LOGOSOL

USER MANUAL

TRANSLATION OF ORIGINAL USER MANUAL.
REF. NO: 0458-395-1201

Customer no:

Serial number

FARMER'S 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.

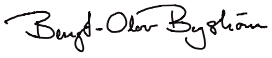
Thanks for choosing a Logosol machine!

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, and in that time we have supplied approximately 30,000 machines to satisfied customers the world over.

We are concerned with your safety and ensuring 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 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

CE

LOgOSOL continuously develops its products.
For this reason, we must reserve the right to modify
the configuration and design of our products.
Document: Farmer's Sawmill, user manual
Manual, part no.: 0458-395-1201
Text: Mattias Byström & Erik Svensson
Pictures: Mattias Byström, Lars Wahlström & Erik Svensson
Last revised: November 2016

Table of contents

SAFETY INSTRUCTIONS

- Read carefully through the entire manual before starting to operate the Farmer's Sawmill. Failure to observe these safety instructions may result in fatal injuries.
- make sure that everyone who uses the sawmill is well informed of the dangers and has read the manual. The manual must also be available to everyone who uses the sawmill. This also applies where the sawmill is sold or loaned out.
- Read the manual and safety rules for the sawing unit used on the sawmill.
- Minors under 18 years of age should not be allowed to operate the Logosol sawmill.
- Make sure that children and animals are not in the vicinity when the sawmill is being operated.
- The Farmer's Sawmill is a one-person machine. Respect the safety distances to avoid injury from high noise levels and from chain thrown-off in the direction of the guide bar if the chain breaks.
- Anyone working with the sawmill must be fit for work, healthy and in good physical condition. make sure you take regular breaks when operating the machine. Never operate the machine while under the influence of alcohol, narcotics or other drugs or medicines that can cause drowsiness or in-attention.
- The Farmer's Sawmill is only to be operated where visibility is good. It is not to be operated in the dark or where visibility is poor.
- Never work alone and make sure there are other persons within earshot who you can summon if you need help.
- Only add extra equipment to the sawmill that is made by Logosol or that is specifically approved by Logosol for the purpose. Other equipment can cause accidents and should not be used. Logosol will not accept liability for personal injury or material damage incurred while using non-approved attachments on the sawmill.
- Support legs must be fitted under the guide rail ends where the sawing unit weighs more than 15 kg. Risk of overturning!
- Always wear protective clothing and use personal protective equipment: Close-fitting work overalls are appropriate. Never operate the unit wearing loose-fitting clothes, overall coats or similar.
- Use safety shoes with high-grip soles and steel toecaps. Neckerchiefs, ties, jewellery or other items that can get caught in the equipment are not to be worn.
- Never stretch over or under the Logosol sawmill's guide rail when the sawmill is in operation. Rotating cutting equipment. Risk of cut injuries!
- Wear strong protective gloves. Risk of cut injuries when handling the guide bar and the saw chain. Cutting equipment can also be hot immediately after sawing.

Remember that hearing can be damaged after relatively short periods of exposure to the high frequency noise of the motor and the cutting equipment.

KEY TO SYMBOLS

For your own safety, read through the entire user manual carefully and do not start the machine before you have understood everything.

Use approved ear protectors and protective eyewear. Hearing can be damaged even after short periods of exposure

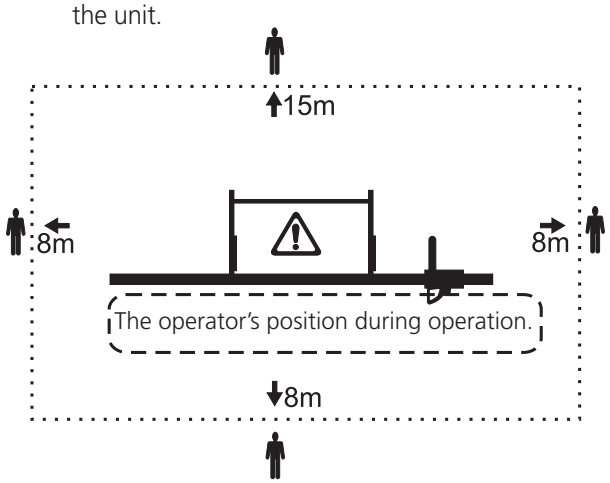
Sharp rotating tools. make sure that your fingers never are in or move into the vicinity of the cutter.

This symbol means 'WARNING'. Pay particular attention where this symbol appears in the manual text.

A warning comes after this symbol. Pay particular attention where this symbol appears in the manual text.

SAFE DISTANCES

Respect the safe distances. The safe distance is 8 m for the operator or 15 m for persons other than the operator. The picture below shows the Logosol sawmill from above. The operator is to remain within the area marked with a dashed line (- - - -) when the saw is in operation. The operator is not to stretch over the line when operating the unit.



WHEN USING PETROL A DRIVEN CHAINSAW:

Fire risk. Turn off the engine before refuelling. Petrol is extremely inflammable. 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 tank cap as tightly as possible, to minimise the risk that the cap vibrates loose during sawing.
- Never saw with the chainsaw throttle locked. Always operate the throttle manually when sawing.

Increased throw-out risk! Never use rip sharpened chain when cutting.

BEFORE EACH WORK PERIOD:

- Check the lifting line's condition in particular. Change immediately any sign of wear is detect- ed. Check that bolted joints and locks in the log bed lift and lock system are fully tightened and that all the sawmill moving parts move freely and smoothly.
- Check that the sawmill is completely level and that it is securely fixed to the underlying surface. Risk of overturning!
- Check that the cutting equipment is correctly assembled. Risk of chain breaks!
- Check that saw unit is pushed fully into position on the guide rail. Throw-out risk on start up!

DURING OPERATION:

The sawmill is not to be in any other position than level when in operation. Risk of overturning! The Logosol sawmill should be fastened directly to the floor or be placed on a bedding of planks which increases the area of the load bearing surface (see manual).

- Hold the crank firmly whenever raising or lower- ing a log. If released, the crank may spin back and hit your hand hard.

Do not place your hand on the inside of the long leg when raising or lowering the log. There is a risk that your hand can be trapped if the lifting line snaps or the crank spins.

- Logs must always be rolled on to the sawmill level with the horizontal beam. Never lift logs from ground level directly up onto the sawmill. There is a risk of damage if the log drops or if the sawmill overturns!
- Do not saw short logs that do not extend more than 0.2 m beyond each log bed. A shorter log can fall off when the log beds are raised!
- The maximum permitted load for the sawmill is 500 kg. extensions increase the maximum load by 250 kg for each leg unit with lifting unit.

Always stand to the right of the saw unit when it is in operation. Chains or bands that break can be thrown out through the chip outlet.

- Keep the worksite free of tools, pieces of wood, chips and other items you can trip on.

Turn the chainsaw off after each cut. Never leave the Logosol sawmill unattended such that unauthorized persons can start it

Stop sawing immediately and turn off the chainsaw, if any problem occurs, until it has been resolved. Always keep this in mind. most accidents with dangerous machines, both Logosol sawmills and other machines, happen when something goes wrong and the operator attempts to fix it while the machine is still running. A stop seldom shows up on the finished product.

DESCRIPTION OF MACHINE

- Many of the aluminium components are anodized and completely rustproof. The outer surface is as wear resistant as tempered steel, has a low friction coefficient and is easy to keep free of resin and chips.
- Adjustable feet make it easy to compensate for uneven surfaces.
- Clear scales show the height of the log bed. extra measuring rods are available as accessories to show sawing height settings.
- The crank axle runs through maintenance-free bronze bearings that do not wear out. The slide rails use low-friction plastic that has a long lifetime thanks to the fine surface of the guide rail.
- The settings for sawing parallel to the grain of conical logs are quick and simple to set.(The log beds can be set at different heights so that more than half of the cuts give acceptable yields.)
- Many accessories for the M5 and M8 also can be used with the Farmer's Sawmill.

MAINTENANCE

The Farmer's Sawmill should be kept clean, and all plastic parts should be lubricated with Logosol's lubricant (7500-001-5050) or silicone lubricant (7500- 001-5067). Regularly check the condition of the lifting lines.

The tempered ratchet bar is only lightly protected against rust and should be kept coated with a thin layer of Superflo (999-000-5115) to prevent rust.

SERVICE

The sawmill must be inspected regularly and maintained as needed.

Only carry out the maintenance and repairs specified in the manual. Other repairs must be carried out by Logosol or by authorized Logosol dealers.

Do not make any alterations to the construction of the sawmill as this can increase the risk of accidents. After service, the Farmer's Sawmill should be in its original condition. Logosol accepts no liability for damage that occurs while working on an improperly modified machine.

ASSEMBLY

The Farmer's Sawmill is designed for simple assembly and adjustment. Set up on an underlying surface which does not scratch the surface treatment during assembly.

Save time by reading through the entire assembly instruction before assembly is begun and then follow the instructions step by step.

When this symbol appears, tighten the fasteners so that they still can move.

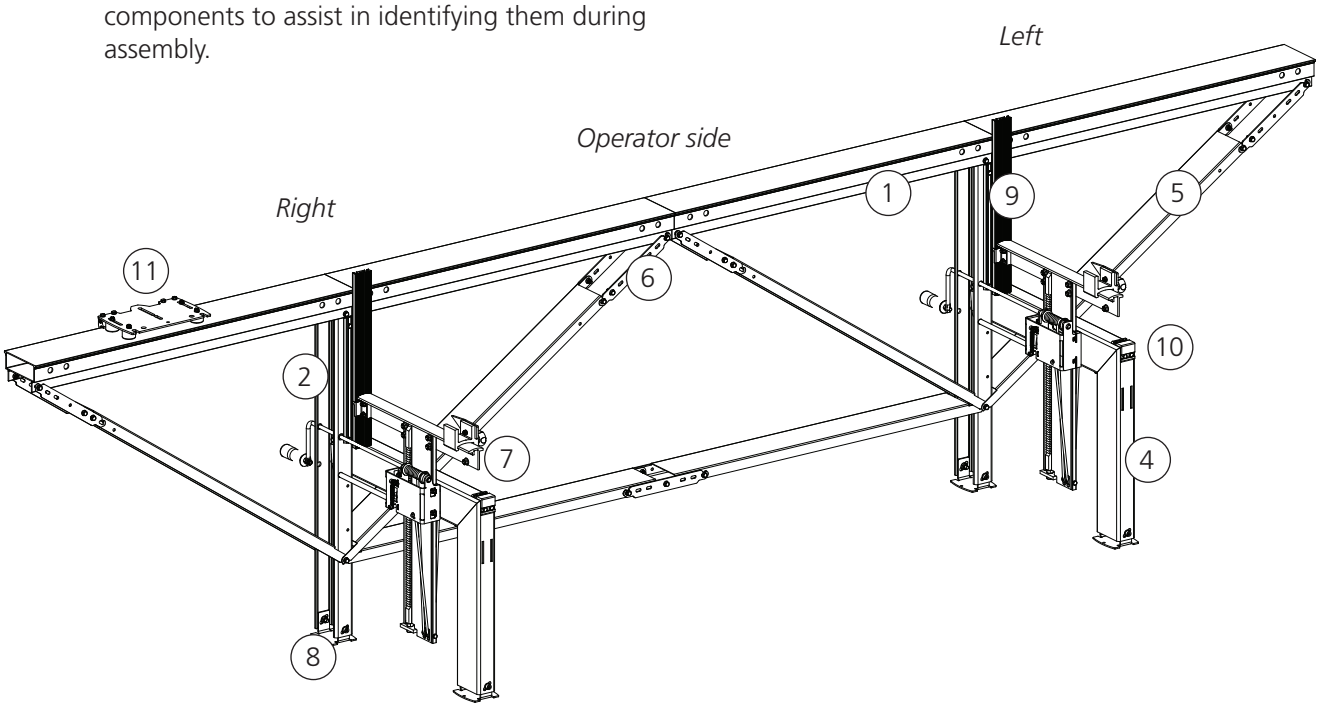
When there is no symbol, tighten the bolts well.

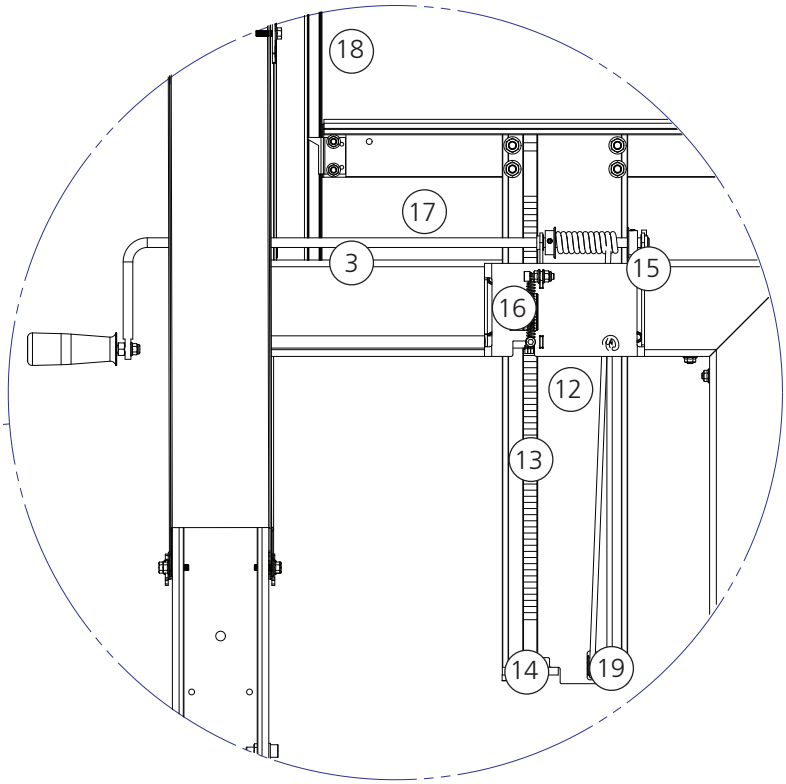
TECHNICAL DATA

Length:	4.0m.
Width:	0.7m
Width of log bed:	0.5m
Weight:	52 kg
Weight with carriage for chainsaw:	53 kg
Max. recommended log diameter:	0.6m
Max. recommended log length, standard version:	3.5 m
Max. log weight:	500 kg

SAWMILL COMPONENTS

Below is a brief description of the Farmer's Sawmill components to assist in identifying them during assembly.



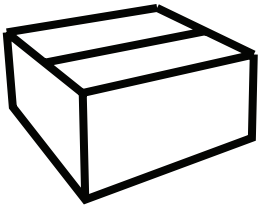


1	Guide rail
	Joint coupler
2	Long leg
3	Horizontal beam
4	Short leg
5	Guide rail strut
6	Brace plate
7	Log bed
	Log holder with log clamp
8	Foot
9	Log support
10	Knee connector
11	Carriage
12	Lifting beam
13	Ratchet bar
14	Ratchet bar stop plate
15	Saddle plate
16	Ratchet cam
	Ratchet cam axle
17	Crank
	Lockring
	Lockring with line attachment
18	Plastic slide rail on log bed
	Indicator
19	Line pulley

SHIPPED BOXES

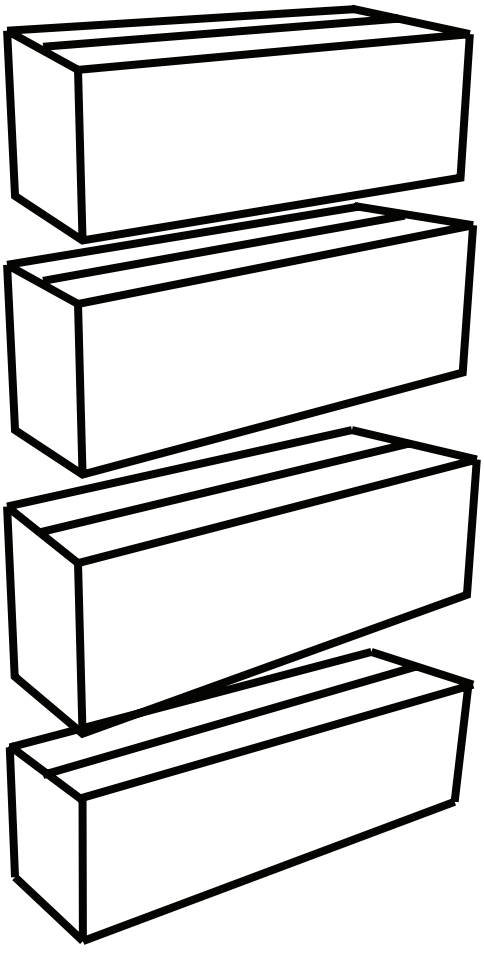
Your Farmer's Sawmill shipment consists of 7 boxes: one saw carriage box, two leg unit boxes and four guide rail boxes. Check that all of these boxes are included in the shipment when receiving the delivery.

Saw carriage box



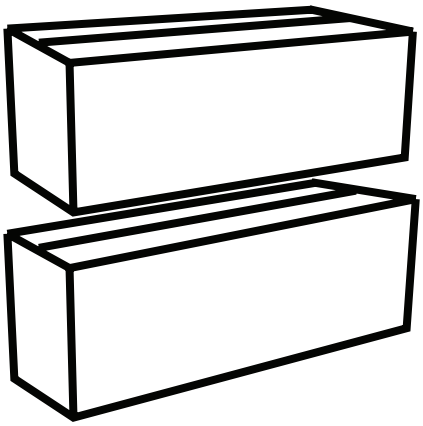
Guide rail boxes

4520-010-1017



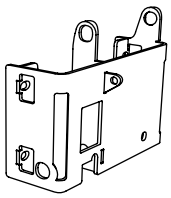
Leg unit boxes

4520-100-1000

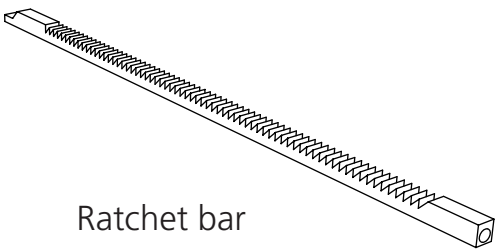


Box contents: Leg unit box

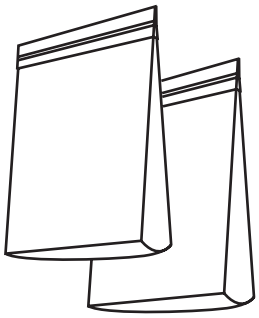
Log bed, Farmer's Sawmill
4520-001-1050



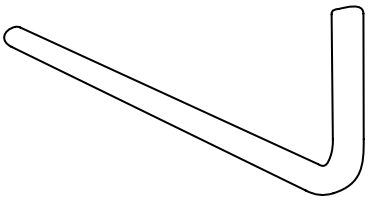
Saddle plate
4520-001-1085



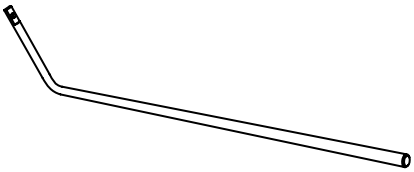
Ratchet bar
4507-001-1150



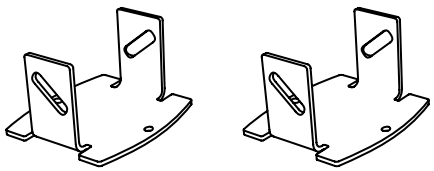
Bolt bag 1 & 2



Ratchet cam axle
4520-001-1110



Crank rod
4507-001-1100



Feet, Farmer's Sawmill
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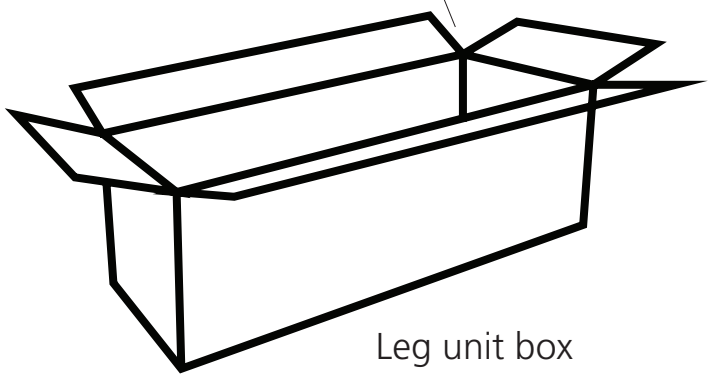
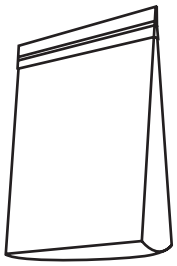
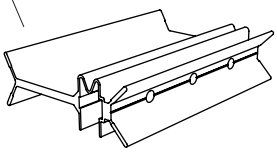


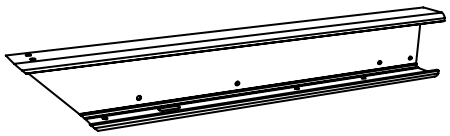
Leg unit box
4520-100-1000



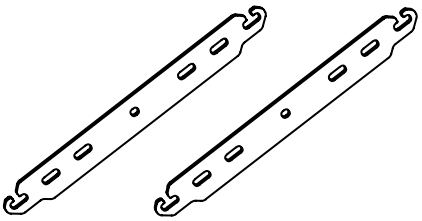
Sundry bag



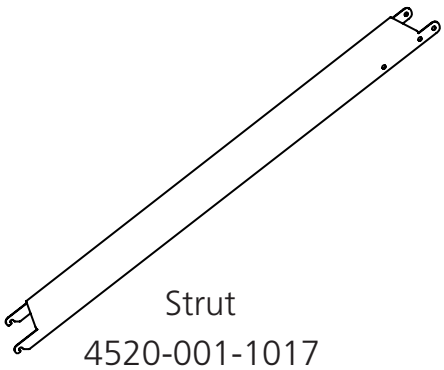
Joint coupler
4520-001-6700



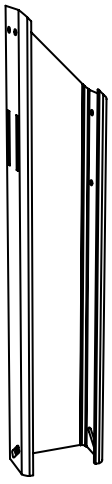
Horizontal beam
4520-001-1200



Brace plates
Farmer's Sawmill
4520-001-1015



Strut
4520-001-1017



Short leg
Farmer's Sawmill
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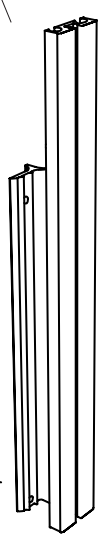

Log support
Farmer's Sawmill
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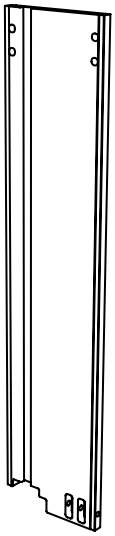
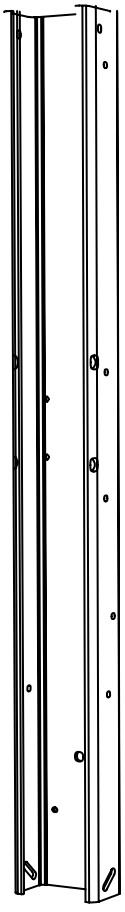
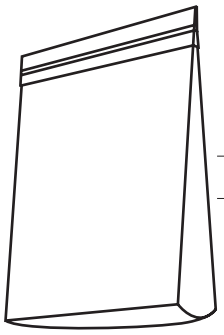


Lifting beam
Farmer's Sawmill
4520-001-1065



Long leg Farmer's
Sawmill
4520-001-1030

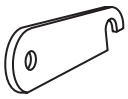
Box contents: Guide rail box



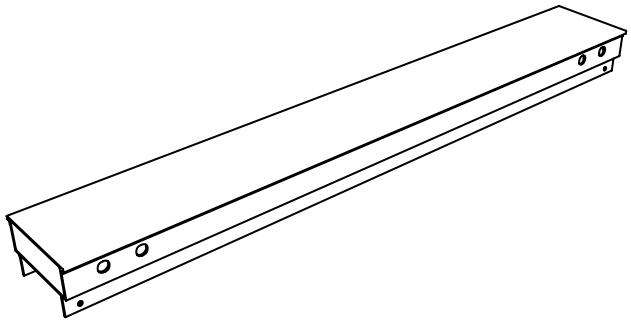
Bolt bag

6 pcs — Flange bolt M6x16 — 9018-346-1355

6 pcs — Flange lock nut M6 — 9214-352-0006



Joint plate
4510-723-0800



Guide rail
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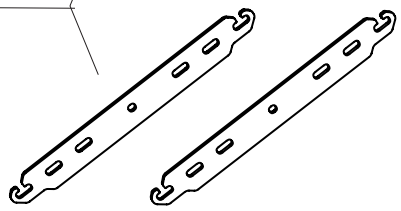
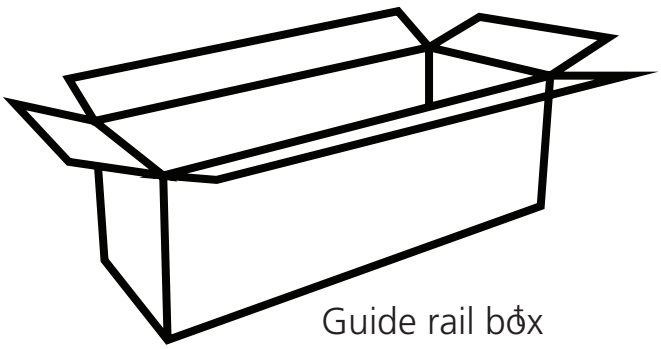
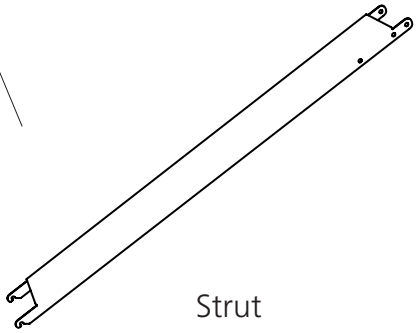


Brace plates
Farmer's Sawmill
4520-001-1017

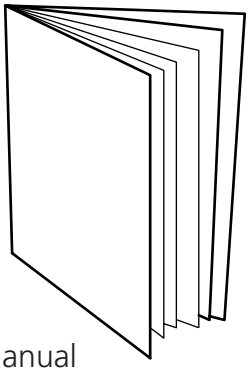


Guide rail box
4520-010-1017

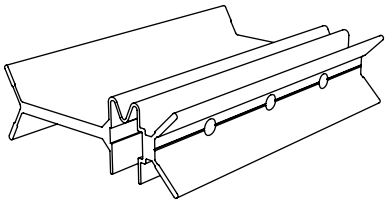


Strut
4520-001-1017

Box contents: Saw carriage box

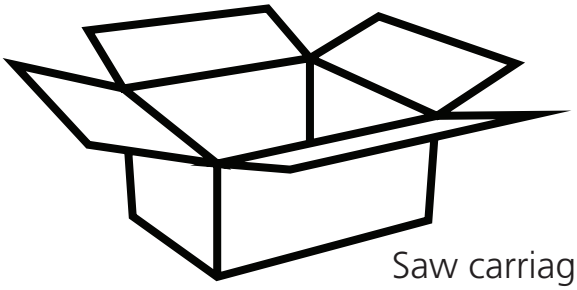


User manual

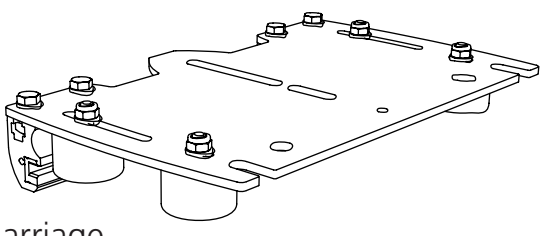


Joint coupler

4520-001-6700

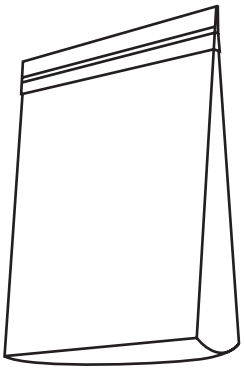


Saw carriage box



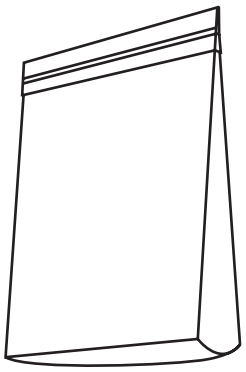
Carriage

4520-720-7502



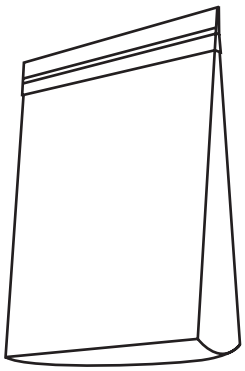
Sundry bag

1 pc	Ratchet spring	4520-0100-1120
1 pc	Line pulley holder	4507-001-1205
2 pcs	Knee connectors	4520-001-1045
3 pcs	Line pulleys	4507-001-0300
5 pcs	Spacer sleeves, saddle plate	4507-001-1095
2 pcs	Plastic glides, saddle plate	4507-001-1090
1 pc	Ratchet bar stop plate	4507-001-1145
2 pcs	Locking ring	4507-001-1105
1 pc	Long pointer	4507-001-1170
1 pc	Guide block	4507-001-1190
1 pc	Ratchet cam	4520-001-1125
1 pc	Log holder	4520-300-1025
1 pc	Crank handle	4507-001-1101
1 pc	Log holder spike	4520-001-1210
1 pc	Star knob	4507-002-1027
1 pc	Lifting line	4507-001-1080



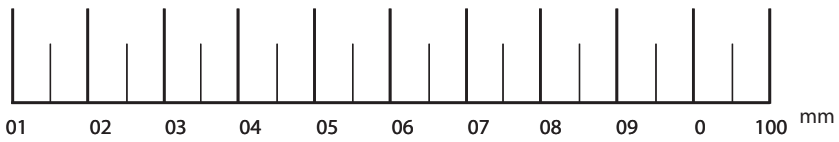
Bolt bag 2
4520-001-2071

10 pcs	Flange bolt M6x16	9018-346-1355
10 pcs	Flange lock nut M6	9214-352-0006



Bolt bag
4520-001-2070

2 pcs	Hex bolt M6x30	9008-319-1352
1 pc	Hex bolt M6x60	9007-319-1450
1 pc	Hex bolt M10x40	9008-319-1040
2 pcs	Allen bolt M6x25	9045-319-
2 pcs	Allen bolt M6x30	9045-323-
5 pcs	Allen bolt M8x20	9045-319-0820
4 pcs	Allen bolt M8x30	9045-323-0830
2 pcs	Allen bolt M8x35	9045-319-1880
4 pcs	Flange bolt M6x20	9018-346-1320
1 pc	Flange bolt M6x25	9018-346-1350
4 pcs	Flange bolt M6x30	9018-346-1370
22 pcs	Flange lock nut M6	9214-352-0900
9 pcs	Flange lock nut M8	9214-352-1100
1 pc	Flange nut M8	9214-353-0040
4 pcs	Flat washer M6	9219-021-0140
4 pcs	Flat washer M8	9219-021-0180
1 pc	Hex nut M10, low	9210-260-1110



ASSEMBLY

Assembly

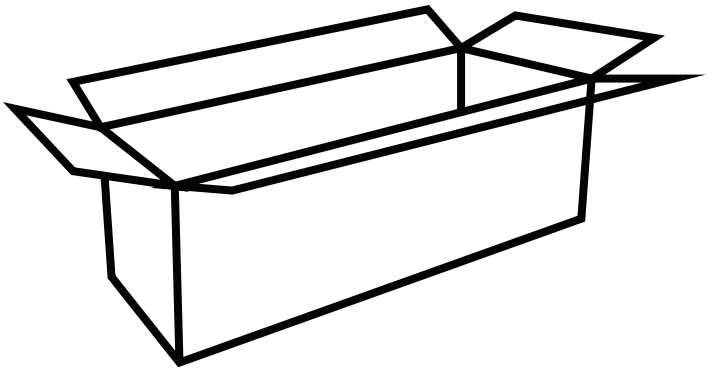
We recommend that you start with assembling the leg units. These are identical, and all components needed are found in the leg unit boxes.

We recommend that you place all fastening elements on a tray or the like to facilitate finding the bolts, nuts, etc.

Open one of the leg unit boxes and start assembling.

Leg unit box

4520-100-1000



ASSEMBLY

Left and right leg units are to be assembled exactly the same way.

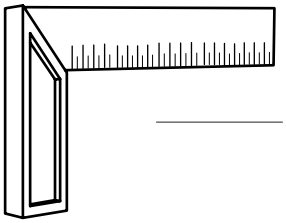
Read through all the assembly instructions before you begin assembling the sawmill. After that you should follow the instructions step by step during the assembly.

1 Order of assembly

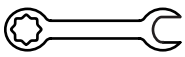
Good job!

TOOLS REQUIRED

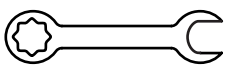
(These tools are not included in the shipment of the sawmill.)



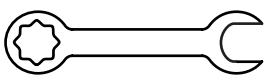
1 — Set square



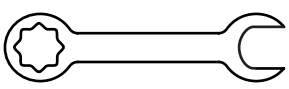
2 — Fixed spanner 10mm



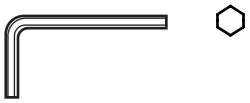
1 — Fixed spanner 13mm



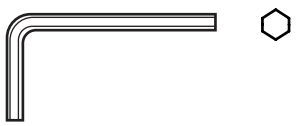
1 — Fixed spanner 16mm



1 — Fixed spanner 17mm



1 — Allen key 4mm



1 — Allen key 8mm

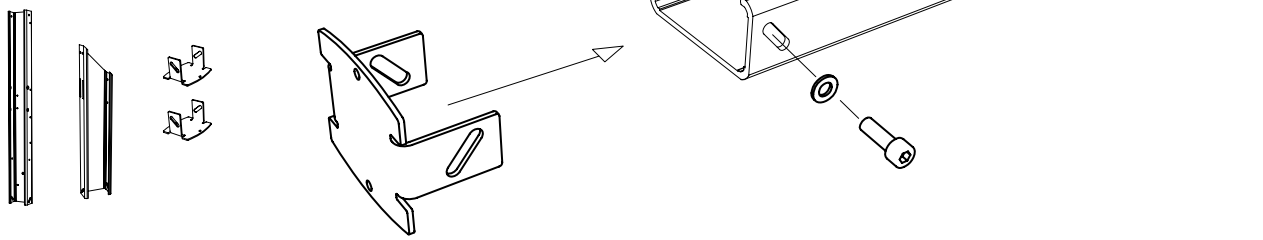
1

Fit the feet to the short leg and the long leg.

– 4 —— Allen bolts M8x20

– 4 —— Flat washers M8

– 4 —— Flange lock nuts M8



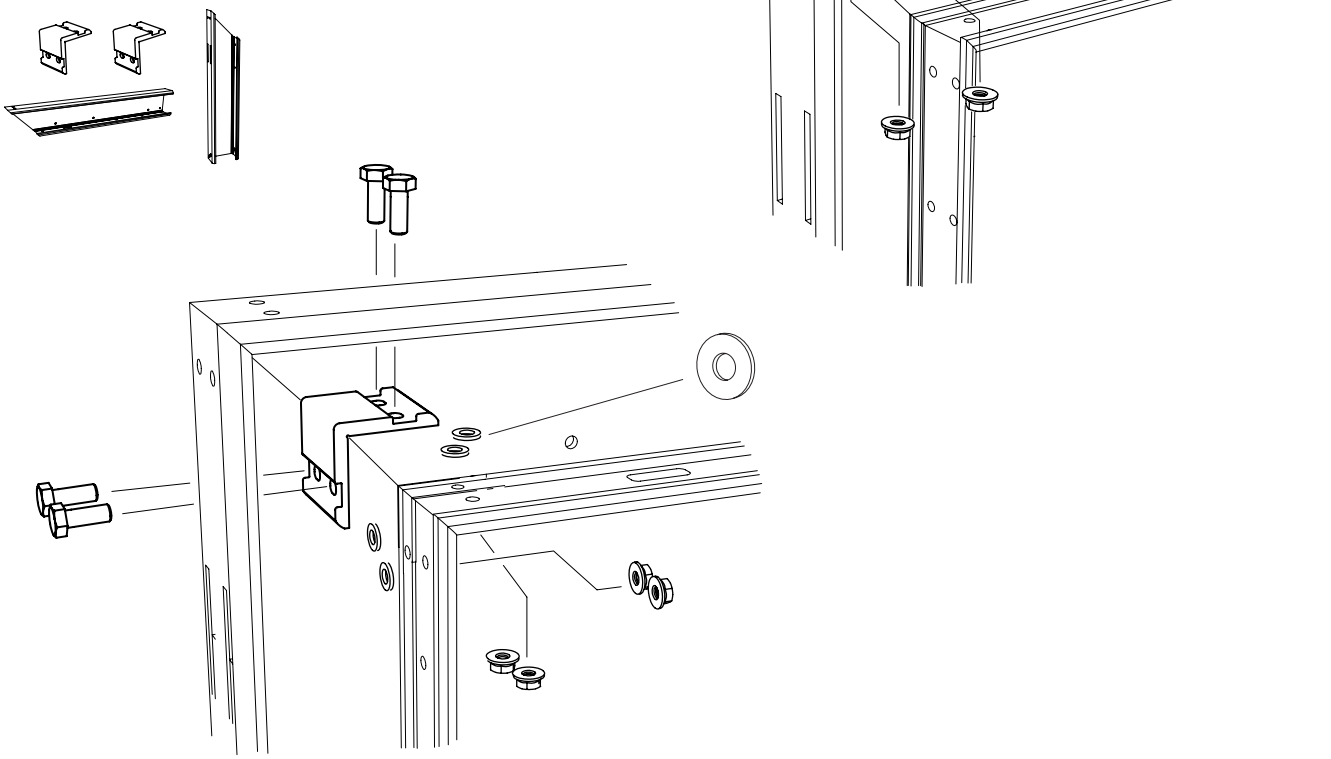
2

Install the knee connectors to the top corner and the lower corner of the leg as in the illustration. NOTE! The 4 flat washers should be placed under the lower knee connector.

– 8 —— Hex bolts M6x20

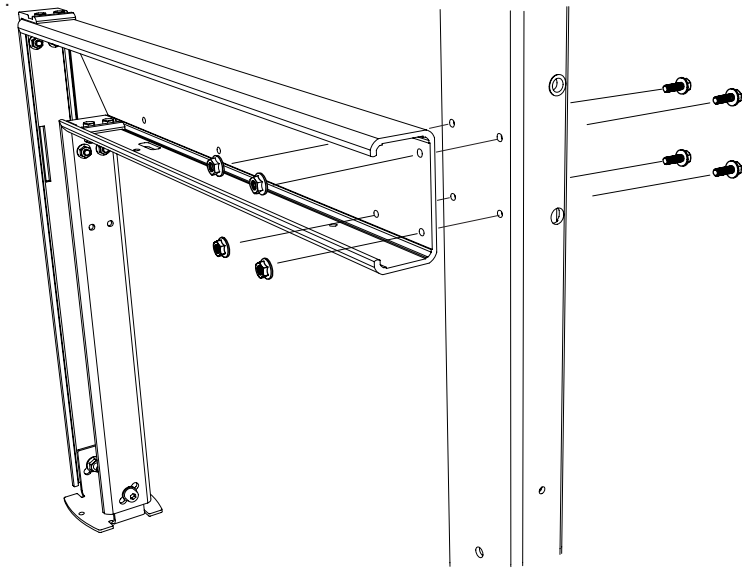
– 8 —— Flange nuts M6

– 4 —— Flat washers M6



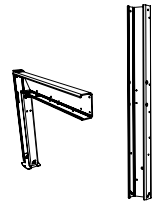
3

Fit the horizontal beam to the long leg.



– 4 —— Flange bolts M6x20

– 4 —— Flange lock nuts M6



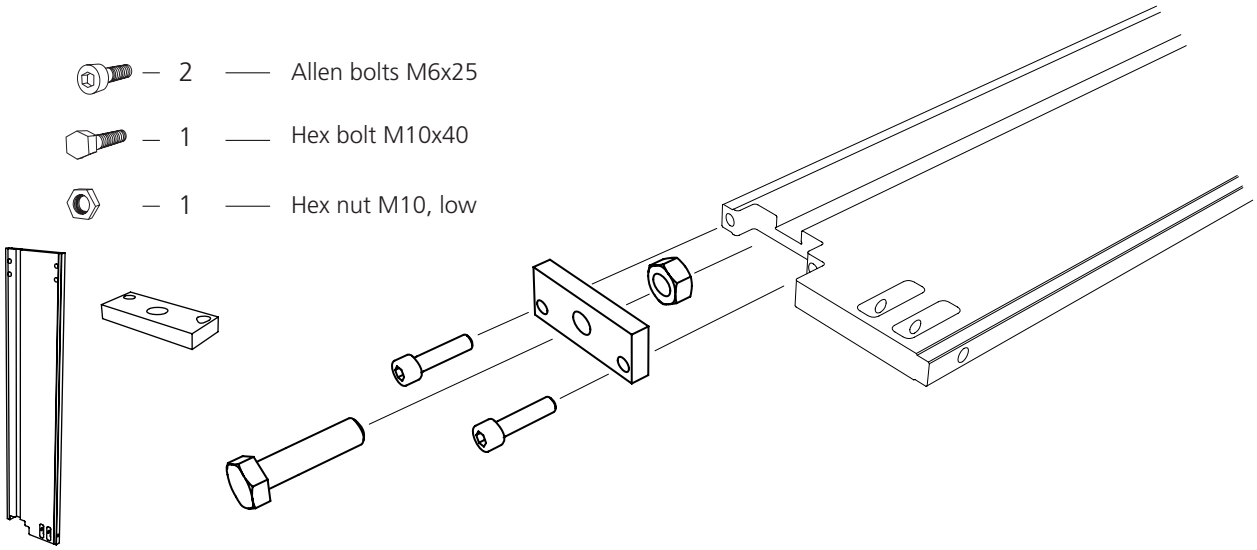
4

Begin assembly of the lifting beam. Install the ratchet bar stop plate with its bolt and nut to the bottom of the beam.

– 2 —— Allen bolts M6x25

– 1 —— Hex bolt M10x40

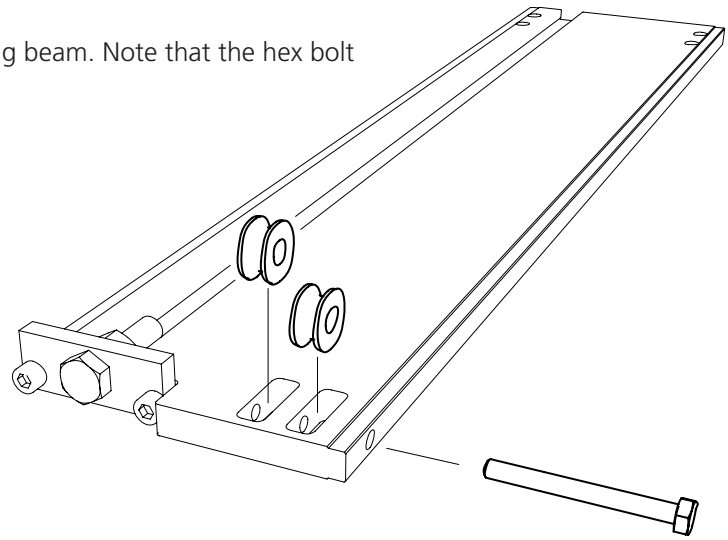
– 1 —— Hex nut M10, low



5

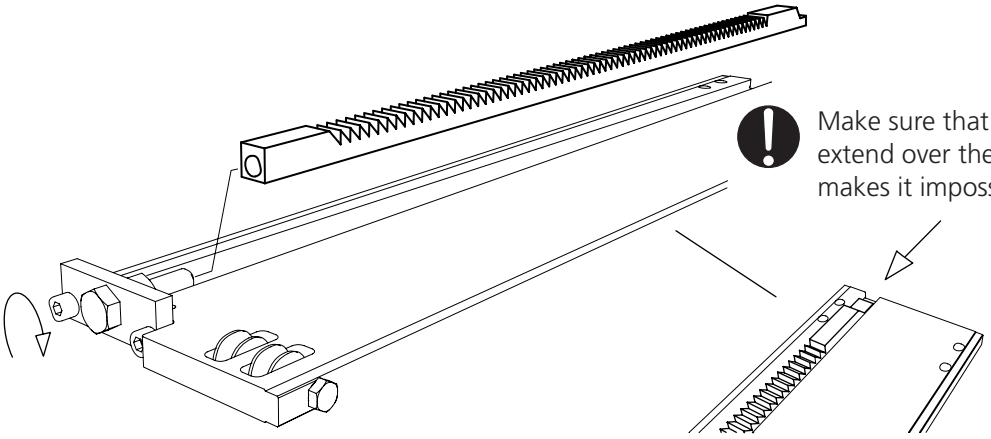
Install the line pulleys in the lifting beam. Note that the hex bolt may be difficult to tighten.

– 1 —— Hex bolt M6x60



6

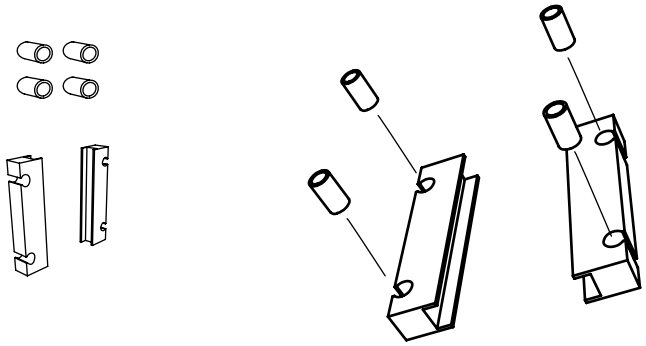
Install the ratchet bar in the lifting beam.



Make sure that the end of the ratchet bar does n
extend over the end of the lifting beam, since th
makes it impossible to assemble the log bed.

7

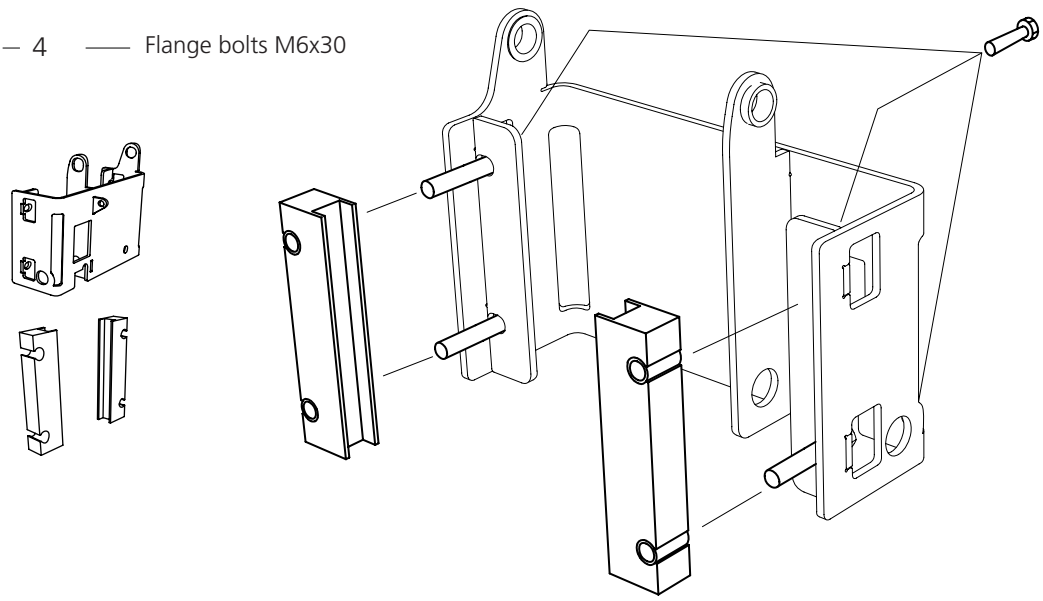
Press the spacer sleeves into the plastic glides for the saddle plate.



8

Insert the four flange bolts in the saddle plate and och fit the plastic glides to it.

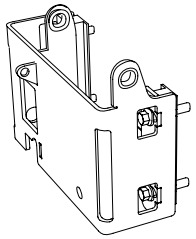
– 4 —— Flange bolts M6x30

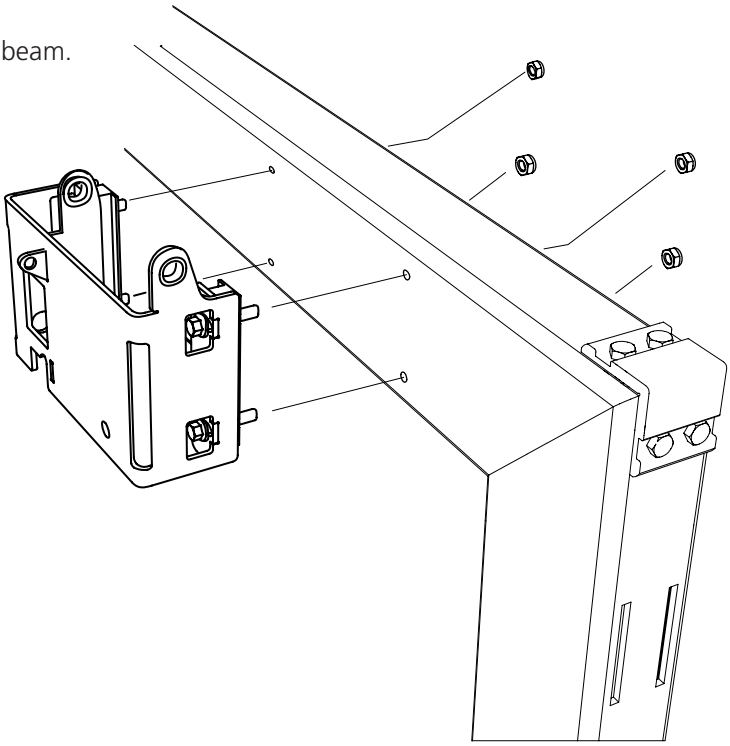


9

Install the saddle plate to the horizontal beam.

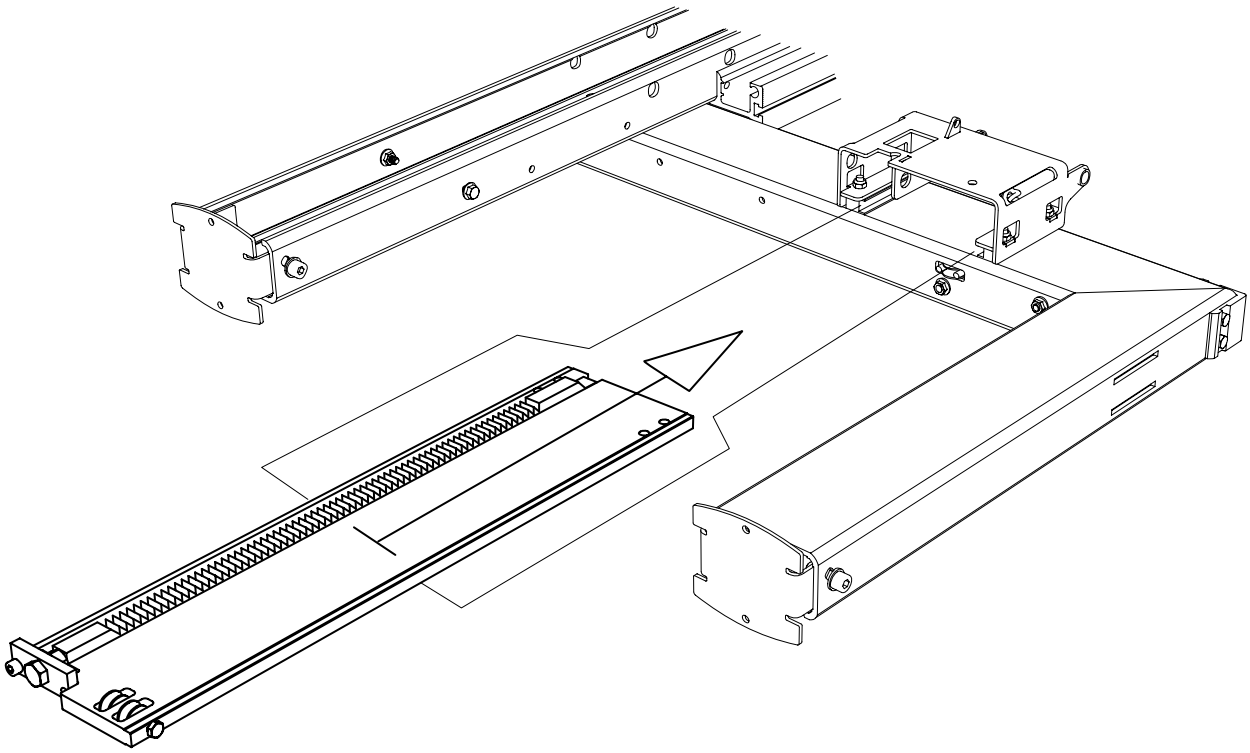
– 4 —— Flange lock nuts M6





10

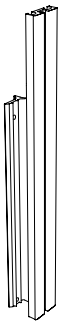
Install the lifting beam in the saddle plate.

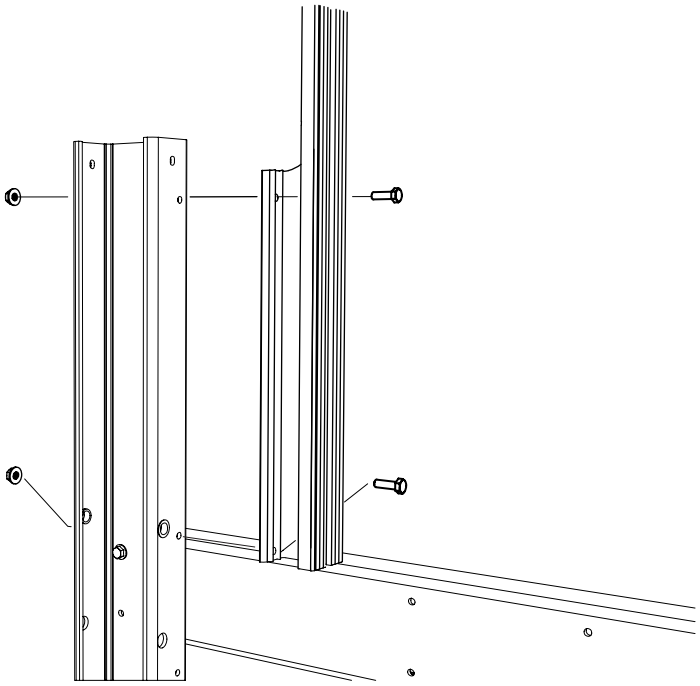


11 Fit the log support to the long leg.

– 2 —— Hex bolts M6x20

– 2 —— Flange lock nuts M6





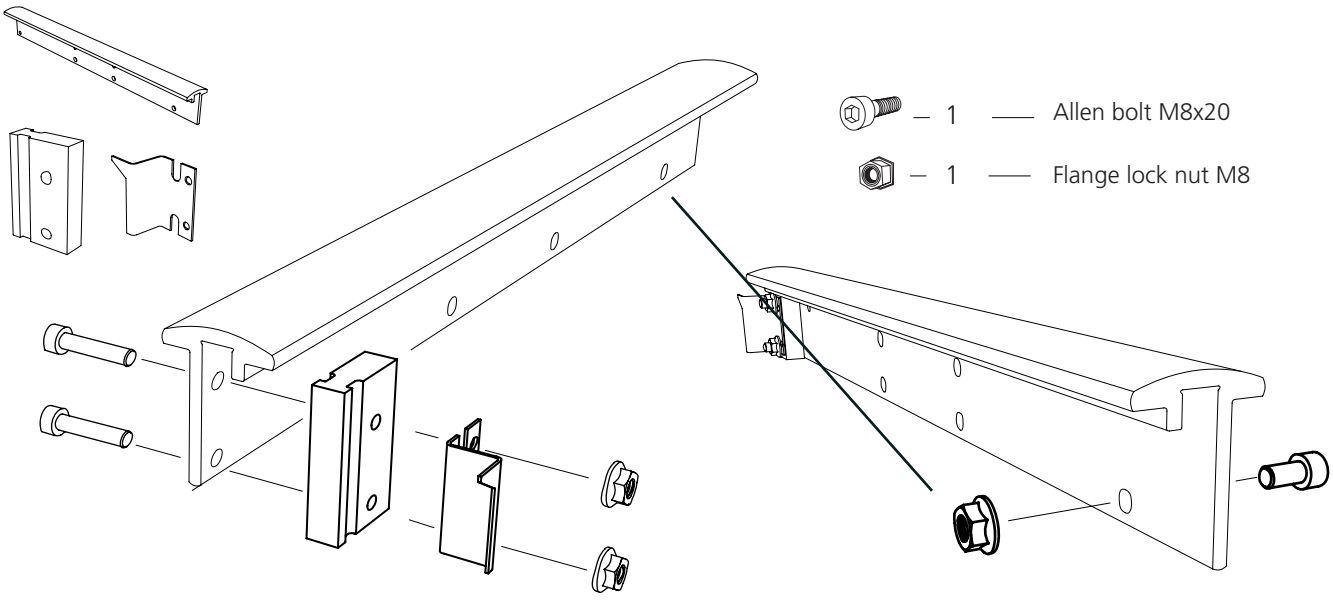
12 Fit the guide block and the pointer to one end of the log bed, and the stop bolt to the other end.

– 2 —— Allen bolt M6x30

– 2 —— Flange lock nut M6

– 1 —— Allen bolt M8x20

– 1 —— Flange lock nut M8

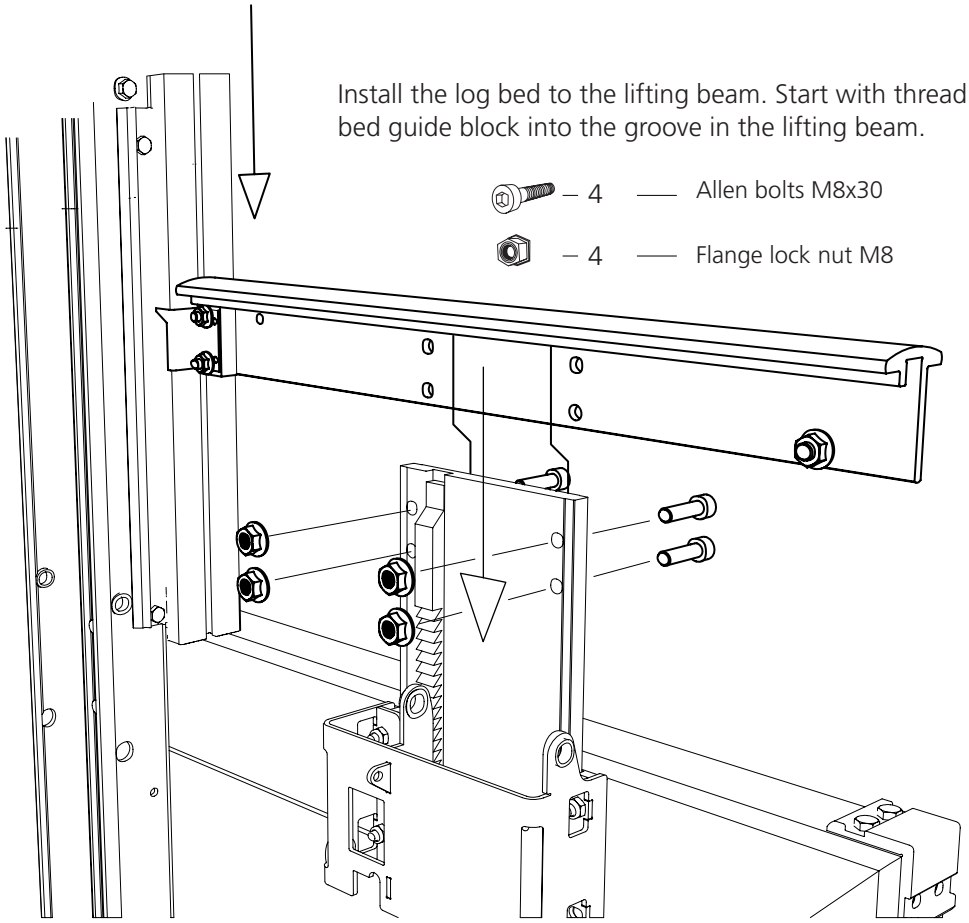


13

Install the log bed to the lifting beam. Start with threading log bed guide block into the groove in the lifting beam.

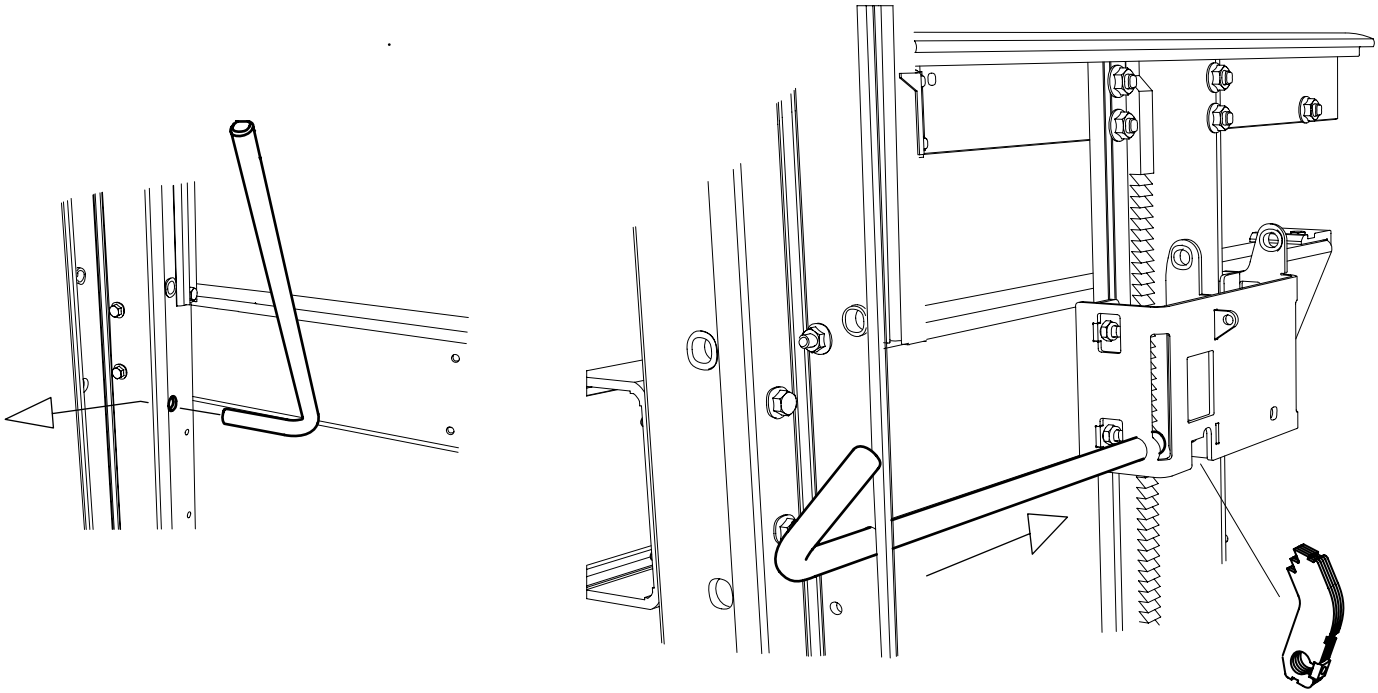
– 4 —— Allen bolts M8x30

– 4 —— Flange lock nut M8



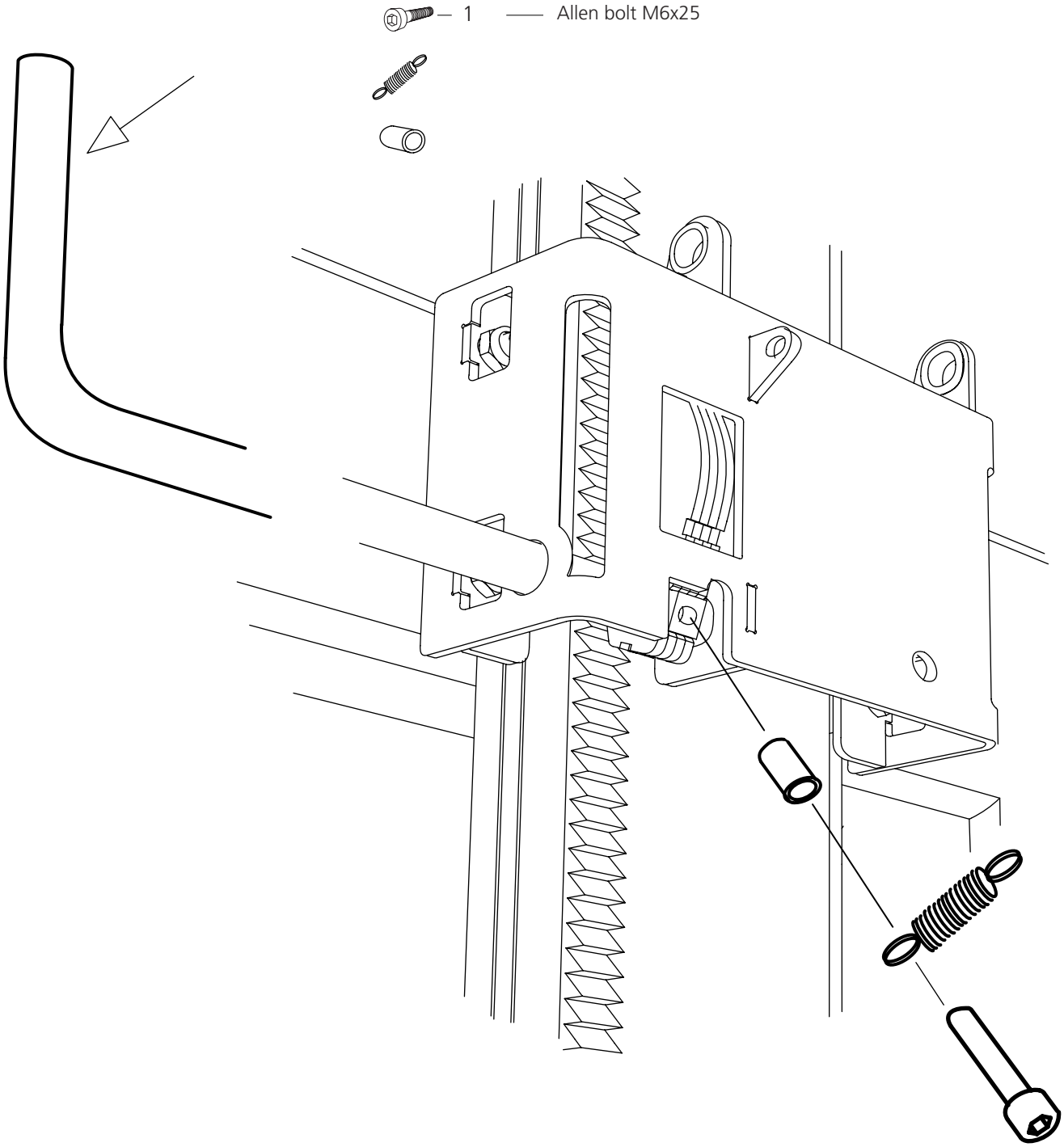
14

Fit the ratchet cam axle through the shod hole in the long leg. Then, pass it through the saddle plate and the ratchet cam.



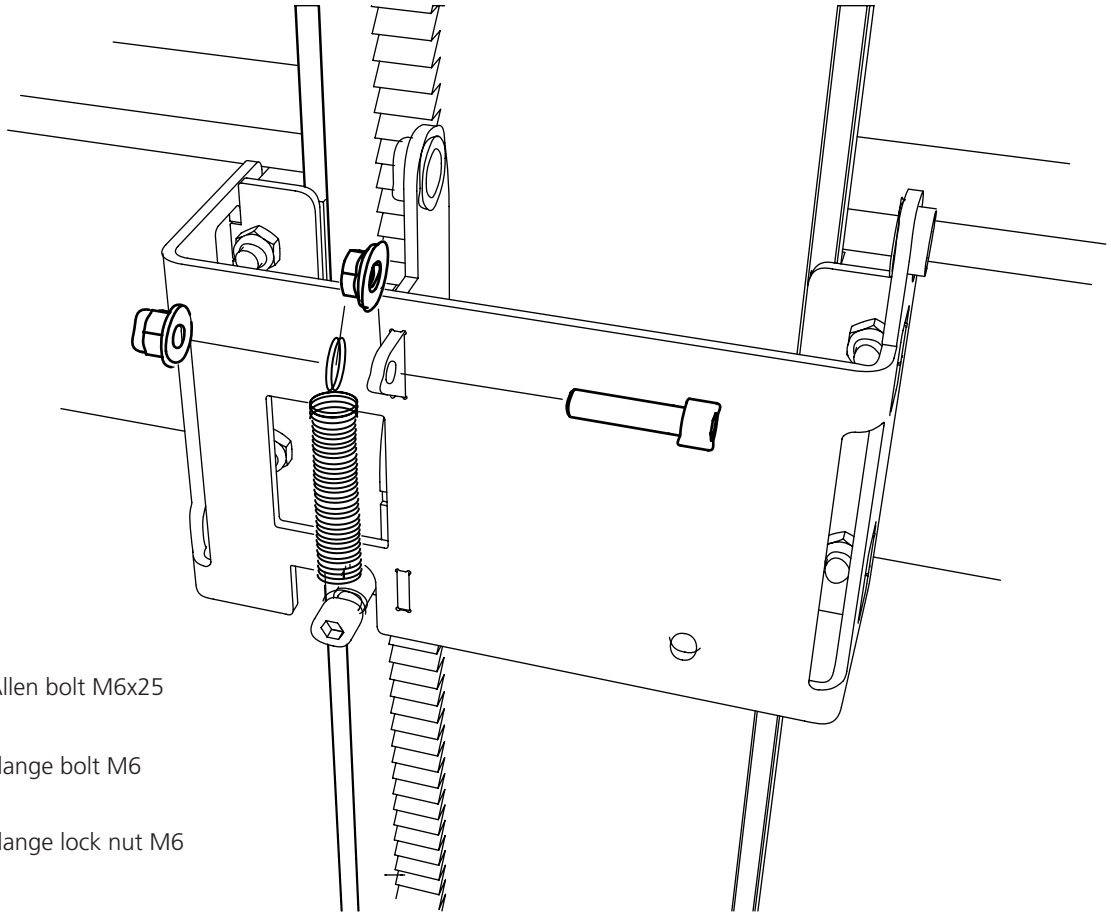
15 Secure the ratchet cam to the ratchet cam axle. Note that the end of the ratchet cam axle should point upwards.

— 1 —— Allen bolt M6x25



16

Secure the ratchet spring at its top end.



— 1 —— Allen bolt M6x25

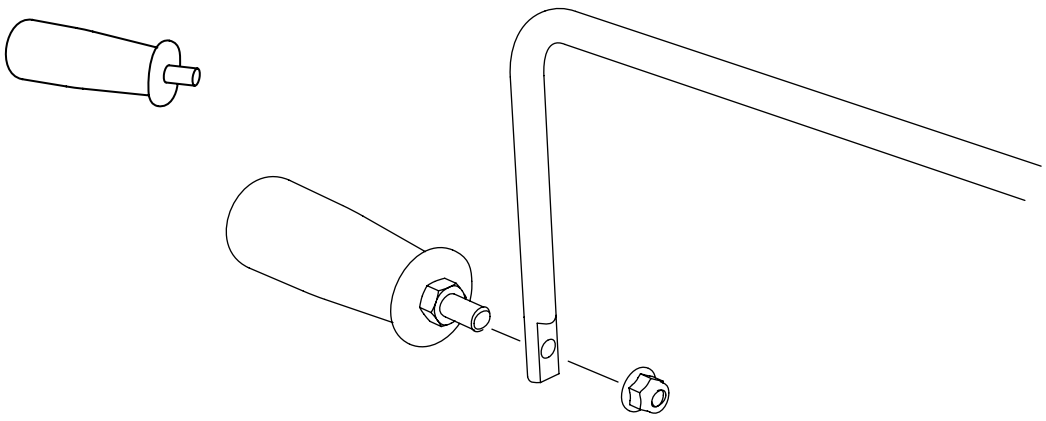
— 1 —— Flange bolt M6

— 1 —— Flange lock nut M6

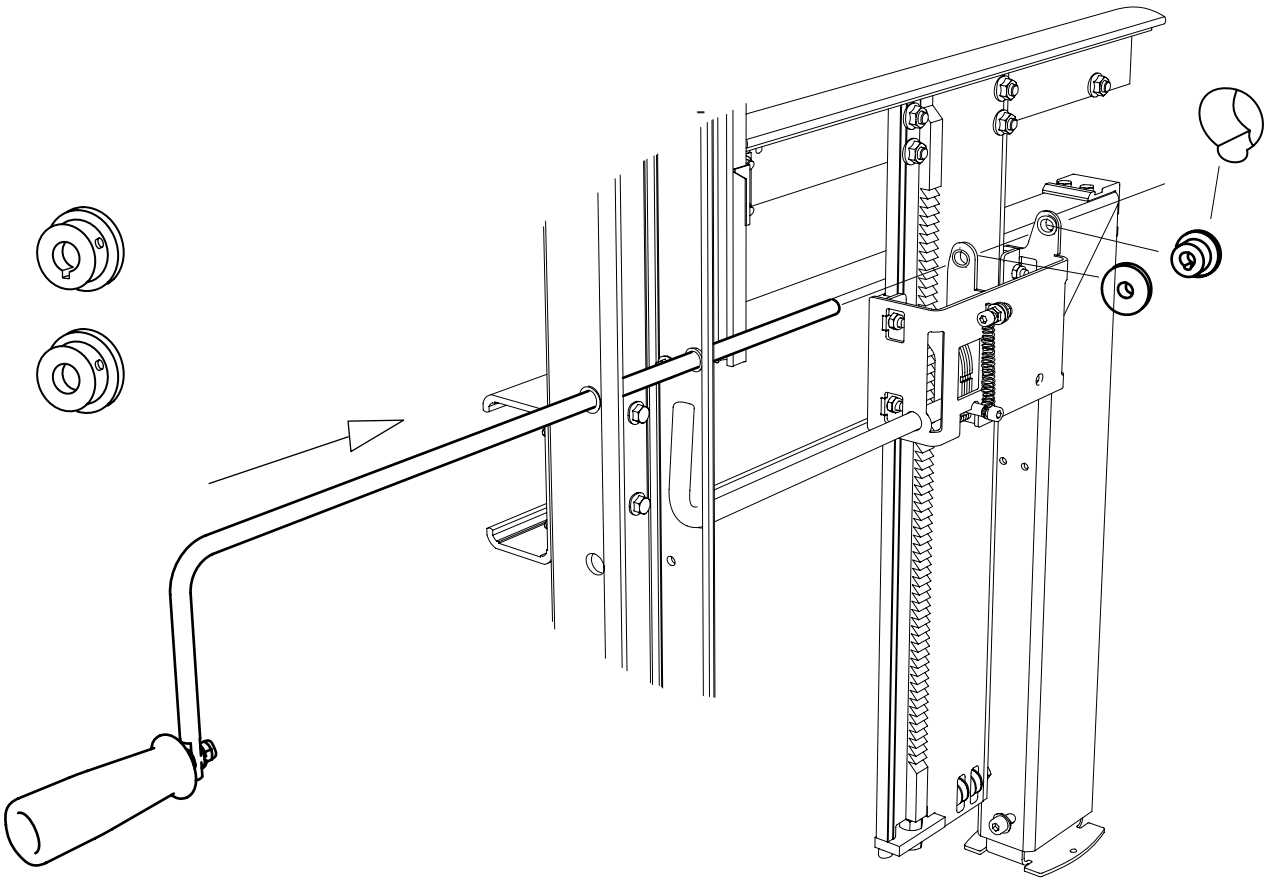
17

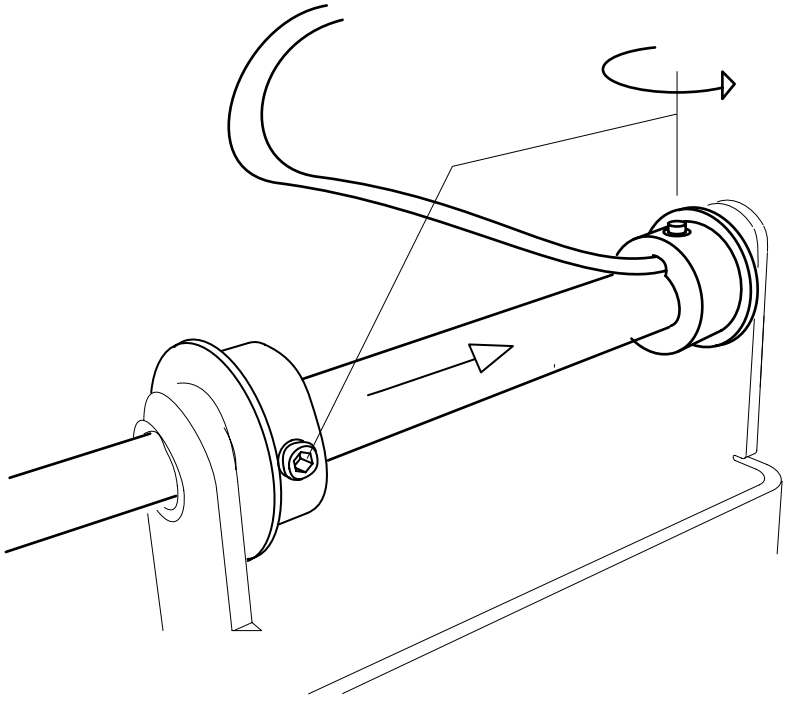
Fit the handle to the crank.

— 1 —— Flange lock nut M8

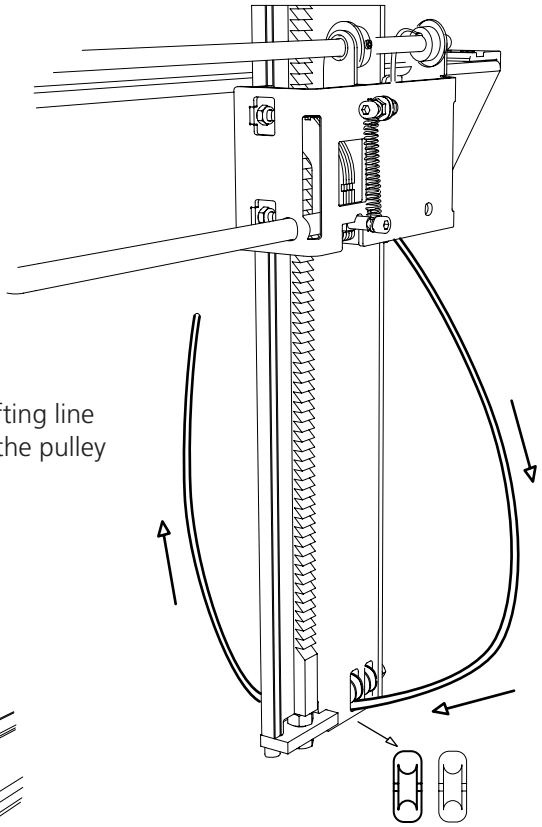


18 Install the crank in the saddle plate. When fitting the locking rings, make sure that they are aligned with the recesses in the crank axle. NOTE! The end of the lifting line must be inserted into the locking ring before assembly.



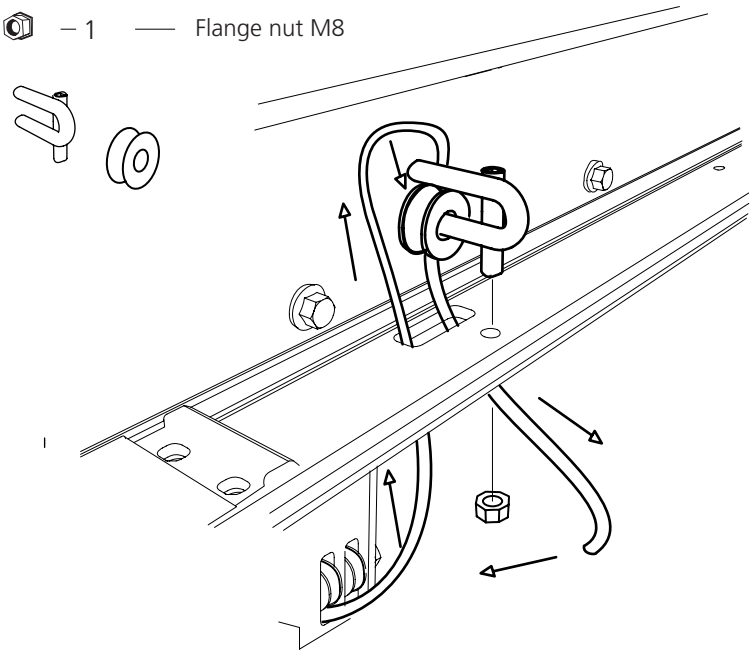


19 Thread the lifting line through the bottom of the lifting beam.

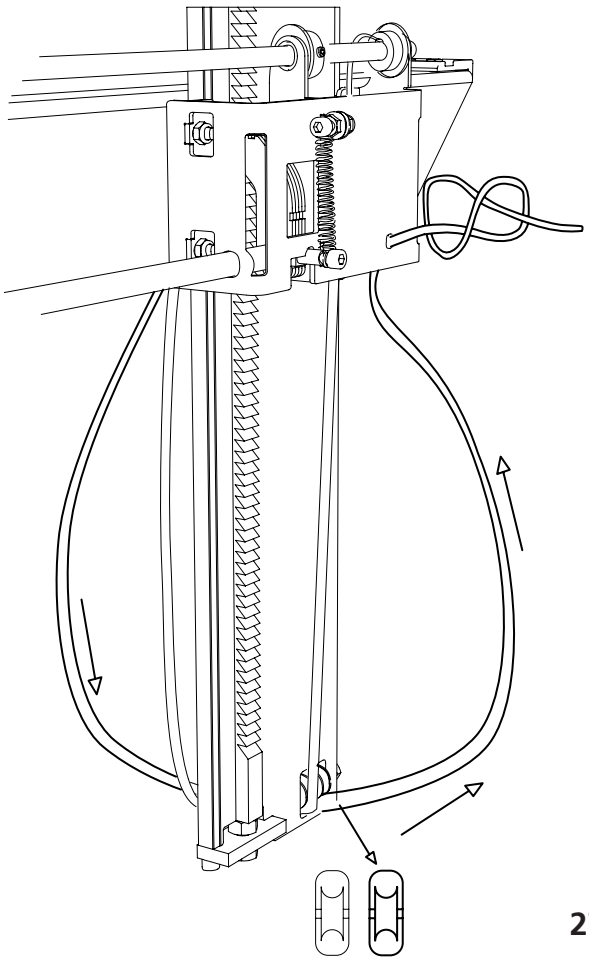


20 Thread the line pulley on its holder and place the lifting line in the track of the pulley. Then, fit the holder with the pulley and the line at the back of the horizontal beam.

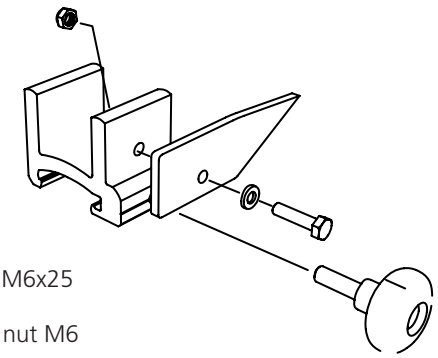
– 1 —— Flange nut M8

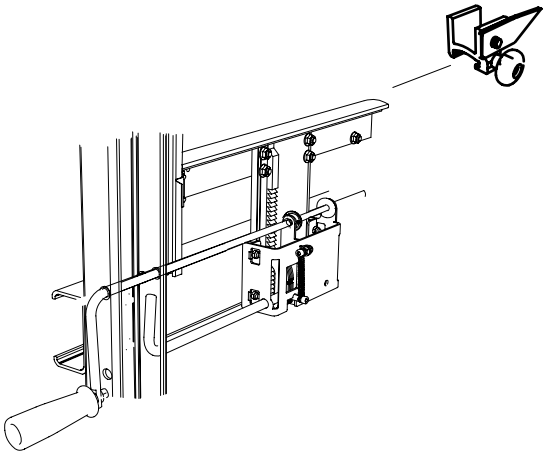


Thread the lifting line through the line pulley in the bottom of the lifting beam and then through the fixing hole in the saddle plate. Tie a figure-eight knot at the end of the line.



21



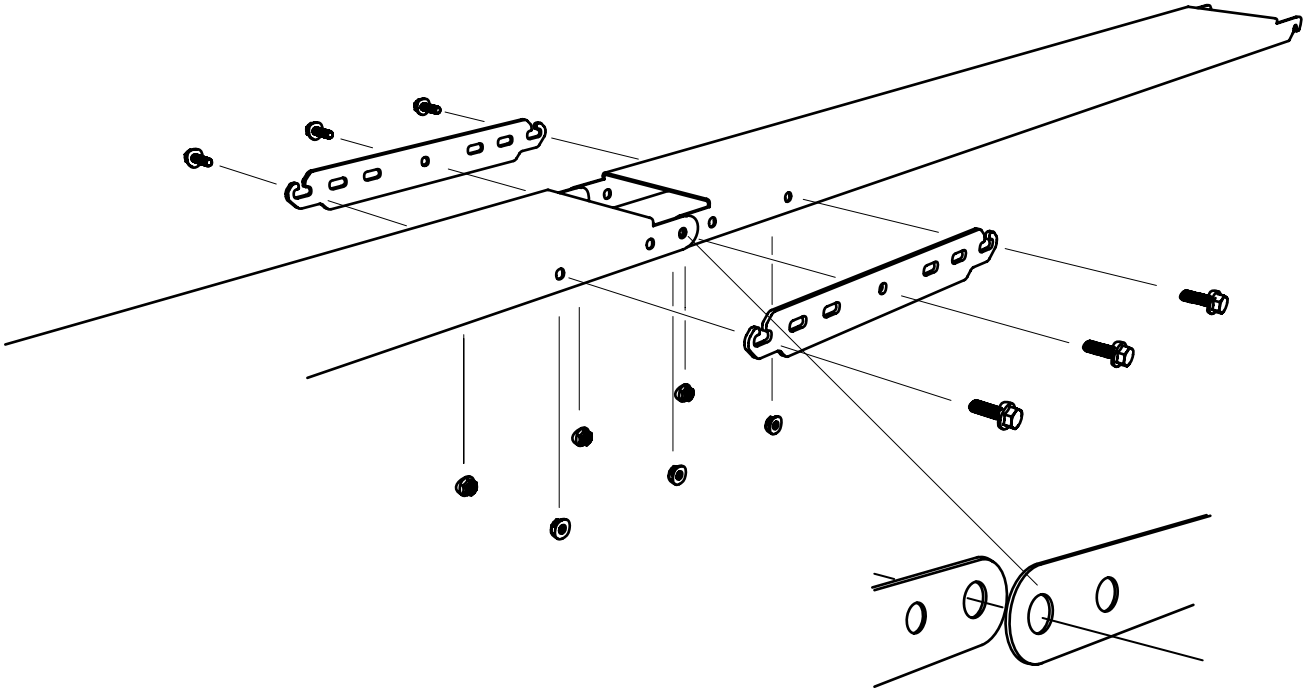


– 1 —— Flange bolt M6x25

– 1 —— Flange lock nut M6

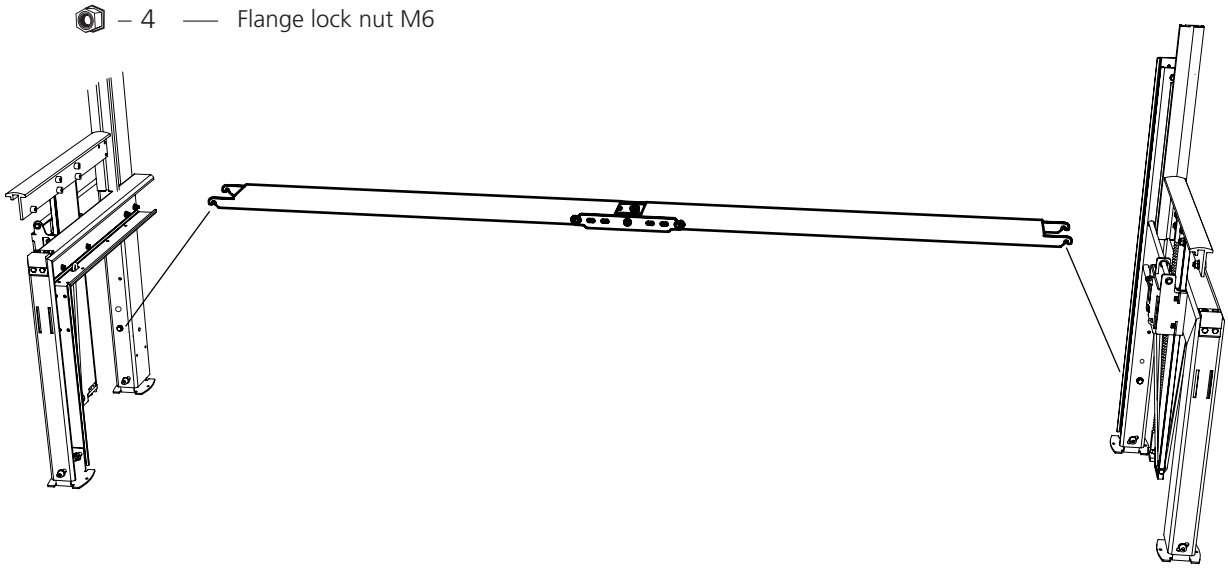
22

Assemble the parts for building the lower strut. Note that the strut parts should overlap each other when fitted together, in order to get the right length. See illustration.



– 4 —— Flange bolt M6x16

– 4 —— Flange lock nut M6



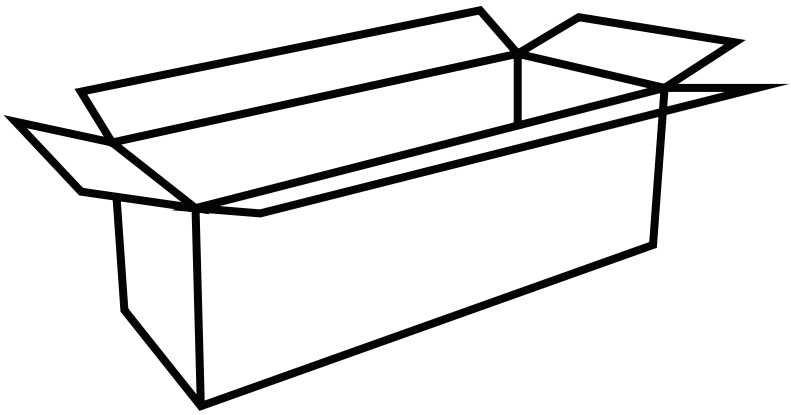
Good job!

To continue with the next step and to complete the assembly you need the parts from the guie rail boxes.

Open the guide rail boxes

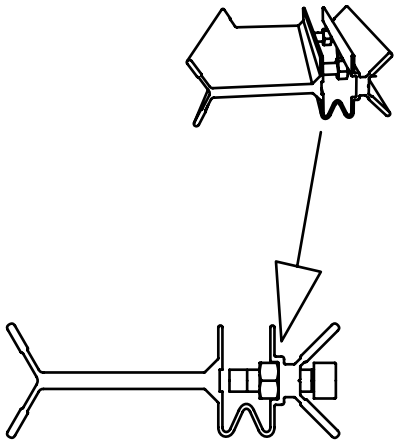
Guide rail box

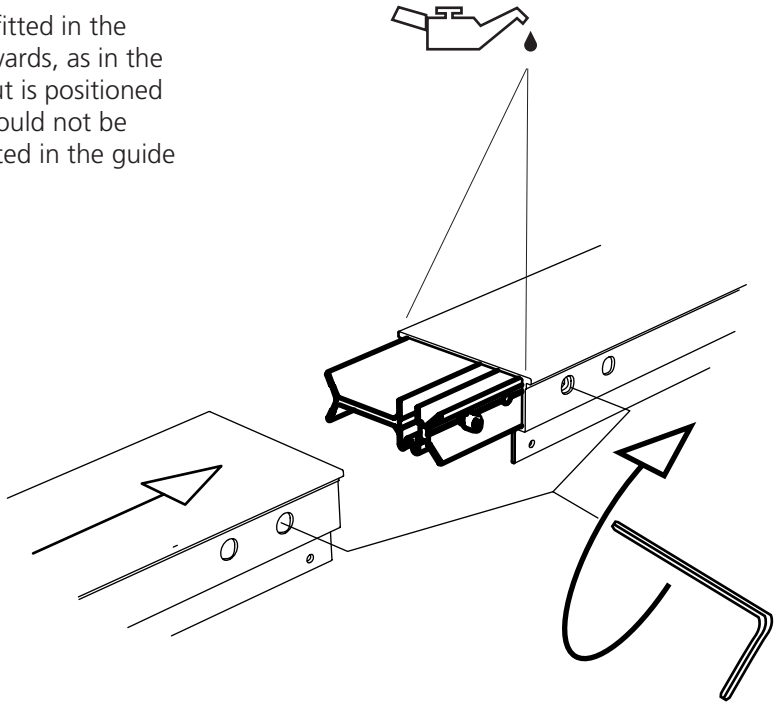
4520-010-1017

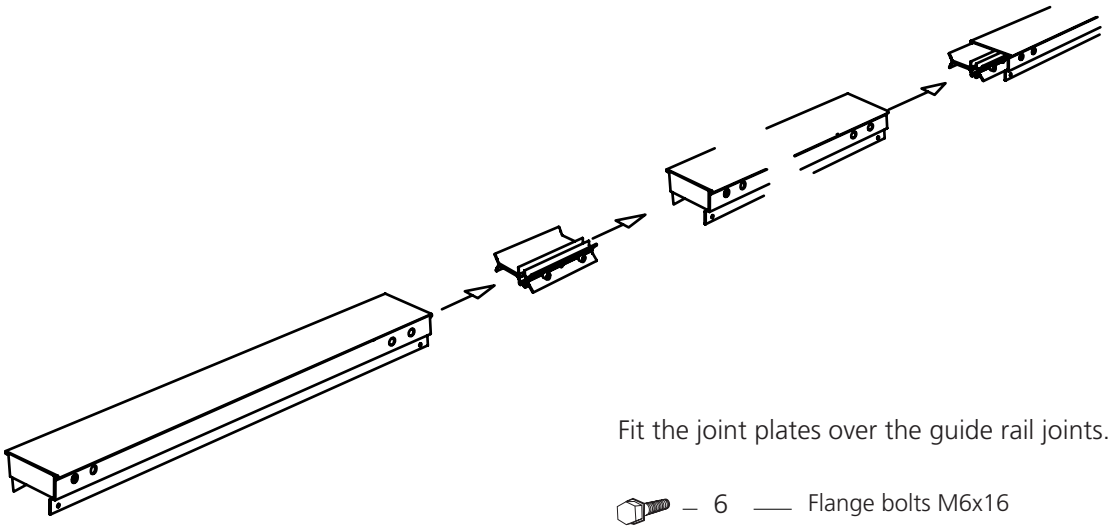


23 Fit three guide rail sections together, as in the illustration.

Note that the joint coupler should be fitted in the guide rail with its opening facing outwards, as in the illustration. Make sure that the lock nut is positioned correctly in the nut recess. The bolt should not be tightened when the joint coupler is fitted in the guide rail ends.



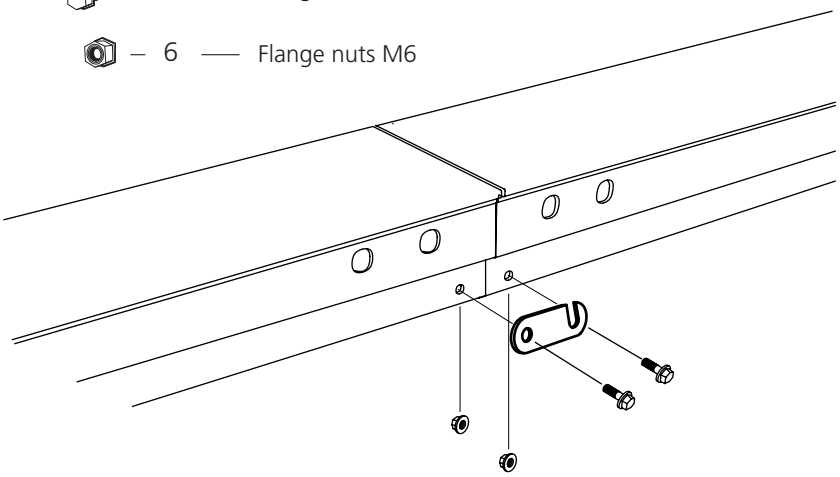




Fit the joint plates over the guide rail joints.

– 6 — Flange bolts M6x16

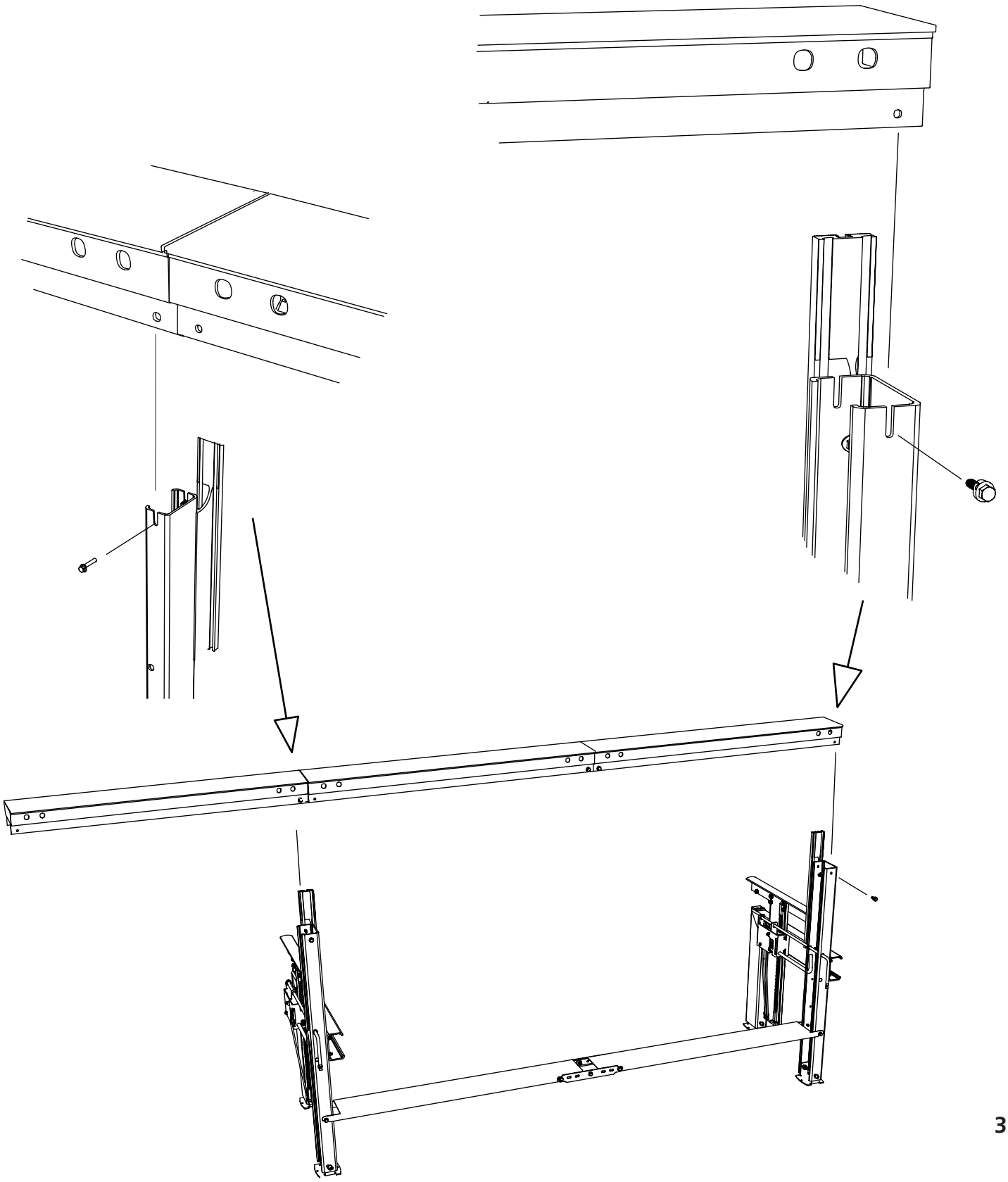
– 6 — Flange nuts M6



24 Install the guide rail to the top of the leg unit. Start with the end of the guide rail and align the bolt hole with the groove in the leg. Then, complete the assembly by fitting the guide rail to the other leg, as in the illustration.

– 4 —— Flange bolts M6x16

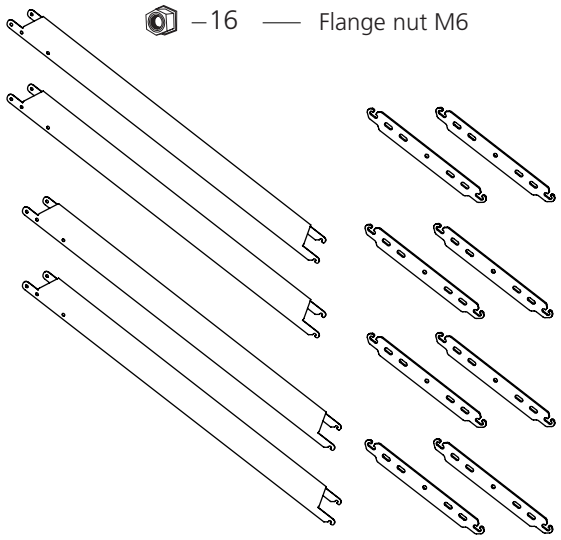
– 4 —— Flange lock nuts M6

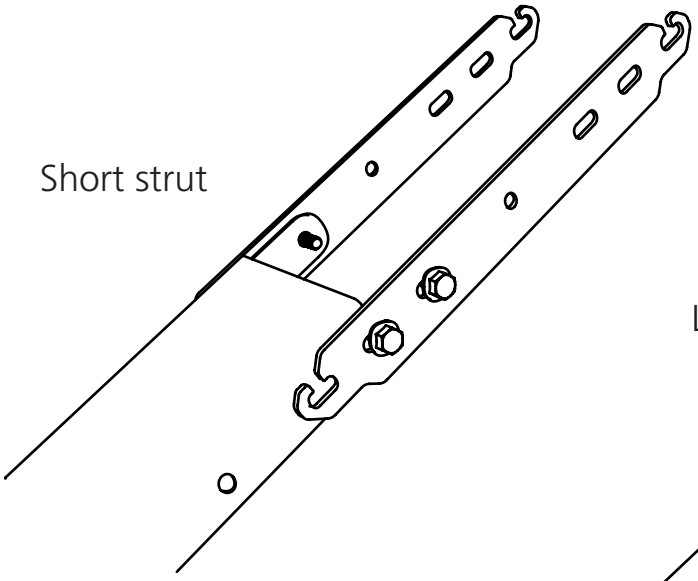


25 Assemble the diagonal struts, which are required to complete the assembly, Two types are needed: long struts and short struts. Look carefully at the illustration below, and then assemble two of each type.

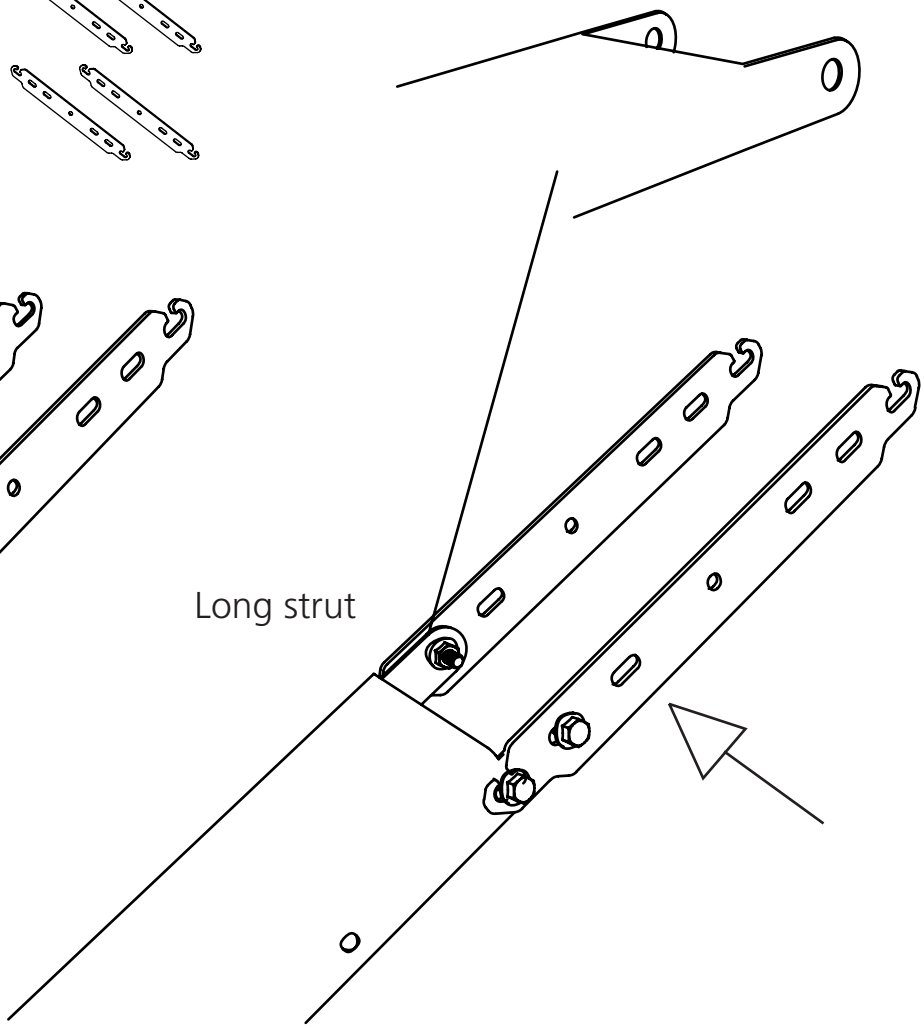
–16 —— Flange bolt M6x16

–16 —— Flange nut M6



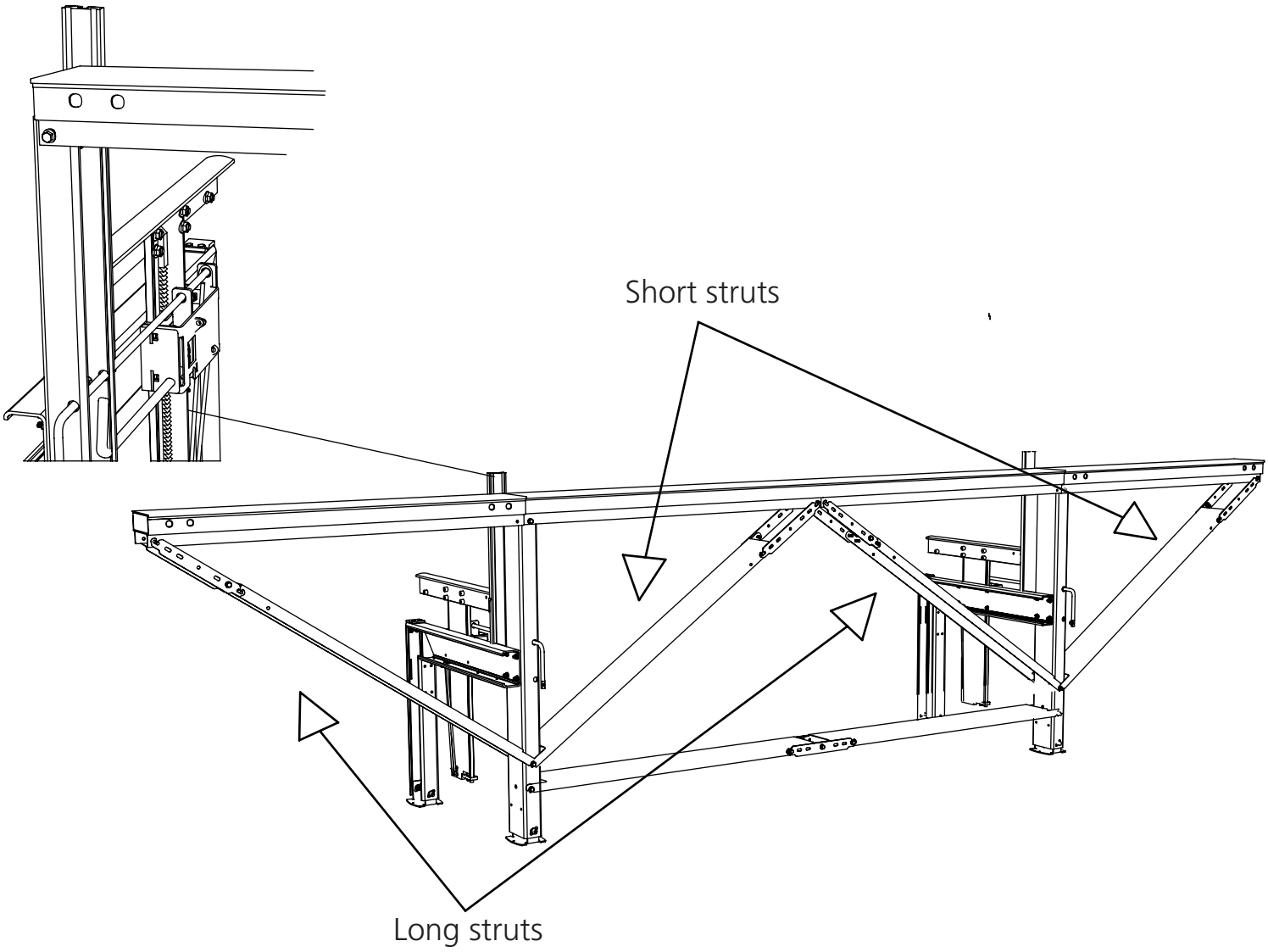


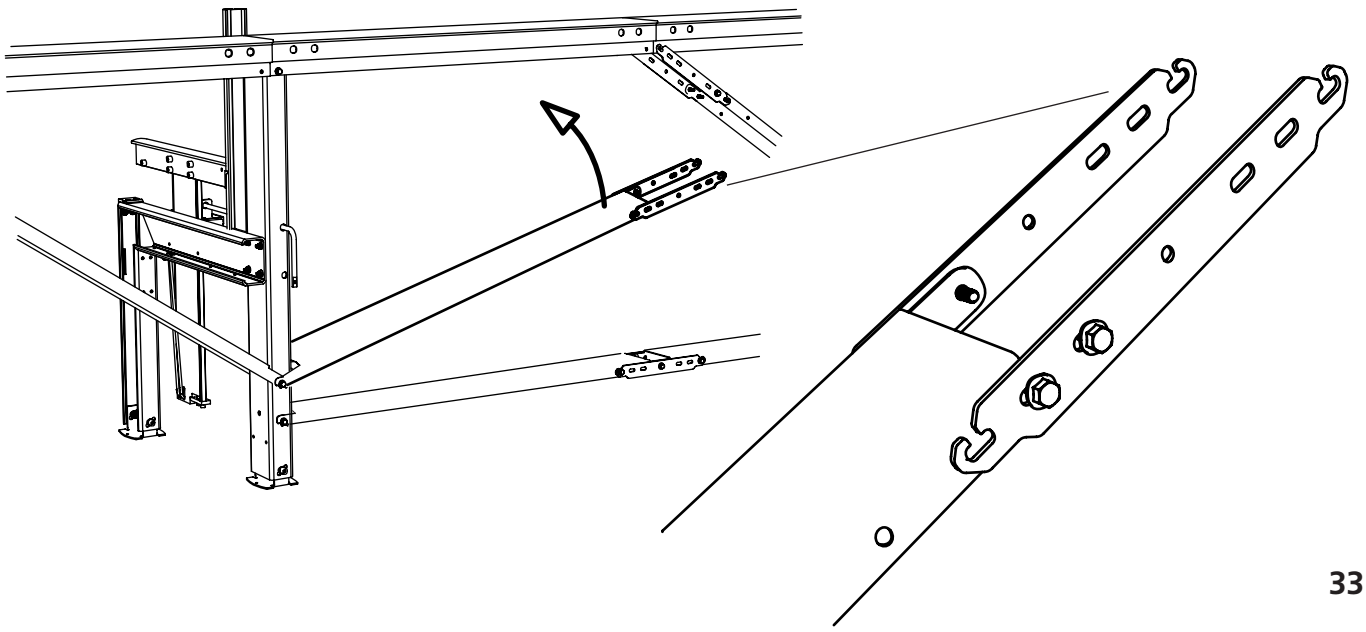
Short strut



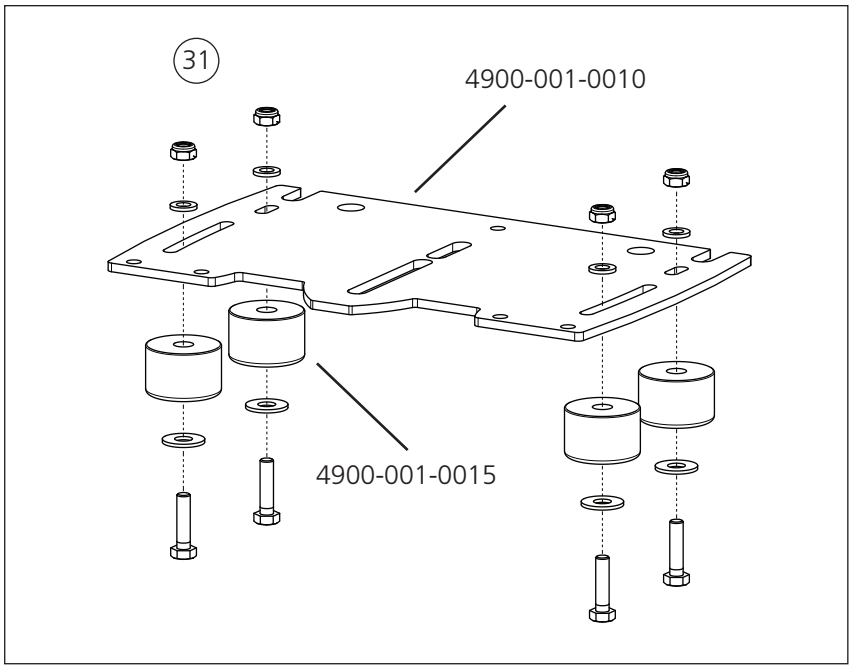
Long strut

26 Install the diagonal struts to the sawmill frame. Start where the end of the guide rail was fitted in step 24. From there, the order of assembly will be short/long/short/long strut, as in the illustration.



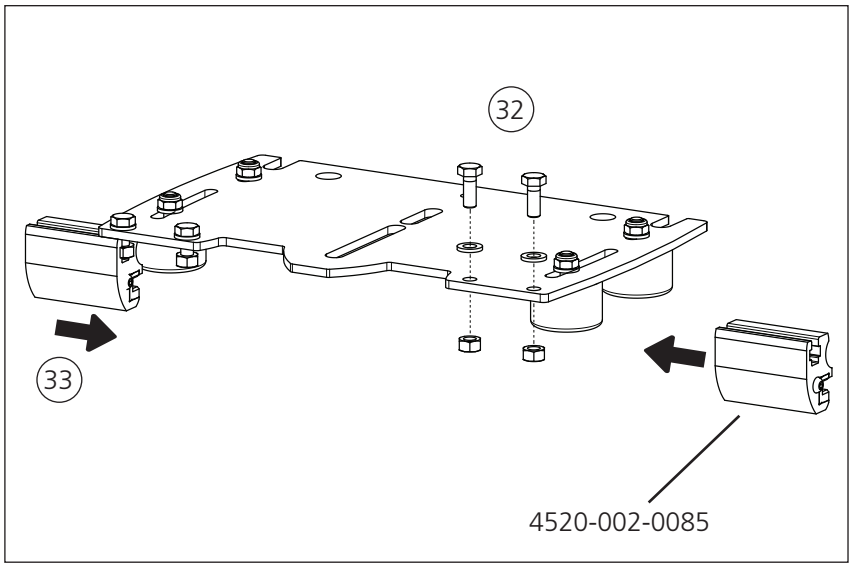


ASSEMBLY: CHAINSAW CARRIAGE



(31) Fit the four sliding pucks to the bottom plate of the carriage (4 x M6x25 hex bolts, 4 x M6 rivet washer, (4 x plastic rollers/ sliding pucks), 4 x M6 washers, 4 x M6 locking nuts).

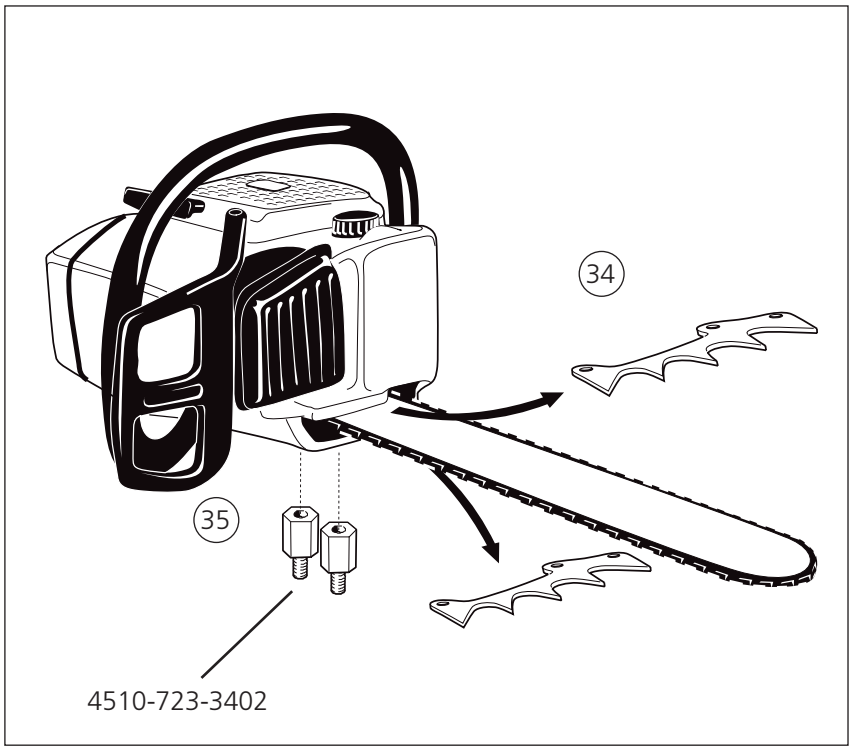
ASSEMBLY: CHAINSAW CARRIAGE



(32) Insert bolts through the holes along the front edge of the bottom plate. Turn the nuts a few times (4 x M6x16 hex bolts, 4 x M6 hex nuts).

(33) Fit the slilding profiles so that the nuts come in the groove on the sliding profiles, then tighten the bolts.

ASSEMBLY: LOGOSOL NUTS



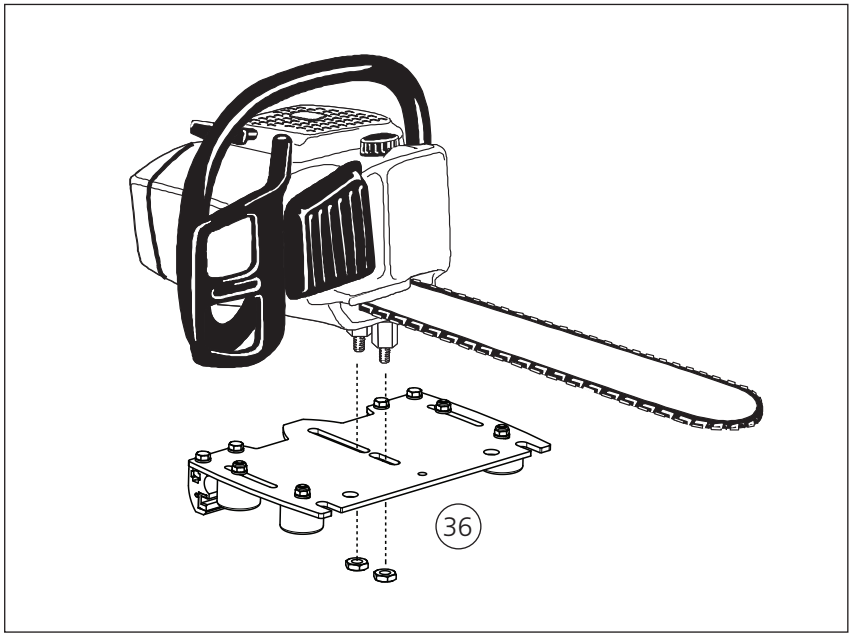
Remove the two bolts holding the guide bar and remove the guide bar cover.

(34) Remove the bark grips, but leave the bolts in place and retighten the nuts.

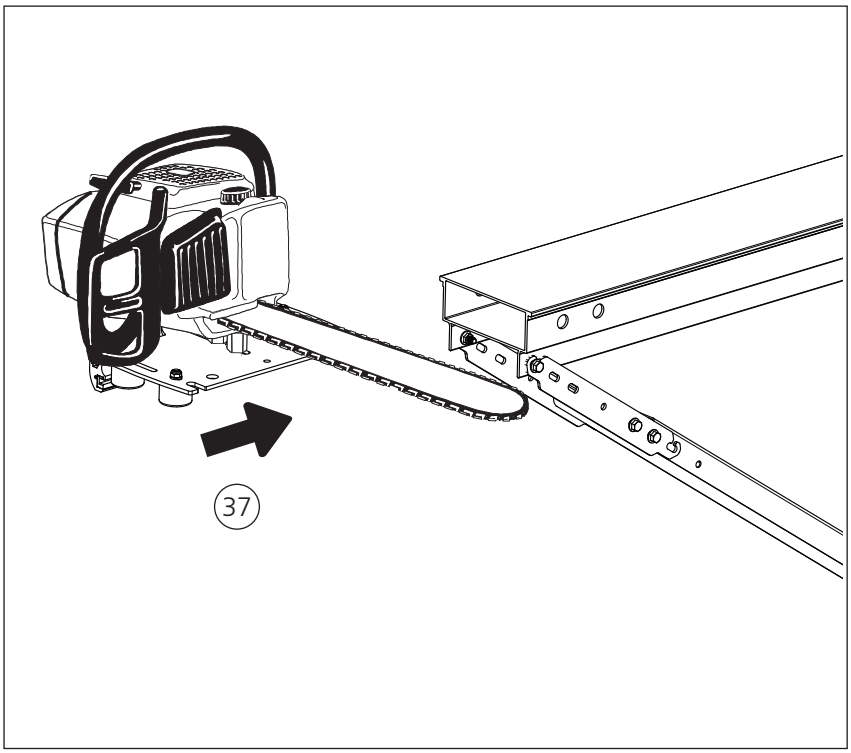
(35) Refit the guide bar cover, replacing the guide bar bolts with Logosol nuts. (The guide bar nuts will later be used to fit the chainsaw to the carriage.)

⚠ **Only CE-approved chainsaws with two guide bar nuts may be used with the Farmer's Sawmill.**

ASSEMBLY: CHAINSAW



(36) Fit the Logosol nuts through the track in the carriage. Tighten the chainsaw into place using the chainsaw's guide bar nuts under the plate.



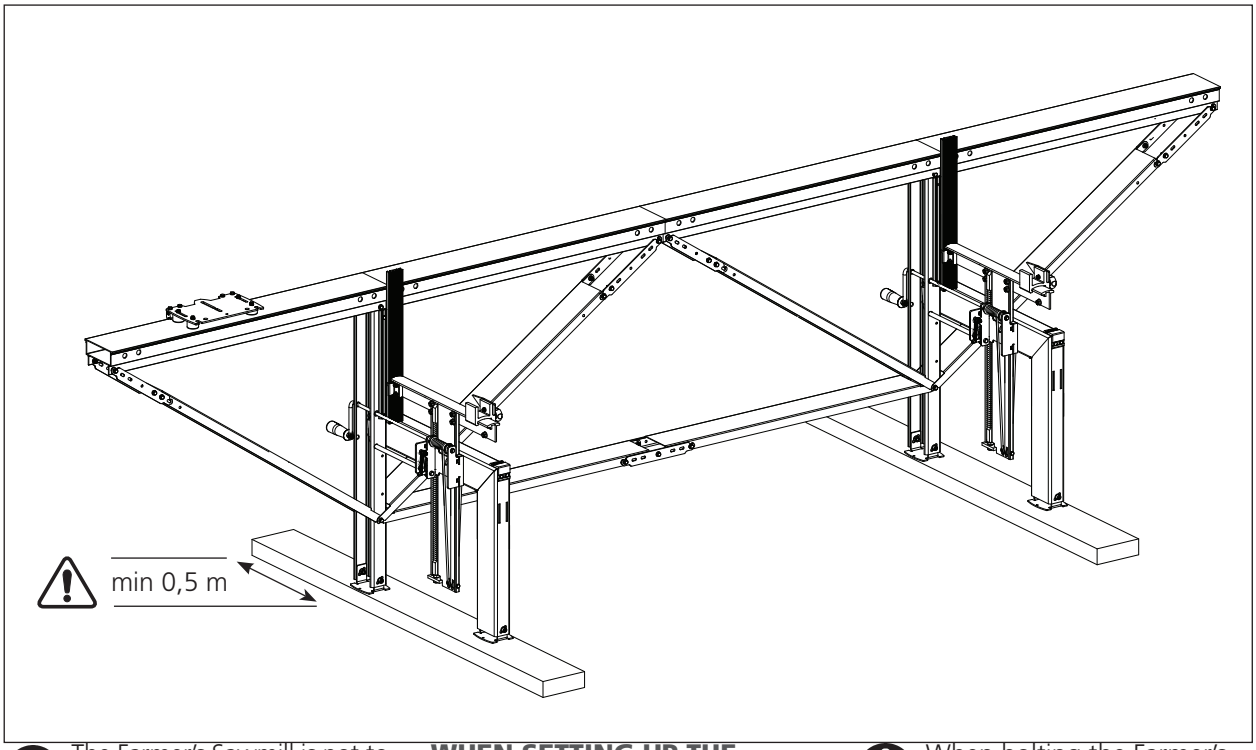
(37) Push the carriage onto the guide rail with the guide bar in the direction of the log beds.

Aleays hold the chainsaw when it is on the guide rail.

Never leave the chainsaw on the guide rail.

Check that the carriage runs smoothly and easily on the guide rail. If the sliding profiles have diffilcuty sliding on the rail, remove the carriage from the guide rail and run a file in the sliding profile groove until the carriage runs easily on the guide rail.

SITING



The Farmer's Sawmill is not to tilt more than 5 degrees from the horizontal in any direction.

The sawmill can overturn if the tilt is greater. The Farmer's Sawmill is not to be operated unless the feet are fixed to the underlying surface.

There is a risk that the saw unit slides off the beam.

The sawmill should ideally not slope away from the operator. It is easier for the block to remain upright if the sawmill is level.

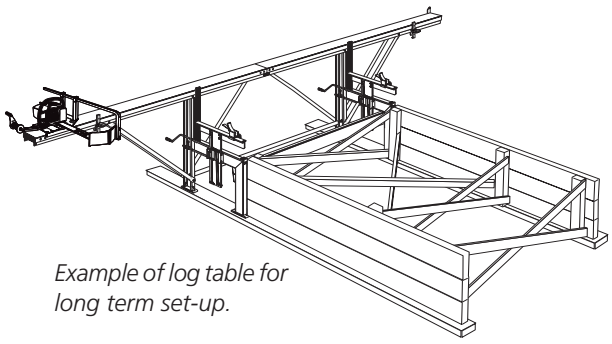
WHEN SETTING UP THE SAWMILL DIRECTLY ON THE GROUND:

The surface must be firm and level enough to drive a car on.

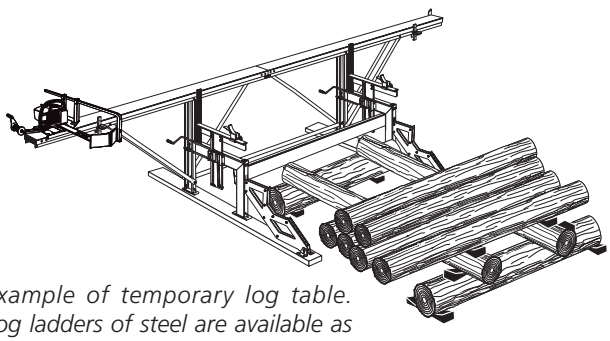
Fit a board under each pair of legs using reliable screw joints, e.g. M6 bolts + nuts. The boards must be of good quality, at least 50x150 mm and at least 1.5 m long. **The boards must extend at least 0.5 m out from the long legs.**

When bolting the Farmer's Sawmill to a concrete floor, asphalt surface or similar surface, a rubber underlay should be placed under each foot in order to prevent vibration damage to the sawmill. use a reliable fastening system between the feet and the surface (not included).

Secure the logs with wedges.

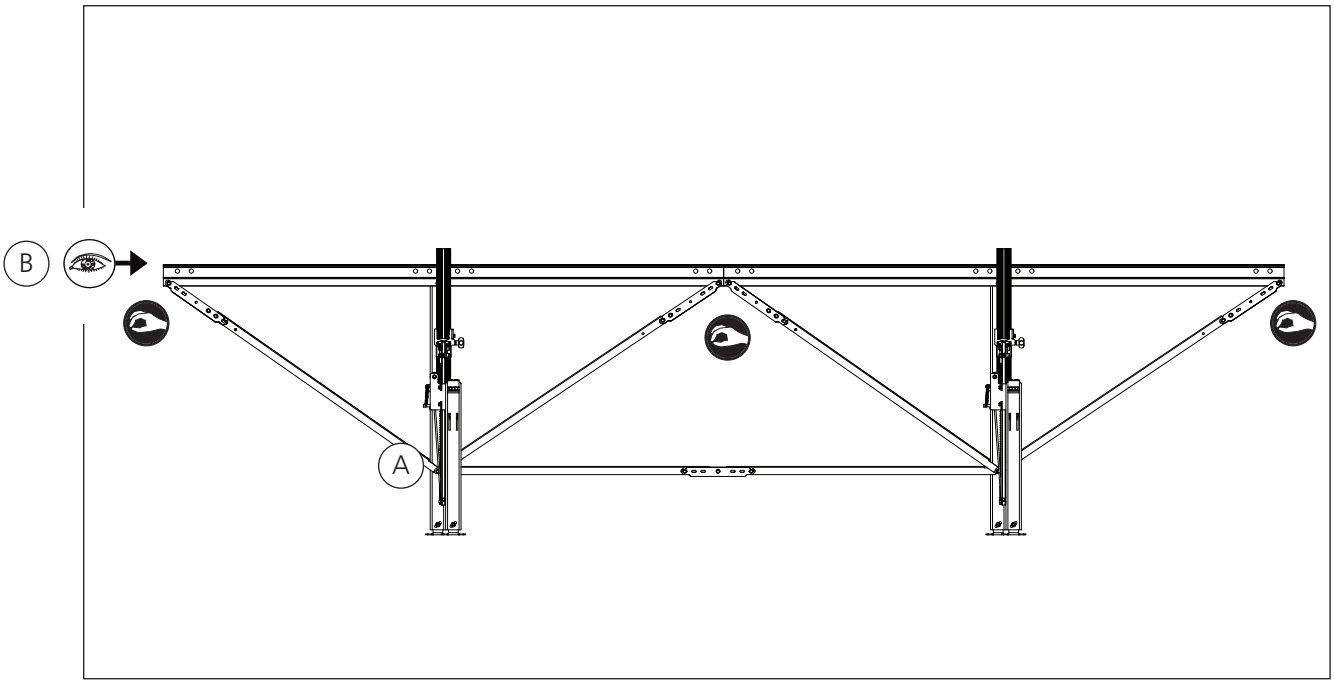


Example of log table for long term set-up.



Example of temporary log table. Log ladders of steel are available as accessories for the Farmer's Sawmill.

ADJUSTMENT: GUIDE RAIL

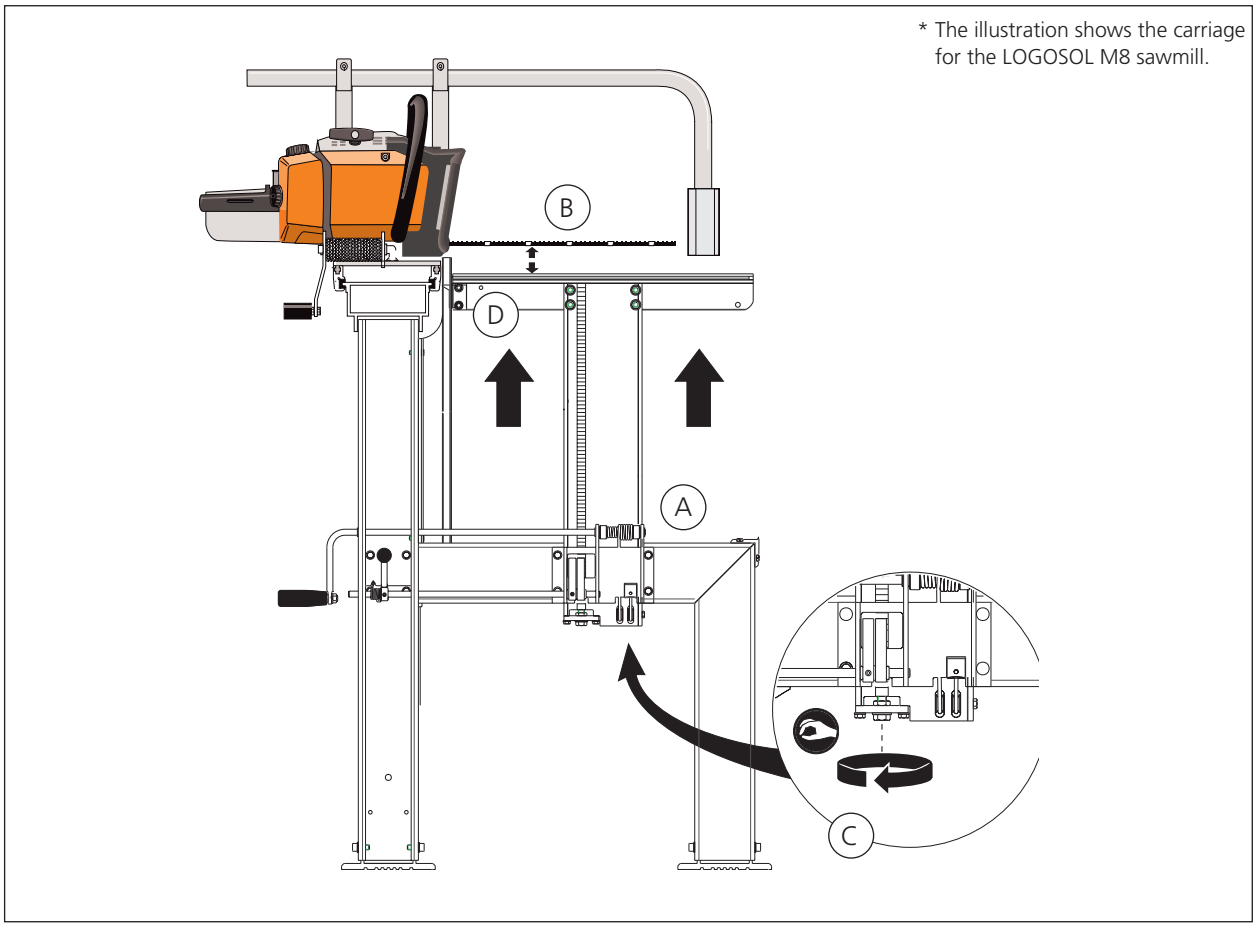


Check the guide rail's straightness. Look from one of the guide rail's upper corners, along the guide rail, so that you can easily see its curvature.

(A) First tighten the lower screw joints where the horizontal struts are fitted to the legs.

(B) Look along the guide rail and press it straight at the same time as you tighten the bolts that fix the brace plates to the guide rail. You can also stretch a string along the guide rail. Place a coin under the string on both ends of the guide rail, so you get a gap between the string and the guide rail. This way it is easy to see the straightness of the guide rail. When necessary, the position of the brace paltes against the strut can be adjusted to get greater adjustability.

ADJUSTMENT: LOG BED



* The illustration shows the carriage for the LOGOSOL M8 sawmill.

(A) Check that when the log bed is cranked down, it moves easily through the saddle plate driven by its own weight. If this is not the case:

• Set the log bed to its top position.

Lock using the ratchet cam. risk of the bed dropping down.

• Loosen the saddle plate's four bolts and position it so that it is straight in relation to the lifting beam. Tighten.

• Place the log bed in its lowest position. Loosen the plastic slide rail on the log bed (D) and adjust it so that it is straight in relation to the T-shaped log bed track. Tighten. (The above adjustments are carried out using the play in the screw joints)

• Lubricate the lifting beam sliding surfaces and the T-track of the the log support with silicon spray (9999-000-5110) or Superflo (9999-000-5115).

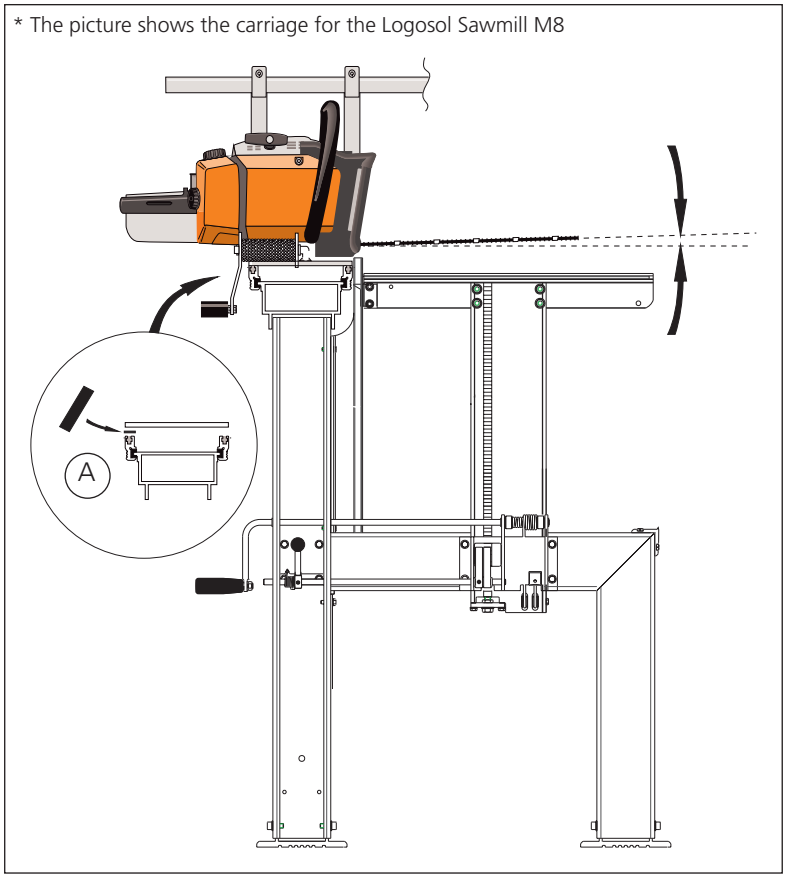
(B) Check the height of the log bed. Set the ratchet in the 1/4" position. Place the setting block on the log bed. move the saw unit* so that the guide bar is right over the log bed. Move the log bed up to the notch nearest to 52 mm from the underside of the guide bar.

(C) Adjust using the bolt and locking nut on the end of the ratchet bar until it is 52 mm between the log bed and the guide bar. Should the adjustment be insufficient, move the ratchet cam up or down a notch and adjust againv
Lock using the locking nut.

(D) The scale indicator: Loosen the two bolts holding the indicator and the plastic block on the log bed, in place. Set both indicators on the scale for 2".

ADJUSTMENT: GUIDE BAR

* The picture shows the carriage for the Logosol Sawmill M8



(A) Guide bar straightness can vary between chainsaws.

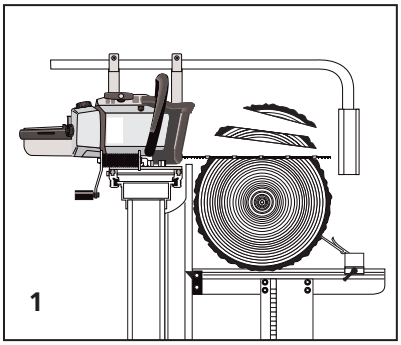
It should only be necessary to adjust a guide bar once, provided that it is not bent during sawing

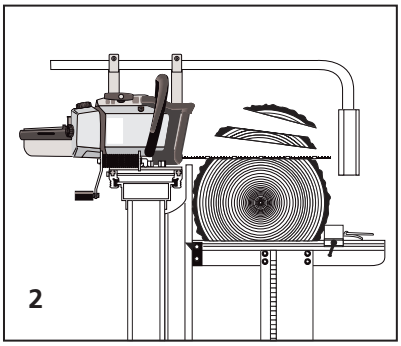
If, after adjusting the guide bar, you notice that you need to adjust it again in the same direction when using the guide bar, it may be that the guide bar mount is not true. This can be com- pensated for by placing one or more shims between the aluminium slide rails or the sliding pucks and the carriage bottom plate.

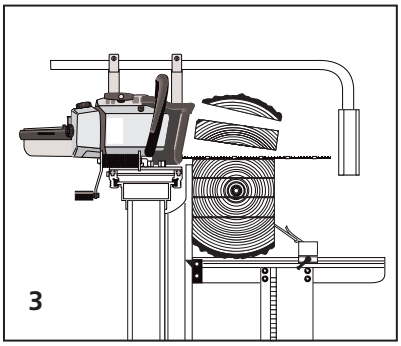
Shims can be ordered from Logosol, part. no. 4507-001-1500.

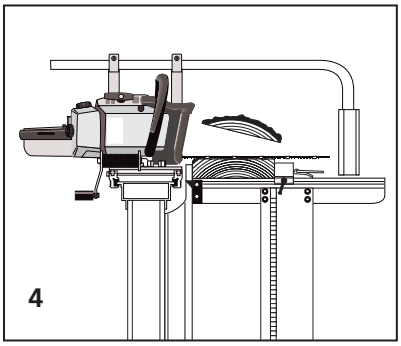
You can also use thin pieces of aluminium from a soft drink can.

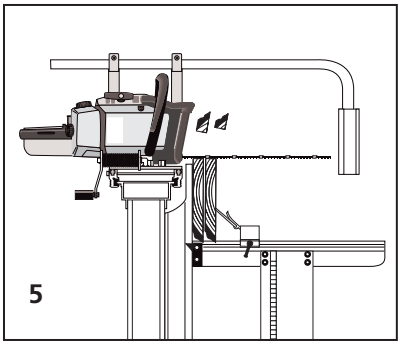
SAWING: STEP BY STEP











1.1 Roll the log onto the log bed.

1.2 Fasten the log in place using the log holders. Lock the log hold- ers a distance from the log, place the log clamp against the log and press down so it locks.

1.3 Set the ratchet cam using the ratchet handle.

1.4 Raise the log so that a suitable slab size will be cut off. Normally the top end of the log is raised 1/4" or 1/2" (one or two clicks) above the bottom end so that the cut will be parallel to the grain.

1.5 STighten the log in place so that the log cannot rotate. This should be done prior to each cut.

1.6 Hook the saw's feed line onto the bolt with a spacer sleeve (does not apply to electric feed).

1.7 Saw the slab off.

1.8 On larger logs it is customary to raise the log bed to cut off another, wane-edged plank (i.e. 2 1/4" thick, nine clicks, to create a 2" plank).

2.1 Make the saw cut and then rotate the log 180 degrees.

2.2 For small logs, now set the block size to for example 6". The log beds would be at the same height. For larger logs, set for example to 7 1/4" or 8 1/4", depending on whether a 1" or 2" board is to be sawed within the block size.

2.3 Saw the slab off and or wane edged plank.

3.1 Rotate the block 90 degrees upwards. Fix in place using the log clamps. Set the height so that a suitable slab is sawn. Now set the top end somewhat higher than the bottom.

3.2 Raise both log beds an equal amount while retaining the height differential. Saw out planks and boards until app.10 cm remain. Do not forget to always add 1/4" to each desired board thickness to compensate for the kerf.

4.1 Rotate the cant 180° and set both log beds to the same height. If a 1" and a 2" board are to be sawed out at the end, set both log beds to 3 1/4" (2+1+1/4").

4.2 Saw the last slab off. Raise 1 1/4". Saw out the 1" board.

4.3 What you have left is a 2" board.

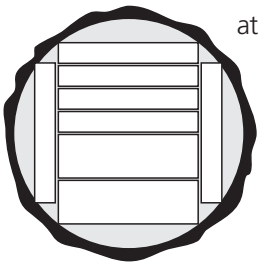
5 Place the wane edged boards on their short end. Lock them in place with the log clamps and trim.

As usual, adjust the log bed height for the fact that one edge is still barked. When you turn the boards so that the side down is trimmed, set the log beds to the same height

Continued on the next page.

(* In the pictures the carriage for the Logosol Sawmill M8 is shown)

SAWING: TIPS

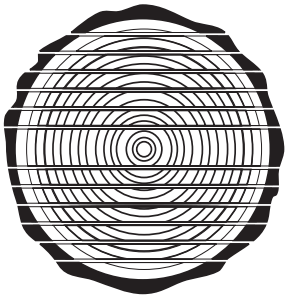


It can be a good idea at the start, to draw up what you want to saw out in the log ends. Draw using a broad felt tipped pen so the line is equivalent to the kerf.

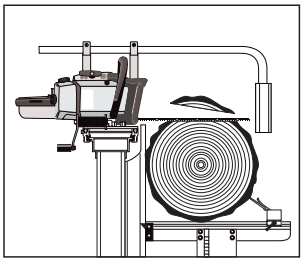
KEEP IN MIND THAT:

- The top end of the log bed is
- set higher than the bottom when log lies on an unsawed surface.
- The beds are set to the same height when a sawed surface faces downwards.
- Compensate for the kerf (1 click of 1/4") when the board is sawed out above the guide bar.
- Do not compensate for the kerf when the board is sawed out under the guide bar.
- The last board is not to be thinner than 2".
- Make sure that you do not saw the edge support log clamps.

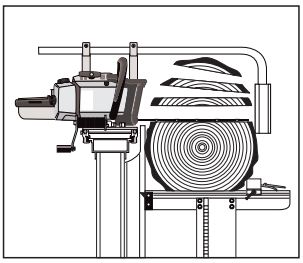
THROUGH SAWING



At times it can be best to slice the log entirely into wane-edged boards. This allows a bit more to be obtained from each log. This does however take a bit more time. If fine joinery wood is required, then it might be best to trim one side before drying. The last trim is made only when you know what the board is to be used for. This is so that as much of the timber as possible is used.



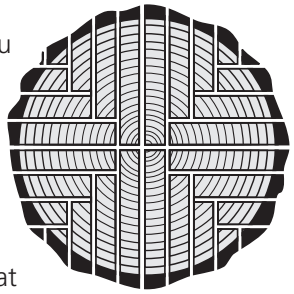
When slicing a log, it is best to saw off a thin slab first and then turn that side downwards so that the log lies on a flat surface on at least one of the log beds. This prevents log movement between cuts and ensuring even boards.



Turn the log when you approach the centre. Figure out the height where you should start and then saw.

The example shown in the picture above calls for the first cut after the log is turned to lie at 8 1/4". It is calculated in the following way: 1+1+1+1+1+2=7 and for each "+", which repre- sents a kerf, is compensated for the saw cut by 1/4". Therefore: (5x 1/4) + 7 = 8 1/4". This ensures that the final cut will be correct and you will have a minimum of wastage.

QUARTER SAWING



Quarter sawing provides you with the finest material. You obtain optimal grain direction in all boards, something that is a great advantage for carpentry work and the like.The price is time, difficulty and in that you obtain several different board widths. Do not quarter saw small logs.

Begin by splitting the log in the middle. Then set up both halves and split these in the middle so you get "quarters".

When sawing the boards out, turn the log between each cut. Sometimes it can be easier to saw from below. The height of the log beds can then be left unchanged.

DOES THIS SEEM DIFFICULT?

- many of us here at Logosol have many years of sawing experience. As a new Logosoler, if you have any questions, then please call us. We'll be happy to provide you with useful tips.

MATERIAL DRYING

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

The best time for outdoor drying is in the spring. 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 i.e. 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 the same thickness (1x1" or 1x2") and dry. (You can get material for these by making an extra cut when trimming your boards.)

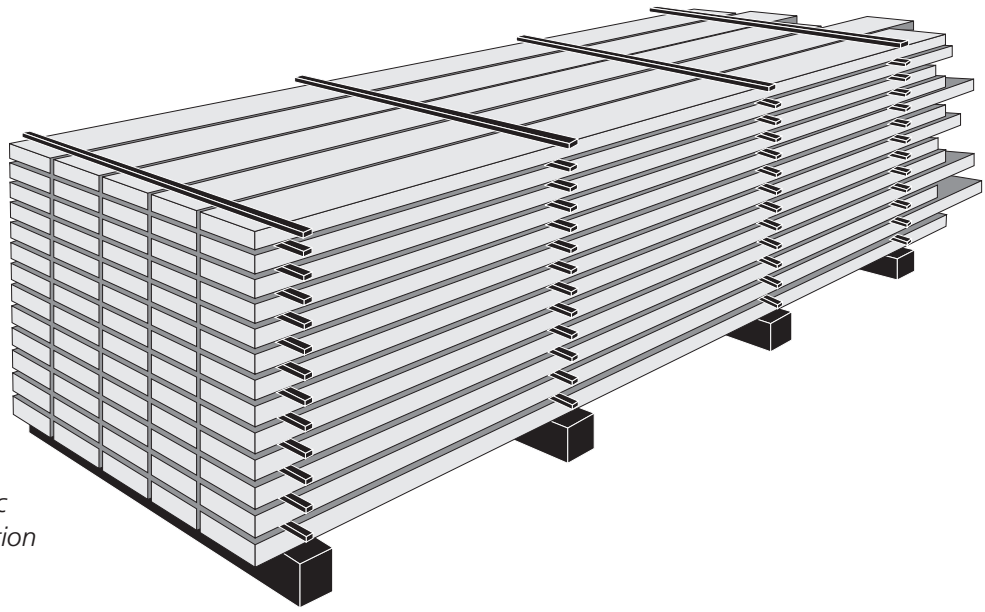
Place the first row of boards on the underlying surface. The board thicknesses are to be equal and are to be positioned a few centimetres apart. Then place a spacer on the boards before the next layer is laid. It is important to place the spacers exactly over each other, to keep the boards from warping 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 carpentry, it ought to be stored in a heated facility for 3-4 weeks (longer for thicker dimensions) or be dried in a kiln for a perfect result.

Once the wood is sawn it must be dried. 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 shrinks around 0.3% in length, which 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. A 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 when you ought to 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 kilns for preparation of fine joinery wood.

TROUBLE SHOOTING

REASONS FOR WRONG MEASUREMENTS WHEN SAWING WITH A FARMER'S SAWMILL

A. The sawmill is incorrectly adjusted or set-up.

B. The cutting equipment does not function as it should.

C. Tensions in the timber.

A. CONTROL OF THE SAWMILL

1. Check that all the sawmill's four legs stand firmly and that the feet do not sink into the ground when a heavy log is loaded..

2. Sight over the log beds and cross beam to check that the sawmill is standing straight. Check both loaded and unloaded.

3. Use a set square to check very carefully that the beam is at an exact 90° angle to the long legs. even a small deviation can lead to large measurement errors.

4. Set the distance between log bed and guide bar so that it is exactly the same as that between the guide bar and both log beds. make sure that the guide bar and the log beds are fully parallel. use the setting block included with the machine.

5. Check that the guide rail is absolutely straight by sighting along the beam or by running a line over the beam and using nails or similar as spacers between the line and the guide rail.

Make sure you loosen the beam strut that runs towards the middle of the beam before adjusting straightness. If support legs are used for the beam, it is essential that they stand on a rigid surface such as a pole driven into the ground.

even factory-new guide bar mounts can be out of true. This is discovered if the parallel relation to the log bed changes when the guide bar is turned. A bent guide bar is most easily straightened by being pressed up or down while the saw is mounted on the sawmill. (page 22)

6. Check that the guide bar is straight in relation to the sawing direction by placing a 1.5 m strip of wood on the guide bar (without the chain). Then sight across the wood strip. It must be parallel with the beam. Wood strips angled more than 5 mm forwards or backwards, can have a negative effect on sawing. An out of true guide bar is corrected by placing washers between the carriage plate and the slide rail. Non-parallel guide bars most often occur when chainsaws other than Stihl are used.

7. The sawmill settings can be checked by placing a broad board of maximum length on the log beds for trimming. First saw away a 1⁄4" wood strip from one side of the board. Then turn the board, set both log beds to the same height and saw off a 1⁄4" strip. Now measure the width of the board carefully. If the board is not the same width along its entire length, it can mean that the log beds are incorrectly set or that the guide rail is crooked.

B. CHECKING THE CUTTING EQUIPMENT

The guide bar must not cut upwards or downwards during sawing. This is most obvious when the guide bar leaves the log. If the guide bar does not 'float' out of the log but springs up or down, problems can arise. There can be something wrong with the guide bar or the chain.

Reasons for malfunction in the cutting equipment:

1. A common cause of Logosol sawmill sawing problems is that blunt chains are used. (See page 29)

2. The chain may be damaged on one side, such as by metal objects in the log. The chain may still cut, but pulls up or down.

3. The chain may have been filed incorrectly. The teeth may have been filed less on one side than on the other. To get a more even result, try to maintain the same working position when filing the left and the right sides of the chain. That individual teeth are faulty or that some are missing, such as after sawing through nails, usually has very small effect on the function.

4. When precision diminishes after a period of fault-free sawing, it is almost always due to wear on the guide bar.

5. If you get a ridged surface, see page 29 in *The Handbook of your Cutting Tools*.

When the guide bar is not fitted straight
On some chainsaws the bar fitting is not level, making the bar tilt sideways. Clean the bar fitting. Place a straight and approx. 1 m long board across the guide bar (without the chain) and check against the guide rail. If the guide bar is tilted sideways, place shims between the carriage plate and the aluminium slide profiles until the board above the guide bar is paral- lel to the beam. Tensions in the wood can sometimes result in the symptoms of faults in the cutting equip- ment.

C. TENSION IN THE TIMBER

The Logosol sawmill can only saw straight. If the wood twists during sawing, then precision will be lost. Tension can cause large variations in measure- ment. Hardwood often has higher tensions than coniferous wood. Tensions in coniferous wood can also be problematic. One example is in trees that have grown on sharp inclines, have high tensions. In such cases, a whole group of logs can be difficult to saw.

Tensions can also arise in storage. If the bark and top segment begin to dry, the whole surface will begin to shrink. In such a case, when one side is trimmed, the log may bend slightly.

It is easy to discover tension in logs that leads to measurement errors. each time you pull the saw back, you can read what is happening in the log. As long as the guide bar continues to lie just above the newly sawn surface, then the log has not bent. However there is space between the guide bar and the sawn surface or if the guide bar is pressed upwards, it is time to plan how the next cut should be made to reduce the effects of tensions.

When sawing from the top towards the bottom, the wood has a tendency to bend downwards at the ends. This is especially true if there is large root-end growth. It is therefore often best to turn the log after passing through the centre and saw the rest of the material from the other side.

If you still want to saw logs with high tensions, a chain saw and a timber jig (4900-000-1000) to slice up the log can be a better alternative. This follows the previous saw surface and therefore gives better precision if the log bends.

SOME TIPS FOR AVOIDING THE EFFECTS OF WOOD TENSIONS

1. Cut wood with tensions in as short lengths as possible. By reducing the log length to app. 2.5 m, the precision will be high even if there are high tensions in the wood.

2. Work around the log, sawing all sides in order.

3. To achieve perfect last plank measurements, use the accompanying log support to support the work- piece. You can also saw the last section with a newly sawed block as underlay. Another way is to use special accessories for the Logosol sawmill to support the ends of the block (articulated support, part.no.: 4500-070-1000 or log support part.no. 4510-720- 6104). If many logs over 3.5 m are to be sawn, it is best to extend the sawmill by 2 m and one extra log bed (F820, part. no. 4507-010-0820).

PRECISION

PRECISION OF THE LOGOSOL SAWMILL COMPONENTS

The Farmer's Sawmill is constructed of extruded aluminium profiles. This material can, by nature, deviate somewhat when it comes to angles and flatness. When designing the sawmill, we have taken this into consideration, so possible deviations will not affect the functions of the sawmill. One place where the slightest deviation is clearly noticeable, is the joint where the ends of the guide rail meet. Often, the deviation seems bigger than it actually is. It has been shown that it is very difficult to make such a wide crosscut at a precise angle. A saw blade is quite simply not more precise then +/- a couple of tenths of a degree, which results in visible deviations. These deviations, however, are of no importance, provided that you do not press the gap closed. Press the beams sections together without using force. The joint coupler will adjust and fix the beam sections in relation to each other. Plastic is soft and difficult to process. For the Farmer's Sawmill, we want to have an as exact fit as possible of the plastic slides. This can result in the log beds or the carriage slide profiles being somewhat difficult to move. If this is the case, use fine sandpaper and polish the plastic until they run easily. usually the plastic will have worn down after a couple of days use. (Before polishing, read the section on adjusting the sawmill).

DEMANDS FOR PRECISION

We are convinced that the Farmer's Sawmill can provide as good or better results than other small-scale sawing methods. A large number of users of the Logosol sawmills have reported that they have never had better wood products than those they have sawn themselves with their Logosol mill. However, it is natural that we also meet customers who want to improve on the precision. experience has shown us that variations in sawing results can have many expla- nations. The choice of raw material is vital. Cutting good boards from short, sturdy logs is considerably easier than getting high precision results from thin, long ones. Tensions caused by storage or place of growth can cause problems. Some tree types cause more problems than others.
The precision requirements also vary. A result that is satisfactory for someone sawing boards for rustic fence posts may not be good enough for someone sawing boards to be used in construction without being planed.

If you have gone through the various steps for adjusting the sawmill, checked the cutting equipment and observed the effects of tensions in the wood, but still do not get the sawing results you expect, contact us at Logosol.

MOVABLE GUIDE RAIL PROP

Fitting this prop between the side of the log and the sawmill beam, dampens the vibrations which can arise in logs, particularly at the beginning of sawing.

Part no: 9999-000-1026

CUTTING EQUIPMENT

Logosol's PmX chain provides quick length sawing using a thin blade. But it is more sensitive than normal chains. If you keep the cutting equipment in good order, timber measurements will be correct, sawing will be quicker and the cutting equipment will last longer.

REGRIND BEFORE THE CHAIN BECOMES BLUNT

You will notice that the chain is beginning to be blunt where cutting speed falls, the guide bar becomes hot and heavier feed. Stop sawing immediately! It is however and in many ways already too late to regrind. Sawing with a blunt chain exposes the cutting equipment to high levels of mechanical stress. Therefore regrind before the chain becomes blunt!

AVOID CHAIN BREAKS

Sawing for too long with a blunt chain result in the chain being thrown off. The chain then breaks under the cutting teeth and you will see that it is worn there.

If however a drive link fails, then this can be due to the chain and sprocket not being a good match. The best solution is to run 5 chains alternately on one chain drive. When the chains are worn out, then replace the entire set. A completely new chain on a worn sprocket can be thrown off in the first few minutes of use.

t is not recommended to run a normal 1.6-3/8" chain and a PmX chain on the same sprocket.

THE GUIDE BAR CAN RUN SKEWED

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 runs out out of the log. The chain wears more on one guide bar and the guide bar wears unevenly if you continue to saw. even though you replace the chain, an unevenly worn bar can guide the chain incorrectly and the new chain can also be unevenly worn. An unevenly worn bar can be repaired. File bar booms so they are equally high e.g. with a uKF file (part.no.: 9999-000-0450) or Logosol's electric bar sharpener (7804-000-0005).

Another more common reason for the guide bar guiding incorrectly is that it is worn out so that the drive link bottoms in the track on the guide bar and the chain loses the support provided by the bar booms. 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 sawmill chain oil, part no. as given below:
1 litre, no:0718-000-1001
10 litre, no:0718-000-1010

HANDBOOK FOR YOUR CUTTING TOOLS

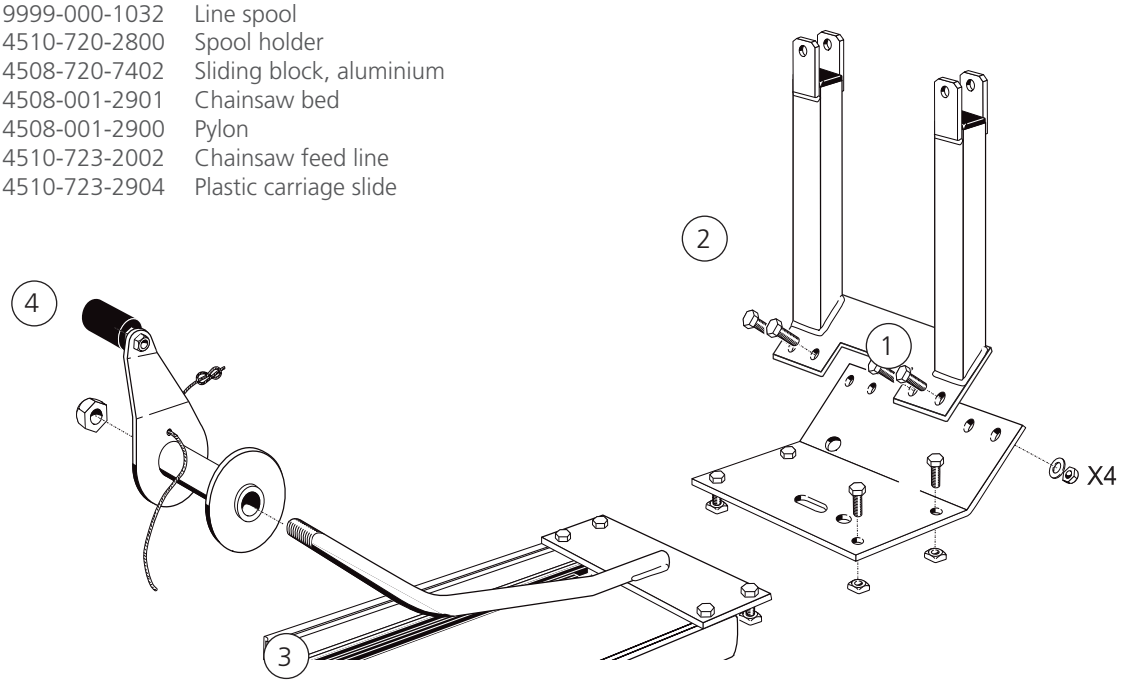
Logosol has a separate document which we keep updated with respect to the technical specification of the latest new products. It is called 'manual for your cutting equipment' and can be downloaded free of charge from our web site. You can also order a printed version.

ACCESSORIES: CHAINSAW CARRIAGE M8

Chainsaw carriage with guard, M8
Item no:: 4508-720-7502

ASSEMBLY: CHAINSAW CARRIAGE

Part no.	Description
9999-000-1032	Line spool
4510-720-2800	Spool holder
4508-720-7402	Sliding block, aluminium
4508-001-2901	Chainsaw bed
4508-001-2900	Pylon
4510-723-2002	Chainsaw feed line
4510-723-2904	Plastic carriage slide



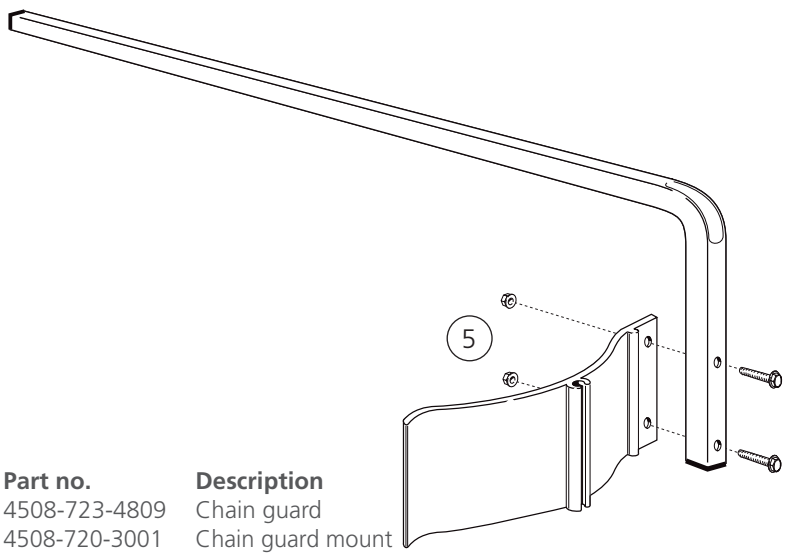
(1) Insert bolts through the holes along the sides of the chainsaw bed and the spool holder. Turn the square nuts a few times. (8 x m6x16 bolts, 8 x m6 square nuts)

(2) Fit the fixed pylon to the the chain guard on the carriage plate (4 X m6x16 bolts, 4 x m6 washers, 4 x m6 locking nuts.)

(3) Feed the square nuts into the plastic slide track. Slide the the spool holder and the chainsaw plate to each end of the slides and tighten the bolts.

(4) Thread the line spool onto the spool holder arm and screw on the nut (1 x m10 locking nut).

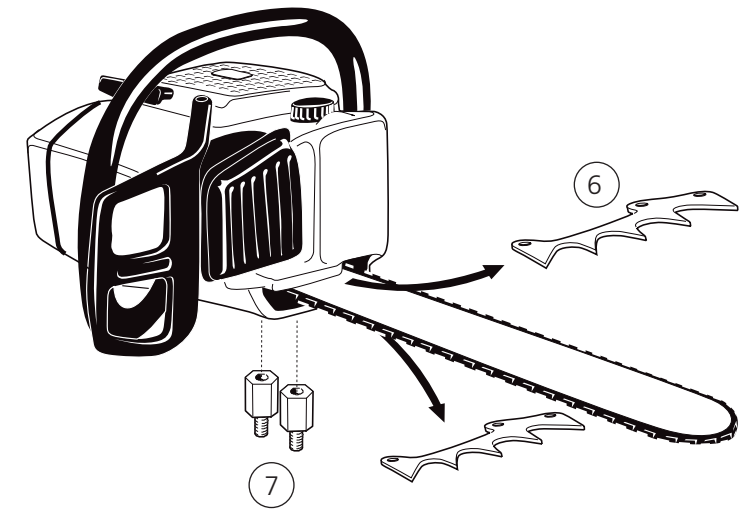
ASSEMBLY: CHAIN GUARD



Part no.	Description
4508-723-4809	Chain guard
4508-720-3001	Chain guard mount

(5) Fit the chain guard on the support and bolt. (2 x m6x40 collar bolts, 2 x m6 collar nuts)

ASSEMBLY: LOGOSOL NUTS



Part no.	Description
4510-723-3402	LOGOSOL nut 066

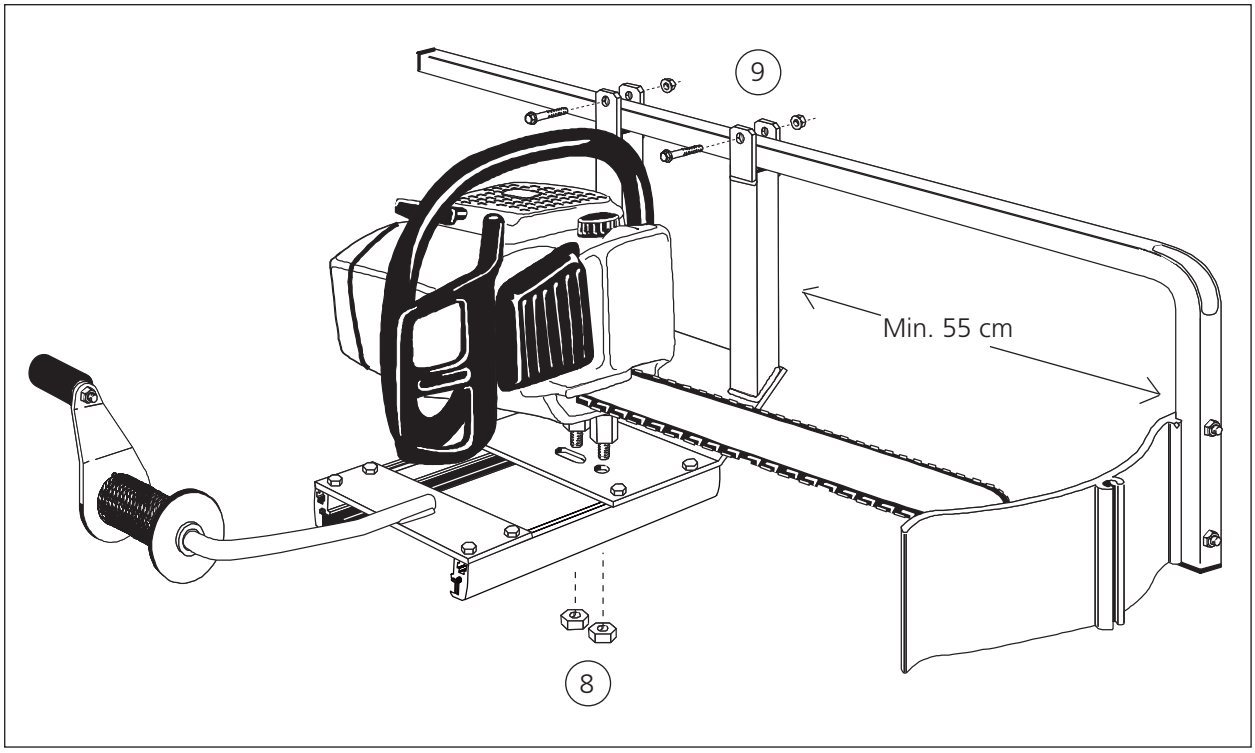
Remove the two bolts holding the guide bar and remove the guide bar cover.

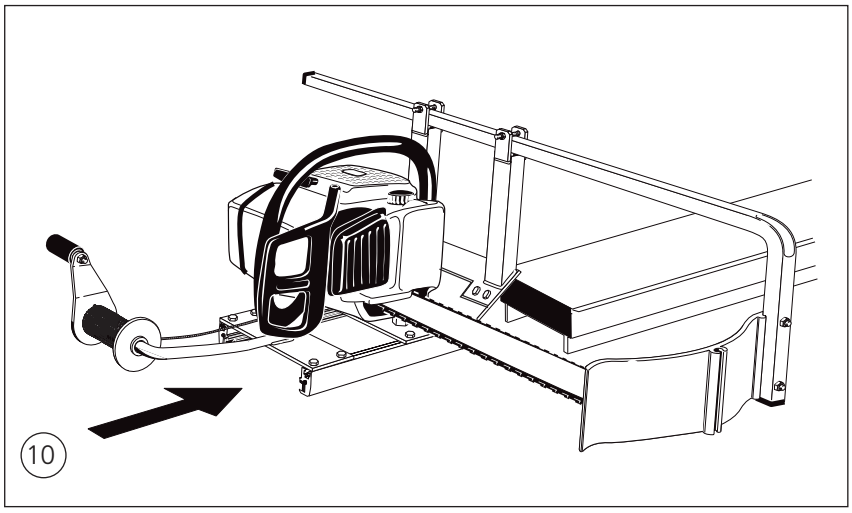
(6) Remove the bark grips, but leave the bolts in place and retighten the nuts.

(7) Refit the guide bar cover, replacing the guide bar bolts with Logosol nuts. (The guide bar nuts will later be used to fit the chainsaw to the carriage.)

⚠ **Only CE-approved chainsaws with two guide bar nuts may be used with the Logosol sawmill.**

ASSEMBLY: CHAINSAW & GUARD MOUNT





Check that the carriage runs smoothly and easily on the beam. If not: Slide the carriage onto the beam, loosen the eight screws which hold the slides in place, rock the carriage a little and then tighten the eight screws again. If this is not sufficient, check that the plastic glides on the carriage are not damaged.

(8) Fit the Logosol nuts through the chainsaw plate track using the front hole. (For some chainsaw models, the rear hole has to be used to ensure that the saw cover will not extend too far out. However, this is relatively unu- sual.) Tighten the chainsaw into place using the chainsaw's guide bar nuts under the plate.

(9) Fit the chain guard support to the guide bar plate so that the guard sits app.4 cm from the tip of the guide bar. (2 x m6x40 collar bolts, 2 x m6 collar nuts)

(10) Push the carriage onto the guide rail with the guide bar in the direction of the log beds.

ACCESSORY: LOG LADDERS M8

Log ladders, M8 (pair)
Item no: 4508-001-1400

LOG LADDERS M8

The log ladders of black anodized aluminium for the LOGOSOL M8 sawmill can also be attached to the Farmer's Sawmill as an accessory. With the help of the log ladders, you can by yourself get the log off the ground to ensure a comfortable working position.

ACCESSORY: EXTENSIONS

Extension (0.5 m)
Item no: 4510-720-6602

Extension with strut, Farmer's Sawmill (1 m)
Item no: 4520-010-1000
Leg with log bed, Farmer's Sawmill
Item no: 4520-100-1000

EXTENSIONS 0.5 M, 1 M AND LEG WITH LOG BED

Farmer's Sawmill is built in sections of 1 metre and the basic model can be assembled as 3 metre long sawmill with 1 metre between the log beds, which is suitable for short workpieces, or as a 4 metre long sawmill with 2 metres between the log beds for longer timber. When required, it is easy to extend the sawmill to any length you want, using o.5 metre extensions, or 1 metre extenstions with struts and legs with log beds.

ACCESSORY: LOG CLAMP XL

LOG CLAMP XL

Holds the largest logs in place. Also a good aid when you are edging boards and cutting cants that are apt to tip forward.

Log Clamp XL
Item no: 4508-001-1027

EC DECLARATION OF CONFORMITY

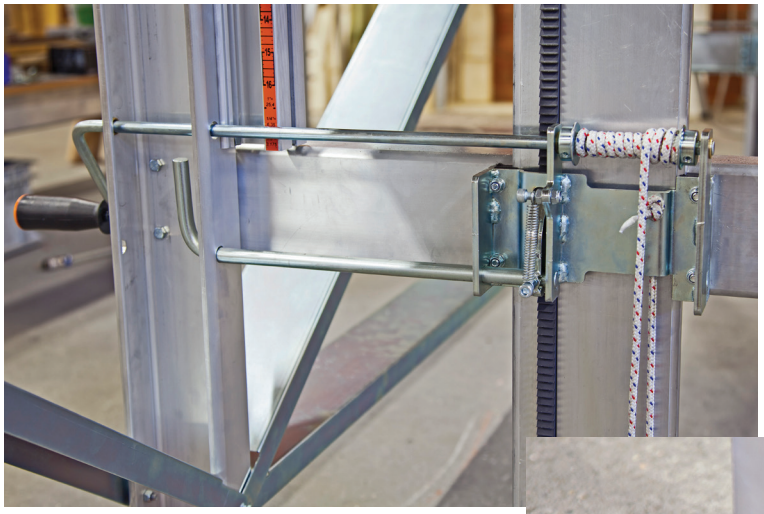
Logosol AB,
Fiskaregatan 2
S-871 33 Härnösand, SWEDEN
Phone +46 611 18285,

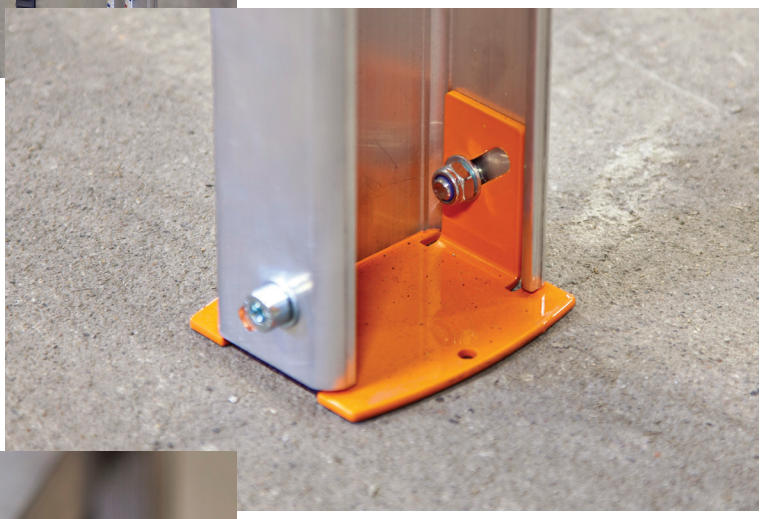
ensures hereby that:
Logosol's sawmill
Type: Farmer's Sawmill
is manufactured in accordance with the following eu directives:
2006/42/EG, Machinery directive
2006/95/EG, Low voltage directive
2004/108/EG, EMC directive

This declaration is based on the following standards:
EN ISO 12100:2010, EN 60204-1:2006 + (EMC standard)

Mattias Byström, product development manager, is responsible for the technical files.

Härnösand 17 March 2014
Malte Frisk, CEO





LOGOSOL

LOGOSOL SWEDEN
Fiskaregatan 2, S-871 33 Härnösand, SWEDEN
Phone +46 611 18285 | Fax +46 611 182 89
info@logosol.com | www.logosol.com