



UM 5150 POTATO PLANTER

User manual and spare parts

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Revised	01.01.2025
Language	ENG

Original user manual

Warranty

This Underhaug product is guaranteed against manufacturing and material defects for one year. Components not produced by Underhaug, such as electrical and hydraulic equipment, power take-off shafts, and tires, are covered according to the original manufacturer's warranty terms.

The following components have limited warranty terms due to their function: tires, skirts, blade tips, breaker pins, fuses, hydraulic seals in pumps, motors, valves, cylinders, etc., as found on new machines. Deterioration due to wear and tear during use is considered normal for these parts. Therefore, the warranty for these parts is limited to manufacturing defects such as breakage, deviations in workmanship, transport damage, etc., found on a new machine.

If damage is expected to be covered by the product warranty, the owner or the owner's representative must inform the dealer when parts and/or repair work are requested. Warranty claims must be reported within the warranty period. The dealer must complete a claim form for each warranty case and send it to Underhaug's sales company/importer by the 10th of the month following the damage report.

The damaged parts must be marked with the claim form number and stored for up to 6 months so that Underhaug's sales company/importer can inspect the parts.

Since the use of Underhaug products occurs outside of the manufacturer's control, we can only guarantee product quality, not performance or any consequential damages.

The warranty may be voided if: a) non-original spare parts are used or the product is repaired or modified without Underhaug's approval. b) The manufacturer's usage and service instructions have not been followed. c) The machine is used for purposes other than what it was designed for.

The warranty does not cover damage due to wear and tear.

Public safety regulations require the manufacturer of this machine to carefully assess safety during proper use of this machine type. Therefore, Underhaug and our importer/sales company are not responsible for the function of components not shown in the spare parts catalogue for this product.

Underhaug reserves the right to make design changes without obligation for previously delivered machines.



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Safety

Before operating the machine

Before operating, adjusting, or repairing the machine, the user, repairer, and owner must familiarize themselves with the safety instructions provided in this manual (Fig 1). Be attentive and cautious when working with agricultural machinery. Read and take note of the safety instructions in this manual.

Safety at work is your responsibility

General safety instructions

Exercise caution when other people or animals are nearby

Never start the machine when people or animals are close to the machine and tractor. Never stand between the tractor wheels and the machine (Fig 2).

Be aware of regulations concerning the operation of agricultural machinery by minors.

Using the machine

The machine should only be used for its intended purpose.

Use personal protective equipment

Do not wear loose clothing that could get caught in moving parts of the machine. Use an approved mask in dusty working conditions (Fig 3).

Be aware of the dangers of high noise levels. Some tractor-implement-combinations may under certain conditions produce noise levels above 85 dB, even inside soundproofed cabs. In such cases, hearing protection must be used. Keep the tractor's

windows and doors closed to reduce the noise level around the driver

Ensure proper tractor compatibility

The tractor's weight must match the machine's maximum working weight. Follow applicable public regulations (Fig 4).

Verify that the correct PTO gear ratio is connected. A machine designed for 540 RPM must never be connected to a tractor with a 1000 RPM. PTO engaged the machine's standard. PTO speed is indicated on a label near the power transmission system.

Important safety symbol



Pay special attention to this symbol. It indicates a safety hazard and outlines precautions to avoid accidents.

This symbol may appear throughout this manual and on warning labels on the machine. They are there for your safety and must be noted.

Connecting the tractor and machine

Always follow the instructions in the manual when connecting the machine. If the connection is made by an agricultural hitch, one part (tractor or machine hitch) must have a clevis design. The hitch pin must be secured with a locking pin (Fig 5).

Follow applicable regulations for road transport

Some countries require the use of safety chains when transporting a towed machine.

Think safety while working

The tractor engine should be stopped and the ignition key removed before performing any repair work, lubrication, or other maintenance on the machine. (Fig. 6).

Protective covers

Ensure that all covers are in good condition and properly mounted. Do not attempt to start the machine until this has been done. Damaged covers should be repaired or replaced immediately. (Fig. 7). Pay special attention to all protective covers related to the power take-off shafts. Replace damaged covers. Safety chains must always be attached to the machine and/or tractor to prevent the protective sleeves from rotating.

Hydraulics

Be cautious when handling hydraulic systems. Wear eye protection and gloves. Oil released under high pressure can penetrate the skin and cause serious internal damage. Seek medical attention if you have been exposed to such injury. (Fig. 8).

Ensure that no one is near the machine when hydraulic functions are operated.

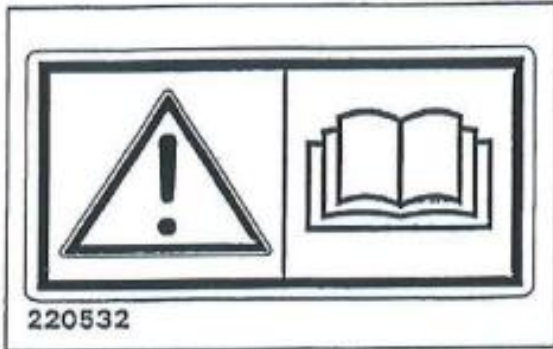


Fig. 1

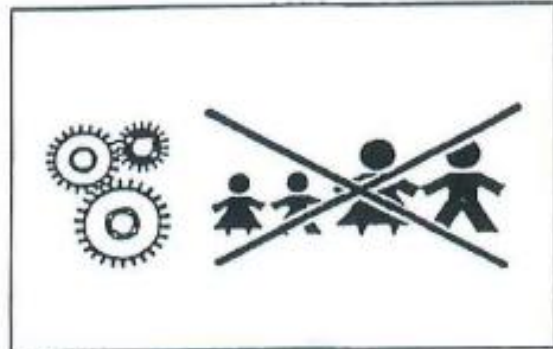


Fig. 2



Fig. 3

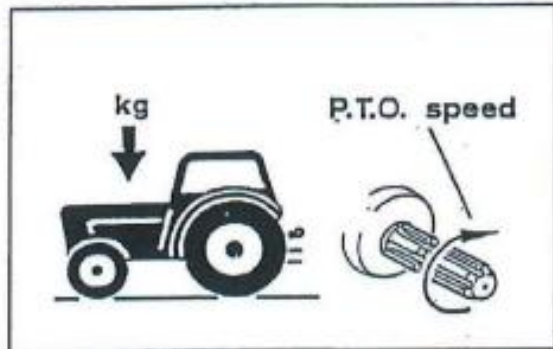


Fig. 4

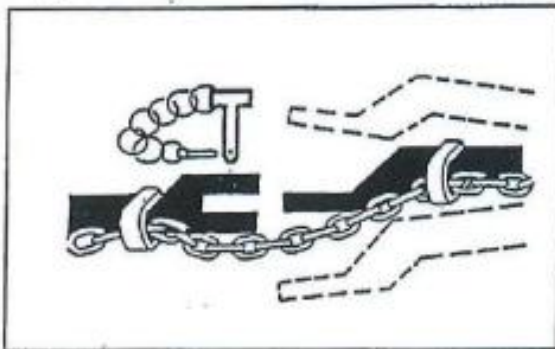


Fig. 5

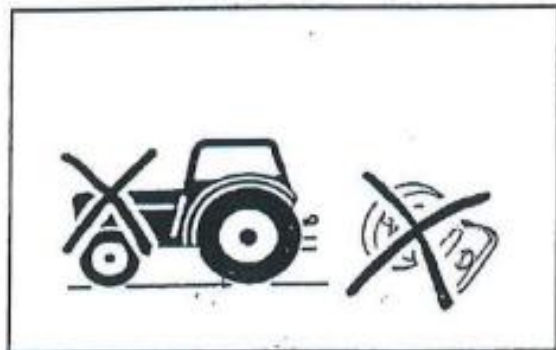


Fig. 6

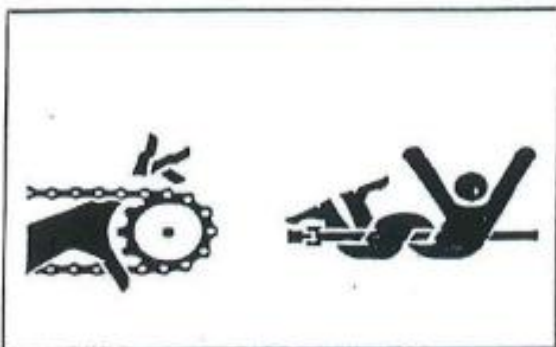


Fig. 7



Fig. 8

When disconnecting the machine and leaving the tractor/machine

Set all hydraulic functions to the neutral position when disconnecting the machine. Lower the movable working components to the ground or set them in the transport position and secure them. If the machine is equipped with parking blocks, these should be used. Do not allow children to play or remain near agricultural machines. (Fig. 9).

Drive Safely

Remember, you are responsible – carelessness and negligence can cause serious injury or even death. (Fig. 10).

Check the wheel bolts and the connection

between the machine and tractor before transport on public roads. Also disconnect the hydraulic system.

Drive carefully. Reduce speed in turns and when driving on uneven surfaces. Ensure that the towed machine does not move uncontrollably sideways.

Be aware of the tipping hazard when driving on slopes and on soil with low bearing capacity. Reduce the load.

Lights

The owner/operator is responsible for equipping the machine with the correct sound and reflectors when driving on public roads. Follow public regulations. (Fig. 11).

Safety equipment

Always carry first aid equipment in the tractor. Follow public regulations regarding fire extinguishing equipment. When working with flammable materials such as hay and straw, fire extinguishing equipment must always be available. (Fig. 12).

Spare parts

For safety reasons, we recommend using only original spare parts. The product warranty is invalid if non-original parts are used. (Fig. 13).

Maintenance

Ensure that the machine is properly maintained and kept in good condition. Never make modifications to the machine's technical design. (Fig. 14).



Fig. 9



Fig. 10

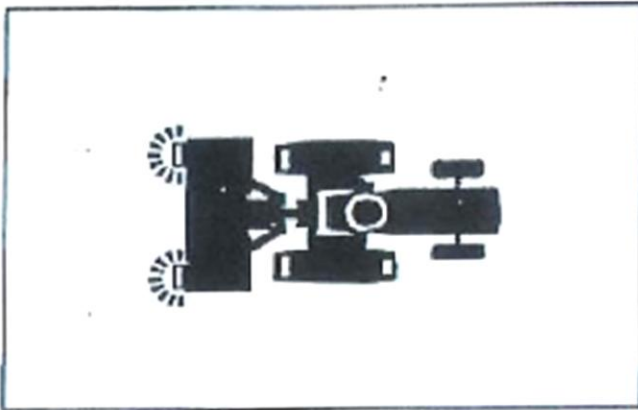


Fig. 11

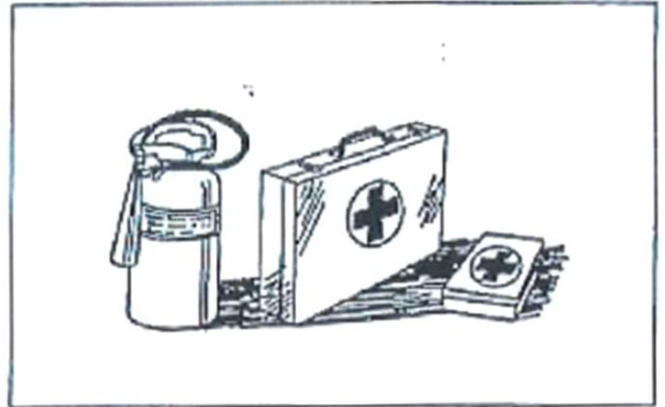


Fig. 12

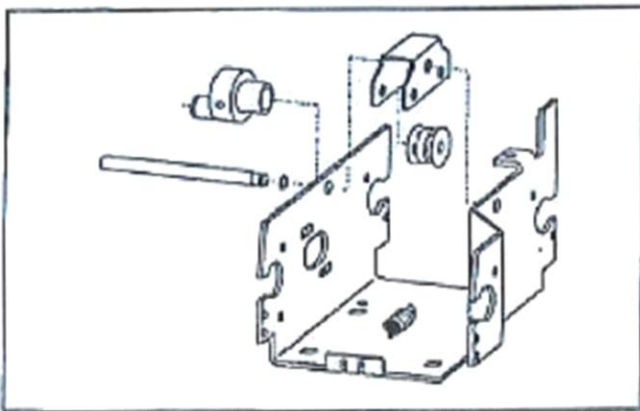



Fig. 13



Fig. 14

Supplementary safety instructions for UM 5150 Potato planter

This equipment is marked with this warning label . If the label is damaged, it must be replaced.

Warning label 2935064 (fig. 1). Be cautious. Read and understand the instruction manual before using the equipment, and before making adjustments or performing maintenance.

Warning label 220525B (fig. 2). Due to the significant risk of pinching, it is important to keep people at a safe distance from the equipment while in use. Special pinching hazard around the rotors during potato planting. Potatoes must be dropped into the rotor. Ensure that hands and fingers never come close to the drop hole. Do not drop potatoes into the last two sections of the drop chute. Ensure all users follow this technique.

Warning label 220526 (fig. 3). Avoid contact with the chain during operation. Risk of pinching between the chain and chain wheel, and the danger of being pulled into the machine or the chain wrapping around. Ensure loose clothing or other objects do not come into contact with the chain or chain wheel. Also, avoid contact with the drive shaft and bevel gears under the rotors.

Warning label 220568 (fig. 4). Avoid pinching underneath the equipment. No one should be under the machine when it is being raised or lowered. Secure the machine properly to avoid pinching if the machine is to be adjusted.



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Intended use of the equipment

Underhaug's UM-5150 semi-automatic potato planter is two machines in one. The planter can be converted into a ridger in just a few minutes.

The machine is primarily designed for those who grow potatoes on a smaller scale and cannot justify the purchase of a fully automatic potato planter.

It is also well-suited for those who specialize in early production and exclusively use pre-sprouted seed potatoes.

Self-sufficiency, farm shops, and locally produced goods are also popular points today.

Use of the Potato Planter

- Capacity of up to 15 HA/day.
- Row spacing can be adjusted from approximately 65 cm to approximately 85 cm.
- The width of the ridging blade (450mm) can be adjusted by changing the wing position, according to the chosen row spacing.
- The planting distance can be set infinitely in the range of 25-40 cm.
- Planting depth is adjusted with the planting blade and ridging blade, and fine-tuned with depth wheels.
- Potatoes of all sizes can be planted with this machine.
- The potatoes must be dropped into the rotor. Ensure that hands and fingers never come near the drop hole. Do not drop potatoes in the last 2 sections near the drop hole.
- Ensure proper training and that competent individuals operate the machine. They should sit securely and have good communication with the operator of the equipment. The operator is responsible for this.
- The operator should have good experience and knowledge of operating the equipment and must exercise great caution.
- The machine should be operated at a low/controlled speed (max 5 km/h).
- Exercise caution with the drive wheel spokes, whether or not the machine is in operation.
- Exercise caution in rough terrain.
- Only authorized personnel should be seated on the machine during potato planting.
- The machine is only designed for a maximum of 2 people.
- Exercise caution in rough terrain.
- Only authorized personnel should be seated on the machine during potato planting.
- The machine is designed for a maximum of 2 people.

Technical data

Weight:	230 kg
Depth:	1700 mm (1200 mm for transport)
Width:	2000 mm
Height:	1100 mm

Connection to Tractor

The machine is connected to the tractor's three-point hitch.

The included top link and drawbar bolts can be adjusted to category 1 or category 2 as needed.

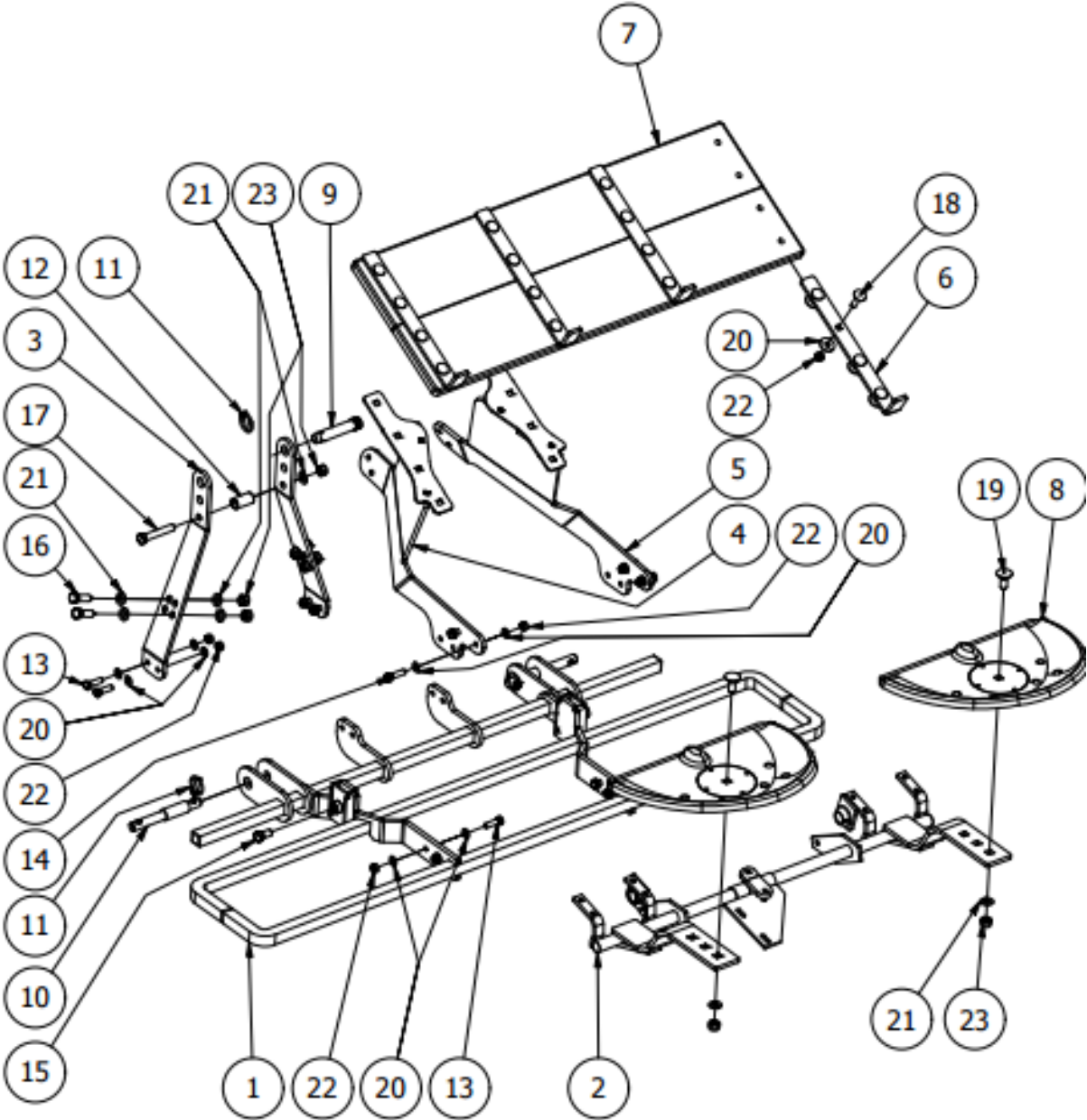
Maintenance

Lubricate all grease points daily.

The machine should be stored indoors when not in use.

Protect shiny parts from rust.

FRAME FIG.1

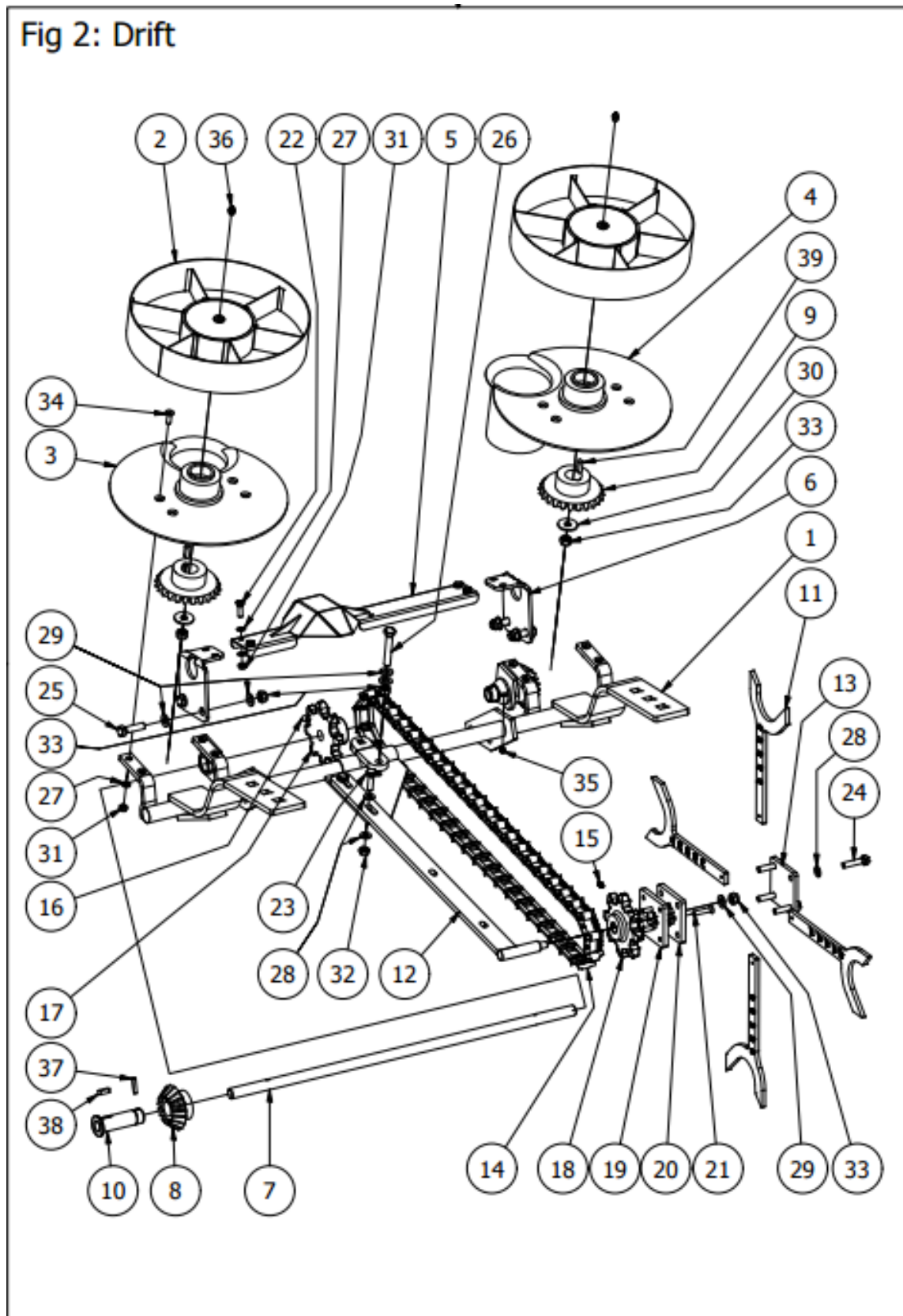


SPARE PARTS UM 5150 – FRAME FIG. 1

Ref.	Art. No.	Qty	Item Description
1	289003	1	Frame
2	287816	1	Rotor frame
3	289011	2	Hitch connector
4	289085	1	Board support L
5	289086	1	Board support R
6	289852	4	Angle support
7	289851	2	Wood board
8	288133	2	Seat
9	190058	1	Top link bolt
10	UH150063	2	Lower link bolt
11	867061	3	Link bolt pin
12	289020	1	Sleeve
13	813640	8	Hex. Screw DIN 933 - M12 x 40
14	032645	4	Hex. Screw DIN 933 – M12 x 45
15	033730	2	Hex. Screw DIN 933 – M16 x 30
16	033745	4	Hex. Screw DIN 933 – M16 x 45
17	032790	1	Hex. Screw DIN 933 – M16 x 90
18	034842	16	Locking screw DIN 603 – M12 x 50
19	033240	2	Locking screw DIN 603 - M16 x 40
20	012922	32	Washer DIN 125 – A 13
21	012927	11	Washer DIN 125 – A 17
22	852162	28	Nylock nut DIN 985 – M 12
23	852166	7	Nylock nut DIN 985 – M16

OPERATION FIG. 2

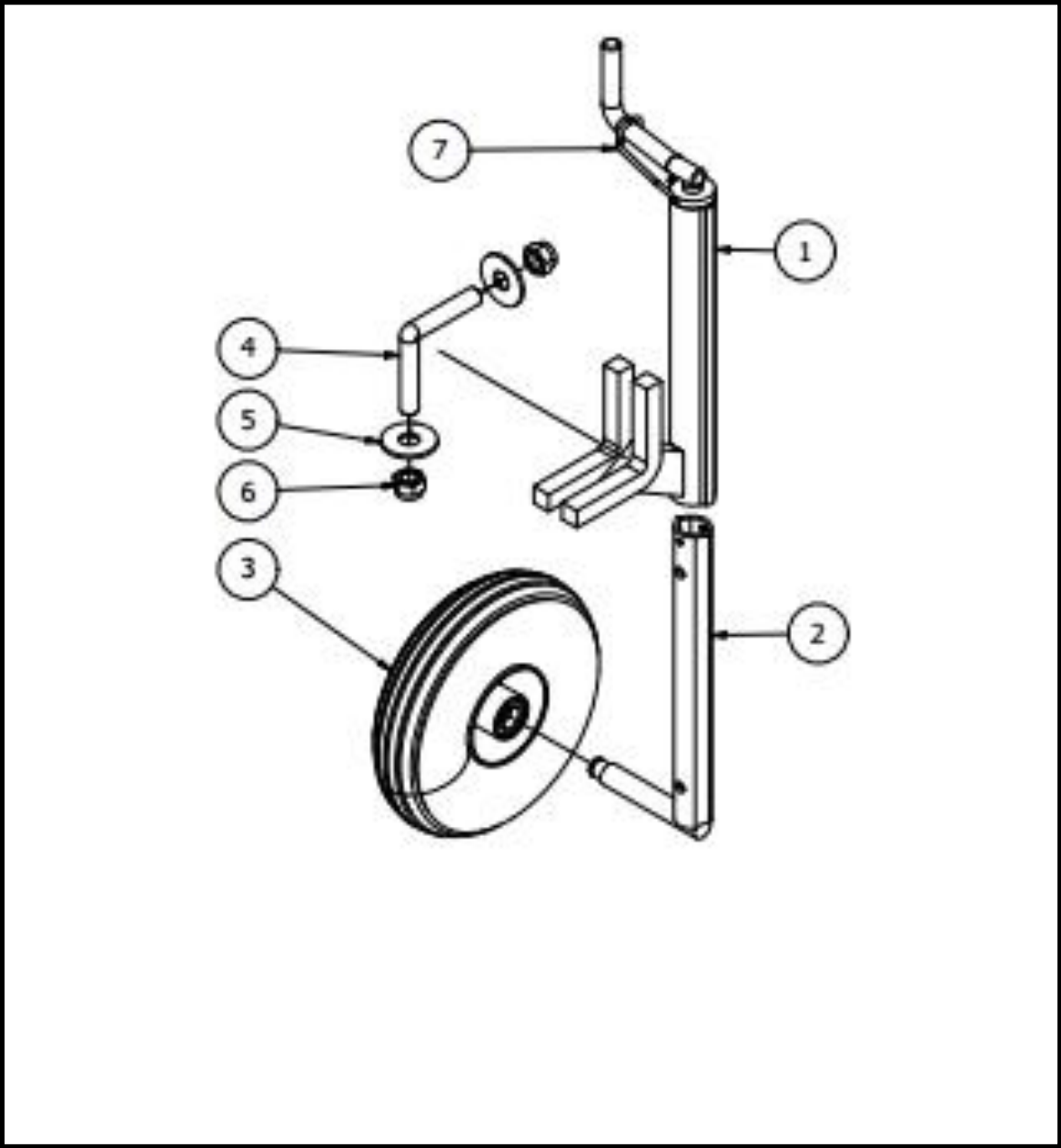
Fig 2: Drift



SPARE PARTS UM 5150 – OPERATION FIG. 2

Ref.	Art. No.	Qty	Item Description
1	287816	1	Rotor frame
2	289031	2	Rotor
3	289027	1	Rotor mount L
4	289035	1	Rotor mount R
5	289079	1	Chain wheel cover
6	289053	2	Bracket for cover
7	287830	1	Axle
8	289032	2	Gear
9	289024	2	Pinion
10	289033	2	Insert sleeve
11	289038	4	Spoke
12	289058	1	Arm for spoke wheel
13	288616	1	Pressure plate for spokes
14-21	289090	1	Chain w/chain wheel cpl.
14	289068	1	Chain cpl.
15	873540	1	Grease nipple M6
16	032131	2	ISO 4026 M10x16
17	289051	1	Front chain wheel
18-21	289060	1	Rear chain wheel cpl.
18	289052	1	Rear spoke wheel
19	289082	1	Anker plate w/threads
20	289059	1	Anker plate
21	860203	4	Umbraco lowering, flat DIN 7991 – M8 x 25
22	813630	4	Hex. Screw DIN 933 – M8 x 25
23	813535	2	Hex. Screw DIN 933 – M10 x 35
24	813545	4	Hex. Screw DIN 933 – M10 x 45
25	032645	4	Hex. Screw DIN 933 – M12 x 45
26	813670	1	Hex. Screw DIN 933 – M12 x 70
27	012903	16	Washer DIN 125 – A 8,4
28	012916	8	Washer DIN 125 – A 10,5
29	012922	11	Washer DIN 125 – A 13
30	012922	2	Washer DIN 9021 – 13
31	852158	12	Nylock nut DIN 9021 – M8
32	852160	2	Nylock nut DIN 985 – M10
33	852162	8	Nylock nut DIN 985 – M12
34	860200	8	Umbraco descender screw ISO 10642 – M8 x 25
35	873560	2	Grease nipple DIN 71412 – AM8 x 1
36	873550	2	Grease nipple DIN 71412 – AM10 x 1
37	011012	2	Clamping sleeve ISO 8752 – 6 x 30 A
38	808104	2	Wedge DIN 6885 – A 8 x 7 x 25
39	808105	2	Wedge DIN 6885 – A 8 x 7 x 28

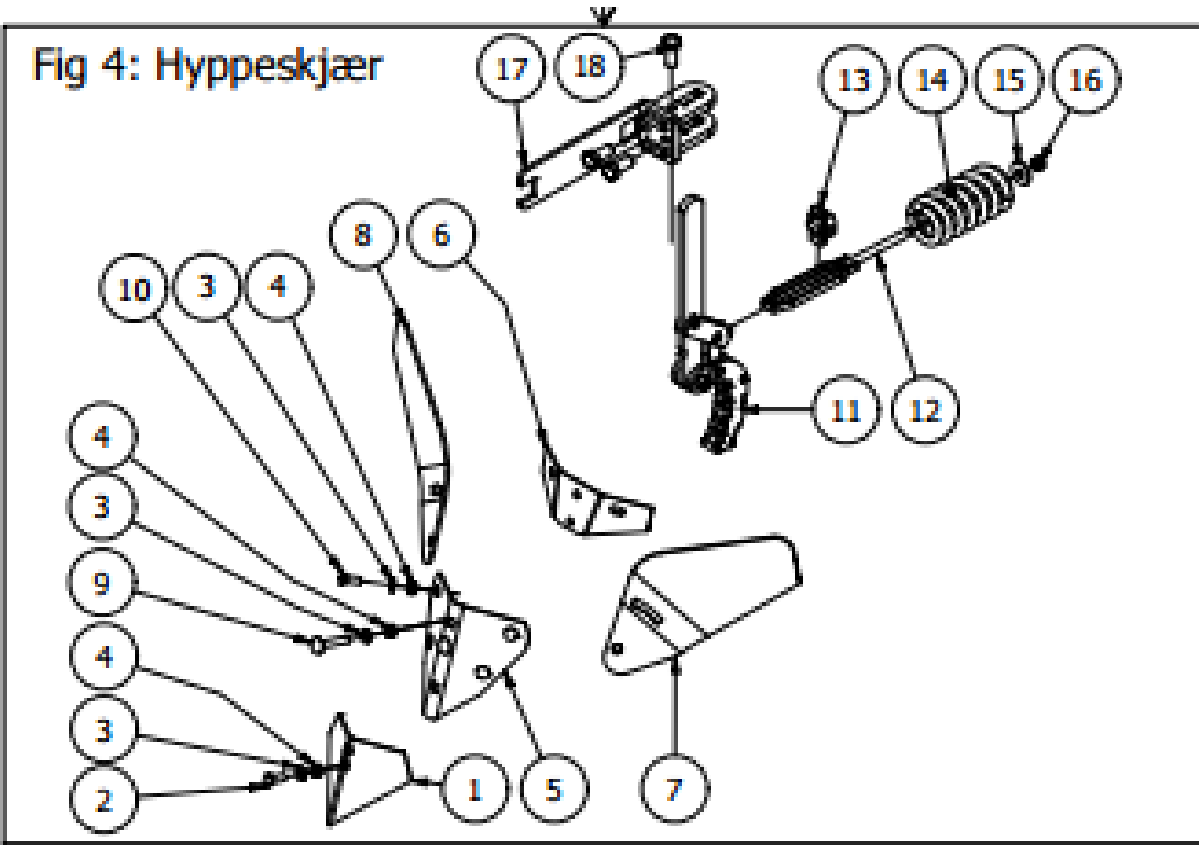
DEPT WHEEL FIG. 3



SPARE PARTS UM 5150 – DEPT WHEEL FIG. 3

Ref.	Art. No.	Qty	Item Description
1-7	289095	1	Dept wheel cpl.
1	3-155001	1	Outer pipe
2	4-155002	1	Inner pipe
3	241285	1	Wheel 4.00 x 4 cpl.
4	155004	1	Mounting bolt
5	012938	2	Washer DIN 9021 - 22
6	852167	2	Nylock nut DIN 985 – M20
7	288599	1	Locking spring

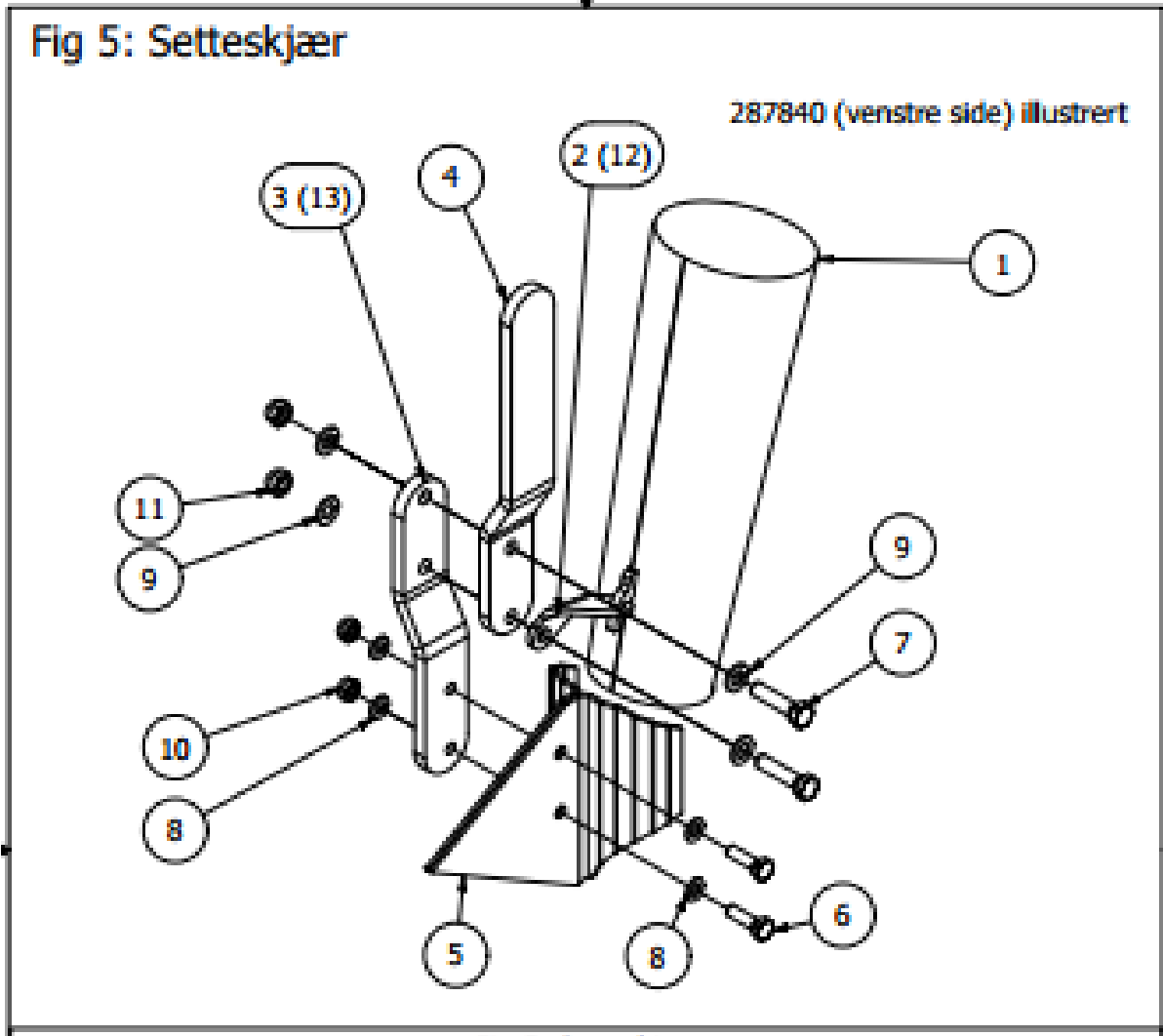
RIDGING SHOWEL FIG. 4



SPARE PARTS UM 5150 – RIDGING SHOWEL FIG. 4

Ref.	Art. No.	Qty	Item Description
1-10	270437	1	Ridging showel 450mm
1-4*	270453	1	Point w/bolt
1	270459	1	Point
2	823590	1	DS6007 M10 x 35
3	860160	7 (1*)	DIN 125 A10,5
4	852160	7 (1*)	DIN 985 M10
5	270450	1	Body
6	270447	1	Support plate
7	270441	1	Left wing
8	270442	1	Right wing
9	821570	2	DIN 603 M10 x 70
10	823530	4	Plough bolt M10 x 30
11-16	288799	1	Elastic hook
11	288796	1	Hook
12	288844	1	Spring bolt
13	289049	1	Spring brace
14	288812	1	Spring
15	012922	1	Washer DIN 9021 A13
16	852162	1	Nylock nut DIN 985 M12
17	289019	1	Mounting bracket
18	032735	3	Hex. screw DIN 933 M16 x 35

FURROW OPENER FIG. 5



SPARE PARTS UM 5150 – FURROW OPENER FIG. 5

Ref.	Art. No.	Qty	Item Description
1	289109	2	Chute
2-11	287840	1	Furrow opener R, assy
4-13	287841	1	Furrow opener L, assy
2	288146	1	Mounting ear, L
3	288149	1	Lower rod L
4	288147	1	Upper rod
5	287842	1	Furrow opener
6	813535	2	Hex. Screw DIN 933 M10 x 35
7	810650	2	Hex. Srew DIN 933 M12 x 50
8	012916	4	Washer DIN 125 A10,5
9	012919	4	Washer DIN 125 A13
10	852160	2	Nylock nut DIN 985 M10
11	852162	2	Nylock nut DIN 985 M12
12	288145	1	Mounting ear R
13	288148	1	Lower rod R
121	289095	1	



EU - DECLARATION OF CONFORMITY

Responsible person

Name	Atle Årslund
Position	General Manager
Company	Underhaug AS
Address	Torlandsvegen 3 4365 Nærbø, NORWAY
Phone	+47 51 43 49 78

Declares that the following machine:

Manufacturer:	Underhaug AS
Type:	<i>UM 5150 Potato Planter</i>
Serial Number:	
Production Year:	

complies with the following directive:

Maximum regulation 554 (for 2009-05-20-554) and meets essential health and safety requirements.

Basic standard ISO 12100

A handwritten signature in blue ink, appearing to read "Atle Årslund".

Atle Årslund

Nærbø, date



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