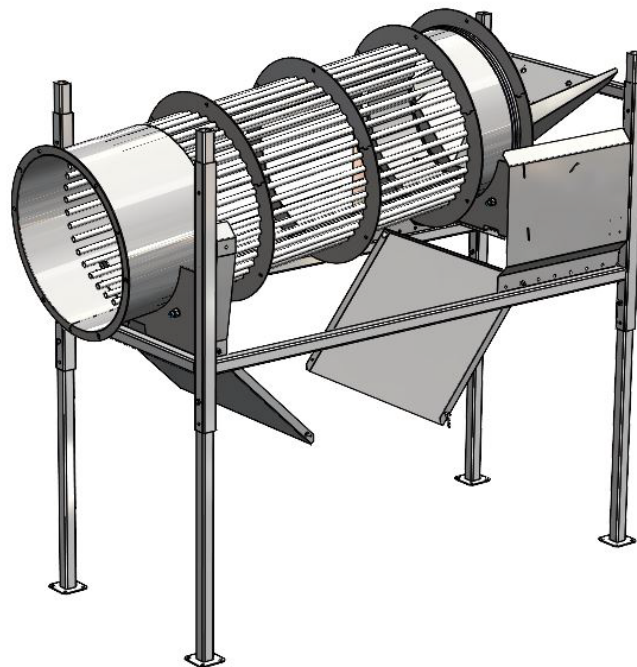


# INSTRUCTION MANUAL

# **PALAX®**

## Cleaner



SERIAL NUMBER AND YEAR OF MANUFACTURE: \_\_\_\_\_

# **PALAX®**

Lahdentie 9  
61400 Ylistaro, FINLAND  
Tel. +358 6 4745100  
[www.palax.fi](http://www.palax.fi)

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# **1. Basic specifications and responsibilities**

## ***1.1. Foreword***

This Instruction Manual is intended for a professional operator of the machine. The operator must have usual general knowledge and skills. For example, the buyer of a tractor-powered machine is expected to master the use of power take-off shaft transmission.

Before the installation and operation, the operator of the machine must become thoroughly familiar with the contents of the manual. The operator is also obliged to gain familiarity with the operating controls of the machine and the emergency stop mechanism. For more information about our products, please visit our website at [www.palax.fi](http://www.palax.fi).

**NOTE!      Keep this manual with the machine at all times.**

## 1.2. *EU Declaration of Conformity*

Directive 2006/42/EC

Manufacturer: TP Silva Oy  
www.palax.fi  
Lahdentie 9  
FI-61400 Ylistaro  
Finland  
+358 6 474 5100

The person in charge of Technical Construction File: Timo Jussila

Product: Debris drum and extension conveyor,  
An optional accessory for Palax firewood processors.  
Powered by: Tractor P.T.O. or electric motor  
Models: TR Powered by tractor equipped with own hydraulic system  
SM Powered electric motor

Serial number of the machine: \_\_\_\_\_

We hereby certify that the machine meets the requirements of the Government Decree 12.6.2008/400 on safety of machinery through which the Machine Directive 2006/42/EC has been put into effect, and that during the manufacturing process the following harmonized standards have been applied.

SFS-EN 12100-1+A1, SFS-EN 12100-2

TP Silva Oy  
1.1.2023



Seppo Koironen  
Business Director

### 1.3. Intended use of the machine

Debris drum and extension conveyor are optional accessories for Palax firewood processors. Using the machine for any other purpose or connecting it to any other machine is prohibited.

### 1.4. Warning signs

 <p><b>Lifting point for forklift truck</b></p>	 <p><b>The danger zone around the conveyor is 5 metres</b></p>	 <p><b>Disconnect the machine from the power source before servicing</b></p>
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### 1.5. Safety instructions

#### General regulations and restrictions

- ❑ The machine is only intended for cleaning firewood in combination with the Palax firewood processor.
- ❑ The danger zone around the debris drum and the conveyor is 5 metres to the sides and to the rear.
- ❑ Never remove any safety-related devices from the machine.

#### The operator

- ❑ Every person operating the machine, must thoroughly study the entire user manual.
- ❑ Always use eye guards and hearing protectors.
- ❑ Always wear protective shoes.
- ❑ Always wear work gloves.
- ❑ Do not wear loosely-fitting clothing.

#### Before use

- ❑ Set up both the debris drum and the conveyor before starting up the machine.
- ❑ Make sure that all other people stay outside the operating range.
- ❑ Only operate the debris drum on a sufficiently firm and level surface.
- ❑ Only operate the drum in an adequately lit space.
- ❑ Always check that all the covers are intact and properly fastened.
- ❑ Always ensure that the electric conductors are intact.
- ❑ Always ensure that the hydraulic hoses and components are intact.
- ❑ Before starting the work, make sure that the drum stands firmly in position.

#### During operation

- ❑ Keep the working space clean and clear of foreign objects.
- ❑ Always stop the machine and disconnect the power supply cable before servicing.

- ❑ Danger! Stay away from moving parts.

### ***1.6. Responsibilities of the operator***

- ❑ The drum may exclusively be used for cleaning firewood as an optional accessory for the Palax firewood processor.
- ❑ **All the safety-related devices** of the drum are necessary to ensure a sufficient level of safety.
- ❑ It is the **responsibility of the operator** of the drum to ensure before starting the work that all the safety-related devices are in perfect order and the drum has been serviced in a due manner.
- ❑ The operator is responsible for ensuring that no one else is subjected to any danger.
- ❑ Modifying the construction of the drum is prohibited.
- ❑ Remember that as the operator you are responsible for any injuries caused if safety-related devices have been removed from the drum.

### ***1.7. Operating conditions***

- ❑ Always place the drum on as level a surface as possible.
- ❑ Only operate the machine in an adequately lit space.
- ❑ The most suitable temperature range for operation is approximately - 20 to +30 degrees Centigrade. Otherwise, the weather conditions do not set any restrictions on the operation.
- ❑ Make sure that no other people, especially children, are present inside the operating range.

### ***1.8. Terms of warranty***

The warranty period runs for 12 months from the date of purchase.

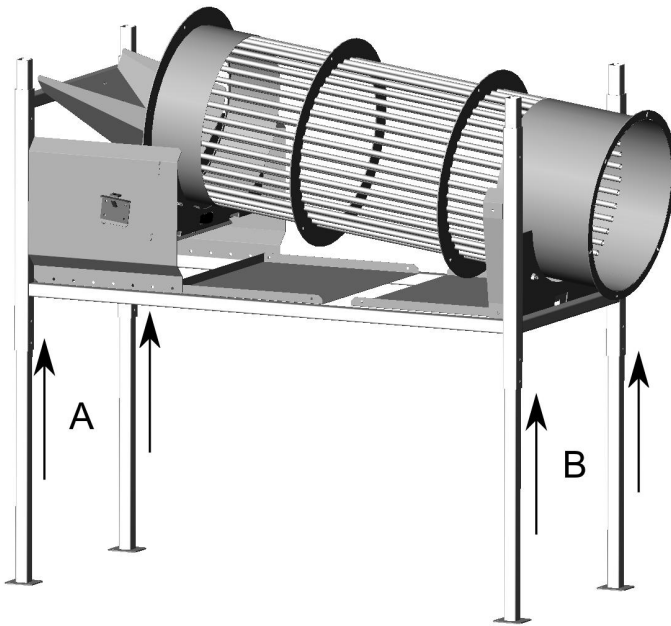
#### **The warranty covers**

- ❑ Parts which have been damaged during normal operation of the machine due to any defects in material or workmanship.
- ❑ The reasonable repair cost as set forth in the agreement between the buyer and the manufacturer.
- ❑ A new part is delivered as a replacement for the defective one.

#### **The warranty does not cover**

- ❑ Defects due to normal wear, faulty operation or negligent maintenance.
- ❑ V-belts.
- ❑ Defects in the product due to any modifications, which the buyer has made or ordered from a third party and which have affected the product in such a way that it can no longer be considered to correspond to its original configuration.
- ❑ Other possible expenses or financial claims due to the above-mentioned measures.
- ❑ Any indirect costs and/or travel expenses incurred from making repairs under the guarantee.
- ❑ For parts changed during the warranty period, the warranty expires at the same time as the warranty period of the product.
- ❑ Consult your dealer about matters related to the warranty.

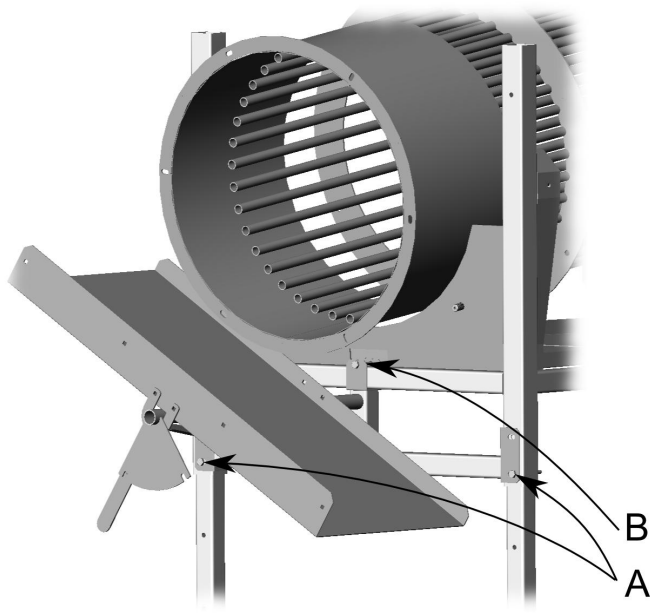
## 2. Setting up the unit for the operation



*Fig. 1.*

- ❑ Lift the debris drum to the desired operating height by lifting with long forklift forks under the frame. (width of the frame 1,120 mm).
- ❑ The angle of the debris drum can be changed by altering the height difference of the legs A and B (Fig. 1).

### 2.1. Debris drum with distributor



*Fig. 2.*

- ❑ Fix the distributor to the debris drum using hexagon bolts A and B, as illustrated in Fig.

2.

- Fix the hexagon bolts A (Fig. 2) to the same holes for the height adjustment of the legs.

## 2.2. Debris drum with conveyor

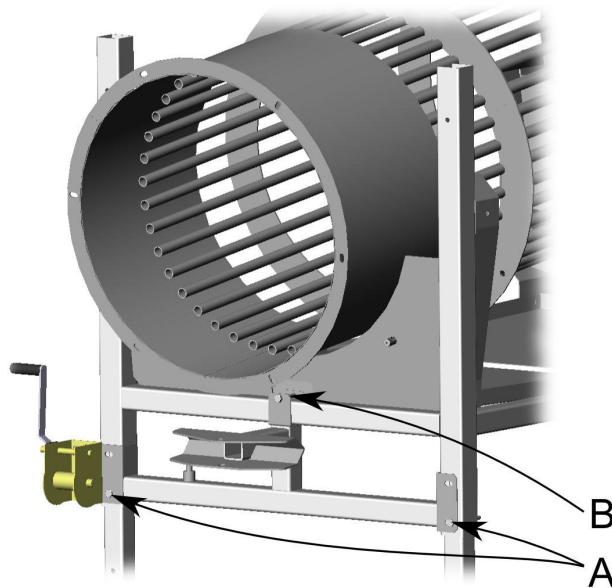


Fig. 3.

- Fix the conveyor bearer to the debris drum using hexagon bolts A and B, as illustrated in Fig. 3.
- Fix the hexagon bolts A (Fig. 3) to the same holes for the height adjustment of the legs.

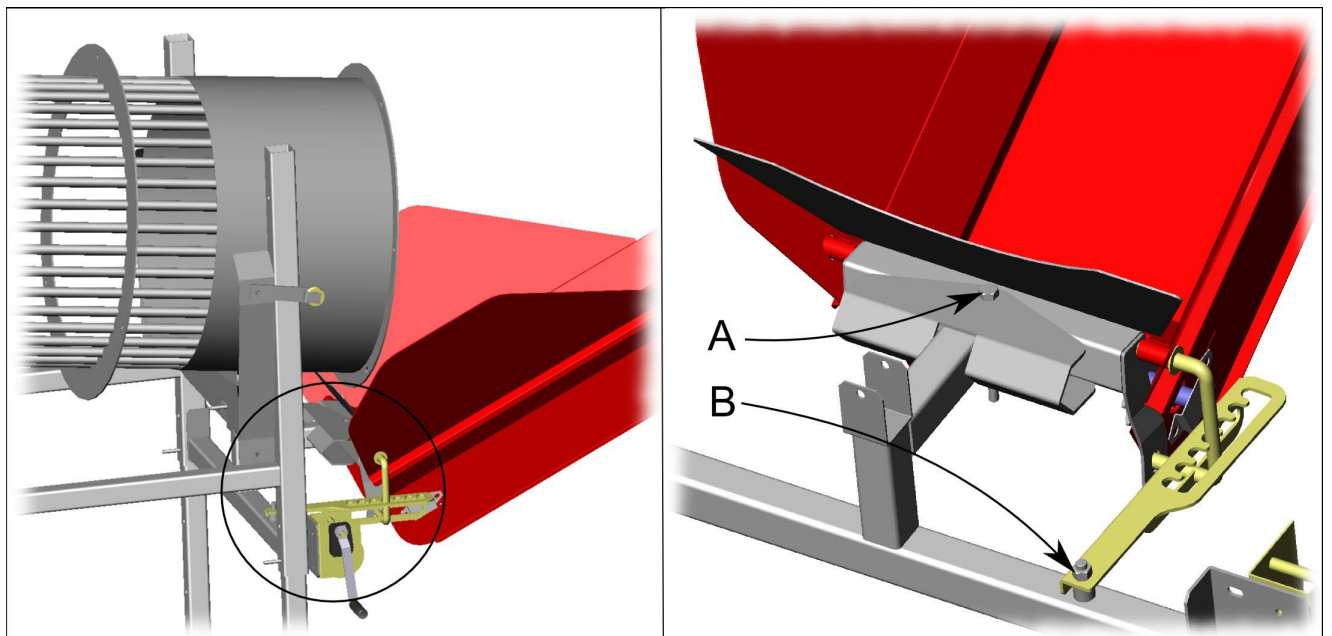
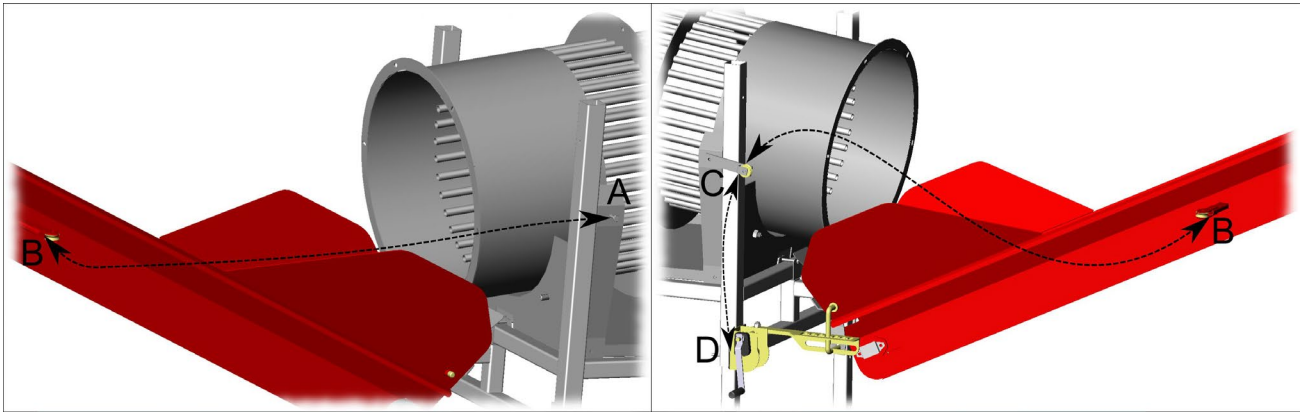


Fig. 4.

- Fix the conveyor to the bearer by hole A (Fig. 4).
- Fix the locking lever for the conveyor to the bearer by point B (Fig. 4)





*Fig. 5.*

- ❑ Fix the wire loop to the bolt A (Fig. 5).
- ❑ Thread the wire through the pipe B located behind the rollers on the conveyor (Fig. 5).
- ❑ Thread the wire via the roller C (Fig. 5) to the winch D (Fig. 5).

### 3. Using the debris drum

#### **3.1. *Hydraulic drive***

- ❑ Connect the hydraulic hoses so that the oil flows in the correct direction.
- ❑ The hydraulic hose on the pressure side is screened with a protective sleeve.

#### **3.2. *Powered by electricity***

- ❑ Make sure that the direction of rotation of the discharge conveyor is correct.
- ❑ As required, change the direction of rotation using the switch in the plug.

#### **3.3. *Adjusting the wood throughput speed***

- ❑ The wood throughput speed can be adjusted by changing the angle of the debris drum by either extending or shortening the legs.
- ❑ In a hydraulically driven machine, the rotational speed of the drum and the conveyor can be altered by adjusting the speed regulating valve next to the hydraulic motor. The unit comes with separate adjustment valves for both the drum and the conveyor.

## 4. Service measures

### 4.1. Lubricating the wheel shafts

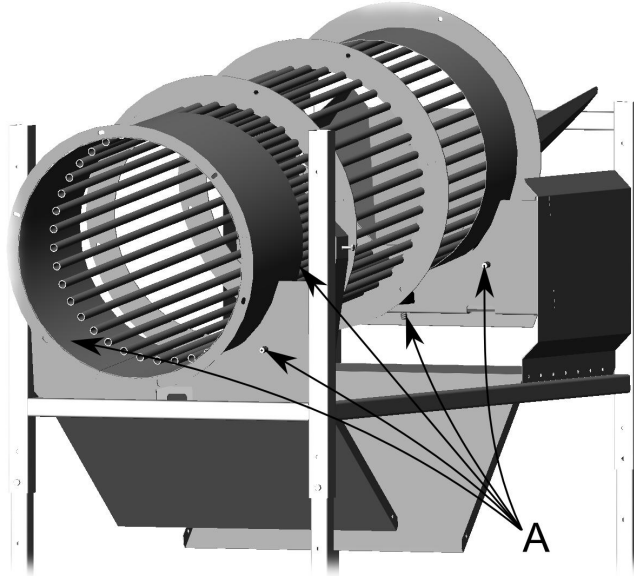


Fig. 6.

- The rotation of the debris drum is supported by five rubber wheels. The shafts A (Fig. 6) of these wheels must be lubricated regularly.

### 4.2. Tightening the V-belts

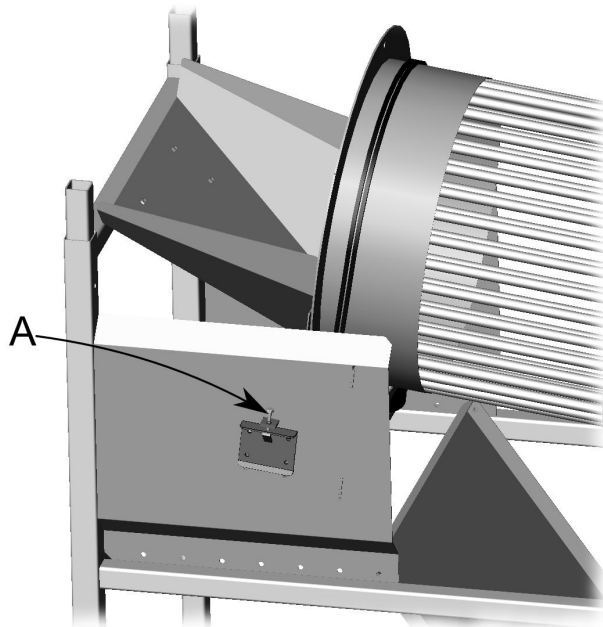


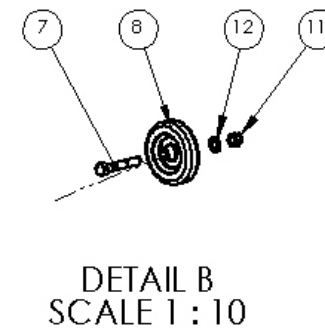
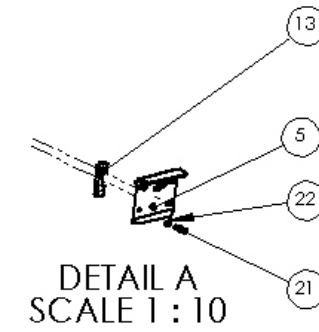
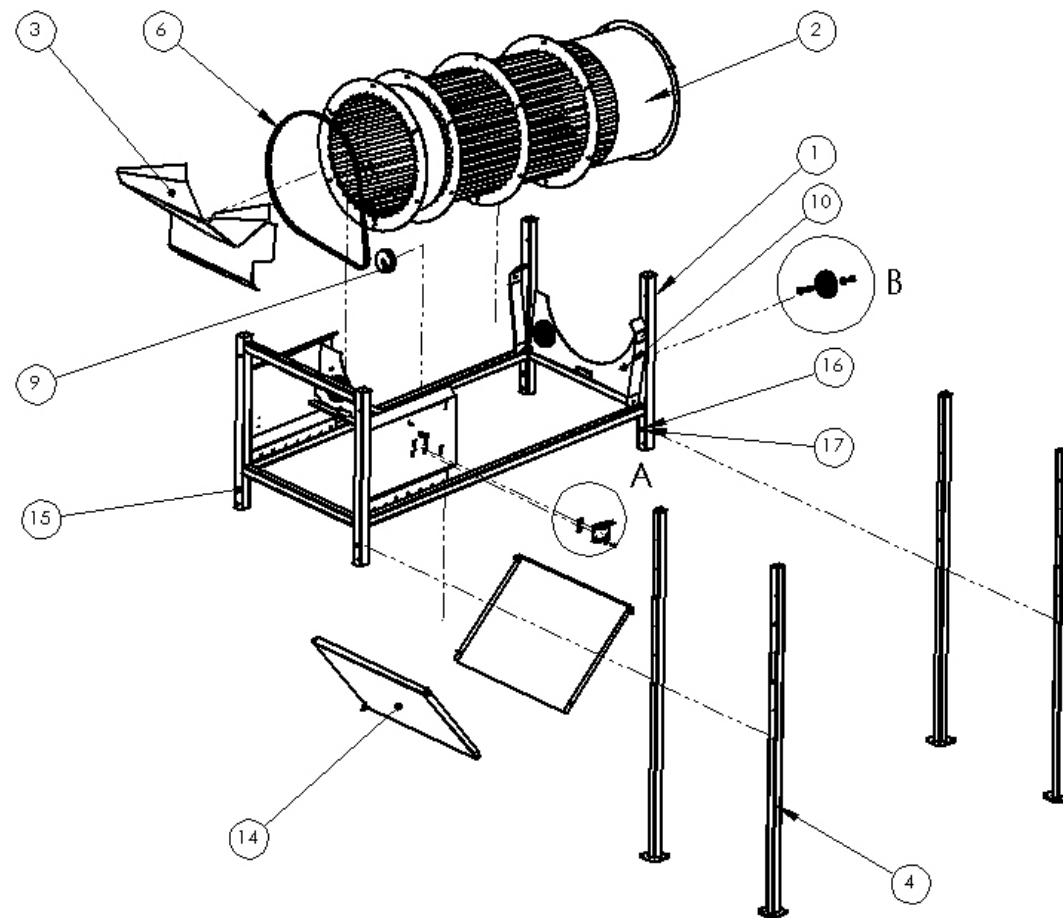
Fig. 7.

- The V-belts are tightened by tightening the bolt A (Fig. 7).

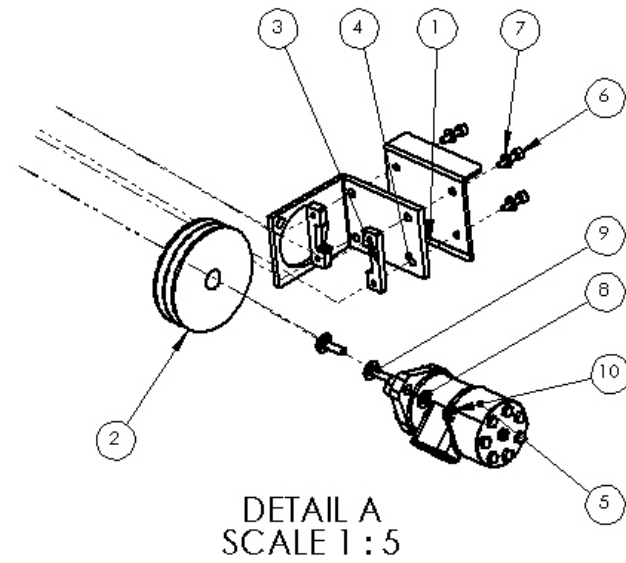
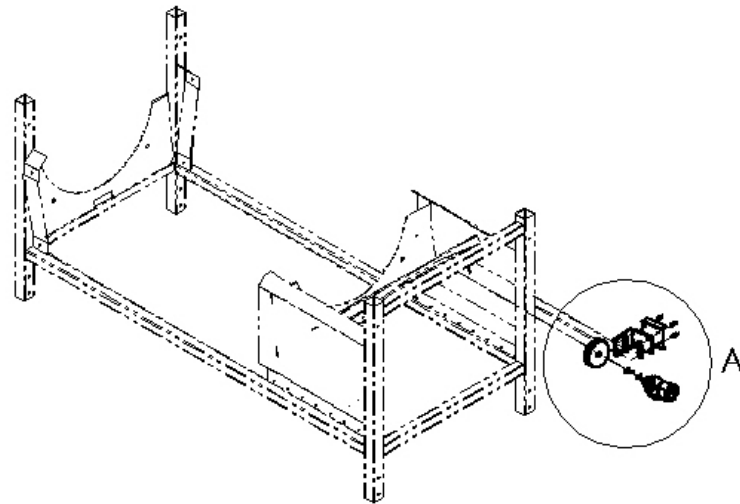
## **5. Spare parts**

### **Ordering instructions**

1. Look up the picture with the required part.
2. Note the reference number for the part shown in the picture.
3. Look up the ordering code referred to by the picture and part number.
4. When placing your order, always mention: ordering code, denomination of the item, serial number and year of manufacture of the machine.

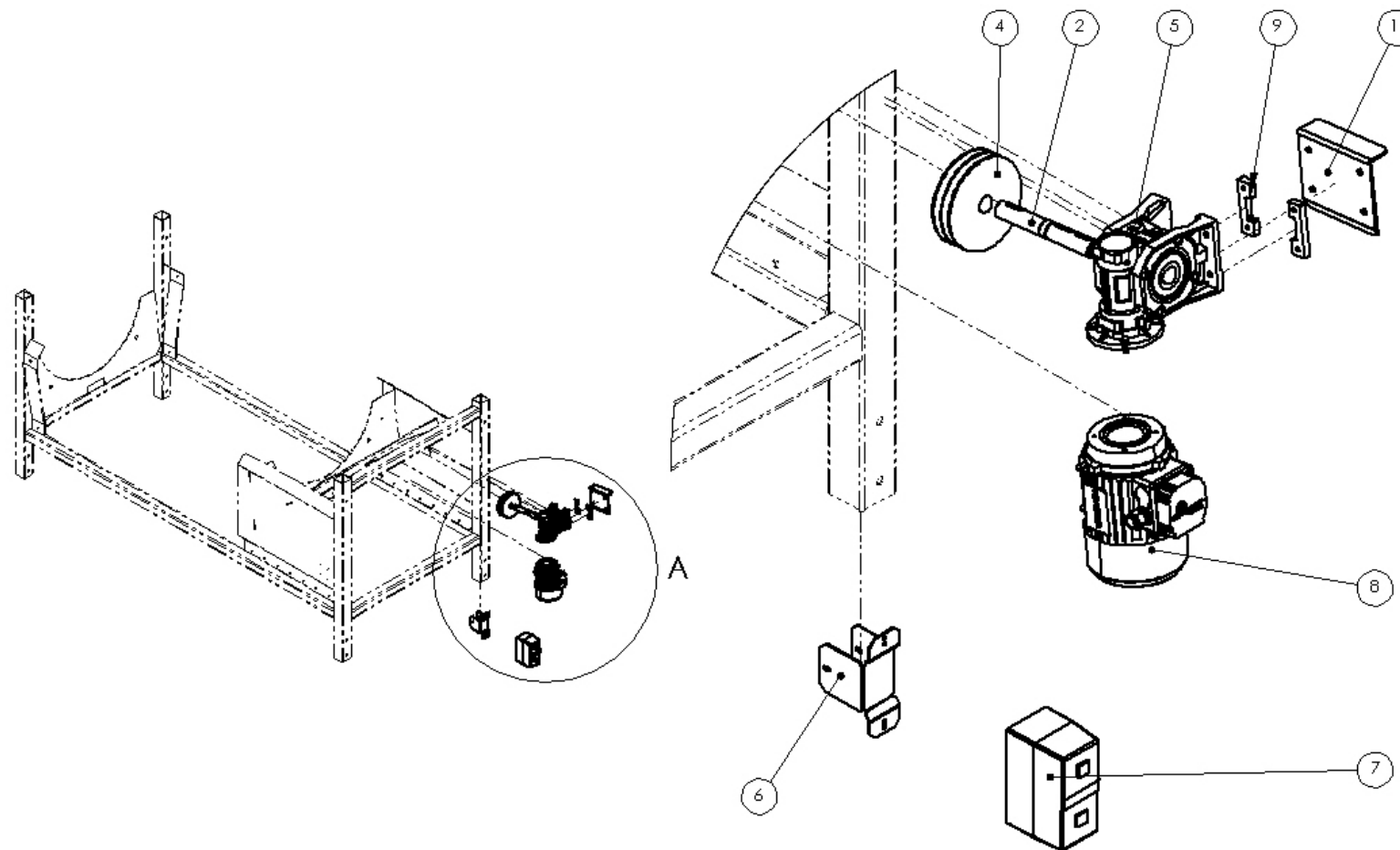


22	Washer	OALM08C125	4
21	Screw	ORM08030C912	4
20	Lock Nut	OMM10C985	4
19	Washer	ORM10C125A	4
18	Lock head screw	ORM10020C603	4
17	Lock Nut	OMM12C985	4
16	Washer	ORM12C125A	4
15	Screw	ORM12090C933	4
14	Debris plates	PX1721010	1
13	Mounting part	L3802061	2
12	Washer	OALM20C125	5
11	Lock Nut	OMM20C985	5
10	Nut	OMM20C934	5
9	V-belt Pulley	OVSPA132	1
8	Ruber Tyre	OYP16040R	5
7	Screw	ORM20120	5
6	V-belt	OVB112	2
5	Adjusting plate	3823001	1
4	Leg	3803001	4
3	Slide	3804002	1
2	Drum	3801003	1
1	Frame	3802001	1
Part	Item	Order code	Pcs



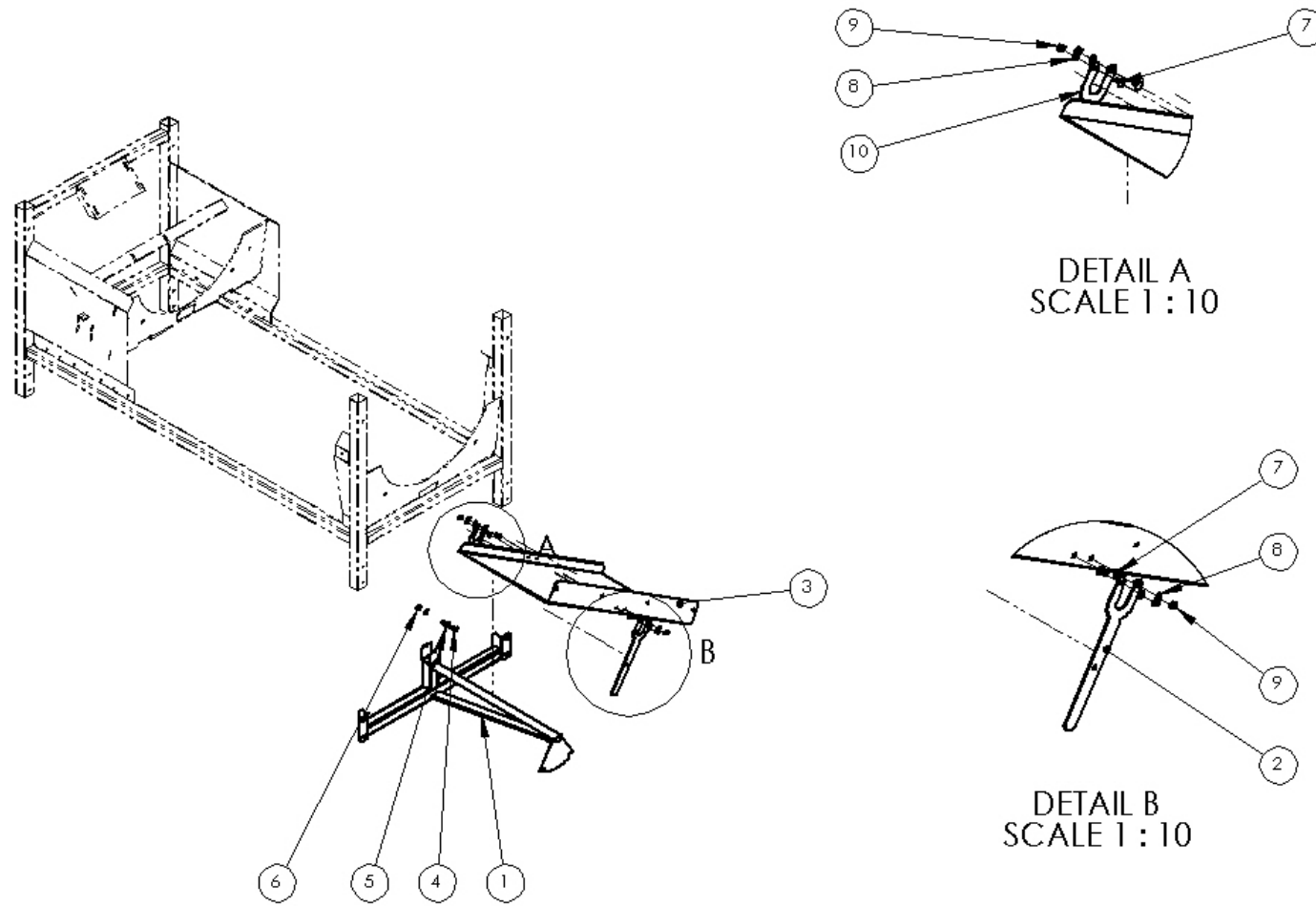
10	Lock nut	OMM10C985	2
9	Lock head screw	ORM10035D603	2
8	Washer	ORM10C125A	2
7	Washer	OALM08C125	4
6	Screw	ORM08030C912	4
5	Hydraulic motor WP80	OH7200081	1
4	Hydraulic motor bracket	L3807040	1
3	Mounting part	L3802061	2
2	V-belt pulley	OVSPA132	1
1	Adjusting plate	3823001	1
Part	Item	Order code	Pcs



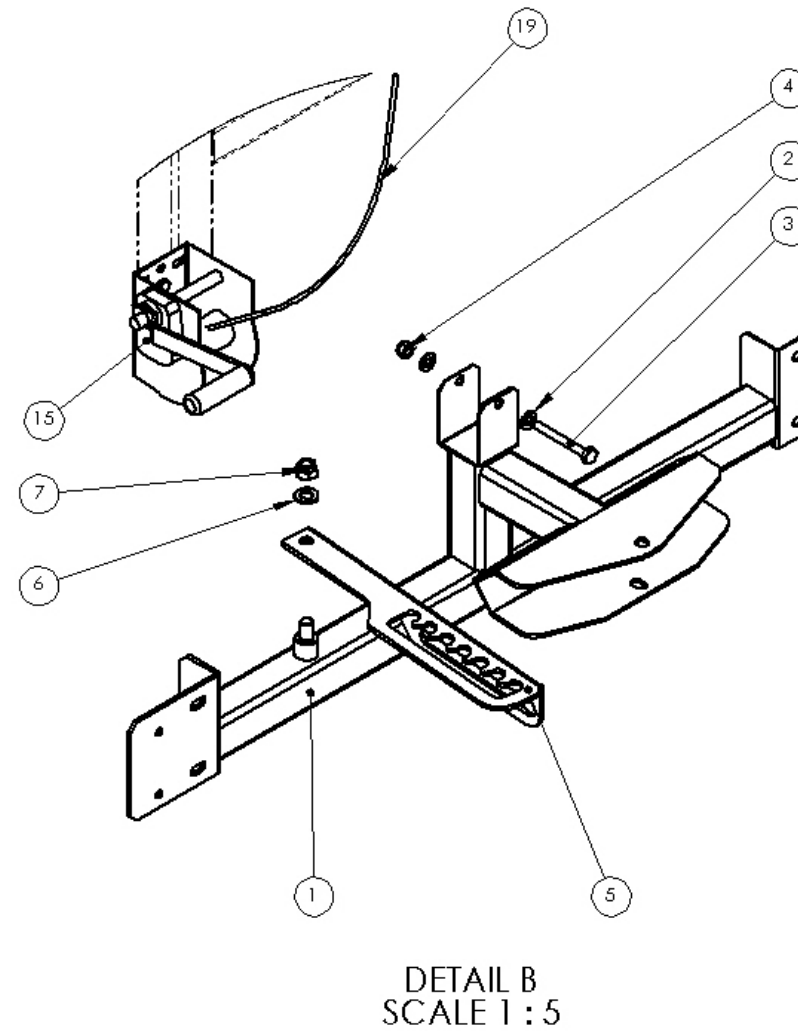
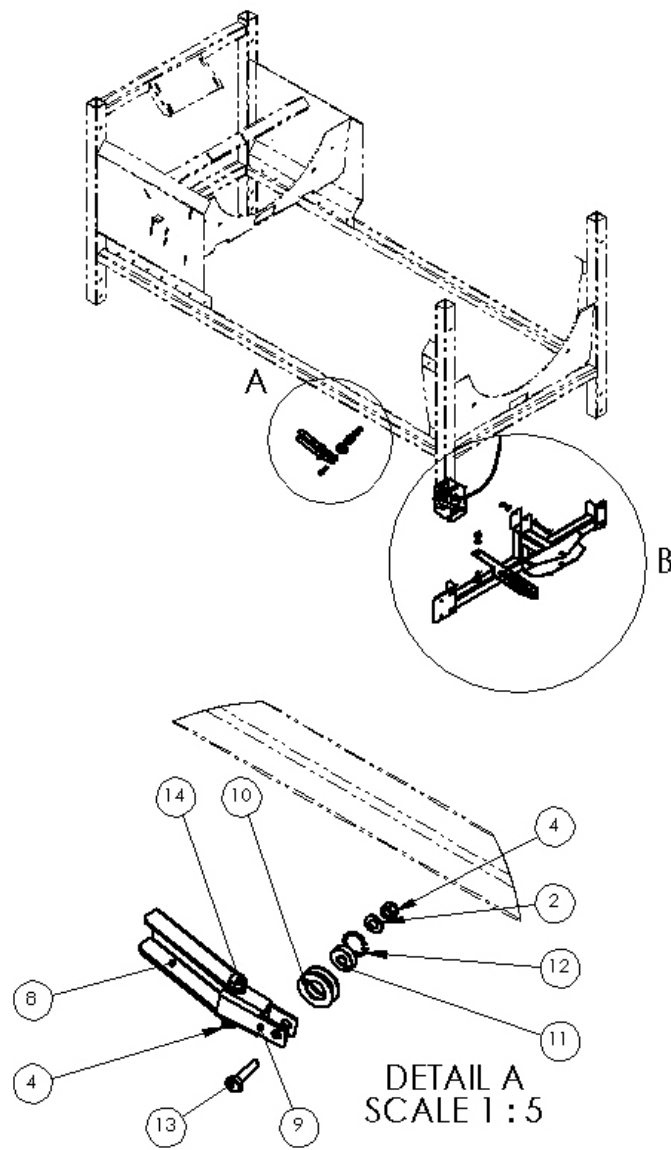


DETAIL A  
SCALE 1 : 5

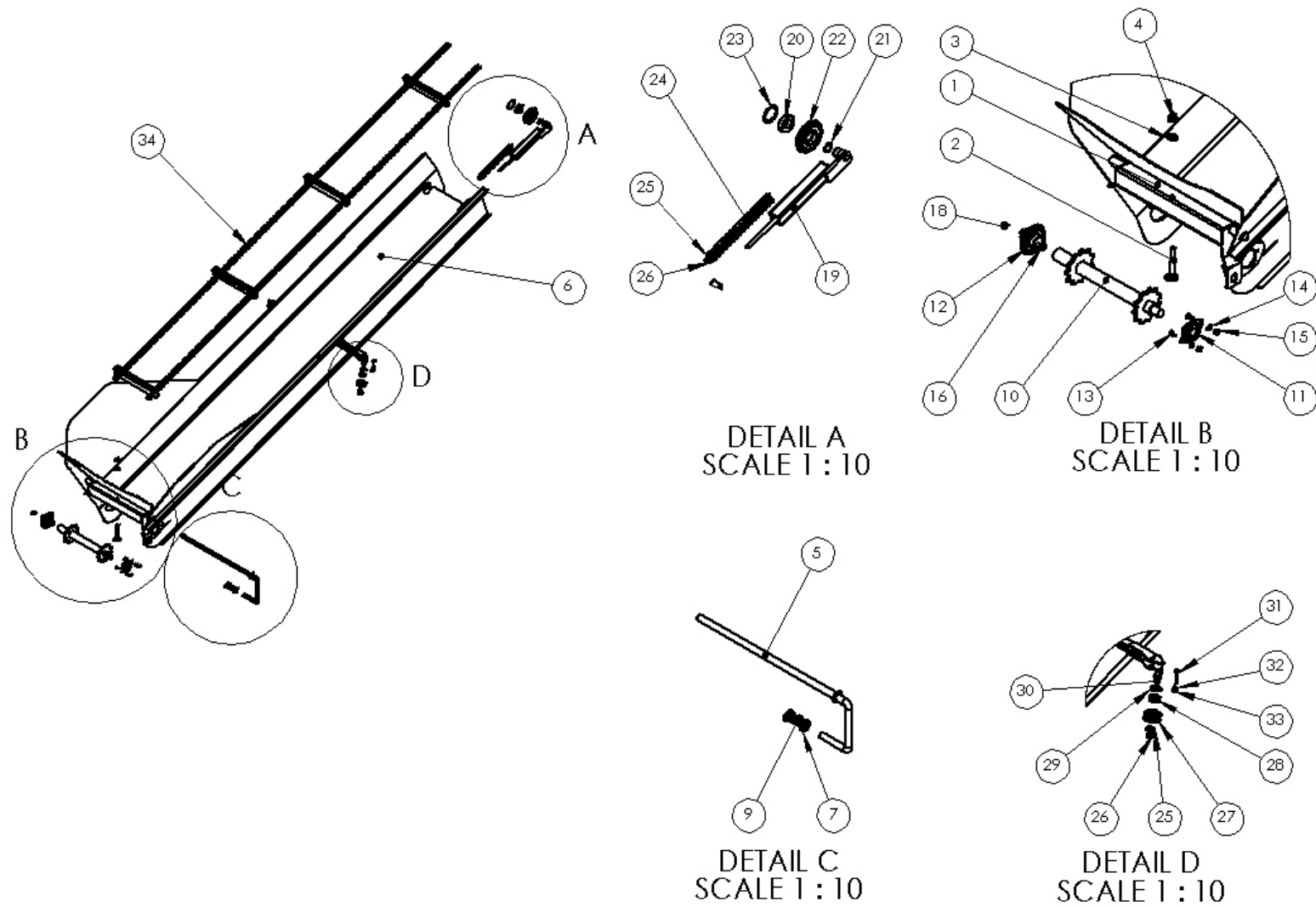
9	Mounting part	L3802061	2
8	Electric motor 0,55 kw	OE0551500	1
7	Starter 0,55kw	OE614301102	1
6	Starter bed	L3807010A	1
5	Worm gear SW050	OSW050PA20	1
4	V-belt pulley	OVSPA132	1
3	Lock ring	OSV25DIN471	2
2	Drive Shaft	K3821011	1
1	Adjusting plate	3823001	1
Part	Item	Order code	Pcs



10	Lug	L3810010	1
9	Lock Nut	OMM10C985	4
8	Washer	ORM10C125A	4
7	Lock head screw	ORM10020C603	4
6	Lock Nut	OMM12C985	1
5	Washer	ORM12C125A	2
4	Screw	ORM12090C933	1
3	Slide	L3809010	1
2	handle	L3811010	1
1	Bearer	3808001	1
Part	Item	Order code	Pcs

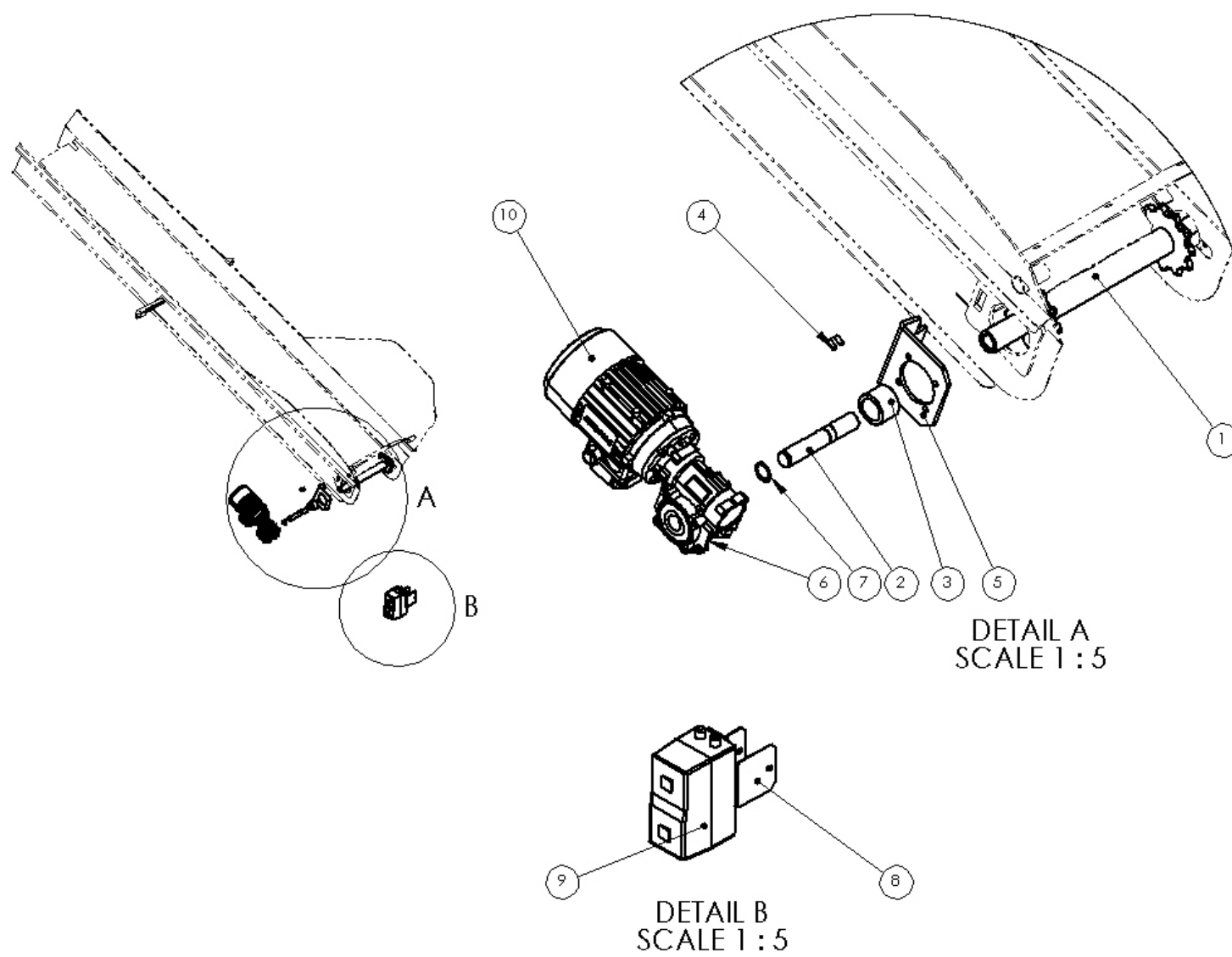


19	Wire	OVA4500	1
18	Lock Nut	OMM10C985	2
17	Washer	ORM10C125A	2
16	Screw	ORM10030C93	2
15	Winch Goliath 6AF	OYV6AF750	1
14	Screw	ORM12070C933	1
13	Screw	ORM12045C93	1
12	Lock ring	OSV32DIN472	1
11	Bearing 6201 2RS	OL62012RS	1
10	Roller wheel	K2620010	1
9	Frame	3822002	1
8	Laippa	L3812210	1
7	Lock Nut	OMM16C985	1
6	Washer	OALM16C125	1
5	Lukitusvipu	L3818010	1
4	Lock Nut	OMM12C985	3
3	Screw	ORM12090C933	1
2	Washer	ORM12C125A	4
1	Conveyor bearer	3816001	1
Part	Item	Order code	Pcs

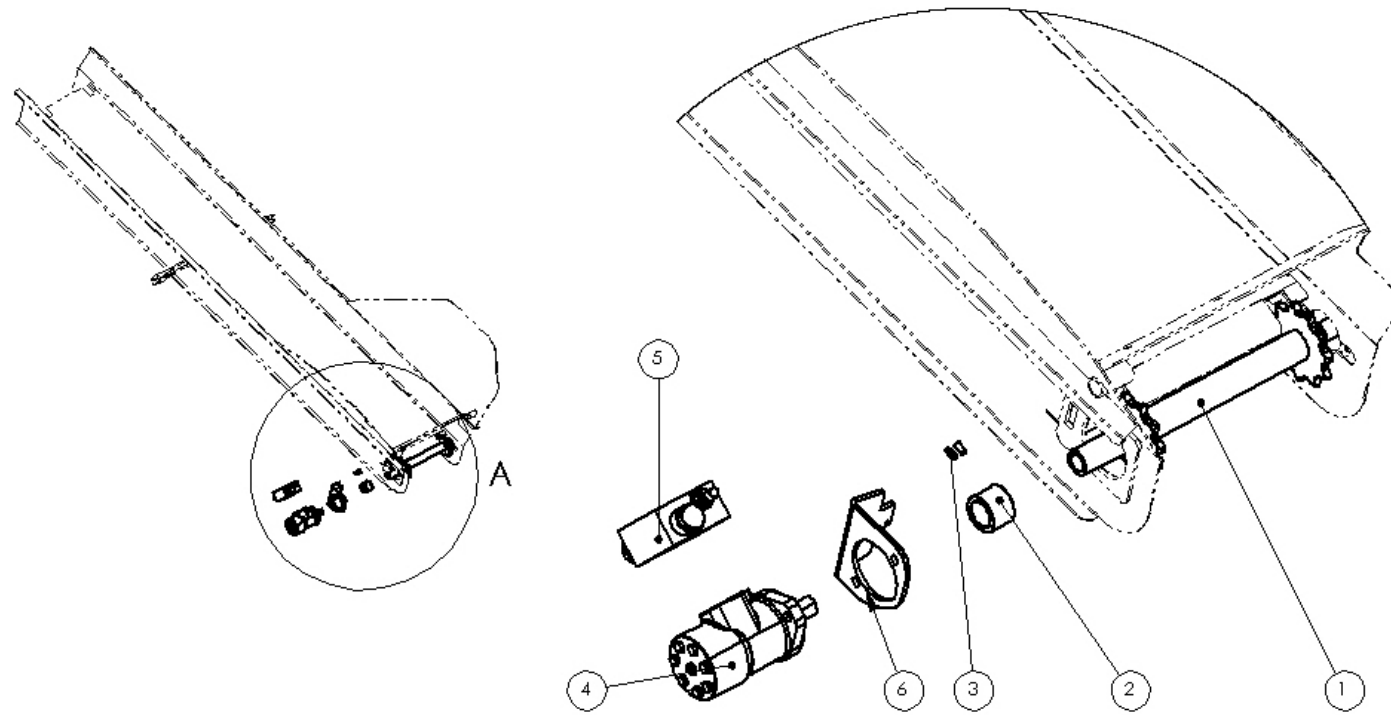


34	Conveyor chains	OKCS32W	1
33	Lock Nut	OMM06C985	2
32	Washer	OALM06C125	2
31	Screw	ORM06040C601	2
30	Screw	ORM12045C93	2
29	Lock ring	OSV32DIN472	2
28	Bearing 6201 2RS	OL62012RS	2
27	Roller wheel	K2620010	2
26	Lock Nut	OMM12C985	4
25	Washer	ORM12C125A	4
24	Spring	50048601	2
23	Lock ring	OSV52DIN472	2
22	Return roller	K2606011	2
21	Lock ring	OSV25DIN471	2
20	Bearing 6205 2RS	OL62052RS	2
19	Return roller holder	2603002	2
18	Lock Nut	OMM10C985	2
17	Washer	ORM10C125A	2
16	Screw i	ORM10025DIN7991	2
15	Lock Nut	OMM08C985	2
14	Washer	OALM08C125	2
13	Screw	ORM08020D7991	2
12	Bearing 207	OBPFL7	1
11	Bearing 205	OBPFL5	1
10	Drive shaft	10104003	1
9	Spring 2,0x25x65	OJP202565	1
8	Split pin	OSS04x32C94	1
7	Washer	OALM20C125	3
6	Conveyor frame	3815002	1
5	Fixing hook	10114010	1
4	Lock Nut	OMM16C985	1
3	Washer	OALM16C125	1
2	lock head screw	ORM16100C603	1
1	Swing beam	3817001	1
Part	Item	Order code	Pcs





10	Electric motor 0,55 kw	OE0551500	1
9	Starter 0,55kw	OE614301102	1
8	Starter bed	L3807010A	1
7	Lock ring	OSV25DIN471	2
6	Worm gear	OSW050T10	1
5	Moves gear bed	L2601271	1
4	stopper screw	ORM08016C916	2
3	Bushing	K2604030	1
2	Drive shaft	K3821011	1
1	Shaft	10104003	1
Part	Item	Order code	Pcs



DETAIL A  
SCALE 1 : 5

6	motor bed	L2601270A	1
5	Pressure relief valve.	OHRFPOMPVMP	1
4	Hydraulic motor WP80	OH7200081	1
3	stopper screw	ORM08016C916	2
2	Bushing	K2604030	1
1	Shaft	10104003	1
Part	Item	Order code	Pcs