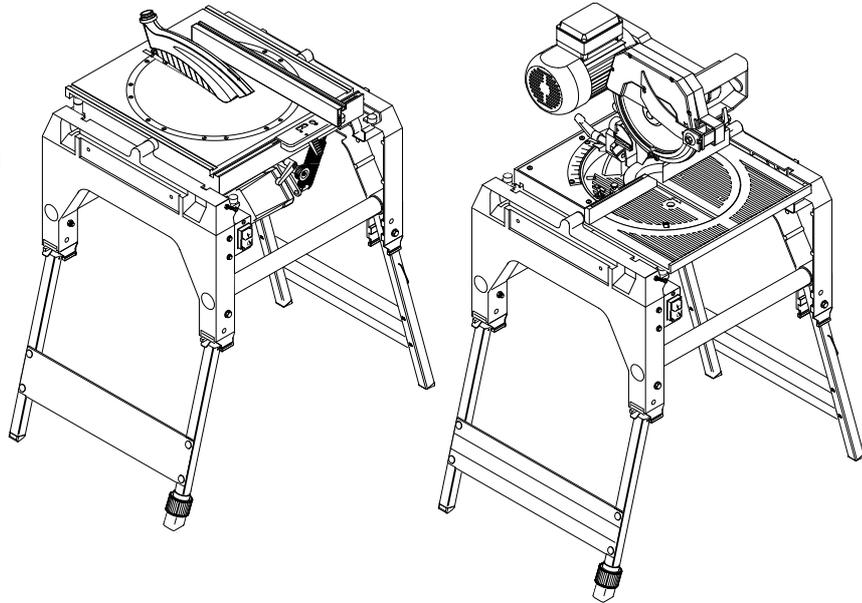
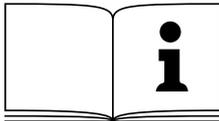


ELEKTRA BECKUM

metabo germany



KGT 501



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D DEUTSCH**KONFORMITÄTSERKLÄRUNG**

Wir erklären in alleiniger Verantwortlichkeit, dass dieses Produkt mit den folgenden Normen übereinstimmt* gemäß den Bestimmungen der Richtlinien** EG-Baumusterprüfung *** durchgeführt von ****

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 ** Contrôle européen du modèle type *** effectué par ****

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 ** Omologazione CE *** eseguita da ****

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 ** controle de amostra de Construção da CE *** efectuado por ****

FIN SUOMI**VAATIMUKSEN MUKAISUUSVAKUUTUS**

Vakuutamme, että tämä tuote vastaa seuraavia normeja* on direktiivien määräysten mukainen** EY-tyyppitarkastustesti *** testin suorittaja: ****

DA DANSK**OVERENSSTEMMELSE ATTEST**

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

EL ΕΛΛΗΝΙΚΑ**ΔΗΛΩΣΗ ΑΝΤΙΣΤΟΙΧΕΙΑΣ**

Δηλώνουμε με ίδια ευθύνη ότι το προϊόν αυτό αντιστοιχεί στις ακόλουθες προδιαγραφές* σύμφωνα με τις διατάξεις των οδηγιών** Έλεγχος-EOK δομικού πρωτοτύπου*** πραγματοποιούμενος από το****

ENG ENGLISH**DECLARATION OF CONFORMITY**

We herewith declare in our sole responsibility that this product complies with the following standards* in accordance with the regulations of the undermentioned Directives** EC type examination *** conducted by ****

NL NEDERLANDS**CONFORMITEITSVERKLARING**

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

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** Homologación de tipo CE *** llevada a cabo por ****

SV SVENSKA**FÖRSÄKRAN OM ÖVERENSSTÄMMELSE**

Vi försäkrar på eget ansvar att denna produkt överensstämmer med följande standarder* enligt bestämmelserna i direktiven** EG-materialprovning *** genomfört av ****

NO NORGE**SAMSVARSERKLÆRING**

Vi erklærer under eget ansvar at dette produkt samsvarer med følgende normer* henhold til bestemmelsene i direktiv** EU-typegodkjennelse *** utstilt av ****

POL POLSKI**OŚWIADCZENIE O ZGODNOŚCI**

Oświadczamy z pełną odpowiedzialnością, że niniejszy produkt odpowiada wymogom następujących norm* według ustaleń wytycznych **Kontrola wzorców UE *** przeprowadzone przez ****

HU MAGYAR**MEGEGYEZŐSÉGI NYILATKOZAT**

Kizárólagos felelősségünk tudatában ezennel igazoljuk, hogy ez a termék kielégíti az alábbi szabványokban lefektetett követelményeket* megfelel az alábbi irányelvek előírásainak** által végzett vizsgálat szerint megegyezik az alábbi építési mintapéldánnyal *** a ****

KGT 501

* EN 61029-2-11, DIN EN 62079, ISO 7960

** 98/37/EG, 73/23/EWG, 89/336/EWG, 93/68/EWG

***011052

**** Prüf- und Zertifizierungsstelle - Fachauschuß Holz

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

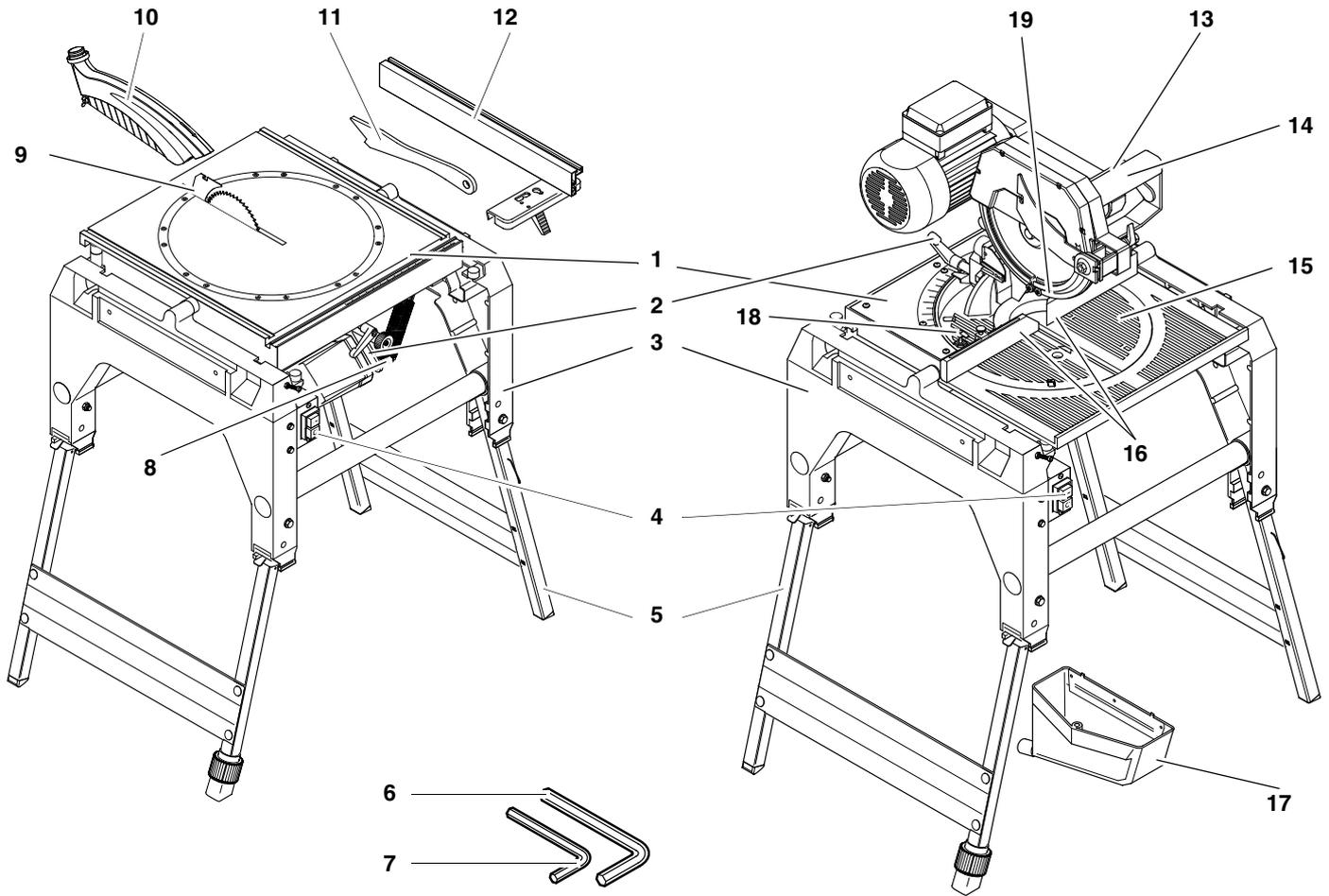


ELEKTRA BECKUM AG

Daimlerstraße 1

D - 49716 Meppen

1. Machine overview (standard delivery)



General operating elements

- 1 Swing table
- 2 Ratchet lock lever for sawhead tilt
- 3 Side panels
- 4 ON/OFF switch
- 5 Folding workstand

Table saw mode

- 8 Handwheel for depth of cut setting
- 9 Riving knife
- 10 Blade guard
- 11 Push stick
- 12 Rip fence

Crosscut and mitre saw mode

- 13 Release lever
- 14 Saw handle
- 15 Rotating table
- 16 Fence
- 17 Chip case for saw blade
- 18 Locking pin, rotating table
- 19 Retractable blade guard

Tools

- 6 Allen key 8 mm
- 7 Allen key 6 mm

Machine documents

- Operating instructions
- Spare parts list

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14.1 Available Saw Blades.....29

2. Please read first!

These instructions have been written in a way which facilitates learning of how to operate your saw safely. 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 indicated 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, ...)
 - indicate 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

The machine offers two modes of operation:

- Crosscut and mitre saw mode for crosscutting strips, profiled stock, etc. of wood, wood-derived materials, or soft metals.
- Table saw mode for cutting sheet-type workpieces of wood or wood-derived materials.

The machine must be set up for the relevant operating mode according to these instructions.

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

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.
- Observe the statutory accident insurance institution regulations and regulations for the prevention of accidents pertaining to the operation of circular and crosscut/mitre saws, where applicable.



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 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.
- When working long stock use suitable supports.
- Do not operate tool near inflammable liquids or gases.
- This tool shall only be started and operated by persons familiar with mitre 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 personal injury and crushing 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 electric tool.
- Wait for the saw blade to come to a complete stop before removing cut-offs, scrap etc. from the work area.
- 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.
- Turn power off 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 kickback (workpiece is caught by the saw blade and thrown against the operator):

- Always have the riving knife correctly set when operating the saw in table saw mode.
- Do not jam workpieces.
- Make sure the saw blade is suitable for the material of the workpiece.
- Cut thin or thin-walled workpieces only with fine-toothed saw blades.
- Always use sharp saw blades.
- If in doubt, check workpiece for inclusion of foreign matter (e.g. nails or screws).
- Cut only stock of dimensions that allow for safe and secure holding while cutting.
- 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.
- When working outdoors wearing of non-slip shoes is recommended.

Risk of injury by inhaling wood dust!

- Dust of certain timber species (e.g. beech, oak, ash) can cause cancer when inhaled. Work only with a suitable dust collector connected 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 deposits in the work area (do not blow away!);
 - Remove 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.
- 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.
- Ensure the riving knife is not bent. A bent riving knife presses the workpiece laterally against the saw blade. This causes noise.

3.3 General safety devices

Motor protection

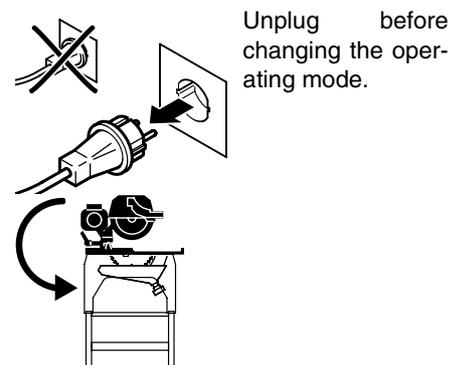
The electronic motor protection switches the motor OFF by overcurrent detection, in case the rotor is locked (e.g. by a blocked saw blade).

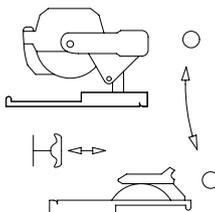
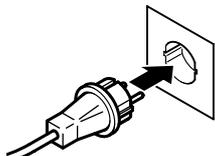
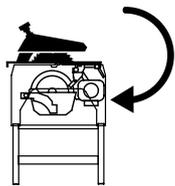
Undervoltage relay

An undervoltage relay prevents the machine from starting up when power is restored after a power failure.

3.4 Symbols on the machine

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

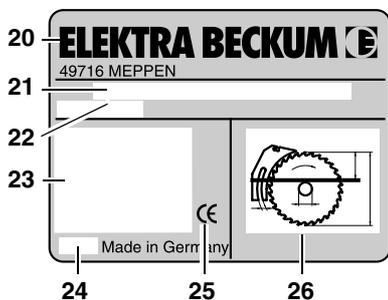




Disengage locking pin for crosscut saw mode.

Let locking pin engage for table saw mode.

Information on the nameplate:



- 20 Manufacturer
- 21 Serial number
- 22 Machine designation
- 23 Motor specifications (see also "Technical specifications")
- 24 Year of make
- 25 CE-mark – This machine conforms to the EC directives as per Declaration of Conformity
- 26 Dimensions of permissible saw blades and riving knives

4. Special product features

- Sturdy and high-precision die-cast aluminum design for highest torsional resistance and accuracy at low weight.
- Operating mode conversion from crosscut saw to table saw without tools in seconds, by simply turning the saw table over.
- Foldable workstand – ideal for site use.
- In crosscut saw mode, the saw head tilts steplessly through 45°.
- The rotating table turns steplessly through 45° left and right.
- Will cut compound mitres up to 45°.
- Large-dimensioned saw table provides a clean, flush support area.

- Robust drive, insensitive to dust.
- Low wear poly-V-belt for optimal power transmission and long service life.

5. Installation and transport

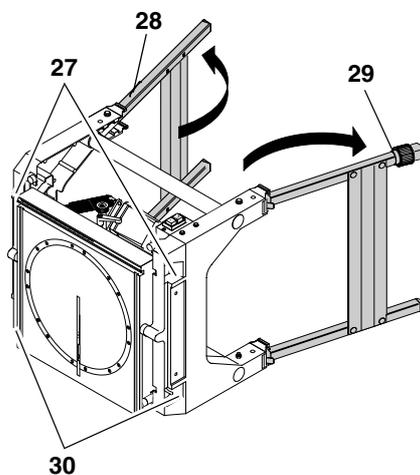
5.1 Machine setup



Caution!

Do not carry the machine at the table; the table is not designed to bear the weight of the machine.

1. With two persons, hold the machine at the front (27) and rear (30) recessed grips and lift it out of the packaging.
2. Lay machine on its rear side.
3. Loosen the locking clips (28) and swing legs out until they engage at the side panel.



4. Hold machine at the rear recessed grips (30) and lift it up into vertical position.
5. If necessary, compensate for an uneven floor with the adjusting foot (29).

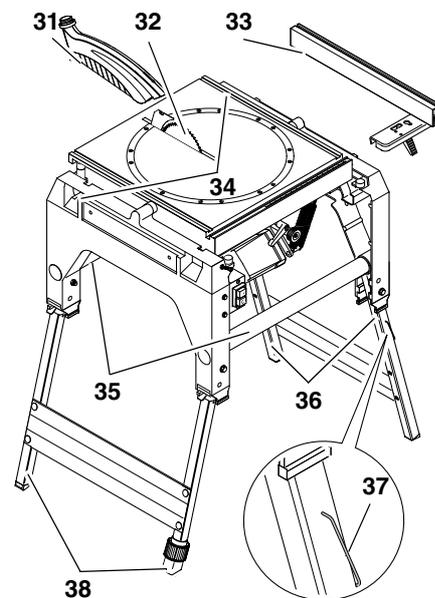


Note:

See the description of the respective operating mode for details about the initial operation in crosscut saw or table saw mode.

5.2 Machine transportation

1. Swing saw table over in position table saw mode (see "Table saw mode").
2. Remove blade guard (31).
3. Lower saw blade (32) fully.
4. Remove rip fence (33), if necessary.
5. Hold saw at the rear recessed grips (34) and lay it on its rear.



6. Run power cable between the two left legs (38).
7. Unlock the legs on the left (38) and fold up.
8. Unlock the right legs (36), fold over the left legs and secure with the locking clips (37).
9. Hold saw at the tubes (35) below the saw table when transporting.

If possible use the original carton for shipping.

5.3 Mains connection



Danger! High voltage

- Operate machine in dry environment only.
- Operate machine only on a power source matching the following requirements (see also "Technical specifications"):
 - outlets properly installed, earthed and tested;
 - mains voltage and system frequency conform to the voltage and frequency shown on the machine's nameplate;
 - fuse protection by a residual current operated device (RCD) of 30 mA sensitivity;
 - system impedance Z_{max} at the interconnection point (house service connection) 0.35 Ohm maximum.



Note:

Check with your local Electricity Board or electrician if in doubt whether your house service connection meets these requirements.

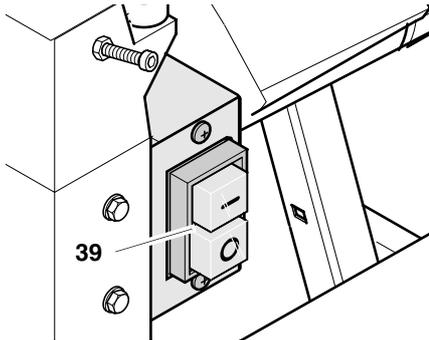
- Position power supply cable so it does not interfere with the work and is not damaged.

- Protect power supply cable from heat, aggressive liquids and sharp edges.
- Use only rubber-jacketed extension cables with sufficient lead cross-section (3 x 1.5 mm²).
- Do not pull on power supply cable to unplug.

6. General operating elements

ON/OFF switch (39)

- To start = press green switch button.
- To stop = press red switch button.



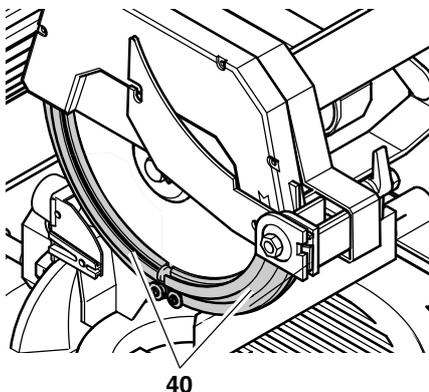
- To restart
 - when motor protection has tripped (e.g. because of a locked motor) or
 - after a power failure (undervoltage relay tripped),
 the green switch button must be actuated again.

7. Crosscut and mitre saw mode

7.1 Safety devices

Retractable blade guard

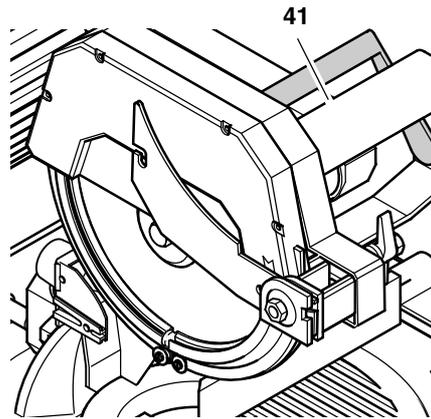
The two-piece retractable blade guard protects against unintentional contact with the saw blade and from chips flying about.



Both segments of the retractable blade guard (40) must always return automatically into their starting position: when the sawhead is lifted up, the sawblade must be covered all around.

Sawhead lock

The sawhead lock prevents inadvertent lowering of the sawhead onto the saw table.



The sawhead lock is released with the release lever (41). The sawhead lock must always engage when the sawhead is in the upper starting position.

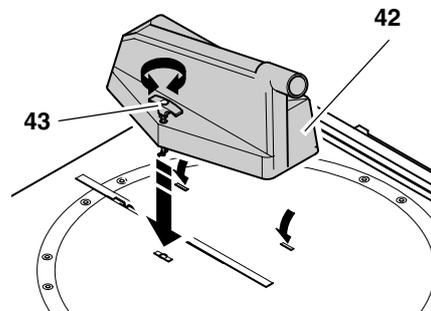
7.2 Setting up for crosscut and mitre saw mode



Danger!

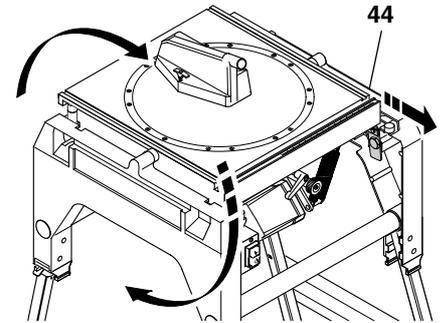
- Prior to machine setup: Turn machine OFF, unplug, and wait for the sawblade to stop.

1. Lower saw blade fully.
2. Install chipcase (42) on the saw table: First insert the two tongues, then secure chipcase in place with the T-handle lock (43).

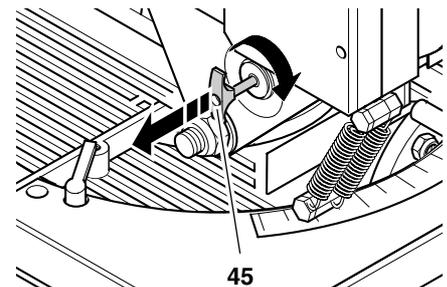


Risk of crushing! When turning the saw table over there is a risk of crushing!

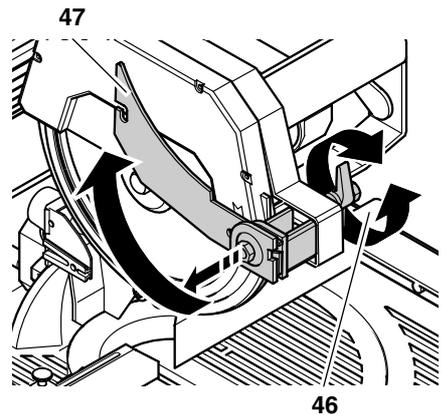
- Do not reach between saw table and side panels!
 - Hold the saw table firmly when turning over, so it will not drop all of a sudden!
 - Make sure the sawhead is firmly locked and secured against unintended tilting!
3. Pull lever (44) forward and turn the saw table gently over.



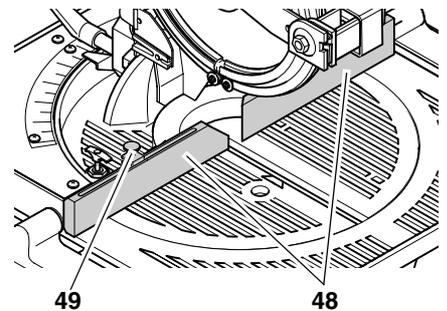
4. Connect the chip case's dust extraction port to a suitable dust collector.
5. Pull out the locking pin (45) for the height adjustment and turn clockwise by a quarter turn.



6. Loosen the locking nut (46) of the riving knife (47).



7. Swing riving knife up and tighten the locking nut.
8. Install auxiliary fences (48), leaving approx. 5 mm distance to the cutting area. Tighten retaining brackets (49).



Note: The auxiliary fences are wearing parts. They must be replaced, when they are cut to such extent that cutoffs can get between auxiliary fence and saw blade.

7.3 Operation



Danger!

- Before starting any work, check to see that the following are in proper working order:
 - saw blade;
 - retractable blade guard;
 - fence.
- Assume proper operating position:
 - at the front of the saw;
 - in front of the saw;
 - to the side of the line of cut.
- 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;
 - work clamp.
- Always hold the workpiece down on the table and against the fence.
- If small cutoffs will result when cutting, use the auxiliary fences.
- Make sure the angle of inclination will not change when sawing (Tighten the stopping lever for the sawhead tilt).

Standard cross cuts

Starting position:

- sawhead fully raised;
- rotating table in 0° position, locking pin (51) is engaged and the rotating table's stopping lever (50) is tightened;
- The sawhead bevel tilt is 0°, the ratchet lock lever for the sawhead tilt is fully tightened.

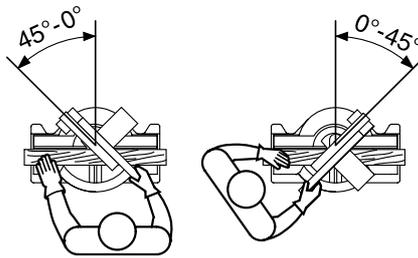
Execution:

1. Hold workpiece against the fence.
2. Start machine (press green switch button).
3. Pull the release lever – the retractable blade guard opens.
4. Holding it at the saw handle, lower the sawhead onto the workpiece. When sawing exert only moderate pressure, to prevent the motor speed to drop too much.
5. Cut workpiece in a single pass.
6. Raise sawhead to its upper starting position.
7. If no further cutting is to be done immediately afterwards, switch the machine OFF (press red switch button).

Mitre cuts



Note:
A mitre cut cuts the workpiece at an angle between -45° and +45° against the rear guide edge.

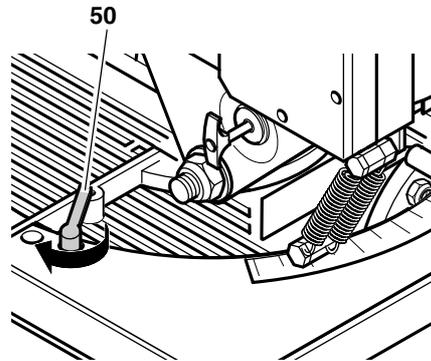


Starting position:

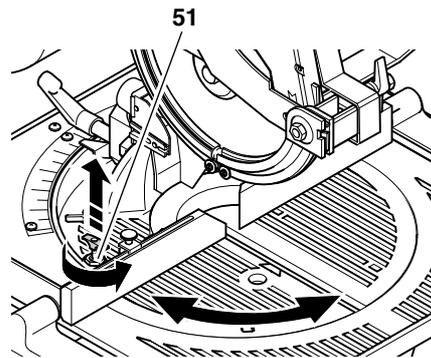
- sawhead fully raised;
- saw blade is vertical to the saw table.

Execution:

1. Loosen the rotating table's stopping lever (50).



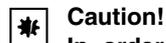
2. Pull out the locking pin (51) and turn counter-clockwise.



3. Set to desired angle.
4. Tighten stopping lever (50), if necessary let locking pin (51) engage.



Note:
The locking pin of the rotating table engages at +45°, 0° and -45°.



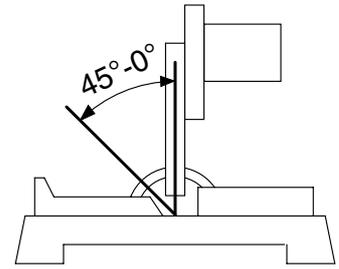
Caution!
In order to prevent the mitre angle from changing during cutting, the stopping lever must always be tightened.

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

Bevel cuts



Note:
A bevel cut cuts the workpiece at an angle between 0° and 45° from vertical.

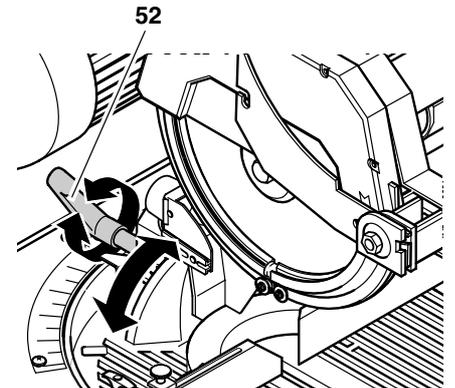


Starting position:

- sawhead fully raised;
- rotating table locked in the 0° position.

Execution:

1. Loosen the ratchet lock lever (52) for sawhead tilt at the rear of the saw.



2. Tilt sawhead to desired angle against the workpiece's surface.
3. Tighten the ratchet lock lever (52).
4. Cut workpiece as detailed under "Standard cross cuts".

Compound mitre cuts



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

Starting position:

- sawhead fully raised;
- rotating table locked in desired position.
- sawhead tilted to desired angle against the workpiece's surface and locked.

Execution:

The actual cutting operation is performed as detailed under "Standard cross cuts".

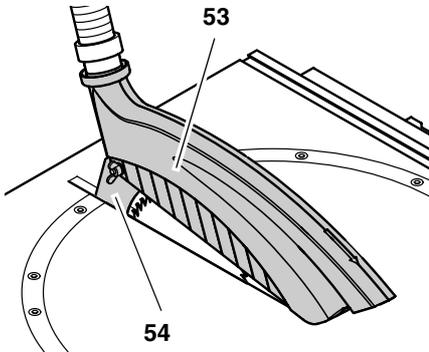
8. Table saw mode

8.1 Safety devices

Blade guard

The blade guard (53) protects against unintentional contact with the saw blade and from chips flying about.

Always have blade guard installed during operation.



Riving knife

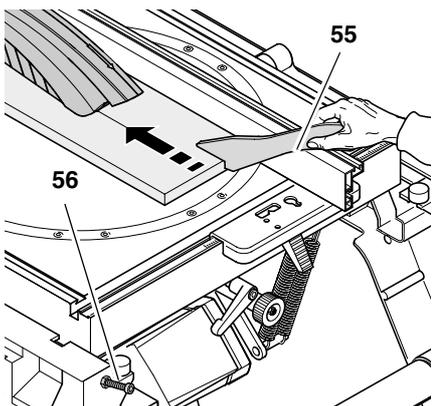
The riving knife (54) prevents the saw blade from getting jammed in the workpiece, thus throwing the workpiece against the operator.

In table saw mode, the riving knife must always be in position behind the saw blade.

Push stick

The push stick (55) serves as an extension of the hand, and protects against inadvertent contact of the saw blade in table saw mode.

Always use the push stick if the distance between fence extrusion and saw blade is ≤ 120 mm.



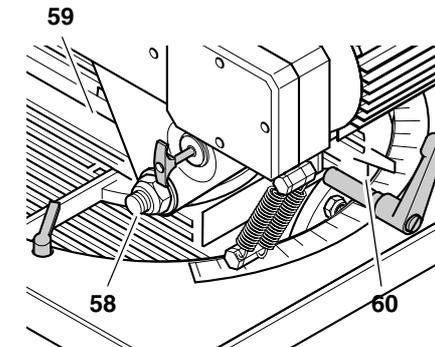
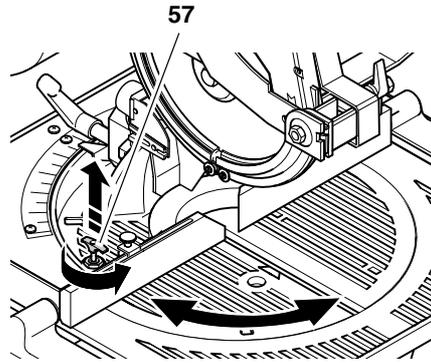
When the push stick is not used, put it on the holder provided (56).

8.2 Setting up for table saw mode

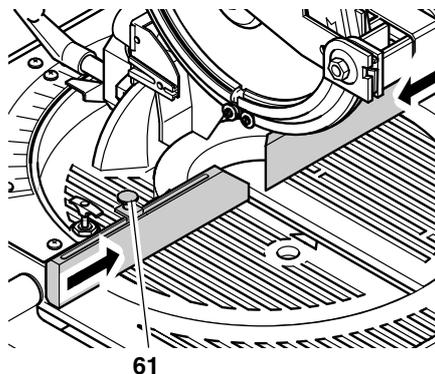


Danger!

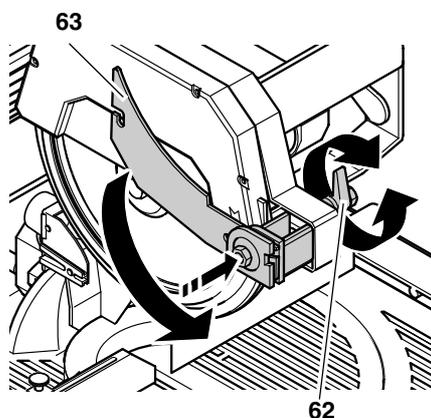
- Prior to machine setup: Turn machine OFF, unplug, and wait for the sawblade to stop.
1. Set rotating table to 0°-position, engage locking pin (57) and tighten the rotating table's stopping lever (58).



2. Set sawhead vertical (0°), and tighten the ratchet lock lever for the sawhead tilt (60).
3. Loosen the retaining brackets for the auxiliary fences (61) and position auxiliary fences so that they do not project over the table's edge. Retighten the retaining brackets.



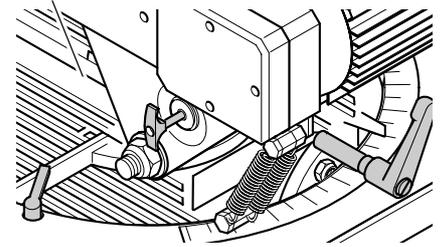
4. Loosen the locking nut (62) of the riving knife (63).



5. Swing riving knife down and tighten the locking nut.
6. To lock the height adjustment: Lower sawhead, turn the locking pin (64) counter-clockwise by a quarter

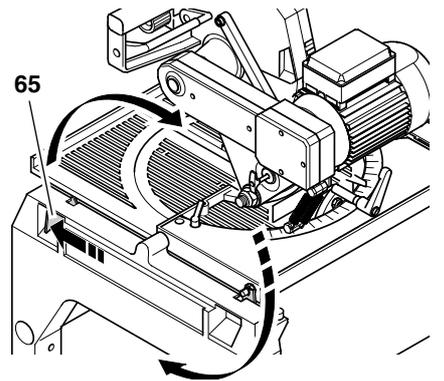
turn and lift sawhead slowly into a horizontal position, until the locking pin (64) engages.

64

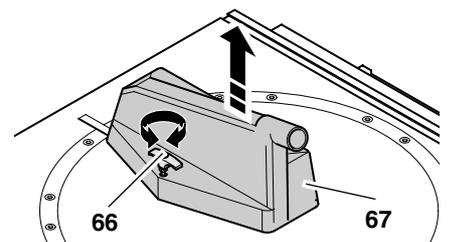


⚠ Risk of crushing!
When turning the saw table over there is a risk of crushing!

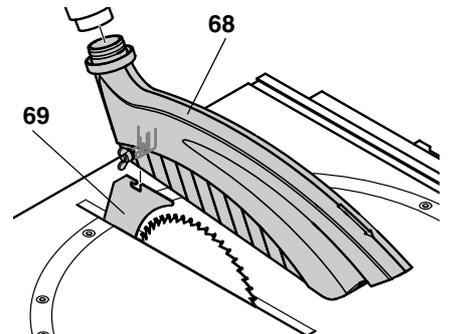
- Do not reach between saw table and side panels!
 - Hold the saw table firmly when turning over, so it will not drop all of a sudden!
 - Make sure the sawhead is firmly locked and secured against unintended tilting!
7. Pull lever (65) forward and turn the saw table gently over.



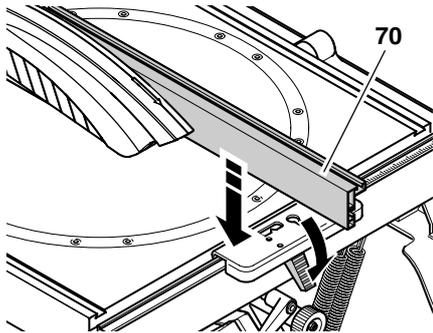
8. Loosen T-handle lock (66) and remove the saw blade chip case (67) from the saw table.



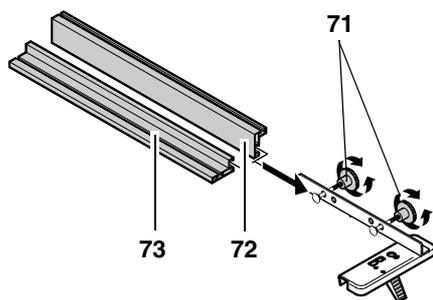
9. Install blade guard (68) on the riving knife (69); to do so, slide it into the riving knife's slot and push it all the way in against the stop, then tighten the wing nut.



10. Connect the blade guard's dust extraction port to a suitable dust collector.
11. If necessary, attach the rip fence (70) to the front of the saw table.



After loosening the two knurled nuts (71), the fence extrusion can be removed and shifted:



- Wide edge (72):
 - for cutting thick stock.
- Small edge (73):
 - for cutting thin stock;
 - when the saw blade is tilted.

8.3 Operation



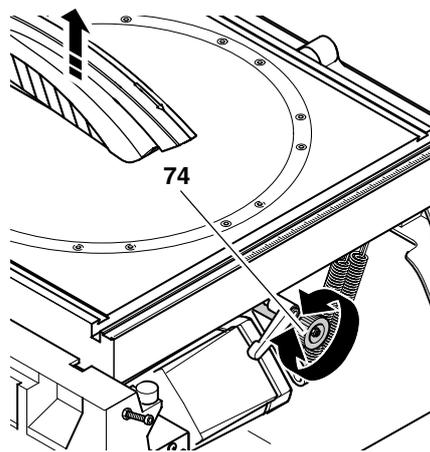
Danger!

- Always work with a properly set riving knife.
- Always use the push stick if the distance between fence extrusion and saw blade is ≤ 120 mm.
- Set-in work or slotting must not be carried out in table saw mode. Carry out such work in crosscut saw mode.
- In table saw mode the rotating table must always be in the 0° position.
- Rebating and grooving must be done using a suitable guard, since for this type of work the blade guard must be removed. A suitable guard would be for example a tunnel-shaped cover for the upper side of the workpiece.
- Before starting any work, check to see that the following are in proper working order:
 - saw blade;
 - blade guard;
 - riving knife;
 - push stick.

- Assume proper operating position:
 - at the front of the saw;
 - in front of the saw;
 - to the side of the line of cut.
- Do not reach under the saw table. Risk of personal injury by the rotating saw blade.
- 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;
 - work clamp;
 - Rip fence.

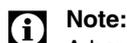
Standard cross cuts

1. Set the saw blade with the hand-wheel (74) for height adjustment to the desired cutting height.
2. Place workpiece flat on the saw table.



3. Start saw (press green switch button).
4. Exert only moderate pressure when sawing, to prevent the motor speed to drop too much.
5. Cut workpiece in a single pass.
6. If no further cutting is to be done immediately afterwards, switch the saw OFF (press red switch button).

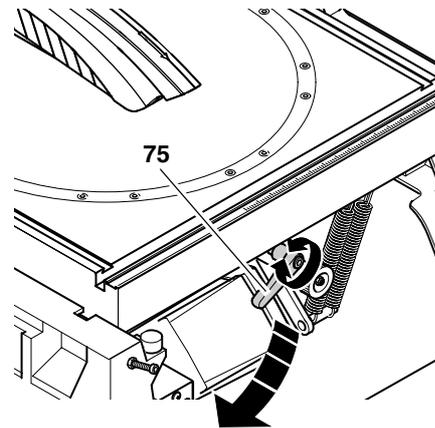
Bevel cuts



Note:

A bevel cut cuts the workpiece at an angle between 0° and 45° from vertical.

1. Loosen the ratchet lock lever (75).



2. Tilt sawhead to desired angle against the workpiece's surface.
3. Tighten the ratchet lock lever (75).
4. Cut workpiece as detailed under "Standard cross cuts".

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.

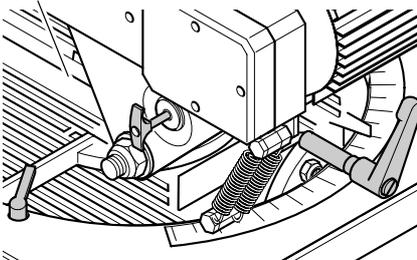
9.1 Saw blade change



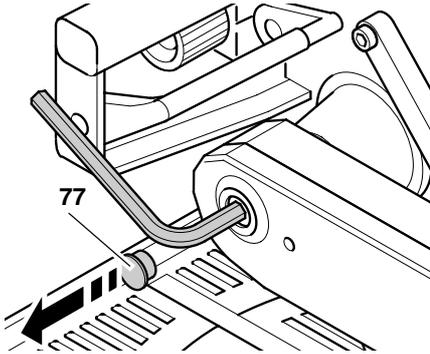
Danger!

- Directly after cutting the saw blade can be very hot – burning hazard! Let a hot saw blade cool down. Do not clean the saw blade with combustible liquids.
 - Risk of injury, even with the blade at standstill. Wear gloves when changing blades.
 - When assembling, the direction of rotation of the saw blade and outer flange must be observed!
1. Remove the chip case (see "Table saw mode").
 2. Change over to "Crosscut saw mode".
 3. Lower sawhead, turn the locking pin (76) counter-clockwise by a quarter turn and lift sawhead slowly into a horizontal position, until the locking pin (76) engages.

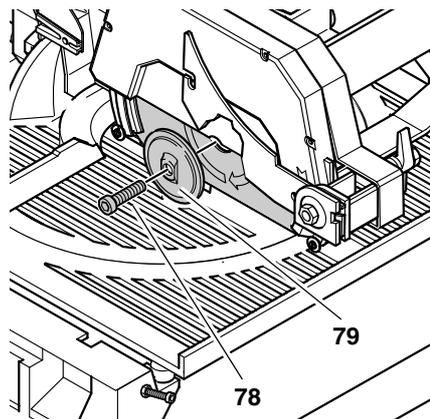
76



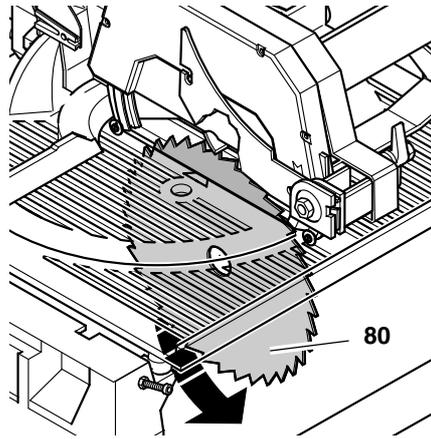
- Pull plug (77) from the drive box and hold the saw spindle with an Allen key.



- Loosen the arbor bolt (78) on the saw spindle using an Allen key (**left-handed thread!**).



- Remove arbor bolt (78) and outer blade flange (79) from the saw spindle.
- Hold saw blade (80) from below to remove from the saw spindle and move down through the table insert as follows:
In order to prevent the saw blade from getting caught when removing, put it with its **front** teeth against the **front** retractable blade guard. Then pull the saw blade carefully down and remove it.



- Clean clamping surfaces of:
 - saw spindle,
 - 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.
- Fit the new saw blade, observe direction of rotation (arrow on the saw blade): Guide saw blade from below through the table insert and place on the saw spindle.
In order to prevent the saw blade from getting caught when fitting, put it with its **rear** teeth against the **rear** retractable blade guard. Then guide the saw blade carefully up.

! Danger!

- Use only saw blades conforming to the technical specifications stated and to EN 847-1 – from unsuitable or damaged saw blades parts can be hurled away explosive-like by centrifugal force.
- Do not use:
 - saw blades made of high speed steel (HS or HSS);
 - saw blades with visible damage;
 - cut-off wheel blades.

! Danger!

- Mount saw blade only using 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.

- Put outer blade flange (79) on – the two flanks must fit over the flats of the saw spindle!
- Screw in arbor bolt (78) (**left-hand thread!**) and tighten with the two Allen keys **firmly**.

! Danger!

- Do not extend arbor bolt tightening wrench.
 - Do not tighten arbor bolt by hitting the assembly wrench.
 - After tightening the arbor bolt, do not forget to remove the assembly wrenches.
- Put plug (77) back in the drive box.
 - Check function:
 - when raising the sawhead into the starting position, both segments of the retractable blade guard must always return automatically into their starting position: when the saw head is raised, the saw blade must be covered all around.
 - Both segments of the retractable blade guard must open around the saw blade, without touching any other parts.
 - If work is to be continued in "cross-cut saw mode", the saw blade chip case must be installed again on the saw table (see "Crosscut saw mode")!

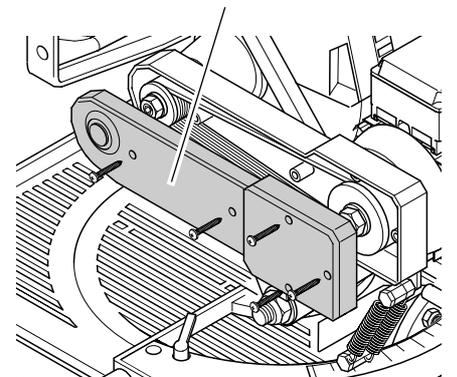
9.2 Drive belt tensioning

The drive belt runs between motor and saw spindle. It needs to be re-tensioned, if there is more than 5 mm slack at the centre between the two pulleys.

To check, re-tension and change

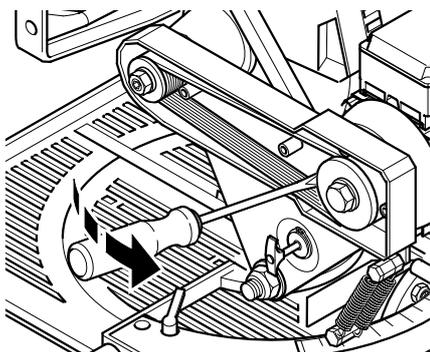
- Lift sawhead and lock in position (as for crosscut and mitre cuts).
- Remove the plastic cover (81).

81



- 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 tension, move motor to the right (put a screwdriver into the oblong hole and lever motor to the right).



- Tighten motor fastening screws crosswise.

4. Replace the plastic cover (81).

9.3 Saw adjustment

⚠ Caution!

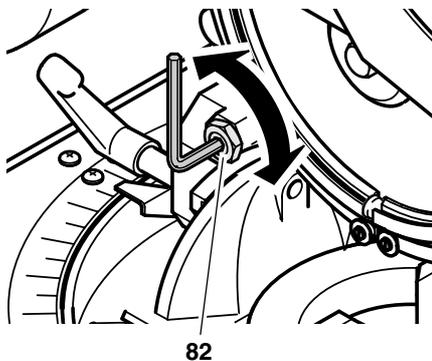
- After any servicing check to see that the saw blade can move freely in any position, by turning it carefully by hand.

Saw blade angle adjustment

The angle between saw blade and fence must be exactly 90°.

To check and adjust:

1. Set saw up in crosscut saw mode and set sawhead vertical.
2. Lock rotating table in the 90° position by means of the stopping lever.
3. Put a try square against the left-hand side of the saw blade and against the fence (watch out for the set of the saw teeth or protruding TC tips, respectively!).
4. Check to see that the angle between saw blade and fence is exactly 90°. If necessary, loosen locking nut (82) and adjust motorhead axle with an Allen key. Tighten locking nut again.



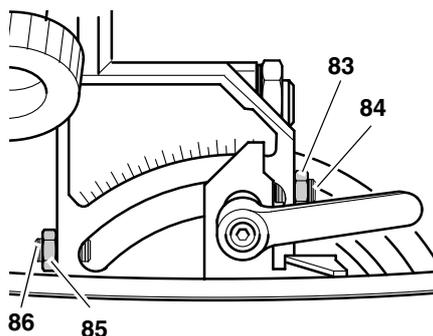
5. After adjusting the saw blade angle, check:
 - stop for saw blade tilt
 - locking pin, rotating table
 - rotating table scale

Sawhead tilt stop adjustment

The saw is provided with adjustable tilt stops at both the 90° and the 45° position.

To check and adjust:

1. Set saw up in crosscut saw mode and set sawhead vertical.
2. Put a try square against the left-hand side of the saw blade and on the saw table (watch out for the set of the saw teeth or protruding TC tips, respectively!).
3. Check to see that the angle between saw blade and saw table is exactly 90°. If necessary, loosen locking nut (83) and adjust stop screw (84). Tighten locking nut again.



4. Tilt sawhead to 45° and check setting with a try square. If necessary, loosen locking nut (85) and adjust stop screw (86). Tighten locking nut again.

Lateral saw blade adjustment

The saw blade position can be laterally adjusted along the saw blade axis. The saw blade must be positioned exactly in the centre of the kerf plate's slot.

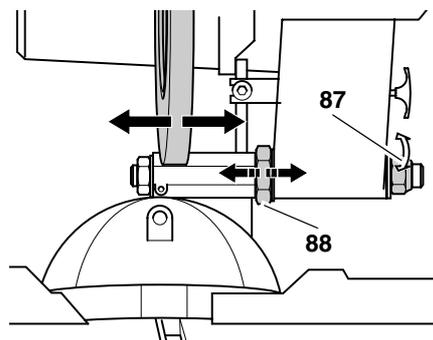
To check and adjust:

i Note:

If any changes are made to the settings of the motorhead axle, it must be prevented from turning by holding it with an Allen key.

If necessary, the saw blade angle must be readjusted.

1. Set saw up in crosscut saw mode and set sawhead vertical.
2. Loosen nut (87).
3. Adjust saw blade position by turning nut (88). Tighten nut (87) again.

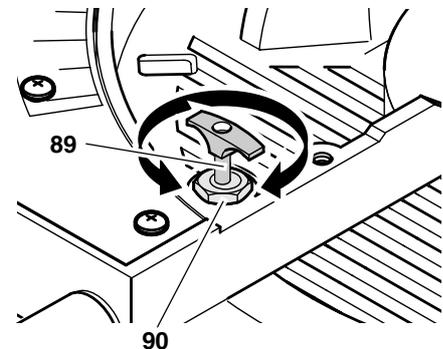


Rotating table locking pin adjustment

The locking pin of the rotating table must engage at the exact 90° and 45° positions.

To check and adjust:

1. Set saw up in crosscut saw mode and set sawhead vertical.
2. Let locking pin (89) engage.



3. Put a try square against the left-hand side of the saw blade and against the fence (watch out for the set of the saw teeth or protruding TC tips, respectively!).
4. Check to see that the angle between saw blade and saw table is exactly 90°. If necessary, loosen nut (90) and turn locking pin, together with the mounting to either the left or right. The locking pin is held eccentric in the mounting. If the angle is exactly 90°, tighten nut (90).

Scale adjustment

After a longer period of operation as well as after any adjustments have been made, the "0"-position of each scale should be checked and readjusted, if necessary:

1. Loosen all scale fastening screws.
2. Angle scales: Loosen the sawhead's locking devices and set sawhead to exact position with the help of a try and/or mitre square. Tighten the locking devices.

Fence scales:

- Put a straightedge of suitable length against the left-hand side of the saw blade and across its complete diameter (watch out for the set of the saw teeth or protruding TC tips, respectively!).
3. Adjust scale so that the "0"-position coincides with the indicated value.
4. Tighten all scale fastening screws, make a trial cut to verify the setting.

9.4 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").**

9.5 Maintenance

Before switching ON

- 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.
- Check if distance saw blade – riving knife is 4...8 mm.

Monthly (if used daily)

- Check drive belt condition and tension, correct if necessary.
- Remove saw dust and chips with vacuum or brush.
- Apply light coat of oil to bearings and guide elements (**not** the motor spindle and saw spindle bearings, these are lubricated for life).

Every 300 hours of operation

- Check all screwed joints, retighten if necessary.
- Check pull-back springs of the sawhead (in crosscut saw mode the sawhead must return by spring power to its upper starting position), replace if necessary.
- Check settings of all stops, adjust if necessary.
- Check settings of all scales, adjust if necessary.

10. 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.

Undervoltage relay tripped by power failure.

- Switch on again.

Motor protection tripped:

Let motor cool down for approx. 10 minutes, then start again.

Motor locked, e.g. by a blocked saw blade:

- Remove cause for blocking, let motor cool down if necessary, then start again.

Loss of cutting performance

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

- Replace saw blade (see "Maintenance").

Obstruction by chips

No dust collector hooked up:

- Connect dust collector.
- Remove saw dust and chips with vacuum or brush.

11. 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.

12. Available accessories

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

- A** Table Rear Extension / Table Side Extension
for working long stock safely.
- B** Sliding Carriage
for convenient guiding of long stock.
- C** Fence Extension
to extend the sliding carriage's fence
- D** Mitre Fence
steplessly adjustable from 90° through 45°.
- E** Work Clamp
for precision cuts, required for cutting non-ferrous metals.
- F** Dust Collection Attachment
to connect a dust collector to the saw – protects your health and keeps the shop clean.
- G** Mini-Laser for Dimensioning
to indicate the line of cut on the workpiece.

- H** TCT Saw Blade 250 x 2.8 / 1.8 x 30
T = 34 W
for rip and cross cuts in solid wood.
- I** TCT Saw Blade 250 x 2.8 / 1.8 x 30
T = 42 W
for rip and cross cuts in solid wood.
- J** TCT Saw Blade 250 x 2.8 / 1.8 x 30
T = 80 W
for rip and cross cuts in veneered and faced wood core sheets.
- K** TCT Saw Blade 250 x 2.8 / 2.0 x 30 T = 80 TF
for cutting non-ferrous metals (aluminium, copper, etc.).
- L** Cleaning Spray
for removing resin residue and protection of metal surfaces.
- M** Suction Adapter
to connect a shop vacuum to the dust collection attachment.
- N** Push Block Handle
to be fitted to a suitable board. For the safe guiding of small stock.
- O** Work clamp
Required for precision cuts and cutting of non-ferrous metals.

13. Environmental protection

The machine's packing can be 100% recycled.

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

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

14. Technical specifications

Motor specifications – Voltage – Current draw – Fuse protection, minimum (time-lag or type K MCB) – Protection class – Degree of protection – Motor capacity (power input P1, S6 40%) – Power output (S6 40%) – Maximum duty cycle (S6 40%) – 100% duty cycle – Motor speed	V A A IP 54 II kW kW min min min ⁻¹	230 (1 ~ 50 Hz) 9.0 10 IP 54 II 2.0 1.5 not limited not limited 2800	110 (1 ~ 50 Hz) 19.5 - IP 54 I 2.2 1.5 not limited not limited 2800
Weight – Machine in packing – Machine ready to work	kg kg	55 45	55 45
Machine dimensions Machine in packing – Length – Width – Height Machine ready to work, rotating table in 90° position, c/w suction port – Length – Width – Height	mm mm mm mm mm mm	790 600 440 720 580 620	790 600 440 720 580 620
Dust collector (not included in standard delivery) – Diameter of blade guard suction connector – Diameter of chipcase suction connector – Minimum air volume flow – Minimum vacuum at suction port – Minimum air speed at suction port	mm mm m ³ /h Pa m/s	40 40 565 1500 20	40 40 565 1500 20
Permissible ambient conditions – Permissible ambient temperature for operation – Permissible temperature for transport and storage	°C °C	+10 to +40 -10 to +40	+10 to +40 -10 to +40
Actual value of weighted acceleration (vibration at handle)	m/s ²	< 2.5	< 2.5
Noise emission according to Iso 7960 Sound power level* * – no-load – when sawing Sound pressure level* * – workplace – when sawing	dB (A) dB (A) dB (A) dB (A)	91.2 103.5 80.1 88.1	91.2 103.5 80.1 88.1
Saw blade – Saw blade diameter (outer) – Arbor bore (inner) – Cutting speed – Speed	mm mm m/s min ⁻¹	250 30 44.6 3.400	250 30 44.6 3.400
Saw blade tilt (to the left)		90° ... 45°	90° ... 45°

		Crosscut and mitre saw	Circular saw
Mitre angle		+45° ... -45°	n.a.
Maximum workpiece dimensions*			
Width			
- Height saw blade vertical	mm	60	81
- at 45° mitre	mm	60	n.a.
- at 45° saw blade tilt	mm	46	54
- at 45° / 45° compound mitre	mm	46	n.a.
Depth			
- saw blade vertical	mm	210	not limited
- at 45° mitre	mm	154	n.a.
- at 45° saw blade tilt	mm	210	not limited
- at 45° / 45° compound mitre	mm	154	n.a.

* The workpiece dimensions stated here are maximum dimensions. Depending on the relation between height and width of the workpiece, the possible dimensions may be less.

** The values stated here only indicate the loudness emitted by this machine. Whether the operator is required to wear hearing protection can not be determined here. This depends on how much noise reaches the operator's ear. And this, among other things, depends on the existing ambient conditions (such as other sources of noise near by). Even though it may not be explicitly required, it is in your own interest to always wear hearing protection when operating this machine.

14.1 Available Saw Blades

Description	No. of teeth	Stock no.
TCT 250 x 2.8 / 1.8 x 30 34 W	34 alternate bevel teeth	091 003 0990
TCT 250 x 2.8 / 1.8 x 30 42 W	42 alternate bevel teeth	091 003 1015
TCT 250 x 2.8 / 1.8 x 30 80 W	80 alternate bevel teeth	091 003 1031
TCT 250 x 2.8 / 2.0 x 30 80 TF	80 trapezoidal-flat teeth	091 003 1040



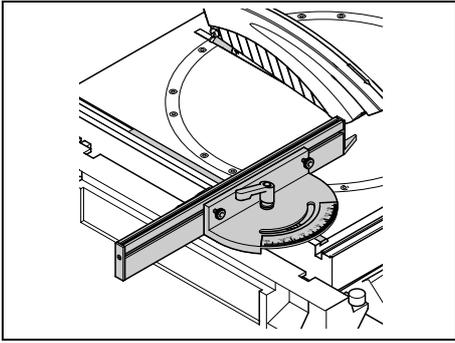
A 091 005 3213



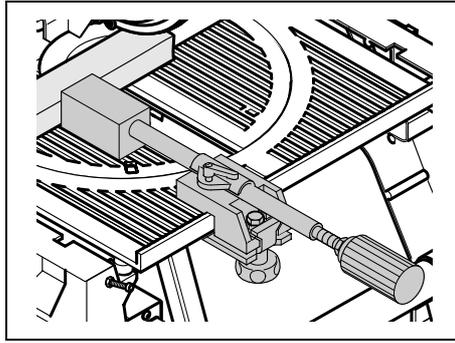
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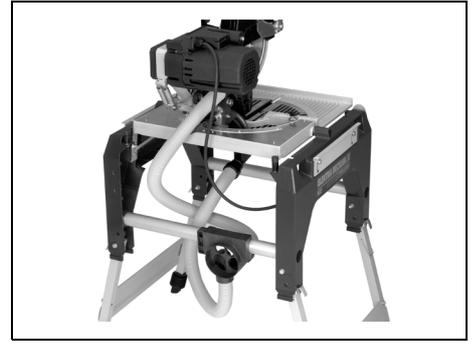
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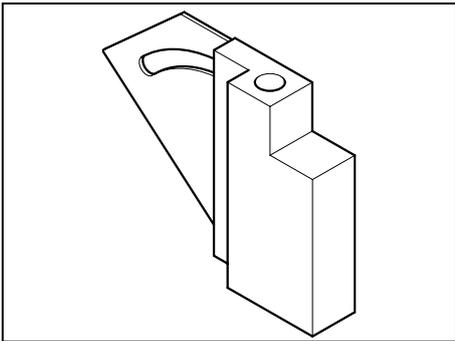
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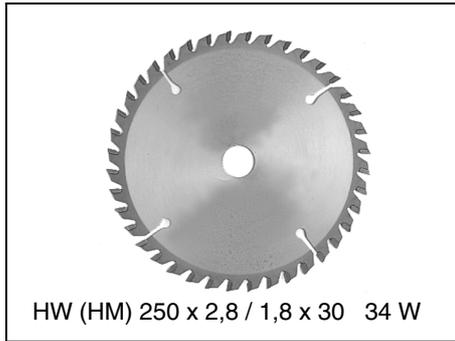
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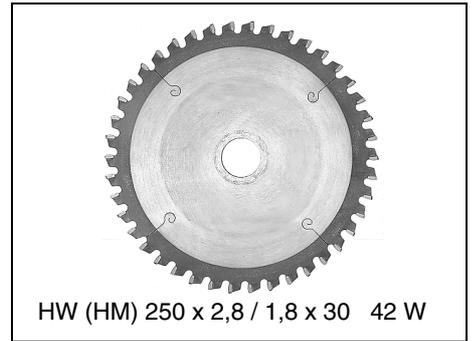
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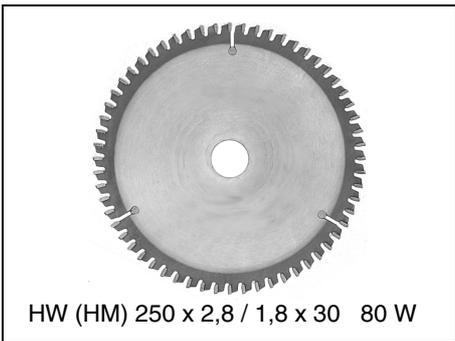
HW (HM) 250 x 2,8 / 1,8 x 30 34 W



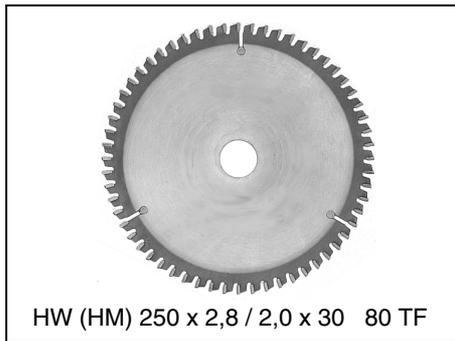
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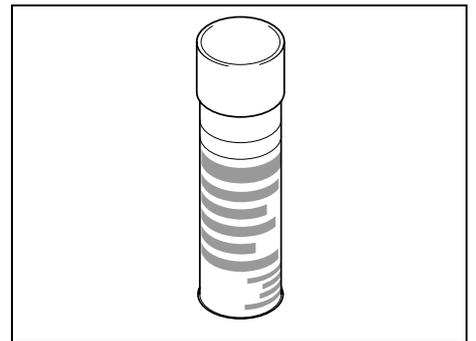
HW (HM) 250 x 2,8 / 1,8 x 30 80 W



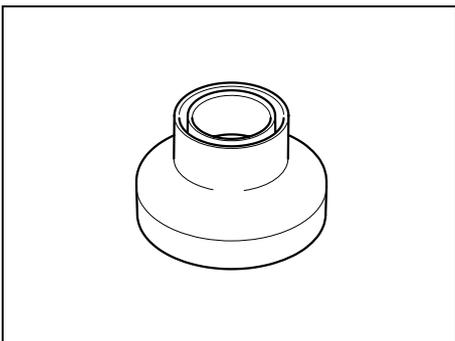
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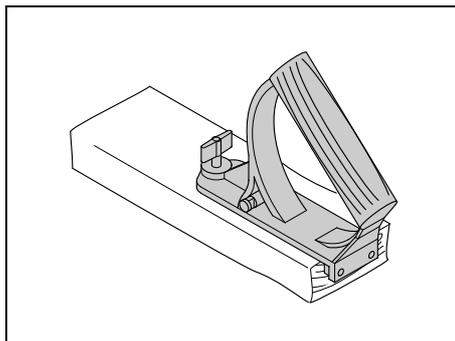
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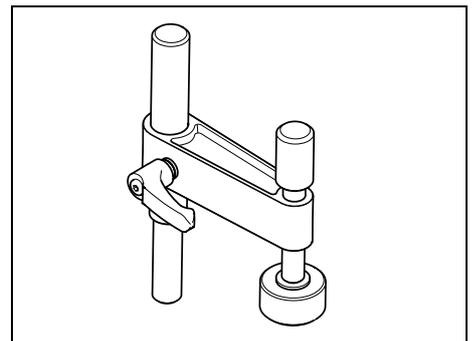
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