

Circular saw (RT/WS/TWS)



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Read the operating instructions carefully before
commissioning the machine!

This manual is valid for:

Model	Article number
RT E	KS-MRT-4
WS700 Z (PTO)	KS-MWS-5
WS700 E	KS-MWS-7
WS700 KE (E+V-belt)	KS-MWS-4
WS700 EZ (E+PTO)	KS-MWS-6
TWS700 Z (PTO)	KS-MTW-1
TWS700 E	KS-MTW-2
TWS700 EZ (E+PTO)	KS-MTW-3
TWS700 KE	KS-MTW-4

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2 Safety instructions


2.1 Explanation of symbols

Please pay attention to the meaning of the following symbolic explanations and instructions description. They are divided into levels of risk and classified in accordance with ISO 3864- 2

DANGER	
	<i>Indicates an immediate threat of danger. If the information is not followed, death or serious bodily injury (invalidity) is the result.</i>






WARNING	
	<i>Indicates a potentially dangerous situation. If the information is not followed, death or serious bodily injury (disability) are the result</i>

CAUTION	
	<i>Indicates a potentially dangerous situation. If the information is not followed, material damage as well as minor or moderate physical injuries are the result.</i>

NOTICE	
	<i>Indicates general instructions, useful operator instructions and working recommendations that have no influence on the safety and health of personnel.</i>

2.2 Pictograms and their meaning

	<ul style="list-style-type: none"> • Read the operating instructions carefully before commissioning! • During operation, wear ear protection class 3M and safety goggles for mechanical hazards! • During operation, safety shoes (with steel toe cap) of safety class S1 must be worn! • Wear category II gloves during operation. • WARNING! from hot media • WARNING! There is a danger of cutting and crushing. • Keep a distance from the operating personnel of the machine to avoid distractions and mistakes.
	<ul style="list-style-type: none"> • Switch off the machine before maintenance work and secure it against being switched on again. • Machine may only be serviced by one person • Let the machine cool down before maintenance work

	<p>Indicates the direction of rotation of the engine or the direction of rotation of the PTO shaft!</p>
	<p>Marks a lubrication point</p>
	<p>Marks the cutting line!</p>
	<p>Indicates in which position the engine brake is applied or released!</p>
	<p>Indicates the saw blade diameter and the maximum speed!</p>

2.3 General safety instructions

The machine may only be operated by people who are trained, instructed and authorised for its use. These people must know the operating instructions and act in accordance with them. The respective competences of the operating personnel are clearly defined.

Operating personnel undergoing training may only initially work with the machine under the supervision of an experienced person. The completed and successful instruction is to be confirmed in writing

2.4 Intended use

The circular saws are designed exclusively for cutting firewood to length. All other forms of usage do not comply with the intended use. The manufacturer is not responsible for any personal injury or material damage that originates from non-compliant usage, but rather the operator of the machine is!

The reading of this manual as well as the observance of all instructions contained within it, particularly the safety instructions, also comply with the intended use. Also included is the fact that all inspection and servicing work is to be conducted in the prescribed time intervals.

2.5 Operator requirements

No special knowledge of mechanical or electrical engineering is required to operate the machine. However, the operator must be at least **18 years** old. The operator must be trained and instructed accordingly by the operator of the machine before starting work for the first time (see General safety regulations). Protective shoes and close-fitting clothing must be worn when operating the machine.

If the operator carries out maintenance and servicing work, he must have the necessary specialist knowledge.

2.6 Modifications to the machine

For safety reasons, no unauthorised modifications may be made to the machine; this applies in particular to welding work on load-bearing parts.

Only use original spare parts / original wear parts / original accessories - these parts are specially designed for the machine. In the case of externally sourced parts, there is no guarantee that they are designed and manufactured to withstand stress and safety.

Parts and special equipment not supplied by us are also not approved by us for use on the machine.

2.7 Misuse and residual risks

Despite correct application of all safety instructions for the machine, residual risks can still occur. These usually result from misuse of the machine.

- Touching rotating or moving components
- Injury from falling wooden or machine parts.
- Fire hazard due to inadequate ventilation of the engine
- Hearing damage from working without hearing protection
- Human error:
 - Mental overload
 - Excessive physical exertion
 - Entering a danger zone
 - Distractions
 - Neglected control activities

3 Description of the machine

3.1 How it works

The Binderberger circular saws (RT/WS/TWS) are ideal for the production of firewood for domestic use. Developed for efficient firewood cutting and equipped with a high level of operating comfort, we produce our circular saws in a wide variety of designs and with different drive variants.

Our components are galvanised or powder-coated and thus offer a very long service life with correct operation and maintenance.

The firewood is cut by means of a rocker function or, in the case of the roller table circular saw, by moving the table. To extend the operating versatility, the table rocker saw can also be used for edging wood.

3.2 Overview



Roller table saw RT



Table rocker saw TWS700




Rocker saw WS700

3.3 Technical data

Type	WS 700	TWS 700	RT
Weight electric [kg]	170	215	180
Weight PTO [kg]	180	295	-
Weight [kg]	250	355	-
Working height [mm]	850	890	890
Cutting diameter and cutting height [mm]	240	230	215
Min. Cutting diameter [mm]	30	30	70
Diameter Saw blade [mm]	700		
Borehole diameter [mm]	30		
Connection cable [V]/[A]	400/16		
Motor power	5,5kW with 60 %		
Electric motor speed [rpm]	1450		
Power take-off speed [rpm]	440		
Table size L x W in [mm]	-	1300 x 1000	1380 x 840

4 Transport of the machine

4.1 Safety instructions during transport

WARNING	
	<p style="text-align: center;"><u>Risk of injury during transport!</u></p> <ul style="list-style-type: none">• Make sure that there are no persons in the danger zone and that a sufficient safety distance is kept!• The machine may only be lifted at the designated holding points!• The specified position for transporting the machine must be strictly adhered to

4.2 Manual journeys and trolley transportation

If you want to transport the circular saw manually, there are two hand levers on the back of the saw. Swing them upwards. Now you can move the circular saw to the desired location. To swing the hand levers back down, push them slightly apart. This unlocks them and the levers can be swivelled downwards.

A transport trolley is available for the TWS 700 Z and TWS 700 EZ circular saws. Due to the heavy weight of the saw, this has been given to the machine instead of the hand levers. It only needs to be inserted into the rear of the holder. You can then lift the circular saw and transport it without great difficulty.



4.3 Transport journeys and journeys in public roads

For the time being, follow the instructions for decommissioning.

If you want to transport the circular saw with the tractor, make sure that it is properly attached to the 3-point of the tractor. For the WS 700 EZ, TWS 700 Z and TWS 700 EZ circular saws, you must first remove the circular saw from the tractor and fold up the lower link plate. Secure it with the hook next to the upper link. Now hitch the circular saw to the lower link pin near the circular saw and to the upper link. After each hitching check that the upper and lower link pins are secured with a cotter pin. In addition, the tractor must be designed for the total weight of the circular saw.

When driving on public roads, the legal regulations must be observed!

- Keep reflectors and lamps clean.
- When driving the vehicle, the driving speed must be adapted to the ground conditions. In this way, you protect the circular saw from strong vibrations that have an unfavourable effect on the joints.
- Be aware of reduced steerability due to the heavy weight.


4.4 Loading and load securing

To avoid machine damage or life-threatening injuries when transporting the machine on a trailer, it is essential to observe the following general points:


- The specified position for transporting the machine must be strictly adhered to.
- Use anti-slip mats and at least two lashings.
- Pay attention to the correct lashing angle
- Calculate the actual number of lashing straps for the tensioning means and ground friction value you are using.
 - Pay attention to the specified weight of the machine.

5 Set up of the machine

5.1 Safety instructions for set up

<h1>WARNING</h1>	
	<p><u>Risk of injury if the machine is not set up correctly!</u></p> <ul style="list-style-type: none">• Always check the machine for transport damage before setting it up!• Set up the machine on a level and firm surface!• Ensure that no persons are endangered by the installation!• Lay machine connections and cables in such a way that there are no tripping hazards!• The machine may only be operated when in perfect condition!

5.2 Duties before starting work

<h1>NOTICE</h1>	
	<p><u>Carry out the following activities before starting work:</u></p> <ul style="list-style-type: none">• Assembly and connection must be carried out according to the instructions.• Check all bolts and screw connections for tightness before starting work.• At outdoor temperatures below 0°Celsius, let the machine run for approx. 10 minutes at idle speed without load.

5.3 Electrical supply line

The fuse and dimensioning of the electrical supply line must be selected by a qualified electrician in accordance with national standards and depending on the length of the line!

Connect the 5-pole CEE 400V/16A supply cable to the plug.

Never carry out work on electrical equipment if you do not have the necessary expertise!

5.4 Starting in electric drive

Connect the supply cable to the plug provided on the machine.

Now switch on the motor using the green switch-on button or the star-delta switch.

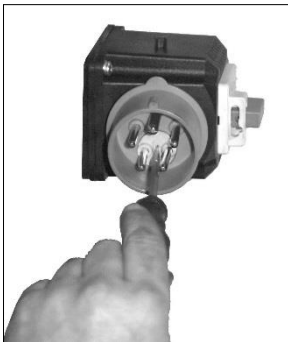
Switching from star to delta connection may only take place after the motor has run up to its rated speed. If the switchover is made too soon, a strong current surge will occur and overcurrent protection devices may respond.

Check the direction of rotation of the motor as described in the following chapter "Checking the direction of rotation of the motor".

The motor can be switched off at the red switch or at the star-delta switch.

5.5 Check the direction of rotation of the motor (Electric drive only)

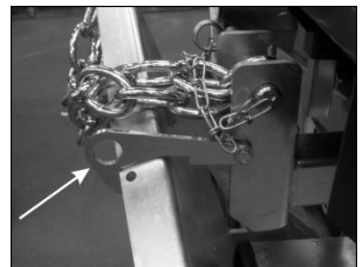
Switch on the motor only briefly and check the direction of rotation on the fan blades of the motor. The correct direction of rotation is indicated by the sticker on the fan cover of the motor. If the direction of rotation is not correct, disconnect the supply cable to the circular saw.



There is a phase inverter in the plug with which you can change the direction of rotation of the motor (press the disc in the plug with a screwdriver and turn it 180°).

5.6 Converting the circular saw for PTO drive

There is a hook next to the upper link. Lift it up. This allows the lower link plate to be swivelled downwards. Swivel the support bracket upwards and secure it with the upper link pin. Now you can hang the circular saw on the 3-point of the tractor.

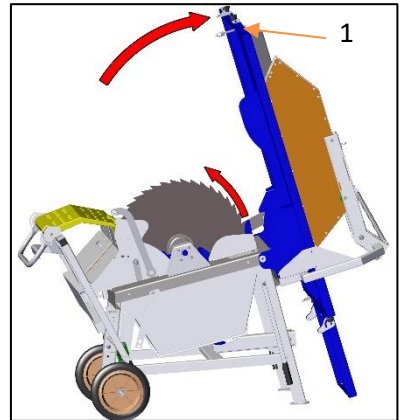


However, the circular saw should not be transported in this way under any circumstances. Reassemble the circular saw for transport.

5.7 Table- rocker saw

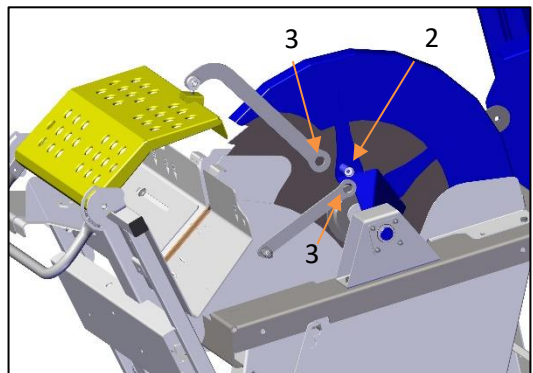
To convert a table rocker saw from table operation to rocker operation, proceed as follows:

Be sure to disconnect the circular saw from the power source (electric or tractor drive) first and let the saw blade run out. Once safety has been ensured, the table's fastening screw (1) can be loosened and the entire table lifted and folded back. The table locks into its raised position and is thus secured.



In order to cover the open circular saw blade again, a rotation protection is installed in the lower saw blade area. This can be carefully unscrewed in the direction of rotation of the saw blade.

To fix the anti-turn device (2), it must be connected to the rocker linkage (3). Join the three marked points and secure the connection with a locking screw attached to a chain.



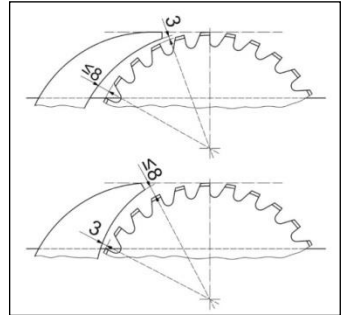
The circular saw can now be used in rocker mode.

To convert from rocker to table operation, proceed in reverse order.

5.8 Adjusting the seaming wedge (TWS700)


Before you start cutting with the circular saw, the riving knife must be properly adjusted. Make sure that its tip reaches at least the highest point of the saw blade.


In addition, the distances to the saw blade must be maintained according to the drawing below. This means that the distance must be at least 3 mm and a maximum of 8 mm.




6 Operation

6.1 Safety instructions during operation

DANGER	
	<p><u>Risk of injury from being caught or pulled in on moving machine parts!</u></p> <ul style="list-style-type: none">• Keep a sufficient safety distance from moving machine parts!

WARNING	
	<p><u>Risk of injury when operating!</u></p> <ul style="list-style-type: none">• Make sure that there are no persons in the danger zone and that a sufficient safety distance is maintained!• Familiarise yourself with the controls of the circular saw!• Ensure that the machine is standing securely!• Do not press the firewood against the saw blade with momentum!• Remove all parts that do not belong to the machine from its vicinity. (tripping)• Wear protective gloves and safety shoes with steel toecaps.• Wear safety goggles and hearing protection.

6.2 Important instructions during operation

<h1>NOTICE</h1>	
	<ul style="list-style-type: none">• The operating personnel must ensure that no unauthorised persons are in the working area of the machine.• Before switching on the machine, inform yourself about the correct behaviour in case of malfunctions.• Before switching on the machine, carry out the points listed in the chapter "Duties before starting work".• After switching off the machine, always carry out the work steps in the following chapter "Decommissioning".• If the operator leaves the machine unattended, it must be switched off and secured against unauthorised restarting.• Pay strict attention to the safety distance when working under power lines. No part of the machine may come closer than the specified safety distances:<ul style="list-style-type: none">➤ For low-voltage lines: min. 2 metres➤ For high-voltage lines: min. 6 metres

6.3 Stop function on Z and EZ circular saws (Important!)

(only circular saws with PTO drive)

All circular saws with PTO drive or electric motor PTO drive are equipped with a mechanical stop function. When this function is triggered, the power flow between the PTO/electric motor and the saw blade is interrupted, the automatic brake is applied and the circular saw blade comes to a stop.

**Do not use the lever for normal machine shutdown.
Use only in case of malfunctions.**

In normal operation, whether with PTO or electric motor, the hand lever must always be engaged at the bottom.

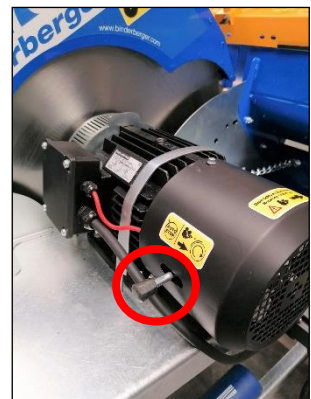
If the stop function has been used and the fault has been rectified, the lever may only be returned to its basic position **when the machine is switched off.**

6.4 Release brake

(for electric circular saws)

With electric circular saws, it is possible to release the motor brake when the machine is switched off.

There is a lever on the electric motor for this purpose. In practice, however, this function is not needed.



6.5 Cutting firewood with rocker and table rocker saw

Set up the circular saw. Follow all instructions in the chapter "Set up the machine".

Cutting firewood is only permitted in rocker mode, not in table mode.

Before the first cut, test whether the rocker returns by itself after being pushed forward. If this is not the case, correct the error before starting work. Now place a piece of wood in the rocker. Make sure that the longer part of the sawn timber is to the left of the saw blade on the longer part of the rocker. Now move the rocker forward with both hands on the bracket on the rocker and cut through the wood. Do not push the rocker into the saw blade with momentum. It can happen that the saw blade gets caught in the wood. This can destroy the saw blade and also tear the motor out of its holder. **This poses a very high risk of injury.**

We are not liable for injuries and damage resulting from improper handling.

6.6 Cutting firewood with roller table saw

Set up the circular saw. Follow all the instructions in the chapter "Set up the machine".

Before the first cut, test whether the table returns by itself after being pushed forward. If this is not the case, check the return spring under the table and the bearings before starting work.

Now place the wood on the roller table. Hold the wood with the wood holder. Now push the table forward so that the wood is cut through. Do not push the table into the saw blade with momentum. It can happen that the saw blade gets caught in the wood. This can destroy the saw blade and also tear the motor out of its holder. **This poses a very high risk of injury.**

We are not liable for injuries and damage resulting from improper handling.

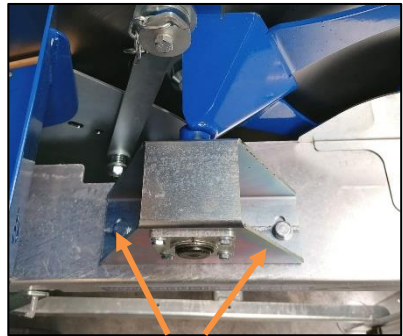
6.7 Hemming wood

(only Table- rocker saw)

Set up the circular saw. Follow all the instructions in the chapter "Set up the machine".

Set the rip fence and also the hem guard as shown in the chapter "Table-rocker saw"

Place the wood on the table and press it lightly against the rip fence. Be sure to use a push stick if the wood is narrow. Push the wood through the saw blade with feeling. Make sure that you do not tilt the wood during the cut and remove it from the table immediately afterwards. Clear the table of leftover pieces before continuing.



1

If you have to do a lot of rip cutting, take a break in between so that the motor can cool down.


If you want to hem on the table rocker saw, it is advantageous to remove the rotation protection for the rocker saw, otherwise it will fill up with sawdust very quickly. To do this, fold the table upwards and swing the rotation guard up. Then undo the two screws (1) and lift the guard away.


6.8 Daily inspection


Visually inspect the unit. Look for faults and defects that could have an influence on safety. Any faults and defects must be rectified.

7 Shut down

7.1 Safety instructions for decommissioning

DANGER	
	<p><u>Risk of injury from being caught or pulled in on moving machine parts!</u></p> <ul style="list-style-type: none">• After parking, wait until all moving machine parts have come to a standstill!• Keep a sufficient safety distance from moving machine parts!

WARNING	
	<p><u>Risk of injury when shutting down</u></p> <ul style="list-style-type: none">• Make sure that there are no persons in the danger zone and that a sufficient safety distance is kept!• Ensure that there are no persons between the machine and the tractor!

WARNING	
	<p><u>Risk of injury when switching on the machine by unauthorised persons!</u></p> <ul style="list-style-type: none">• Secure the machine after operation against unauthorised switching on!

7.2 Switch off the drive

Switch off the drive of the circular saw and wait for the saw blade to stop.

7.2.1 Electric mode

Switch off the drive by pressing the switch!

Disconnect the 400V/16A supply cable from the plug and secure the drive against being switched on again!

7.2.2 PTO mode

Disconnect the PTO drive on the tractor and then park the tractor. Secure it against being switched on again and disconnect the PTO connection.

The PTO shaft should be stored in such a way that it cannot become dirty:

- On roller table saws on the shelf to the right of the cut-out for the PTO shaft.
- On circular saws with a 3-point attachment plate, place the PTO shaft on this plate or attach it to the upper link with a chain.

7.3 Transport position

WS:

On the left side of the operator's position there is a small hook at knee height. This hook can be hooked into the rocker.



TWS:

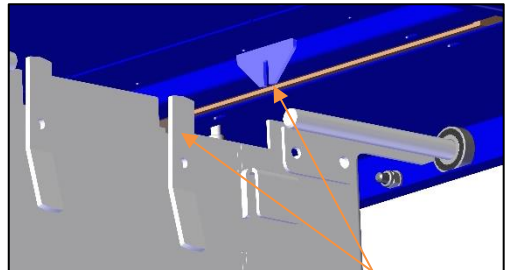
If you have just made a firewood cut with a table rocker saw, convert it to table operation before transport.

To do this, follow the instructions in the chapter "Table - rocker saw" and proceed in reverse order.

Rolling table:


If you look under the table you will find 2 levers. The right one is for the transport lock and the left one is used for changing the saw blade.


Turn the right lever to the horizontal position and push the roller table forward. Halfway there is a possibility to engage the lever again. In this way, valuable space can be saved for transport.




8 Maintenance


8.1 Safety instructions during maintenance

<h1>DANGER</h1>	
	<p><u>Serious risk of injury from switching on the drive during maintenance work!</u></p> <ul style="list-style-type: none">• Switch off the machine!• Secure against being switched on again!

<h1>CAUTION</h1>	
	<p><u>Risk of injury! Scalding by hot machine components and media!</u></p> <ul style="list-style-type: none">• Allow the machine to cool down to ambient temperature before carrying out any maintenance work.• Keep highly flammable material away from hot surfaces.

<h1>CAUTION</h1>	
	<p><u>Danger of chemical burns due to contact with lubricants!</u></p> <ul style="list-style-type: none">• Avoid skin and eye contact.• Do not swallow or inhale.• Use suitable protective equipment (gloves, goggles).

8.2 Important notes during maintenance

<h1>NOTICE</h1>	
	<ul style="list-style-type: none">• Replace all machine parts that are not in perfect working condition immediately.• Only use original spare parts.• Self-locking screws and nuts must always be replaced.• Installing the wrong spare parts or wearing parts can cause serious machine damage.• There is a risk of fire during welding work. Keep fire extinguishers ready.• Improperly routed cables can cause braising and cable fires.• Never release the machine for operation without the factory-provided safety devices.• It is strictly forbidden to remove safety notices affixed to the machine.• Replace the information stickers on the machine if they are no longer legible.• Always observe the warning notices located on the machine. They help to avoid hazards.• Do not carry out any repairs if you do not have the necessary qualifications.

8.3 Cleaning

After each operation and before each maintenance, the machine must be cleaned of dirt!

After each cleaning with water, the log splitter must be lubricated!

8.4 Notes when working on electrical equipment

All work on the electrical equipment of the machine may only be carried out by trained electricians.

- Check electrical equipment regularly.
- Reattach loose connections.
- Replace damaged lines or cables immediately.
- Never clean electrical equipment with water or similar liquids.

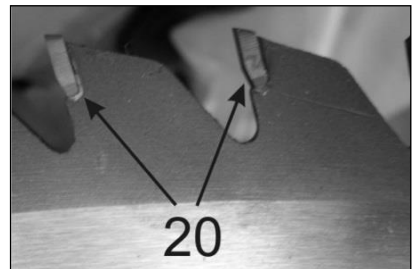
8.5 Check saw blade

At regular intervals it is necessary to check the saw blade carefully. Inspect it to see if it is sharp and if the cabinet of teeth is sufficient. In the case of carbide saw blades, check that all the carbide plates (20) are present.

Also check your saw blades for cracks or signs of overheating.

If your saw blade does not meet the requirements, take it to a specialist. If it is even badly damaged, replace it with a new one.

Under no circumstances should you work with a damaged or improper saw blade.



8.6 Changing the saw blade

If you want to change your saw blade, first switch off the drive of the machines. Wait until the saw blade has come to a standstill.

Disconnect the circular saw from the drive source and secure it against accidental switch-on.

	CV	HM
Diameter [mm]	700	700
Thickness [mm]	3,2	4,2/3,2
Borehole \varnothing	30	30
Max. Speed [U/min]	2700	2300
Number of teeth	56 Z	45 Z

Make sure to use saw blades that comply with the EN847-1 standard.

8.6.1 Changing the saw blade on WS and TWS

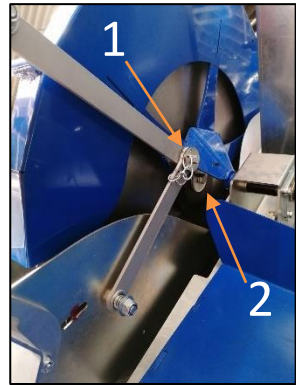
ATTENTION! The saw blade change must only be carried out by two people.

Changing the saw blade can be done in a few steps. Under all circumstances, use leather gloves or similar gloves that protect against cuts, because even if the saw blade appears blunt during the work process, it still has enough sharpness to injure itself.

To dismantle the saw blade, some covers must first be removed.

TWS: Here the table must be folded upwards.

WS: Here the linkage between the rocker cover and the rotation protection must be loosened. To do this, remove the screw (1). Now both covers can be folded away.



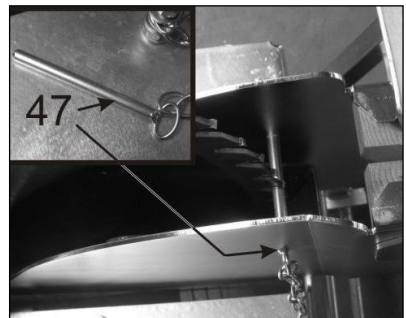
To be able to loosen the screw connection on the saw blade (2), it must be secured against turning by means of the enclosed bolt (47) on the teeth.

ATTENTION! Danger of cutting

Open the screw on the clamping flange with a suitable tool.

To protect the saw blade from falling and to avoid injuries, we recommend inserting wooden wedges between the housing and the saw blade. Remove the screw and also the aluminium clamping flange. Now you can replace the saw blade.

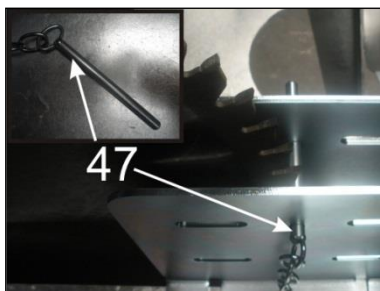
To fix everything again, first put the aluminium clamping flange back on the saw blade and fix the screw. Make sure that the screw is properly tightened. Now you can reattach the rotation guard on the tilting circular saw.



8.6.2 Changing the saw blade on a roller table

There are two lugs under the table on the working side. Turn the middle lug horizontally and screw it tight. Now you can push the table all the way back, at the same time lift the table. Just before the table is all the way back, it swings up.

Secure the saw blade against turning using the bolt (47).



Use leather gloves to protect yourself against injuries. Open the screw on the clamping flange with a suitable tool. The saw blade is held in place by the locking mechanism.

Remove the screw and also the aluminium clamping flange. Now you can replace the saw blade.

To fix everything again, first put the aluminium clamping flange back on

the saw blade and fix the screw. Make sure that the screw is properly tightened.

Fold down the table and let it snap into the guide. Now turn the middle tab under the table upwards and tighten the wing screw. This makes the table movable, but it can no longer be pushed back so far that it can fold up. Also check that the table can only be pushed backwards when the wooden holder is pressed down.

8.7 Checking the supply lines

Before each work, inspect the supply line for damage. They must not be kinked or show any other damage. Otherwise, there is a great danger of electric shock.

Also make sure that the cable has a sufficient cross-section. This should be at least 2.5mm², with a maximum length of 25m.

If you are not sure whether your supply line is sufficient, contact an electrical specialist.

8.8 Lubrication

On all tilting saws there are 2 bearings at the bottom of the pivot points which must be lubricated. In addition, on PTO machines that are attached at an angle, there are 2-4 bearings on the shafts from the PTO connection to the saw blade.

To lubricate the bearings, remove the dust cap and lubricate with the grease gun.



8.9 Maintaining or adjusting the motor brake

Determining the leeway / lever play

It is relatively easy to determine whether the brake is sufficiently adjusted and there is enough gap between the brake and the brake shoe or whether an adjustment is required.

Move the brake lever shown in the picture alternately in both directions (see direction of arrow).

If the lever has a total play of approx. 10

to 20 mm when rocking, no adjustment is necessary.

If the lever can hardly be moved, it is necessary to adjust the brake.



Opening the motor casing

Make sure that the power supply is disconnected! Danger of electric shock!

Open the housing around the brake by loosening and removing the cross-slotted screws.



Before removing the cover, you must unscrew the brake lever (anticlockwise).

After removing the cover, you will see the area where we will focus exclusively on brake adjustment.

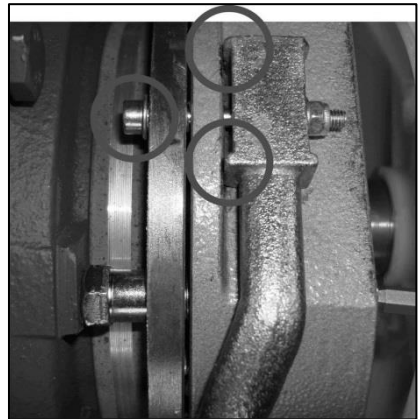


Adjusting the clearance

As you can see, there is no space / play at the three marked points.

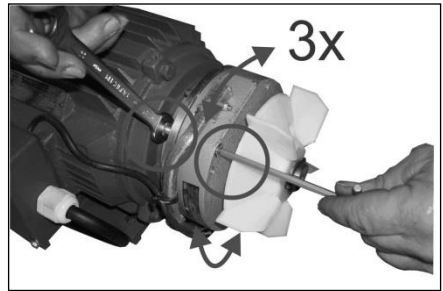
Therefore, you cannot sufficiently rock the brake lever!

With the SW 12 open-end spanner, turn the nut (see Figure) anticlockwise and with the SW 5 Allen key, turn the screw clockwise so that the gap opens to approx. 0.5 to 1 mm.

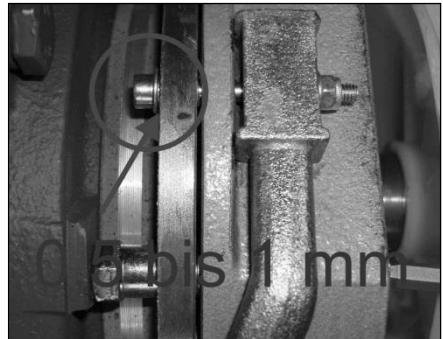


These set screws are present 3 times axially.

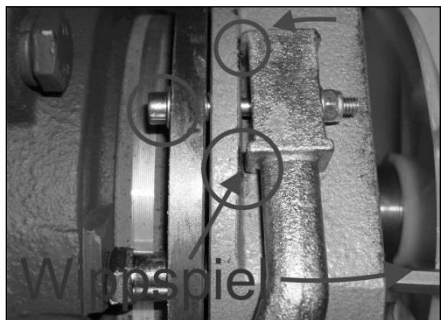
Repeat the whole process until you have adjusted all screws all around so that the gap corresponds to approximately 0.5-1 mm.



After successful adjustment, you will find sufficient clearance when rocking the brake lever.



When everything is satisfactory, refit the cover on the motor. Insert the cross screws and screw the brake lever back in.




8.10 Duties before finishing work


After completing the maintenance work and before starting the machine, observe the following points:


- Check all previously loosened screw connections for tightness.
- Check that all previously removed guards, covers, container lids, are properly reinstalled.
- Make sure that all tools, materials and other equipment used have been removed from the work area.
- Cleaning the work area
- Ensure that all safety devices of the machine are working properly again.
- Check the function of the safety devices. Do not release the machine for use if the safety devices are not functioning properly.
- Carry out a test run with a function check of the repaired components.
- Secure the machine against unauthorised switching on if you have not completed the work.
- Do not handle naked flames or smoke.

9 Help in case of malfunctions

9.1 Safety instructions

DANGER	
	<p><u>Serious risk of injury from switching on the drive in the event of a malfunction!</u></p> <ul style="list-style-type: none">• Switch off the machine!• Secure against being switched on again!

CAUTION	
	<p><u>Risk of injury! Scalding by hot machine components and media!</u></p> <ul style="list-style-type: none">• Allow the machine to cool down to ambient temperature before carrying out any troubleshooting.

CAUTION	
	<p><u>Danger of burns due to contact with lubricants!</u></p> <ul style="list-style-type: none">• Avoid skin and eye contact.• Do not swallow or inhale.• Use suitable protective equipment (gloves, goggles).

Error	Cause	Error correction	Look up
Too little cutting power	Wrong direction of motor rotation	Change the direction of rotation	5.6
	Saw blade is blunt	With carbide blades, check whether the cutting plates are missing	9.3
		Sharpen the saw blade and check the set.	9.3
Engine does not run or switches off often	Motor protection responds	Supply cable too weak (min. 5x2,5mm ²)	5.4
	Motor protection responds (motor hums)	Only two phases	Contact a specialist
		A plug has come loose on the phase inverter	Contact a specialist
	Faulty supply line	Have the supply cable checked by a specialist	Contact a specialist
	Fuse or motor protection of the switch defective	Have switch checked	Contact a specialist
	Motor covered or heavily soiled	Clear or clean the motor (ATTENTION!! Do not clean with water)	9.2
	Saw is blunt	Sharpen the saw blade and check the set	9.3
In the case of carbide blades, check whether the cutting plates are missing.		9.3	
Motor gets hot and has no power	Only two phases connected	Have the supply line checked by a specialist	Contact a specialist
If the malfunctions cannot be eliminated according to the above instructions. Please contact your dealer! He will be happy to help you.			

10 Guarantee and Warranty

The circular saws are guaranteed for a period of 12 or 24 months from the date of invoice (please keep the invoice!).

The warranty claim covers all material and / or manufacturing defects.

Defective parts will be replaced free of charge - they may only be replaced by a specialist. Please request and renew damaged stickers.

No warranty is given for:

- Damage caused by improper handling or use.
- Transport damage - this must be reported to the deliverer immediately after receipt of the goods delivery.
- Modifications or alterations to the machine or if no original spare parts or standard parts were used for repair work.

11 Conduct when dealing with accidents

As a matter of routine, ensure you have up-to-date information about available first aid options.

After the initial care of injured people, immediately inform your supervisor of any personal injuries, damage to the machine or material damages.

In the event of the specific use of emergency vehicles, state the severity of the injury and damage.

In a disaster situation, immediately leave the machine (fire).

Note

In the pursuit of technical advancement, Binderberger Maschinenbau GmbH continually works to improve its products. We reserve the right to make changes from the illustrations and descriptions in this operating manual/replacement parts list. This cannot give rise to any claim to changes on machines that have been already delivered. The technical data, dimensions and weights are not binding.

Errors excepted.

Dealer's stamp:

Name plate:



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