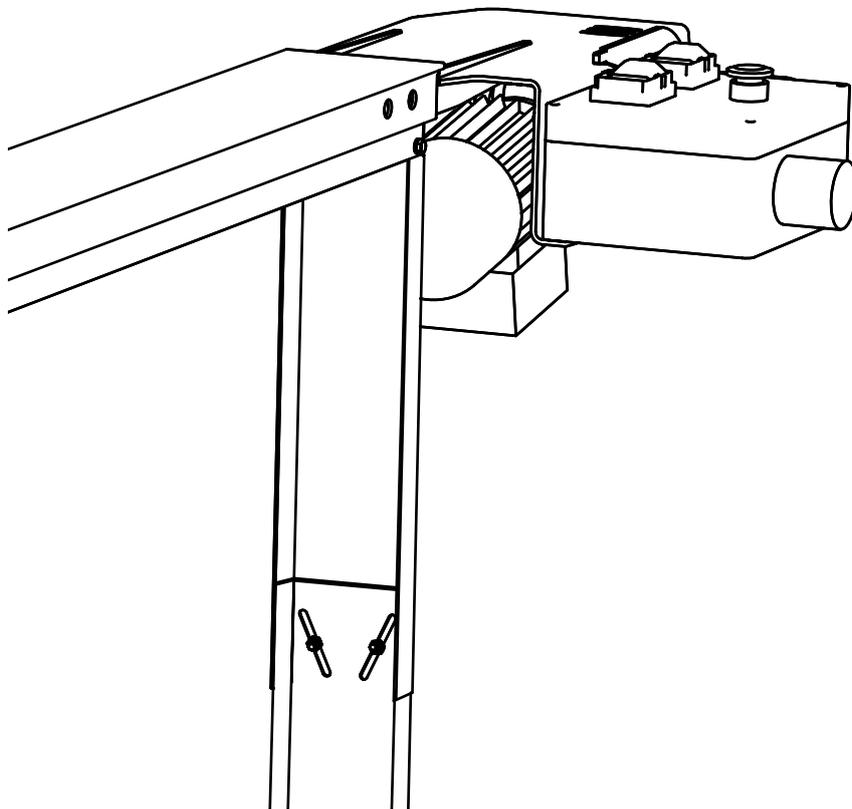


 **LOGOSOL**

USER MANUAL

Ref. no. 0458-395-0552



OPTIONAL ATTACHMENT

ELECTRIC FEED UNIT

EN

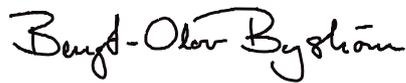
THANK YOU FOR CHOOSING A LOGOSOL PRODUCT!

Welcome! We are very pleased that you have demonstrated your confidence in us by purchasing a LOGOSOL product, 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 equipment. 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 equipment. Remember that the equipment 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 LOGOSOL product.



Bengt-Olov Byström
Founder and chairman,
Logosol in Härnösand, Sweden



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



This user manual contains important safety instructions.



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



LOGOSOL continuously develops its products. For this reason, we must reserve the right to modify the configuration and design of our products.
Document: Electric Feed Unit
Ref. No. User Manual, English: 0458-395-0552
Text: Mattias Byström, Robert Berglund
Illustrations: Mattias Byström, Martin Söderberg, Robert Berglund
Last revised: Augusti 2018
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SAFETY INSTRUCTIONS

- Read carefully through the entire user manual before starting to use the product. Failure to observe these safety instructions may result in fatal injuries.
- Make sure that everyone who uses the product 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 product. This also applies where the product is sold or loaned out.
- Minors under 18 years of age are not allowed to use the product.
- Make sure that children and animals are not in the vicinity when the product is being used.
- Anyone working with the product must be fit for work, healthy and in good physical condition. Make sure you take regular breaks when working with the product. Never use the product while under the influence of alcohol, narcotics or other drugs or medicines that can cause drowsiness or inattention.
- The product is only to be used where visibility is good. It is not to be used in the dark or where visibility is poor.
- Make sure there are other persons within earshot who you can summon if you need help.
- Only add extra equipment to the product 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 that occurs while using non-approved attachments on the product.
- If the saw unit used weighs more than 15 kg, support legs must be fitted under the guide rail ends. Risk of overturning.
- Always wear protective clothing and use personal protective equipment: Close-fitting work overalls are appropriate. Never work with the product 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.
- Wear strong protective gloves.

Key to symbols



For your own safety, read through the entire user manual carefully and do not use the product 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.

DESCRIPTION OF THE EQUIPMENT

The product has several integrated functions.

- Forward and reverse feed with stepless, variable pressure.
- Control panel for electric saw unit or log moulder
- Loading ramp that makes it easy to push the saw unit onto the guide rail.

En stor fördel med friktionskopplingen är att du indirekt reglerar hastigheten på aggregatet genom att ställa drivningstrycket. Detta gör att farten delvis blir självjusterade. 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.

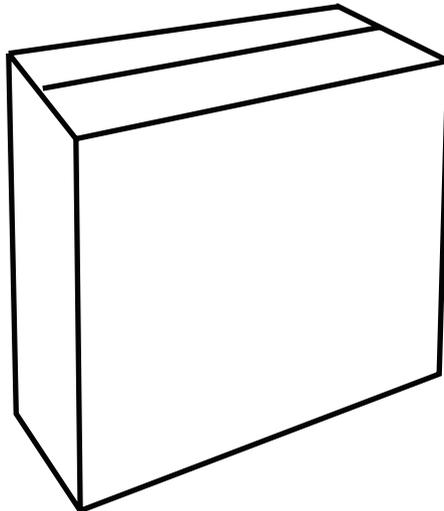
This can be compared to feeding machines that have adjustable speed, where the cutting equipment is exposed to very high stress when the cutting unit meets with temporary resistance that the operator does not manage to compensate for.

With the LOGOSOL Electric Feed Unit the guide bar and the chains will last longer, and it is easy to maintain optimum sawing speed.

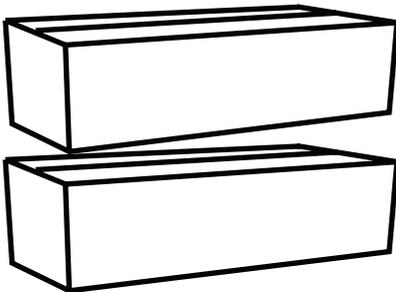
COMPONENTS: ON DELIVERY

The product comes in 4 boxes consisting of 1 wire tensioner, 2 support legs, and 1 electric feed unit. Check that all of these boxes are included in the shipment when receiving it.

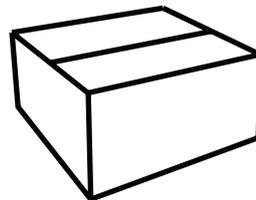
Electric feed unit
6600-000-3035 (400V)
6600-000-3040 (230V)



Support legs
6600-000-3005

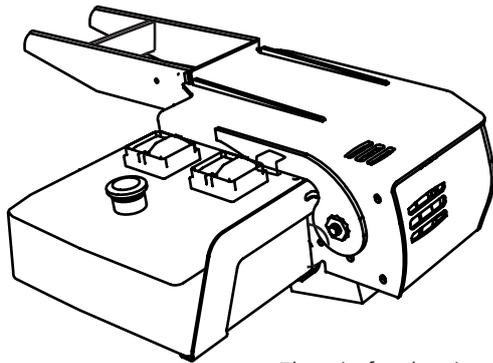


Wire tensioner
01-00339

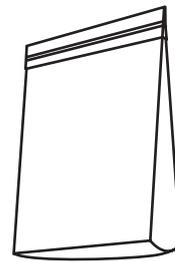


COMPONENTS: ELECTRIC FEED UNIT

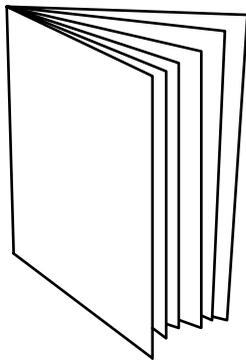
Contents of the box.



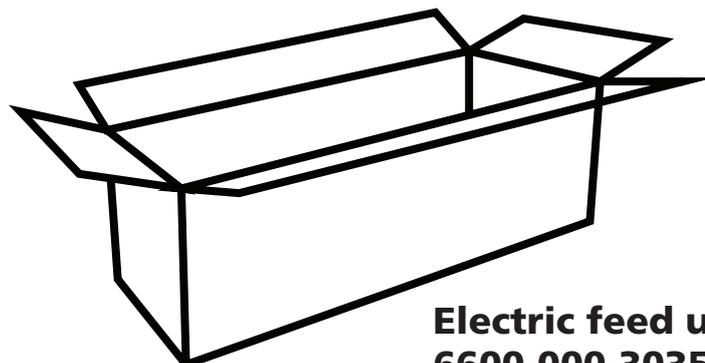
Electric feed unit



Bolt bag



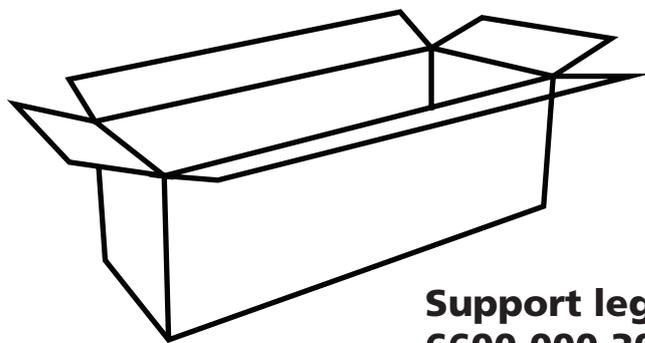
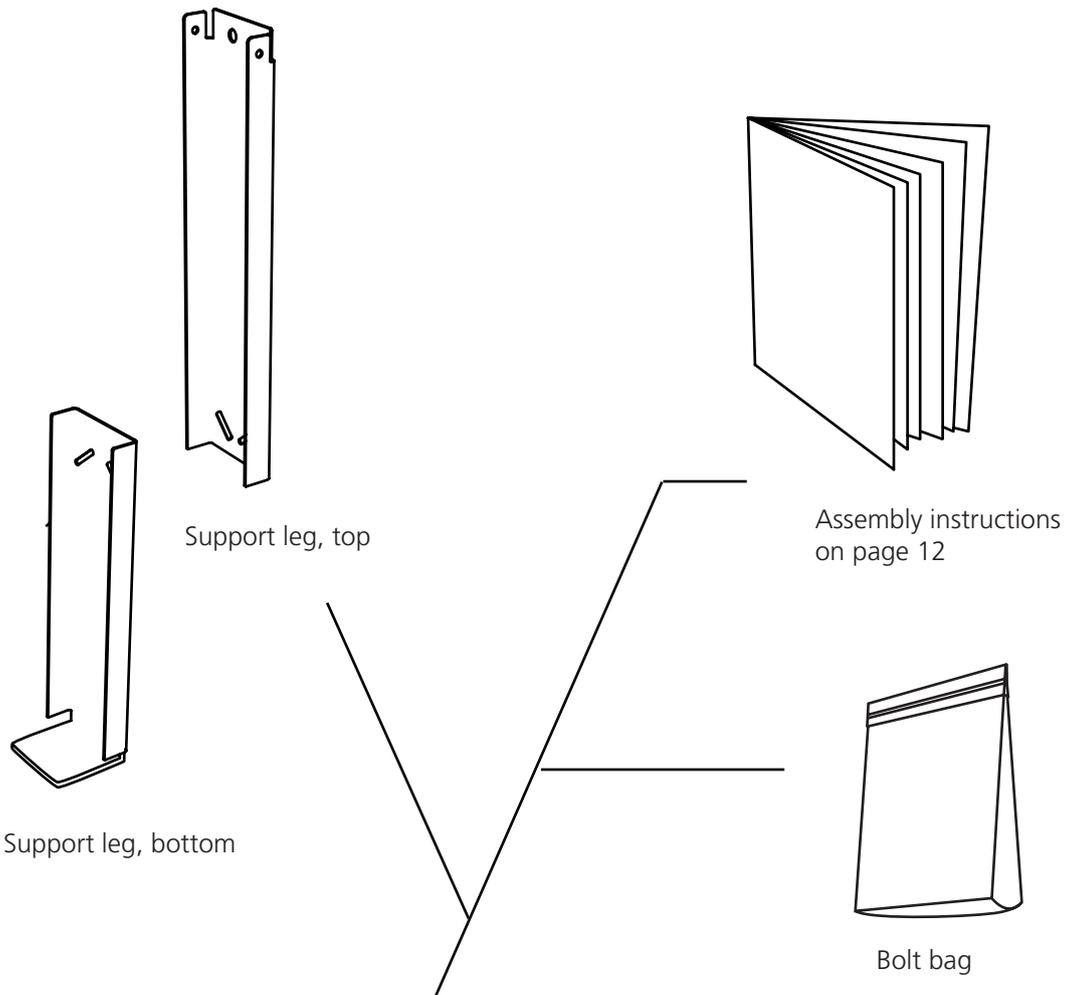
User manual



Electric feed unit
6600-000-3035 (400V)
6600-000-3040 (230V)

COMPONENTS: SUPPORT LEG

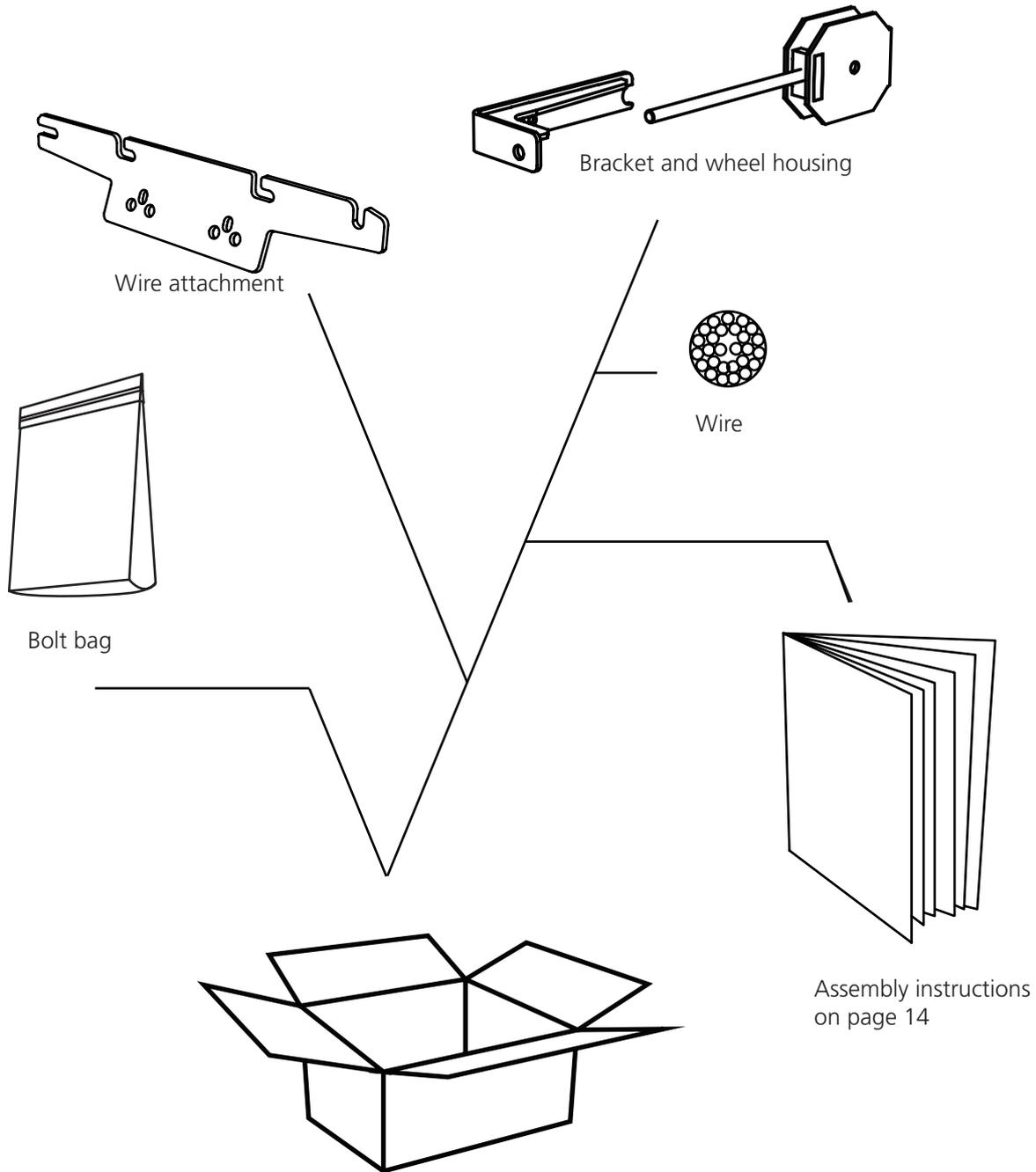
Contents of the box.



**Support leg
6600-000-3005**

COMPONENTS: WIRE TENSIONER

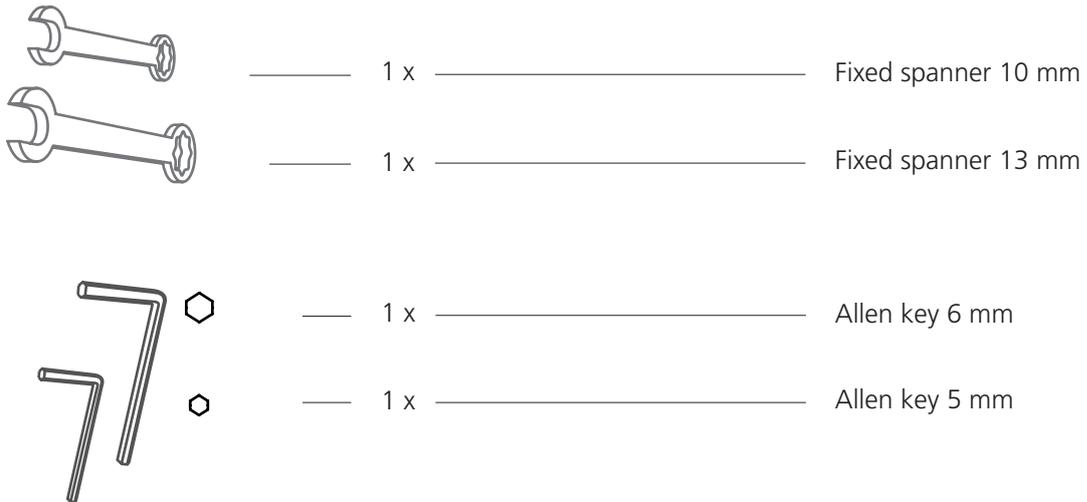
Contents of the box.



Wire tensioner
01-00339

TOOLS REQUIRED

These tools are not included in the shipment.





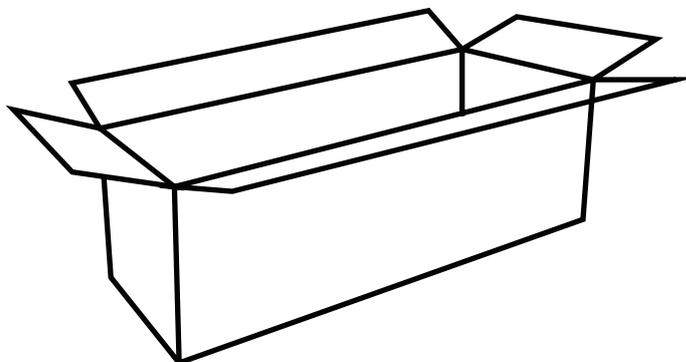
Here we go!

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

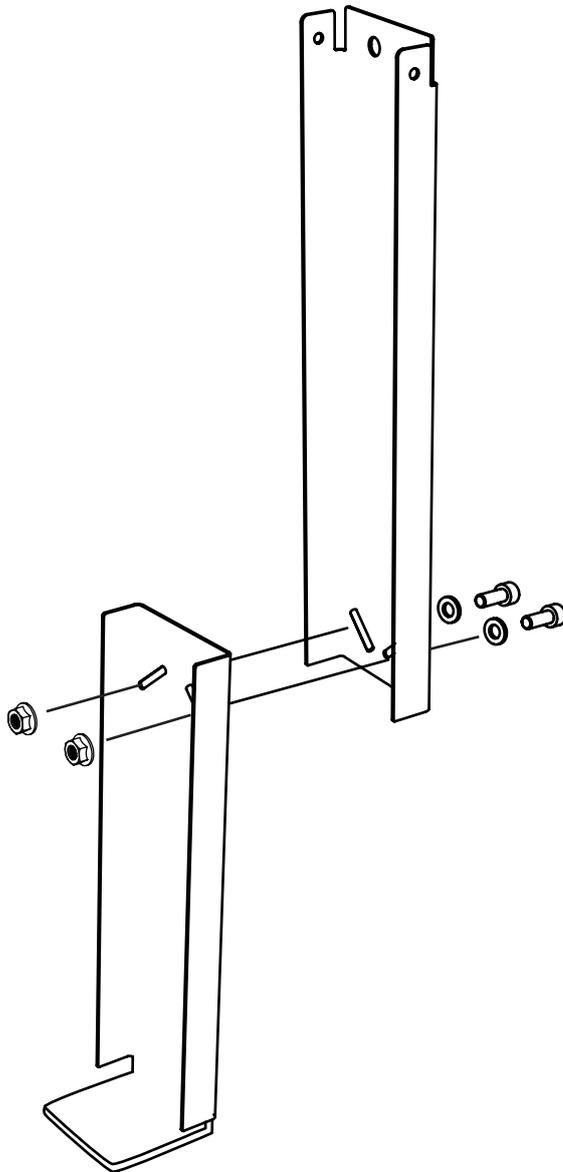
**Support leg
6600-000-3005**



ASSEMBLY: SUPPORT LEG

1

-  — 2 x — Allen bolt M8x20
-  — 2 x — Flange lock nut M8
-  — 2 x — Washer M8



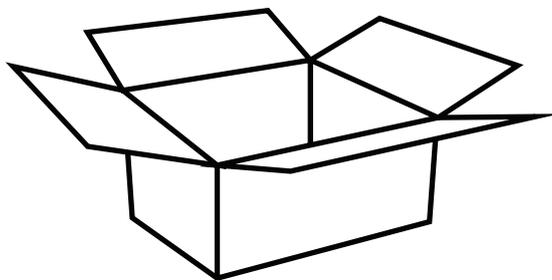


Good job!

To continue with the next step you need the components from the wire tensioner box.

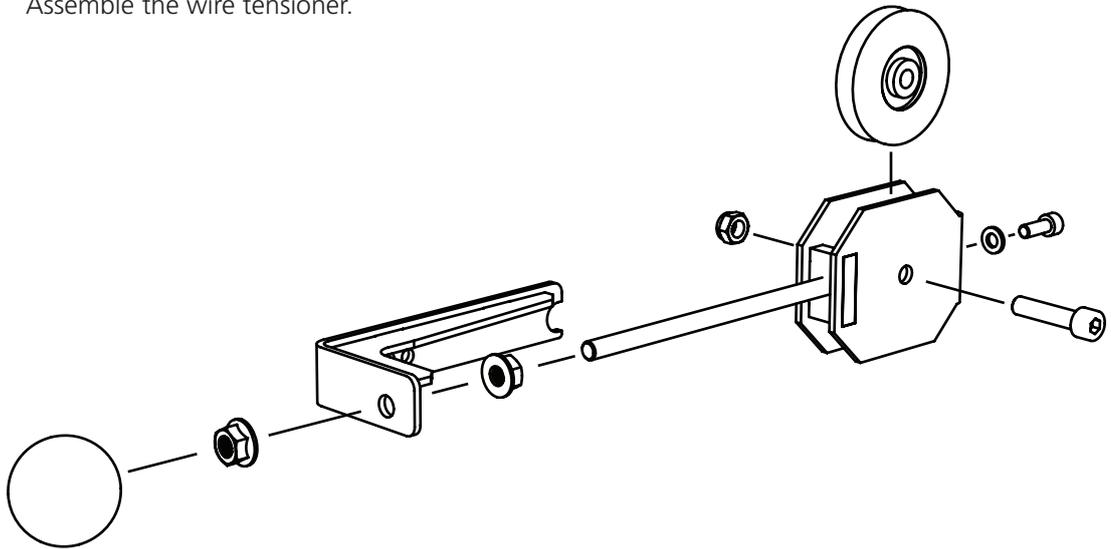
Open the wire tensioner box.

**Wire tensioner
01-00339**



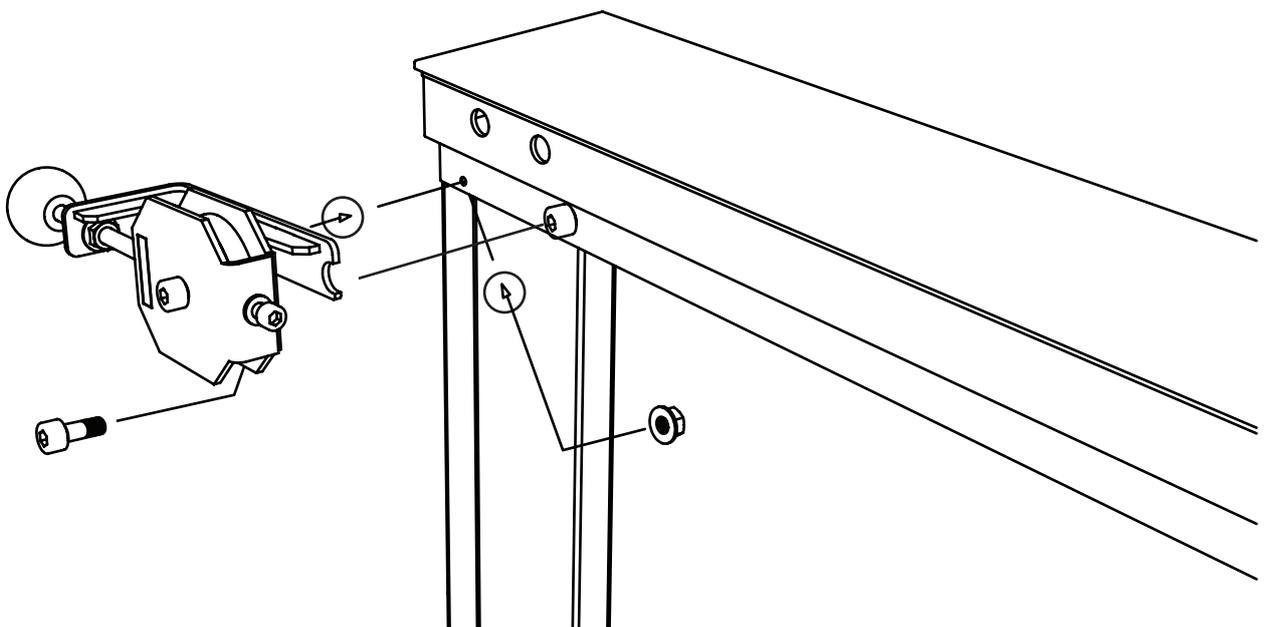
ASSEMBLY: WIRE TENSIONER

- 1** Assemble the wire tensioner.



- 2** Fit the wire tensioner and the support leg to the guide rail.

-  — 1 x — Allen bolt M6x20
-  — 1 x — Flange lock nut M6



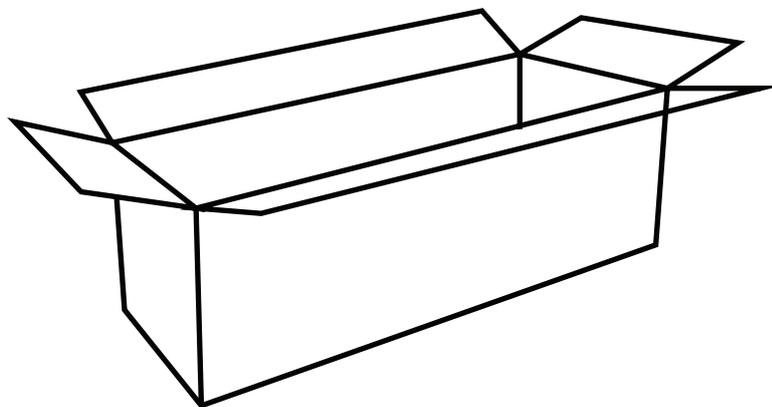


Good job!

To continue with the next step you need the components from the electric feed unit box.

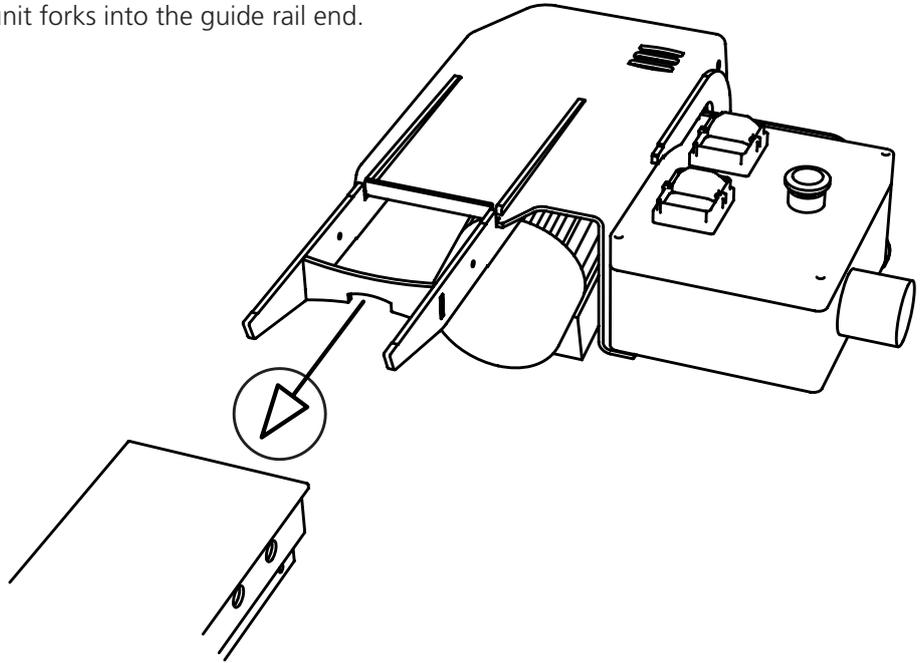
Open the electric feed unit box.

Electric feed unit
6600-000-3035 (400V)
6600-000-3040 (230V)



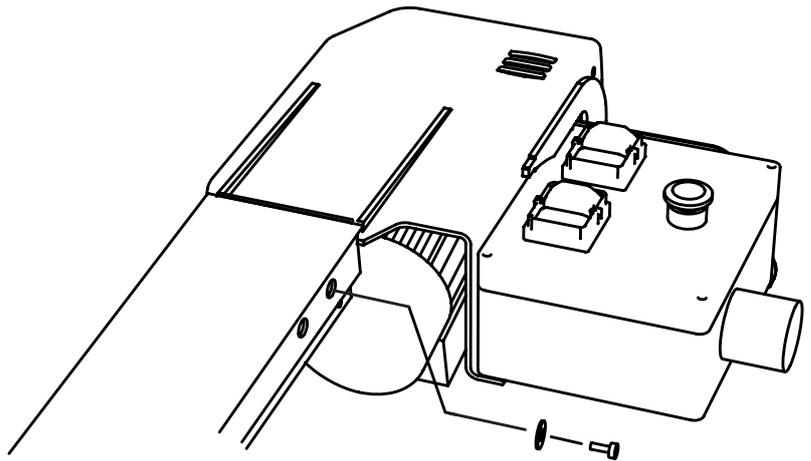
ASSEMBLY: ELECTRIC FEED UNIT

- 1** Slide the feed unit forks into the guide rail end.



- 2** Secure the feed unit with bolts in the guide rail.

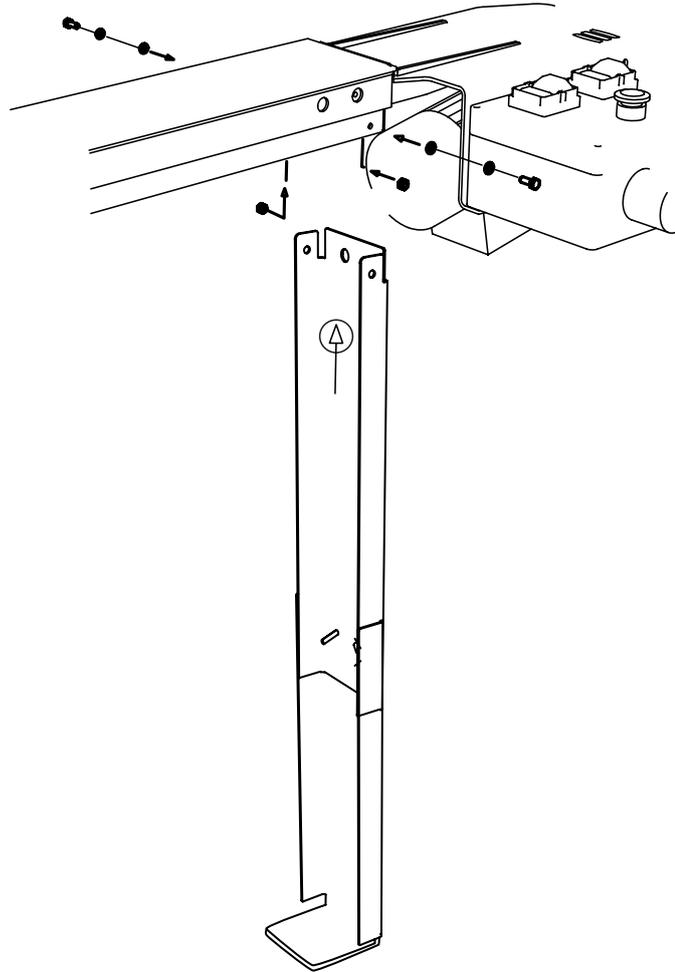
- ⊕ — 1 x — Allen bolt M6x20
○ — 1 x — Washer 20 mm



ASSEMBLY: ELECTRIC FEED UNIT

3 Fit the support leg to the guide rail.

-  - 2 x — Allen bolt M6x20
-  - 2 x — Flange lock nut M6



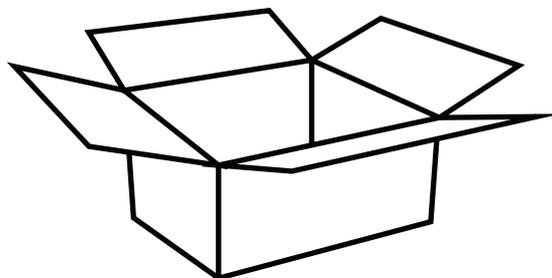


Good job!

Now it is time to assemble the wire and the wire attachment.

The components needed are in the wire tensioner box.

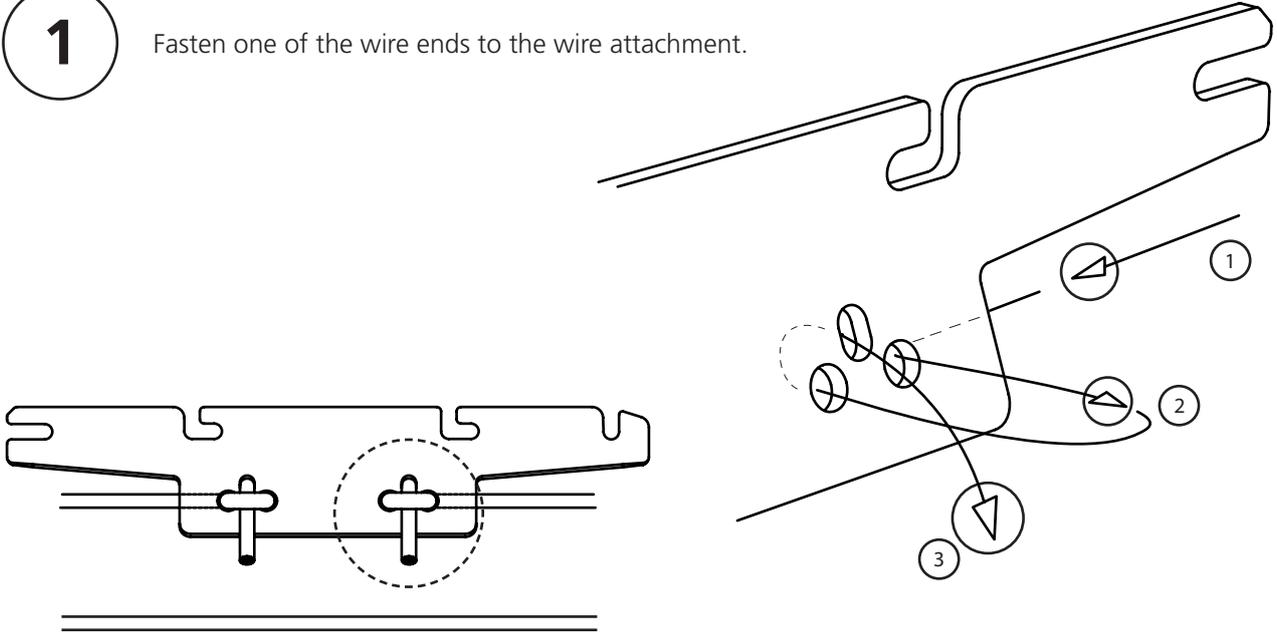
**Wire tensioner
01-000339**



ASSEMBLY: WIRE AND WIRE ATTACHMENT

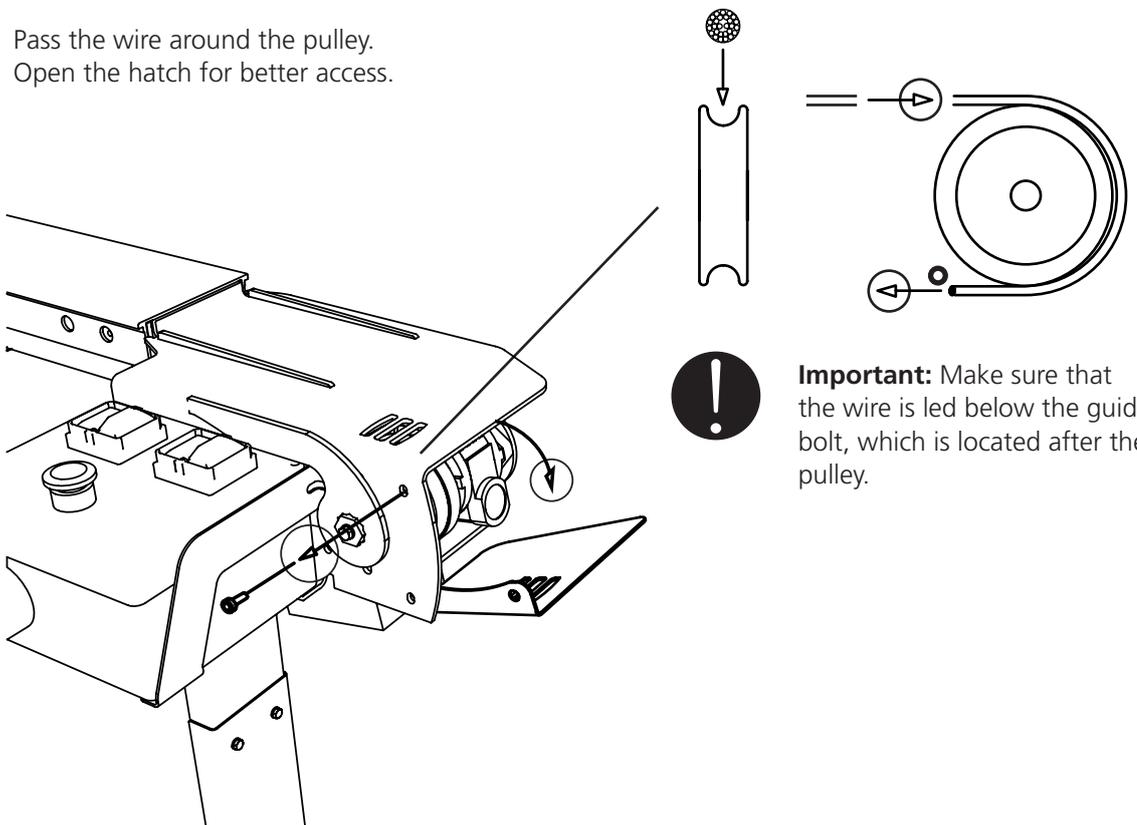
1

Fasten one of the wire ends to the wire attachment.



2

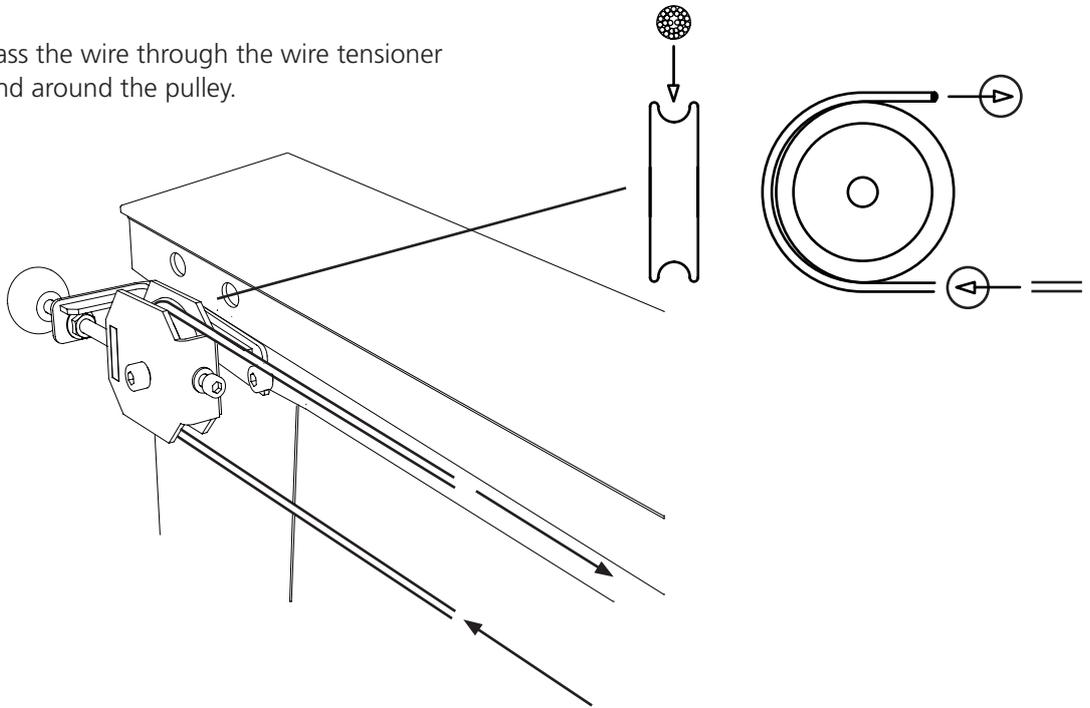
Pass the wire around the pulley.
Open the hatch for better access.



ASSEMBLY: WIRE AND WIRE ATTACHMENT

3

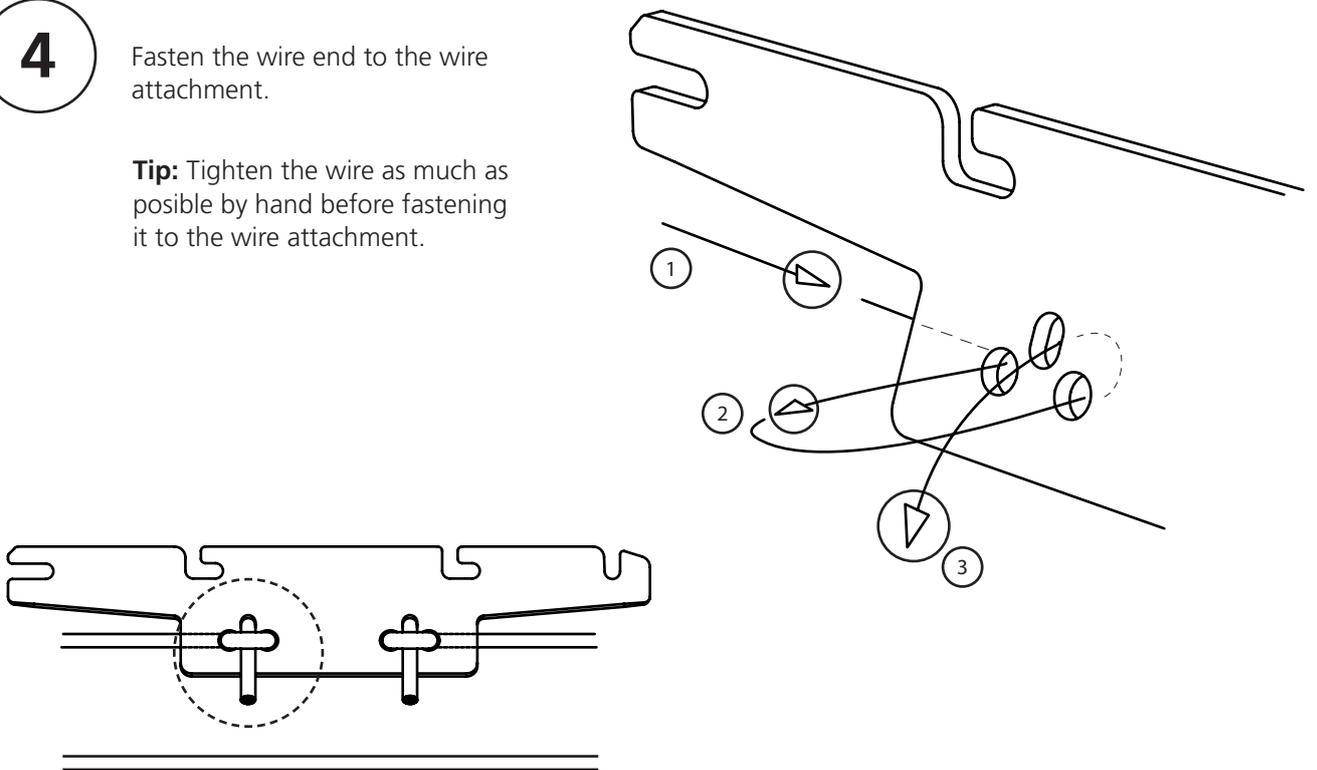
Pass the wire through the wire tensioner and around the pulley.



4

Fasten the wire end to the wire attachment.

Tip: Tighten the wire as much as possible by hand before fastening it to the wire attachment.

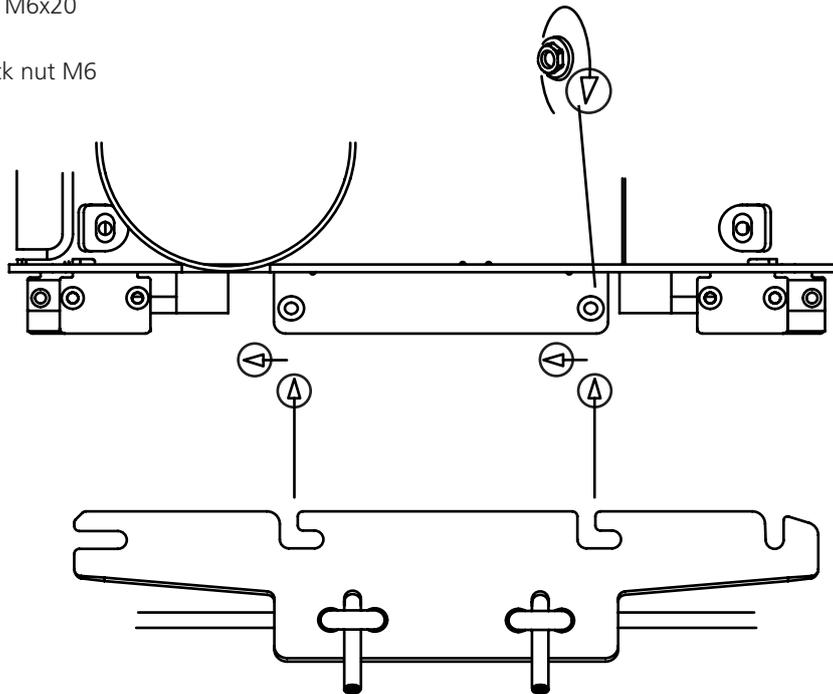


ASSEMBLY: WIRE AND WIRE ATTACHMENT

- 5** Screw the bolts to the fastening plate on the saw unit. Secure the wire attachment with the nuts.

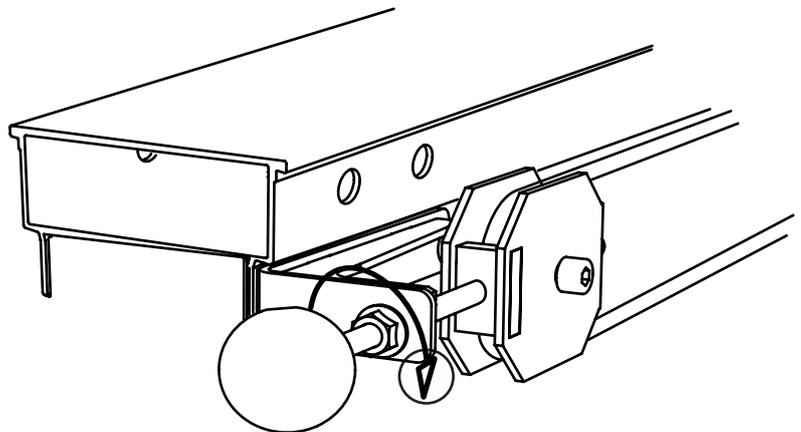
 — 2 x — Allen bolt M6x20

 — 2 x — Flange lock nut M6



- 6** Tighten the wire with the wire tensioner.

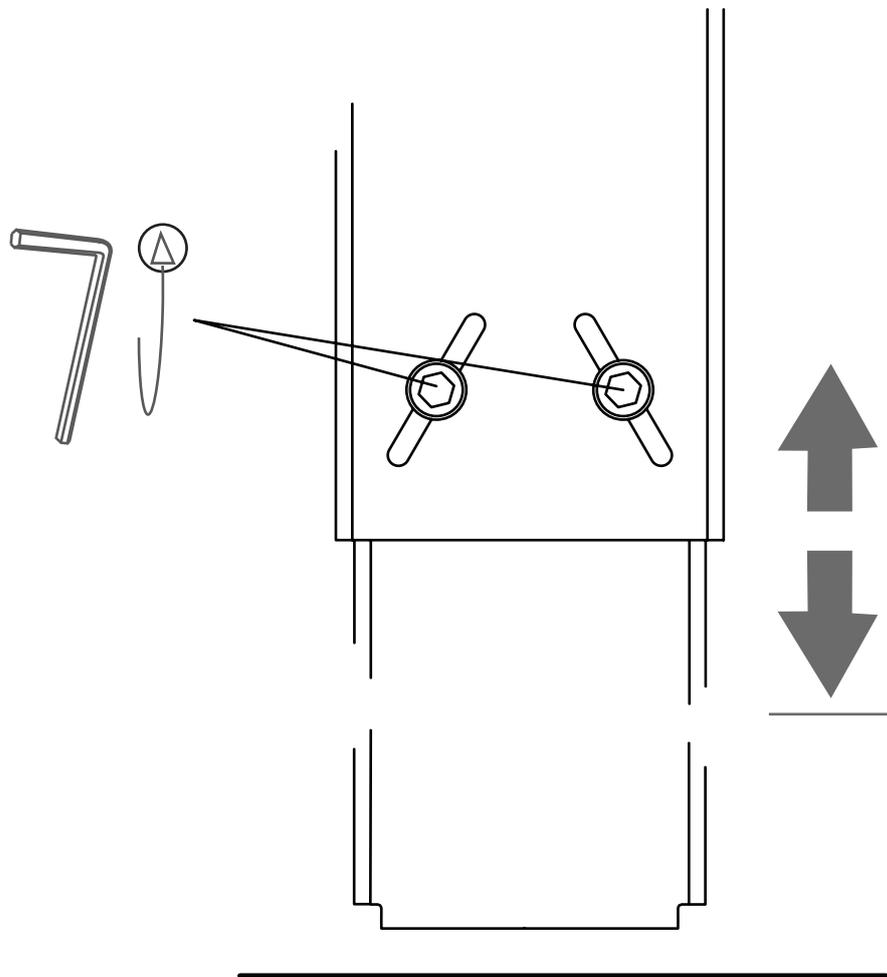
! **Important:** It is important that the feed unit has the right wire tension to work satisfactorily. Tighten the wire until it stops slipping in the pulley. The wire tension may need to be readjusted after a period of use.



ADJUSTMENT: SUPPORT LEGS

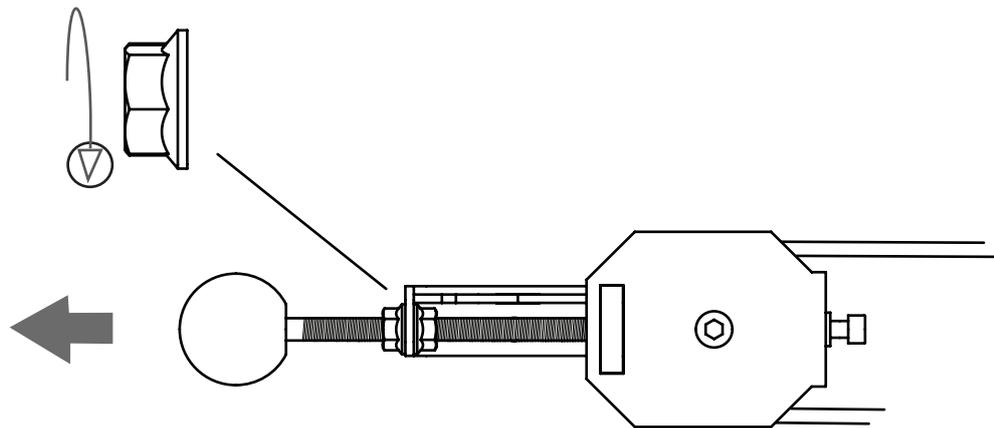
The support legs can be adjusted vertically by loosening the two adjusting bolts. Adjust the height of the support leg until it rests lightly against the ground.

! **Important:** The supports legs should just rest lightly against the ground. The sawmill should put all its weight on the feet of the log lifters.

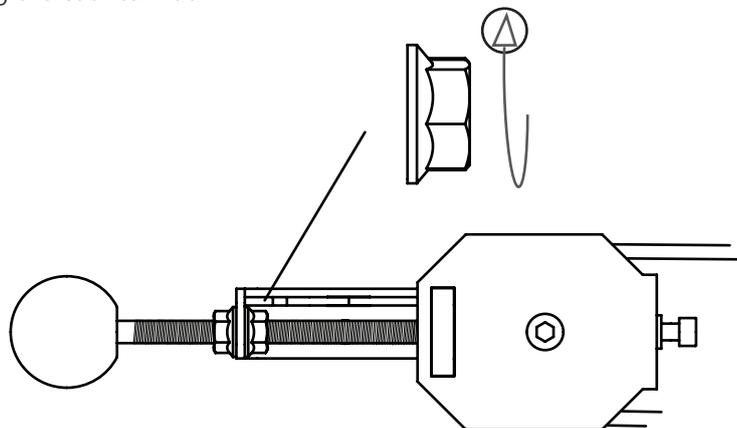


ADJUSTMENT: WIRE TENSIONER

Adjust the wire tension by pulling the ball outwards at the same time as you tighten the tensioning bolt. Note that you have to loosen the counter nut to tighten the wire.



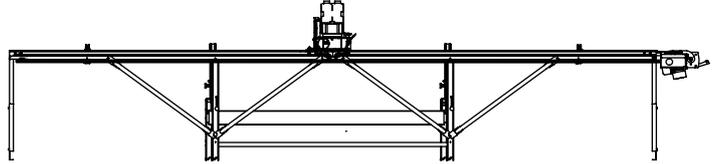
Finish the adjustment by tightening the counter nut.



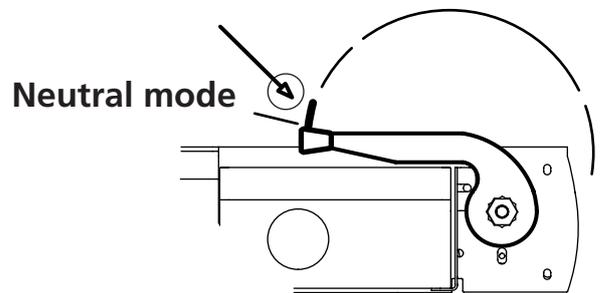
Important: It is important that the feed unit has the right wire tension to work satisfactorily. Tighten the wire until it stops slipping in the pulley. The wire tension may need to be readjusted after a period of use.

ADJUSTMENT: NEUTRAL MODE

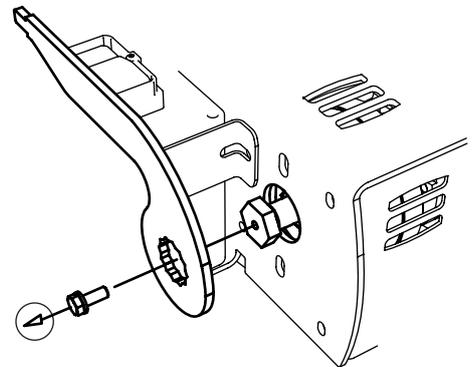
- 1** Position the saw unit at the centre of the guide rail.



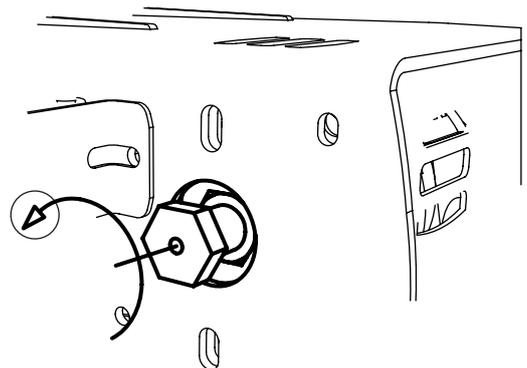
- 2** Check that the control lever is in its neutral position.



- 3** Unscrew the lock bolt from the control lever to reach the pressure bolt.

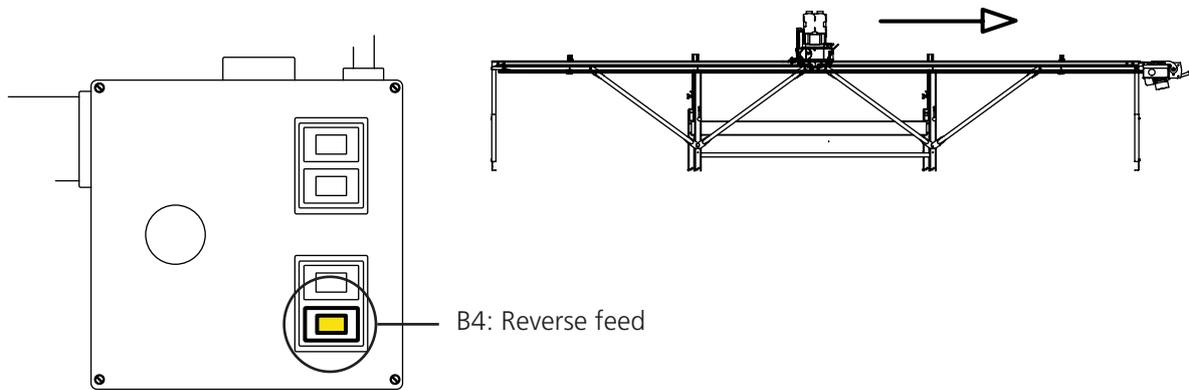


- 4** Loosen the pressure bolt.



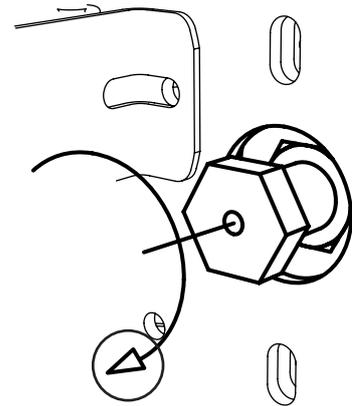
ADJUSTMENT: NEUTRAL MODE

- 5** Press the B4: reverse feed button on the control panel.

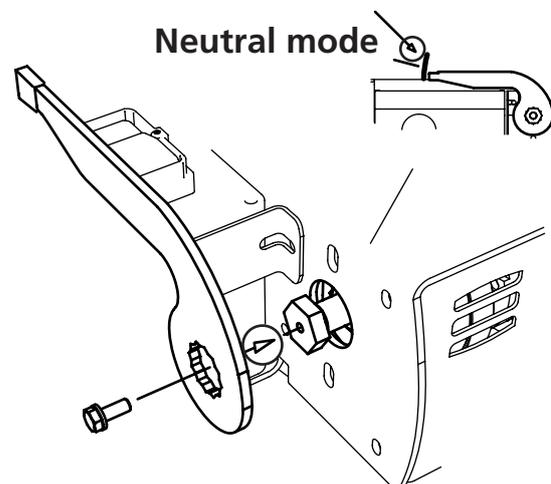


- 6** Tighten the pressure bolt until the saw unit just begins to move backwards. When this happens, you loosen the bolt slightly until the saw unit stops again.

Tip: Uses the control lever as a tool to facilitate adjusting the pressure bolt.

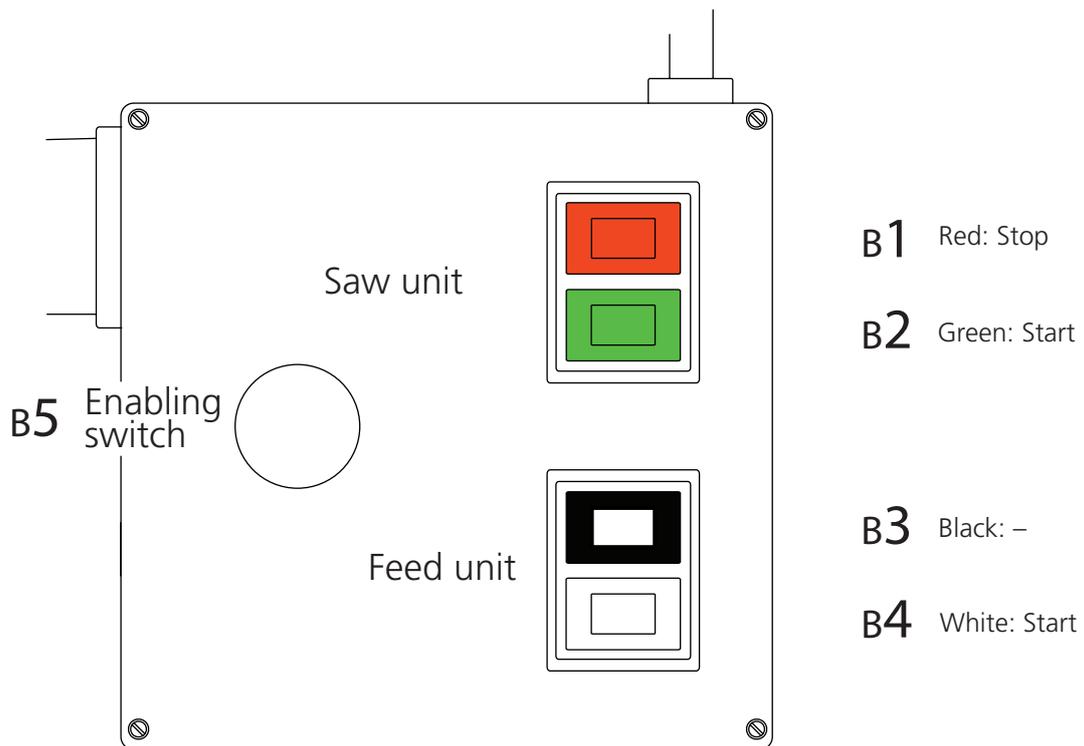


- 7** Reinstall the control lever in its neutral position.



CONTROL PANEL

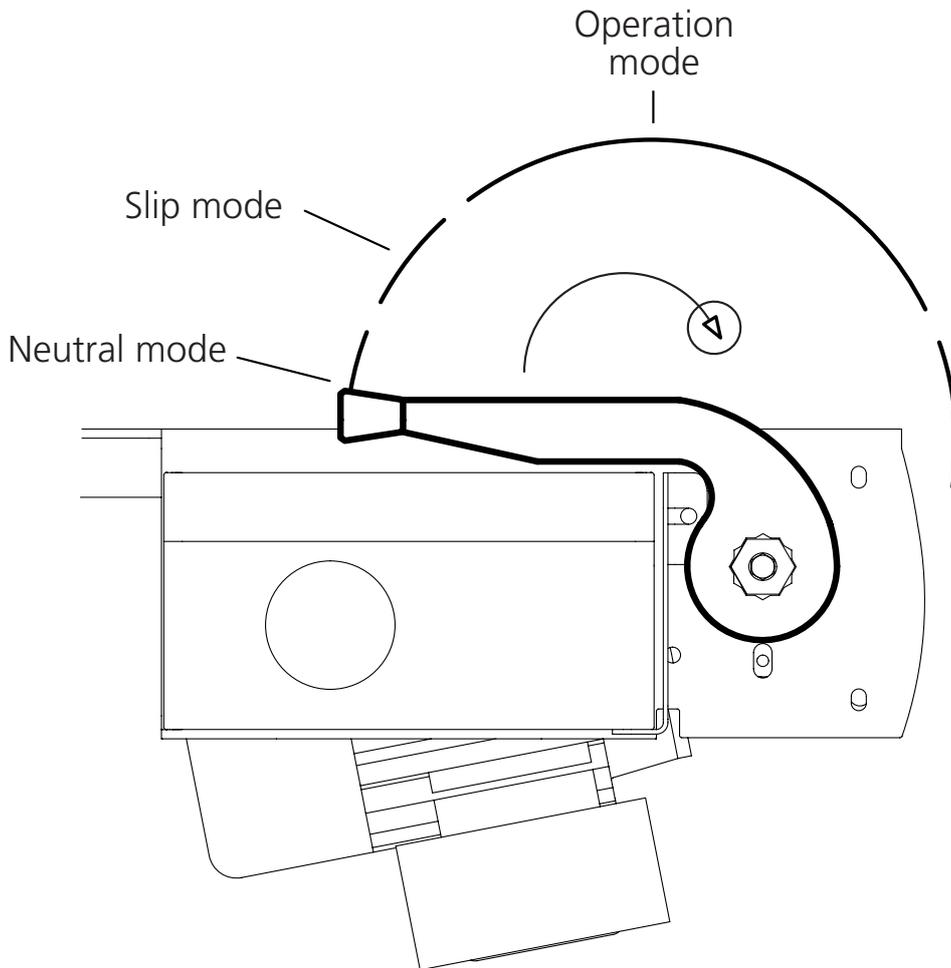
With the control panel buttons you choose the desired function. During all types of forward processing you need to keep the enabling switch pressed down to enable operation.



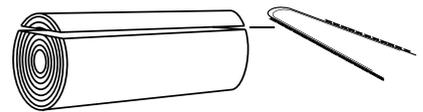
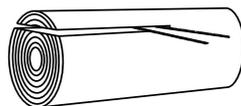
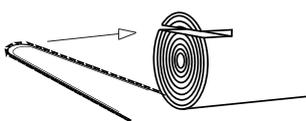
Important: An enabling switch button is a pressure-sensitive switch. It has to be pressed down all the time during sawing and forward feed.

CONTROL LEVER

With the control lever you control the feeding speed.

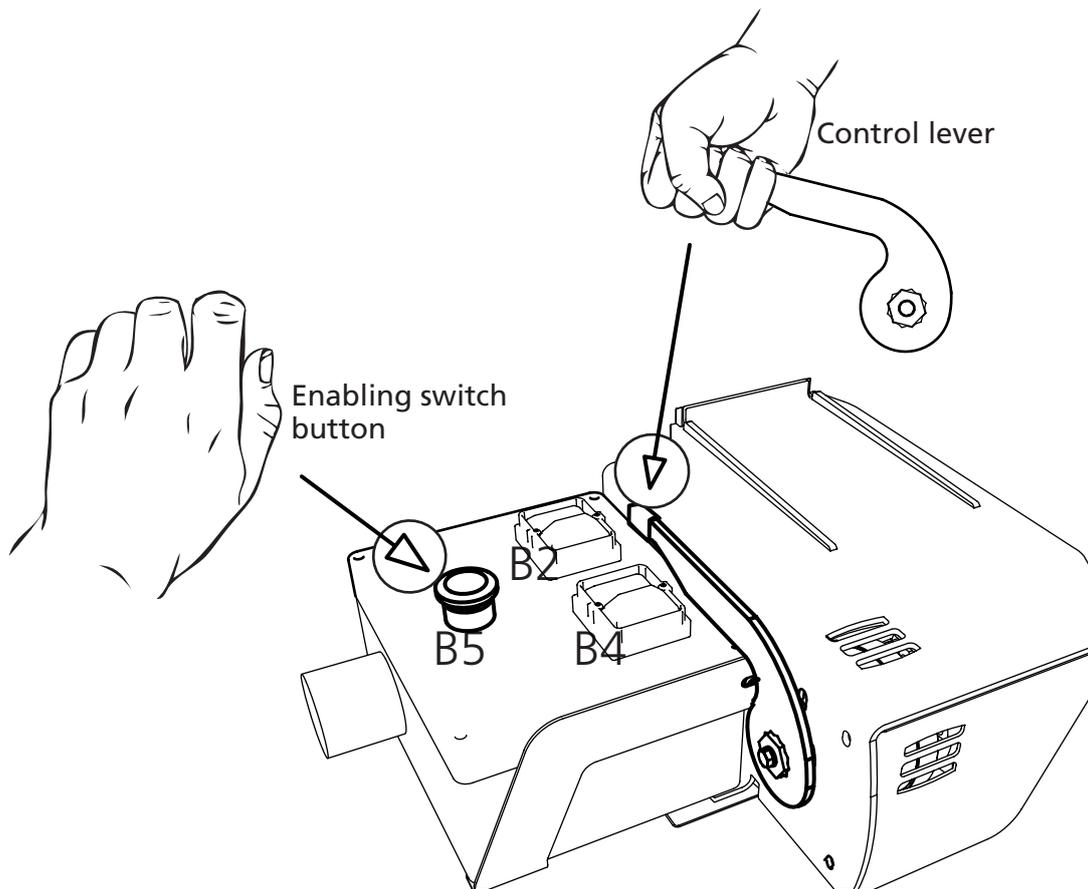


Danger: When starting the feed unit, the control lever should always be in its neutral position.



OPERATION: FORWARD FEED

For forward feed, press down the enabling switch button, B5, with your left hand. With your right hand you first start the saw unit by pressing the B2 button, and then start the feed unit by pressing the B4 button. After that, you slowly pull the control lever with your right hand.



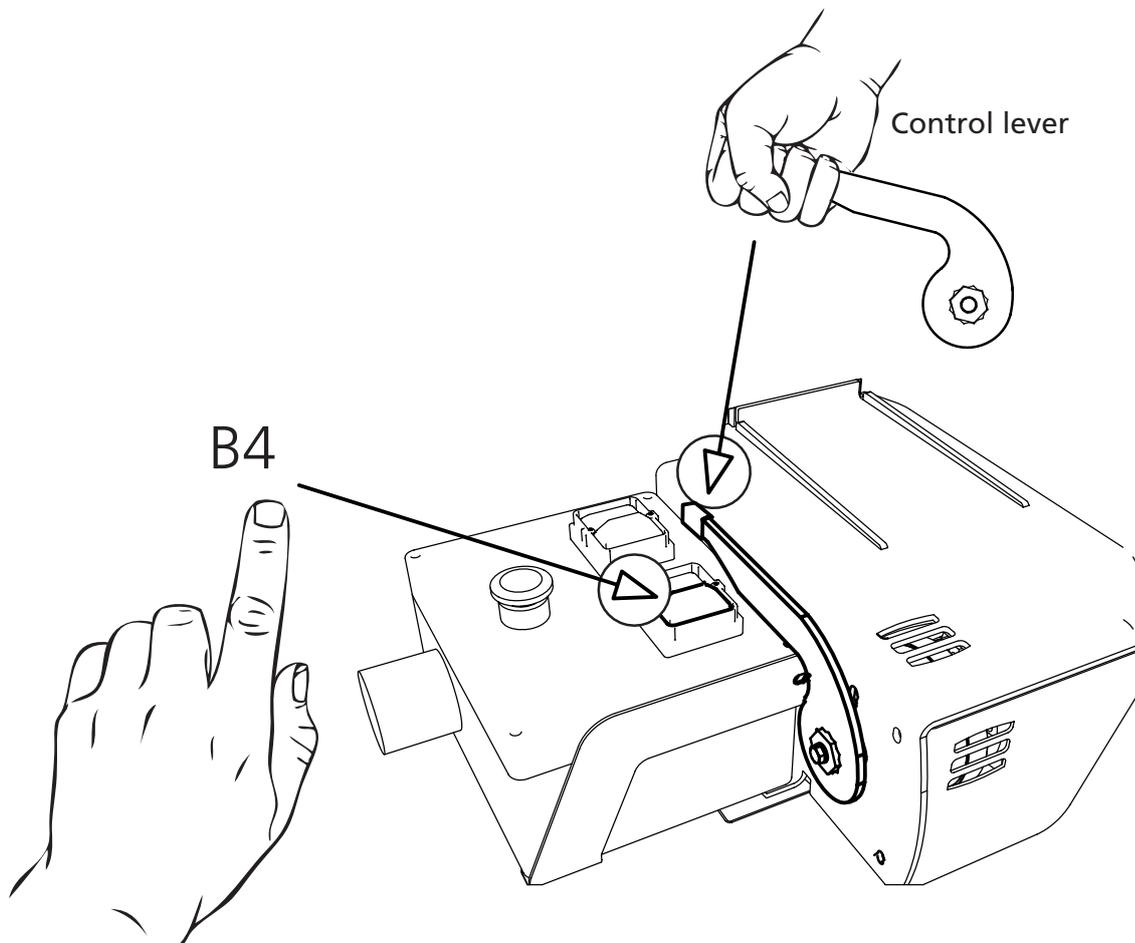
Important: When using the saw unit and forward feed, the enabling switch button has to be pressed down.



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

OPERATION: REVERSE FEED

For reverse feed, press down the B4 button with your left hand while the control lever is pulled back with your right hand.



Important: During reverse feeding the B4 button has to be pressed down.



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

MAINTENANCE

The first hours of operation, the feed unit can run unevenly. The wire may need to be retightened a couple of times before it becomes fully stretched out, and it takes some time for the friction disc to be worn into the discs before full feeding pressure is attained. Also, the feeding pressure can pulsate a little, but this will decline in the course of time. If the pulsation become worse or does not decline after a couple of hours, read the section 'Trouble shooting' or contact Logosol.

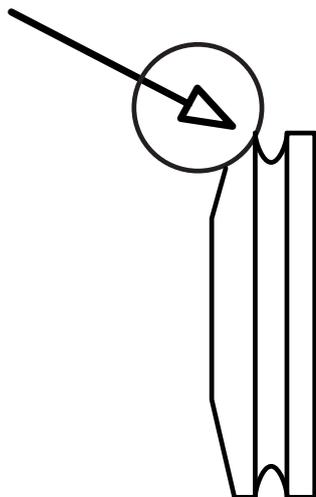
Normally, the control lever has to be adjusted a couple of times during the first working day.



Important: Regularly check that no sawdust is building up in the pulleys. 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 in the track in the secondary clutch disc (see exploded view on p.35). This is a detail that will wear over time, and will need to be replaced at regular intervals.



Condensation

If the feed unit and the electric saw are 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, several decilitres of water can accumulate here.



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 have accumulated. The control panel drain plug is located on the underside of the panel. On the feed motor it is located on the side of the motor. On the electric saw it is either located at the belt pulley or on 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.

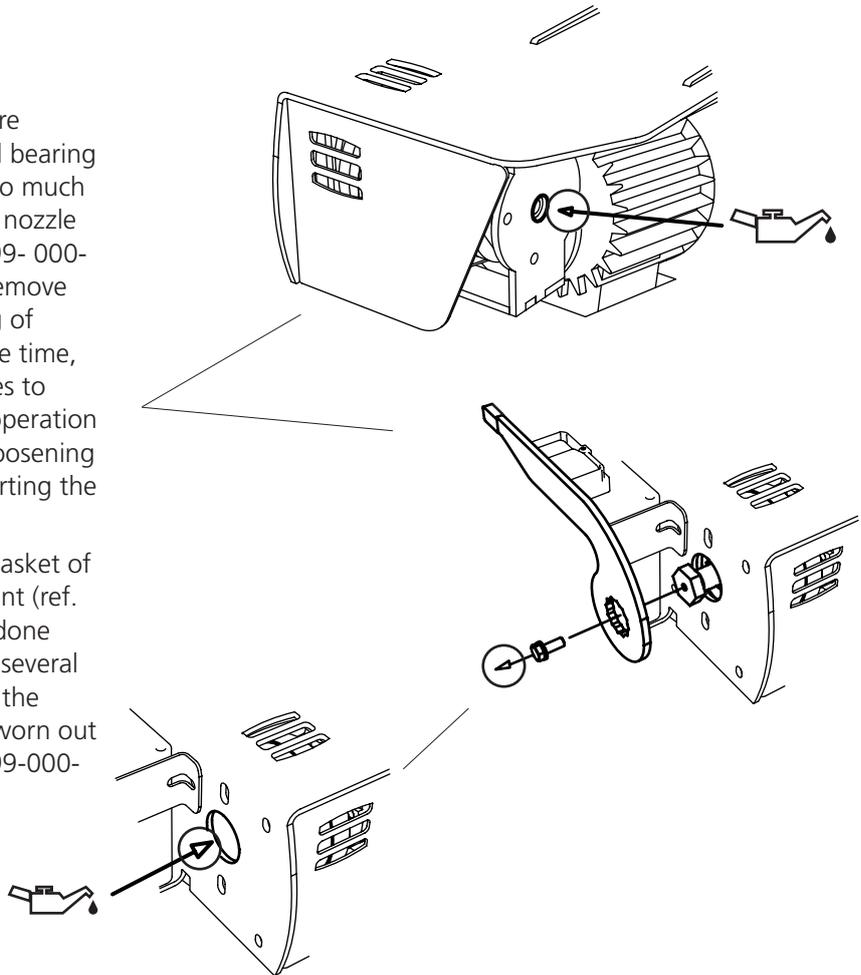
Make sure that the label on the top of the loading ramp is intact and legible. If not, order a new label.

MAINTENANCE

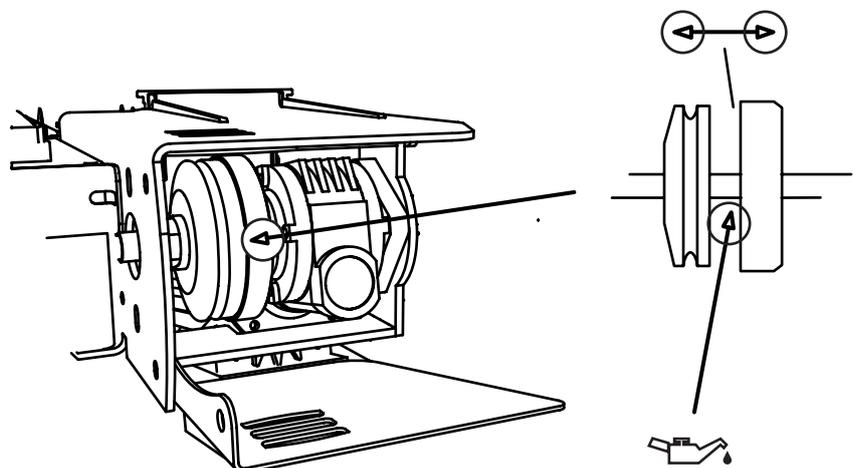
Lubrication points

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

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

1. the wire tension
2. the track 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 feed unit does not start:

Do you press the enabling switch button (B5) down while you are trying to start the equipment? The enabling switch button must always be pressed down during sawing and forward feeding. See more about the functions of the enabling switch under the section *Operation: Forward Feed* on page 28.

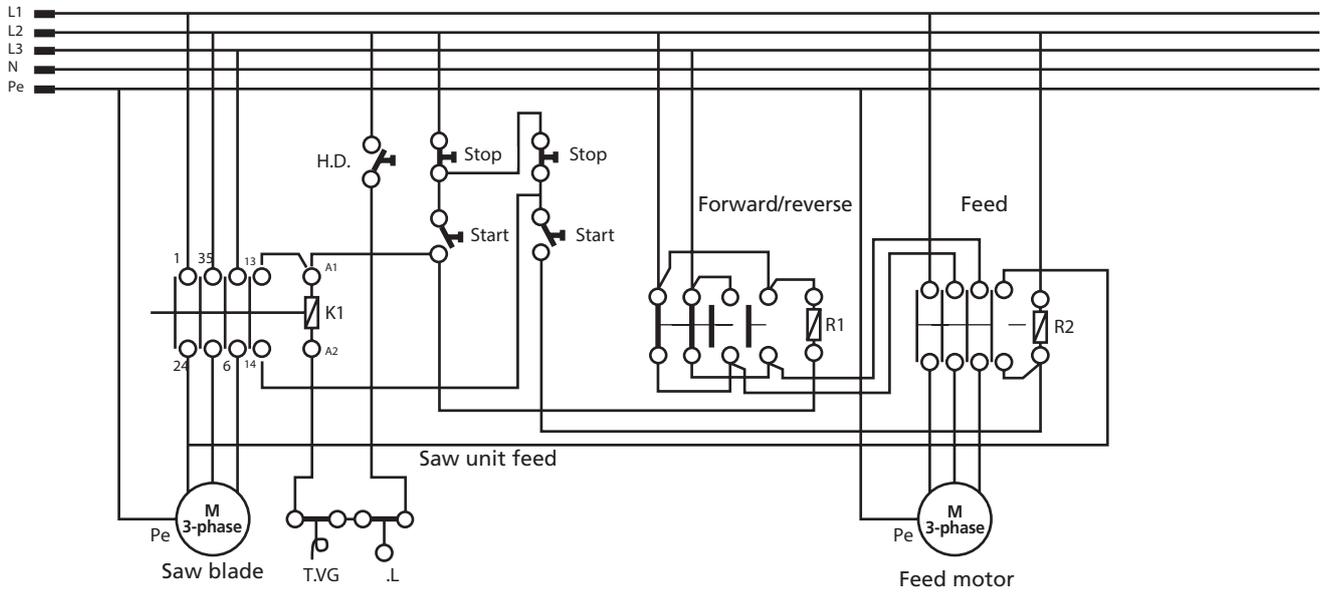
Drivningen är svag:

– The feed wire is not tightened enough. Check the tension of the wire, see *Adjustment: Wire Tensioner* on page 23.

– Sawdust has accumulated in the wire track of the secondary clutch disc. Clean the track, see *Maintenance* on page 30.

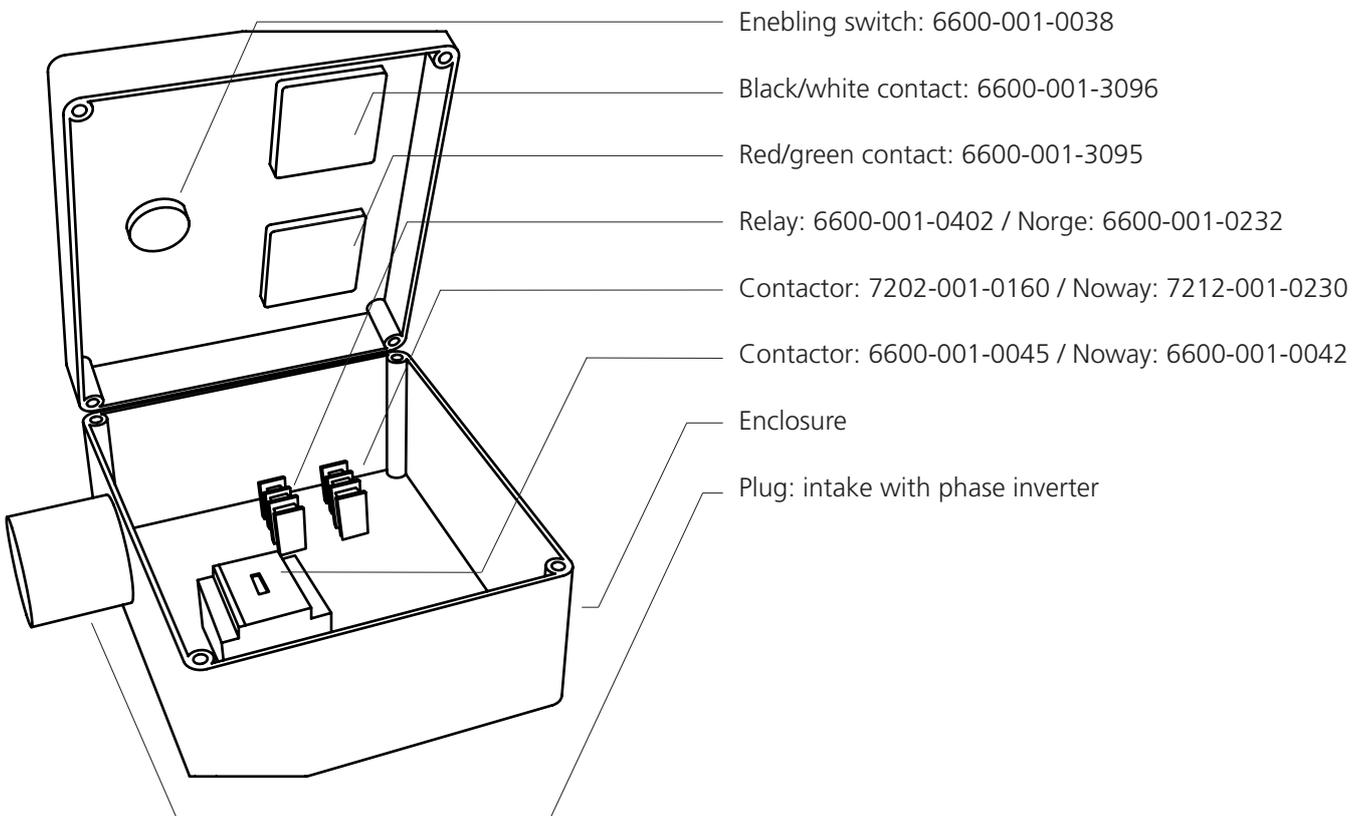
WIRING DIAGRAM

Circuit diagram

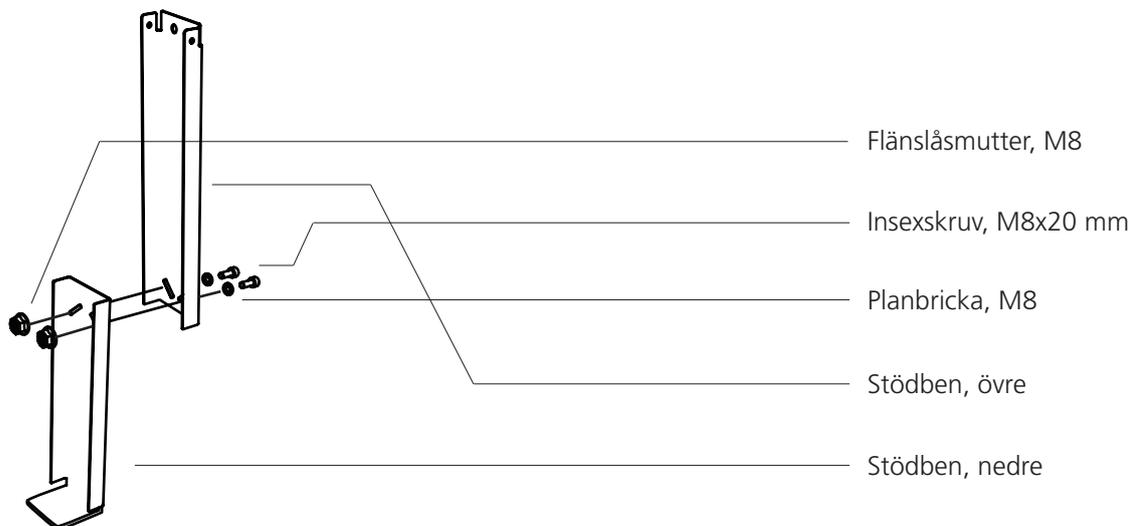
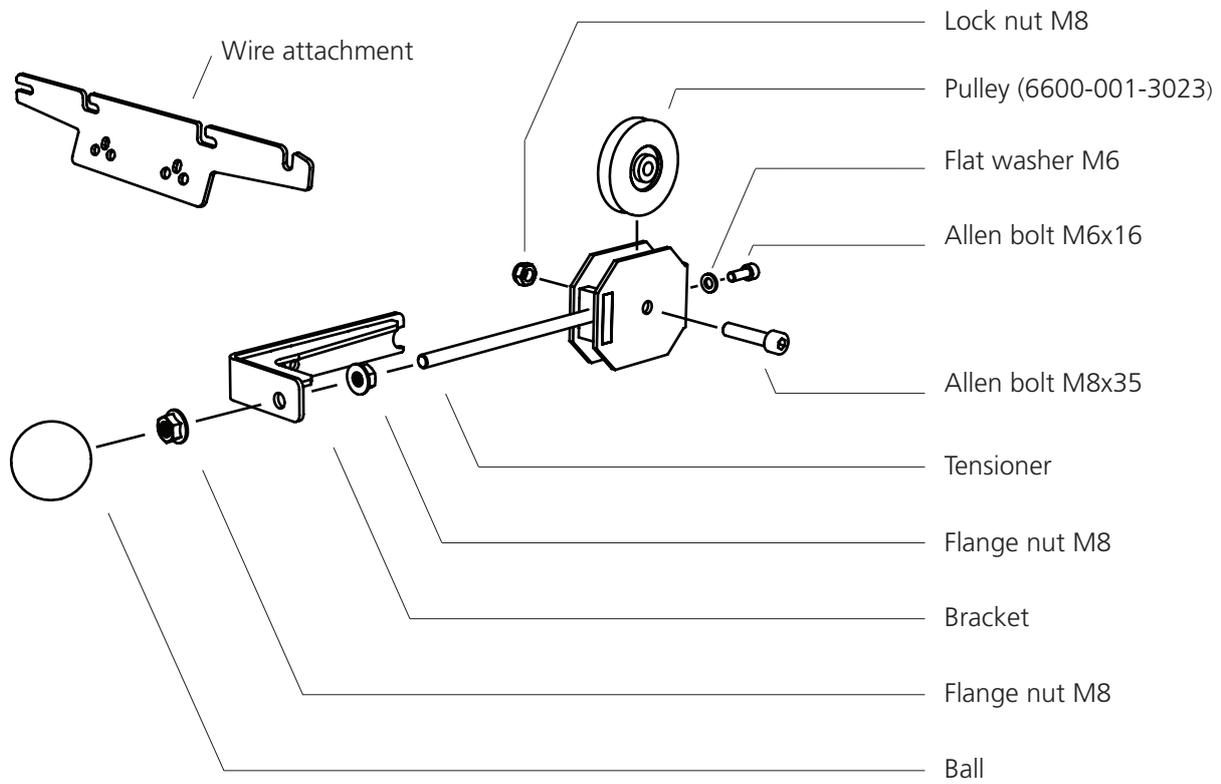


Electrical components list

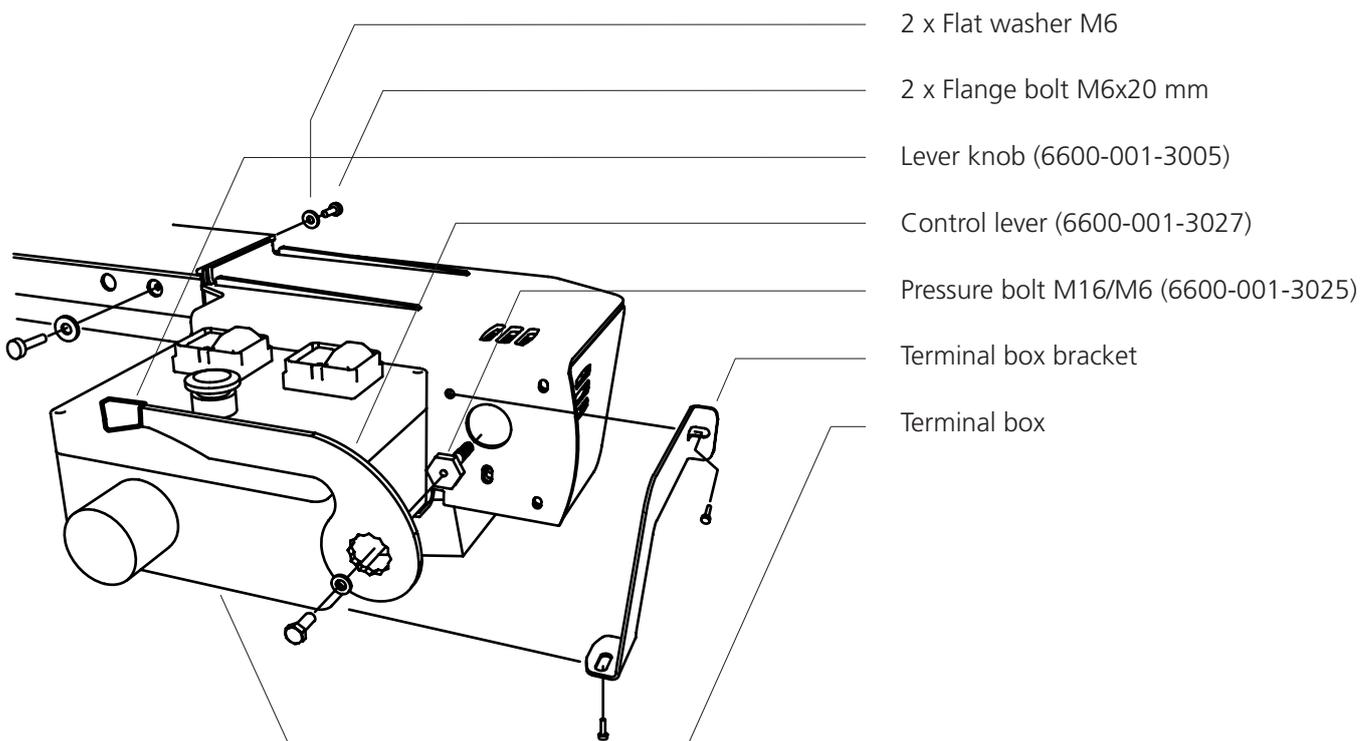
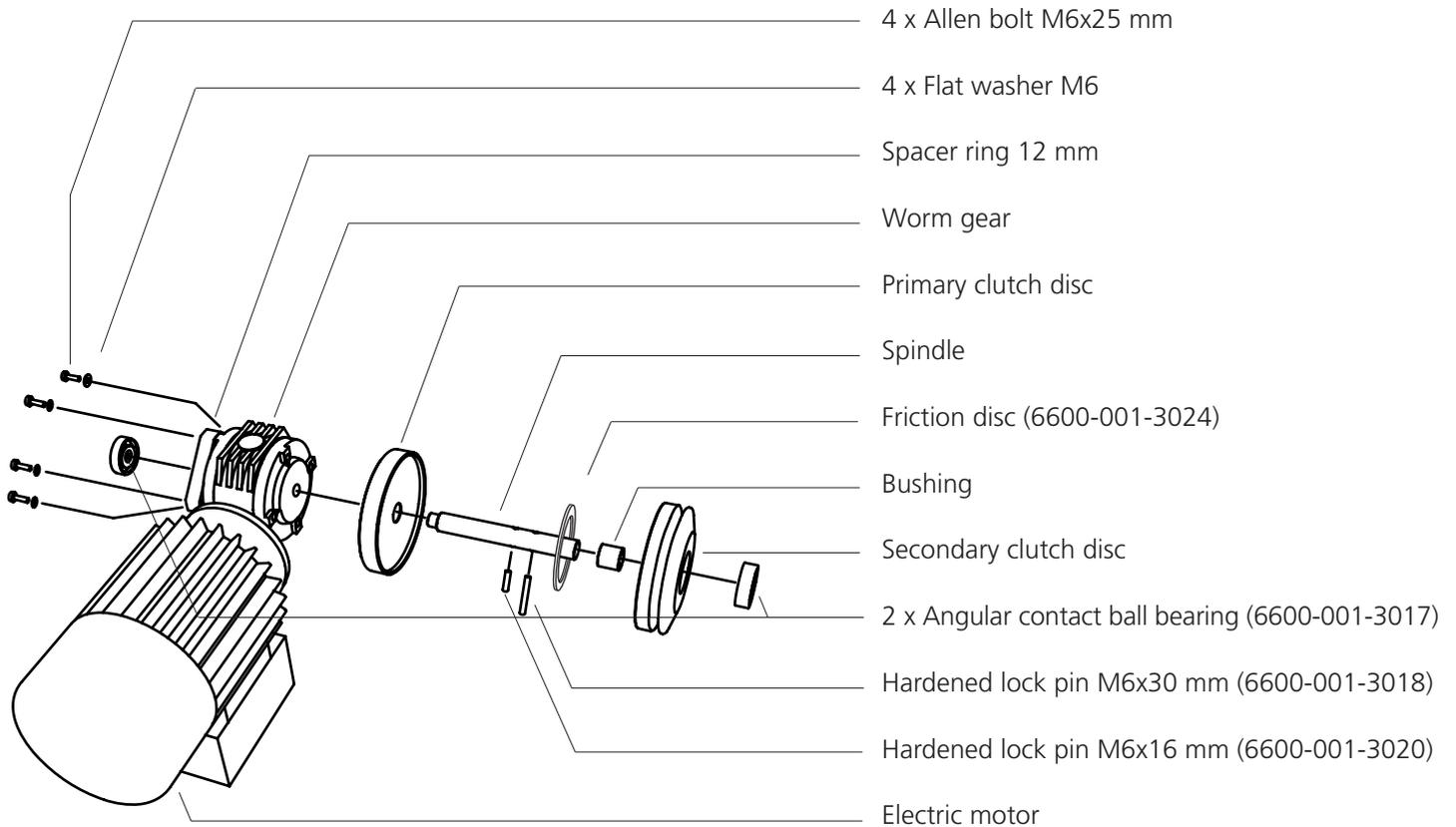
Complete terminal box: 6600-001-3027



EXPLODED VIEW



EXPLODED VIEW





EU declaration of conformity

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

Logosol AB
Fiskaregatan 2
871 33 Härnösand
SWEDEN

herewith declares that the **Electric Feed Unit**

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

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

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

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

Härnösand 21/08/2018
Malte Frisk, CEO



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