

HEMOS

User manual Hemos road side cutter Type BSL30P



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This manual is made as an instruction to use the Hemos road side cutter in the correct way.

This road side cutter is designed and constructed to achieve a maximum performance, efficiency and control convenience.

This machine has been carefully checked before leaving the factory, to be sure that the machine will be delivered in a perfect condition.

After receiving this road side cutter, we advise to check it on possible damage caused during transport.

Damaging or missing of parts has to be reported to the supplier. And check that the delivery complies to the specifications of the order.

The manufacturer will always seek for improvements of their products and reserves the right to make changes, which will improve earlier supplied executions.

Read this instruction book carefully and keep it on hand for future consultation. If you ever need advice on the machine, do not hesitate to consult your manufacturer.

In Chapter 4 you will find a complete list of safety rules which must to your own safety and that of other services.

Read these safety rules and follow the given advice, before using the machine.

technical specifications

	Hemos Road side cutter BSL30P	
	machinenumber	
	Year of construction	
	Weight	
	Working width	30 cm - 130 cm
✓	blade wheel	Ø 100 cm, width 30 cm
✓	Ploughing knife	Length 170 cm
✓	Cutting wheel	Ø 38 cm
✓	Conveyor belt	1.000 cm x 40 cm
✓	Oiltank	200 litre
✓	Oilcooler	12 Volt
✓	Gear box	1 : 2
✓	Blade wheel pump	210 litre / min. max. 310 bar
✓	Conveyor belt- and blade wheel pump	150 litre/ min. max. 210 bar

○	Electrical proportional cylinder control	Danfoss PVG 32
○	Electrical proportional conveyor belt control	
○	Additional conveyor belt	200 cm x 40 cm
○	Conveyor belt support	front 3 - point
○	Brush	working width 225 cm
○	Electrical proportional brush speed control	



standard

option



Read the following safety instructions before using the road side cutter



This Hemos road side cutter BSL30P may only be controlled by people who are capable to do this.

Take care that no persons are in the working area of the machine.

Take care of a distance of at least 5 m to persons near this machine during work.

Avoid obstacles.

After cutting the road side always let the conveyor belt run empty,
to make sure that the machine will not lose ground during transport.

Only leave the control seat after switching of the PTO shaft of the tractor and
turning of the main switch on the control panel.

Leave the road clean and tidy behind you so that road safety is not at risk.

Check the hydraulic hoses that they can't crack or get caught.

You should note that the hydraulic system works with high pressure.
Oil under high pressure beams can be invisible and cause very serious injuries.

Refer servicing only to a totally switched off machine.

8) conveyor belt rev. speed

9) brush rev. speed

7) road side cutter



1) paddle wheel

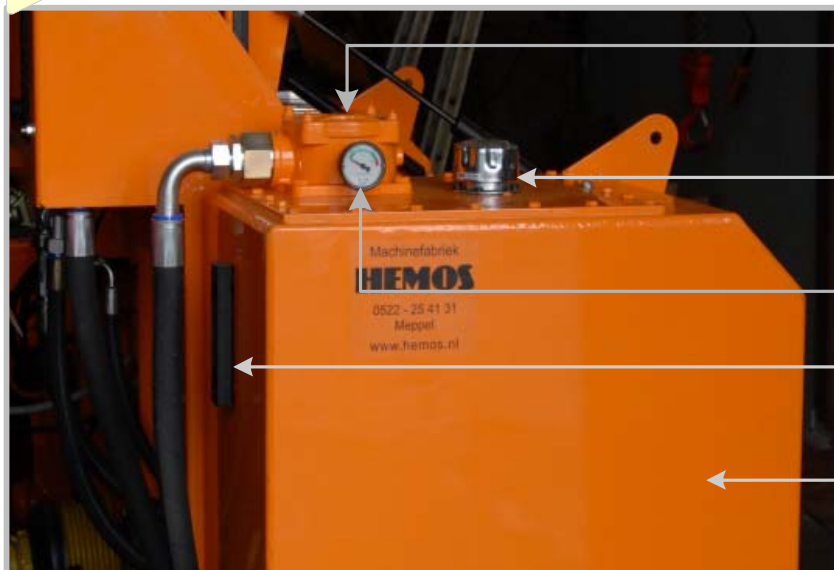
2) reverse
paddle wheel

5) cuttingwheel on plough

3) brush

4) conveyor belt

6) main switch



return filter element
TXW5A - 10 - B
replace every
12 months

32104200

filler cap

32405000

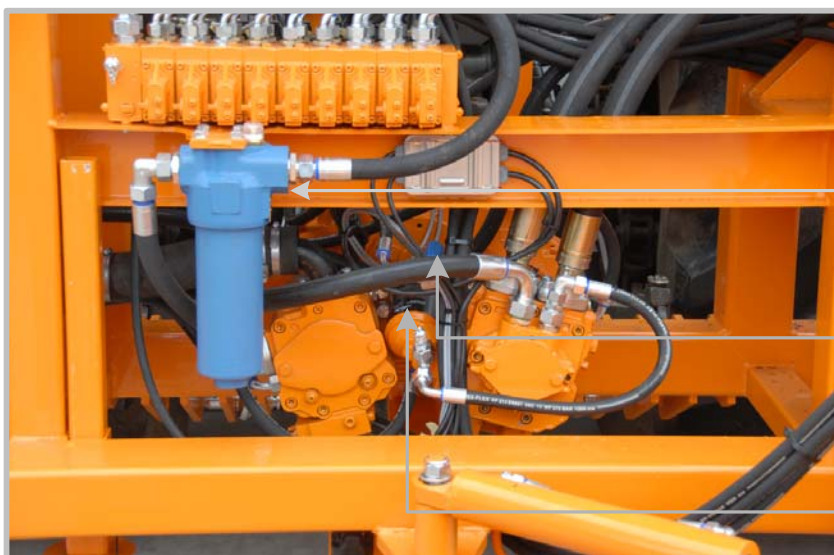
return filter indicator
PM 1,2 BAR

32111000

gauge

32310500

Filled with 200 litre Shell
Tellus T 46
changes after 2.000
operating hours



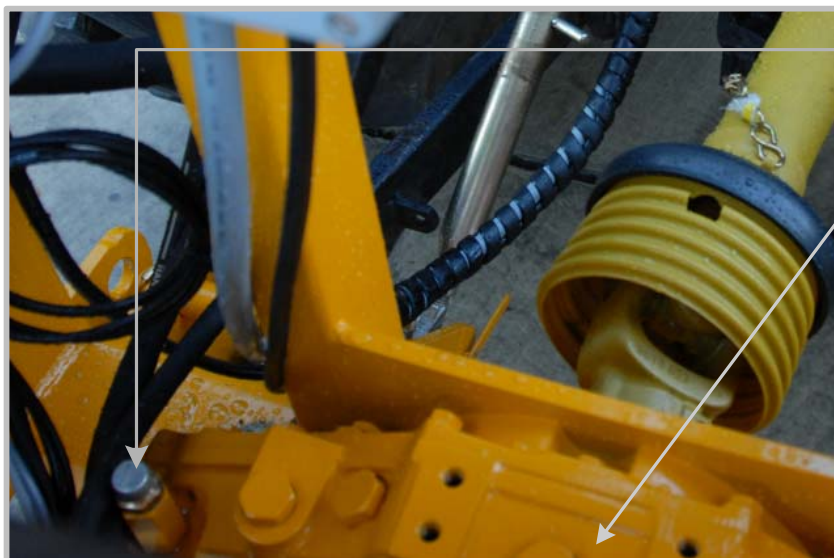
Pressure filter element
270L.222A
changes every 12 months

32150220

Throttle.
Do not touch!
Is adjusted by
manufactoror!

32156000

Pump filter
0009830615
Change every
1000 working hour



vent plug

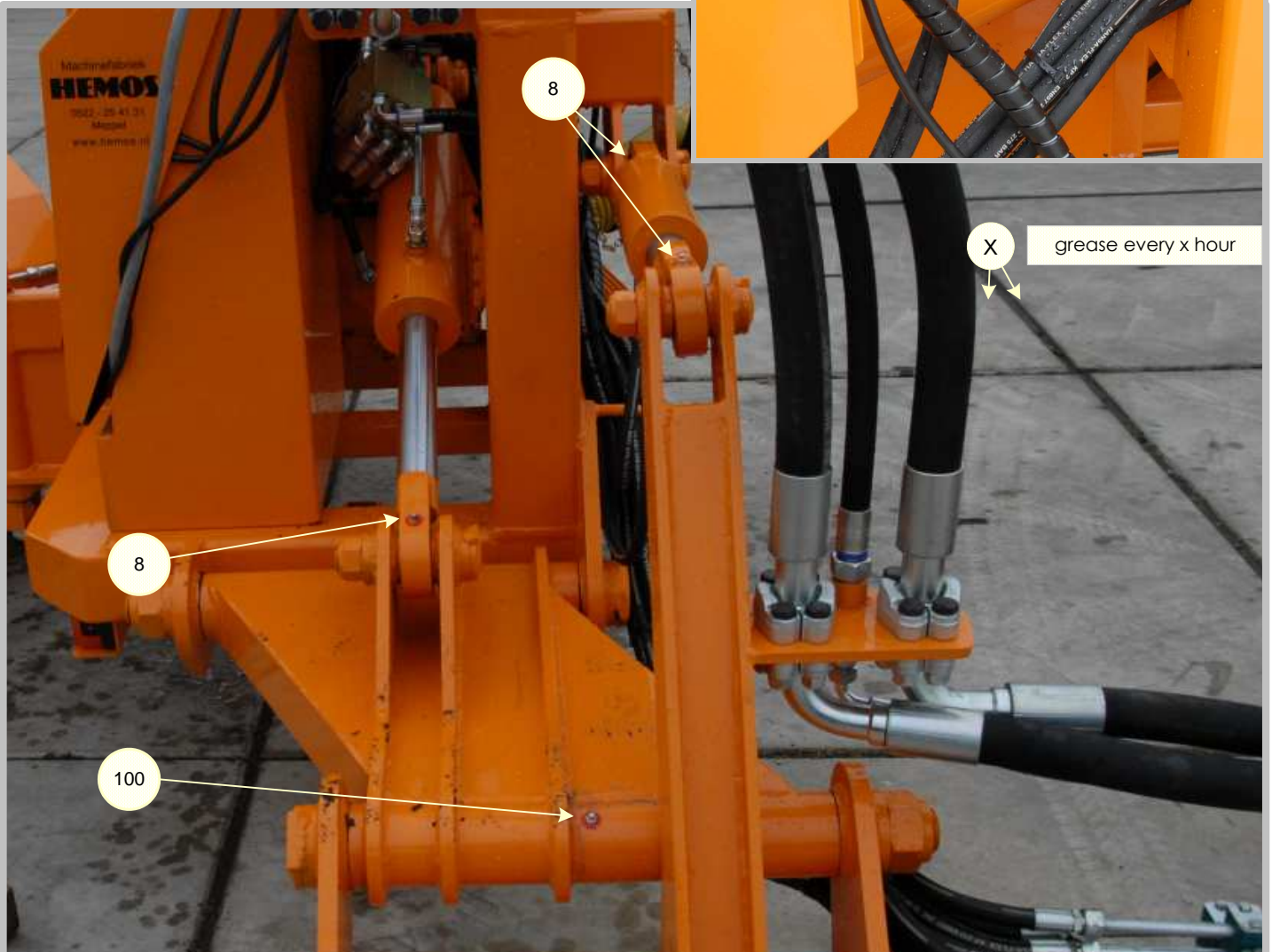
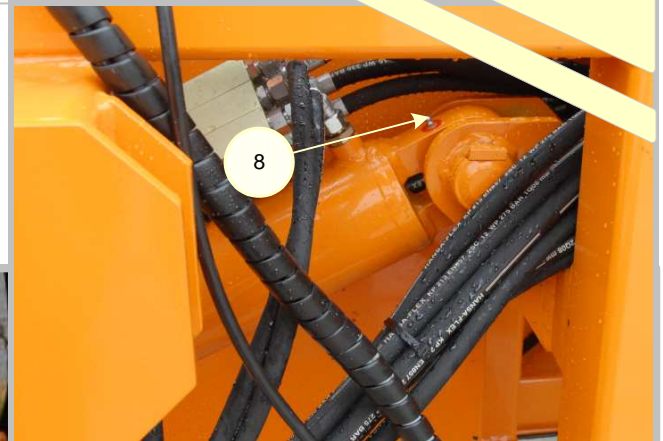
32404500

Fill plug 1/2"

41271500

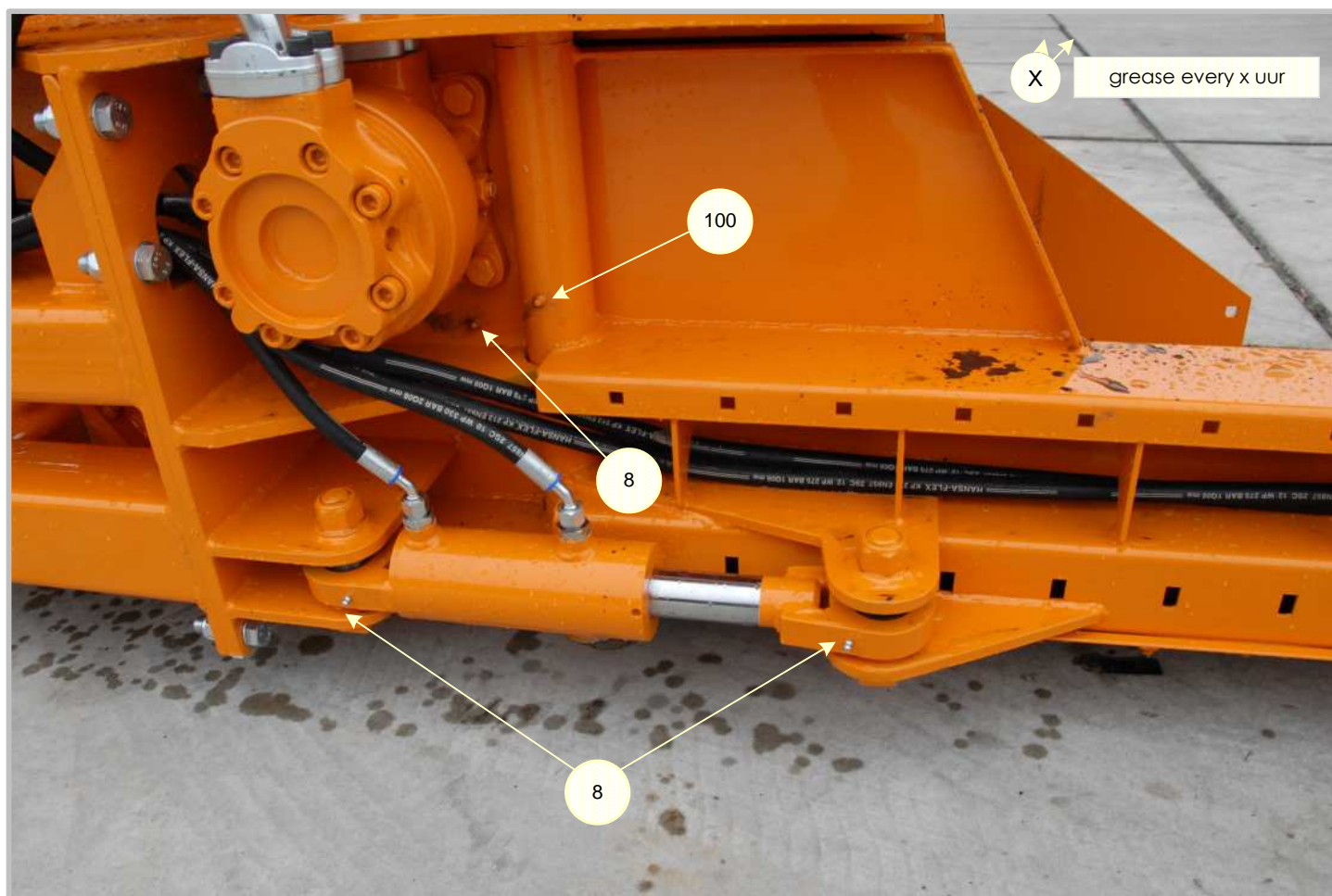
Gearbox filled with
2,5 litre Shell OMALA 220

Change after 50 working hours.
Then after each 1.000 working hours
or 12 months.



Maintenance

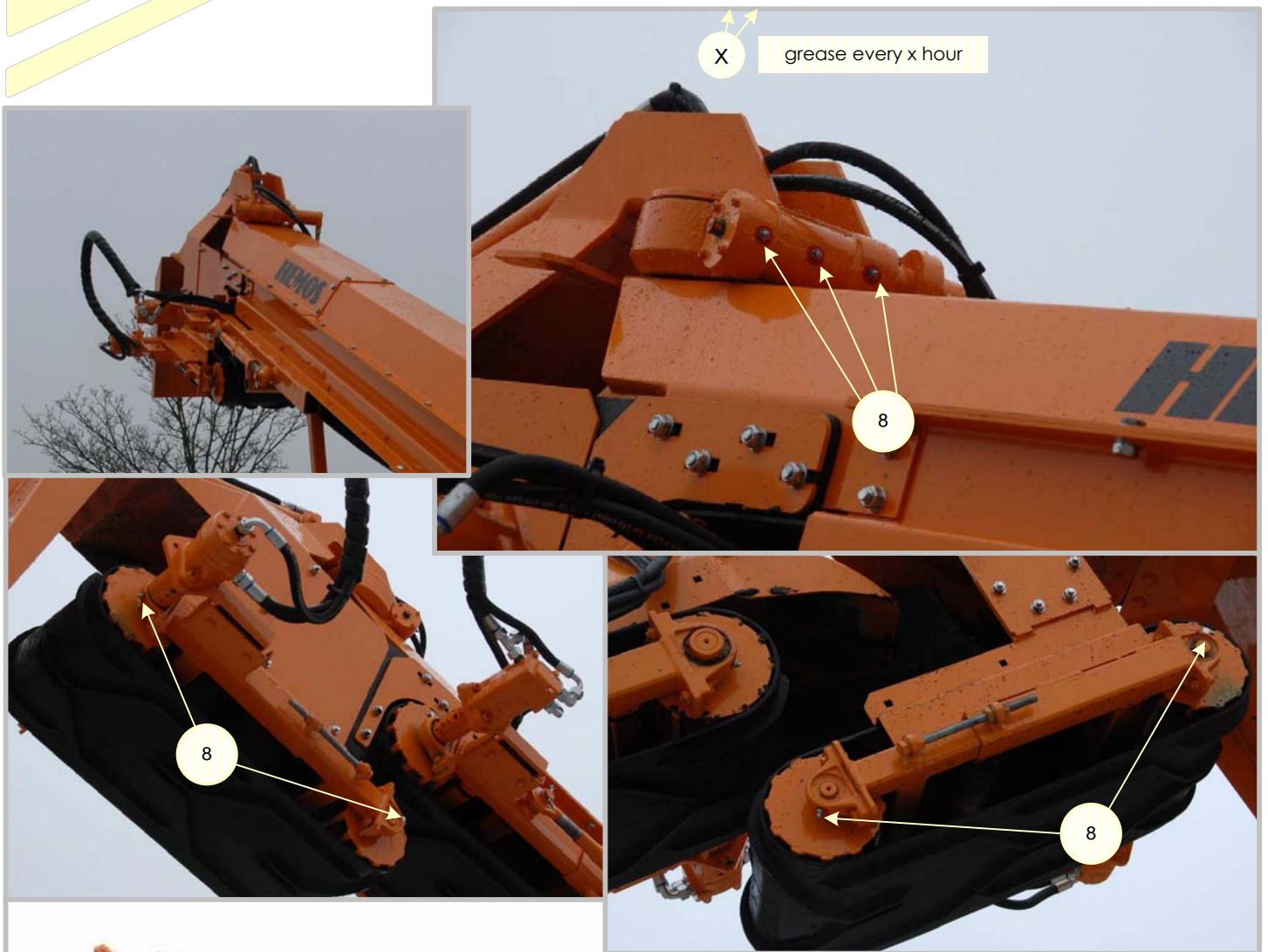
Lubrication points blade wheel housing and plough



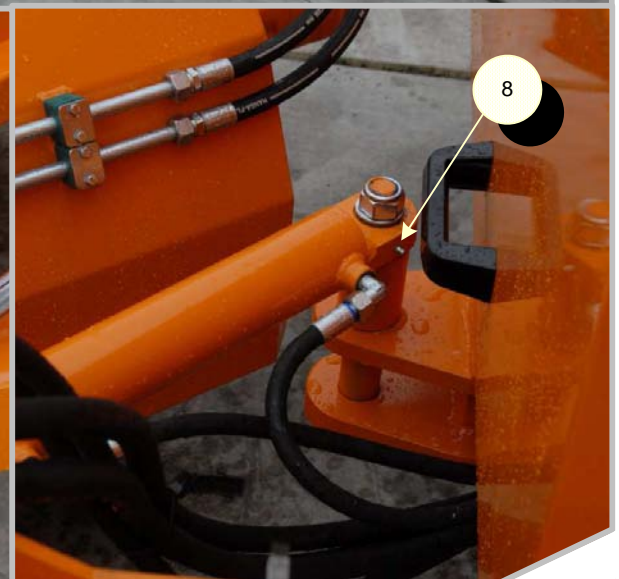
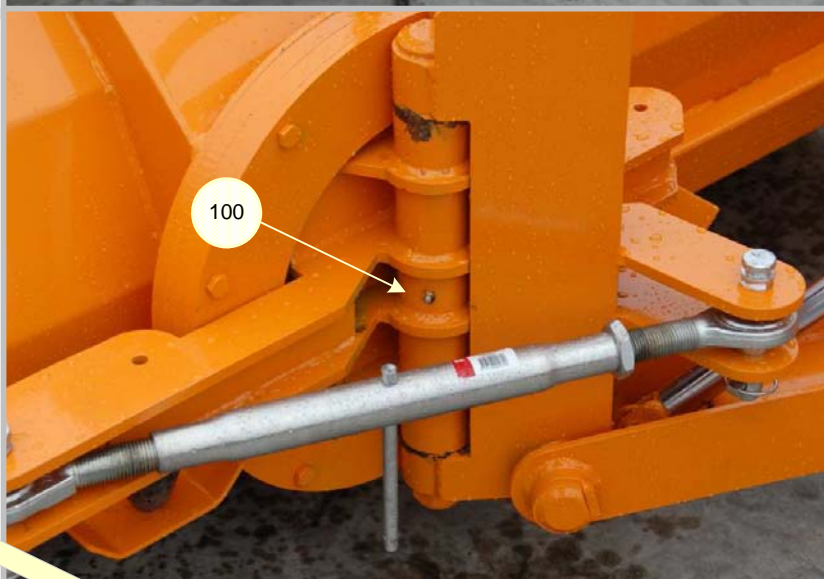


Maintenance

Lubrication point additional conveyor belt



Hemos Road side cutter



This machine has been adjusted by the manufacturer before delivery.
To maintain the functions of the machine, some parts need to be re-adjusted in a matter of time.
This is due to normal wear.

In this chapter is written how and when this needs to be done.
With the help of position numbering it becomes clear what parts are ment.

The coulter (**H9.10 Pos nr. 3**) is height adjustable. This part will wear out after a matter of time. It is important that this part is adjusted at the right height. If the cutting edge is completely worn out, it is possible to flip the coulter and use the other edge.

The conveyor belt (**H9.14 Pos nr. 4**) can be tensioned by using the tensioners (H9.14 Pos nr. 22) which are mounted at the sides. This has to be done when the belt is giving signs of slip.

It is important that both tensioners are tightened the same and turned on at the same time. This is the way to adjust the belt and secure a straight run.

After tensioning and adjusting, lock both tensioners.

At the sides of throw wheel housing there are 2 sheets of metal (**H9.4 Pos nr. 7 & 8**). Both these sheets slide on top of the asphalt. These sheets are height adjustable. To maintain a proper functioning of the machine, these sheets need to be lowered after a while.

The support wheel mounted at the side of the machine is height adjustable. By adjusting this height, the final cutting depth of the machine, with regard to the asphalt, is adjusted.

Make sure this wheel gives enough support to the machine at all times!

Connection



1

Place the road side cutter on flat solid foundation, with enough space around it, to connect the tractor.



2

Drive the tractor in front of the 3-point connection of the machine.



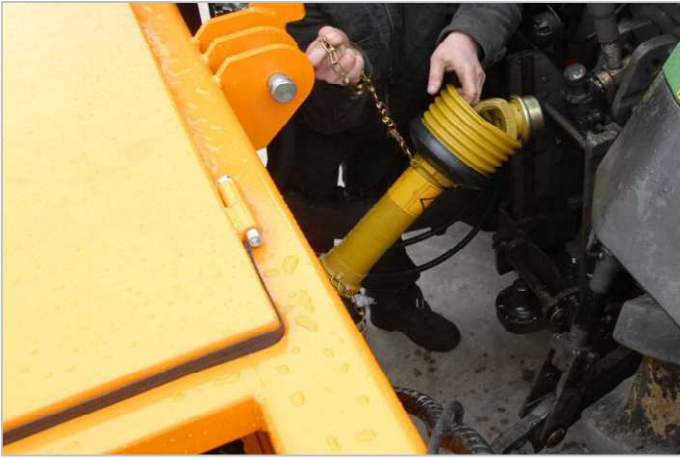
3

Keep approximately 20 cm between the right rear wheel of the tractor and the support wheel of the machine.



4

Hook the arms of the 3-point lift device of the tractor on both sides at the connections of the machine and lift it a little.



5

Connection

Connect the Power Take Off shaft and lock the protection cover with the corresponding chain.



6

Connect the top bar and adjust it to the right length.



7

Connect the stabilization bar with the rear end.



8

Tighten the connection bolt firmly.

Connection



9

Connect the hydraulic lines.



10

Move the control unit and joystick in the control cab and mount them to the predetermined places.



11

Place the 3 point support in the front de 3-punts bok in de front lift.



12

Lift the front lift this much to secure the frame in it's place, but watch out to not lift the conveyor belt.



13

Connection

Connect the top bar and adjust this so the three point frame is exactly vertical.



14

Now raise the front lift, so the conveyor get's lifted. Keep in mind that there should always be someone to hold the support in this way the leg will not fall.



15

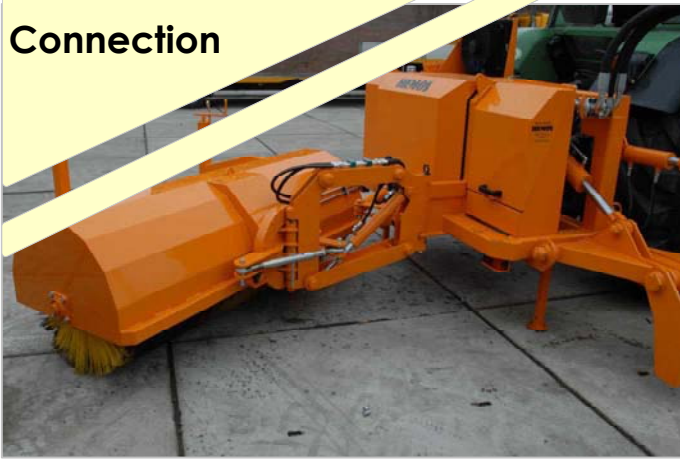
Raise the side arm



16

Adjust the support wheel so it will give full support to the machine during operations.

Connection



17

Check if the sweeper is ready to be lifted.



18

Lift the sweeper and, if necessary turn it into the transport position.



19

Now lift the complete machine, and put the supporting legs of the frame in their highest position.

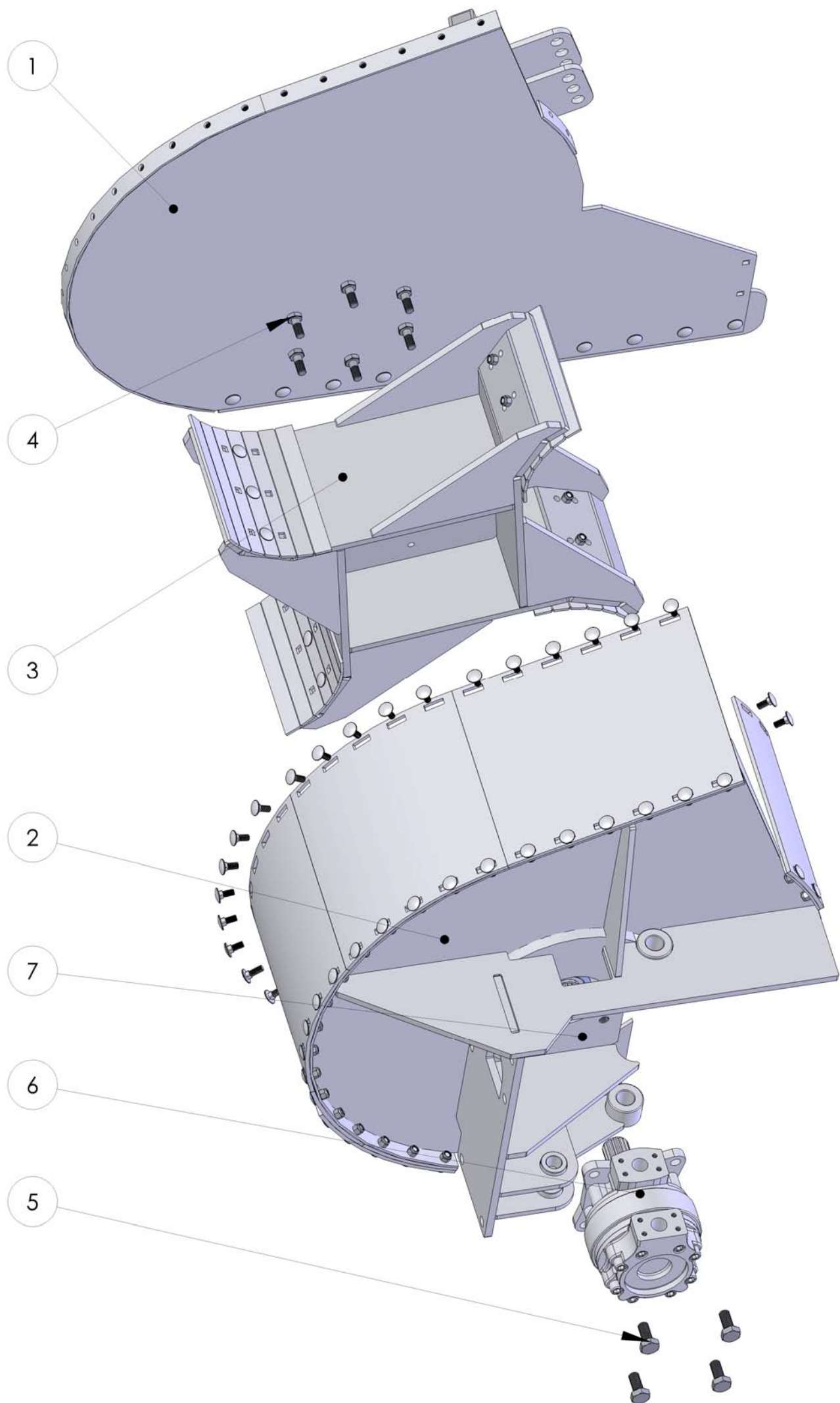


20

The machine is now ready for transport and use.

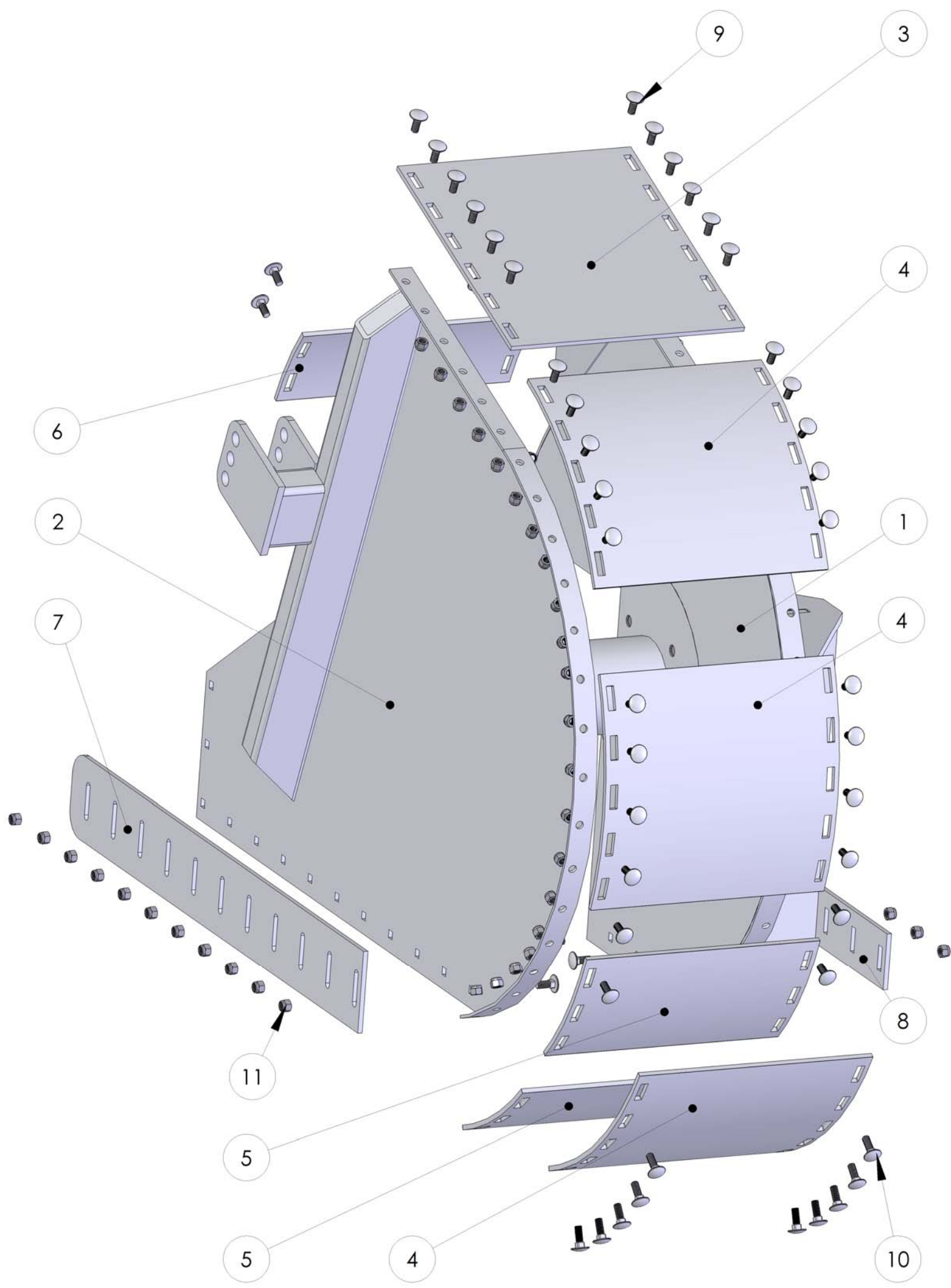
Paddle wheel housing assembly

Nr.	Quantity	Article number	Description	Type/ Size
1	1	83406505	Side sheet inner side	
2	1	83406510	Side sheet engine side	
3	1	83305000	Paddle wheel	
4	6	60012040	Bolt	M16x40
5	4	60045200	Bolt	M20x45
6	1	31514020	Hydromotor	
7	1	83406500	Front bearing complete	



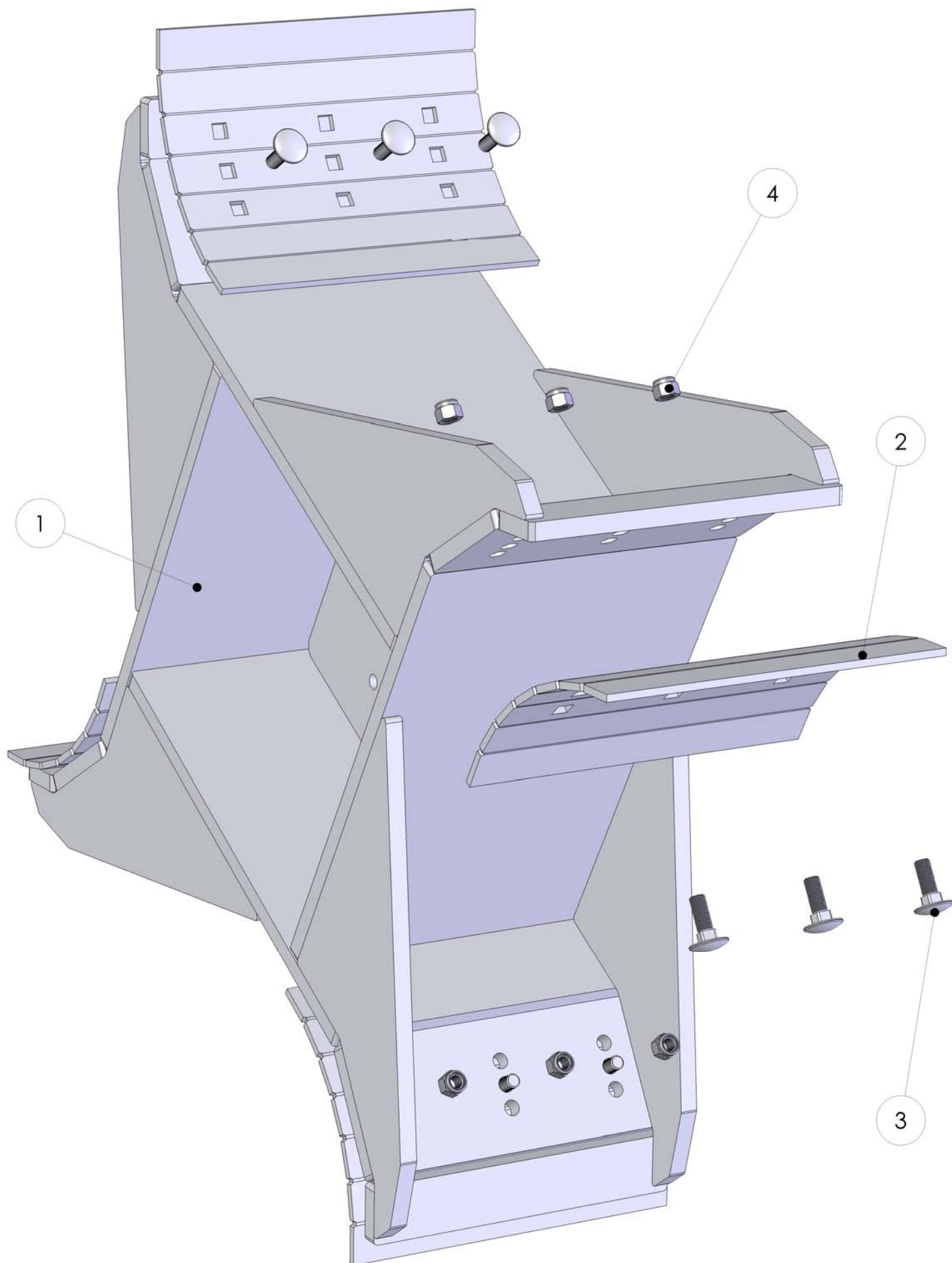
Paddle wheel assembly wear out parts

Nr.	Quantity	Article number	Description	Type/ Size
1	1	83603026	Side sheet engine side	
2	1	83603025	Side sheet inner side	
3	1	83603050	Upper plate 6 holes	RAEX
4	2	83603060	Upper plate 5 holes	RAEX
5	2	83603070	Upper plate 3 holes	RAEX
6	1	83603080	Frontplate 2 holes	RAEX
7	1	83603090	Wear out sheet inner side	RAEX
8	1	83603095	Wear out sheet engine side	RAEX
9	52	60050010	Coach bolt	M13x30
10	12	60050015	Coach bolt	M12x35
11	64	60307200	Self locking nut	M12



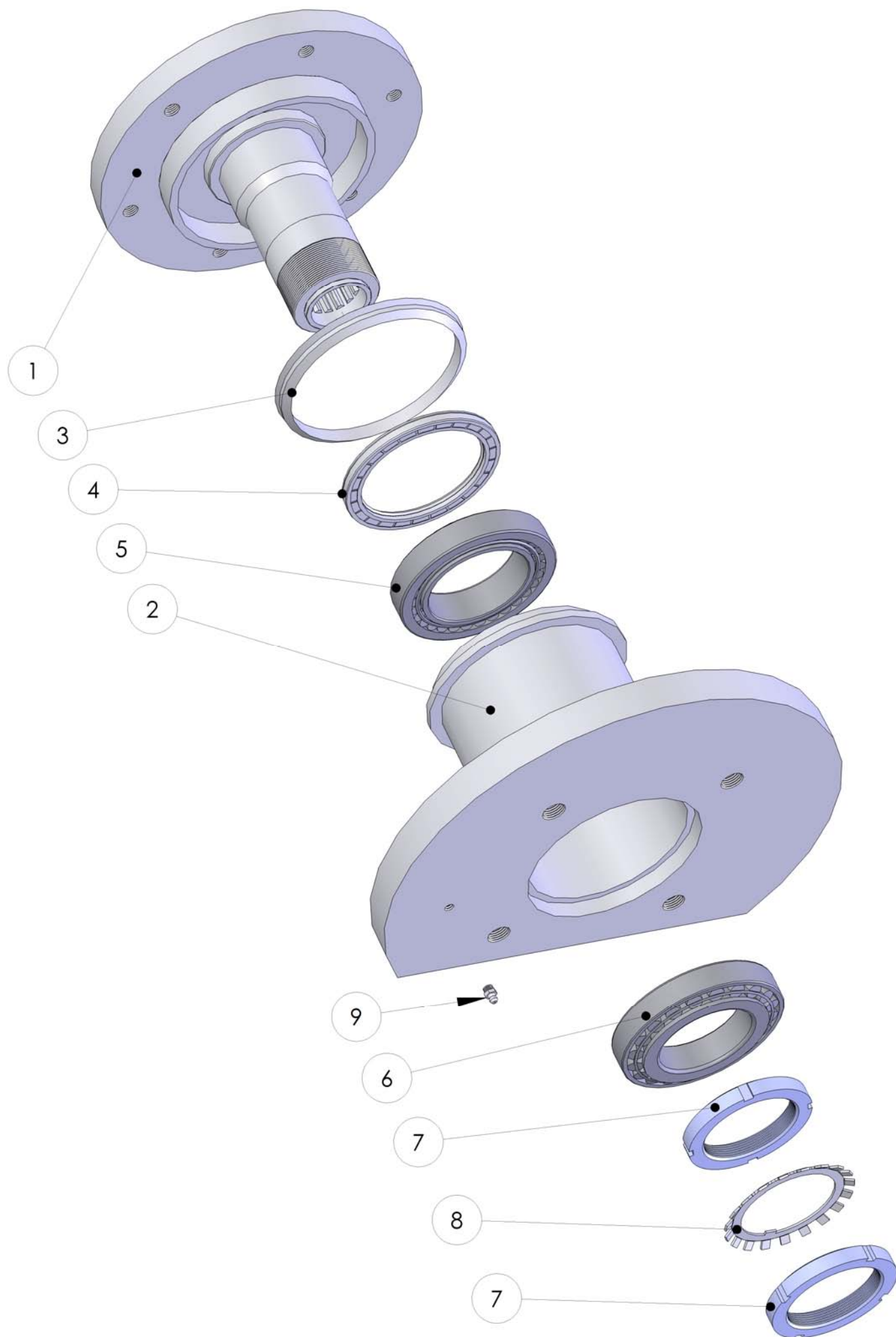
Paddle wheel assembly

Nr.	Quantity	Article number	Description	Type/ Size
1	1	83305000	Paddle wheel	
2	4	83305050	Wear out sheet paddle wheel	RAEX
3	12	60050015	Coach bolt	M12x35
4	12	60307200	Self locking nut	M12



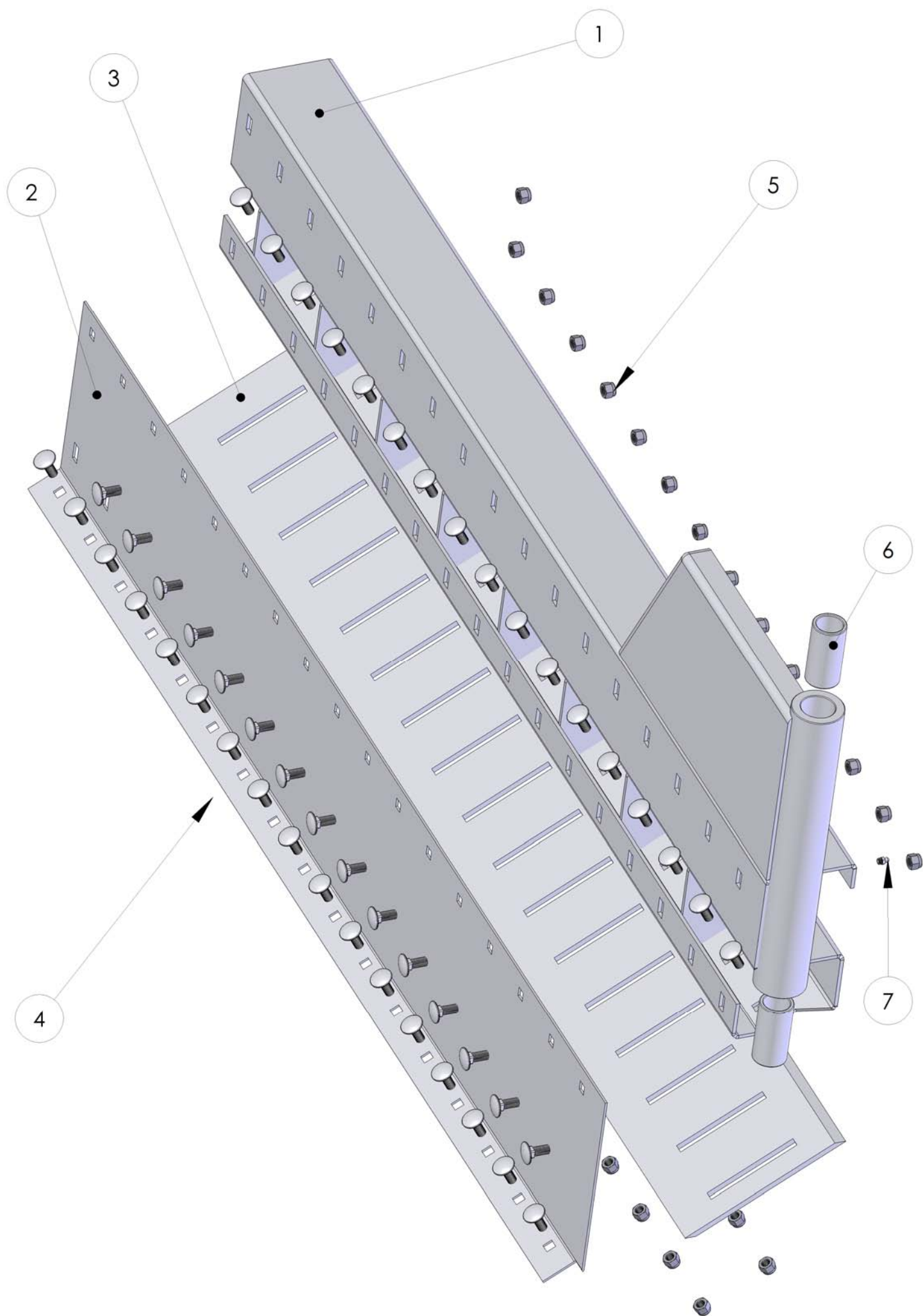
Front bearing assembly

Nr.	Quantity	Article number	Description	Type/ Size
1	1	83406502	Connecting bush front bearing	SAE-F
2	1	83406503	Outer bush front bearing	
3	1	23215000	V-ring	150
4	1	23045100	Oil seak	110-140-10
5	1	22221800	Tapered roller bearing	32018 X
6	1	22221600	Tapered roller bearing	30216
7	2	22271600	Shaft nut	AN 16
8	1	22281600	Safetying	AW 16
9	1	60501600	Lubricating nipple	8mm



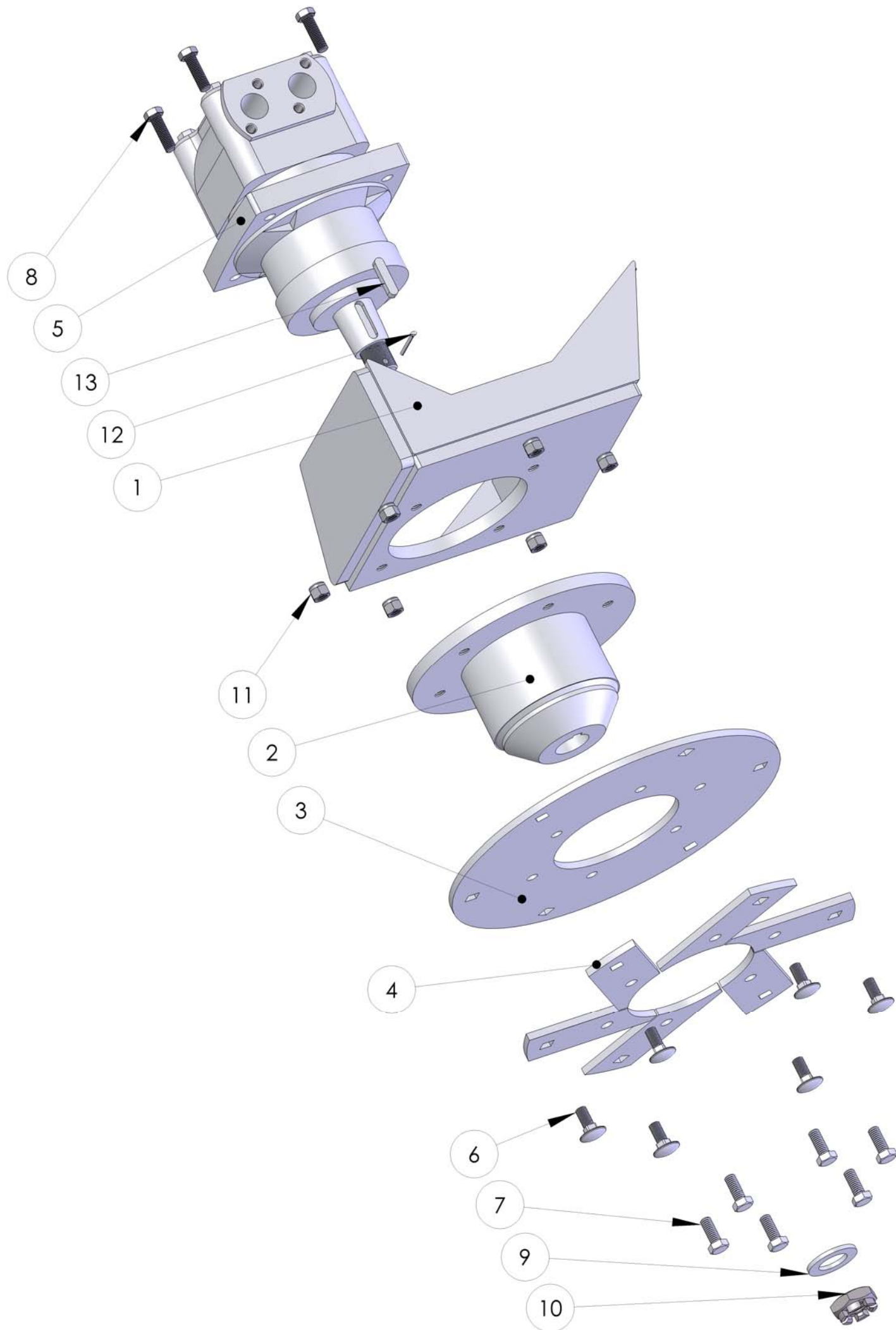
Coulter Assembly

Nr.	Quantity	Article number	Description	Type/ Size
1	1	93125000	Coulter suspension	
2	1	93125005	Front sheet coulter	
3	1	93125010	Coulter	RAEX
4	49	60050010	Coach bolt	M12x30
5	49	60307200	Self locking nut	M12
6	2	22543500	Plastic bush	35-45-90
7	1	60501600	Lubrication nipple	M8



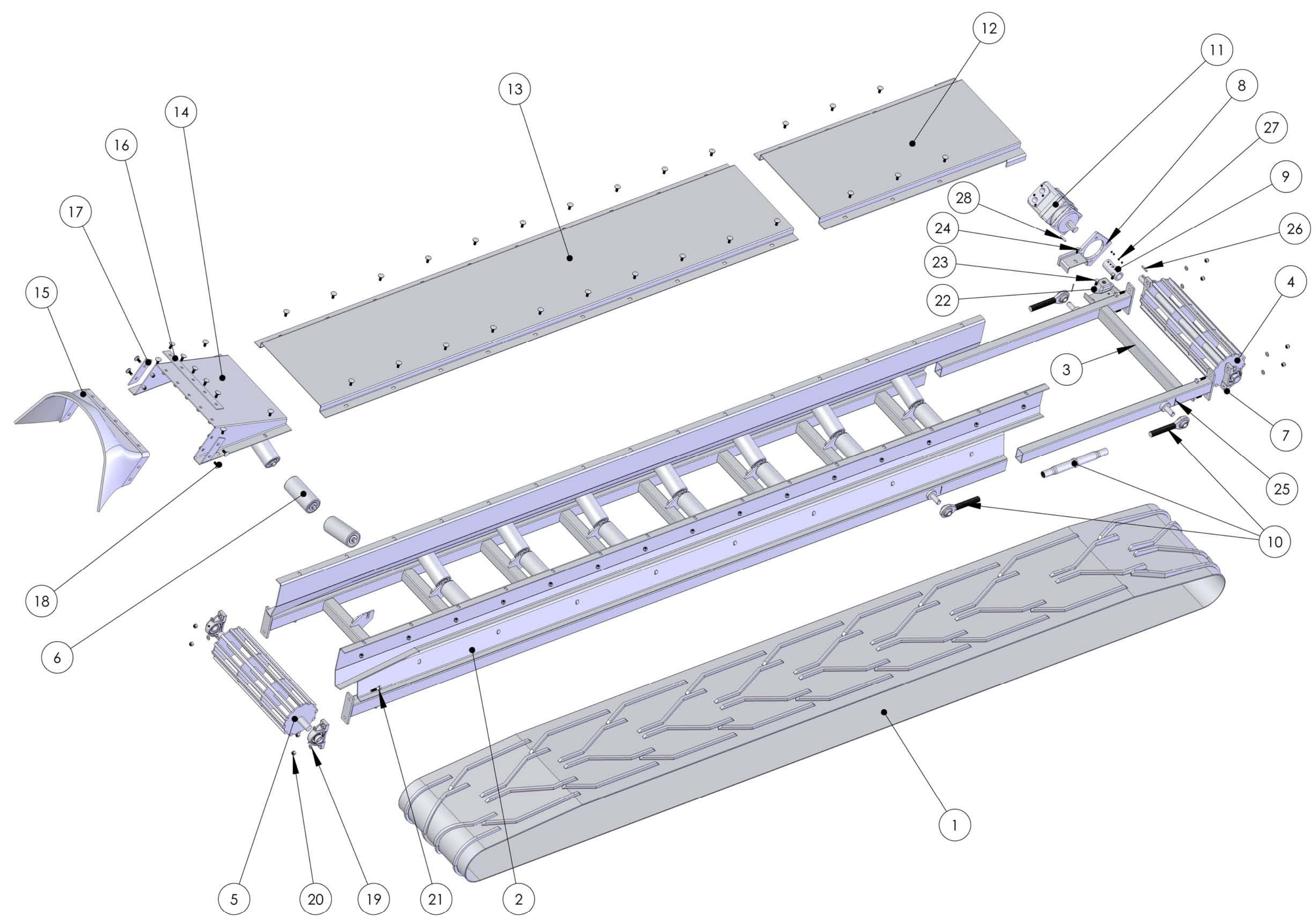
Cutter wheel Assembly

Nr.	Quantity	Article number	Description	Type/ Size
1	1	83608000	Cutter wheel suspension	
2	1	83608010	Cutter wheel hub	
3	1	83608020	Cutter wheel disc	RAEX
4	6	83608030	Cutter wheel sheet	RAEX
5	1	31514030	Hydromotor	
6	6	60050010	Coach bolt	M12x30
7	6	60034600	Bolt	M12x30
8	4	60050020	Bolt	M12x40
9	1	60403800	Washer	M30x2
10	1	60309820	Castle nut	M30x2
11	6	60307200	Self locking nut	M12
12	1	60505650	Split pin	
13	1	60482350	Peg	12x8x28



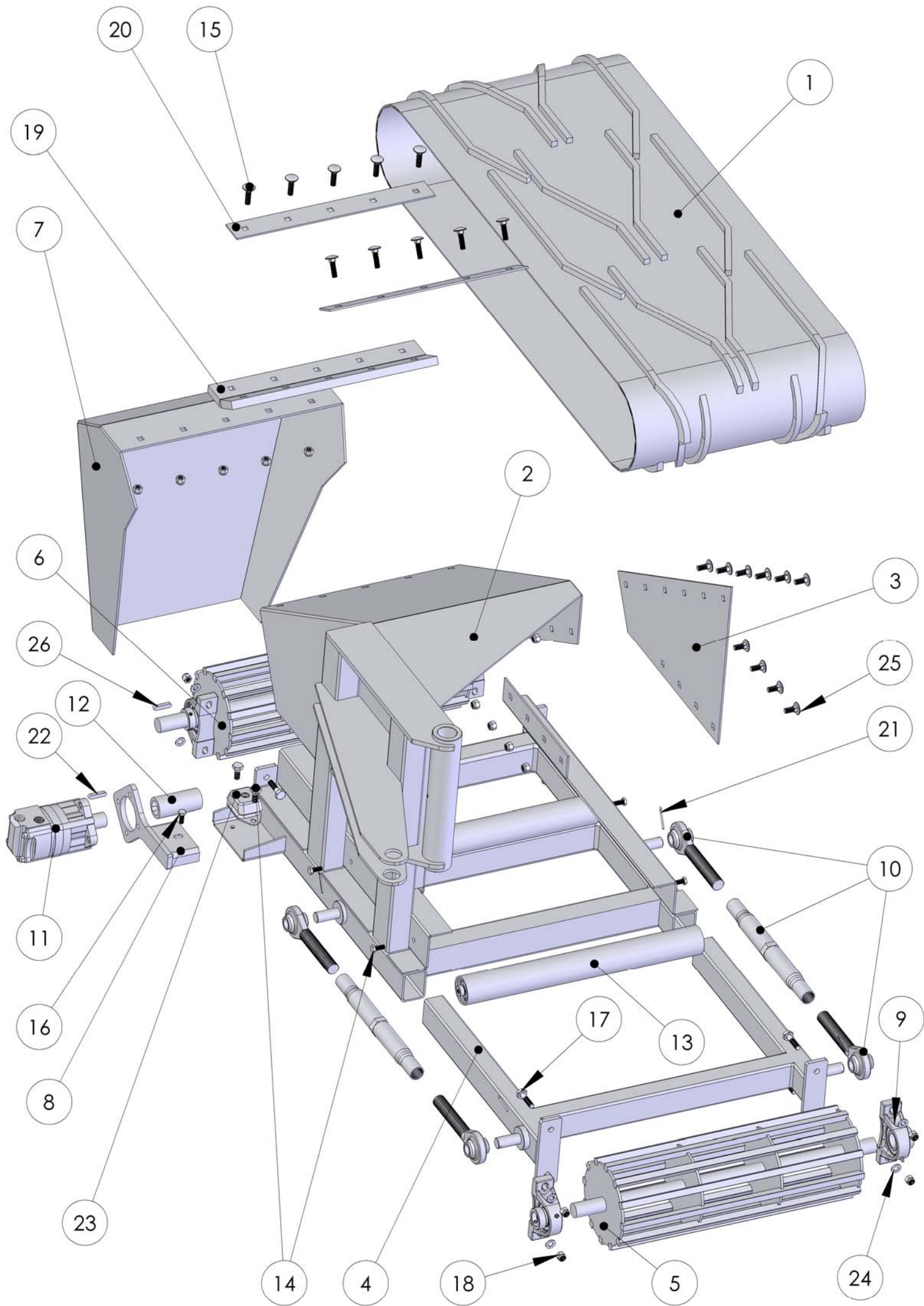
conveyor belt ZRBSL40P

position number	Number	article number	definition	type / dimension
1	1	93603010	conveyor belt	10,000 x 600 mm
2	1	83502050	conveyor belt construction	
3	1	83502060	slide/ stretch construction	
4	1	83601050	cageroll up	220 x 610mm
5	1	83601060	kageroll down	220 x 610mm
6	24	93603060	steel role	38/38 -Ø 80 ,9x 3,2
7	4	22354500	bearingblock	INA Phase 35
8	1	31514095	Hydromotor fork	
9	1	83607100	joining "tube"	32-35
10	2	83500030	conveyor belt strecher	
11	1	31552060	Hydromotor	
12	1	83500100	3e cover of belt	
13	1	83500150	2e cover of belt	
14	1	83500180	1e cover of belt	
15	1	83706060	rubber flap incomming	
16	1	83706065	rubber flap mounting 1	
17	2	83706070	rubber flap mounting 2	
18	39	60050010	grip bolt	M12x30
19	8	60041450	washer	M12
20	47	60307200	prevailing torque nut	M12
21	8	60006805	Hex bolt	M12x50
22	1	32506000	Motor rubber	
23	2	60035410	Hex bolt	M10x25
24	1	60037600	Hex bolt	M12x30
25	4	60006755	security pin	6,3 x 56mm
26	2	60505600	wedge	12 x 70
27	4	60263410	Socket set screw	M10x20
28	1	60482300	Wedge	10 x 50



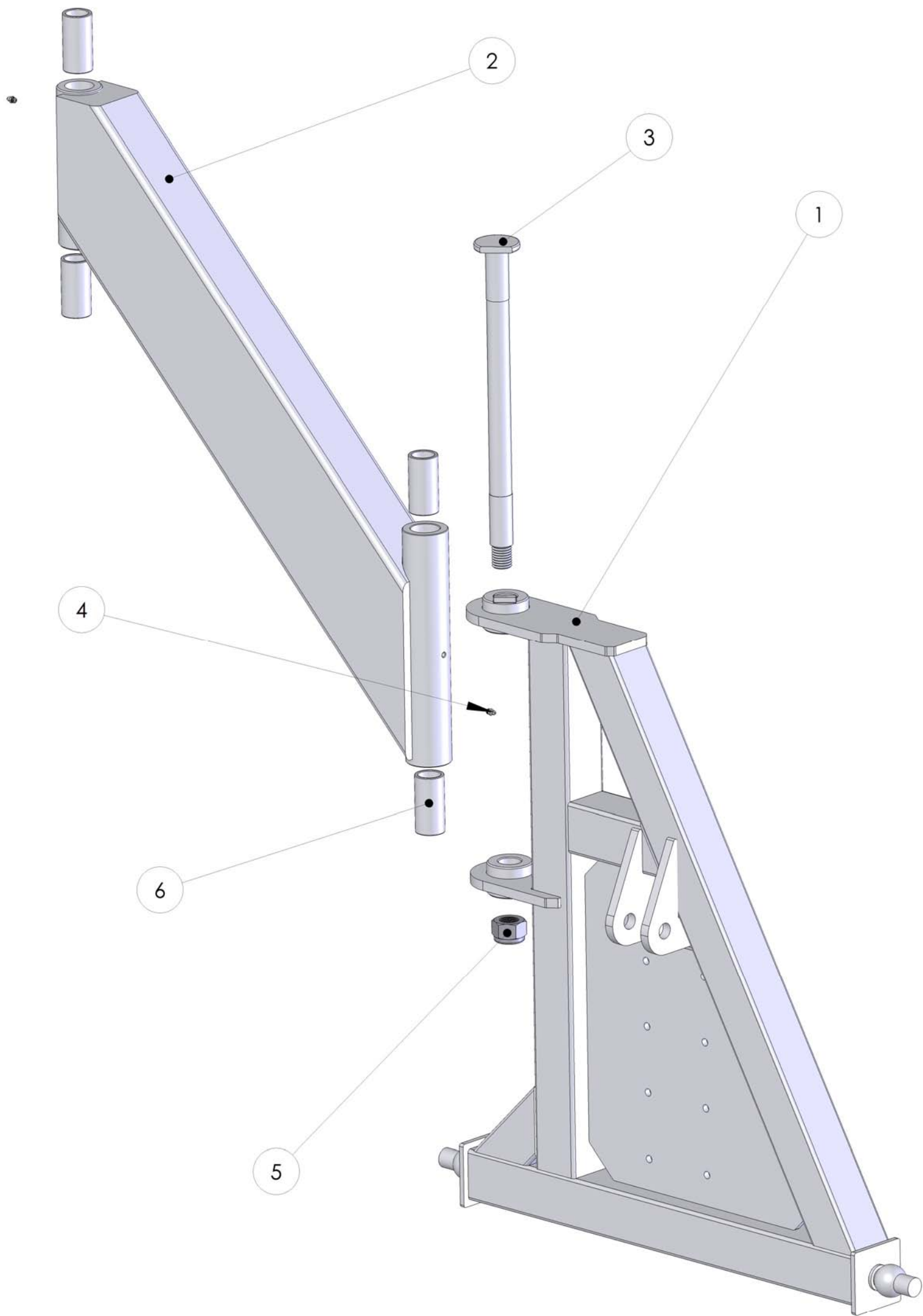
front belt ZRBSL40P

position number	Number	article number	definition	type / dimension
1	1	93601030	conveyor belt front	3,000 x 600 mm
2	1	83407000	front belt construction	
3	1	83407010	mounting plate	
4	1	83407020	slide/ stretch construction	
5	1	83407030	cageroll	
6	1	83407040	cageroll motor side	
7	1	83407050	flap on front belt	
8	1	31514100	Hydromotor fork	
9	1	22354500	bearing block	INA Phase 35
10	2	83500030	conveyor belt strecher	
11	1	31514080	Hydromotor	104- 1384 80CC
12	1	83607100	joining "tube"	32-35
13	1	93603070	steel role	
14	4	60035410	Hex bolt	M10x25
15	10	60050045	grip bolt	M12x45
16	1	60037600	Hex bolt	M12x30
17	8	60006805	Hex bolt	M12x50
18	30	60307200	prevailing torque nut	M12
19	1	83707010	Rubber hinge	
20	2	83707020	mounting rubber hinge	
21	4	60505600	security pin	6,3 x 56
22	1	60481600	wedge	8 x 40
23	1	32506000	Motor rubber	
24	8	60041450	washer	M12
25	10	60050010	grip bolt	M12x30
26	1	60482300	Wedge	10 x 50



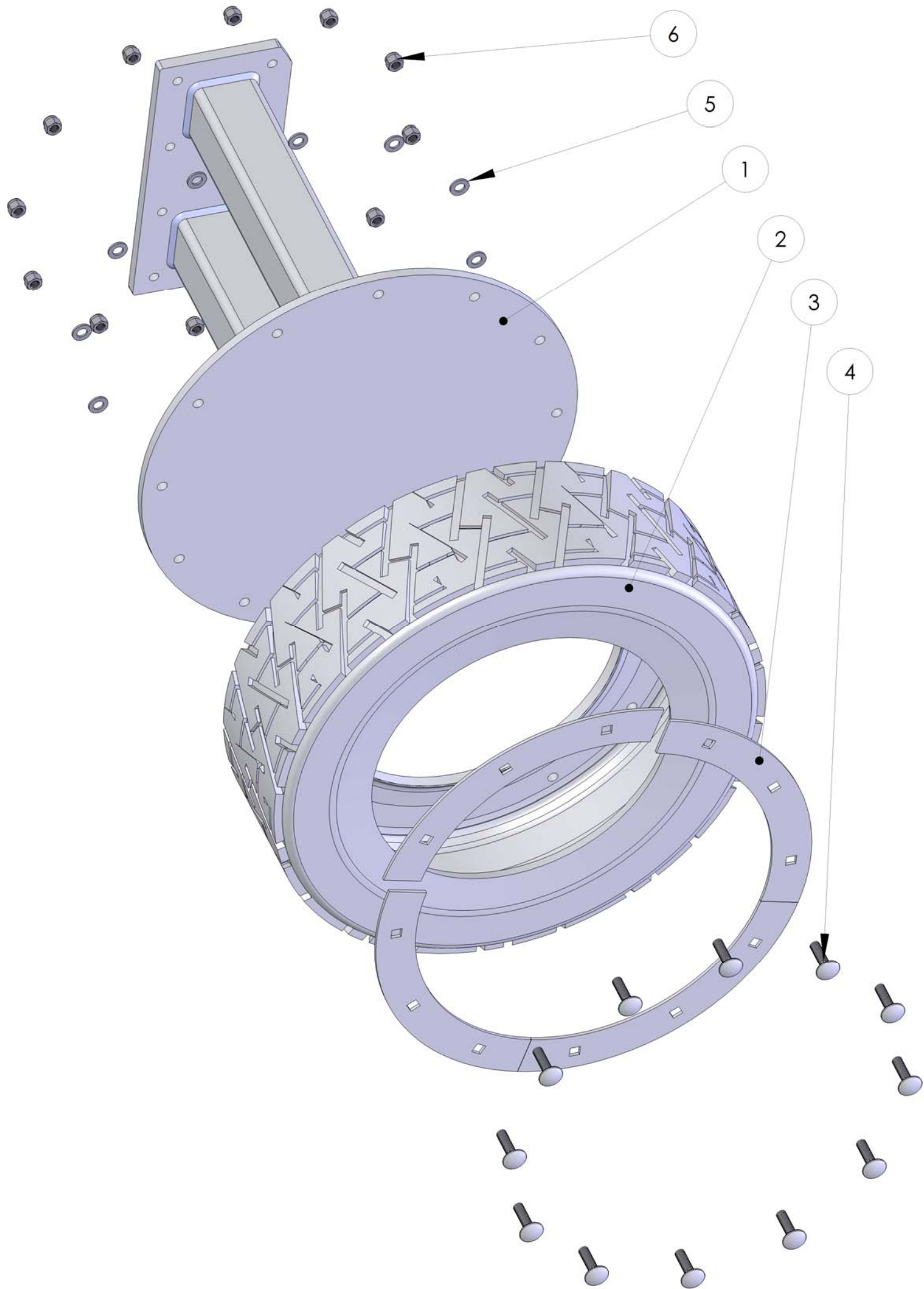
Boom support assembly

Nr.	Quantity	Article number	Description	Type/ Size
1	1	83401000	3 point support	
2	1	83401050	Support	
3	1	83607300	Pen boom support	35-70-470
4	2	60501600	Lubrication nipple	M8
5	1	60308800	Self locking nut	M30
6	4	22543500	Plastic bush	35-45-90



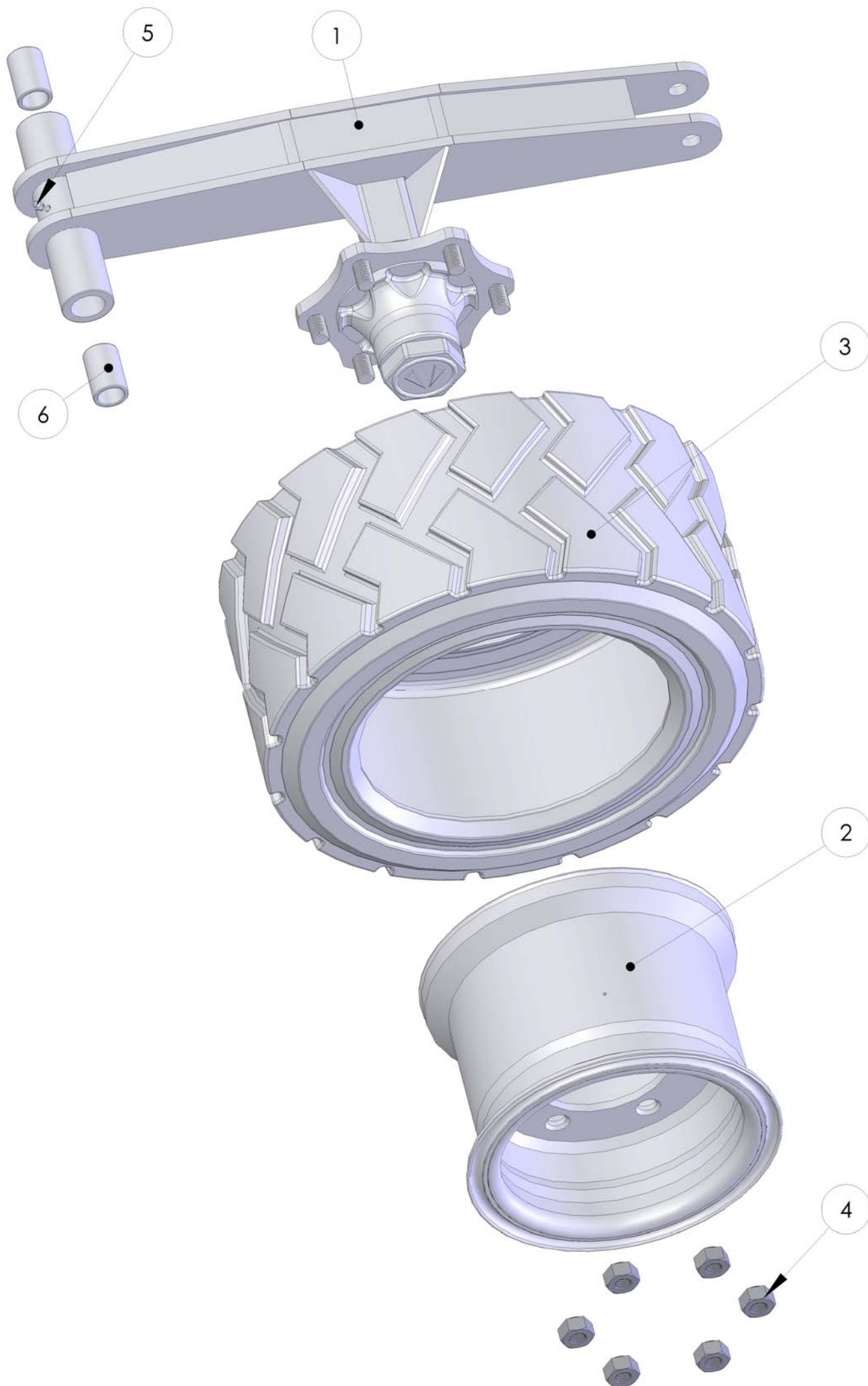
Push support assembly

Nr.	Quantity	Article number	Description	Type/ Size
1	1	83607400	Push support suspension	
2	1	26524050	Tire	
3	4	83607500	Push support segment	
4	12	60050045	Coach bolt	M12x45
5	12	60402200	Washer	M12
6	12	60307200	Self locking nut	M12



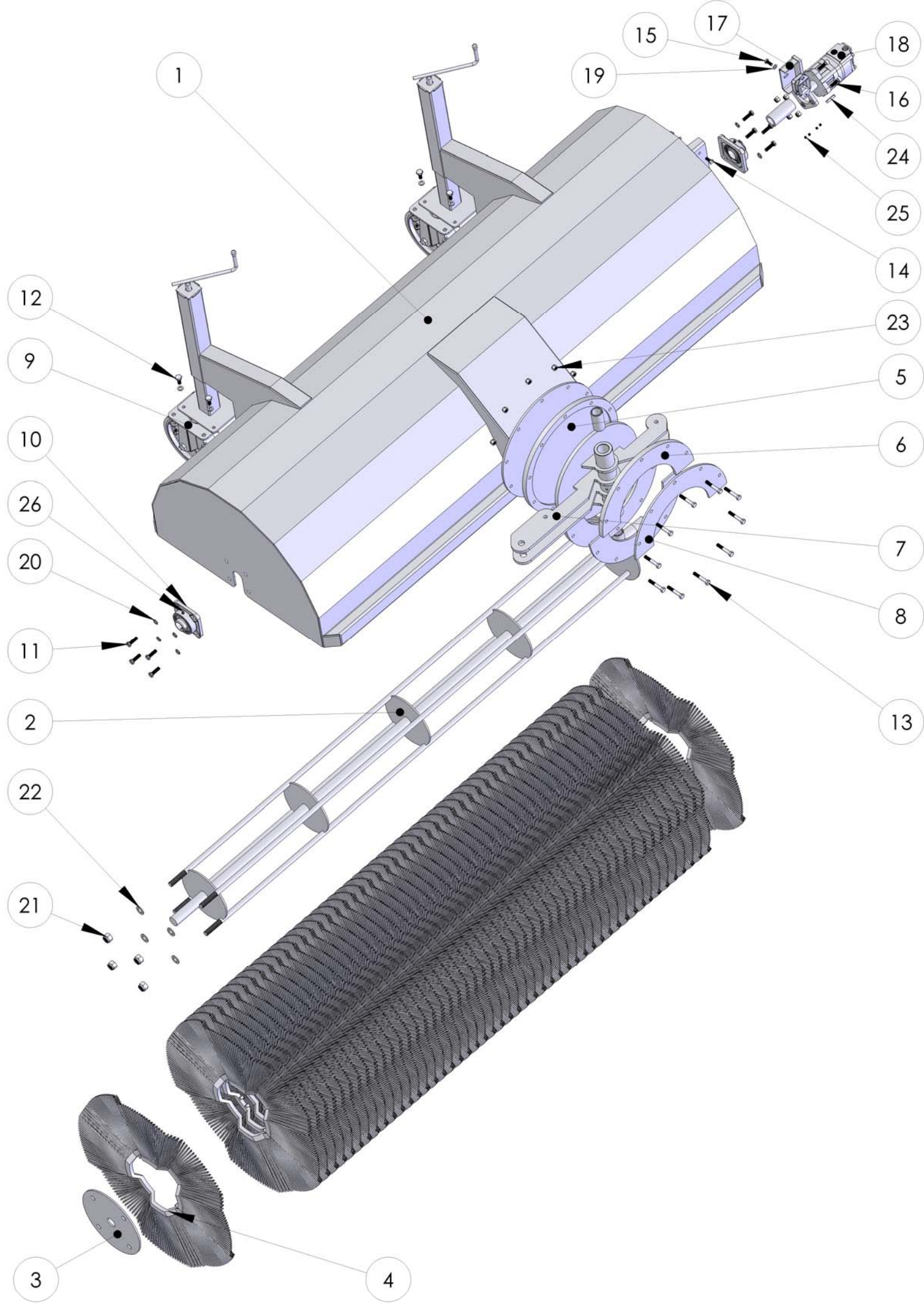
Support wheel assembly

Nr.	Quantity	Article number	Description	Type/ Size
1	1	83402020	Support wheel suspension	
2	1	26524060	Rim	
3	1	26524055	Tire	23x10.1-12
4	6	26504065	Wheel nut	
5	1	60501600	Lubrication nipple	M8
6	2	22543000	Plastic bush	30-40-60



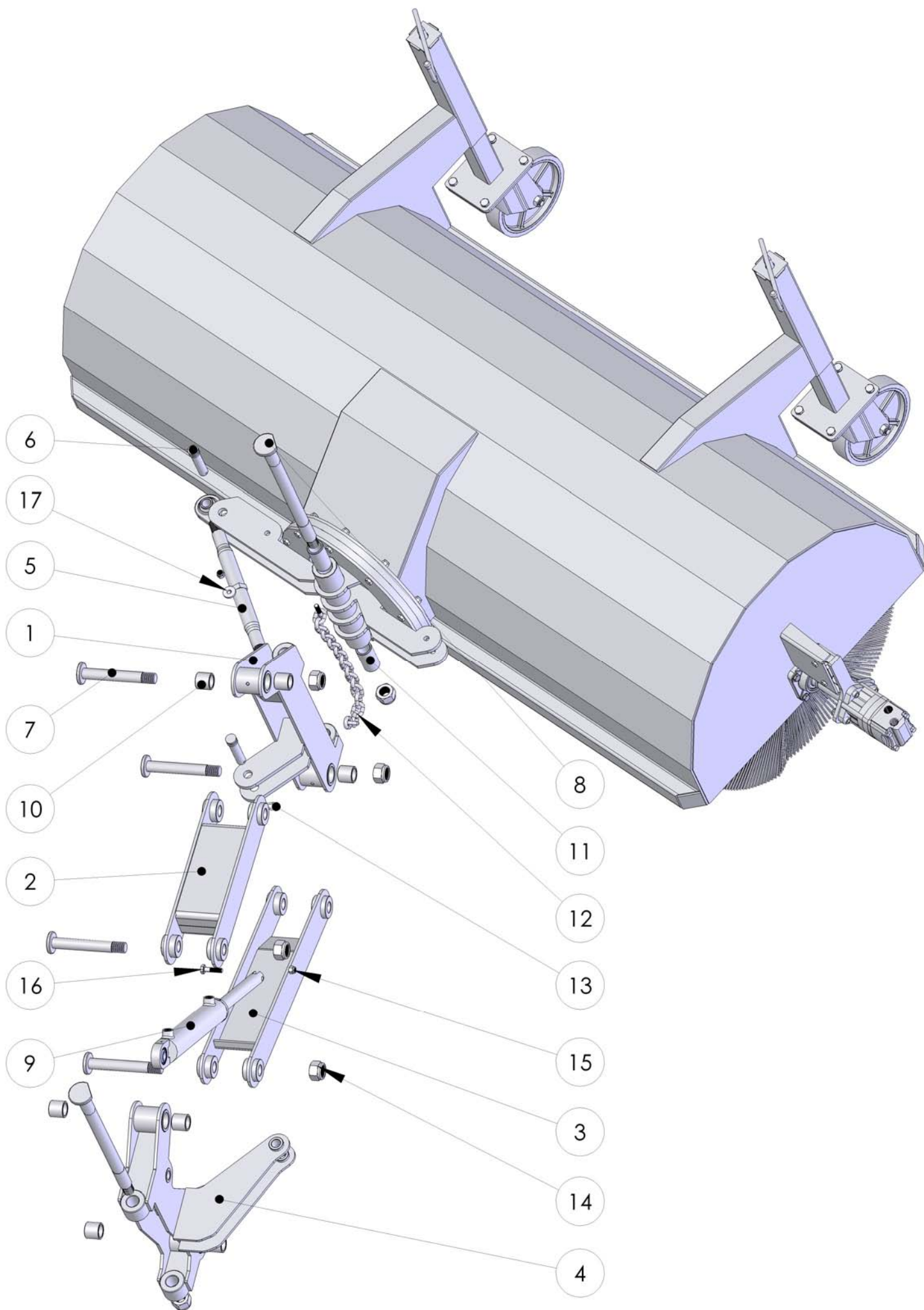
Brush assembly

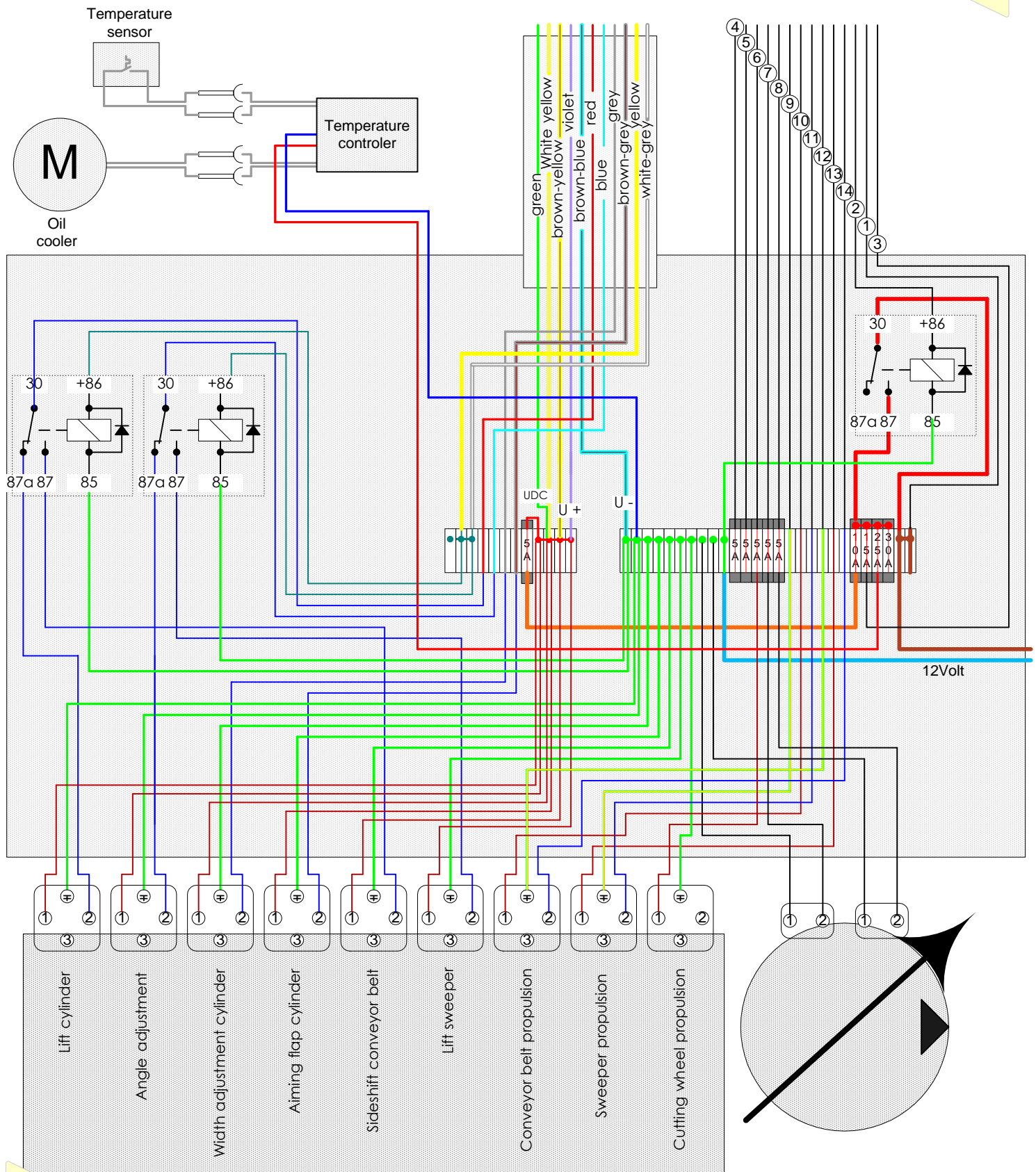
Nr.	Quantity	Article number	Description	Type/ Size
1	1	83805050	Brush cap	
2	1	83805100	Brush cage	
3	2	83805110	mounting plate brush	
4	50	83805120	brushes	
5	1	83805130	Nylon disc	
6	2	83805140	Nylon half moon	
7	1	83805150	corner adjustment brush	
8	2	83805160	mounting half moon	
9	2	83805170	turnwheel brush	
10	2	22303150	bearing block	Ina F208
11	8	60050020	hex bolt	M12x40
12	8	60034600	hex bolt	M12x30
13	10	60007200	hex bolt	M12x70
14	2	60006750	hex bolt	M12x25
15	1	60263410	hex bolt	M10x25
16	4	60035410	Bolt	M12x40
17	1	83605000	Motor fork	
18	1	31514085	Hydromotor	104-1384 Charlynn
19	1	60041425	Washer	M10
20	16	60041450	Washer	M12
21	4	60308000	prevailing torque nut	M20
22	4	60402220	Washer	M20
23	24	60307200	prevailing torque nut	M12
24	2	60482200	Wedge	10-8-1945
25	4	60263410	Set screw	M10x25
26	2	60501600	Lubrication point	M8
27	1	32506000	Motor rubber	

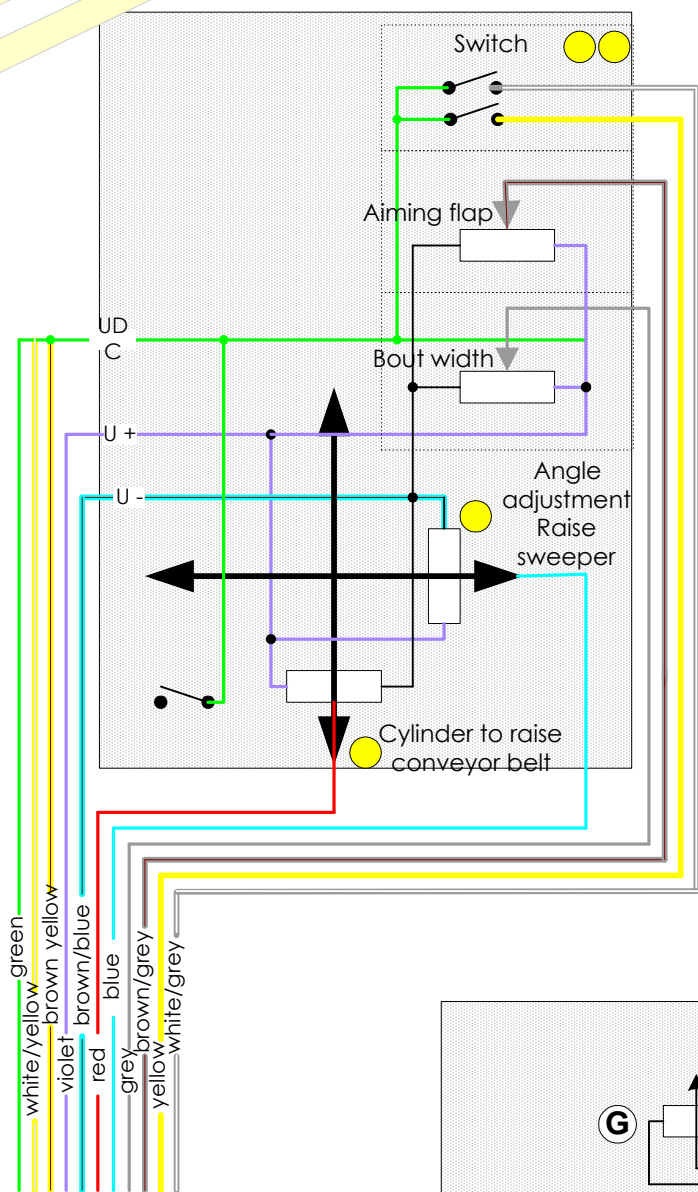


brush suspension assembly

Nr.	Quantity	Article number	Description	Type/ Size
1	1	83806050	corner verse count brush	
2	1	83806100	upper lift arm brush	
3	1	83806150	Bottom lift arm brush	
4	1	83806200	corner verse count pumpunit	
5	1	60605020	Top rod	650mm
6	2	60605010	top rod pen	25mm
7	4	80024125	Pen	30mm lg 125
8	2	83607200	Pen	35mm lg 470
9	1	33354300	Hydraulic cilinder	35/60 slag 300
10	8	22542800	plastic bush	30x40x40
11	4	22543500	plastic bush	35x45x90
12	1	83806250	chain	10x25x40
13	2	60504050	secure clip	4mm
14	6	60308800	prevailing torque nut	M30
15	2	60307200	prevailing torque nut	M12
16	1	60006805	Hex bolt	M12x50
17	1	60418000	Washer	M12
18	5	60501600	lubrication point	M8x1







(A)	Paddle wheel on/off
(B)	Paddle wheel reverse
(C)	Cutting wheel coulter on/off
(D)	Conveyor belt on/off
(E)	Sweeper on/off
(F)	Main switch
(G)	Conveyor belt speed
(H)	Sweeper speed

