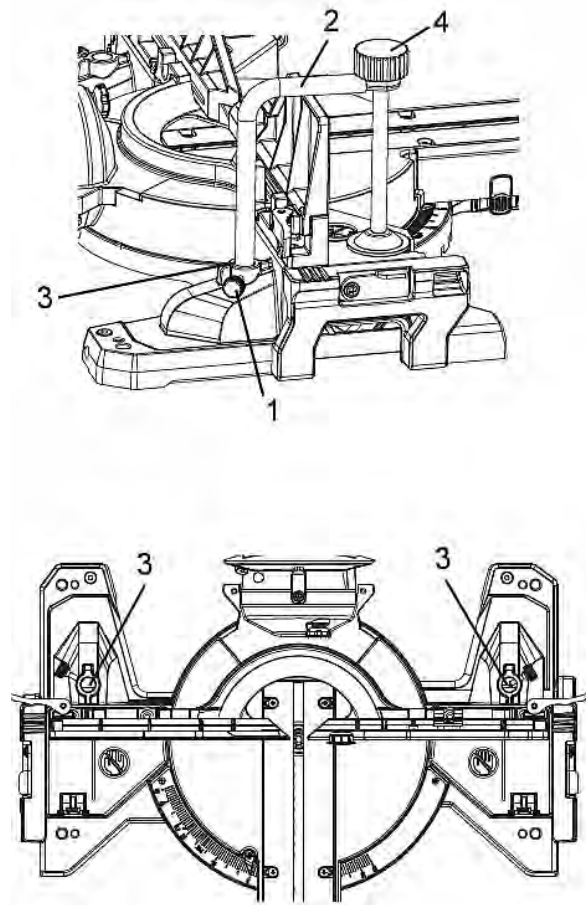


Fig. 9: Attaching the downholder

7.4 Attaching the rear support rod (Fig. 10)

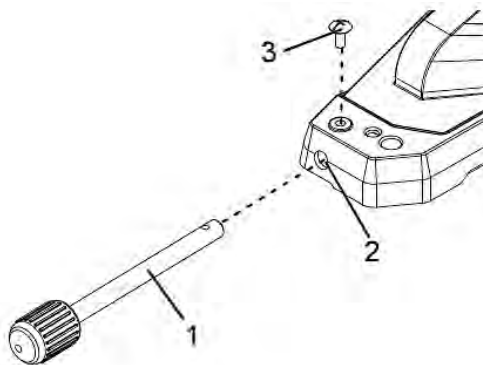


Fig. 10: Locking handle for the tilt angle

Step 1: Insert a rear support rod (1) into the hole (2) at the back of the base.

Step 2: Thread the screw (3) into the hole next to the mounting hole.

Step 3: Tighten the screw (3) with a screwdriver.

Step 4: Repeat the above steps to install the other rear support rod.

7.5 Unlocking the sliding carriage (Fig. 11)

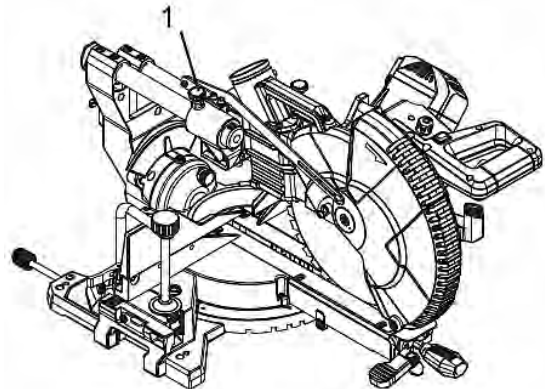


Fig. 11: Unlocking the sliding carriage

Step 1: Take the saw out of the box.

Step 2: Loosen the locking knob (1) on the left side of the carriage.

When transporting or storing the mitre saw, the carriage should always be in position.

7.6 Storage of the power cable (Fig. 12)

When not using or transporting the miter saw, use two clips (1) on the back of the saw to store the power cord.

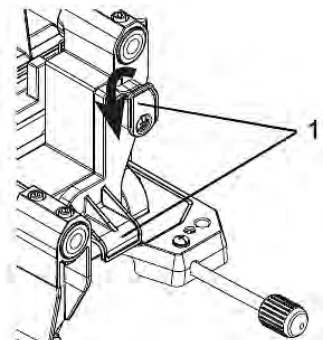


Fig. 12: Storage of the power cable

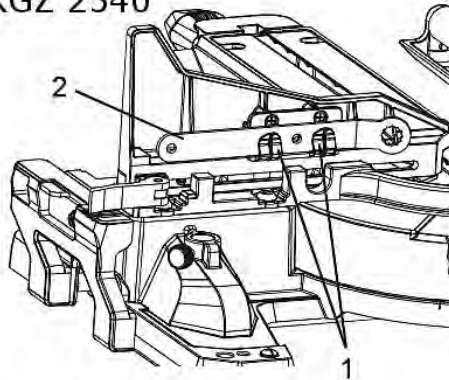


NOTE!

This saw has a quick release fastener for the power cord. Simply slide the upper bracket down and the power cable is released.

7.7 Saw blade socket wrench (Fig. 13)

KGZ 2540



KGZ 3050

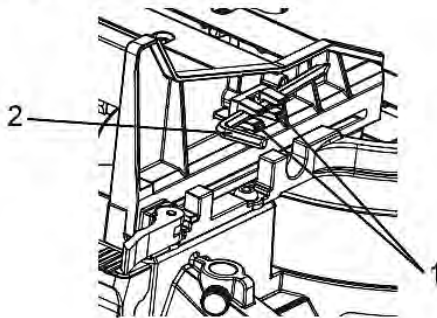


Fig. 13: Saw blade socket wrench

For convenient storage and to prevent loss, there is a holder (1) on the back of the right-hand carriage fence for storing the saw blade key (2) when it is not in use.

7.8 Attaching and removing the sliding stop (Fig. 14)

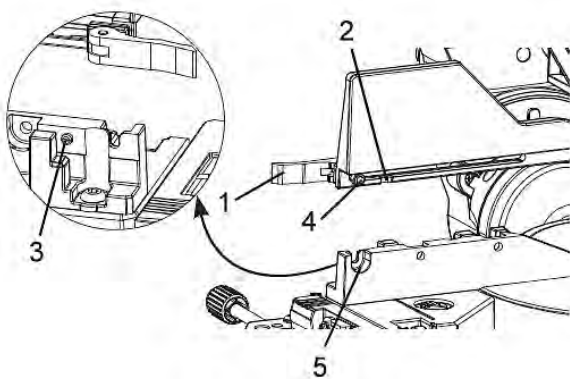


Fig. 14: Attaching and removing the sliding stop

Remove (Fig. 14)

Step 1: Unlock the cam lock lever (1) by pushing it to the back of the saw.

Step 2: Align the slot (2) with the bolt (3) on the back of the fence.

Step 3: Lift the sliding stop to remove it from the saw.

Apply (Fig. 14)

Step 4: Align the slot (2) with the bolt (3) on the back of the fence to place the sliding stop on the mitre fence.

Step 5: Move the sliding stop to align the nut (4) with the slot (5).

Step 6: To lock the sliding stop, push the locking lever (1) towards the front of the saw.



WARNING!

Dry run - It is important to know where the saw blade cuts with the workpiece during cutting. Always perform a simulated cutting sequence with the tool switched off to understand the projected path of the saw blade.

At some extreme angles, the left side stop may need to be removed to ensure the correct distance before cutting.

8 Operation of the chop and mitre saw



Danger!

Danger to life through electric shock!

There is a danger to life when in contact with live components. Switched-on electrical components can execute uncontrolled movements and cause serious injuries.

- Unplug the machine from the mains before making adjustments to the machine.
- The crosscut and mitre saw may only be operated by a person who has read and understood the warning notices and the operating instructions.



Danger!

Danger to life!

There is danger to life for the operator and other persons if the following rules are not observed.

- The chop and mitre saw may only be operated by a trained and experienced person.
- If possible, use collets to support the workpiece. If you support the workpiece by hand, you must always keep your hand at least 100 mm away from both sides of the saw blade.
- The operator must not work when under the influence of alcohol, drugs or medication.



Danger!

Danger to life!

There is danger to life for the operator and other persons if the following rules are not observed.

- The operator must not work if he is overtired or suffers from illnesses that impair concentration.
- The chop and mitre saw may only be operated by one person. Other persons must stay away from the working area during operation.
- The Chop- and Mitre Saw may only be operated by one person.



CAREFUL!

Risk of crushing!

There is a risk of injury to the upper limbs when working improperly on the machine.



DANGER!

- Harmful emissions of wood dust when used in closed rooms.
- Danger due to kickback of the workpiece.
- Danger of knots and workpiece parts being thrown out.



DANGER!

- Protect the machine from moisture (danger of short circuit!).
- Do not overload the machine! You will work better and safer in the specified performance range.
- Never use blunt or damaged saw blades. Check that the appropriate saw blade is used.



Wear ear protection!



Wear protective goggles!



Wear breathing protection!



Wear safety shoes!



Wear protective work clothing!

8.1 Mounting the machine

We recommend that you fix this Chop- and Mitre Saw to a workbench with screws to achieve maximum stability and reduce working noise. Always make sure that the machine is bolted to a suitable and safe place.



WARNING!

Observe the following to avoid unexpected sawing movements:

- Pull the power cord out of the socket and lock the cutting head with the hold-down device in the lower position.
- Lock the carriage by tightening the carriage lock knob.
- Lift the saw to prevent back injuries. Use the carrying handles provided on the top of the machine. Lift the machine from your knees without bending your back.
- Never carry the mitre saw by the power cord or switch handle. Carrying the tool by the power cord may damage the insulation or cable connections, resulting in electric shock or fire.
- To avoid injury from flying parts, do not allow visitors to stand near the saw while it is cutting.
- Support the saw on a flat work surface.
- Screw or clamp the saw to its support.

Mounting instructions (Fig. 15, 16)

For stationary use:

Step 1: Place the saw in the desired location, directly on a workbench with space for handling and proper support of the workpiece.

Step 2: The bottom of the saw (KGZ 2540) has eight mounting holes, four holes (Ø 6.4 mm) and four holes (Ø 9.5 mm). The bottom of the saw (KGZ 3050) has eight mounting holes, four holes (Ø 6.8 mm) and four holes (Ø 9.0 mm). Select the correct mounting holes based on the size of the screws used to screw the mitre saw base frame (1) to the workbench (5) as shown in Fig. 15 using the mounting method.

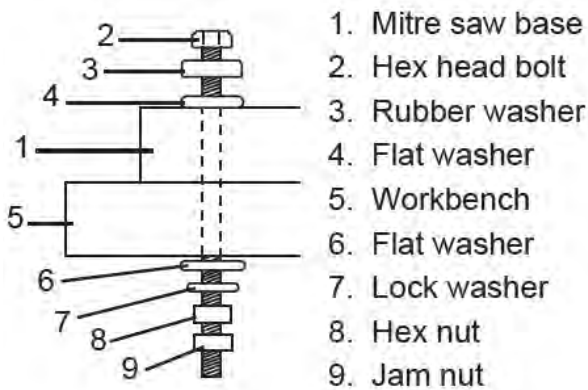


Fig. 15: Fixing the saw



NOTE!

Fixing material is not included in the scope of delivery. Bolts, nuts, washers and screws must be procured separately.

For unsteady use (Fig. 16)

Step 1: Place the saw on a 19.05 mm thick piece of plywood.

Step 2: Screw the base frame of the mitre saw firmly to the plywood using the holes in the base frame.

Step 3: Use C-clamps to clamp the portable mounting board firmly to a stable work surface at the workplace.

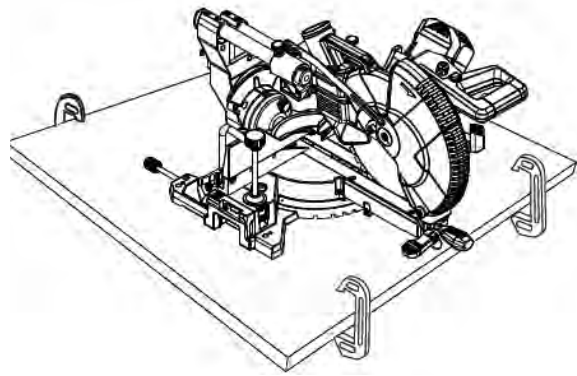


Fig. 16: Fixing the saw



NOTE!

When using a mitre saw stand, please strictly follow the instructions in the manual supplied with the mitre saw stand.

8.2 Connection to the power source

Check that the connection cable or other connections are in accordance with the crosscut saw. Look at the rating plate of the motor. All changes must be made by a qualified electrician.



DANGER!

The machine must be earthed!

If this machine is not properly grounded, it may result in electric shock. Make sure that the power outlet is earthed. If there is any doubt about this, it must be checked by a qualified electrician.



WARNING!

Avoid direct contact with the contacts of the mains plug while connecting or disconnecting it from the mains. Touching the contacts of the power plug may cause an electric shock.

Using an extension cable

The use of an extension cable leads to a certain loss of power. To keep this as low as possible and to prevent overheating and burning out of the motor, please contact a qualified electrician. The electrician can recommend the best connection cable. If the power cable is defective, please contact the nearest service center.

The extension cord must have a plug with earthing contacts at one end that matches the power outlet and a socket with earthing contacts at the other end that matches the plug of this machine.

Basic use of the saw

Step 1: Always use the clamp to hold the workpiece firmly. Two holes are provided for the clamp.

Step 2: Always position the workpiece at the stop.



DANGER!

Any workpiece that is bent or warped and cannot be held flat on the table or against the fence can jam the saw blade and should not be used.

Notes of sawing

The saw does not cut wood automatically. The user enables cutting by guiding the wood into the moving saw blade. The wood must be guided slowly into the saw blade because the teeth of the saw blade are very small. Every person who wants to work with the saw needs a certain amount of learning time. When cutting thicker wood, it is important to ensure that the saw blade is not bent or twisted. This increases the life of the saw blade.

Posture and position of the hands (Fig. 17)

Always take care not to get your hands into the working area of the saw. Your hands must always be outside the marked "No Hands" area, which covers the entire saw table.

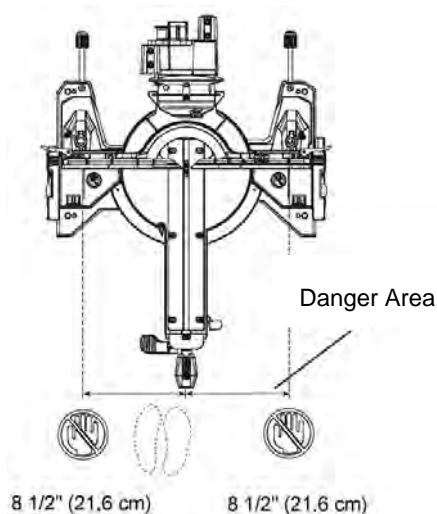


Fig. 17: Posture and position of the hands



WARNING!

To avoid injury from flying chips if the saw is accidentally switched on, it should be disconnected from the mains. Remove chips and sawdust.

8.3 Setting the tool



NOTE!

This tool is precisely set at the factory before shipment.

Check the following accuracy and adjust if necessary to obtain the best results in operation.



WARNING!

To avoid injury from an accidental start, make sure the switch is in the OFF position and the plug is not connected to the power source socket.

Tilt stop adjustment



NOTE!

To ensure accurate cuts, the alignment should be checked and adjustments made before use.

Adjusting the 90° inclination (Fig. 18, 19)

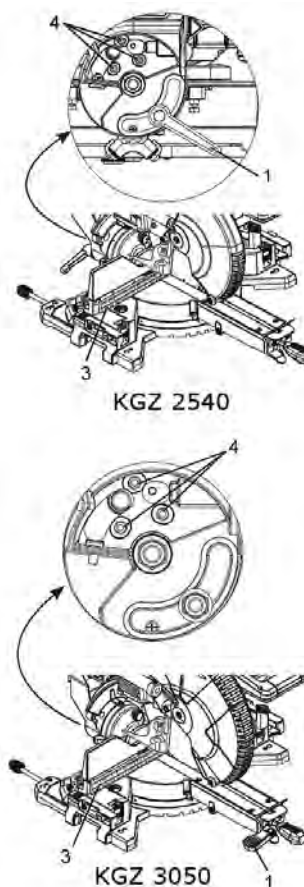


Fig. 18: Setting the 90° inclination

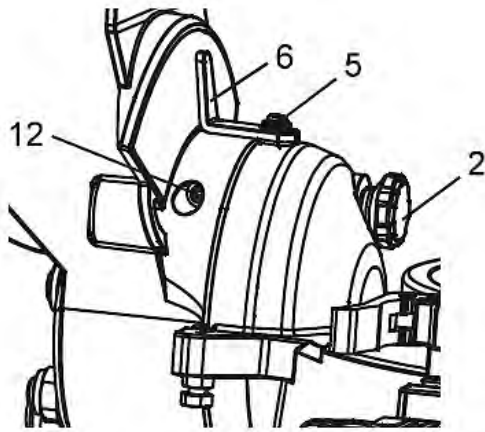


Fig. 19: Setting the 90° inclination

- Step 1:** Loosen the miter lock handle (1) and fully tilt the cutting arm to the right while pressing the 33.9° chamfer pin (2-Fig.19) against the 0° chamfer stop. Tighten the miter lock handle (1).
- Step 2:** Place a combination angle (3) on the miter table with the ruler against the table and the heel of the square against the saw blade.
- Step 3:** If the saw blade is not 0° away from the miter table, loosen the three adjustment screws (4) on the back of the saw with a 5 mm Allen key. Unlock the miter lock handle (1) and adjust the cutting arm.
- Step 4:** Tilt the cutting arm 90° (0°) to the right and check again for alignment.
- Step 5:** Repeat the above steps if further adjustments are required.
- Step 6:** Tighten the three adjustment screws (4) and tighten the locking handle (1) when alignment is achieved.

Setting the 90° tilt indicator (Fig.19)

- Step 1:** When the saw blade is exactly 90°, loosen the screw (5) from the table with a Phillips screwdriver.
- Step 2:** Set the inclination pointer (6) to the "0" mark on the inclination scale and retighten the screw (5).

Setting the 45° right tilt angle positive stop (Fig. 18, 19, 20)

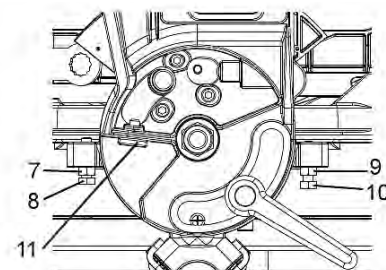
- Step 1:** Set the miter angle to 0°. Pull the sliding stop fully to the right and the taper lock pin (2) forward. (Fig. 19).



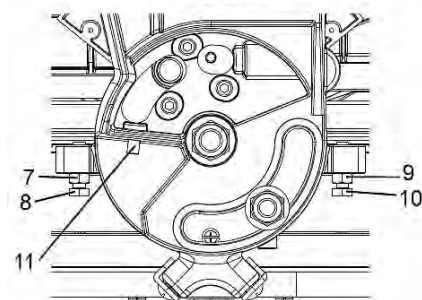
NOTE!

When retracting the taper lock pin, it may be necessary to move the upper arm assembly of the mitre saw to the left/right to reduce the holding pressure.

- Step 2:** Loosen the diagonal locking handle (1, Fig.18) and tilt the cutting arm to the right.
- Step 3:** Use a combination angle to check that the saw blade is at 45° to the table.
- Step 4:** If the saw blade is not at 45° to the miter table, tilt the cutting arm to the left, loosen the lock nut (7) and turn the adjustment screw (8) in or out to increase or decrease the angle (Fig.20).
- Step 5:** Tilt the cutting arm to the right again and check the alignment again.
- Step 6:** Repeat the above steps until the saw blade is at 45° to the table. Once the alignment is reached, tighten the lock nut (7) (Fig. 20).



KGZ 2540



KGZ 3050

Fig. 20: Adjustment mechanism

Setting of the 45° left tilt positive stop (Fig. 18, 19, 20)

Step 1: Set the miter angle to 0°. Pull the sliding stop fully to the right and the taper lock pin (2) forward. (Fig. 19).



NOTE!

When retracting the taper lock pin, it may be necessary to move the upper arm assembly of the mitre saw to the left/right to reduce the holding pressure.

Step 2: Loosen the diagonal locking handle (1, Fig. 18) and tilt the cutting arm to the left.

Step 3: Use a combination angle to check that the saw blade is at 45° to the table.

Step 4: If the saw blade is not at 45° to the miter table, tilt the cutting arm to the right, loosen the lock nut (9) and turn the adjustment screw (10) in or out to increase or decrease the angle (Fig. 20).

Step 5: Tilt the cutting arm to the left again and check the alignment again.

Step 6: Repeat the above steps until the saw blade is at 45° to the table. Once the alignment is reached, tighten the lock nut (9).

Setting the 33.9° right tilt angle (Fig. 18, 19, 20)

Step 1: Set the miter angle to 0°. Fully extend both sliding fences.

Step 2: Loosen the mitre locking handle (1) (Fig. 18).

Step 3: Pull out the 33.9° locking pin (2), tilt the cutting arm to the 33.9° right stop and push the 33.9° locking pin (2) in (Fig. 19).

Step 4: Use a combination angle to check that the saw blade is at 33.9° to the table.

Step 5: If the saw blade is not 33.9° to the miter table, tilt the cutting arm to the left, turn the hexagon screw (11) on the back of the saw in or out with a 3 mm hexagon key until the saw blade has an angle of 33.9° to the table (Fig. 20).

Adjustment of the 33.9° left tilt angle (Fig. 18, 19, 20)

Step 1: Set the miter angle to 0°. Fully extend both sliding fences.

Step 2: Release the tilt lock handle (1). (Fig. 18)

Step 3: Tilt the cutting arm to 33.9° to the left by pushing in the 33.9° tilt pin (2). (Fig. 19)

Step 4: Use a combination angle to check that the saw blade is 33.9° from the table.

Step 5: If the saw blade is not 33.9° to the miter table, tilt the cutting arm to the right and turn the hexagonal screw (12) in or out with a 3 mm Allen wrench until the saw blade is 33.9° to the table. (Fig. 19)

Mitre scale (Fig. 21)

The mitre saw scale with double cones is easy to read and shows mitre angles from

0° to 50° to the left and right. The mitre saw table has positive stops at the most common angle settings: 0°, 15°, 22.5°, 31.6° and 45°. These positive stops position the saw blade quickly and accurately at the desired angle. Follow the procedure below for the fastest and most accurate settings.

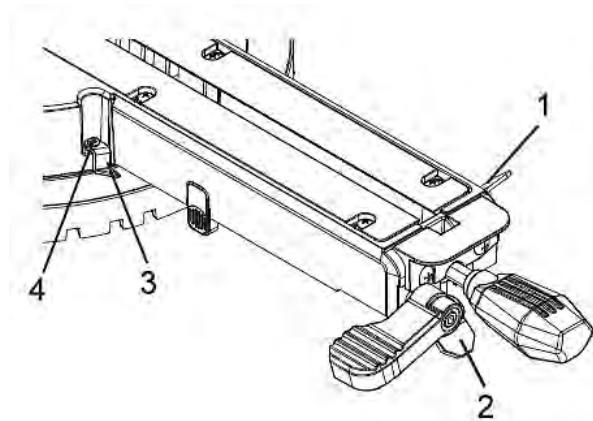


Fig. 21: Mitre scale

Setting the mitre angle

Step 1: To unlock the table, lift the quick release lever (1).

Step 2: Move the turntable while lifting the locking lever (2) of the fixed stop to align the pointer (3) with the desired mitre angle measurement.

Step 3: Lock the table by pressing the quick lock lever (1).

Setting the mitre angle display

Step 1: Move the table to positive 0 Stop.

Step 2: Loosen the screw (4) holding the pointer with a Phillips screwdriver.

Step 3: Set the pointer (3) to the 0° mark and retighten the screw (4).

Setting the squareness of the fence (Fig. 22)

Step 1: Remove the left and right slide stops.

Step 2: Loosen the four locking screws (1).

Step 3: Lower and lock the cutting arm.

Step 4: Using a combination square (2), place the heel of the square against the saw blade and the ruler against the stop (3) as shown in Fig. 22.

Step 5: Set the fence at 90° to the saw blade and tighten the four locking latches.

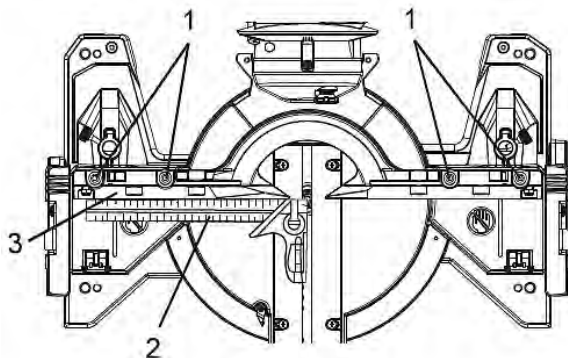


Fig. 22: Perpendicularity of the stop



NOTE!

If the saw has not been used for some time, check again that the saw blade is perpendicular to the fence and readjust it if necessary.

Step 6: After aligning the fence with a combination angle, make a 90° cut and then check the squareness of the part. Readjust if necessary.

Setting the cutting depth

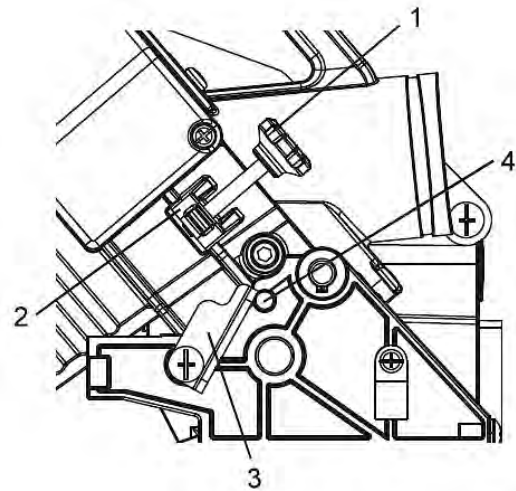


Fig. 23: Setting the cutting depth

The maximum depth travel of the cutting head was set at the factory.

To set the maximum width movement of the cutting head, follow the steps below

(Fig. 23):

Step 1: Turn the stop knob (1) counterclockwise until the stop knob (1) does not protrude from the stop block (2) while the cutting head is moved upwards.

Step 2: Turn the stop plate (3) clockwise until it touches the stop rod (4).

Step 3: Check the saw blade depth again by moving the cutting head from front to back through the entire movement of a typical cut along the control arm.

Setting the maximum height travel of the cutting head. Follow the steps below (Fig. 24):

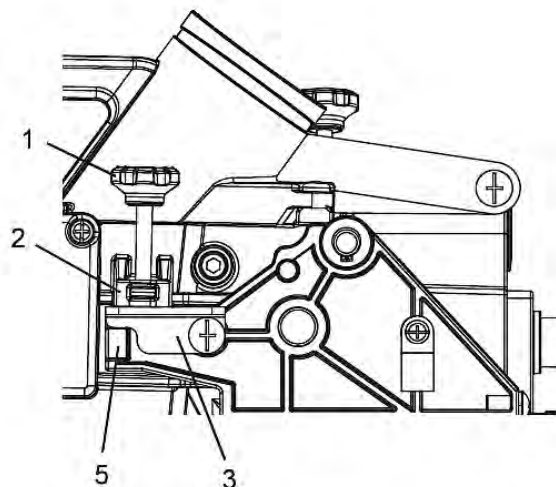


Fig. 24: Setting the maximum height travel distance

Step 1: Turn the stop knob (1) counterclockwise until the stop knob (1) does not protrude from the stop block (2) while the cutting head is moved upwards.

Step 2: Turn the stop plate (3) counterclockwise to touch the stop seat (5).

Step 3: Make sure that the stop block (2) touches the stop plate (3) completely.

The cutting depth can be preset for even and repeating flat cuts (Fig. 24):

Step 1: Move the cutting head down until the teeth of the saw blade are at the desired depth.

Step 2: While holding the upper arm in this position, turn the stop knob (1) until it touches the stop plate (3).

Step 3: Check the saw blade depth again by moving the cutting head from front to back through the entire movement of a typical cut along the control arm.



NOTE!

If the stop plate comes loose, this can affect the lifting and lowering of the cutting head. The stop plate must be tightened in the horizontal position.

Adjusting the locking lever (Fig. 25)

Step 1: Press down and lock the quick-release lever (1) to lock the mitre table.

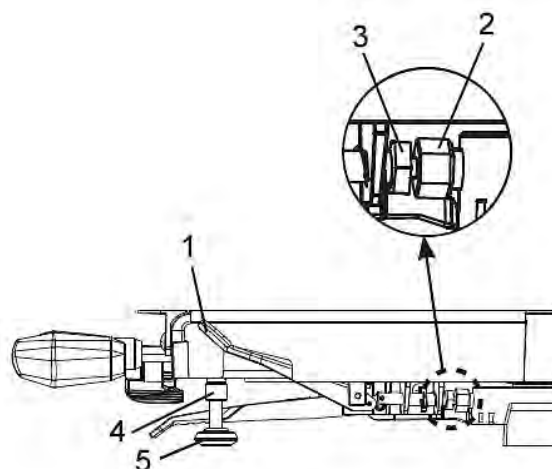


Fig. 25: Setting the maximum height travel distance

Step 2: When the table with the quick-lock lever moves to the lower position, turn the stop nut (2) to the left with a 13 mm wrench to press the locking arm against the foot of the miter saw.

Step 3: Test the quick-lock lever to make sure it locks the table securely.

Step 4: Turn the lock nut (3) to the right to lock the miter lock mechanism.

Adjusting the table support rod (Fig. 25)

Step 1: Place the mitre saw on a flat surface.

Step 2: Check that the mitre saw is level with the flat surface.

Step 3: If not, loosen the nut (4) and turn the table support rod (5) clockwise or counterclockwise to adjust the height of the table support rod (5) until the miter saw is level with the flat surface.

Step 4: Tighten the nut (4).

Application and adjustment of the extension leaf (Fig. 26)

The left and right side extension wings can provide additional support for long workpieces.

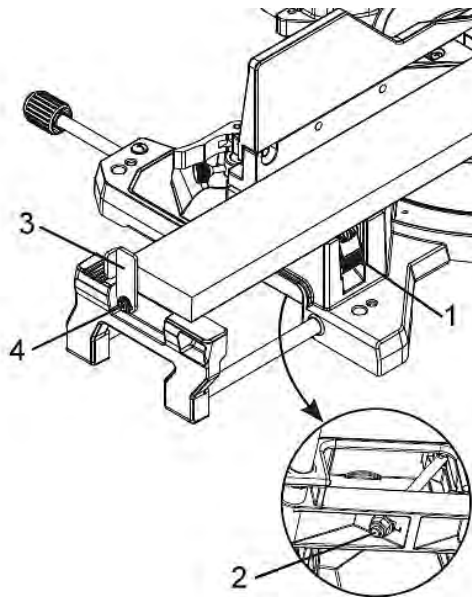


Fig. 26: Adjustment of the extension leaf

- Step 1: Lift the locking lever (1) and pull out the left extension leaf to the desired support length.
- Step 2: Press the locking lever (1) to tighten the extension wing.
- Step 3: Repeat the procedure for the right side extension wing, if necessary.
- Step 4: If the locking lever (1) is not tightened, adjust the nut (2) located under the base frame by 1/4 turn clockwise with a 10 mm wrench until it is tight.

Repeated cutting with the stop plate (Fig. 26)

The stop plate is designed for repeated cuts of equal length.



NOTE!

Always use only one stop plate. NEVER use both stop plates.

- Step 1: Rotate the stop plate (3) to the vertical position.
- Step 2: If the stop plate does not rotate, loosen the locking screw (4) by 1/4 turn using a screwdriver and an 8 mm wrench.

8.4 The laser line

Your tool is equipped with class 1 M laser guidance. The laser line allows you to preview the saw band path on the material to be cut before starting the mitre saw. This laser guide is fed directly from the transformed AC power supply via the power line. The saw must be connected to the power source and the laser ON / OFF switch must be on for the laser line to be displayed.



WARNING!

To avoid injury from an accidental start, make sure the switch is in the OFF position and the plug is not connected to the power source socket.



WARNING!

AVOID DIRECT EYE CONTACT.

The laser beams when the laser guide is switched on. Avoid direct eye contact. Always disconnect the miter saw from the power source before making adjustments.



NOTE!

For your own safety, do not connect the plug to the socket until all setting steps have been completed and you have read and understood the safety and operating instructions.



DANGER!

Using controls or adjustments or performing procedures other than those specified herein may result in hazardous radiation.



DANGER!

The use of optical instruments with this product increases the risk of eye damage.

Do not attempt to repair or disassemble the laser. Unqualified personnel may be seriously injured if they attempt to repair this laser. Any necessary repair to this laser product should be performed only by authorized service center personnel.

Observe the laser warning sign (Fig. 28):

Laser radiation - do not look directly into the beam with optical instruments Class 1 M, laser product <0.39 mW, wavelength range 400-700 nm, CW, Complies with IEC 60825-1:2014.

AVOID EXPOSITION: Laser radiation is emitted from the aperture.



Fig. 27: Switching on the laser guide

Step 1: To turn on the laser, set the toggle switch (Fig. 29) to "ON".

Step 2: To turn the laser off, press the toggle switch (Fig. 29) to "OFF".

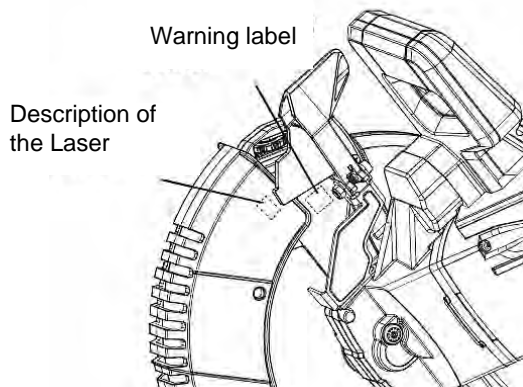


Fig. 28: Warnings

Switch for varying the speed (Fig. 29)

This saw is equipped with a variable speed regulator (fig. 29; pos. 2). The speed of the saw blade can be adjusted by simply turning the adjusting wheel:

- To increase the speed, turn the knob clockwise.
- To decrease the speed, turn the dial counterclockwise.

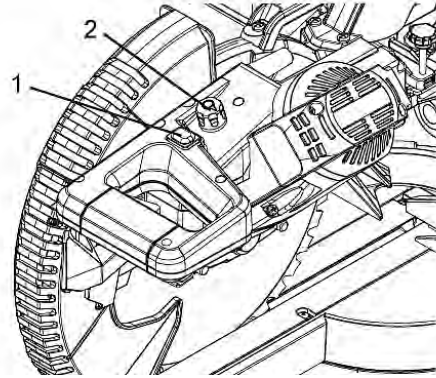


Fig. 29: Switch for varying the speed

Speed variability (Fig. 29)

The power tool is a variable speed saw. The speed regulator (2) is located on the switch handle:

- To increase the speed, turn the speed control knob (2) clockwise.
- To decrease the speed, turn the speed control knob (2) counterclockwise.

Follow the table below for the correct use of the saw blade types and the materials to be cut.



WARNING!

Never use a saw blade that is not recommended in this manual.



WARNING!

Before starting the application, make sure that the workpiece is held securely and firmly by the clamping function.

If the workpiece is not secured, serious personal injury may result.

TCG (Triple Chip Grind) Saw blade: For cutting hard materials such as wood, laminates, MDF and non-ferrous metals (see table) at the recommended speed.

ATB (Alternate Top Bevel) type saw blade: for general cutting and trimming of wood, plywood and pressboard, hardboard and chipboard when a nice cut is needed.














| Tooth Type Material | | 60~100 T | | 24~100 T | |
|------------------------|---|--|-------|--|-------|
| | | TCG  | Speed | ATB  | Speed |
| Wood | Lumber  | ● | 4000 | ● | 4000 |
| | Plywood  | ● | 4000 | ● | 4000 |
| | Hardboard  | ● | 4000 | ● | 4000 |
| | Chipboard  | ● | 4000 | ● | 4000 |
| Plastic | PVC  | ● | 3000 | | |
| | ABS  | ● | 3000 | | |
| | Acrylic  | ● | 3000 | | |
| | PC  | ● | 3000 | | |
| | PS  | ● | 3000 | | |
| | | | | | |
| Non-ferrous metal | Aluminum  | ● | 4000 | | |
| | Copper  | ● | 4000 | | |

Table 1: Saw blade selection

Setting the laser guide (Fig. 30, 31, 32, 33)



NOTE!

All settings for the operation of this machine have been completed at the factory. Due to normal wear and tear and use, some occasional adjustments may be necessary.

Check the alignment of the laser line (Fig. 30)

Step 1: Set the saw to 0° mitre and 0° Chamfer adjustment.

Step 2: Take a board and use a straight edge (not supplied), mark a 90° line on the top and front of the board. This line serves as a "sample line" for all laser line alignments. Place the board on the saw table.

Step 3: Gently lower the cutting head to align the saw blade with the pattern line.

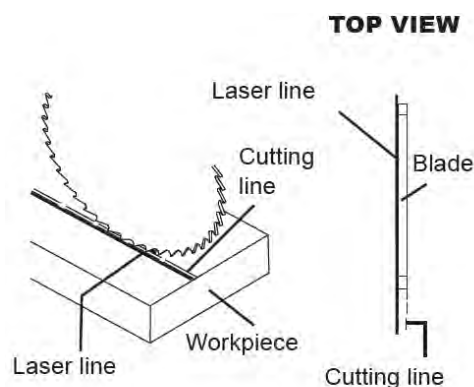


Fig. 30: Switching on the laser guide

Step 4: Position the saw blade on the left, middle or right side of the "sample line", depending on your preference for the position of the laser line.

Step 5: Turn on the laser guide when the saw is inserted. Your saw has been preset with the laser line on the left side of the saw blade.

Step 6: Look at the front of the board to see if the laser line is parallel to the "pattern line", if not, follow the instructions in Procedure A.

Step 7: Look at the top of the board to see if the laser line is parallel to the "pattern line", if not follow the instructions in procedure B.

Adjust the position of the laser line according to procedure A (Fig. 31, 32)

Turn the laser adjustment knob (1) slightly to adjust the vertical angle of the laser line on the front of the Plantine:

- If the laser line is angled from left to right, turn the laser adjustment knob (1) clockwise;
- When the laser line is angled from right to left, turn the laser adjustment knob (1) counterclockwise until the laser line is parallel to the vertical "pattern line".

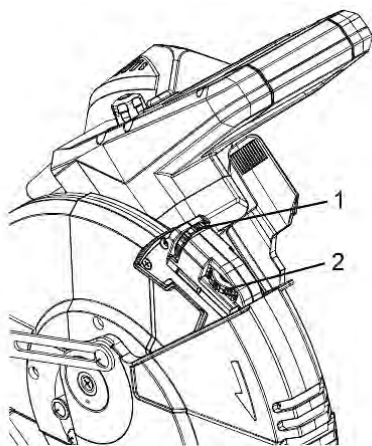


Fig. 31: Adjust the position of the laser line according to procedure A

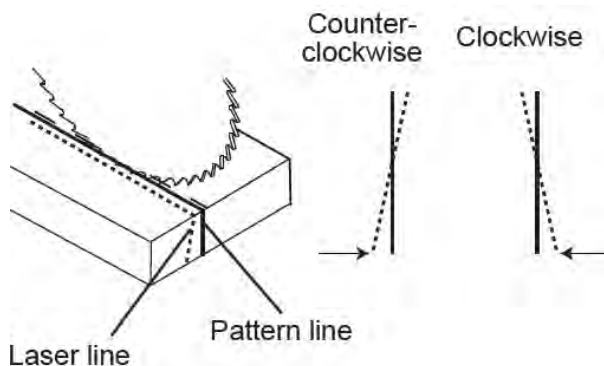


Fig. 32: Adjust the position of the laser line according to procedure A

Adjust the position of the laser line according to procedure B (Fig. 31, 33)

Turn the horizontal adjustment knob (2) of the laser slightly to adjust the horizontal angle of the laser line on the top of the board.

- If the laser line is angled from left to right, turn the laser adjustment knob (2) clockwise;
- When the laser line is angled from right to left, turn the laser adjustment knob (2) counterclockwise until the laser line is parallel to the vertical "pattern line".

Check the alignment of the laser line again.

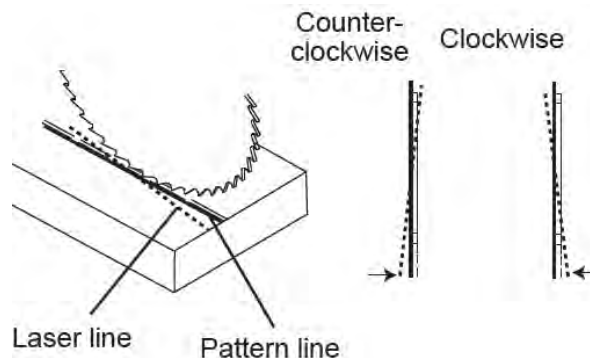


Fig. 33: Adjust the position of the laser line according to procedure B



NOTE!

The laser line is calibrated and adjusted so that it protrudes on the left side of the saw blade.

8.5 Switching on the saw (Fig. 34)

This mitre saw is equipped with an ON / OFF switch (1). When the trigger switch is pressed, the mitre saw is turned on.



NOTE!

To make the ON / OFF switch childproof: Insert a padlock (not supplied) or padlock chain through the opening (2) in the trigger switch to lock the switch of the appliance and prevent children and other unqualified users from turning on the appliance.

The miter saw is equipped with an electric blade brake. When the trigger switch is released, the blade brake stops the blade within about 10 seconds.

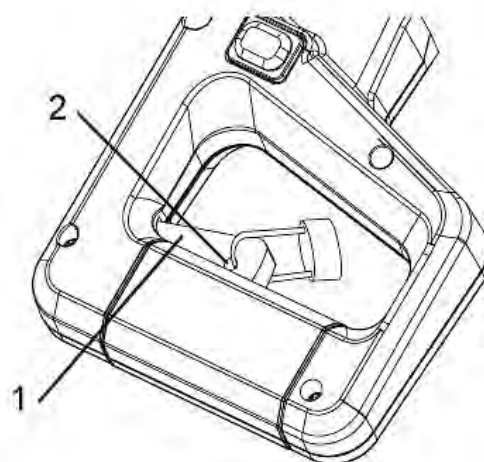


Fig. 34: ON/OFF switch

8.6 Sliding stop (Fig. 35)



NOTE!

For bevel cuts the sliding stop must be extended. If the sliding stop is not extended, there is not enough space for the blade, which can lead to serious injuries. With extreme mitre or chamfer angles, the saw blade may also touch the fence.

Step 1: Unlock the pawl locking lever (1) by sliding it to the rear of the machine.

Step 2: Extend the stop (2) by sliding it out. Lock the stopper cam locking lever (1) by pulling it towards the stopper.

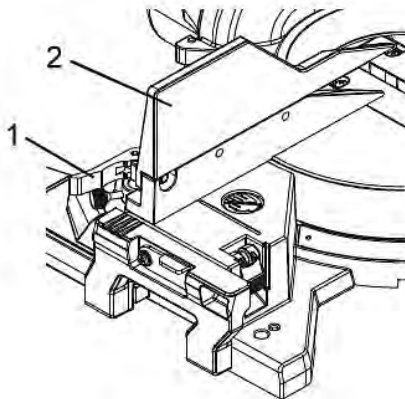


Fig. 35: Sliding stop



NOTE!

When transporting the saw, always secure the sliding fence in the folded position and lock it.

8.7 Sliding carriage system (Fig. 36)



WARNING!

To reduce the risk of injury, move the carriage to the full rear position after each cross section.

- For cutting small workpieces, push the cutting head set all the way back and tighten the locking knob of the carriage (1).
- To cut wide boards up to 305 mm (KGZ 2540) or 310 mm (KGZ 3050), the locking knob (1) must be released to allow the cutting head to slide freely.

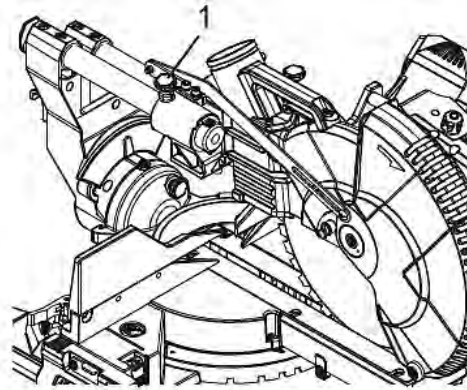


Fig. 36: Sliding carriage system

8.8 Quick cam table locking application (Fig. 37)

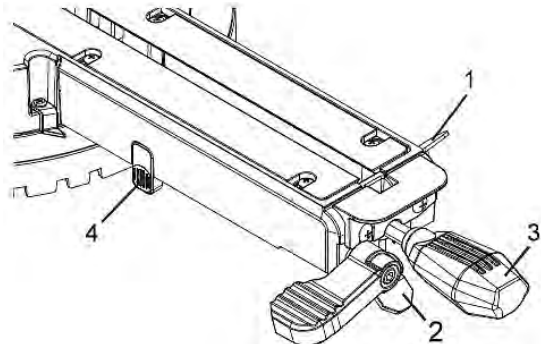


Fig. 37: Quick cam locking lever

If the requested mitre angle cannot be covered by one of the nine positive stops, the mitre table can be locked at any angle between these positive stops by using the quick cam locking lever.

Step 1: Unlock the mitre table by lifting the quick release lever (1).

Step 2: Hold the lever (2) of the ratchet lock upwards, grip the mitre handle (3) and move the mitre table to the left or right to the desired angle.

Step 3: Release the positive ratchet lever (2).

Step 4: Push the quick lock lever (1) until the mitre box engages in the desired position.



NOTE!

The quick release lever should adjust the table and prevent it from moving.

If an adjustment is necessary, follow the procedure in "Adjusting the quick-lock lever".

Mitre lock bridging (Fig. 37)

The bridging of the mitre detent allows fine adjustment of the table and releases the function of the positive detent stops. If a required mitre angle is close to a positive detent stop, this bridging prevents the wedge on the mitre arm from sliding into this detent slot at the base.

Step 1: Unlock the mitre table by pulling the quick release lever (1).



NOTE!

The mitre handle (3) does not lock or unlock the table.

Step 2: While holding the miter handle (3), pull the positive locking lever (2) upwards and then push the bridging lock (4) in.

Step 3: Release the release lever (3). Hold down the override lock (4), the lock control is now activated.

Step 4: Turn the table to the desired angle and secure it by pressing the quick release lever (1).

Step 5: To release the override lock, pull the quick-release lock lever (1), pull up the ratchet lock lever (2). This will release the override lock (4) and the table will now stop at the positive detent angles.

Before leaving the saw

Step 1: Never leave the tool running unattended. Turn it off. Wait until all moving parts have stopped.

Step 2: Make the workshop childproof. Lock the workshop. Disconnect the main switches. Keep tools away from children and other unqualified users.



WARNING!

To avoid injury from throwing materials, always unplug the saw to prevent accidental starting and remove small pieces of material from the table cavity. The table insert can be removed for this purpose, but always put it back on before a cutting operation is performed.

Mitre cut (Fig. 38)

The tool is equipped with nine positive mitre stops on the saw frame. The positions are at 0°, 15°, 22.5°, 31.6° and 45° left and right.

These positions represent the most common angles for cutting applications.

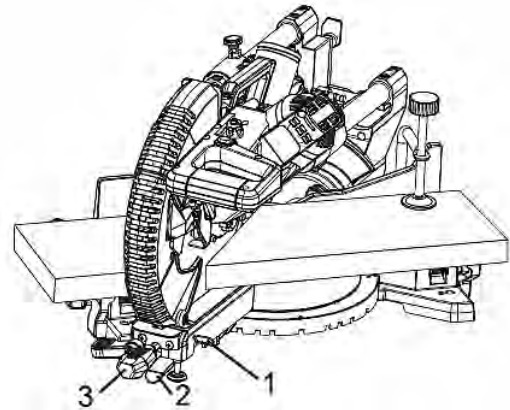


Fig. 38: Mitre cut

Performing a mitre cut:

Step 1: Unlock the mitre table by lifting the quick cam locking lever (1).

Step 2: While lifting the positive stop lock lever (2), grasp the miter grip (3) and turn the miter table left or right to the desired angle.

Step 3: Loosen the locking lever (2) for positive stop and set the miter to the desired angle. Make sure that the lever engages in place.



NOTE!

The lever only engages at one of the nine positive stops.

Step 4: Once the desired miter angle is reached, push down the Quick Cam Lock Lever (1) to secure the table in that position.

Step 5: If the desired miter angle is NOT one of the nine positive stops, simply lock the table at the desired angle by pushing down the Quick Cam Locking Lever (1).

Step 6: Turn on the laser guide and position the workpiece on the table for pre-alignment of the next cut.

Inclination cut (Fig. 39, 40)



WARNING!

For bevel cuts, the sliding stop must be fully extended to the left or right. If you do not extend the sliding stop, there may not be enough room for the blade, which can cause serious injuries. If the mitre or bevel angles are extreme, the saw blade may also touch the fence.

The sliding fence must be removed if left or right bevel angle cuts greater than 33.9° are made.

Step 1: If a tilt cut is required, release the mitre lever (1) by turning it upwards (Fig. 39).

Step 2: Tilt the cutting head to the desired angle as shown on the tilt scale (2).

Step 3: The blade can be positioned at any angle, from a 90° straight cut (0° on the scale) to a 45° right bevel. Tighten the taper lock handle (1) to hold the cutting head in position. Positive stops are provided at 0°, 33.9° and 45°.



NOTE!

The saw is supplied with a 33.9° chamfered locking bolt (3) for setting up crown form cuts when the wall angle is 90°.

Step 4: Switch on the laser guide and position the workpiece on the table for pre-alignment of the cutting.

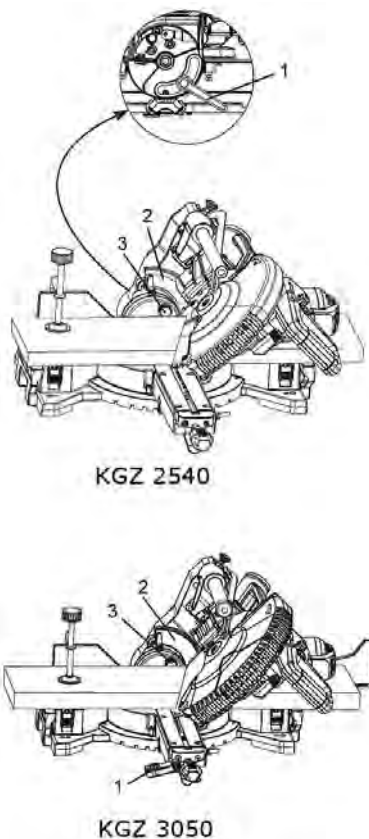


Fig. 39: Quick cam locking lever

Step 5: To make 47° bevel cuts, slide the adjustment plate (4) to the back of the saw. Slide the right adjustment plate for the right 47° bevel cut; slide the left adjustment plate for the left 47° bevel cut.



NOTE!

47° right bevel cannot be executed by the KGZ 2540.

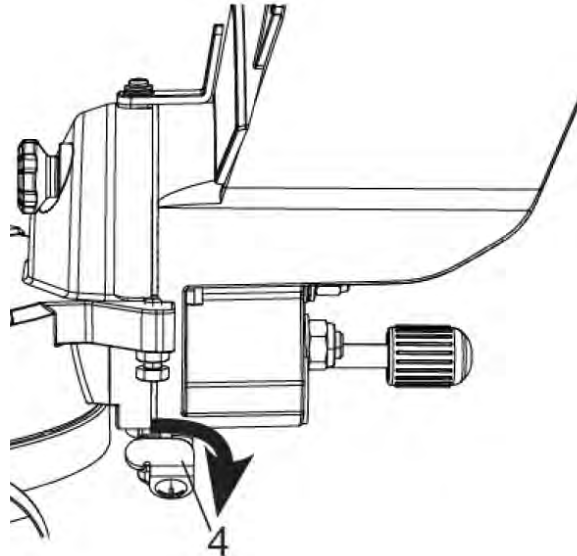


Fig. 40: Cut to length

33.9° inclination locking bolt for cutting decorative strips (Fig. 39)

Step 1: Slide the 33.9° tilt lock pin (3) towards the rear of the machine.

Step 2: Release the tilt lock handle (1).

Step 3: Turn the cutter head until the 33.9° tilt lock pin (3) stops the tilt at 33.9° on the tilt scale (2).

Step 4: Tighten the miter lock handle (1) before cutting.

Composite cut (Fig. 41)

A compound cut is the combination of a mitre and an inclined cut simultaneously.



NOTE!

The sliding stop must be removed if left-hand or right-hand diagonal cuts greater than 33.9° are made in combination with left-hand or right-hand diagonal cuts greater than 31.6°.

Step 1: Extend the stop by sliding it to the desired position or remove the sliding stop if necessary.

Step 2: Set the desired mitre angle and lock it.

Step 3: Set and lock the desired bevel angle.

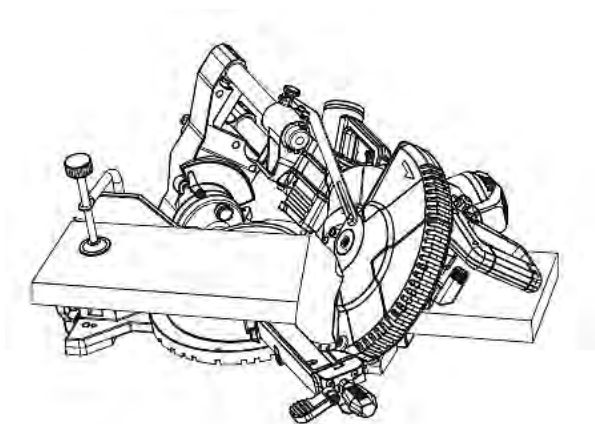


Fig. 41: Composite cut

Cut basic cut (Fig. 42)

Base profiles and many other shaped parts can be cut on a compound mitre saw. The design of the saw depends, as shown, on the shape properties and the application. Carry out practical cuts on old material to achieve the best results.

1. Always make sure that the strips are firmly attached to the stop and table. If possible, use hold-down clamps, vices or C-clamps.
2. Reduce splintering as soon as material is caused.



NOTE!

Always perform a dry run cut so that you can determine whether the operation to be attempted is possible before the saw is supplied with power.

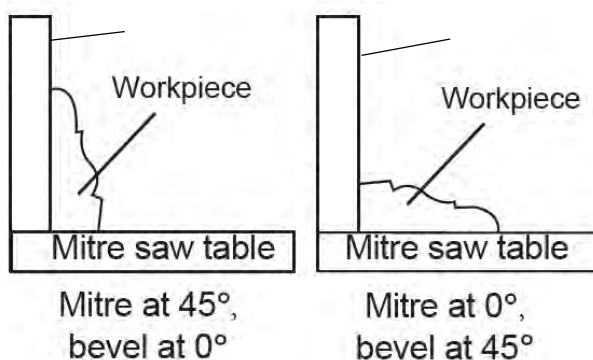


Fig. 42: Composite cut

| SETTINGS | | Vertical Position (Back of molding is against the fence) | | Horizontal Position (Back of molding is flat on the table) | |
|--------------------|------------------|---|------------------------|---|------------------------|
| Bevel Angle | | 0° | | 45° | |
| Molding Position | | Left side | Right side | Left side | Right side |
| Inside Corner | Miter Angle | Left at 45° | Right at 45° | 0° | 0° |
| | Molding position | Bottom against table | Bottom against table | Top against fence | Bottom against fence |
| | Finished side | Keep left side of cut | Keep right side of cut | Keep left side of cut | Keep left side of cut |
| Outside Corner | Miter Angle | Right at 45° | Left at 45° | 0° | 0° |
| | Molding position | Bottom against table | Bottom against table | Bottom against fence | Top against fence |
| | Finished side | Keep left side of cut | Keep right side of cut | Keep right side of cut | Keep right side of cut |

Table 2: Reference values Basic cut

Cutting of ornamental strips

Trim strips can only be cut flat on the table with this mitre saw.

This mitre saw has special mitre stops of 31.6° left and right and a mitre stop of 33.9° for a special shape of moulding, i.e. 52° between the back of the moulding and the upper flat surface that joins against the ceiling; 38° between the back of the moulding and the lower flat surface that joins the wall.

Refer to the following table in the next column for this moulding cut.

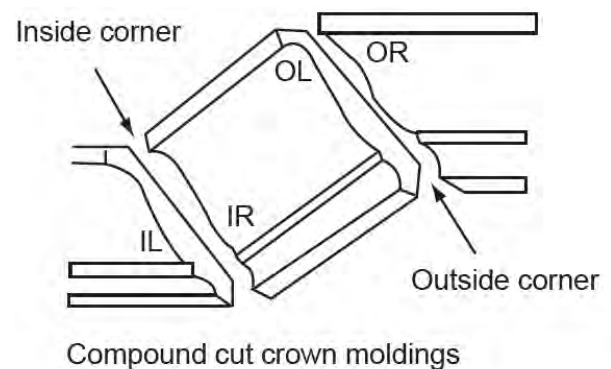


Fig. 43: Cutting composite decorative strips



| SETTINGS | | Left Side | Right Side |
|--|------------------|------------------------|------------------------|
| Inside Corner  | Miter Angle | 31.6° Right | 31.6° Left |
| | Bevel Angle | 33.9° | 33.9° |
| | Molding Position | Top against fence | Bottom against fence |
| | Finished Side | Keep left side of cut | Keep left side of cut |
| Outside Corner  | Miter Angle | 31.6° Left | 31.6° Right |
| | Bevel Angle | 33.9° | 33.9° |
| | Molding Position | Bottom against fence | Top against fence |
| | Finished Side | Keep right side of cut | Keep right side of cut |

Table 3: Reference values for cutting decorative strips

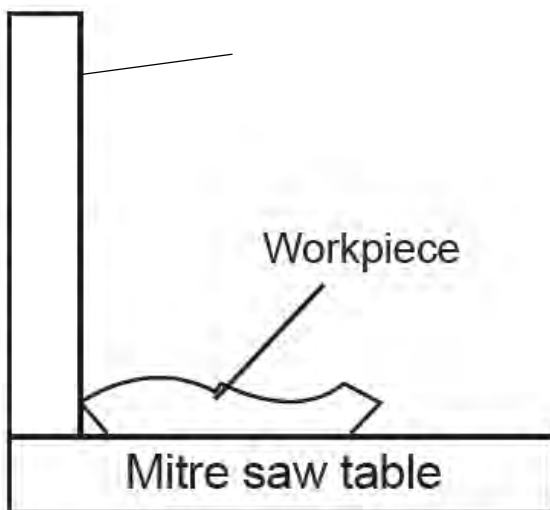


Fig. 44: Cutting ornamental strips



NOTE!

These special stops cannot be used with 45° trim forms.

Since most rooms do not have angles of exactly 90°, fine tuning is necessary.

Always make a test cut to confirm the correct angles.

Sliding cut (Fig. 45)



WARNING!

Never pull the cutting head assembly and rotating saw blade toward you while cutting. It is possible for the saw blade to climb up the top of the workpiece, causing the cutter head assembly and the rotating saw blade to forcefully recoil.

The cutting head unit should be fully retracted and then advanced during sawing.

Let the saw blade reach full speed before cutting. This helps to reduce the risk of ejection of the workpiece.

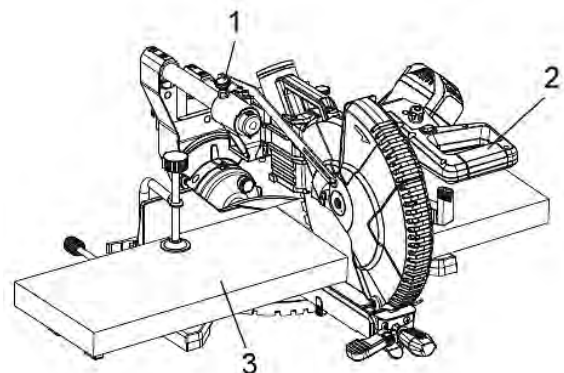


Fig. 45: Sliding cut

Step 1: Unlock the locking knob of the carriage (1) and let the cutting head run freely.

Step 2: Set the desired tilt angle and/or miter angle and lock it in position.

Step 3: Use a hold-down clamp to secure the workpiece.

Step 4: Turn on the laser guide and position the workpiece on the table to pre-adjust your cut.

Step 5: Grasp the trigger switch handle (2) and pull the carriage forward until the center of the saw blade is above the front of the workpiece (3).

Step 6: Press the trigger to turn on the saw.

Step 7: When the saw reaches full speed, slowly push down the saw handle and cut through the front edge of the workpiece.

Step 8: Slowly move the trigger handle back to the stop and complete the cut.

Step 9: Release the trigger and let the blade stop rotating before lifting the cutting head and removing the workpiece.

8.9 Saw blade change



WARNING!

Never use a saw blade larger than 305 mm (KGZ 3050) or 254 mm (KGZ 2540) in diameter.

To prevent injury from accidental startup, make sure the switch is in the OFF position and the power plug is not connected to the power supply.

Always wear protective gloves when removing and installing the saw blade.

Observe the maximum speed and tooth type marked on the saw blade.

Replacement of the saw blade, including the procedure for repositioning the saw blade, must be carried out correctly.

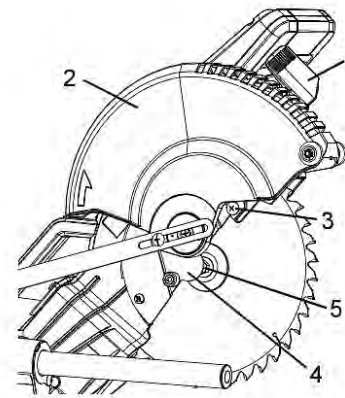
Removing the saw blade (Fig. 46, 47, 48)

Step 1: Disconnect the saw from the power outlet.

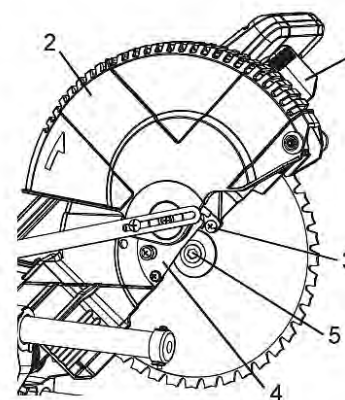
Step 2: Lift the cutting head to the upright position.

Step 3: Press lightly on the locking lever (1) of the blade guard and then lift the lower blade guard (2) to the upper position (Fig. 46)

Step 4: Loosen the screw of the cover plate (3) using a slotted screwdriver or key.



KGZ 2540



KGZ 3050

Fig. 46: Removing the saw blade

Step 5: Turn the cover plate (4) backwards to expose the mandrel screw (5).

Step 6: Place the hexagonal end of the saw blade wrench over the mandrel bolt (5).

Step 7: Locate the locking knob (item 6, fig. 47) under the switch handle.

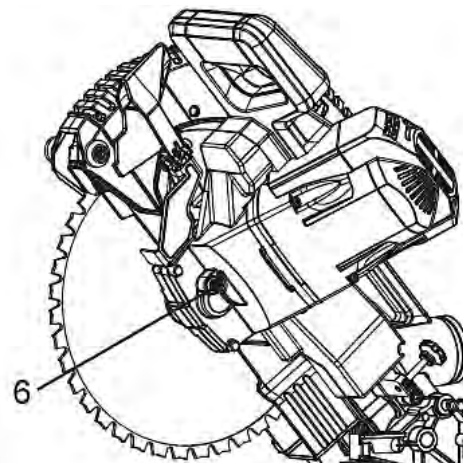


Fig. 47: Removing the saw blade

Step 8: Press and hold the locking button (6) while turning the saw-blade key clockwise. This will engage the canopy lock and the mandrel bolt can be released with the blade key. Keep the locking button (6) depressed while turning the key clockwise to release the locking bolt.

Step 9: KGZ 2540: Remove the mandrel screw (5), the saw blade ring (7) and the saw blade (9). Do not remove the inner saw blade ring (10) (Fig. 48).

KGZ 3050: Remove the mandrel screw (5), the saw blade ring (7), the reducer (8) and the saw blade (9). Do not remove the inner saw blade ring (10) (Fig. 48).

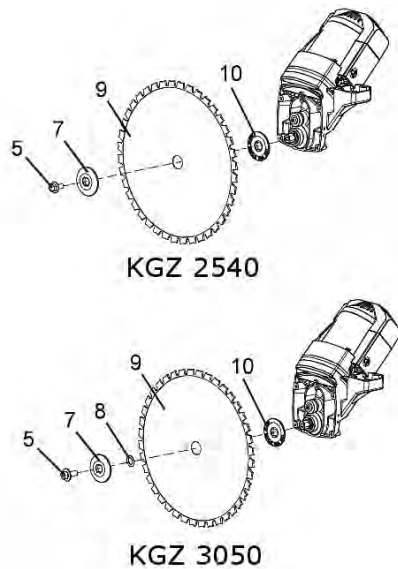


Fig. 48: Removing the saw blade



NOTE!

Look for the removed parts and note their position and direction. Wipe the saw blade sleeves from sawdust before installing a new blade.

Installing the saw blade (Fig. 47, 48)

Step 1: Disconnect the mitre saw from the mains before changing / installing the saw blade.

Step 2: KGZ 2540: Install a 254 mm saw blade with a 30 mm arbor.

KGZ 3050: Install a 305 mm saw blade with a 30 mm arbor.

Step 3: Make sure that the rotation arrow on the saw blade corresponds to the clockwise arrow on the top of the protective hood. The saw blade teeth on the front of the saw must face down.

Step 4: KGZ 2540: Place the outer saw blade ring (7) on the saw blade (9) and on the mandrel screw (Fig. 48).

KGZ 3050: Place the reduction piece (8) against the saw blade (9) and place the reduction piece (8) on the shaft (Fig. 48).

Step 5: Screw the threaded screw (5) onto the shaft in an anti-clockwise direction (Fig. 46).

IMPORTANT: The flat side of the saw blade collar must be placed against the saw blade. Do not install the collar with the bent side against the saw blade.

Step 6: Place the saw-blade wrench on the shaft bolt (5).

Step 7: Press and hold the locking button (6) while turning the saw blade wrench counterclockwise. Continue to press while the shaft screw is tightened (Fig. 47).

Step 8: Turn the cover plate (4) back until the slot in the cover plate engages with the cover plate screw (3) (Fig. 46).

Step 9: Tighten the screw with the cross end of the wrench provided.

Step 10: Pull the main handle up and down several times to ensure that the lower saw blade guard works without jamming.

Step 11: Make sure that the locking knob (6) is released to allow the saw blade to rotate freely (Fig. 47).



WARNING!

Never use the saw without the cover plate in place to avoid injury. It prevents the mandrel pin from falling out if it is accidentally released and prevents the spinning wheel from coming off the saw.



WARNING!

Make sure that the cuffs are clean and correctly positioned. Lower the saw blade into the lower table and check contact with the base or miter table by manually turning the saw blade.

9 Care, maintenance and repairs



DANGER!

Danger to life through electric shock!

There is a danger to life when in contact with live components. Switched-on electrical components can execute uncontrolled movements and cause serious injuries.

- Before starting cleaning and maintenance work, switch off the machine and pull the mains plug.
- Connection and repair of the electrical equipment may only be carried out by a qualified electrician.

9.1 Care after end of work



Use protective gloves!



NOTE!

Never use harsh cleaning agents or solvents for any cleaning work. This can lead to damage or destruction of the device.

Step 1: Unplug the power cord from the wall outlet.

Step 2: Empty and clean the suction device.

Step 3: Use a cloth to clean the machine of dust and chips.

Step 4: Oil the moving parts once a month. Never oil the motor.



DANGER!

Do not remove the chips with your bare hand. There is a risk of cuts from chips and tools!

9.2 Maintenance and repair/repair

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

If the Chop- and Mitre Saw does not function properly, contact a dealer or our customer service department. See chapter 1.2 Customer Service for contact details. All protective and safety devices must be reinstalled immediately after repair and maintenance work has been completed. There are no other parts inside the device that require maintenance.

General maintenance

Occasionally use a cloth to wipe chips and dust from the machine. Oil the turned parts once a month to prolong their service life. Do not oil the motor.

Carbon brush inspection (Fig. 49)



WARNING!

Always unplug the power supply before inspecting the carbon brushes.

The supplied carbon brushes must be replaced after approximately 50 hours of operation or 10,000 ON/OFF cycles. After the first inspection, they must be checked every 10 hours of operation. Replace both carbon brushes if there is less than 6 mm carbon or if the spring or wire is damaged or burnt.



WARNING!

If the carbon brushes are worn down to 6 mm, or if the spring and leads are faulty, always replace both carbon brushes. If the carbon brushes are faultless, they can continue to be used.

To check or replace the brushes, proceed as follows:

Step 1: First disconnect the power plug from the power supply.

Step 2: Remove the motor cover (1) by loosening two screws (2).

Step 3: Remove the black plastic cap (3) on the side of the motor. Remove the cap carefully as it is spring loaded. Then pull out the brush (4) and replace it.

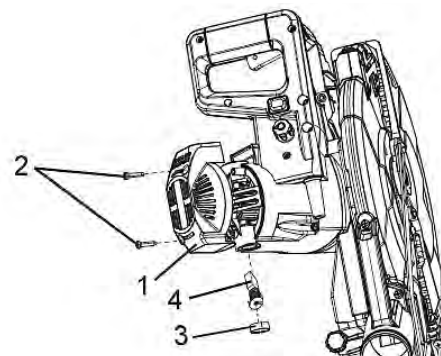


Fig. 49: Inspection of the carbon brushes

Step 4: Replace the other side in the same way.

Step 5: To reassemble it, reverse the process. The eyelets on the metal end of the assembly go into the same hole where the carbon part will fit. Tighten the cap, but do not overtighten.



NOTE!

To reinstall the same brushes, first make sure that the brushes are replaced as they came out. This avoids a running-in period.

10 Troubleshooting

| Fault | Possible causes | Remedy |
|--|---|--|
| The motor does not start up | No mains power Connecting cable is defective Motor defective | Have the mains power /connection cable checked by qualified personnel. Have the motor replaced by qualified personnel |
| Motor becomes too hot | 1. Motor short circuit 2. Motor overload | 1. Disconnect the power plug and have the saw repaired by qualified personnel 2. Check if the saw blade is suitable for the material to be cut Check whether the saw blade is still sufficiently sharp. Take a work break and let the engine cool down |
| Broken saw blades | 1. Wrong voltage 2. Old saw blade 3. Wrong saw blade 4. Jamming in the wood | 1. Adjust the saw blade tension 2. Reduce the speed 3. Use the correct saw blade 4. Reduce the pressure on the saw blade |
| Saw vibrates, saw blade hammers | 1. Saw blade does not conform to specification 2. Saw blade not sufficiently fastened 3. Saw blade is defective 4. Saw is not screwed together correctly 5. Bad underground 6. Loose connections at the work table 7. The motor is not properly fixed | 1. Use the specifications in the technical data to check whether the saw blade is suitable for installation 2. Tighten the fixing screw 3. Check the saw blade for mechanical damage and replace it if necessary. 4. Look under fixing at the worktable 5. The heavier your workbench or worktable is, the more stable your machine will be 6. Tighten the handwheel from the workbench 7. Tighten the screws of the motor mountings |
| Cutting angle not maintained | Saw positions not properly fixed | Check whether the saw is fixed in the appropriate position so that the angle cannot adjust itself during sawing. |
| Saw blade goes wrong Saw blade does not run parallel to the saw arm | Saw blade holders are not sitting straight | Loosen the screws of the saw blade holder and adjust them. |
| Turntable is difficult to move | The wood chips in the turning area | Remove the the wood chips |

11 Disposal, reusing used machines

In your own interest and to protect the environment make sure that all machine components are exclusively disposed of in as intended and permitted.

11.1 Decommissioning

Disused machines must be decommissioned immediately to prevent misuse at a later point and putting the environment or persons at risk.

Step 1: remove all environmentally hazardous processing materials from the used machine.

Step 2: If necessary, disassemble the machine into assemblies and components that are easy to handle and suitable for recycling.

Step 3: The machine components and processing materials must be disposed of using the intended disposal methods.

11.2 Disposal of electrical equipment

Note that electrical equipment contains a variety of recycling-capable materials and also environmentally hazardous components.

Please help to separate these components and dispose of them responsibly. In case of doubt, contact your local waste disposal authority. Consult a specialist disposal agent for recycling if needed.

11.3 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 this equipment).



The symbol on the product or its packaging indicates that this product should not be treated as normal household waste, but should be handed in at a collection point for the recycling of electrical and electronic equipment. By helping to dispose of this product correctly, you will help protect the environment and the health of those around you. The environment and health are endangered by incorrect disposal. Material recycling helps to reduce the consumption of raw materials. For more information about recycling this product, contact your local authority, municipal waste disposal service or the shop where you purchased the product.

12 Spare parts



DANGER!

Risk of injury caused by the use of incorrect spare parts!

The use of incorrect or faulty spare parts may cause risks for operating staff and damage as well as malfunctions.

- Exclusively genuine spare parts made by the manufacturer or spare parts authorised by the manufacturer shall be used.
- Always contact the manufacturer if you are unsure.



Tips and recommendations

The manufacturer warranty shall be rendered void in the event of a use of unauthorised spare parts.

12.1 Spare parts orders

Spare parts are available from authorised retailers or directly from the manufacturer. The contact details have been listed in section 1.2 Customer service.

The following key data is required for queries or spare parts orders:

- Device type
- Item number
- Position number
- Year of construction
- Quantity
- Desired shipping type (post, freight, sea, air, express)
- Shipping address

Spare parts orders without the aforementioned data cannot be taken into account. The supplier shall determine the shipping type if no relevant data was provided.

Data on the machine type, item number and year of manufacture is listed on the type plate attached to the device.

Example

The Saw blade for the chop- and mitre saw KGZ 2540 VARIO must be ordered. The Saw blade has the position number 3Y9H in the drawing 1.

When ordering spare parts, send a copy of the spare parts drawing (1) with the marked component (Saw blade) and marked position number (3Y9H) to the authorised dealer or to the spare parts department and provide the following information:

- Type of device: **Chop- and mitre Saw**
KGZ 2540 VARIO
- Item number: **5701254**
- Drawing number: **1**
- Position number: **3Y9H**

The following drawings should help to identify necessary spare parts in case of service. To order, send a copy of the parts drawing with the marked components to your authorized dealer.

This diagram is a detailed exploded view of a mechanical assembly, likely a piece of industrial machinery. It shows the relationship between various components, which are labeled with alphanumeric codes. The parts are arranged in a way that illustrates how they fit together. Key components include a large central gear or flywheel, a motor or actuator at the top right, and various structural frames, linkages, and fasteners. The labels are distributed throughout the diagram, often with leader lines pointing to the specific parts. Some parts are shown in multiple quantities, indicated by subscripts (e.g., 32RC, 32RA₂). The diagram is a technical drawing, typical of engineering manuals or assembly guides.

KGZ SERIES | Version 2.03

[illegible]

KGZ SERIES | Version 2.03

Spare parts drawing 1 KGZ 3050 VARIO

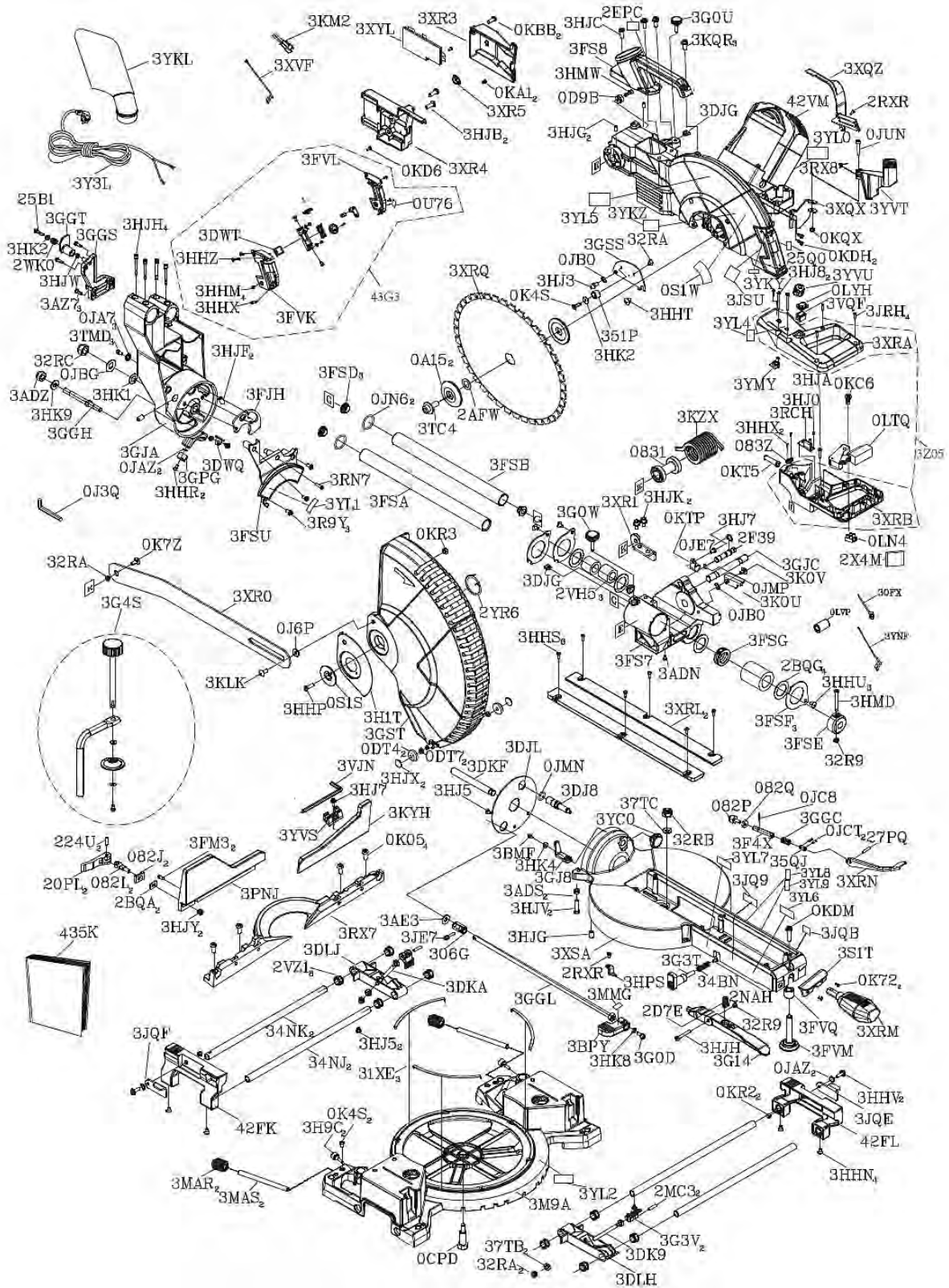


Fig. 52: Spare parts drawing 1 KGZ 3050 VARIO

[illegible]

Fig. 53: Spare parts drawing 2 KGZ 3050 VARIO

Spare parts drawing 2 KGZ 2540 VARIO

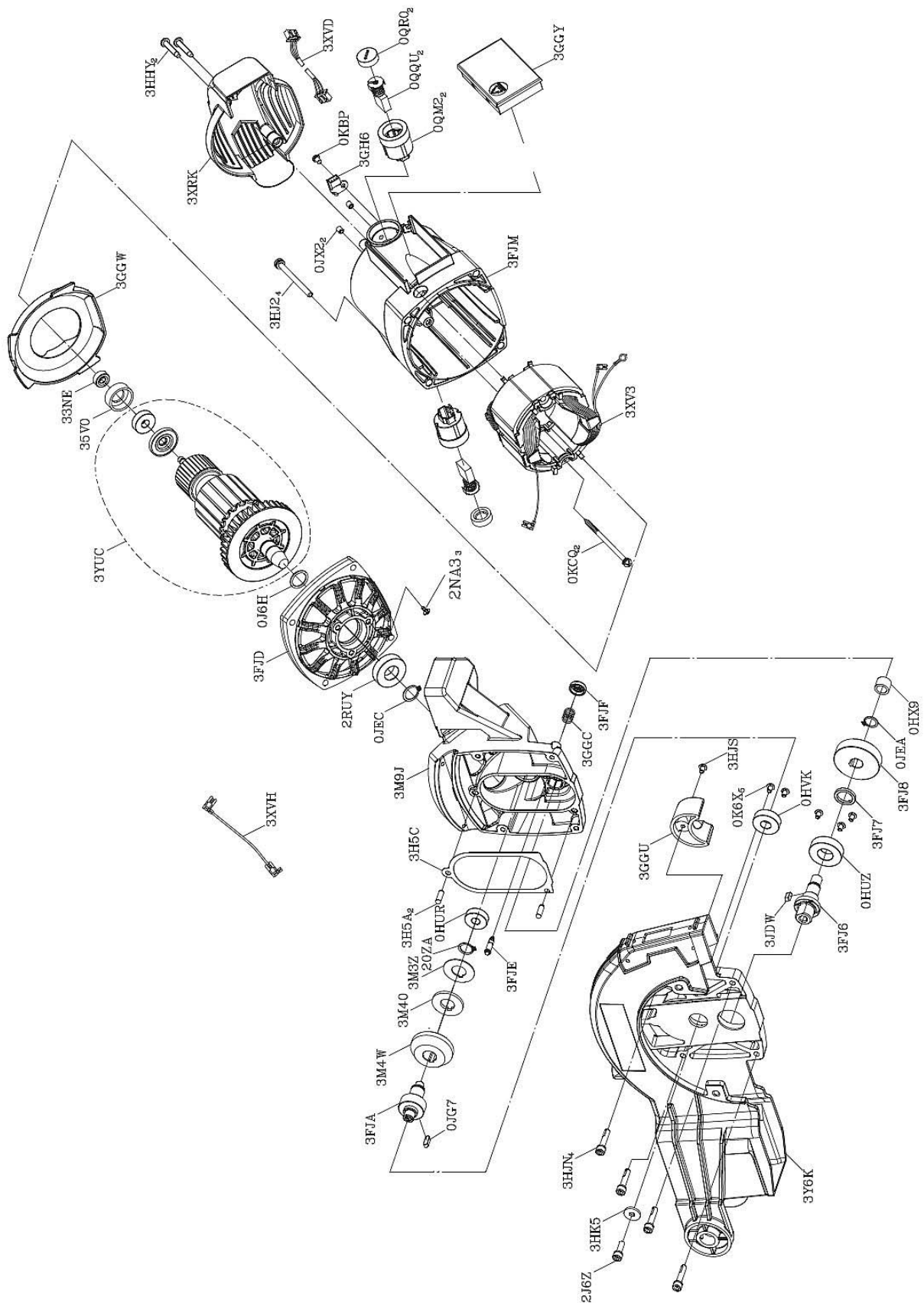


Fig. 55: Spare parts drawing 2 KGZ 2540 VARIO

Spare parts drawing 1 KGZ 3050 VARIO

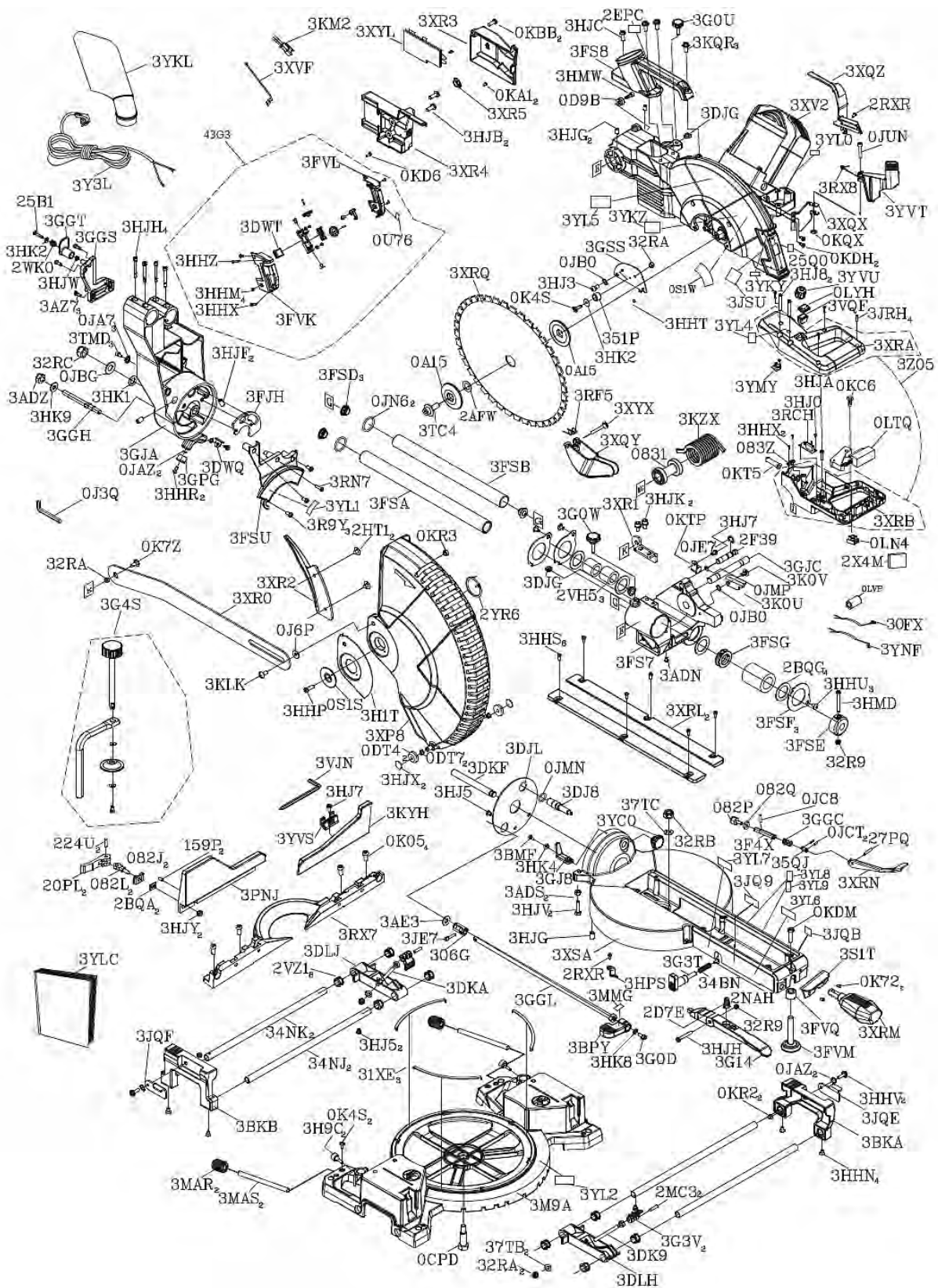


Fig. 56: Spare parts drawing 1 KGZ 3050 VARIO

Spare parts drawing 2 KGZ 3050 VARIO

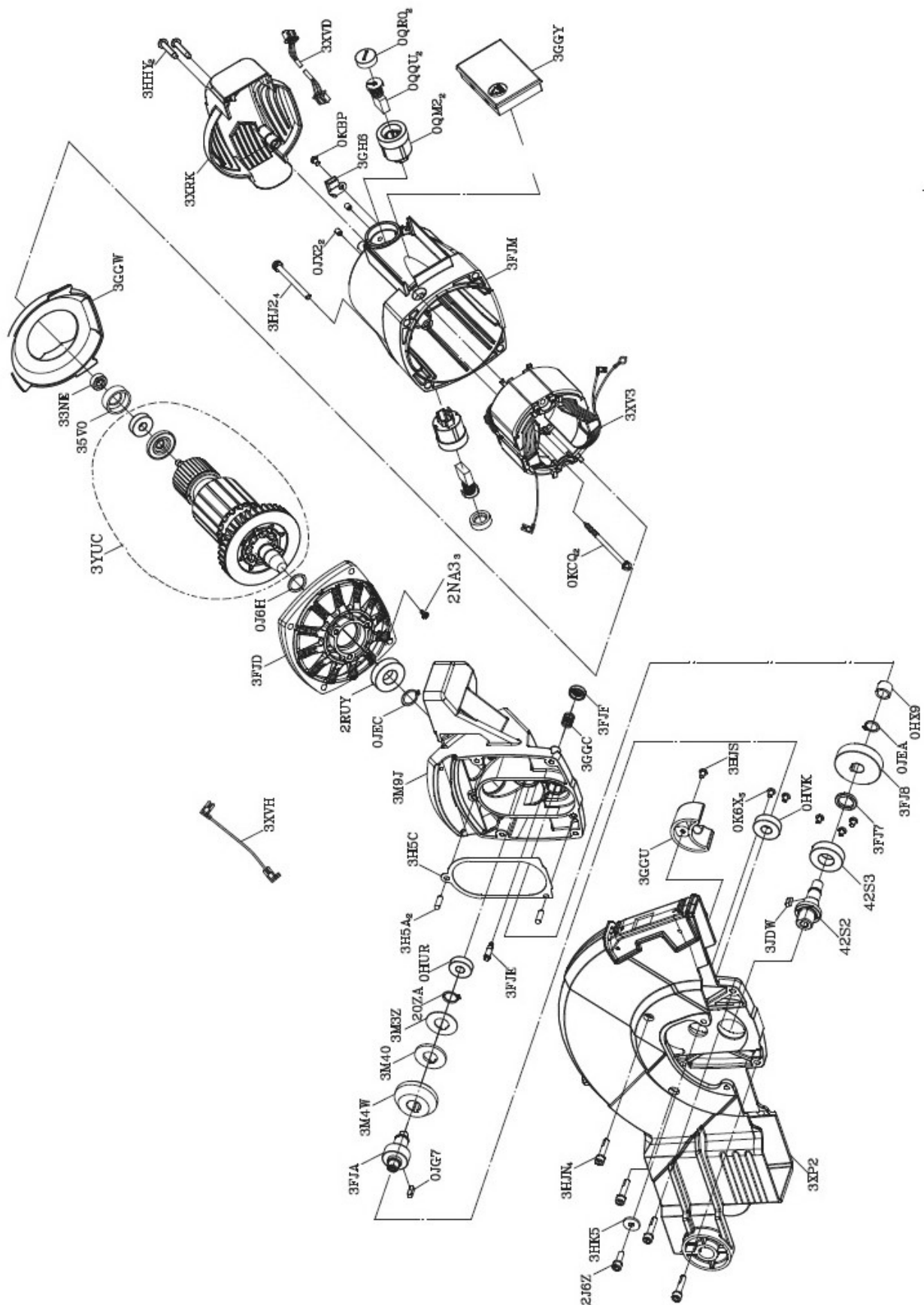


Fig. 57: Spare parts drawing 2 KGZ 3050 VARIO

13 Electrical circuit diagram

KGZ 2540 VARIO and KGZ 3050 VARIO

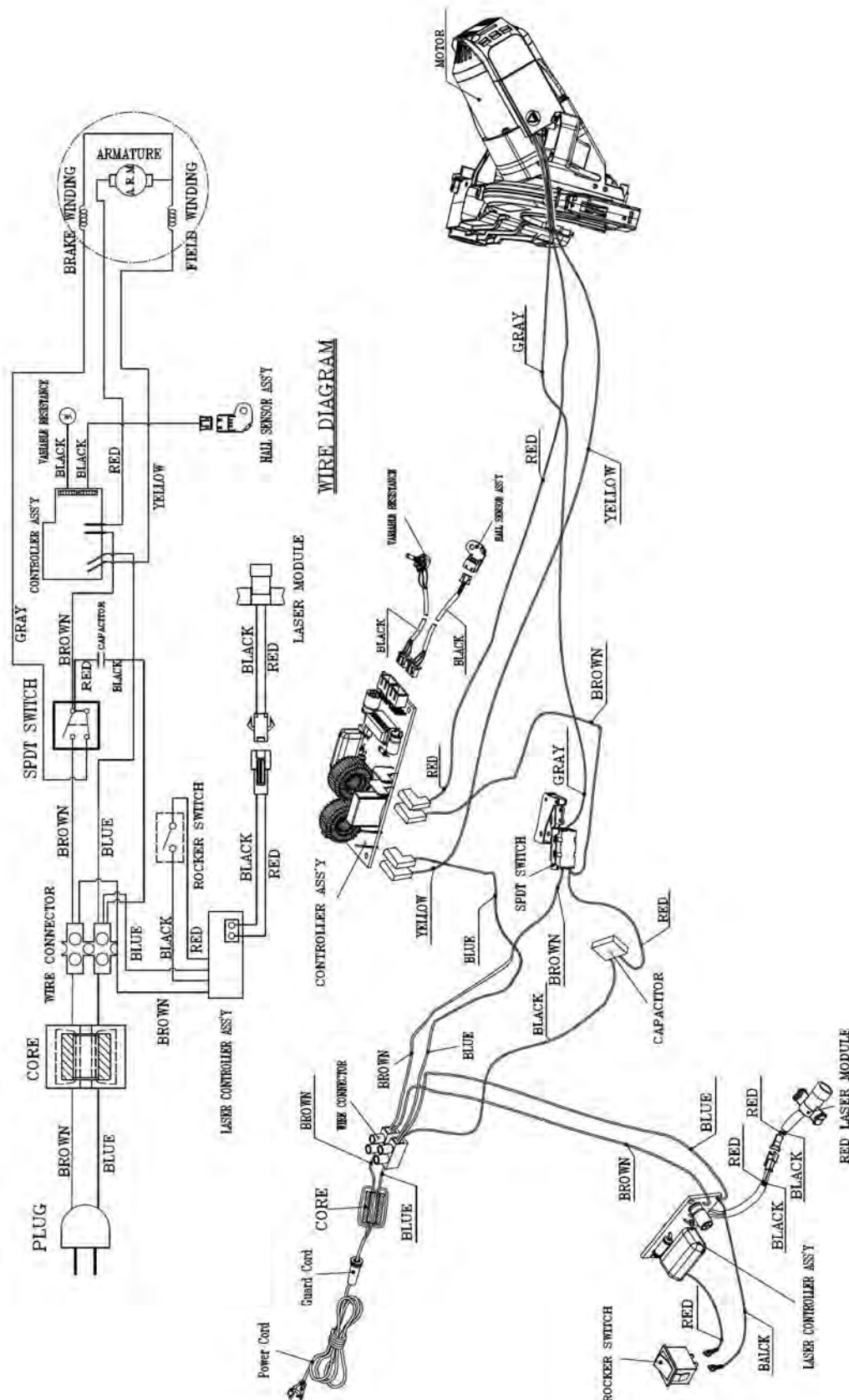


Fig. 58: Electrical circuit diagram KGZ 2540 VARIO and KGZ 3050 VARIO

14 EC-Declaration of Conformity

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

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

hereby declares that the following product

Product group: HOLZKRAFT® Woodworking machines

Type of machine: Chop- and Mitre Saw

Designation of the machine *: ☐ KGZ 2540 VARIO **Item number *:** ☐ 5701254
☐ KGZ 3050 VARIO ☐ 5701315

Serial number*: _____

Year of manufacture*: 20_____

* please fill in these fields according to the information on the type plate

complies with all the relevant provisions of the abovementioned Directive and of the other Directives applied (hereafter referred to as the Directives), including the amendments thereto in force at the date of this declaration.

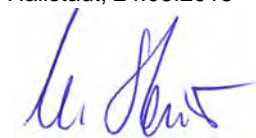
Relevant EU directives: 2014/30/EU EMC-Directives
2012/19/EU WEEE-Directives
2011/65/EU RoHS-Directives

The following, harmonised standards have been applied:

| | |
|---|--|
| DIN EN ISO 12100:2010 | Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010); |
| DIN EN 62841-1:2015 + AC:2015 | Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 1: General requirements (IEC 62841-1:2014, modified + Cor. 1:2014 + Cor. 2:2015) |
| DIN EN 62841-3-9:2015+ AC:2016 + A11:2017 | Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3-9: Particular requirements for transportable mitre saws (IEC 62841-3-9:2014, modified + COR1:2015 + COR2:2016) |
| DIN EN 55014-1:2006 + A1:2009 + A2:2011 | Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission |
| DIN EN 55014-2:2015 | Electromagnetic compatibility - Requirements for household appliances , electric tools and similar apparatus - Part 2: Immunity - Product family standard |
| DIN EN 61000-3-2:2014 | Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase) |
| DIN EN 61000-3-3:2013 | Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection |

Responsible for documentation: Kilian Stürmer, Stürmer Maschinen GmbH,
Dr.-Robert-Pfleger-Str. 26, D-96103 Hallstadt

Hallstadt, 24.08.2018



Kilian Stürmer
Manager



15 List of recyclable materials

KGZ 2540 VARIO

| Recyclable Materials Analysis List | | | | | |
|------------------------------------|----------|-------------|---------------|--------|---------|
| Material | Aluminum | Iron | Plastics | Others | Total |
| Weight (Kg) | 12.46 | 6.45 | 2.91 | 1.1 | 22.92 |
| Percentage (%) | 54.4% | 28.1% | 12.7% | 4.8% | 100.00% |
| Major Packaging Materials | | | | | |
| Material | Carton | Polystyrene | Polypropylene | Others | Total |
| Weight (Kg) | 2.12 | 1.1 | 0.12 | 0.03 | 3.37 |

KGZ 3050 VARIO

| Recyclable Materials Analysis List | | | | | |
|------------------------------------|----------|-------------|---------------|--------|---------|
| Material | Aluminum | Iron | Plastics | Others | Total |
| Weight (Kg) | 10.79 | 6.43 | 3.18 | 1.08 | 21.48 |
| Percentage (%) | 50.2% | 29.9% | 14.8% | 5.0% | 100.00% |
| Major Packaging Materials | | | | | |
| Material | Carton | Polystyrene | Polypropylene | Others | Total |
| Weight (Kg) | 2.32 | 0.9 | 0.12 | 0.03 | 3.37 |

16 Notes

