ELEKTRA BECKUM

Ein Unternehmen der Metabo-Gruppe

(D) Betriebs- und Montageanleitung
Präzisionskreissäge

(ENG) Operating Instructions Precision Circular Saw

(F) Notice de service et de montage Scie circulaire de précision

(NL) Handleiding Bediening
Precisie-cirkelzaagmachine

English only

PK 300 K

Untergestell nicht im Lieferumfang enthalten (Sonderzubehör)
Base not included in Standard Delivery (Optional Accessoires)
Le châssis n'est pas compris dans le programme de livraison (équipement optionnel)
Het onderstel wordt niet standaard meegeleverd (beschikbaar als optie).

(D)	**Achtung!**	Lesen Sie diese Anleitung vor der Installation und Inbetriebnahme aufmerksam durch.
(ENG)	**Attention!**	Carefully read through these instructions prior to installation and commissioning.
(F)	**Attention!**	Prière de lire attentivement la présente notice avant l'installation et la mise en service.
(NL)	**Attentie!**	Lees deze instructies voor de installatie en ingebruikname aandachtig door.

115 115 9270 / D/ENG/F/NL / 3100 - 3.1

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

VAATIMUKSENMUKAISUUSVAKUUTUS

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-ΕΟΚ δομικού πρωτοτύπου*** πραγματοποιούμενος από το****

ENG ENGLISH

DECLARATION OF CONFORMITY

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

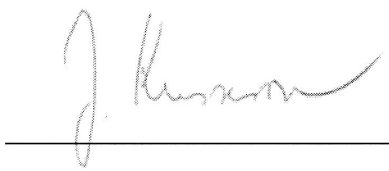
PK 300/4200 DNB

* DIN-EN 294; EN 60204-1

** 89/392/EWG, 89/366/EWG. 73/23/EWG, 93/68/EWG

*** 941005101

**** TÜV-Rheinland, Postfach 910351, D-51101 Köln



Jürgen Kusserow

Vorstand

CE

ELEKTRA BECKUM AG – Daimlerstraße 1 – 49716 Meppen

1000942/ 00

Scope of Application

This Elektra Precision Circular Saw is designed to perform rip and crosscuts in wood or wooden materials having a square or rectangular cross section.

- Crosscuts should be performed only with the help of a mitre fence or the Sliding Carriage PK, available as optional accessory.
- Do not crosscut round stock, for ripping use the Square and Round Stock Jig available as optional accessory.
- Maximum saw blade diameter is 300 mm, the minimum blade diameter must be 250 mm.

User Responsibility

This machine will perform in conformity with the description contained tin the instructions provided. This machine must be checked periodically. Defective equipment (including power cable) should not be used. Parts that are broken, missing, plainly worn, distorted or contaminated, should be replaced immediately. Should such repair or replacement become necessary, it is recommended that such repairs are carried out be qualified persons approved by Elektra Beckum or its representative. This machine or any of its parts should not be altered or changed from standard specifications. The user of this machine shall have the sole responsibility for any malfunction which results from improper use or unauthorized modification from standard specification, faulty maintenance, damage or improper repair by anyone other than qualified persons approved by Elektra Beckum or its representative.

Product Liability/Warranty

We explicitly draw your attention to the fact that, under the current product liability regulations, Elektra Beckum does not have to assume liability for any damages causes by its products, if such damages result from improper repair, use of replacement parts other than genuine Elektra parts, or repairs not having been carried out by customer service or authorized service centres.

The three-phase motor of this machine is equipped with an automatically engaging mechanical motor brake, designed for a long service life. If the braking action fades, and the time to standstill exceeds 10 sec, the brake has to be replaced.
Consult your dealer or authorized service centre.

Table of Contents

1 Specifications

	PK 300 K/4200 DNB
Saw table size	710x900 mm
Table working height	940 mm
Dept of cut at 90°/45°	104/70 mm
Motor speed	2800 rpm
Arbor speed	3800 rpm
Main blade diameter	300 mm
Cutting speed with Ø 300 mm blade	60 mtr/sec
Motor capacity P_1	4200 W-
Motor voltage	3 ~ 400 V
Mains frequency	50/60 Hz
Mains fuse	3 x 16 A time-lag
Suction port diameter	100 mm
Weight	90 kg
Stock-no.	010 300 4209

Noise Emission

The noise emission levels shown below have been established by measuring methods according to:
DIN EN 23 746;
DIN EN 31 202;
ISO 7960 appendix A.

The correction factor K_3 has been established by DIN EN 31204.

1. PK 300 K operating under no load

A-sound pressure level L_{pA}	74,3 dB(A)
A-sound power level L_{WA}	87,8 dB(A)

2. PK 300 K operating under load

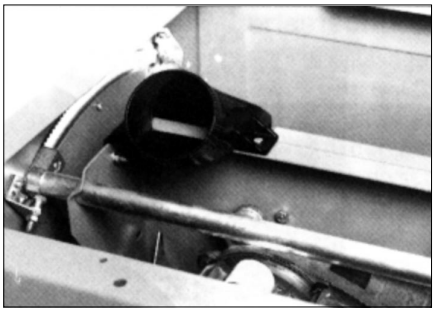
A-sound pressure level L_{pA}	84,7 dB(A)
A-sound power level L_{WA}	98,2 dB(A)

2 Standard Delivery

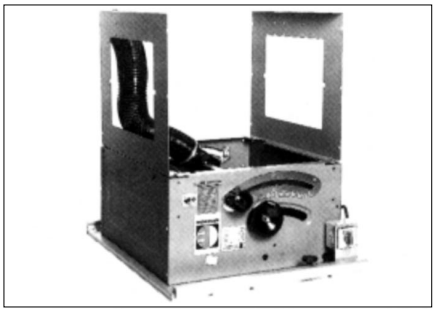
Saw blade TCT 300x2.6/1.8x30 mm 28 alternate bevel teeth
Riving knife 2.5 mm
Saw blade guard
Rip fence
Mitre fence
Dust extraction port with hoses
Push stick
Tool set
Operating instructions

3 Installation

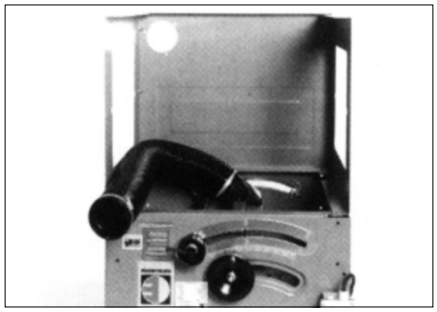
Place machine upside down on two battens to install the workstand. Do not tighten screws fully before all parts have been installed.



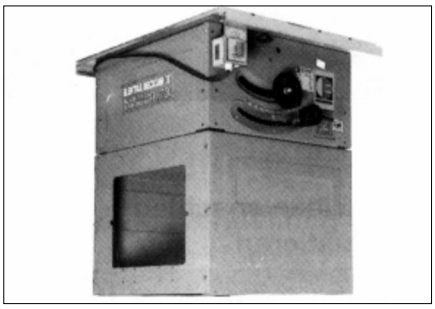
Install suction port to chip case.
Use 3 each
hex. head screw M 6x16
serrated lock washer Ø 6.4
hex. nut M 6



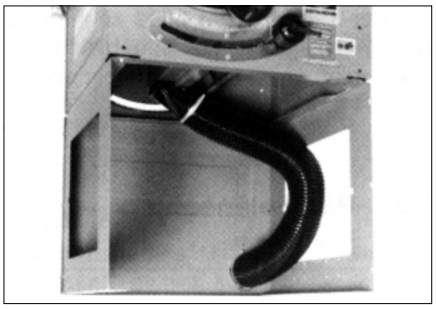
Place spiral hose Ø 100 mm onto suction port and secure with hose clamp Ø 100 mm. Install both side panels, using 4 each
hex. head screw M 6x16
serrated lock washer Ø 6.4
hex. nut M 6



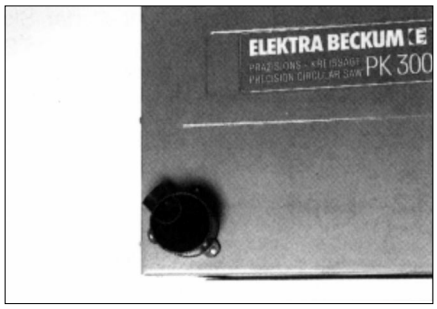
Install rear panel (with hole) between the side panels.
Use 6 each
hex. head screw M 6x16
serrated lock washer Ø 6.4
hex. nut M 6



Install dust collection port into hole of the rear panel with 3 each
hex. head screw M 6x16
serrated lock washer Ø 6.4
hex. nut M 6

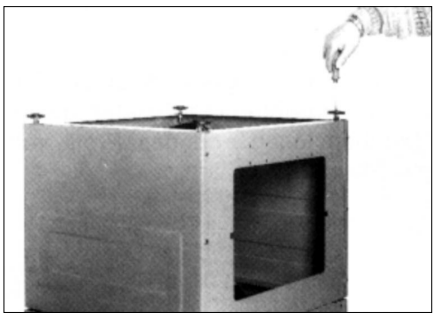


Place the spiral hose on the dust collection port and secure in place with the second hose clamp Ø 100 mm.

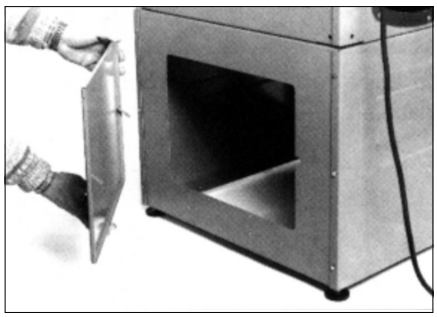


Install the workstand's front panel.
Use 6 each
hex. head screw M 6x16
serrated lock washer Ø 6.4
hex. nut M 6

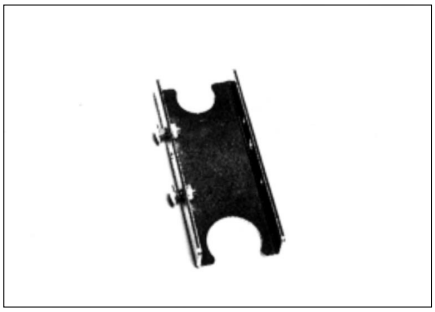
Put a hex. nut M 10 on the threaded bolt of all 4 adjustable feet.

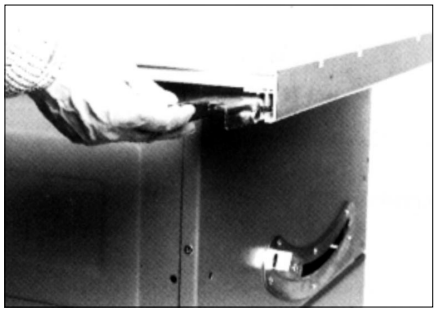


Install feet into tapped bushes M 10 located on each corner.

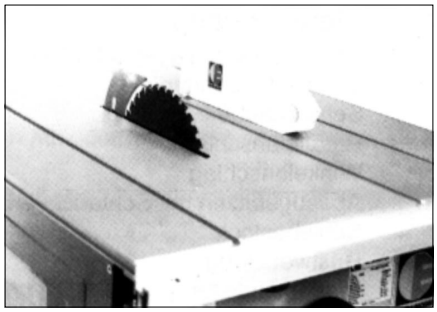


Now tighten all screw joints fully, then stand machine on its feet. Place side panels lids into the panel openings.





Loosely attach 2 carriage bolts M 6x16 to hose carrier, then slide hose carrier into the rear T-groove of the table.

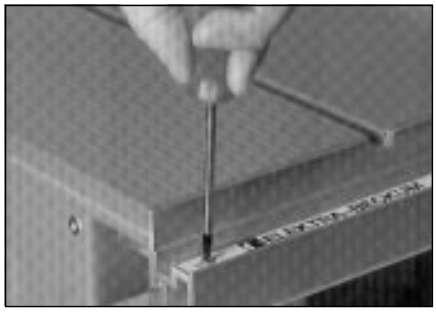


Raise saw blade (see paragraph 5) and attach saw blade guard to riving knife.

Install spiral hose between saw blade guard and dust collection port.

3.1 Rip Fence Scale Adjustment

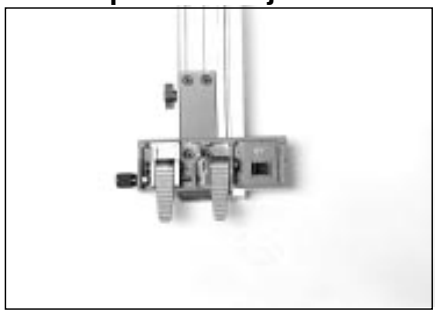
The rip fence scale is adjustable to accommodate saw blades of different widths. Set rip fence against the blade. Loosen scale fixing screw and set scale until zero mark matches the hairline of the fence bracket's magnifying glass. Tighten fixing screw and verify setting by making a trial cut on a piece of scrap.
Note: The scale's zero mark and the hairline of the magnifying glass can only line up with the fence extrusion installed in the upright position (wide edge facing the blade).



3.2 Magnifying Class

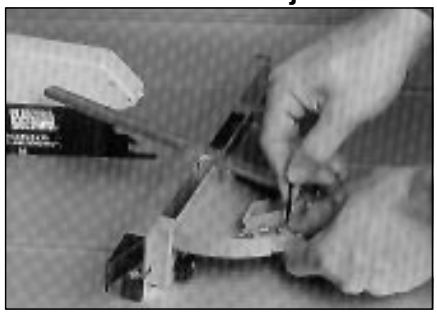
The magnifying glass can be removed from the rip fence for cleaning.

3.3 Rip Fence Adjustment



The rip fence is factory set parallel with the saw blade. If adjustment is necessary loosen the four screws holding the fence extrusion to the carrier and set square with the table.

3.4 Mitre Fence Adjustments



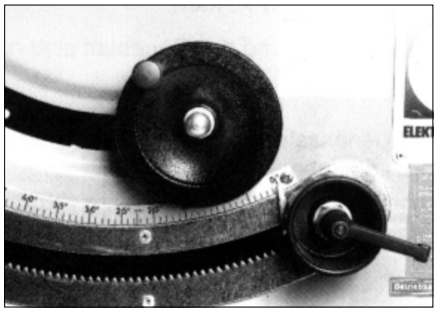
Both left and right hand 45° end stops are factory set. If required the positions can be adjusted with the setting screws. The angle scale is also adjustable.

4 Connection to Power Mains

- This machine must be operated on a residual current operated device of 30 mA capacity, having a fault current breaker.
- This machine must be safety earthed. The yellow/green lead is the earth conductor.
- Fit plug matching your local standard outlet to the power cable.
- The outlet this machine is connected to must be earthed and phase protected by a 16 A time-lag fuse or circuit breaker.
- Do not operate saw with a damaged power cable. Risk of electrical shock.

Worn or defective cables must be replaced immediately. Have replaced by a qualified electrician only.
Check if voltage of power mains matches with voltage stated on machine's type plate.
For mains connection a 5-lead power cable is required. The yellow/green lead is the earth conductor. Do not connect the yellow/green earth lead to any of the current conducting terminals. If in doubt-consult a qualified electrician.
Extension cables should have a minimum lead cross section of 1.5 mm^2 and a rubber outer jacket (HO7RNF/SJT or similar). Use of extension cables with too small a lead cross section causes a voltage drop and possible damage to motor and/or switch.
Important! Always disconnect from power before servicing the saw.
Direction of rotation of the saw blade is clockwise, when looking at it from the left side of the saw. To check start saw briefly. If the blade runs counter-clockwise on a three-phase machine, have a qualified electrician interchange two of the phases to correct.
Note: Wrong direction of rotation of the saw blade is dangerous and may cause severe personal injury.

4.1 Switch/Overload Protection

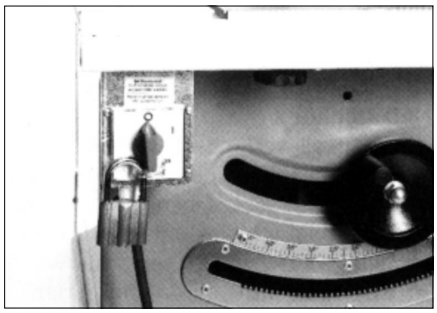


The switch is equipped with a no-volt release solenoid (magnetic switch), to prevent start-up after a power failure. If the saw is not connected to the power mains the switch does not engage. In the event of a power failure the machine has to be restarted. In case of an overload of the main motor the build-in motor protection relay trips and cuts the power to the motor. If the motor is shut off repeatedly by the overload relay, check machine (motor brake action, dull blade, low voltage etc.). A cooling down period of 30 min. is recommended.
A light humming from the solenoid inside the switch is normal and does not indicate a fault.

- Block rotary switch knob with a padlock to prevent unauthorized use.

5 Controls/Settings

5.1 Sawblade Vertical Setting



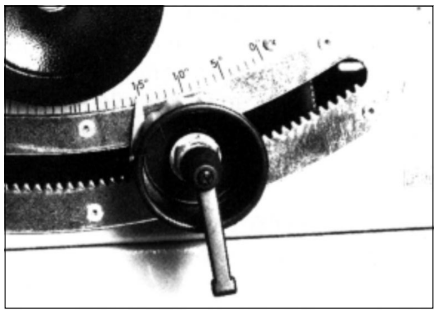
The depth of cut of the main blade is set by turning the cranked handwheel.

Turn clockwise to raise blade

Turn counter-clockwise to lower blade

To compensate for possible play always **raise** blade into desired position.

5.2 Blade Tilt



After release of the ratchet lock lever inside the handwheel the blade can be tilted steplessly to any position between 90° and 45° by turning the handwheel.
Reference point is the graduation mark to the right of the pointer.

- Tighten ratched lock lever after setting.

Caution! Carry out setting only with the blade at complete standstill.

5.3 Rip Fence Setting

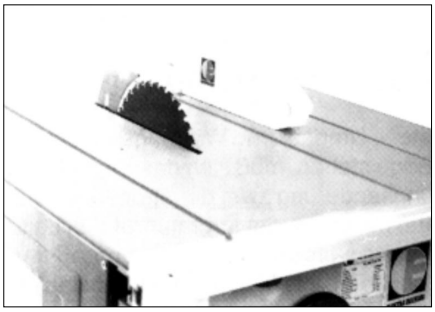
Place rip tence onto the saw table. Set to required width of cut, then push the right hand side lock lever down.

Turn micro-adjuster screw to set fence to exact dimension.

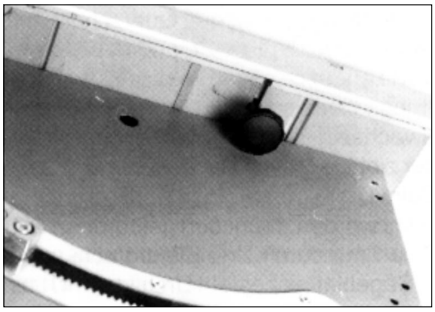
After micro-adjustment is made push down the left hand side lock lever to lock the rip fence in position.

5.4 Opening the Chipcase

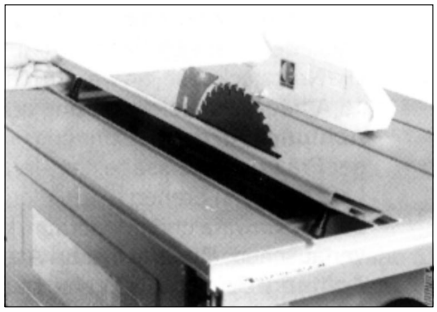
Disconnect from power before servicing!



Loosen wingnut of saw blade guard a few turns. Pull forward and up to remove blade guard from riving knife.



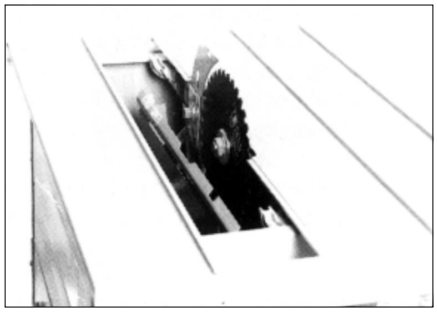
Loosen starknobs located below the table at front and rear of removable table section and push against the workstand panel.



Remove the removable table section.

Lift chip case cover on both ends, pull forward by approx. 50 mm, then lower.

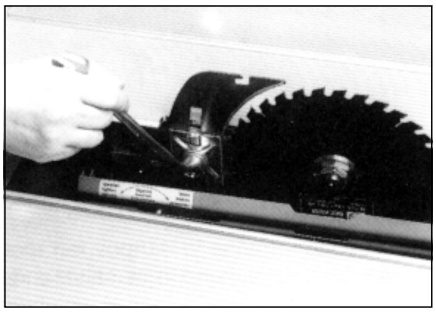
Riving knife and saw blade are now accessible for maintenance and servicing

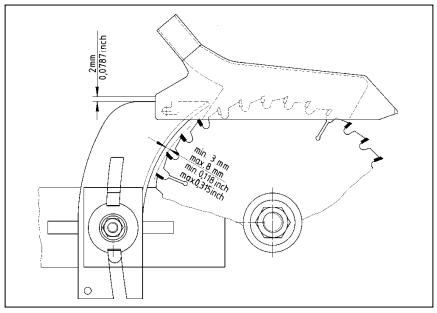


5.5 Setting of Riving Knife

Disconnect from power before servicing!

The riving knife prevents the work from closing behind the blade, thus stalling it and causing kickback.
Except for set-in work (see paragraph 11.3) **never perform any cutting operation without the riving knife in place** and correctly set.
Set riving knife to a distance of 3 - 8 mm against the saw blade.



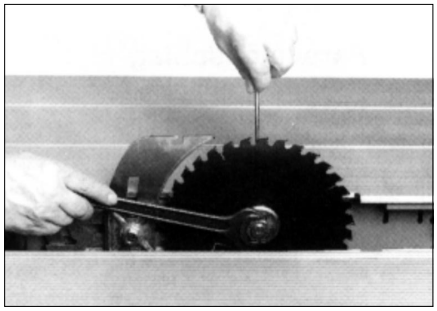


Set the height so that the top of the riving knife is not less then 2 mm below the crown of the saw blade.
Important! Check mounting screw regularly for stripped threads.

5.6 Changing the Main Blade

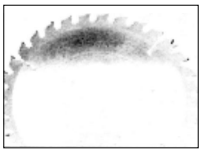
Disconnect from power before servicing!

Insert lock bar from tool set through the hole in the table into the hole of the blade flange below. Turn blade by hand to line up holes. Use 30 mm spanner from tool set to loosen arbor nut.
Note: Left-hand thread, turn clockwise to loosen!
Take off arbor nut and blade. Before fitting another blade be sure that blade seat and arbor thread are clean. Wipe of with rag any chips or saw dust which may have deposited there, so blade can fit snug against flanges to ensure safe operation. Fit blade so that teeth on top point towards the operator in front of saw.
Replace arbor nut and tighten. **Do not overtighten.**
Remove lock bar, close chip case and put removable table section back in place.
Install saw blade guard before starting the saw.



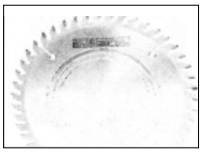
6 Saw Blades

Never use HSS blades, as these are not flexible enough and will crack or break easily.
Saw blades must be marked with the name or trade mark of the manufacturer. On this saw the following blades can be used with the standard riving knife: min. Ø 250 mm, max. Ø 300 mm, arbor bore 30 mm, blade thickness/tooth width 1.8 - 2.5 mm.
Use of thinner or thicker blades requires a different riving knife.
The riving knife must not be wider than the width of the kerf and not narrower than the blade body.



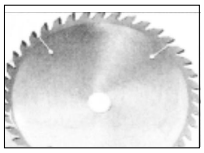
TCT blade T = 28 W
Ø 300x2,6/1.8x30 mm
Alternating teeth.
General purpose blade for rip and cross cuts, timber and particle board.
Standard delivery.

Stock-no.
091 001 4099



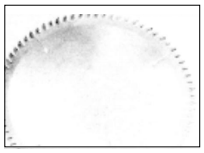
TCT blade T = 60 DH
Ø 300x3.2/2.2x30mm
Pointed-hollow teeth.
For cutting plastic laminated boards. Makes scribing/scoring blade obsolete.

Stock-no.
091 001 4102



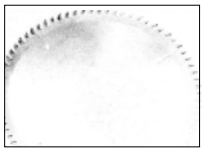
TCT blade T = 48 UW
Ø 300x3.2/2.2x30 mm
Universal alternating teeth.
For cutting cabinet boards, veneered and laminated boards as well as solid timber.

Stock-no.
091 001 4110



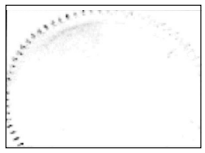
TCT blade T = 72 KW
Ø 300x3.2/2.2x30 mm
Combination alternating teeth.
Cuts Melamin boards, extrusions, all kinds of plastics.

Stock-no.
091 001 4129



TCT blade T = 96 VW
Ø 300x3.2/2.2x30 mm
Multiple alternating teeth. For the ultimate performance in cabinet making. Cuts solid timber as well as all plywoods and boards.

Stock-no.
091 001 4137

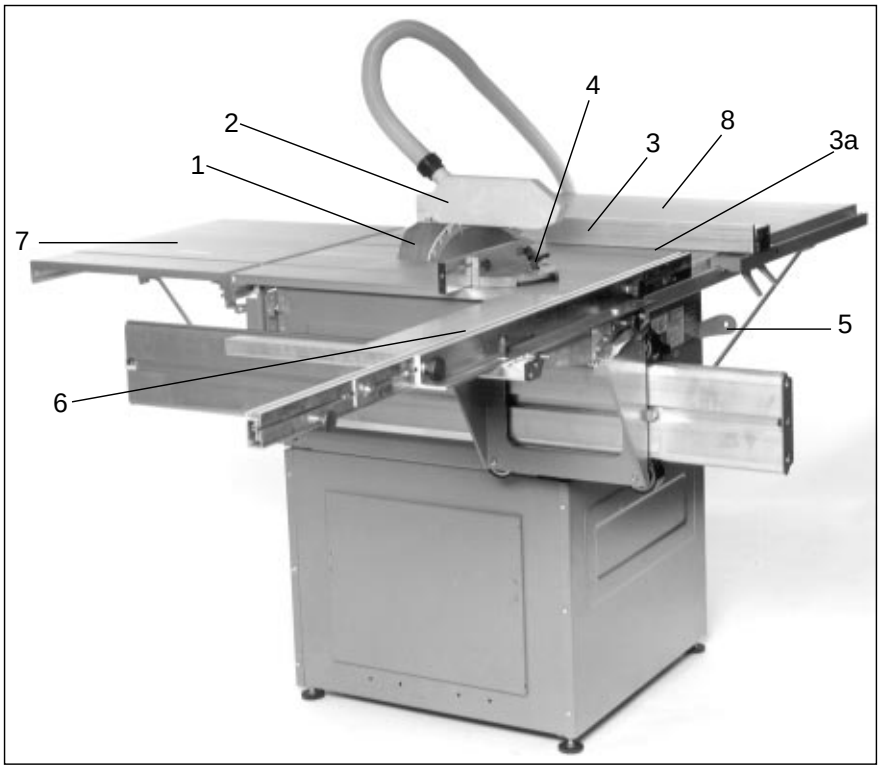


TCT blade T = 96 TF
Ø 300x3.2/2.6x30 mm
Trapezium-flat teeth.
For solid timber, ply, plastic and aluminium extrusions, fine furniture boards.

Stock-no.
091 001 4145

7 Overview of Components/Terms

1 Riving knife
2 Saw blade guard
3 Rip fence
3a Auxiliary fence
4 Mitre fence
5 Push stick



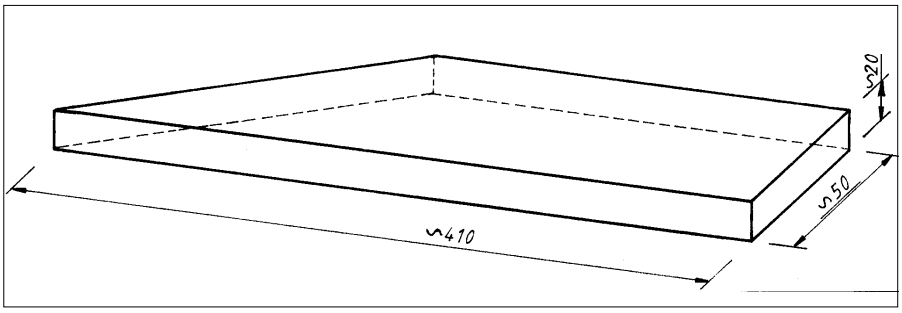
7.1 Optional Accessories

6 Sliding Carriage
7 Table Rear Extension
8 Table Side extension

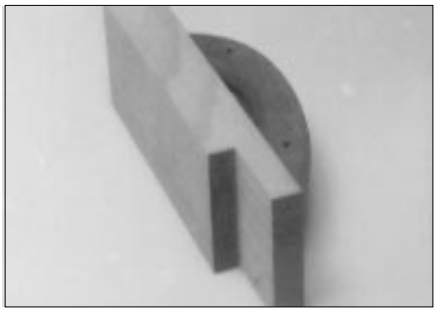
Optional accessories not shown:

- Edge Trimming Attachment
- Wheel Set
- Cam-lock Clamp
- Square & Round Stock Jig

8 Jigs and Push Blocks

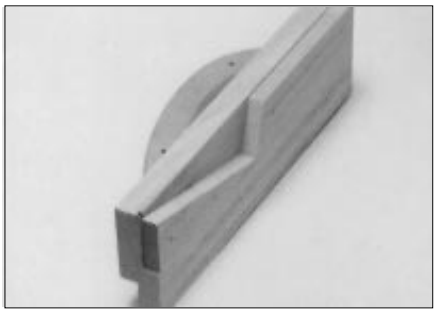


Make a deflector board when crosscutting small work pieces (see paragraph 11.5 below). Do not use chipboard for making the deflector board.



Make a push block for cutting tenons (see para. 11.7 below). The recess must correspond to the thickness of the workpiece that is to be worked.

Always use push stick when cutting strips of less than 120 mm width (see para. 11.4 below).



Always use wedge cutting jig for cutting wedges or tapers (see para. 11.8 below). The wedge cutting jig should be at least 300 mm long and 170 mm wide.

9 Safety Rules

As with all power tools there is a certain amount of hazard involved with the operator and his use of the machine. Using the machine with the respect and caution demanded as far as safety precautions are concerned will considerably lessen the possibility of personal injury. If, however, normal safety precautions are overlooked or completely ignored, personal injury to the operator can develop.

General Safety Precautions

- FOR YOUR OWN SAFETY; READ AND UNDERSTAND INSTRUCTION MANUAL BEFORE OPERATING
- THE SAW: Learn the saw's applications as well as the specific hazards peculiar to it.
- KEEP GUARDS IN PLACE and in working order.
- REMOVE ALL ADJUSTING KEYS AND WRENCHES: Form habit of checking to see that all keys and adjusting wrenches are removed from tool before switching it "ON".
- ALWAYS USE SAW BLADE GUARD AND RIVING KNIFE for every operation for which they can be used, including through sawing. Through sawing operations are those when the blade cuts completely through the work piece as in ripping or cross cutting.
- ALWAYS HOLD WORK FIRMLY AGAINST RIP FENCE OR MITRE FENCE.
- USE PUSH-STICK if distance between blade and rip fence is less than 120 mm / 5 in.
- NEVER PERFORM ANY OPERATION "FREE-HAND".
- NEVER REACH BEHIND, OVER OR UNDER THE CUTTING TOOL WITH EITHER HAND FOR ANY
- REASON. Keep hands away from saw blade; do not reach into area 120 mm / 5 in. left and right of saw blade.
- DIRECTION OF FEED: Feed work into saw blade against direction of rotation only.
- AVOID KICKBACKS (work thrown back at you) by keeping the rip fence parallel to the blade, keeping riving knife and guards in place and operating, by not releasing work before it is pushed all the way past the saw blade, and by not ripping stock that is twisted or warped or does not have a straight edge to guide along the fence.

Safety Precautions particularly for this Saw Model PK 300 K

- Before operating the saw check if saw blade is mounted correctly and arbor bolt tightened. Check if blade turns freely.
- Large or long stock, which may tilt the saw by its weight, must be supported at both infeed and outfeed side of the table by suitable means, e.g. the Roller Table Extensions available as optional accessory, saw horses or other supports of suitable height.
- Never cut round stock without using suitable jigs.
- Do not use High Speed Steel (HSS) saw blade on this saw.
- Perform crosscuts only with the crosscut/mitre fence, or with a Sliding Carriage (optional accessory).
- Replace dull or cracked saw blades at once.
- Replace kerf plate if worn.
- Set guards as required for the job on hand.
- If operated indoors use a dust collector with a minimum air flow rate of 20 mtr/sec at the suction port.

9.1 Problems

- If the saw blade is stalled by waste, switch machine off and let blade come to a complete standstill before removing obstruction.
- Switch motor off at once if blade is stalled. A dull blade is likely to be the cause, which may cause motor overloads.
- A dull blade may be the reason for what appears to be a loss of power.
- An extremely dull blade leaves burn marks in the kerf. The heat generated by friction may temper the blade body. Replace at once to prevent overloading the motor.
- After a power failure the motor has to be restarted by switching ON again.
- Resin residue on the blade affects performance. Clean regularly.
- If the saw blade needs more than 10 sec. to come to a complete standstill the motor brake is worn. Have repaired by a qualified electrician.

10 Dust Collection

The Precision Circulars Saws models PK 300 K must be connected to a dust collector (e.g. Elektra Beckum model SPA 2000). The standard dust collection port has a nominal diameter of 100 mm.
Adhere to all local codes and directives regarding dust collection on woodworking machines.

11 Operation

11.1 Through Sawing

If not in place install riving knife and saw blade guard, set as per paragraph 5.6 of this manual. Set depth of cut to approx. 10 -15 mm more than the workpiece thickness and rip fence to desired width of cut. Start saw **only after** all setting have been made. Place workpiece against the fence and feed into the blade in a steady motion. Do not force work, as this may overload the motor.
- When ripping strips less then 120 mm wide always use pushstick supplied with machine for feeding the work to prevent personal injury.

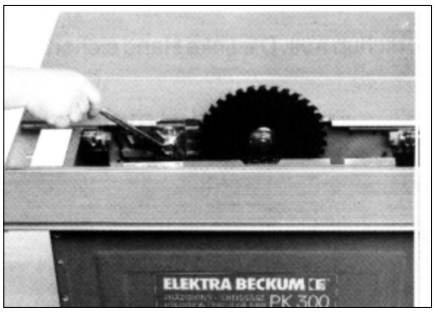
11.2 Rabetting and Grooving

First cut

Second cut

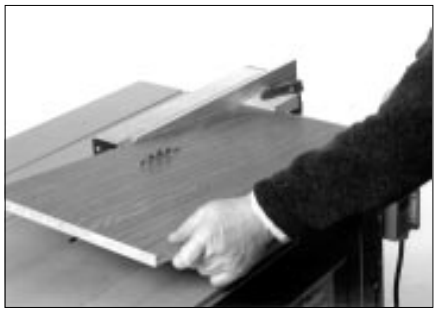
Remove blade guard and set riving knife as decribed in paragraph 5.6 of this manual. Check depth of cut directly on the blade with tape or stick measure. Set rip fence to required width and make first cut. The sequence of cuts is important: when making the second cut the waste must be on the left side of the blade. If on to the right of the blade, the waste may jam between fence and blade and kicked back against you (danger of personal injury).

11.3 Set-In Work



Remove the riving knife and **tighten the gusset plate**.

With set-in work the cut starts somewhere within the board. To do this work safely (danger of kickback) backstops are required. These can simply be wooden blocks clamped to the saw table or, for longer workpieces, a complete jig or anti-kickback fence may be required, which is firmly attached to the saw table.



Set rip fence as required. Place workpiece with yout right hand against the stop, the left hands holds the workpiece against the fence and pushes it down into the blade.
Note: Mark area where blade will cut through on top of workpiece. Keep hands at at least 150 mm distance from blade.

11.4 Ripping with the Auxiliary Fence

Have riving knife and blade guard installed as described in paragraph 5.5.

The auxiliary fence is used for ripping stock that tends to open or close behind the blade.
Loosen both wing nuts holding the rip fence extrusion, remove the rip fence extrusion and install it with the small edge facing the blade. In this position it serves as an auxiliary fence. The wide edge must rest on the table. Position the fence extrusion to that its front end reaches to approx. the centre of the saw blade.

Always use the auxiliary fence when ripping 45° bevels, guiding the work along the small edge of the fence extrusion.
See also paragraph 5.3.

11.5 Crosscuts

Perform all crosscutting operations with the mitre fence supplied with this machine or with a sliding carriage available as optional accessory.

Install fence extrusion with the small edge facing the blade and position so that its front end just reaches the saw blade. With very small cutoffs use a deflector board as described in paragraph 8 to keep the cutoffs from being picked up by the rising teeth of the saw blade.

11.6 Tenons and Slots

- To cut tenons and slots a push block is required as shown in paragraph 8. The recess in the push block has to match the workpiece.
- The riving knife must be installed.

Cutting:
Guide workpiece along the rip fence with your right hand. The left hand, holding the push block, feeds the work into the blade, keeping it from tilting and twisting. When the cut is completed pull back both workpiece and push block clear of the blade.

11.7 Cutting the Tenon Shoulder

To cut the shoulder of the tenon always use the mitre fence or the sliding carriage, available as optional accessory.

- The riving knife must be installed.
- Have auxiliary fence installed on rip fence and positioned for crosscuts.

11.8 Cutting Wedges

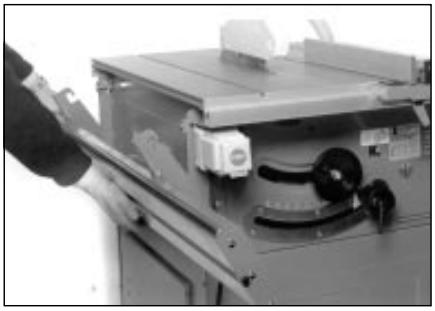
Cut wedges only with a wedge cutting jig made for the wedge dimensions as described in paragraph 8.

- Have riving knife and saw blade guard installed.

With the right hand guide the wedge cutting jig along the rip fence until the wedge is clear of the riving knife. The left hand keeps the waste clear of the blade (use push stick if waste is small to keep hand clear of blade).

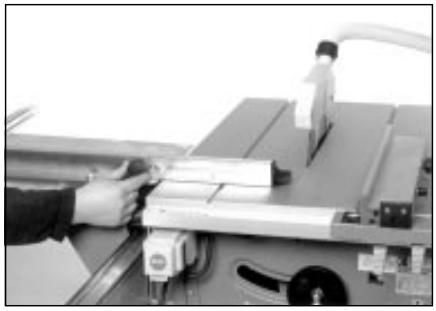
11.9 Dimensioning with the Optional Accessory Sliding Carriage

- For dimensioning have the riving knife and blade guard installed.

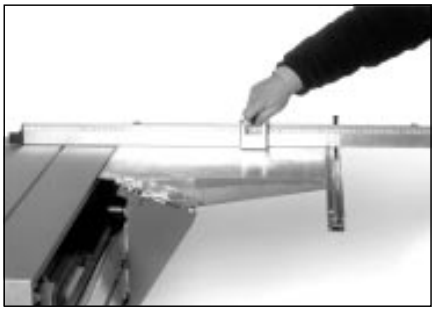


Hang roller carriage extrusion into crosshead plates.

Place table onto traversing saddle and secure with locking levers.



Set fence extrusion closely against the blade, tighten starknobs.



Use tape or stick measure to set flipstop to desired width.

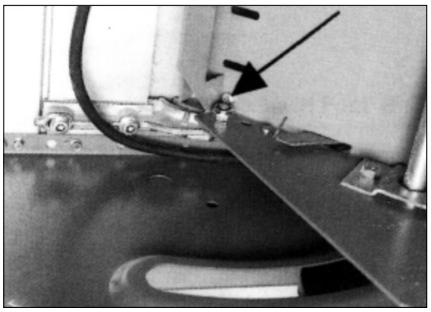
Swing flipstop up and place workpiece on table.
Start saw and square workpiece.

Pull sliding carriage back.
Turn work around by 180°, swing flipstop down again and place squared edge against the stop.
Make second cut.

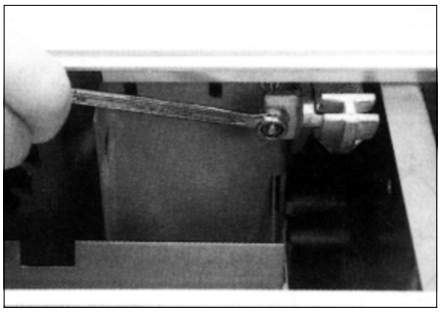
When dimensioning large panels, which are not adequately supported by the saw table, install the table rear and/or table side extension, available as optional extras, for additional support.

12 Adjusting the Saw Blade Position

The saw blade is factory set to a centre position in the table slot. Use of saw blades with wider teeth may require a resetting of the blade position



Tilt machine to the rear and rest on rear housing panel to have access to the chip case.
Loosen the two bolts size M 12, holding the chip case, by 1/2 turn.

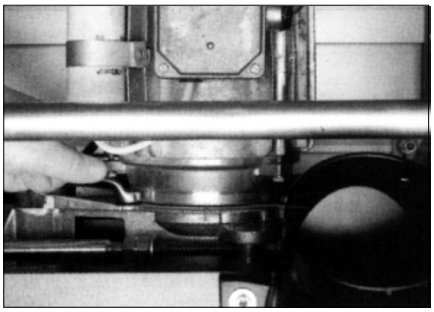


Remove table insert and chip case lid. Loosen counter nuts M6 on the swivel trunnions and adjust saw blade position by turning the nuts as required, until blade runs clear of the table's edge.

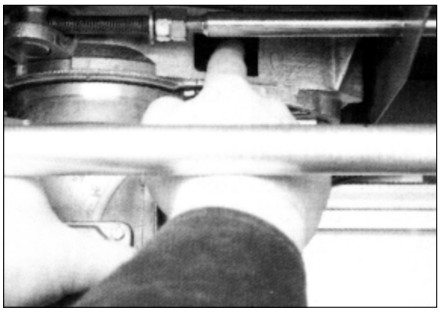
Important!
Make sure that all screws and nuts are retightened after setting.

13 Belt Tension

Disconnect from power before servicing!



To set belt tension loosen the 4 motor mounting screws one full turn.



Turn motor to tighten belt. The belt tension can be checked through the opening in the transmission housing. Slack should be approx. 5 mm.

14 Care and Maintenance

- Always disconnect from power before servicing.

This machine is designed to require only minimal maintenance. It is recommended to protect it from high humidity, rain and agressive agents, such as acid vapors or solvents. All bearings and threaded rods, as well as the extrusions supporting the rip fence, should regularly given a light coating with gun oil.
To ensure smooth operation clean the threaded rod (218) of the main blade's rise and fall mechanism regularly with kerosene, then give a light coat of oil to the spindle and bearing. Keep saw blades from rust.
Regularly clean the motor's cooling fins from dust to ensure sufficient cooling.

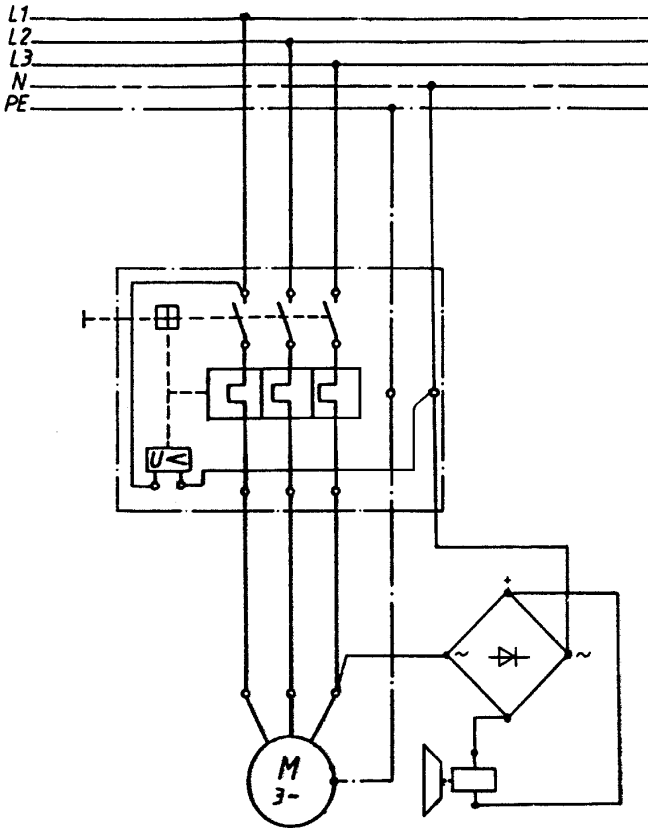
Note

Both single-phase and 3-phase motors supplied with this saw are equipped with a mechanical motor brake designed for a long service life. However, friction causes the brake pad to wear. If the blade needs more than 10 sec. to come to a complete standstill the motor brake has to be replaced. Contact your dealer or a authorized service centre for help.

14.1 Tool Maintenance

Residue resin built-up on the saw blades should be removed regularly. Immerse blade(s) in a sodium carbonate solution, or in a parafin/kerosene solution or mineral turpentine for 24 hours. The residue resin can then be easily wiped off with a rag. Clean blades improve performance and cut quality.

15 Wiring Diagram



Circuit diagram PK 300 K 4.2 DNB

16 Optional Accessories

Sliding Carriage PKS 1500	Stock-no. 0910003291
Sliding Carriage PKS 2300	Stock-no. 0910003321
Table Rear Extension PK	Stock-no. 0910003330
Table Side Extension PK	Stock-no. 0910003305
Square and Round Stock Jig	Stock-no. 0910004018
Cam-Lock Clamp	Stock-no. 0910009680
Wheel Set BKH/PK	Stock-no. 0910007262
Saw Blades	Stock-nos. see paragraph 6

17 Spare Parts List PK 300 K

Pos.	Description	Dimension	DIN	Stock-no.
100	Removable table section	863 mm		138 321 3769
101	Saw table assembly PK			101 021 3823
102	Hex. socket head cap screw	M 8x35	912	612 100 0812
103	Disk spring	Ø16 Ø8.2x0.6	2093	705 301 6795
104	Hexagon lock nut	M 8	985	620 200 2305
105	Clamping piece A	55x20x31		138 020 7482
106	Hex. head drilling screw w. collar	4.8x16		614 406 3978
107	Blind rivet	6x16 F		662 101 0423
108	Toothed plate			149 220 0723
109	Blind rivet	6x8 F		662 100 9530
110	Rear panel, motor housing			139 220 0246
111	Side panel, motor housing			139 220 0211
112	Hexagon head screw	M 8	934	620 000 2235
113	Stop plate			139 220 0319
114	Hexagon head screw	M 8x35	933	610 300 1208
115	Clamping piece B	55x26x33		138 020 7474
116	Toothed rack	724 mm		139 320 0746
117	Clamping rod	Ø7.1 (M8) x 753		149 520 7516
118	Washer	A 21	125	630 008 7696
119	Setting knob	Ø 72x52		139 120 0390
120	Washer	A 17		630 001 6713
121	Hexagon thin nut, shape B	M 17	936/439	620 503 2396
122	Washer	A 8.4	125	630 001 6322
123	Ratchet lever	M 8 female		700 602 8653
124	Blind rivet	6x12 F		662 101 0407
129	Cross rec. pan head tapping screw	4.8x9.5	7981	617 201 6683
130	Arbor tilt scale			114 120 0468
135	Hexagon head screw	M 8x16	933	610 300 1178
136	Cross rec. pan head tapping screw	2.9x9.5	7981	617 203 9632
137	Rip fence scale	0.23x13x707		114 220 0623
138	Spring plate	0.3x22x60		139 220 4918
139	Carriage bolt	M 8x40	603	611 001 5990
140	Spacer bushing	8.2/15x25 mm		139 108 7560
141	Starknob	M 8 female		700 002 8937
142	Switch ass'y PK 4.2 DNB			101 001 4499
143	Cord clamp	0.9x15x40		705 207 8118
144	Front panel, machine housing			139 220 0238
145	Hexagon lock nut	M6	985	620 200 2291
146	Carriage bolt	M 6x16	603	611 000 0594
147	Disk spring	5x6.5 mm	6888	672 000 8538
148	Spacer bushing	DH 14x55		644 220 0309
149	Washer	A 15	125	630 001 9984
150	Handwheel	Ø 125		700 308 7322
151	Washer	A 13	125	630 001 6705
152	Cap nut	M 12x1.5	1587	620 107 4264
153	Crank handle	M 6		700 407 6740
154	Hexagon nut	M 6	934	620 000 2219
158	Pointer			148 221 4718
159	Pointer support			148 221 4700
160	Push stick pocket			138 221 4699
200	Hexagon thin nut, L.H. thread	M 20x1.5 L	936/439	620 500 8460
201	Counter flange PK 300			148 521 3682
202	Saw blade, TCT	300x2.6/1.8x30 T=28		091 001 4099
203	Bearing bolt	M 8 10h7		139 520 0611
204	Circlip ring	58x2	471	640 008 7588
205	Pilot link plate			139 220 0343
206	Shim for ball bearing	58x67.0x0.5		714 000 6941
207	Riving knife carrier plate	Bl 2.5x347x152		139 220 7151
208	Washer	A 6.4	125	630 001 6365
209	Swivel segment pair L + R			239 020 0199
210	Hexagon head screw	M 10x20	933	610 300 5270
211	Serrated lock washer	A 6.4	6798	630 408 4047
212	Hex. head screw, thread rolling	M 8x35		614 310 1264
213	Swivel trunnion PK			239 020 0202
214	Bearing plate			139 220 0289
215	Grooved roller bearing 6202-2Z/QE6LHT23			710 013 6915
216	Setting tube	Ø24.6x675.5		139 320 7503
217	Hexagon head screw	M 6x45	933	610 300 0430
218	Threaded rod			149 502 4381
219	Adapter sleeve	6x16	1481	650 300 1711
220	Saw blade spindle, 30mm arbor PK 300	Rd 57x137		138 521 3669
221	Transmission housing			139 020 0753
222	Grooved ball bearing 6005 2RS	25x47x12		710 001 6812
223	Hex. thin nut, shape B	M 20x1.5	936/439	620 505 2753
224	Grooved belt pulley 14J x 46.5PK 300	46.5x50/M 24x1.5		138 521 3693
225	Poly-V-belt	14 PJ 457		723 308 7313
226	Circlip for bores	42x1.75	472	640 112 1364
227	Grooved ball bearing 6004 2RS	20x42x12		710 001 6995
228	Hex. head bolt with washer Ø25	M 8x16	933	610 310 2632
229	Eccentric plate standard motor	D = 80		139 220 0360
231	Motor pulley standard motor PK 300	54.0x57/20 PN 6		138 521 3707

Pos.	Description	Dimension	DIN	Stock-no.
232	Hex. socket head cap screw	M 6x16	912	612 102 3081
233	Feather key	A 6x4x30	6885	672 105 9322
234	Motor 4.2 DNB w/o switch PK 300			101 017 9145
235	Hexagon nut	M 12	934	620 001 7992
236	Bolt	Ø 25x35		139 520 0271
237	Hexagon lock nut	M 12	985	620 202 4139
238	Hexagon lock nut	M 10	985	620 200 2313
239	Carriage bolt	M 6x35	603	611 002 9436
240	Chip case PK 300			101 021 3793
241	Pressure spring	Ø 9.9x2x22.5		705 120 7240
242	Guide bracket PK 300	Fl 16x5x215		148 221 3754
243	Disk spring	23x8.2x0.9		705 307 5104
244	Cover plate, transmission housing			139 220 0084
245	Carriage bolt	M 12x30	603	611 000 0691
246	Saw blade guard w/suction port PK 300	Ø 37.4		138 115 8612
247	Riving knife carrier	60x80x16		238 021 3730
248	Riving knife, std.	Gr. 25x2.5		138 221 3722
249	Gusset plate PK 300	Bl 2.99x80x60		138 221 3749
250	Hexagon nut, Keps type	M 12		620 900 2432
251	Chip case cover w/o hooks PK 300			138 221 3803
252	Hook, chip case cover	Bl 2x20x146		139 220 0386
253	Hexagon head screw	M 6x16	958/933	610 301 5675
254	Suction port			139 120 0501
255	Washer B 6.4	9021		630 500 2087
256	Carriage bolt	M 6x45	603	611 000 0624
257	Wing nut	M 6		700 512 5213
285	Pan head tapping screw	St 3.9x13	7981	617 200 1805
286	Motor brake ass'y			805 504 6132
287	Motor fan 120/13			133 140 8839
288	Fan cover 120/13			133 140 8847
289	Hexagon head bolt	M12x1.5x25 L.H.	961	610 300 1267
290	Brake pad			133 218 5329
294	Terminal box. workstand			133 140 9657
295	Cross rec. pan head screw	M4x12	7985	612 300 2022
296	Rectifier			101 000 1141
297	Lid, terminal box			133 140 9665
298	Pan head screw	5x20		618 901 1421
308	Push stick	10x70x410		139 420 1630
317	Carriage bolt	M6x25	603	611 003 1325
326	Guide rail			149 202 7223
327	Stop block			139 120 0439
328	Cross recessed countersunk head screw	M 6x12	965	613 105 9530
329	Vernier scale, mitre fence			114 120 0450
330	Hexagon socket head cap screw	M 4x20	912	612 110 2640
331	Hexagon nut	M 4	934	620 000 2197
332	Serrated lock washer	A 4.3	6798	630 408 4020
333	Mitre fence body			139 020 0419
334	Ratchet lever	M 6x25		700 600 3847
335	Cross recessed countersunk head screw	St 4.2x13	7982	617 400 1942
336	Mitre fence extrusion end plate, std.			239 109 1725
337	Mitre fence extrusion	300 mm		139 300 5315
338	Mitre fence scale 0-2x45°			114 120 0441
339	Cross recessed pan head tapping screw	St. 3.5x9.5	7981	617 202 8215
340	Washer	A 4.3	125	630 001 6330
341	Slotted headless screw w/chamfered end	M 6x25	427	616 000 0340
342	Knurled nut	M 6		624 112 5058
343	Extrusion end plate, extented			139 120 0145
350	Rip fence carrier extrusion	S8x48x450		138 321 4420
351	Thumb screw	M6xLB=68		615 019 0299
352	Washer	B6.6 verz.	9021	630 500 2087
353	Square nut	M8 verz.	557	621 800 5126
354	Hex. socket head cap screw	M8x16	912	612 100 0790
355	Rip fence carrier			138 021 4497
356	Set screw	Ø6/M8/Ø20x110		148 521 4379
357	Dish spring	16x8.2x0.6	2093	705 301 6795
358	Clamping fork			138 021 4349
360	Hexagon nut, self-locking	M8	985	620 200 2305
361	Bolt	Ø10/Ø11/Ø17x47		148 521 4360
362	Eccentric clamp			239 020 5484
363	Circlip for shafts	10x1	471	640 004 7349
364	Cross rec. pan head tapping screw	M5x6 galv.	7985	612 314 9287
365	Leaf spring	0.8x25		705 221 4356
366	Thread cutting screw	AM 5x12-St-Lt galv.	7516	617 517 4166
367	Extrusion end plug	57x49x7		138 121 4458
368	Cross rec. counters. head tapping screw	Stz 4.8x19-C-Lt galv.	7982	617 415 5800
369	Slide rail	16x5x200		148 221 4548
370	Holder, magnifying glass	63x36x30		138 121 4393
371	Magnifying glass	Ø 30		138 121 4407
372	Auxiliary fence extrusion	60x35x700		138 321 4447
7000	Mitre-/Crosscut fence			201 020 0108
7002	Spiral hose	Ø 100x1000		785 412 6290
7003	Shoulder plate			139 220 1595
7004	Extension ring			148 521 3674

U.K Supplement to Operating Instructions for Elektra Beckum PK 300 K Precision Circular Saw

Please note the following supplementary information associated with this machine:

1974 Woodworking Machinery Regulations
When in industrial use, this machine falls under the scope of these regulations. In the interest of health & safety of the machine user we recommend you study and follow these regulations.
We would also draw your attention to the booklet "Woodworking Machines Regulations 1974 - Guidance on Regulations" ref L4 (ISBN 0118855921) published by HMSO.

Rabetting, Grooving etc.
This manual is prepared for world-wide distribution. Some of the operations depicted here are prohibited by the 1974 Regulations without the use of special guards. These operations include rabetting, grooving, tenoning etc. Always follow the 1974 Regulations.

Paragraph 4 Connection to Power Mains
230 V motor. Although the motors supplied with this machine will run safely on a 13A domestic ring main, on starting the machine a high current of very short duration is drawn, which could cause your 13A fuse to blow. If this persists we recommend to have the machine connected to a 16A separate radial circuit. Ensure a suitably sized fuse matching the motor is used.
This work should be undertaken only by a qualified electrician!

Paragraphs 11.2, 11.3, 11.6, 11.7
See note above "Rabetting; Grooving etc."

Wiring Instructions

Warning: This appliance must be earthed!

If the plug, fitted to the power cable supplied with the machine, has to be changed or replaced, connect the mains lead conductors in accordance with the following colour code.

Single-phase motors (110/115/220/230/240 volts):

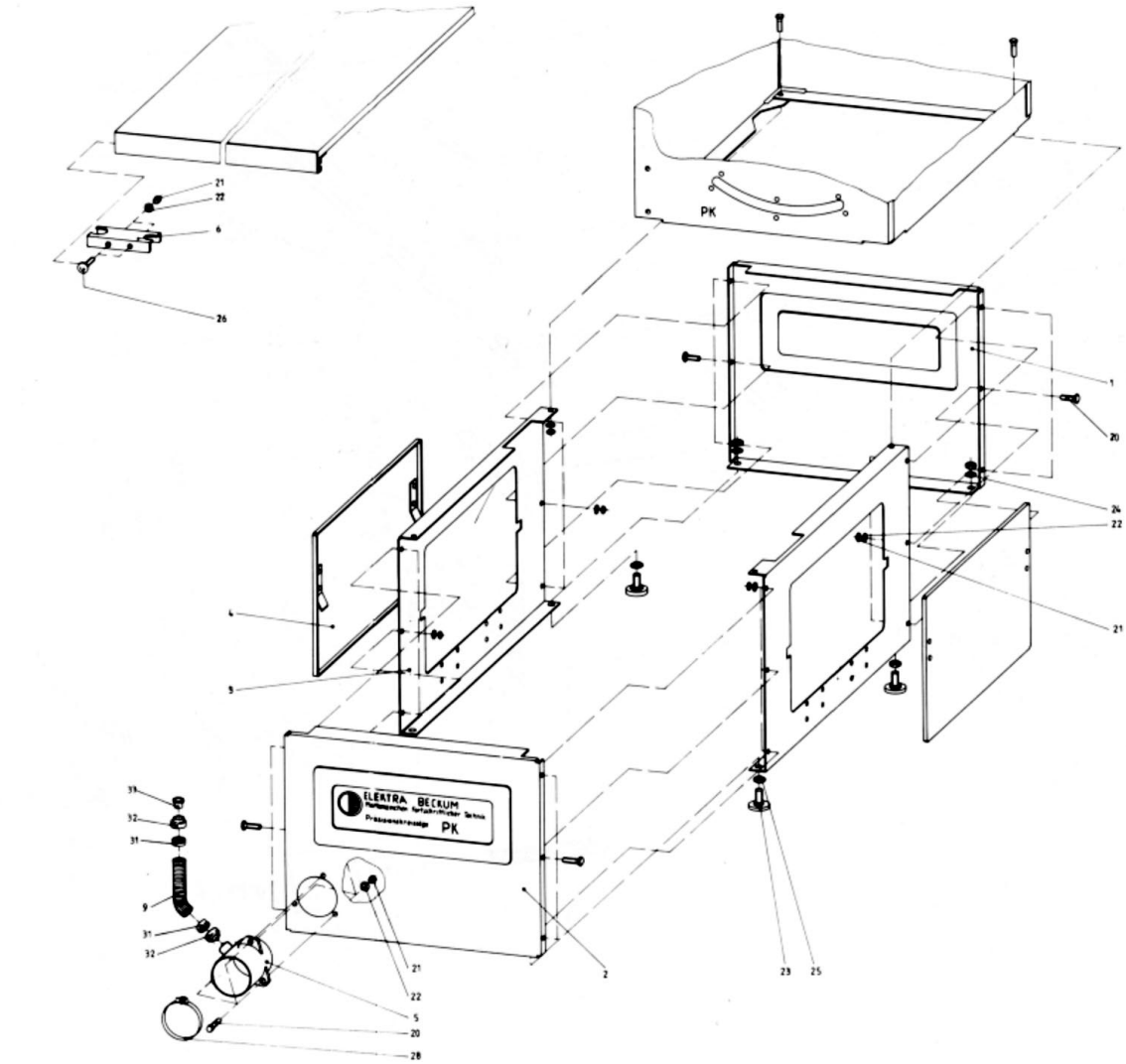
Yellow/green	-	Earth
Blue	-	Neutral
Brown	-	Live

Three-phase motors (220/380/400/415 volts):

Machines with a 3-phase motor are connected to power mains using a 5-pin industrial appliance-inlet/connector according to VDE 0623/BS 4343/IEC 309.

4-wire mains lead	Yellow/green	-	Earth
	Brown	-	Phase (L1)
	Black	-	Phase (L2)
	Black	-	Phase (L3)
5-wire mains lead	Yellow/green	-	Earth
	Brown	-	Phase (L1)
	Black	-	Phase (L2)
	Black	-	Phase (L3)
	Blue	-	Neutral

IF IN DOUBT - CONSULT A QUALIFIED ELECTRICIAN!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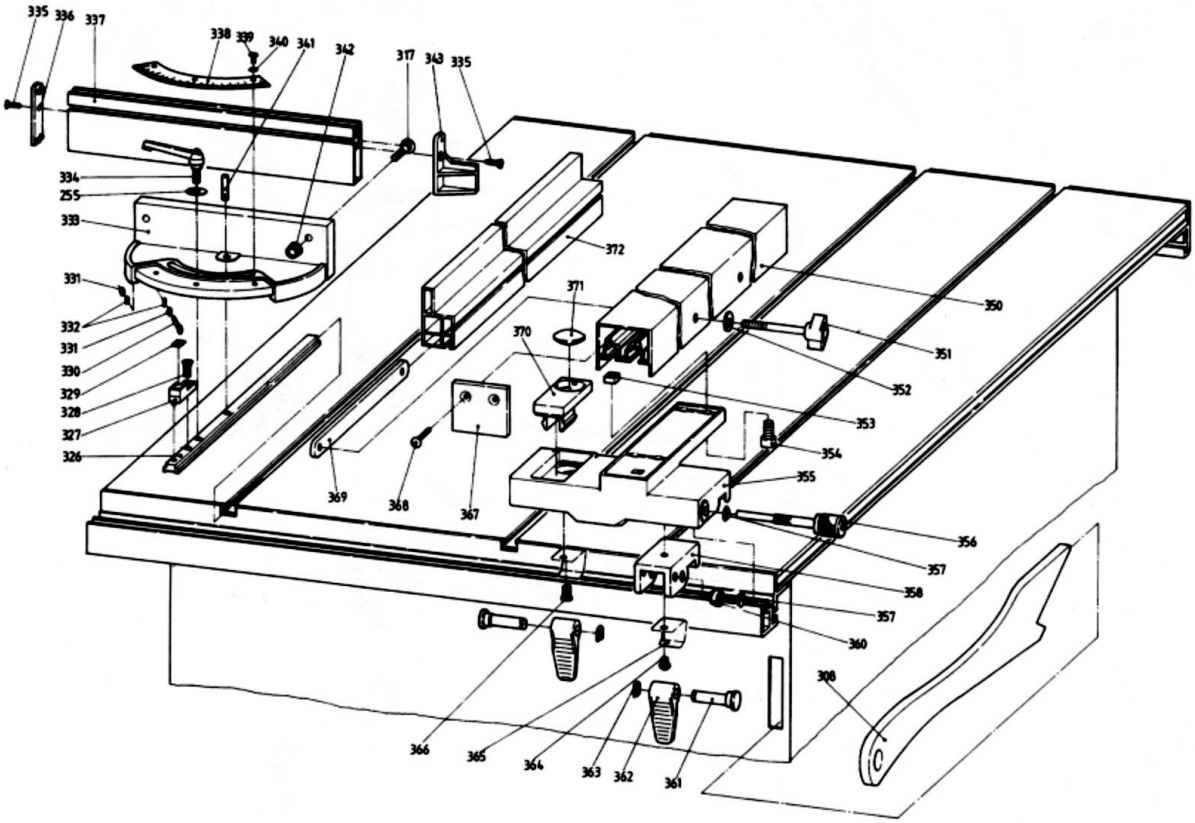

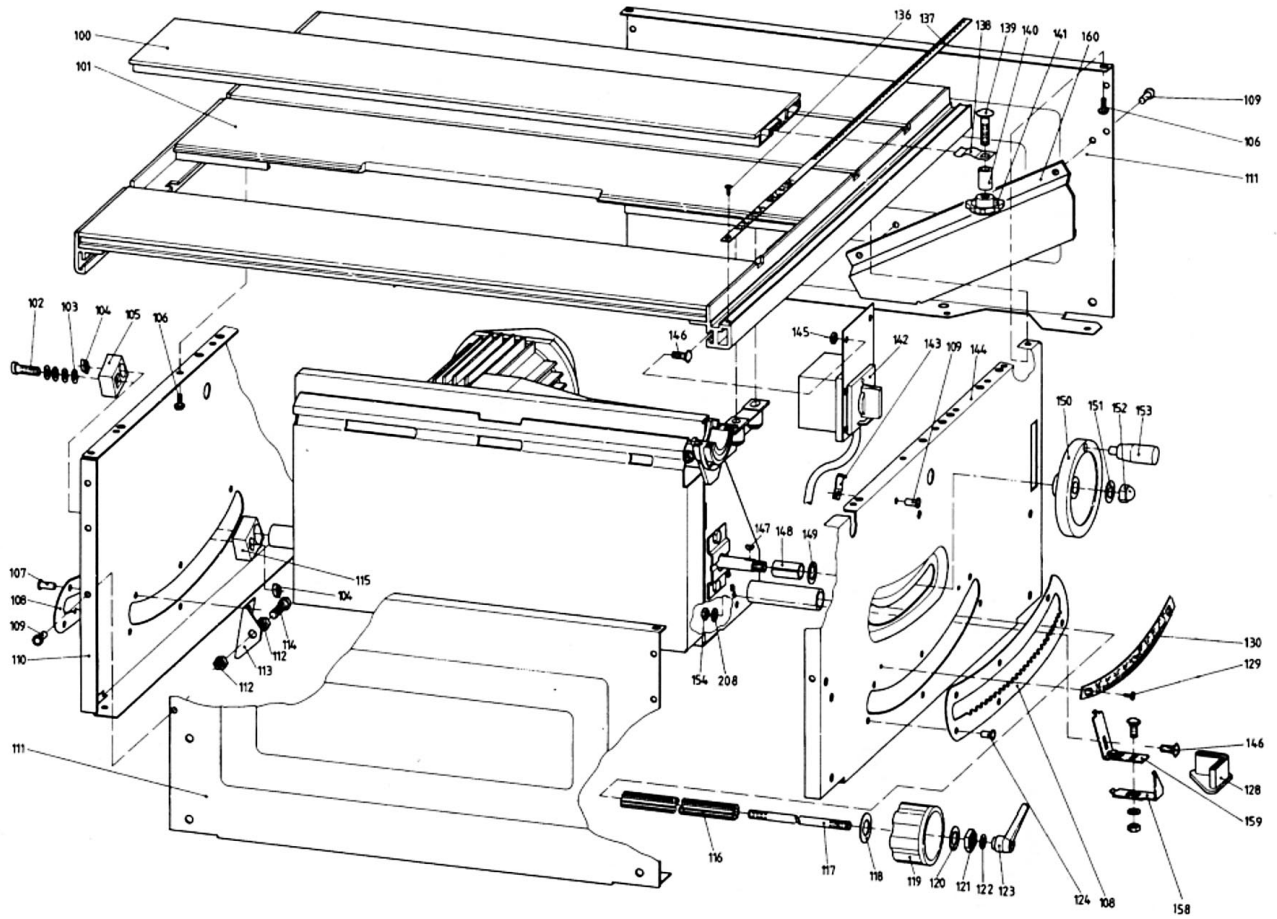
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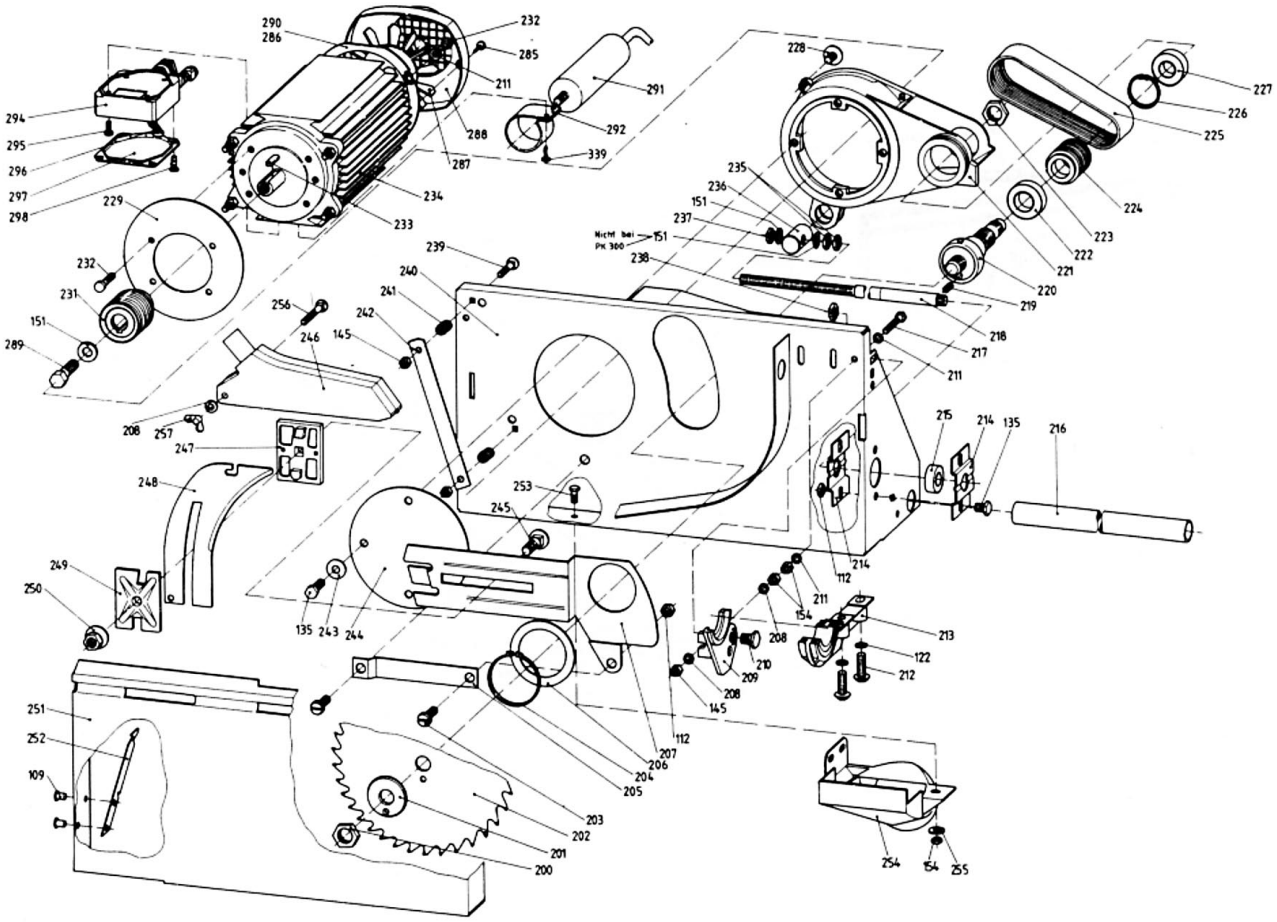
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Nicht bei PK 300

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