

UK

HE-VA

Operating Instructions
Spare Parts List
Declaration of Conformity



Warning: Be sure to read the operation instructions before using the machine.

Disc-Roller XL Contour

Trailed: 4,50 - 5,50 m

Manual nr. 8000021 - 07 22.08.2024



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EC DECLARATION OF CONFORMITY

in accordance with the EU Machinery Directive 2006/42/EC
applicable as from December 29th 2009:

HE-VA ApS
N. A. Christensensvej 34,
DK-7900 Nykøbing Mors

hereby confirms that the following machine has been manufactured in accordance with the Council
Directive 2006/42/EC.

The declaration comprises the following machine:

Disc-Roller XL 4.5m – 5.5m

Nykøbing d. 29. januar 2015



Villy Christensen

The undersigned is furthermore authorised to compile technical documentation for the above
machine.

Description of the machine

The Disc-Roller XL Contour is a versatile cultivator. It can be used to mix stubble and other crop residues with a working depth down to 175 mm in reduced soil working. It is also an outstanding tool for working ploughed soil prior to sowing.

The high net weight and large discs give highly efficient cutting as well as good compacting of the processed soil. Despite the spacious design, it is compact and therefore easy to manoeuvre both in the field and on the road.

The Disc-Roller XL Contour can be fitted with both 610 mm and 570 mm discs. The new, larger disks penetrate deeper into the soil, where they effectively incorporate plant and stubble material – even large amounts of crop residues, such as maize stems or cover crops, are incorporated without problems.

The large discs are staggered, which allows maximum movement and mixing of soil and straw material, when working the surface, and because the discs are more powerful and designed with larger teeth that efficiently grip the soil, the risk of them jamming during operation is minimised.

The Disc-Roller XL Contour is designed with a greater depth in the frame structure than smaller disc harrows to provide room for the large discs and ensure good soil flow. With good soil flow, the plant material is more easily incorporated, creating optimum conditions for germination.

Delivery check

Preparing the machine

Check:

- the machine for possible damages.
- transport damage to paint - to be repaired.
- the hydraulic hoses for cut or pinch damage.
Check that the other hydraulic components are not damaged during transport.
- that the frame structure has not suffered any damage.
- that the transport wheels are fastened and in order.
- air pressure according to technical specifications.
- that all distance clips for depth adjustment are included with the machine.
- traffic light system - to be tested if fitted.

Controle tightening,
after specification page 8:

- of wheelbolts
- flange for towing eye



Safety Instructions for Disc-Roller XL Contour

Do not start-up the machine if there are **persons in exposed positions*** within a **hazardous area****.

When persons are in exposed positions (e.g. in connection with adjustment, maintenance, attachment and uncoupling), the following conditions must be observed:

- The machine must be lowered to firm ground.
- The hydraulics must be relieved.
- The tractor must be stopped and the key removed from the ignition switch.
- The driver must ensure that no persons are staying in exposed positions during the operation.

* **Person in exposed position: Any person who is staying wholly or partly within a hazardous area.**

** **Hazardous area: On and under the machine within a distance of 4 m from the machine.**

Most accidents that happen in connection with the operation, transport and maintenance of machines are caused by non-compliance with the most elementary safety conditions.

Therefore it is vital that anybody working at the machine carefully complies with the safety instructions as well as other instructions applying to the machine.

The machine may only be operated, maintained and repaired by persons, who are familiar with this work and who are further familiar with the possible elements of danger with this particular machine.

ATTENTION !! Rotary parts and loose clothes are a dangerous combination.

IMPORTANT !! In connection with the risk of parts falling down, it may endanger the lives of persons staying on the base frame of the machine, when it is operated attached to a tractor.

IMPORTANT!! In connection with transport and storage, the safety lock must be activated.



Safety and Instructions on Hydraulics

1. The maximum working pressure is 225 bar.
2. It is advisable to label the attachment parts at hydraulic connections between the tractor and the tool in order to eliminate incorrect operation!
3. When checking for hydraulic leaks, use suitable safety wear (eye protectors, gloves, etc.) High-pressure hydraulic oil may penetrate the skin and cause dangerous injuries. In case of injury, consult a doctor immediately. **RISK OF INFECTION!**
4. After operating the hydraulics, lower the machine to firm ground. Relieve the hydraulics, stop the motor and remove the ignition key.
5. Check the hydraulic hoses on a regular basis, however, every six months as a minimum due to any cracks, wear and tear, etc. Replace any defective hoses immediately.
6. The life of hydraulic hoses is maximum 5 years.
New hydraulic hoses must meet the manufacturer's requirements.

Complaints/disposal

2-year guarantee:

2-year guarantee on all material and design defects, provided that HE-VA's operating instructions are followed and that only original HE-VA components have been used. All warranty repair work is only performed according to a prior agreement with HE-VA and within normal working hours. Machines for improvement shall be submitted in cleaned condition.

The second year of the guarantee period only includes delivery of components and not replacement of these.

No compensation for loss of operation and profit or other indirect losses.

With front-mounted tools, HE-VA disclaims any liability for the tractor.

Disposal: When, after many years of use, the machine can be regarded as end-of-life, it must be handed over to a registered and approved product dealer. This will carry out the statutory draining and disposal of hydraulic oil, as well as sorting of materials with a view to further processing for recycling.

INSTRUCTIONS ON TRANSPORT ON THE PUBLIC ROADS

Check before transport on public roads that the attachment of the machine at the tractor is in accordance with the local rules and regulations in force (permitted total weight, permitted axle load, transport width, lights, warning signs, etc.).

FRONT AXLE LOAD

After the attachment of the machine and at maximum load, the driving properties of the tractor must be ensured. Check that the front axle is sufficiently loaded. As a minimum, the front axle load must be 20% of the tractor weight. Permitted axle load and permitted total weight for the tractor must always be observed.

NB! The driving, controlling and braking properties are affected by the attached machine combination.



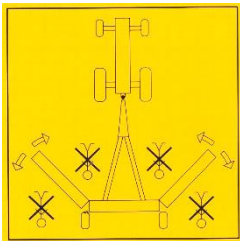
Labels on the machine

You will find several labels on your Disc-Roller containing **safety** and practical instructions as regards the correct application of the machine. Please study the instructions and point out to the user the importance of the labels as well as the **safety instructions** in these Operating Instructions. Always keep the labels clean and readable – if not they must be replaced.

Safety – and other markings on the machine



Study the Operating Instructions thoroughly before any operation of the machine and observe all safety instructions
Reorder number: 1305028



Take care that no persons are within the machine's hazardous area during the unfolding and folding procedure.
Reorder number: 1305029



Plate with number and year of manufacture



Tighten up the bolts regularly. If this is not performed, our warranty obligations will no longer apply.
Reorder number: 1305030

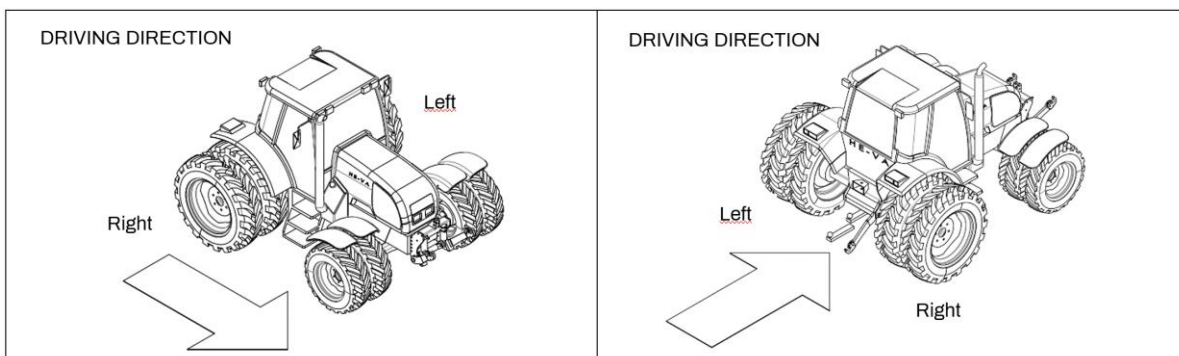
Maximum torque according to ISO 898-1, in Nm.		With lubricated thread	
Metric thread	Quality 8.8	Quality 10.9	Quality 12.9
M10x1,5	47	65	79
M12x1,75	81	114	136
M14x2,0	128	181	217
M16x2,0	197	277	333
M18x2,5	275	386	463
M20x2,5	385	541	649
M22x2,5	518	728	874
M24x3,0	665	935	1120
Wheelbolt M18x1,5 fine-pitch thread		385 Nm	
Wheelbolt M22x1,5 fine-pitch thread		550 Nm	



Technical Specifications / Data

Model	Rollertype / Diameter	No. of rings	Working width	Weight kg Quick-push/hydr.	No. of disc	Power Requirement, HP
4,5 m	Wave roller 600 mm	30	4,25 m		34	140 +
	U-Profile, 600 mm single	30	4,25 m		34	140 +
	V-Profile 600 mm, single	30	4,25 m	4030	34	140 +
	V-Profile 700 mm, single	30	4,25 m	5400	34	140 +
	Twin V-Profile 600-600 mm	30	4,25 m	4010	34	140 +
	Twin U-Profile 600-600 mm	30	4,25 m	4340	34	140 +
	Twin U-Profile 700-700 mm	30	4,25 m		34	140 +
5,5 m	Wave roller 600 mm	36	5,25 m		42	200 +
	U-Profile, 600 mm single	36	5,25 m		42	200 +
	V-Profile 600 mm, single	36	5,25 m	4770	42	200 +
	V-Profile 700 mm, single	36	5,25 m		42	200 +
	Twin V-Profile 600-600 mm	36	5,25 m	4740	42	200 +
	Twin U-Profile 600-600 mm	36	5,25 m	5090	42	200 +
	Twin U-Profile 700-700 mm	36	5,25 m		42	200 +
Pivoting support wheels (extra equipment)			300/55x14,5 SG Flotation – Max. air pressure Bar: 4.4			
Wheel installation			500/50x17,0-18 Ply – Max. air pressure Bar: 4,5 / 3,5			
Transport width			2,52 m			
Transport height			3,1 meter / 3,6 meter			
The machine requires 3 double-acting outlets						

Direction of driving – Definition of the right and left side of the machine



Start-up of the machine

General Information

The machine is supplied as standard in transport position. At start-up, attach the machine to the tractor.

Important:

Check that the towing hook height is between 500 og 600 mm.
Check that the factory-fitted male quick couplings fit into the tractor's female quick couplings.

The hoses for the drawbar - / wheel cylinder are provided with **red** cable straps.

The hoses for the folding cylinder are provided with **blue** cable straps.

The hoses for the disc cylinder are provided with **green** cable straps.

Attachment

1. Reverse the tractor to the machine.
2. Connect all hydraulic hoses to the tractor outlets.
3. Pressurise the drawbar - and the wheel cylinder (red) so that the machine drawbar is lifted to the suitable height.
4. Then reverse the tractor and attach the machine.
5. Now lift the machine to maximum height.

Transport position to workposition

1. **Important: When unfolding the side sections, the locking claw must first be relieved by activating the folding function, until the side sections meet the stop at the center frame.** Next, when the unfolding function is activated, the locking claw then first will open, after which the side sections are unfolding.
2. When the side sections are completely unfolded, let go of the hydraulic handle and the machine is ready for use.
Always set the tractor's flow control on MAX, to make sure that the side sections will follow each other.
3. Unfold the edge equipment to working position.
4. Now lift and lower the discs to the required working depth.

Transport


1. Lift the discs to the top before folding up the machine.
2. Then lift the machine to maximum transport height.
3. Fold up the side sections (blue) towards the stop on the centre frame, and the locking claw will engage. **It is important to check visually that the locking claw is engaged.** The hydraulic system must then briefly be put in the float position after the locking pawls are engaged, until the locking claw has relieved the hydraulics.
4. Now the machine is secured and ready for transport.
5. Lower the machine in order to minimise the transport height, to get a point of gravity as low as possible. Slow and gentle cornering is recommended as otherwise the machine is at risk to tip over.



Uncoupling, Trailed Model

1. Lift the machine up and tilt the depth stop on the drawbar forward towards the tractor.
2. Now lower the machine onto firm ground.
3. Adjust the drawbar – and wheel cylinder (red) so that the drawing bolt is loose.
4. Now the machine may be uncoupled.
5. Drive the tractor a little forward and then relieve all hydraulic hoses.

Important:

<p>Put the machine on level ground and relieve the hydraulics, before leaving the machine.</p>	
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Settings and adjustment

When starting the Disc-Roller XL in the field, it is important that the machine is horizontal in relation to the direction of travel.

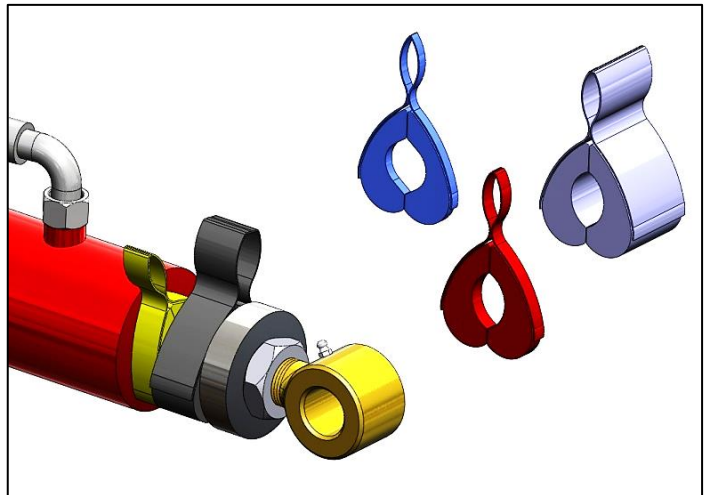
The profile roller at the back and the tractor carry the machine, which is crucial for a uniform depth processing. **Support wheels** (optional equipment) **are not for depth regulation**, but only for support to avoid uneven working depth on the outer discs.

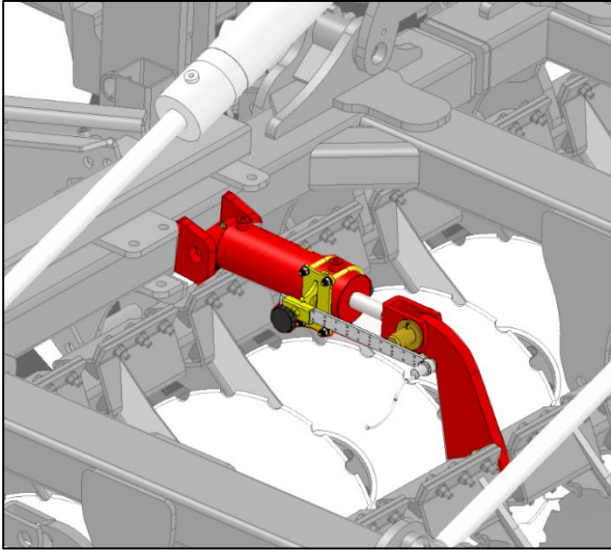
Drawbar

The horizontal position is adjusted on:
by means of distance clips on
the drawbar cylinder

Height of the towing eye:
approx. 500-550 mm

For german towing eye height:
approx. 800 – 850 mm



Disc

The Discs are adjusted up or down by a hydraulic Master-Slave system.

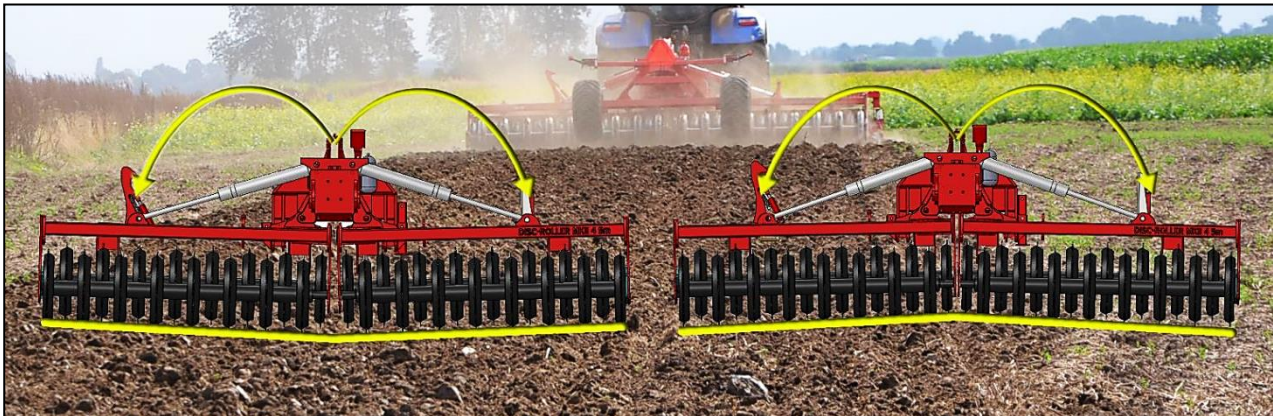
It is important that the discs are regularly lifted to the top

to reset the Master-Slave system. The depth position is readable on the scale (standard).

The sensor can be adjusted, where el. depth stop is mounted. (additional equipment) It is possible to over steer the electrical system by turning off the switch mounted in the cabin, now the discs can pass the sensor, thereby a deeper working depth is achieved e.g. at headland and tramlines.

**SAT system:**

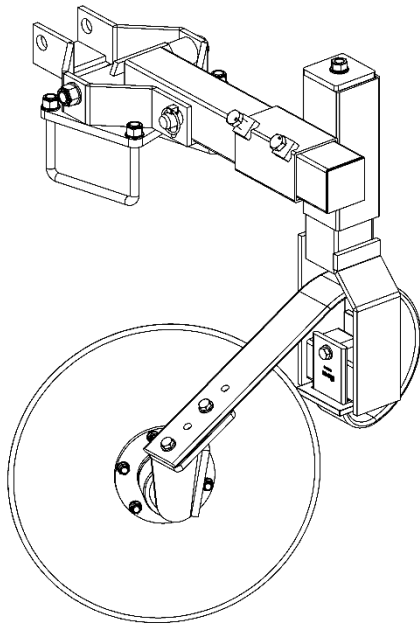
Hydraulic adjustable weight transfer system, ensuring equal weight transfer in the total working width, resulting in the fact that the wing sections are following the ground.

**Manometer for pressure adjustment on 2-sections machines**

During work, the hydraulic pressure will vary according to the ground surface. The pre-set hydraulic pressure in the working position must be 50 – 70 bar.



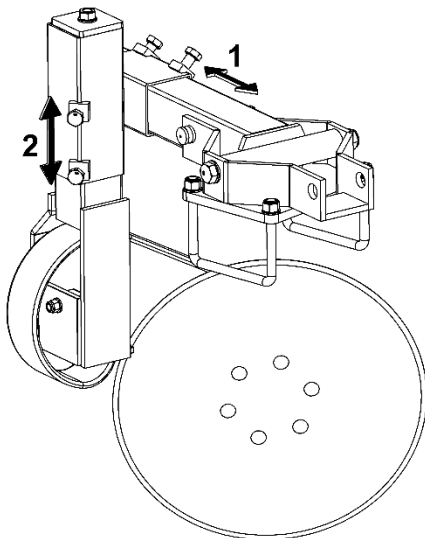
Edge equipment



Edge equipment for Disc-Roller XL Contour.

The disc can be adjusted so that excavated soil is collected.

Keep the disc away from the ground to avoid bending when turning.

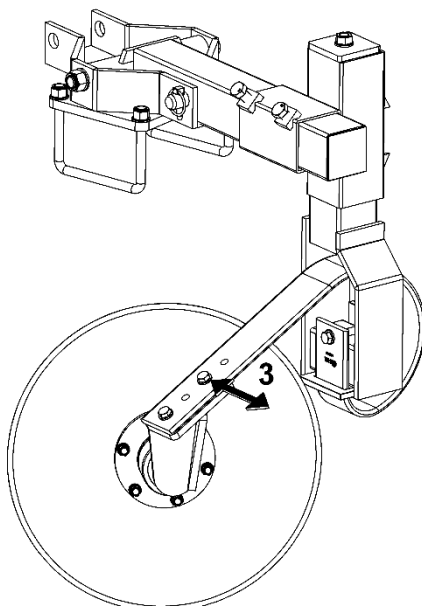


The edge equipment can be adjusted in three places:

1. Two bolts are loosened - move the arm out / in
2. Use the spindle - raises and lowers the plate.

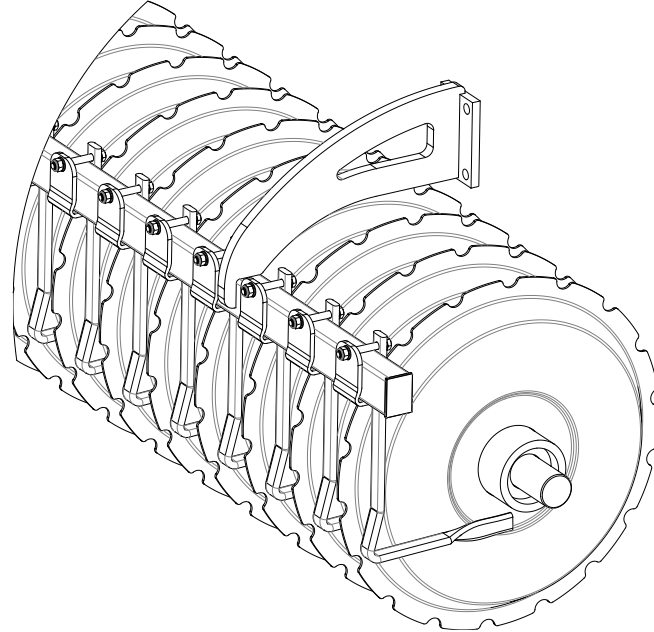
Two bolts are loosened - raise/lower with the spindle and tighten the bolts again.

3. A bolt is loosened – tilt the plate more or less.



Scraper

The Disc-Roller XL Contour has special designed scrapers among the packer rings on the single VProfile and U-Profile as well as on the Wave Roller. To avoid unnecessary wear and to obtain the best scraper effect it is important to check the centering of the scrapers every day.

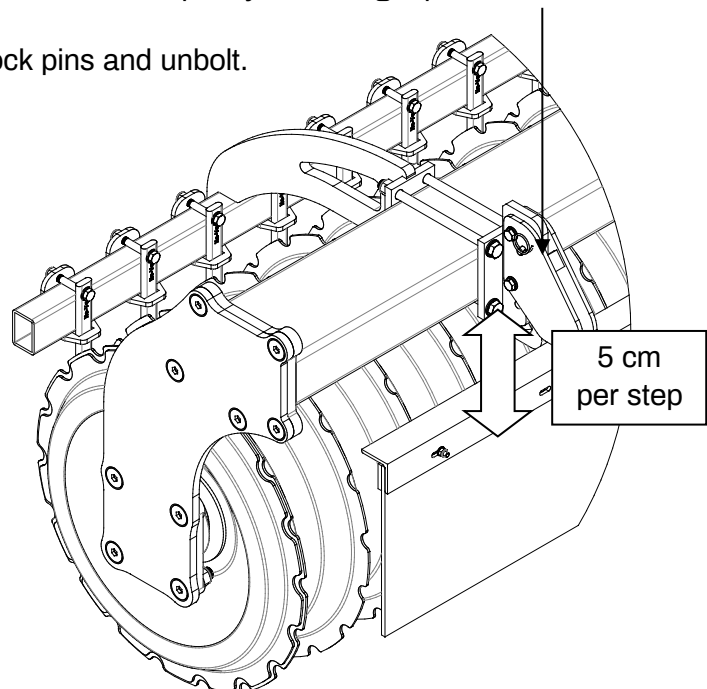


Material-damper-guard

The Disc-Roller Contour XL can be equipped with material damper guard, ensuring that excavated soil from the discs is falling down before packing.

The material damper guard is height adjustable in 5 cm steps, by unlocking 1 pin in each bracket.

To dismount the material damper guard, unlock pins and unbolt.



Maintenance and service

Vigtigt:

Oil, type Hydro Texaco HD 32 has been filled in the hydraulic system.

After the first 10 hours of operation, re-tension the machine. Hoses, fittings and cylinders are inspected for any leaks and tightened. Check regularly that all bolts are tight.

Before winter storage, the machine is washed and lubricated. After washing, the machine may be injected into oil.

Lubricating

For lubrication, maintenance and repairs, the machine must be lowered, the tractor must be braked and the engine must be stopped.

On the Disc-Roller XL Contour there are 25 grease nipples on the 4.5 meter and 31 grease nipples on the 5.5 meter machine

There is 1 grease nipple on each support wheel in the hinge joint. The spindles of the support wheels should be separated and internally lubricated once a year, (figure 1).

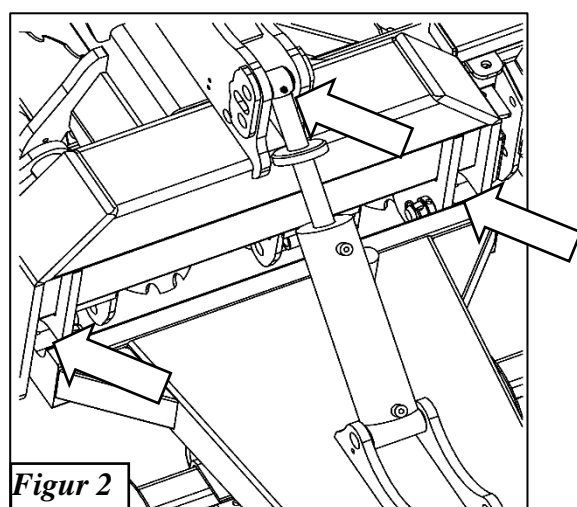
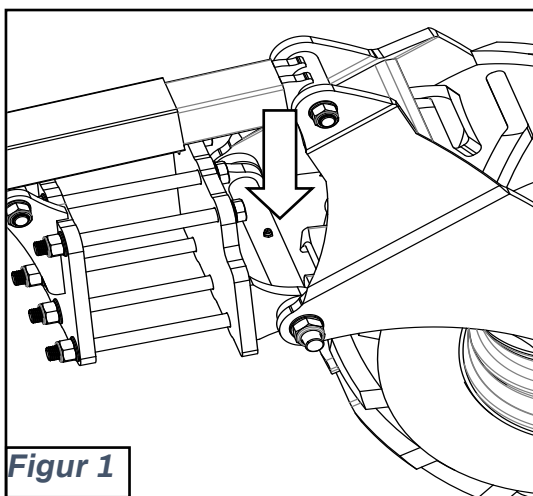
There is 1 grease nipple on each hinge joint of the drawbar (figure 2).

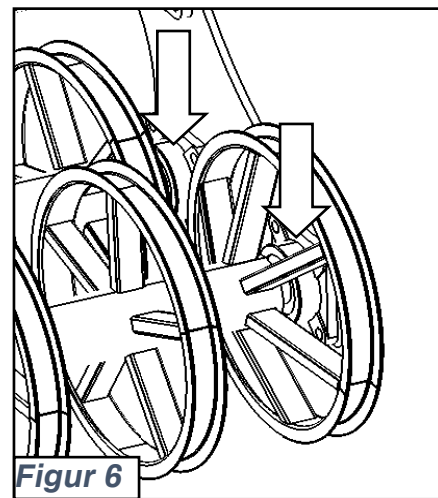
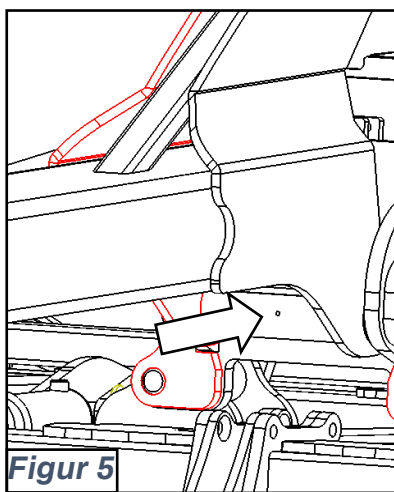
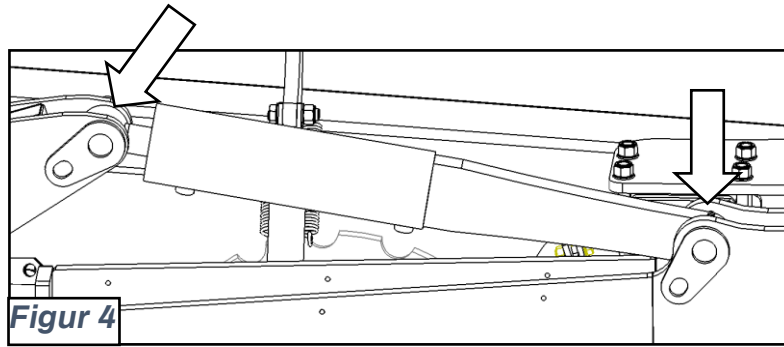
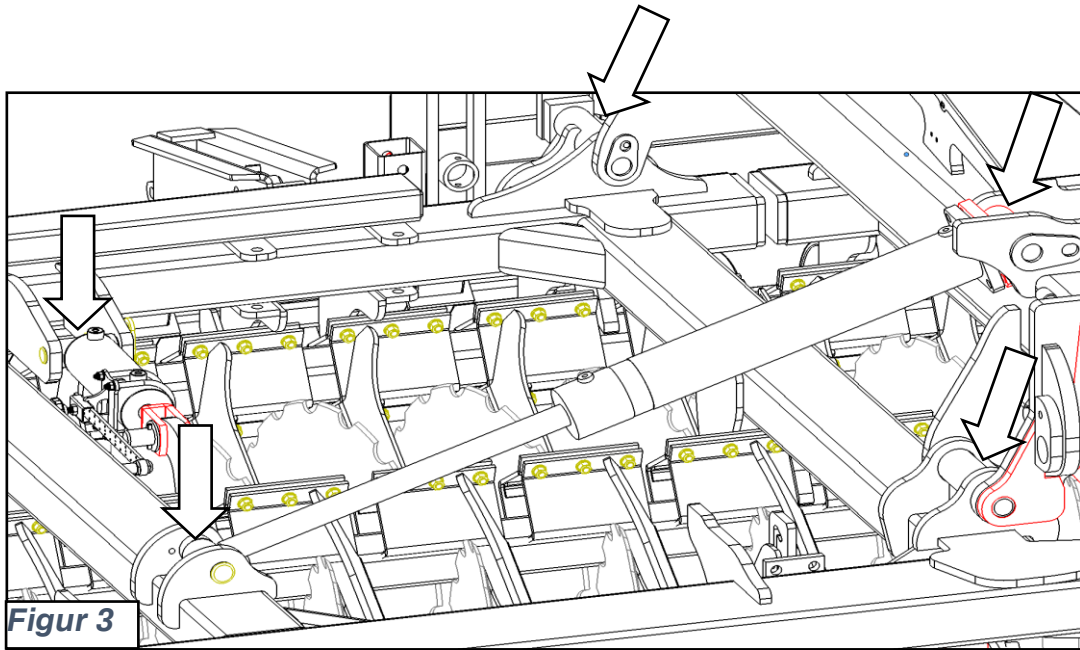
There are 2 on each hydraulic cylinder except the two disc depth adjustment cylinders, which only have 1 grease nipple at the bushing end, (figures 3 and 4). Figure 4 is the cylinder of the wheel frame.

There is 1 grease nipple in each hinge joint on the wings, 4 pcs. in total, (Figure 3).

There is 1 grease nipple on the hinge joint of the transport wheels, (figure 5).

There is 1 grease nipple on each of the rollers' bearings, which only needs to be lubricated 1 to 2 times per season (figure 6).



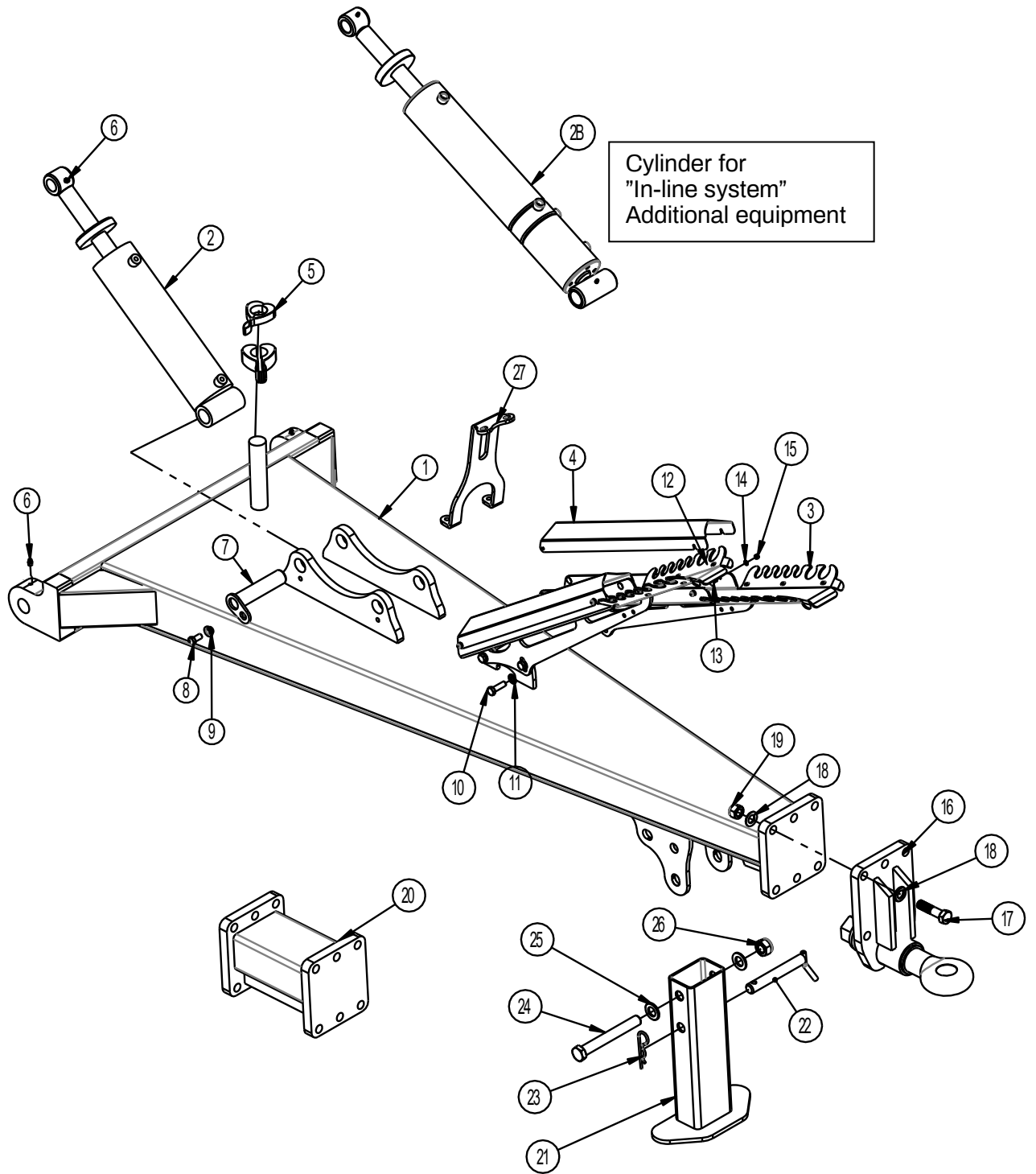


Noter

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Spareparts

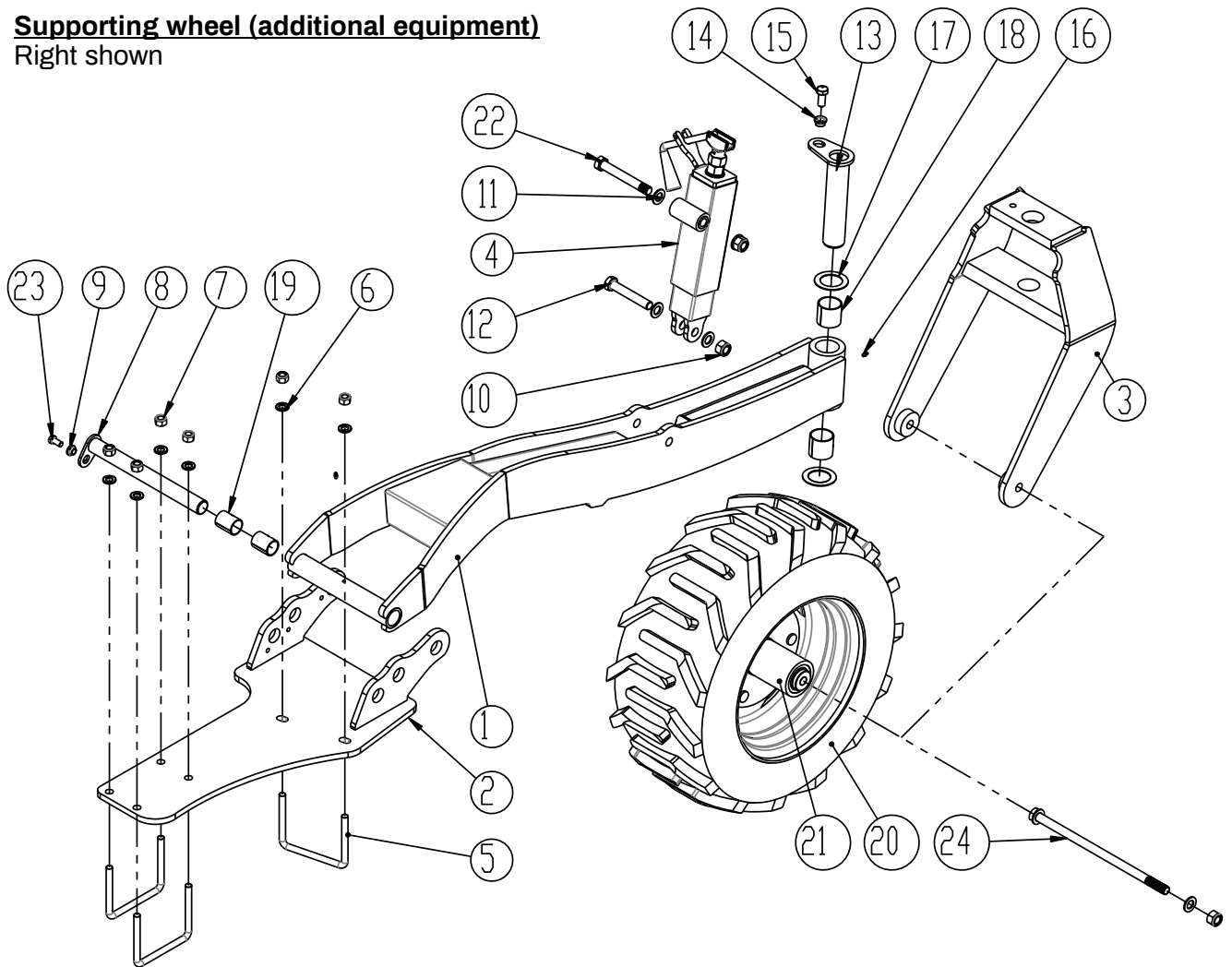


Pos.	Itemno.	Designation Bolt	4,5m	5,5m
1	1300138	Drawbar	1	1
2	0463302	Cylinder 100/40x280 Ø35/Ø32	1	1
2a	0463372	Gasket set 100/40		
2b	7345041	Cylinder "In-Line system" 100/40 x 280/50	1	1
3	7345006	Lower part for parking device hydr. tube	1	1
4	7345003	Screen for parking device hydr. tube	1	1
4a	7345019	Parking device, complete incl bolts – washers - nuts		
5	690200664	Distance clip, 6.2mm, blue	2	2
5	690200665	Distance clip, 9.4mm, red	2	2
5	690200666	Distance clip, 18.8mm, yellow	2	2
5	690200667	Distance clip, 31.6mm, black	1	1
5	690200668	Distance clip, 50.8mm, silver	2	2
6	0432510	Lubricating nipple M8	4	4
7	69435170G	Pin Ø35 L=170	1	1
8	690101101	Bolt M12x25 8.8 w/glue	1	1
9	630532600	Lock bush f/pin head	1	1
10	0235360	Screw set M12x40 8.8	2	2
11	0272270	Facet plate Ø12	4	4
12	0264070	Self-locking nut M12 DIN985	2	2
13	0246060	Bolt M6x16 DIN603 (carrier bolt)	4	4
14	0272240	Facet plate Ø6	4	4
15	0264040	Self-locking nut M6 DIN985	4	4
16	630757017	Drawbar complete, Towing eye Ø50, Strong swivel	1	1
17	690103069	Bolt M20x80 10.9	6	6
18	0272310	Facet plate Ø20	12	12
19	0264110	Self-locking nut M20 DIN985	6	6
20	6301950	Drawbar extension 300 mm (additional equipment)		
21	1285146	Supporting leg	1	1
22	69525155B	Pin Ø25 L=155	1	1
23	0377600	Hairpin split Ø6 DIN 11024	1	1
24	0236500	Bolt M24x190 8.8	1	1
25	0272330	Facet plate Ø24 FZB	2	2
26	0264130	Self-locking nut M24	1	1
27	7297691	Bracket for airbrakes (only machines with air brake)	1	1



Supporting wheel (additional equipment)

Right shown



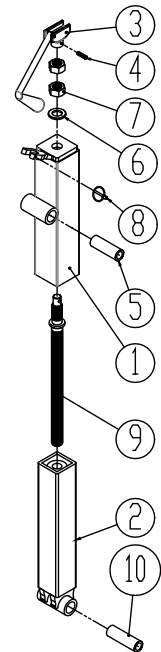
Pos.	Itemno	Designation	Pcs
1	630910764	Bracket for Wheel suspension	2
2	1295188	Rear mounting bracket right	1
2	1295185	Rear mounting bracket left	1
3	630910740	Wheel suspension	2
4	630916557	Complete spindle right	1
4	630916545	Complete spindle left	1
5	0382800	U-bolt M16x100x150x100	6
6	0272290	Facet plate Ø16 DIN125B	12
7	0264090	Self-locking nut M16 DIN985	12
8	69435355G	Pin Ø35 L=355	2
9	630532600	Lock bush for pin head	2
10	0264110	Self-locking nut M20	6
11	0272310	Facet plate Ø20	12
12	0236210	Bolt M20x120 8.8	2
13	69450230G	Pin Ø50 =230	2



Pos.	Itemno	Designation	Pcs
14	630532700	Lock bush for pin head	2
15	690103124	Bolt M16x35 8.8	2
16	690136001	Lubrication nipple M6, straight	4
17	690140712	Sliding disc $\varnothing 52/\varnothing 78 \times 2$	4
18	690140710	Slide bush $\varnothing 50/55$ L=50	4
19	690140716	Slide bush $\varnothing 35/39$ L=50	4
20	0395653	Wheel 300/55x14,5 SG Flotation, right	1
20	0395654	Wheel 300/55x14,5 SG Flotation, left	1
21	7365005	Hub complete 6-M18x1,5/205	2
	0396470	Hub nut M18x1,5 R19	12
	0396460	Hub bolt M18x1,5 L=49	12
22	0236240	Bolt M20x150 8.8	2
23	0235330	Bolt M12x25 8.8	2
24	0236333	Bolt M20x420 10.9	2

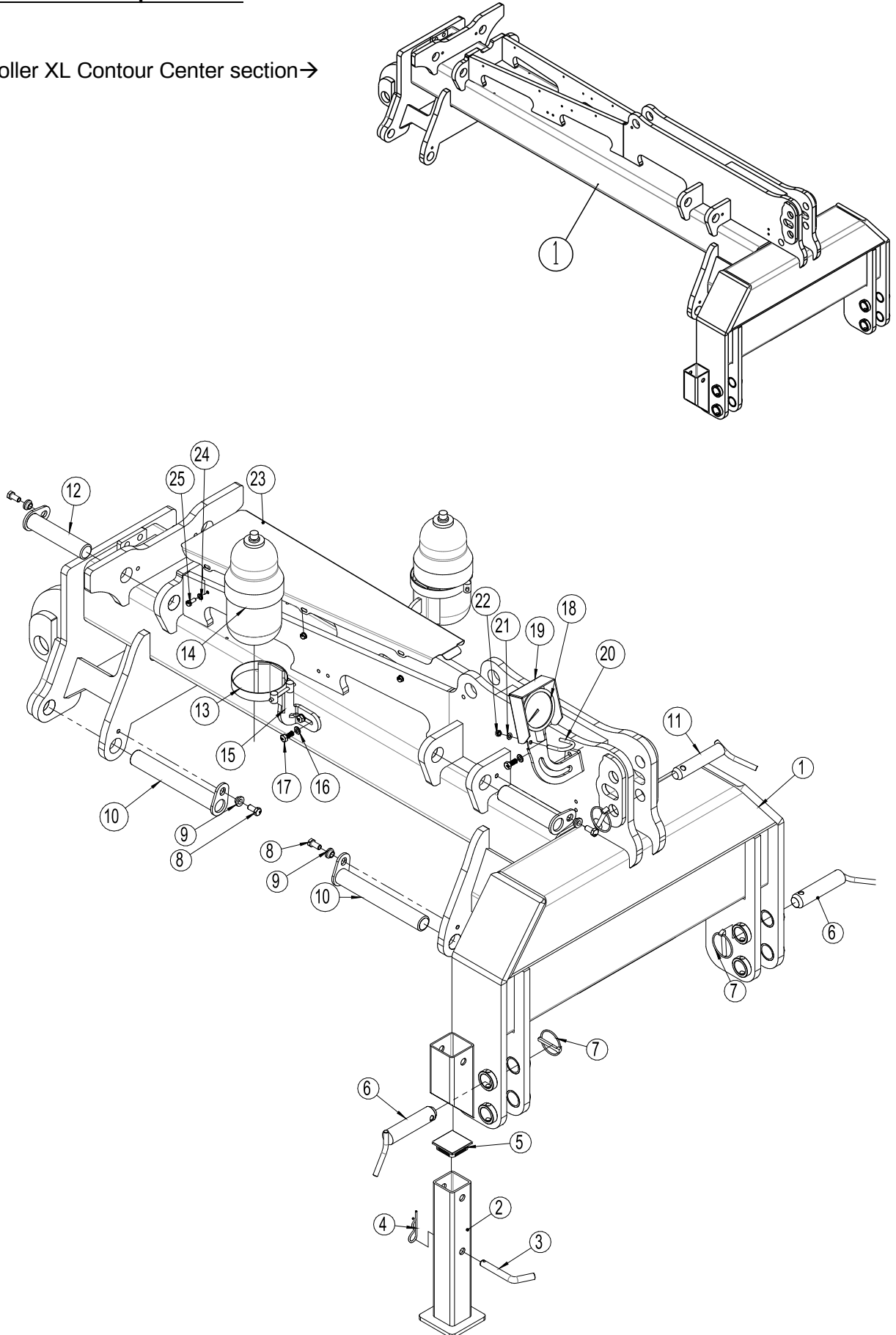
Spindle for support wheel

Pos.	Item number	Designation	Pcs
1	675101007	Outer part complete	1
2	1237023	Interior complete	1
3	690304102	Handle	1
4	0371660	Pipe pin $\varnothing 8 \times 30$ mm	1
5	675101006	BK-tube 30x5 L=89 S235JR	1
6	0272330	Disc $\varnothing 24$	1
7	0261425	Nut M24	2
8	0378200	Ring split, $\varnothing 4.5$ mm, galv.	1
9	690304122	Spindle, threaded rod 28TR L=455	1
10	1237022	BK-tube 30x5 L=98 S235JR	1



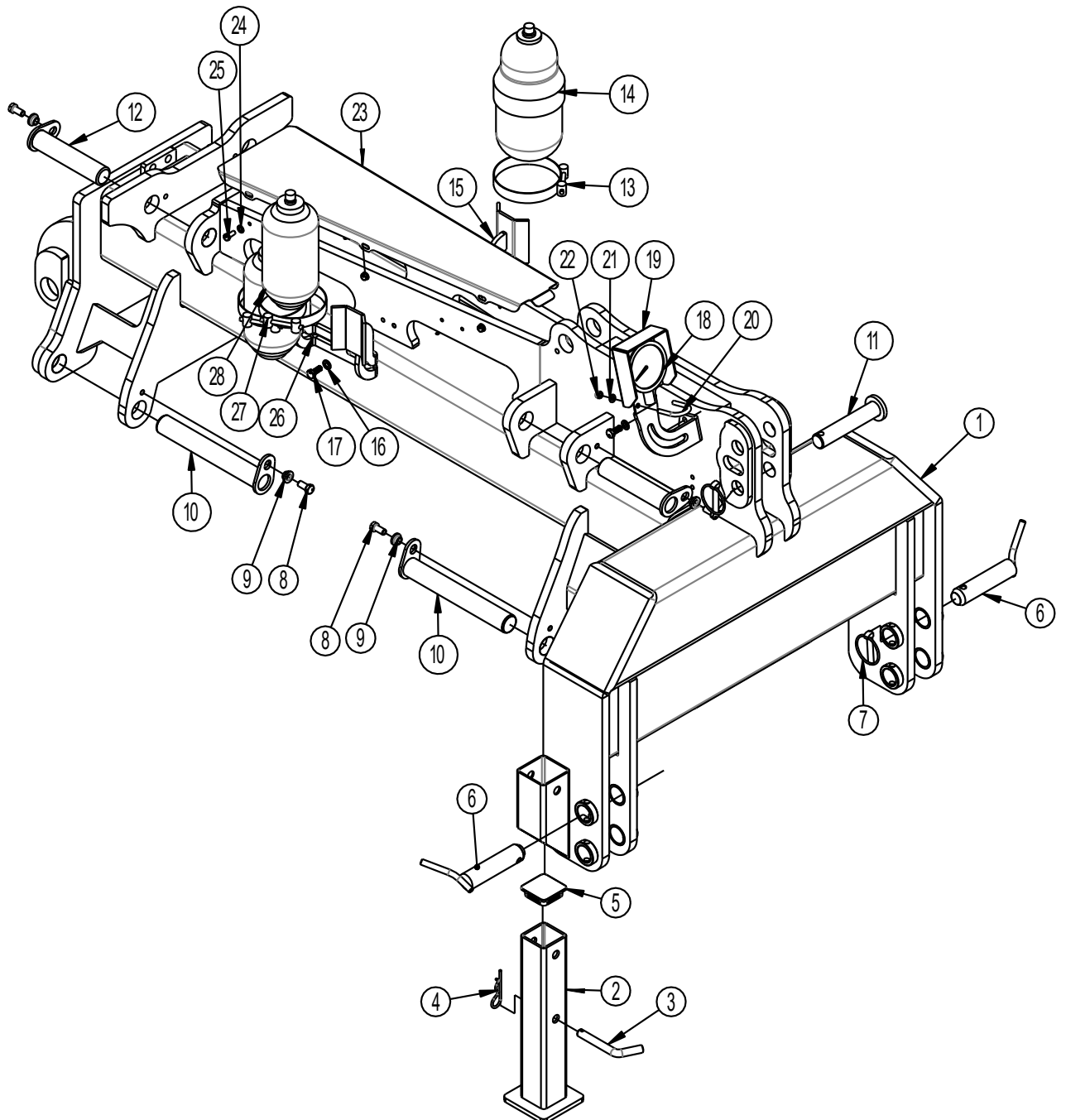
Centre section with protection

Disc-Roller XL Contour Center section →



Pos.	Itemno.	Designation	4,5m	5,5m
1	1295126	Centre frame w/protection	1	1
2	630916554	Supporting leg	1	1
3	1030280	Pin Ø16 L=96 / 45°	1	1
4	0377400	R-clip Ø4	1	1
5	0489610	Plastic plug RHS 70x70x5	1	1
6	69537129B	Pin Ø37 =129 (Pin for lift arm CAT III) w/handle and cotter slot	2	2
7	690134008	Ring pin Ø11,5 – ring Ø60	3	3
8	690101101	Bolt M12x25 8.8 m/lim	4	4
9	630532600	Lock bush	4	4
10	69440287G	Pin Ø40 L=287	2	2
11	69532129B	Pin Ø32 L=129	1	1
12	69440187G	Pin Ø40 L=187	2	2
13	690206511	Clamp for accumulator HST 2,3 ltr	2	2
14	690206510	Accumulator HST 2,3 ltr. 40 Bar	2	2
15	1300065	Holder for accumulator, right	1	1
15a	1300062	Holder for accumulator, left	1	1
16	0272260	Facet plate Ø10	6	6
17	0235040	Bolt M10x25 8.8	6	6
18	0442052	Manometer 250 Bar Ø100	1	1
19	1300067	Holder for Manometer	1	1
20	690110003	U-bolt M8x60x Ø35	1	1
21	0272250	Facet plate Ø8	2	2
22	0264050	Self-locking nut M8	2	2
23	1300120	Protection for centerframe	1	1
24	0234750	Steel set screw M8x20 fzb 8.8	6	6
25	0272250	Facet plate Ø8	6	6

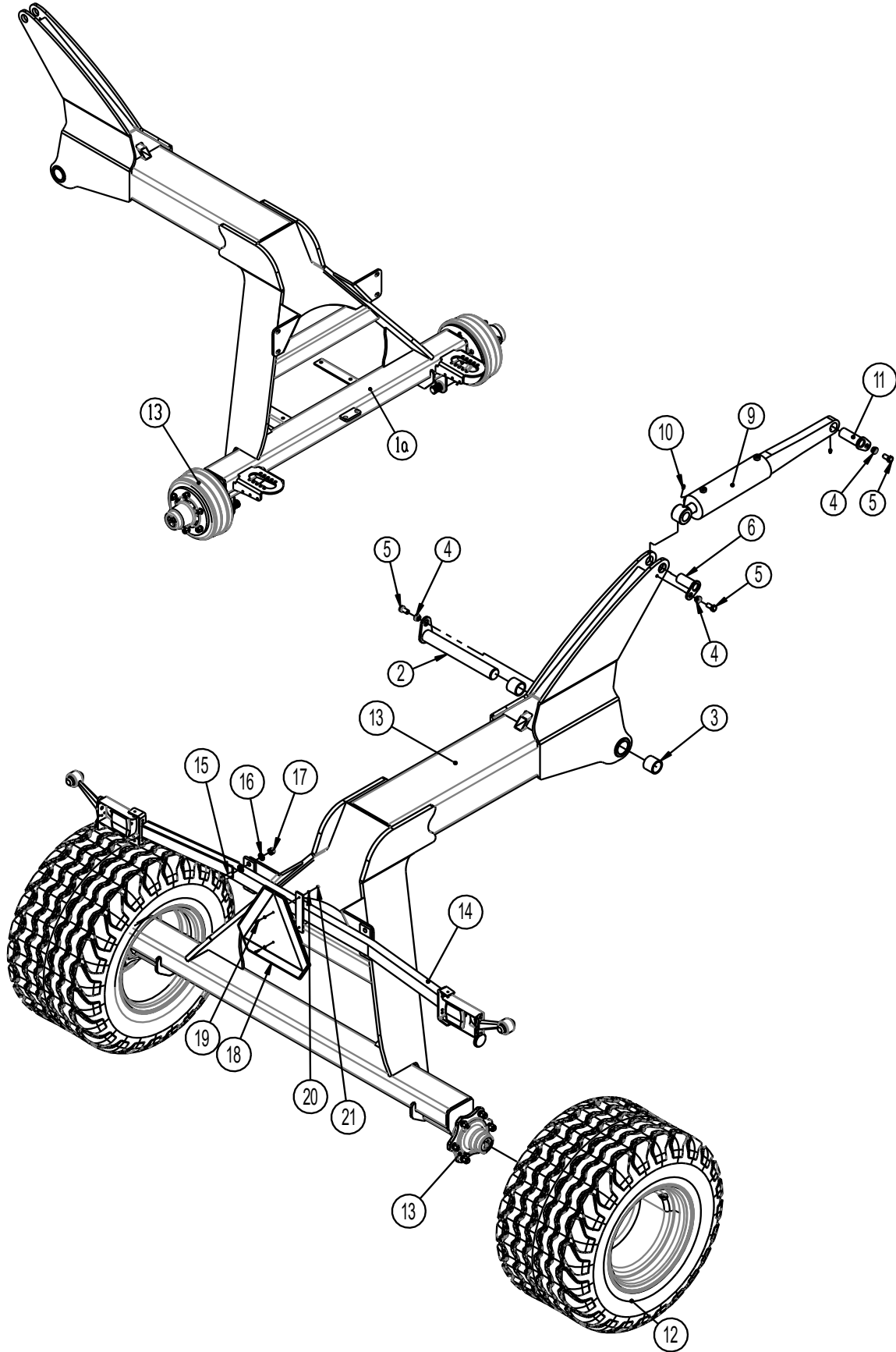


Centre section with protection: From jan 2021

Pos.	Itemno.	Designation	4,5m	5,5m
1	1295126	Centerframe	1	1
2	630916554	Supporting leg	1	1
3	1030280	Pin Ø16 L=96 / 45°	1	1
4	0377400	R-clip Ø4	1	1
5	0489610	Plastic plug RHS 70x70x5	1	1
6	69537129B	Pin Ø37 =129 (Pin for lift arm CAT III) w/handle and cotter slot	2	2
7	690134008	Ring pin Ø11,5 – ring Ø60	3	3
8	690101101	Bolt M12x25 8.8 m/lim	4	4
9	630532600	Lock bush	4	4
10	69440287G	Pin Ø40 L=287	4	4
11	1140361	Pin Ø32 L=149	1	1
12	69440187G	Nagle Ø40 L=187	2	2
13	690206511	Clamp for accumulator HST 2,3 ltr Max Ø130mm	2	2
14	690206510	Accumulator HST 2,3 ltr. 40 Bar	2	2
15	1300065	Holder for accumulator, right	1	1
15a	1300062	Holder for accumulator, left	1	1
16	0272260	Facetskive Ø10	6	6
17	0235040	Bolt M10x25 8.8	6	6
18	0442052	Manometer 250 Bar Ø100	1	1
19	1300067	Holder for Manometer	1	1
20	690110003	U-bolt M8x60x Ø35	1	1
21	0272250	Facet plate Ø8	2	2
22	0264050	Self-locking nut M8	2	2
23	1300120	Protection for centerframe	1	1
24	0234750	Steel set screw M8x20 fzb 8.8	6	6
25	0272250	Facet plate Ø8	6	6
26	1300428	Holder for accumulator, double	1	1
27	0434530	Clamp for accumulator ø104-138mm 12mm Width	2	2
28	690206517	Accumulator HST 1,4 ltr. 40 Bar	2	2



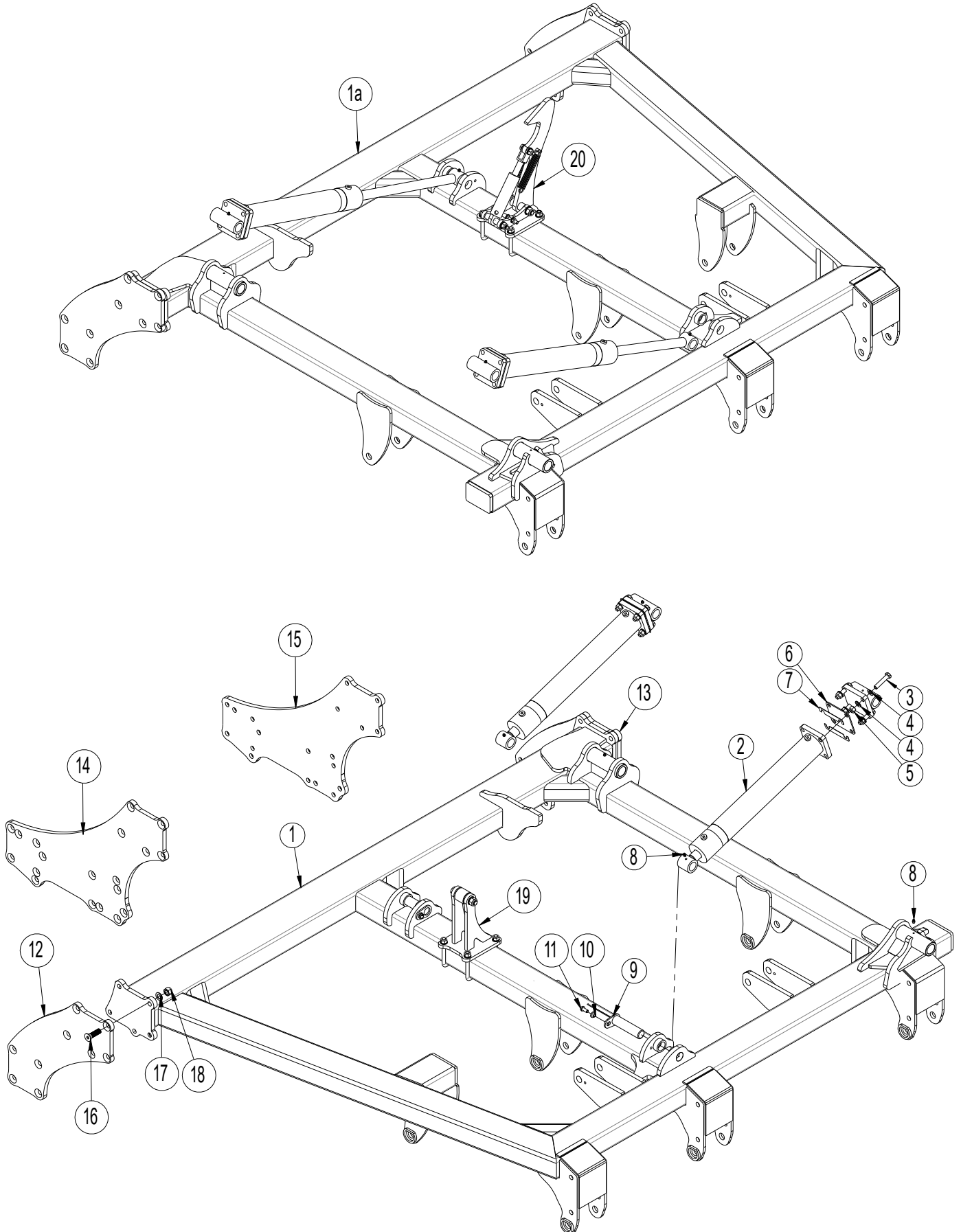
Wheel frame:



Pos.	Varenr.	Betegnelsen	4,5m	5,5m
1	1300454	Wheel frame, short for single roller	1	1
1	1141258	Wheel frame, medium for double roller	1	1
1a	1300495	Wheel frame with brake, short for single roller	1	1
1a	1141262	Wheel frame with brake, medium for double roller	1	1
2	69450400G	Pin Ø50 L=400	1	1
3	0475400	I-presbøsning EG Ø60/50 x 50 mm	2	2
4	630532700	Lock bush for pin head	1	1
5	0235770	Bolt M16x30 8.8	1	1
6	69440090G	Pin Ø40 L=90	1	1
7	630532600	Lock bush for pin head	2	2
8	690101101	Bolt M12x25 m/lim	2	2
9	7345095	Cylinder 100/40x285 Ø40,5/Ø40,25	1	1
9a	690200296	Gasket set 100/40 (Laizhou)		
10	0432510	Lubricating nipple M8	2	2
11	69440110G	Pin Ø40 L=110	1	1
12	690141360	Wheel 500/50x17,0 – 18 PLY Right complete	1	1
12	690141362	Wheel 500/50x17,0 – 18 PLY Left complete	1	1
13	0395442	Hub 2500 kg	2	2
13a	0395437	Hub cap with thread 88x3	2	2
13b	0396470	Hub nut M18 x 1,5	12	12
13c	0396460	Hub bolt M18 x 1,5 L=49	12	12
13	7297579	Hub with brake 3700 kg TVZ	2	2
13a	690141034	Hub cap Ø90	2	2
13b	0396470	Hub nut M18 x 1,5	12	12
13c	690141042	Hub bolt M18 x 1,5 x 61 TVZ brakehub	12	12
14	630835015	Bar for light	1	1
15	690103197	Bolt M16x50	4	4
16	0272290	Facet plate Ø16	8	8
17	0264090	Self-locking nut M16	4	4
18	0521010	Warning triangel (in a few countries)	1	1
19	0233860	Bolt M5x20	2	2
20	0272230	Facet plate Ø5	4	4
21	0264030	Self-locking nut M5	2	2



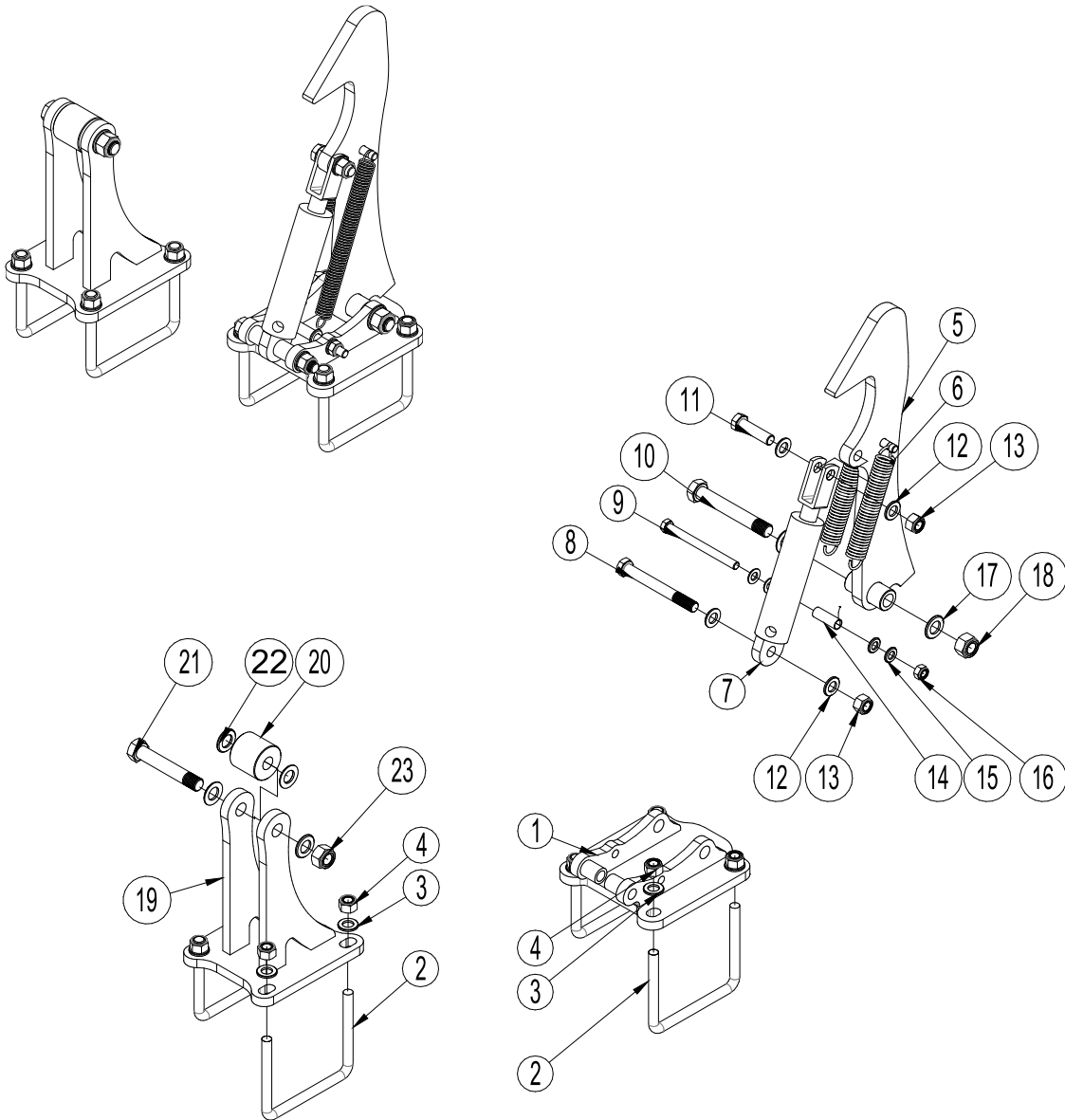
Side sections



Pos.	Varenr.	Betegnelse	4,5	5,5
1	1295144	Side section, right	1	
1	1295133	Side section, right (shown)		1
1a	1295143	Side section, left	1	
1a	1295132	Side section, left (shown)		1
2	690200252	Cylinder 90/40x600 Ø40,25	2	4
2a	690200253	Square flange with bush Ø40,25	2	4
	690200273	Gasketset 90/40 (Hydraflex)		
3	0235870	Bolt M16x75mm, 8.8 fzb	8	16
4	0272290	Facet plate 16mm, fzb	16	32
5	0264090	Self-locking nut M16	8	16
6	645200176	Shim 3 mm		
6	645200178	Shim 4 mm		
6	645000382	Shim 5 mm		
7	645000396	Shim 1mm		
8	0432510	Lubricating nipple M8	8	12
9	69440153G	Pin Ø40 L=153 med påsvejst hoved	2	4
10	630532600	Bush for pin	2	4
11	690101101	Bolt M12x25 m/lim	2	4
12	1295486	End plate for single roller, Ø600 H (20mm)	2	2
12	1295493	End plate for single roller, Ø700 H (20mm)	2	2
13	1295488	End plate for single roller, Ø600 V (20mm)	2	2
13	1295492	End plate for single roller, Ø700 V (20mm)	2	2
14	1295216	End plate for double roller, Ø600, H (20 mm)	2	2
14	1295138	End plate for double roller, Ø700, H (20 mm)	2	2
15	1295217	End plate for double roller, Ø600, V (20mm)	2	2
15	1295139	End plate for double roller, Ø700, V (20mm)	2	2
16	0229250	Hexagon screw M20x70 8.8 UH fzb DIN7991	20	20
17	0272310	Facet plate Ø20	20	20
18	0264110	Self-locking nut M20	20	20
19	630916604	Console for locking claw system with roller (see page 30-31)	1	1
20	630916593	Console for locking claw system with hook (see page 30-31)	1	1



Locking claw system



Pos.	Item no.	Designation	Per pcs.
1	630916606	Console for hook	1
2	0382800	U-bolt M16x100x150x100	2
3	0272290	Facet plate Ø16 DIN125B	8
4	0264090	Self-locking nut M16	6
5	630916605	Hook	1
6	0431650	Extension spring 4,0mm x 32mm x 160mm x30,5v with 2 eyes	2
7	690200170	Cylinder 40/25x80	1
7a	690200175	Gasket set 40/25	
8	0235940	Steel bolt M16x140mm, 8.8 fzb	1
9	0235500	Steel bolt M12x140mm, 8.8 fzb	1
10	0236230	Steel bolt M20x140mm, 8.8 fzb	1
11	0235840	Bolt M16x60mm 8.8	1
12	0272290	Facet plate 16mm, fzb	8
13	0264090	Self-locking nut M16	6
14	630916607	Hydraulic tube Ø16x1 L=45	1
15	0272270	Facet plate Ø12	4
16	0264070	Self-locking nut M12	1
17	0272310	Facet plate Ø20	2
18	0264110	Self-locking nut M20	1
19	630916599	Console for roller	1
20	630670593	Roller Ø20,5x56 L=51 POM black	1
21	0236210	Steel bolt M20x120mm, 8.8 fzb	1
22	0272310	Facet plate Ø20	4
23	0264110	Self-locking nut M20	1
	1300137	Mounted console set (pos 1 – 23)	

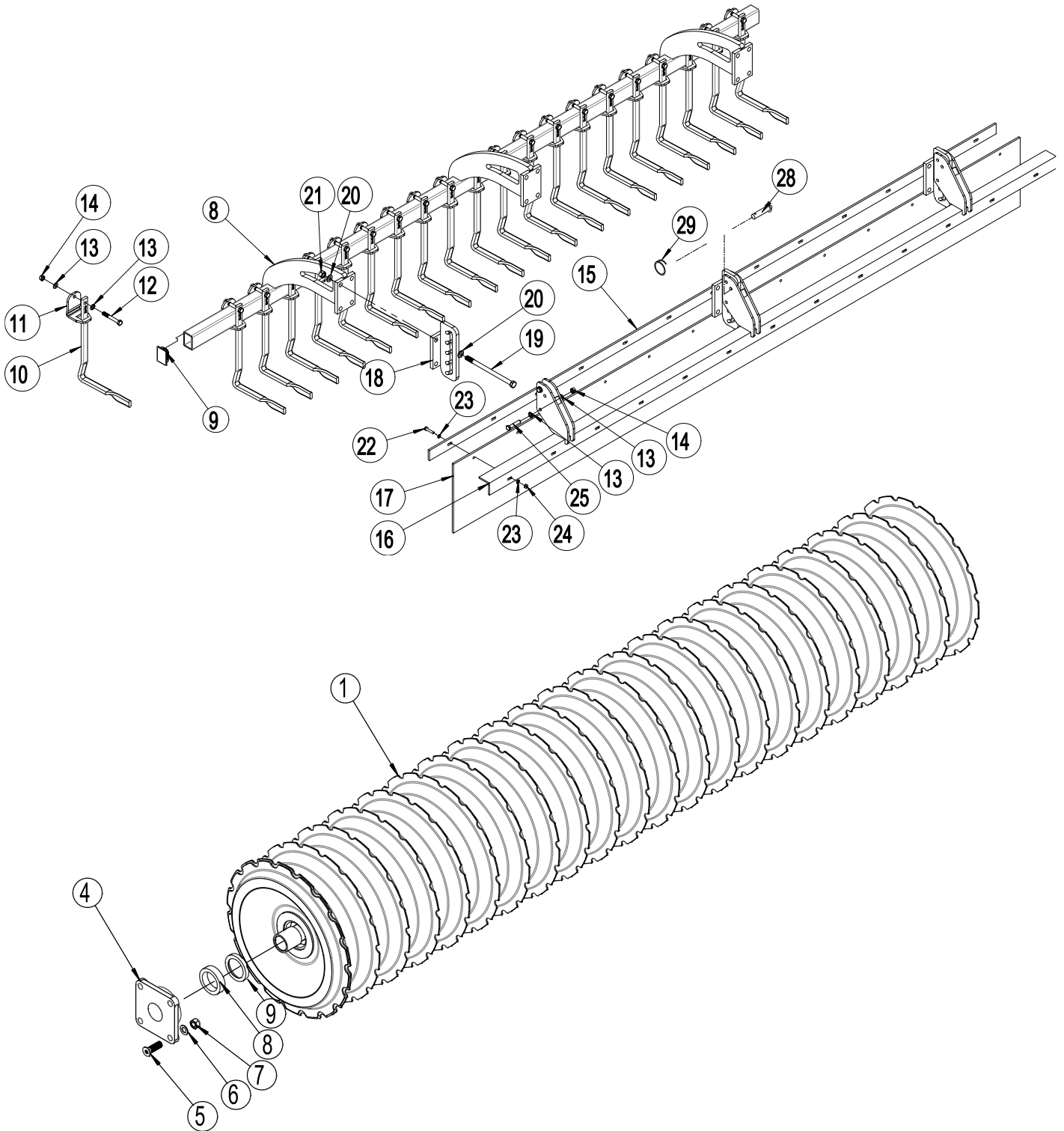


Notes

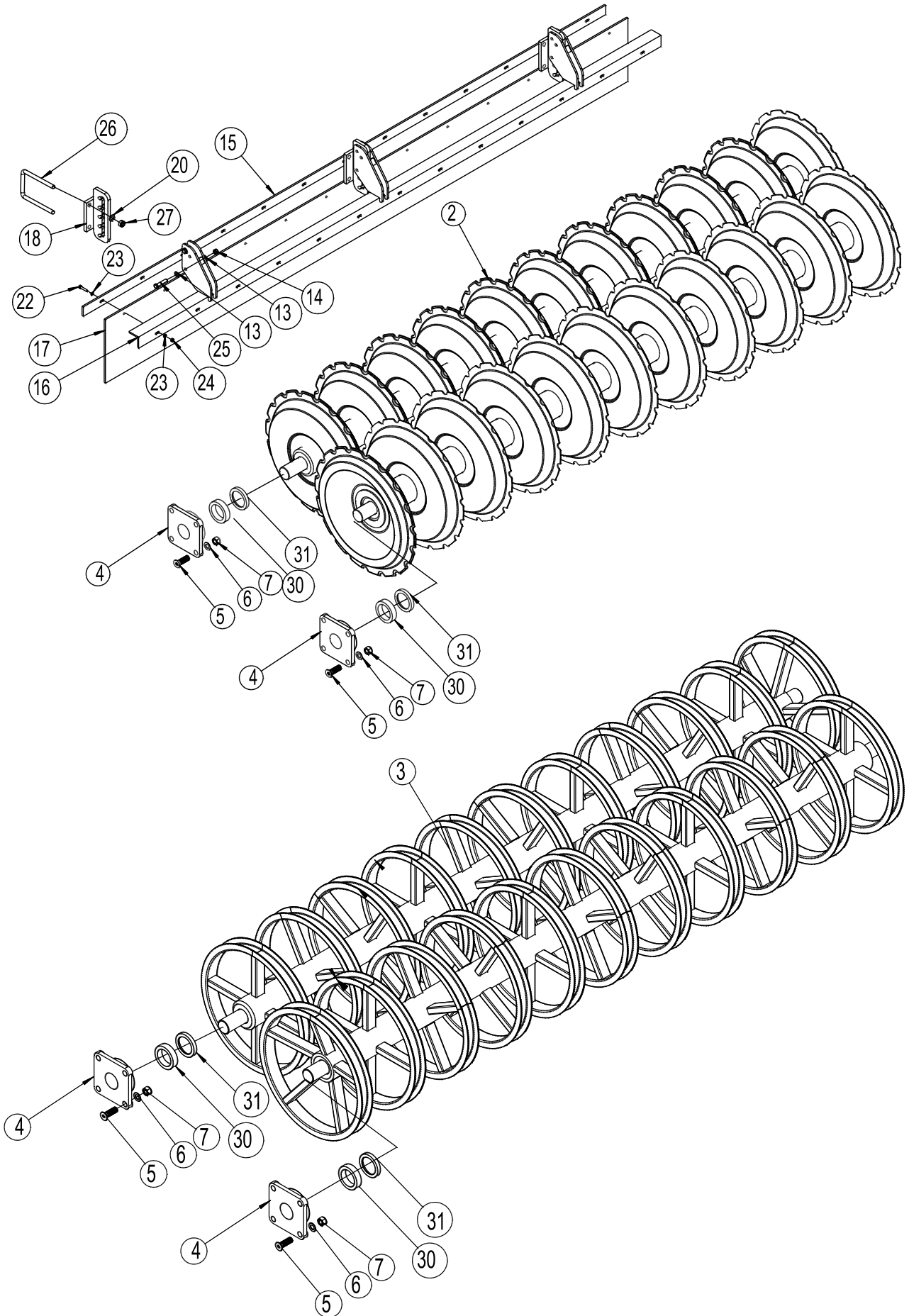
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Single V-Profile roller – scraper – material damper guard



Twin U/V-Profile roller – material damper guard

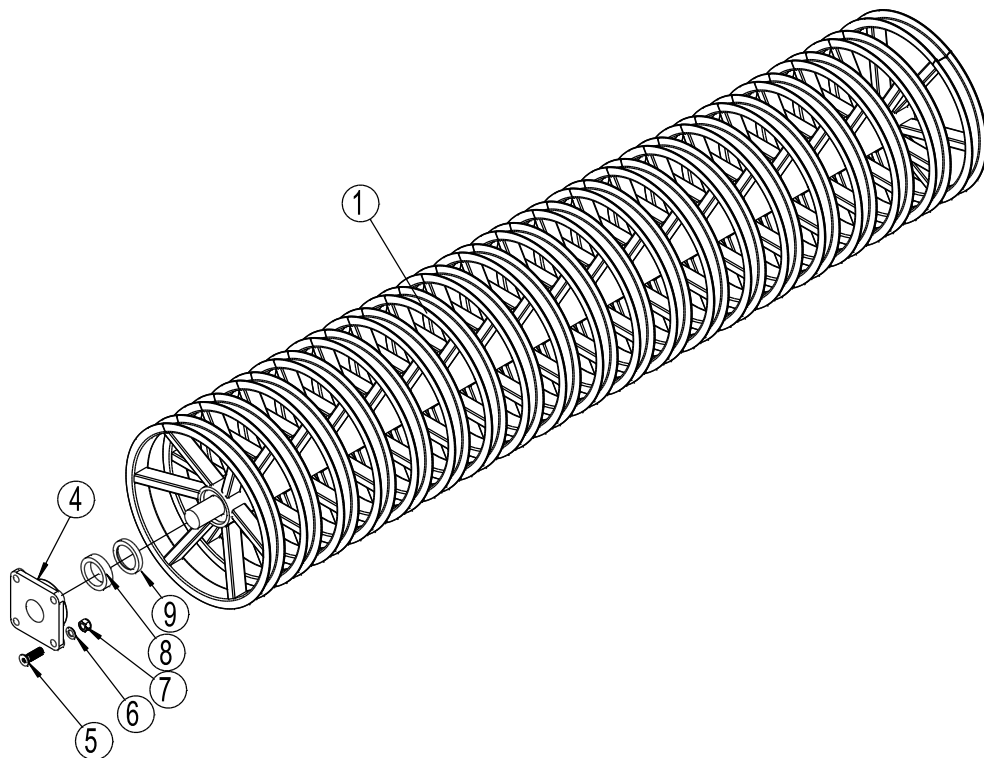


Pos.	Item no.	Designation	4,5m	5,5m
1	7451101	Single V-profile roller, Ø600 L=2242	2	
1	7451042	Single V-profile roller, Ø600 L=2740		2
1	7451072	Single V-profile roller, Ø700 L=2242	2	
1	7451076	Single V-profile roller, Ø700 L=2710		2
2	7451025	Twin V-Profile roller, Ø600 L=2240	4	
2	7451022	Twin V-Profile roller, Ø600 L=2740		4
2	7451136	Twin V-Profile roller Ø700 L=2240	4	
2	7451133	Twin V-Profile roller Ø700 L=2740		4
3	7450027	Twin U-Profile roller, L=2240	4	
3	7450007	Twin U-Profile roller, L=2740		4
4	0478972	Bearing HCF 312, 4 holes flange bearing w/excentric lock washer, ductile house	4 (8)	4 (8)
5	0229250	Hexagon screw M20x70 8.8 UH DIN7991	16 (32)	16 (32)
6	0272310	Facet plate Ø20	16 (32)	16 (32)
7	0264110	Self-locking nut M20	16 (32)	16 (32)
8	1295449	Scraper bar R/L for Ø600 roller	2	
8	1295650	Scraper bar R/L for Ø600 roller		2
8	1295648	Scraper bar R/L for Ø700 roller	2	
8	1295529	Scraper bar R/L for Ø700 roller		2
9	0489487	Plastic plug for tube 70x50x2, black	4	4
10	630938520	Scraper short – twisted 255 mm Ø600 roller	28	34
10	630938521	Afskraber lang – twisted 320 mm Ø700 roller	28	34
11	630938522	Clamp 50x70 f/scraper	28	34
12	0235450	Steel bolt M12x90mm 8.8	28	34
13	0272270	Facet plate Ø12	56	68
14	0264070	Self-locking nut M12	28	34
15	1300132	Clamping plate L=2230 mm	2	
15	1300136	Clamping plate L=2730 mm		2
16	630928714	Mounting bar f/material damper guard, L	1	
16	630928712	Mounting bar f/material damper guard, R	1	
16	630938638	Mounting bar f/material damper guard, L		1
16	630938633	Mounting bar f/material damper guard, R		1
17	1300131	Rubber mat L=2230	2	
17	1300135	Rubber mat L=2730		2
18	630938545	Suspension f/material-damper guard	4	4
19	690103295	Bolt M16x260 8.8	16	16
20	0272290	Facet plate Ø16	32	32
21	0264090	Self-locking nut M16	16	16
22	0234790	Bolt M8x40 8.8	18	22
23	0272250	Facet plate Ø8	36	44
24	0264050	Self-locking nut M8	18	22



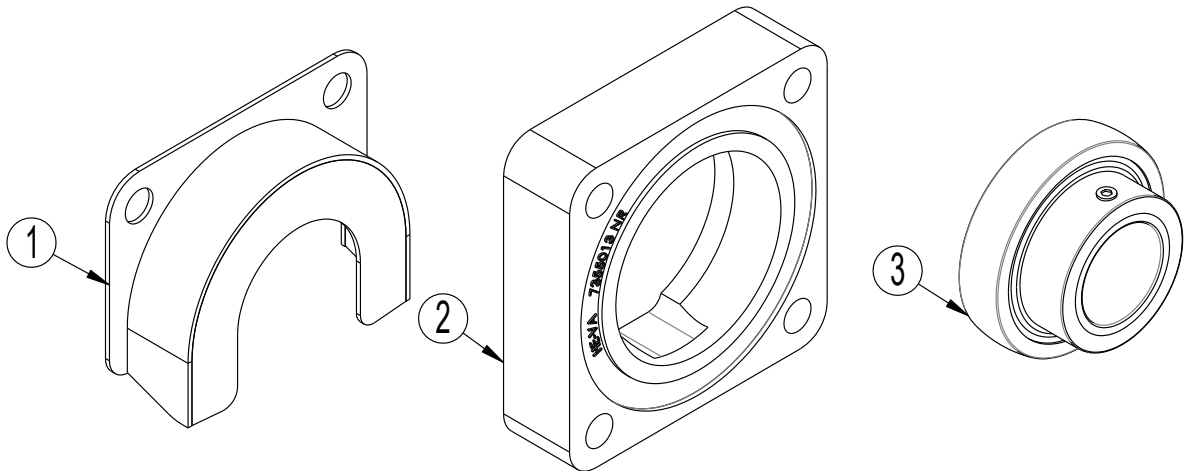
Pos.	Item no.	Designation	4,5m	5,5m
25	0235400	Bolt M12x60 8,8	8	8
26	0382800	U-bolt M16x100x150x100	8	8
27	0264090	Self-locking nut M16	16	16
28	69512040K	Pin Ø12,5 L=40	4	4
29	0431975	Security ring 30 x Ø3	4	4
30	690600020	Bush Ø60 L=20	4 (8)	4 (8)
31	7330021	Thrust washer, adapted for the welding, Ø82,5xØ61 L= 12	4 (8)	4 (8)

U-profile roller



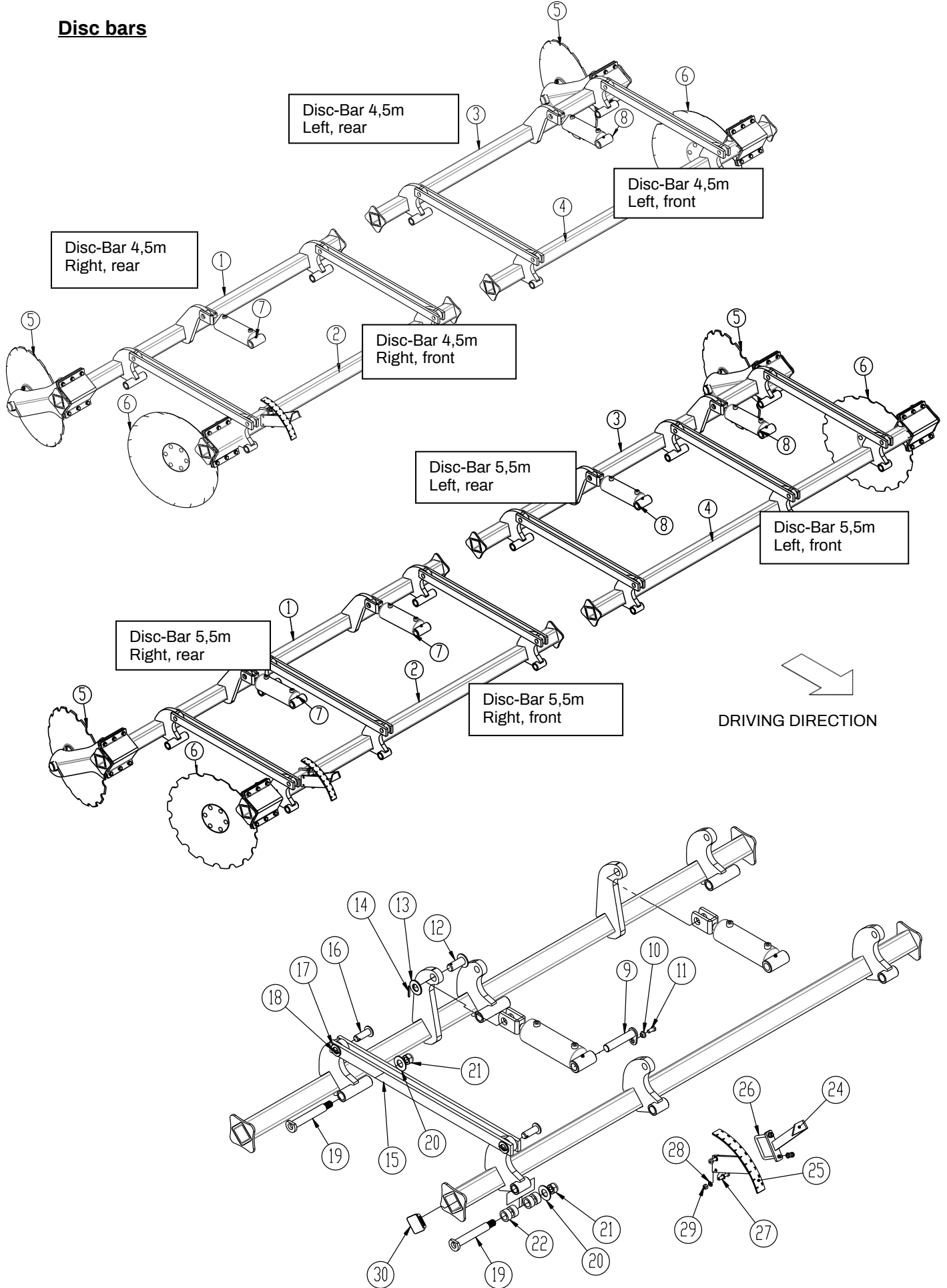
Pos.	Varenr.	Betegnelse	4,5m	5,5m
1	7450030	U-profile roller single Ø600 L=2240	2	
1	7450031	U-profile roller single Ø600 L=2740		2
4	0478972	Bearing HCF 312, 4 holes flange bearing w/excentric lock washer, ductile house	4	4
5	0229250	Hexagon screw M20x70 8.8 UH DIN7991	16	16
6	0272310	Facet plate Ø20	16	16
7	0264110	Self-locking nut M20	16	16
8	690600020	Bush Ø60 L=20	4	4
9	7330021	Thrust washer, adapted for the welding, Ø82,5xØ61 L= 12	4	4

Rubber cushioned bearings and protective shield for general bearing
(additional equipment)



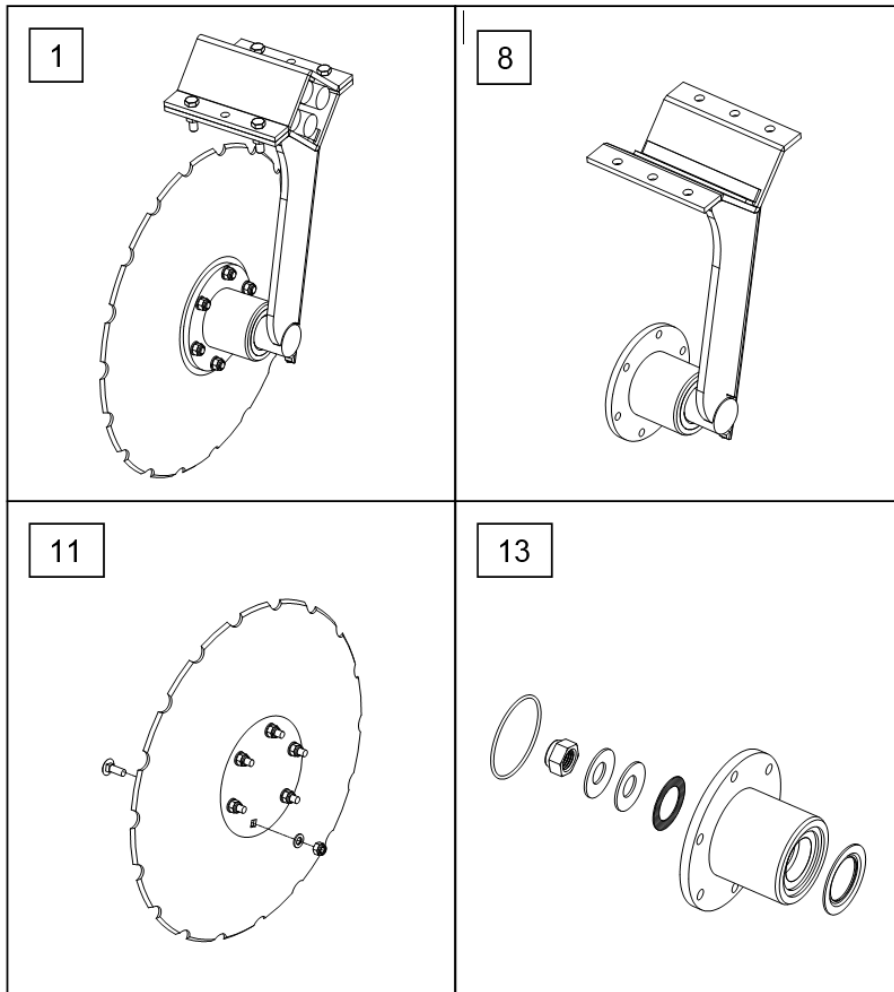
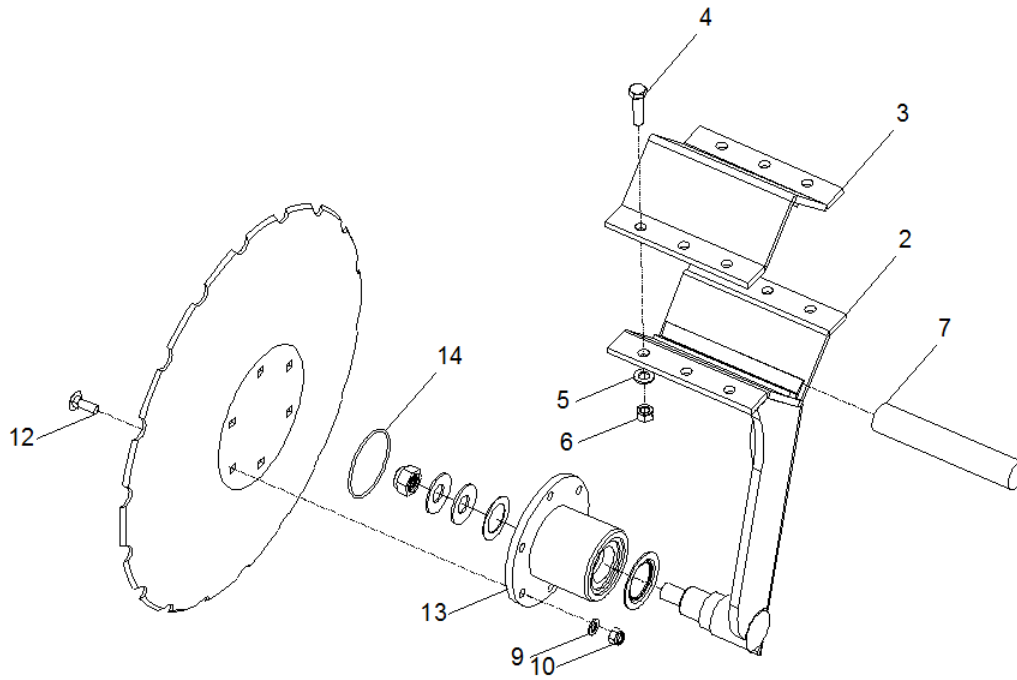
Pos.	Item no.	Designation	No. per roller
1	7355054	Protection shield for HCF 312 bearing, (additional equipment, dont use for rubber cushioned bearing)	2
2	7355034	Rubber cushioned housing for Ø60 axle	2
3	690140118	Bearing HC 312 R6 (d=60 D=130 B=33)	2

Disc bars



Pos.	Item no.	Designation	4,5m	5,5m
1	1295204	Rear discbar, Right	1	
1	1295198	Rear discbar, Right		1
2	1295203	Front discbar, Right	1	
2	1295199	Front discbar, Right		1
3	1295155	Rear discbar, Left	1	
3	1295201	Rear discbar, Left		1
4	1295157	Front discbar, Left	1	
4	1295200	Front discbar, Left		1
5	1295395	Complete disc, left	17	21
6	1295396	Complete disc, right	17	21
7	690200640	Cylinder 85/30x155 Ø30/fork (right)	1	2
7a	690200641	Gasket set 85/30	1	2
8	690200620	Cylinder 80/30x155 Ø30/fork (left)	1	2
8a	690200621	Gasket set 80/30	1	2
9	69430145G	Pin Ø30 L=145	2	4
10	630532600	Bush for pin	2	4
11	690101101	Bolt M12x25 8.8 (with glue)	2	4
12	69530060F	Pin Ø30 L=60	2	4
13	0272350	Facet plate Ø30	2	4
14	0371540	Retaining pin Ø6x50 DIN1481	2	4
15	631700140	Parallel bar for bars	8	12
16	69525061F	Pin Ø25 L=58	8	12
17	0272340	Facet plate Ø27	8	12
18	690130132	Retaining pin Ø6x40 DIN1481	8	12
19	631700133	Pin Ø30 L=174	8	12
20	0272350	Facet plate Ø30	8	12
21	0264110	Self-locking nut M20 DIN985	8	12
22	630949078	Bush for arm (loose, L=20)	16	24
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24	1295391	Indicator f/depth control on Disc-Roller Contour	1	1
25	630933260	Scale f/ depth control on Disc-Roller Contour	1	1
25a	698500018	Transfer 1-9 scale for depth control	1	1
26	0382110	U-bolt M10 70x70x70	1	1
27	0235080	Steel bolt M10x45mm, 8.8	2	2
28	0272260	Facet plate Ø10	6	6
29	0264060	Self-locking nut M10	4	4
30	690109202	Plast plug 70x70	8	8

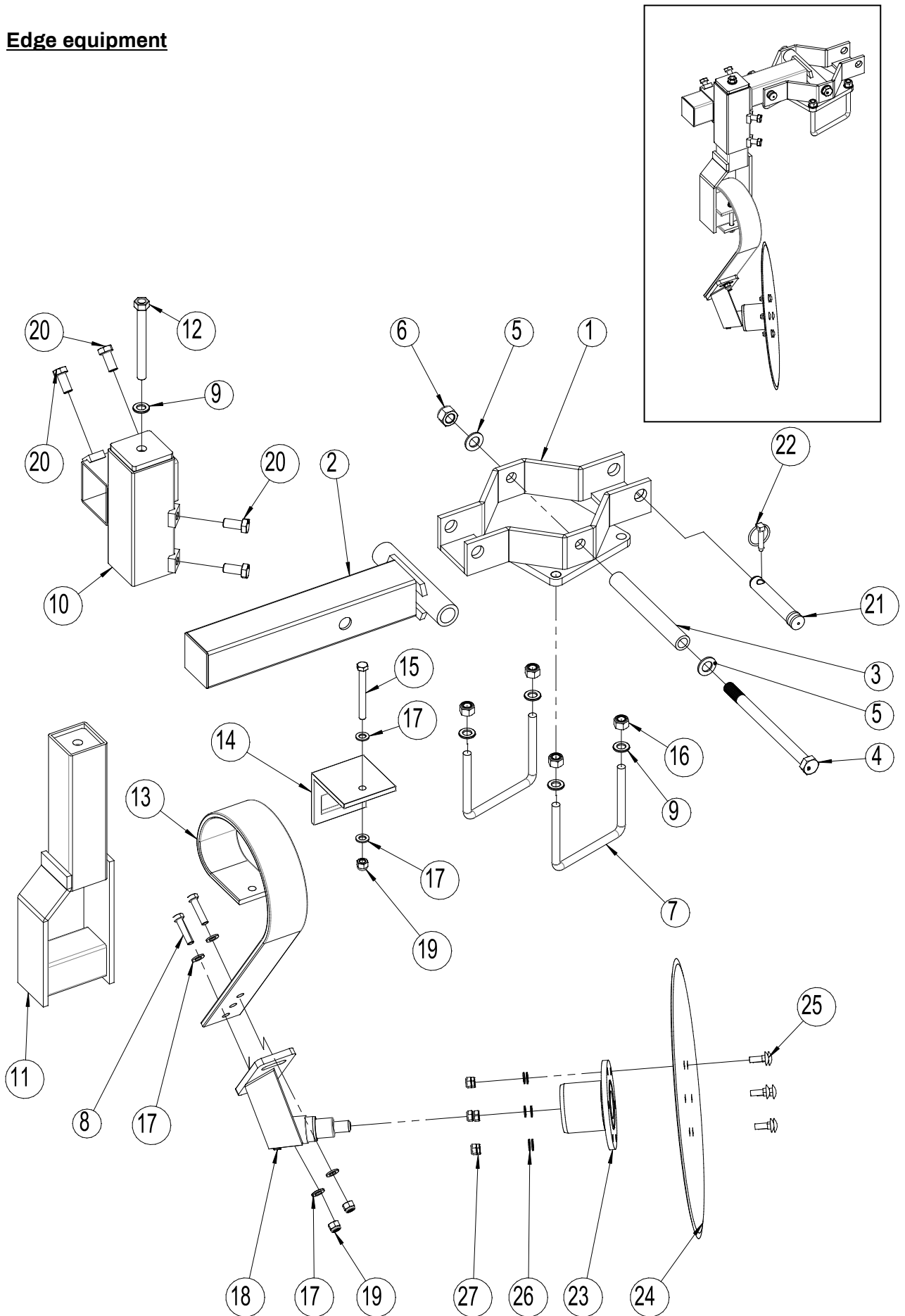


Disc

Pos	Vare nr.	Betegnelse	Pr. Disc-stilk
1	1295395	Complete disc (left)	
1	1295396	Complete disc (right)	
2	631700004	Carrier arm (left)	1
2	631700020	Carrier arm (right)	1
3	631700005	Clamping plate for carrier arm	1
4	690103091	Bolt M12x45 10.9	6
5	0272270	Facet plate Ø12	12
6	690113013	Self-locking nut M12 (all-metal)	6
7	690210711	Rubber cord Ø40 L= 210	4
8	631700002	Complete carrier arm with hub (left)	
8	631700019	Complete carrier arm with hub (right)	
9	0272260	Facet plate Ø10	6
10	0264060	Self-locking nut M10	6
11	631700003	Sabre disc, scalloped Ø608 x 6,0 med 6 holes and flat center	1
12	0248421	Carrier bolt M10x30 kval.8.8	6
13	630949032	Repair kit- incl Hub	
14	0483735	O-ring ø 82 x 3,0mm	



Edge equipment

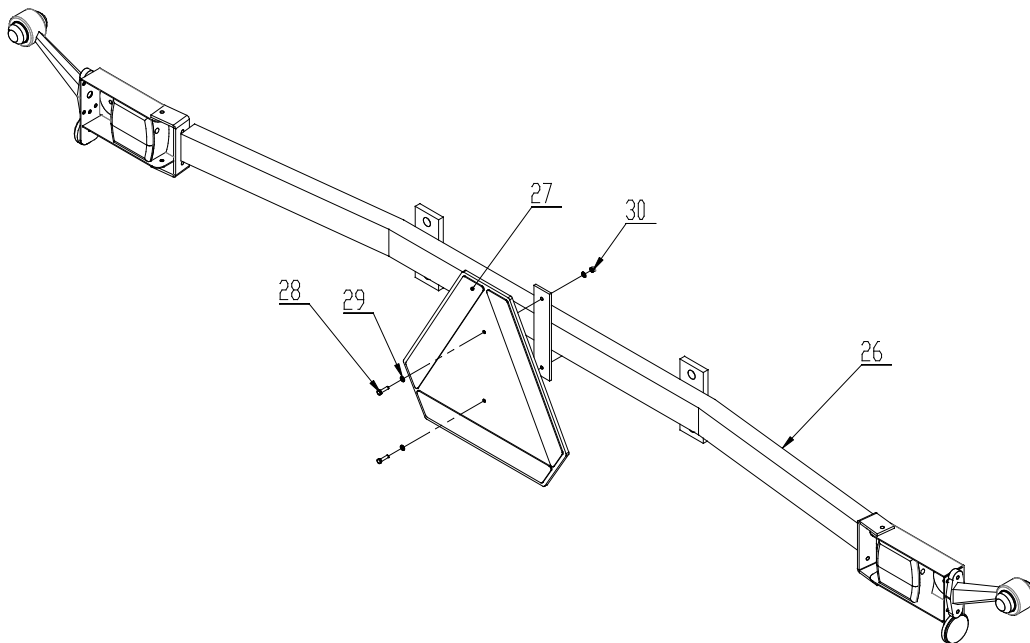
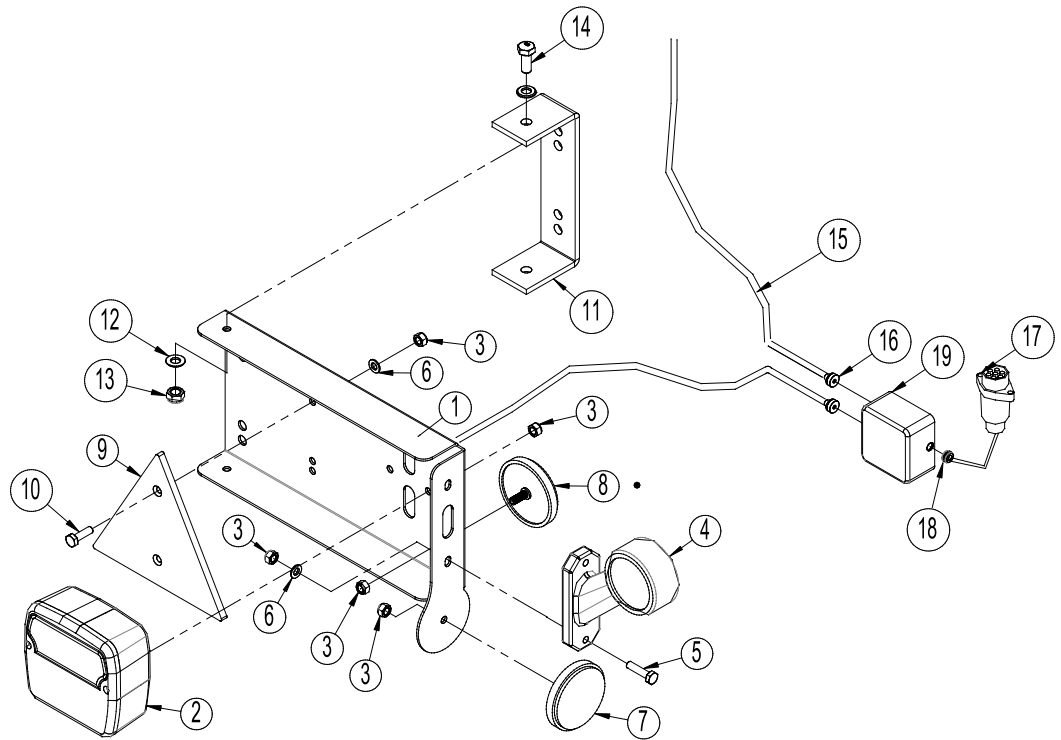


Pos.	Item no.	Betegnelse	4,5m	5,5 m
	630943094	Complete edge equipment with 508 mm disc	1	1
1	630943088	Mounted holder	1	1
2	630943090	Mounted link	1	1
3	630943095	BK-tube 30x5 L= 233	1	1
4	690103285	Bolt M20x280 8.8	1	1
5	690117005	Facet plate Ø20	2	2
6	690113009	Self-locking nut M20	1	1
7	690110103	U-bolt M16x100x150x100	2	2
8	690117013	Facet plate Ø16	5	5
9	690113008	Self-locking nut M16	4	4
10	630943099	Spindel bracket complete	1	1
11	630943102	Tine holder spindle complete	1	1
12	630943109	Adjustment bolt	1	1
13	633052050	Springboard tine 80x10mm – long	1	1
14	0422390	Clamp for Spring-Board tine	1	1
15	690103098	Bolt M12x110 10.9	1	1
16	690117014	Facet plate Ø12	6	6
17	690113006	Self-locking nut M12	3	3
18	630943080	Bracket complete	1	1
19	690103096	Bolt M12x50 8.8	2	2
20	690103124	Bolt M14x35 8.8 set bolt	4	4
21	69525107J	Pin ø28 L=107	1	1
22	690134004	Ring pin Ø10	1	1
23	630949032	Hub	1	1
24	690153509	Disc plain, ø508x4,0mm	1	1
25	690101210	Carrier bolt M10x30 8.8	6	6
26	690117012	Facet plate Ø10	6	6
27	690113005	Self-locking nut M10	6	6



Lights

Trailed machine



Pos.	Item no.	Designation	Pcs
1	7357505	Lightbox (L)	1
	7357508	Lightbox (R)	1
2	7357504	Rear light	2
3	0264030	Locking nut M5	16
4	7357507	Marking light (L)	1
	7357509	Marking light (R)	1
5	0234340	Bolt M5x25	4
6	0272240	Facet plate Ø5	8
7	0656240	Reflector, yellow	2
8	0656250	Reflektor, white	2
9	0521030	Reflektor (triangel) red 125/145	2
10	0233860	Bolt M5x20	4
11	7357516	Bracket	2
12	0272240	Facet plate Ø6	16
13	0264040	Self-locking nut M6	8
14	0234330	Bolt M6x20	4
15	690160080	Cabel 5 x 1mm ² (Inform about lenght by ordering sparepart)	
16	7357545	Rutaseal nipple M20 8-12mm Grey RAL7001	2
17	690160070	Plug 7 poles DIN 72 577 – ISO 1724	1
18	7357546	Rubberbushing No. 38A Ø10/3 sort	1
19	0520492	Junction box 105x105x60	1
26	630835015	Light beam	1
27	0521010	Warning triangel (in some countries)	1
28	0233860	Bolt M5 x 20	1
29	0272230	Facet plate Ø5	2
30	0264030	Self locking nut M5	4

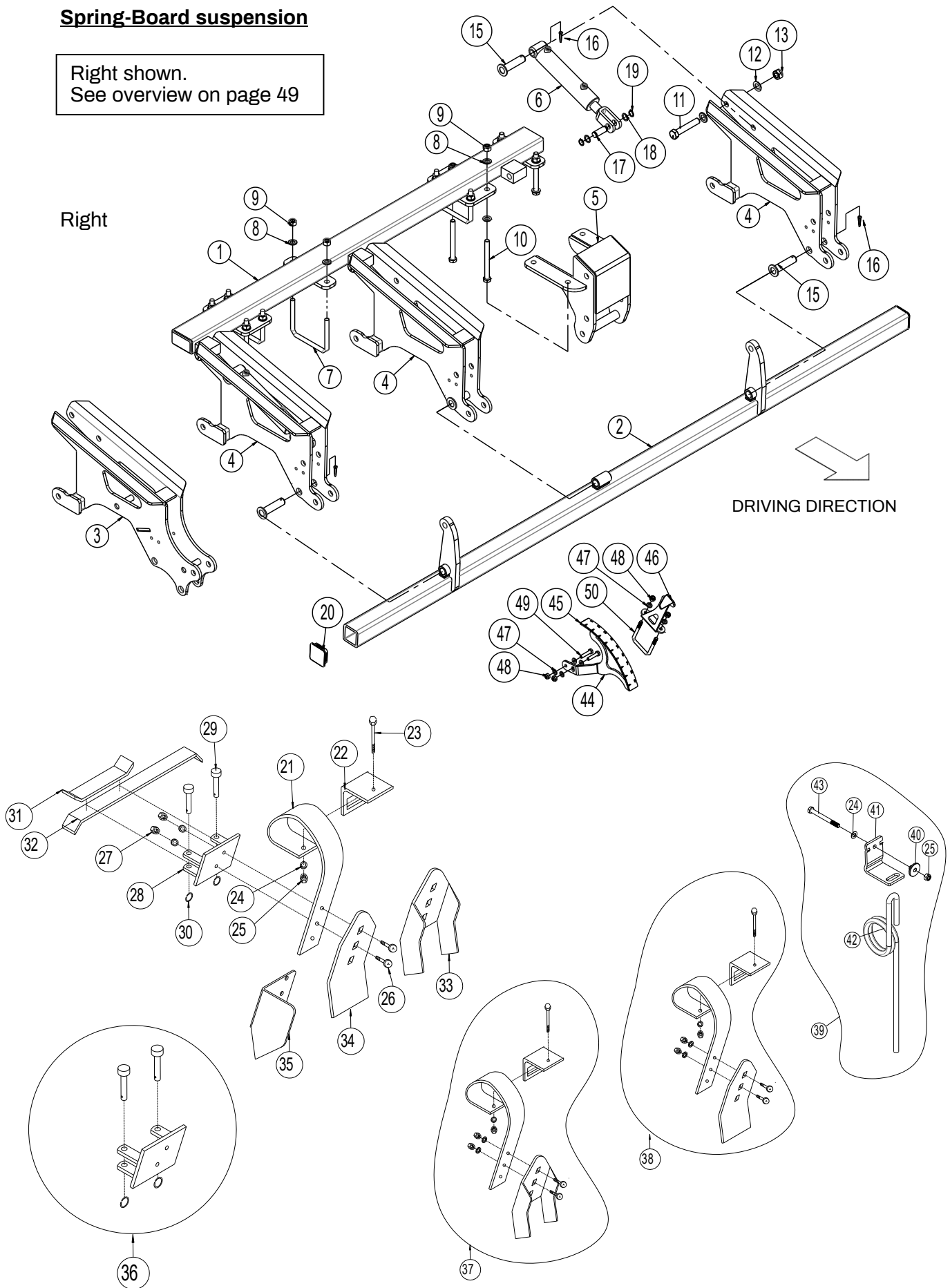
Note: Check number and measurements of all cables before ordering the spare parts.



Spring-Board suspension

Right shown.
See overview on page 49

Right



Pos.	Item no..	Designation	4,5m	5,5m
1	1300000	Mounting bar spring-board, right	1	
1	1300002	Mounting bar spring-board, left	1	
1	630938611	Mounting bar spring-board, right		1
1	630938612	Mounting bar spring-board, left		1
2	1300004	Spring-Board bar, right	1	
2	1300007	Spring-Board bar, left	1	
2	630938615	Spring-Board bar, right		1
2	630938617	Spring-Board bar, left		1
3	1295164	Spring-Board horn for depth wheel <i>Before 1/11-2020</i>	2	2
3	1295310	Spring-Board horn for depth wheel From 1/11-2020	2	2
4	1295202	Spring-Board horn <i>Before 1/11-2020</i>	4(2)	6(4)
4	1295167	Spring-Board horn <i>Before 1/11-2020</i>	4(2)	6(4)
4	1295313	Spring-Board horn From 1/11-2020	4(2)	6(4)
5	630916511	Disc suspension	2	2
6	690200160	Cylinder 50/30x155 Ø20/fork	4	4
	690200046	Gasket set 50/30 mm Laizhou		
7	0382800	U-bolt M16x100x150x100	4	8
8	0272290	Facetplate 16mm, fzb	24	32
9	0264090	Self locking nut M16	16	28
10	0235955	Steel bolt M16x160mm, 8.8 fzb	8	8
11	0238870	Bolt M20x110 10.9	4	6
12	0272310	Facetplate Ø20	8	12
13	0264110	Self locking nut M20	4	6
15	69525087F	Pin Ø25 L=87	4	6
16	0378200	Ring split, Ø4,5mm	4	6
17	69520046D	Pin Ø20 L=46	4	4
18	690115010	Washer Ø20/Ø28x1,0	8	8
19	691372020	Seeger circlip ring Ø20 Din 471 outside (A2)	8	8
20	0489610	Plastic plug RHS for 70 x70 x5,0	4	4
21	0422145	Spring-Board tine 80x10mm-long	18	22
22	0422390	Tine holder, bar 70x70	18	22
23	690103098	Bolt M12x110 10.9	18	22
24	0272270	Facet plate Ø12	36	44
25	0264070	Self locking nut M12	18	22
26	0248670	Carrier bolt M12x45	36	44
27	0264070	Self locking nut M12	36	44
28	633055500	Bracket for tine f/transverse locking system	18	22
29	69512040K	Pin Ø12,5 L=40	36	44
30	0431975	Locking ring Ø30x3	36	44

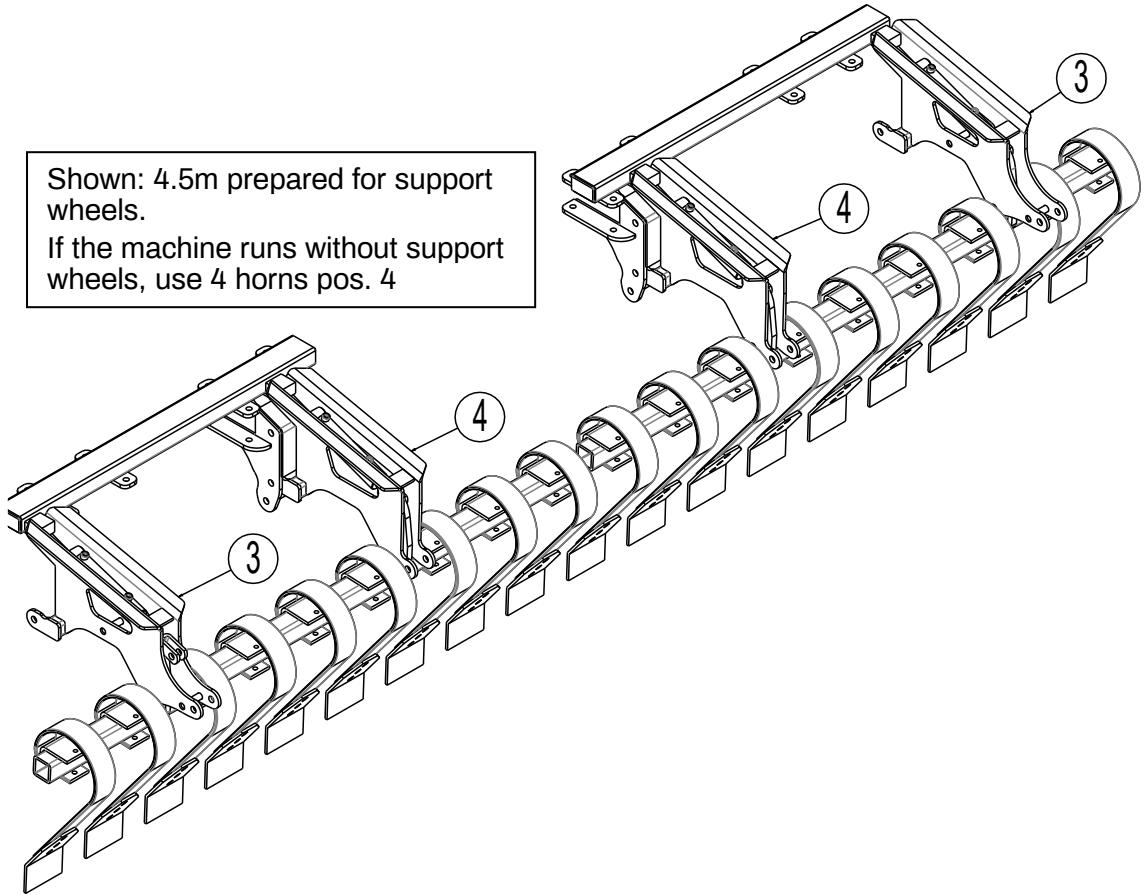


Pos.	Item no..	Designation	4,5m	5,5m
31	633055700	Locking bar (short) f/transverse locking system	4	4
32	633055710	Locking bar (long) f/transverse locking system	16	20
33	633052150	Slicing plates point, incl. bolt (slicing plate point)	18	22
34	633052100	Spring-Board tine point incl. bolt (flat)	18	22
35	633052250	Edge equipment (L) f/Spring-Board	1	1
35	633052255	Edge equipment (R) f/Spring-Board	1	1
36	633055510	Tine bracket f/transverse locking system (complete)		
37	633052025	Spring-Board tine (complete) (slicing plate)		
38	633052000	Spring-Board tine, (complete) (flat)		
39	633055615	Longfinger tine Ø16 H=515mm (complete)		
40	7355063	Konus washer fro Ø16 longfingertine	18	22
41	633055612	Clamp Ø16	18	22
42	633055614	Longfinger tine Ø16 H=515mm checkmeasure 361mm	18	22
43	0235485	Steel bolt M12x120 10.9	18	22
44	1295439	Bracket for depth control	1	1
45	698500018	Transfer 1-9 for depth control	1	1
46	1295440	Indicator for depth control	1	1
47	0272260	Facet plate 10mm DIN 125B	6	6
48	0264060	Self locking nut M10 DIN 985	4	4
49	0235080	Bolt M10x45 8.8	2	2
50	0382110	U-bolt M10x70x70x70	1	1

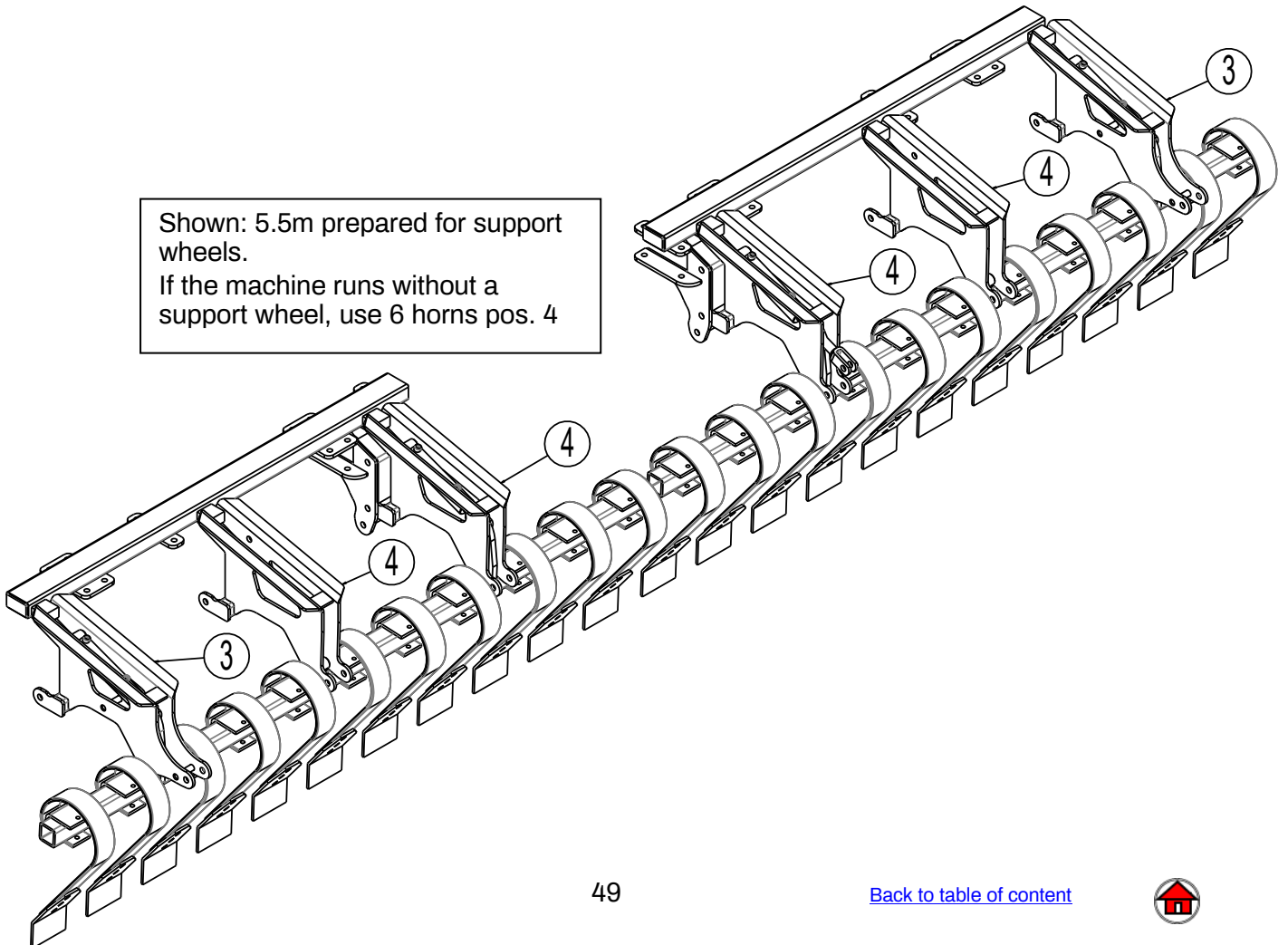


Overview over horn

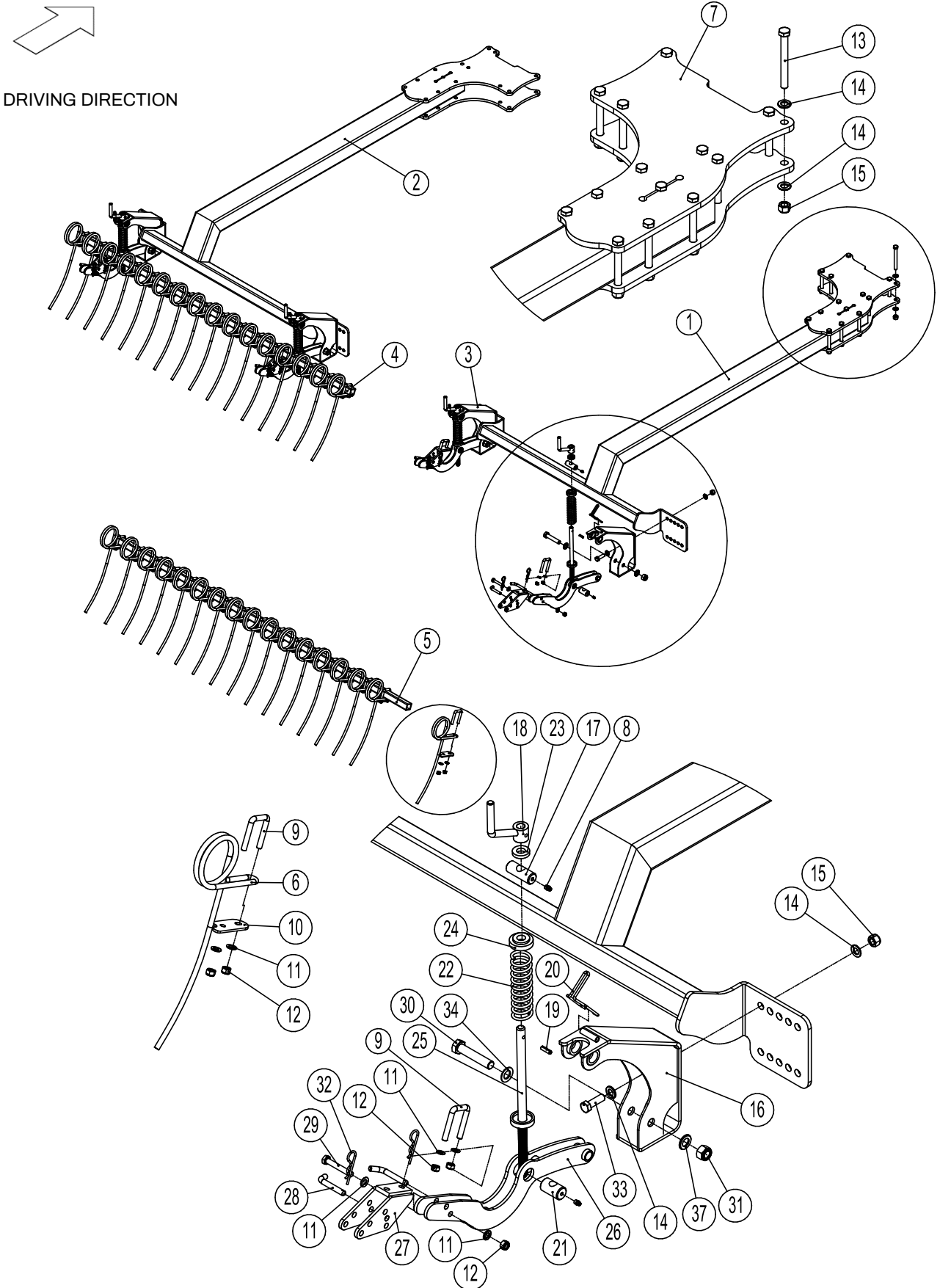
Shown: 4.5m prepared for support wheels.
If the machine runs without support wheels, use 4 horns pos. 4



Shown: 5.5m prepared for support wheels.
If the machine runs without a support wheel, use 6 horns pos. 4



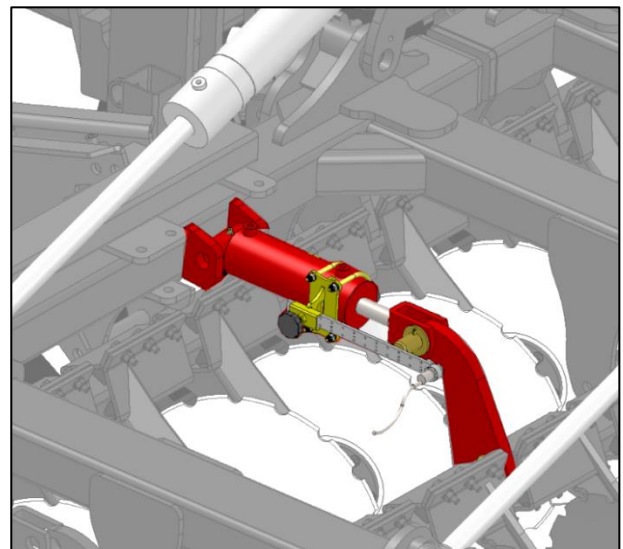
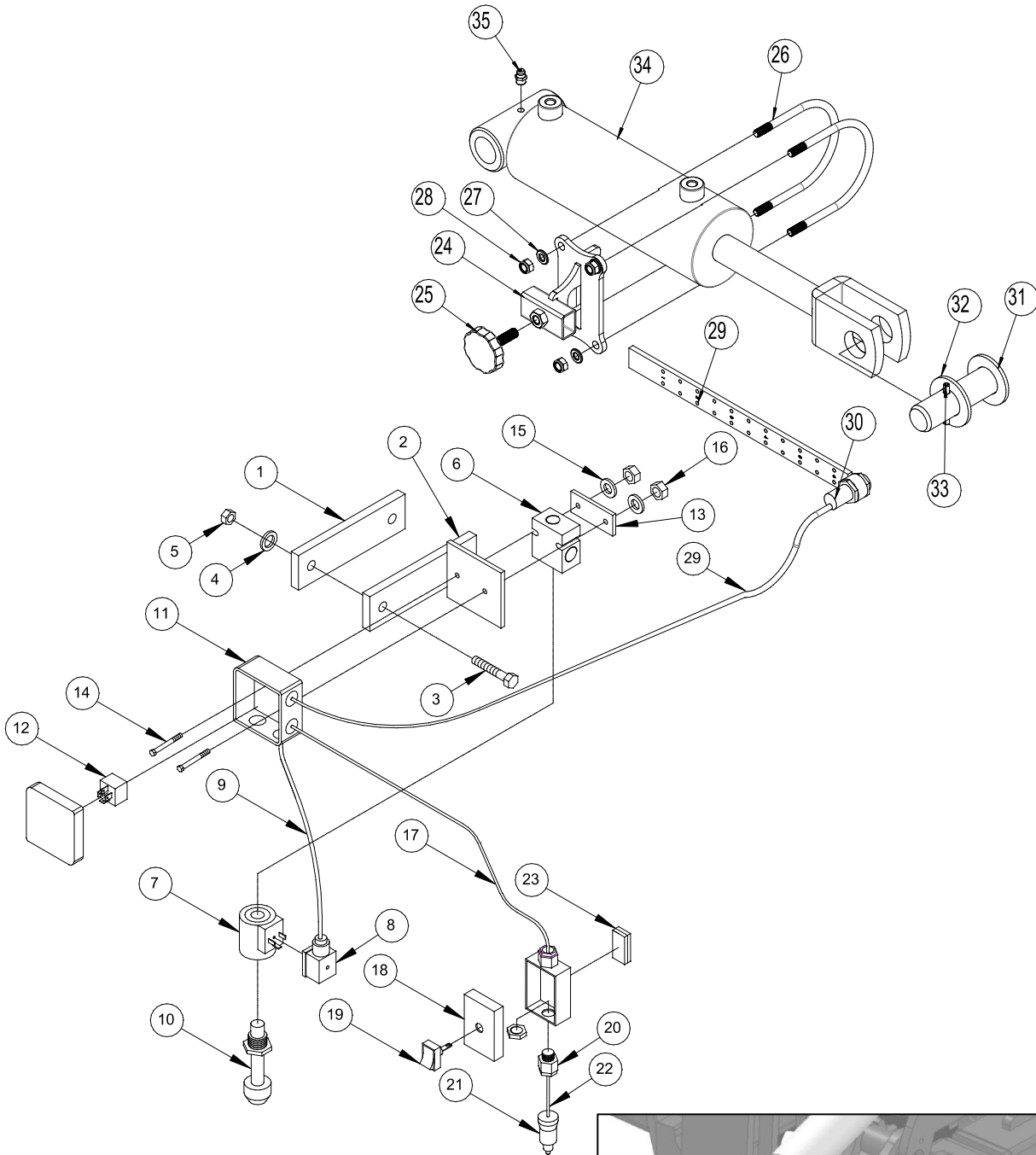
Longfinger afterharrow (additional equipment)



Pos.	Item no..	Designation	4,5m	5,5m
1	1295220	Arm for afterharrow, right	1	1
2	1295222	Arm for afterharrow, left	1	1
3	1140969	Complete holder for arm	4	4
4	1300158	Bar 40x40x5 L=2230, left	1	-
4	1295622	Bar 40x40x5 L=2730, left	-	1
5	1300147	Bar 40x40x5 L=2390, right	1	-
5	1295621	Bar 40x40x5 L=2890, right	-	1
6	0426125	Longfinger tine Ø12	33	39
7	1300336	Plate for mounting arm	4	4
8	0432500	Lubrication nipple M8	4	4
9	690110050	U-bolt M12 40x40x40	37	43
10	1012521	Clamp for longfinger tine	33	39
11	0272270	Facet plate Ø12 DIN 125B fzb	78	90
12	0264070	Self-locking nut M12, DIN 985	82	94
13	0235955	Bolt M16x160 8.8 fzb	28	28
14	0272290	Facet plate Ø16 DIN125B	72	72
15	0264090	Self-locking nut M16	36	36
16	1140966	Console for afterharrow	4	4
17	1011470	Bearing for spindle	4	4
18	1036260	Handle	4	4
19	0371660	Clamping pin Ø8x30 mm	4	4
20	0431980	Locking bracket Ø5, fzb	4	4
21	1012300	Spindle nut	4	4
22	0431250	Spring Ø6x44x180x12v	4	4
23	1011410	Stopring	4	4
24	1170460	Disc for spindle for harrow	4	4
25	1170467	Spindle for console	4	4
26	1170468	Arm for afterharrow	4	4
27	1170469	Adjustment for afterharve	4	4
28	1170478	Pin Ø12	8	8
29	0235440	Bolt M12x80 8.8 fzb	4	4
30	0236190	Bolt M20x100 8.8 fzb	4	4
31	0264110	Selflocking nut M20	4	4
32	0377400	Hair clip Ø4	8	8
33	690103197	Bolt M16x50 8.8	8	8
34	0272310	Facet plate Ø20 DIN125B	4	



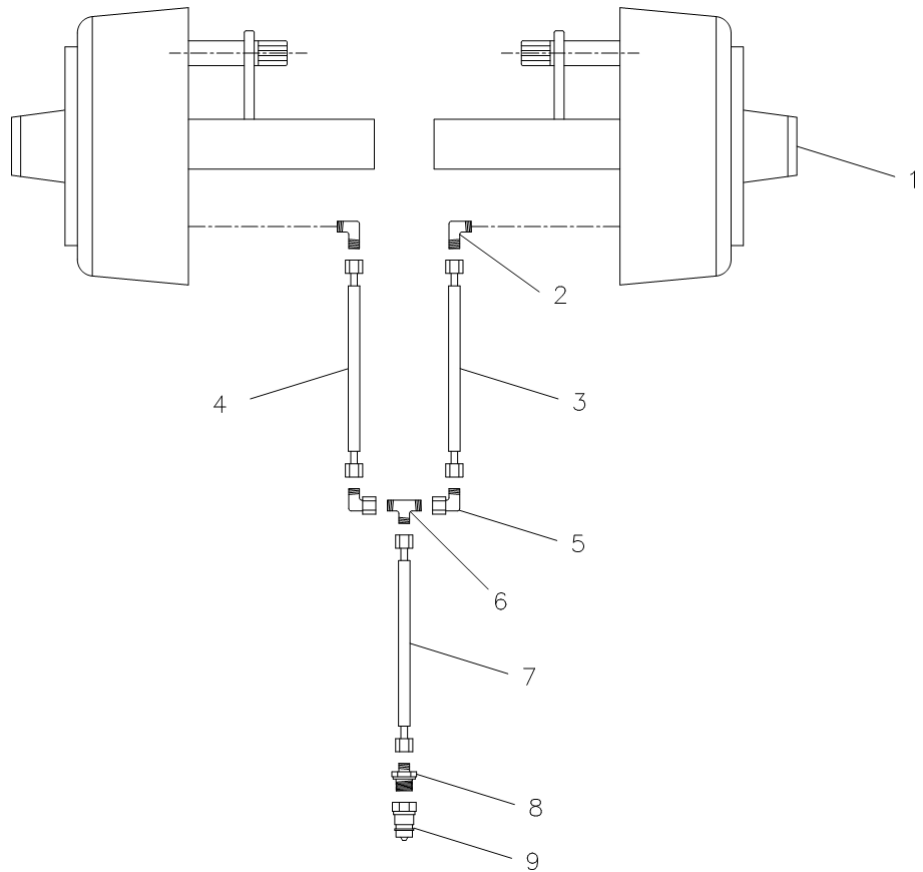
El-depth stop for disc



Pos.	Item no.	Designation	Pcs
1	630932034	Clamping plate f/el-depth stop	1
2	630932035	Bracket f/connection box on el-depth stop	1
3	0235400	Bolt M12x60 8.8	2
4	0272270	Facet plate Ø12	2
5	0264070	Selflocking nut M12 DIN985	2
6	0442763	Valve block 4B 10/2 ½"	1
7	0442764	Magnet coil 12VDC 20W	1
8	690209030	Plug f/solenoid valve DIN 43650	1
9	0525060	Cable 2x0,75 mm ² L = 0,32m	1
10	0442762	Valve 10 NO (57 ltr)	1
11	0520490	Connection box 80x80x50 (hvid)	1
12	0527120	Relay 12V/30A	1
13	630941061	Clamping plate f/valve block	1
14	0234400	Bolt M6x60 8.8	2
15	0272240	Facet plate Ø6	2
16	0264040	Selflocking nut M6 DIN985	2
17	0525060	Cable 2x0,75 mm ² L = 4,5m	1
18	690209486	Conecting box 72x50x41	1
19	0527135	Switch 0-1 (red) Ø12 hol mounting	1
20	690209475	Connector PG11 w/nut	2
21	0442766	Plug 2 pol +/- 12V	1
22	0525060	Cable 2x0,75 mm ² L = 1,0m	1
23	690210720	Velcro band L=65 mm	1
24	1300085	Bracket f/scale/inductive sensor	1
25	0489103	Thumbscrew M10x30	1
26	690110001	U-bolt M8 Ø92	2
27	0272250	Facet plate Ø8	4
28	0264050	Selflocking nut M8	4
29	1115480	Scale	1
30	0442768	Inductive sensor M18 (incl. cable)	1
31	69530056F	Pin Ø30 L=56	1
32	0272350	Facet plate Ø30	2
33	0371540	Roll pin ø6x50mm, fzb DIN1481	4
34	690200620	Cylinder 80/30x155mm gaffel/ø30	2
34a	690200621	Gasket set 80/30	
35	0432510	Lubricating nipple, straight H1 M8x1,25	1



Hydraulic brakes



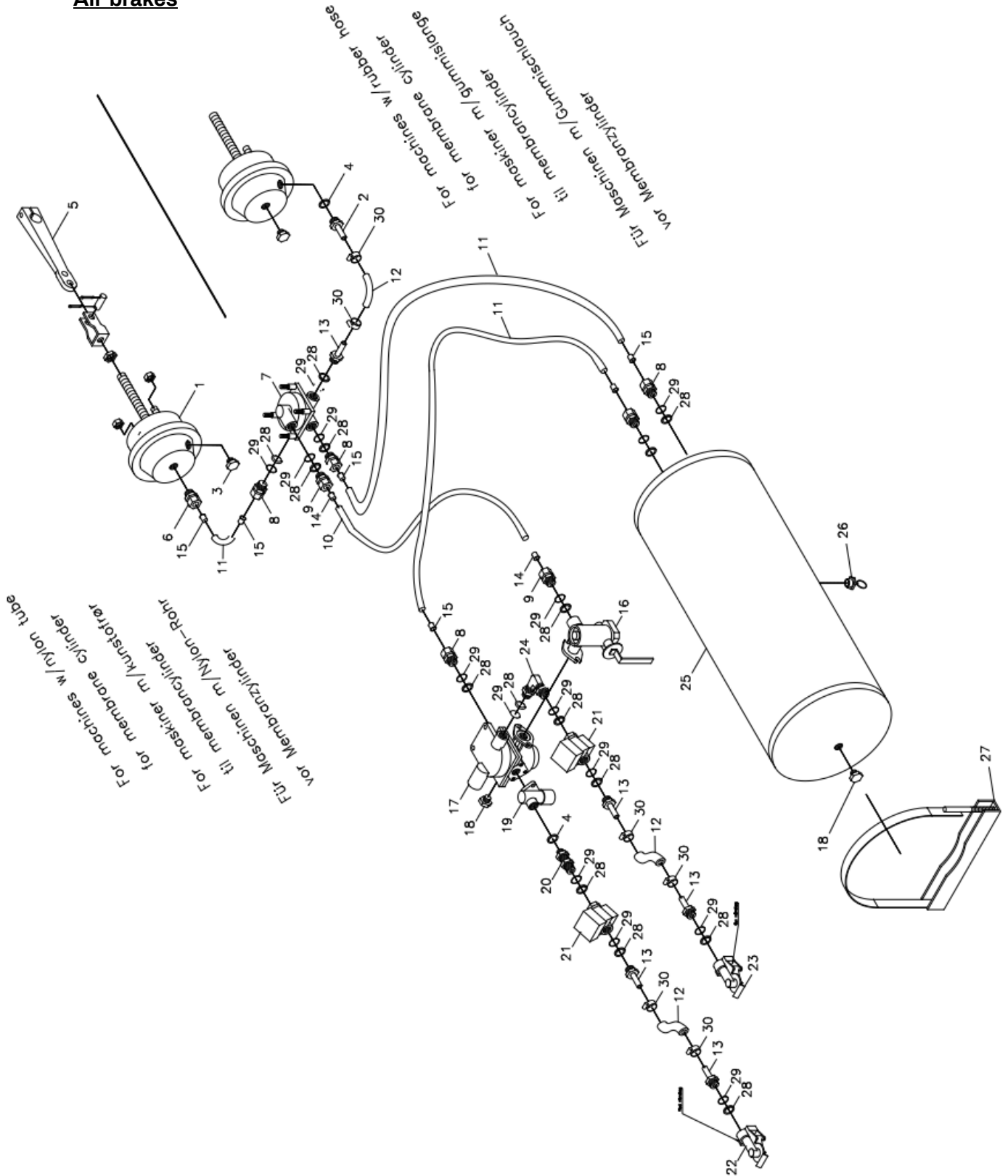
Pos.	Item no.	Designation	4,5 m	5,5 m
1		See pages with wheelframes	2	2
2	690203106	Fitting, 90angle 12-3/8" BSP	2	2
3	690201020	Hydr. hose 1625 mm ¼" st/st	1	1
4	690201020	Hydr. hose 1625 mm ¼" st/st	1	1
5	0446678	Fitting 90 angle Ø10x3/8"	2	2
6	690203015	Fitting, T10	1	1
7	690201012	Hydr. hose 6000mm ¼" st/st	1	1
8	690203003	Fitting, straight 10-1/2" BSP	2	2
9	690203001	Quick coupling 1/2", E402 male	2	2

Note:

Check number and measurements of all hoses before ordering the spare parts.



Air brakes



Pos.	Item no.	Designation	w/nylon tube for membrane cyl	w/rubber hose for membrane cyl.
1	690190001	Membrane cylinder 16"	2	2
2	690190070	Hose fittings M16x1,5 m/ Ø12	0	2
3	690190005	Test fitting, straight M16x1,5	2	2
4	690208102	Bonded seal PP 45-12	1	3
5	690190010	Mounting set, short U-bracket	2	2
6	690202930	Fitting, straight M16x1,5, Ø15 hose	2	0
7	690190015	Relay valve M22x1,5	1	1
8	690202941	Fitting, straight M22x1,5, Ø15 hose	6	4
9	690202940	Fitting, straight M22x1,5, Ø10 hose	2	2
10	690190080	Nylon tube Ø10x1mm	1	1
11	690190085	Nylon tube Ø15x1,5mm	4	2
12	690190105	Hose Ø14,5x5mm	2	4
13	690190073	Hose fitting M22x1,5, m/Ø12	4	6
14	690190090	Support bushing f/tube Ø10x1,5mm	2	2
15	690190095	Support bushing f/tube Ø15x1,5mm	8	4
16	690190020	Brake power regulator M22x1,5	1	1
17	690190025	Trailer air brake valve M22x1,5	1	1
18	690190026	Plug	2	2
19	690190035	Relief valve	1	1
20	690203420	Fitting, straight M16x1,5+M22x1,5	1	1
21	690190040	Filter M22x1,5	2	2
22	690190045	Hose coupling M22x1,5 (red)	1	1
23	690190046	Hose coupling M22x1,5 (yellow)	1	1
24	690190030	V-fittings M22x1,5	1	1
25	690190050	Air receiver 40ltr	1	1
26	690190051	Drainage valve	1	1
27	690190052	Suspension for air receiver	2	2
28	690190060	Pressure ring M22x1,5	15	15
29	690190065	O-ring M22x1,5	15	15
30	690109305	Hose clamp 15-24 mm	4	8

Note:

Check number and measurements of all hoses before ordering the spare parts.

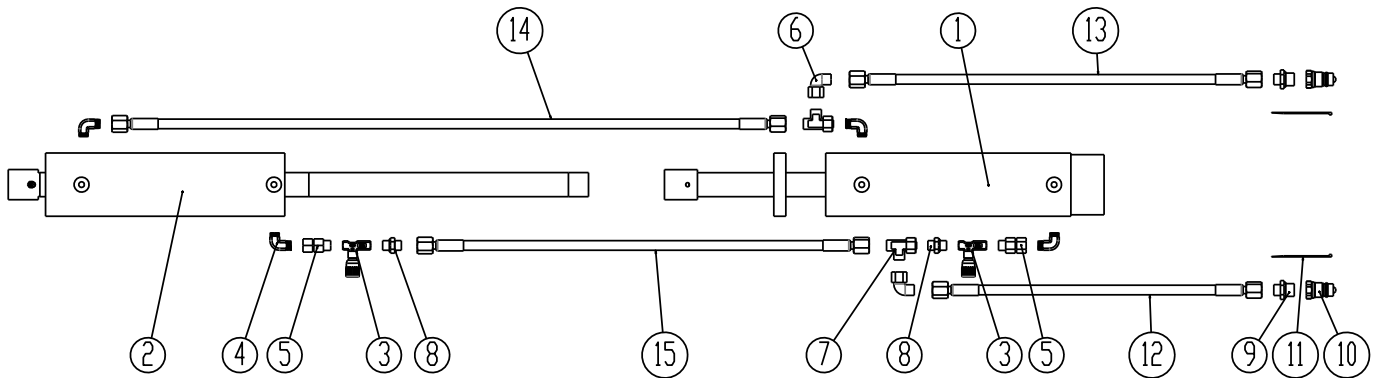


Hydraulic

Note:

Check number and measurements of all hoses before ordering the spare parts.

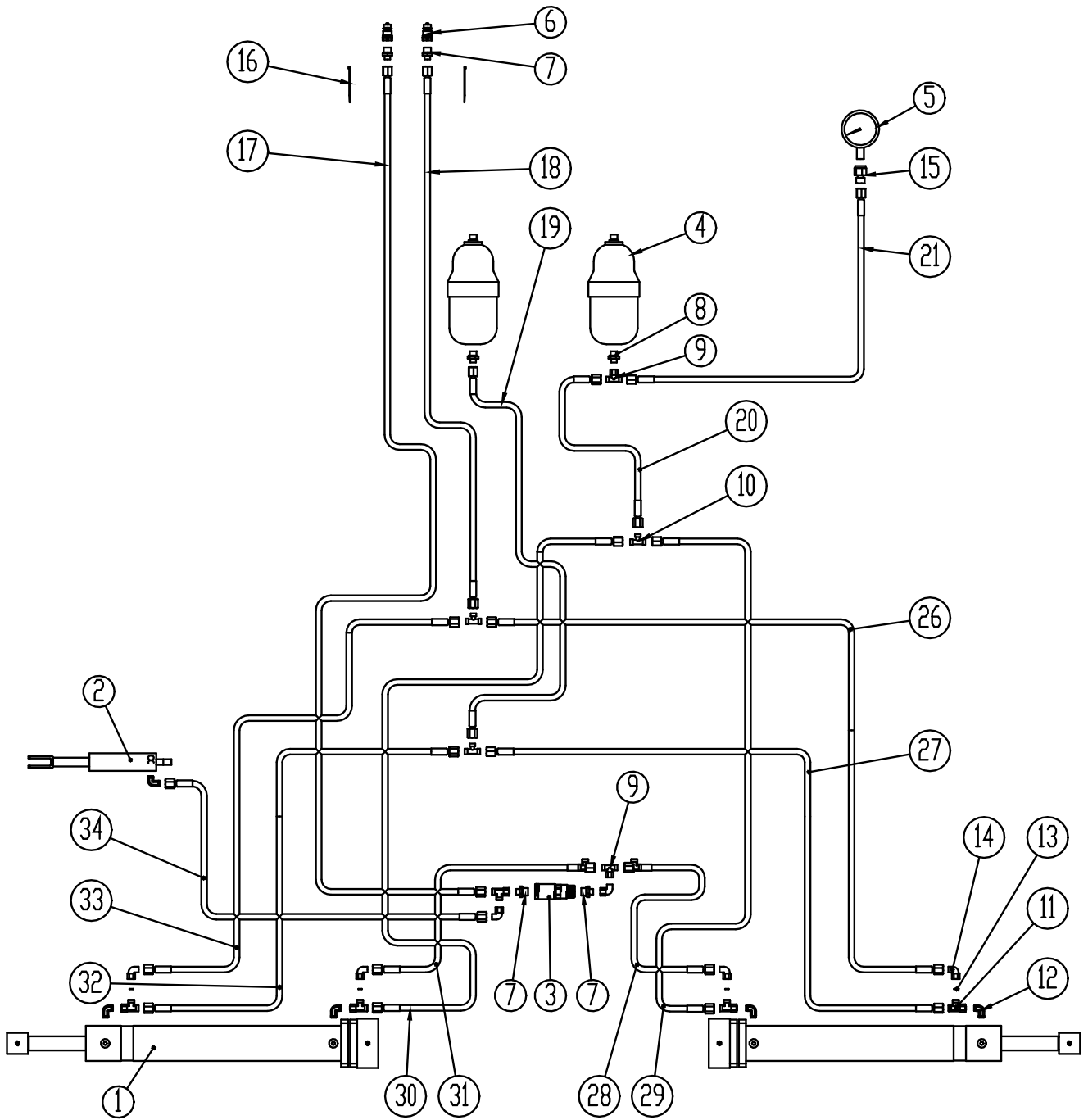
Drawbar and wheelframe



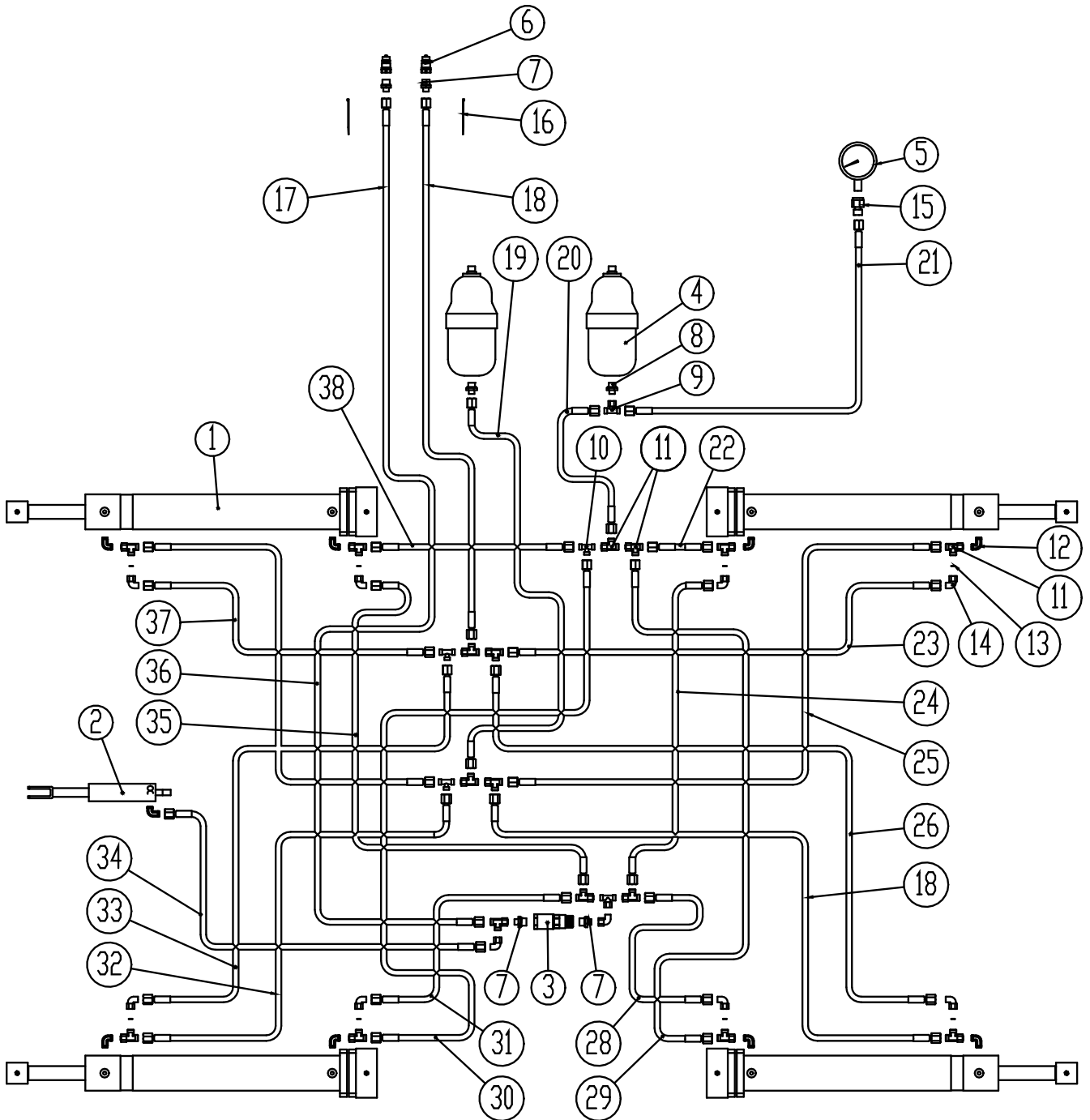
Pos.	Item no.	Designation	Pcs.
1	0463302	Cylinder 100/40x280 Ø35/Ø32	1
	0463372	Gasket set 100/40	
1	7345041	Cylinder 100/40 x 280/50 "in-line cylinder"	1
	690200296	Gasket set 100/40 (Laizhou)	
2	7345095	Cylinder for transport wheels 100/40x285 Ø40,5/Ø40,25	1
	690200296	Gasket set 100/40 (Laizhou)	
3	690207130	Restrictor valve, adjustable 3/8"	2
4	690203106	Fitting 90°12-3/8" BSP	4
5	690203130	Fitting straight Ø12 premounted w/ O-ring	2
6	690203112	Fitting 90° Ø12	2
7	690203017	Fitting T12, premounted w/ O-ring	2
8	0446754	Fitting straight, Ø12 x 3/8"	2
9	690203103	Fitting straight, Ø12 x 1/2" BSP	2
10	690203001	Quickcoupling 1/2" male	2
11		Cable straps	2
12	690201232	Hydraulic hose 3/8" st/st L= 3520 mm	1
13	690201234	Hydraulic hose 3/8" st/st L= 3800 mm	1
14	690201228	Hydraulic hose 3/8" st/st L= 2300 mm	1
15	690201202	Hydraulic hose 3/8" st/st L= 2025 mm	1



Folde 4,5m



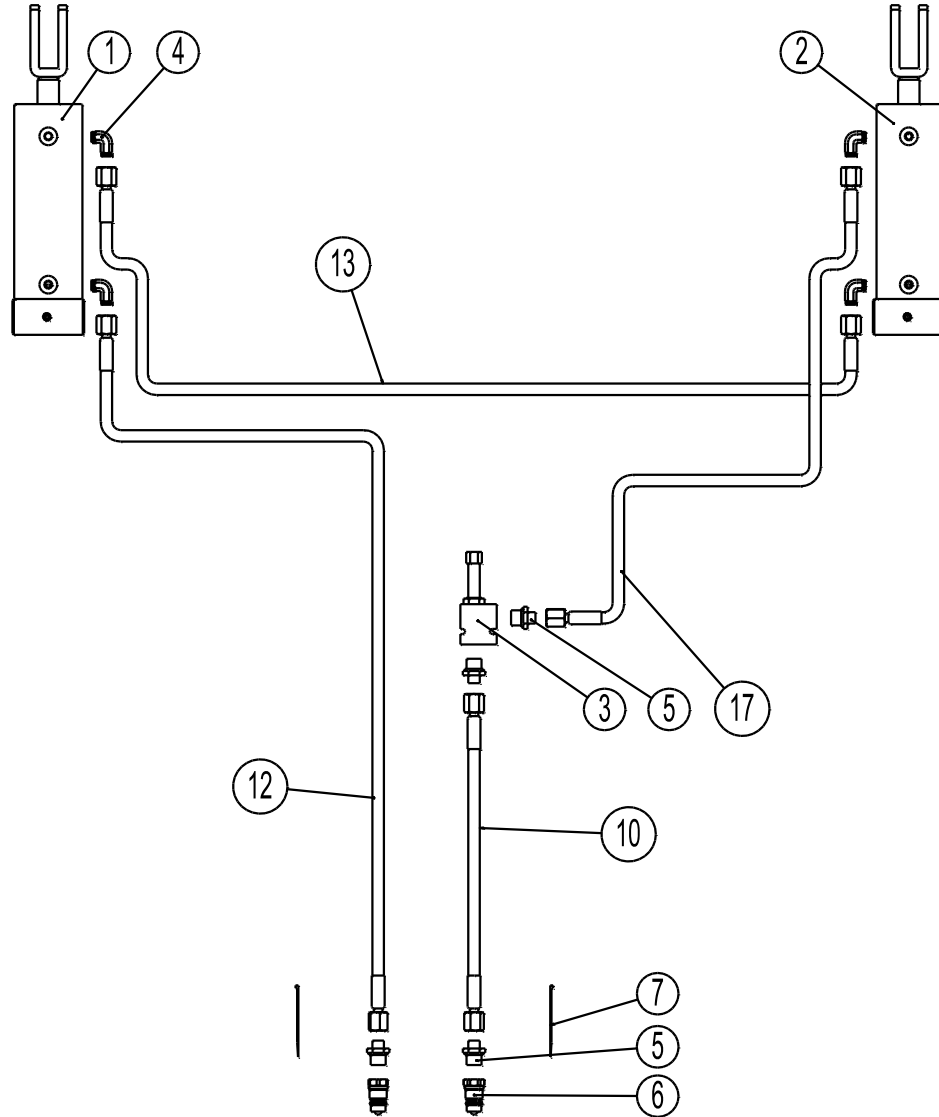
Folde 5,5 m



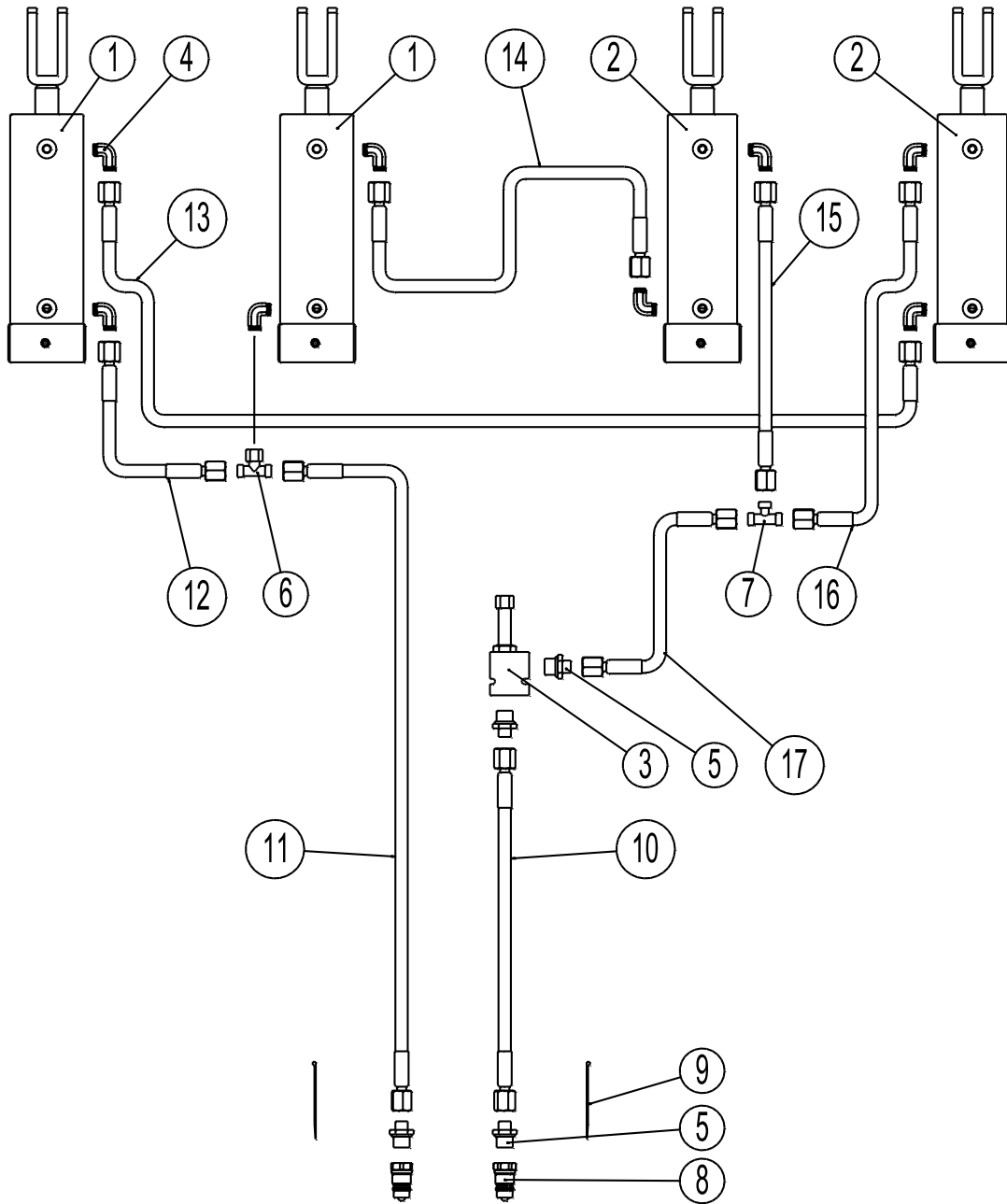
Pos.	Item no	Designation	4,5 m	5,5 m
1	690200252	Cylinder 90/40 x 600 Ø40	2	4
1a	690200273	Gasket set 90/40 (Hydraflex)		
2	690200170	Cylinder 40/25 x 80	1	1
2a	690200175	Gasket set 40/25 mm		
3	0442450	Sequential valve 1/2"	1	1
4	690206510	Accumulator HST 2,3 L 40 bar	2	2
5	690206822	Manometer 250 bar, Ø100	1	1
6	0444020	Quick coupling 1/2", male	2	2
7	0446752	Fitting straight Ø10 x 1/2"	4	4
8	690203096	Fitting straight M18x1,5 x Ø10	2	2
9	690203014	Fitting T10 L	2	2
10	690203015	Fitting T10	3	3
11	690203120	Fitting T10 L premounted w/ O-ring	5	17
12	690203006	Fitting, 90° angle 10 – 3/8" BSP	5	9
13	690207901	Restrictor Ø1 mm	4	8
14	690203016	Fitting 90° 10 mm	6	10
15	690206823	Manometer-fitting Ø10 x 1/2"	1	1
16	-	Cable straps	2	2
17	690201026	Hydraulic hose 1/4" L = 5670 mm	1	1
18	690201026	Hydraulic hose 1/4" L = 5670 mm	1	1
19	0454171	Hydraulic hose 1/4" L = 500 mm	1	1
20	0454171	Hydraulic hose 1/4" L = 500 mm	1	1
21	690201053	Hydraulic hose 1/4" L = 1260 mm	1	1
22	0454313	Hydraulic hose 1/4" L = 1130 mm	-	1
23	690201020	Hydraulic hose 1/4" L = 1625 mm	-	1
24	0454313	Hydraulic hose 1/4" L = 1130 mm	-	1
25	690201020	Hydraulic hose 1/4" L = 1625 mm	-	1
26	0454313	Hydraulic hose 1/4" L = 1130 mm	1	1
27	0454313	Hydraulic hose 1/4" L = 1130 mm	1	1
28	0454171	Hydraulic hose 1/4" L = 500 mm	1	1
29	0454171	Hydraulic hose 1/4" L = 500 mm	1	1
30	0454171	Hydraulic hose 1/4" L = 500 mm	1	1
31	0454171	Hydraulic hose 1/4" L = 500 mm	1	1
32	0454313	Hydraulic hose 1/4" L = 1130 mm	1	1
33	0454313	Hydraulic hose 1/4" L = 1130 mm	1	1
34	690201060	Hydraulic hose 1/4" L = 3000 mm	1	1
35	0454313	Hydraulic hose 1/4" L = 1130 mm	-	1
36	690201020	Hydraulic hose 1/4" L = 1625 mm	-	1
37	690201020	Hydraulic hose 1/4" L = 1625 mm	-	1
38	0454313	Hydraulic hose 1/4" L = 1130 mm	-	1



Depth control 4,5 meter

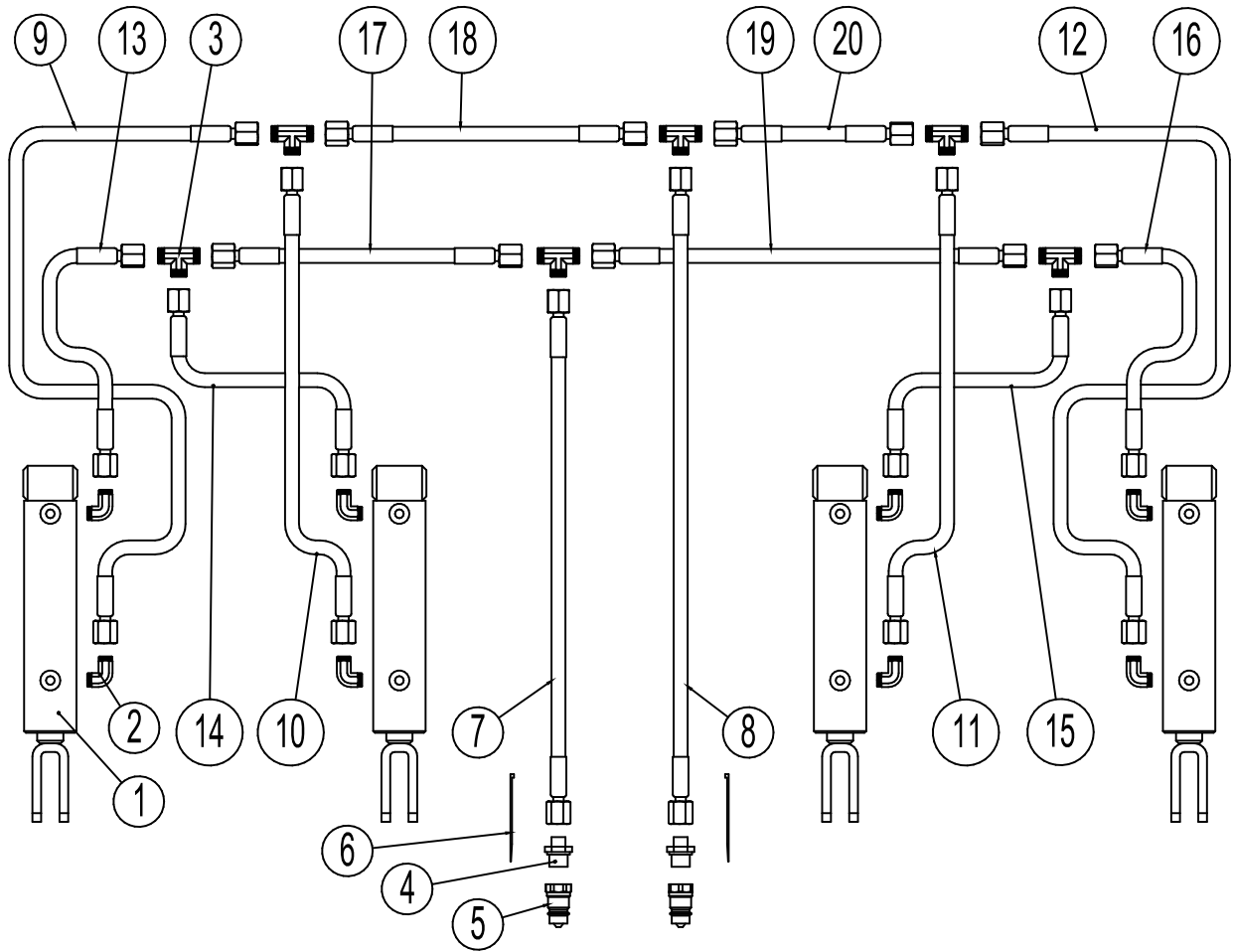


Depth control 5,5 meter



Pos.	Item no	Designation	4,5 m	5,5 m
1	690200640	Cylinder 85/30 x 155 Ø30 fork	1	2
1a	690200641	Gasket set 85/30		
2	690200620	Cylinder 80/30 x 155 Ø30 fork	1	2
1a	690200621	Gasket set 80/30		
3	690209453	Depth stop valve, electric w/3 x Ø1/2" inside	1	1
4	690203006	Fitting 90° 10-3/8" BSP	4	8
5	0446752	Fitting Ø10-1/2"	4	4
6	690203014	Fitting T10 L	-	1
7	690203015	Fitting T10	-	1
8	0444020	Quickcoupling 1/2" male	2	2
9	-	Cable straps	2	2
10	690201028	Hydraulic hose 1/4" L = 6700 mm (non depth stop))	1	-
10	690201074	Hydraulic hose 1/4" L = 7450 mm (with depth stop)	1	-
10	690201076	Hydraulic hose 1/4" L = 8140 mm (non depth stop))	-	1
10	690201074	Hydraulic hose 1/4" L = 7450 mm (with depth stop)	-	1
11	690201076	Hydraulic hose 1/4" L = 8140 mm	-	1
12	690201073	Hydraulic hose 1/4" L = 8800 mm	1	-
12	690201044	Hydraulic hose 1/4" L = 3460 mm	-	1
12	690201038	Hydraulic hose 1/4" L = 4000 mm	-	-
13	690201038	Hydraulic hose 1/4" L = 4000 mm	1	-
13	690201011	Hydraulic hose 1/4" L = 5350 mm	-	1
13	690201031	Hydraulic hose 1/4" L = 6350 mm	-	1
14	690201070	Hydraulic hose 1/4" L = 2800 mm	-	1
15	0454120	Hydraulic hose 1/4" L = 250 mm	-	1
16	0554441	Hydraulic hose 1/4" L = 1460 mm	-	1
16	0454591	Hydraulic hose 1/4" L = 2000 mm	-	-
17	0454313	Hydraulic hose 1/4" L = 1130 mm (with depth stop)	-	1
17	0454578	Hydraulic hose 1/4" L = 1995 mm (with depth stop)	1	-



Spring-Board 4,5 + 5,5

Pos.	Varenummer	Betegnelse	4,5 m	5,5 m
1	690200160	Cylinder 50/30 x 155	4	4
2	690203006	Fitting 90° 10-3/8" BSP	8	8
3	690203015	Fitting T10	6	6
4	0446752	Fitting Ø10-1/2"	2	2
5	0444020	Quickcoupling 1/2" male	2	2
6	-	Cable straps	2	2
7	690201045	Hydraulic hose 1/4" L = 4800 mm	1	1
8	690201045	Hydraulic hose 1/4" L = 4800 mm	1	1
9	0554441	Hydraulic hose 1/4" L = 1460 mm	1	-
9	690201016	Hydraulic hose 1/4" L = 1850 mm	-	1
9	0454675	Hydraulic hose 1/4" L = 2500 mm	-	-
10	0454171	Hydraulic hose 1/4" L = 500 mm	1	1
10	0454166	Hydraulic hose 1/4" L = 450 mm	-	-
11	0454171	Hydraulic hose 1/4" L = 500 mm	1	1
11	0454166	Hydraulic hose 1/4" L = 450 mm	-	-
12	0554441	Hydraulic hose 1/4" L = 1460 mm	1	-
12	690201016	Hydraulic hose 1/4" L = 1850 mm	-	1
12	0454675	Hydraulic hose 1/4" L = 2500 mm	-	-
13	690201053	Hydraulic hose 1/4" L = 1260 mm	1	-
13	690201020	Hydraulic hose 1/4" L = 1625 mm	-	1
13	0454645	Hydraulic hose 1/4" L = 2300 mm	-	-
14	0454120	Hydraulic hose 1/4" L = 250 mm	1	1
15	0454120	Hydraulic hose 1/4" L = 250 mm	1	1
16	690201053	Hydraulic hose 1/4" L = 1260 mm	1	-
16	690201020	Hydraulic hose 1/4" L = 1625 mm	-	1
16	0454645	Hydraulic hose 1/4" L = 2300 mm	-	-
17	690201053	Hydraulic hose 1/4" L = 1260 mm	1	1
18	690201053	Hydraulic hose 1/4" L = 1260 mm	1	1
19	690201053	Hydraulic hose 1/4" L = 1260 mm	1	1
20	690201053	Hydraulic hose 1/4" L = 1260 mm	1	1



as it looks
As good as it looks
As good as it looks
As good as it looks
As good as it looks



The design is subject to modification without notice.