LOGOSOL

USER MANUAL

TRANSLATION OF ORIGINAL USER MANUAL

Ref. no. 0458-395-5201



LOGOSOL BIG MILL

WIDE SLAB SAWMILL

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.

EN

LOGOSOL

THANK YOU FOR CHOOSING A LOGOSOL MACHINE!

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 1989, and in that time we have supplied approximately 50 000 machines to satisfied customers the world over.

We are just as concerned with your safety as we are that you 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 this user manual. 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

CE

LOGOSOL continuously develops its products.
For this reason, we must reserve the right to modify
the configuration and design of our products.
Document: LOGOSOL Big Mill, User Manual
Manual, ref. no.: 0458-395-5201
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Illustrations: Martin Söderberg
Last revised: June 2018
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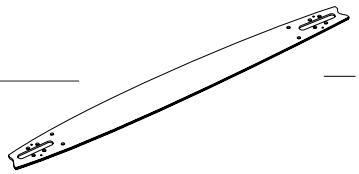
LOGOSOL

COMPONENTS

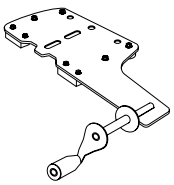
Check that all components are included in the shipment.



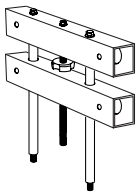
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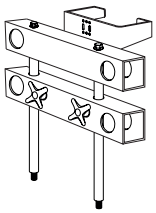
1 pc — Guide bar



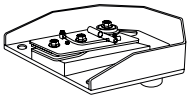
1 pc — Saw carriage



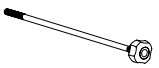
1 pc — Tube holder, saw carriage



1 pc — Tube holder, bar nose carriage



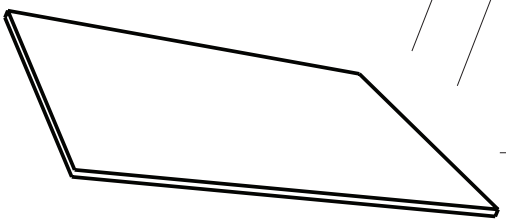
1 pc — Bar nose carriage

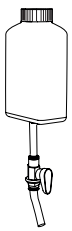


2 pcs — Tube lock

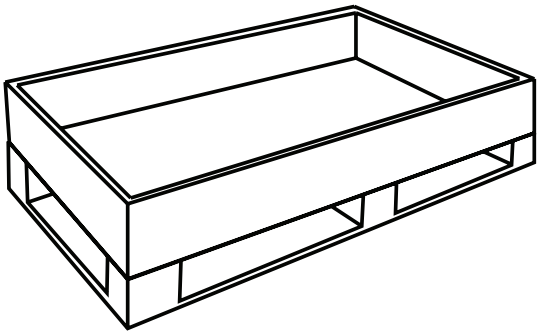


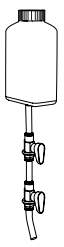
4 pcs — Tube





1 pc — Oil bottle





1 pc — Water bottle

COMPONENTS



Bag 1



8 pcs — Square tube plug



Bag 2

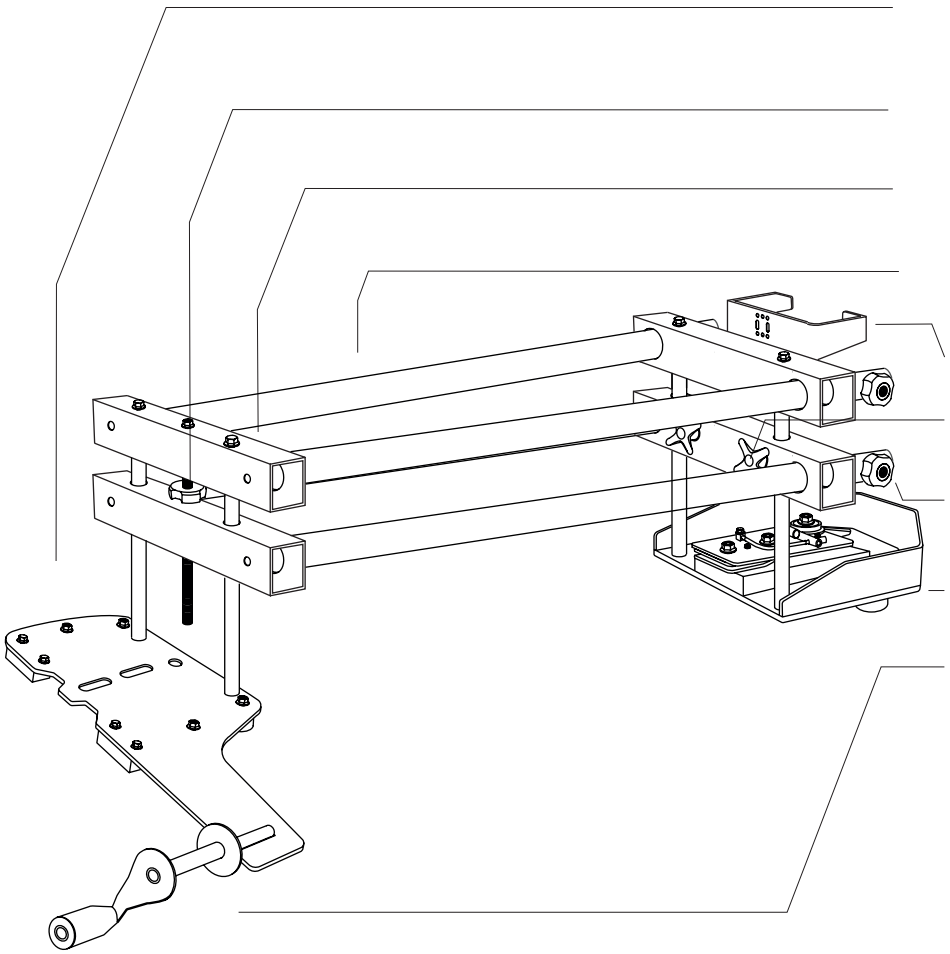


4 pcs — Round tube plug



4 pcs — Flange bolt M8x20

DESCRIPTION



Saw carriage

Height adjustment knob

Tube holders, saw carriage

Tube

Bottle holder

Locking knob

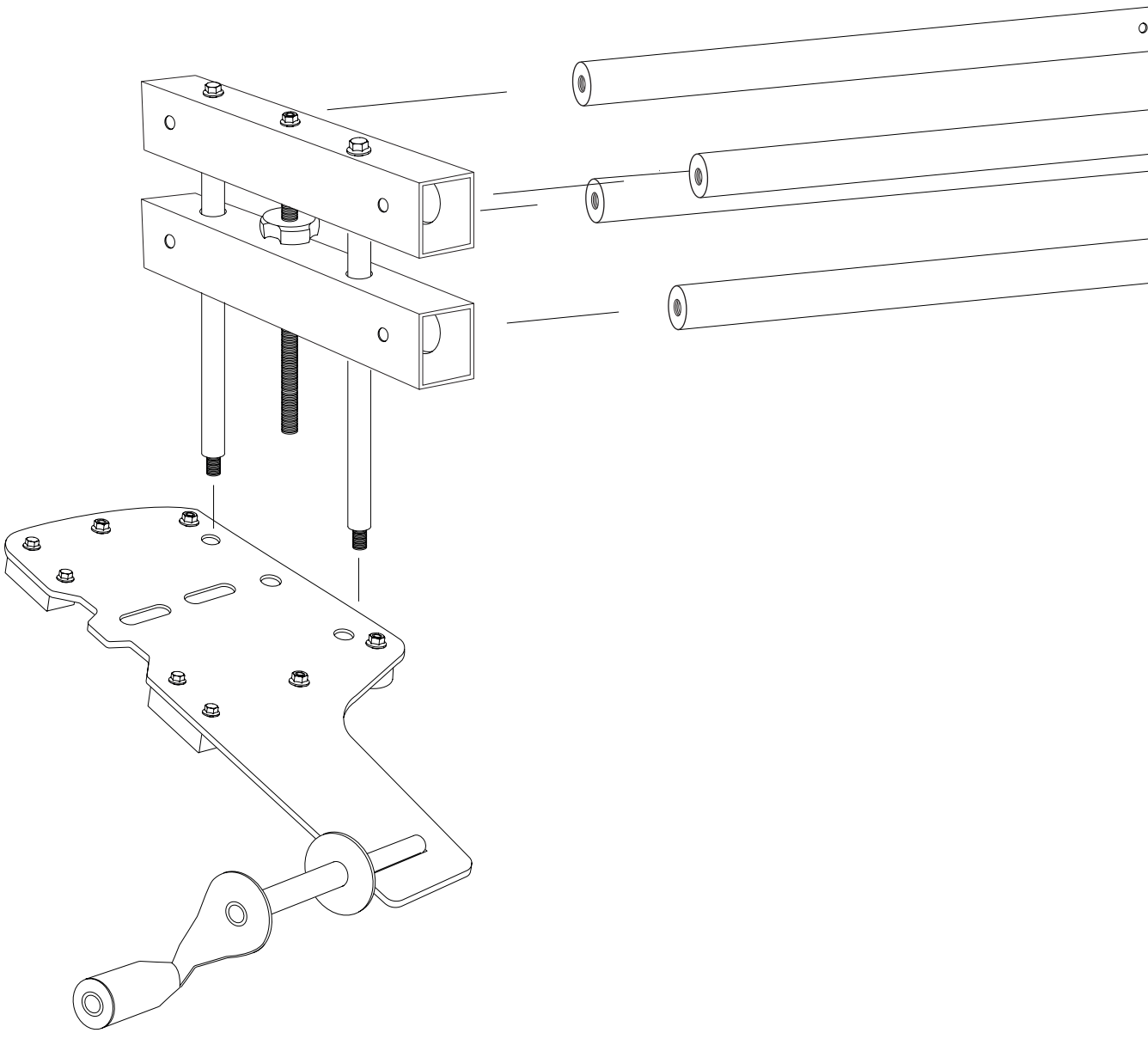
Tube lock

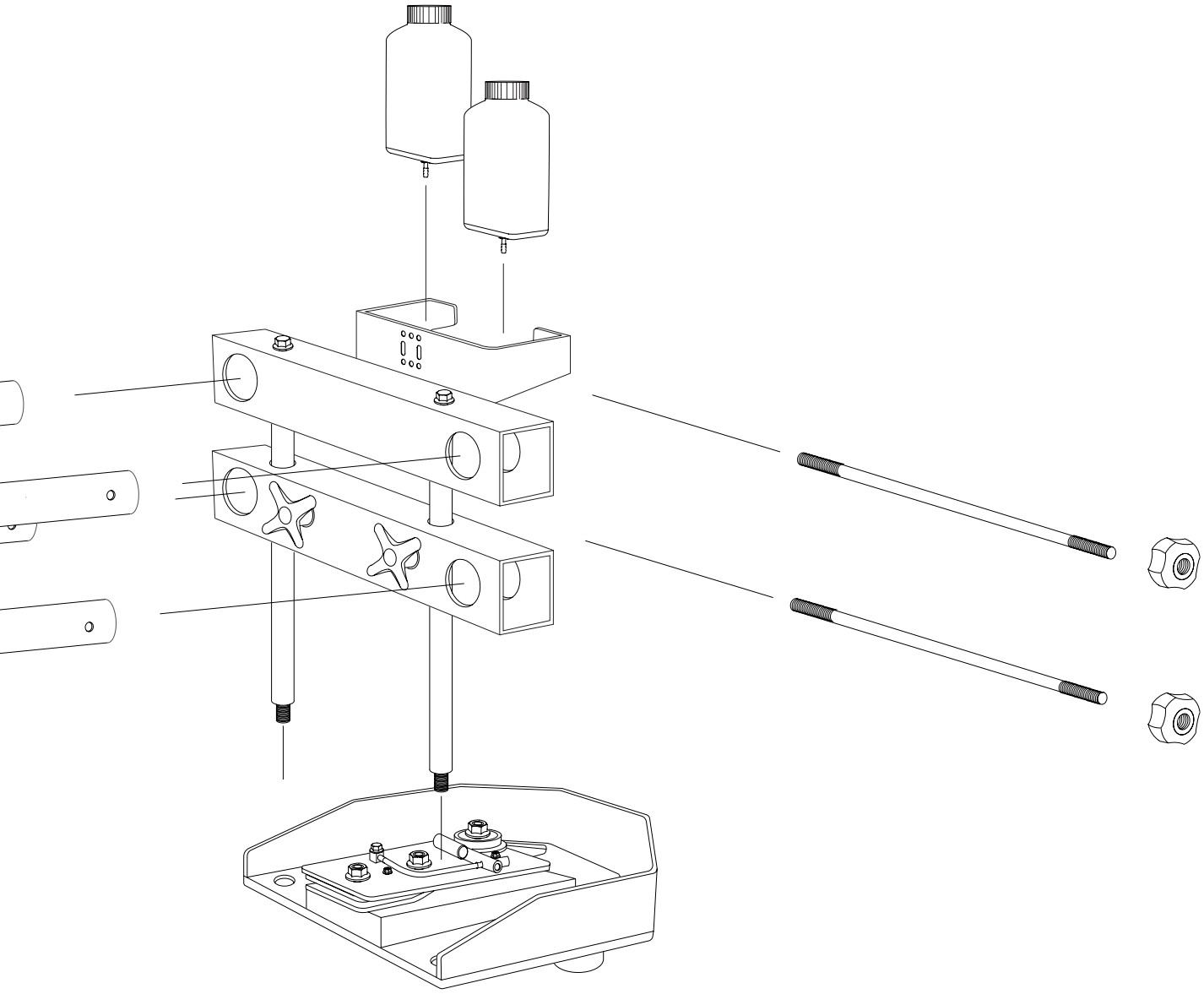
Bar nose carriage

Crank

LOGOSOL

EXPLODED VIEW





LOGOSOL

SAFETY INSTRUCTIONS

Make sure that all warning and information lables 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 it is always followed by information about the relevant risk.



This symbol is followed by important information or instructions. Pay particular attention when this symbol appears in the manual text.



For your own safety and the safety of others, do not use the equipment without first having read and understood all the contents of this user manual.



WARNING! Cutting tools: Incorrect use of the equipment can lead to life-threatening injuries.



Always use protective gloves (class 1) when working with the equipment. Risk of sustaining cuts when handling cutting tools. The equipment 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 closefitting 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 nonslip soles when working with the equipment.



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

SAFETY INSTRUCTIONS

All protective equipment (safety goggles, protective helmet, hearing protection, protective footwear, protective gloves, protective trousers and protective jacket) should be CE-certified and approved for work with chainsaws.

If used incorrectly, the equipment can cause serious injury.

The most important safety instructions are found on these two pages. Additional safety instructions will appear in connection to the sections they concern. All warnings and instructions must be followed to avoid serious injury.

Only persons who have read and understood all of the instructions in this manual, and who are well-rested, in good physical health, and have good eyesight are qualified to use the equipment. Persons who do not meet these requirements are not qualified operators.

Do not use the equipment under the influence of alcohol or drugs.

Only use the equipment in good visibility conditions.

Minors under 18 years of age are not allowed to use the equipment. Make sure that children and animals are not in the vicinity when the sawmill is being operated.

The safety distance for persons other than the operator is 10 m. A chain that breaks can be thrown out through the sawdust outlet.

Risk of the chain being thrown out through the sawdust outlet if it breaks.

Always stand behind the chainsaw during operation.

Increased throw-out risk! Do not use a ripping chain when cross cutting.

Never work alone and make sure there are other persons within earshot who you can summon if you need help.

OPERATING INSTRUCTIONS

WHEN USING A PETROL-DRIVEN CHAINSAW:

Fire risk. Turn off the engine before refuelling. Petrol is extremely flammable. Burn injuries can be life-threatening. If you spill fuel, immediately clean the components the fuel has come in contact with. Clothes on which fuel has been spilt are to be changed immediately.

Tighten the fuel cap as hard as possible to minimize the risk that the cap vibrates loose during sawing.

Never saw with the chainsaw throttle locked. Always operate the throttle manually when sawing.

Safety check before starting the chainsaw
Always check that:
…all bolts and knobs are tight on all equipment.
…there is no risk that you will saw unintentionally into something behind or at the ends of the log. Kickback risk!
…the log is firmly secured.
…the fuel cap and oil cap are tightened.
…the chain brake is activated.
…both you and your equipment are standing firmly on the ground.
...no one but the operator is within the 10 m safety distance.

STARTING THE CHAINSAW

Read the manual and safety instructions for the chainsaw. Please contact Logosol if any of the information is not clear or understood.

Make sure that you are standing firmly. Use the chainsaw decompression valve, if there is one.

The chain brake should always be activated when the equipment is being lifted on or off the log.

DURING SAWING

Hold the chainsaw handle firmly with one hand, and the crank with the other.

When using only the saw frame (no guide rails): Hold the chainsaw handle firmly with both hands. When the guide bar has completely entered the log, you can move your right hand to the upper horizontal saw frame tube, but take great caution.

AFTER EACH CUT

Release the throttle and wait until the chain stops. Activate the chain brake and turn off the chainsaw before lifting the equipment off the log. Keep your work site clean. Always remove slabs and boards. Never leave the equipment unattended such that unauthorized persons can start it.

Always keep in mind that most accidents with dangerous machines happen when something goes wrong and the operator attempts to fix it while the machine is still running. Whenever an operational disturbance occurs, turn the chainsaw off immediately! A stop seldom shows up on the finished product.

OPERATING INSTRUCTIONS

THE WORK SITE

Prepare a work site on clean and level ground. The easiest way is, if you place the project log across two parallel, smooth and level blocks or logs. These log beds should not be more than 50 cm in height.

If you are going to use logs as log beds, you have to prevent them from rolling sideways by using wedges, e.g.

Ensure that you do not saw on an upward slope. It is better that the log bed is somewhat higher on the side you start sawing on, so that you saw slightly downwards.

Wedges, or the like, should be fixed to the log bed on both sides of the log. This is to prevent the log from slipping sideways when you are sawing through it, but also to prevent the log from rolling down on you.

Risk of serious injury.

If you are working close to a pile of logs, secure the pile with a strong strap around the front logs, to prevent the log pile from falling down over you.

Keep the work site free of tools, pieces of wood, sawdust, and other things you can trip over.

Risk of crush injury if the log rolls down.

Always prevent the log from rolling down from the log bed by using wedges or the like.

PREPARING FOR SAWING

It is good if the project logs are cut straight at the ends. In the beginning, it is a good idea if you mark where the cuts are to be made at the root and top end of the log. Start from the centre of the log when you are measuring. Use a 6 mm felt tip, so the line will match the kerf.

Tipping risk. Always check that the log is firmly secured.

Use screws that are suitable for the purpose when securing the log.

Do not start the chainsaw until you have read and understood the chainsaw manual and its safety instructions.

Always perform the "Safety check before starting the chainsaw" (see Safety Instructions on p.10) before each saw cut.

MAINTENANCE INSTRUCTIONS

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 equipment.

WARNING! Risk of serious injury.

WARNING! Risk of cutting injury:

Saw chains are sharp. Always handle saw chains with utmost care.

WARNING! Risk of fire:

Do not smoke or perform any work (welding, sharpening saw chains, etc.) that can produce sparks or flames near fuel or other flammable material.

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

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

MAINTENANCE INSTRUCTIONS

LOGOSOL's ripping chain allows quick length sawing with a thin kerf. But it is less durable than normal chains. If you keep the cutting equipment in good condition, you get the right timber dimensions, faster sawing and the cutting equipment will last longer.

Sharpen the chain before it gets dull

When the chain is beginning to get dull, you will notice that the cutting speed is decreasing, the guide bar becomes hot and it becomes harder to feed the saw unit forward. Stop sawing immediately! Acctually, when this happens, it is already too late to sharpen the chain. Sawing with a dull chain exposes the cutting equipment to high levels of mechanical stress. Therefore, sharpen the chain before it becomes dull!

Avoid chain breaks

If you are sawing too long with a dull chain, it can break. The chain breaks under the cutting teeth, and you will see that it is worn there.

If, however, a drive link breaks, this can be due to the chain and sprocket not being a good match. A completely new chain on a worn sprocket can break in the first few minutes of use.

The guide bar can pull askew

If the chain has been damaged on one side or been filed unevenly, it can run incorrectly. The guide bar is pressed upwards or downwards and "springs back" when it comes out of the log. The chain will then wear more on one bar rail, and if you continue to saw the guide bar will wear unevenly. Even though you replace the chain, an unevenly worn bar can guide the chain incorrectly and, in addition, the new chain can also be worn down. An unevenly worn bar can be repaired. File the bar rails so they are equally high with an edge file (SKU: 9999-000-0450) or LOGOSOL's electric guide bar grinder (SKU: 7804-000-0005).

Another more common reason for the guide bar pulling askew is that it is worn out so that the drive links touches the bottom in the track of the guide bar and the chain loses the support provided by the bar rails. This is shown on the chain by the tip on the drive link becoming worn.

The best chain oil

In order for the chain oil to work well it must be viscous and thready. When you place a drop between the thumb and the index finger and then open them, long threads should form. We recommend LOGOSOL's sawmill chain oil, SKU numbers as given below:

1 litre, SKU: 0718-000-1001
10 litres, SKU: 0718-000-1010

Handbook for your cutting tools

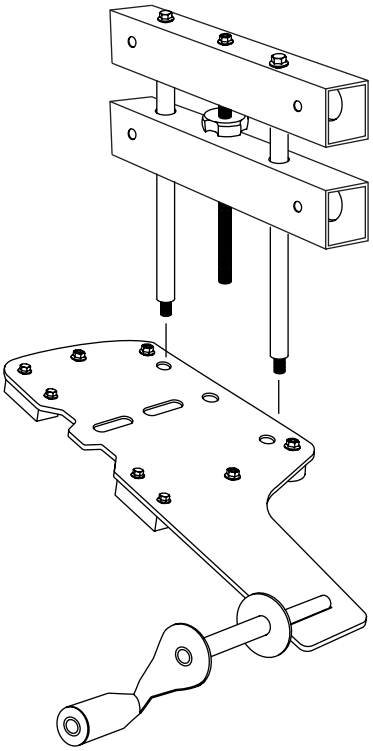
LOGOSOL has a separate document which we keep updated with respect to the technical specification of the latest new products. It is called 'The Handbook for Your Cutting Tools' and can be downloaded free of charge from our web site. You can also order a printed version.

ASSEMBLY

ASSEMBLY: SAW FRAME

1

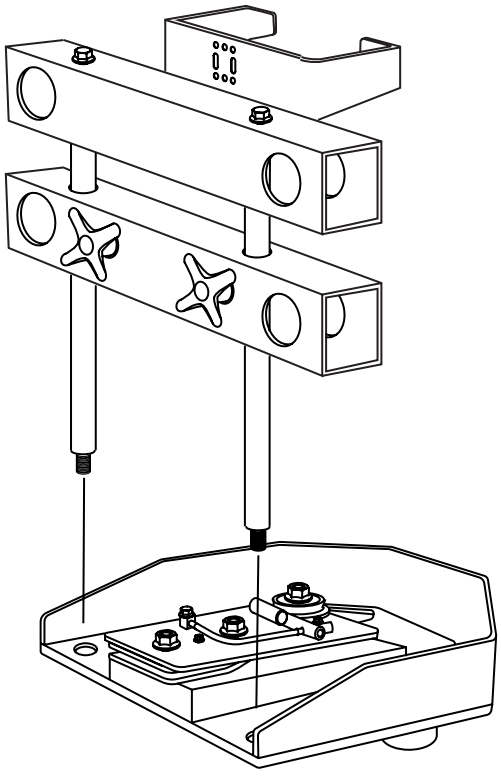
Fit the tube holder to the saw carriage.



2 pcs — Lock nut M10

2

Fit the other tube holder to the bar nose carriage.



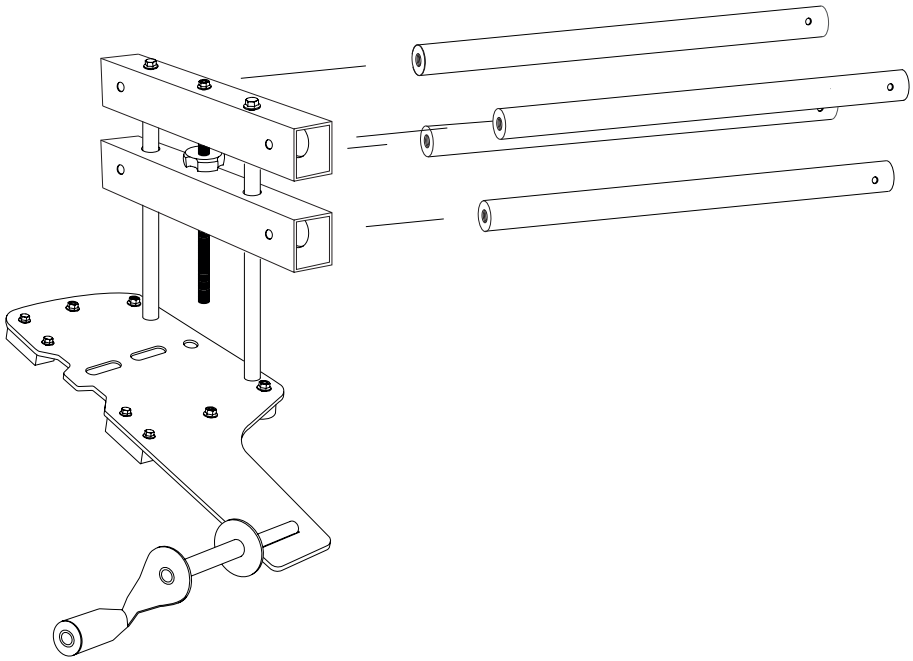
2 pcs — Lock nut M10

3

Install the tubes in the tube holder on the saw carriage.

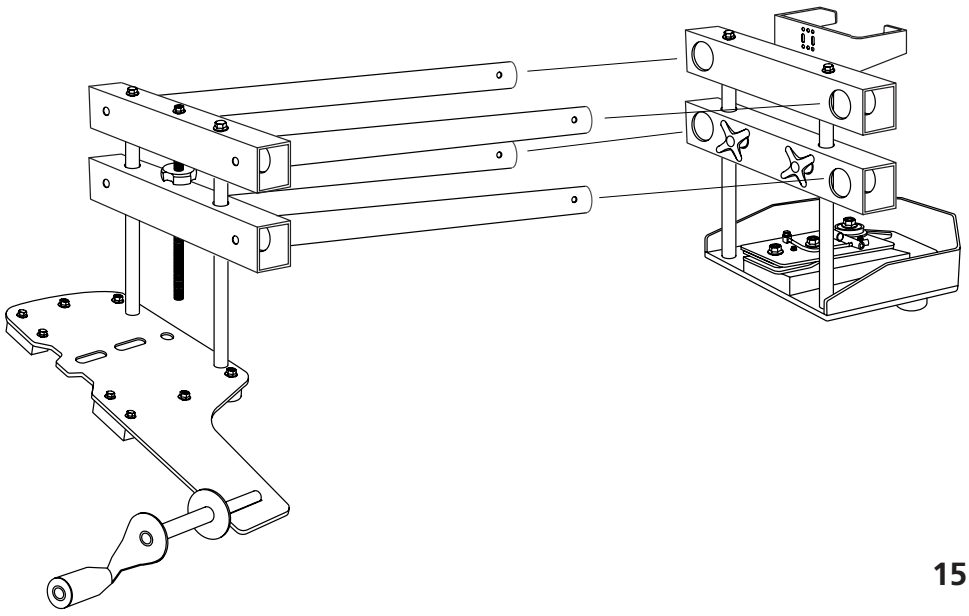


— 4 pcs ——— Flange bolt M8x20



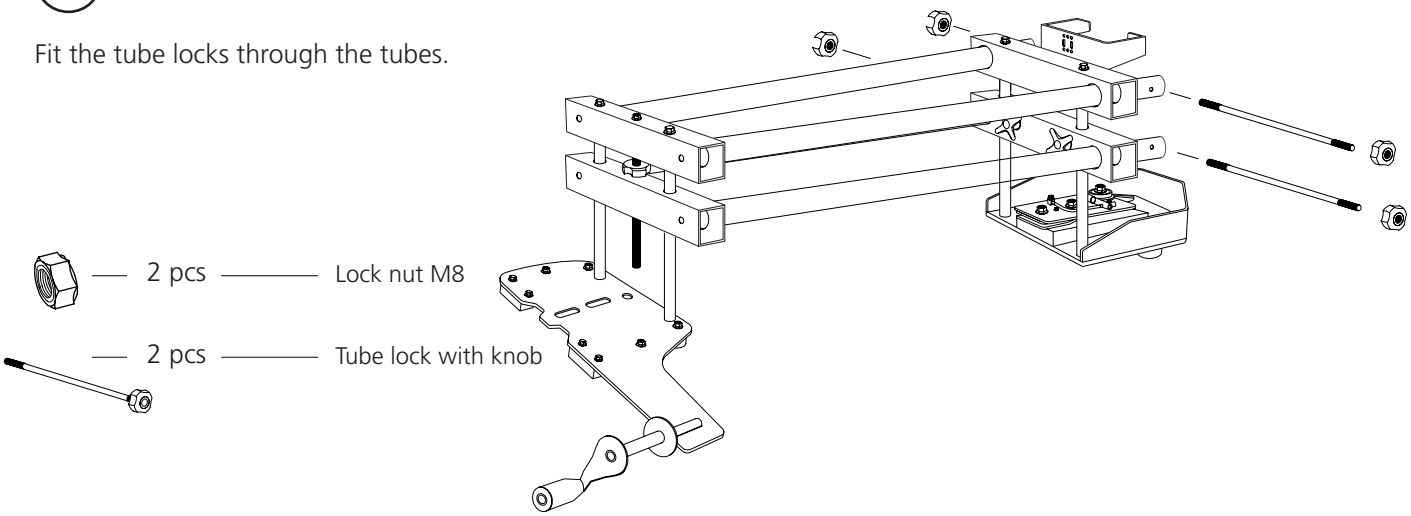
4

Fit the tubes through the tube holder on the bar nose carriage.



5

Fit the tube locks through the tubes.

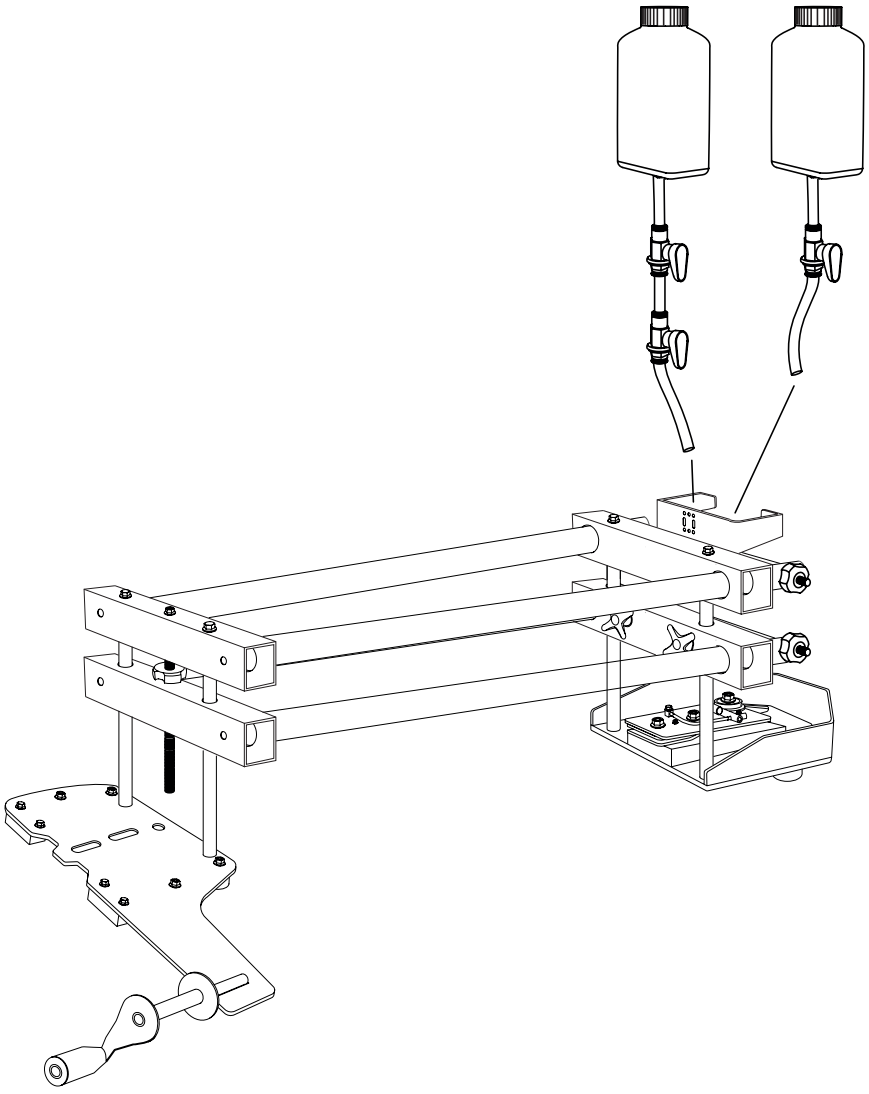


2 pcs — Lock nut M8

2 pcs — Tube lock with knob

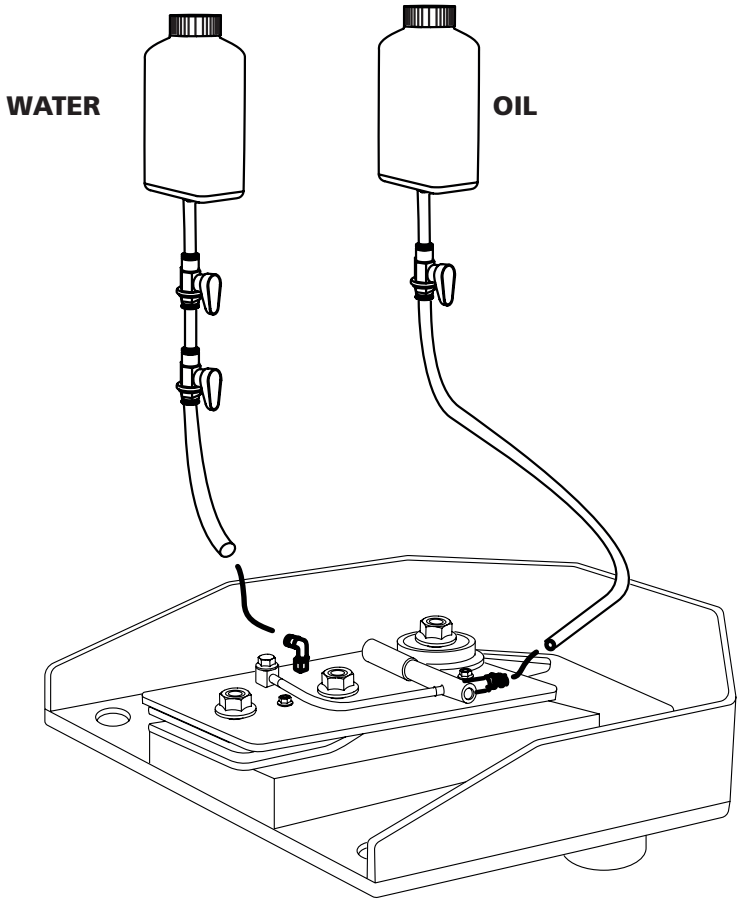
6

Fit the bottles in the bottle holder.



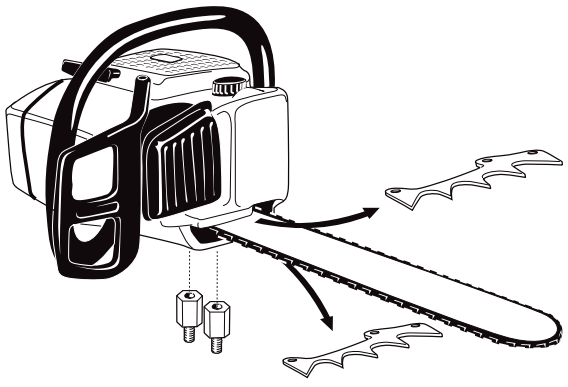
7

Connect the bottles to their respective valve. Note that the water bottle has two valves, one for adjusting the water flow and one for turning the water flow on or off. The oil bottle is connected to the oil pump.



8

Replace the bumper spikes.



Unscrew the two guide bar nuts from the chainsaw and remove the guide bar cover.

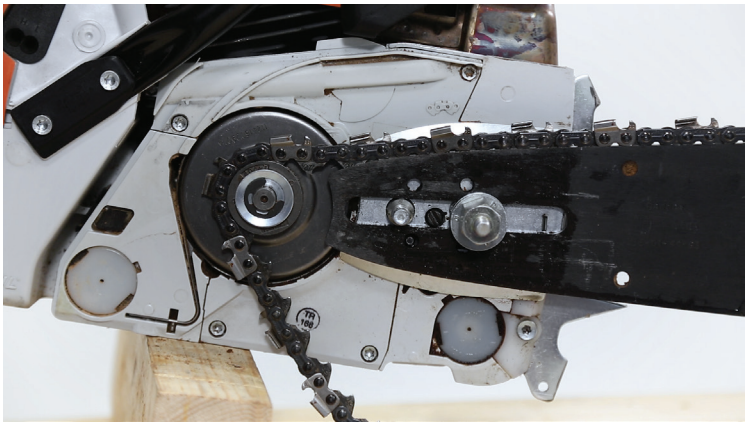
Replace the chainsaw bumper spikes and the chain catcher with the supplied bumper spikes.

If the chainsaw is to be used for cross cutting, the original bumper spikes have to be reinstalled.

Only CE-approved chainsaws with two guide bar nuts may be used with the Big Mill equipment.

9

Temporarily fit the guide bar to the chainsaw using the supplied washer and Logosol nut on one of the guide bar bolts. Install the saw chain on the guide bar. Remove the washer and the Logosol nut.



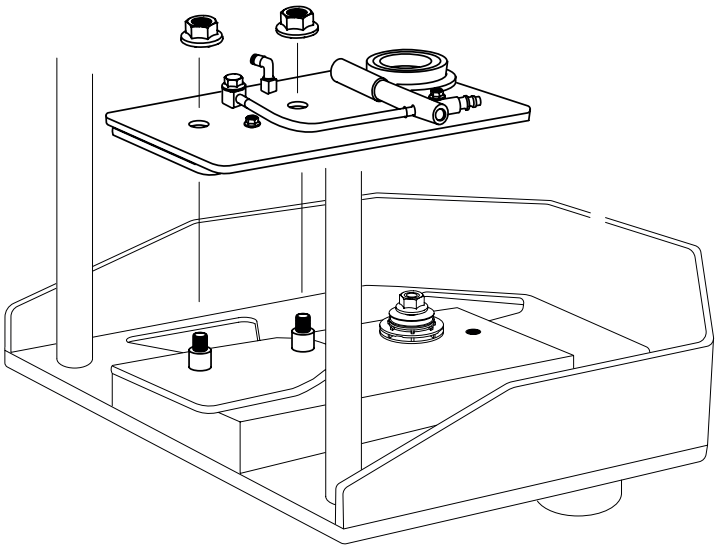
10

Reinstall the guide bar cover. Use the supplied Logosol nuts.



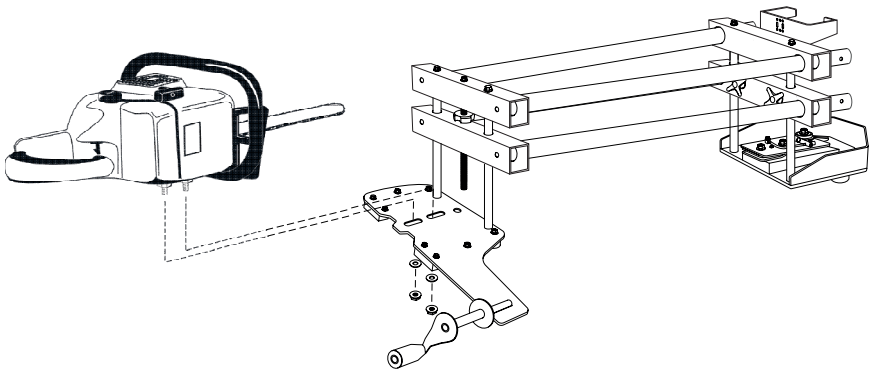
11

Remove the oil pump plate from the bar nose carriage.



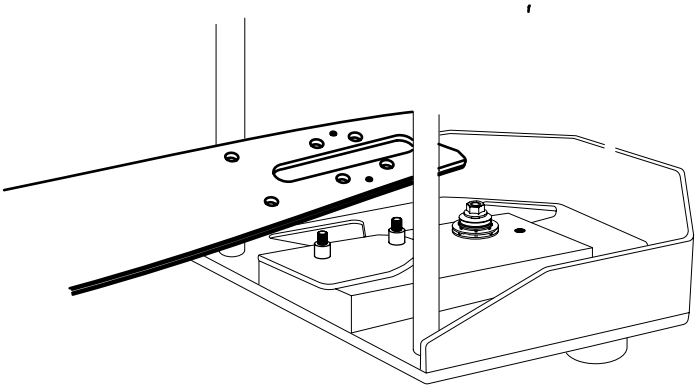
12

Mount the chainsaw, equipped with guide bar and chain, on the saw carriage.



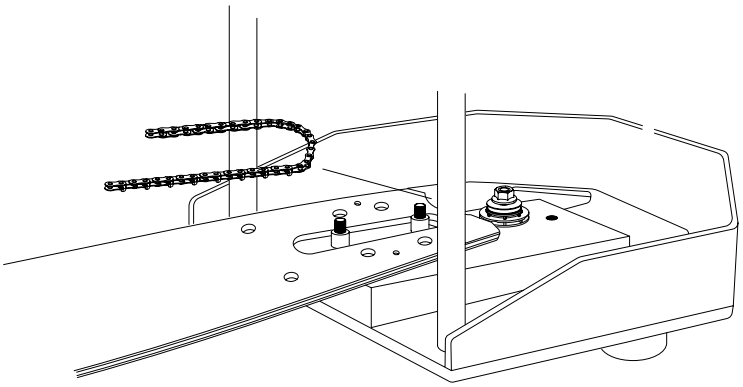
11

Fit the guide bar to the bar nose carriage.



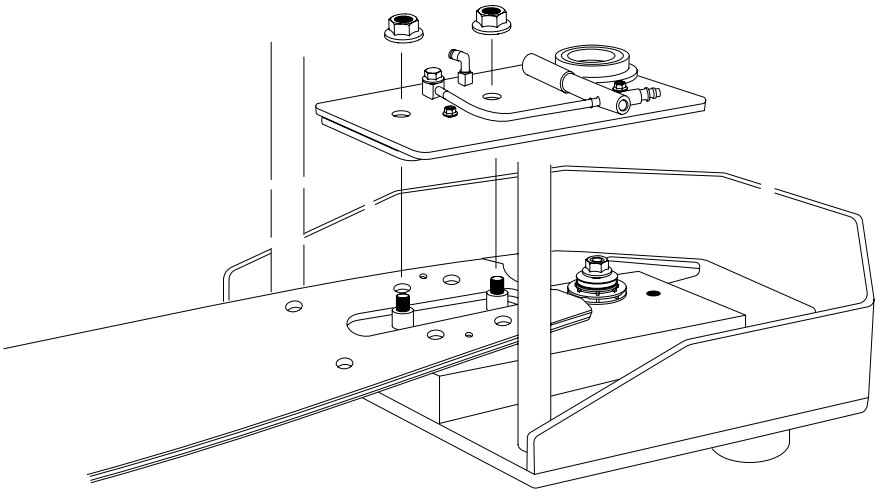
12

Install the chain on the bar nose carriage.



13

Refit the oil pump plate.



CHANGING CHAIN

1

Start by detaching the valves from the lubrication tubes at the guide bar end.



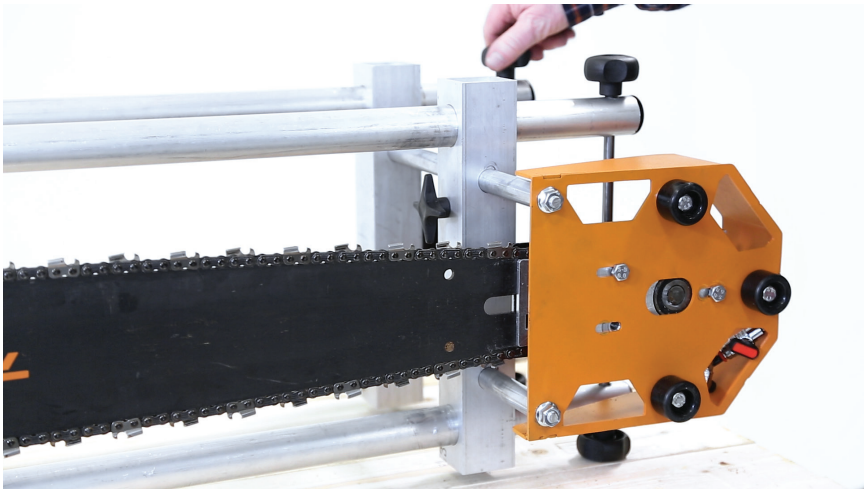
2

Remove the bottles from the bottle holder at the guide bar end.



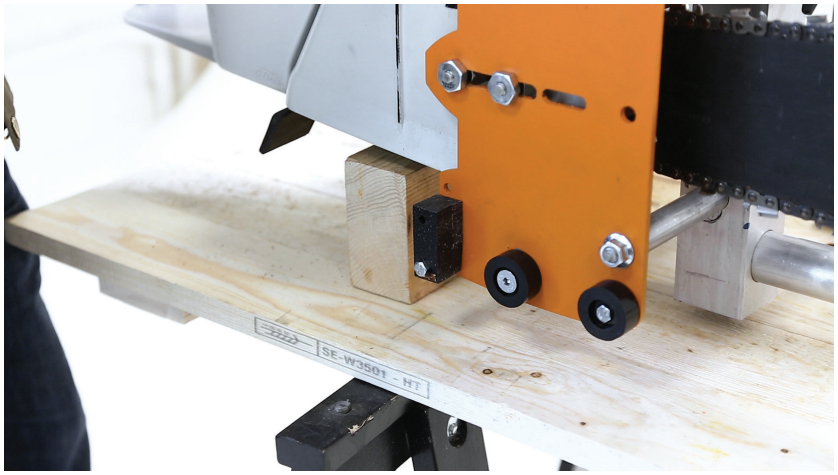
3

Loosen the tube locks.



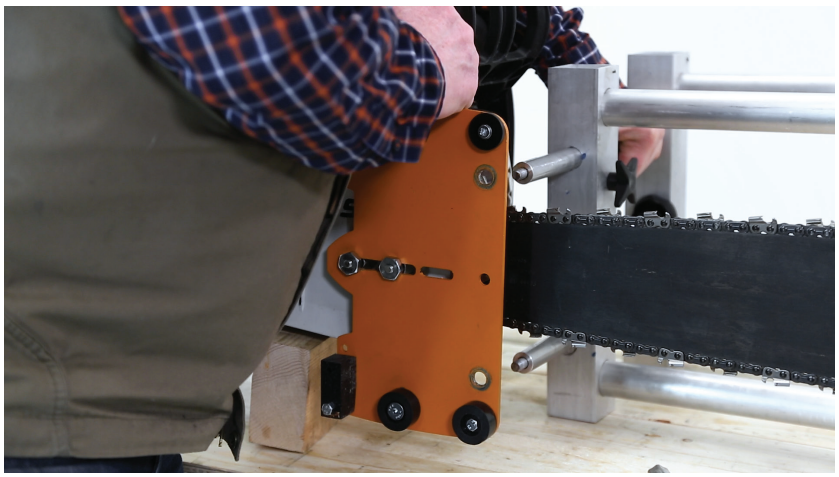
4

Place a block under the chainsaw to facilitate the next steps.



5

Remove the tube holder from the saw carriage.



6

Remove the tube holder from the bar nose carriage.



7

Take away the tube holders and tubes.



8

Turn the tensioning bolt on the chainsaw to release the chain tension.



9

Unscrew the saw carriage, using a 19 mm spanner.



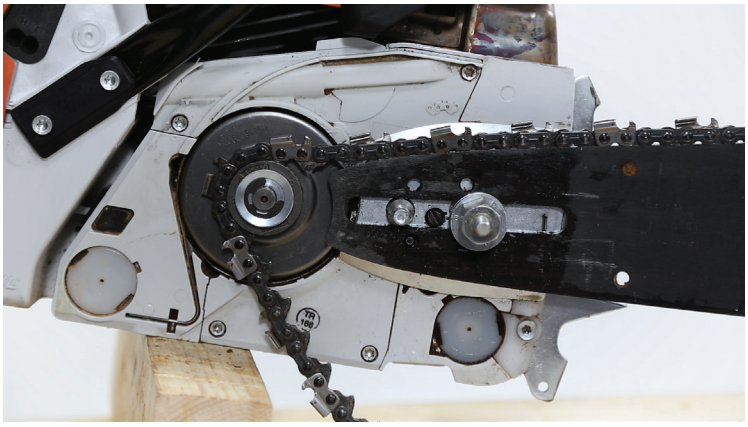
10

Loosen the Logosol nuts and remove the cover.



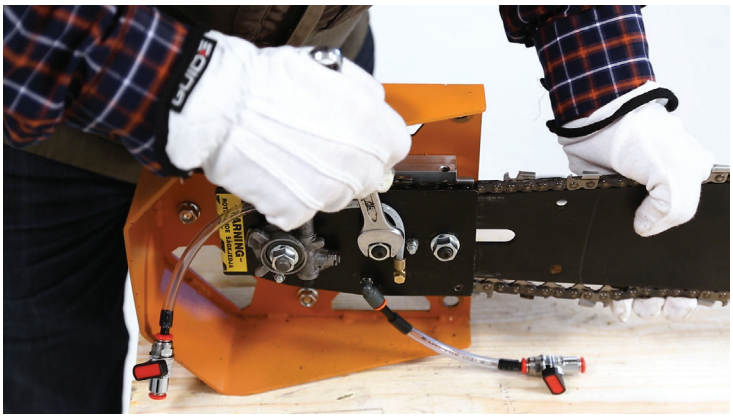
11

Temporarily fit the guide bar using a washer and a Logosol nut on one of the guide bar bolts. Now, you can easily remove the chain from the chainsaw.



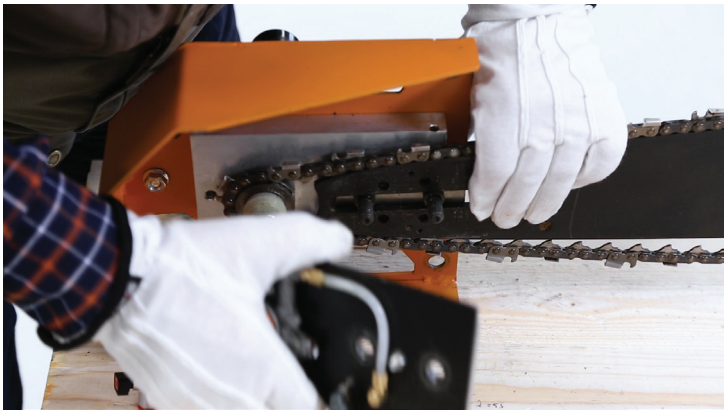
12

Loosen the two nuts on the oil pump plate.



13

Remove the oil pump plate.



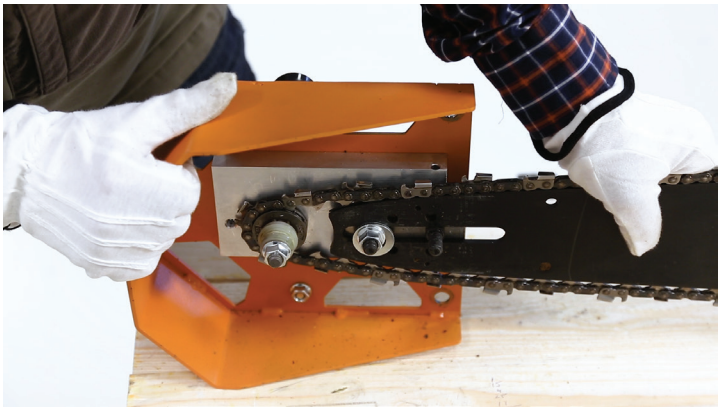
14

Lift off the chain.



15

Install the new chain by carrying out these instructions in reverse order. Note that you should finger tighten the chain tension at the bar nose before using the tensioning bolt.



ASSEMBLY, GUIDE RAIL PACKAGE

ASSEMBLE THE GUIDE RAIL PACKAGE ON THE LOG



1

Draw a line to mark the first cut on the log. Note that the line will be used for positioning the guide rail holder. The actual cut will come 50 mm above the line.



2

Screw the guide rail holder to the log end so that the upper edge touches the line.



3

Install the guide rail supports.

4

Fit the guide rails to the guide rail holders.



5

Secure the guide rails.



6

The guide rails can be adjusted in or out, to adjust the parallelity between them.



7

Fit the plate, together with its eyebolt, to the guide rail. Note that the eyebolt should be located on the "outer side" of the guide rail. Repeat the assembly on the other guide rail.



8

Thread the feed line through the eyebolts.



9

Fasten the feed line to the bar nose carriage.
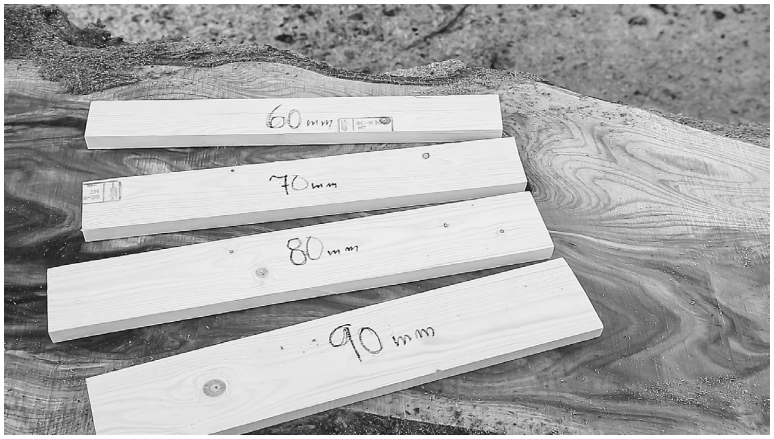


10

Now, you can make the first saw cut.



11 TIP!

You can make saw templates of different sizes to facilitate when moving the guide rail for the next cut.



12

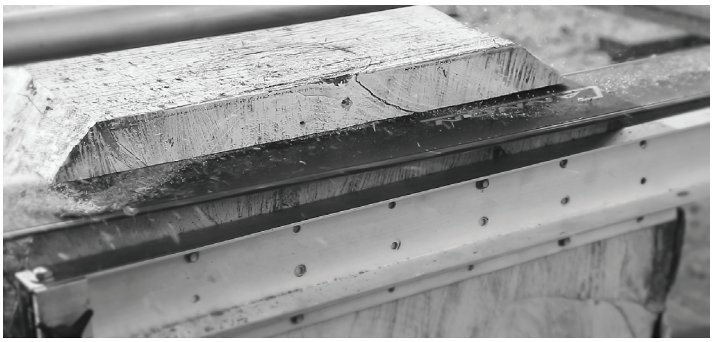
Place a saw template below the guide rail holder, and then fasten the aluminium angle iron under the lower edge of the template.





13

Remove the saw template and loosen the screws that hold the guide rail holder. When the guide rail holder has been lowered down to the aluminium angle iron, you fasten it for the next cut. Repeat all the steps at the other end of the log.



14

Now you can make the next cut.

15

By repeating the steps 12-15, you can cut up the log into the desired number of boards and dimensions.

MATERIAL DRYING

Once the wood is sawn it must be dried. If this is not done in the right way, there is a danger it will be damaged by dry or fungal rot.

The best time for outdoor drying is in the spring. Then the relative humidity of the air is very low and the wood will dry in a couple of weeks.

Cut some supportive blocks in the length that corresponds to the width of your pile, ideally larger pieces, e.g. 5”5, to raise the wood from the ground, which should also be dry, level and free of growth. The spacing should not exceed 1 m and should lie level and in line with each other.

Cut spacers or drying sticks in the same length as the supportive blocks.They should be of the same thickness (1x1” or 1x2”) and dry. (You can get material for these by making an extra cut when edging your boards.)

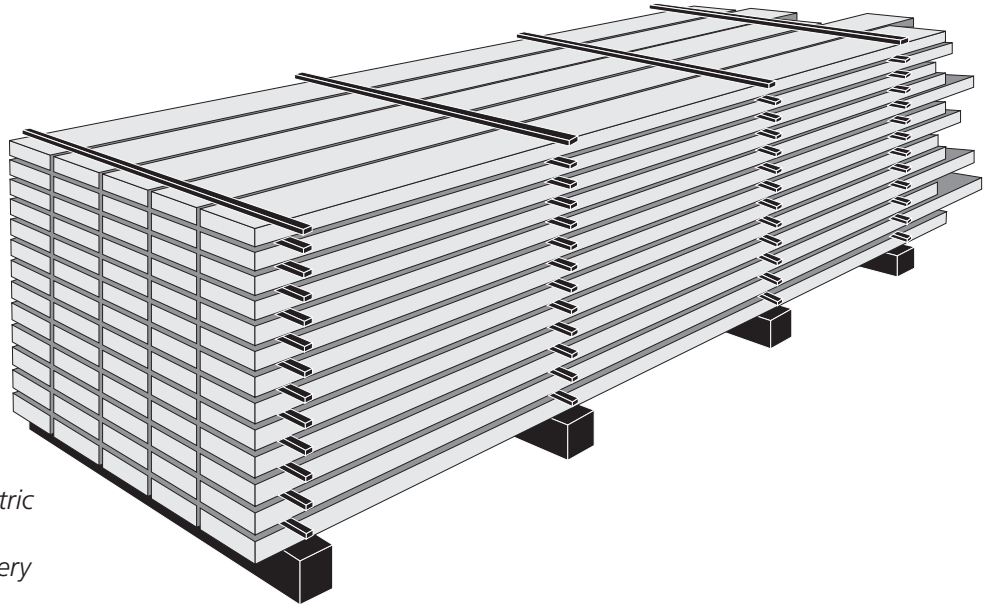
Place the first row of boards on the underlying surface. The boards should be of the same thickness and be positioned a few centimetres apart. Then place spacers on the boards (in the same positions as the underlying supportive blocks) before the next layer is laid. It is important to place the spacers exactly over each other, to keep the boards from warping or bending.

The higher you pile the boards, the better pressure there is on the lower boards. Place roofing of plastic, metal sheeting or masonite over the top to provide protection from rain, but leave the sides open. Put a weight of some sort on the roof to put pressure on the top planks.

If the wood is to be used for fine joinery, it should be stored in a heated room for another 3-4 weeks (longer for thicker dimensions) or be dried in a wood drying kiln for a perfect result.

It is possible to use undried wood in some constructions, but it must be kept in mind that the width and height will shrink 5%. Wood also shrinks around 0.3% in length, but this can usually be disregarded. In order to avoid rot, you should not enclose undried wood in a way that makes it hard for air to circulate. One further tip: Do not drive two nails next to each other as the board will probably crack in the middle when it dries out. Drive one nail and wait with the second until the wood has dried.

One example of where you should use undried wood is when building log structures. In such a situation, a heavy wall is a plus, as is the possibility that the logs still can be shaped when they are pressed against each other.



LOGOSOL also has electric wood drying kilns for preparation of fine joinery timber.

LOGOSOL

Declaration of conformity

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

Logosol AB
Fiskaregatan 2
871 33 Härnösand, Sweden

herewith declares that the **Logosol Big Mill**
(SKU: 5000-000-0001)

has been manufactured in conformity with:
The Machinery Directive 2006/42/EG
The EMC Dierctive 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 chain sawmill corresponds to the sawmill that was subject to EC type-examination.

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

Härnösand, Sweden, 2018-06-01
Malte Frisk, CEO

LOGOSOL

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