GLOBUS

GSF 255-18

User manual and spare parts

Underhaug

WELCOME AS A UNDERHAUG CUSTOMER!

Congratulations on purchasing a Globus product! Before using the equipment, we ask that you carefully read the user manual. You should keep this manual and pass it along if you sell the product to others.

Underhaug manufactures a wide range of products, including stone pickers, stone rakes, seeders, round bale forks, pallet forks, harrows, Cambridge rollers, crosskill rollers, snow blowers, potato machines, excavation buckets, quick coupler attachments, and other construction equipment for excavators.

If you would like to learn more about our products, you can visit our website at **www.underhaug.no** or contact us by phone or email.

Our goal is for you to be a satisfied Globus customer. To achieve this, we focus on quality and user-friendly products. In collaboration with our dealers, we aim to solve any problems that may arise and guarantee the supply of spare parts for 10 years.

Underhaug is a forward-looking company, and we are committed to continuous product development. We would appreciate receiving feedback from you as a customer. Both positive and negative experiences help strengthen our development and make our products better. Please feel free to send us ideas or suggestions for product modifications or additional equipment via email at arild@underhaug.no. All suggestions will be considered during future product upgrades.

We recommend that you fill out the necessary information about the product you have acquired in the table below. This will make it easier and faster to handle any inquiries for spare parts and/or additional equipment. It is also helpful in case of a product warranty claim.

Best regards,
Underhaug AS

PRODUCT INFORMATION:

Art. no.: (see type plate)	
Serial no.: (see type plate)	
Production year: (see type plate)	
Purchase date:	
Distributer:	

Underhaug AS
Rev. 1.1
01.01.2025

DECLARATION OF CONFORMITY

Producer: **Underhaug AS**

Address: **Torlandsveien 3**
4365 Nærbø

N-NORWAY

We hereby declare under our own responsibility that the following product:

Type: ***Globus snøfres GSF 255-18***

Serial No.:

Year of Manufacture: 2024->

covered by this declaration, complies with the following standards:

- **NS/EN ISO 13857: 2008**
- **NS/EN 13021: 2003 + A1: 2008**
- **NS/EN ISO 12100: 2010**
- **Directive 2006/42/EC**

Nærbø, October 1, 2024

Sales manager Arild Høien

CONTENT

2 SAFETY

2.1 User manual

All users of the Globus Snowblower *GTF 255* must familiarize themselves with the content of the user manual before using the machine.

2.2 Caution

Ensure that no one is in the snowblower's throwing area. Snow, ice, stones, and other foreign objects thrown from the blower can cause damage to people, vehicles, buildings, and other objects. Adjust the throwing distance and direction using the speed, deflector, and nozzle rotation to avoid injury.

2.3 Crushing hazard, chute

If the chute becomes blocked with snow, always disengage the power take-off (PTO), stop the engine, and remove the key from the ignition before beginning the cleaning process. If necessary, the chute can be tilted down, and the included cleaning pin can be used. Never place your hands or feet into the chute opening to clear it.
Be aware of crushing hazards when tilting the chute back into position. The protective guard on the chute must always be mounted and in proper condition when the snow blower is in use.

2.4 Crushing hazard, fan and fan shaft

Ensure that no one is near the snow blower while it is in use. When the fan shaft and fan are rotating, this represents a significant crushing hazard that can lead to serious personal injury.
Never stay within the opening in front of the blower or near the chute opening when the fan is rotating. Always remember to disengage the power take-off (PTO) and ensure the fan has stopped before leaving the tractor's driver's seat.

2.5 Crushing hazard, PTO

Check that the protective cover around the power take-off (PTO) shaft is always in place and securely attached with the included chains so that it does not rotate during use. Avoid staying near the PTO shaft when it is rotating.
If clothing or similar items get caught in an unprotected shaft, it can lead to serious personal injury. For further information on the use and safety of the PTO shaft, refer to the separate user manual that comes with the shaft.

2.6 Repairs

Before performing any form of maintenance or repairs, always ensure the engine is stopped and the key is removed from the ignition, or the snow blower is disconnected from the tractor. Never position yourself under machines that are suspended by the tractor's hydraulics. Therefore, make sure the snow blower is properly supported before starting any work.

Before performing any maintenance or repairs, always ensure the engine is stopped and the key is removed from the ignition, or the snow blower is disconnected from the tractor. Never position yourself under machinery that is supported by the tractor’s hydraulics. Make sure the snow blower is properly supported before performing any work.

2.7 Hydraulics under pressure

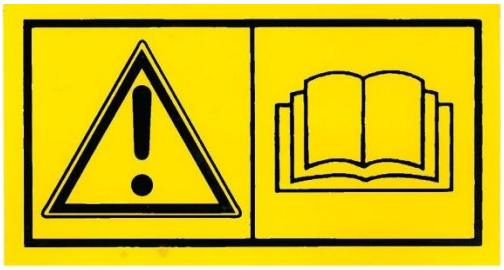
The snow blower is equipped with hydraulics for operating the chute. Ensure that no one is near when hydraulic functions are being performed. Hydraulic oil under pressure can penetrate the skin and cause serious injuries and infections. Always wear eye protection and gloves, and exercise caution when working with hydraulics. Seek medical attention if you sustain an injury.

2.8 Safety Markings

Globus snow blowers are equipped with various warning labels indicating actions that must be taken to avoid injuries and accidents. The symbols appear on warning signs located in different parts of the machine. These are shown in the images below.
If the markings are removed from the snow blower, replacements can be supplied by the manufacturer or dealer.

The machine is designed for 540 RPM.

Rotating parts.



Read the user manual.

Warning.

When performing repairs, always remove the key from the ignition.

2.9 Lifting points

The snow blower body is equipped with three lifting points, marked with the symbol shown.
Please note that a snow blower weighs approximately 1200 kg, so always use straps designed for this total weight.

3 PRODUCT INFORMATION

3.1 Intended use

The Globus GSF 255 is a robust and functional V-snow blower suitable for large tractors from 130 hp. The blower is supplied with a fixed three-point hitch, designed to meet current standards. The machine requires skilled operation, and the user manual should be read before connection and operation, even if the operator has prior experience with similar equipment.

3.2 Construction and function

The Globus GSF 255 features a symmetrical blower housing. This means that the fan shaft is positioned in the centre of the blower, and the sidewalls are identical on both sides. Additionally, with a length of 220 cm, this design allows snow to easily flow into the fan, thereby increasing the blower's capacity.

The fan shaft is equipped with 6 hardened and hinged intake blades, each fitted with grease nipples. These blades direct the snow into the fan, and the hinged design ensures that the blades move away from foreign objects, reducing the risk of damage to the blower.

The discharge fan has a diameter of 90 cm and is designed to provide optimal throw distance based on power requirements. The chute has a rounded shape, which facilitates the passage of snow. It is also equipped with a swivel motor and an adjustable deflector flap, allowing snow to be directed as desired. The chute is foldable, providing easy access for maintenance.

Optional accessories include right and left side deflector wings. Hydraulic swing and deflection are standard and included in the price.

3.3 Technical data

Model	GSF 255
Working width	255cm
Scrape width	238cm
Working width w/ edge cutter R	275cm
Working width w/ cutting edge R + L	295cm
Power requirement	130hk
Fan diameter	90cm
Weight PTO shaft	30kg
Weight snow blower w/PTO shaft	1230kg

3.4 Optional equipment

The available additional equipment for the Globus GSF 255 is listed below. Drawings and parts lists for the individual items can be found further back in the user manual.

Art.no.	Description	Add. Info.	Page
930466	Double-acting hydraulic tilt	For hydraulic control of the tilt	22
124939	Edge cutter cpl R 110cm	20cm bredde	28
124936	Edge cutter cpl L 110cm	20cm bredde	28
124940	Edge cutter cpl R 170cm	20cm bredde	28
124949	Wheel set	125/75-8	27

4 ASSEMBLY AND CONNECTION

4.1 Assembly

The snow blower is delivered fully assembled and ready for use unless otherwise agreed.
The GSF 255 comes standard with a fully hydraulic-operated chute, pre-assembled.
Edge cutters can be supplied either loose or mounted, depending on practical reasons related to shipping, etc.
If the edge cutter needs to be mounted, please refer to page 28 in the parts list for detailed drawings.

4.2 Adjusting PTO shaft

Always use the power take-off shaft supplied with the machine. It is designed to match the snow blower's power requirements and is equipped with a 12mm 8.8 shear bolt to protect against overloads.

Some tractors have a high-mounted power take-off (PTO), which increases the angle of the PTO shaft and thus reduces its lifespan. The angle should be as small as possible, ideally not exceeding 25 degrees. The following steps are recommended for adjusting the shaft:

1. Mount the snow blower on the tractor without the PTO shaft. Ensure there is enough clearance between the tractor and the snow blower at all lift heights, including when the top link is in use.

2. Find the position where the distance between the spline pin on the snow blower and the tractor is shortest. Then, separate the PTO shaft and install it onto each profile pin with the tubes next to each other.

3. Mark the tubes for cutting and ensure there is at least 15mm of clearance at the ends.

4. Check the longest distance between the spline pins. If this is the working position, the profile tubes should still overlap by half the tube length.

5. Once the adjustments are made, the shaft can be cut. It's important to cut equally from both tubes. Deburr the edges to ensure smooth sliding, clean, and lubricate the profile tubes with grease.

Install the PTO shaft and carefully check the alignment during all movements.

4.2 Connection

- Ensure that no one is standing between the tractor and the snow blower during the connection process.

- Reverse the tractor towards the snow blower and stop the engine before attaching the drawbars to the three-point hitch. Use the stabilizer bars on the tractor to prevent uncontrolled side movements during operation.

- Connect the hydraulic hoses for the chute. Check that the hoses are intact and undamaged before using any hydraulic functions.

- First, attach the PTO shaft to the snow blower and secure the safety chain to prevent the protective cover from rotating. Make sure the protective covers are intact and replace them if they are damaged. Follow the instructions for adjusting the PTO shaft in section 4.2 and refer to the PTO shaft manual for further details.

5 USER TIPS

5.1 PTO

The snow blower is designed for a power take-off (PTO) that operates at 540 RPM. The forward speed and gear selection depend entirely on snow conditions and the type of tractor. The PTO should ***only*** be engaged at low engine speed.

5.2 Adjustment of working width/depth

The working width of the 255cm snow blower can be adjusted by mounting edge cutters (see technical data 3.3). The edge cutters on the right and left sides add approximately 20cm in width, thereby increasing the specified working width of the snow blower.
The depth of the snow blower is adjusted with skid shoes that can be steplessly raised and lowered. An alternative is the wheels (see optional equipment 3.4), which are also adjusted steplessly using a mechanical rod. The top link is used to adjust the float of the blower.

5.3 User tips

- Prepare the road well in advance before snow arrives by removing large stones and other foreign objects that may interfere with the snow blower. If stones or other objects enter the blower during operation, this may damage or destroy vital parts.

- Equip the tractor with good chains or studded tires.

- Clear the entire width of the road with the first snowfall and create an even base. Do not wait until the snow depth becomes too large; instead, drive several times.

- Choose a speed that provides smooth progress, as this makes the job easier.

- Do not waste power by throwing the snow too far; reduce the engine speed to make it easier and use less fuel.

- If the snow blower clogs with wet snow, keep the engine speed high from the moment you enter the snow until the snow blower is emptied.

- If the chute becomes clogged with snow, stop the fan before cleaning, disengage the PTO, and turn off the engine. Loosen the two screws at the bottom of the chute and tilt it down. Use the provided stake pin to clean the chute.

- If moving snow without throwing it out, it is better to reverse the snow blower slightly before engaging the PTO.

- The chute is designed with a fold-down feature that allows you to throw the snow in front of the blower without stopping the fan and then swing the chute back when the obstruction is passed.

- To ensure proper scraping, it is important to adjust the height of the skid shoes or wheels. Place the snow blower on a flat surface and adjust the skid shoes and wheels to their highest position. This ensures that the blower rests all its weight on the scraper blades, which provides better scraping performance. Lowered wheels or skid shoes reduce the wear on the scraper blades and result in poorer scraping.

- Regularly check that the top link is adjusted so that the snow blower lies flat on the ground. If the top link is pulled in too far, the snow blower will tilt forward and cause excessive wear on the front of the scraper blades. If the top link is extended too far, the snow blower will lift at the front and cause excessive wear on the rear of the scraper blades. When using the three-point hitch, it is recommended to operate the snow blower with the top link in the float position.

6 MAINTENANCE

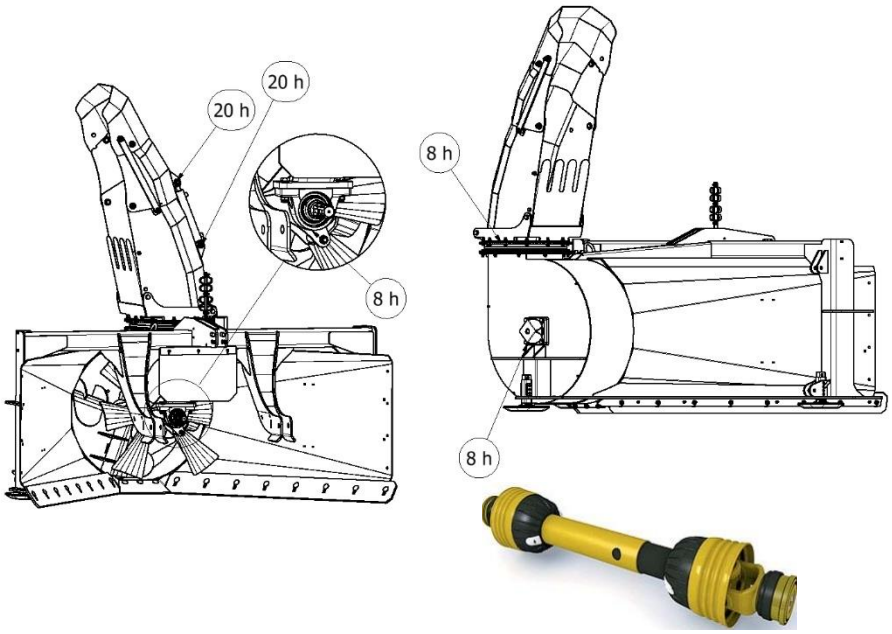
6.1 Retightening

After a few hours of operation with a new snow blower, all screw connections should be checked and tightened where necessary. This should then be checked regularly thereafter.

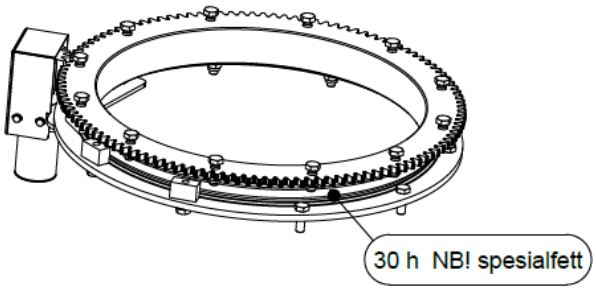
6.2 Lubrication points

1. PTO
   The fan shaft is supported by two bearings, each with one grease nipple. Additionally, the PTO shaft is equipped with two grease nipples. These should be lubricated every 8 operating hours.
   Use universal grease, such as Statoil UniWay Li 712.

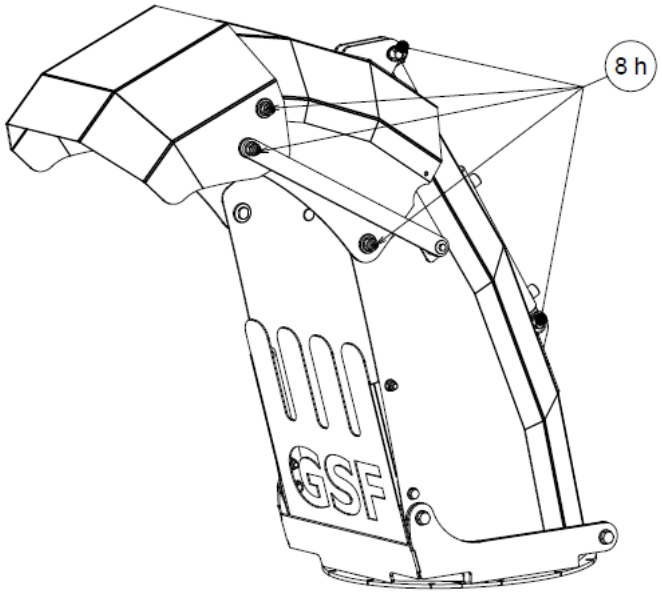
h = operating hours



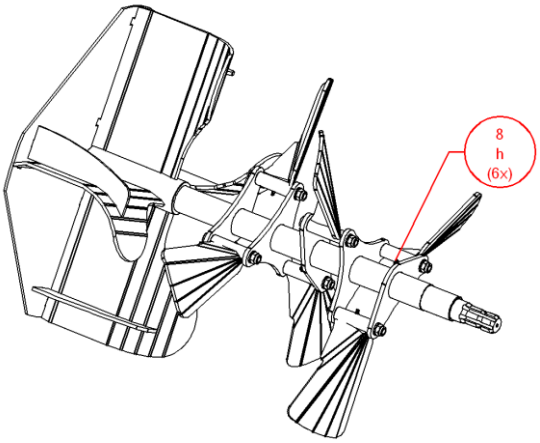
1. Swivel ring
   The swivel ring has a grease nipple and should be lubricated every 30 operating hours.
   Note! It is important to use special grease, Omega 66.



2. Chute
   The chute has 8 grease nipples and should be lubricated every 8 operating hours.
   Use universal grease, such as *Statoil UniWay Li 712.*



3. Fan blades
   Each fan blade has one grease nipple and should be lubricated every 8 operating hours.
   Use universal grease, such as *Statoil UniWay Li 712.*



6.2 Replace wear blade

Globus snow blowers are equipped with Hardox 500 wear plates, offering excellent wear resistance. The wear plates are reversible on both the left and right sides, as well as replaceable under the fan housing. When the wear plates are worn down on both sides, they should be replaced before the wear reaches the housing of the snow blower.
The wear plates are secured with M16x40 lock bolts all around, making them easy to replace.

6.3 Color code

The paint color code is red RAL 3000.

7 WARRANTY

7.1 What is covered by the warranty

1. The warranty covers the repair of faults and defects in the product or components that are part of the product. This applies to defects that can be traced back to manufacturing or material defects.

7.2 What is not covered by the warranty

1. The warranty does not cover third-party costs/consequences or downtime.
2. The warranty does not cover transportation of the product between the customer and the dealer for repair.
3. The warranty does not cover consumable parts, including the PTO shaft.
4. Underhaug does not cover damage caused by incorrect use or load beyond what the product is designed for.

7.3 Warranty duration

1. The warranty is valid for 12 months from the date of sale. The invoice date from the dealer to the customer serves as documentation of the sale date.
2. However, the warranty is limited to 24 months from the invoice date from Underhaug to the dealer.

7.4 Warranty terms

1. The warranty becomes invalid if the product fails or is damaged due to incorrect use or if the instructions in the user manual are not followed.

2. The warranty becomes invalid if the product is used for purposes other than those described in the user manual.

3. The warranty becomes invalid if non-original spare parts (including PTO shaft) are used or if the prescribed maintenance of the product is not followed.

4. The warranty assumes that the service intervals in the user manual are followed. The customer may be asked to provide documentation of performed maintenance.

7.5 Extended warranty

1. If the conditions listed below are met, the product is covered by Underhaug's extended warranty for 3 years – 36 months from the date of sale. The invoice date from the dealer to the customer serves as documentation for the sale date.

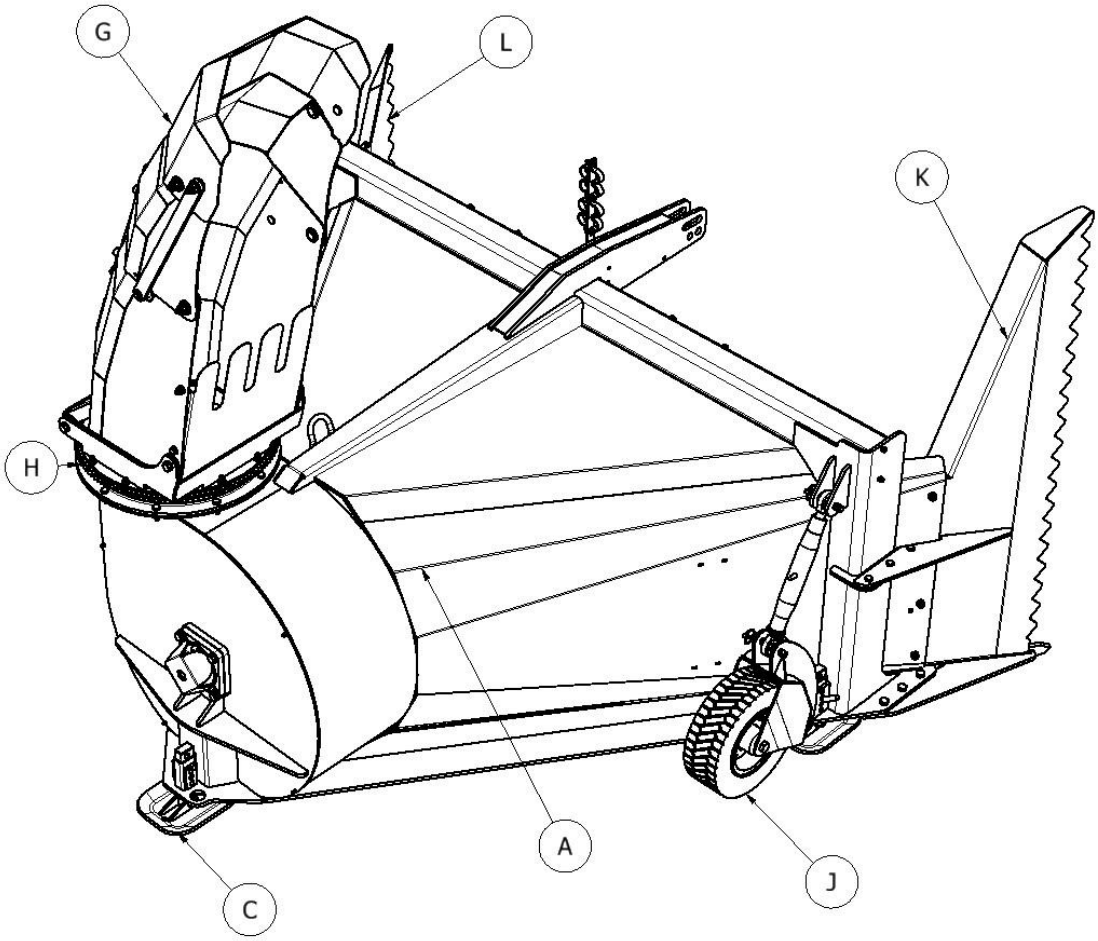
2. However, the warranty is limited to 48 months from the invoice date from Underhaug to the dealer.

3. The product must follow the recommended service intervals from Underhaug. This applies to machines sold from 2020. A minimum of one service by the dealer is required each year. This service must be completed before the season and no later than September 15th.

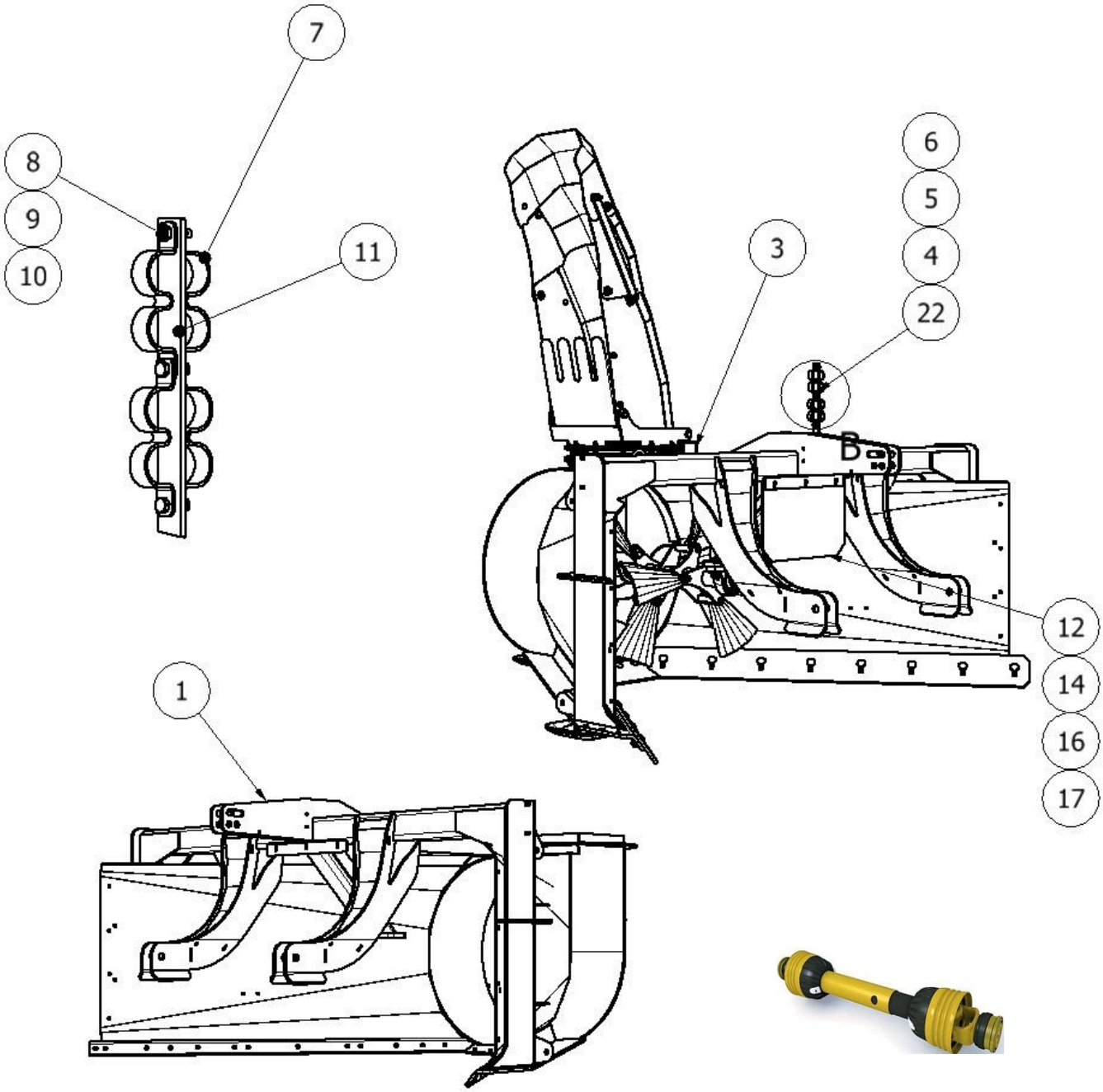
4. The handover form must be sent to Underhaug no later than 1 month after the handover of the new product to the customer for the extended warranty to apply.

8 SPARE PARTS

8.1 Content

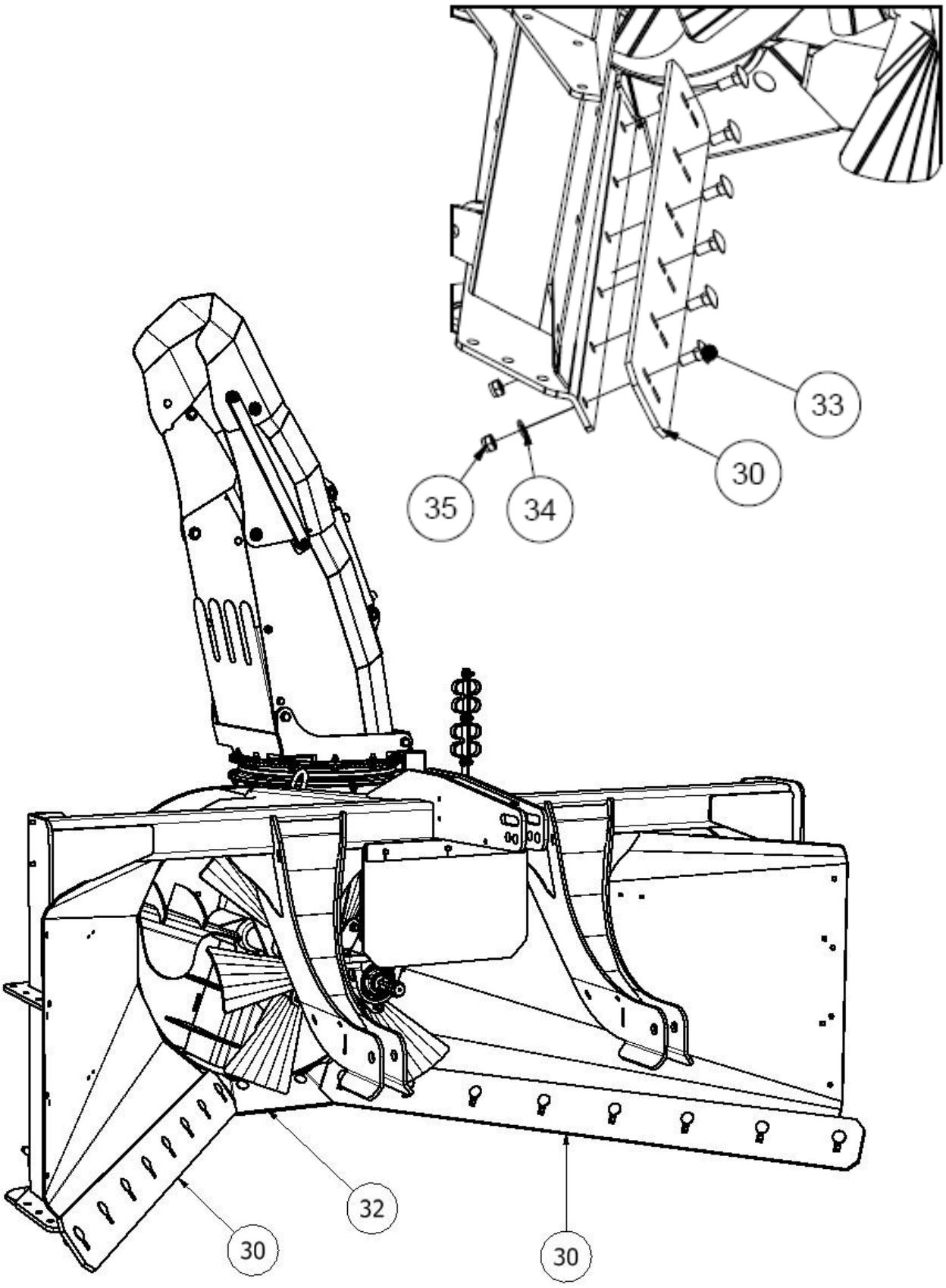


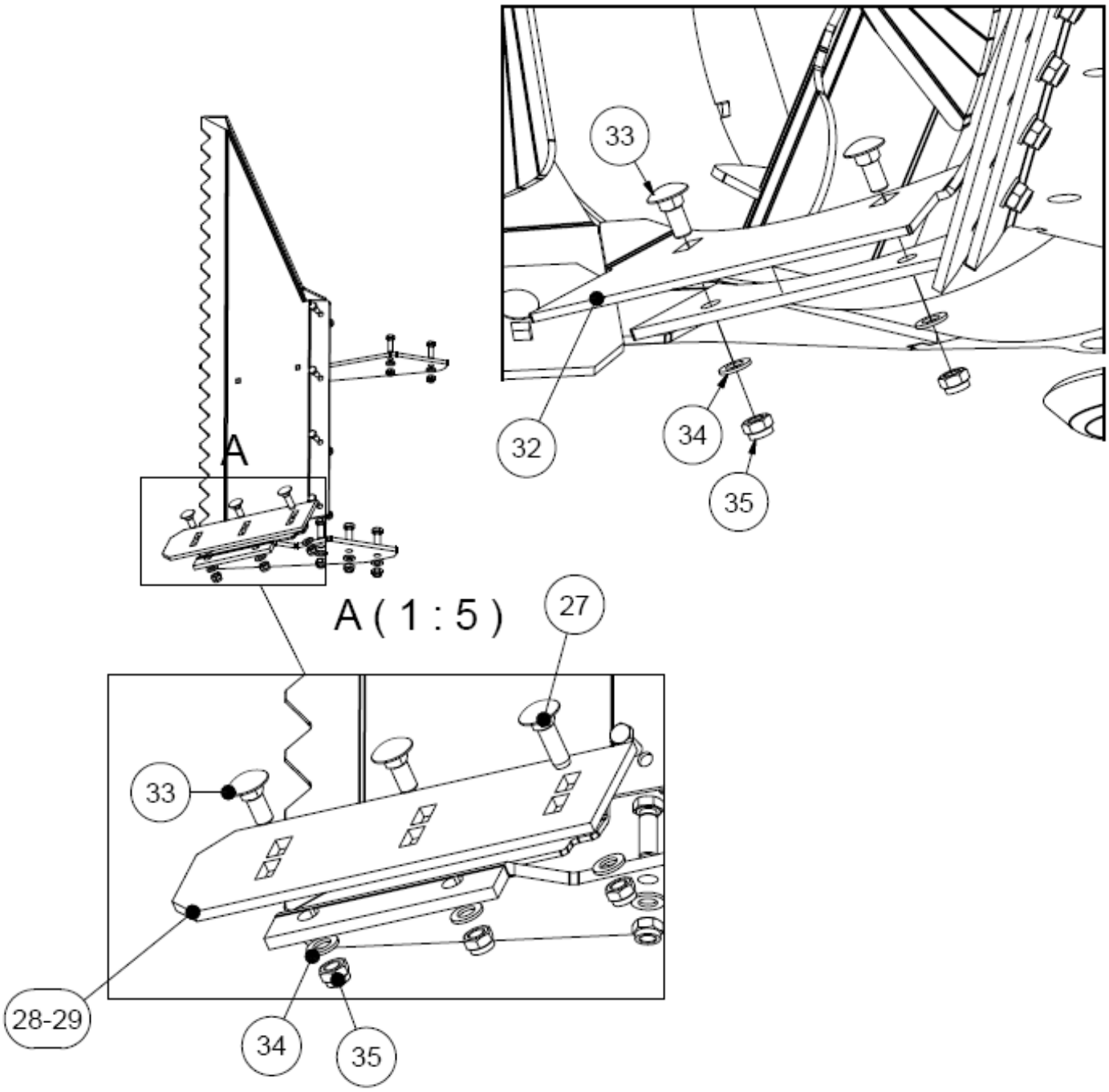
8.2 Chassis



Pos	GSF-2	Name, type	Qty.	Serial no.	Note
1	124900	Chassis welded	1	100->	
2	930260	PTO	1	100->	
3	930468	Pin	1	100->	
4	032430	Screw M10x30	2	100->	
5	012916	Washer Ø10,5	2	100->	
6	016006	M10 nut DIN 985	2	100->	
7	123820	Hose holder	4	100->	
8	032430	Screw M8x30	3	100->	
9	016005	M8 nut DIN 985	3	100->	
10	012903	Washer Ø8,5	3	100->	
11	930646	Hose rack	1	100->	
12	124958	Center rubber sheet	1	110->	
14	127257	Rubber sheet center fastening	1	110->	
16	032325	Screw M16x25	5	110->	
17	016005	M8 nut	5	110->	
22	127311	Hose rack cpl	1	100->	

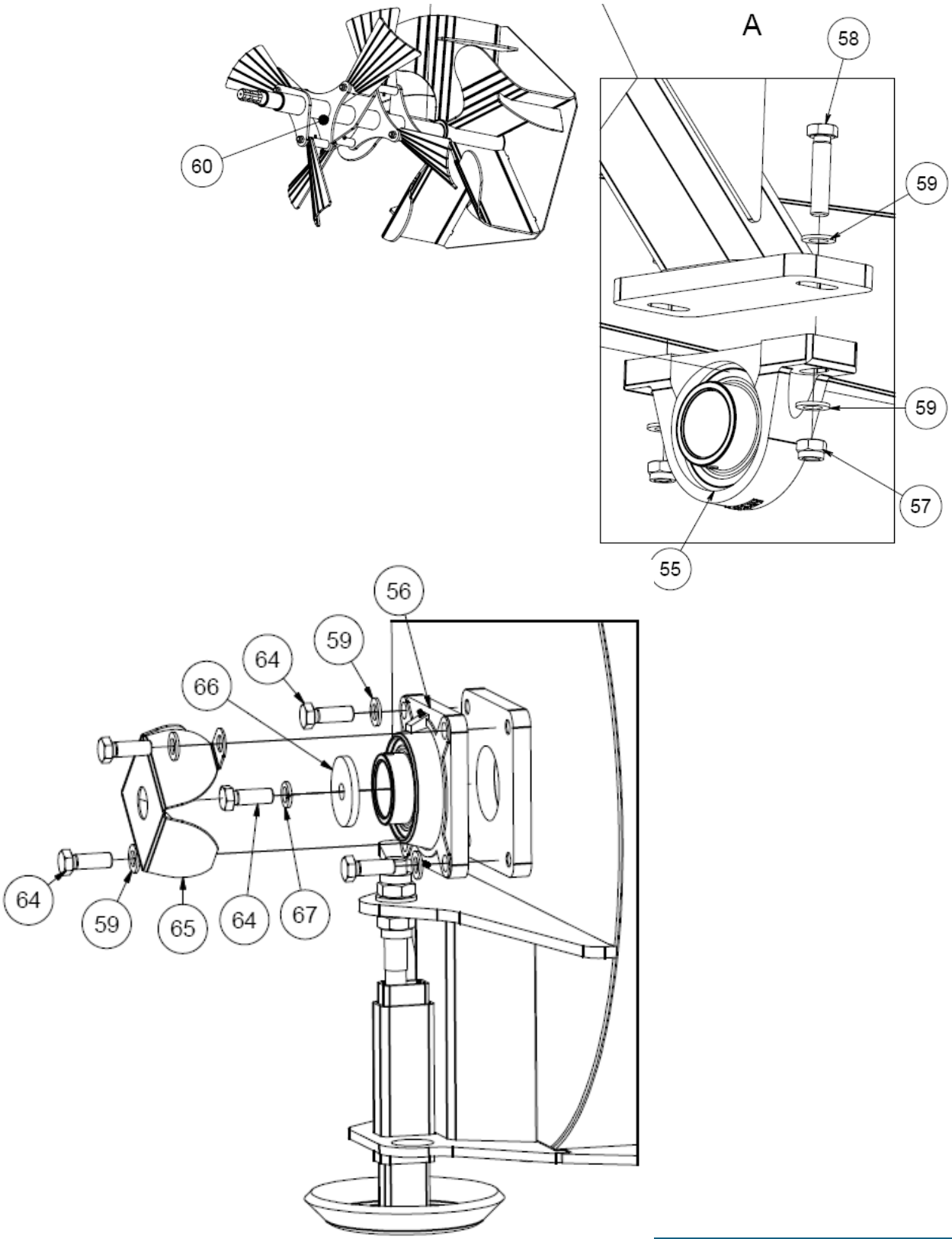
8.3 Wear plate

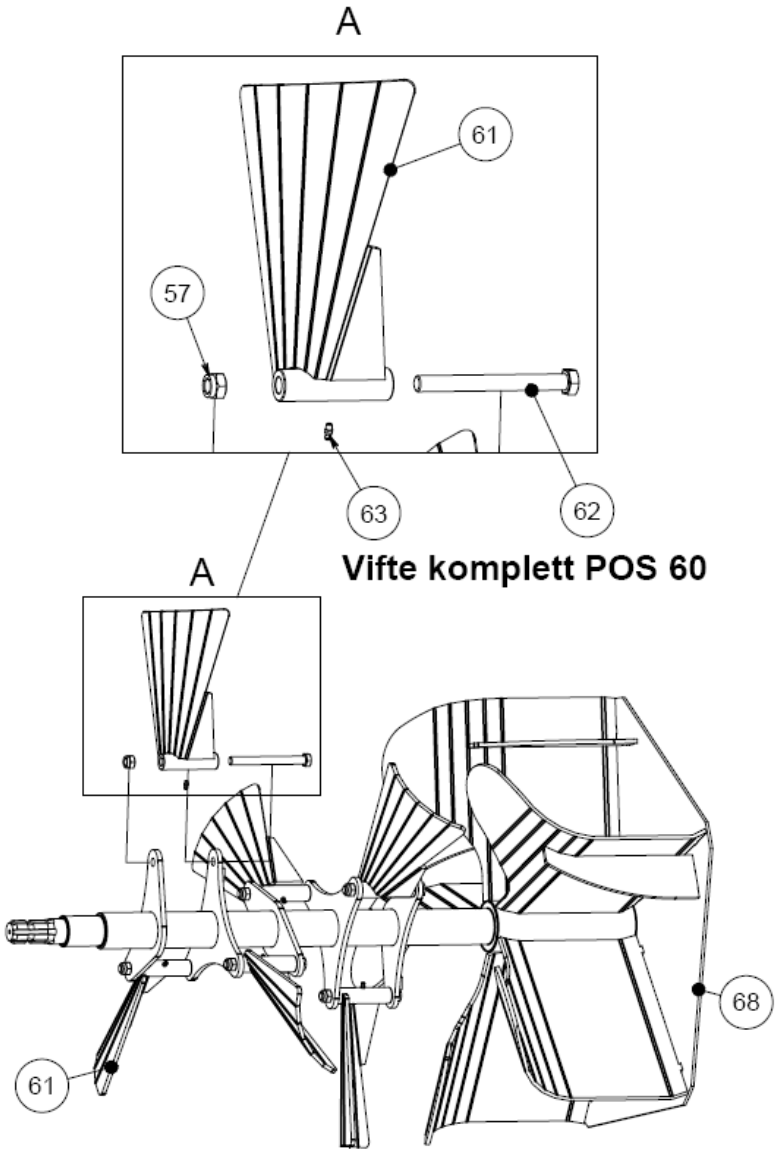




Pos	GSF-2	Name, type	Qty.	Serial no.	Note
27	034841	Locking screw M16x50	1	100->	
28	124851	Wearing plate edge cutter L	1	100->	R+L side
29	124851	Wearing plate edge cutter R	1	100->	R+L side
30	124840	Wearing plate R+L	1	100->	R+L side
31					
32	124841	Wearing plate entry blade	1	100->	
33	034840	Locking screw M16x40	x	100->	
34	012927	Washer Ø17	x	100->	
35	016010	M16 nut DIN 985	x	100->	

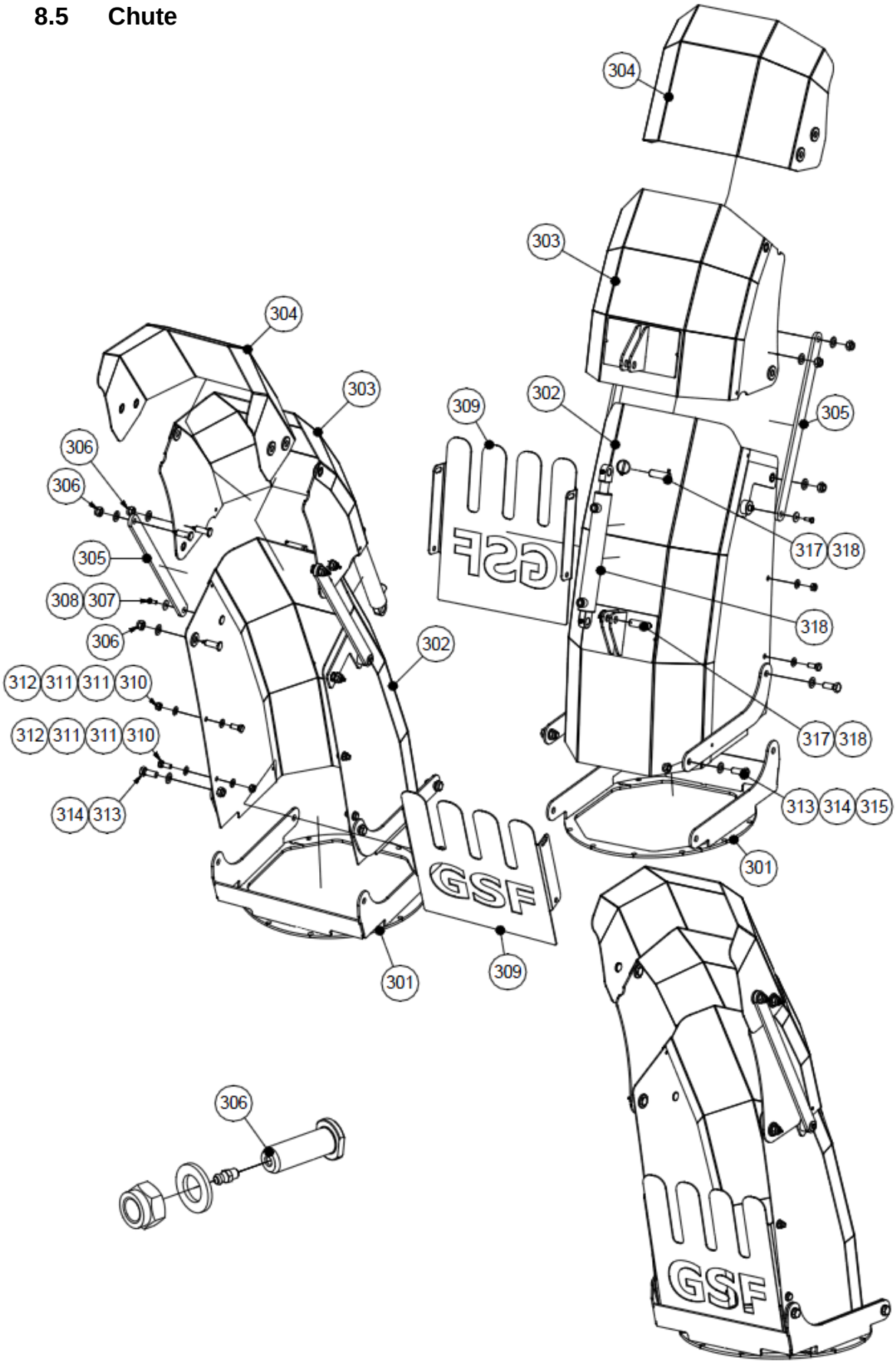
8.4 Fan and bearing





Pos	GSF-2	Name, type	Qty.	Serial no.	Note
55	011226	Foot bearing Ø60	1	100->	
56	011227	Flange bearing Ø60	1	100->	
57	016010	M16 nut DIN 985		100->	Qty. varies
58	032770	Screw M16x70	2	100->	
59	012927	Washer Ø17		100->	Qty. varies
60	124890	Fan cpl	1	100->	w/entry blade
61	124912	Auger blade	6	100->	cpl /nipple
62	032711	Screw M16x160	6	100->	
63	029918	Grease nipple M6 rett	6	100->	
64	033745	Screw M16x45	5	100->	
65	127277	Safety shield bearing	1	100->	
66	930707	Locking washer shaft	1	100->	
67	012989	Spring washer Ø17	1	100->	
68	124942	Fan welded	1	100->	fan + shaft

8.5 Chute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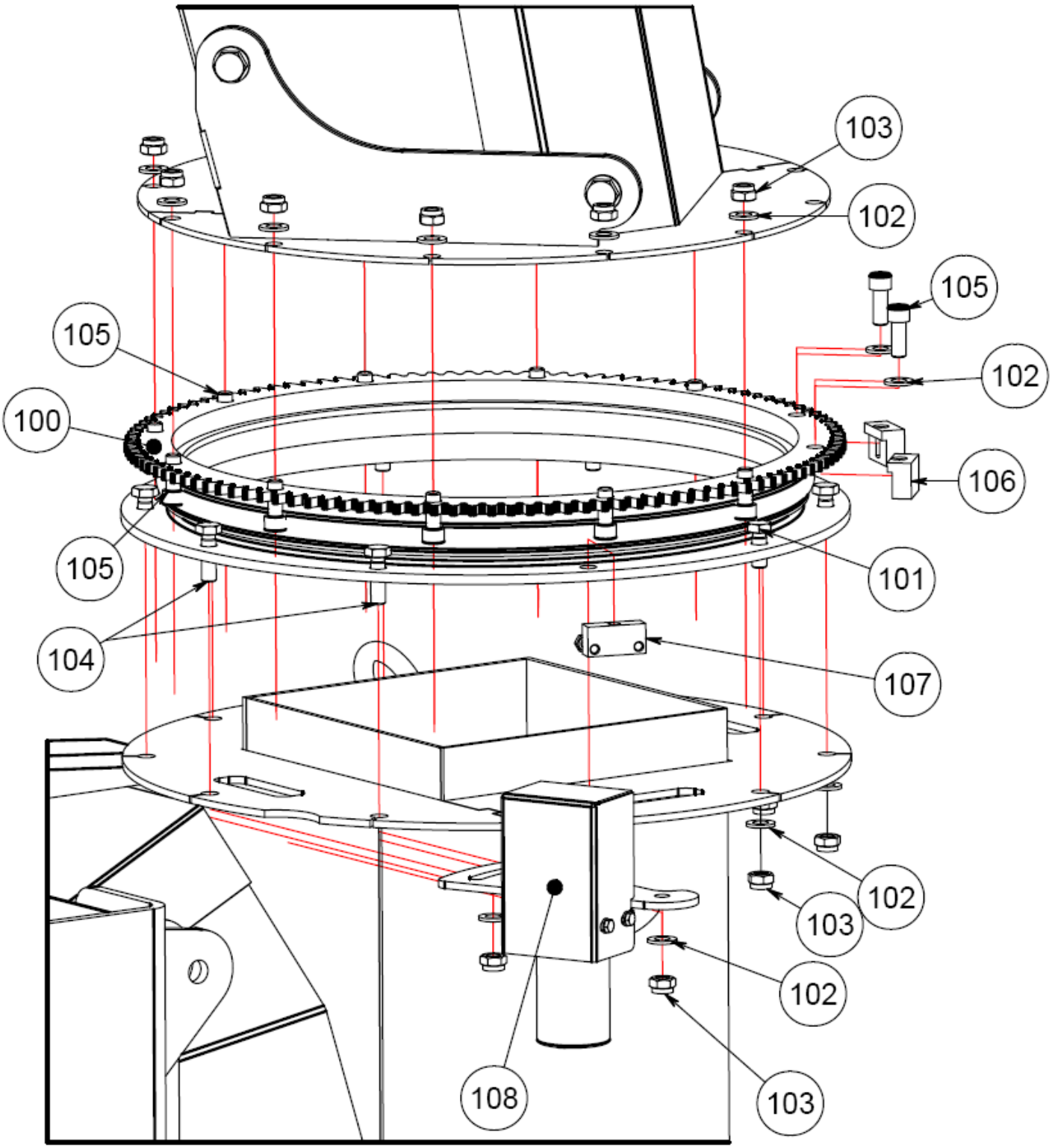
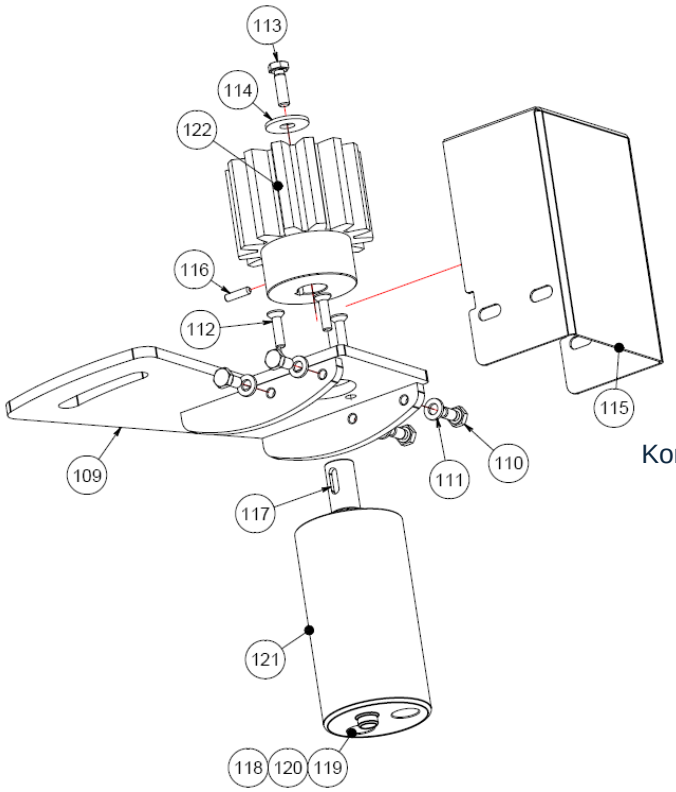
8.6 Chute			Serial no.		
POS:	**Art. no:**	**Description:**	**From**	**To**	**Add. info:**
301	124920	Lower part of the chute towards the swivel ring 2011	130	-	
302	124159	Chute lower part 2011	130	-	
303	124150	Flap 1 chute 2011	130	-	
304	124153	Flap 2 chute 2011	130	-	
305	124157	Linkage rod for chute transmission 2011	130	-	
306	124954	Fastening bolt Chute cpl	130	-	
307	033420	Screw M8x20	130	-	Glued
308	012904	Washer Ø8,4 DIN 9021	130	-	
309	124916	Safety shield	130	-	
310	016008	M12 Locking nut	130	-	
311	012919	Washer Ø13 DIN 125	130	-	
312	033640	Screw M12x40 DIN 933	130	-	
313	032740	Screw M16x40 DIN 933	130	-	
314	012927	Washer Ø17 DIN 125	130	-	
315	016010	M16 Locking nut	130	-	
316	930391	Bolt for cylinder	130	-	
317	010703	Cotter pin	130	-	
318	124163	Cylinder cpl w/hoses	130	-	

8.6 Swivel ring / engine

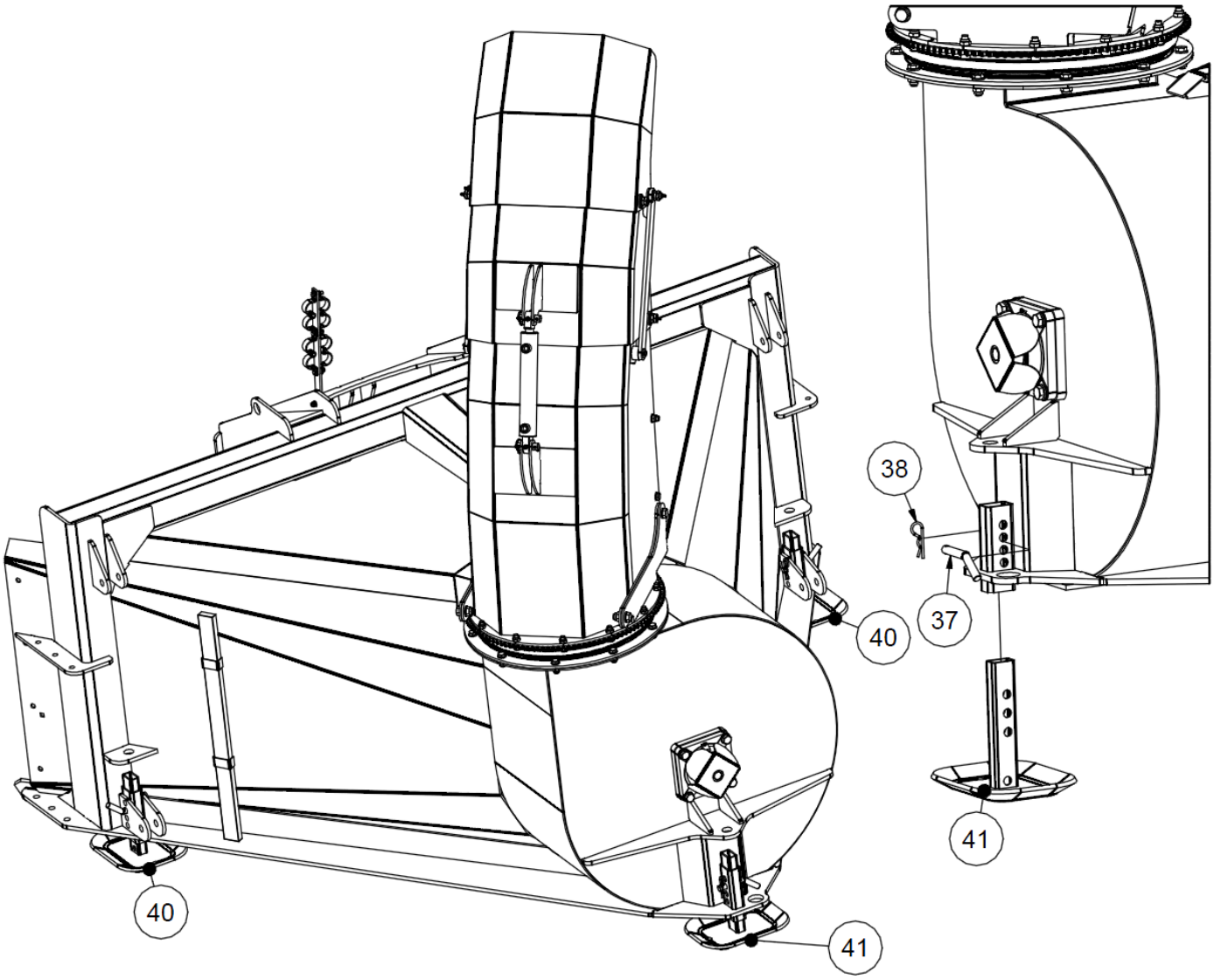




Komplett POS 108

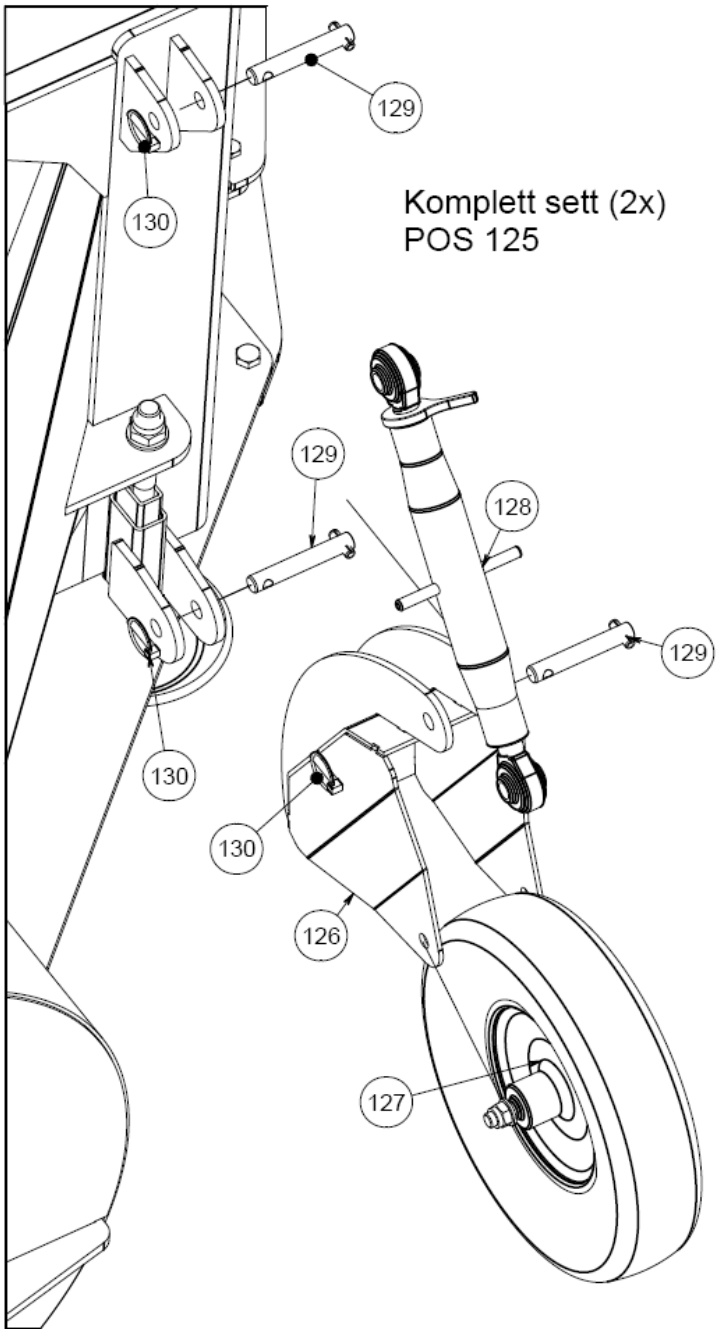
Pos	GSF-2	Name, type	Qty.	Serial no.	Note
100	124804	Swivel ring w/teeth	1	100->	Cpl w/brake
101	033630	Srew M12x30	8	100->	
102	012919	Washer Ø13	22	100->	
103	016008	M12 nut DIN 985	22	100->	
104	033640	Screw M12x40	2	100->	
105	802040	Screw M12x35 DIN 912	12	100->	
106	127284	Upper brake	2	100->	
107	127285	Lower brake	1	100->	
108	124875	Engine bracket cpl	1	100->	w/engine
109	124874	Engine mount	1	100->	
110	032320	Screw M6x20	4	100->	
111	012911	Washer Ø6,4	4	100->	
112	015027	Screw M6x16 Senk	3	100->	
113	B06012	Screw M6x12	1	100->	
114	012904	Washer Ø8 DIN 9021	1	100->	
115	124876	Saftey shield sprocket	1	100->	
116	032119	M4x6 set screw	1	100->	
117	930574	Wedger	1	100->	
118	011517	Hydr. hose 1/4'' BSP	2	100->	not ill. w ISO
119	011585	Gasket DBS 3/8''	2	100->	not ill.
120	012292	Conn. nipple 3/8''-1/4''	2	100->	not ill.
121	930371	Hydr.engine	1	100->	
122	124859	Sprocket M5	1	100->	

8.7 Wear skids



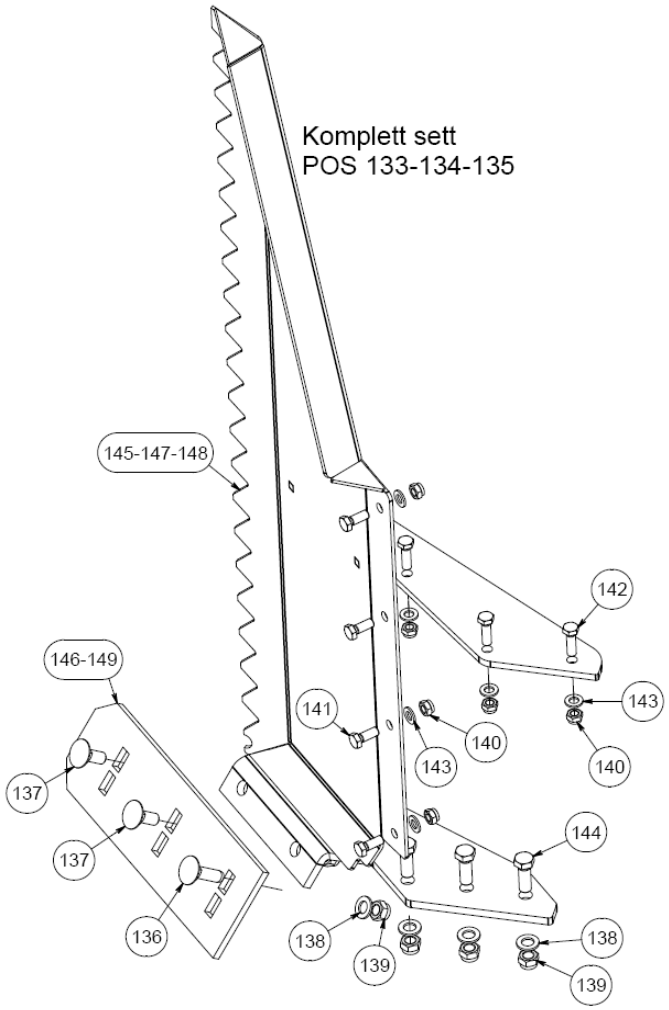
Pos	GSF-2	Name, type	Qty.	Serial no.	Note
38	029712	Spring splint Ø4	1	110->	Qty./skids
37	970049	Bolt Ø16	1	110->	Qty/skids
40	126510	Front wear skids	2	110->	
41	126510	Rear wear skids	1	110->	

8.8 Wheel



Pos	GSF-2	Name, type	Qty.	Serial no.	Note
125	124938	Wheel set cpl	1	100->	Set/2 wheels
126	124866	Frame wheel	2	100->	
127	124865	Wheel cpl w/bolt	2	100->	
128	124871	Adjustment rod	2	100->	
129	010278	Bolt	6	100->	
130	010704	Ring splint	6	100->	

8.9 Edge cutter



Pos	GSF-2	Name, type	Qty.	Serial no.	Note
133	124939	Edge cutter R cpl. 110cm	1	100->	
134	124940	Edge cutter L cpl. 170cm	1	100->	
135	124936	Edge cutter L. cpl. 110cm	1	100->	
136	034841	Locking screw M16x50	1	100->	
137	034840	Locking screw M16x40	2	100->	
138	012927	Washer Ø17	6	100->	
139	016010	M16 nut DIN 985	6	100->	
140	016008	M12 nut DIN 985	7	100->	
141	033635	Screw M12x35	4	100->	
142	033640	Screw M12x40	3	100->	
143	012919	Washer Ø13	7	100->	
144	033745	Screw M16x45	3	100->	
145	124930	Edge cutter R welded 170cm	1	100->	
146	124851	Wear plate edge cutter R	1	100->	
147	124850	Edge cutter R welded 110cm	1	100->	
148	124935	Edge cutter L welded 110cm	1	100->	
149	124851	Wear plate edge cutter L	1	100->	

Maintenance schedule:

Date	Bearing	Axle	Swivel	Auger	Chute	Sign.

Annual <u>mandatory</u> inspection of the machine (according to the user directive).

Date:	Controller (approved)	Stamp/Signature

NOTES:

WWW.UNDERHAUG.NO

PRODUCER:

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