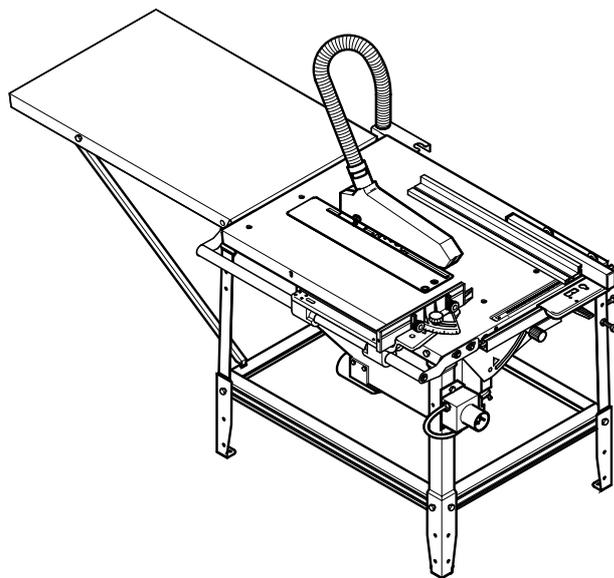
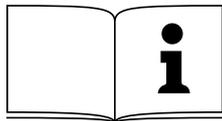


ELEKTRA BECKUM

Ein Unternehmen der Metabo-Gruppe



TKHS 315 E/P



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English only

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**OVERENSSTEMMELSESATTEST**

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 ιδία 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** EG 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**SAMSVAR SERKLÆRING**

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

POL POLSKI**OŚWIADCZENIE O ZGODNOŚCI**

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

HU MAGYAR**MEGEGYZŐSÉGI 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 ****

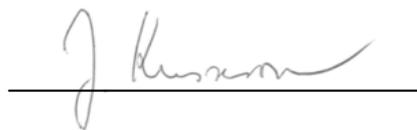
TKHS 315 E/P

*EN 1870-1, EN 60204

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

*** BM 9410359 02

**** TÜV-Rheinland, Am Grauen Stein, D-51105 Köln



Jürgen Kusserow

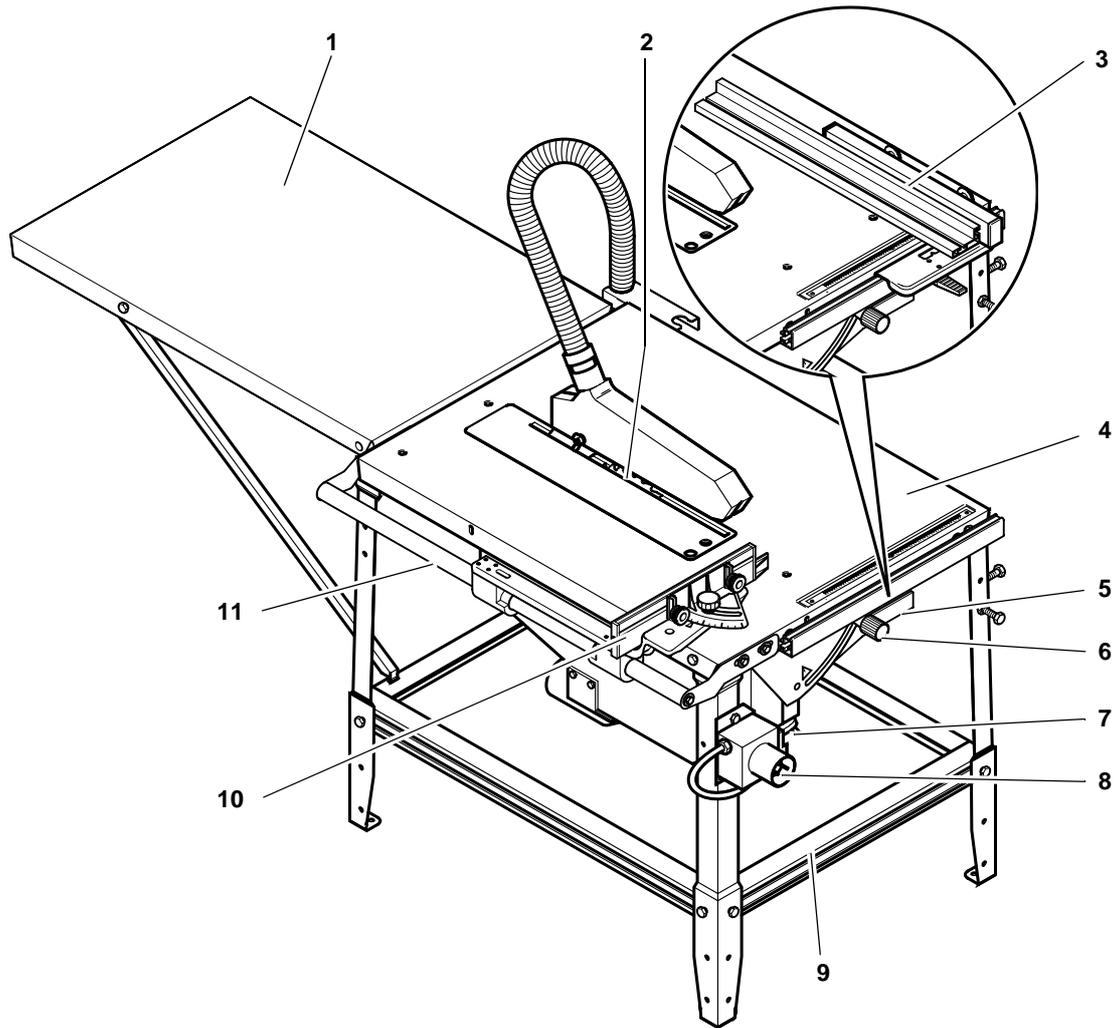
Vorstand



ELEKTRA BECKUM AG – Daimlerstraße 1 – 49716 Meppen

1001028/01

1. Machine overview



- | | |
|---|--|
| 1 Swing-out galvanized steel sheet rear table extension | 9 Stand with multiple reinforcement beads for high stability. |
| 2 Saw blade \varnothing 315 mm | 10 Mitre fence |
| 3 Rip fence | 11 Maintenance-free induction motor |
| 4 Table top of galvanized steel plate – high stability under load and permanent protection against corrosion | |
| 5 Blade tilt lever, to set the saw blade tilt stepless from 90° through 45° | |
| 6 Twist handle for locking the blade tilt angle | |
| 7 Handwheel for setting the depth of cut steplessly from 0 – 85 mm | |
| 8 ON/OFF switch | |

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2. Please read first!

- Assemble tool in strict accordance with these instructions. Only if you follow the instructions exactly does the machine conform to the safety regulations and can be safely operated.
- Read the safety instructions before initial operation.
- If you notice transport damage while unpacking, notify your supplier immediately. In this case, do not assemble and operate the saw!
- Dispose of the packing in an environmentally friendly manner. Take to a proper collecting point.
- Keep these instructions for reference on any issues you may be uncertain about.
- If you lend or sell this machine be sure to have these instructions go with it.

3. Safety instructions

3.1 Specified conditions of use

This machine is intended to rip and crosscut grown timber, faced boards, chip board and wood-core plywood sheets, and similar wood-derived materials.

Do not cut round stock without suitable jigs or fixtures. The rotating saw blade could turn the workpiece.

Any other use is considered to be not as specified and not permitted. The manufacturer is not liable for any damage caused by unspecified use.

Modification 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 circular 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 tool while under the influence of drugs, alcohol or medication.

Consider environmental effects: provide proper lighting.

Prevent adverse body positions. Ensure firm footing and keep your balance at all times. Use suitable workpiece supports when cutting long stock.

Do not operate tool near inflammable liquids or gases.

The saw shall only be started and operated by persons familiar with circular saws, and who are at any time aware of the dangers associated with the operation of such tool.

Keep bystanders, particularly children, out of the danger zone. Persons under 18 years of age shall use this tool only in the course of their vocational training, under the supervision of an instructor.

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. Do not attempt to stop the saw blade by pushing the workpiece against its side.

Ensure the tool is disconnected from power supply 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.

 **Risk of kickback (workpiece is caught by the saw blade and thrown against the operator):**

Always work with a properly set riving knife.

Do not jam workpieces.

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.

When cutting round stock, use a suitable jig to prevent the workpiece from turning.

 **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** loose-fitting clothes; contain long hair with hairnet).

Never cut workpieces containing the following materials:

- ropes
- strings
- cords

- cables
- wires

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. oak, beech, ash) can cause cancer when inhaled: work only with a suitable dust collector attached to the saw.

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.

Use only tools (saw blades) conforming to EN 847-1:1997.

Do not make changes to any of the parts.

Use only matching saw blades and riving knives.

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.

3.3 Symbols used throughout these instructions

Danger!
Indicates risk of personal injury or severe material 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.

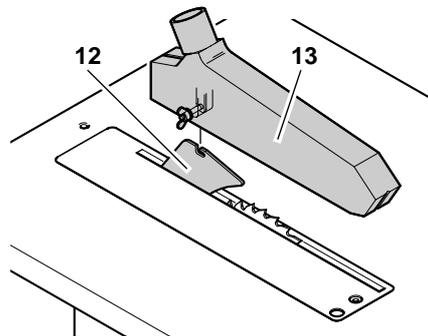
Note:
Additional information.

3.4 Safety devices

Riving knife

The riving knife (12) prevents the workpiece from being caught by the rising teeth of the saw blade and being thrown against the operator.

Always have the riving knife installed during operation.



Blade guard

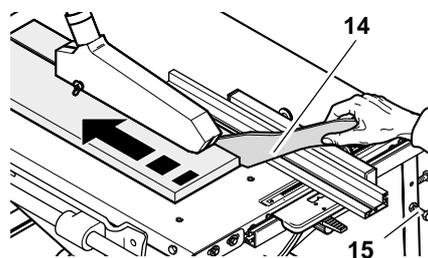
The blade guard (13) protects against unintentional contact with the saw blade and from chips flying about.

Always have the blade guard installed during operation.

Push stick

The push stick (14) serves as an extension of the hand and protects against accidental contact with the saw blade.

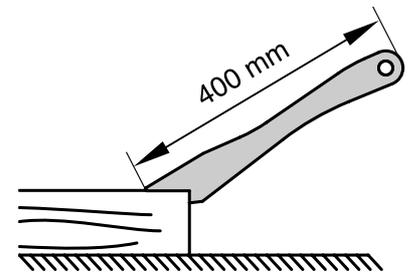
Always use the push stick if the distance between saw blade and rip fence is less than 120 mm.



Guide the push stick at an angle of 20° ... 30° against the saw table's surface.

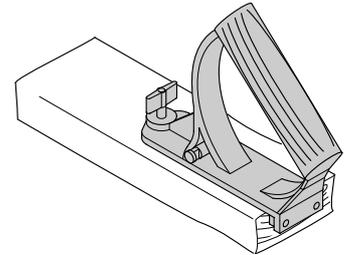
When the push stick is not used, it can be hung to the holder (15) provided.

Replace the push stick if damaged.



Handle for push block

To be affixed to a suitable board. For the safe guiding of small stock.



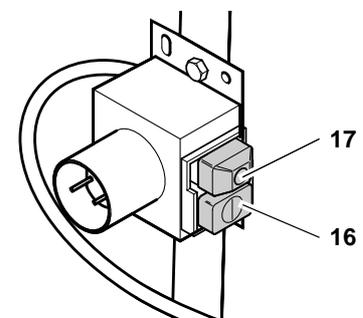
4. Special product features

- Steplessly adjustable bevel tilt from 90° to 45°.
- Stepless depth of cut setting to 85 mm.
- An undervoltage relay prevents the machine from starting up when power is restored after a power failure.
- All operating elements are located at the machine's front.
- A rear table extension is standard delivery.
- Robust sheet metal construction with galvanized saw table.

5. Operating elements

ON/OFF switch

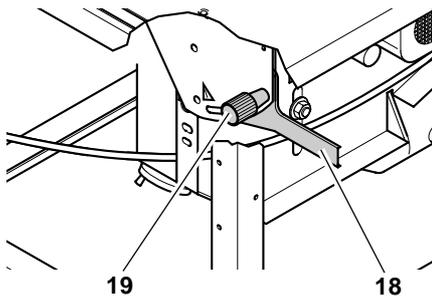
- To start = press green switch button (16).
- To stop = press red switch button (17).



Note:
In the event of a power failure an undervoltage relay is activated. This prevents the starting of the machine when the power is restored. To restart, the green switch button must be actuated.

Setting device for saw blade tilt

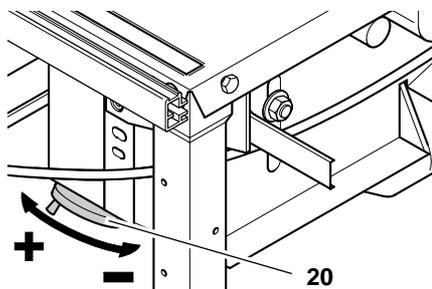
With the blade tilt lever (18) the saw blade is steplessly tilted from 0° through 45°.



In order for the blade angle not to change during cutting, the blade is locked in position with the turning knob (19).

Handwheel for setting the depth of cut

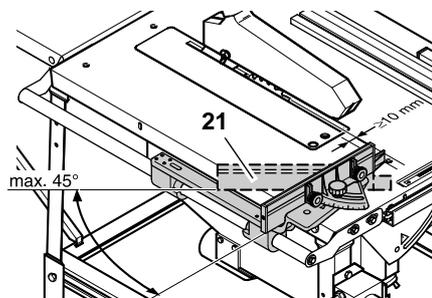
The depth of cut can be adjusted by turning the handwheel (20).



Fence

The saw is equipped with two fences:

- Mitre fence (for cross/mitre cuts):

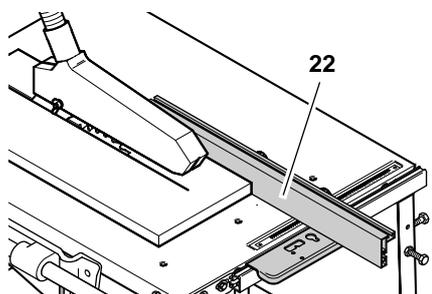


For use as mitre fence the short fence extrusion (21) must be installed. The mitre fence is mounted on a guide bar, fastened to the left-hand side of the saw table.

The plastic nose of the fence extrusion must point towards the saw blade.

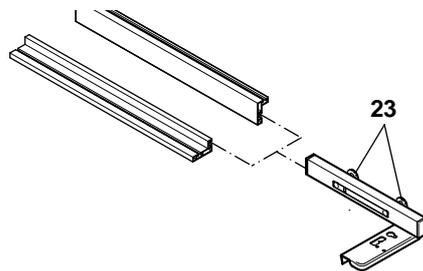
For mitre cuts, the fence extrusion is adjustable to 45° maximum.

- Rip fence (for ripping):



For use as rip fence the long fence extrusion (22) must be installed. It is mounted on the guide extrusion at the front of the saw table.

After loosening the two knurled nuts (23), the fence extrusion can be removed and shifted:



Wide edge:

- for cutting thick stock

Small edge:

- for cutting thin stock;
- when the saw blade is tilted.

6. Assembly



Danger!
Modifications of the saw or the use of parts not tested and approved by the equipment manufacturer can lead to unforeseen damage during operation!

- Assemble the saw in strict accordance with these instructions.
- Use only the parts supplied as standard delivery.
- Do not change any parts.

Only if you follow the instructions exactly does the saw conform to the safety regulations and can be safely operated.

If you also observe the following notes, the assembly will cause no problems:

- Read the instructions for each step before executing it.
- Lay out the parts required for each assembly step.

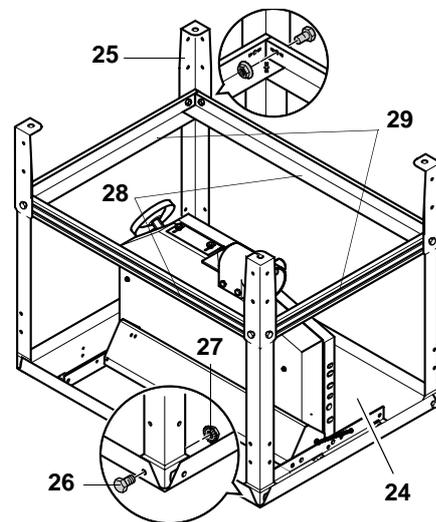
Required tools

- Hex. wrench 4 mm
- Hex. wrench 5 mm
- Hex. wrench 6 mm
- Wrench 10 mm
- Wrench 13 mm
- Wrench 19 mm
- Ring spanner 46 mm
- Phillips screwdriver

Stand assembly

Item	Description	Qty.
24	Table top with chip case	1
25	Leg	4
26	Hexagon head screw M8 x 16	20
27	Flange nut M8	20
28	Stanchion, long	2
29	Stanchion, short	2

1. Place table top (24) upside down on a stable, level support. Put a layer of cardboard or similar underneath to prevent marring the surface.
2. Attaching the four legs (25) to the inside of the table panel's corners:
 - fit hexagon head screws (26) into holes from the outside;
 - from the inside screw on flange nuts (27) – do not yet tighten fully.

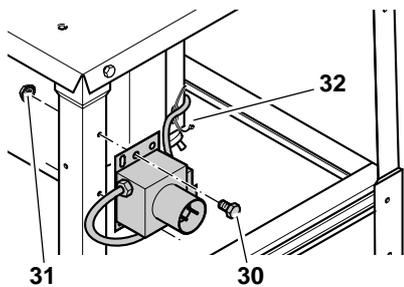


3. Fit long stanchions (28) between the side legs, short stanchions (29) between the front and rear legs:
 - the wide sides of the stanchions face the table panel;
 - the nibs and recesses must fit into each other;
 - fit hexagon head screws into holes from the outside;
 - from the inside screw on flange nuts – do not yet tighten fully.
4. Screwing up the stanchions with each other:
 - Fit hexagon head screws from the side of the table top;
 - from the other side turn on the flange nuts – **do not yet tighten fully, this will be done after installation of the table extension.**
 - With the help of another person, turn the saw over and stand it on a level floor.

Mounting the switch

Item	Description	Qty.
30	Hexagon head screw M8 x 16	2
31	Flange nut M8	2
32	Cable tie	1

1. Attach the switch plate with two each hexagon head screws (30) and flange nuts (31) to the left front leg. The switch buttons must point to the right-hand side.



2. Attach cable with cable tie (32) to the motor carrier unit.



Caution!
Make sure the cable does not run over sharp edges and is not bent.

Riving knife adjustment.



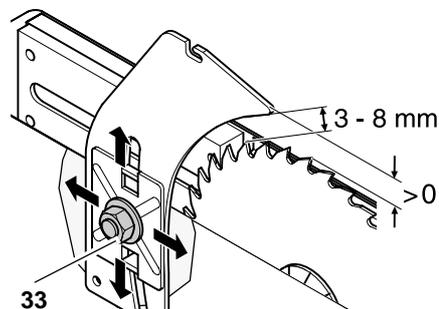
Danger!
For shipping the riving knife is lowered beneath the table top's surface. Prior to initial operation the riving knife therefore needs to be adjusted:

- in the distance to the saw blade;
- in its lateral alignment.

Distance to the saw blade:

The distance between the saw blade's peripheral edge and the riving knife shall be between 3...8 mm.

The riving knife must project at least the same distance over the saw table as the saw blade.

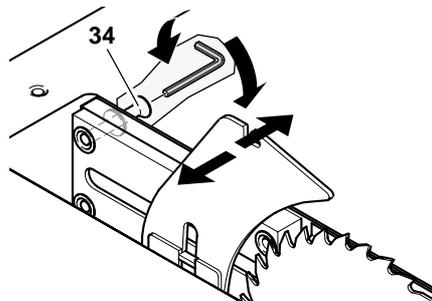


1. If necessary, loosen the Keps nut (33) on the riving knife one turn.
2. Adjust distance of the riving knife to the saw blade.
3. Tighten the Keps nut.

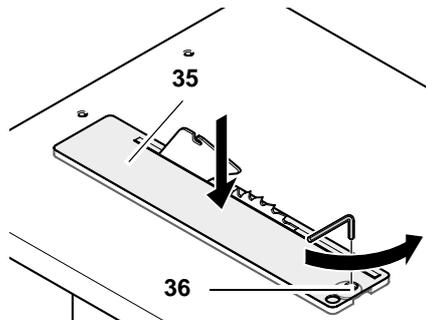
Lateral alignment:

riving knife and saw blade must be perfectly in line.

- Turning the four hexagon socket head cap screws (34) on the motor carrier unit below the saw table clockwise = riving knife is moved to the right.
- Turning the four hexagon socket head cap screws (34) on the motor carrier unit below the saw table counter-clockwise = riving knife is moved to the left.



4. Fit table insert extrusion (35) flush into the saw table.

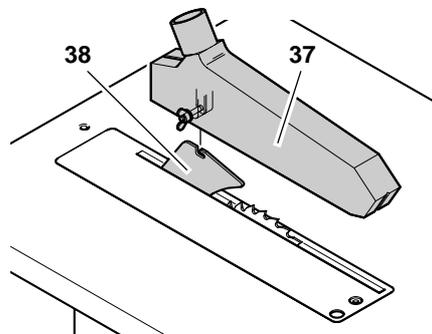


5. Turn the countersunk screw (36) counter-clockwise against the stop.

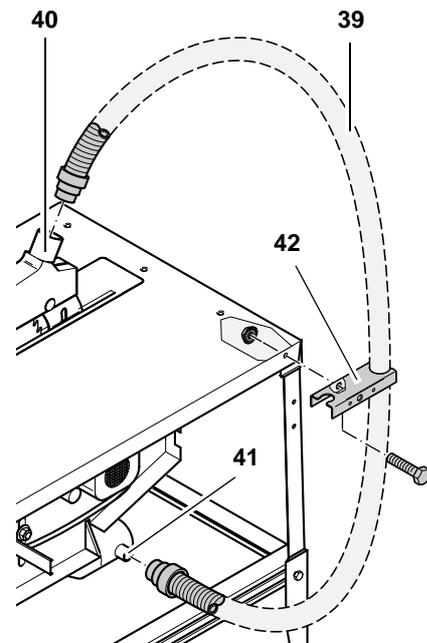
Installing the dust collection gear

Item	Description	Qty.
37	Blade guard	1
39	Suction hose	1
42	Hose carrier	1

1. Install blade guard (37) on the riving knife (38).



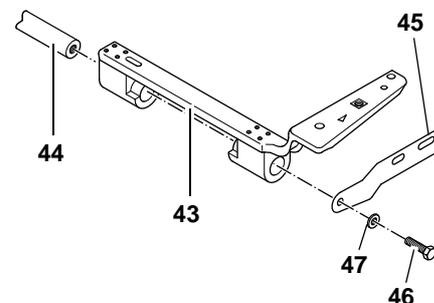
2. Push one end of the suction hose (39) on the blade guard's suction port (40).
3. Fit other end of the suction hose to the dust extraction port (41) on the chipcase.
4. Attach the hose carrier (42), with the larger opening pointing to the rear, to the saw table. To do so, loosen the screws of the right-hand rear leg and tighten again with the hose carrier in position.
5. Hook the suction hose into the hose carrier.
6. Connect the saw's dust extraction port at the chip case to a suitable dust collector (see "Dust collector" in chapter "Operation").



Mitre fence assembly

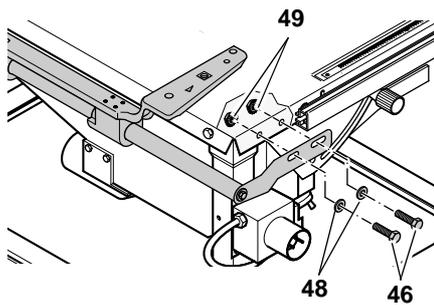
Item	Description	Qty.
43	Fence carrier, lower	1
44	Guide bar	1
45	Mounting bracket	2
46	Hexagon head screw M8 x 16	6
47	Serrated lock washer 8.4	2
48	Washer 8.4	7
49	Flange nut M8	4
50	Fence carrier, upper	1
51	Star-knob screw M8 x 23	1
52	Fence extrusion, short	1
53	Knurled nut M6	2

1. Slide the lower fence carrier (43) onto the guide bar (44) as illustrated.
2. Install a mounting bracket (45) using a hexagon head screw (46) and serrated lock washer (47) to both ends of the guide bar.

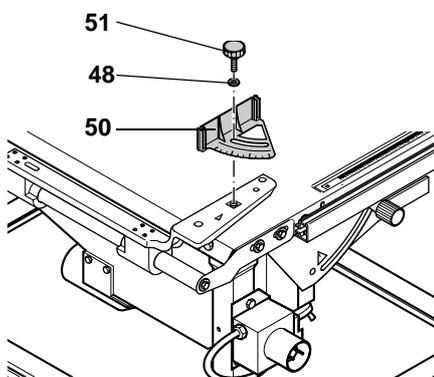


3. Attach guide bar with mounting brackets to front and rear of the table top:
 - Put two each hexagon head screws (46) with fitted washers (48) through the holes from the outside;

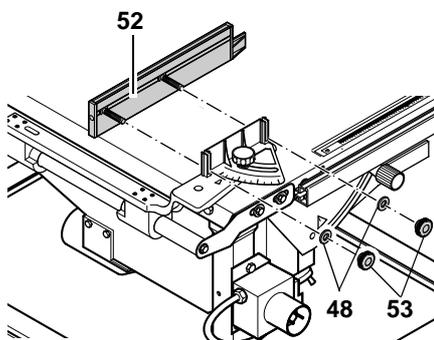
- from the inside screw on flange nuts (49) – do not yet tighten fully.



- Align guide bar exactly parallel with the table top's edge.
- Tighten all screws of mounting brackets and guide bar.
- Swing the lower fence carrier up.
- Install the upper fence carrier (50) with washer (48) and star-knob screw (51).



- Install the short fence extrusion (52) using two each knurled nuts (53) and washers (48):
 - the wide edge of the fence extrusion must face the workpiece
 - the plastic nose of the fence extrusion must point towards the saw blade.

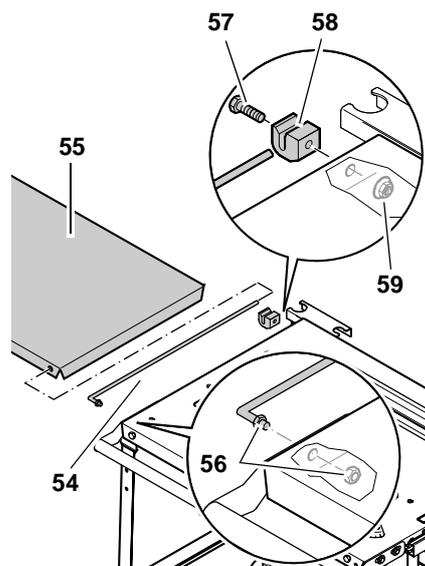


i Note:
When the mitre fence is not required swing it down, out of the way.

Table extension installation

Item	Description	Qty.
54	Guide bar, long	1
55	Plate, table rear extension	1
56	Hexagon thin nut M12	2
57	Hexagon head screw M6 x 50	1
58	Plastic bracket	1
59	Flange nut M6	3
60	Support	2
61	Hex. socket head bearing screw M8 x 15	2
62	Washer 8.4	2
63	Hexagon nut M8	2
64	Hexagon head screw M6 x 16	2

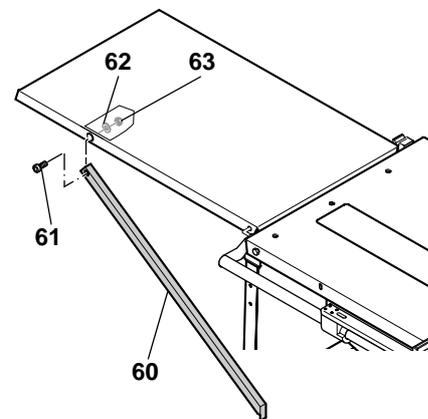
- Put guide bar (54) into the extension table (55) as illustrated.
- Screw a hexagon thin nut (56) onto the guide bar.
- Install the rear table extension, with the guide bar fitted to the table top's rear edge left side.



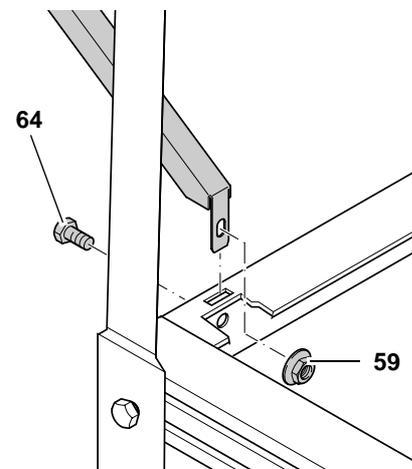
- Screw another hexagon thin nut (56) onto the guide bar from inside, to hold it to the table top.
- Put a hexagon head screw (57) from the narrow side through the plastic guide bar bracket (58) and slide plastic guide bar bracket onto the guide bar.
- Fasten the plastic guide bar bracket to the table top, using a flange nut (59).

i Note:
When folded up the surface of the extension table must not be higher than the table top's surface. Otherwise a workpiece can get stuck at the extension table.

- Adjust the hexagon thin nuts (56) on the guide bar until the guide bar is exactly parallel with the edge of the table top.
- Tighten the hexagon thin nuts against each other.
- Fasten supports (60) with one each hex. socket head bearing screw (61), washer (62) and hexagon nut (63) to the extension table.



- Insert the supports into the slots provided in the short stanchion at the rear of the saw.
- If required, secure each support with one each hexagon head screw (64) and flange nut (59) on the rear short stanchion.



- Tighten all hexagon head screws and flange nuts of the saw's stand.

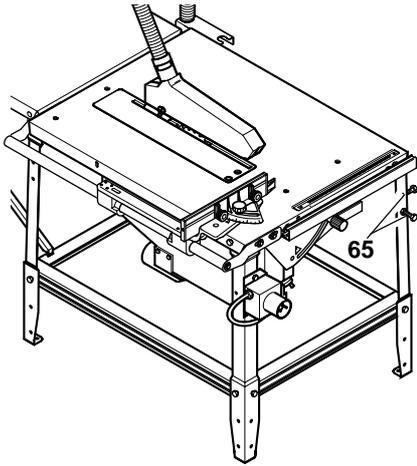
Accessory holder installation

Item	Description	Qty.
65	Hexagon head screw M6 x 50	2
-	Flange nut M6	4

In a final assembly step, two hexagon head screws are fitted as holders for the push stick, push block handle and assembly wrench to the right front leg:

- Turn one each flange nut approx. 10 mm on the two hexagon head screws (65).
- Fit one hexagon head screws in the hole at the front of the leg and secure it with another flange nut.

3. Attach the other hexagon head screws likewise to the right-hand side of the right front leg.



6.1 Mains connection



Danger! Electrical hazard.

Operate saw in dry environment only.

Operate saw only on a power source matching the following requirements (see also "Technical specifications"):

- Outlets properly installed, earthed and tested.
- Three-phase outlets with neutral wire.
- Mains voltage and system frequency conform to the voltage and frequency shown on the machine's rating label.
- Protection against electric shock by a residual current device (RCD) of 30 mA sensitivity.
- Fuse protection of 16 A maximum against short circuits.
- 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 (see "Technical specifications").

Do not pull on power supply cable to unplug.



Changing the direction of rotation! (three-phase motors only) Depending on the phase sequence, it is possible the saw blade will turn in the wrong direction. This can lead to the workpiece being hurled away when attempting to make a cut. The direction of rotation must therefore be checked every time the saw is connected to another outlet. In case of an incorrect direction of rotation, the wiring of the outlet must be changed by a qualified electrician:

1. After the saw and all of its safety devices have been assembled, connect it to the mains supply.
2. Raise saw blade fully.
3. Start saw and switch OFF immediately.
4. Check the saw blade's direction of rotation from the left-hand side of the saw. The saw blade must rotate clockwise.
5. If the saw blade rotates counter-clockwise, unplug the power cable at the saw.
6. Have the electric supply changed by a qualified electrician!

6.2 Installation

- Place the machine on a firm, level floor.
- Ensure there is sufficient space to handle larger workpieces.

For maximum upright stability the saw can be bolted to the floor:

1. Place the fully assembled saw at a suitable site and mark the bore holes on the floor.
2. Move saw aside and drill the holes.
3. Align saw with the holes and bolt to the floor.

7. Operation



Risk of injury!

This saw may only be operated by one person at a time. Other persons shall stay only at a distance to the saw for the purpose of feeding or removing stock.

Before starting work, check to see that the following are in proper working order:

- power cable and plug;
- ON/OFF switch
- riving knife
- blade guard
- feeding aids (push stick, push block and handle).

Use personal protection gear:

- dust respirator;
- hearing protection;
- safety goggles.

Assume proper operating position:

- at the front of the saw;
- in front of the saw;
- to the left of the line of cut;
- when working with two persons, the other person must remain at an adequate distance to the saw.

If the type of work requires, use the following:

- table extension, if otherwise workpiece would fall off the table after cutting;
- sliding carriage;
- dust collector.

Avoid typical operator mistakes:

- Do not attempt to stop the saw blade by pushing the workpiece against its side. Risk of kickback.
- Always hold the workpiece down on the table and do not jam it. Risk of kickback.
- 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!

Never cut stock to which ropes, cords, strings, cables or wires are attached or which contain such materials.

7.1 Dust collector



Danger!

Dust of certain timber species (e.g. beech, oak, ash) can cause cancer when inhaled. Use a suitable dust collector when working in enclosed spaces. The dust collector must meet the following requirements:

- hoses must fit the outer diameter of the dust extraction ports (blade guard 36 mm; chip case 100 mm);
- air flow volume $\geq 460 \text{ m}^3/\text{h}$;
- vacuum at dust extraction port of saw $\geq 530 \text{ Pa}$;
- air speed at dust extraction port of saw $\geq 20 \text{ m/s}$.

The dust extraction ports are located at the chip case assembly and at the saw blade guard.

Observe the dust collector's operating instructions as well!

Operation without a dust collector is only possible:

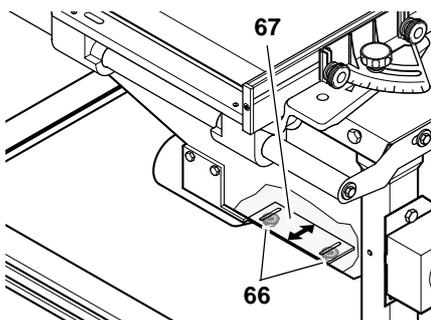
- outdoors;
- for short-term operation (up to a maximum of 30 minutes);
- with dust respirator.

*** Caution!**

If no dust collector is hooked up the sliding plate on the chip case must be opened, otherwise chips and saw dust build up inside the chip case.

To open the sliding plate:

1. Loosen both nuts (66) on the underside of the chip case slightly.



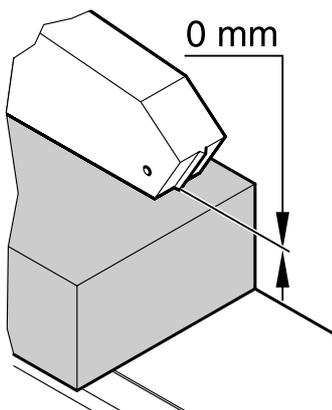
2. Slide sliding plate (67) to the side.
3. Tighten nuts (66).

7.2 Setting the depth of cut

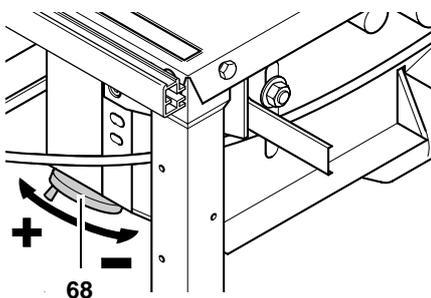
! Danger!

Parts of the body or objects in the setting range can be caught by the running saw blade! Set the depth of cut only with the saw blade at standstill!

The saw blade's cutting height needs to be adapted to the height of the workpiece: the blade guard shall rest with its front edge on the workpiece.



- Set the depth of cut by turning the handwheel (68) on the chip case.



i Note:

To compensate for possible play in the blade height setting mechanism, always raise the blade to the desired position.

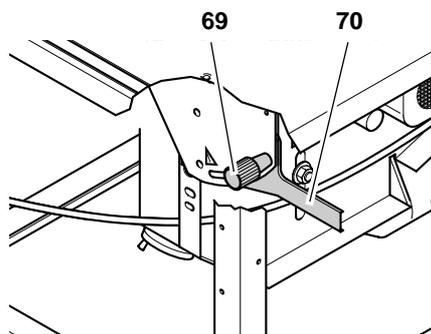
7.3 Setting the saw blade tilt

! Danger!

Parts of the body or objects in the setting range can be caught by the running saw blade! Set the depth of cut only with the saw blade at standstill!!

The saw blade tilt is steplessly adjustable between 0° and 45°.

1. Loosen twist handle (69) approx. one turn.



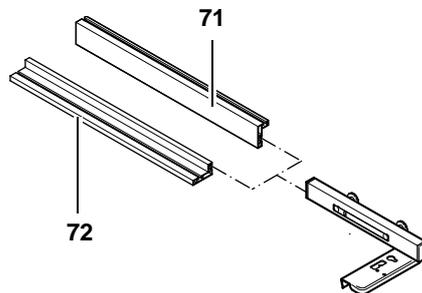
2. Set required blade tilt with the blade tilt lever (70).
3. Lock the set bevel angle by tightening the twist handle again.

7.4 Sawing with the rip fence

i Note:

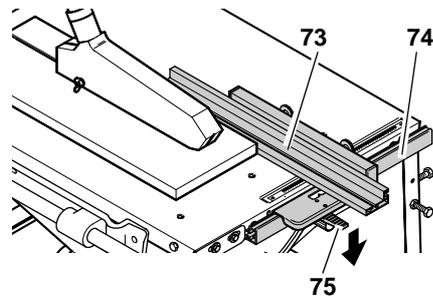
When sawing with the rip fence the long fence extrusion must be used.

1. Adopting the fence extrusion to the workpiece height:



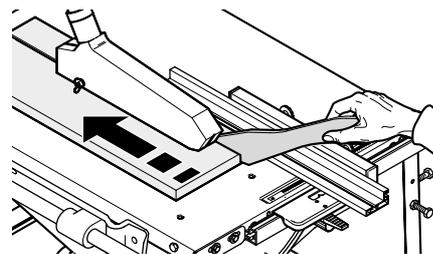
- Wide edge (71) = for cutting thick stock
- Small edge (72) = for cutting thin stock

2. The rip fence (73) is placed from top onto the guide extrusion (74) at the front of the saw and locked with the lock lever (75).

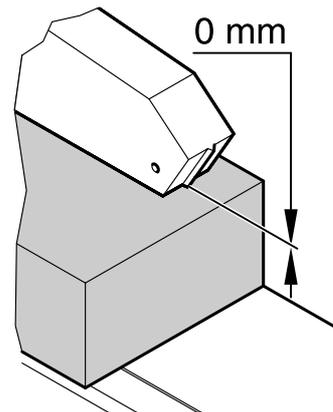


! Danger!

Always use the push stick if the distance between saw blade and rip fence is less than 120 mm.



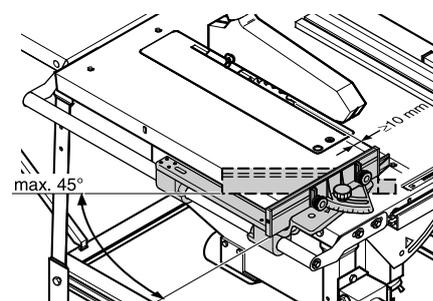
3. Set the cutting height of the saw blade. The blade guard must rest with its front edge on the workpiece.



4. Set saw blade tilt and lock.
5. Start motor.
6. Cut workpiece in a single pass.
7. Switch machine off if no further cutting is to be done immediately afterwards.

7.5 Sawing with the mitre fence

1. Swing mitre fence on the table top.
2. Set to desired mitre angle and lock in that position. For mitre cuts, the fence extrusion is adjustable to 45° maximum.



⚠ Caution!

The plastic nose must have at least 10 mm distance to the line of cut.

3. Set the cutting height of the saw blade.
4. Set saw blade tilt and lock.
5. Start motor.
6. Cut workpiece in a single pass.
7. Switch machine off if no further cutting is to be done immediately afterwards.

8. Tips and tricks

- Before cutting a workpiece to size make trial cuts on pieces of scrap.
- Always place a workpiece on the saw table in such way that it can not tilt or rock (e.g. always place a curved board on the table with the convex side up).
- When working long stock use suitable supports, such as table rear or side extensions (optional accessories).
- Keep surfaces of the table top and table extension clean – in particular, remove resin residue with a suitable cleaning and maintenance spray (optional accessory).

9. Care and maintenance



Danger!

Prior to all servicing:

- switch machine OFF;
- unplug power cable;
- wait for saw blade to stop.
- Check that all safety devices are operational again after each service.
- Repair and maintenance work other than described in this section should only be carried out by qualified specialists.

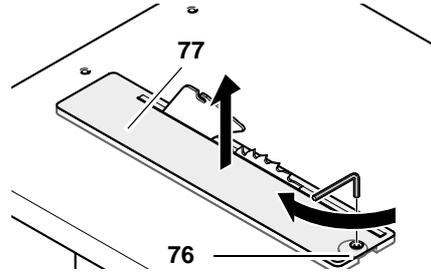
9.1 Saw blade change



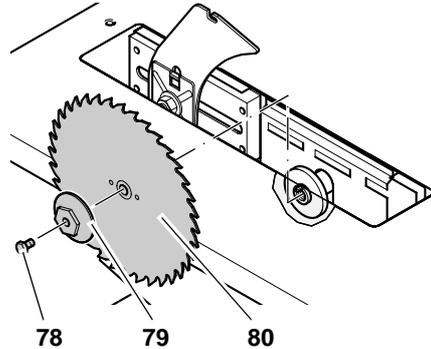
Danger!

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 fitting a saw blade, observe the direction of rotation!

1. Raise saw blade fully.
2. Remove blade guard.
3. Turn the flat head screw (76) of the table insert extrusion (77) clockwise by 1/4 turn and remove the table insert.



4. Loosen arbor bolt (78) with spanner (L.H. thread!). Hold outer blade collar (79) with ring spanner to counter.



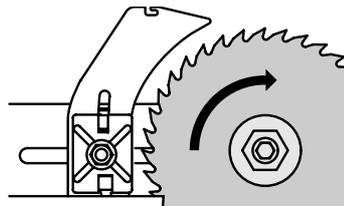
5. Remove outer blade collar (79) and saw blade (80) from the saw spindle.
6. Clean clamping surfaces of saw spindle and saw blade.



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.

7. Put on a fresh saw blade (observe direction of rotation!).



Danger!

Use only suitable saw blades (see "Available accessories") – when using unsuitable or damaged blades parts could be explosive-like hurled from it by centrifugal force.

Do not use:

- saw blades made of high speed steel (HSS or HS);
- saw blades with visible damage;
- cut-off wheel blades.



Danger!

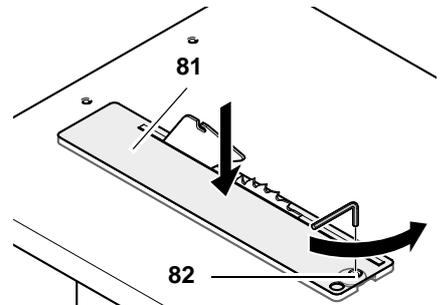
- Mount saw blade only using genuine parts.
- Do not use loose-fitting reducing rings; the saw blade could work loose.

- 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.
8. Put on outer blade collar (79) (the inner blade collar's lug must engage in the groove of the outer blade collar).
 9. Screw arbor bolt (78) back in the saw spindle (L.H. thread!) and tighten it. Hold outer blade collar (79) with ring spanner to counter.



Danger!

- Do not extend arbor bolt tightening wrench.
 - Do not tighten arbor bolt by hitting the wrench.
 - After the arbor bolt has been tightened, remove all tools used during saw blade installation!
10. Fit table insert extrusion (81) flush into the saw table.



11. Turn the countersunk screw (82) counter-clockwise against the stop.

9.2 Cleaning the saw blade's height adjustment mechanism

1. Raise saw blade fully and dismount it (see "Saw blade change"). Now the spindle of the height adjustment is accessible from the top.
2. Clean spindle with brush, vacuum, or compressed air.
3. Apply a light coat of Care and Maintenance Spray.
4. Install saw blade and tighten arbor bolt.
5. Install the table insert.

9.3 Saw storage



Danger!

Store saw so that

- it can not be started by unauthorized persons, and
- nobody can get injured.



Caution!

Do not store saw unprotected outdoors or in damp environment.

9.4 Maintenance

Before switching ON

Visual check if distance saw blade – riving knife is 3...8 mm.

Visual check of power cable and power cable plug for damage; if necessary have damaged parts replaced by a qualified electrician.

After switching OFF

Check to see if the saw blade post-runs for more than 10 seconds; if so, have the electronic motorbrake replaced by a qualified electrician.

Monthly (if used daily)

Remove saw dust and chips with vacuum or brush; apply light coat of oil to guide elements:

- threaded rod and guide rods of blade rise and fall mechanism;
- swivel segments.

Every 300 hours of operation

Check all screwed joints, retighten if necessary.

10. 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.

11. Transportation

- Lower saw blade fully.
- Dismount add-on parts (fence, sliding carriage, table extension).
- If possible use original carton for shipping.

12. Available accessories

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

A Universal Wheel Set

For easy moving.

B Sliding Carriage

For convenient guiding of long stock.

C Table Side Extension, right

Table size 1000 mm x 600 mm; with foldable supports.

D Suction Adapter to connect a shop vacuum to the dust collection attachment.

E Care and Maintenance Spray to remove resin residue and preserve metal surfaces.

F Saw blade CV 315 x 1.8 x 30 56 multiple combination teeth for solid wood and particle board.

G Saw blade CV 315 x 1.8 x 30 80 neutral multiple teeth for especially smooth cuts in solid wood and particle board.

H Saw blade TCT 315 x 2.8 x 30 48 universal alternate bevel teeth for all woods and wood-derived materials.

I Roller Stand RS 420

J Roller Stand RS 420 W

K Roller Stand RS 420 G

13. Environmental protection

The saw's packing can be 100% recycled.

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

These instructions are printed on chlorine-free bleached paper.

14. Trouble shooting



Danger!

Before carrying out any fault service or maintenance work, always:

1. **switch machine OFF;**
2. **unplug power cable;**
3. **wait for saw blade to come to standstill.**

Check that all safety devices are operational again after each fault service.

Motor does not run

Undervoltage relay tripped by power failure:

- switch on again.

No mains voltage:

- check cables, plug, outlet and mains fuse.

Motor overheated, e.g. by a blunt saw blade or chip build-up in the chip case:

- remove cause for overheating, wait for a few minutes, then start saw again.

Motor supply voltage too low:

- use a shorter extension cable or extension cable with larger lead cross section ($\geq 1.5 \text{ mm}^2$).
- Have power supply checked by a qualified electrician.

Loss of cutting performance

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

- replace saw blade (see chapter "Care and maintenance").

Chip build-up in the chip case

No, or dust collector of insufficient capacity connected (see "Dust collector" in chapter "Operation"):

- connect dust collector, or

- increase suction capacity.

Sliding plate of chip case closed:

- open sliding plate

Height adjustment mechanism of saw blade working stiff

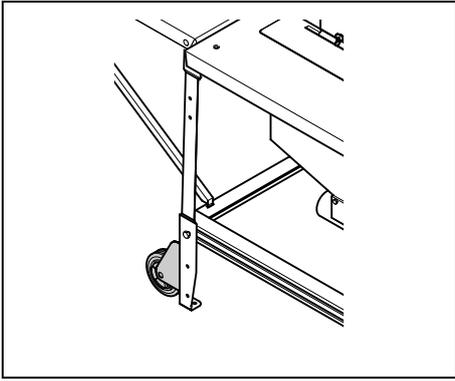
Spindle of height adjustment mechanism gummy:

- clean spindle and spray with Care and Maintenance Spray (see chapter "Care and maintenance").

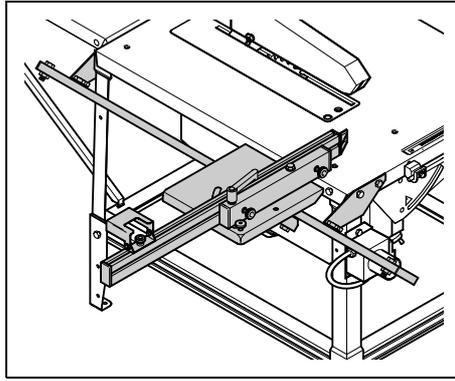
15. Technical specifications

		TKHS 315 E/P 2.2 W	TKHS 315 E/P 3.1 W	TKHS 315 E/P 2.8 D	TKHS 315 E/P 4.2 D
Voltage		230 V / 1~50 Hz	230 V / 1~50 Hz	400 V / 3~50 Hz	400 V / 3~50 Hz
Nominal current	A	10.6	14.0	4.7	7.5
Fuse protection min.	A	1 - 16 (time-lag)	1 - 16 (time-lag)	3 - 16 (time-lag)	3 - 16 (time-lag)
Degree of protection		IP 54	IP 54	IP 54	IP 54
Motor speed	min ⁻¹	2800	2800	2800	2800
Motor capacity	input capacity P ₁ power output P ₂	kW kW	2.2 S6 40% 1.5 kW S1 100%	3.1 S6 40% 2.0 kW S1 100%	2.8 kW S6 40% 1.8 kW S1 100%
Saw blade cutting speed	m/s	47	47	47	47
Saw blade diameter (outer)	mm	315	315	315	315
Arbor bore	mm	30	30	30	30
Depth of cut	with saw blade vertical at 45° saw blade tilt	mm mm	0 ... 85 0 ... 53	0 ... 85 0 ... 53	0 ... 85 0 ... 53
Dimensions					
length saw table	mm	800	800	800	800
width saw table	mm	600	600	600	600
length table extension	mm	794	794	794	794
width table extension	mm	500	500	500	500
height (saw table)	mm	850	850	850	850
height (over all)	mm	1150	1150	1150	1150
Weight complete approx	kg	65.0	66.0	67.0	68.0
Sound power level according to DIN 23746*					
no-load	dB (A)	84.0	84.0	84.0	84.0
when sawing	dB (A)	99.3	99.3	99.3	99.3
Sound pressure level according to DIN 31202*					
no-load	dB (A)	74.8	74.8	74.8	74.8
when sawing	dB (A)	85.0	85.0	85.0	85.0
Ambient temperature range	°C	-10 ... +40	-10 ... +40	-10 ... +40	-10 ... +40
Extension cable – min. lead cross section					
Length of cable 10 m	mm ²	3 x 1.5	3 x 2.5	5 x 1.0	5 x 1.5
Length of cable 25 m	mm ²	3 x 2.5	3 x 2.5	5 x 1.5	5 x 2.5
Length of cable 50 m	mm ²	–	–	5 x 2.5	5 x 2.5

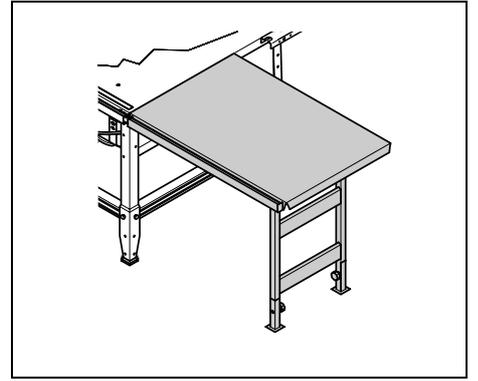
* The values stated here only indicate the loudness emitted by this machine. Whether the operator is required to wear hearing protection can not be determined here. This depends on how much noise reaches the ear of the operator. And this, among other things, depends on the existing ambient conditions (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.



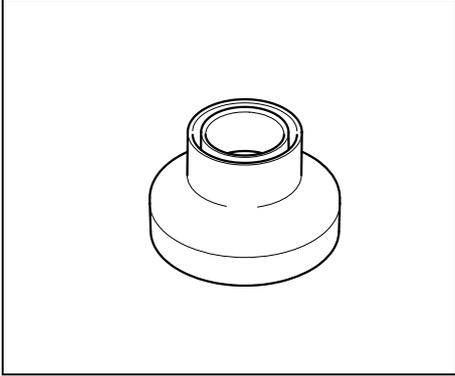
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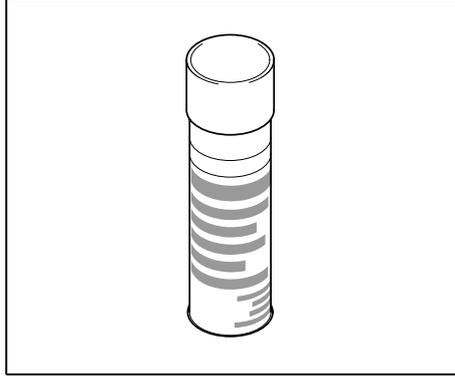
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C 091 001 4030



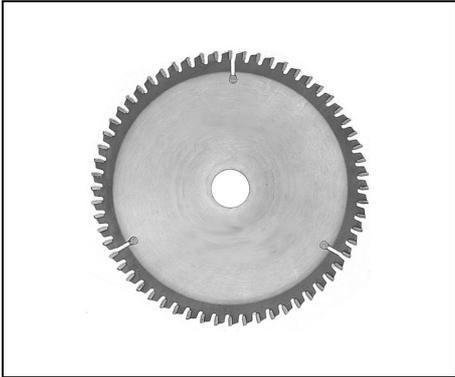
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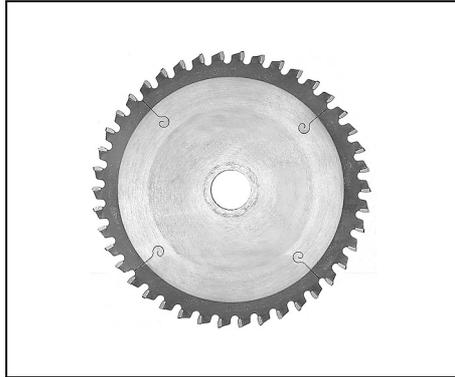
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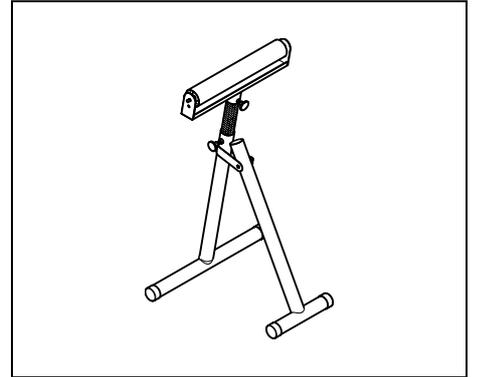
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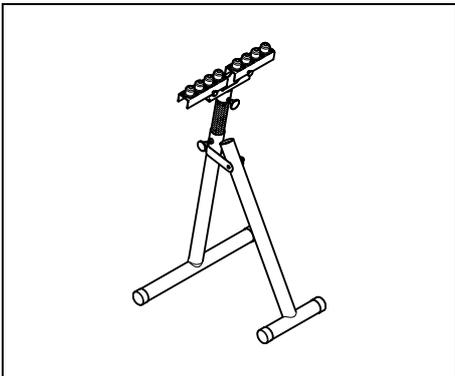
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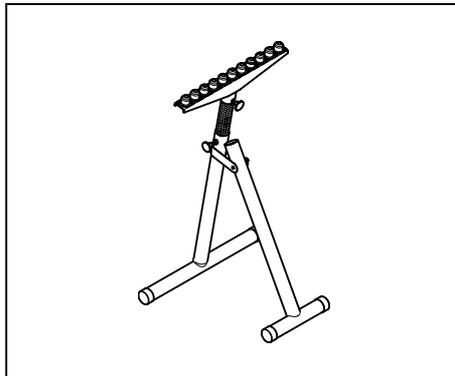
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J 091 005 3361



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