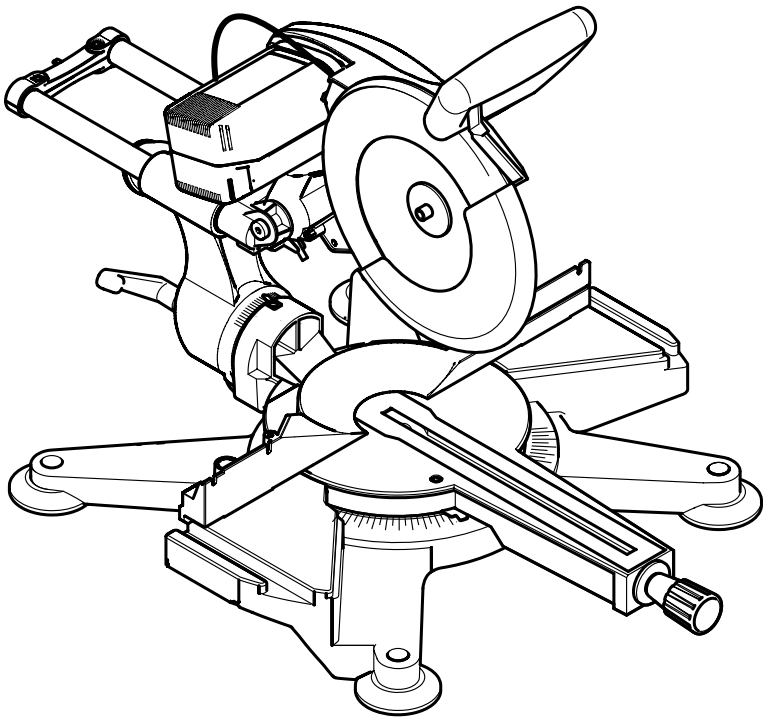
ELEKTRA BECKUM

metabo germany

English only



KGS 303

(D) Betriebsanleitung 3
(ENG) Operating Instruction 16
(F) Instructions d'utilisation 28
(IT) Manuale d'istruzioni 41

115 168 6660 / 3003 - 1.2

Anwenderfreundliche Dokumentation — Userfriendly Documentation — TÜV PRODUCT SERVICE — DQC

D DEUTSCH

KONFORMITÄTSERKLÄRUNG

Wir erklären in alleiniger Verantwortlichkeit, dass dieses Produkt mit den folgenden Normen übereinstimmt* gemäß den Bestimmungen der Richtlinien**

F FRANÇAIS

DECLARATION DE CONFORMITE

Nous déclarons, sous notre seule responsabilité, que ce produit est en conformité avec les normes ou documents normatifs suivants* en vertu des dispositions des directives **

IT ITALIANO

DICHIARAZIONE DI CONFORMITÀ

Noi dichiariamo sotto la nostra esclusiva responsabilità che il presente prodotto è conforme alle seguenti norme* in conformità con le disposizioni delle normative **

PT PORTUGUÊS

DECLARAÇÃO DE CONFORMIDADE

Declaramos sob nossa responsabilidade que este produto está de acordo com as seguintes normas* de acordo com as directrizes dos regulamentos **

FIN SUOMI

VAATIMUKSENMUKAISUUSVAKUUTUS

Vakuutamme, että tämä tuote vastaa seuraavia normeja* on direktiivien määräysten mukainen**

DA DANSK

OVERENSSTEMMELSESATTEST

Hermed erklærer vi på eget ansvar, at dette produkt stemmer overens ed følgende standarder* iht bestemmelserne i direktiverne**

EL ΕΛΛΗΝΙΚΑ

ΔΗΛΩΣΗ ΑΝΤΙΣΤΟΙΧΕΙΑΣ

Δηλώνουμε με ιδία ευθύνη ότι το προϊόν αυτό αντιστοιχεί στις ακόλουθες προδιαγραφές* σύμφωνα με τις διατάξεις των οδηγιών**

ENG ENGLISH

DECLARATION OF CONFORMITY

We herewith declare in our sole repsonsibility that this product complies with the following standards*
in accordance with the regulations of the undermentioned directives**

NL NEDERLANDS

CONFORMITEITSVERKLARING

Wij verklaren als enige verantwoordelijke, dat dit product in overeenstemming is met de volgende normen*
conform de bepalingen van de richtlijnen**

ES ESPAÑOL

DECLARACION DE CONFORMIDAD

Declaramos bajo nuestra exclusiva responsabilidad, que el presente producto cumple con las siguientes normas* de acuerdo a lo dispuesto en las directrices**

SV SVENSKA

FÖRSÄKRAN OM ÖVERENSSTÄMMELSE

Vi försäkrar på eget ansvar att denna produkt överensstämmer med följande standarder* enligt bestämmelserna i direktiven**

NO NORGE

SAMSVARSERKLÆRING

Vi erklærer under eget ansvar at dette produkt samsvarer med følgende normer* henhold til bestemmelsene i direktiv**

POL POLSKI

OŚWIADCZENIE O ZGODNOŚCI

Oświadczamy z pełną odpowiedzialnością, że niniejszy produkt odpowiada wymogom następujących norm* według ustaleń wytycznych **

HU MAGYAR

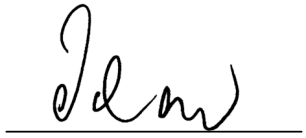
MEGEGYEZŐSÉGI NYILATKOZAT

Kizárólagos felelősségünk tudatában ezennel igazoljuk, hogy ez a termék kielégíti az alábbi szabványokban lefektetett követelményeket* megfelel az alábbi irányelvek előírásainak**

KGS 303

* EN 61029-1(2000), prEN 61029-2-9(2001), DIN EN 55014-1, DIN EN 55014-2, EN ISO 3744, DIN EN 62079

** 98/37/EG - 73/23/EG - 89/336/EWG



Ing. grad. Hans-Joachim Schaller
Leitung Entwicklung und Konstruktion

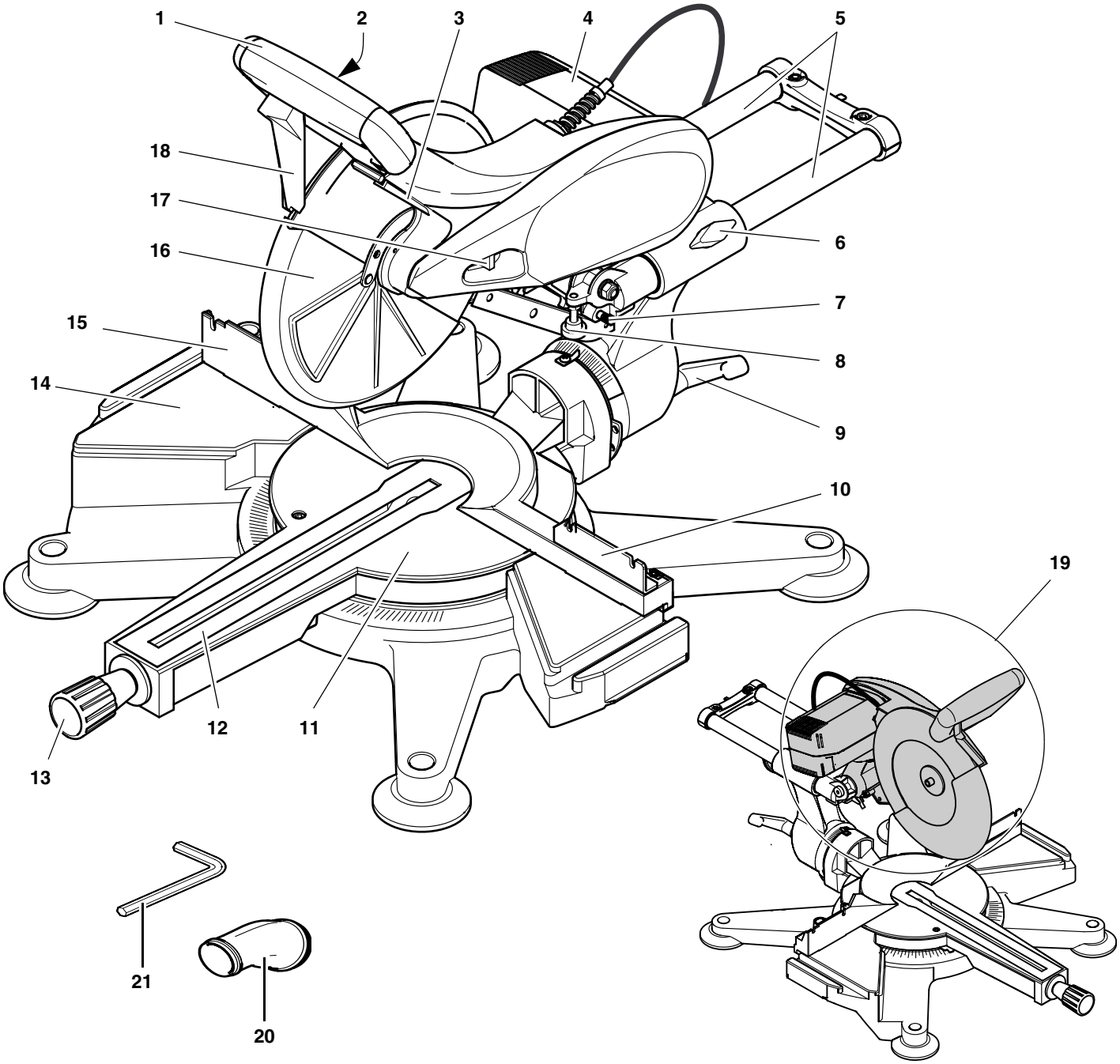
CE

Metabowerke GmbH
Business Unit Elektra Beckum
Daimler Str. 1
D - 49716 Meppen

Meppen, 11.10.2002

1001093/ 02

1. Parts identification (standard delivery)



1 Handle

2 ON/OFF switch

3 Holder for Allen key 6 mm

4 Motor

5 Track arm guide bars

6 Track arm locking screw

7 Transport locking pin

8 Cutting depth limiter

9 Sawhead tilt locking lever

10 Hinged fence

11 Rotating table

12 Table insert

13 Rotating table locking screw

14 Saw base

15 Fence

16 Retractable blade guard

17 Saw blade lock

18 Safety lock

19 Sawhead

20 Dust spout adaptor
(for connection of dust collector)

Tools

21 Allen key 6 mm

Machine documents

– Operating instructions

– Spare parts list

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2. Please read first!

These instructions have been written in a way which facilitates learning of how to safely operate your saw. Here is a guide on how you should read these instructions:

- Read these instructions before use. Pay special attention to the safety information.
- These instructions are intended for persons having a basic technical knowledge of the operation of machines such as the one described herein. If you have no experience whatsoever, we strongly recommend to seek the advise of an experienced person.
- Keep all documents supplied with this machine for future reference. Retain proof of purchase in case of warranty claims.
- If you lend or sell this machine be sure to have these instructions go with it.
- The equipment manufacturer is not liable for any damage resulting from neglect of these operating instructions.

Information in these instructions is denoted as under:

Danger!
Risk of personal injury or environmental damage.

Risk of electric shock!
Risk of personal injury by electric shock.

Drawing-in/trapping hazard!
Risk of personal injury by body parts or clothing being drawn into the rotating saw blade.

Caution!
Risk of material damage.

Note:
Additional information.

- Numbers in illustrations (**1**, **2**, **3**, ...)
  - denote component parts;
  - are consecutively numbered;
  - relate to the corresponding number(s) in brackets **(1)**, **(2)**, **(3)** ... in the neighbouring text.
- Instructions to be carried out in a certain sequence are numbered.
- Instructions which can be carried out in any sequence are indicated by a bullet (•).
- Listings are indicated by an En Dash (–).

3. Safety

3.1 Specified conditions of use

This saw is intended for cross cuts, bevel cuts, mitre cuts, and compound mitre cuts of strips, profiled ledges, etc. Grooving is also possible as well. Only such materials suitable for cutting by the saw blade fitted may be cut (see "Technical specifications" for available saw blades).

The permissible workpiece dimensions must be observed (see "Technical specifications").

Stock having a round or irregular cross section (such as firewood) must not be cut, as it can not be securely held during cutting. When sawing thin stock layed on edge, a suitable auxiliary fence must be used for firm support.

Any other use is not as specified. Unspecified use, alteration of the machine, or use of parts not approved by the equipment manufacturer can cause unforeseeable damage!

3.2 General safety instructions

- When using this tool observe the following safety instructions, to exclude the risk of personal injury or material damage.
- Please also observe the special safety instructions in the respective chapters.
- Where applicable, follow the legal directives or regulations for the prevention of accidents pertaining to the use of crosscut saws.

General hazards!

- Keep your work area tidy – a messy work area invites accidents.
- Be alert. Know what you are doing. Set out to work with reason. Do not operate the tool while under the influence of drugs, alcohol or medication.
- Consider environmental conditions: keep work area well lighted.
- Prevent adverse body positions. Ensure firm footing and keep your balance at all times.
- Do not operate the tool near inflammable liquids or gases.
- This tool shall only be started and operated by persons familiar with crosscut saws, and who are at any time aware of the dangers associated with the operation of such tool. Persons under 18 years of age shall use this tool only in the course of their vocational training, under the supervision of an instructor.
- Keep bystanders, particularly children, out of the danger zone. Do not permit other persons to touch the tool or power cable while it is running.
- Do not overload tool – use it only within the performance range it was designed for (see "Technical specifications").

Danger! Risk of electric shock!

- Do not expose tool to rain.
  Do not operate tool in damp or wet environment.
  Prevent body contact with earthed

objects such as radiators, pipes, cooking stoves, refrigerators when operating this tool.

- Do not use the power cable for purposes it is not intended for.

⚠ Risk of injury by moving parts!

- Do not operate the tool without installed guards.
- Always keep sufficient distance to the saw blade. Use suitable feeding aids, if necessary. Keep sufficient distance to driven components when operating the tool.
- Wait for the saw blade to come to a complete stop before removing cut-offs, scrap, etc. from the work area.
- Cut only stock of dimensions that allow for safe and secure holding while cutting.
- Do not attempt to stop the saw blade by pushing the workpiece against its side.
- Ensure the tool is disconnected from power before servicing.
- Ensure that when switching on (e.g. after servicing) no tools or loose parts are left on or in the tool.
- Unplug if the tool is not used.

⚠ Cutting hazard, even with the cutting tool at standstill!

- Wear gloves when changing cutting tools.
- Store saw blade in such manner that nobody will get hurt.

⚠ Risk of sawhead kickback (the saw blade is caught in the workpiece and the sawhead kicked up all of a sudden)!

- Make sure the saw blade is suitable for the workpiece material.
- Hold the handle firmly. When the saw blade enters the workpiece, the kickback risk is particularly high.
- Cut thin or thin-walled workpieces only with fine-toothed saw blades.
- Always use sharp saw blades. Replace blunt saw blades at once. Increased risk of kickback when a blunt tooth gets caught by the workpiece's surface.
- Do not jam workpieces.
- Avoid lateral pressure on the saw blade when grooving – use a stock clamp.
- If in doubt, check workpiece for inclusion of foreign matter (e.g. nails or screws).
- Never cut several workpieces at the same time – and also no bundles containing several individual pieces. Risk of personal injury if individual pieces are caught by the saw blade uncontrolled.

⚠ Drawing-in/trapping hazard!

- Ensure that no parts of the body or clothing can be caught and drawn in by rotating components (**no** neckties, **no** gloves, no loose-fitting clothes; contain long hair with hairnet).
- Never attempt to cut any workpieces which contain
  - ropes,
  - strings,
  - cords,
  - cables or
  - wires, or to which any of the above are attached.

⚠ Hazard generated by insufficient personal protection gear!

- Wear hearing protection.
- Wear safety glasses.
- Wear dust mask.
- Wear suitable work clothes.
- Wear non-slip shoes.

⚠ Risk of injury by inhaled wood dust!

- Dust of certain timber species (e.g. beech, oak, ash) can cause cancer when inhaled. Work only with a suitable dust collector attached to the saw. The dust collector must comply with the data stated in the technical specifications.
- Ensure that as little as possible wood dust will get into the environment:
  - remove wood dust deposit in the work area (do not blow away!);
  - fix any leakages on the dust collector;
  - ensure good ventilation.

⚠ Hazard generated by modification of the machine or use of parts not tested and approved by the equipment manufacturer!

- Assemble tool in strict accordance with these instructions.
- Use only parts approved by the equipment manufacturer. This applies especially for:
  - saw blades (see "Technical specifications" for stock nos.);
  - safety devices (see "Technical specifications" for stock nos.).
- Do not change any parts.

⚠ Hazard generated by tool defects!

- Keep tool and accessories in good repair. Observe the maintenance instructions.
- Before any use check tool for possible damage: before operating the tool all safety devices, protective guards or slightly damaged parts need to be checked for proper function as specified. Check to see that all moving parts work properly and do not jam. All parts must be correctly installed and meet all conditions necessary for the proper operation of the tool.
- Do not use damaged or warped saw blades.
- Damaged protection devices or parts must be repaired or replaced by a qualified specialist. Have damaged switches replaced by a service centre. Do not operate tool if the switch can not be turned ON or OFF.
- Keep handles free of oil and grease.

⚠ Risk of injury by noise!

- Wear hearing protection.
- For reasons of noise protection do not use warped saw blades. A warped blade is exiting vibrations to an especially large extent, which means noise.

3.3 Symbols on the machine

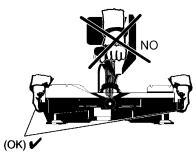
⚠ Danger!
Disregard of the following warnings can lead to severe personal injury or material damage.


Read instructions.


Do not reach into the running saw blade.

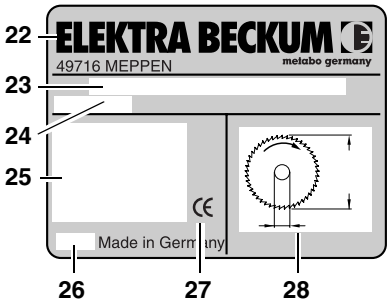

Wear safety goggles and hearing protection.


Do not operate tool in moist or wet environment.



Do not carry tool at the handle; the handle is not designed to bear the weight of the tool.

Information on the nameplate:



(22) Manufacturer

(23) Serial number

(24) Machine designation

(25) Motor specifications (see also "Technical specifications")

(26) Year of make

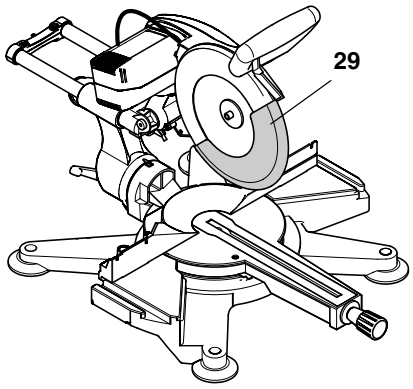
(27) CE-mark – This machine conforms to the EC directives as per Declaration of Conformity

(28) Dimensions of permissible saw blades

3.4 Safety devices

Retractable blade guard

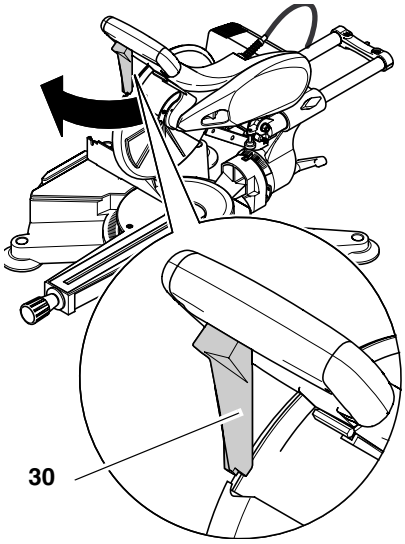
The retractable blade guard **(29)** protects against unintentional contact with the saw blade and from chips flying about.



Both segments of the retractable blade guard must always return automatically into their starting position: when the sawhead is lifted up, the sawblade must be covered all around.

Safety lock

The safety lock **(30)** prevents the retractable blade guard from unintentional opening.



For cutting the safety lock is pushed to the side (arrow). Only then can the sawhead be lowered, opening the retractable blade guard.
After the cut is made - and the sawhead is in its upper starting position - the retractable blade guard is locked again by the safety lock.

4. Installation and transport

Caution!
Do not carry tool at the handle; the handle is not designed to bear the weight of the tool. To carry, hold the tool at both sides of the base.

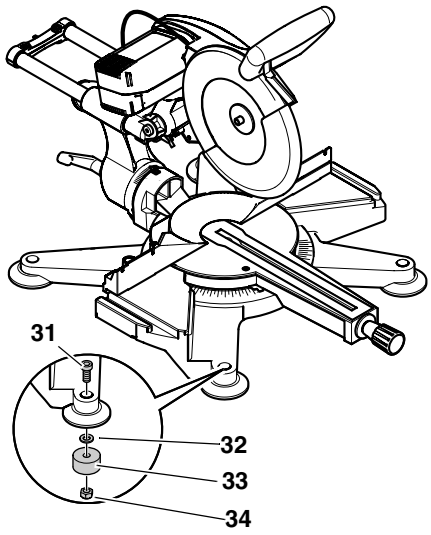
Installation

1. Lift the tool out of the box with the help of another person.

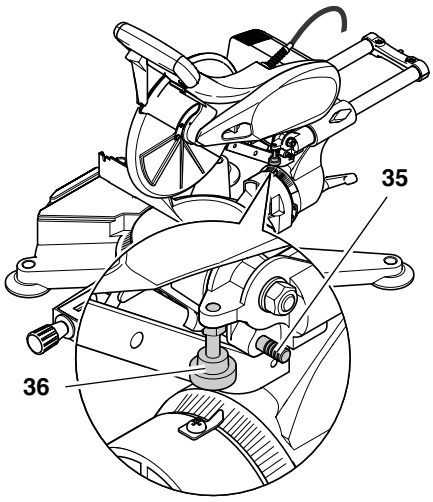
Note:
If the machine is set up on the workstand:
do not install the rubber feet!

---

2. To install the rubber feet tilt the machine:
   - The rubber feet must be accessible from both sides.
   - The machine must rest firmly in its tilted position.
3. Put nut **(34)** into the hole on the underside of the rubber foot.
4. Put hexagon socket screw **(31)** from the top through the machine's foot. Put a washer **(32)** on the screw and screw the rubber foot **(33)** with the fitted nut **(34)** on.
5. Tighten rubber foot hand-tight only. To do so, hold the screw with the Allen key to counter.
6. Tighten the screw with the Allen key hand-tight.



7. Place tool on a suitable base:
   - All four feet must firmly rest on the base.
   - The ideal height of the base is 800 mm.
   - The saw must stand securely, even when cutting larger workpieces.
8. Push the sawhead slightly down and pull the transport locking pin **(35)** out – the sawhead can then be fully lifted.



Transportation

1. If necessary, adjust the cutting depth limiter **(36)** to the maximum depth of cut.
2. Lower the sawhead and push the transport locking pin **(35)** in.
3. Keep the packing for future use, or separate by material and dispose of in an environmentally friendly manner.

5. Special product features

- 96° cutting angle range for bevel cuts (48° left thru 48° right) with five positive stops.

- 110 ° cutting angle range for mitre cuts (50 ° left thru 60 ° right) with ten positive stops.
- Soft start.
- Integrated cutting depth stop for grooving.
- Perfect for mobile use because of its low weight and small dimensions.
- Precise and sturdy die-cast aluminium construction.
- TCT saw blade.
- Unproblematic saw blade change by saw blade lock; no dismounting of the retractable blade guard required.
- Maximum dept of cut 81 mm.
- The track arm provides for up to 285 mm cutting width.
- Ergonomic control for both left-handers and right-handers.
- Installation of auxiliary fence possible.

6. Machine details

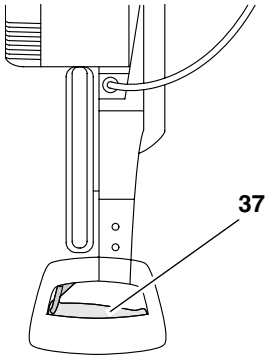
Note:
In this chapter the essential operating elements of the machine are introduced.
The proper use of the saw is detailed in chapter "Operation". Read this chapter before using the saw for the first time.

ON/OFF switch

- To turn the motor ON:

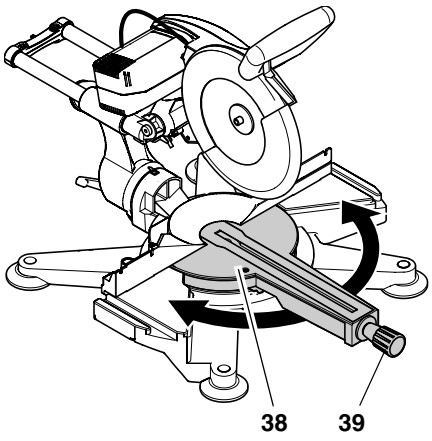
  Press and hold the ON/OFF switch **(37)**.
- To turn the motor OFF:

  Release the ON/OFF switch.

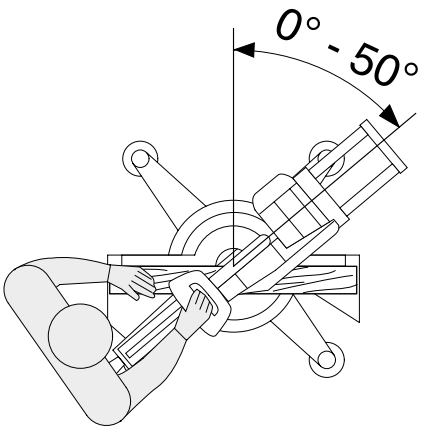


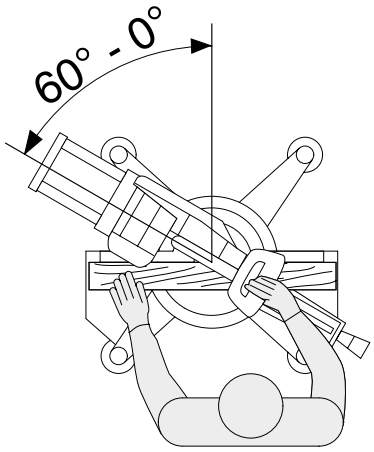
Rotating table

For mitre cuts the rotating table **(38)**, after loosening the locking screw **(39)**, can be turned by 50° to the left and 60° to the right.



The rotating table engages at positive stops at the 0°, 15°, 22.5°, 30°, 45°, and 60° position.

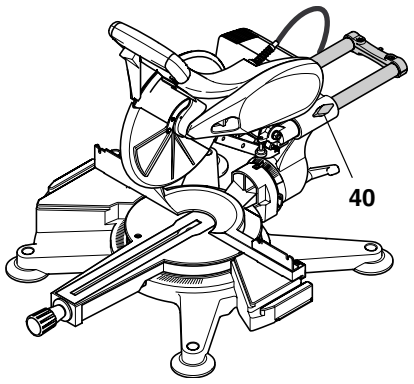




Caution!
In order to prevent the mitre angle from changing during cutting, the rotating table's locking screw must be tightened (also when engaged at the positive stops!).

Push/pull action

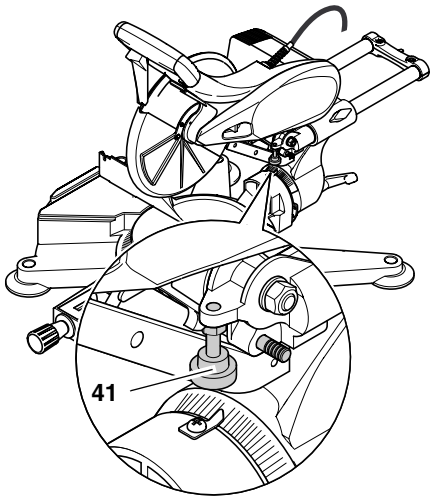
The track arm permits the cutting of workpieces having a larger cross section. The track can be used for all type of cuts (standard cross cuts, mitre cuts, bevel cuts, compound mitre cuts).



When it is not required, arrest the track arm with the locking screw **(40)**.

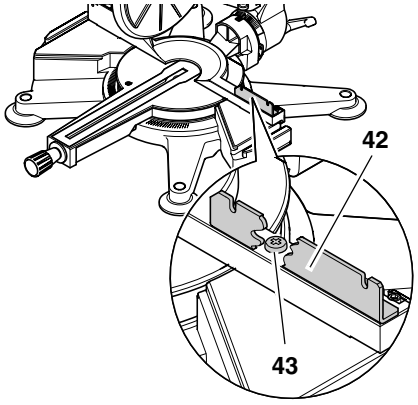
Cutting depth limiter

Together with the track arm, the cutting depth limiter **(41)** makes grooving possible.



Hinged fence

The hinged fence **(42)** permits the sawhead to tilt up to 48° to the right for bevel cuts.

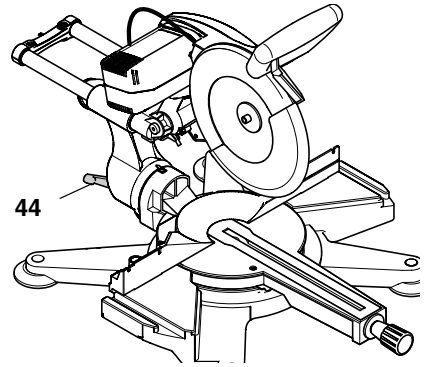


Caution!
To provide firm support for the workpiece (as much supporting area as possible), the hinged fence is to be used as under:

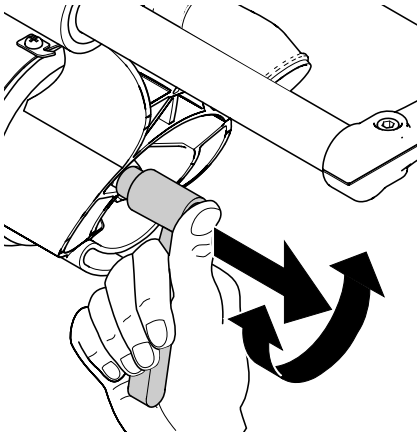
- Sawhead tilted between 22.5° and 48° to the right: loosen screw **(43)** and swing the hinged fence to the rear.
- Sawhead tilted between 22.5 ° and 48° to the left: swing the hinged fence up and tighten screw **(43)**.

Bevel tilt setting

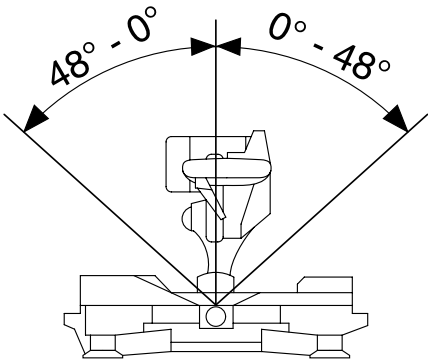
After loosening the ratchet lock lever **(44)** at the rear, the sawhead tilts steplessly up to 48° from vertical to the left or right.



Risk of crushing!
There is a risk of crushing your fingers between the ratchet lock lever and the track arm holder. Always position the ratchet lock lever (by pulling out and turning) so that there is sufficient space between lock lever and track arm holder.



The track arm holder engages at positive stops at the 0°, 22.5°, and 45 ° position.



Caution!
In order to prevent the angle of inclination from changing during cutting, the ratchet lock lever must be tightened (also when engaged at a positive stop!).

7. Initial operation

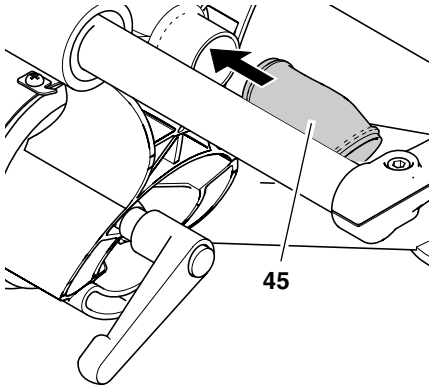
7.1 Connection of a dust collector

Danger!
Wood dust of certain species (e.g. oak, beech, ash) can cause cancer when inhaled: use a dust collector

- **when using the saw in enclosed spaces;**
- **when using the saw over extended periods (more than 1/2 hour per day);**
- **when cutting oak, beech or ash.**

Dust spout adaptor installation

- Push on the dust spout adaptor **(45)** as illustrated.



7.2 Mains connection

Danger! High voltage

- **Operate this machine in dry surroundings only.**
- **Operate the machine only on a power source meeting the following requirements (see also "Technical specifications"):**
  - **mains voltage and system frequency conform to the voltage and frequency shown on the machine´s rating label;**
  - **fuse protection by a residual current operated device (RCD) of 30 mA sensitivity;**
  - **Outlets properly installed, earthed, and tested.**
- **Position power supply cable so it does not interfere with the work and is not damaged.**
- **Protect power supply cable from heat, aggressive liquids and sharp edges.**
- **Use only rubber-jacketed extension cables of sufficient lead cross-section (3 x 1.5 mm^2).**
- **Do not pull on power supply cable to unplug.**

8. Operation

Danger!

- **Before starting any work, check to see that the safety devices are in proper working order:**
- **Use personal protection gear.**
- **Assume proper operating position:**
  - **at the front of the saw;**
  - **in front of the saw;**
  - **to the side of the line of cut.**
- **Risk of crushing!**
  When tilting the sawhead, keep your hands out of the track arm holder's tilting range! Hold at the sawhead.
- **If the type of work requires, use the following:**
  - **work support – for long stock, which would otherwise fall off the table on completion of the cut;**
  - **dust collector.**
- **Cut only stock of dimensions that allow for safe and secure holding while cutting.**
- **Use an auxiliary fence if small cutoffs will result when cutting.**
- **Always hold the workpiece down on the table and do not jam it. Do not attempt to stop the saw blade by exerting lateral pressure. Risk of injury if the saw blade is blocked.**

8.1 Standard cross cuts

Maximum workpiece cross section (dimensions in mm):

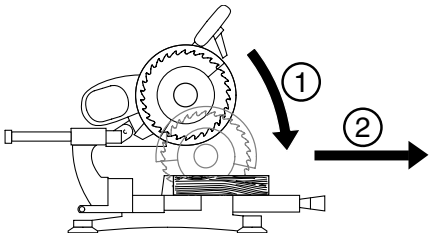
Width approx.	285
Height approx.	81

Starting position:

- Transport locking pin pulled out.
- Sawhead fully raised.
- Cutting depth limiter set to maximum depth of cut.
- Rotating table in 0° position, the locking screw of the rotating table is tightened.
- Motorhead in vertical (90°) position, bevel tilt locking lever tightened.
- Hinged fence on top of the fence and secured.
- Track arm not extended.
- Locking screw of the track arm loosened (if workpiece width requires).

Cutting the workpiece:

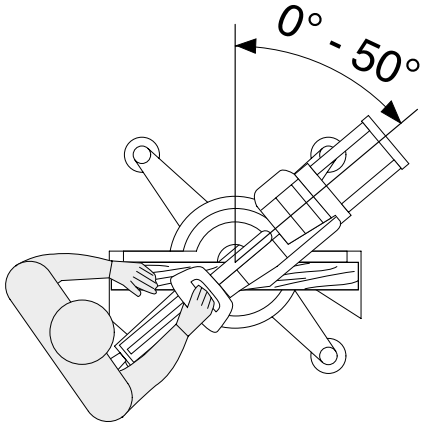
1. Hold workpiece against the fence.
2. Push the safety lock to the side and press and hold the ON/OFF switch.
3. Slowly swing the sawhead fully down, holding the handle firmly. When sawing, exert only moderate pressure to keep the motor speed from dropping too much.
4. For wider workpieces pull the sawhead forward (towards the operator).

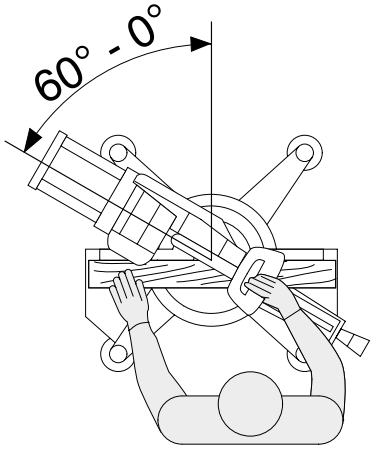


5. Cut workpiece in a single pass.
6. Release the ON/OFF switch and let the sawhead slowly return to its upper starting position.

8.2 Mitre cuts

Note:
A mitre cut cuts the workpiece at an angle against the rear guide edge.





Maximum workpiece cross section (dimensions in mm):

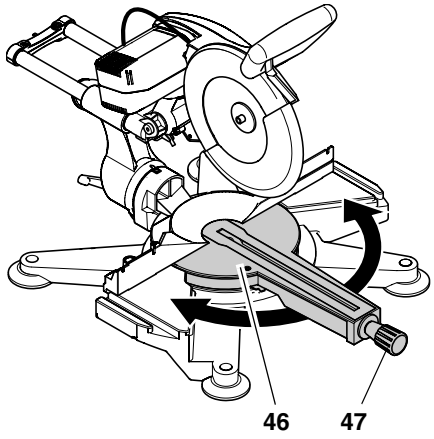
Rotating table position		Width approx.	Height approx.
	15°	275	81
	22.5°	260	81
	30°	245	81
	45°	200	81
	50°	180	81
	60° right	140	81

Starting position:

- Sawhead fully raised.
- Cutting depth limiter set to maximum depth of cut.
- Motorhead in vertical (90°) position, bevel tilt locking lever tightened.
- Hinged fence on top of the fence and secured.
- Track arm not extended.
- Locking screw of the track arm loosened.

Cutting the workpiece:

1. Loosen the locking screw **(47)** of the rotating table **(46)**.



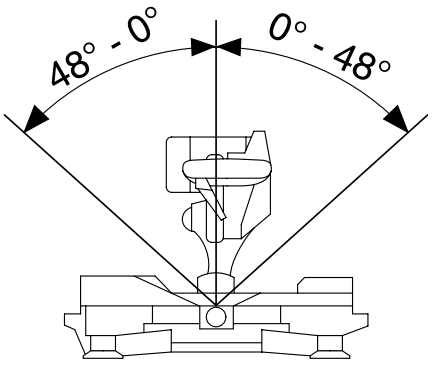
2. Set to desired angle.

Note:
The rotating table engages at positive stops at the 0°, 15°, 22.5°, 30°, 45°, and 60° position.

3. Tighten the rotating table's locking screw.
4. Cut workpiece as detailed under "Standard cross cuts".

8.3 Bevel cuts

Note:
A bevel cut cuts the workpiece at an angle other than 90° against its surface.



Maximum workpiece cross section (dimensions in mm):

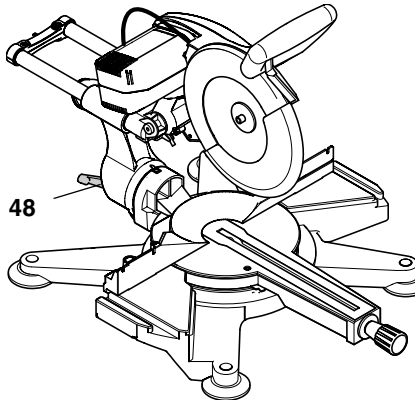
Motor head inclination		Width approx.	Height approx.
	22.5° left	285	70
	22.5 ° right	285	65
	45 ° left	285	50
	45 ° right	285	25
	48 ° left	285	45
	48 ° right	285	20

Starting position:

- Sawhead fully raised.
- Cutting depth limiter set to maximum depth of cut.
- Rotating table in 0° position, the locking screw of the rotating table is tightened.
- Track arm not extended.
- Locking screw of the track arm loosened.

Cutting the workpiece:

1. If the sawhead is to be tilted between 22.5 ° and 48° to the right, swing the hinged fence down.
2. Loosen the ratchet lock lever **(48)** for sawhead tilt at the rear of the saw.



3. Tilt the motorhead slowly into the desired position.

Note:
The track arm holder engages at positive stops at the 0°, 22.5°, and 45° position.

4. Tighten the sawhead tilt locking lever.
5. Cut workpiece as detailed under "Standard cross cuts".

8.4 Compound mitre cuts

Note:
The compound mitre cut is a combination of mitre and bevel cut. This means the workpiece is cut at an angle other than 90° against the rear guide edge **and** against its surface.

Danger!
When cutting compound mitres the saw blade is much more exposed than normally - increased risk of injury. Always keep sufficient distance to the saw blade.

Maximum workpiece cross section (dimensions in mm):

Width with sawhead tilted approx.					
		22.5 ° left	22.5 ° right	48 ° left	48 ° right
Rotating table position	15°	275	275	275	275
	22.5°	260	260	260	260
	30°	245	245	245	245
	45°	200	200	200	200
	50°	180	180	180	180
	60° right	140	140	140	140
Height with sawhead tilted approx.					
		22.5 ° left	22.5 ° right	48 ° left	48 ° right
Rotating table position	15°	70	65	45	20
	22.5°	70	65	45	20
	30°	70	65	45	20
	45°	70	65	45	20
	50°	70	65	45	20
	60° right	70	65	45	20

Starting position:

- Sawhead fully raised.
- Cutting depth limiter set to maximum depth of cut.
- Rotating table locked in desired position.
- Sawhead tilted to desired angle against the workpiece's surface and locked.
- If the sawhead is to be tilted between 22.5 ° and 48° to the right, swing the hinged fence down.
- Locking screw of the track arm loosened.
- Track arm not extended.

Cutting the workpiece:

- Cut workpiece as detailed under "Standard cross cuts".

8.5 Grooving

Note:
Together with the track arm, the cutting depth limiter makes grooving possible. With grooving no parting cut is made, but the workpiece is cut to a certain depth only.

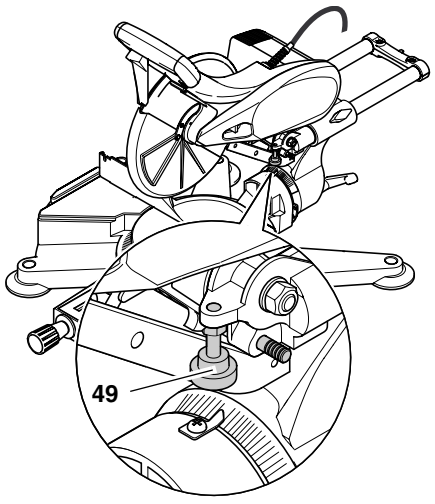
Risk of kickback!
When grooving it is especially important no lateral pressure is applied to the saw blade. Otherwise the sawhead may be kicked up abruptly! Use a stock clamp when grooving. Avoid lateral pressure on the sawhead.

Starting position:

- Sawhead fully raised.
- Sawhead tilted to desired angle against the workpiece's surface and locked.
- Rotating table locked in desired position.
- Locking screw of the track arm loosened.
- Track arm not extended.

Cutting the workpiece:

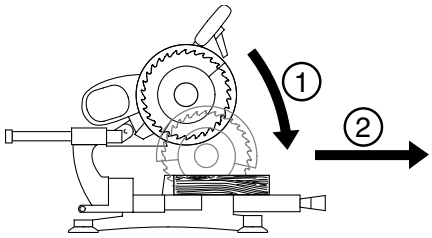
1. Adjust cutting depth limiter **(49)** to desired cutting depth and secure setting with locking nut.



2. Hold workpiece against the fence.

Note:
For the groove to be cut at the desired depth across the whole workpiece width, a suitable spacer strip needs to be placed between workpiece and fence.

3. Push the safety lock to the side and press and hold the ON/OFF switch.
4. Slowly swing the sawhead fully down, holding the handle firmly. When sawing, exert only moderate pressure to prevent the motor speed to drop too much.
5. When sawing, pull sawhead forward (towards the operator).



6. Groove workpiece in a single pass.
7. Release the ON/OFF switch and let the sawhead slowly return to its upper starting position.

9. Care and maintenance

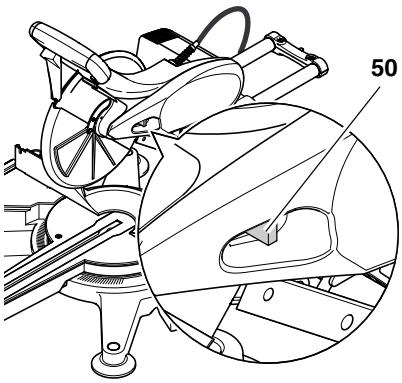
Danger!
Unplug before servicing.

- Repair and maintenance work other than described in this section should only be carried out by qualified specialists.
- Replace defective parts, especially of safety devices, only with genuine replacement parts. Parts not tested and approved by the equipment manufacturer can cause unforeseen damage.
- Check that all safety devices are operational again after each service.

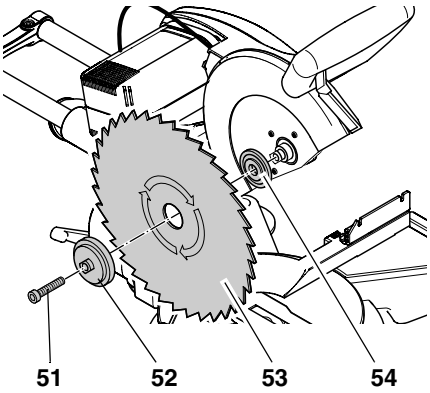
9.1 Saw blade change

Danger!
Directly after cutting the saw blade may be very hot – burning hazard! Let a hot saw blade cool down. Do not clean a hot saw blade with combustible liquids. Risk of injury, even with the blade at standstill. When loosening and tightening the arbor bolt, the retractable blade guard must encompass the saw blade. Wear gloves when changing blades.

1. To arrest the saw blade, pull the saw blade lock **(50)** forward. At the same time slowly turn the saw blade by hand, until the saw blade lock engages.



2. Remove the arbor bolt **(51)** from the saw spindle (left-handed thread!).

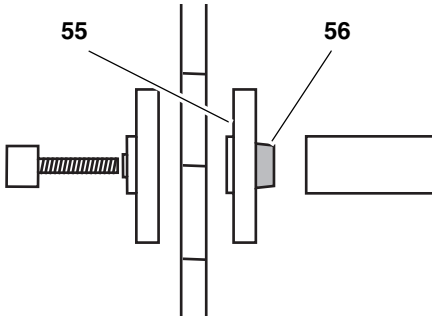


3. Unlock the retractable blade guard and open it.
4. Remove the following parts from the saw spindle:
   - arbor bolt **(51)**,
   - outer blade flange **(52)**,
   - saw blade **(53)**,
   - inner blade flange **(54)**.
5. Clean clamping surfaces of:
   - saw spindle,
   - inner blade flange,
   - saw blade,
   - outer blade flange,
   - arbor bolt.

Danger!
Do not use cleaning agents (e.g. to remove resin residue) that could corrode the light metal components of the saw; the stability of the saw would be adversely affected.

6. Put the inner blade flange **(54)** on the saw spindle.

Danger!
Fit the inner blade flange correctly! Otherwise the saw may be blocked, or the saw blade could work loose! The inner blade flange is in the correct position when the chamfered collar (56) shows to the right and the spring ring groove (55) shows to the left.



7. Mount the new saw blade **(53)** – observe the rotational direction (the arrows on both saw blade and blade guard must point in the same direction)!

Danger!
Use only saw blades conforming to standards and which are designed for the maximum speed (see "Technical specifications") – when using unsuitable or damaged saw blades, parts might be hurled away explosive-like by the centrifugal force.

Do not use:

- **saw blades made of high speed steel (HSS);**
- **damaged saw blades;**
- **cut-off wheel blades.**

Danger!
- **Mount saw blade using only genuine parts.**
- **Do not use loose-fitting reducing rings; the saw blade could work loose.**
- **Saw blades have to be mounted in such way that they do not wobble or run out of balance and can not work loose during operation.**

8. Put outer blade flange **(52)** on – the two flanks must fit over the flats of the saw spindle!
9. Screw on the arbor bolt **(51)** (left-handed thread!) and tighten with the Allen key **fingertight**.
   To arrest the saw blade, use the saw blade lock **(50)**.

Danger!
- **Do not extend arbor bolt tightening wrench.**
- **Do not tighten arbor bolt by hitting the assembly wrench.**

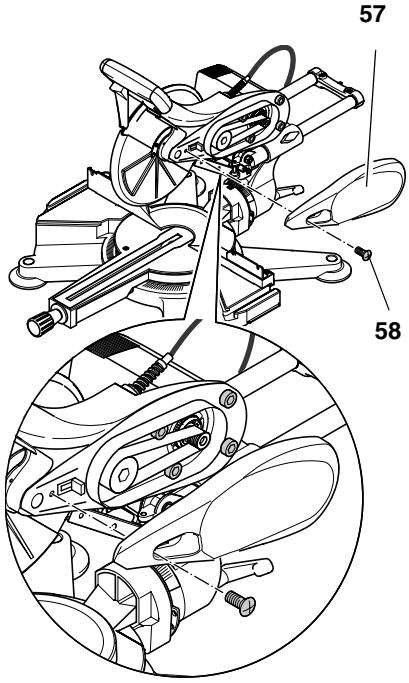
10. Check function. To do so, lower the sawhead:
    - The retractable blade guard must open without touching the saw blade or any other parts.
    - When returning the sawhead in the starting position the retractable blade guard must automatically encompass the saw blade.
    - In the upper starting position of the sawhead the safety lock must lock the retractable blade guard to prevent unintentional opening.
    - Check the saw blade lock – the saw blade must turn freely.

9.2 Drive belt tensioning

The drive belt, running on the right-hand side of the sawhead behind a plastic cover, needs to be re-tensioned if it can be depressed more than 3 mm halfway between the two pulleys.

To check, re-tension and change:

1. Remove the plastic cover **(57)**: remove screw **(58)** and unhook the plastic cover's snap-in hook at the rear.



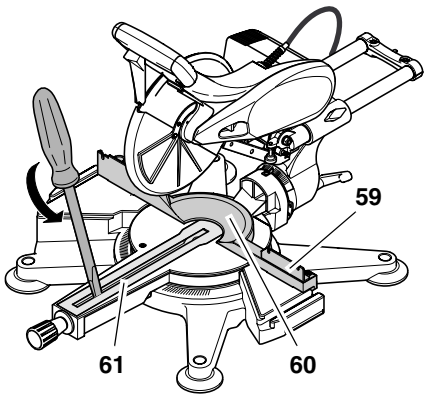
2. Check belt tension by thumb pressure.
   If the drive belt needs to be re-tensioned or replaced:
   - Loosen the four motor screws by approx. one turn.
   - Re-tension or replace the drive belt. To re-tension slide the motor to the rear.
   - Tighten motor fastening screws crosswise.
3. Replace the plastic cover **(57)** and secure with the screw.

9.3 Kerf plate replacement

Danger!
With a damaged table insert, there is a risk of small parts getting stuck between table insert and saw blade, blocking the saw blade. Replace damaged table inserts immediately!

1. Swing the hinged fence **(59)** down.
2. Take the fence **(60)** off.

3. Lever the table insert **(61)** up with a screwdriver. Doing so will damage the table insert; it can not be used again.

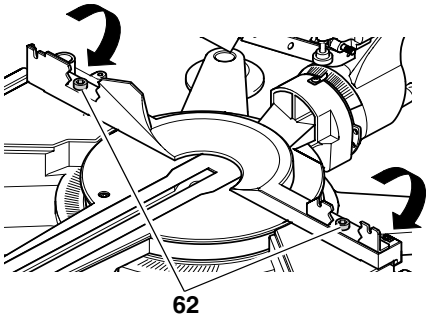


4. Fit new table insert and let engage.
5. Reinstall the fence **(60)**.
6. Swing the hinged fence up **(59)** and secure it.

9.4 Adjustments

Fence adjustment

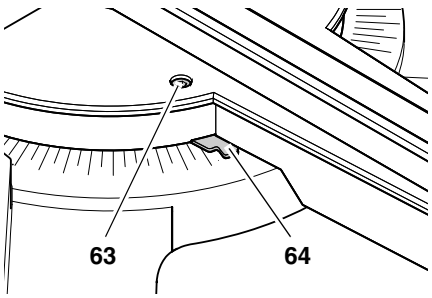
1. Swing the hinged fence down.
2. Loosen the fastening screws **(62)** of the fence.



3. Using the two screws at the rear of the fence (arrow) adjust the fence position, until it is exactly 90° to the saw blade with the rotating table locked in the 0° position.
4. Tighten the fastening screws of the fence.
5. Swing the hinged fence up and secure it.

Mitre angle indicator adjustment

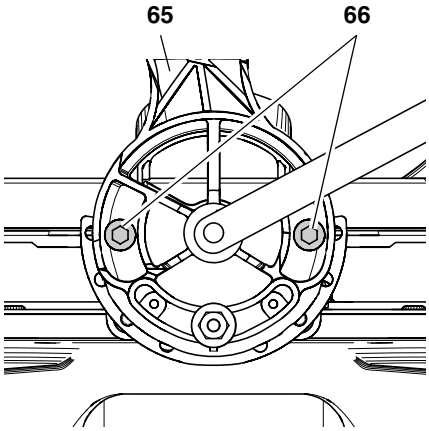
1. Adjust the indicator's **(64)** position by means of the screw **(63)**, until the value indicated coincides with the rotating table's positive stop.



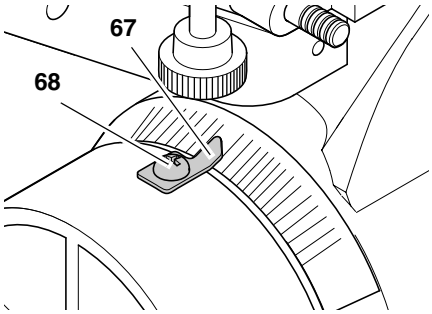
Note:
The rotating table engages at positive stops at the 0°, 15°, 22.5°, 30°, 45°, and 60° position.

Bevel tilt positive stop adjustment

1. Lock the track arm holder **(65)** in the 0° position.



2. Loosen the two hexagon socket head cap screws **(66)** at the rear of the saw by approx. one turn.
3. Adjust the track arm holder until the saw blade is at exactly 90° against the rotating table.
4. Tighten the two hexagon socket head cap screws **(66)** at the rear of the saw again.
5. Adjust the indicator's **(67)** position, after loosening the screw **(68)** until the value indicated coincides with the current positive stop position of the track arm holder.



Note:
The track arm holder engages at positive stops at the 0°, 22.5°, and 45° position.

9.5 Machine cleaning

Remove chips and saw dust with brush or vacuum cleaner from:

- setting devices;
- operating elements;
- motor vent slots;
- space below table insert.

9.6 Machine storage

Danger!

- **Store the saw in such way that it can not be started by unauthorized persons.**
- **Make sure that nobody can get injured by the stored machine.**

Caution!

- **Do not store saw unprotected outdoors or in damp environment.**
- **Observe the permissible ambient conditions (see "Technical specifications").**

9.7 Maintenance

Prior to every use

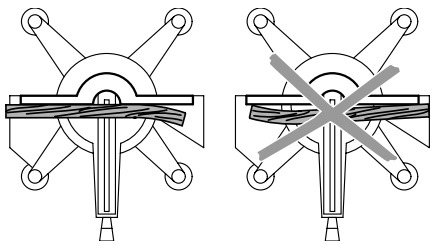
- Remove saw dust and chips with vacuum or brush.
- Check power cable and power cable plug for damage; if necessary have damaged parts replaced by a qualified electrician.
- Check all moving parts to see that they can move freely across their whole range of travel.

Periodically, depending on operating conditions

- Check drive belt condition and tension, correct if necessary.
- Check all screwed joints, retighten if necessary.
- Check pull-back springs of the sawhead (the sawhead must return by spring power to its upper starting position), replace if necessary.

10. Tips and tricks

- For long stock use suitable supports on both sides of the saw.
  - When making bevel cuts : hold workpiece to the right of the saw blade.
- Use auxiliary fence when sawing small cut-offs (this may be a suitable board, fastened with four screws to the fence).
- When cutting warped stock, place the convex side of the bow against the fence.



- Do not cut stock standing on edge; always place it flat on the rotating table.

– Keep the supporting surfaces clean – in particular, remove resin residue with a suitable cleaning and maintenance spray.

11. Available accessories

For special tasks the following accessories are available at your specialized dealer – see back cover for illustrations:

A Dust collection attachment
Protects your health and keeps the shop clean.

B Dust spout adaptor
To connect the dust collection attachment to a dust collector.

C Work clamp
Required for precision cuts and cutting of non-ferrous metals.

D Table extension, left
Required for cutting long stock;
extends to 3000 mm;
folds for space saving storage.

E Table extension, right
Required for cutting long stock;
extends to 3000 mm;
folds for space saving storage.

F Work stand
For a secure machine stand and optimal working height;
folding, ideal for mobile use.

G TCT saw blade 250 x 2.8 / 2.0 x 30
24 alternate bevel teeth
for wood and non-laminated particle board.

H TCT saw blade 250 x 2.4 / 1.8 x 30
48 alternate bevel teeth
For wood and panels.

I TCT saw blade 250 x 2.4 / 1.8 x 30
60 alternate bevel teeth
For wood, panels and thick-walled plastic extrusions

J TCT saw blade 250 x 2.8 / 2.0 x 30
80 trapezium-flat teeth
For wood, panels, ducting, NF extrusion, high-quality veneered sheets and laminates.

12. Repairs

Danger!
Repairs to electric tools must be carried out by qualified electricians only!

Electric tools in need of repair can be sent to the service centre of your country. Refer to the spare parts list for the address.

Please attach a description of the fault to the electric tool.

13. Environmental Protection

The machine's packing can be 100% recycled.

Worn out power tools and accessories contain considerable amounts of valuable raw and rubber materials, which can be recycled.

These instructions are printed on paper produced with elemental chlorine-free bleaching process.

14. Trouble Shooting

In this section problems and faults are described which you may remove yourself. If the measures detailed here do not solve the problem, see under "Repairs".

Danger!
Many accidents happen particularly in connection with problems and faults. Therefore please note:

- **Always unplug before servicing.**
- **Check that all safety devices are operational again after each fault service.**

Motor does not run

No mains voltage

- Check cables, plug, outlet and mains fuse.

No crosscut function

Transport locking pin engaged:

- Pull transport locking pin out.

Safety lock engaged:

- Actuate the safety lock.

Only little sawing performance

Saw blade blunt (possibly tempering marks on blade body):

Saw blade not suitable for material being cut (see chapter "Technical specifications");

Saw blade warped:

- Replace saw blade (see chapter "Maintenance").

Saw vibrates heavily

Saw blade warped:

- Replace saw blade (see chapter "Maintenance").

Saw blade incorrectly mounted:

- Mount saw blade correctly (see chapter "Maintenance").

Saw squeals when starting

Drive belt tension too low:

- Retension the drive belt (see chapter "Maintenance - Drive belt tensioning").

Stiffness of rotating table

Saw dust build-up under rotating table:

- Remove saw dust.

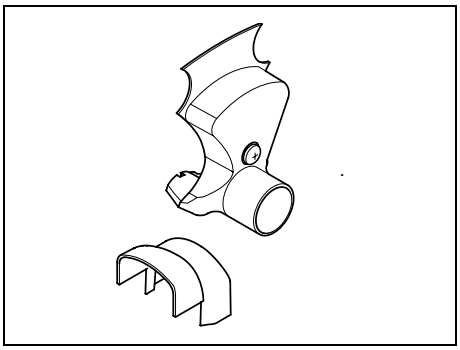
15. Technical specifications

Voltage	V	230 (1~ 50 Hz)	110 (1~ 50 Hz)
Current draw	A	8.4	15.9
Fuse protection	A	10 (time-lag)	-
Motor capacity* (power input P1, S6 20% - 5 min)	kW	1.8	1.6
Protection class	IP	20	20
Degree of protection		II	II
Saw blade speed	min^{-1}	5020	5020
Cutting speed	m/s	66	66
Saw blade diameter (outer)	mm	250	250
Arbor bore	mm	30	30
Dimensions Machine in packing – Length / width / height	 mm	 800 / 600 / 450	 800 / 600 / 450
Machine ready to work, rotating table in 90°position, c/w suction port – Length / width / height	 mm	 575 / 885 / 595	 575 / 885 / 595

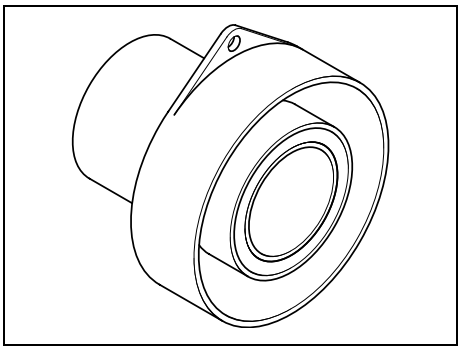
Maximum workpiece cross section Standard cross cuts – width / height Mitre cuts (rotating table 45°) – width / height Bevel cutss (track arm holder 45° left) – width / height Compound mitre cuts (rotating table 45° / track arm holder 48° left) – width / height	 mm mm mm mm	 285 / 81 200 / 81 285 / 50 200 / 45	 285 / 81 200 / 81 285 / 50 200 / 45
Weight Machine in packing Machine ready to work	 kg kg	 23 19,5	 23 19,5
Permissible ambient temperature for operation Permissible temperature for transport and storage	° C ° C	0 to + 40 0 to + 40	0 to + 40 0 to + 40
Noise emission according to EN ISO 3744 Sound power level L_{WA} sound pressure level at operator ear L_{PA}	 dB (A) dB (A)	 118 104	 118 104
Effective value of weighted acceleration (vibration at handle)	 m/s^2	 < 2.5	 < 2.5
Dust collector (not included in standard delivery) – Suction port diameter – Minimum air volume flow – Minimum vacuum at suction port – Minimum air speed at suction port	 mm m^3/h Pa m/s	 43.5 550 740 20	 43.5 550 740 20
*This machine is specially designed for the high momentary loads of crosscutting. The motor reaches the stated power of 1800 watts at S6 20% 5 min. (intermittent periodic duty-type with starting). This means that this saw can be operated for 1 minute at full-load rating (1800 watts) within a 5 minute operating period. The motor has to deliver these 1800 watts only under extreme load conditions – during normal crosscutting it is subjected to much lower loads. With lower loads the duty cycle of the motor increases substancially. Thus, when used as specified, because of its high reserve capacity, overheating or overloading of the motor is not possible.			

15.1 Available saw blades

Diameter	Arbor bore	Tooth rake	No. of teeth	Used for	Stock-no.
250 mm	30 mm	5° neg.	24 alternate top bevel teeth	wood, non-lamintated particle board	091 003 0973
250 mm	30 mm	5° neg.	48 alternate top bevel teeth	wood, panels	091 003 1058
250 mm	30 mm	5° neg.	60 alternate top bevel teeth	wood, panels thick-walled plastic extrusions	091 003 0981
250 mm	30 mm	6° neg.	80 trapezoidal-flat teeth	wood, panels Cable ducting, NF profiles, high-quality veneered sheets, laminates	091 003 1040



A 091 005 7561



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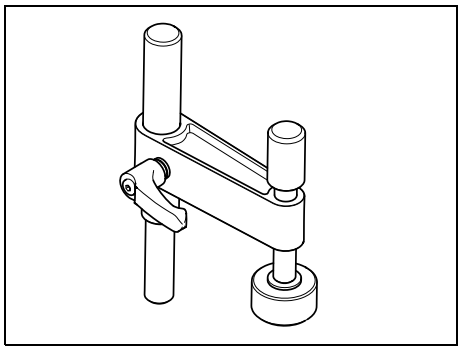

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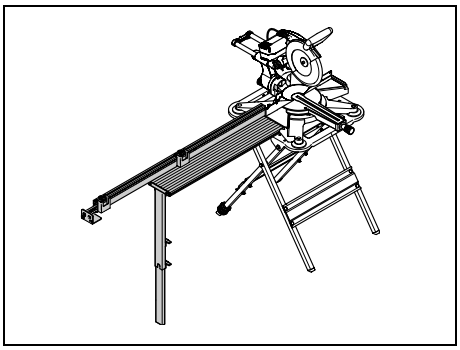

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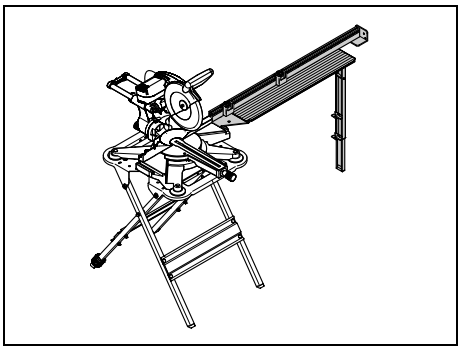
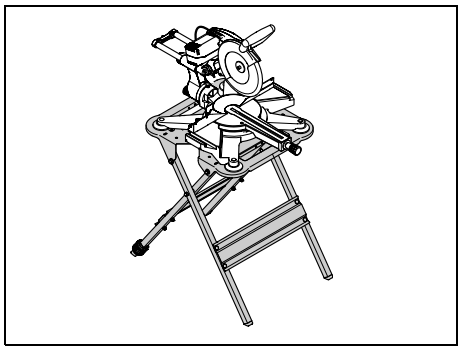


E 091 005 7545



F 091 005 7529

HW 250 x 2,8 / 2,0 x 30 24 W

G 091 003 0973

HW 250 x 2,4 / 1,8 x 30 48 W

H 091 003 1058

HW 250 x 2,4 / 1,8 x 30 60 W

I 091 003 0981

HW 250 x 2,8 / 2,0 x 30 80 TF

J 091 003 1040