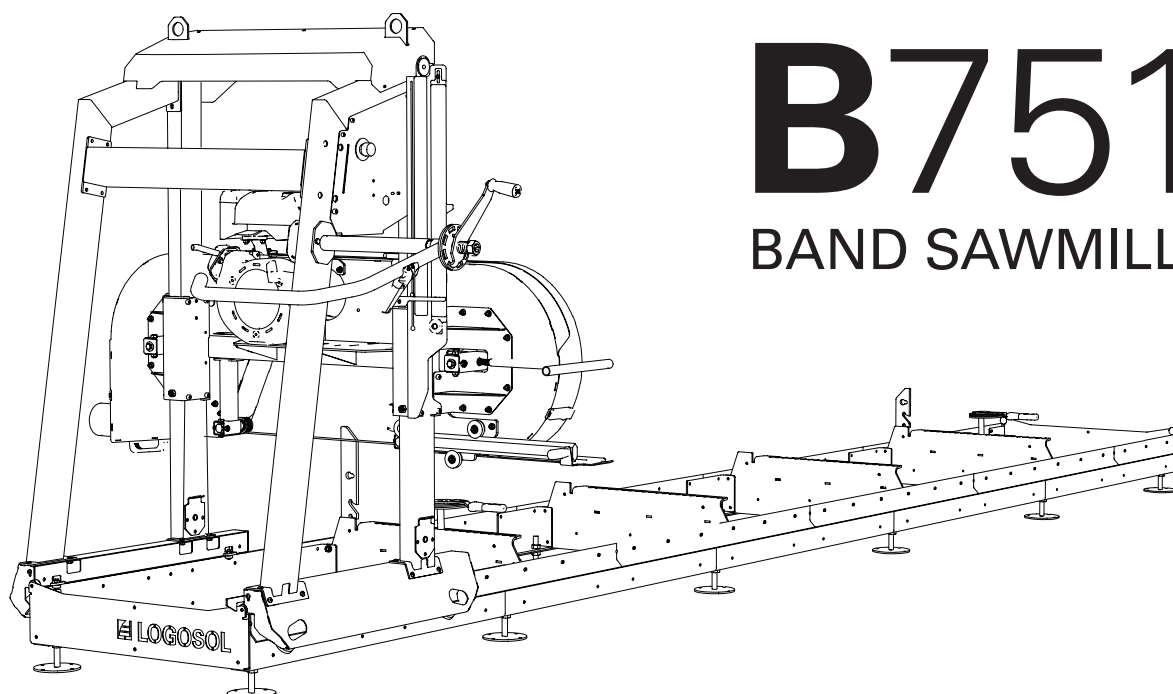


**LOGOSOL**

# **USER MANUAL**

TRANSLATION OF ORIGINAL USER MANUAL



Read through the user manual carefully and make sure you understand its contents before you use the machine.



This user manual contains important safety instructions.



**WARNING!** Incorrect use can result in serious or fatal injuries to the operator or others.

## Thank you for choosing a Logosol machine!

Welcome! We are very pleased that you have demonstrated your confidence in us by purchasing this sawmill, and we will do our utmost to meet your expectations.

Logosol has been manufacturing sawmills since 1988. In that time we have supplied approximately 30,000 machines to satisfied customers the world over.

We care about your safety as well as we want you to achieve the best possible results with your sawmill. We therefore recommend that you take the time to carefully read this user manual from cover to cover in peace and quiet before you begin using the saw. Remember that the machine itself is just part of the value of the product. Much of the value is also to be found in the expertise we pass on to you in the user manuals. It would be a pity if that were not utilised.

We hope you get a lot of satisfaction from the use of your new machine.



**Bengt-Olov Byström**

Founder and chairman,  
Logosol in Härnösand, Sweden

LOGOSOL continuously develops its products.  
For this reason, we must reserve the right to modify  
the configuration and design of our products.

Document: LOGOSOL B751 User Manual

Pictures: Lars Wahlström

Last revised: May 2017

Ref. No. User Manual, English: 0458-395-5001

© 2017 LOGOSOL, Härnösand Sweden

## TABLE OF CONTENTS

General information	4
Description of the band sawmill	4
Components	6
Safety instructions	8
Operating the band sawmill	10
Sawdust management	12
Start & stop instructions	13
Operation instructions	14
Maintenance instructions	19
Troubleshooting	24
Technical data	25
Assembly: Rails / bed	26
Adjustment: Rails / bed	34
Final assembly: Rails / bed	38
Sawhead	41
Order of adjustments	43
Other adjustments	50
The functions of the sawmill	56
Wiring diagram	60
Exploded views	61
CE Declaration of conformity	72

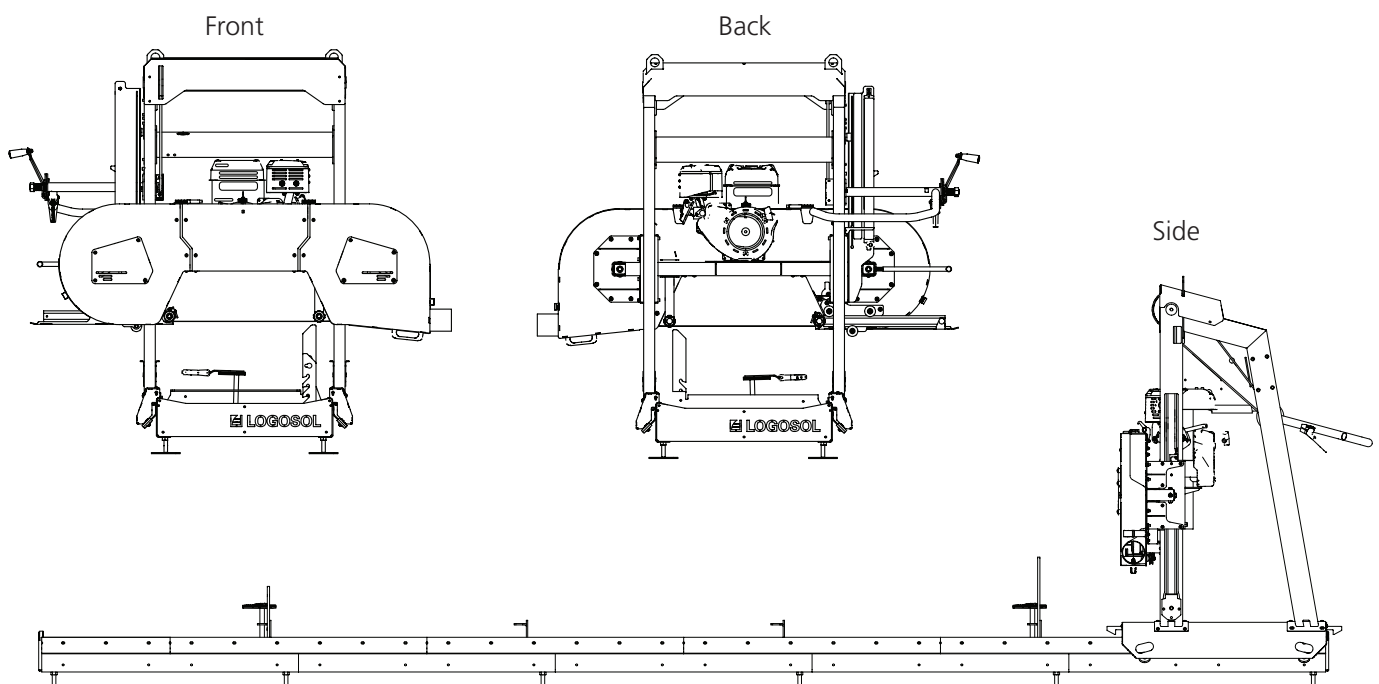
## GENERAL INFORMATION

This user manual, the instructions of the motor, the assembly instructions of the band sawmill and instructions for accessories should be seen as integral parts of the band sawmill and should always be kept together with it. They should also follow the band sawmill if it is sold.

Responsibility for the band sawmill being correctly assembled and put into operation, and being used in a safe way, lies solely with the person(s) who assembles and uses the band sawmill.

## DESCRIPTION OF THE BAND SAWMILL

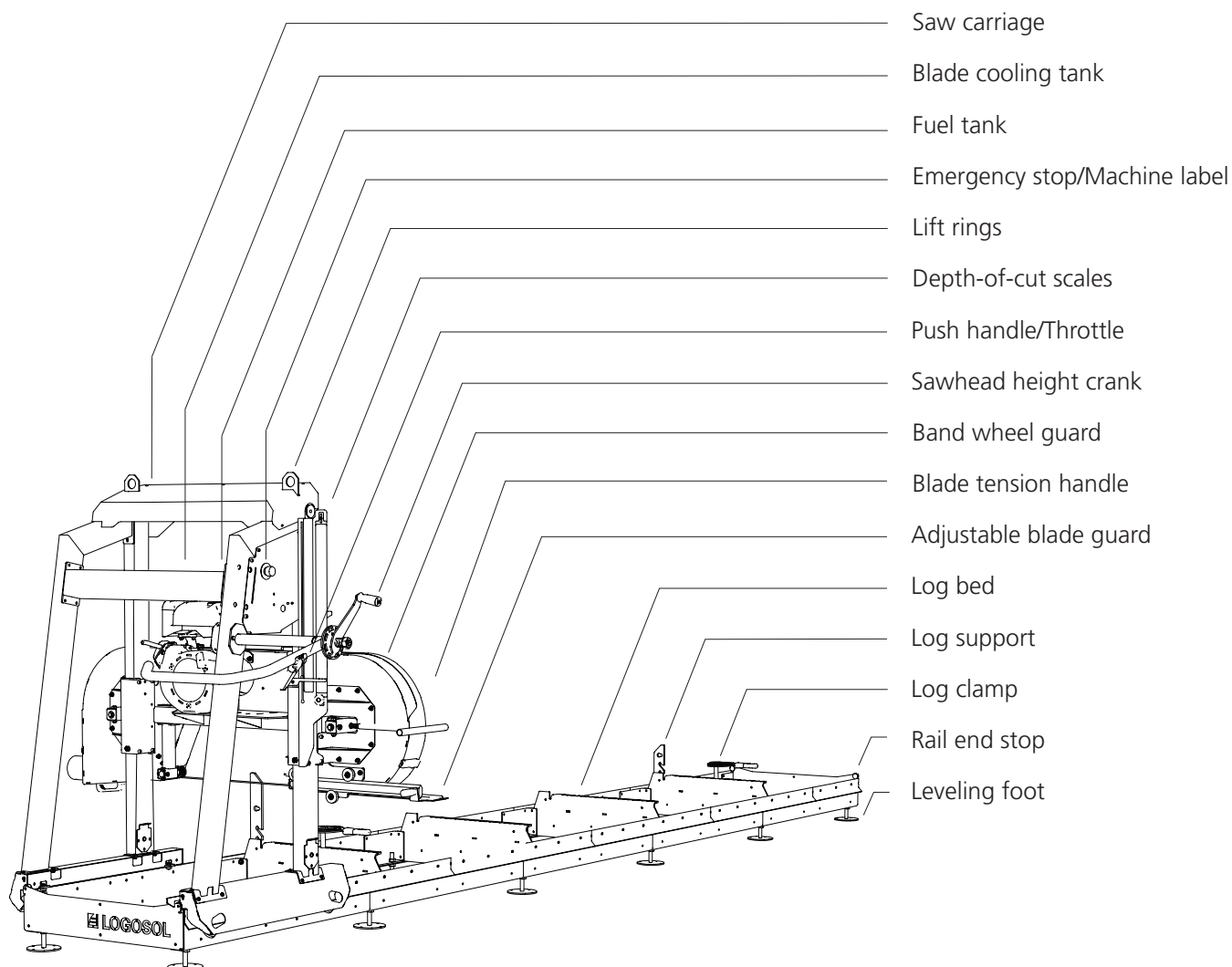
### B751



## DESCRIPTION OF THE BAND SAWMILL

This band sawmill is designed for cutting knot-free logs and timber.

### LOGOSOL B751

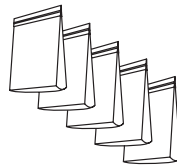


## COMPONENTS: RAILS / BED

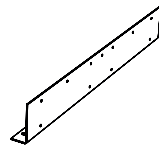
Check that all the components of the rails / bed are included in the shipment when receiving your sawmill.



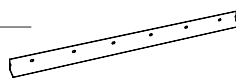
User manual 0000-0000



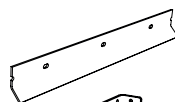
— 5 pcs — Bolt bag 8200-005-0005



— 10 pcs — Bed base section 03-01457



— 8 pcs — Long rail top section 03-01445



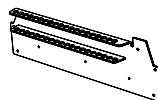
— 4 pcs — Rail, top section 03-01444



— 4 pcs — Left cross bunk bracket 03-01446



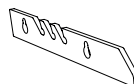
— 4 pcs — Right cross bunk bracket 03-01447



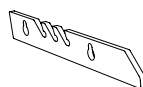
— 4 pcs — Cross bunk 02-00226



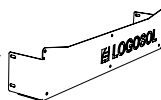
— 12 pcs — Leveling foot 02-00228



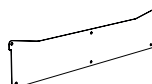
— 2 pcs — Short log support 03-01449



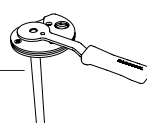
— 2 pcs — Long log support 03-01448



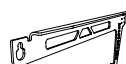
— 2 pcs — Bed end frame 03-01443



— 2 pcs — Inner end plate 03-01546



— 2 pcs — Eccentric handle 03-01465



— 1 pcs — Toe board 02-00289

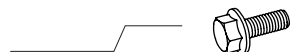


— 1 pc — Sundry bag 8200-005-0200

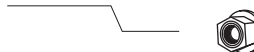
## COMPONENTS: RAILS / BED



Bolt bag 1  
8200-005-0010



— 96 pcs — Hex bolt M8x20 9018-346-1800



— 106 pcs — Tensilock nut M8 9214-352-0008



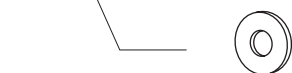
Bolt bag 2  
8200-005-0020



— 4 pcs — Flange bolt M8x25 9018-346-0825



— 4 pcs — Flange bolt M8x16 9018-346-0816



— 2 pcs — Flat washer M8 9219-021-0180



Bolt bag 3  
8200-005-0030



— 12 pcs — Flange bolt M8x12 9018-346-0812



Bolt bag 4  
8200-005-0040

— 24 pcs — Hex nut M16 9210-260-1600



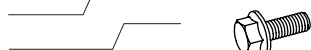
Bolt bag 5  
8200-005-0050



— 1 pc — Flange bolt M8x40 9018-346-0840



— 1 pc — Flange bolt M8x20 9018-346-1800



— 4 pcs — Flange bolt M5x16 9018-346-0516



— 1 pcs — Flat washer M8 9291-021-0180



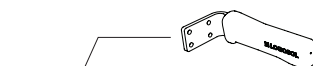
— 4 pcs — Flange bolt M6x35 9018-346-0516



— 4 pcs — Tensilock nut M6 9214-352-0006



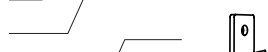
Sundry bag  
8200-005-0200



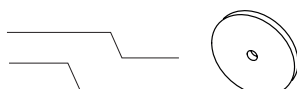
— 1 pc — Handle 03-01782



— 8 pcs — Spacer sleeve M8x11 9291-020-0005



— 1 pc — Hook 03-01783



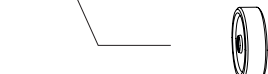
— 2 pcs — Washer 03-01464



— 4 pcs — Rubber bumper 9826-015-0002



— 2 pcs — Eccentric handle 03-01465



— 4 pcs — Anti-tip wheel 9029-011-0001

## SAFETY INSTRUCTIONS

Make sure that all warning and information labels are in place, clean and legible. Damaged labels should be replaced immediately.

### KEY TO SYMBOLS



**WARNING!** This symbol means that you should pay particular attention and is always followed by information about the relevant risk.



This symbol is followed by a prompt. Pay particular attention when this symbol appears in the manual text.



For your own safety and the safety of others, do not operate the band sawmill or handle band blades without first having read and understood all the contents of this user manual.



**WARNING!** Cutting tools: Incorrect use can lead to life-threatening injuries. Band blades are extremely sharp and dangerous.



Always use protective gloves (class 1) when working with the band sawmill or handling band blades. Risk of sustaining cuts when handling band blades. Band blades and engine parts can be hot after sawing.



Always use approved hearing protection when working with the machine. Even short exposure to high frequency noise can damage your hearing. Always use close-fitting safety goggles when working with the machine or handling band blades. Under certain circumstances the use of respiration protection may be necessary. This would mainly apply if you are sawing dry wood or sawing indoors.



Always wear approved protective footwear with saw protection, steel toe-caps and non-slip soles when working with the machine or handling band blades.





Always wear full-length protective trousers when working with the machine or handling band blades. Never wear loose-fitting clothing, scarves, neck chains, etc., that can get caught in the machine during operation. Secure loose hair before working with the band sawmill.



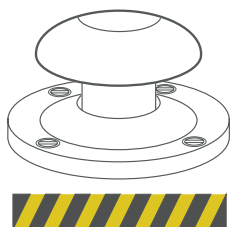
## SAFETY INSTRUCTIONS

### THE SAFETY EQUIPMENT OF THE BAND SAWMILL

 **WARNING!** Never use the machine if the safety equipment is defective.

 The safety equipment must be checked and maintained.

Here is a description of the safety features of the band sawmill together with their functions.



#### Emergency stop

The emergency stop stops the motor. The emergency stop must be reset before the machine can be restarted.


#### Interlock safety switch on the band wheel guard


One of the hinges of the band wheel guards is equipped with an interlock safety switch. The machine can not be used without having the guards in position.


#### Rail end stops

These mechanical stops prevent the saw carriage from rolling off at the end of the rails.


### OPERATOR


 **WARNING!** Whenever the machine is used, approved personal protective equipment must always be used.


 Persons under the age of 18 may not work with the band sawmill or handle band blades.


 Never work with the machine or handle band blades if you are tired, if you have consumed alcohol or if you are taking medication that can impair your vision, judgement, reaction times, mobility, alertness or otherwise cause negative side effects.

### THE WORKSITE

 **WARNING!** Never operate a band sawmill with a petrol-powered engine in enclosed or poorly ventilated areas. This can result in death due to suffocation or carbon monoxide poisoning.

 Only operate the band sawmill and handle band blades in full daylight or under adequate lighting.

 Keep the work area free from clutter, pets, children, obstacles or other things that can distract the operator.


 Choose a worksite where the ground is hard-packed and level with plenty of space for the band sawmill, a pile of logs and sawn timber. If possible, place the band sawmill so that the sawdust blows away from the operator. Set up the band sawmill on level ground with at least 5 m of free space without any obstacles around the equipment. If the band sawmill is to be set up permanently, we recommend that you support the rail frame with concrete plinths or wooden blocks (15 cm x 15 cm) under each cross bunk.


 Always keep an ABC fire extinguisher (min. 3 kg) easily accessible at the worksite.


 Always keep a fully-stocked first-aid kit easily accessible at the worksite.


## USING THE BAND SAWMILL


### OPERATING THE BAND SAWMILL


 **WARNING!** Cutting tools: Always stand behind the saw carriage and keep both your hands on the handles while operating the machine. Never stand in front of the carriage or band blade. Never pull the carriage through the cut.


 **WARNING!** Risk of crush injury. Rotating parts: Even a slight force applied to the release mechanism of the sawhead can cause the sawhead to drop uncontrollably and make the crank rotate rapidly, which can cause serious injury.


 **WARNING!** Never modify this machine in such a way that it no longer corresponds with the original design. Do not use it if it has been modified. Never use other attachments/ accessories than those recommended in this user manual.


 **WARNING!** A broken band blade can be ejected out of the sawdust chute at high velocity.

 During operation, make sure that nobody is on the side of the band sawmill where the sawdust chute is located. The risk of a blade breaking increases if it is not correctly installed or maintained.


 The band blades and plastic parts are cold-resistant down to -25°C. Do not operate the band sawmill in colder temperatures than -25°C.


 Ensure that the machine is correctly assembled and maintained in accordance with the instructions in this user manual.


 Never work alone. Make sure that there are other adults within hearing distance, should you need to call for help.


 Never stand between the pile of logs and the band sawmill. Always stand at the side of the pile of logs when handling the logs. Never stand where you are at risk of being hit by a rolling log.


#### **Danger area of the machine:**


 Minimum safety distance around the sawmill is shown in *Illustration 1*. Note that the safety distance on the left side of the band sawmill is 15 m due to the risk of blade pieces being ejected out of the sawdust chute when a blade breaks. On the other sides of the sawmill the safety distance is 5 m. [*Illustration 1*]


 **WARNING!** Keep hands, limbs and other body parts well away from the band blade, cables and other moving parts.


 **WARNING!** Risk of being crushed by the saw carriage.


 When working with the saw carriage, always use the parking lock.

 **WARNING!** Risk of tripping over the rails and cross bunks.

 Never take a short cut across the rails. Hang electric cables up and out of the way so that they do not get damaged or become a tripping hazard.

 **WARNING!** Never operate the petrol powered engine in enclosed areas. Ensure that there is good ventilation. The exhaust gases contain harmful substances that can pose a danger to life and health.

 **WARNING!** Risk of being crushed between the sawmill and a moving log.

 The log stack must always be secured with reliable straps around the logs (see the chapter *Operation Instructions*).

Never walk on the rails or the cross bunks.

## USING THE BAND SAWMILL

### Every time before operating the band sawmill:

Ensure that

- the operator is wearing the prescribed personal protective equipment
- the prescribed maintenance procedures have been properly carried out
- the band blade is not moving when the engine is idling
- the machine stands firmly and securely and the rails are supported along their full length
- the anti-tip wheels of the carriage and the rail end stops are properly installed.
- everything on the band sawmill is properly and securely installed and in good working order
- all safety features on the band sawmill are properly and securely installed and in good working order
- the band blade is correctly installed and can rotate freely and in the right direction.

### Before each cut:

Ensure that

- no other persons than the operator and no pets are within the danger area of the machine
- the worksite is free of objects that can pose a tripping hazard or distract the operator
- the band blade runs clear of the log supports and log clamps
- the rails are free of debris, dirt, etc.
- the log is firmly secured
- the adjustable blade guard has been correctly adjusted to manage the maximum width of the log.

### When operating the band sawmill:



**WARNING!** Risk of burn injuries. The engine and its muffler get very hot during operation and remain hot a while after operation. This also applies to an idling engine.



**WARNING!** Risk of fire! Petrol and petrol vapours are extremely flammable. Be aware of the fire, explosion and inhalation risks involved.



**WARNING!** Risk of fire.



The engine must be turned off and have been allowed to cool for 10 minutes before refueling.

Always turn the engine off when you are leaving the operating station, even just temporarily, e.g. to take care of sawn timber or do maintenance.

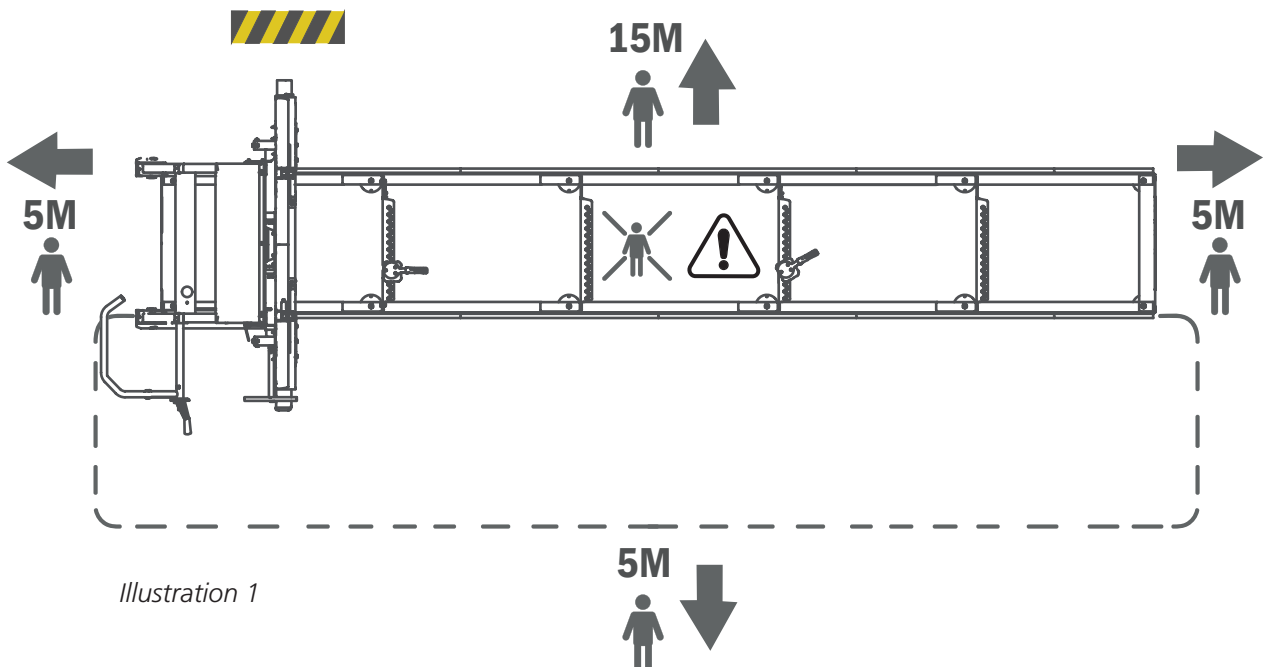


Illustration 1

## USING THE BAND SAWMILL

### STORING

If the band sawmill is not in use, even when it is for short periods of time, the band blade must be removed from the machine and be stored where it is inaccessible to children and other persons.

#### For longer periods of storage:

- empty the fuel tank and the water tank,
- remove the band blade from the machine,
- close the fuel valve,
- secure the saw carriage to the bed.

Store the band sawmill where it is inaccessible to children and other persons, preferably in a locked location.

- ! After very work session, release the tension on the blade to reduce wear.

### MAINTENANCE

- ! **WARNING!** Risk of serious injury.

- ! Before performing any service and maintenance on the machine: - turn the ignition key to the OFF position and close the fuel valve.

- ! **WARNING!** Risk of burn injury. The engine and its muffler get very hot during operation and remain hot after the engine has stopped.

- ! Allow the engine and the muffler to cool before you perform any service or maintenance on the machine.

### MOVING THE BAND SAWMILL

- ! **WARNING!** Risk of crush injuries.

- ! Keep people and pets outside the 5 m danger area around the machine while lifting and moving the machine parts. Secure the load during transport.

- ! The saw carriage and the rails/bed must not be lifted or transported when assembled together, but must be transported separately as two parts.

**Lifting the saw carriage:** Disconnect the carriage's anti-tip wheels, one on each side, and lift the carriage with the help of reliable lifting gear affixed to the lift rings located at the top of the carriage. Weight: see *Technical data*.

**Lifting the rails/bed:** Use a hand pallet truck or a forklift truck and lift under the rails. Place a protective layer of wood on the forks before lifting. Ensure that the rails are well balanced and secure the load to the lift forks before transport. Weight: see *Technical data*.

### REFUELING

- ! **WARNING!** Risk of burn injury. Petrol is an extremely flammable fluid.

- ! Before refueling the engine of the machine, wait until the engine has cooled. Turn the ignition key to the OFF position and close the fuel valve.

Refueling: Lower the sawhead to its lowest position and have the saw carriage in its locked position at one of the rail ends before refueling. Use a funnel and try to avoid spilling.

## SAWDUST MANAGEMENT

If the sawmill is used outdoors it can be operated without a chip extractor.

- ! Make sure that you regularly remove sawdust that has accumulated around the machine, using a shovel e.g. If a chip extractor is connected, you need a capacity of at least 800m<sup>3</sup>/h.

- ! Exhaust hose: In case an exhaust hose is connected to the sawmill, it must have a spiral that can be grounded.

## START & STOP INSTRUCTIONS – PETROL ENGINE

### START

1. Open the fuel valve by moving the fuel control lever to the right until it reaches the position "ON"
2. To start a cold engine, move the choke control lever to closed position (the control lever in its left position). To start a hot engine, leave the choke control lever in its open position (the control lever in its right position).
3. Turn the ignition key to the "ON" position.
4. Gently pull the start handle until you feel some resistance and then pull firmly. Gently return the starter handle.
5. Give gas by squeezing the throttle handle all the way in to its end position. This brings the engine up to its operating speed and the band blade starts rotating.
6. If the choke is in its closed position, gradually move the control lever towards its open position as the engine gets hotter.

### STOP

You stop the band blade by releasing the throttle on the push handle. The band blade will then slow down and stop, and the engine goes down to idle. Then, turn off the engine by turning the ignition key to the "OFF" position and close the fuel valve.

### EMERGENCY STOP

Activate the emergency stop by pressing the emergency stop button. The emergency stop has to be reset after it has been used.

## OPERATION INSTRUCTIONS

### LOG STACK

Do not stack the logs higher than 1 m.


Logs that are soiled, sandy, muddy or dirty considerably shorten the life of the band blade and increase the risk of blade breakage. Avoid dragging the logs over the ground and try to keep the logs as clean as possible

It can also be a good idea to separate different sorts of wood into different log stacks.


### LOG TABLE


It is possible to load logs from both sides of the band sawmill. If the log stack is placed on the same side as the operator's side, the log stack must be secured before every occasion of sawing.


Build the log table so it is the same height as the cross bunks on the band sawmill. If the log table is placed on the left side of the band sawmill, it should end 10 cm from the band sawmill. If the log table is placed on the operator's side, it should end approx. 1 m from the band sawmill and you should use a removable ramp between the log table and the sawmill. Ensure that the rear of the log table has large wedges to prevent the logs from rolling off from the log table.


 Ensure that the logs closest to the band sawmill are secured with heavy-duty straps so that they can not roll towards the sawmill while the sawmill is running. [See *illustration 2*]

### LOADING LOGS

 **WARNING!** Risk of crush injuries between log and band sawmill.

 Always stand at the side of the log table when handling logs [see *illustration 3*, area A].

 Avoid standing between the log table/log stack and the band sawmill. The log stack must always be secured with reliable straps when you are within area B [see *illustration 3*].

 The logs should be rolled from the log table. Do not drop them onto the band sawmill.

### When loading a log:

1. Position the saw carriage at its rearmost position on the rails (the 'home' position).

2. When loading the log from the operator's side, raise the log supports to their highest position. When loading the log from the left side of the band sawmill, the log supports have to be moved to the opposite side of the bed (the operator's side). Then, fit them in their highest position. When the log lies stably on the bed, refit the log supports to the left side of the bandsawmill.

3. If you use a removable ramp, it should be built and positioned so that there is no gap between the log table and the band sawmill.

4. Untie the straps that secure the front of the log pile.

5. Roll out a log.

6. Retie the front logs with the straps.

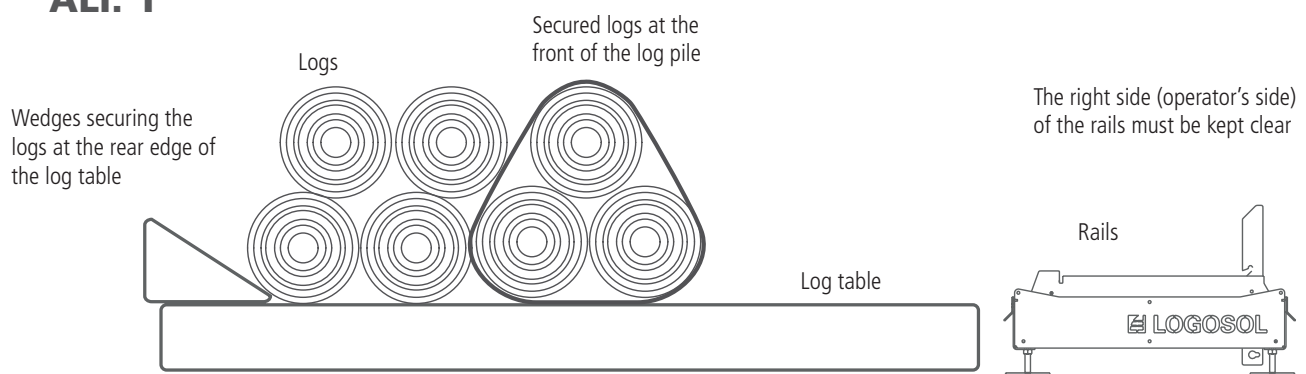
7. Carefully roll the log up against the log supports. Use the accessory SMART Turner. Centre the log laterally over the log bed cross bunks.

8. Adjust the log posts so that they support the log, but will not come into contact with the band blade when you are sawing. Lock the log supports in position.

9. Adjust the log clamps so that they come in the same position as the log supports, but on the opposite side of the log. Adjust the height of the log clamps to secure the log. Ensure that the log clamps will not come into contact with the band blade when you are sawing.

# OPERATION INSTRUCTIONS

## ALT. 1



## ALT. 2

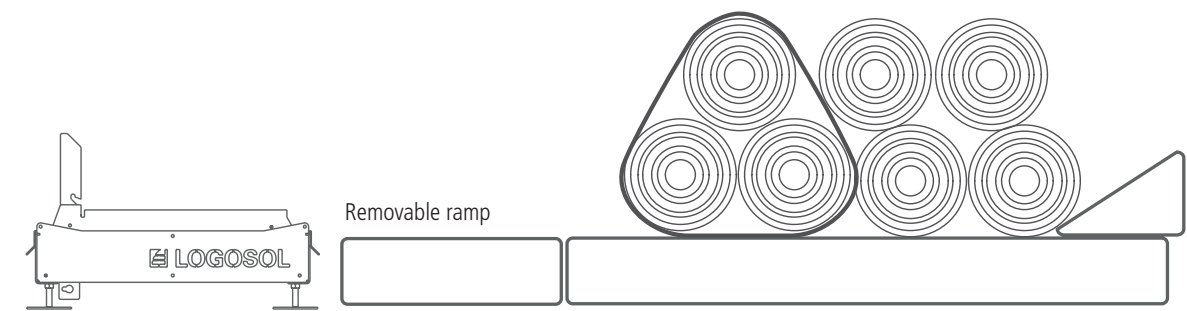
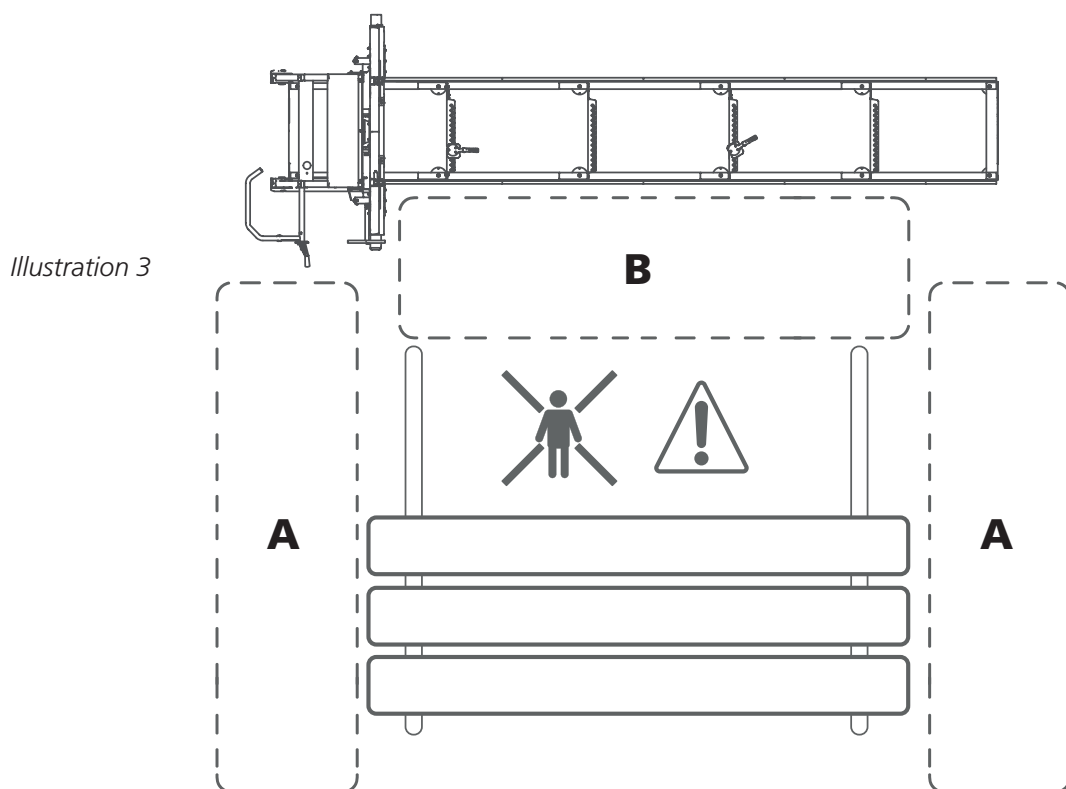


Illustration 2



## OPERATION INSTRUCTIONS

### ADJUSTING THE CUT

You can adjust the position of the sawhead in steps to set the depth of cut. The band sawmill B751 is equipped as standard with 1", 1 1/2", 1 3/4" and 2" scales with kerf compensation. The depth of cut is set by using the crank on the sawhead. Crank the sawhead down until the mark on the desired scale comes in level with the pointer.

### SAWING



**WARNING!** Cutting tools:



Always stand behind the saw carriage and keep both hands on the push handle while operating the machine. Never stand in front of the saw carriage or blade. Never pull the saw carriage back through the cut.



**WARNING!** Read and follow all the safety instructions described in the chapter *Safety Instructions* under the section *Before each cut*.

**1.** Before operating the sawmill, perform all safety checks described in the chapter *Safety Instructions* under the section *Every time before operating the band sawmill*.

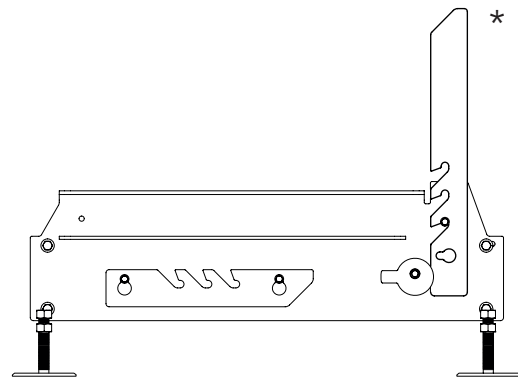
**2.** Raise the log supports by unhitching them, then lifting them to the desired height and locking them in place.



**WARNING!** Risk of pinching.



Watch your fingers when lowering the log supports. Make sure that the log supports are properly and securely fitted in their adjustment notches.



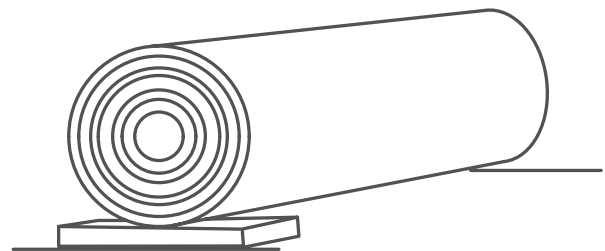
Log support.

(\*The longer log support is an accessory.)

**3.** Always use the accessory SMART Turner when rolling a log on the log bed. Centre the log on the log bed and roll it up against the log supports. Check the position of the log on the log bed. To be able to cut through the whole length of the log, the log should not protrude past the last cross bunk.

**4.** Rotate the log to a position that will give the best sawing yield.

**5.** If the log is distinctly tapered from one end to the other, you have to compensate for this to get the best possible result. You always want the cut to run parallel to the centre line of the log. Place a shim between the log bed cross bunk and the narrow end of the log.

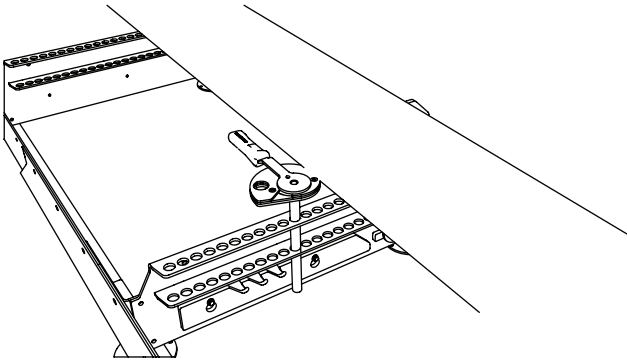


A shim placed under the narrow end of the log.



## OPERATION INSTRUCTIONS

**6.** Clamp the log with the log clamp. Adjust the height of the log clamp. Ensure that it will not come into contact with the blade when you are sawing.



*Log clamp. We recommend that you use two log clamps.*

**7.** Set the height of the sawhead for the first cut by turning the crank that adjusts depth of cut. You raise the sawhead by turning the crank clockwise, while turning the crank counterclockwise will lower the sawhead.

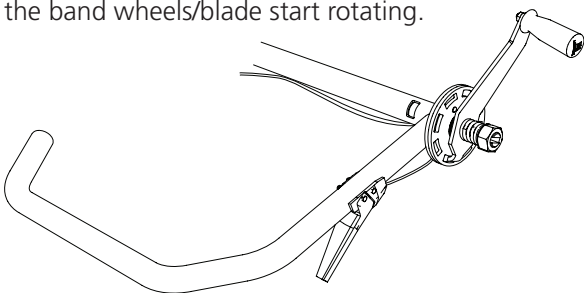
**8.** Check that the blade will not come into contact with the log supports and log clamps.

**9.** Set the adjustable blade guard taking into account the widest part of the log.

**10.** Open the valve for blade cooling to provide a small trickle onto the blade guide roller/band blade.

**11.** Before each cut, perform all safety checks described in the chapter *Safety Instructions* under the section *Before each cut*.

**12.** Stand behind the push handle of the saw carriage and start the engine. Give gas by squeezing the throttle handle all the way in to its end position. This brings the engine up to its operating speed and the band wheels/blade start rotating.



*Push handle with throttle*

**13.** With both hands on the push handle, gently push the saw carriage forward until the blade begins to cut into the log. When the band blade is completely in the log, you can increase the feed rate. Adjust the feed rate so the cut becomes straight with a clean finish. Lower the feed rate when cutting through knots in the wood and when cutting large or hard logs. Also lower the feed rate when you come to the end of the log.

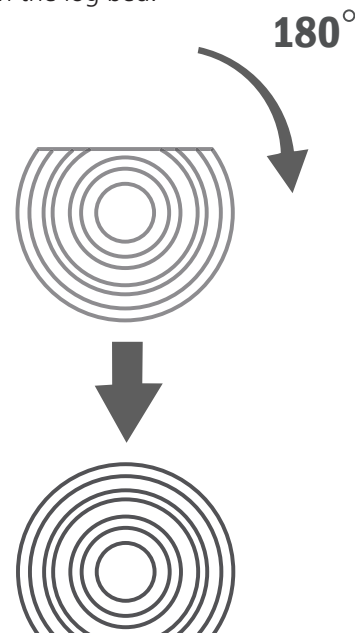
**14.** As soon as you have sawn through the log, release the throttle handle and let the blade come to a complete stop before continuing to step 15.

**15.** Remove the slab from the log.

**16.** Raise the sawhead slightly and, by hand, roll the saw carriage back to the starting position.

**17.** Set the height for the next cut. Use the crank and the depth of cut scales.

**18.** Rotate the log 180° so that the freshly sawn surface rests on the log bed.

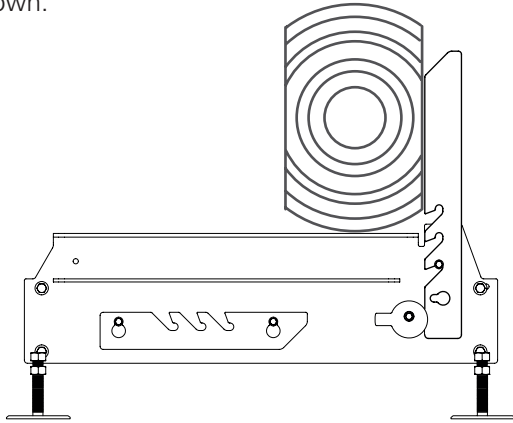


*Rotate the log 180° so that the freshly sawn surface rests on the log bed.*

Lower the log supports and the log clamps so that they will not come into contact with the blade and clamp the log in position. Continue sawing until you reach the desired cant width.

## OPERATION INSTRUCTIONS

Rotate the log 90° so that one of the freshly sawn sides rests flat against the log supports and clamp the log in position. Now you can make the third cut and then produce boards. Lower the log support gradually and cut up the log with the bark facing down.



*Rotate the log 90° so that one of the freshly sawn sides rests flat against the log supports and clamp the log in position.*

**19.** When you have rotated the log the last time to cut the last boards, you have to calculate where you should take the cut to make the last cut agree with the calculation. Check this by lowering the blade until it rests against the log. Now you can read the absolute scale to see the amount of wood left under the blade. Set the sawhead to the desired height.

**TIP:** The easiest way is to wait to rotate the log until there only remains material for one 2" board. If you do so, there is no need for calculation.

### HANDLING SAWN TIMBER

When cutting the cant into boards, you can either immediately lift the boards off the cant, or you can leave them there while cutting more boards before handling the timber.

When you are going to lift boards from the rails, ensure that the saw carriage is in its locked position at one of the rail ends. Then, move the sawn timber to a timber stack. Place spacers between the layers of boards to facilitate drying.

# MAINTENANCE

## MAINTENANCE

The regular maintenance that is expected to be performed by the operator, is described in this chapter. BE sure to perform the prescribed maintenance intervals as this forms the basis for a good functionality of the sawmill.



**WARNING!** Risk of serious injury:



Before performing any service or maintenance on the machine: turn the ignition key to the OFF position and close the fuel valve.



**WARNING!** Risk of cutting injuries:



Coiled band blades can unpredictably spring apart with considerable force. Handle coiled band blades with utmost care.



**WARNING!** Risk of fire:



Do not smoke or perform any work (welding, grinding, etc.) on the band sawmill that can produce sparks or flames near the engine, fuel tanks, fuel or other flammable material.



If you spill fuel on the machine when refueling, wipe this up immediately. If you get any fuel on your clothes, change clothes immediately.



Never operate the engine if there is a fuel or oil leak. Always turn the engine off before refuelling.

## MAINTENANCE

### HANDLING BAND BLADES

**⚠ WARNING!** Cutting tools: Incorrect handling of band blades can cause life-threatening injuries. Band blades are extremely sharp.

**⚠ WARNING!** Risk of cutting injuries.

**! When handling band blades:**

- always wear protective gloves (class 1) of leather
- always wear close-fitting safety goggles or visor
- wear protective footwear with saw protection, steel toe cap and non-slip sole
- wear full-length protective pants
- keep people and pets at a safe distance, at least 5 m away.

### BAND BLADES COILING

Hold the blade band blade out in front of you with your palms facing up and the blade teeth pointing away from your body. Your thumbs should be placed on the outside of the blade and your fingers on the inside. Your hands should be placed about 1 m apart. Hold the bottom of the blade on the ground with your foot. Be careful so you do not damage the teeth.

Press the band blade inwards at the same time as you rotate your wrists inwards and downwards. Bring your hands together and downwards, and complete the coiling so that the band blade forms three loops.

Secure the band blade by tying the loops together at a couple of points so that the blade can not spring apart.



### BAND BLADE REPLACEMENT

It is crucial to change the blade regularly to ensure peak performance. Normally, you can saw 15-30 logs before changing blades, but this depends a lot on how clean the bark is. Using dull band blades will result in wavy or imprecise cuts, reduced blade life and greater risk of blade breakage. Always wear protective gloves when handling band blades.

#### To remove a band blade:

1. Release the tension on the blade by turning the T-handle counter-clockwise.
2. Open the band wheel guards.
3. Remove the blade from the band wheels.

#### To install a new band blade:

1. Fit the blade under the blade guides and then around the band wheels. Make sure that the saw teeth point towards you.
2. Rotate the band blade by hand in the direction of the cut to check that the blade still tracks straight. See the section *The lengthwise position of the blade and Adjusting the position of the blade*, on page 48.
3. Replace the guards over the band wheels.
4. Close the guards.

## MAINTENANCE

### 1 Cleaning the band sawmill

Clean the band sawmill after each work shift. Remove sawdust and wood debris inside the band wheel guards and on and around the rails. Wipe painted surfaces and plastic parts with silicone spray (ref. no: 9999-000-5110). Lubricate moving parts with Super Flo (ref. no: 9999-000-5115).

### 2 Water tank

If the temperature falls below freezing, empty the water tank and tubes if there is water in them. At temperatures below 0°C, use windshield washer fluid. Never use glycol or flammable liquids as a coolant.

### 3 Horizontal alignment of the band blade

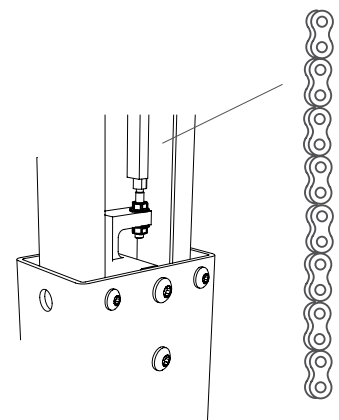
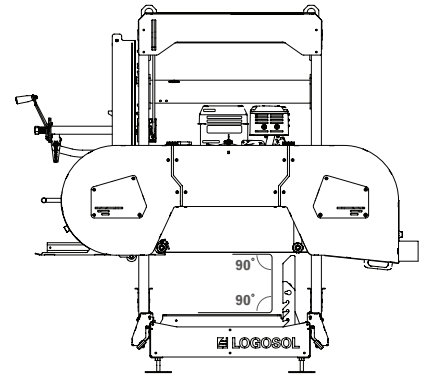
Before each work shift, check that the blade is parallel with the log bed.

### 4 Engine

Check the oil level in the engine before each work shift. Follow the maintenance schedule in the user manual for the engine.

### 5 Sawhead lifting chains

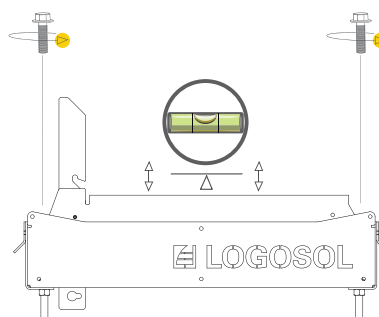
Inspect the sawhead lifting chains for any wear or damages. Replace with new chains if necessary.



## MAINTENANCE

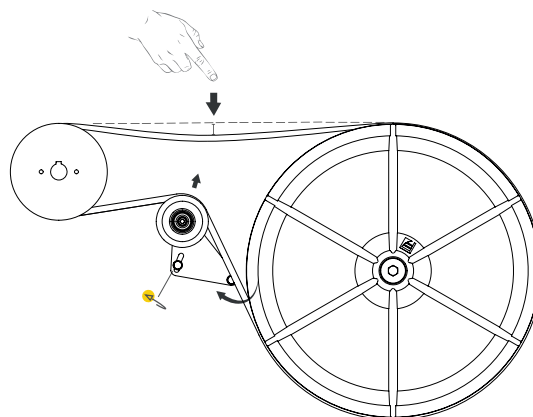
### 6 Level alignment of the rails

Before each work shift, check that the rails are level, especially in winter when frost can heave the ground.



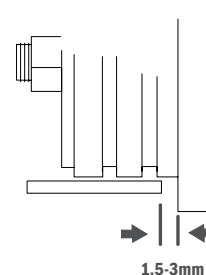
### 7 Band wheel belts

Regularly inspect the condition of the band wheel drive belt and the band wheel belt. Replace worn and damaged parts. Regularly check the tension of the drive belt and adjust if necessary.



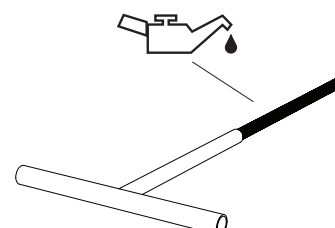
### 8 Blade guides

Regularly inspect the condition of the blade guides and check that the distance between the flange on the blade guide and the blade is within 3-5 mm. Replace worn or damaged blade guides.



### 9 Blade tensioning T-handle

Every month, the threaded hole and the threads of the T-handle should be lubricated with multi-purpose grease, or alternatively Super Flo. If you operate the band sawmill on a daily basis, you should lubricate more frequently.



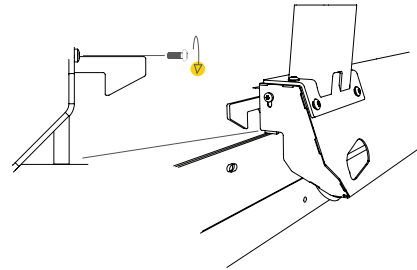
## MAINTENANCE

### 10 Band wheel guards

Every hour of operation, or when you replace the band blade, clean the inside of the band wheel guards and the blade from build-up of sawdust and wood debris.

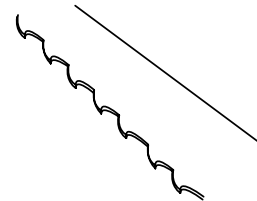
### 11 Track sweepers

Regularly check that both track sweepers touch the rails. This keeps the rails free from sawdust.



### 12 Band blades

Replace the blade with a new, sharp blade after approx. every two hours of effective sawing.



### 13 Inspection of safety features

Before each work shift, inspect the working order of following safety features: Check that the throttle handle returns to its neutral position when released, so that the engine goes down to idle. If not, lubricate the throttle wire with Super Flo (ref. no: 9999-000-5115). Check that the interlock safety switch in the hinges of the band wheel guards works. Check by opening the band wheel guards while the engine is turned off and listen for the safety switch disconnecting. Check that the emergency stop shuts down the engine ignition (listen for a clicking sound).

## TROUBLESHOOTING

SYMPTOM	PROBABLE CAUSE	SOLUTION
The blade quickly loses its sharpness	<ul style="list-style-type: none"> <li>• Dirty logs</li> <li>• The blade is worn out</li> </ul>	<ul style="list-style-type: none"> <li>• Avoid dragging the logs over the ground.</li> <li>• Debark the log where the blade is going to cut</li> <li>• Square the logs before cutting boards, to minimize the cuts into bark</li> <li>• Replace the blade with a new one</li> </ul>
Wavy cuts	<ul style="list-style-type: none"> <li>• Dull blade</li> <li>• The feed speed is too high</li> <li>• The feed speed is too low</li> <li>• Sawing through a partly frozen log</li> </ul>	<ul style="list-style-type: none"> <li>• Resharpener the blade</li> <li>• Lower the feed speed</li> <li>• Increase the feed speed</li> <li>• Let the log fully thaw or fully freeze before sawing it. <b>TIP:</b> Do not use a slower sawing speed when the blade are entering the log, but cut into the log end with the same sawing speed you are planning to have for the rest of the cut.</li> </ul>
The blade dives or rises when sawing	<ul style="list-style-type: none"> <li>• Insufficient blade tension</li> <li>• The feed speed is too high</li> <li>• The blade is damaged</li> <li>• The blade does not track correctly on the band wheels</li> </ul>	<ul style="list-style-type: none"> <li>• Increase the blade tension</li> <li>• Lower the feed speed</li> <li>• Replace the blade with a new one</li> <li>• Install the blade correctly and adjust the tracking</li> </ul>
Blade breakage	<ul style="list-style-type: none"> <li>• The blade is worn out</li> <li>• Dull and/or incorrectly installed blade</li> <li>• The blade tension is too tight</li> <li>• The blade guide rollers are not aligned with the band wheels</li> <li>• Worn band wheel belts. This makes the blade running directly on metal</li> </ul>	<ul style="list-style-type: none"> <li>• Replace the blade with a new one</li> <li>• Resharpener the blade</li> <li>• Reduce the blade tension</li> <li>• Adjust the blade guides</li> <li>• Replace the belts on the band wheels with new ones</li> </ul>
Uneven board thickness	The log bed flexes due to insufficient support	Support the rails and the log bed as outlined in the instructions in this manual
The blade does not track correctly and slips off the band wheels	<ul style="list-style-type: none"> <li>• The band wheels are incorrectly adjusted</li> <li>• Worn band wheel belts</li> </ul>	<ul style="list-style-type: none"> <li>• Adjust the band wheels as outlined in the instructions in this manual</li> <li>• Replace the belts with new ones</li> </ul>
The blade does not cut	The blade is installed backwards	Remove the blade and, turn the blade inside out and reinstall it
The blade does not slacken after releasing the blade tension with the T-handle	The blade tension assembly is sticking	Push the T-handle inwards
The sawhead is stiff when raised or lowered	<ul style="list-style-type: none"> <li>• The vertical guides are too tight</li> <li>• The sawhead lifting winch drum is dry</li> </ul>	<ul style="list-style-type: none"> <li>• Lubricate with Superflo and, if necessary, loosen them slightly</li> <li>• Lubricate with Superflo</li> </ul>
The sawhead is rattling when going down	The rails are not level and cause the carriage to twist	Level the rails as outlined in the instructions in this manual
The blade overheats during operation	<ul style="list-style-type: none"> <li>• The water tank is empty</li> <li>• The water valve is closed</li> </ul>	<ul style="list-style-type: none"> <li>• Refill with water</li> <li>• Open the water valve</li> </ul>
The engine does not start	<ul style="list-style-type: none"> <li>• The ignition key is in the "OFF" position</li> <li>• The emergency stop is pushed in</li> <li>• The interlock safety switch on the blade guards is disconnected</li> </ul>	<ul style="list-style-type: none"> <li>• Turn the ignition key to the "ON" position</li> <li>• Reset the emergency stop</li> <li>• Check the working order of the interlock safety switch</li> </ul>



## TECHNICAL DATA

### LOGOSOL B751

#### RAILS/BED

Length of rails, standard	5.75 m
Length of rail extension	1140 mm
Track width	800 mm
Total width	850 mm
Height	230 mm
Weight (5.75 m rails)	195 kg

#### SAW CARRIAGE

Length	900 mm
Width	1975 mm
Height	170 cm
Weight	195 kg
Volume of water tank	7.5 litres
Feed rate	Manual

#### CAPACITY

Max. log diameter	750 mm
Max. cant width	600 mm
Effective sawing length (standard)	4.8 m

#### BAND BLADE

Type and size	3843x33 pitch 22 mm
Band wheel diameter	500 mm
Band wheel rotation speed	1000 rpm
Blade speed	28 m/s

#### SAWMILL ENGINE

Electric motor	
Petrol engine	Briggs & Stratton
Volume of fuel tank	5 litres

#### SOUND LEVELS/VIBRATIONS

Equivalent sound pressure level in the operator's area 1)	88.4 dB(A)
Sound power level (estimated) 2)	109.4 dB(A)
Vibration level in handle 3)	<2.5 m/s <sup>2</sup>

1) The typical distribution measurement for equivalent sound pressure level is a standard deviation of 2 dB(A).

2) The typical distribution measurement for sound power level is a standard deviation of 3 dB(A).

3) The typical distribution measurement for the vibration level in the handles is 1 m/s<sup>2</sup>.

## ASSEMBLY: RAILS/BED

Work on level ground, as this will facilitate when adjusting the rails.



Read all the assembly instructions before beginning the assembly, and then follow the step-by-step instructions during the assembly.



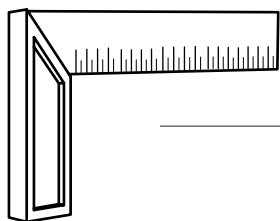
Order of assembly



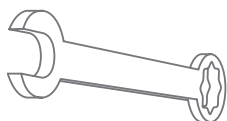
Good job!

## TOOLS REQUIRED

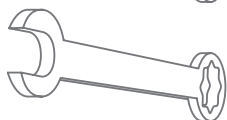
(Tools are not included in the shipment of the sawmill)



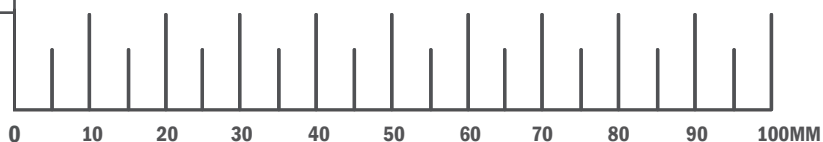
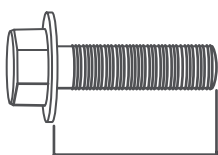
\_\_\_\_\_ 1 \_\_\_\_\_ Set square



\_\_\_\_\_ 2 \_\_\_\_\_ Fixed spanner 10 mm




\_\_\_\_\_ 1 \_\_\_\_\_ Fixed spanner 13 mm



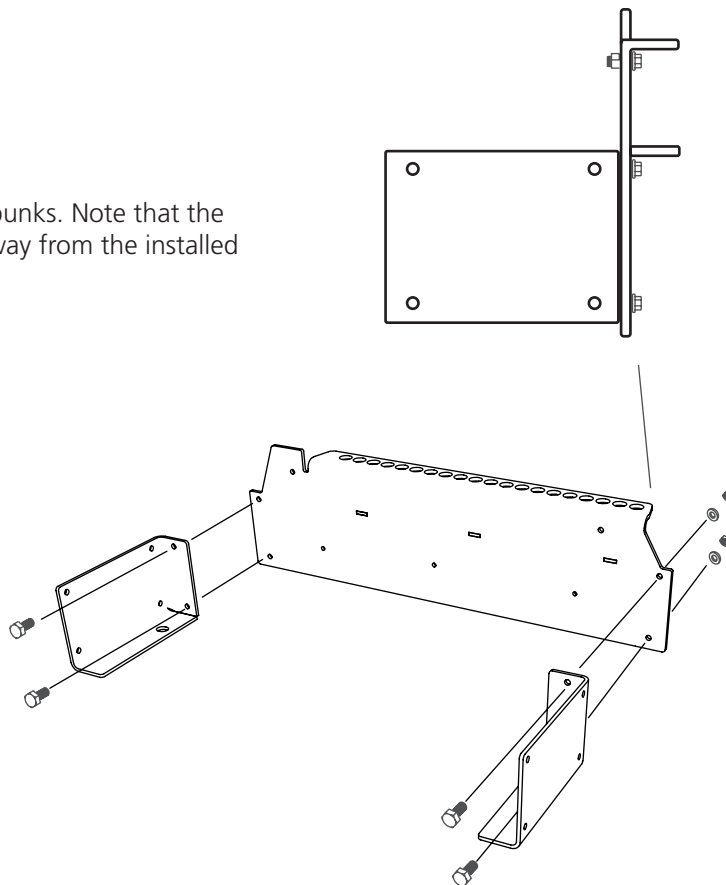
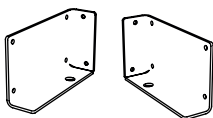
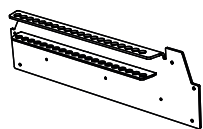
## ASSEMBLY

1

Fit the attachment brackets to one of the cross bunks. Note that the bent top edge of the cross bunk should point away from the installed attachment bracket.

 — 4 pcs — Sexkantsskruv M8x20

 — 4 pcs — Tensilock nut M8

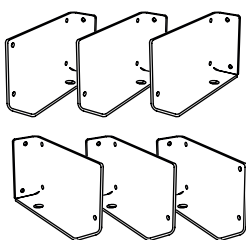
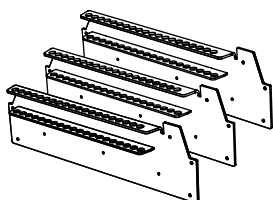


2

Repeat the assembly of the other cross bunks as described in step 1 above.

 — 12 pcs — Flange bolt M8x20


 — 12 pcs — Tensilock nut M8



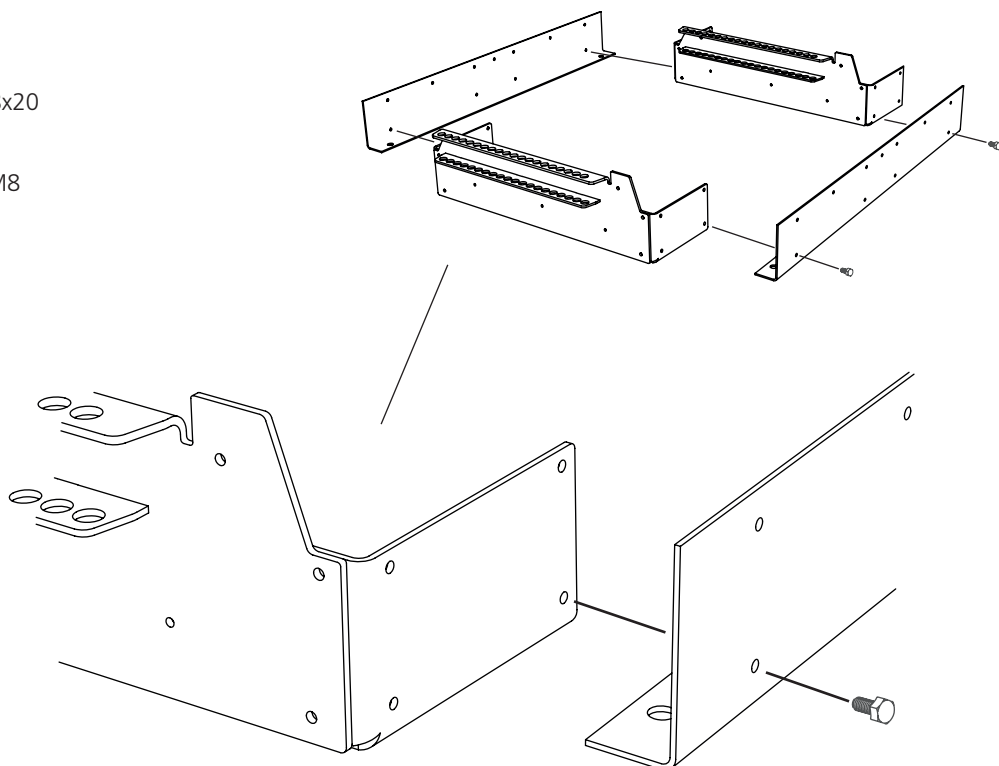
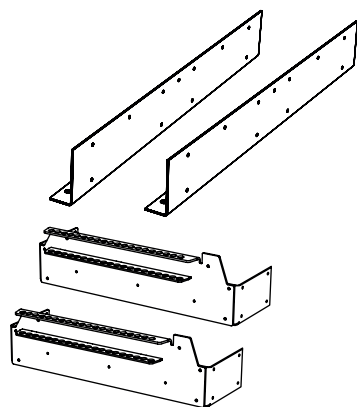
## ASSEMBLY

3

Fit the bed parts and the cross bunks together. Note that they should only be attached with bolts in the lower holes and the bolts should be loosely tightened.

 — 4 pcs — Flange bolt M8x20


 — 4 pcs — Tensilock nut M8

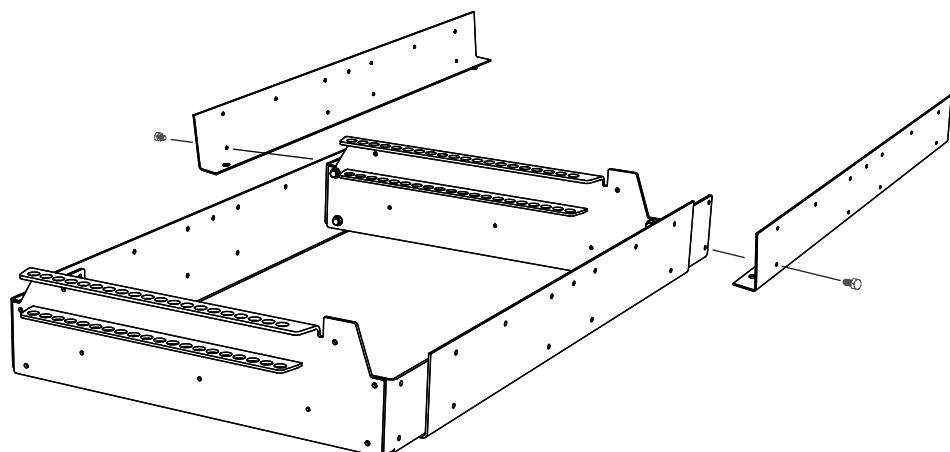
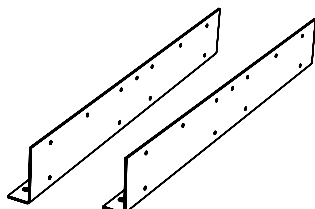


4

Continue fitting the bed parts and the cross bunks together. Note that they should only be attached with bolts in the lower holes and the bolts should be loosely tightened.

 — 2 pcs — Flange bolt M8x20

 — 2 pcs — Tensilock nut M8



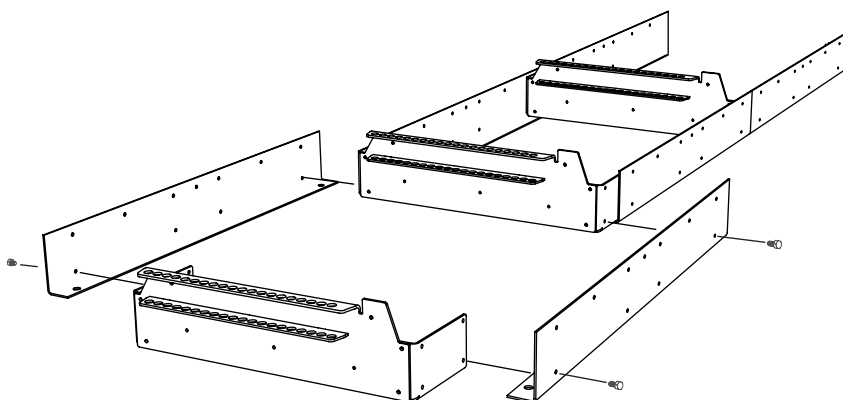
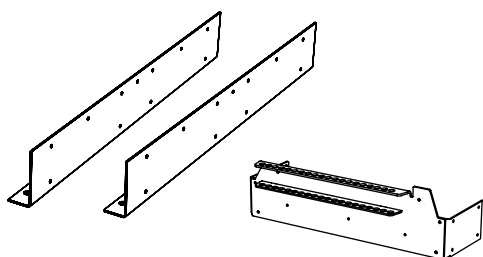
## ASSEMBLY

5

Continue fitting the bed parts and the cross bunks together. Note that they should only be attached with bolts in the lower holes and the bolts should be loosely tightened.

 — 4 pcs — Flange bolt M8x20

 — 4 pcs — Tensilock nut M8

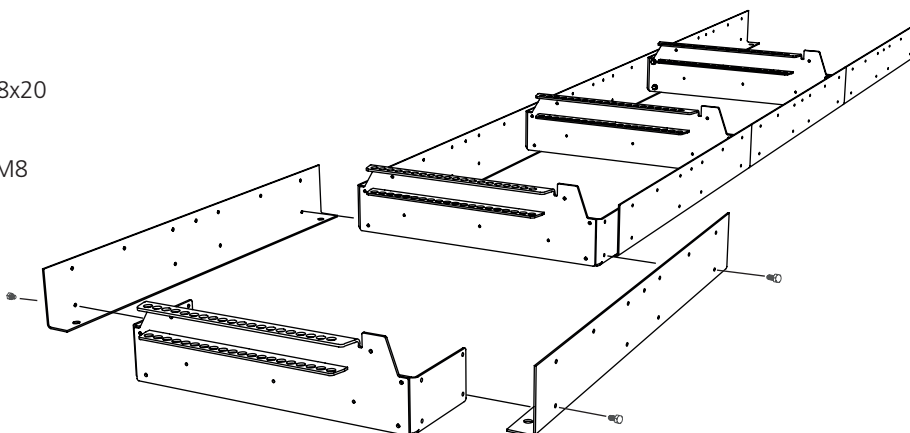
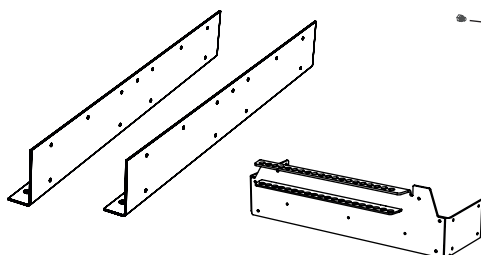


6

Continue fitting the bed parts and the cross bunks together. Note that they should only be attached with bolts in the lower holes and the bolts should be loosely tightened.

 — 4 pcs — Flange bolt M8x20

 — 4 pcs — Tensilock nut M8



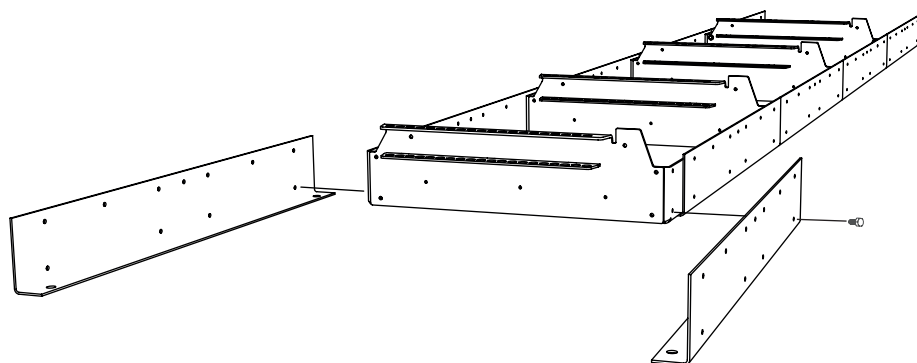
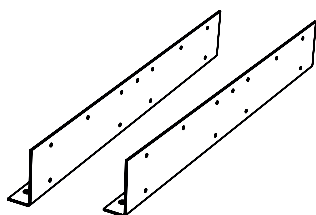
## ASSEMBLY

7

Continue fitting the bed parts and the cross bunks together. Note that they should only be attached with bolts in the lower holes and the bolts should be loosely tightened.

 — 2 pcs — Flange bolt M8x20

 — 2 pcs — Tensilock nut M8



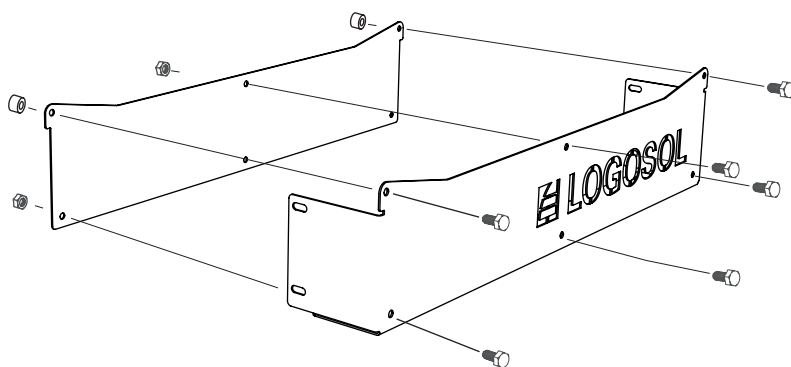
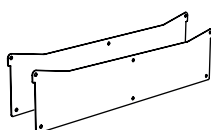
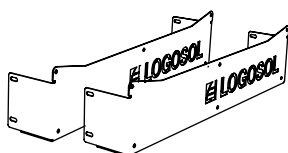
8

Fit the inner end plates to the bed end frames. Note that the two rubber bumpers should be installed in the top corners.

 — 12 pcs — Flange bolt M8x12

 — 8 pcs — Tensilock nut M8

 — 4 pcs — Rubber bumper



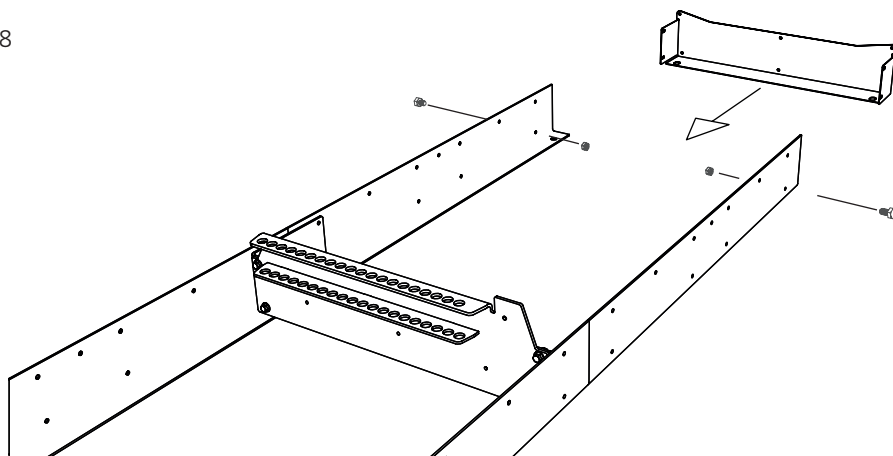
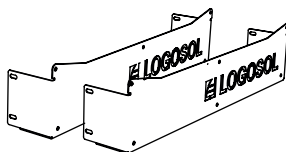
## ASSEMBLY

9

Fit the bed end frame to the bed end. Only secure with bolts in the lower holes. Repeat the assembly on the other bed end.

 — 4 pcs — Flange bolt M8x20

 — 4 pcs — Tensilock nut M8

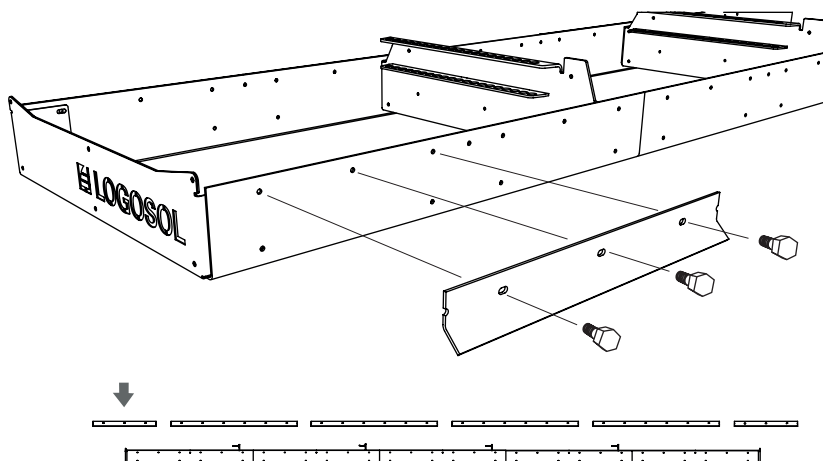
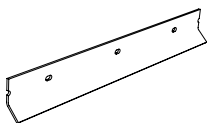


10

Assemble the rail parts. Start with a short rail part (3 holes), which is to be installed at the end of the bed. Tighten the bolts loosely.

 — 3 pcs — Flange bolt M8x20

 — 3 pcs — Tensilock nut M8



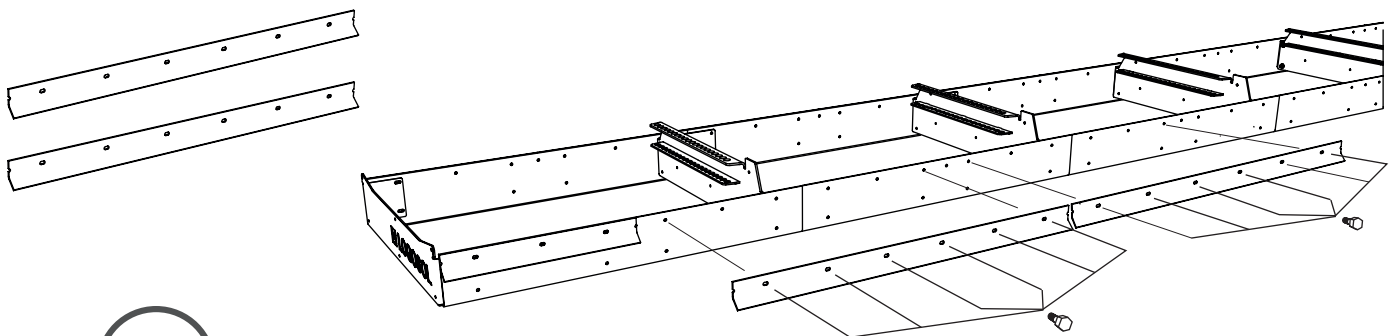
## ASSEMBLY

11

Install the two following rail parts. Tighten the bolting loosely.

 — 12 pcs — Flange bolt M8x20

 — 12 pcs — Tensilock nut M8

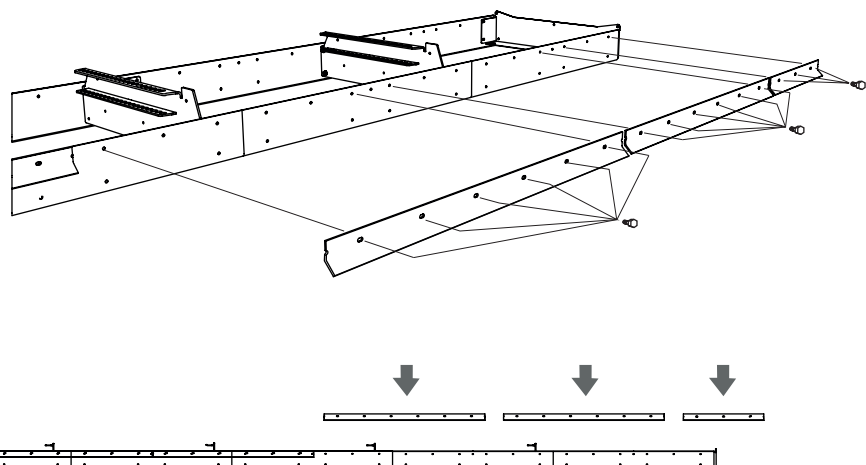
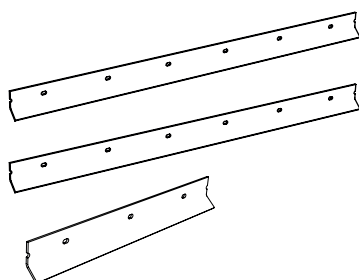


12

Fit the last three rail parts. Note that the short rail part should be installed at the end of the bed. Tighten the bolting loosely.

 — 15 pcs — Flange bolt M8x20

 — 15 pcs — Tensilock nut M8





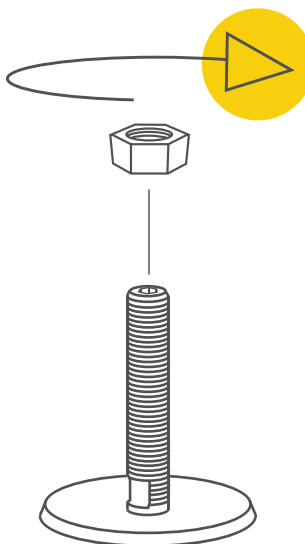
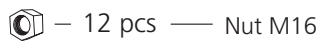
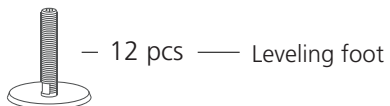
## ASSEMBLY

13

To complete the assembly of the rail parts, repeat the steps 9-12 on the opposite side of the bed.

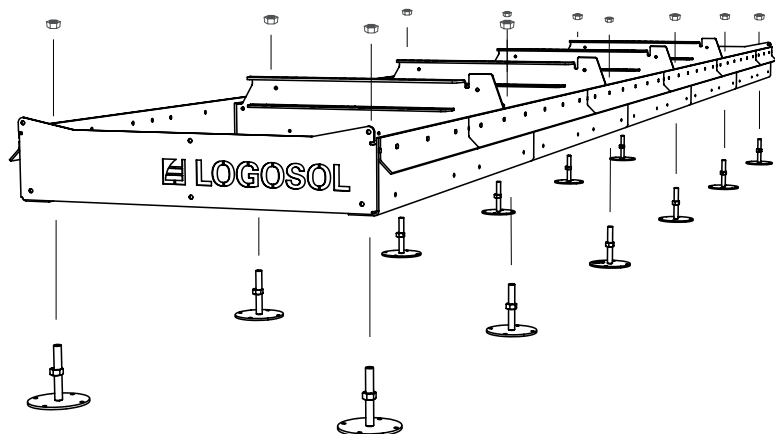
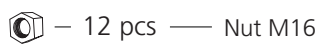
14

Fit the adjusting nuts on the leveling feet.



15

Install the leveling feet to the underside of the bed and secure with the lock nuts.



## ADJUSTMENT



Good job!

Now it is time to adjust the rails.

## ADJUSTMENT

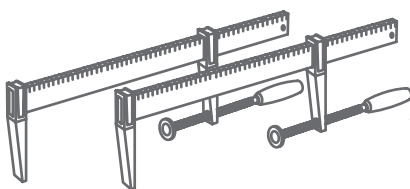
(Tools are not included in the shipment of the sawmill)



Read all the assembly instructions before beginning the assembly, and then follow the step-by-step instructions during the assembly.

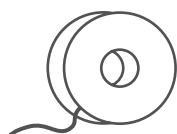


The purpose of adjusting the rails is to get them as level as possible. Read through the instructions and be careful.



2st

Clamps



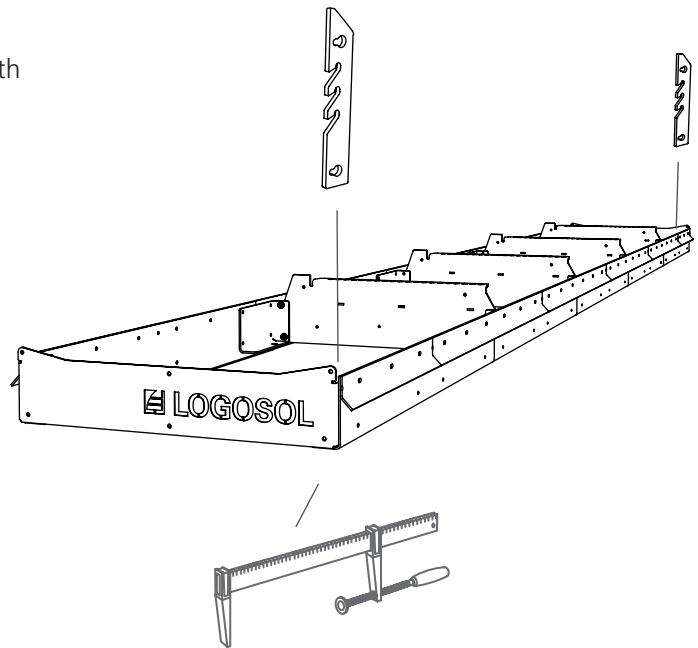
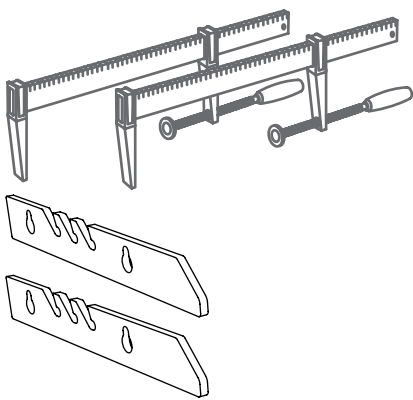
1st

Mason's string

## ADJUSTMENT

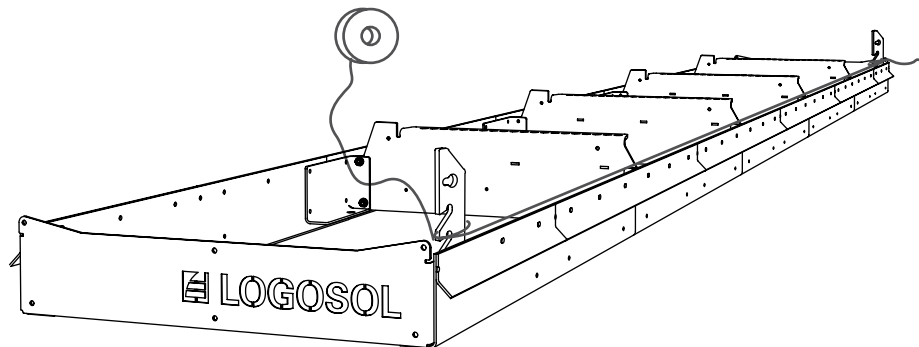
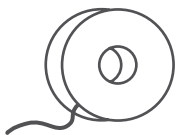
1

Start by securing a log support with a clamp on both ends of the bed.



2


Tie a string around the log supports and tighten it firmly. Place the string close to the rail.

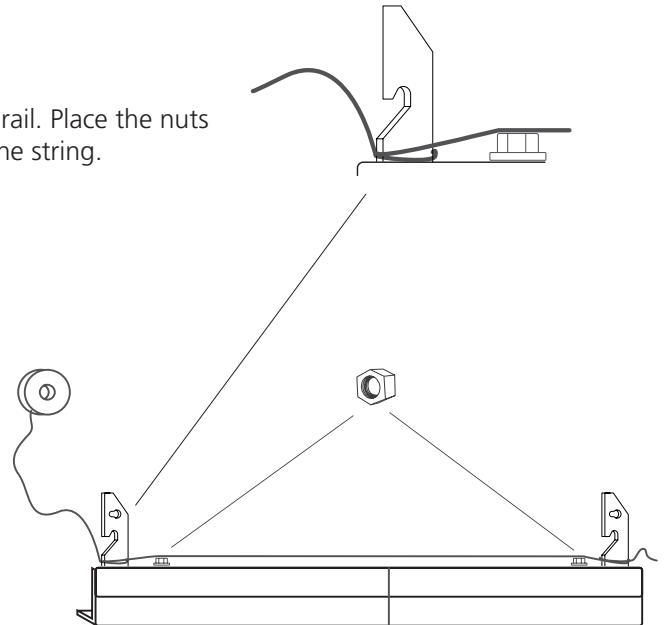


## ADJUSTMENT

3

Place two nuts as spacers between the string and the rail. Place the nuts at the ends of the rail and make sure they are lifting the string.

 — 2 pcs — Tensilock nut M8

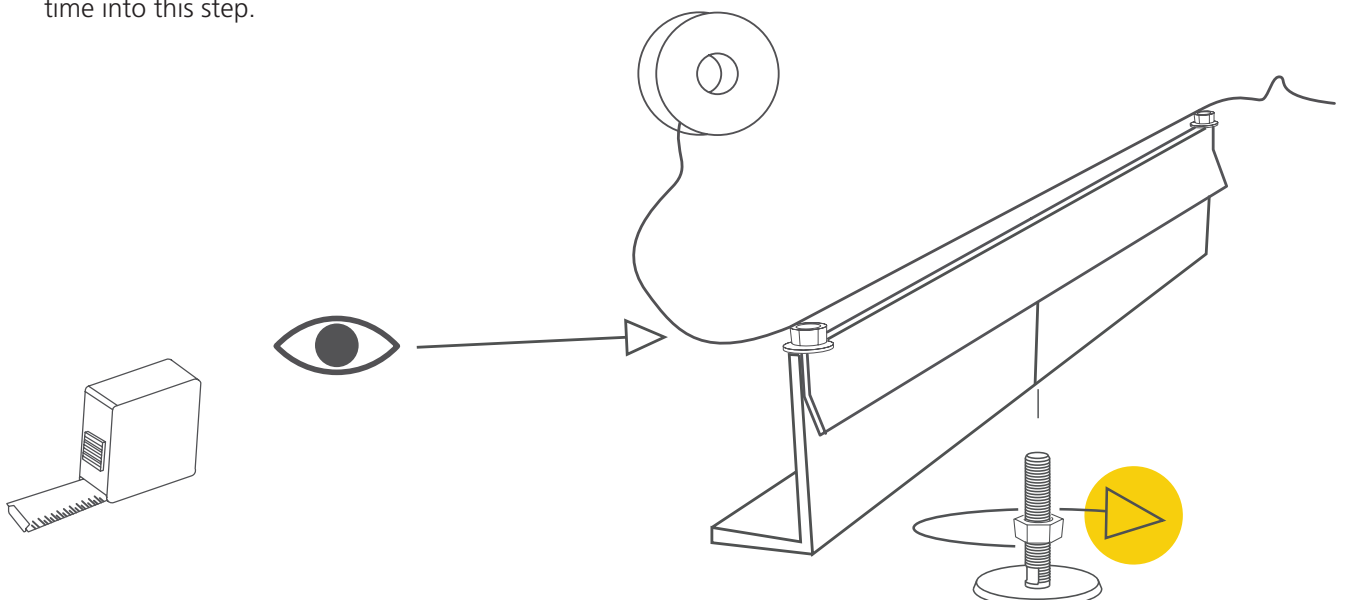


4

Measure along the string to check that the distance between the string and the rail is the same along the whole rail. To adjust the levelness of the rail, turn the adjusting nuts on the leveling feet at the points where the rail is not level.

### Important!

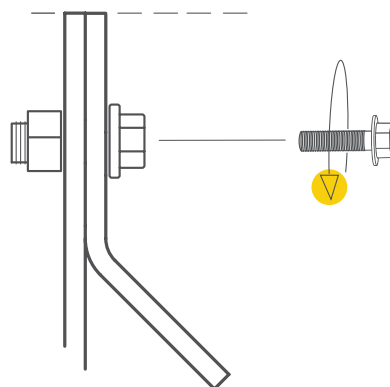
This step is crucial for the precision of the sawmill. Be careful and put some extra time into this step.



## ADJUSTMENT

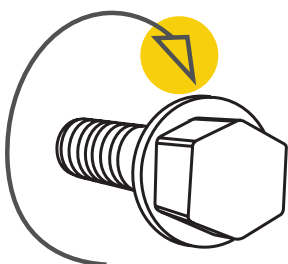
5

When the rail is adjusted level, check that the all the bed joints are level and that the bed parts and the rail parts are level with each other. All joints should be as level as possible. Adjust and tighten the bolting step by step.



6

When one side of the bed is adjusted along its whole length and the joints are level, tighten all boltings on this side of the bed. Then, repeat all the adjustment steps on the opposite side of the bed to complete the adjustment.



Good job!

## FINAL ASSEMBLY: RAILS/BED



Read all the assembly instructions before beginning the assembly, and then follow the step-by-step instructions during the assembly.

Now it is time to do the final assembly of the rails/bed.

1

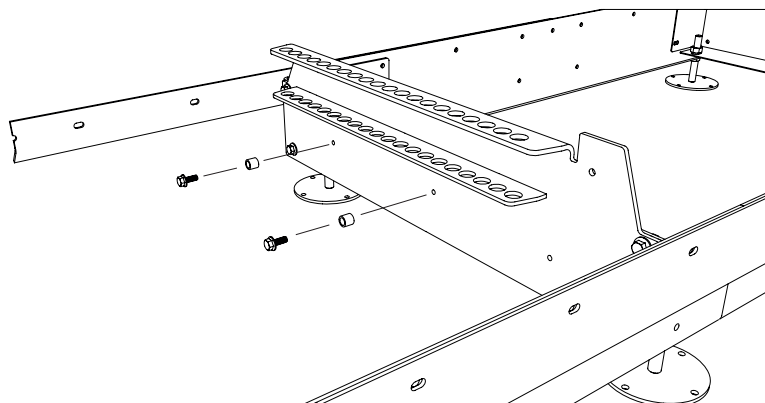
Fit the spacer sleeves for the log supports with bolts in two of the cross bunks.



— 4 pcs — Flange bolt M8x16



— 4 pcs — Spacer sleeve M8x11




## ASSEMBLY

2


Fit the log support adjusting arm to the cross bunk. Note the possibility of hanging away the log support on the spacer sleeves on the cross bunk (to the left in the illustration). Repeat the assembly on the other cross bunk.


 — 4 pcs — Flange bolt M8x25

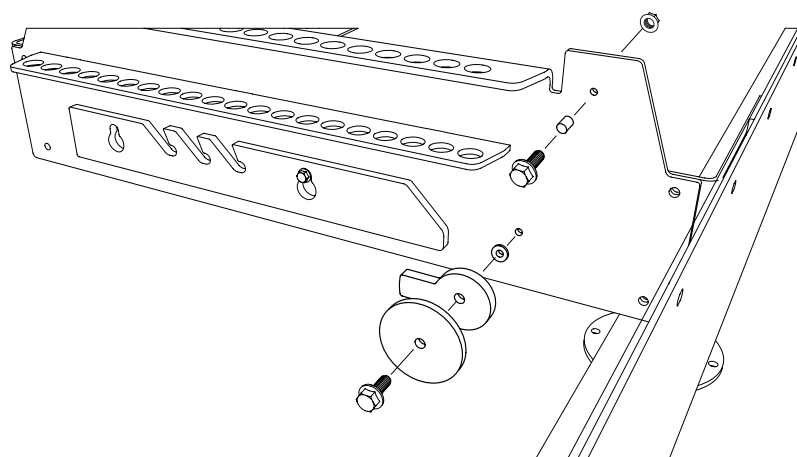
 — 2 pcs — Eccentric handle

 — 2 pcs — Washer

 — 2 pcs — Flat washer M8

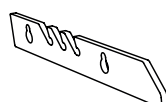
 — 2 pcs — Spacer sleeve M8x11

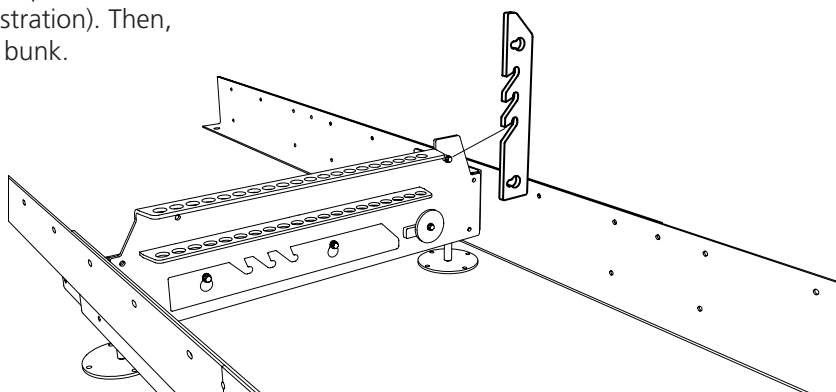
 — 2 pcs — Tensilock nut M8



3

Fit the log support to the cross bunk. Note the possibility of hanging away the log support on the spacer sleeves on the cross bunk (to the left in the illustration). Then, repeat the assembly on the other cross bunk.

 — 4 pcs — Log support





Good job!

Now it is time to install the sawhead onto the rails.

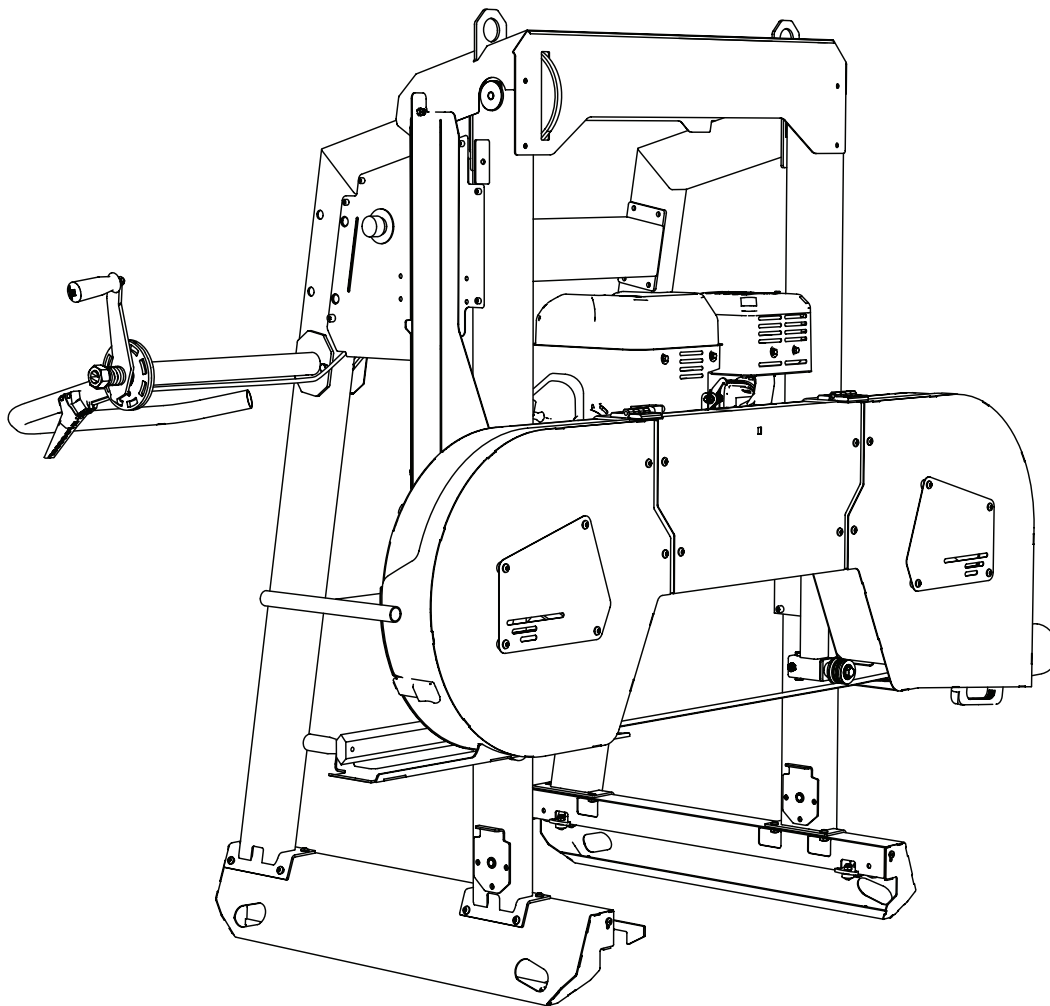


## SAWHEAD

### The sawhead

The sawhead comes fully assembled except for the anti-tip wheels of the carriage, which are to be installed immediately after the sawhead is positioned on the rails. After the anti-tip wheels have been installed, the equipment must be adjusted in the same order as is outlined in the user manual in the chapter *Order of adjustment* to ensure proper operation of the machine.

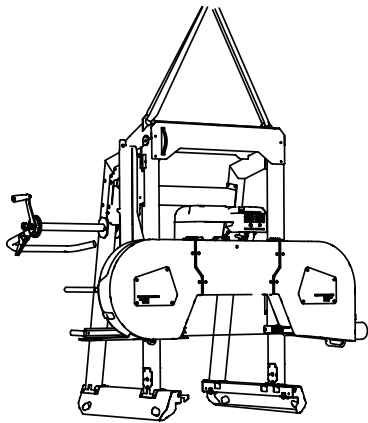
**Sawhead weight: 130 kg**



## SAWHEAD

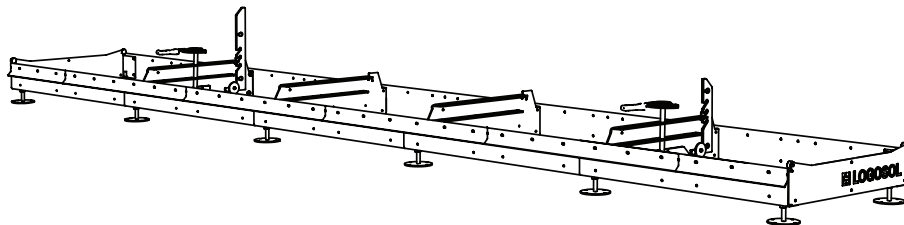
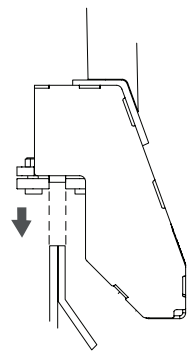
### Install the sawhead onto the rails

Lift the sawhead in place on the rails. The total weight of the sawhead is 130 kg. Use straps that are approved for this and fasten them in the sawhead lift rings. Carry out the lift with the help of a for this situation appropriate lifting device.



#### Important!

Make sure that the top guide bearings of the lower side frames clasp the rails.



**Danger! Risk of tilting.**  
**Critical step of assembly.**



When the sawhead is installed onto the rails, the anti-tip wheels must be fitted to the underside of the lower side frames of the carriage.



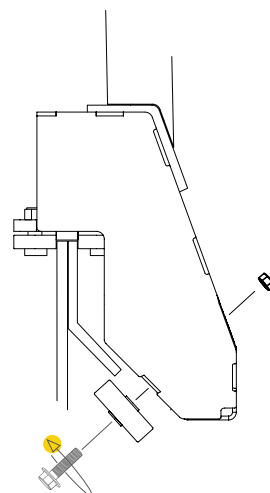
— 4 pcs — Wheel



— 4 pcs — Flange bolt M8x30



— 4 pcs — Tensilock nut M8



## ORDER OF ADJUSTMENTS



Read all the adjustment instructions before beginning adjusting, and then follow the step-by-step instructions while adjusting.



Order of assembly



Good job!

## ORDER OF SAWMILL ADJUSTMENTS



To ensure good operation of the sawmill, it is important that it is correctly adjusted. Some adjustments affect other machine settings. Due to this, it is crucial that you follow the order outlined below.



Adjust the levelness of the rails/bed



Adjust the parallelity between the band blade and the cross bunks



Adjust the adjustable blade guide horizontally



Adjust the band wheels



The lengthwise position of the blade / Adjust the lengthwise position of the blade



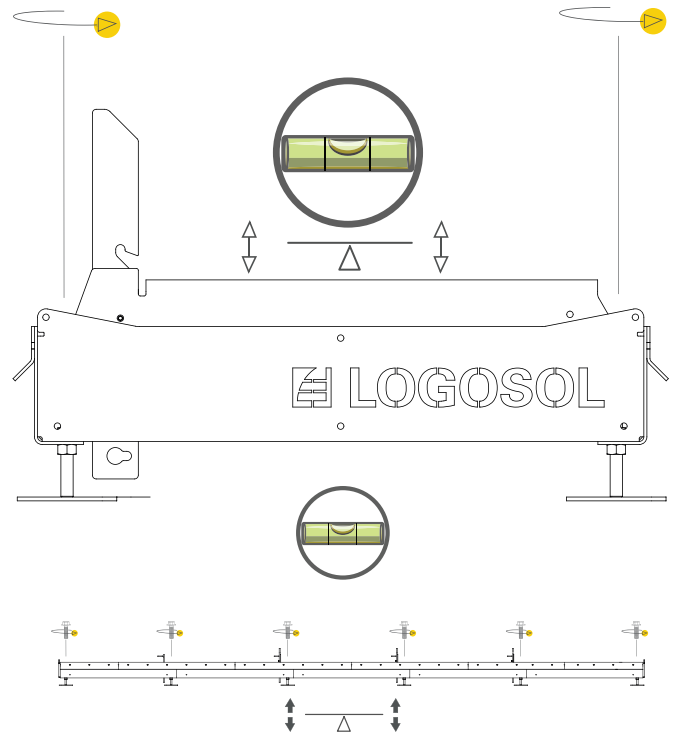
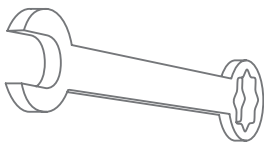
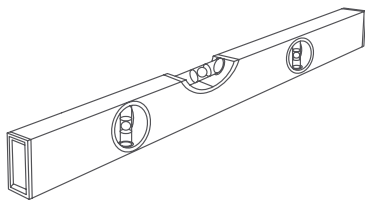
Adjust the parallelity between the band blade and the bed

## ORDER OF ADJUSTMENTS

1

### Adjust the levelness of the rails/bed

To ensure a good sawing result, it is important that the rails are completely level. Earlier, we have adjusted the levelness along the long sides of the bed. Now the bed is to be adjusted on its short sides. Place a spirit level on a cross bunk and adjust the leveling feet until the rails are on a level. Repeat this procedure on all cross bunks until the rails are on a level along the whole length of the bed.



## ORDER OF ADJUSTMENTS

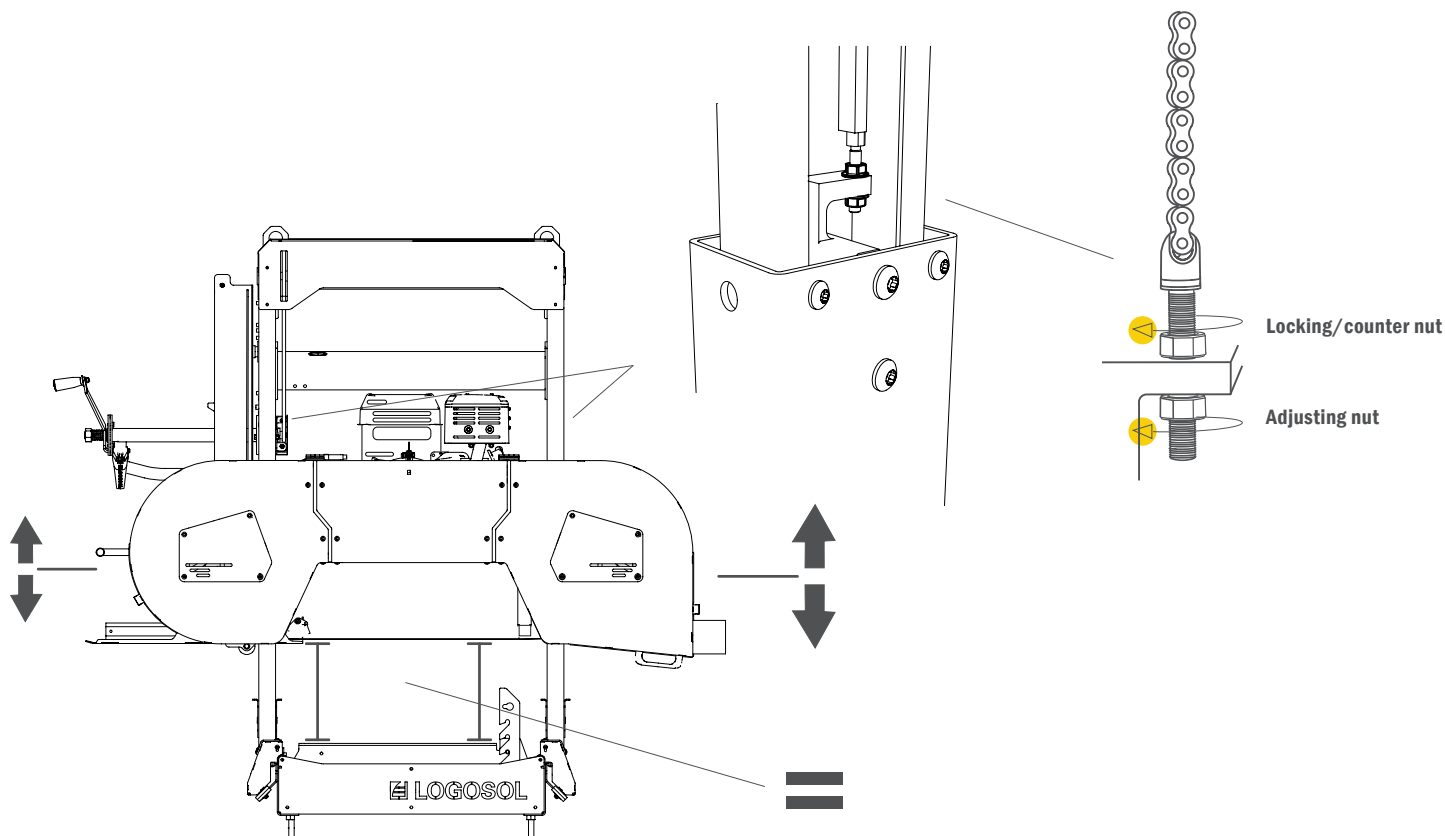
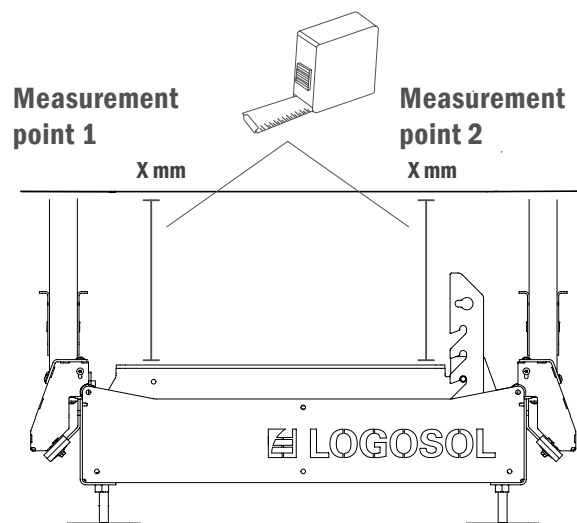
2

### Adjust the parallelity between the band blade and the cross bunks

To ensure a good sawing result, it is important that the band blade is parallel with the cross bunks. Measure the vertical distance between the blade and the cross bunk. Note down the measurements.

When carrying out this adjustment, the blade guide rollers have to be removed.

Adjust the band blade by turning the adjusting bolts on the sawhead until the measurements are the same at both measuring points.

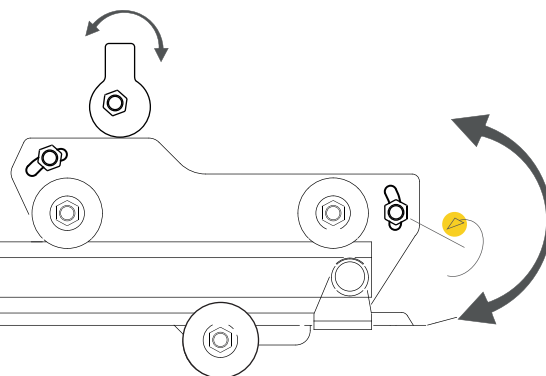
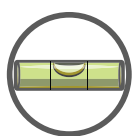
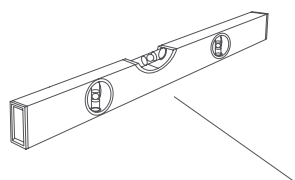
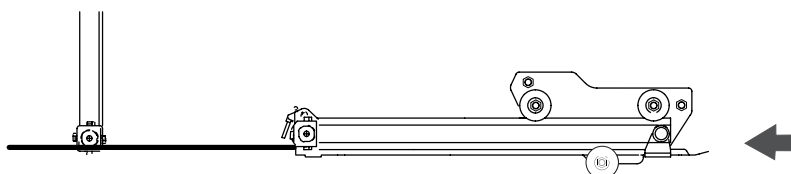


## ORDER OF ADJUSTMENTS

3

### Adjust the adjustable blade guide horizontally

The adjustable blade guide with guard has to be adjusted to ensure straight cuts in all positions. Install the blade guide rollers. Then, bring the blade guide with support to its innermost position. Place a spirit level on the blade guide and adjust by turning the eccentric handle until the blade guide with guard is horizontally level. When it is level, use spacers on the fixed blade guide roller until both blade guide rollers have the same distance to the cross bunk.



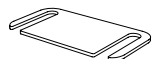
0.5mm



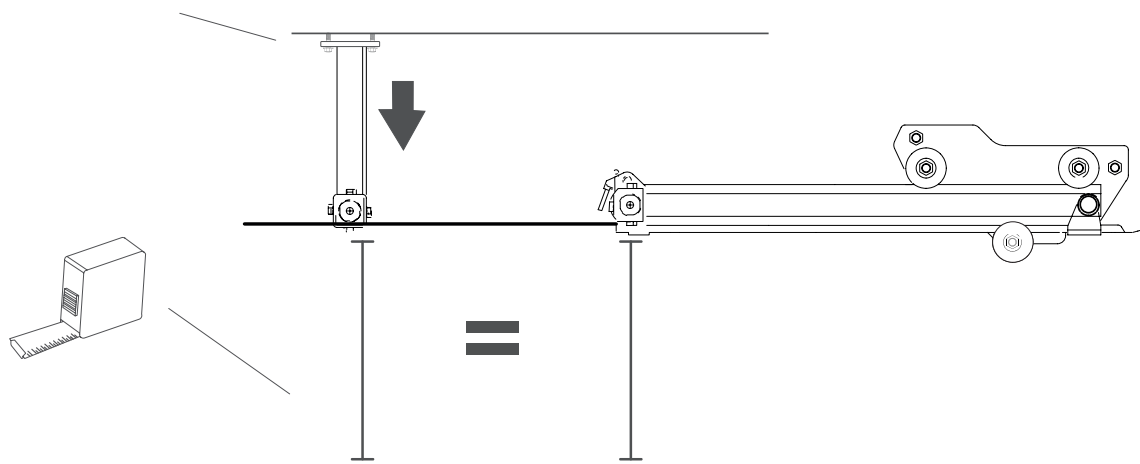
1mm



2mm



As standard, the sawmill comes with 2 mm spacers installed.

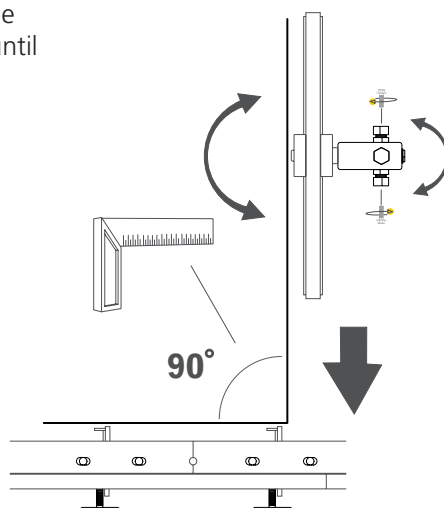
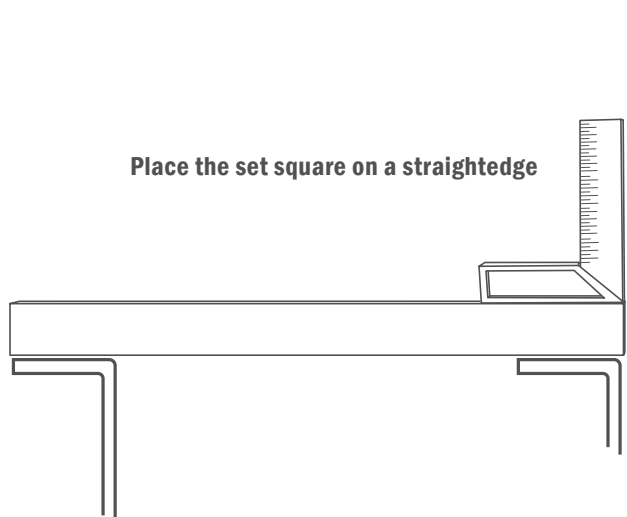


## ORDER OF ADJUSTMENTS

4

### Adjust the band wheels

The angle of the band wheels has to be adjusted so that they are at right angles to the cross bunks. With the sawhead in its lowest position, check the perpendicularity between the band wheels and the cross bunks. A good method is to place a set square on a straightedge that rests on two cross bunks. Adjust by first loosening the lock nut and then turning the adjusting screws on the top side of the band wheel shaft mountings until the band wheels and the cross bunks are perpendicular to each other. Tighten lock nuts and adjusting bolts.

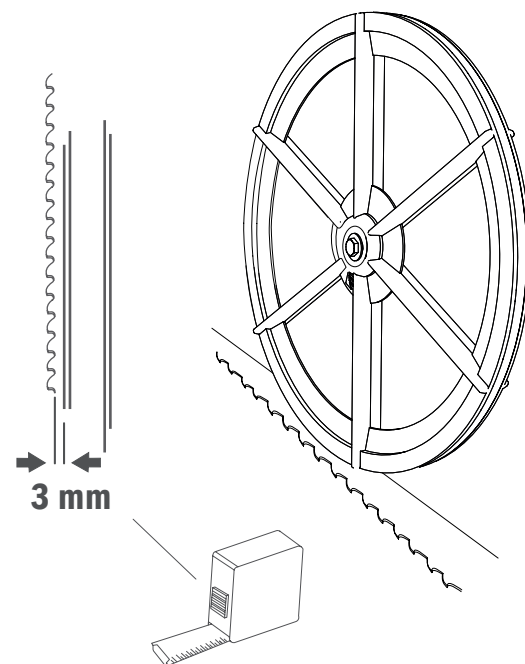


## ORDER OF ADJUSTMENTS

5

### The lengthwise position of the blade

The lengthwise position of the blade is crucial to the sawing result. To ensure the best possible sawing result, we recommend that the blade is positioned so that the distance between the lowest part of the tooth and the front edge of the band wheel is 3 mm. First, install the blade according to this measurement. Then, tension the blade. Rotate the wheels by hand and check that the blade's lengthwise position is unchanged. Rotate the wheels at least three turns. If the blade moves outwards or inwards on the wheels, you adjust this as described below in the next section. If the blade runs straight on both band wheels, close the band guards and start the sawmill. Throttle up to make the wheels spin, then release the throttle. Open the blade guards and check that the lengthwise position of the blade is unchanged. If this is the case, the adjustment is correct.

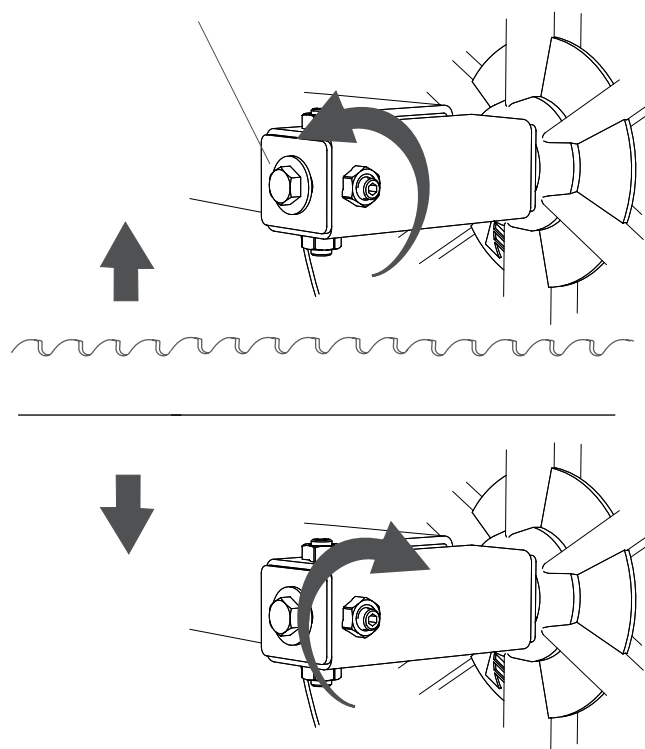


### Adjust the lengthwise position of the blade

The lengthwise position of the blade is adjusted by the adjusting bolts that is positioned horizontally, i.e. the bolts situated on the outside of the shaft mountings. Before adjusting, the lock nut has to be opened. If the blade moves outwards from the wheels, turn the adjusting bolt clockwise to compensate. If the blade moves inwards, turn the bolt counter-clockwise. Adjust in small steps. Tighten all lock nuts and adjusting screws after the adjustment.

**TIP!** You may need to loosen the adjusting bolts slightly on the top side of the shaft mountings before adjusting the blade.

Loosen the lock nut



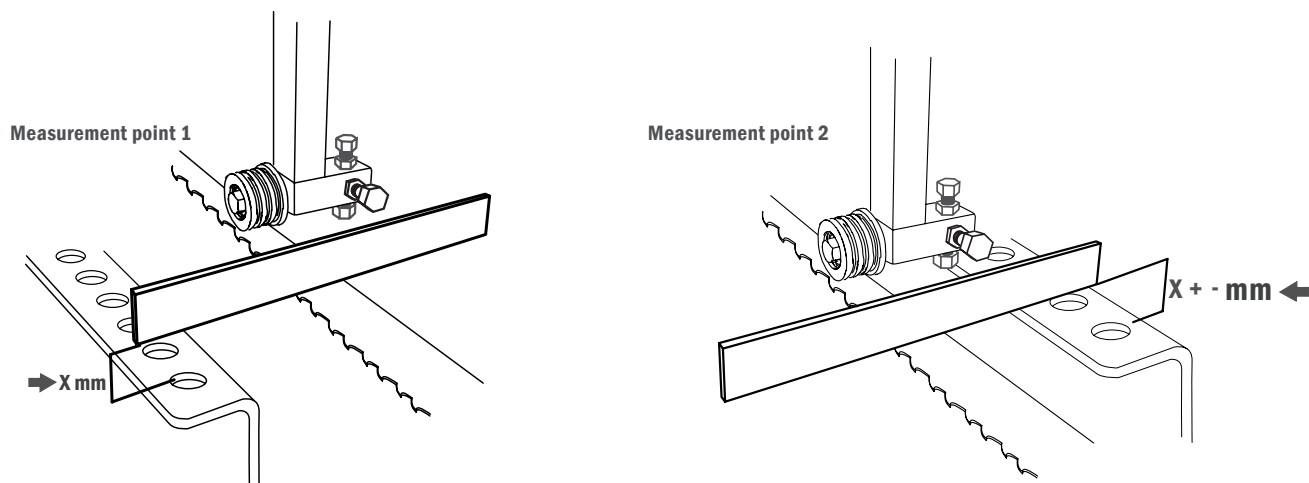


## ORDER OF ADJUSTMENTS

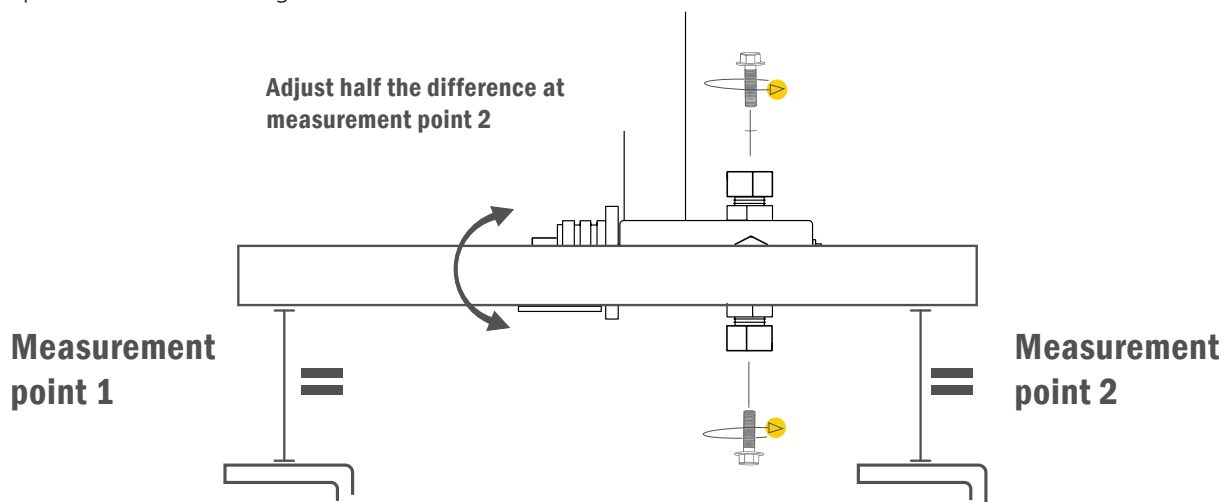
6

### Adjust the parallelity between the band blade and the bed

To ensure good operation of the sawmill it is important that the blade is parallel to the bed/rails. Place a straightedge on the blade as close as possible to one of the blade guide rollers. The straightedge should rest on a tooth that is not set. Now, measure from the lower front edge of the straightedge (measurement point 1) vertically down to a cross bunk. Note down the measurement. Move the sawhead forward and measure from the rear edge of the straightedge down to the cross bunk (measurement point B). Compare the measurements. They should be the same at measurement point 1 and measurement point 2.



If the measurements differ, turn the adjusting bolts on the blade guide until the measurements are the same at both measurement points. One method to facilitate adjusting, is to use the value from measurement point 1, compare it with the value from measurement point 2 and then, by raising or lowering the blade guide, adjust half the difference at measurement point 2. When the blade is parallel to the bed, repeat the adjustment steps on the other blade guide roller.





Good job!

## OTHER ADJUSTMENTS

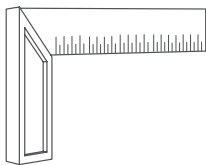


Read all the adjustment instructions before beginning adjusting, and then follow the step-by-step instructions while adjusting.

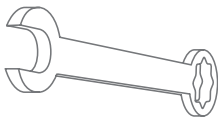


The following instructions are crucial for a good operation of the sawmill, but the adjustments do not affect each other and do not have to be carried out in a particular order.

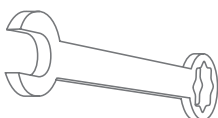
## TOOLS REQUIRED



\_\_\_\_\_ 1 pc \_\_\_\_\_ Set square



\_\_\_\_\_ 2 pcs \_\_\_\_\_ Fixed spanner

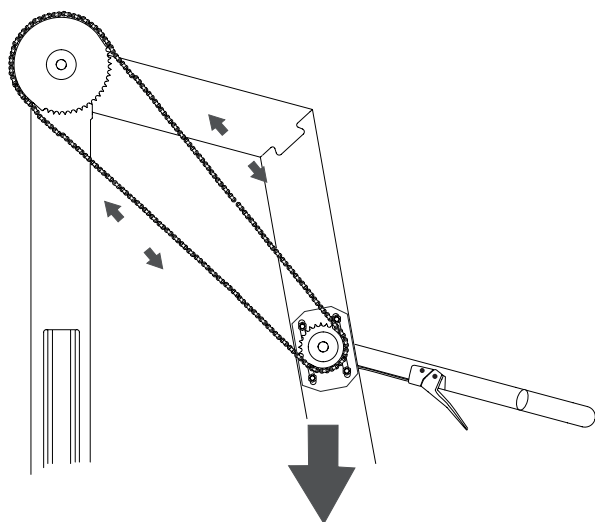


\_\_\_\_\_ 2 pcs \_\_\_\_\_ Fixed spanner

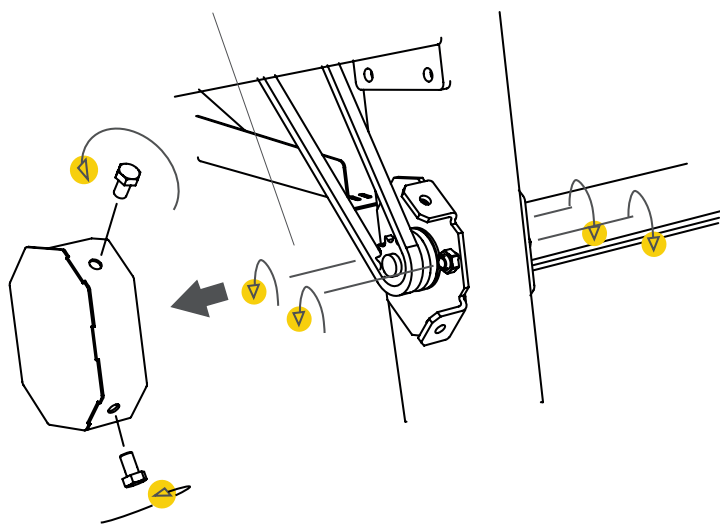
## OTHER ADJUSTMENTS

### Chain tension

The crank handle chain has to be tensioned to ensure good functioning of the lifting mechanism. First, unbolt and remove the chain drive cover. Then, loosen the crank handle's fastening bolts. Now, move the handle downwards along the rear carriage leg to tension the chain.

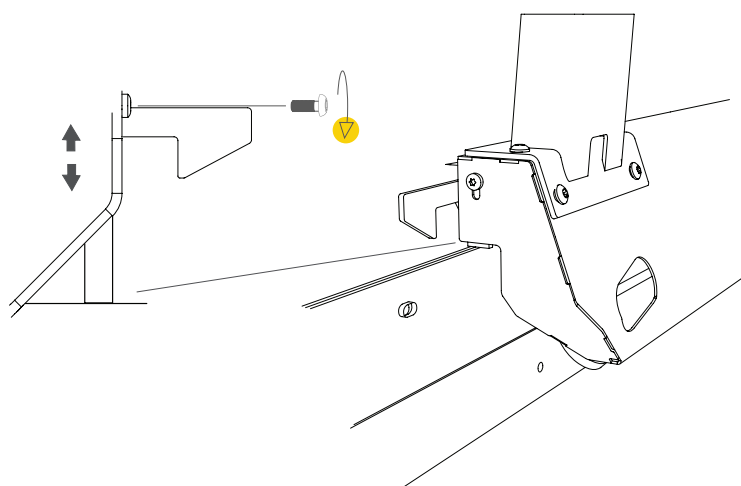


### Loosen the locking bolts



### Track sweepers

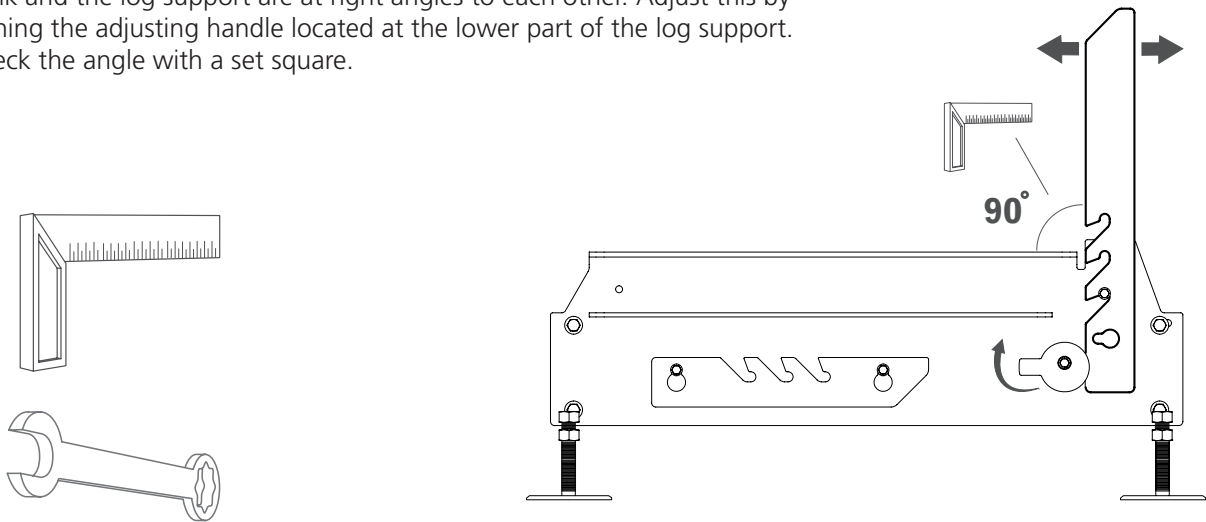
The saw carriage has track sweepers on its ends. Regularly check that they touch the rails. The position of the track sweepers is adjusted by loosening the lock bolt and then moving them up or down to the correct position.



## OTHER ADJUSTMENTS

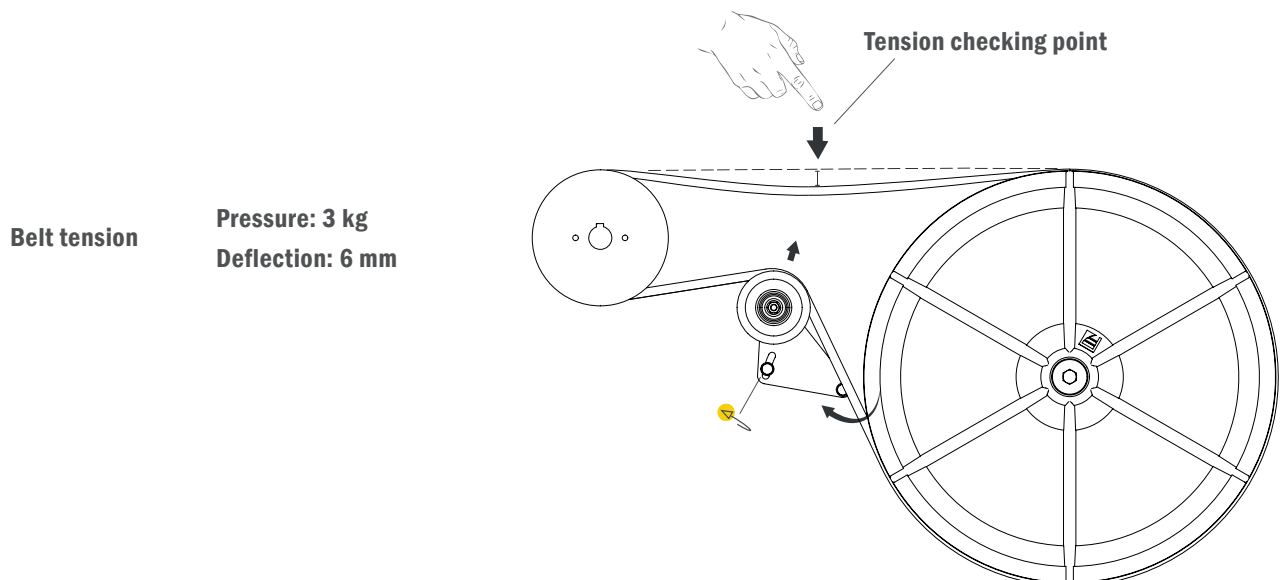
### Log support

To ensure good operation of the sawmill, it is important that the cross bunk and the log support are at right angles to each other. Adjust this by turning the adjusting handle located at the lower part of the log support. Check the angle with a set square.



### Drive belt tension

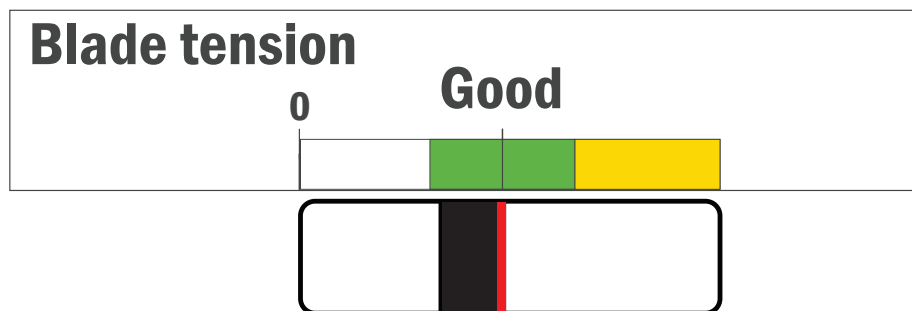
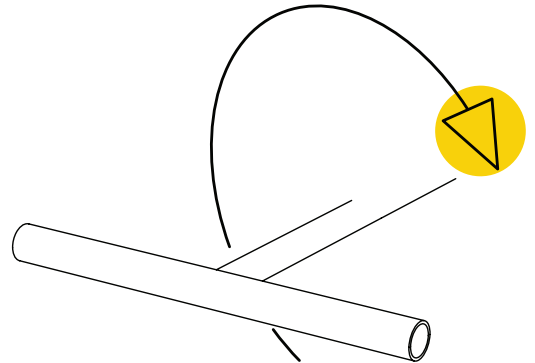
To prevent the drive belt from slipping on the pulley, the drive belt has to be correctly tensioned. The belt tensioner pulley assembly can be rotated around its lower bolting. Tension the belt until you have reached the same values as stated below at the tension checking point.



## OTHER ADJUSTMENTS

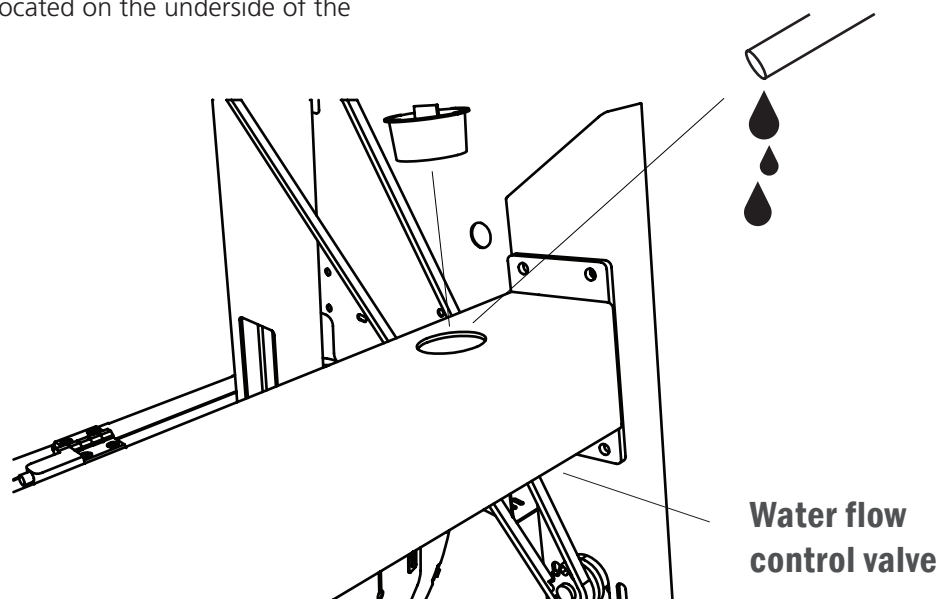
### Blade tension

Tension the blade by turning the T-handle clockwise. Read the blade tension scale, which is located inside the band wheel guards. Tension the blade until the red line is aligned with the centre of the green field on the blade tension decal.



### Water tank

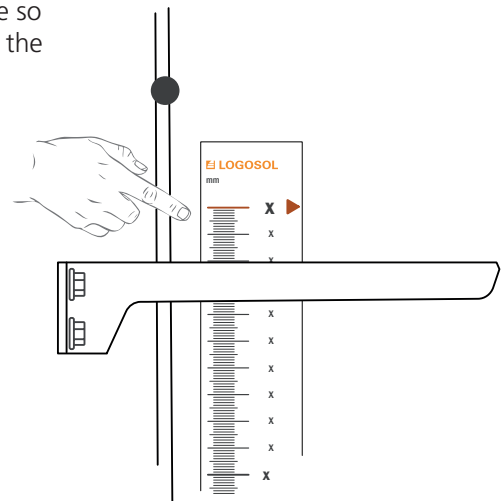
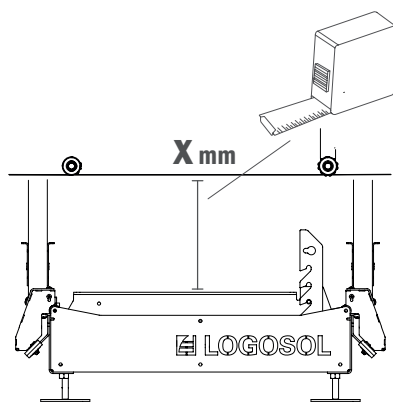
The sawmill water tank has to be refilled before operation. Refill through the opening in the back of the saw carriage. The volume of the tank is 7 litres. The water flow to the blade is adjusted by a valve located on the underside of the tank.



## OTHER ADJUSTMENTS

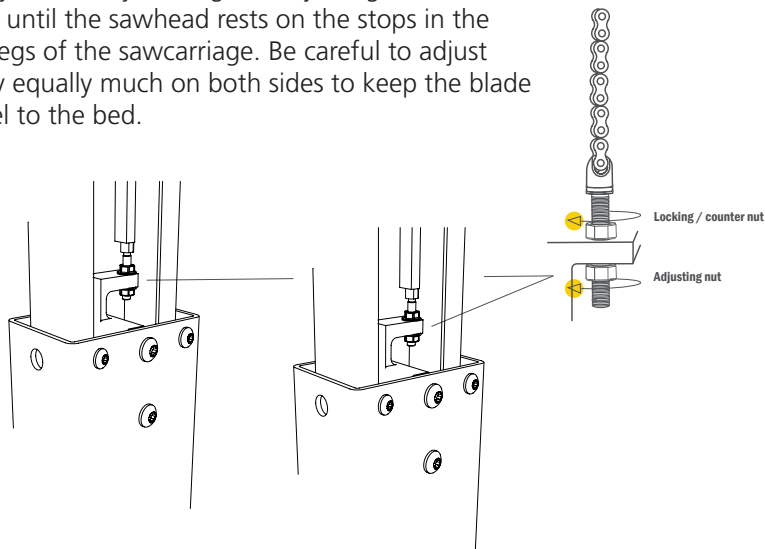
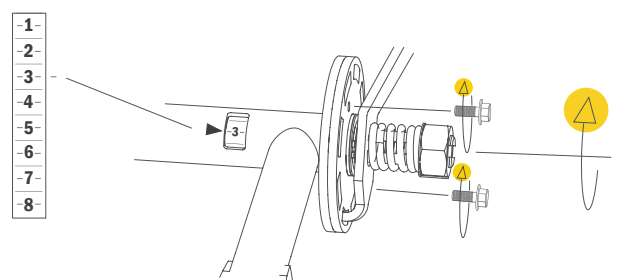
### Adjusting the scale

To ensure that the scale shows the correct measurement between the cross bunk and the blade, it has to be calibrated. Do as follows: Measure the vertical distance between the sawhead and a cross bunk. Note down the distance. Fit the magnetic scale to the scale plate so that the measurement indicated at the top side of the pointer is the same as the measurement you noted down.



### Adjusting the crank

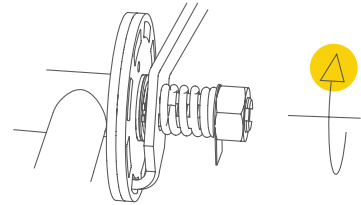
To ensure that the scale on the sawhead crank works correctly, it has to be calibrated. This is done by lowering the sawhead to its lowest position and then loosening the adjusting plate of the crank. Now, raise the sawhead until the pointer in the crank tube is aligned with a number on the crank scale. It does not matter what number it is, as long as it is aligned with the pointer. Then, tighten the bolting. Finish the adjustment by turning the adjusting bolts on the chains until the sawhead rests on the stops in the front legs of the sawcarriage. Be careful to adjust exactly equally much on both sides to keep the blade parallel to the bed.



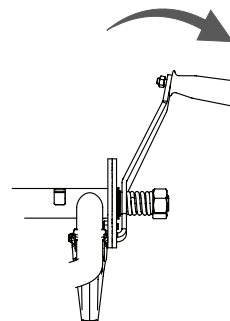
## OTHER ADJUSTMENTS

### Adjusting the crank spring

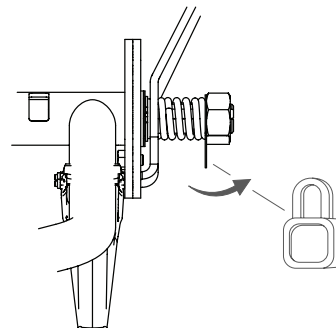
Tighten the lock nut to tension the spring so that the handle easily springs back and locks in the crank disc.



Check that the sawhead easily can be lowered by pushing the crank handle in, and turning it counter-clockwise.

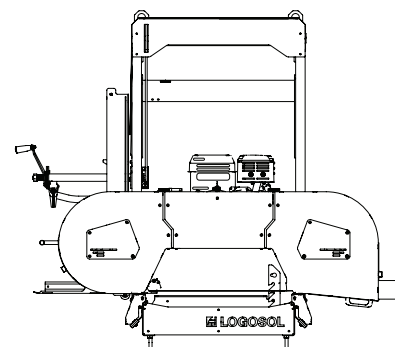


Once the handle is in good working order, you bend the lock washer to secure the lock nut in position.



### Preparing the engine before starting up

Before starting the engine for the first time, the engine has to be filled with oil and fuel. Lower the sawhead to its lowest position to facilitate the work. More detailed information on the engine can be read in the user manual of the engine, which is included in the shipment.

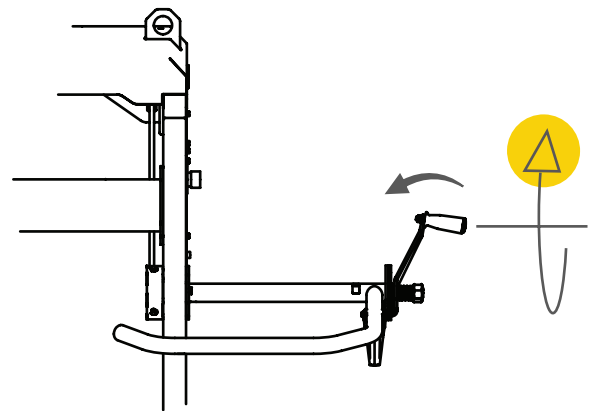
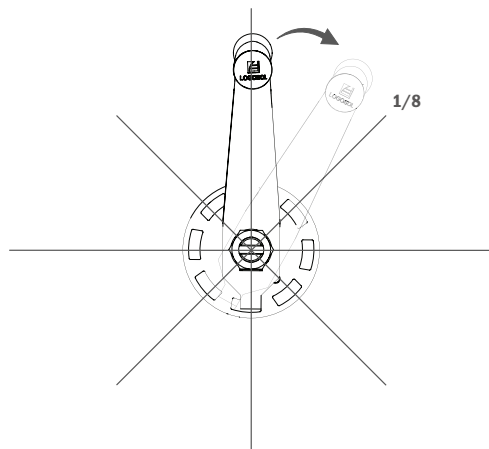


**Tip:** Work with the sawhead lowered to its lowest position to facilitate access to the engine.

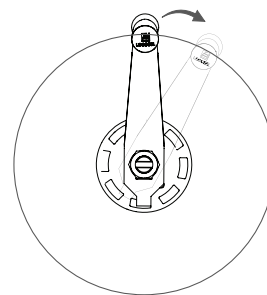
## THE FUNCTIONS OF THE SAWMILL

### The function of the crank

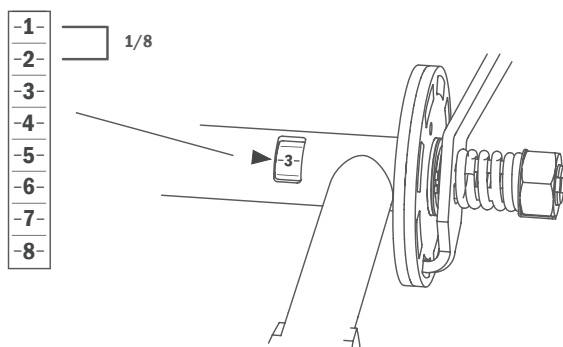
The crank that is used for moving the sawhead up and down is spring loaded, and has to be pushed inward to release the locking mechanism when you are raising or lowering the sawhead.



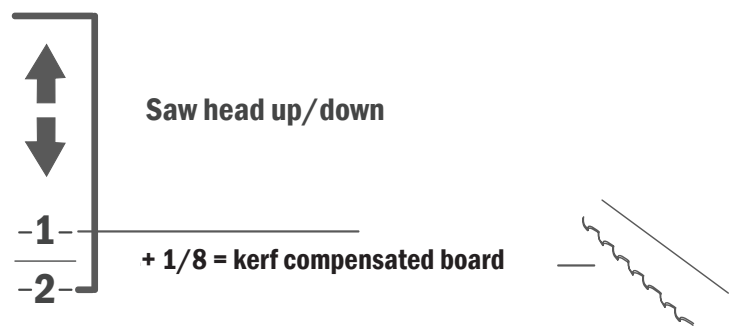
$360^\circ = 1 \text{ inch}$



The locking mechanism of the crank is divided in eight steps per revolution. Each step moves the sawhead by  $1/8"$ , and one full revolution represents  $1"$ .



### Kerf compensated cut:



On the crank shaft, there is an opening where you can see numbers on a scale. This scale has eight steps, where each step is  $1/8"$ . **TIP:** When a board is cut above the blade, you have to compensate for the kerf, i.e.  $1/8"$ . The wood piece below the blade never needs to be kerf compensated. It has the same measurement that is shown on the absolute scale on the front leg of the carriage.

### This is how you use the crank scale when adjusting depth of cut

Example 1: If you are going to cut a  $1"$  board and the crank scale shows the number "3", you first turn the crank one full revolution and stop at "3", then you turn the crank one step ( $1/8"$ ) to number "4".

Example 2: To cut a  $2"$  board starting from "3" on the scale, turn the crank two revolutions and stop at "4".

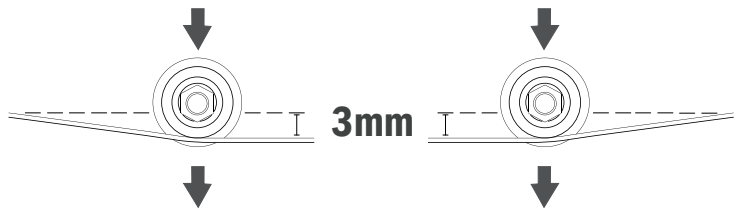
Example 3: To cut a  $3/4"$  board starting from "3" on the scale, turn the crank exactly one revolution and stop at "3".



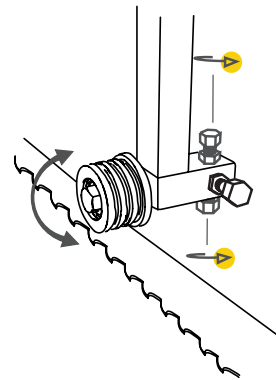
## THE FUNCTIONS OF THE SAWMILL

### Blade guides

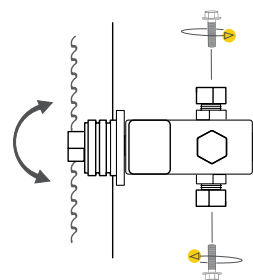
The blade guides tension the blade so that it comes 3 mm below the band wheels.



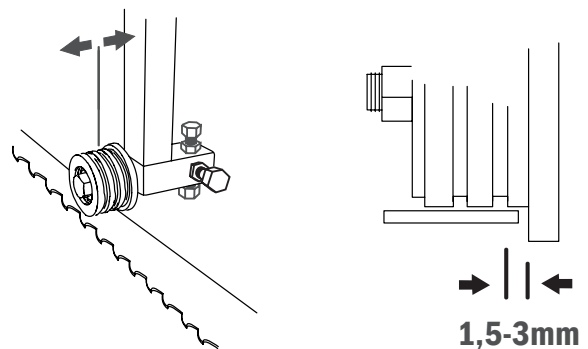
The blade guides can adjust the angle of the blade, measured in the direction of the cut, by adjusting the top and bottom adjusting bolts.



The blade guides must be adjusted so that they are parallel to the back of the blade. This is done by adjusting the outer and inner adjusting bolts. It is crucial that the blade guides run parallel to the blade. Be careful to adjust this correctly.



The blade guides can be adjusted inwards and outwards by pulling or pushing its shaft after the adjusting bolts have been loosened. The back of the blade should be approx. 1.5-3 mm from the rear edge of the blade guide roller.



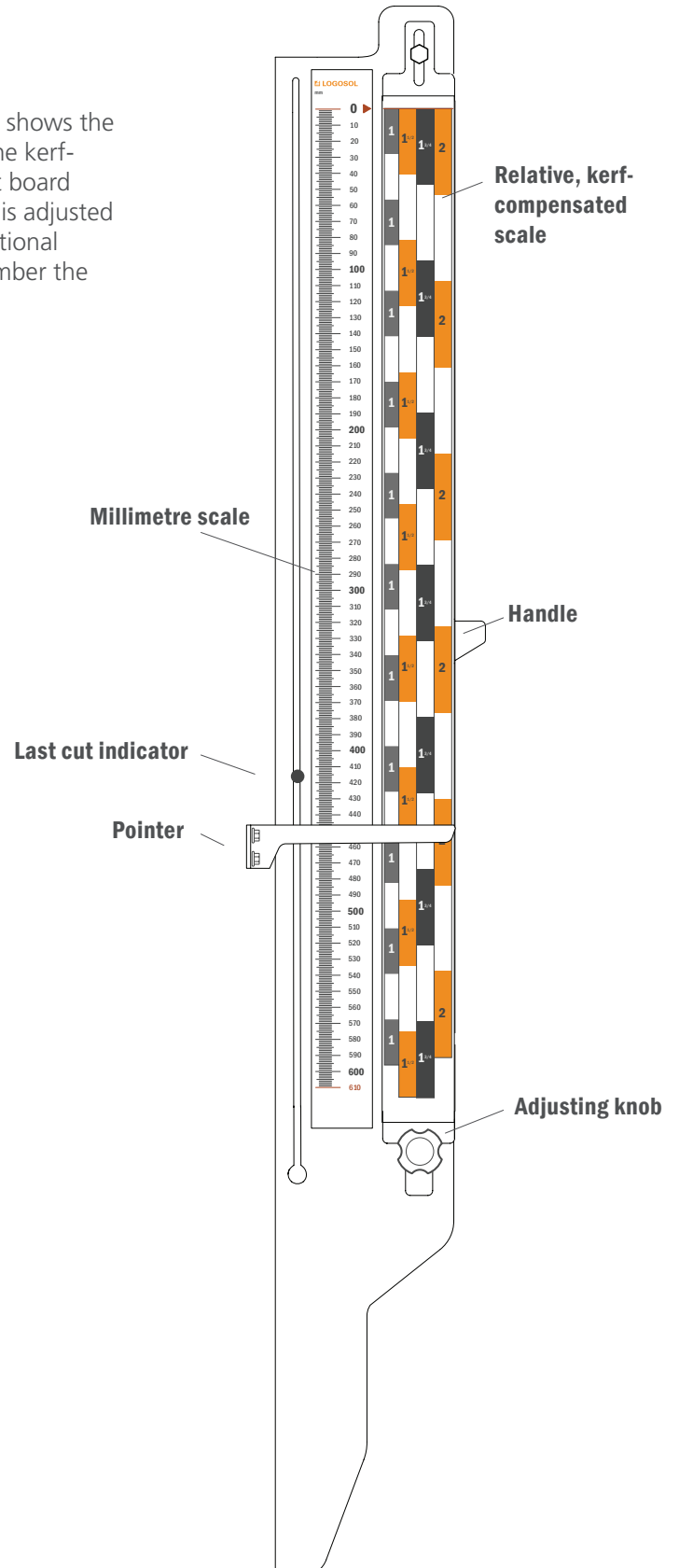
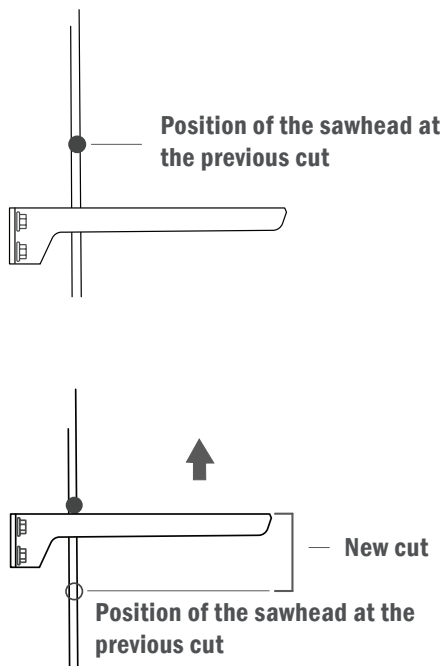
## THE FUNCTIONS OF THE SAWMILL

### The functions of the scales

The sawmill has two scales: one millimetre scale, which shows the distance between the cross bunk and the blade, and one kerf-compensated scale, which shows a number of different board thicknesses in inches. The kerf-compensated inch scale is adjusted by a knob located at the bottom of the scale. One additional feature is the Last Cut indicator, which helps you remember the position of the sawhead at the previous cut.

### Last Cut indicator

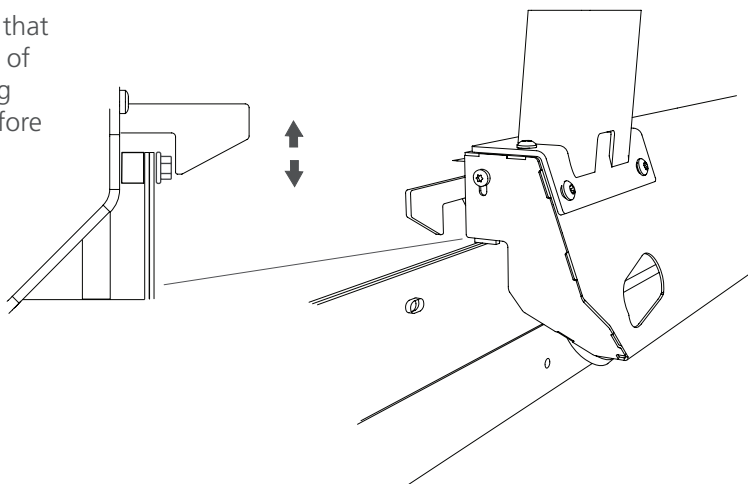
To use the Last Cut function, push the indicator down until it rests on the pointer before starting to saw. When you raise the sawhead to return it for the next cut, the Last Cut indicator helps you remember where the sawhead was positioned at the previous cut. When you lower the sawhead for the next cut, you have the Last Cut indicator as a reference showing the position of the previous cut.



## THE FUNCTIONS OF THE SAWMILL

### Parking lock

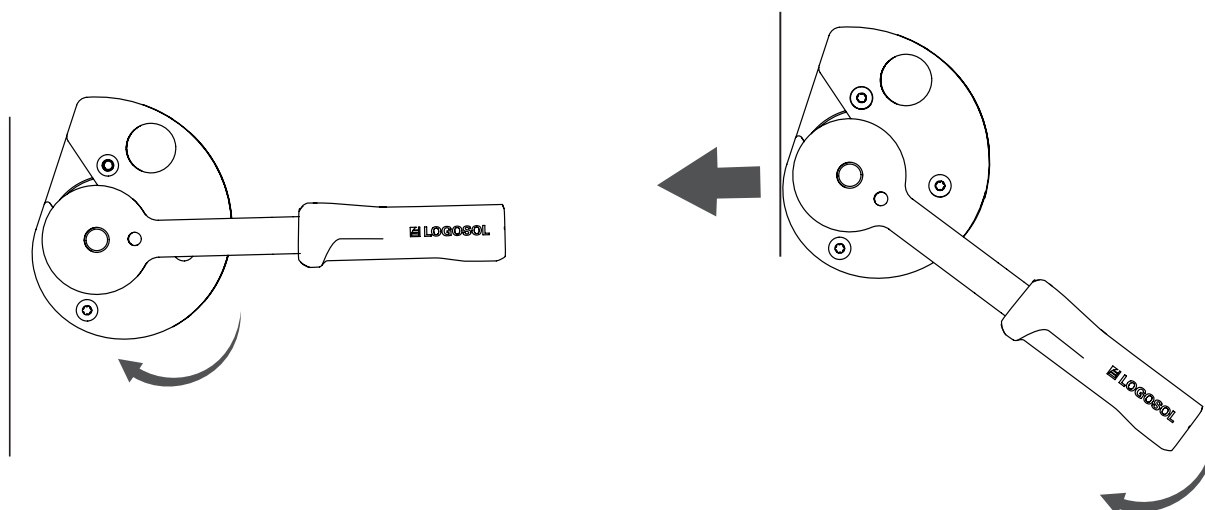
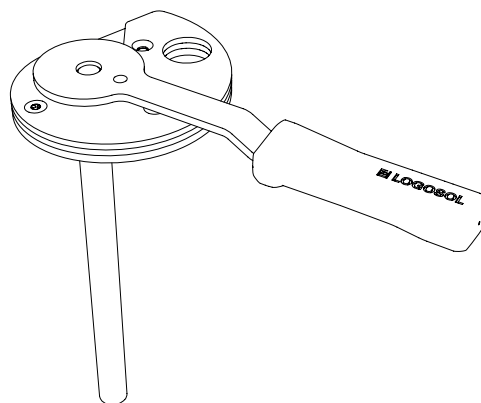
The sawmill is equipped with two catches that lock the saw carriage when it reaches one of the ends of the rails. To release the parking lock you lift the catches with your foot before moving the saw carriage.



### Log clamps

The sawmill comes with two log clamps that secure the log on the bed. The log clamp is an eccentric clamping device.

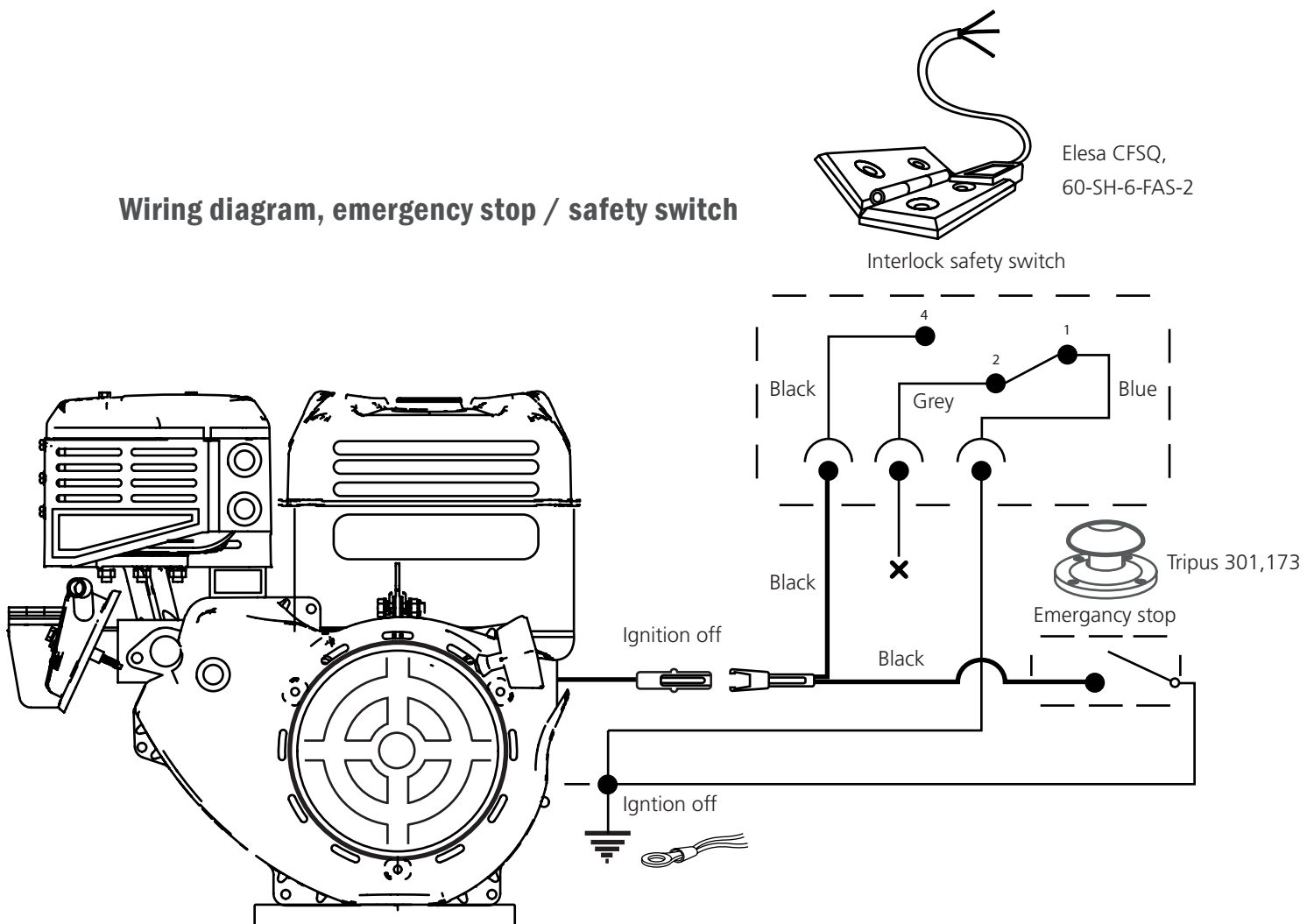
First set the eccentric plate so that it lies against the log. This is done by turning the eccentric plate clockwise. Then, to secure the log, you turn the handle on the clamp clockwise, as shown in the illustration. To release the tension, carry out the steps in reverse order. The plate and the handle are then turned counter-clockwise.



## WIRING DIAGRAM

The wiring diagram shows the connection of safety switch and emergency stop.

### Wiring diagram, emergency stop / safety switch



## NOTES





In accordance with Directive 2006/42/EG, Annex 2A

Logosol AB,  
Fiskaregatan 2,  
S-871 33 Härnösand, Sweden  
Phone: +46 611 18285,

herewith declares that the portable band sawmill  
Logosol B751, with reference number:

has been manufactured in conformity with: the  
Machinery Directive 2006/42/EG and the EMC  
Directive 2004/108/EU

and has been manufactured in conformity with the  
following harmonized standards:  
EN ISO 12100:2010, EN 60204-1:2006, EN 50370-  
1, -2.

Notified body, 0404, RISE SMP Swedish Machinery  
Testing Institute AB, Box 7035, 750 07 Uppsala,  
Sweden, has executed EC type-examination  
according to Directive 2006/42/EG, article 12,  
paragraph 3b. The EC type examination certificate  
has the number: 0404/17/2408

The delivered band sawmill corresponds to the  
machine that was subject to EC type-examination.

Mattias Byström, Product Manager, is responsible for  
the technical files.

Härnösand 0000-00-00  
Malte Frisk, CEO

**Davies Implements Ltd: Telephone 01267 237726**

 **LOGOSOL**  

---

***Bäst på småskalig träförädling***

**LOGOSOL SVERIGE**  
Fiskaregatan 2 13, S-871 33 Härnösand  
Tfn 0611-182 85 | Fax 0611-182 89  
info@logosol.se | www.logosol.se