Operator's Guide WA8



Version 1.0/2006



Foreword ...1

Technical data ...3

Machine identification ...3

Machine data ...3

Equipment ...5

Characteristic noise values ...6

Dust emission data ...6

Intended use ...6

Safety ...8

Explanation of symbols ...8

Health and safety instruction ...8

Safety devices ...9

Other risks ...15

Working safely with the sliding table saw ...16

Transport ...22

Packing ...22

Degree of dismantling ...22

Sensitivity ...22

Storage ...22

Assembly ...23

Installation of the sliding table saw ...23

Sliding table assembly ...23

Installation of table length extension ...23

Electrical connection ...24

Connection of extraction system (customer side!) ...26

Rip fence ...26

Machine configuration ...27

Free cut adjustment of sliding table ...28

Free cut adjustment of rip fence ...28

Adjustment angle cut ...29

 0° position of the saw blade ...30

Machine operation ...31

Tilting ...31

Height adjustment ...31

Changing the main saw blade ...32

Saw blade recommendation ...33

Table locking ...34

Switching drives on and off ...35

Motor protection ...35

Scoring saw ...36

Troubleshooting ...40

Service ...42

Lubrication ...43

Brake ...43

Customer service - spare parts ...44

Single-sided mitre fence ...45

Double-sided mitre-fence DUPLEX ...46

1 Foreword

Safety instructions

- Do not wear loose clothing, gloves, neckties, rings,
 bracelets or other jewelry which may get caught in moving parts
- Nonslip footwear is recommend
- Wear protective hair covering to contain long hair
- NEVER STAND ON TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
- NEVER LEAVE TOOL RUNNING UNATTENDED.
 Turn POWER OFF. Don't leave tool until it comes to a complete stop.



Please read this Operator's Guide through carefully before commissioning the saw since we do not accept liability for damage and disruptions to operating resulting from not adhering to this Operator's Guide!

Persons operating this sliding table saw, musthave had sufficient instruction and be suitably-qualified!

This Operator's Guide can thus not be regarded as a binding type description of the models involved.

The Operator's Guide must always be available at the location where the machine is being used and is to be read and used by any person involved withworking with or on the machine, e.g.

- operation, including upgrading, troubleshootingduring operation, rectification of productiondowntimes, services, disposal of operating andauxiliary materials
- upkeep (maintenance, inspection, repair)
- transport

In addition to the Operator's Guide, national regu-lations on health and safety at work and environmental protection should to be noted.

Removal of the safety equipment, especially thesafety hood for the saw blade cover and the riving knife, endanger the operator and lead toaccidents!

Safe working is only possible with a clean machineand a clean environment!

Reproduction, even of parts of this document, is only allowed with our permission!

2 Technical data

2.1 Machine identification



The type label attached to the machine stand is used to determine the machine identity and further important key data.

Meaning of the specified designations:

Typ: Machine designation

Nummer: Machine-specific identification numbe

Baujahr: Year of manufacture

Sägeblatt min \varnothing Diameter of the smallest permitted saw blade Sägeblatt max \varnothing Diameter of the largest permitted sawblade

Führungsschlitz- Diameter of the guide pins for the riving knife in the

breite des Spaltkeils: riving knife holder

Marks

To document that the machine complies with the basic health and safety requirements as defined in Appendix I of Guideline 98/37/EWG for modifying Guideline 89/392/EWG (Machine Guideline) the machine is identified by the CE symbol.

2.2 Machine data

Manufacturer

Altendorf Qinhuangdao

Machinery Manufacturing Co. Ltd.

No. 4 Hengshan Road,

Economic & Technical Development Zone,

Qinhuangdao 066004, P.R. China

Machine

ALTENDORF-sliding table saw

Type WA8

Usable main blade diameter and associated cutting heights

Saw blade diameter [mm]	250	300	315	350*	400**
Saw blade height vertical [mm]	0 - 55	0 - 80	0 - 87	0 - 105	0 - 130
Saw blade height at 45° [mm]	0 - 38	0 - 56	0 - 60	0 - 73	0 - 91

^{*} Not in CE-Version!

^{**} Only by option parallel safety hood!

main saw	Diameter of tool holder [mm]	30
	Tilting range of the saw blade [°]	0-46
	Idle speed [1/min]	3 / 4 / 5000
Scoring saw	Diameter of scorer saw blade [mm]	120
	Diameter of tool holder [mm]	22
	Idle speed [1/min]	8200
Machine table	size of the machine table [mm]	900 x 702 ± 5
Sliding table	Lenght of the sliding table [mm]	1800, 3200
Stops	Cutting width at rip fence [mm]	1000 / 1300
	Crosscutting at the crosscut fence [mm]	3200
Extraction	Connection pipe Ø under table [mm]	120
	Connection pipe Ø for upper safety hood [mm]	80
	Overall connection Ø	140
	Min. speed of air [m/s]	20
	Min. volume flow [m ³ /h]	1500
	Under-inflation [Pa]	1100
Environmental conditions	Operating temperature [°C]	10 - 40
	Max. rel. humidity [%], no condensation!	90
	No gases of corrosive / explosive	
Weight	Weight of machine [kg]	ca. 850
Electrical equipement	Voltage [V] + 5%, -10%	see type label
DIN EN 60204	Current [A]	see type label
	Frequency [Hz]	see type label
	Power of main saw motor [kW]	5,5
	Power of scoring saw motor [kW]	0,75

The machine may basically only be connected to a 3 phase alternating current supply with phases L1, L2, L3 since otherwise its braking module can be destroyed. If operated with phase converters, frequency converters or transformer-capacitor combinations the braking modules andthe starter unit can be destroyed!

2.3 Equipment

Parameter value	China (non-CE)	Asien (non-CE)	CE	UL/CSA	GOST
main saw drive 5,5 kW/3 speeds/speed indicator					
main saw drive 5,5 kW/3 speeds					
hand control tilt- and height adjustment with digital tilt display					
sliding table length 3200 mm					
sliding table length 1800 mm	option	option	option	option	option
rip fence 1000 mm with eccentric clamping					
rip fence 1300 mm with eccentric clamping		option			
cross cut fence F92 and single-sided mitre fence					
scoring saw with hand control height and side adjustment					
max. saw blade diameter 350 mm, safety hood mounted at riving knife without dust extraction					
xax. saw blade diameter 315 mm, safety hood mounted at riving knife with dust extraction					
max. saw blade diameter 400 mm, safety hood not mounted at riving knife	option	option			

2.4 Characteristic noise values

The noise emission values determined according to EN 3746 for the sound power level or EN 11202 (correction factor k3 calculated according to appendix A.2 of EN 11204) for the sound pressure levelbased on the working conditions listed in ISO 7960 appendix A amount to.:

Sound power level [dB (A)] Emission sound pressure level at the workplace [dB (A)]		Tool			
Idle running	$L_{WA} = 101,3$	Idle running	L _{PA} = 95,7	saw blade 350 x 3,5 / 54 WZ	
Working	$L_{WA} = 104,2$	Working	$L_{PA} = 92,1$	n = 3987 r.p.m	

A measuring error allowance of K = 4 dB (A) applies to the specified emission values.

The specified values are emission levels and therefore not necessarily levels for safe working. Although there is a correlation between emission andemission levels, it cannot be reliably deduced from this whether or not additional precautionary measures to protect the user are necessary. The current factors encountered at the workingplace which influence the emission level, encompass the duration of the exposure, the room characteristics, other sources of noise such asneighbouring machines and the number of neighbouring machines or other working processes involving noise emission. In addition, the permissible judgement basis can vary depending on the country concerned.

2.5 Dust emission data

The workplaces at the sliding table saw are classed in accordance with BGI 739 Annex 4 as low-dust environments.

2.6 Intended use

The sliding table saw and the workpiece guide equipment supplied is intended exclusively to be used for the following purposes:

- Cutting laminated and unlaminated sheet materials such as chipboard, woodworking boards, MDF boards and material to be processed in a similar way
- Solid wood
- Veneer with suitable clamping
- Gypsum
- Paperboard
- Processing of other materials such as nonferrous metals and compositematerials made of NF metals and plastics requires our approval as regardsthe approval of the individual material and the saw blade intended for cutting it.
- Only use the machine to cut pieces which can be securly held and guided

Saw blades:

- Care should be taken to choose the correkt saw blade for the job, whichwill depend (for example) on whether you are ripping or crosscutting and the type of material being cut!
- Only one-piece (CV) or composite (HM) circular saw blades of at least 250mm and maximum 315 mm diameter as well as routers/milling blades upto a cutting width of 15 mm are allowed for the main saw blade. Before using a milling cutter, remove the middle table strip and the cushioning disc!
- For the scoring blades saw blades of maximum 120 mm diameter are allowed.
- The use of HS saw blades and oscillating router equipment is not allowed!

Site/use:

- The machine is not suitable for operation in the open air, in damp environ-ments or in areas where there is a danger of explosion.
- Use of the machine according to specifications also includes connection a suitably dimensioned industrial extraction system.
- Adherence to the manufacturer's specifications as regards operating, maintenance and servicing conditions and following the safety precautionsgiven in the Operator's Guide.
- Sliding table saw may only be used, equipped and maintained by persons who are familiar with the
 unit and have been instructed in the dangers involved. Responsibilities for use, equipping and maintenancemust be clearly defined. Service work must be carried out by our service department.
- The applicable accident prevention regulations as well as the other generally recognized safety and medical rules applying to the workplace are tobe noted.
- Only original Altendorf spare parts may be used. The manufacturer doesnot accept any liability for damage caused by using non-original spareparts. Modifications made to the machine by users and the use of non-original parts on the machine exclude any liability by the manufacturer for anyresulting damage.

Machine workplaces:

In line with specifications the sliding table saw will be operated from the follo-wing workplaces:

- at the workstation on the left-hand side of the sliding table view in the direction of feed in the front part of the machine (main workplace)
- on the front opposite side of the machine to the right of the sliding table when working with the rip fence
- The space for any workpiece acceptor is on the rear opposite side of
 the machine behind the table length extension, not under any circumstance in the area of travel of the sliding table and the telescopic tube
 of the swivel arm! Otherwise there is a danger of injury through impact in the knee area!

Important information:

- Any other use which goes beyond this is taken as not in accordance with specifications. The manufacturer is not liable for any damage that may result; the risk is borne by the user alone!
- Modifications made to the machine by users and the use of non-original parts on the machine exclude any liability by the manufacturer for any resulting damage.

3 Safety

3.1 Explanation of symbols



You will find this symbol all information relating to health and safety in this Operator's Guide where there is a danger to life and limb. Please read this information carefully and take particular care in these cases. Please pass thesafety information on to other users. As well as the information in this guidethe generally-applicable safety and accident prevention instructions must be noted.

3.2 Health and safety instruction

Operating any machine tool, in particular woodworking machines with manual feed, involves a high risk if the machine is operated incorrectly. For this reason please always comply with the safety instructions summarized in this chapter as we as with official and other regulations governing health and safety at work (e.g. accident prevention regulations)!

- Never operate the machine without using the protective equipment provid-ed for the procedure involved (see also the section entitled "Safe use ofthe sliding table saw (- working examples -)" and do not change anythingthat could affect safety.
- Check before working with the machine that the protective and operating equipment is securely attached and not damaged.
- Before changing tools, rectifying faults and during regular servicing work ensure that the machine cannot be turned on by mistake by securing the main switch with a padlock.
- Only saw blades and routing tools corresponding to European Norm EN847-1 may be used.
- Only saw blades with the dimensions described in table 1 may be fitted. The diameter of the mounting hole must be 30 mm in any event. Use of loose spacing rings is not permitted.
- The speed must be chosen so that the highest reliable speed when thetool is equipped with hard metal saw blades or routing cutters is not exceeded.
- The use of HS saw blades and cracked or reformed saw blades is not permitted.
- Always wear working clothes and remove rings, bracelets and watches...
- Ensure that the workplace is unobstructed and that nothing slides around and that there is sufficient lighting.
- Do not work on any workpieces that are too large or too small for the power of the machine.
- Take up a working position so that you are always standing to the side ofthe saw blade outside a
 possible recoil area (area directly in front of thesaw blade).
- Before the machine is switched on loose parts must be removed from the immediate vicinity of the saw blades.
- Only start cutting when the saw blade has reached its full speed.
- Always use the upper safety hood!
- The upper safety hood must be set to the height that matches the thickness of the workpiece to be cut. When working with a tilted saw blade replace the narrow hood with the wide hood.
- Always use the riving knife except for insert cuts. It may not be thicker than the width of the cut and thinner than the master blade. It is to be set so that the gap to the tooth tip is a maximum of 8 mm. Only riving knives may be used for which the slot width does not exceed 13 +0.5 mm. The supplied riving knife covers the entire diameter range of the saw blades that can beused from 250 to 315 (350/400) mm. As regards their thickness they are matched tothe commercially-available carbide tipped saw blades that are as wide as the cut. If other saw blades, e.g. CV saw blades are used, the width of riving knife necessary must be selected so that this lies between the cut width and the main blade width. This type of riving knife is available in thetrade of directly from us.
- For cutting inserts a recoil protector should be used, e.g. the front side of the clamping shoe. This is
 to be attached in the groove of the sliding table where by the carriage with the clamp must be secured
 so that it does not move. After insert cutting the riving knife and the upper safety hood are tobe refitted immediately.

- Always ensure secure workpiece guidance and use the appropriate fences (rip fence, fence scale, crosscut fence on cross slides, cross stop).
- For lengthwise cutting of narrow workpieces (gap between saw blade and rip fence smaller than 120 mm) the push stick must be used.
- Only make crosscuts with the cross slides attached to the sliding table. En-sure that the cut-off work
 pieces are not caught by the rising tooth tip and catapulted out.
- Cross cutting and lengthwise cutting of round-section wood is not allowed with the series feed aids or fences.
- For trimming use the clamping shoe which is attached to the sliding table to hold down the workpiece.
- If a feed device is used at least the riving knife should be employed for recoil protection.
- Replace worn-out table bars immediately.
- Use of an oscillating router or oscillating router milling tools is not allowed.
- Only router milling tools that have a maximum width of 15 mm and are allowed for manual feed may be used. With tools labeled "MAN" this is guaranteed.
- The noise level at the workplace generally exceeds 85 dB(A). For this reason wear ear defenders when working.
- The wood dust generated when working not only affects your vision butcan also be damaging to your health in some cases. The machine must therefore be connected at both extraction sockets to a sawdust extractor. The air speed at the lower extraction socket must be at least 20 m/s. Suitable measures must be taken to ensure that when the machine is switched on, the extraction system is switched on at the same time (use of the floating contact).
- Work on the electrical parts of the machine may only be performed by electrical specialists.
- Regular cleaning of the machine, particularly the table, the sliding tableand the guides (e.g. rip fence) represents an important safety factor. Before starting such work you should ensure that the machine cannot be inadvertently switched on.

3.3 Safety devices

The machine is equipped with all the necessary safety devices to guard against any danger from it that could not have already been eliminated during construction. In particular these safety devices include:

- The top safety hood (fixed to the riving knife) is made of high quality polycarbonate and designed to
 optimally cover the section of the saw blade not used for cutting above the machine table. The start
 up slope at the front end of the safety hood simplifies the workpiece feed with different workpiece
 thicknesses.
- Or:
 - Top parallel safety hood with narrow and wide protection hood made of polycarbonate for optimum covering of the section over the machine table not required for saw cutting with protection against lifting beyond the maximum cutting height + 5 mm. Rollers integrated at the leading and trailing ends simplify both the workpiece feed as well as pulling back in the case of slightly differing workpieces.
- 3 riving knifes for saw blades between 250 and 315 (350/400) mm diameter to avoid workpiece recoil through sticking in the kerf.
- Rip fence with scale adjustable in the direction of the cut: With drawable toavoid sticking of the cut lengths of workpiece between fence and rising tooth tip or adjustable to a lower feed surface for cutting narrower and flatter workpieces with sufficient space for manual feed, combined with the option here, too, of lowering the upper safety hood down to the workpiece.
- Trimming clamp to clamp and hold down untrimmed wood blocks to prevent slipping during trimming.
- Holder device for the sliding table as security against workpiece slippage when cutting inserts in conjunction with the crosscut fence.
- Electrical locking of the cover plate on the dust channel below the machine table in the area of the saw blades. When the cover plate is open it is not possible to turn on the machine and when the machine is running the drives are switched off if the cover plate is opened..

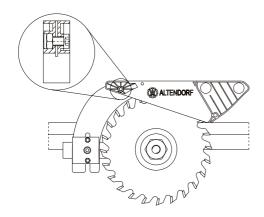
Safety devices

- Automatic brake which stops the main saw blade in less than 10 seconds after the machine is switched off, regardless of the diameter and speed ofthe blade.
- Enhanced flow design of the sawdust catcher and of the upper safety hood to reduce dust emission below 2 mg/m³, provided the machine is connected at both extraction sockets to an industrial extraction system with at least20 m/s air speed.
- Good ergonomic design of the controls in easy-to-reach positions on the machine stand.

3.3.1 Safety hood

To protect the saw blade above the table, there must be an adjustable removable protection device. (DIN EN 1870-1).

Safety hood mounted at the riving knife



Safety hood not mounted at the riving knife (only CE-version)

Changing the safety hood

When working with a tilted saw blade replace the narrow hood with the wide hood.

Never replace the safety hood when the saw blade is running!

Replacing the safety hood:

- after releasing the securing screw, pull the hood out forwards.
- to fit it, place the safety hood in the hood carrier
- push the safety hood up to the end until the two arrows are one above the other
- tighten the securing screw



Moving the safety hood out of the way

You may only work with the safety hood moved out of the way in special cases taking extra care, e.g. with bulky workpieces (carcass). When you have finished the safety hood is to be moved back immediately into its operating position!

Move the safety hood as follows:

- Switch off the main switch and prevent it from being switched on again
- Release the clamping screw
- The protective hood can be moved out of the wa





normal position

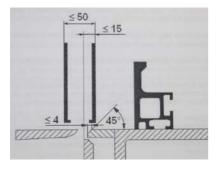
safety hood in place

After you have finished move the safety hood back into its normal working position!

Lateral adjustment of the safety hood to the saw blade

Adjust the protective hood mount by moving it on tits arm so that there is a gap of max 15 mm between the edge of the protective hood and the spacer of the saw drive shaft.

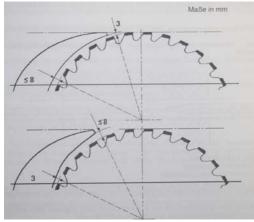
This setting is made at the factory and is marked by adjacent red arrows on the attachment bracket and the arm.



3.3.2 Riving knifes

The correct setting of the riving knife is of great importance for safety. The gap between the riving knife and the toothed wheel of the saw blade may not be more than 8 mm in the area of the cutting height. The sensible gap in practice is around 5 mm. Use of the positively guided Altendorf riving knife automatically ensures with this gap that the height adjustment of the riving knife matches the tip appr. 2 mm below the uppermost tooth (see illustration)..

Riving knife adjustment



Before adjusting the riving knife you must check whether its size and thickness match the saw blade being used. The series versions of the machine are supplied with the following riving knives: (range of diameters and thickness are stamped on the lower end of the knife in each case).

250/2,5 for saw blade diameter of 250 mm and a body thickness of maximum 2.5 mm

315/2.8 for saw blade diameter of 300 to 350 mm and a body thickness up to maximum 2.8 mm.

300-350/2.8 for saw blade diameter of 300 to 350 mm and a body thickness up to maximum 2.8 mm, for concealed cuts.

400/3.2 for saw blade diameter of 400 mm and a body thickness up to maximum 3.2 mm

The thicknesses of the riving knife are selected so that they match the com-mercially available saw blade thicknesses in the relevant diameter range.

Always switch off the main switch prior to setting the riving knife!

To adjust the riving knife unlock the upper carriage and move it to its end po-sition and lift up the orange protective cover. The supplied special spanner can then be used to release the clamping bolt on the riving knife holder. The riving knife can then be positioned at the correct height by moving it in its slot or adjusting the gap between it and the blade by moving the entire holder on the bar, noting the markings on the riving knife when doing this. Then retighten the clamping bolt and close the protective cover..

3.3.3 Table length extension

The table length extension prevents the workpiece tipping over after cutting and makes working safer.

3.3.4 Clamping shoe

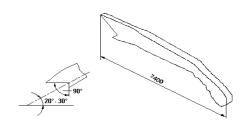
The clamping shoe is used for trimming planks and fixes the workpiece securely on the sliding table.



3.3.5 Push stick

For cuts less than 120 mm the push stick must be used to prevent your hands getting near the saw blade when working. The push stick holder is located close to the work area on the rip fence.





Example of push stick (Dimensions in millimetres)

3.3.6 Push block (through-sawing)

Push blocks should be used for cutting narrower workpieces and if necessary, for pressing the workpiece against the fence. A push block can easily be made by the operator and be fitted with the push block handle suppled with the machine.



3.3.7 Kickback

Do not use the crosscut fence and the rip fence at the same time. Use of both fences at once can cause the material to bind on the saw blade, resulting in a kick back.

3.3.8 Freehand

Do not cut freehand, use a hand or clamping devices for fixing the workpiece.

3.4 Other risks

Even when the machine is used in accordance with specifications, despite compliance with all safety regulations, because of the construction of the machine which is determined by the purpose for which it is used, the following risks might still arise:

- Touching the main saw blade and the scoring saw blade in the cutting area.
- Touching the main saw blade and of the scoring saw blade below the table level when the sliding table is right forward or right back.
- Backstroke of the workpiece or of parts of the workpiece.
- Catapulting off of individual teeth with carbide-tipped saw blades.
- Breakage and spinning off of the saw blade.
- Sticking between the motorized tilt movement of the saw blade and the rip fence or workpieces located in the tilt area.
- Contact with live parts when electrical installations are open
- Long-term effects of noise when working for long periods without hearing protection
- Emission of dust that can damage your health if operating the machine without dust extraction.
- Avoid any dangers that may arise from these other risks by taking extra care when setting up, operating and maintaining the machine!

3.5 Working safely with the sliding table saw

3.5.1 Cross slide / cross cut fence

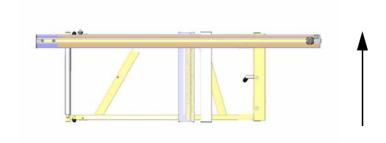
Sizing and mitre cutting

The cross slide is placed on the end bolts of the swivel arm and the circularbar of the upper carriage and clamped with the clamping screws. Depending on the size of the material to be handled this can be done at any point on the upper carriage. For the mitre fence there are two positions on the cross slide..

Position 1

Use: For handling boards

The operator pushes the workpiece in the cutting direction against the fence

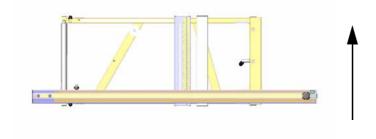


cutting direction

Position 2

Use: For handling wood and boards up to 600 mm width

The operator pulls the workpiece against the cutting direction to the fence



cutting direction

3.5.2 Changing the cross cut fence

- Lift the clamping lever and push to the inside (to release)
- Bring the cross cut fence into a new position, ensuring that the centering bolts are engaged in the holes
- Lift the clamping lever and push to the outside
- Push down the clamping lever (to clamp)

Note:

For dimensions that have to be set with the hinged bar it shouldbe noted that the individual tilt stop is actually against the fenceof the cutout!

3.5.3 Rip fence

Adjustment

For parallel cutting the rip fence is set to the desired dimension. The dimensionset is read off via the edge of the aluminum profile bar. The scale can be adjusted in accordance with the relevant tool thickness after the clamping screw has been released.

For cuts less than 120 mm wide the material must be fed with a pushstick and the extended fence must be in a flat position.

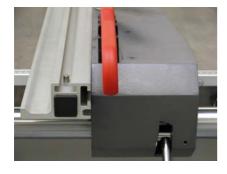
The extended fence of the rip fence is adjustable in the cutting direction and in the profile height. It is clamped in the desired position using a star knob screw.

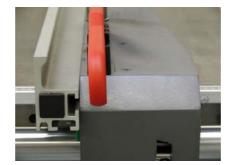
Crosscutting

For crosscutting shorter workpieces, for removal (e.g. tenon cutting) or other procedures in which pieces falling off could jam between fence and saw blade, the extension fence is pulled far enough forward for its rear end to be in front of the saw blade.

Flat and narrow workpieces

When handling flat and narrow workpieces the flat extension fence is used. This gives more space to guide the workpiece and the fence can be positioned closer to the saw blade, especially when the saw blade is tilted, without hitting the safety hood.





Flat position of the extension fence

Extension fence height adjustement

3.5.4 Working examples

General

The Altendorf sliding table saw is a universal machine which can be used for different cutting jobs. To do this however it is necessary to equip the machine accordingly.

Tool

The first important point is to only use undamaged saw blades, to correctly adjust the riving knife and to move the upper safety hood so that it is positioned closely above the workpiece to be cut. This last point is also of great importance for correct functioning of the extraction facility mentioned above.

Speed

Ensure that the correct speed is set and after switching on the machine, only begin to push the workpiece forward when the saw blade has reached full speed.

Position of hands

The hands lie flat with the fingers closed on the workpiece; the thumbs are adjacent with a sufficient safety margin to the saw blade.

You will find further notes on safe working in the following description of the individual work processes:

Edge cutting (trimming)

Tool: Ripping circular saw blad

Operation: Mount clamping shoe on the sliding table. Place workpiece hollow side down and press down with clamping shoe. The ball of the right hand is used to apply forwards pressure to the edge of the workpiece. Place hands at a suitable safe distance from the tool.



Ripping of narrow workpieces

(workpiece width < 120 mm)

Tool: Ripping circular saw blade

Operation: Adjust rip fence to the desired cutting width. Lower the safety hood in accordance with the height of the workpiece. Move workpiece against the fence with the sliding table; use the push stick in the area of the saw blade and push the separated workpiece until it is beyond the riving knife. For short workpieces use the push stick right from the start.



Cutting of strips

Tool: Circular saw blade for fine cutting

Operation: Set the aluminum scale of the rip fence to the lower guide surface. Place the workpiece on the sliding table and use your left hand to push it against the rip fence. Move the workpiece forward with the sliding table, using the push block in the area of the saw blade and continue to push the strip until it is beyond the riving knife



Crosscutting of wide workpieces

Tool: Circular saw crosscut blade:

Operation: Place the workpiece against the mitre fence, use the left hand to press it firmly against the fence while moving it forward. When the flip stop is used, this is to be flipped up before pulling the workpiece back after cutting and the workpiece with drawn from the saw blade or the workpiece is only to be removed beyond the rising blade tip.



Concealed cutting, rebating

Tool: Circular saw blade for fine cutting:

Operation: For rebating select the cutting sequence so that the strip cut outfalls away on the side of the saw blade opposite to the fence. Lower the safety hood onto the workpiece and ensure good workpiece guidance (left handpushes the workpiece against the rip fence.



Concealed cutting, routing

Tool: Milling router permitted for manual feeding (maximum width 15 mm).

Operation: Close the table opening by a table strip matched to the milling router. Set the tool to the desired routing depth. Leave the riving knife and the rear tool cover in place. On feeding push the workpiece firmly onto the table (otherwise there is the danger of an unintentional insert process)

For crossrouting of narrow workpieces always use the mitre fence.



Crosscutting against the rip fence

The material is laid against the mitre fence of the cross slide. The desired dimension is set on the rip fence, the extension fence is pulled back to in frontof the saw blade after unclamping it and the item to be cut moved with the sliding table. With the extension fence with drawn the workpiece can not stick between saw blade and fence



Crosscutting short and narrow workpieces

Tool: Circular saw blade for fine cutting:

Operation: Set the magnetic guide piece (not included with the machine) so that workpiece offcuts cannot come into contact with the rising part of the sawblade. Only feed the workpiece using the mitre fence. Do not remove fallen pieces from the vicinity of the tool with your hands



Dividing up large boards

With this operation the dimension can be set either at the rip fence orat the mitre fence. If you wish to cut out many pieces with the same dimensions from a larger board, the best way to proceed is to first cut off parallel strips at the rip fence and then cut these to the desired dimensions. However as soon as the part pieces are greater than the cutting width of the machine the dimension is set at the mitre fence of the machine.





4 Transport

When transporting the sliding table saw with a crane or fork lift (only fixed length forks) only lift the machine a little and protect it from shocks!

4.1 Packing

The transport route is a deciding factor in the type of packing. Unless specifi-cally agreed otherwise, the packing corresponds to the packing guidelines HPE laid down by the German body Bundesverband Holzmittel, Paletten, Ex-portverpackung e.V. and by the VDMA.

The graphic symbols which appear on the packing should be complied with!

4.2 Degree of dismantling

The degree to which the sliding table saw is dismantled is governed by the transport conditions and by the options available on the machine.

Basically the sliding table saw is delivered divided into a number of installationmodules.

4.3 Sensitivity

Particular care should be taken when transporting the sliding table saw to prevent damage from external forces or lack of care when loading and unloading.

During transport buildup of condensation as a result of variations in temperature as well as shocks are to be avoided.

4.4 Storage

If the sliding table saw or the assembly modules are not assembled immediately after delivery they must be carefully stored at a protected location.

When this is done they should be correctly covered so that no dust and no moisture can get in.

The sliding table saw is delivered with a preservative for the bare, non-surface treated parts which protects these parts for around 1 year. If it is stored beyondthis period further preservation measures should be undertaken.

5 Assembly

5.1 Installation of the sliding table saw

Foundation

No special foundation is required at the installation site for the sliding table saw. The floor must have suitable load bearing capacity to take the weight of the machine, it must be even and level. If the machine rocks this should be remedied by putting a machine foot underneath it.

Installation site

The installation site for the machine should be selected so that, taking into account its space requirements and the size of the workpieces to be handled, sufficient free space is available around the sliding table saw. In addition the appropriate safe distances from parts of the building and from other machines are to be adhered to so that there is no danger to the operator or to others of being trapped..

5.2 Sliding table assembly

- Before to assemble the lower carriage, disassembly the Emergency Stop:
 Switch cabinet after loosening the fastening screw rotate
- Position the lower carriage onto the machine frame and screw in place with the outer fixing screws.
 Push up against the stop screws prior to tightening!
- Middle fastening screw loos screw in
- Position the middle carriage onto the lower carriage such that the locking system points to the right
- Push the middle carriage to the right so that the 1st double roller is just resting on the round bars.
- Carefully push on the top carriage ensuring that the top carriage does not and that the guide rods are gently pushed onto the sliding table rollers
- Push the top carriage firmly through up to the stop
- Fit the rear stop and check that the stop on the top carriage and the stopon the bottom carriage simultaneously hit the end position, readjust if nec-essary.
- Middle fastening screw screw tightly
- Check the subrollers settings prior to starting up
- Switch cabinet rotate back and screw tightly

5.3 Installation of table length extension

- Guide the pins of the table length extension into the holes on the face of the table plate
- Secure loosely to the table plate with two M10 nuts and shake proof washers
- Tighten the M10 nuts



5.4 Electrical connection

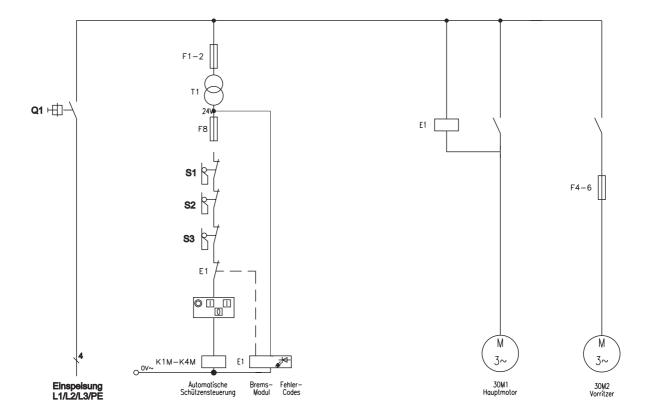
All work on the electrical system, including connection to the power network, may only be performed by an electrical specialist. When working on the electrical equipment the machine must be disconnected from the mains power.

The junction box for the electrical connection of the sliding table saw is fitted at the side next to the machine door. If the machine is connected via a flexible supply line (e.g. machines with travelling gear), a rubber sheathed cable (wire marking H07RN-F) must be used.

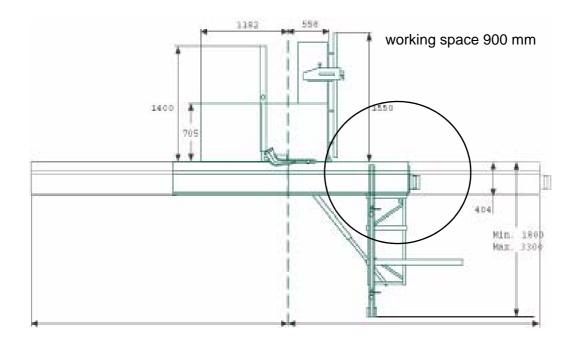
After the lead is connected the direction of rotation of the main saw mo-tor is to be checked by briefly turning the machine on and if necessarycorrected by swapping two external leads in the mains connection box.

Note the arrow indicating direction of rotation on the saw blade cover!

25A fuses are to be provided on the operating side!



Short description	Description
Q1	main switch
F1-2	fuse transformer
T1	transformer
F8	fuse transformer
F4-6	fuse scoring saw motor
E1	control
M1	main motor
M2	scoring saw motor
S1-3	safety limited switch



In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord connector having a grounding plug. The cord connector must be properly installed and grounded in accordance with all local codes and ordinances. Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal. Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded. Repair or replace damaged or worn cord immediately.

USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

		Volts	Total length of cord in feet					
1		120 V	25 ft. 50 ft. 100 ft. 150 ft.					
Ampere	Rating	240 V 50 ft. 100 ft. 200 ft. 300				300 ft.		
More Than	Not More Than	AWG						
0	6		18	16	16	14		
6	10		18	16	14	12		
10	12		16	16	14	12		
12	16		14	12	Not Recommended			
³ Only the applicable parts of the Table need to be included. For instance, a 120-volt product need not include the 240-volt heading.								

The reference to the table and the table itself may be omitted if a statement indicating the appropriate gage and length is incorporated into the instruction.

5.5 Connection of extraction system (customer side!)

The minimum air speed at the extraction connection must be 20m/s. The extraction connection and the hoses are not supplied with the machine!

It must also be ensured that when the machine is switched on the extraction system is also switched on!

5.6 Rip fence

5.6.1 Installing the table length extension

- Guide the bolts of the table length extension into the side holes of the tableplate
- Secure loosely to the table plate with two M10 nuts and shake proof wash-ers
- stove in the slotted spring pins
- Tighten the M10 nuts

5.6.2 Installation of the rip fence

- Guide the stop bar with the threaded bolts into the holes in the table plate
- Install the washers and nuts
- Tighten the nuts
- Install the belt scale
- Push on the fence
- Install the fence scale

6 Machine configuration

The basic machine settings are made in the works during final assembly. Dismantling various modules, transport and assembly at the installation site can mean that it is necessary to correct the machine settings. The machine parts to be checked are described below.

Checking the lower rollers

Lower rollers on sliding table

The lower rollers must move smoothly at the start and end of the running surface over the starting angle. They should be set so that they can be stopped manually by exerting a perceptible force and slide freely while the sliding table is moved.

Adjustment of the lower rollers

The lower rollers are supported eccentrically and adjustable. If they are set too tight the sliding table is hard to move.

Checking the main table

Main table

Place a straight edge on the sliding table, carriage in mid position. Move carriage backwards and forwards, main table must lie about 1/10mm lower.

Adjustment of the main table

Loosen the locknuts on the 4 fixed bolts, adjust the table plate, tighten the nuts. Then lay the straight edge in parallel to the sliding table on the main table.

6.1 Free cut adjustment of the sliding table

Checking

Free cut adjustment of sliding table

Set saw blade to max. cutting height, cut a short piece of a test piece (where possible MDF) at the mitre fence. The difference in the noise between the cutting and non-cutting teeth allows you to determine whether the sliding table is set correctly. On the passage of the rising teeth a slight fluttering noise should be heard compared to the noise of the cutting teeth.

Adjustment

Release the sliding table attachment at both ends **and** in the middle (where present). Release the lock nuts on the fence screws. Make the appropriate adjustments and retighten the lock nuts. Then readjust the sliding table and tighten all securing screws again.

6.2 Free cut adjustment of the rip fence

Checking

Free cut adjustment of rip fence

Set saw blade to max. cutting height, cut a short piece of a test piece (wherepossible MDF) at the mitre fence. The difference in the noise between the cutting and non-cutting teeth allows you to determine whether the sliding table is set correctly. On the passage of the rising teeth a slight fluttering noise shouldbe heard compared to the noise of the cutting teeth.

Adjustment

Release the bolts connecting the table extension to the circular rod. Then, by adjusting the center locknuts, change the position of the circular bar and there by of the rip fence.

When a scorer is used ensure that both free cuts are set to approximately the same!

6.3 Adjustment angle cut

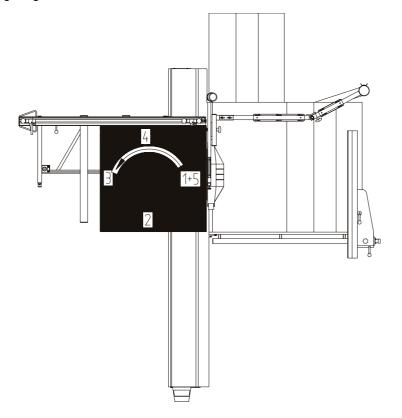
Checking

Angle cut

Before the angle cut is checked the adjustment of the sliding table must be checked and corrected if necessary.

The angle cut is checked at the mitre fence as follows:

A sharp quality saw blade, D = 350 mm/ 3.5/2.5/72 teeth alternate teeth, at n=5000 r.p.m. is used as a tool. Take a 1000x1000 mm plank or sheet of MDF, thickness at least 19 mm. Make 5 cuts (see Fig.), laying the last cut side against the mitre fence for the next cut (turn the board in a counter clockwise direction). On the 5th cut, cut off a strip about 10 mm wide. Measure the width of the strip at both ends with a gage. The difference between the two dimensions divided by 4 gives the angular error per meter cutting length.



The angle cut must be checked at last 2 different positions of the mitre fence on the sliding table.

Adjustment

The mitre fence is clamped in the position shown in the illustration (appr. 300mm from the end of the table) and in a further position (appr. 1300 mm from the end of the table). In these two positions the angle cut is checked and ad-justed, as described above. The adjustment may not exceed an allowablemax. tolerance of **< 0.2 mm** (on the 5th cut (dimension 1 - dimension 2)).

6.4 0° position of the saw blade

Checking

Lay 2 strips (appr. 70 mm wide) on edge in front of the mitre fence, cut them in this position and push the cut surfaces together. If the setting is exact, the cut edges are parallel, i.e. there is no air gap detectable between the cut edges.

Adjustment

Recalibrate the machine!

7 Machine operation

7.1 Tilting

By turning the right handwheel, tilt adjustment is actuated. The tilt angle is displayed on the left side over the handwheels.



Before tilting the saw blade it is vital to note the following points:



- Free the main table in the tilt area of the workpiece
- Move the stop profile of the rip fence into the flat position for a cutting width<130 mm!
- Use the wide safety hood!

7.2 Height adjustment

By turning the left handwheel at the side wall of the machine, the height adjustment is actuated.



7.3 Changing the main saw blade



The following basic points should be noted:

- Do not fit any saw blades that have cracks or are damaged in any otherway.
- Only fit saw blades with a diameter of between 250 and 315 mm (350/400) mm
- Check that the speed set for the saw blade is not too high. For composite saw blades the highest permitted speed is shown on the blade in the formn Max =....

Please note that only saw blades with adjacent holes (2 holes 10 mm ø spaced at 60 mm) can be tensioned. This is necessary to prevent the saw blade securing system becoming loose during braking.

Changing the saw blade

- Switch off the drives
- Set the saw blade to the upper height position and tilt it to 0°
- Switch off the main switch
- Guide the top carriage in the cutting direction, release the lock in the middle of the saw blade by pressing the ball button on the middle carriage
- Move the top carriage to the end in the cutting direction
- Hinge up orange colour base plate
- Bring bore holes in front flange into a vertical position
- Secure saw blade against with retaining pin (bore hole for this purpose in machine table and saw shaft)
- Loosen saw shaft nut by turning clockwise (left-hand thread
- Prior to fitting the new saw blade remove any adhering chips and dust from both flanges
- Fit the saw blade and the front flange onto the saw shaft and tighten the saw shaft nut counter-clockwise
- Remove retaining pin
- Check that the thickness and spacing of the riving knife matches the saw blade
- Close the bottom protection covering and check by way of a brief trial run that the saw blade runs correctly. For this operation lower upper circular saw safety hood down to the table so that the saw blade is fully covered.

After the saw blade has been changed it is vital to make the correct riving knife adjustments!

7.4 Saw blade recommendation

- When selecting tools ensure that no blunt or damaged tools are fitted.
- The highest permitted speed specified on the tool may not be exceeded.
- HS saw blades may not be used!
- The tools must have a hole diameter of 30 mm and driving pin holes of 10mm Ø in a 60 mm Ø semicircle.
- The correct choice of saw blade depending on the material to be handledand the strength of the material is vitally important, along with the correct cutting speed for clean cutting and low stress on the operator. A selection of saw blades for the Altendorf sliding table saw is shown in the following table. This table makes no claims to be complete. Since the figures for the cutting speed cover large ranges in some cases it is vital to determine the best cutting speed for optimum cutting results by trial and error!

Materials	Cutting speed [m/s]	Saw blade D = 250mm	Saw blade D = 315mm	Saw blade D = 350mm	Saw blade D = 250mm	Saw blade D = 315mm	Saw blade D = 350mm
Softwood lenghtwise	60 - 80	24 W	28 W	32 W	40 W	48 W	54 W
Softwood crosswise	60 - 80	40 W	48 W	54 W	48 W	60 W	72 W
Hardwood lenghtwise	60 - 80	24 W	28 W	32 W	40 W	48 W	54 W
Hardwood crosswise	60 - 80	40 W	48 W	54 W	48 W	60 W	72 W
Veneer	70 - 80	60 W	72 W		80 W	96 W	
Plywood	50 - 70	40 W	48 W		48 W	60 W	
Blockboard	60 - 80	48 W	60 W	72 W	60 W	72 W	84 W
Laminated wood	50 - 80	40 W	48 W	54 W	60 W	72 W	84 W
Raw chipboard	60 - 80	48 W	60 W	72 W	60 W	72 W	84 W
Coated chipboard	60 - 80	60 TF	72 TF	84 TF	80 TF	96 TF	108 TF
MDF raw board	60 - 80	48 W	60 W	72 W	60 W	72 W	84 W
Laminated MDF	60 - 80	60 W	72 W	84 W	80 W	96 W	108 W
Laminate flooring	50 - 70	60 TF	72 TF	84 TF	80 TF	96 TF	108 TF
Hard fiberboard	60 - 80	60 W	72 W	84 W	80 W	96 W	108 W
PVC-Profile *	40 - 60	60 TF	72 TF	90 TF	48 DD	60 DD	72 DD
Plexiglas	40 - 50	60 W	72 W	84 W	80 WF	96 WF	108 WF
Gypsum	40 - 60	48 W	60 W	72 W	60 W	72 W	84 W
Aluminium-profile *	60 - 70	60 TF	72 TF	90 TF	80 TF	96 TF	108 TF

Short cuts

- * negative tensioning angle
- W alternate, tooth with bevel
- TF trapezoidal flat tooth

Saw blad diameter 350mm not in all versions possible!

Scoring saw

Scorer saw blade: D=120 mm, 24 teeth, flat tooth, arbor diameter 22 mm

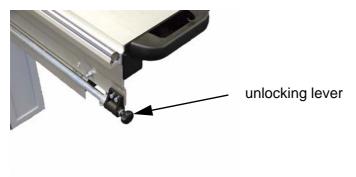
Riving knife

The riving knives supplied are suitable in size for the range of saw blade diameters specified in the table. The corresponding range is specified on the bottom end of the relevant riving knife.

The thickness of the riving knife is however only correct where the blades concerned are commercially available carbide-tipped saw blades. For CV saw blades other riving knives are required.

7.5 Table locking

The sliding table lock automatically blocks the sliding table in its end position, so that the items for cutting can be pushed against the mitre fence without any un desired movement of the easy to move sliding table. The table is unlocked by turning the lever at the end of the upper carriage by hand.



With an additional locking adjustment the sliding table can be blocked in its center setting with the carriage lock.

7.6 Switching drives on and off

Before switching on the machine ensure that all the necessary protective de-vices for the relevant operation are fitted and operational. Also check that thesaw blades are correctly tensioned and that there is no workpiece or other ob-jects in their vicinity. Check that the correct speed for the saw blade and forthe operation to be performed has been preselected. Check by switching onbriefly that the circular saw blade is rotating in the right direction.

Ensure that when you switch the machine on you are simultaneously switchingthe extraction system on.



7.7 Motor protection

If the motor protection cuts in it is a sign that the motor is being overloaded and the cause must be identified and rectified before the machine is switched backon (e.g. blocking of the drive by a jammed workpiece, feed too great or failure of a mains phase).

The drive motors are protected against overload by a coil protection. If the motor gets too hot this automatically switches the motor off. Note here that for machines with scorers this drive is switched off as well, even if this motor was not overloaded. The machine cannot be switched back on until the motor has cooled down. The motor can take several minutes (max. 10 minutes) to cooldown!

7.8 Scoring saw

The Altendorf scoring saw was developed to enable boards coated on both sides to be cut on the underside without damage.

The material is only cut into by around 1-2 mm by the scorer or the underside and then separated from the main sheet. The blade of the scorer must be precisely aligned to the main blade and set to the corresponding width.

- Two-piece scorer blades are to be recommended which are adjusted to the required blade strength by insertion of distance pieces. The cutting widths of the scorer blades should be at least. 1/10 mm wider than those of the main blades, i.e., 5/100 mm to each side. In addition the two scorer blades should feature driver pins and the width should be printed on the spacers.
- The scorer saw can only be started after the main saw has reached its operating speed (after around 5 seconds.), by pressing the white button I which is also located in the panel and identified by the symbol for the scoring saw.

Adjustment

Height and lateral adjustments are made mechanically and can be performedwhen the machine is running.





Height adjustment

Lateral adjustment

7.8.1 Saw blade change

The description of saw blade change only applies to divided scorer saw blades and also to saw blades with stepless cutting width adjustment. Only use sawblades with a diameter of 120 mm and 22 mm arbor diameter

- Switch off the drives
- Move scoring saw into its highest position
- Move sliding table in cutting direction
- Unlock the lock in the middle of the saw blade by pressing the spherical button on the center carriage
- Move the sliding table into its end position in the cutting direction
- Raise lower protective hood (orange hood)
- Release the securing screws by turning them to the left
- Before fitting the new scorer saw blade clean off any sawdust adhering to the two flanges
- Place the saw blade and front flange on the saw drive shaft and tighten the nut in a clockwise direction

In addition the following points should be noted when using **RAPIDO** scorer saw blades with stepless cutting width adjustment:

- Ignoring the operating instructions reduces operational safety impermissibly and leads to exclusion of liability
- max. speed = 9000 rpm
- Permitted cutting width 2,8 3,8 mm
- The adjuster unit must be unpacked and packed with particular care, danger of injury!
- Only store the adjuster unit in its original packing!
- The scorer saw blade must be installed outside the machine
- All connecting elements must be installed
- If the connecting elements are lost or damaged only original spare partsmay be used as replacements!

7.8.2 Adjustment of the saw blade width of the scoring saw

Standard saw blade

- Use spacers to bring the scorer saw blade to the width which is 0.1 mm greater than the width of the main saw blade
- Set the alignment of the scorer to the main saw first on the table plate side
- Test cut
- Set the alignment on the left side by adding or removing intermediate rings

Saw blade with stepless cut width adjustment RAPIDO

For adjustment only use the provided tools!

- Release the clamping screw, appr. 2 turns
- Turn the spindle until the desired dimension is reached. (1 turn = 0.5 mm)
- Tighten the clamping screw
- Test cut, if necessary correct the cutting width again as described above.





release the clamping screw

turn the spindle

Replace scoring saw blades for RAPIDO

 Take the adjuster unit off the machine; the clamping screw may have to bereleased since a tightened clamping screw can cause the adjuster unit tojam on the shaft!

Dismantling

With allen wrench:

 Release clamping screw (1) appr. 3-4 turns, rotate spindle (2) clockwise until the flange (3) can be pulled away from holder (4)

With internal torx key:

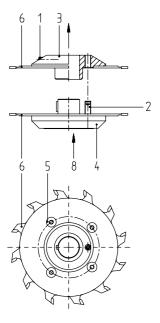
- Unscrew screws (5)
- Remove circular saw blade (6)
- Fully clean flange (3) and screws (5). The running and flange surfaces must be clean and dust free.
- Fit a new circular saw blade, note direction of rotation and arbor image when fitting: The circular saw blade (6) lies flat on the flange (3)and the protrusion on the circular saw blade points to the contactsurface
- Screw in screws (5) and tighten to a torque of 8,6 Nm
- Proceed in the same way with the other half of the adjuster unit

Assembly:

Do not oil or grease

- Clamping screw (1) is released
- Place flange (3) horizontally on the holder (4) so that the spindle (2) engages in threaded hole (7)
- Use the hexagonal key to turn the spindle (2) in a counterclockwise direction. The flange (3) will be pulled into the holder (4) no additional force may be used here.

- Continue to turn spindle (2) until the two halves of the circular saw blade are lying against each other
- Install the adjuster unit on the machine
- Setting the cutting width, see above
- Only turn clamping screw (1) slightly





8 Troubleshooting

There is generally an increased danger involved in troubleshooting. Therefore you should make sure that you take particular care when performing the actions required.

Bug fix	Cause	Remedy
Machine cannot be switched on	The main switch is not switched on	Switch main switch to position "I"
	Mains failure or failure of a phase	Wait for power to return or remedy cause of power failure (e.g. defective operational side fuses)
	Overload protection has triggered	Wait for motor to cool dow
	Sliding table moved beyond middle of saw blad	Pull sliding table back in front of saw blade
	EMERGENCY OFF button active	Release the EMERGENCY OFF button again by pulling it
Machine cannot be switched on	Lower protective cover in front of the saw blades opened	Close door or lower protective cover
	Control circuit fuses defective	Switch off the main switch, open switching cabinet and determine which of fuses F1, F2, F8 is defective. Clarify and remedy cause. Replace defective fuses, use fuses of the same ratings as replacements!
Machine switches off by itself during operation	Power failure in one or more phases through activation of the operational side fuses	Remedy cause of phase failure
	Overload protection trig- gered by blunt saw blade or feeding the workpiece too quickly	Change saw blade or reduce feed speed. Wait for motor to cool down
	Control circuit fuses defective	Switch off the main switch, open switching cabinet and determine which of fuses F1, F2, F8 is defective. Replace defective fuses, use fuses of the same ratings as replacements!
Workpiece sticks on feeding	Blunt saw blade	Tension sharp saw blade
	Thickness of riving knife does not match saw blade being used	Fit correct riving knife with a thickness greater than or equal to the master blade thickness of the saw blade
The finished dimension of the cut workpiece does not correspond to the cutting width set at the rip fence	Scale for cutting width display incorrectly adjusted	Readjust scale. Cut workpiece at rip fence, measure cutting width and move measuring scale so that the measured cutting width is shown on the edge of the straightedge.

Bug fix	Cause	Remedy
The finished dimension of the cut workpiece does not correspond to the cutting width set at the crosscut fence	Scale for cutting width display incorrectly adjusted	Readjust scale. Cut workpiece at crosscut fence, measure cutting width and move measuring scale so that the magnifier display matches the measured cutting width.
Tilt arm moves jerk- ily	Telescopic tube or track rollers dirty	Clean telescopic tube or track rollers; Test stripper
Sliding table has sideways play	Lower rollers incorrectly adjusted	Adjust lower rollers
Sliding table in end positions higher than machine table	Lower rollers incorrectly adjusted	Adjust lower roller
Saw blade burns on the sliding table side	Insufficient free cutting space of sliding tabl	Adjust free cut
	Free cut adjustment of rip fence too great	Adjust rip fence
Saw blade burns on the rip fence side	Insufficient free cut of the rip fence	Adjust free cut
Saw blade burns on both sides	Saw blade burns on both sides	Adjust free cut
	Workpiece sticks	Place wedge in cut or use thicker riving knife
	Operating error	Feed workpiece left or right on fence. When cutting with the sliding table do not fed the workpiece at the rip fence.
Workpiece has burn marks	Blunt saw blade	Changing the saw blade
	Feed too slow	Increase speed of feed
	Saw blade has too many teeth	Change saw blade
	Incorrect free cut	Adjust free cut
Tears instead of scorer	Scorer not aligned with main saw	Adjust free cuts; the free cut should be almost "0"
	Scorer blade too narrow	Set saw width blade
Workpiece lifts when cutting with the scorer	Scorer blade blunt	Replace
	Cutting height too small	Set blade higher



9 Service

Before performing any maintenance always switch off the main switchand prevent it from being switched on again!

Regular cleaning of the machine extends its working life and is also a requirement for problemfree cutting. The sliding table saw should therefore, depending on how dirty it is, be cleaned at least once a week. Theparticular are as affected are:

the machine table
the sliding table
the sliding table guides
the tilting segments
the bar of the rip fence
the interior of the machine
the machine environment

Sawdust and dust adhering is removed with a vacuum cleaner. To remove resin residues it is best to use a cleaning solvent. It is essentialthat parts treated in this way are treated afterwards with an oil-soaked-cloth to avoid the buildup of rust.

The sliding table guides are to be cleaned regularly. If contaminated with resin, the guides are to be cleaned with petroleum and possibly using Scotch Brite pads for example. It is not advisable to use steel woolor sandpaper since this than irreparably damages the guide tracks.

Before using a solvent and cleaner you must make sure that this substance will not cause any damage to the lacquered, anodized or zincplated surfaces as well as to plastic parts. You can obtain information about this by consulting the safety data sheets for this substance (obtainable from makers of solvents or cleaners).

9.1 Lubrication

9.1.1 Saw drive shaft

The bearings of the main saw shaft and the scorer saw shaft are sealed for life so that no subsequent lubrication is needed.

9.1.2 Tilt segments

The tilt segments are to be cleaned and lubricated on a regular basis. The intervals for such work (2 weeks) depend on the period of use.

9.2 Brake

The electronic brake of the main saw unit is not subject to wear!

10 Customer service - spare parts

Holding a stock of the most important spares and parts that wear out is an important prerequisite for the ongoing function and availability of the sliding table saw.

To order spare parts please use the spare parts list.

The spare parts codes entered in the spare parts list provide further information.

We only accept a guarantee for original spare parts supplied by us.

We would explicitly point out that spare parts and accessories not originally supplied by us are not tested and released by us. Fitting and/or use of such products can therefore under some circumstances negatively affect the characteristics specified by the construction of the sliding table saw and thereby adversely affect active and/or passive safety. No liability or warranty claims are accepted by Wilhelm Altendorf GmbH & Co KG for damage arising fromuse on non-original spare parts.

Please note that there are often special manufacturing and delivery specific-tions for own and third-party parts and that we always supply you with spareparts to the latest technical specification and in line with the latest official regulations.

the latest official regulations.	
When ordering spares please quote the following information:	

Machine number.

Article-No.

Our address for spare parts sales and customer service::

Wilhelm Altendorf GmbH & Co KG Service department

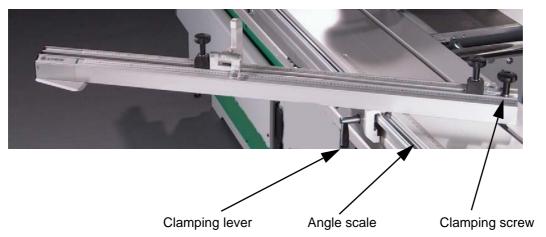
Wettinerallee 43 / 45 Postfach 20 09

D-32429 Minden D-32377 Minden

Telefon:+49 571/95500 Telefax:+49 571/9550111

11 Single-sided mitre fence

The eccentric clamping system of the fence allows it to be fast and easily fitted to the sliding table. Max. length to cut: 2500 mm. The throw-over stops are of a sturdy, backlash-free and easy adjusting design. DDimension scales are inclined to enhance visibility for the operator.



Changing:

- Pull up the clamping lever and the clamping screw to loosen
- Adjust the angle
- Apply light pressure and push down the clamping lever and tighten the clamping screw to clamp

12 Double-sided mitre-fence DUPLEX

Basic settings



Abb. 12-1: Test cut

- Set the DUPLEX to a 90° angle and lock it
- Set the first stop to a distance 200mm from the saw blade and fix it
- Cut test piece and measure it (for example 201mm)



Abb. 12-2: Adjustment flip stop

- Adjust the scale of length so that the marker of the magnifying glass corresponds to the test reading (201mm). The scale can be adjusted by exerting slight pressure on its center point and moving it
- Adjust flip stop to 200 mm



Abb. 12-3: Adjustment scale

- loosen scews of the compensation scale with Allan key 2,5
- Remove scale of length compensation so that the 0° mark corresponds to the marker on the flip stop
- Tighten screws of compensation scale with Allan key 2,5mm

THIS PROCESS GOES FOR BOTH SIDES!

Cutting using length compensation

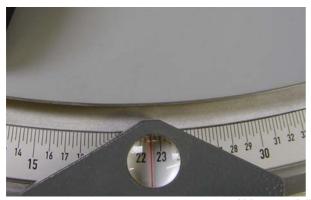


Abb. 12-4: Adjustment angle

Adjust cutting angle according to scale, for example 22,5°



Abb. 12-5: Adjustment flip stop

Adjust marker on stop holder to the same angle

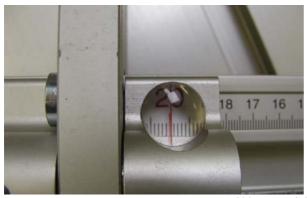


Abb. 12-6: Adjustment scale

- Adjust scale of lenght so that the marker of the red reference point "20" corresponds to the marker on the magnifying glass
- The scale of length has now been adjusted to the corresponding angle of 22,5°
- Now the requested measure of length can be adjusted