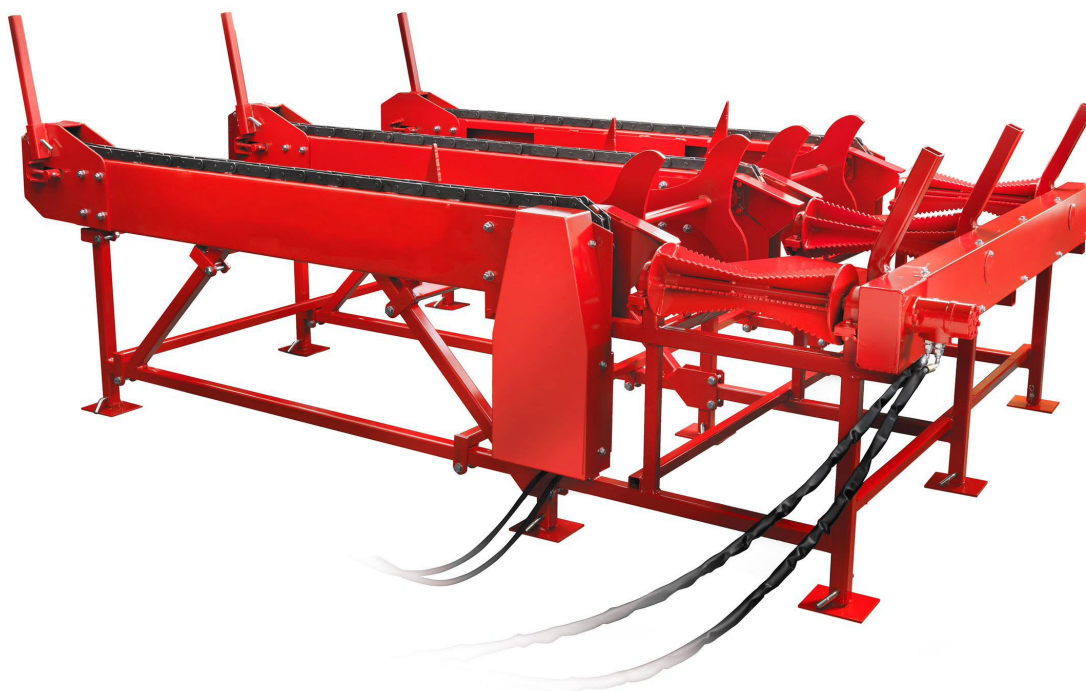


FEED 472

Manual Spare parts book



SERIAL NUMBER

MANUFACTURING YEAR

TP SILVA OY
Valimotie 1, FI-85800 Haapajärvi, Finland
tel. +358 8 772 7300

Table of contents

1.	General information and responsibilities.....	3
1.1.	Introduction	3
1.2.	Connection Assurance of partly completed machinery	4
1.3.	Purpose of use	5
1.4.	Konemallit ja perustiedot	5
1.5.	Safety instructions	5
1.6.	Guarantee terms.....	7
2.	Receipt and assembly	9
2.1.	Delivery inspection	9
2.2.	Assembly instructions	9
2.3.	Lifting and moving the machine	9
2.4.	Main components of the machine.....	10
3.	Control functions and setting up the machine	10
3.1.	Arranging the machine for operation and transport.....	10
3.2.	Connecting the hydraulics	11
4.	Operating the machine.....	12
4.1.	Performing a test run on the machine.....	12
4.2.	Loading logs onto the conveyor	12
5.	Machine maintenance	13
6.	Storage	15
7.	Maintenance table.....	15
8.	Failures and remedial measures	15
9.	Spare part images and listings	16
9.1.	Cross conveyor 1 (48001)	16
9.1.1.	Cross conveyor 1 part listing	17
9.2.	Cross conveyor 2.....	18
9.2.1.	Cross conveyor 2 part listing.....	19
9.3.	Cross conveyor 3.....	20
9.3.1.	Cross conveyor 3 part listing.....	20
9.4.	Log roller (48103).....	21
9.4.1.	Log roller part listing	21
9.5.	Rear roller attachment (50054597).....	22
9.5.1.	Rear roller attachment part listing.....	22
9.5.	Overview	23

1. General information and responsibilities

1.1. Introduction

The purpose of this manual is to ensure that the machine is used in the manner intended by the manufacturer, taking safety into consideration. Everyone operating the machine or working in close proximity to it must study this manual carefully.

Before commencing work, operators must also familiarise themselves with the machine's control and safety equipment, and ensure their proper operation.

Keep this manual in the immediate vicinity of the machine.

1.2. Connection Assurance of partly completed machinery

Machine Directive 2006/42/EC, Appendix II B

The name and address of the person who is authorized to assemble the technical file:

Name: Timo Jussila
Address: Valimotie 1, 85800 Haapajärvi

Certifies that

Product: FEED 472 log table (TP Silva firewood processor accessory)

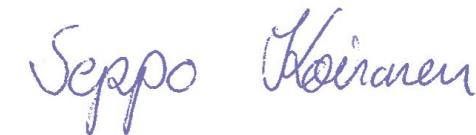
Serial number: _____

Is in accordance with the relevant provisions of the Machinery Directive (2006/42/EC).

This partly completed machine may only be connected to a compatible TP Silva firewood processor.

Date, place: Haapajärvi, 17.05.2022

Signature:



Seppo Koiranen
Chief Executive Officer

1.3. Purpose of use

The FEED 472 log table is intended for moving pruned wood or logs onto a TP Silva firewood processor. The firewood processor must not be used to process any treated wood, such as is found in construction waste.

The maximum diameter of the logs to be processed is 55 cm. This limit must not be exceeded. When loading smaller logs on to the table, stacking height of 50 cm must not be exceeded. Also, the maximum load-bearing capacity mentioned in the section 1.4. must not be exceeded.

1.4. Konemallit ja perustiedot

Model	FEED 472 (accessory, TP Silva)
Driving power	TP Silva firewood processor's hydraulics (max 200bar, max 16l./min)
Weight	965 kg (+ 415 kg, if the 2 m extension is installed)
Height/width/length	1000-1440 / 2200 / 3600 (+extension +2000) (mm)
Max log diameter	55 cm
Max/min log length	5000 mm – 2500 mm
Max load-bearing capacity	4000 kg (+2000 kg, if the 2 m extension is installed)

The machine's serial number, year of manufacture, weight and model are provided on the grey type plate fixed to the machine's frame – on the right side of in-feed conveyor C. (Figure 2, on the right side

Koneen sarjanumero, valmistusvuosi, paino ja malli löytyvät koneen harmaasta tyyppikilvestä, joka sijaitsee koneen rungossa, syöttökuljettimen C oikealla puolella. (Figure 2, on the right side near the engine).

1.5. Safety instructions

These safety instructions are general in nature. When handling the machine, you must take into account all other relevant instructions concerning health and safety, road traffic regulations regarding transportation, as well as the provisions of the general legislation. Observing the instructions helps to prevent accidents.

The machine may only be used by persons who have familiarised themselves with the manual and the operation of the machine. The operator must not be under the influence of alcohol or narcotic substances. Persons under 18 years of age may not operate the machine. Observe all requirements placed on the operator! The operator(s) must carefully study the machine's safety and installation instructions, along with the operation and control functions, before installing and operating the machine.

General provisions:

- The machine must be used solely for loading logs.
- Only one person may operate the assembly.
- Persons under 18 years of age may not operate the machine.
- The operator must ensure that the use of the device does not cause danger to others and that there are no unauthorised persons in the danger zone. The danger zone is 10 m.
- The operator must always use approved eye and ear protection.
- The machine must be cleaned and maintained on a regular basis.
- The machine must always be stopped and the power source disconnected before performing maintenance work.

- The machine may only be transported in the transport position. This is the responsibility of the driver.
- The machine must not be operated while under the influence of alcohol or other drugs, or when tired.
- The machine must not be operated unless the operator has familiarised themselves with this instruction manual.
- The operator is not permitted to modify the structure or operation of the machine or remove protective equipment.
- Before starting up the machine, the operator must ensure that the machine and its guards are intact.

Working area and operating conditions:

- The working area must be level and solid.
- The area must be clean and free of obstructions.
- The ground must not be slippery near the machine.
- The machine must not be used indoors, as the dust may enter your airways or cause a fire hazard.
- The machine may only be used with sufficient lighting: daylight is recommended.
- The temperature range within which the machine can be operated is -20 to +30 °C. In the winter, the operator must ensure that there is no risk of slipping in the working area.

Before use:

- Place the machine in the working position and always check the safety devices before starting the machine.
- The operator must always check the integrity of any possible power cables before use.
- The operation of the safety devices must always be checked before starting the machine. Do not use the machine if part of the mechanism is not functioning properly.

During operation:

- Stop using the machine immediately if you observe a fault.
- Stop using the machine immediately if you observe that its operation causes a hazard to you, other people or property.

1.6. Guarantee terms

Roles

Guarantor

Manufacturer of the TP Silva product:

TP Silva Oy

Lahdentie 9	Valimotie 1	Kusnintie 44
61400 Ylistaro	85800 Haapajärvi	23800 Laitila
Finland	Finland	Finland
+358 6 474 5100	+358 8 772 7300	+358 2 857 1200

Retailer

The retailer is a company authorised by TP Silva Oy, which sells and markets TP Silva products in its local area. The retailer acts as the recipient in guarantee matters from the buyer. In matters regarding the guarantee, the buyer must contact the retailer from whom the machine was purchased.

Buyer

The buyer is the person or community that acquires a TP Silva product for personal use. The buyer is obliged to report faults within the guarantee terms to the retailer and to retain the receipt in order to prove where and when the TP Silva product has been purchased. When necessary, the buyer is also obliged to indicate the type plate information to the retailer.

Operator

The operator is the person or community that uses the machine.

The guarantee is valid for the original buyer for 12 months, starting from the date of purchase, but for no more than 1 000 operating hours. In guarantee matters, always contact the machine's seller before undertaking any procedures.

A guarantee demand has to be issued to the seller **immediately** upon discovery of a defect. If the defect concerns a damaged part or component, please send a photograph of the damaged part or component to the seller, if possible, so the fault can be identified. When submitting a guarantee claim, the buyer must always include the type and serial number of the machine and present a receipt that includes the date of purchase. Guarantee claims must be submitted to an authorised retailer.

The guarantee covers

- Parts damaged in normal use due to faults in material or manufacture.
- Reasonable expenses caused by repairing a fault in accordance with the agreement between the seller or buyer and manufacturer. Faulty parts will be replaced with new ones. A faulty part or parts replaced due to a material fault should be returned to the manufacturer through the retailer.

The guarantee does not cover

- Damage caused by normal wear and tear (for example blades, mats and belts), improper use or use contrary to the instruction manual.
- Damages caused by negligence of maintenance or storage procedures detailed in the instruction manual.
- Damage caused during transport.
- Cutting blades, V-belts and oil, and normal adjustment, care, maintenance or cleaning procedures.
- Defects in a machine to which the buyer has carried out or commissioned structural or functional changes to the degree that the machine can no longer be considered equivalent to the original machine.
- Other potential costs or financial obligations resulting from the procedures mentioned above
- Indirect costs.
- Travel costs resulting from guarantee repairs.
- The guarantee for parts replaced during the guarantee period of the machine expires at the same time as the machine's guarantee.
- The guarantee is void if the ownership of the machine is transferred to a third party during the guarantee period.
- The guarantee is void if any of the machine's seals have been broken.

If a fault or defect reported by the customer is found to not be covered by the guarantee, the manufacturer has the right to charge the customer for the pinpointing and possible repair of the fault or defect in accordance with the manufacturer's current price list.

This guarantee certificate indicates our responsibilities and obligations in full and it excludes all other responsibilities.

Guarantee terms come into force when you register your customership in the extranet service found on our website.

2. Receipt and assembly

2.1. Delivery inspection

Please dispose of the log table's packaging materials in an environmentally friendly manner. Check that the machine has not sustained any damage during transport, and ensure that all necessary parts are included in the package. In the event of any defects or damage, contact the retailer immediately.

2.2. Assembly instructions

The table can be delivered either assembled or packaged. If the table is delivered in packaged form, it must be assembled before commissioning in accordance with separate assembly instructions provided with the package.

2.3. Lifting and moving the machine

When moving the machine, make sure that the moving and lifting capacity of your tractor or forklift is sufficient for the weight of the machine. Ensure the sufficient length of the lifting prongs so that the tips rest safely under both frame plates (Figure 1). Only lift the table when it is empty and use the lifting points shown in **Figure 1**.

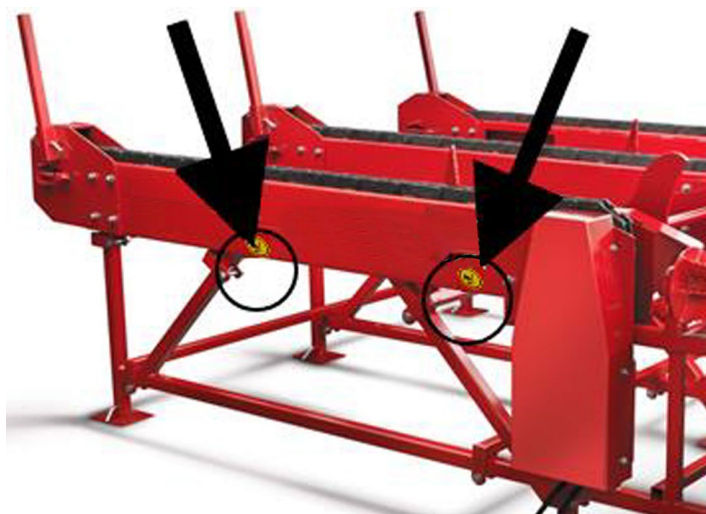


Figure 1. Machine lifting points

Note! Incorrect lifting may cause a hazardous situation or damage the machine.

2.4. Main components of the machine

FEED 472 log table is a hydraulically controlled accessory for TP Silva firewood processors. It is controlled hydraulically with the operating levers of the firewood processor's control unit.

- A. In-feed conveyor
- B. Chain conveyor
- C. Dispenser stoppers
- D. Dispensers

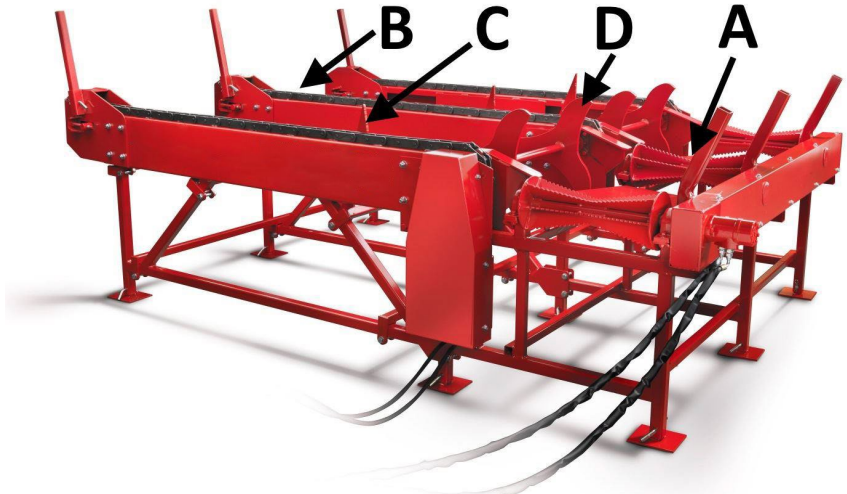


Figure 2. Main components of the machine

3. Control functions and setting up the machine

3.1. Arranging the machine for operation and transport

Before arranging the machine for operation and using it, ensure that the operating conditions, detailed in Section 1.5, are met. Also review the safety instructions to ensure safe use of the machine.

When preparing the table for operation, ensure that it is positioned on an even and firm foundation so that the logs on the table are straight. Make sure that the machine's hydraulic hoses cannot be caught between moving parts or cause a hazard.

When arranging the machine for transport, clear the table of wood and fix the hydraulic hoses to it with cable ties, for example.

Note! Inspect and clean the machine before arranging it for transport.

3.2. Connecting the hydraulics

Use the operator's manual of the relevant TP Silva firewood processor for the connections!

Use of the table requires two separate control valves: Example **Figure 3**.

In-feed conveyor A ([Figure 2](#))

Connected in series to the TP Silva firewood processor's in-feed system (quick couplings **C** (red) and **D** (black))

Note! If the machine features the valve shown in figure 3, it must be opened to ensure oil flow through the quick couplings.

Chain conveyor B ([Figure 2](#))

Connected to the accessory valve of a TP Silva firewood processor (quick couplings **A** (red) and **B** (black))

Chain conveyor motor's spill hose (from the motor end): connect the hose directly to the machine's hydraulic oil tank

Note! Dispenser **D** runs when chain conveyor **B** is being operated.

Ensure that all connections are safe and secure!



Figure 3.

4. Operating the machine

4.1. Performing a test run on the machine

The machine may not be used before a test run has been performed and all the functions of the machine have been tested. Both the test run and testing can only be performed by a person who has studied the machine's manual.

Before the test run, all of the components of the firewood processor must be checked. If any faults or wear and tear that may affect the safe use of the machine are discovered, the processor must not be used until the faulty or worn component is replaced and safe use can be ensured.

1. Make sure that you are familiar with the functions of the machine's controls. If necessary, See Section 3.
2. Operate in-feed conveyor A (Figure 2) empty, and ensure that the rollers run freely and in the right direction.
3. Operate chain conveyor B empty, and ensure that the chains run freely and in the right direction
4. Load logs on chain conveyor B, and use one log to test the operation before beginning actual work.

If a fault occurs during the test run, determine the cause of the fault and take remedial action as deemed necessary. The machine must be shut down and disconnected from the power source for the duration of both the diagnostics and repairs.

4.2. Loading logs onto the conveyor

Use a forklift with sufficiently sized forks to ensure safe loading.

- Always load logs from the chain conveyor side.
- Lower the logs on the chains carefully. Never drop logs on the chains.
- Load logs in the machine with the stem end first, and ensure that the centre of gravity is in the middle so that the logs cannot tip to the side off the conveyor.
- Do not exceed the load-bearing capacity of the table (Section 1.4.), and leave enough room for the free operation of dispenser D.
- Smaller logs can be stacked on top of each other, but a total height of 47 cm must not be exceeded.

Note! Ensure that there are no other people in the vicinity of the machine when loading logs!

Note! Ensure that the log's centre of gravity stays on the conveyor!

5. Machine maintenance

The machine must be disconnected from its power source before any maintenance, adjustment, replacement or cleaning measures. Only use spare parts that are supplied by the manufacturer or your retailer. If any guards of the machine have to be removed for maintenance, they must always be reattached before the machine is activated. After maintenance and adjustment measures, a test run must be carried out on the machine, according to the instructions in Section 4.1.

5.1. Chains

Tighten the chains of chain conveyor B in accordance with Figure 4. Adjust them by opening the lock nut and move tensioning nut as shown in Figure 4 on the left. The tightened tensioning nut after adjustment is seen on the right in the figure. The tightness is correct when the chain hangs about 10 mm from the bottom and rises about 100 mm when lifted from the centre. Excessively tight chains move sluggishly and excessively loose chains increase wear or cause jams. Check also that the lining of the chain is in the center.

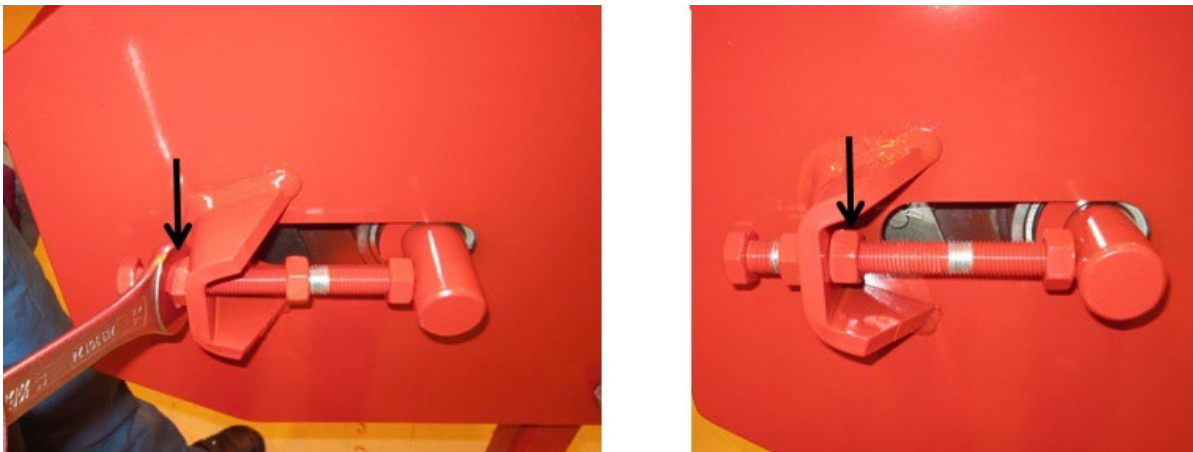


Figure 4.

Tighten the motor chain by opening the motor guard of chain conveyor B. The correct tightness is presented in Figure 5 to the left. Tension the chain as follows:

- Open the three motor fastening screws in Figure 6 (pictured in the centre).
- Open locking nut B, tighten bolt A and finally lock the locking nut and tighten the motor's fastening screws (in the middle)



Figure 5.

5.2. Lubrication

There are a total of 21 lubrication points on the machine, presented in the figures below. The recommended lubrication intervals for each lubrication points are in brackets.

1. Chain conveyor (B) chains 3 pcs, dispenser stoppers (A), **Figure 6: A,B** (every 50 hours)
2. Motor chain 1 pc (under guard), **Figure 7** (every 100 hours)
3. Bearing nipples on the chain conveyor's dispenser (D) 6 pcs, **Figure 6: D** (every 200 hours)
4. Bearing nipples on the infeed conveyor C 6 pcs, **Figure 6: C** (every 200 hours)
5. Infeed conveyor (C) power transfer chains 2 pcs, **Figure 8** (every 100 hours)

Note! Be careful when applying grease to dustproof bearings!

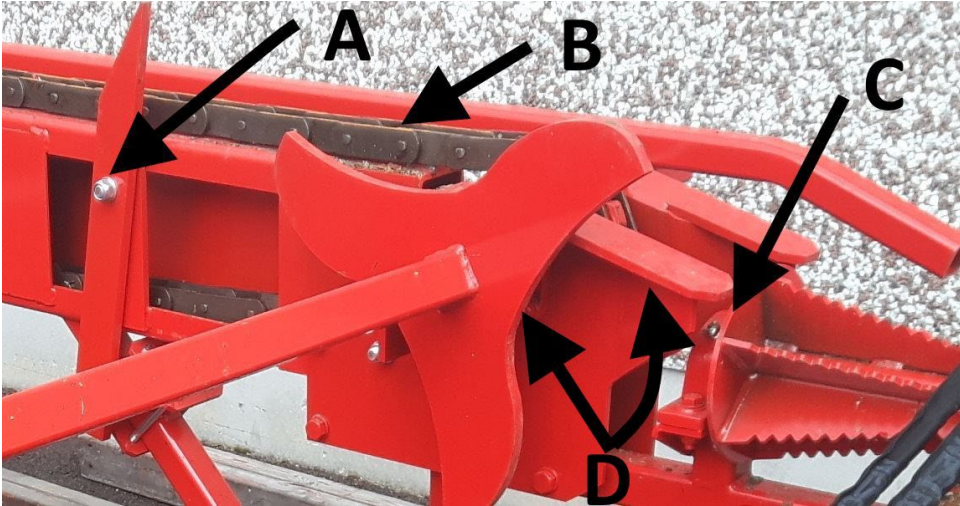


Figure 6.



Figure 7.



Figure 8.

5.3. Washing and cleaning

Loose debris and sawdust can be cleaned from the machine with pressurised air, for example. The machine can also be washed with a high-pressure washer as long as the water jet is not aimed directly at the bearings.

Always ensure that the machine and the working area are sufficiently clean during operation. The machine must always be cleaned after use. Clean the machine at suitable intervals and always before storing the machine for a prolonged time. After washing, the machine must be lubricated according to the instructions in Section 5.2.

6. Storage

Although the machine is intended for outdoor use, it should be covered and stored in a sheltered location or indoors. Before prolonged storage, the machine must first be cleaned, then washed according to Section 5.3. and lubricated according to Section 5.2.

7. Maintenance table

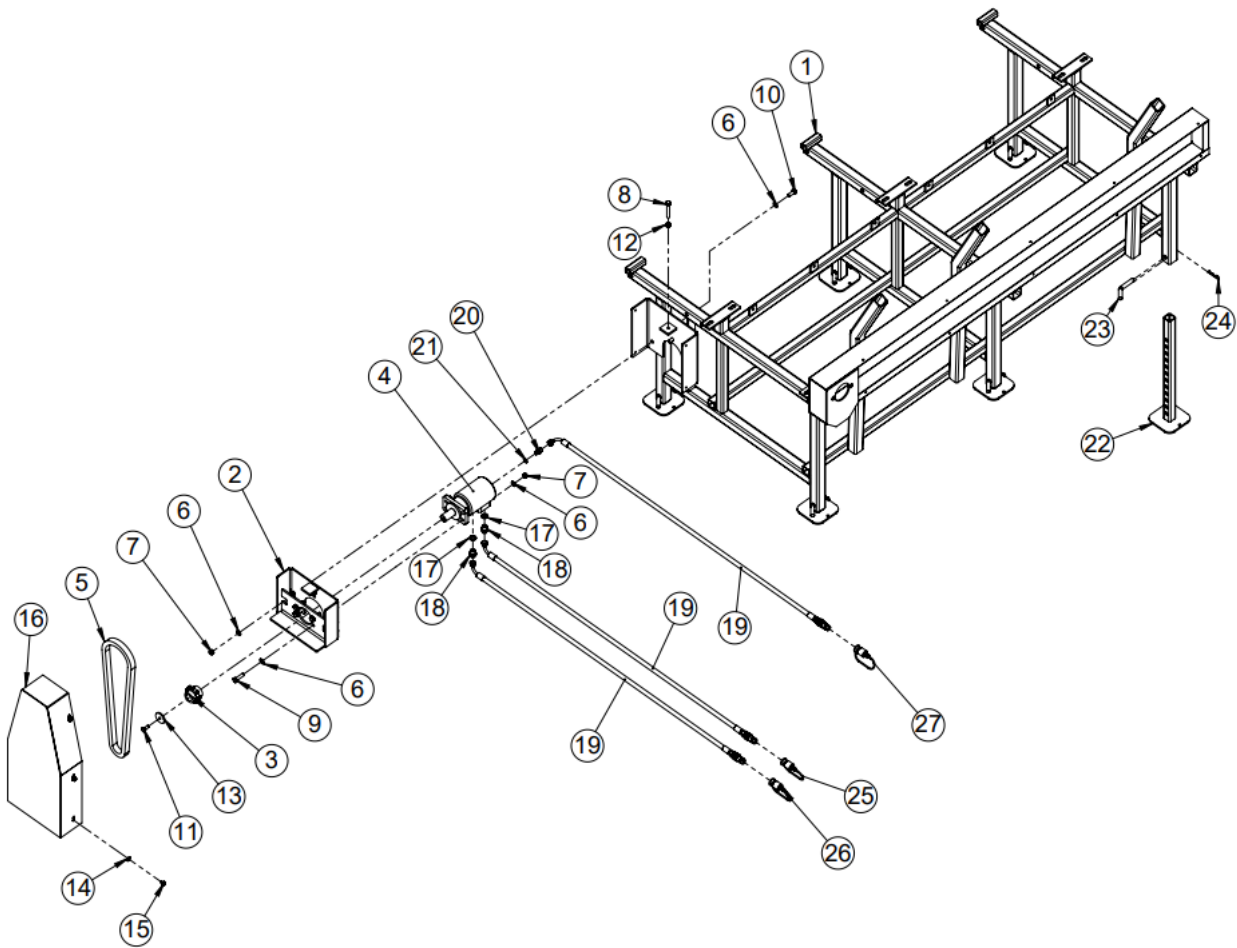
Item	Task	Daily	Interval 100 h	Interval 500 h	Substance/ accessory item
Lubrication points	Lubrication	(Section 5.2.)			Lubrication grease/oil
Chains (condition, tightness)	Check	X			
Hoses	Check	X			

8. Failures and remedial measures

Failure	Cause	Remedial measure
The chain conveyor chains are not running or are sluggish	<ol style="list-style-type: none">1. The chains are too tight or loose2. Log stuck crosswise3. Chains must be greased4. Quick coupling fault or loose coupling5. Incorrect valve pressure	<ol style="list-style-type: none">1. Check chain tension (Section 5.1)2. Remove and replace3. Grease chains4. Repair connection5. Contact the retailer
The in-feed conveyor rollers are not rotating.	<ol style="list-style-type: none">1. The feed serial connection valve is connected to the machine2. Quick coupling fault or loose coupling3. Log stuck	<ol style="list-style-type: none">1. Open the valve2. Repair connection3. Disconnect from the power source and remove blockage

9. Spare part images and listings

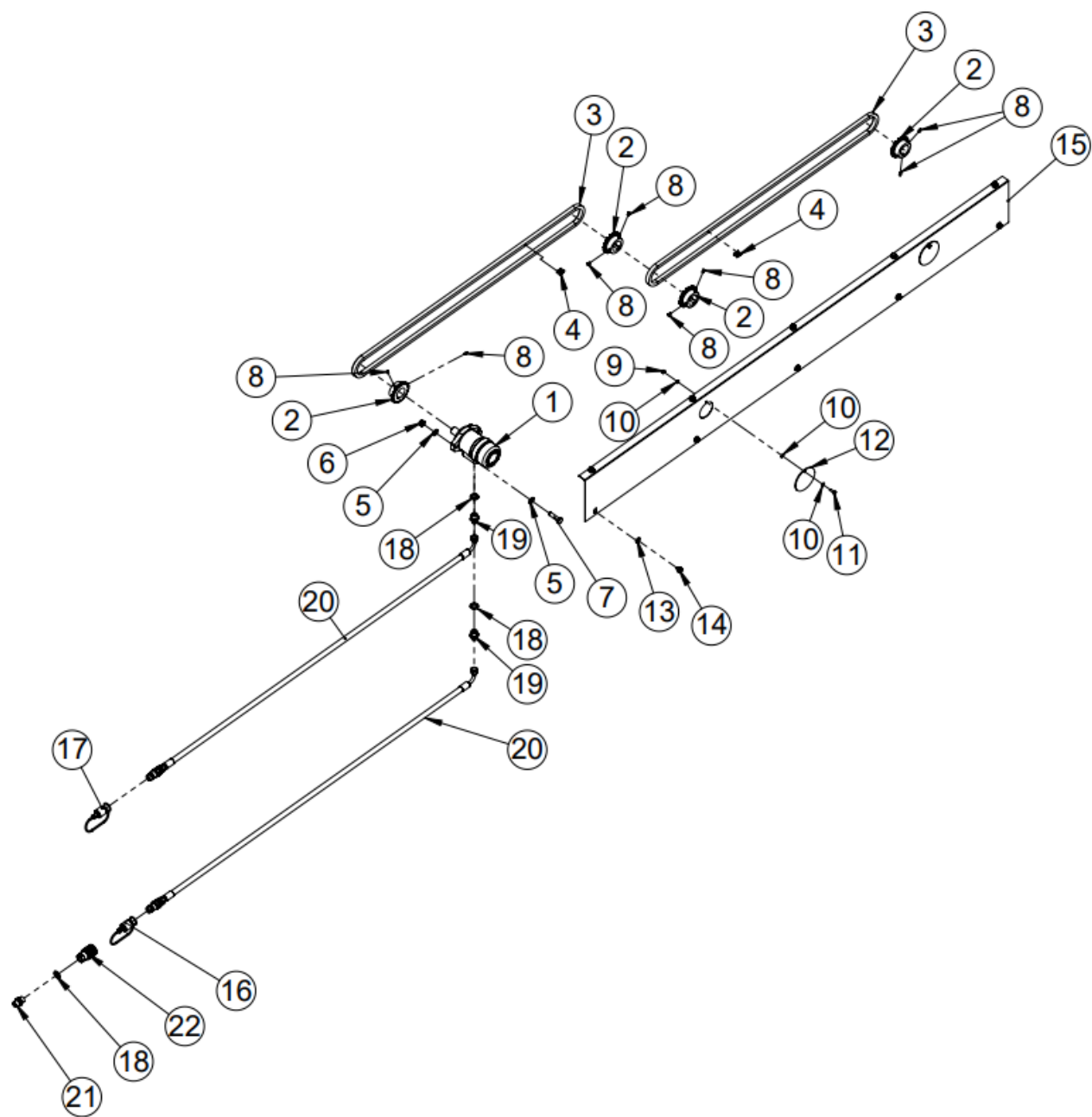
9.1. Cross conveyor 1 (4800l)



9.1.1. Cross conveyor 1 part listing

No.	Part number	Name	Spec	Pcs
1	48005	Frame		1
2	48056	Hydraulic motor mount		1
3	95269	Sprocket Z9		1
4	97312	Hydraulic motor		1
5	48110	Chain 1"		1
6	96058	Washer	A12	14
7	96218	Locking nut	M12	7
8	96151	Hex head screw	M12x80	1
9	96149	Hex head screw	M12x45	4
10	96146	Hex head screw	M12x30	3
11	96139	Hex head screw	M10x25	1
12	96200	Hex nut	M12	1
13	48098	Washer		1
14	96085	Washer	M8	6
15	96373	Nyloc Locking screw	M8x12	6
16	48060	Motor guard		1
17	97213	USIT 1/2"		2
18	97203	Double nipple 3/8" x 1/2"		2
19	97076	Hydraulic hose 3/8" -5200		3
20	97201	Double nipple 1/4" x 3/8"		1
21	97211	USIT 1/4"		1
22	48015	Height adjusting tube		6
23	48033	Locking pin		6
24	96208	Cotter pin		6
25	97660	Quick coupling guard black (male)		1
26	97661	Quick coupling guard red (male)		1
27	97658	Quick coupling guard blue (male)		1

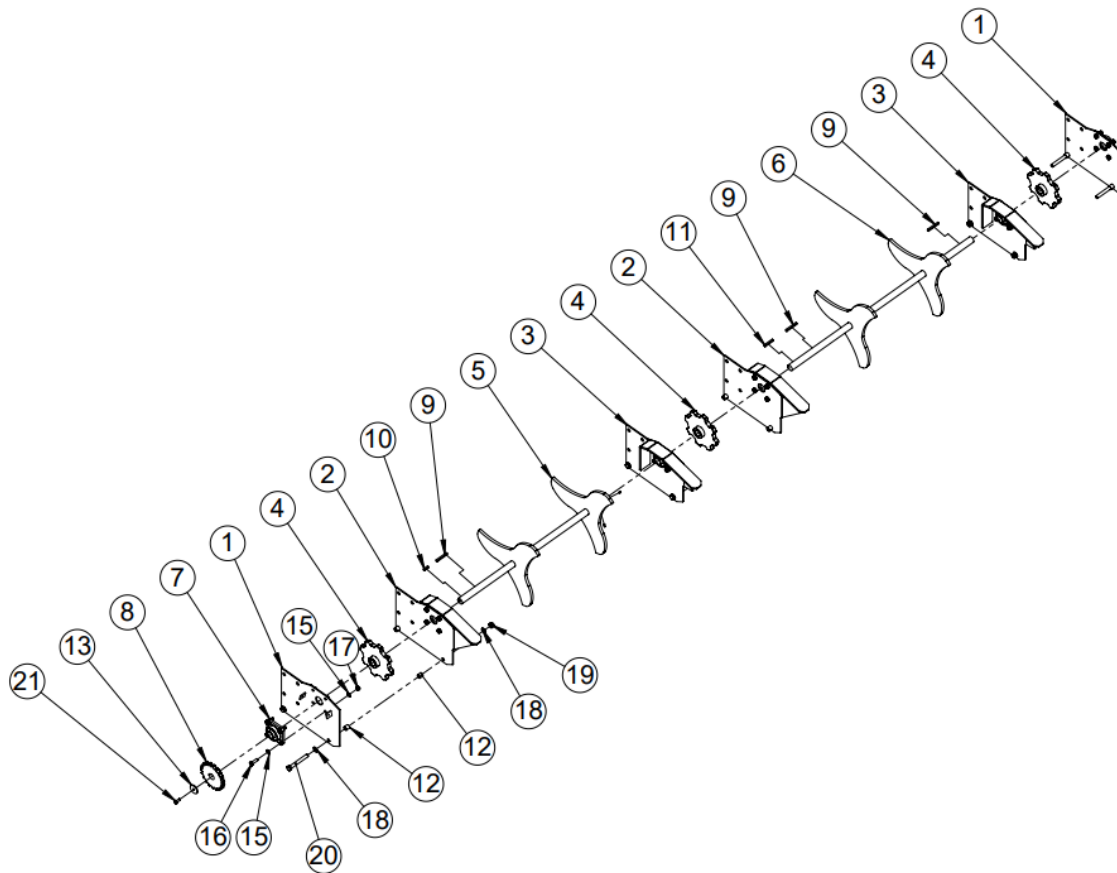
9.2. Cross conveyor 2



9.2.1. Cross conveyor 2 part listing

No.	Part number	Name	Spec	Pcs
1	97308	Hydraulic motor		1
2	48041	Sprocket Z19		4
3	95073	Roller chain 1/2"		2
4	95074	Connecting link 1/2"		2
5	96058	Washer	A12	4
6	96218	Locking nut	M12	2
7	96149	Hex head screw	M12x45	2
8	96277	Setscrew	M8x12	8
9	96221	Locking nut	M6	2
10	96060	Washer	A6	6
11	96135	Hex head screw	M6x20	2
12	48061	Lubricating hole cover		2
13	96287	Sesco washer	M8	10
14	96373	Nyloc Locking screw	M8x12	10
15	78030	Protection plate		1
16	97660	Quick coupling guard black (male)		1
17	97661	Quick coupling guard red (male)		1
18	97213	USIT 1/2"		3
19	97203	Double nipple 3/8" x 1/2"		2
20	97076	Hydraulic hose 3/8" -5200		2
21	97204	Double nipple 1/2" x 1/2"		1
22	97388	Quick connector, female 1/2" automatic		1

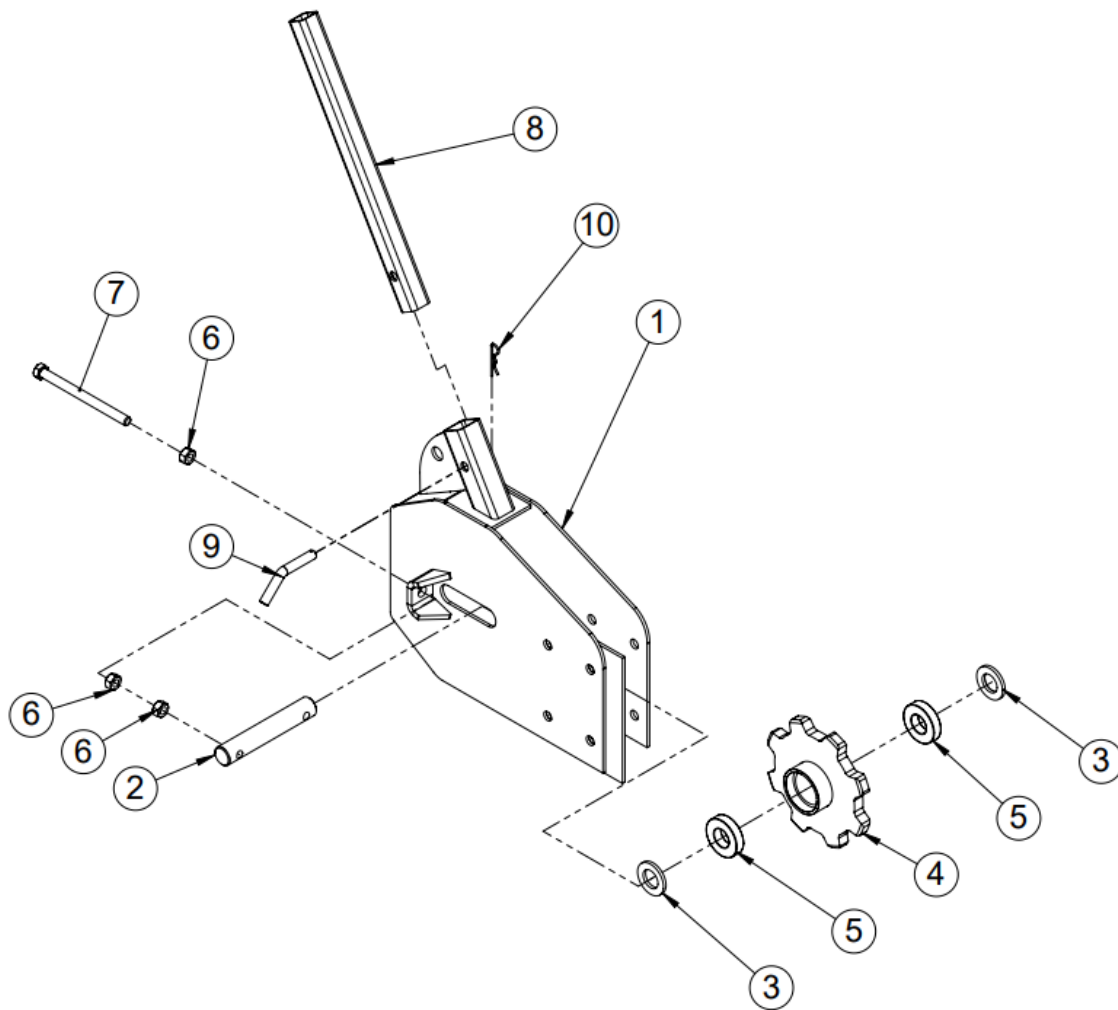
9.4. Log roller (48103)



9.4.1. Log roller part listing

No.	Part number	Name	Spec	Pcs
1	48013	Roller mount		2
2	48105	Roller mount		2
3	48106	Roller mount		2
4	48023	Drive roller		3
5	48091	Axle (shorter)		1
6	48026	Axle		1
7	95277	Bearing assembly	UCF207	6
8	95180	Sprocket		1
9	48046	Slot wedge	10x8x75	3
10	48093	Slot wedge	10x8x30	1
11	48096	Slot wedge	10x8x60	1
12	48053	Spacer		12
13	48098	Washer		1
14	96224	Set screw	M8x16	2
15	96058	Washer	A12	48
16	96148	Hex head screw	M12x40	24
17	96218	Locking nut	M12	24
18	96059	Washer	A16	12
19	96219	Locking nut	M16	6
20	96113	Hex head screw	M16x130	6
21	96139	Hex head screw	M10x25	1

9.5. Rear roller attachment (50054597)



9.5.1. Rear roller attachment part listing

No.	Part number	Name	Spec	Pcs
1	50054598	Roller mount		1
2	48032	Roller axle		1
3	47197	Washer		2
4	48040	Sprocket		1
5	95055	Bearing	6207	2
6	96195	Hex nut	M16	6
7	96153	Hex head screw	M16x200	2
8	48044	Rear stopper tube		1
9	48033	Locking pin		1
10	96208	Cotter pin		1

9.5. Overview

