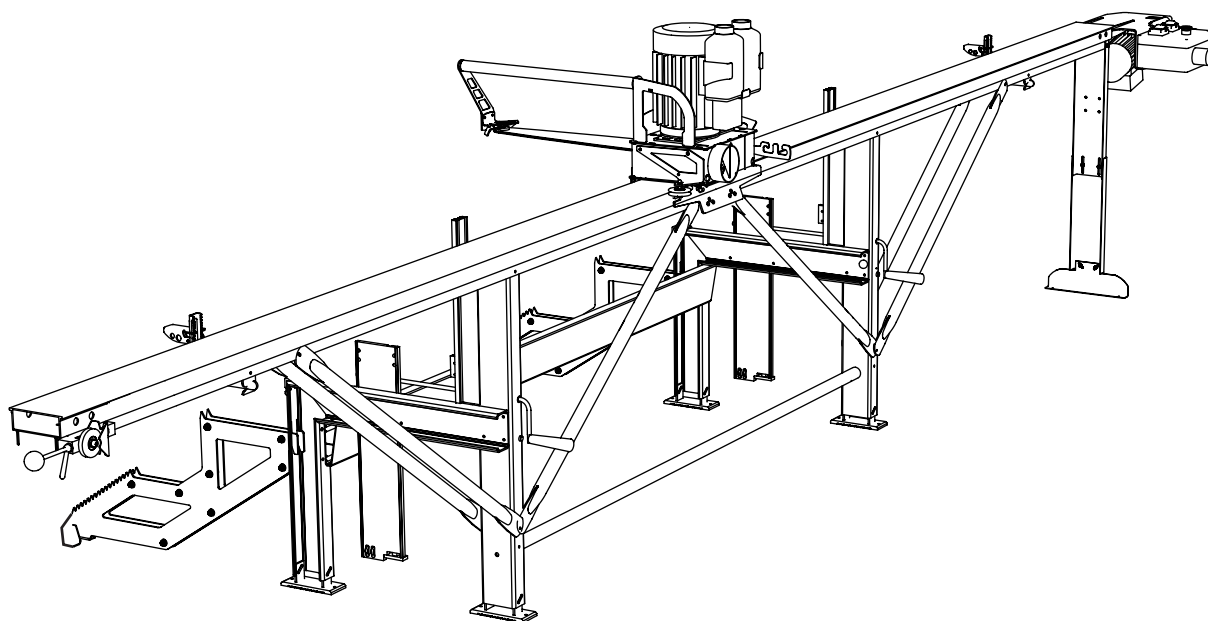


# LOGOSOL USER MANUAL

TRANSLATION OF ORIGINAL USER MANUAL.

ITEM NO: 0458-395-0552



## LOGOSOL E37



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



This user manual contains important safety instructions.



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

## Thank you for choosing a Logosol machine!

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

Logosol has been manufacturing wood processing machines 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 machine. 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 machine. 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 of the Board,  
Logosol, Sweden



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

Text: Mattias Byström

Document: Logosol E37 Manual

Last revised: December 2016

Manual, ref. no: 0458-395-0552

© 2010 LOGOSOL, Härnösand Sweden

## Table of contents

Safety instructions	4
Description of machine	5
Components	6
Use of the machine	8
Control panel	8
Control lever functions	9
Position of hands during operation	10
Assmebly	12
Feed pressure	22
Setting of neutral mode	23
Operation	25
Backward feeding	27
Maintenance	28
Troubleshooting	30
Circuit diagram	31
Exploded view	32
Notes	34
CE Declaration of conformity	35

## SAFETY INSTRUCTIONS



For your own safety, read through the manual carefully. Do not operate the machine before you have understood all the instructions. Do not let anyone who has not read the instructions use the machine.



Use approved ear protection. Hearing can be damaged even after short periods of exposure to high-frequency sounds. Use approved safety goggles. Splinters and wood pieces can be hurled out with great force.



Warning! Cutting tools.



This symbol means "WARNING". Pay extra attention when this symbol appears in the text.



This symbol is followed by an admonition. Pay extra attention when this symbol appears in the text.

- This document is primarily a machine instruction. It does not describe different timber processing methods. The machine can cause serious body injuries when incorrectly used. Always be fully concentrated and careful when using the machine.
- Ensure that no unqualified person can start the machine.
- Qualified operator: To be a qualified operator, the operator must be over 18 years old and have read and understood all of the instructions in the manual for the feed unit and the cutting units that are to be used. In addition, the operator must be well-rested, in good physical health, and have good eyesight. Persons that do not meet these requirements are not qualified operators.
- Never leave the equipment unattended when its plugged in. Make sure that no unqualified person is able to plug in the equipment.
- Before starting the machine:
  - Familiarize yourself with all functions and settings before starting to use the machine.
- Children and animals may not be near the equipment while the machine is running.
- Make sure that no other person besides the operator is within the safety distance.
- Risk of crushing injuries! Never touch the feed wire when the machine is plugged in. The feed wire is particularly dangerous at the pulley and where the wire enters the feed unit.
- Only use the equipment under good visibility conditions.
- Do not wear loosely hanging clothes or anything else that can get caught in the moving parts of the machine. Fasten long hair up in a secure (and nice) way.
- Always work in good lighting.
- Do not use the machine if you are under the influence of alcohol or other narcotics or medicines.
- Keep the workplace clean and tidy. Do not place anything on the ground which you can later trip over.
- Do not climb onto the machine.
- Do not tread on the machine's electric cable. If possible, the electric cable should be attached to the ceiling. See wire kit: 8020-000-0015
- For greatest electrical safety, use a residual current device.
- The machine is not to be modified and is not to be added to. Only use original parts supplied by Logosol which are designed for the purpose.
- The machine's warning markings are there for your own and other's safety. Damaged or illegible labels are to be replaced.

## GENERAL

- Check the machine on receipt. Any transport damage is to be immediately reported to the transport company.

## SAFE DISTANCES



No one other than the operator is to be present within 3 metres from the sides of the machine or 8 metres from the short sides of the machine when in operation. Make some form of boundary that prevents persons from unintentionally entering the risk area.

## DESCRIPTION OF MACHINE

The E37 Friction has several integrated functions.

- Forward and backward feeding with stepless, variable force
- Control panel for the electric saw unit or the log moulder
- Loading ramp that makes it easy to push the saw unit onto the guide rail.
- Stable support leg.

A great advantage of the friction clutch is that you indirectly regulate the speed of the saw unit by adjusting the **feeding pressure**. This makes the speed partly selfadjusting. The saw unit

will accelerate or decelerate depending on the dimension and quality of the log. This makes the feed unit very easy to operate.

Also, there will be less stress on the cutting equipment, since the speed is immediately adjusted when sawing through a knot or swelling in the log.

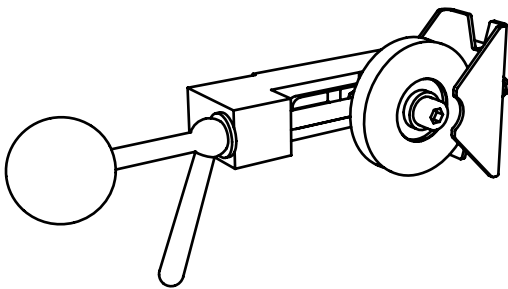
This could be compared to feeding machines that have adjustable **speed**, where the cutting equipment is exposed to very high stress when the cutting unit meets with temporary resistance that the operator does not manage to compensate for.

With the E37 Friction the guide bar and the chains will last longer and it is easy to maintain optimum sawing speed.

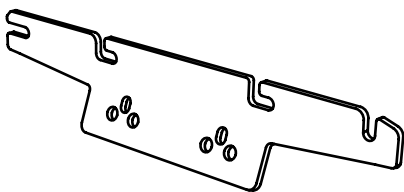
## COMPONENTS

The product comes unassembled in these separate parts. On delivery, check that all components of the product are included.

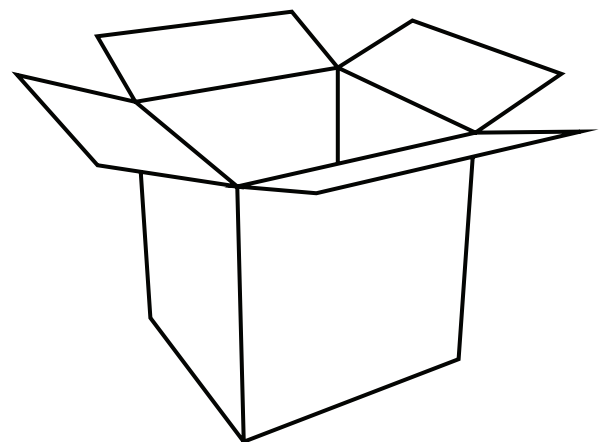
Wire tensioner  
Item no. DS-00182

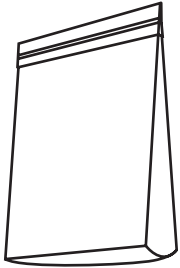


Drilling template  
DR-01382



Wire attachment  
DR-01377



**COMPONENTS**

Bolt bag



— 6 pcs —

Flange bolt M6x20

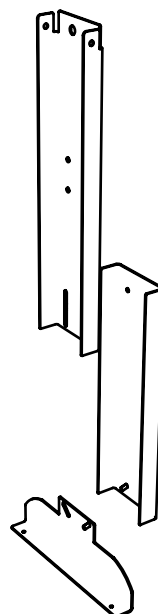
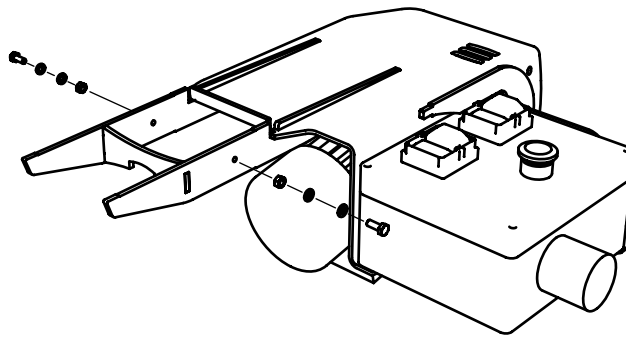
9018-346-1320



— 6 pcs —

Flange nut M6

9018-346-1320



Support leg

9018-346-1320

## USE OF THE MACHINE



Risk of serious injury.



Read the safety instructions

**Functions:** With the control panel buttons you choose the desired function. During all types of processing you need to keep the enabling switch pressed down to enable operation.

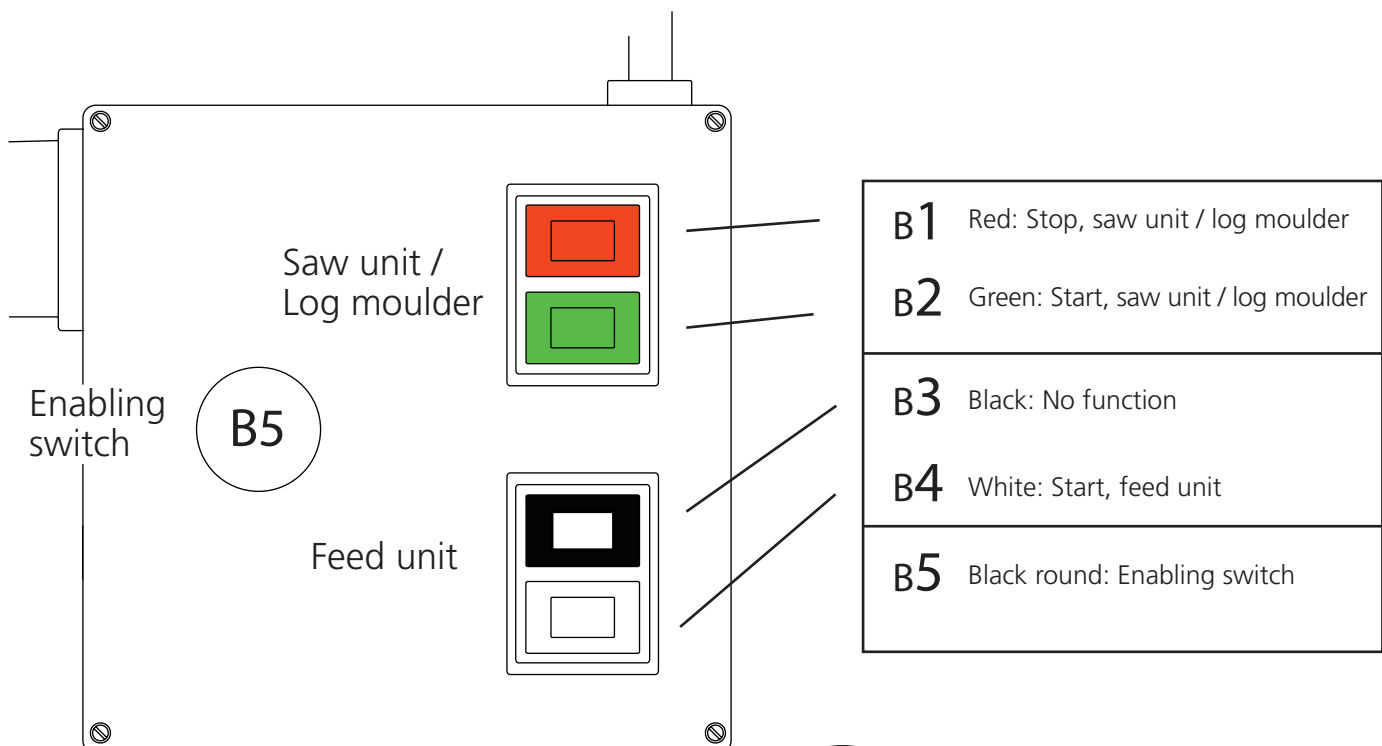


**Important:** An enabling switch is a pressure-sensitive switch. It has to be pressed down all the time during feeding and forward machining to make the electric drive work.



**Danger:** When starting the feed unit, the control lever should always be in its neutral position.

## CONTROL PANEL

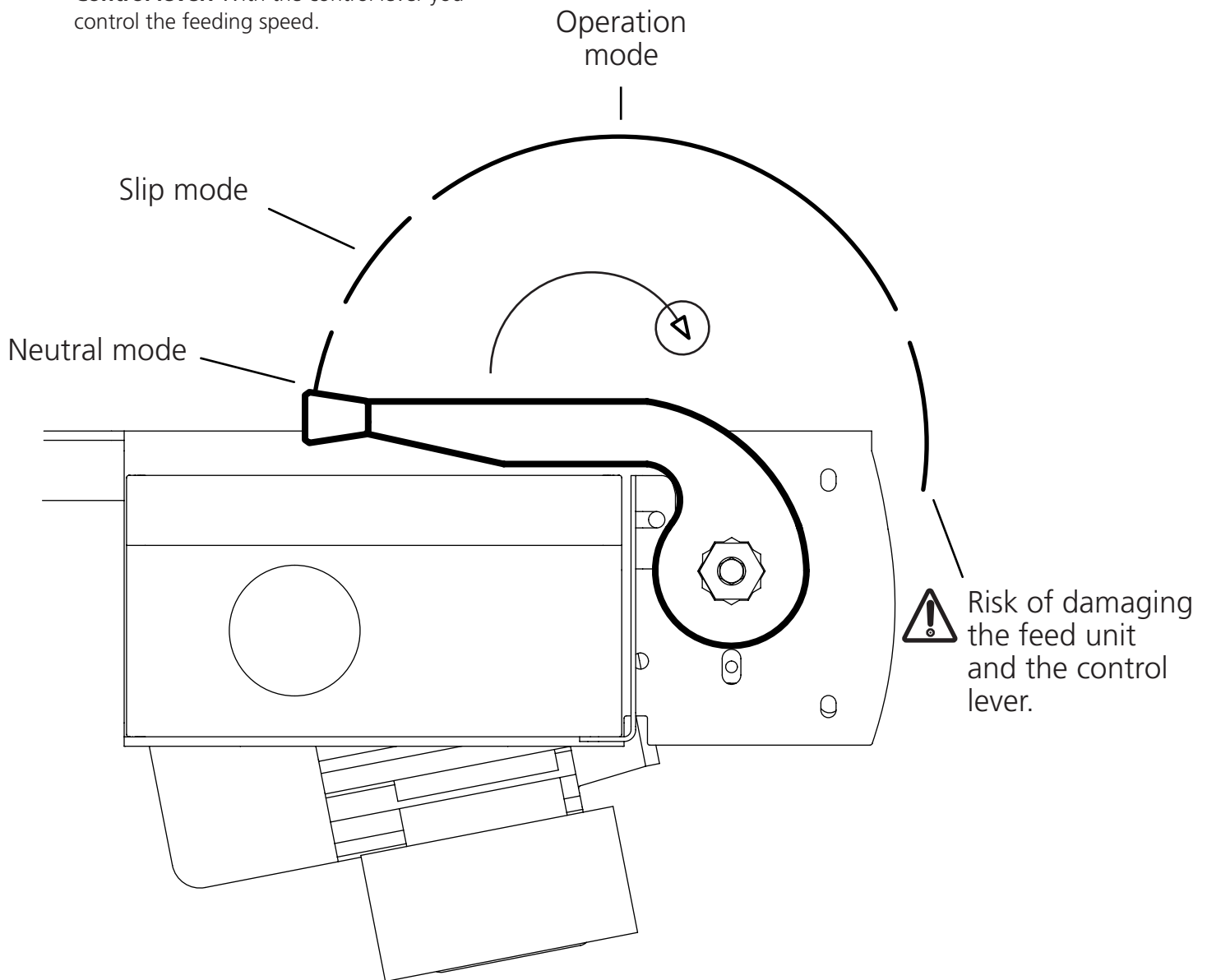


**Important:** When using the saw unit and forward feeding, the enabling switch has to be pressed down to enable operation.



## CONTROL LEVER FUNCTIONS

**Control lever:** With the control lever you control the feeding speed.



**Danger:** When starting the feed unit, the control lever should always be in its neutral position.

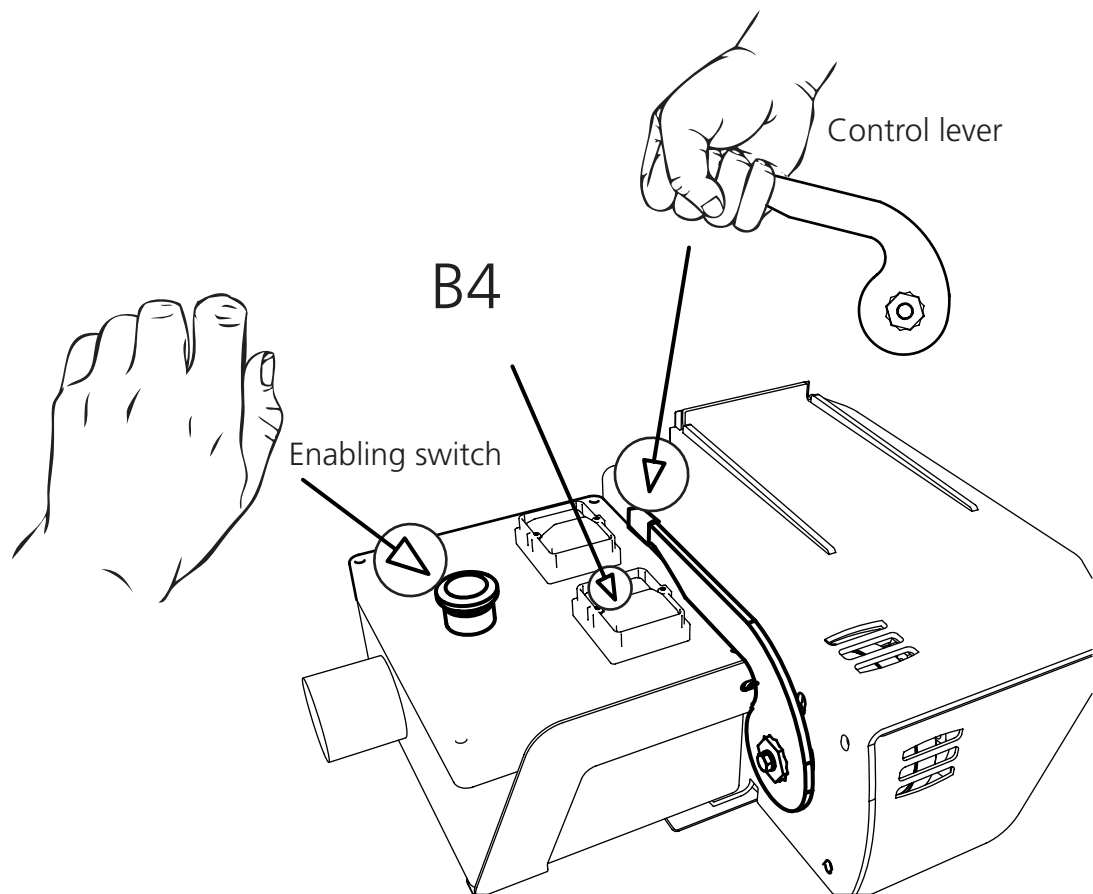


**Important:** When using the saw unit and forward feeding, the enabling switch has to be pressed down to enable operation.

## POSITION OF HANDS DURING OPERATION

### Forward feeding

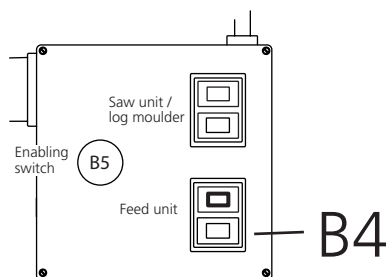
**Important:** For forward feeding, the enabling switch has to be pressed down when starting the feed unit.



**Danger:** Risk of crushing and cutting injury when the saw unit / log moulder backs in over the loading ramp.

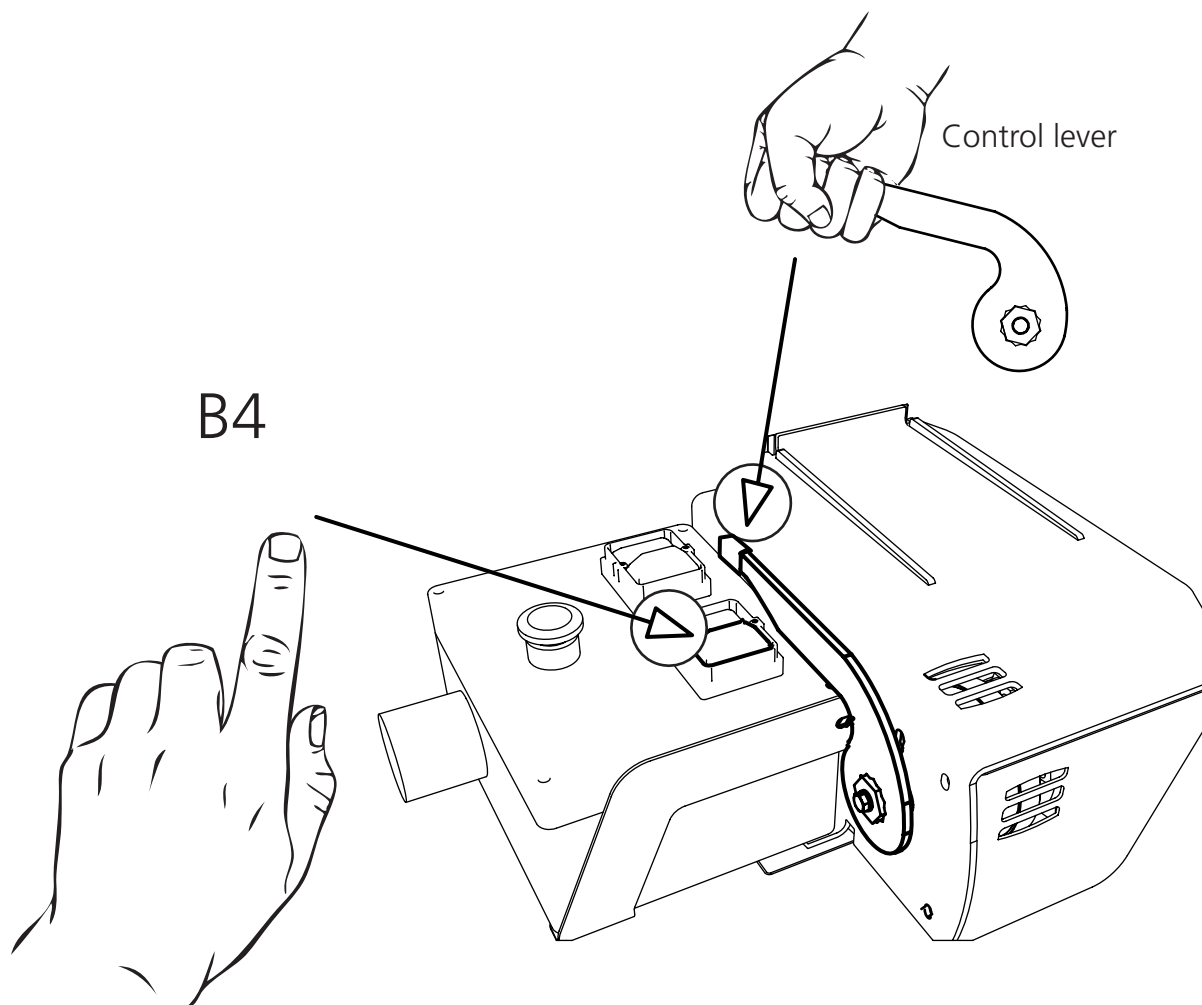


**Important:** When using the saw unit and forward feeding, the enabling switch has to be pressed down.



## POSITION OF HANDS DURING OPERATION

Backward feeding:



**Important:** When feeding backwards, the button (B4) must be pressed down.

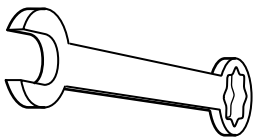
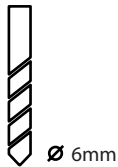
## ASSEMBLY

# Assembly

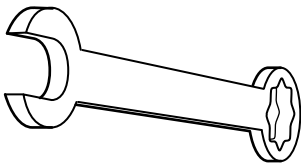


**Important:** Read the assembly instructions first, to get an understanding of the different steps before starting the assembly.

Tools required:



Fixed spanner: 5mm

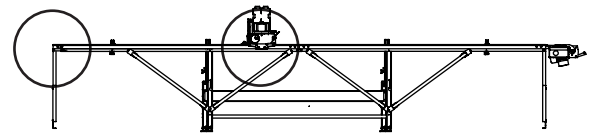


Fixed spanner: 6mm

Sawmill symbol:

This refers to the location of a specific step of the assembly.

This refers to the saw unit's position on the sawmill.



1

Order of assembly



Flange bolt



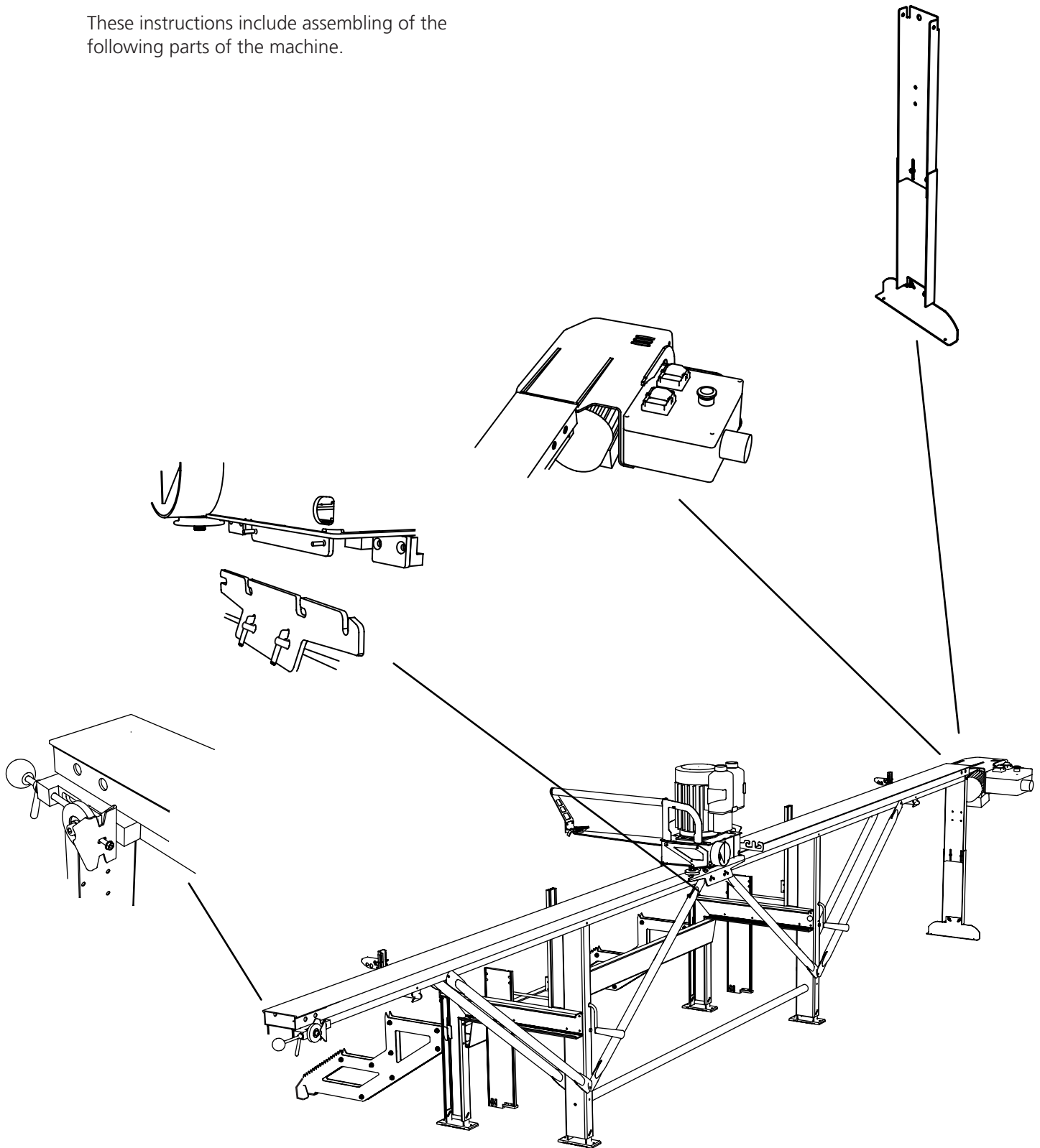
Flange nut



Flat washer

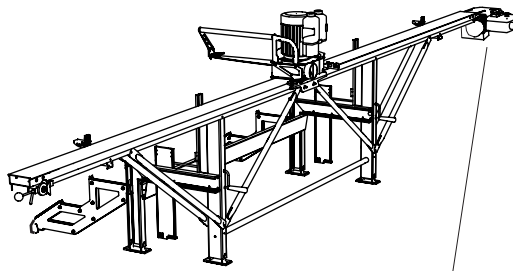
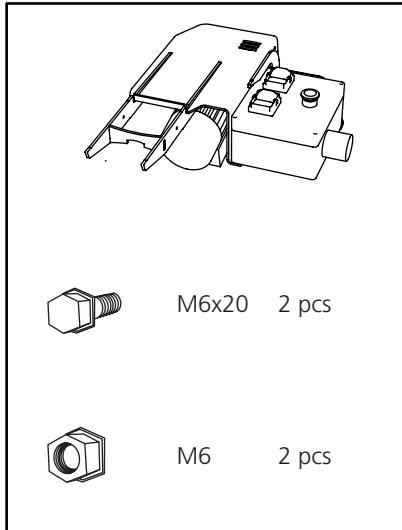
## ASSEMBLY

These instructions include assembling of the following parts of the machine.

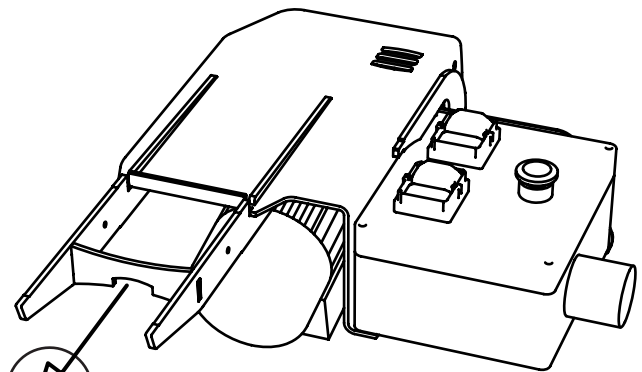


## ASSEMBLY

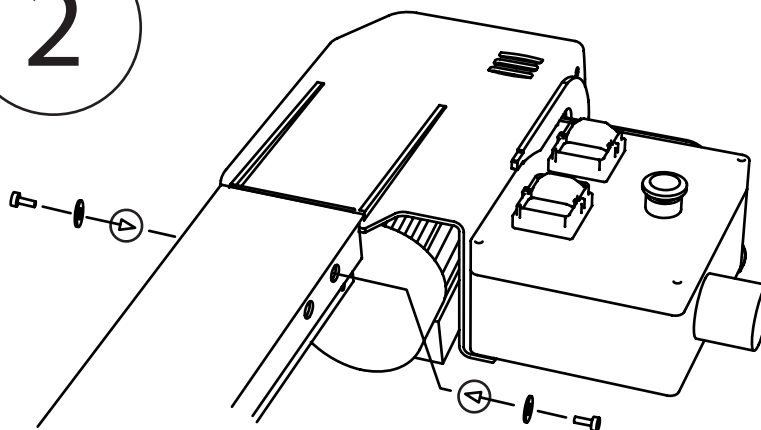
**Tip:** The component box shows the components that are to be used for each step of the assembly.



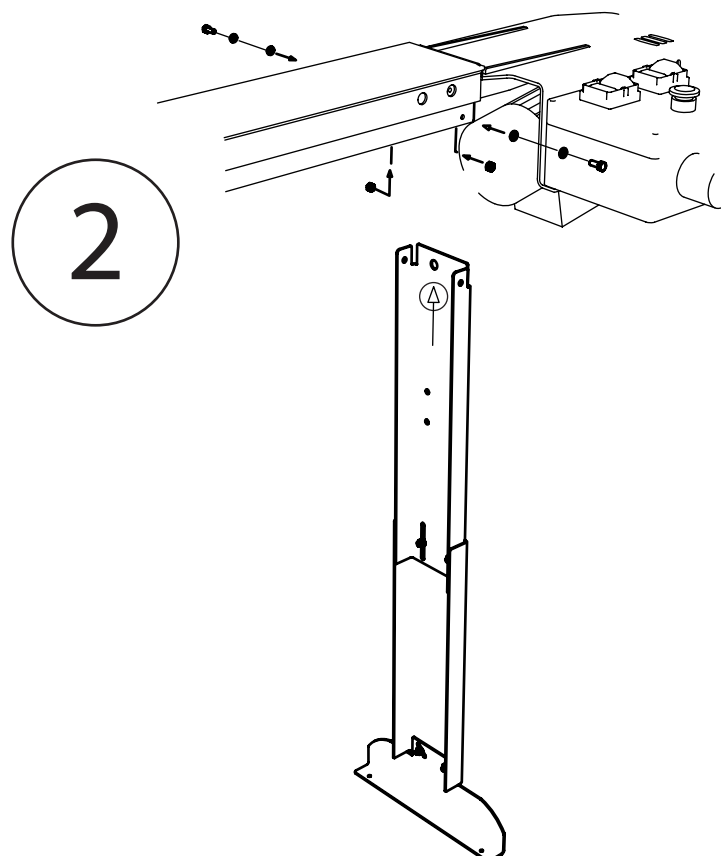
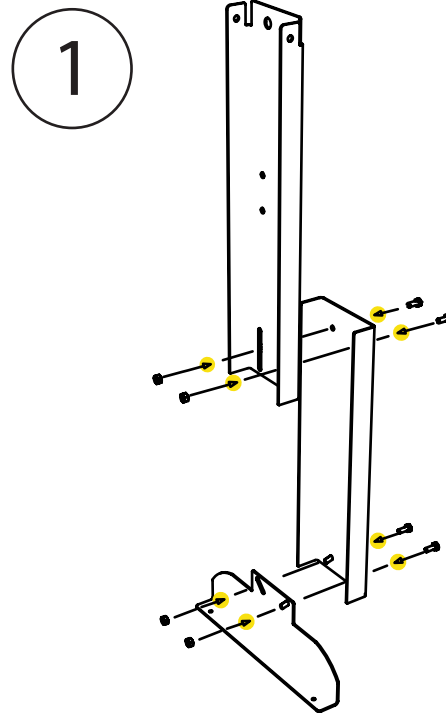
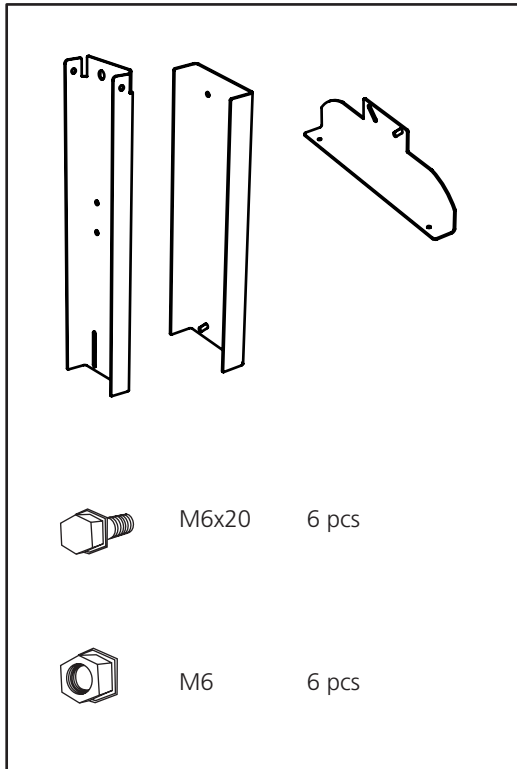
1



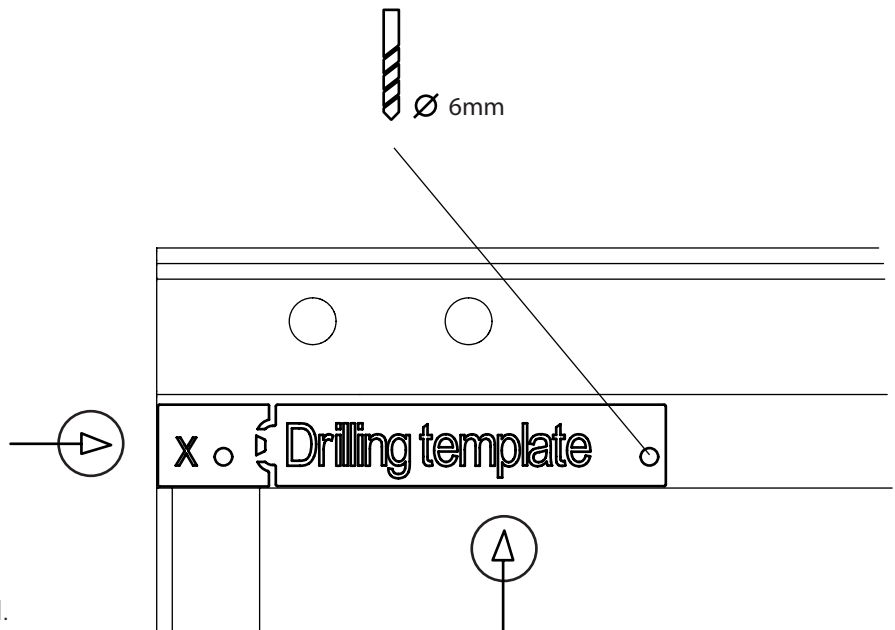
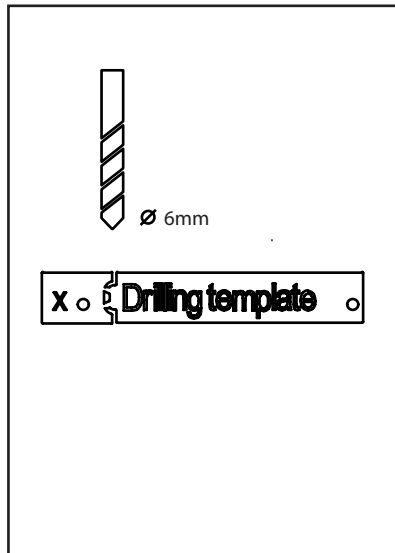
2



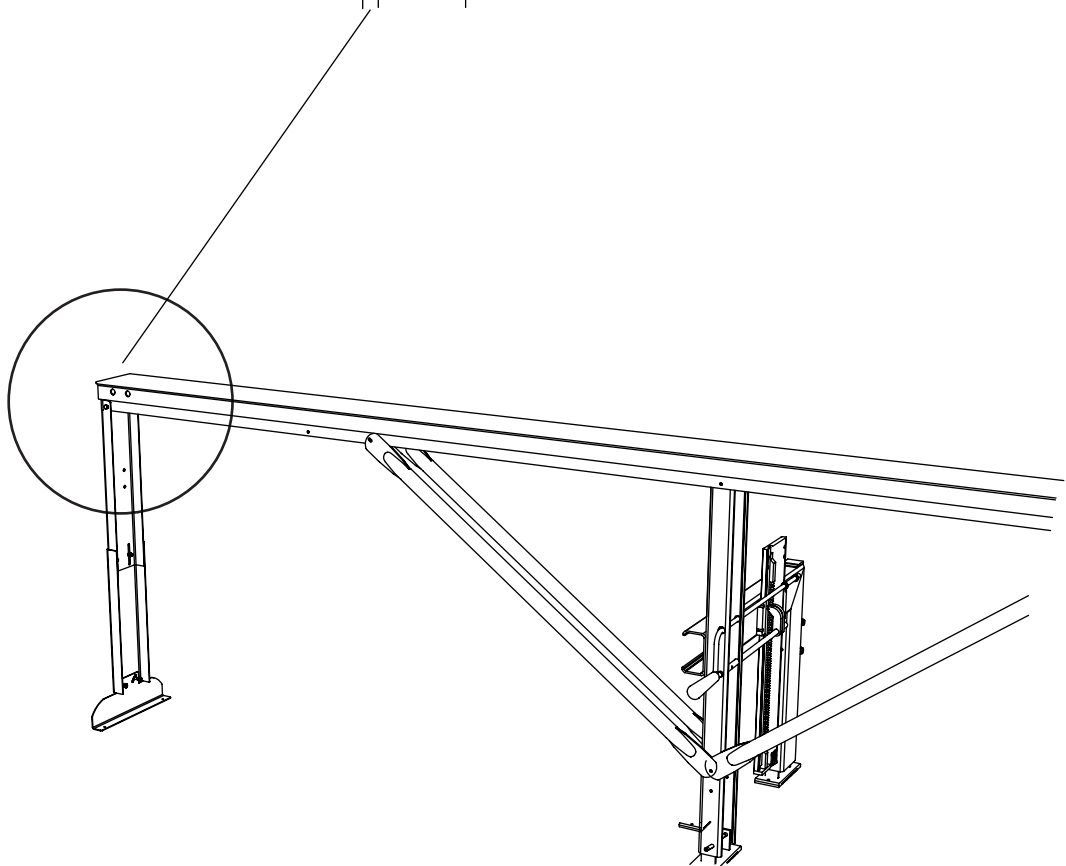
# ASSEMBLY



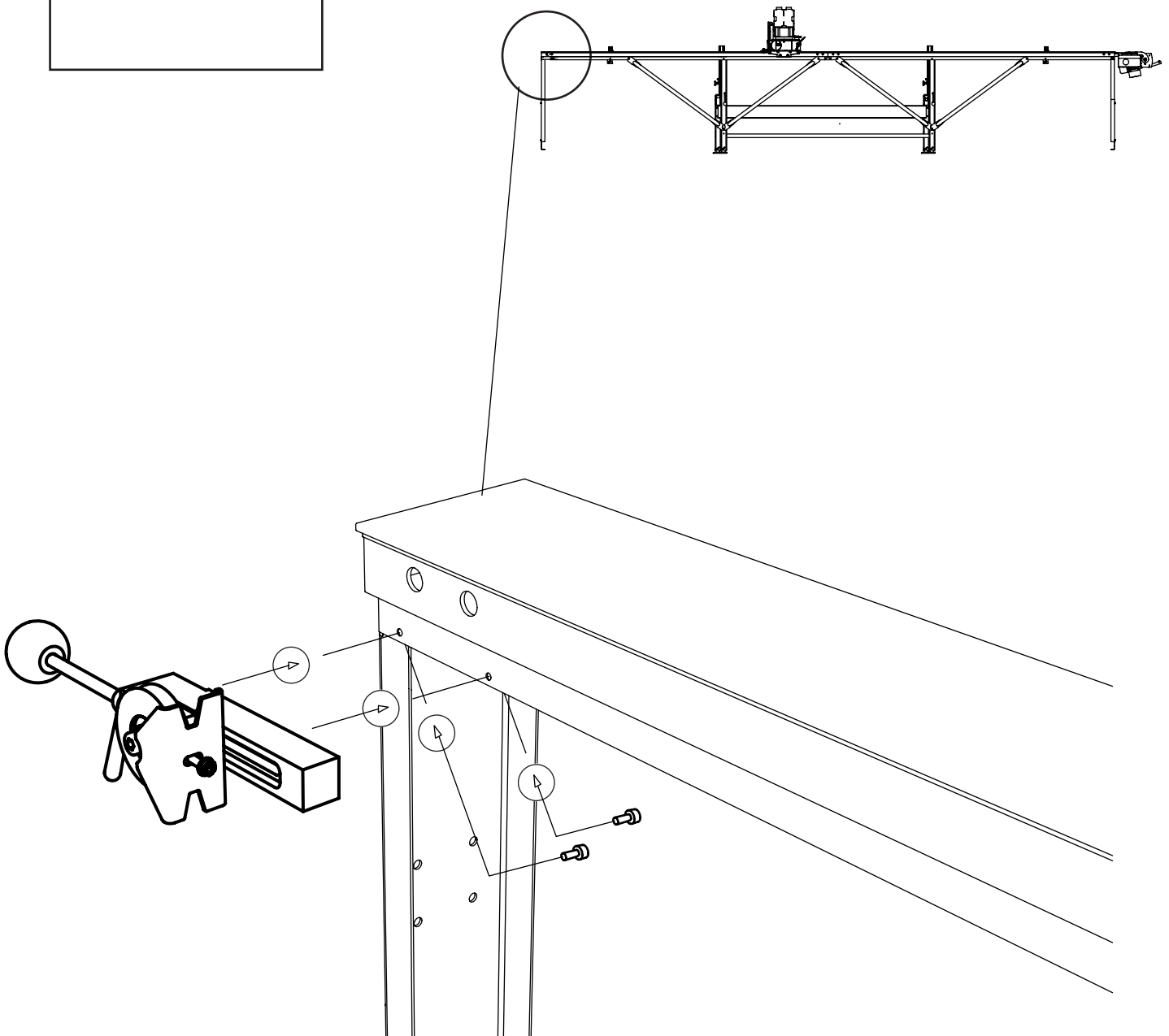
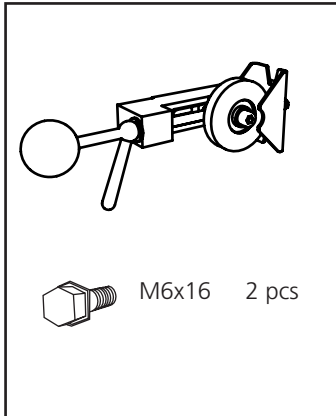
## ASSEMBLY



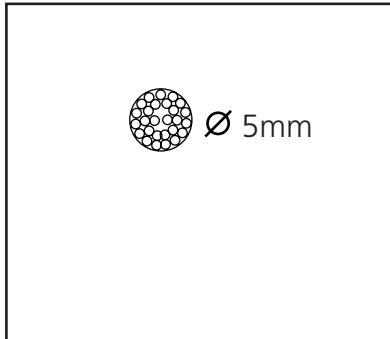
**Tip:** Use a clamp to secure the drilling template to the sawmill.



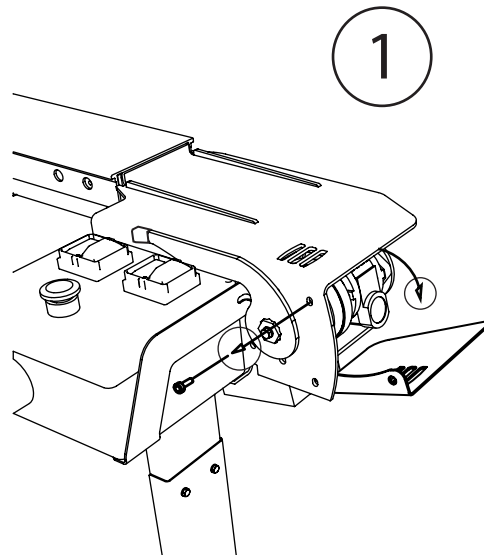


**ASSEMBLY**

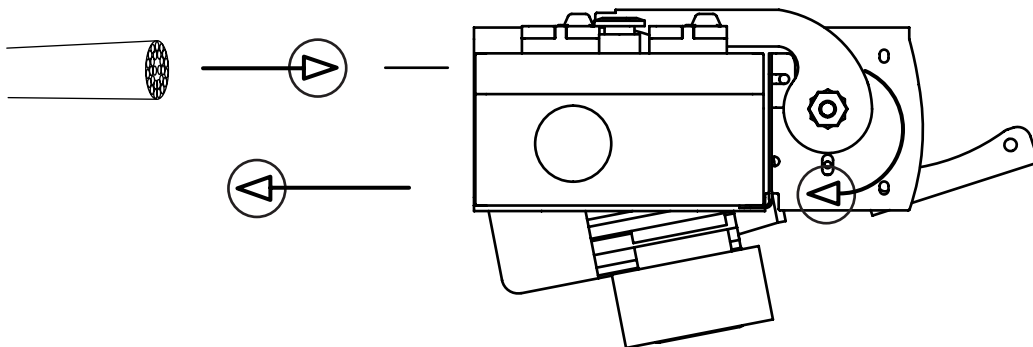
## ASSEMBLY



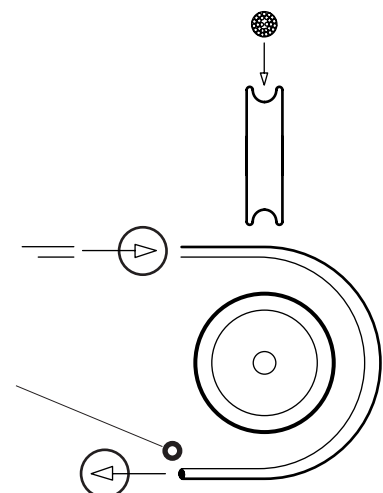
**Tip:** When installing the feed wire, it is easier if you start at the motor side.  
Follow the instructions.



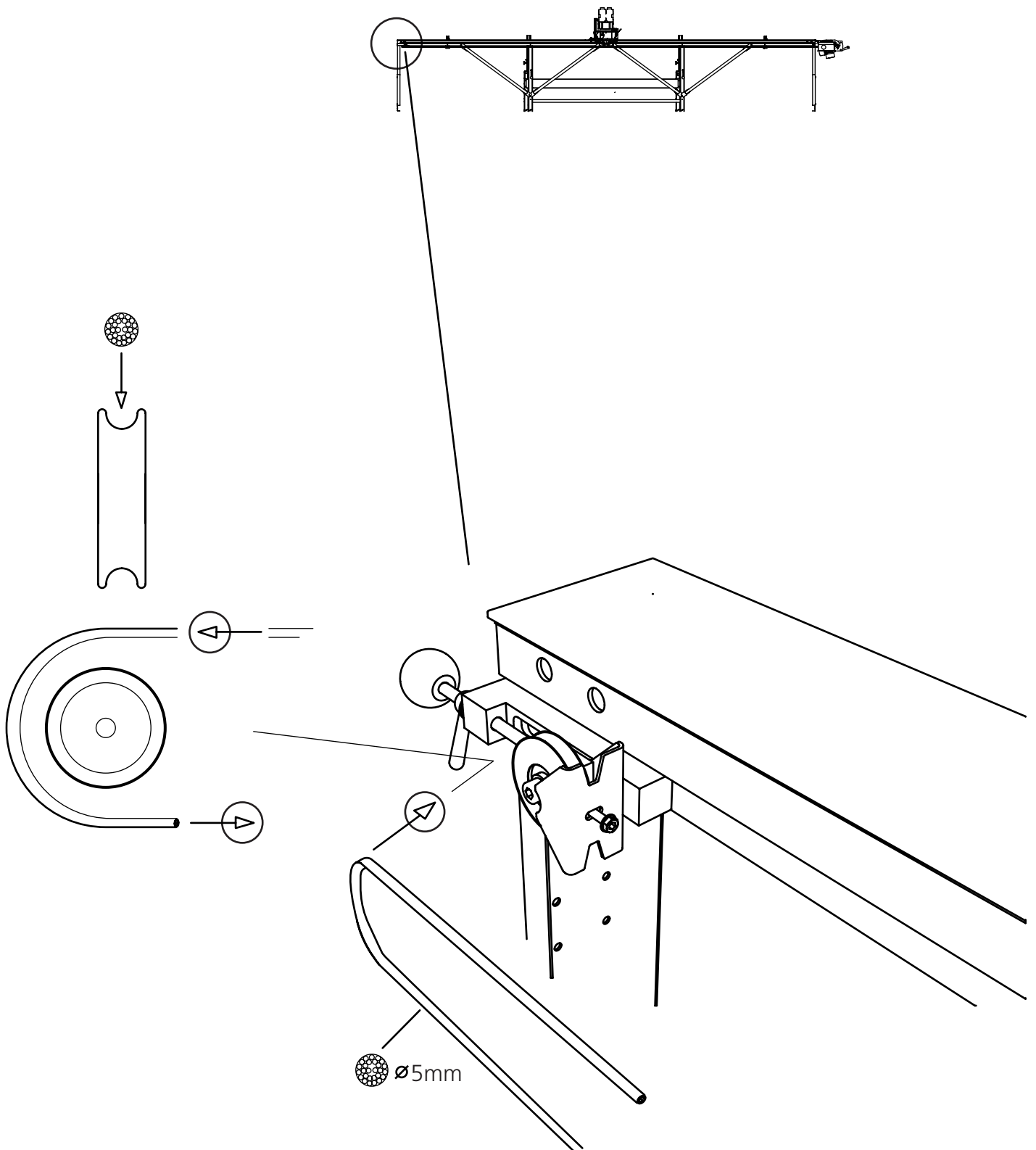
2



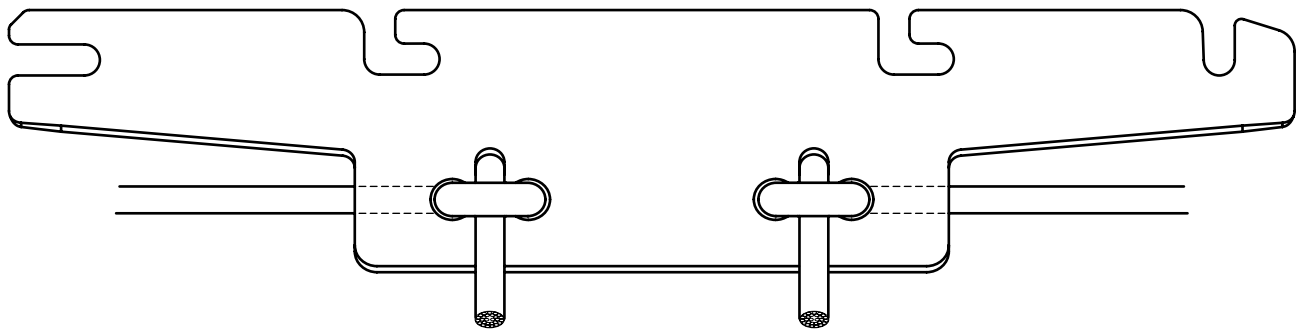
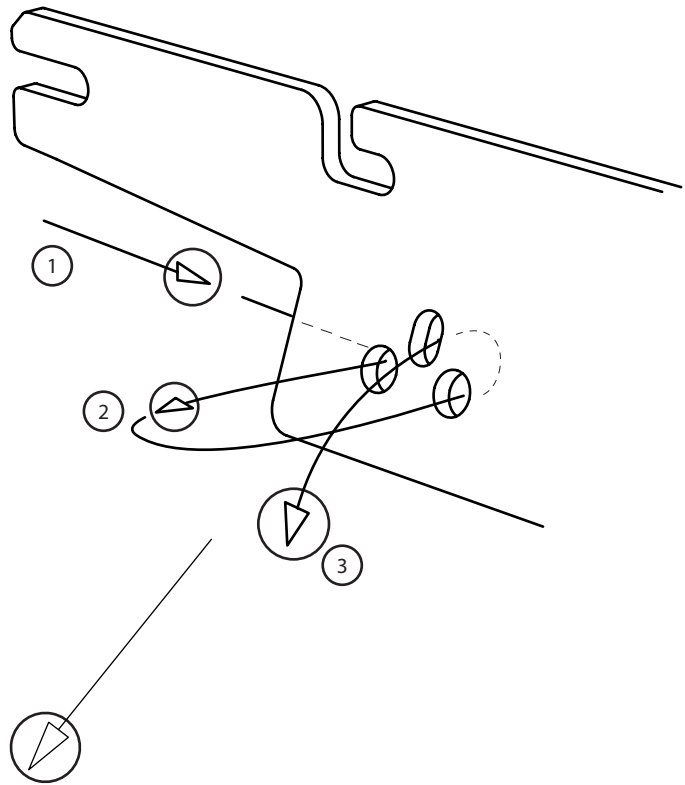
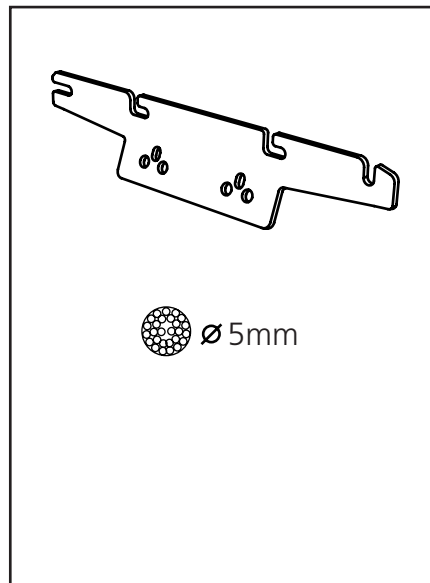
**Important:** Make sure that the wire is led below the guide bolt, which is located after the pulley.



**ASSEMBLY**

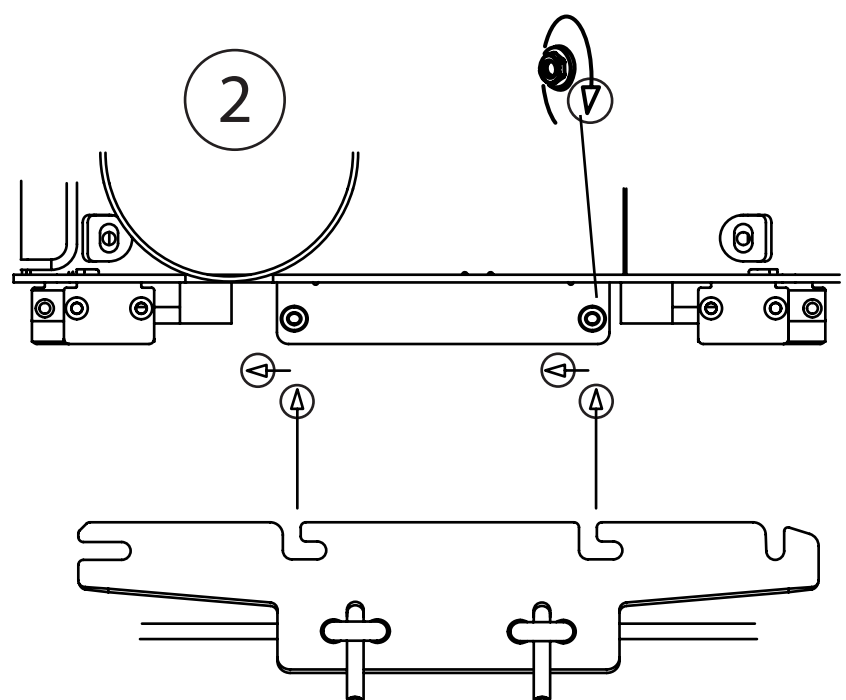
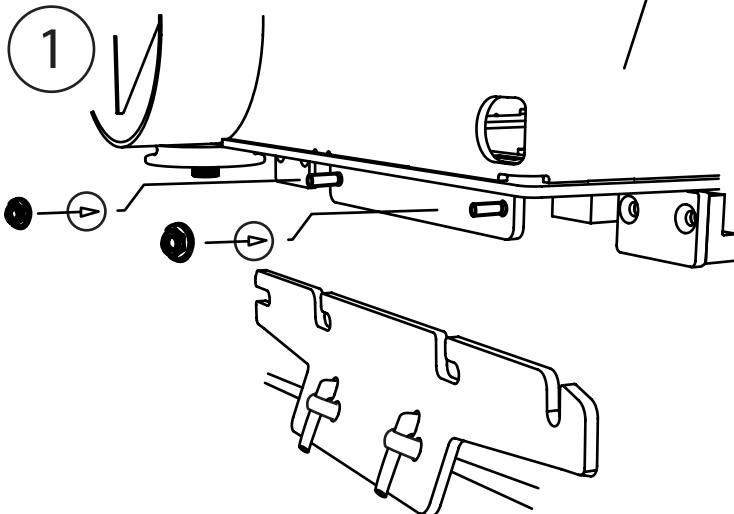
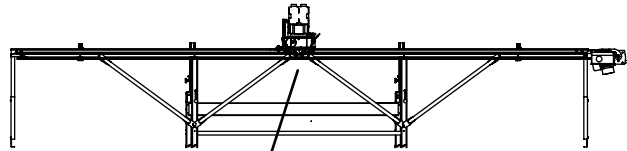
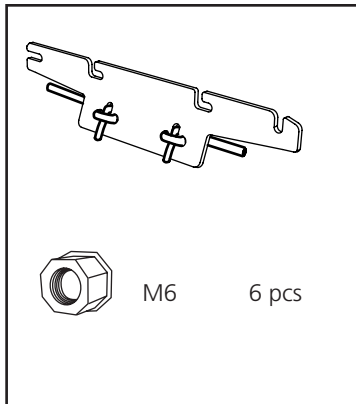


## ASSEMBLY



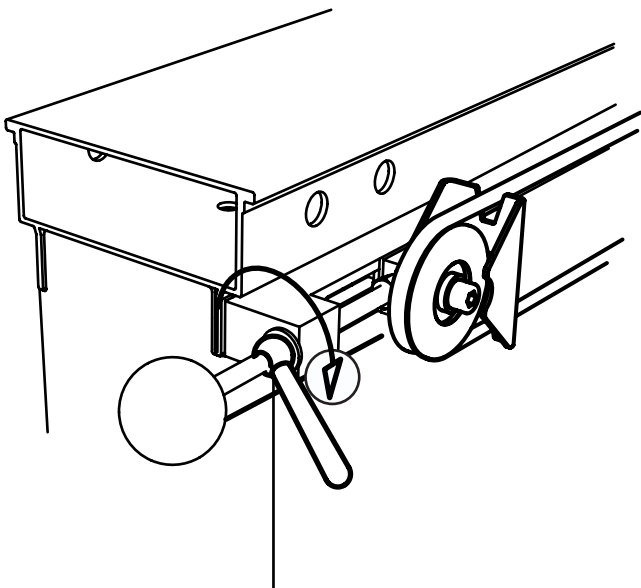
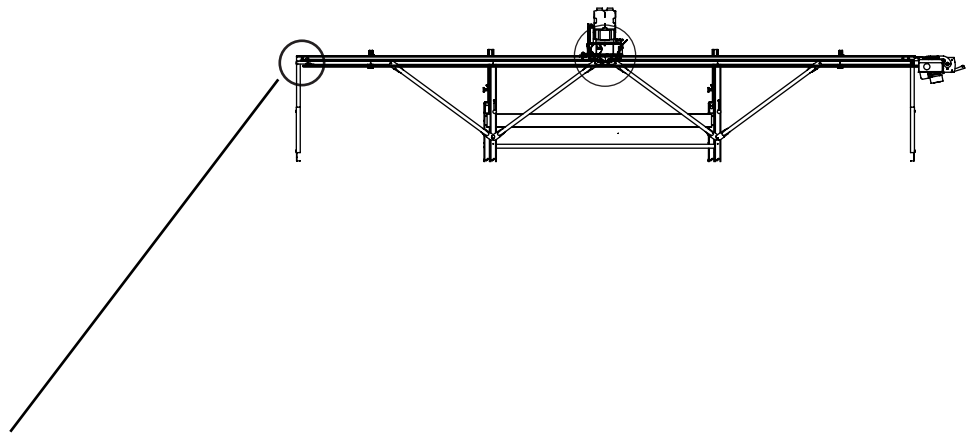
**Tip:** Be sure to tighten the wire as much as possible before fixing it to the attachment plate.

# ASSEMBLY



## FEED PRESSURE

**!** **Important:** It is important that the electric feed unit has the right feed pressure to work satisfactorily. Tighten the wire until it stops slipping in the pulley. The feeding may need to be readjusted after a period of use.

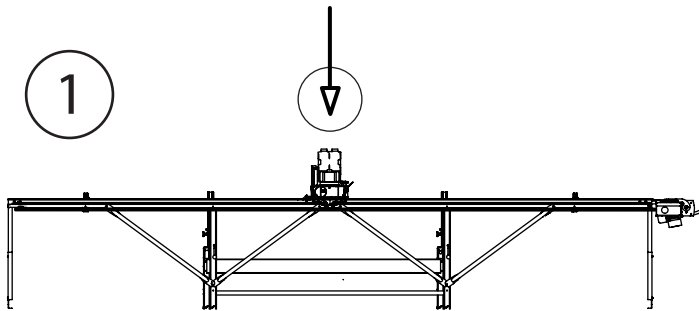


Tighten the feed wire until it does not slip in the pully at the motor side.

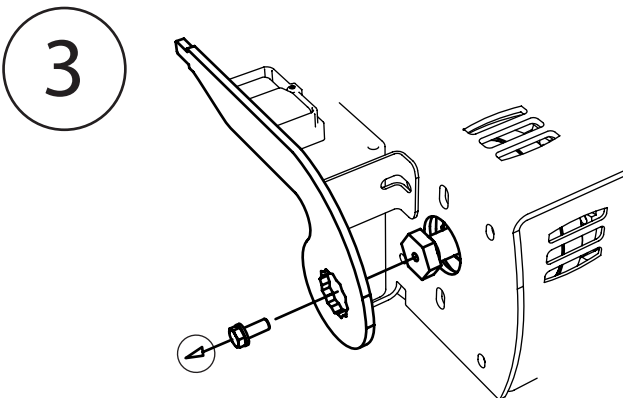
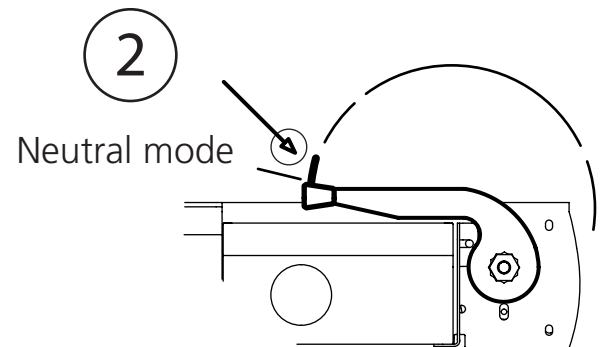
## SETTING OF NEUTRAL MODE



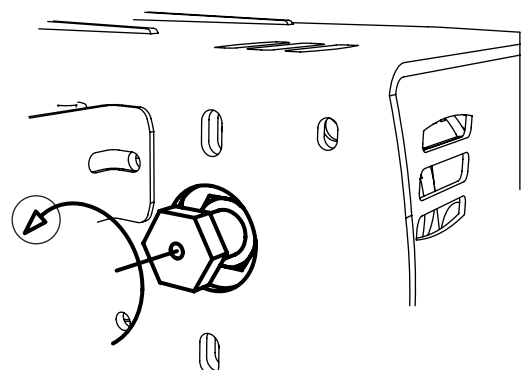
**Important:** The purpose of this adjustment is to ensure that the position of the control lever corresponds with the clutch. Be careful and follow the instructions.



**Neutral mode of the feed unit:** Position the saw unit on the guide rail's centre. Check that the control lever is in its neutral position. Unscrew the lock bolt from the control lever to reach the pressure bolt. Then loosen the pressure bolt.

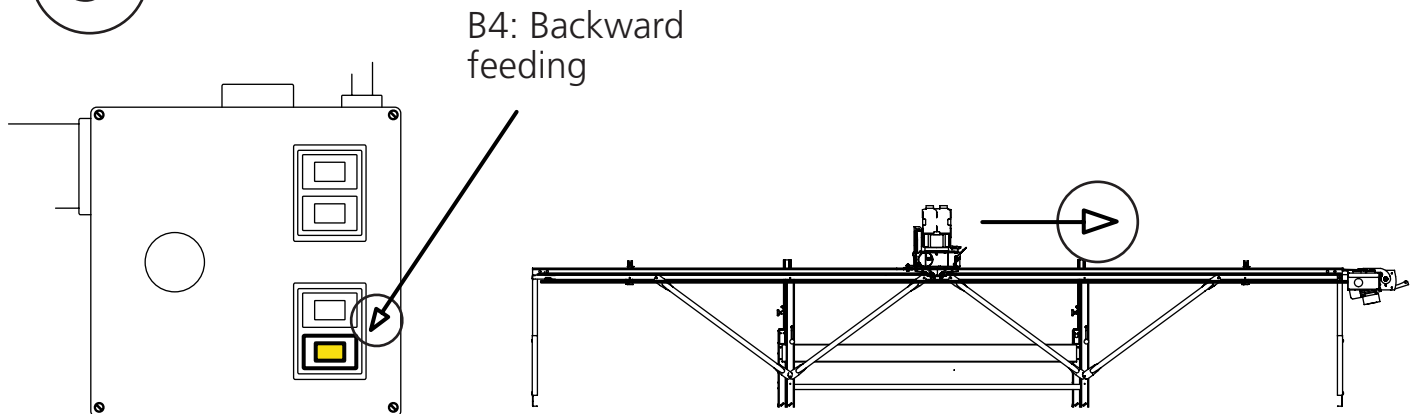


Loosen the pressure bolt.



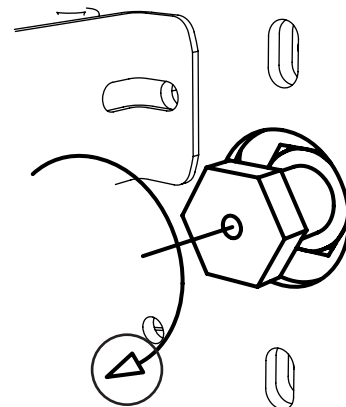
## SETTING OF NEUTRAL MODE

5



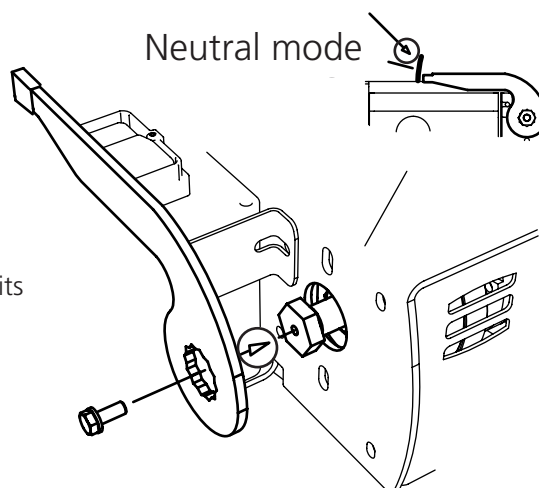
**Setting:** When you start backward feeding (B4) the saw unit will stand still. To adjust the neutral mode, tighten the pressure bolt until the saw unit just begins to move. When this happens, you loosen the bolt slightly until the saw unit stops again.

**Tip:** It can facilitate to use the control lever handle as a tool when adjusting the pressure bolt.



6

Reinstall the control lever in its neutral position.

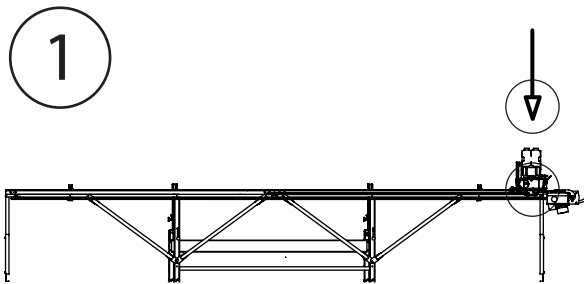




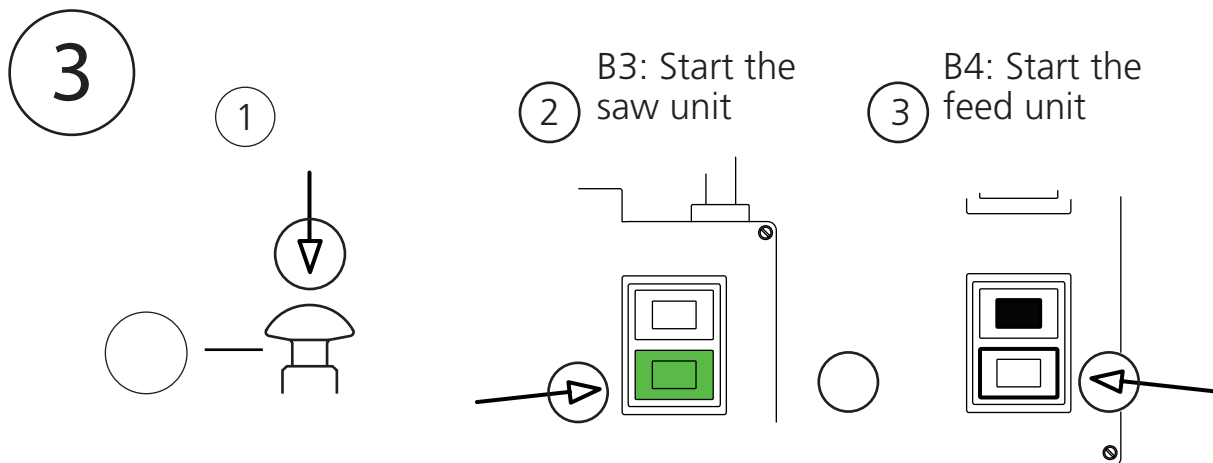
# OPERATION

## Forward feeding

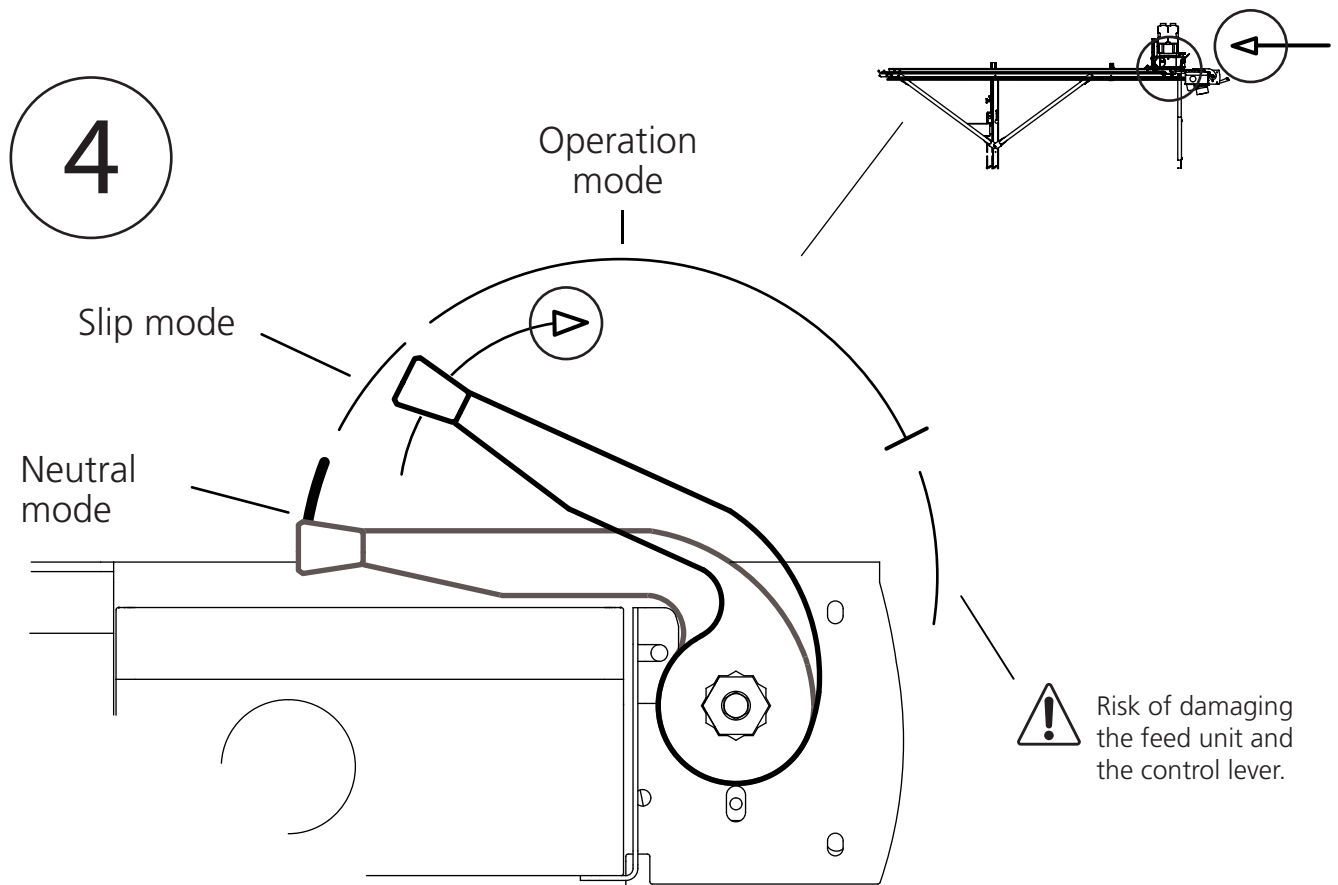
**!** **Important:** When using the saw unit and forward feeding, the enabling switch has to be pressed down.



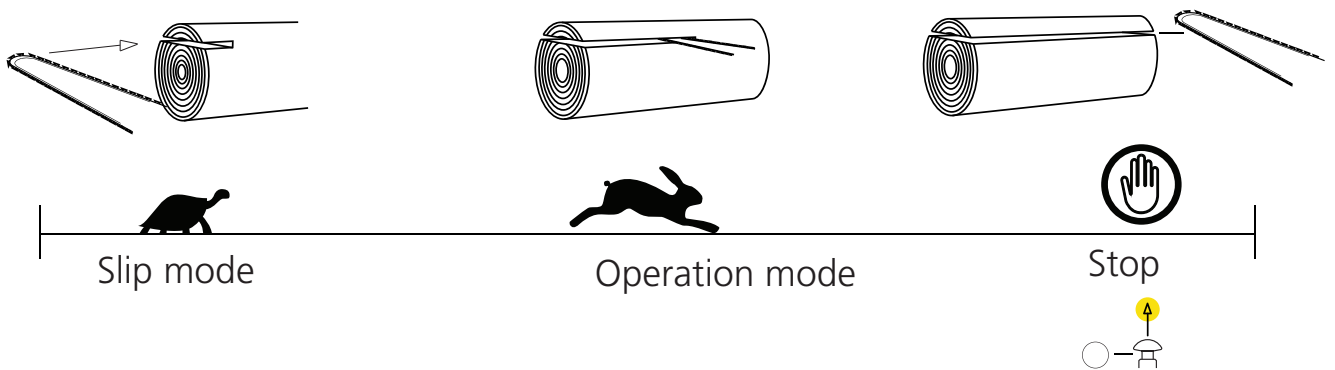
Place the material that is to be sawn on the sawmill according to the instructions in the LOGOSOL Sawmill manual.



## OPERATION



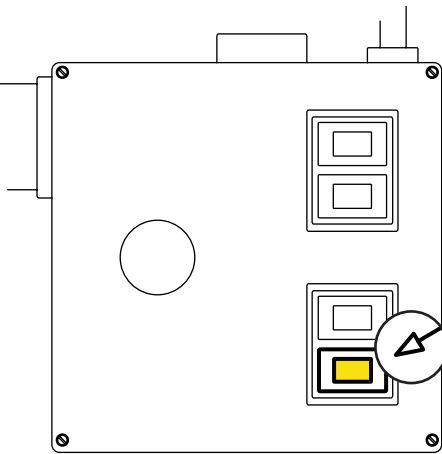
**Important:** To lower the stress on the equipment, it is important that the saw unit slowly enters the wood that is to be cut.



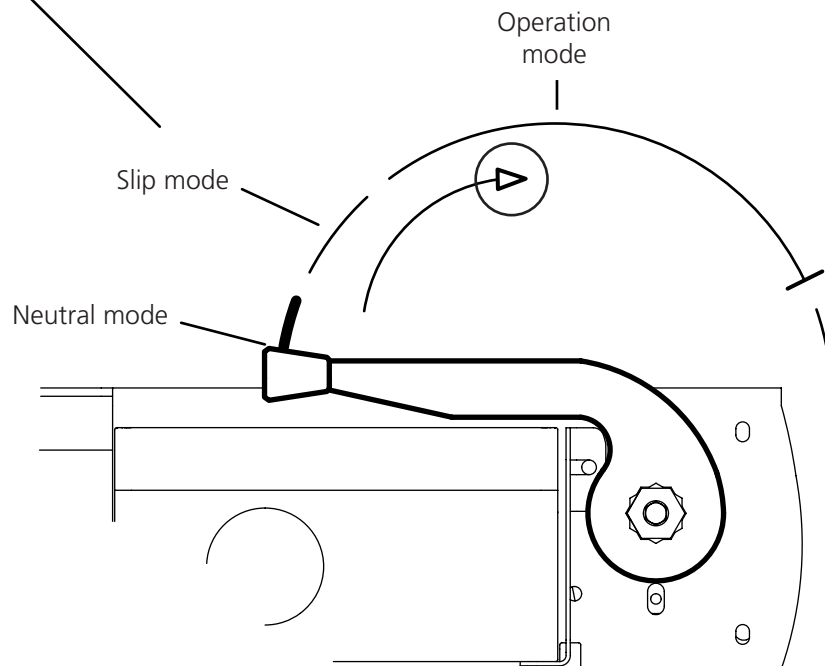
## BACKWARD FEEDING



**Important:** When feeding backwards, the button (B4) is kept pressed down. The enabling switch does not have to be pressed down. The saw unit has to be turned off during this operation



B4: Backward feeding



## MAINTENANCE

### Maintenance

The feed unit can behave strangely the first hours of operation. The wire may need to be retightened a couple of times before it becomes fully extended, and it takes some time for the friction disc to be worn into the discs before full feeding pressure is attained. Also, the feeding force might pulsate a little, but this will decline in the course of time.

If the pulsation becomes worse or does not decline after a couple of hours, read the section 'Trouble shooting' or contact Logosol.

Normally, the power adjusting lever has to be adjusted a couple of times during the first working day.



**Important:** Regularly check that no sawdust is building up in the pulley or the clutch disc. Be extra attentive when it rains, or when extremely wet or resinous timber is sawn. If this is overlooked there is risk that the wire wriggles off. Clean the pulleys with a thin piece of rigid plastic, or the like. Do not use tools of steel.



**Important:** Regularly check the wear of the groove in the secondary clutch disc (see exploded view on p.32). This is a wear detail that will need to be replaced at regular intervals.

### Condensation

If the feed unit is stored outdoors or in an unheated place, there is risk that water condenses in the control panel and in the motors due to variations in temperature. Under adverse conditions, there can be several decilitres of water.



**Danger:** Risk of electric shock and that the equipment becomes damaged.



**Important:** Check that there is no water in the system. The control panel and the motors have a drain plug or a bolt that can be opened to drain out any water that may have accumulated. The control panel's plug is located on the panel's underside. On the feed motor it is located at the side of the motor. On the electric saw it is either located at the belt pulley or at the side of the motor. Accumulated water in the equipment does not constitute a reason to make complaints.

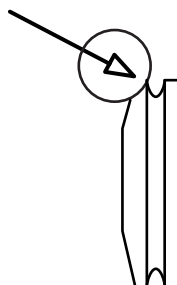
### Other maintenance

Cover the feed unit and the saw unit when they are not being used.

Long-term storage: Clean the feed unit and lubricate the ball bearings. Store the feed unit in a heated place to prevent condensation caused by variations in temperature.

When removing the paint on the top of the loading ramp: Rub off rust and paint flakes, wipe off with ethyl alcohol, and paint with black paint in order to keep the feed unit nice and clean.

Make sure that the decal on the top of the loading ramp is intact and legible. If not, order a new decal.



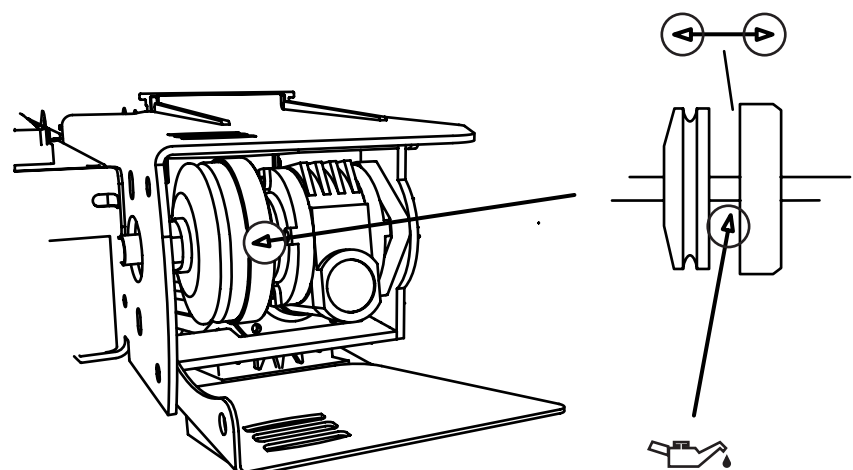
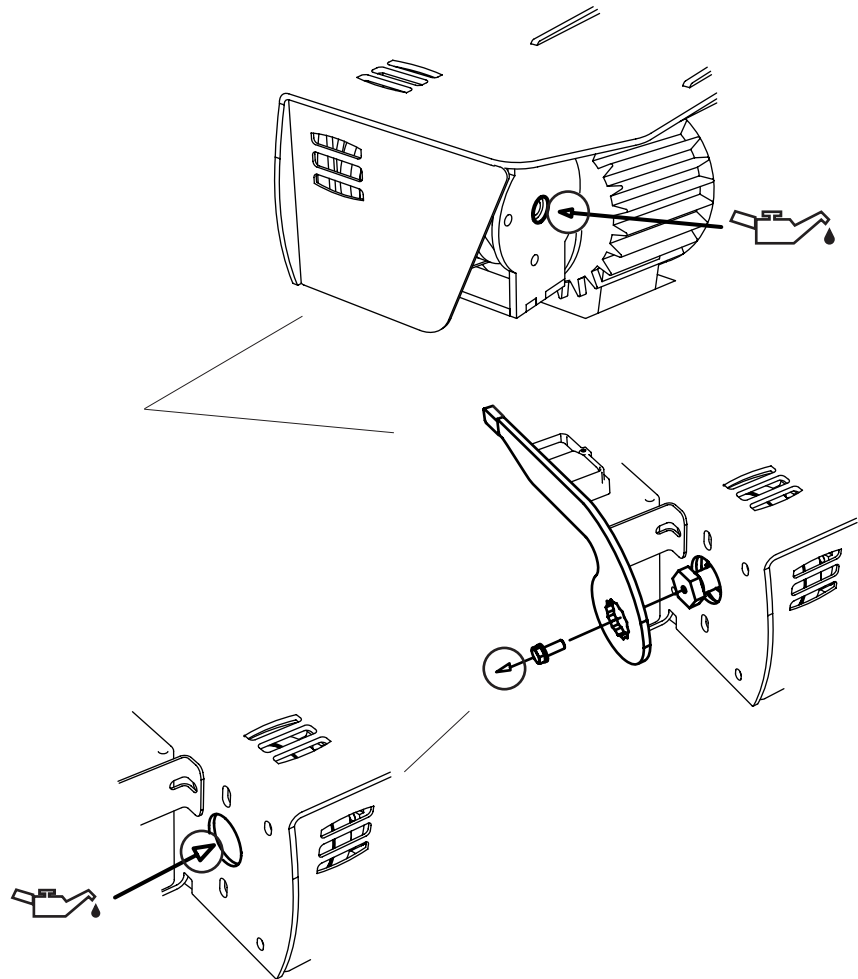
## MAINTENANCE

### Lubrication points

Check that the ball bearings always are lubricated. Use adhesive oil in the ball bearing of the clutch. Be careful not to use too much oil. One press on the adhesive oil can nozzle gives enough lubrication (ref. no: 9999-000-5100). At the control lever side you remove the pressure bolt to reach the bearing of the secondary clutch disc. At the same time, lubricate the friction disc on both sides to prevent rust, and to get a smoother operation of the feeding. This can be done by loosening the pressure bolt about 5 mm and parting the clutch.

Lubricate the square-shaped rubber gasket of the 6-pole plug with a silicone lubricant. (ref. no: 9999-000-5110). This should be done daily if the same feed unit is used for several machines and there is heavy wear on the gasket. Check that the gasket is not worn out and replace it if it breaks (ref. no: 9999-000-9999).

Lubrication of both sides of the friction clutch and the spindle. After maintenance is done, the neutral mode of the feed unit must be adjusted (see p.24)



## TROUBLESHOOTING

### Troubleshooting



**Important:** Always stop the machine if you suspect that something is wrong with

1. the wire tension
2. the groove in the clutch disc
3. the lock pins in the spindle



**Important:** Check the saw unit and the cutting equipment. If the cutting equipment does not cut as it is supposed to, it can result in poor feeding.

#### The feeding does not start:

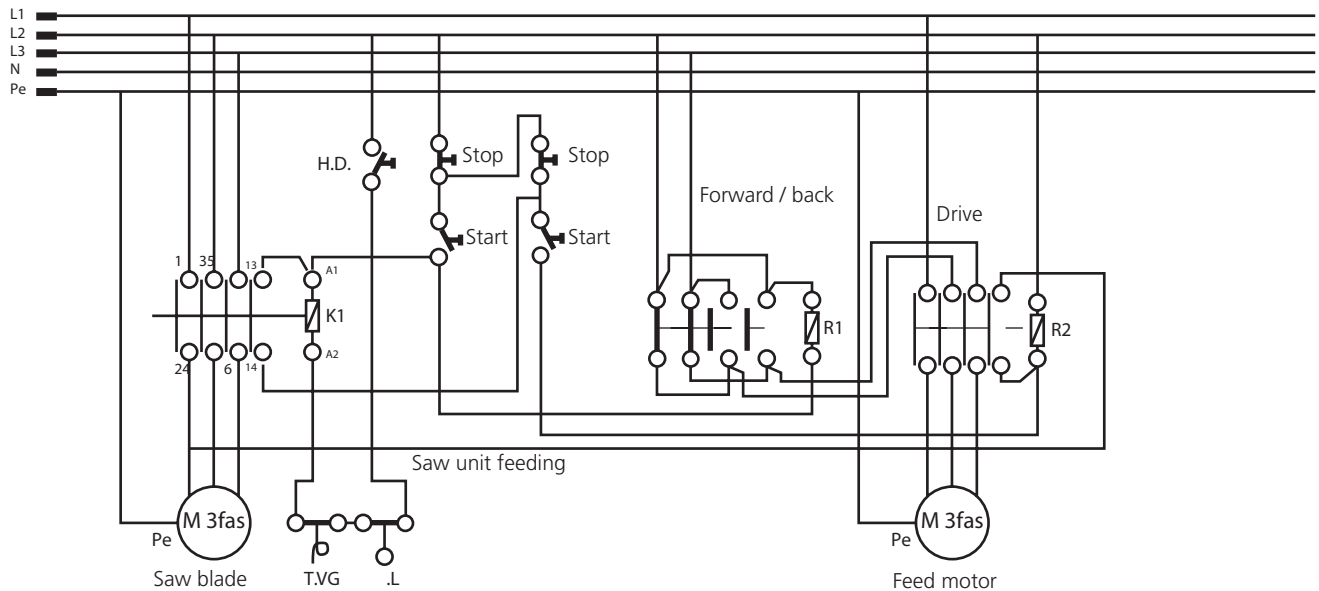
Do you press the enabling switch button (B5) down while you are trying to feed forward? The enabling switch button must always be pressed down during feeding and forward machining to make the electric drive work. See more about the functions of the enabling switch under the section 'Use of the machine' on page 8.

#### The feed unit does not pull:

- The feed wire is not tightened enough, Check the tension of the wire, see 'Feed Pressure' on page 22.
- Sawdust has accumulated in the clutch disc wire groove. Clean the groove, see 'Maintenance' on page 28.

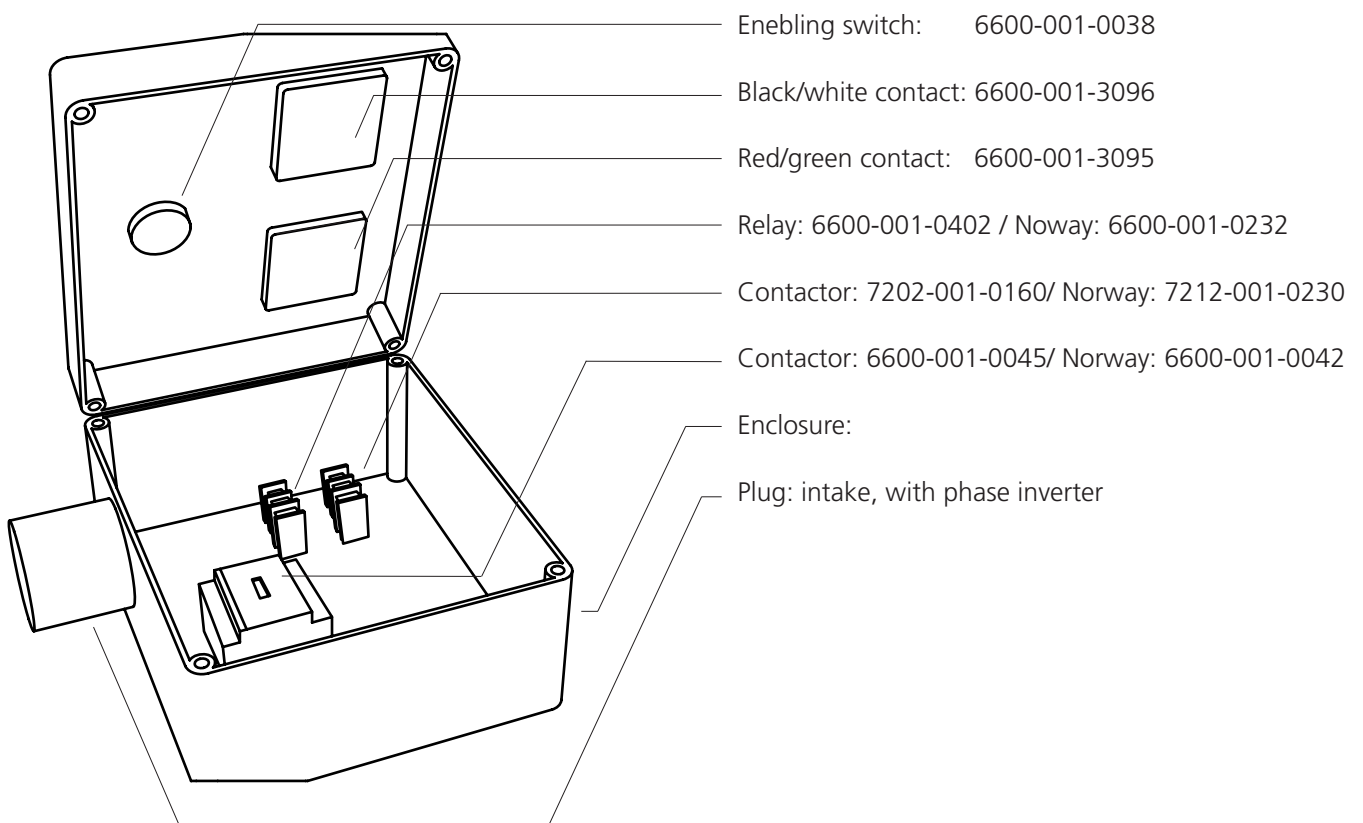
# WIRING DIAGRAM

## Circuit diagram

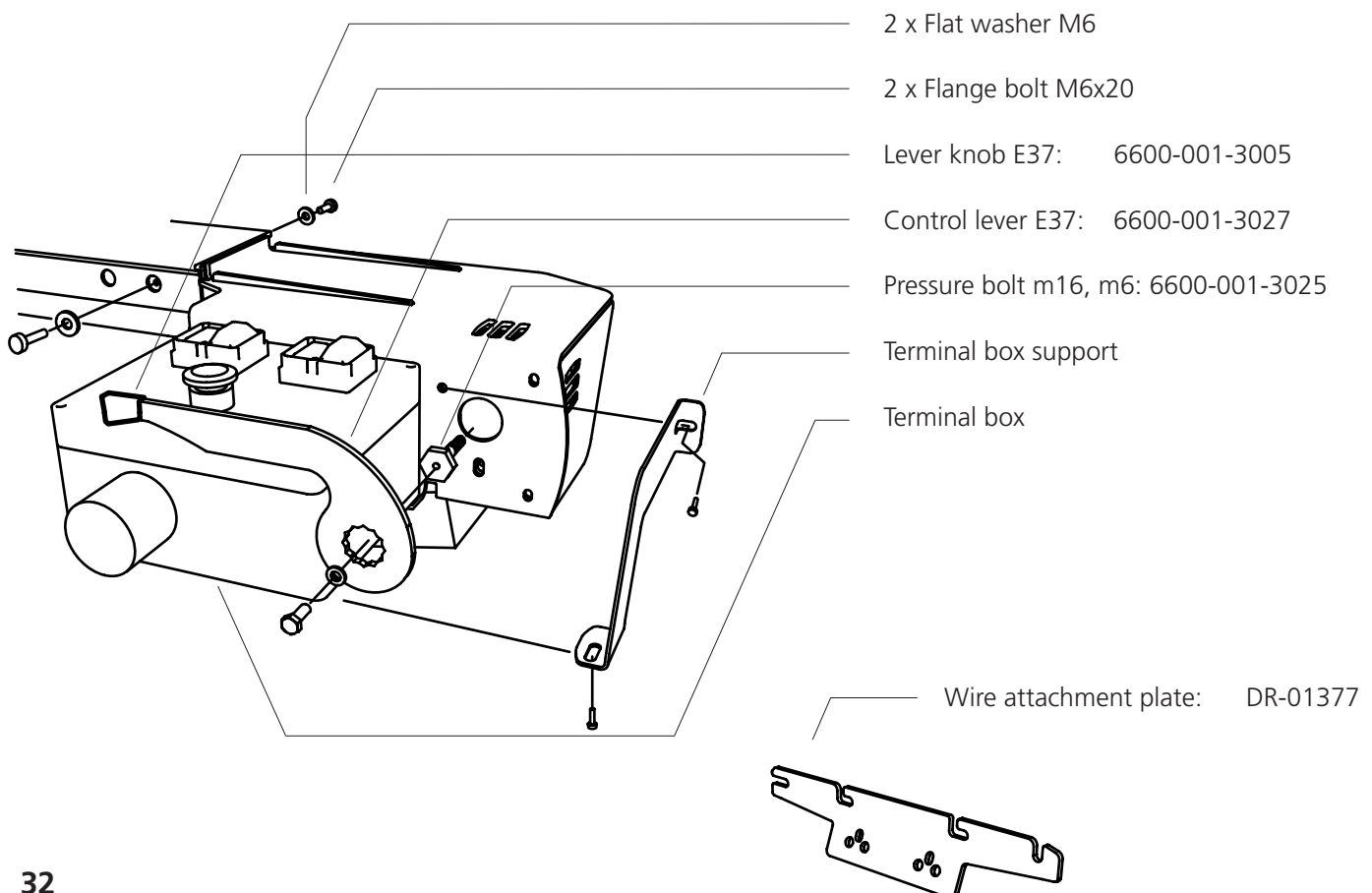
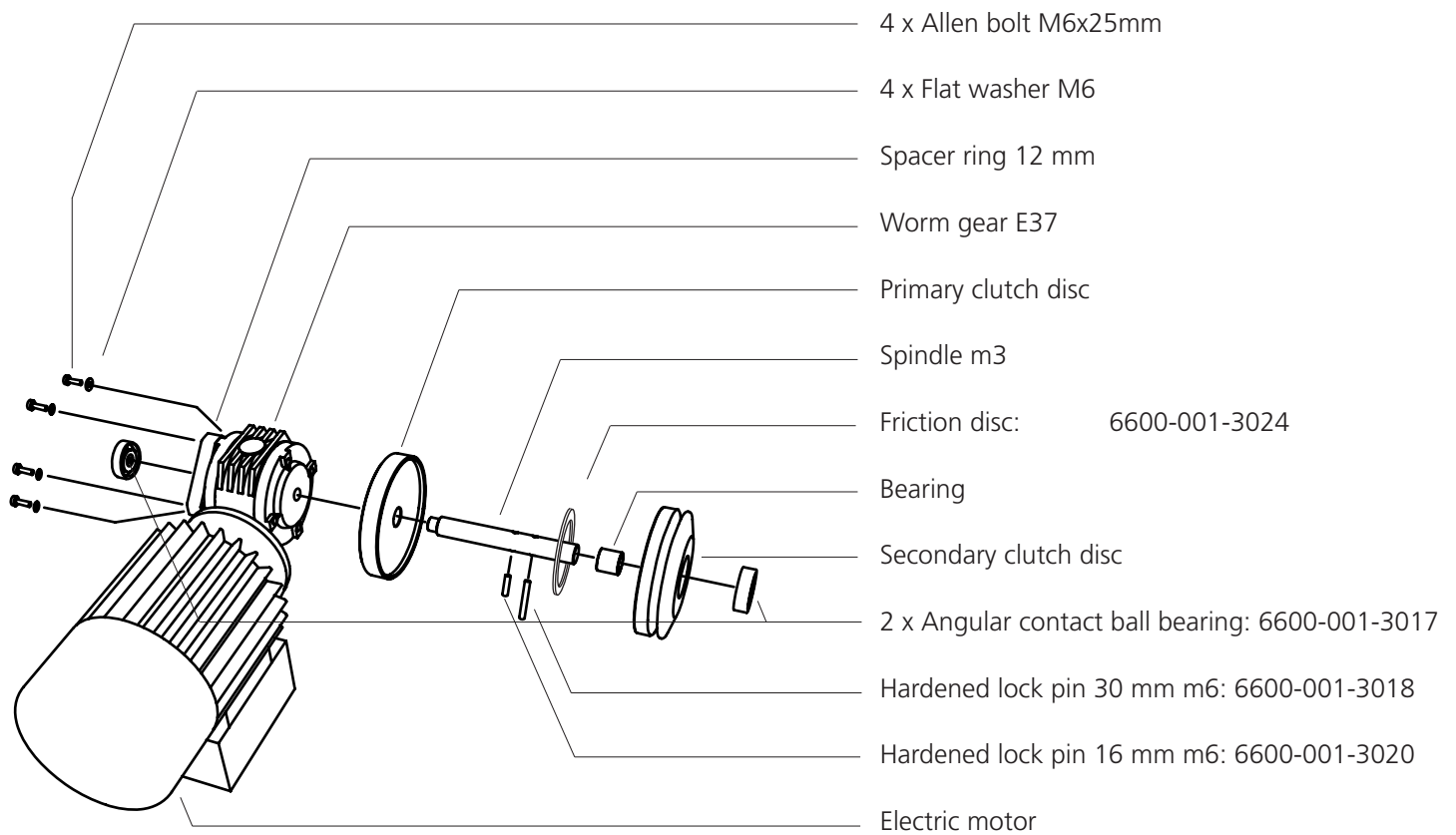


## Electrical components list:

Complete terminal box E37: 6600-001-3027

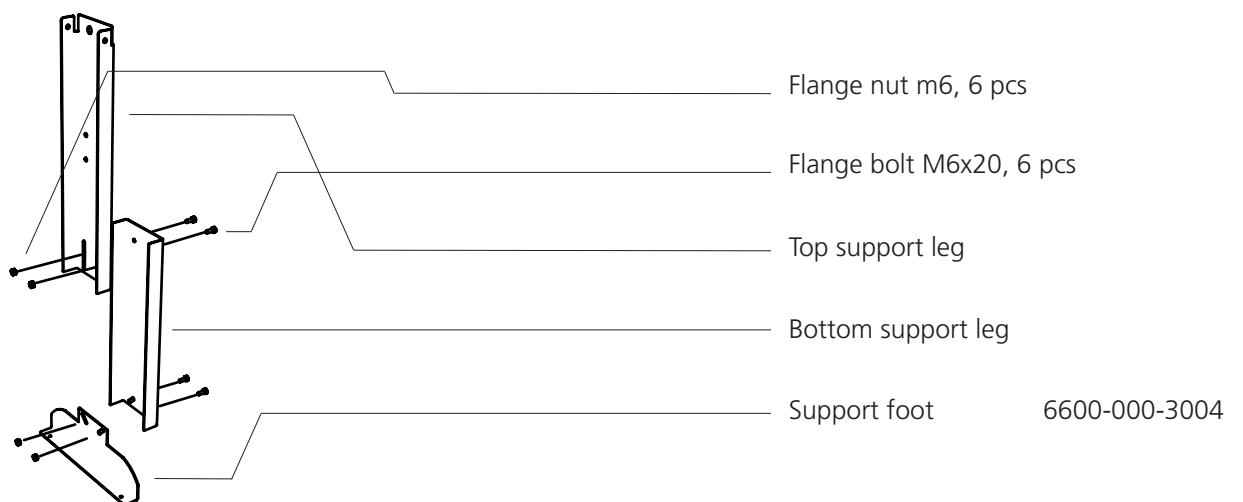
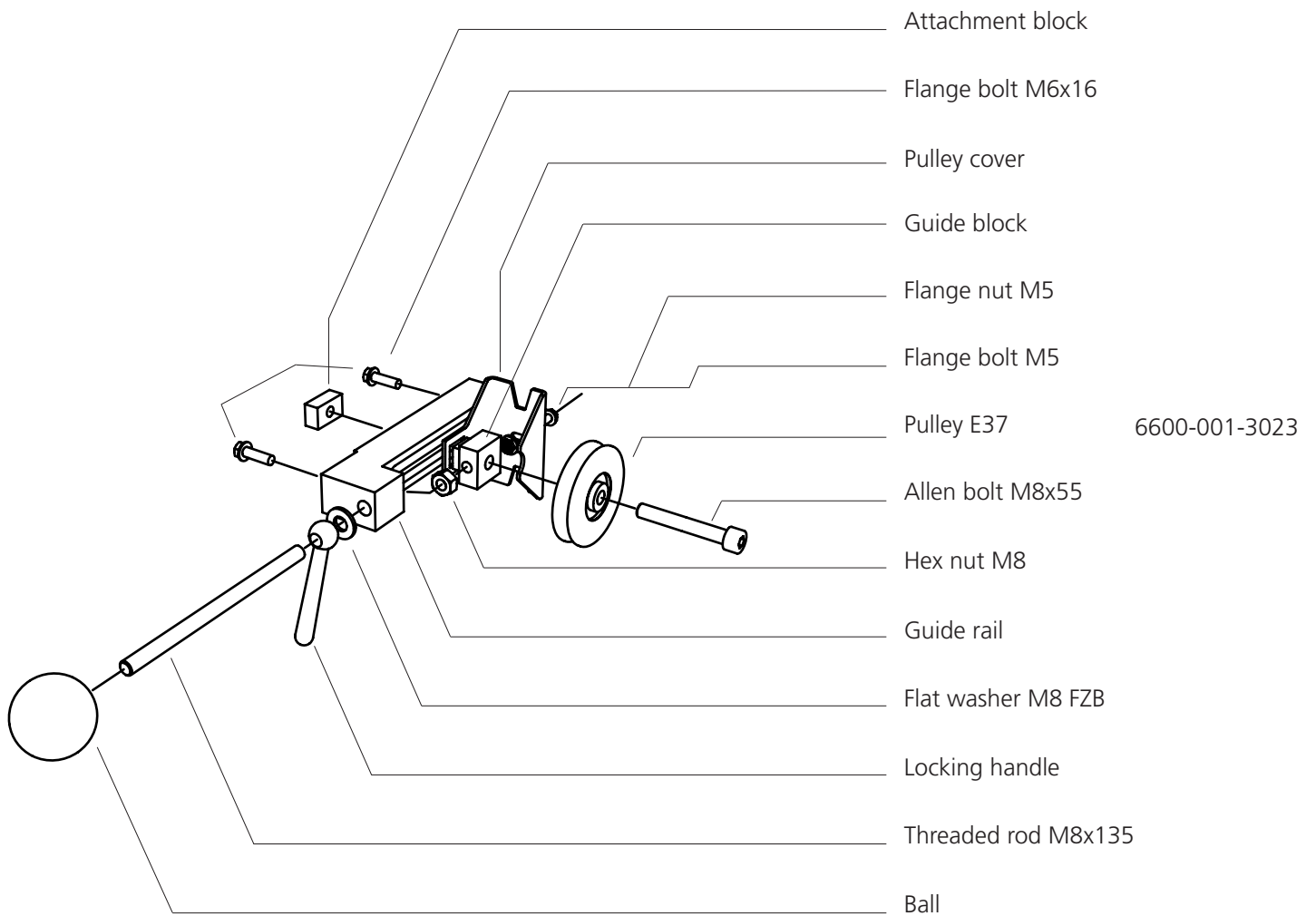


## EXPLODED VIEW





## EXPLODED VIEW



Drilling template





## Declaration of Conformity

The manufacturer, Logosol AB, Fiskaregatan 2, S-871 33 Härnösand, Sweden, tel. +46 611 18285, hereby declares that E37 Friction, with art. no. 6600-000-3015, is manufactured in accordance with:

Machinery Directive 98/37/EG, EMC directive 2004/108/EG, and LVD-directive 2006/95/EG,

and that it is manufactured in accordance with the following harmonized standards: EN ISO 12100-1, -2:2003, EN 60204-1:2006, EN 61000-6-1, -3.

The feeding machines Logosol E37 Friction are intended to be used together with the Logosol sawmill combined with Logosol's products E3000 / E4000 / E5000 / E8000 / Log House Moulder 3kW. E37 Friction may not be taken into use before the Logosol sawmill and the machinery conform to the EU machine directive, which is the case if all the safety rules and instructions that come with the respective included components are followed.

Härnösand 2008-02-27

A handwritten signature in black ink, reading 'Bengt-Olov Byström'.

Bengt-Olov Byström  
Founder and Chairman of the Board,  
Logosol, Sweden



**LOGOSOL SWEDEN**

Fiskaregatan 2, S-871 33 Härnösand, Sweden

Phone +46 611 18285 | Fax +46 611 18289

[info@logosol.se](mailto:info@logosol.se) | [www.logosol.se](http://www.logosol.se)