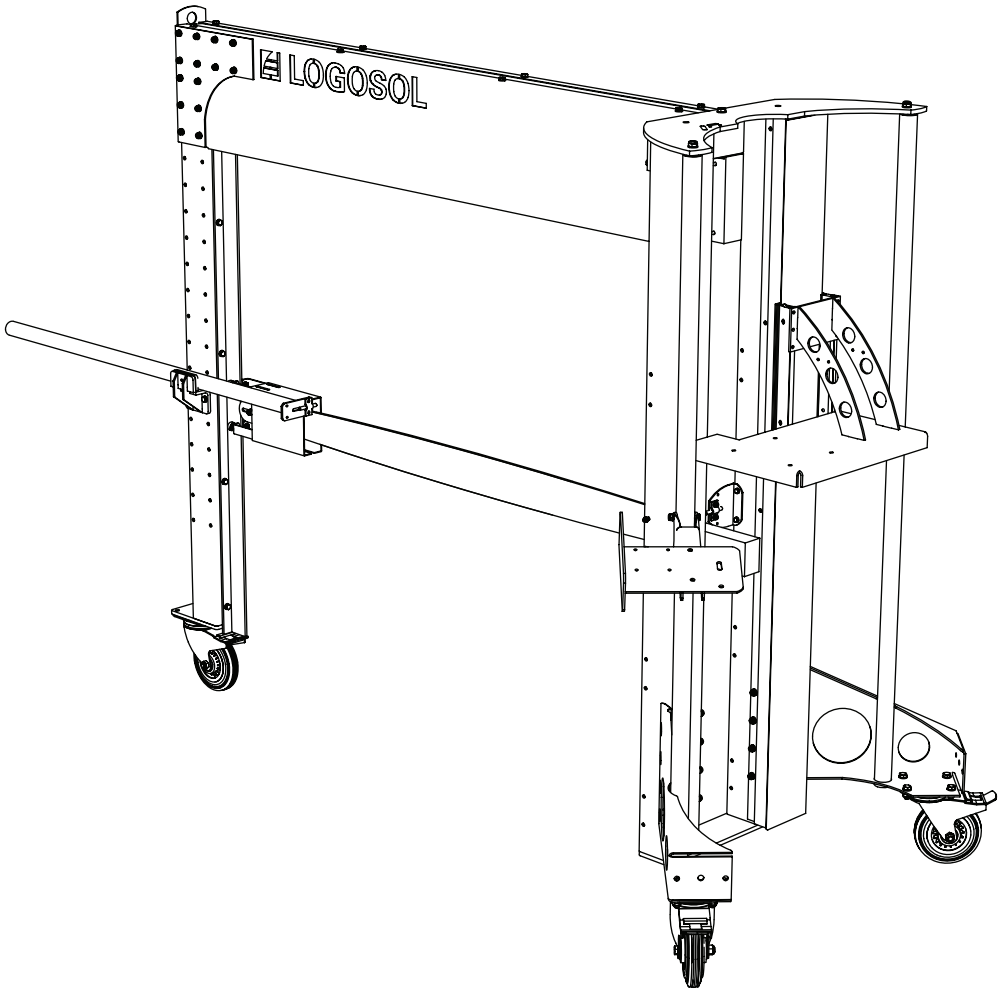
LOGOSOL

USER MANUAL

0458-395-0603

REV: 2



LOGOSOL PK1500

STACK CUTTER

EN

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

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

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

Bengt-Olov Byström
Founder,
Logosol in Härnösand, Sweden

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.

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 F2, user manual
Manual, ref. no.: 0458-395-1210
Last revised: September 2023

TABLE OF CONTENTS

SAFETY INSTRUCTIONS

- Read carefully through the entire user manual before starting to operate the LOGOSOL F2. 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 user manual. The user manual shall always be available to the persons working with the sawmill. This also applies where the sawmill is sold or loaned out.
- Minors under 18 years of age are not allowed to operate the Logosol sawmill.
- Make sure that children and animals are not in the vicinity when the sawmill is being operated.
- 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 inattention.
- The machine 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.
- Always wear protective clothing and use personal protective equipment: Close-fitting work overalls are appropriate. Never operate the sawmill 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.

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 come near the cutting tools.

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

This symbol is followed by instructions that must be observed. Pay particular attention where this symbol appears in the manual text.

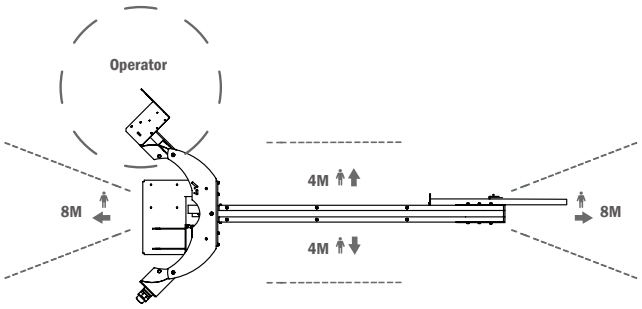
SAFETY INSTRUCTIONS

During operation

Do not start stack cutting before all the operations described in "Preparing stacks for cutting" (page 8) have been carried out.
Never start the cutter if the guide bar is not in its top position and completely covered by the fixed bar guard.
Never stick hands or tools under any guards or in the guide bar's cutting path.
Always stand so that your face is protected by the safety screen. When end trimming, the chain can throw blocks of wood in the operator's direction.
On the same axis as the guide bar, with a 20-degree deviation to either side, the safe distance "in front of" and "behind" the machine is 8 m (see the diagram). This also applies to the operator. Besides the operator (shown as "Op" in the diagram), no one may stand within 4 meters of the machine's sides while it is operating. The diagram below shows a bird's-eye view of the machine. During operation, the operator must stay within the indicated area behind the control panel. The operator must not stretch his/her arms or legs outside this area.

⚠ Risk of the saw chain flying out if it breaks! Respect the safe distance!

Do not wear loose fitting clothes or anything else that can catch in the machine's moving parts.
Never use the machine when visibility is poor. Always work in good lighting.
Do not use the machine under the influence of alcohol or other drugs.



Miscellaneous:

The machine must not be modified or added to. Use only parts supplied by LOGOSOL. After servicing, the machine must be returned to its original condition.

⚠ Risk of being hit by the winding crank!

⚠ Risk of the saw unit being lowered unintentionally!

Before releasing the winch safety catch, take a firm grip of the winding crank. Except when the saw unit is to be lowered, the safety catch should always be on.

⚠ Risk of burns when changing the chain! Cutting equipment can be hot after use!

A chip fan (min. 700 m^3/h) must be connected during operation. Be aware of the risk of breathing in dust. Saw outdoors or ensure good ventilation.

Even people outside the safe distance may still require ear protectors. Outdoors, the safe distance for harmful noise is around 15 m. Ensure that no one without ear protectors is exposed to sounds above 70 dB(A).

Use non-toxic, vegetable, saw chain oil to lubricate the chain.

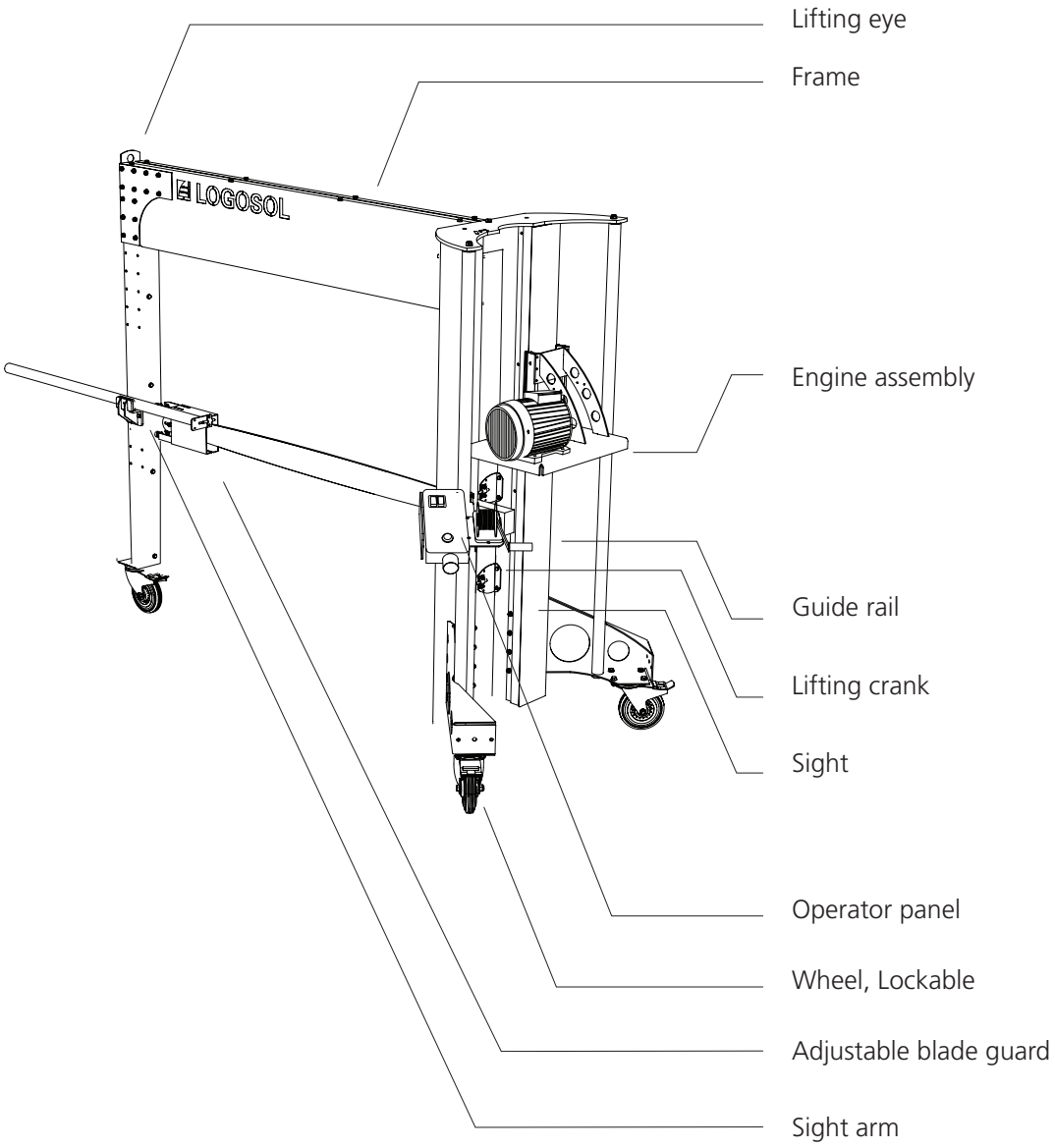
⚠ Risk of unintentional start-up and electric shock!

In this manual, the instruction "disconnect the power" always means unplug the power cable at the control panel, hang it up so that neither the plug nor the cable can be damaged and ensure that the chain has stopped.

Disconnect the power

- Before touching the chain in any way.
- Before attempting to free a jammed chain.
- Before servicing or other intervention involving the guide bar, belt guard or electrical system.
- Before moving the machine.
- If the machine is to be left unsupervised. Ensure also that no unauthorized person can start the machine.
- After fitting a chain, ensure that it runs freely before plugging the cable into the control panel.

MACHINE DESCRIPTION

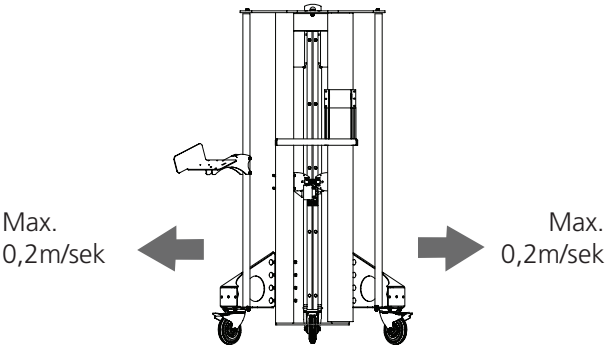


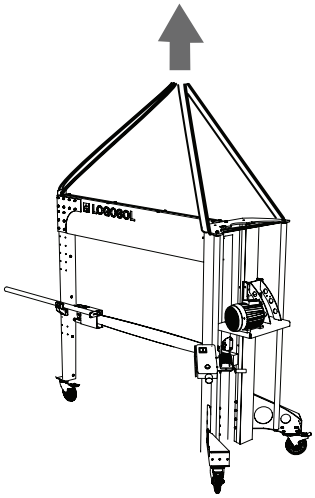
MOVING THE CUTTER

Thanks to its wheels, Stack Cutter can be easily moved when required. Whenever possible, Stack Cutter should be moved in the longitudinal direction of the guide bar (i.e., not sideways). The high center of gravity makes the machine unstable if it is moved sideways.
If Stack Cutter is being moved more than a short distance, the motor unit must be lowered to its bottom position. The risk of toppling increases considerably if Stack Cutter is moved sideways (right/left). The floor over which Stack Cutter is moved must be smooth and free from gravel and anything else that can make it uneven.

- Disconnect the power before moving Stack Cutter.
- ⚠ Risk of toppling! Stack Cutter may only be moved on its wheels when the surface is smooth and even.
- ⚠ Risk of toppling! The maximum permitted speed when moving sideways is 0.2 m/sec. (1 m in 5 sec.).
- During moving, pay particular attention to ensuring that the control panel does not hit any obstacles.
- During moving, the winding crank's safety catch must always be on.

Stack Cutter can be easily moved using a crane, tractor or other equipment suitable for this purpose. Use approved lifting straps/lifting chains. Stack Cutter has a lifting eye at the top of the rear beam. On the motor-side, thread the straps or chains between the handling bars and the rule. Ensure that the guide rail is properly secured by the straps/chains. When lifting, ensure that no one stands under, or in the immediate vicinity of, the load. Match the speed of travel to the prevailing conditions.





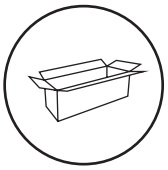
SETTING UP THE CUTTER

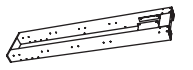
- Read the entire manual and, before using the machine, familiarize yourself with all the machine's functions and settings.
- Inspect Stack Cutter immediately on reception. Any transport damage must be notified immediately to the freight company.

Position Stack Cutter on an even surface. Using the crank on the adjustable wheel, adjust the machine so that it is level and stable.
Using hose clips at both the machine end and the fan end, connect the hose for the chip fan.
Ensure that the lighting is first-class. Fit a powerful light above the machine.
Check that all bolts are correctly tightened.
Check that the saw chain runs freely and unobstructed on the guide bar. Check that the chain has been tensioned.

End trimming with Logosol's Stack Cutter

- Note where the operator is standing, the position of his hands, that the guide bar top guard is offset towards the stack, that the stack stands firmly on flat ground and that it is properly strapped.

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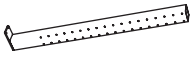
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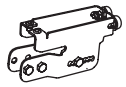
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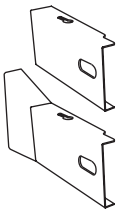
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2 x – 03-03634


1 x – 8510-001-0251


1 x – 8510-001-0082


1 x – 8510-001-0320


1 x – 8510-001-0300


1 x – 8510-001-0063


1 x – 8510-001-0072


1 x – 8510-001-0120

1 x – 8510-001-0122


6 x – 8510-001-0081

1 x – 8510-001-0069


1 x – 8510-001-0067


1 x – 8510-001-0061


1 x – 03-02247


1 x – 03-03611


1 x – 8502-001-0061


1 x – 8510-001-0093

1 x – 8510-001-0092

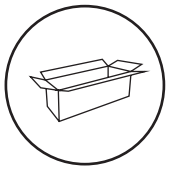

1 x – 8510-001-0115

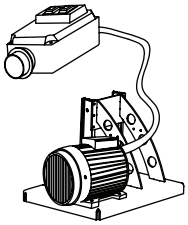

1 x – 8510-001-0068


1 x – 8510-001-0073


1 x – 8510-001-0089


1 x – 8510-001-0065





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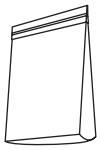

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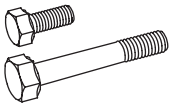
4 x – M5x8

2 x – M5x20



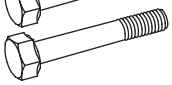
2 x – M8x60

8 x – M10x25

2 x – M10x35

12 x – M8x20

16 x – M8x120



23 x – M6x120

28 x – M6x20

3 x – M10x30

2 x – M8

45 x – M6

20 x – M8

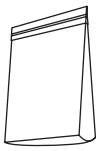
11 x – M10

4 x – M5

94 x – M6

52 x – M8

20 x – M10



8510-001-0320

2 x – 4507-001-1205

2 x – 4510-723-2511

1 x – 8510-001-0010

7 x – 8510-001-0079

7 x – 8510-001-0080

1 x – M8x15

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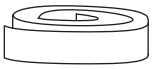
2 x – 9038-013-004

2 x – 9999-000-6048



2 x – 8510-001-1020

BOLTS & NUTS

Definition of fasteners on following pages.


Shoulder bolt


Phillips bolt


Slotted bolt

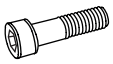

Set screw

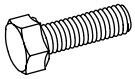

Hex nut

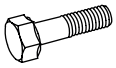

Flange nut


Flat washer

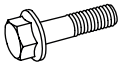

Allen bolt

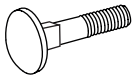

Partial thread Allen bolt


Hex bolt


Partial thread hex bolt


Flange bolt


Partial thread flange bolt


Carriage bolt

ADDITIONAL SYMBOLS

The following symbols are used as supplements to the symbols above to describe the design or function of the fasteners.


Low


Tensilock


Lock


Countersunk

Dome

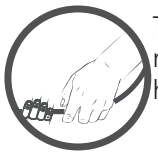

When this symbol appears during assembly, parts must be lubricated before installation. Lubricate affected parts with universal grease.


This symbol describes the sawing direction and reappears during assembly.

DIAMETER & LENGTH

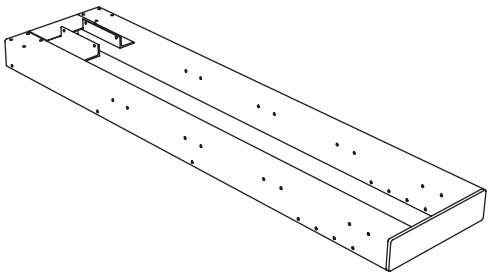
The size of a fastener is written as a diameter measurement **(M)** ISO 68-1. For bolts, this is followed by a length measurement. The length of the bolt is measured from below the head to the tip of the bolt.

(Diameter)		**(Length)**
M8	x	20


This symbol describes the recommended lifting point for heavy lifts.


Screw the joint finger-tight.

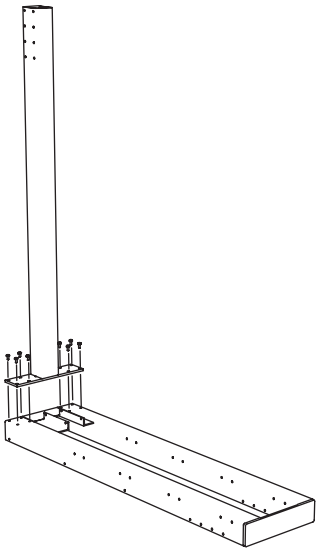
1



2

8 x – M8x20

8 x – M8

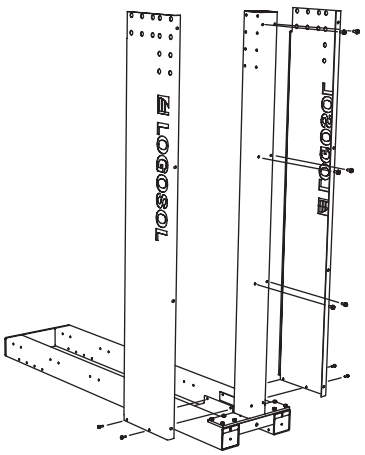


3

10 x – M6x20

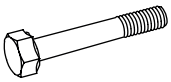
4 x – M6

14 x – M6



LOGOSOL

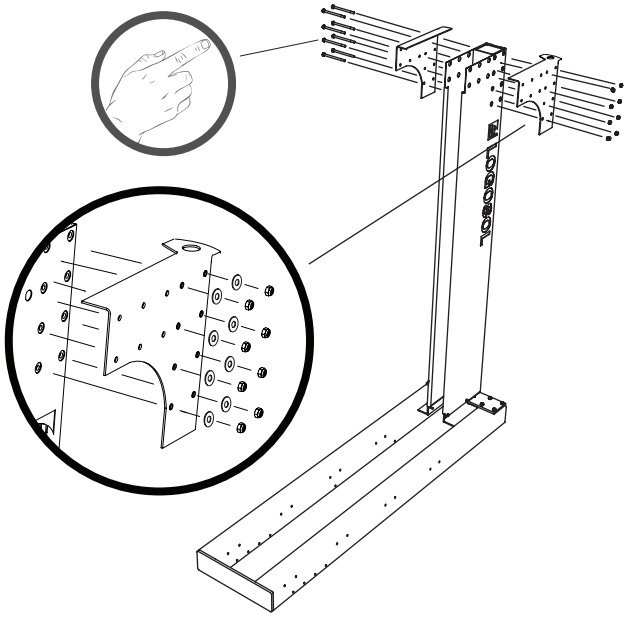
4



8 x – M8x120

8 x – M8

16 x – M8



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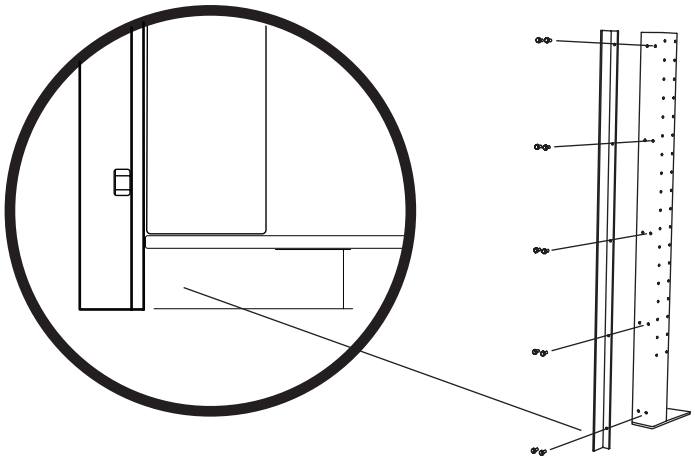
10 x – M6x20

10 x – M6



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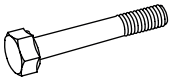
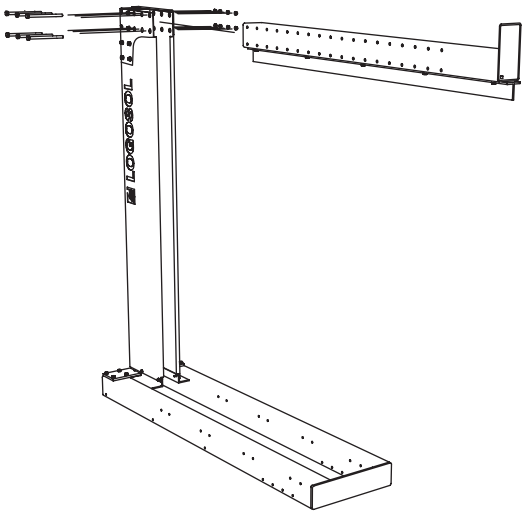


6 x – M8x120

6 x – M8

12 x – M8



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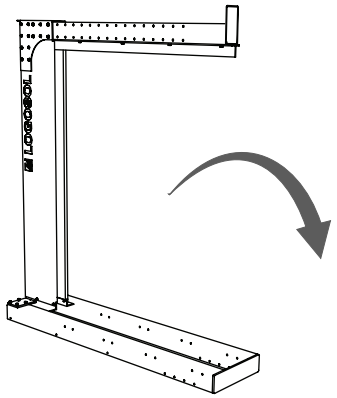

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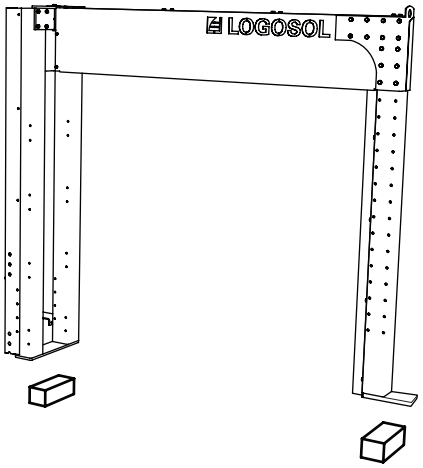

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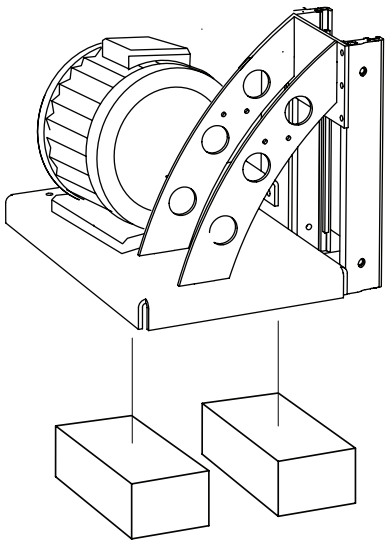
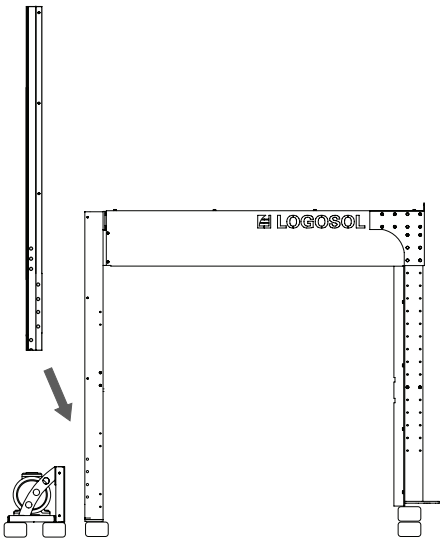
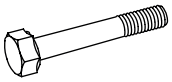


10

Place the engine assembly next to the vertical leg, mount the guide rail by first sliding it on to the engine assembly before attaching it to the vertical leg. Note the position of the four holes in the guide rail, these should be facing down.

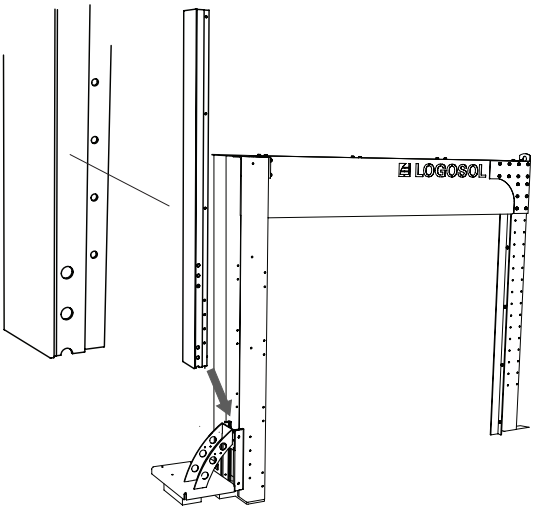




3 x – M6x120

3 x – M6

6 x – M6



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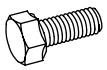
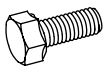


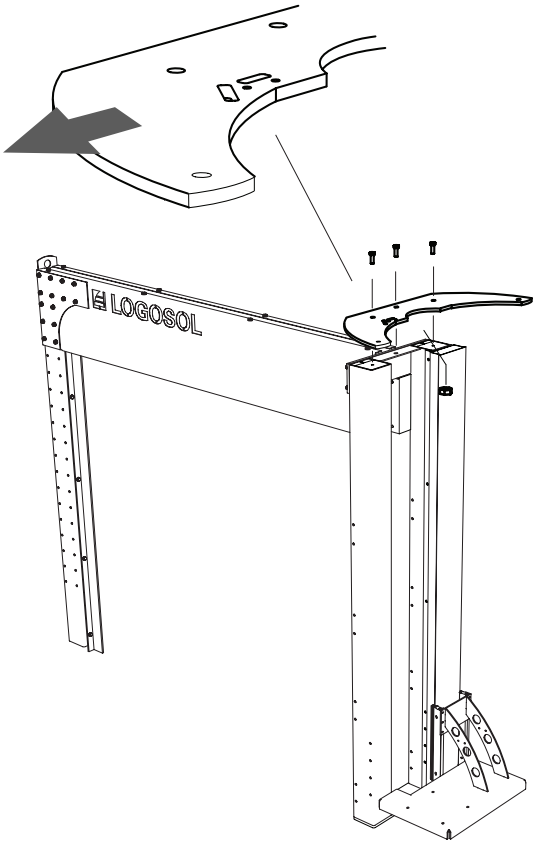
1 x – M10x30



2 x – M10x25

1 x – M10

4 x – M10



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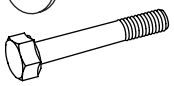
2 x – M10

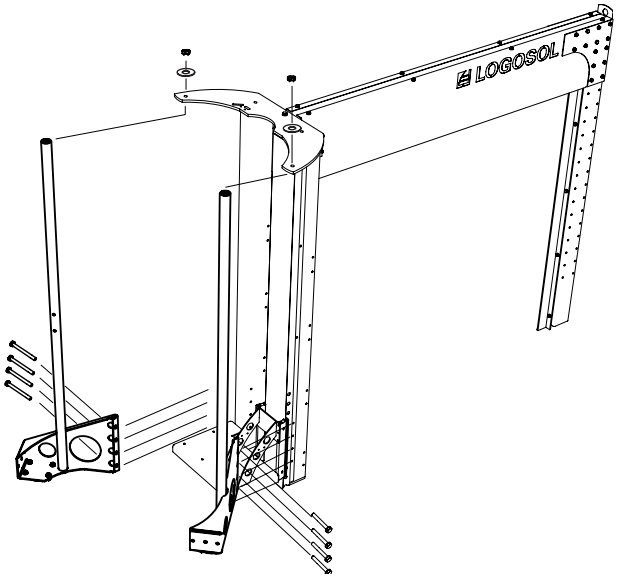
2 x – M10



8 x – M6x120

8 x – M6

16 x – M6



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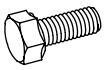
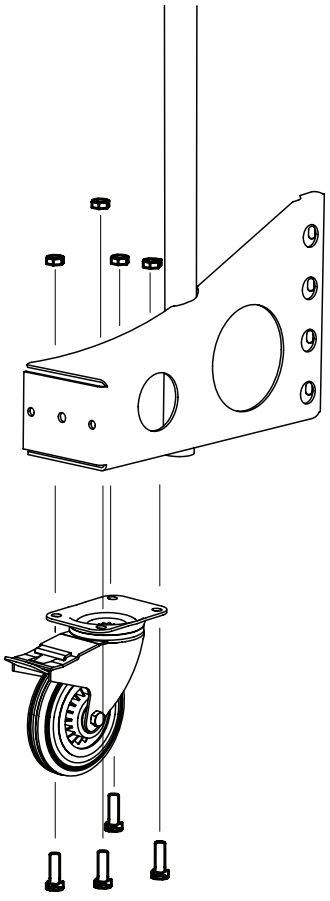


4 x – M10x25

4 x – M10

4 x – M10



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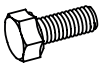
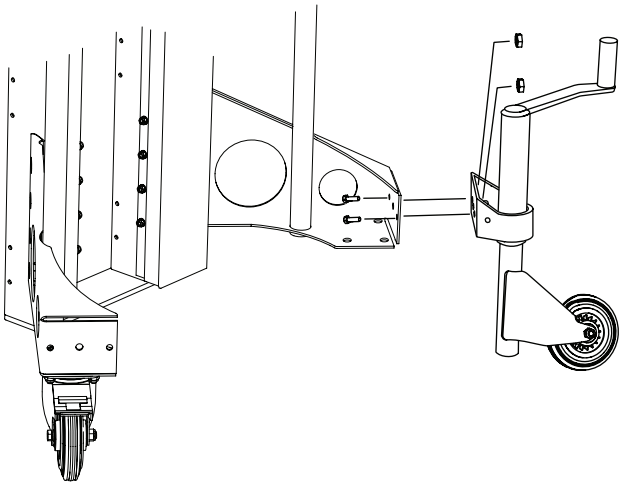


2 x – M10x25

2 x – M10

4 x – M10



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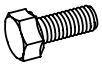
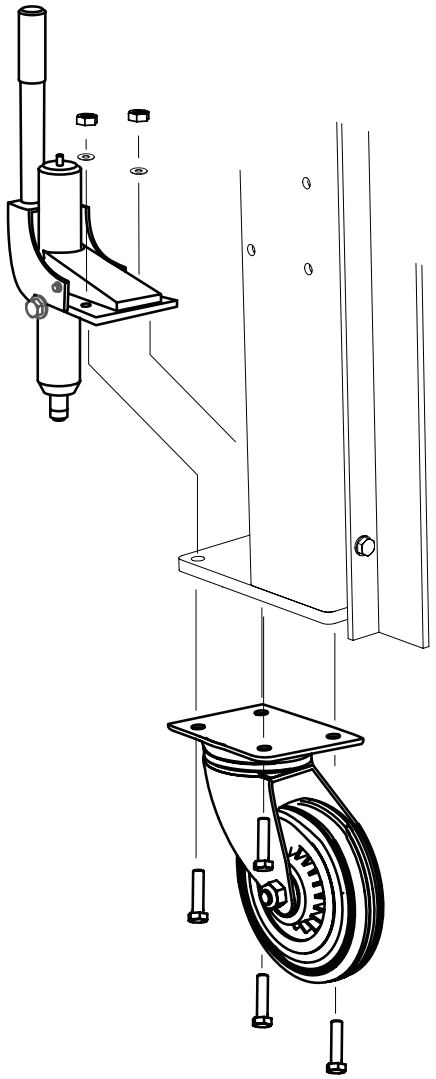
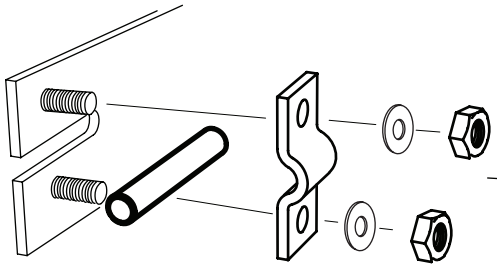


4 x – M10x30

2 x – M10

2 x – M10





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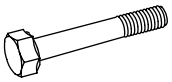
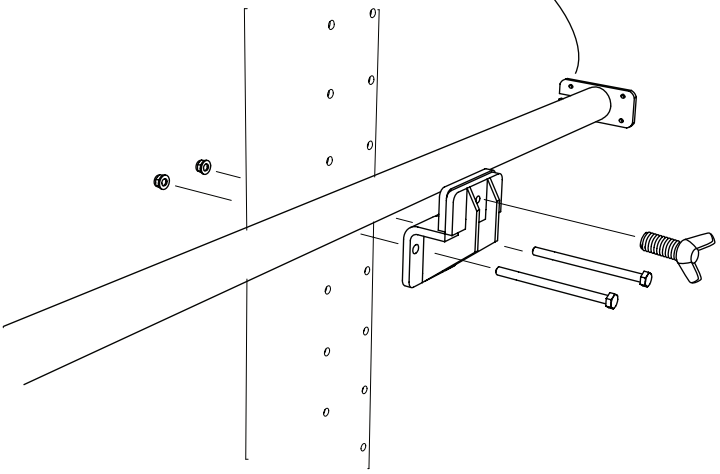


2 x – M8x120

2 x – M8

4 x – M8

1 x – M8x15

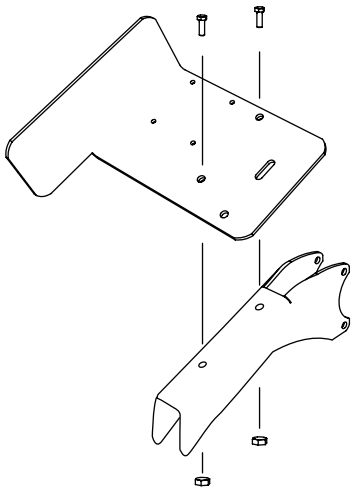


17

2 x – M8x20

2 x – M8

4 x – M8



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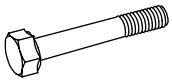
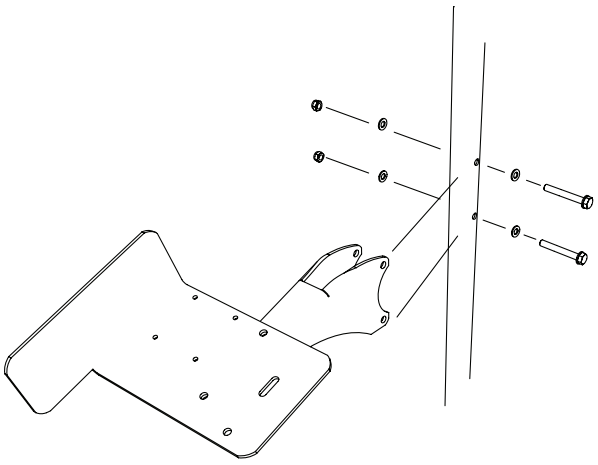


2 x – M8x60

2 x – M8

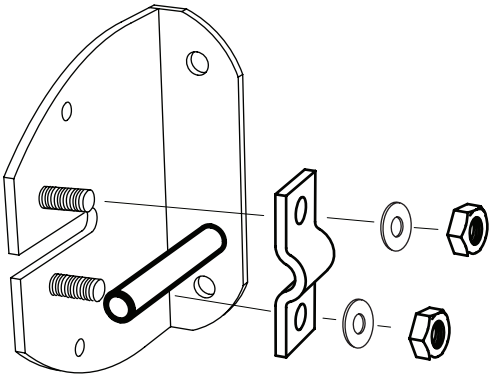
4 x – M8

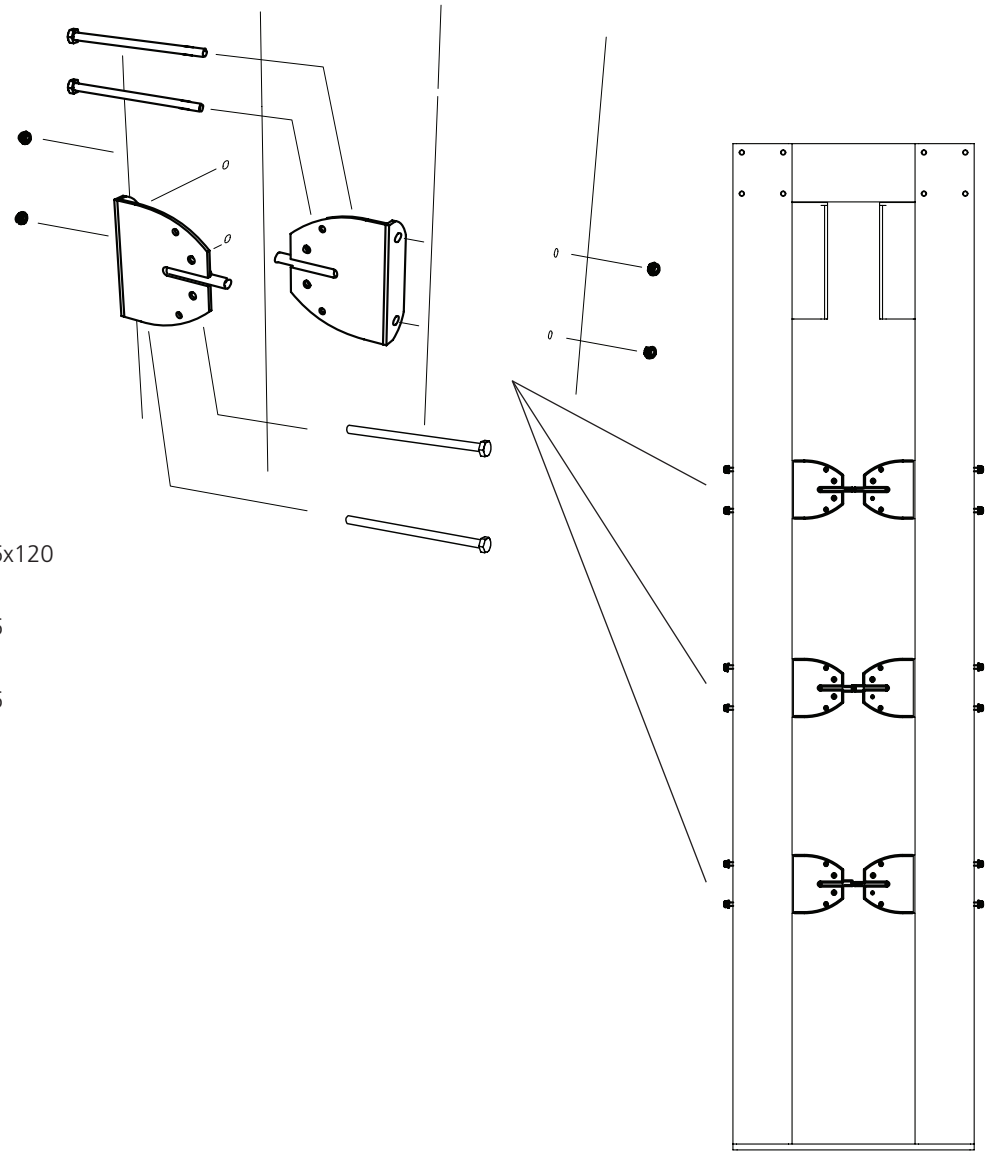


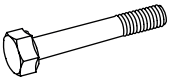
19

12 x – M6

12 x – M6







12 x – M6x120

12 x – M6

24 x – M6

20

2 x – M8x20

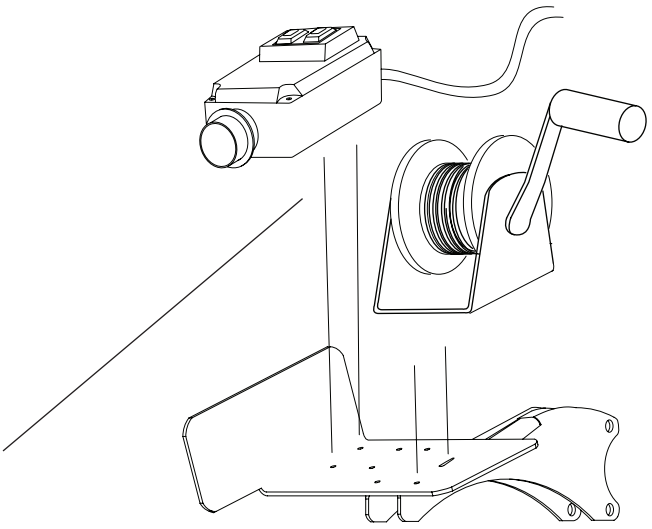
2 x – M8

2 x – M8

4 x – M5x8

4 x – M5

4 x – M5



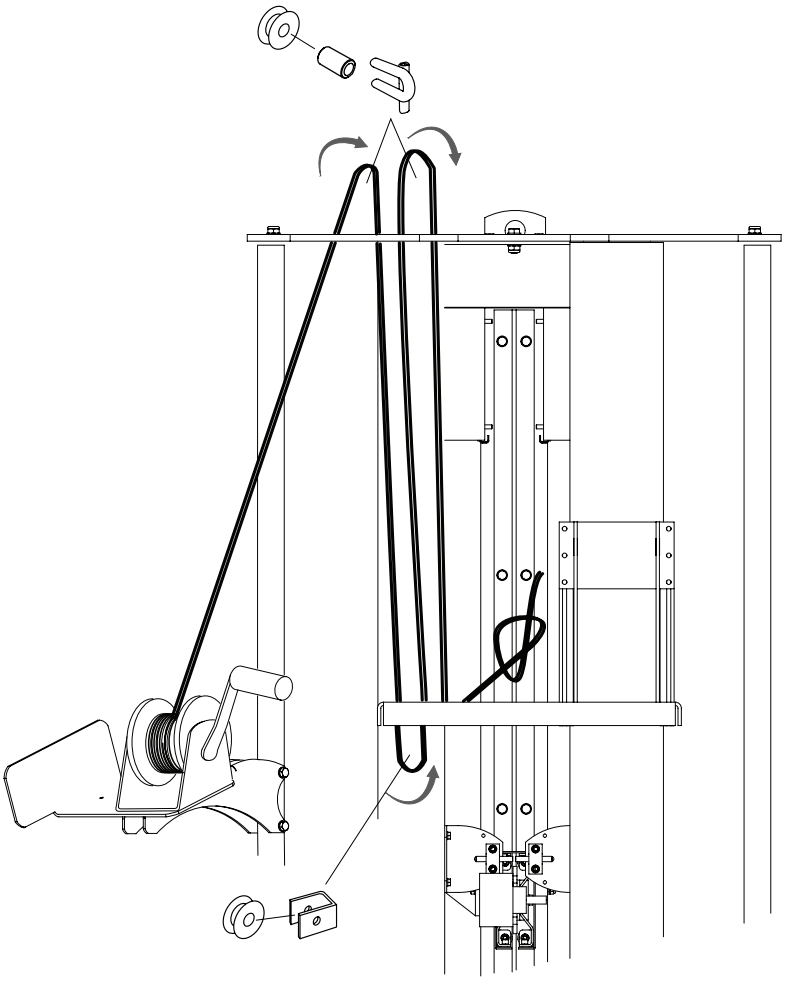
21

2 x

2 x

2 x – M6

2 x



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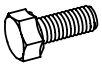
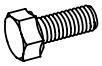


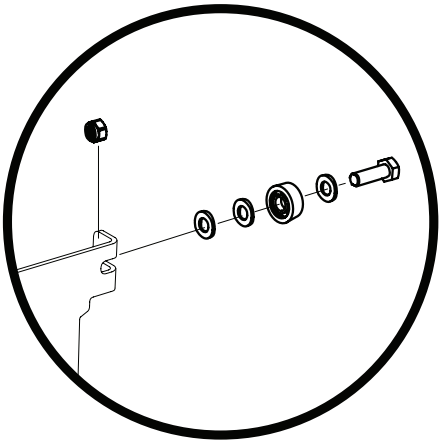
1 x – M8x50

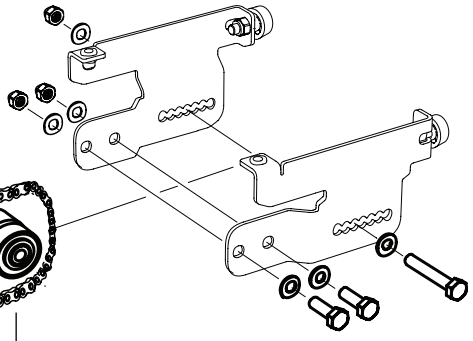


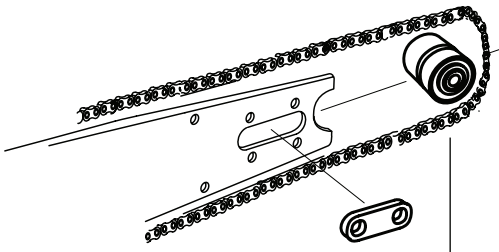
4 x – M8x25

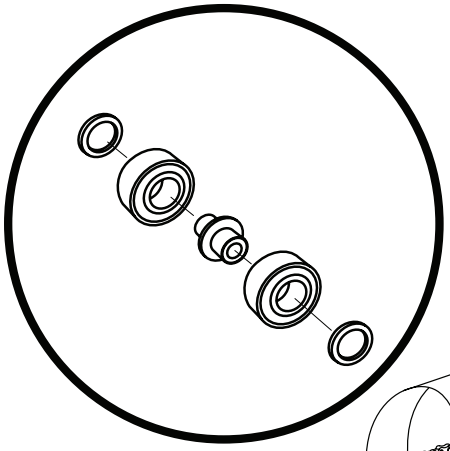
5 x – M8

12 x – M8









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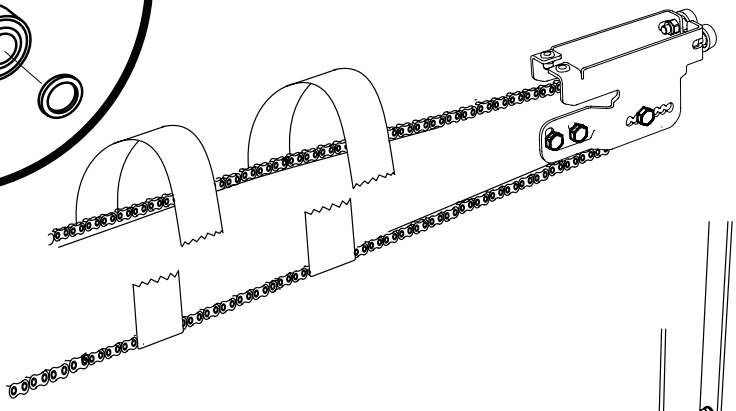

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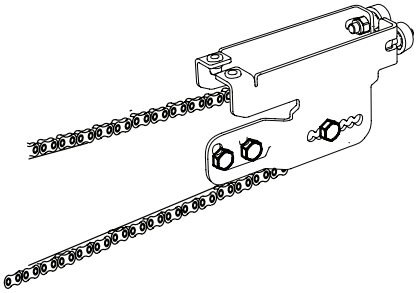
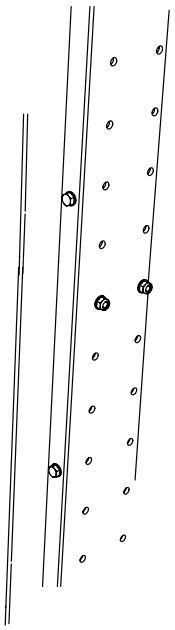
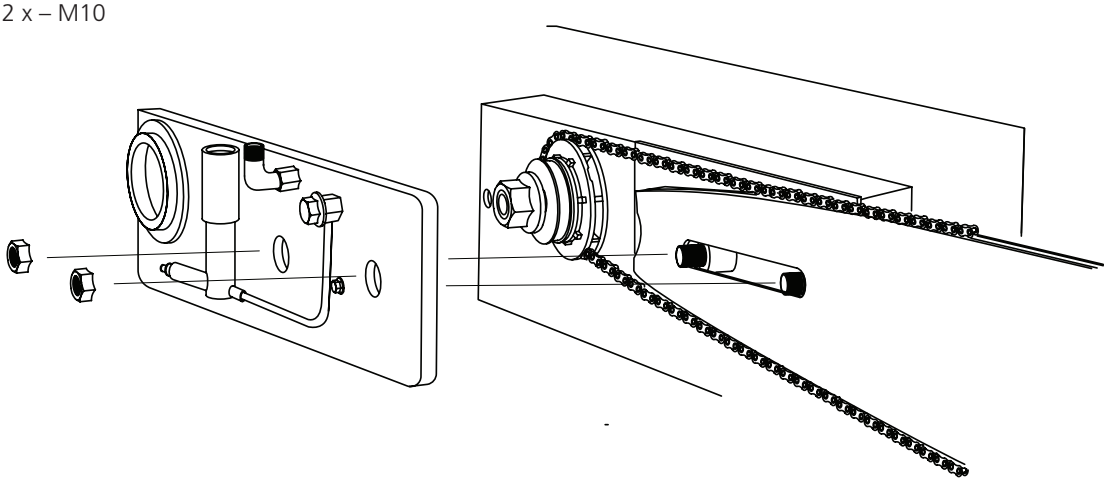




25

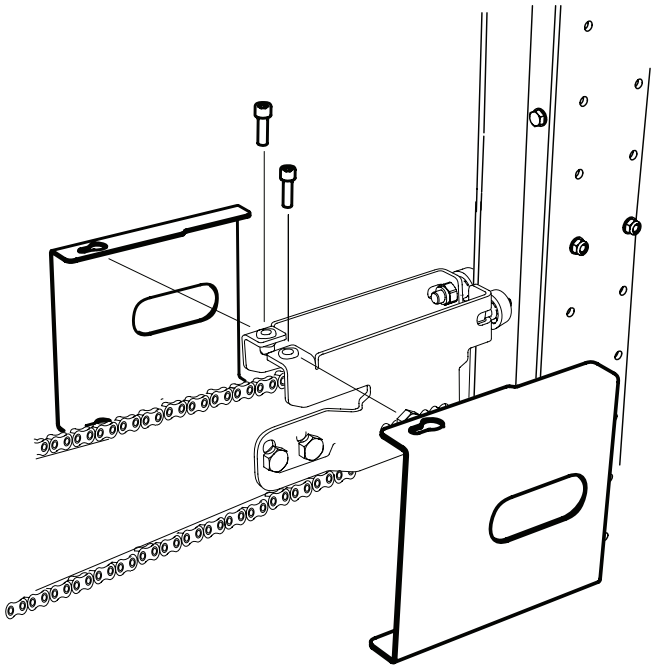
2 x – M10

2 x – M10



26

2 x – M6x20



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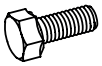
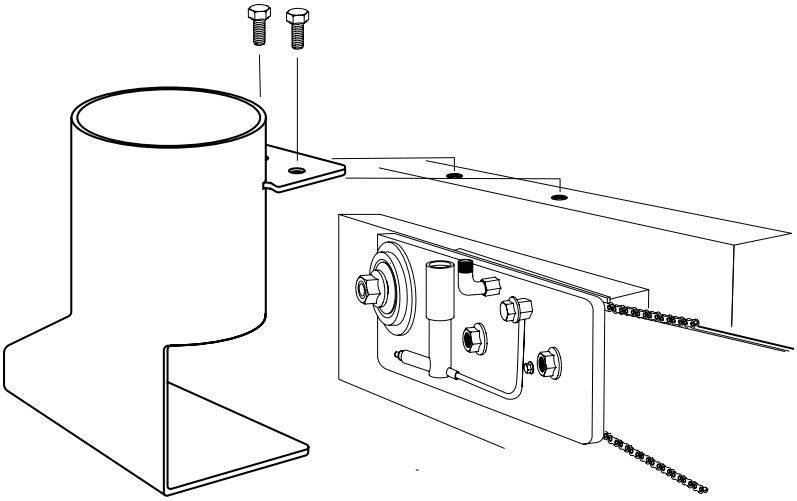


2 x – M6x20

2 x – M6



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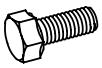
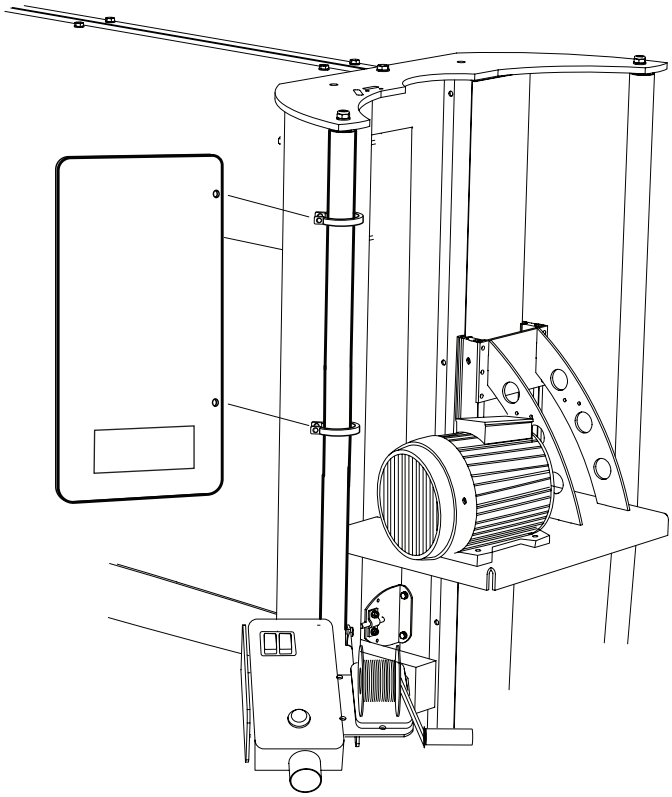


2 x – M6x20

2 x – M6

4 x – M6

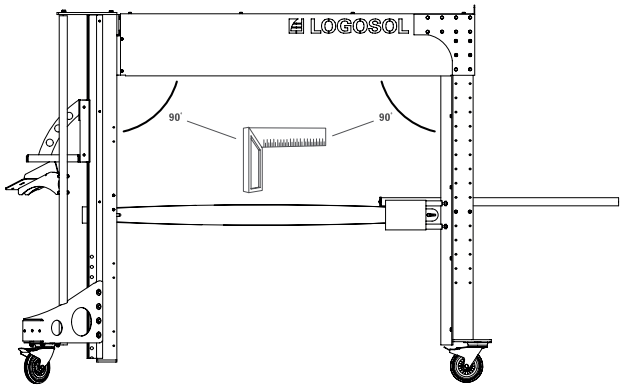
2 x



ADJUSTMENTS

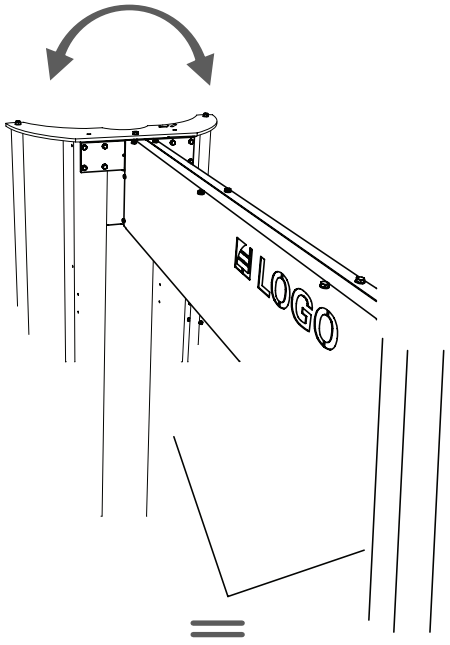
1

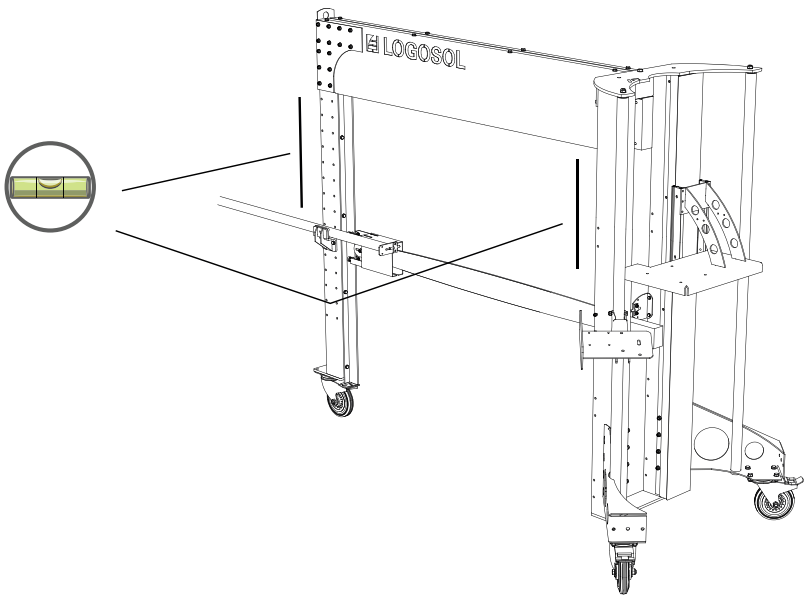
Check and adjust so that the inside angle of the frame is at a 90-degree angle.



2

Adjust the inner and outer legs until they are parallel to each other. Both legs should be vertical.

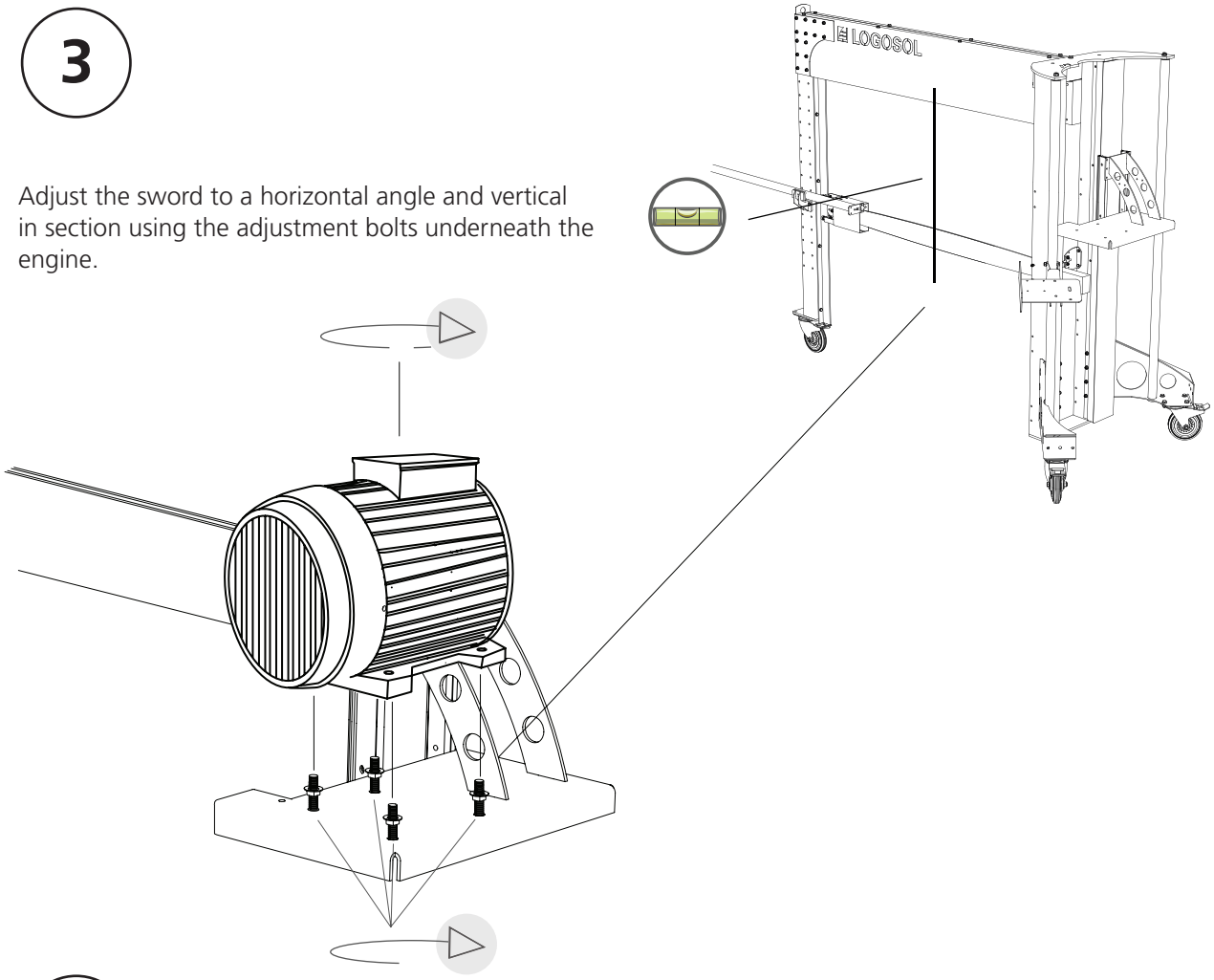




ADJUSTMENTS

3

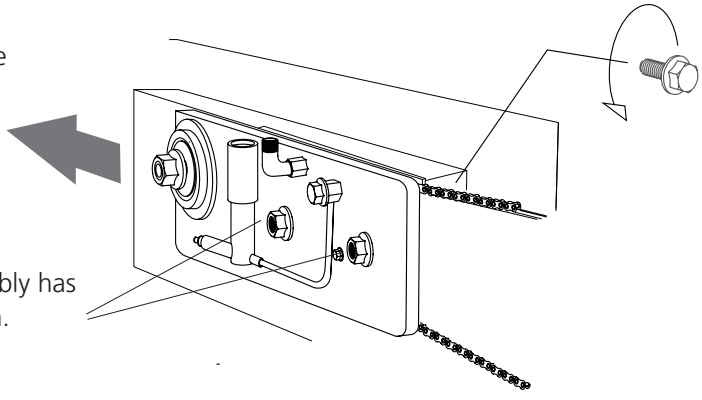
Adjust the sword to a horizontal angle and vertical in section using the adjustment bolts underneath the engine.



4

Tension the cutting chain with the tensioner on the top assembly.

The screw holding the sword in the top assembly has to be released to allow tensioning of the chain.



PREPARING STACKS FOR CUTTING

- Ensure that there is no electrical power to the machine while the stack is being prepared.
- End trimming (F) refers to cutting the end of a stack. The longest waste piece sawn off must be min. 10 mm and max. 500 mm.

⚠ Risk of chain breakage!

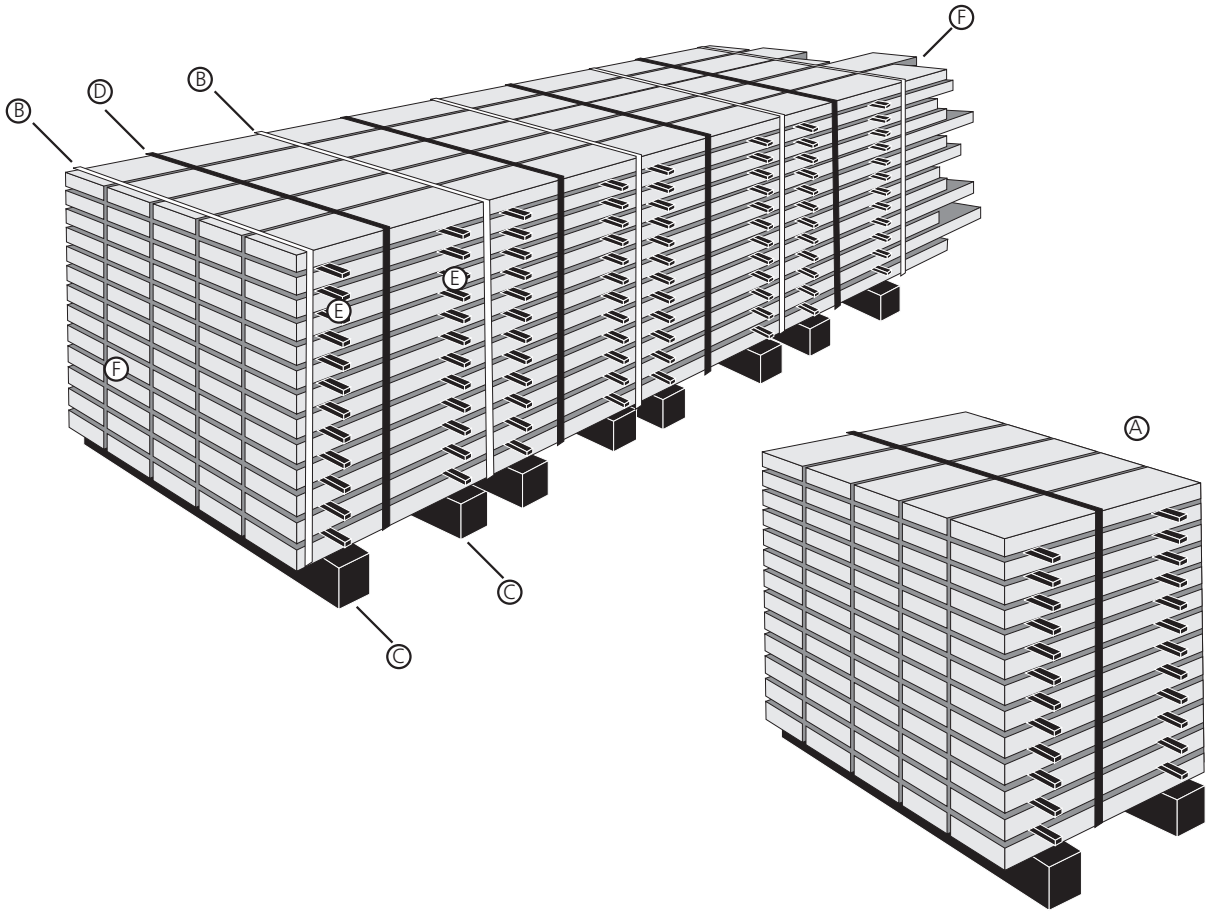
- If the stack's set-up and the positioning of crossers and straps is not correct, Stack Cutter will not be able to cut correctly. The guide bar will either jam or the chain will lift out of its groove. There is a great risk of chain breakage when this happens.

⚠ Risk of the stack toppling!

- Ensure that the part of the stack that is to be cut off will still stand firmly supported after the cut is made (A).

Stack Cutter is supplied with a measuring stick that has a scale and an adjustable stop plate. To prepare a stack for cutting, first mark out the approximate position of all the cuts. Do not forget to take the cut's width into account.
Exact measurements are made between each saw cut (see "Setting cut length").
The ground where the stack is set up should be flat and even. Plan the sequence in which the cuts (B) will be made. With the exception of end trimming (where support is required on one side only), there must be stable supports (C) on the ground on each side of the cut. Supports must be at least 175 mm high.
With the exception of end trimming (where strapping is required on one side only), the stack must be firmly strapped (D) on both sides of the cut.

- Viewed from the cut, any strapping (E) must lie on the far side of any crossers.
- There must not be any strapping between crossers and the cut.



Control panel

⚠ **Do not connect the machine to a power supply** before you have read and understood the entire manual. Incorrect use may result in a fatal accident.

A Green button: Start

B Raised red button: Emergency stop/stop
C Round black button: Safety button (dead man's handle)
D Motor unit winding crank
E Plug socket
F Phase inverter

G Winding crank safety catch

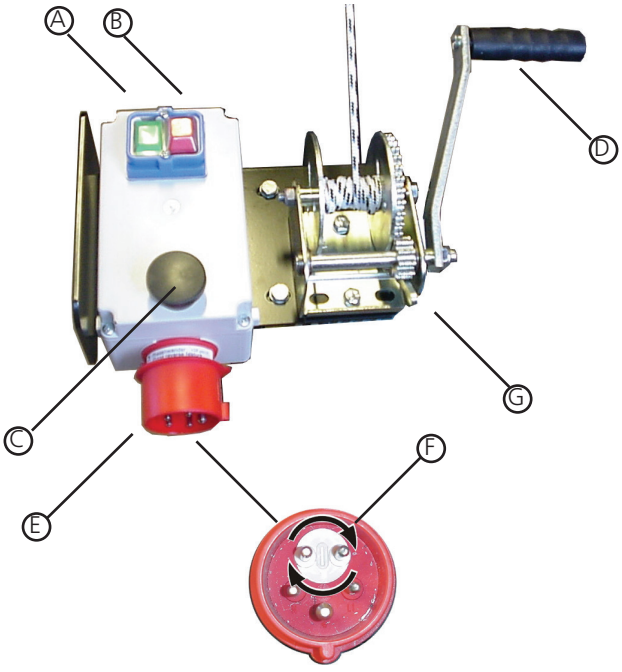
Start: Hold down the safety button and, at the same time, press the green start button.
Stop: Press the red stop button.

Emergency stop: Press the red stop button or release the safety button.

⚠ Risk of being hit by the winding crank!

⚠ Risk of the saw unit being lowered unintentionally!

❗ Before releasing the safety catch (G), take a firm grip of the winding crank (D). Except when the saw unit is to be lowered, the safety catch should always be on.



Electrical connection

⚠ Risk of electric shock.

❗ Do not connect the machine to a power supply before you have read and understood the entire manual. Incorrect use may result in a fatal accident.

❗ Stack Cutter should be connected via an earth-leak circuit breaker.

Fix the machine's power cable to the ceiling or protect it in some other way. Never tread on the cable.
Position the machine so that the green start button and red stop button are immediately accessible.
The red stop button functions as an emergency stop button and must not be disabled in any way.
The round black button is a so-called "dead man's handle" that must be physically held down by the operator during operation.
When all the instructions under "Setting up the cutter" have been followed:
With the guide bar in its top position, plug the machine in (E) and check that the motor is running in the right direction. Look at the chain in the guard from a safe distance – see safe distance in the safety instructions. On the underside of the guide bar, the chain should be running in towards the saw unit. If it is not, pull the plug out of the machine and switch the phases in the plug by using a large flat screwdriver to turn the disc (F) that holds two of the pins.
⚠ Risk of electric shock!

❗ Only qualified electricians are authorized to open/access the electrical system.

❗ The plug does not need to be opened to switch the phases.

Stack cutting

⚠ Risk of serious injury if the warnings and instructions in this manual are ignored!

❗ Before cutting begins...

...you must have read and understood the warnings and other instructions in this manual.

...Stack Cutter must have been correctly set up in the right position as per the sections "Preparing stacks for cutting" and "Cut positioning".

Lower the guide bar towards the stack. Select a suitable length guard (A) for the guide bar's tip and set the guard to come as near as possible to the stack. Winch the guide bar back up to its top position.

❗ The maximum permitted distance between the stack and the guide bar guard is 50 mm. Long guide bar guards can be ordered from Logosol.

❗ So that you do not saw through anything unintentionally, check the guide bar's path and the ground beneath the guide bar.

❗ Before cutting, check that the saw chain runs freely and unobstructed on the electric saw. Wear safety gloves.

❗ Do not plug the power cable into the machine until it is fixed in the right position.

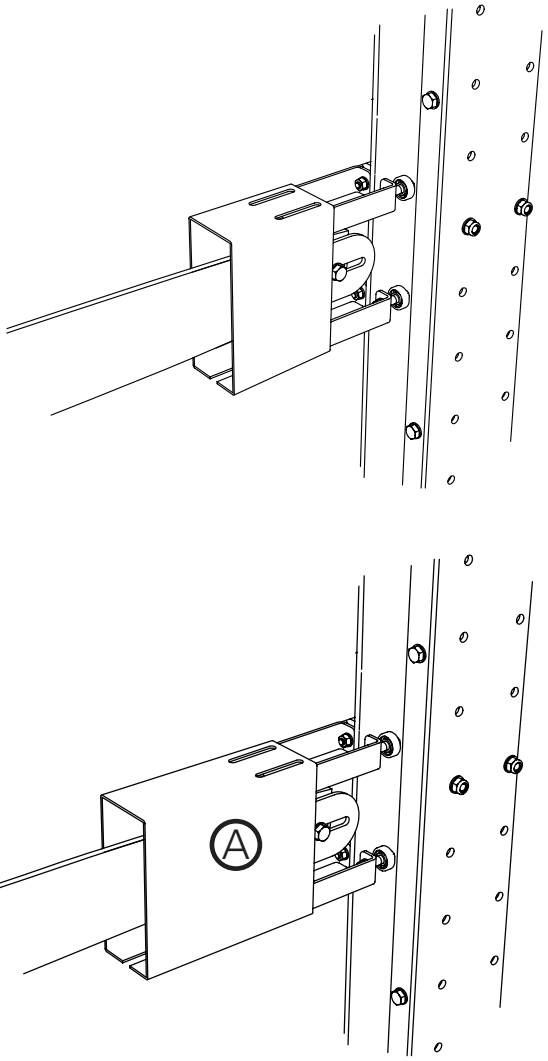
⚠ Risk of the operator being hit by wood debris thrown backwards in the chain's direction!

❗ Always stand with your face shielded by the protective screen. Wear safety glasses.

❗ Refer to the section "The control panel". Take a firm grip of the winding crank when taking off the safety catch.

❗ During cutting, the saw unit must not be pushed downwards to increase feed pressure. The saw unit's maximum feed pressure must be its own weight. Take great care if the saw chain jams because of "pinching". If, at any time, the saw unit does not descend easily through the stack, stop cutting immediately. Disconnect the power and remedy the fault. The cause may be that the saw chain has jammed due to inwards pressure from both sides ("pinching") and, as a result, has lifted from its groove on the top of the guide bar.

⚠ Extreme risk of chain breakage if the chain **lifts out of the guide bar's groove! Risk of fatal accident! If the chain breaks, it may fly out at high speed, either forwards or backwards, along the axis of the guide bar.**



Wind the saw slowly down to the stack and continue all the way through the stack. Wind extra slowly when trimming to avoid bar bending. Stop the cutter by releasing the safety button or by pushing the red stop button (see the section on the control panel).

DRAWING THE LINE FOR END TRIMMING

The basic procedure when using Stack Cutter is to mark out the intended cut by drawing lines on the stack's sides.
Draw a vertical line on both sides of the end of the stack that is to be trimmed. Waste pieces must not be shorter than 10 mm or longer than 500 mm.

1. Position the cutter by the drawn line.
2. Using the wheel crank, adjust Stack Cutter to approximately the correct angle.
3. Align the upper sight exactly with the line. On the side that is not going to be cut off, fix a screw into the stack through the hole in the sight.

4. Use the wheel crank to fine adjust the lower sight.

5. Go around the machine and align with the cut on the opposite side.

The sighting rod must be on the side of the stack that is not going to be taken away.
The sighting rod's holder must be fitted in such a way that you can measure close to the center of the stack.

6. Push the sighting rod close to the stack.
7. Ensure that the plastic sight pegs are close to the horizontal position.
8. Tighten the sighting rod in its holder.
9. Align Stack Cutter and lock the position by pushing down the locking foot next to the wheel (and, if desired, screwing the sighting rod into the stack – in which case, disregard point 10).
10. Loosen the sighting rod, pull it back and, so that the plastic pegs do not get in the way of the saw chain, turn it 90 degrees.

⚠ Risk of sawn-off pieces of wood flying in the operator's direction!

❗ Stand behind the protective screen. Wear safety glasses. Ensure all other people observe the safe distance.

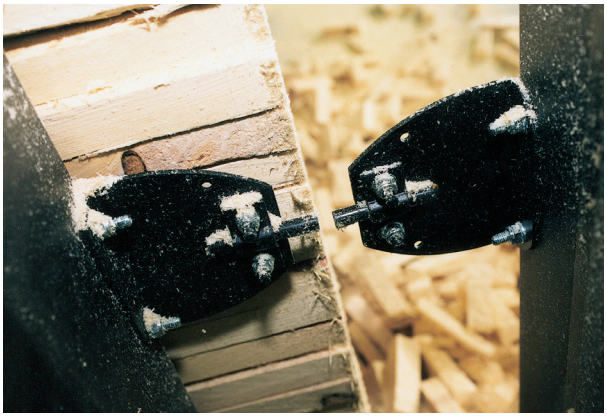
13. Cut along the line as per the instructions in "Stack cutting". Observe all the warnings.

When making the first cut, calibrate the machine's plastic sight pegs by pushing them out a few millimeters and then sawing them off. This will show the exact path of the guide bar.

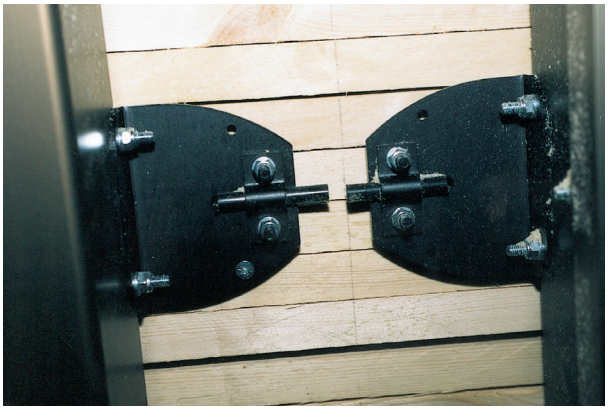
SETTING CUT LENGTH

End trimming

Once one of the stack's ends has been trimmed, the cut surface provides the point for measuring the position of the next cut.



Set the measuring stick's stop plate.



Draw a line between the sights on both sides of the stack.

CHANGING CUTTING EQUIPMENT

After a while, the saw chain will lose its edge.

The saw chain can be easily removed for sharpening. An electric grinder is recommended for sharpening, but it is also possible to use a round saw chain file.

A new chain may need re-tensioning after the first or second cut.

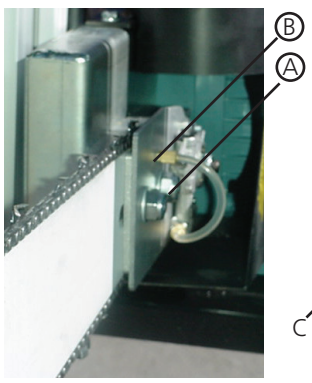
⚠ Risk of cuts and burns!

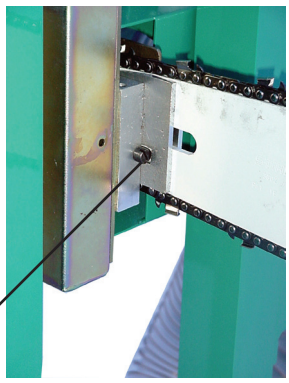
❗ Before commencing servicing, ensure that the power is disconnected and that the saw chain is not rotating. The chain may be hot. Always wear safety gloves.

Removing the guide bar and chain

When changing the chain, it is not necessary to remove the guide bar tip control.

1. Remove the flexible chip duct.
2. Lay the chain around the guide bar and tape it fast so that it does not hang below the bar.
3. Place a support, e.g., a euro pallet, beneath the guide bar.
4. Lower the motor unit until the guide bar is resting on the support.
5. Set the chain tensioner (C) to its rearmost position.
6. Undo the guide bar nuts (A) and the cover plate (B) that the oil pump sits on.
7. Lift the guide bar out.





The "shortness" of a new chain may make fitting it around the sprocket difficult. Chains stretch with use and are then easier to fit.

(Remove the flexible chip duct.)

1. Lay the chain around the guide bar and tape it fast so that it does not hang below the bar.
2. During fitting, lower the motor unit until it rests on a support, e.g., a euro pallet.
3. Check that the chain tensioner (C) is in its rearmost position.
4. Rest the guide bar on the support.
5. Fit the guide bar tip control to the T-profile (depending on chain length, this can sometimes not be done before the chain is tensioned).
6. Fit the guide bar to the guide bar bolts (A). Pull the saw chain around the chain sprocket. Check that the sprocket sits tight to the bearing housing and that the collars of the guide bar bolts are in the guide bar's groove.
7. Push the cover plate (B) down over the bolts and tighten (hand-tight) the nuts.
8. Check that the guide bar, chain and tip control are correctly positioned.
9. Using the chain tensioner (C), tighten the chain. The chain must be tensioned to the point where it sits against the underside of the guide bar.
10. Tighten the guide bar nuts (A).
11. Wearing safety gloves, rotate the chain by hand and check that it runs correctly around the guide bar. If it does not, the chain may not be correctly threaded around the sprocket, or it may be over-tensioned.
12. Checking that the guide bar tip control is in the correct position all the way, raise the saw unit to its top position.
13. Refit the flexible chip duct.

Troubleshooting

The guide bar must not cut at an angle. Any fault in this respect is most clearly noticeable when the guide bar is raised after a cut has been made. If the bar does not gently rest against the cut surface, but pushes against it, or hangs away from it, there may be a fault with the bar or the chain.

1. A dull chain is one cause of a problem when using Stack Cutter.
2. The chain may have been damaged on one side, e.g., by a metal object in the wood. The chain will still cut, but will pull to one side.
3. The chain has been filed incorrectly. The cutters on one side have been filed down less than those on the other. To achieve a more even result, try to have the same working position when filing the right and left sides of the chain. That a few teeth are damaged or completely lost after cutting through a nail does not normally have a noticeable effect on the chain's performance.
4. When precision decreases after a period of problem-free cutting, guide bar wear is almost always the cause.

The guide bar may pull to one side

If the chain has been damaged on one side, or filed unevenly, it can run incorrectly. It will then increase the wear on one side of the guide bar and, if cutting is continued, wear the bar at an angle. Even if the chain is changed, a bar that has been worn at an angle will guide incorrectly and may even wear the chain at an angle.
A guide bar that has been worn at an angle can be repaired. Using, for example, a UKF file (art. no. 9999-000-0450), file the guide bar rails to an even height.
Another common cause of the guide bar pulling to one side is wear that has resulted in the drive links bottoming in the groove. This deprives the chain of its support from the guide bar rails. The chain shows this through the tips of the drive links being worn.

Test the chain oil with your fingers

Always use vegetable chain saw oil.
For the chain oil to work well, it must be viscous and form threads. When a drop is squeezed between thumb and index finger, many threads should form when these digits are re-opened. If only 2 – 3 threads form, the oil's adhesion is insufficient and the oil will fly off the tip of the guide bar. We recommend Stihl chain oil (5 liters, art. no. 0781-516-3353).
The oil flow is set by a screw on the oil pump. Flow is set to maximum at the factory and must not be altered.

SHARPENING OF THE CHAIN

The cutters on the chain of a motor saw are coated with a very thin layer of chromium. This gives a very sharp and wear-resistant edge.
As long as the edge is in the chromium layer, the chain is perfectly sharp.

If you always file before the chain becomes dull, the guide bar and the chain will be subject to minimal wear. If, on the other hand, you make 5 – 10 cuts after the edge have left the chromium layer, the chain becomes dull and cutting is poor. Saw speed is low and feed pressure is high. The bar and the chain rapidly overheat. It is still possible to cut under these conditions, but the equipment wears very quickly.

When filing a dull chain, there is a clear risk of not reaching the chromium layer. The chain will be sharp but, as the edge is not in the chromium layer, it will soon become dull again.

If you do not file in time, you will have to file away a large part of each cutter to make it sharp. This considerably reduces the chain's service life. If a lot of cutting is done with a dull chain, the feed pressure will be high. Consequently, the bar will wear quickly and there is a risk of chain breakage.
Summary – File before the chain becomes dull. This prevents the setting up of a vicious circle in which wear is high and cutting results poor.

MAINTENANCE

If you keep your cutting equipment in good condition, the sawn product will have the right dimensions, cutting will be speedy and the equipment will last longer.
When the timber you are cutting is "aggressive" to the chain (e.g., dry wood, hard wood, or timber that has sand or earth in the bark), regular sharpening of the chain is particularly important.

File before cutting slows down

When the chain starts to lose its edge, the cutting speed falls, the guide bar gets hot and descends through the stack more slowly. Stop cutting immediately! Really, filing has already been delayed too long. Cutting with a dull chain subjects the cutting equipment to great stresses. Thus, always file before the chain becomes dull!

File comfortably

Filing by hand or using an electric chain grinder both give good results. The chain does not need to be removed for manual filing. We recommend a double file that has an integral depth gauge file.
❗ Filing angle – 10 degrees! Keep the file flat over the cutters.

Avoid chain breaks

Cutting too long with a dull chain can result in breakage. The chain will break under the cutters (inspection will show excessive wear at this point).
If, however, a drive link breaks, this may be because the chain and the sprocket are not well matched. Check the sprocket every time you change the chain.
❗ Change the chain sprocket when the sprocket's teeth show small indentations. These are a sign of wear.

MATERIAL DRYING

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 of the same thickness (1x1” or 1x2”) and dry. (You can get material for these by making an extra cut when edging your boards.)

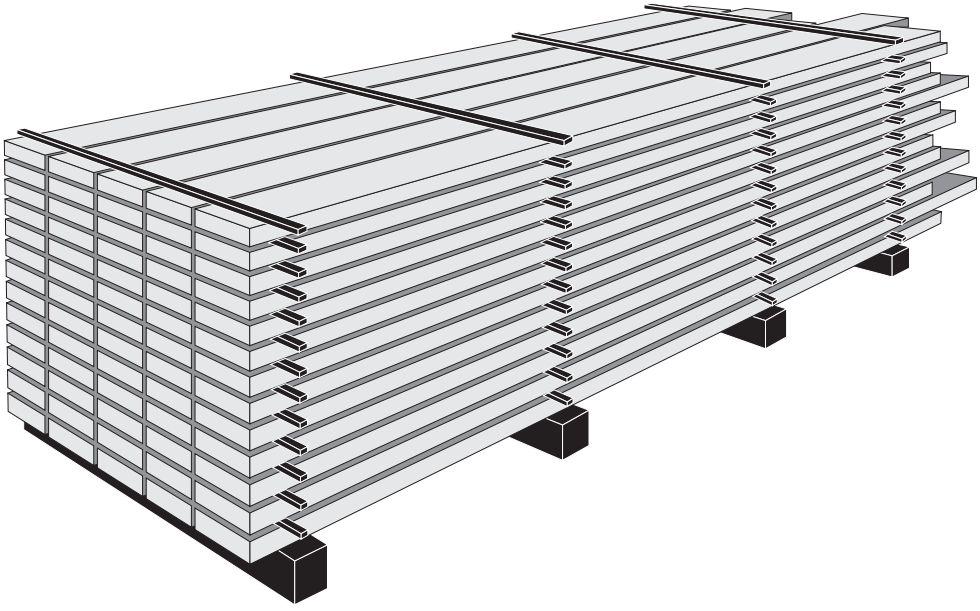
Place the first row of boards on the underlying surface. The boards are to be of the same thickness and be positioned a few centimeters apart. Then place a spacer on the boards (in the same positions as the underlying supportive blocks) before the next layer is laid. It is important to place the spacers 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.



WIRING DIAGRAM

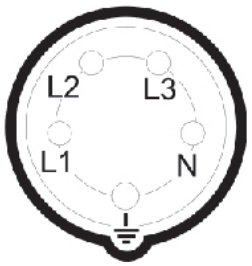
⚠ Potentially lethal voltage! Faulty connection can result in a fatal accident.

❗ Note that only qualified electricians are authorized to open or work on the machine's electrical equipment. Ensure that the power is disconnected before exposing any part of the electrical system.

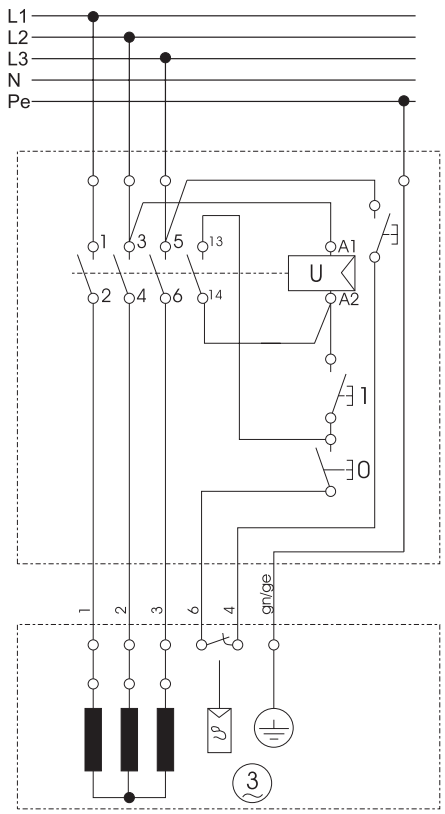
❗ Connect the machine and check that the motor is running in the right direction. If it is not, pull the plug out of the machine. Switch the phases in the plug by using a large flat screwdriver to turn the disc (6) that holds two of the pins.

⚠ Under current regulations, the machine must be connected via a 5-flex cable (7). It must not be switched on if the power connection does not have a separate earth and a separate neutral.

(6) Plug 400 V



(7) Circuit diagram



Technical data

Dimensions Stack Cutter 150	Length	2,600 mm-
	Width	1,100 mm
	Height	1,900 mm
	Weight	145 kg
Cutting dimensions Stack Cutter 150	Max. stack width	1,400 mm
	Theoretical max. width approx.	1,450 mm
	Max. stack height	1,350 mm
	Rec. height off ground	150 mm
	Max. total stack height	1,500 mm
Dimensions Stack Cutter 120	Length	2,300 mm
	Width	1,100 mm
	Height	1,900 mm
	Weight	135 kg
Cutting dimensions Stack Cutter 120	Max. stack width	1,100 mm
	Theoretical max. width approx.	1,150 mm
	Max. stack height	1,350 mm
	Rec. height off ground	150 mm
	Max. total stack height	1,500 mm
Chip handling	Chip duct	100 mm
	Required min. chip fan capacity	700 m^3/h
Electrical system	Power supply 400 V, 50 Hz, 3-phase	CCA16 A,
	Protection class	IP54
	Motor power rating	5 kW
Sound levels	Sound pressure level (A)	102.0 dB
	Sound power level (A)	113.0 dB
Cutting equipment	Chain pitch	0.404"
	Chain speed	22.5 m/sec

EU declaration of conformity

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

Logosol AB
Fiskaregatan 2
871 33 Härnösand
SWEDEN

hereby declares that: **Logosol PK1500**

is manufactured in accordance with the following EU directives:
Machinery Directive 2006/42/EG
EMC Directive 2004/108/EU

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

Fredrik Forssberg, CEO, is responsible for the technical files.

Härnösand 2023-09-27

Fredrik Forssberg, CEO

Declaration of conformity

Logosol AB
Fiskaregatan 2
871 33 Härnösand
SWEDEN

hereby declares that **Logosol PK1500**

is manufactured in accordance with:
Supply of Machinery (Safety) Regulations 2008

and has been manufactured in conformity with the following harmonized standards:
BS EN ISO 12100:2010

Fredrik Forssberg, CEO, is responsible for the technical files.

Härnösand 2023-09-27

Fredrik Forssberg, CEO

LOGOSOL