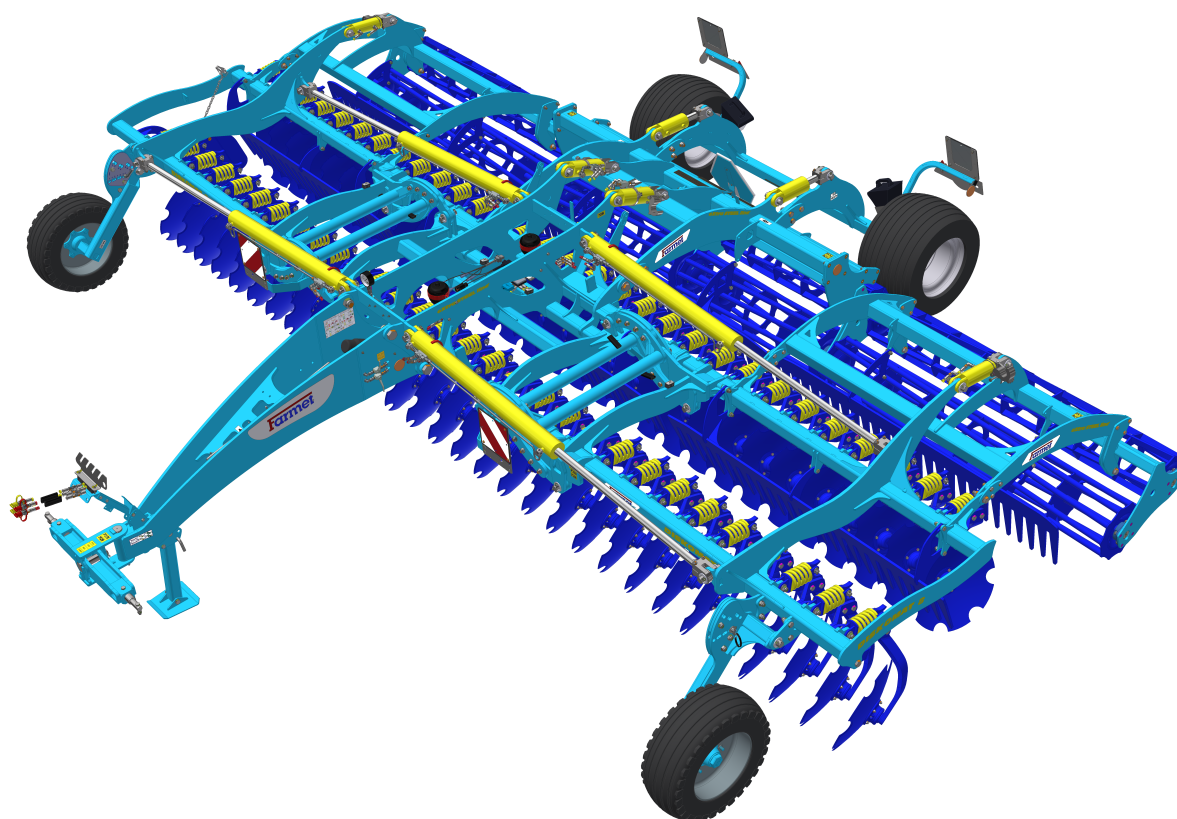


OPERATING MANUAL

DISKOMAT

5 PS | 6 PS | 8 PS



Edition: **7**

Effective from: **01.01.2022**

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PREFACE

Dear customer,

The agricultural machine you have purchased is a high-quality product of Farmet a.s. Česká Skalice.

You can fully utilise the advantages of your machine after thoroughly studying the operating manual.

The serial number of the machine is punched on the production label and written in the operating manual (Your Machine Characteristics). This machine serial number must be stated whenever ordering spare parts for possible repairs. The production label is located on the frame.

Use only spare parts for these machines according to the **Spare parts catalogue** officially issued by the manufacturer, Farmet a.s. Česká Skalice.

POSSIBILITIES OF USE OF YOUR MACHINE

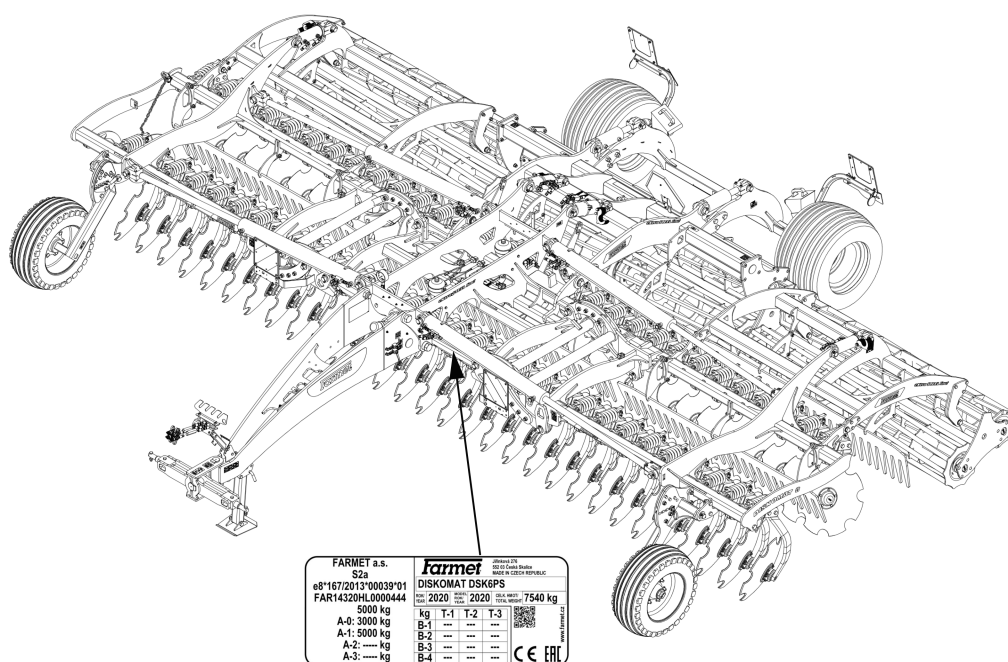
The **DISKOMAT** disc plough-harrow is intended for ploughing all types of soil up to the depth of 18 cm (7,1 in).

YOUR MACHINE CHARACTERISTICS

MACHINE TYPE :

MACHINE SERIAL NUMBER :

SPECIAL DESIGN OR ACCESSORIES :



IMPORTANT

READ CAREFULLY BEFORE USE

KEEP FOR FUTURE REFERENCE

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1 MACHINE LIMIT PARAMETERS

- The machine is designed for soil ploughing up to a depth of 18 cm (7,1 in) when agricultural soil cultivation. Another type of use exceeding the determined purpose is forbidden.
- Machine operation is performed by one person – the tractor driver.
- Machine operator must not use the machine in a different way, especially:
 - Transport of persons and animals on the machine structure,
 - Transport of burdens on the machine structure,
 - Aggregation of the machine with another towing equipment than stated in Chapter 8.1.

1.1 Technical parameters

PARAMETERS		DISKOMAT 5 PS	DISKOMAT 6 PS	DISKOMAT 8 PS
Working width		5 m (16,4 ft)	6 m (19,7 ft)	7,8 m (25,6 ft)
Transport width		3 m (9,84 ft)		
Transport height		3,3 m (10,83 ft)	3,3 m (10,83 ft)	4 m (13,1 ft)
Machine total length		6,6 m (21,65 ft)		
Working depth		6 – 18 cm (2,4 – 7,1 in)		
Number of discs ø620 mm (24,4 in)	front	20	24	30
	rear	20	24	30
Working performance		5 – 7,5 ha/h (12,4 – 18,5 ac/h)	6 – 9 ha/h (14,8 – 22,2 ac/h)	8 – 12ha/h (19,8 – 29,7 ac/h)
Towing means		150 – 220 kW (200 - 300HP)*	180 – 260 kW (240 – 350 HP)*	240 – 300 kW (320 – 400 HP)*
Working speed		10 – 15 km/h (6 – 9,5 mph)		
Maximum transport speed		25 km/h (15 mph)		
Maximum slope grade		6 (°)		
Tyre dimensions - transport axle	Tyre pressure	19,0/45 – 17 14 PR		400 kPa (58 Psi)
Tyre dimensions - pneumatic rollers	Tyre pressure	10,0/75 – 15,3 10 PR		550 kPa (80 Psi)
Tyre dimensions - Tracing wheels	Tyre pressure	10,0/75 – 15,3 14 PR		400 kPa (58 Psi)
Machine weight		6 200 kg (13 700 lb)	6 950 kg (15 320 lb)	8 660 kg (19 100 lb)

* Recommended towing means, the real towing force may significantly vary according to the processing depth, soil conditions, land slope, working body wear and adjustment.

1.2 Safety statement



This warning sign warns about an immediate dangerous situation ending with death or severe injury.



This warning sign warns about a dangerous situation ending with death or severe injury.



This warning sign warns about a situation that may end with a smaller or slight injury. It also warns about dangerous actions related to the activity that could lead to an injury.

2 GENERAL INSTRUCTIONS FOR USE

- The machine is made in accordance with the latest equipment state and approved safety regulations. However, dangers of user or third person injury or machine damage or creation of other material damage may arise during use.
- Use the machine only in a technically sound condition, in accordance with its purpose, aware of possible dangers, and while adhering to the safety instructions of this operating manual!
The Manufacturer is not liable for damages caused by the use of the machine that is in contradiction with the limit parameters of the machine and with the instructions for the use of the machine. The User bears the risk.
Immediately remove especially the failures that may negatively affect safety!
- Machine operation may be performed by a person authorised by the operator under these conditions:
 - It must own a valid driver's licence of the corresponding category,
 - It must be demonstrably familiarised with the safety regulations for work with the machine and must practically master the machine operation,
 - The machine may not be operated by juveniles,
 - It must know the meaning of the safety signs located on the machine. Their respecting is important for safe and reliable machine operation.
- Maintenance and servicing repairs on the machine may only be performed by a person :
 - Authorised by the operator,
 - Educated in the machinery field with knowledge of repairs of similar machines,
 - Demonstrably familiarised with safety regulations for work with the machine,
 - During a repair of a machine connected to a tractor, it must own a driver's licence of the corresponding category.
- Machine operator must secure the safety of other persons when working with the machine or transporting the machine.
- During machine work in the field or during transport, the operator must control the machine from the tractor's cabin.
- The operator may enter the machine structure only with the machine at rest and blocked against movement, namely only for these reasons:
 - Adjustment of the machine working parts,
 - Repair and maintenance of the machine,
 - Release and securing of spherical valves of the axle,
 - Securing of spherical valves of the axle before folding the side frames,
 - Adjustment of the working parts of the machine after unfolding the side frames.



- When stepping on the machine, do not step on roller tyres or other rotary parts. Those may turn and you can cause very serious injuries by the subsequent fall.
- Any changes or modifications of machine may be performed only with written consent of the manufacturer.
For possible damage arisen due to ignoring this instruction, the producer bears no responsibility.
The machine must be maintained equipped with prescribed accessories and equipment including safety marking.
All warning and safety signs must be legible and in their places. In case of damage or loss, these signs must be immediately renewed.

- The operator must have the Operating Manual with the work safety requirements available at any time when working with the machine.



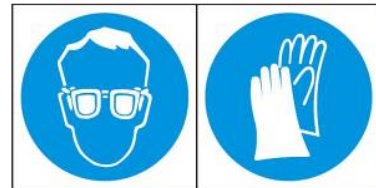
- The operator must not consume alcohol, medicines, narcotic and hallucinogenic substances that decrease his attention and coordination capabilities while using the machine.

If the operator must use medicines prescribed by a physician or uses freely sold medicines, he must be informed by a physician, whether he is capable of responsible and safe operation of the machine under these circumstances.

Protective equipment :

For operation and maintenance use:

- tight clothes
- protective gloves and goggles against dust and sharp parts of the machine



3 MACHINE TRANSPORT USING TRANSPORT MEANS

- The transport means designed for machine transport must have the load capacity minimally identical with the weight of the transported machine. The total weight of the machine is stated on the production label.
- The dimensions of the transported machine including the transport means must comply with the valid regulations for road traffic (decrees, laws).
-  • The transported machine must be always fastened to the transport means so that its spontaneous loosening could not happen.
- The carrier is responsible for damage caused by the loosening of incorrectly or insufficiently fastened machine to the transport means.

4 MACHINE HANDLING USING LIFTING EQUIPMENT

- The lifting equipment and tying means designed for handling of the machine must have their load capacity at least identical with the weight of the handled machine.



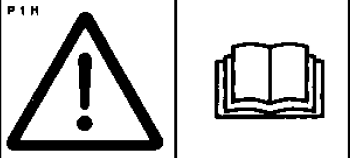
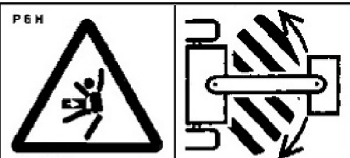
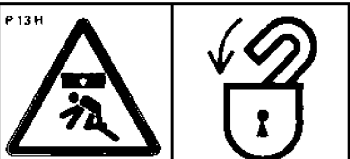
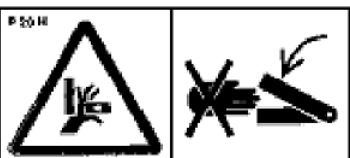
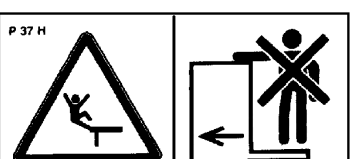
- Machine fastening for handling may only be performed in places designed for that and marked with self-adhesive labels showing the "chain" symbol. 
- After fastening (suspending) at designated points, it is forbidden to move in the space of possible reach of the handled machine.

5 WORK SAFETY LABELS

Warning safety labels serve for operator protection.

General:

- Strictly observe the warning safety labels.
- All safety instructions also apply to other users.
- Upon damage or destruction of the aforementioned "SAFETY LABEL" located on the machine, THE OPERATOR IS OBLIGED TO REPLACE IT WITH A NEW ONE!!!
- The position, appearance, and precise meaning of work safety labels on the machine is determined in the following tables and in the figure (Fig. 1).

WARNING SAFETY LABEL	LABEL TEXT	MACHINE POSITION
	Before handling the machine, carefully read the operating manual. Observe the instructions and safety regulations for machine operation during use.	P 1 H
	When connecting or disconnecting, do not step between the tractor and the machine, also do not enter this space, if the tractor and the machine are not at rest and the engine is not turned off.	P 2 H
	Stay outside the reach of the tractor - agricultural machine set, if the tractor engine is in operation.	P 6 H
	Before commencing the machine transport, secure the axle with spherical valves against unexpected drop. (DSK 5 - 8 PS)	P 13 H
	When folding the side frames, do not reach into the space of the machine folding joints. There is a danger of cutting when setting the depth of the machine.	P 20 H
	Travelling and transport on the machine structure is strictly forbidden.	P 37 H

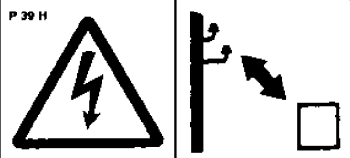
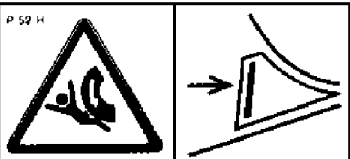
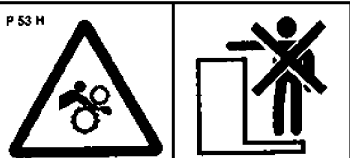
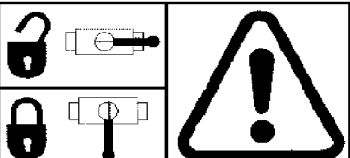
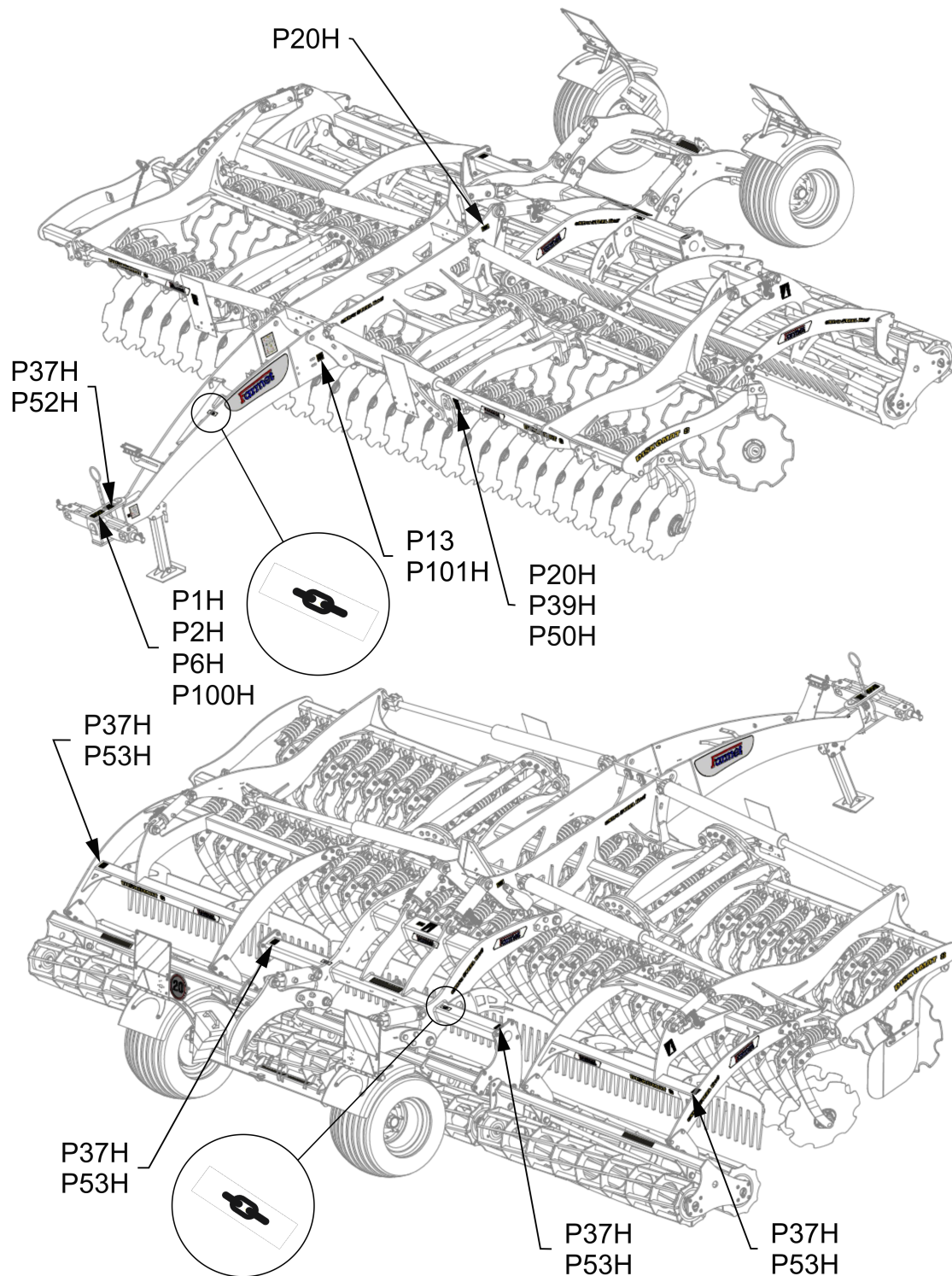
	When working and transporting the machine, maintain safe distance from the electric appliances. (DSK 5 – 8 PS)	P 39 H
	When folding and unfolding the side frames, stay outside their reach.	P 50 H
	Secure the machine against unwanted movement by positioning on its working bodies (discs). U strojů DSK 5 – 8 PS zajistěte kola nápravy podkládacími klíny.	P 52 H
	Do not approach the rotary parts of the machine, if these are not at rest, i.e. they do not turn.	P 53 H
	It is strictly folding and unfolding the side frames on slopes or inclined surfaces.	P 100 H
	The shown positions of the lever and the function of the hydraulic spherical valve located on the piston rod. (DSK 5 – 8 PS)	P 101 H

Fig. 1 - Location of safety labels on the machine

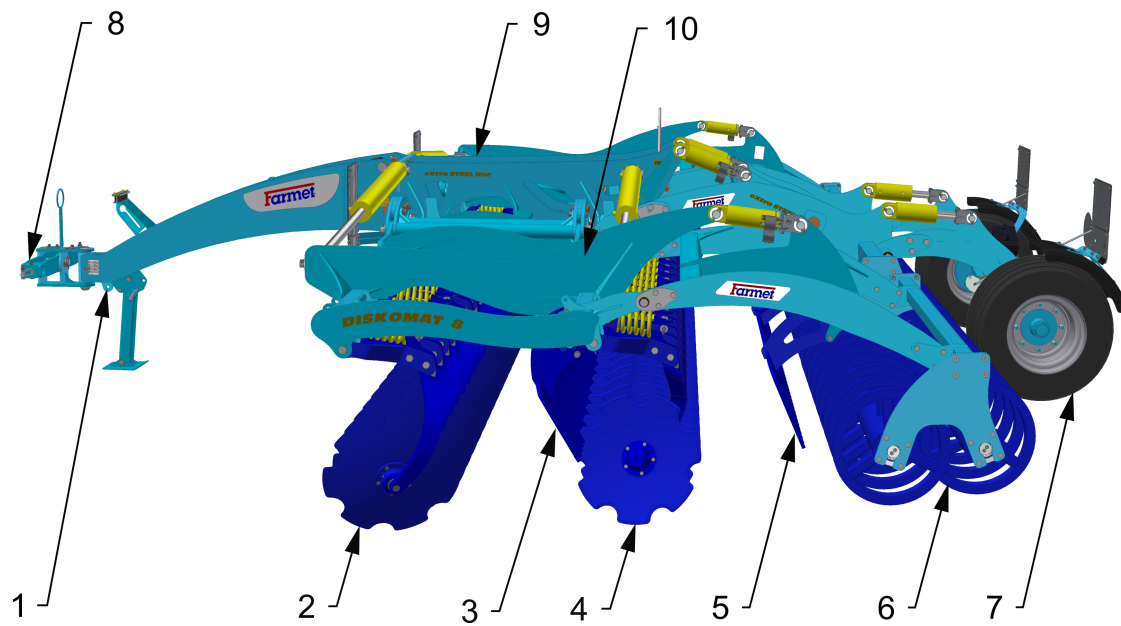


6 DESCRIPTION

The **DISKOMAT 5, DISKOMAT 6, DISKOMAT 8** machines are constructed as semi-carried.

The basic version consists of a tractive pole with a TPS suspension bar with $\varnothing 36$ mm or $\varnothing 60$ mm pivots for the TPS 3 and KIROVEC category, (when requested, the machine can be equipped with a hydraulic pole for the fixed tractor hitch with $\varnothing 50$ mm/ $\varnothing 70$ mm or with K80 hitch). There are a central frame with the transportation axle and two side frames. There are $\varnothing 620$ mm. working discs in two rows on the central and side frames and deflectors behind the front and rear disc row which regulate and crumble the flying soil. There are rubber-tyred rollers in the rear that compact the loosened soil.

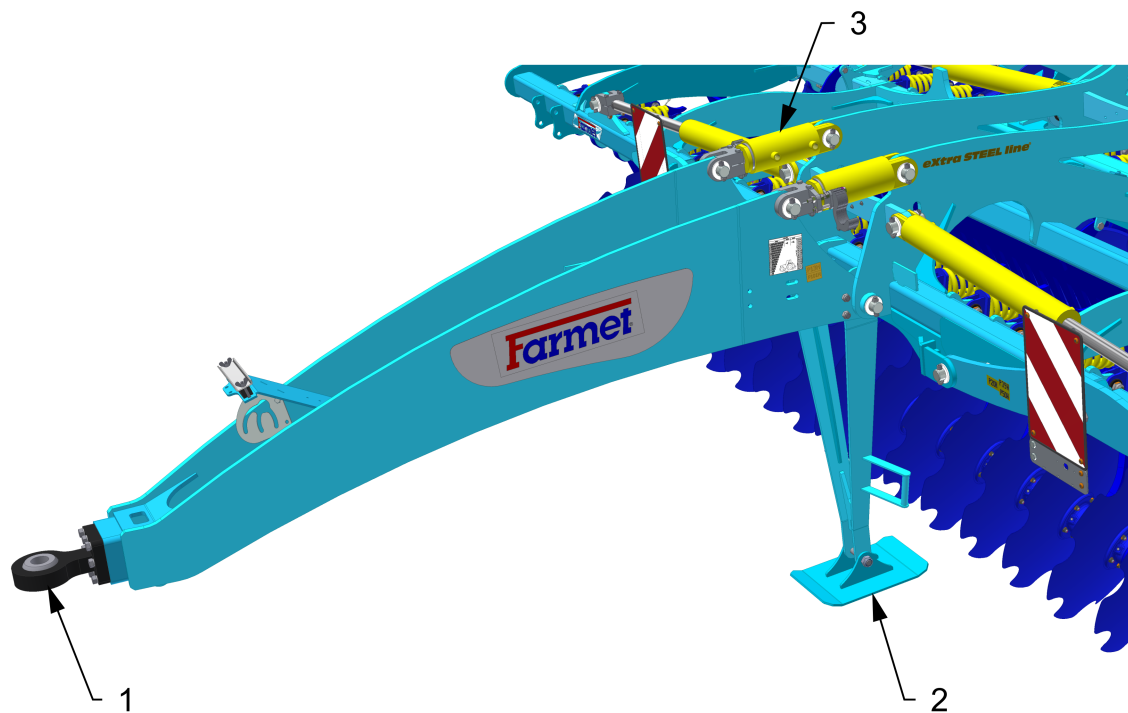
6.1 Working parts of the machine



- 1 – Tractive pole with a folding leg
- 2 – Front disc row
- 3 – Front deflectors
- 4 – Rear disc row
- 5 – Rear deflectors

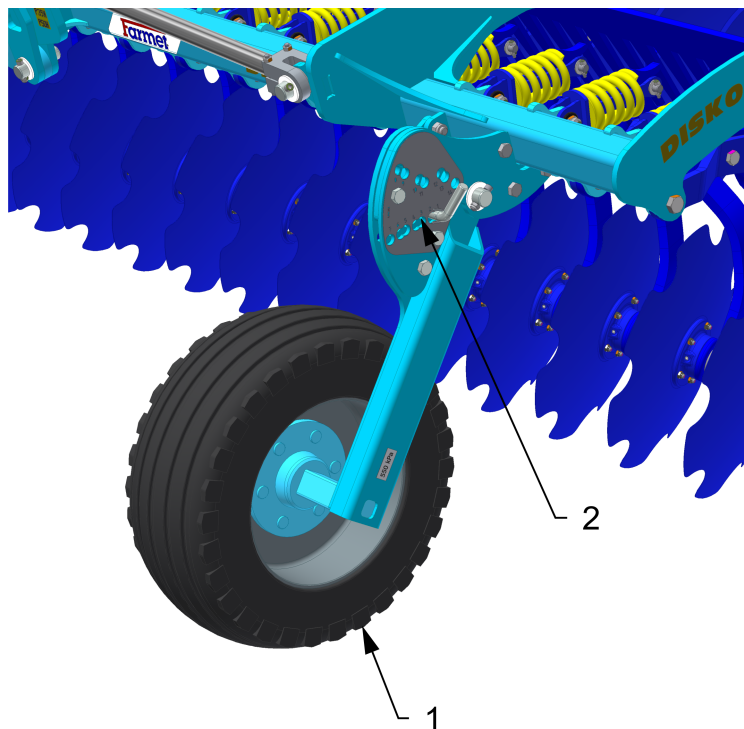
- 6 – Rear roller
- 7 – Transport axle
- 8 – Drawbar
- 9 – Central frame
- 10 – Side frames

When requested, the machine can be equipped with a hydraulic pole for the fixed tractor hitch allowing machine depth setting.



- 1 – Hitch loop
- 2 – Folding leg
- 3 – Depth setting

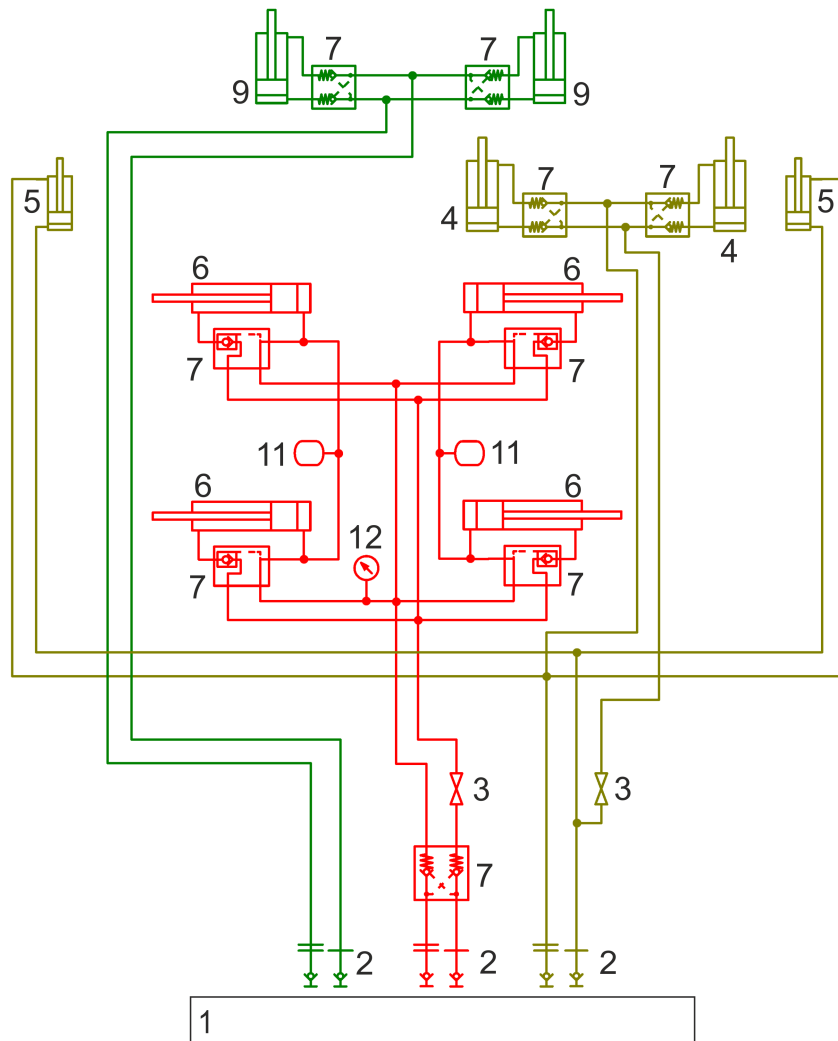
When requested, the machine can be equipped with front tracing wheels allowing machine depth setting.



- 1 – Front tracing wheel
- 2 – Depth setting

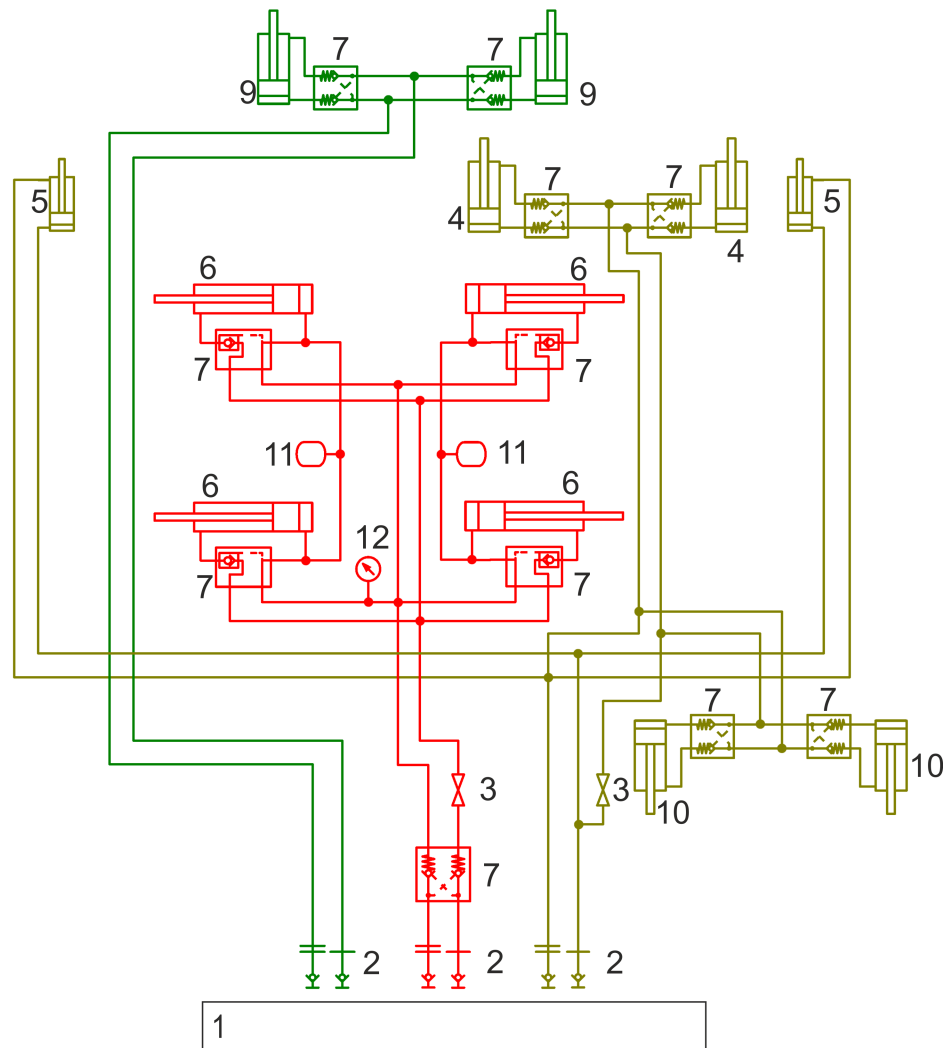
6.2 Hydraulics

Hydraulic diagram of DISKOMAT 5-8
Drawbar into arms / other types of rollers



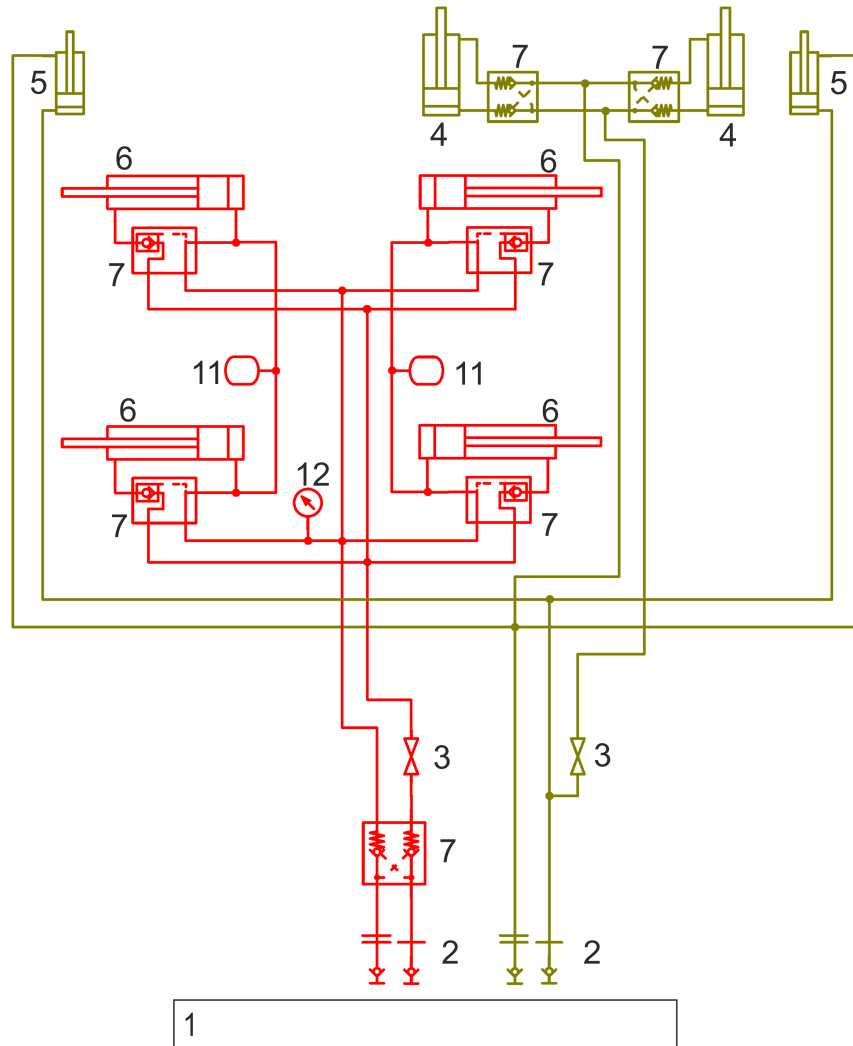
- | | |
|---|-----------------------------------|
| 1 – Control distributor (tractor) | 7 – Hydraulic closing valve |
| 2 – Hydraulic coupling | 8 – Safety valve |
| 3 – Closing cock | 9 – Hydraulic cylinder (axle) |
| 4 – Hydraulic cylinder (Central roller) | 10 – Hydraulic cylinder (drawbar) |
| 5 – Hydraulic cylinder (side Rubber-tyred roller) | 11 – Hydraulic accumulator |
| 6 – Hydraulic cylinder (folding side frames) | 12 – Manometer |

Hydraulic diagram of DISKOMAT 5-8
Drawbar into fixed hitch / other types of rollers



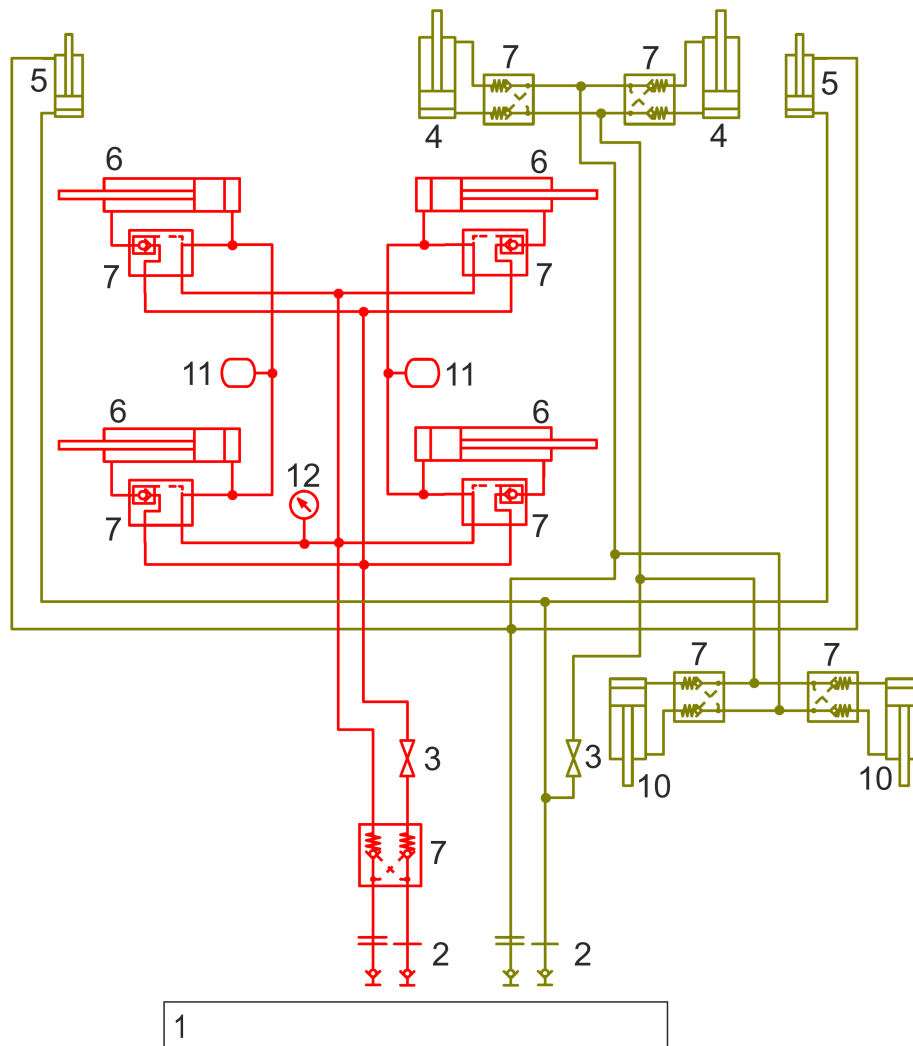
- | | |
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| 5 – Hydraulic cylinder (side Rubber-tyred roller) | 11 – Hydraulic accumulator |
| 6 – Hydraulic cylinder (folding side frames) | 12 – Manometer |

Hydraulic diagram of DISKOMAT 5-8
Drawbar into arms / pneumatic roller



- | | |
|---|-----------------------------------|
| 1 – Control distributor (tractor) | 7 – Hydraulic closing valve |
| 2 – Hydraulic coupling | 8 – Safety valve |
| 3 – Closing cock | 9 – Hydraulic cylinder (axle) |
| 4 – Hydraulic cylinder (Central roller) | 10 – Hydraulic cylinder (drawbar) |
| 5 – Hydraulic cylinder (side Rubber-tyred roller) | 11 – Hydraulic accumulator |
| 6 – Hydraulic cylinder (folding side frames) | 12 – Manometer |

Hydraulic diagram of DISKOMAT 5-8
Drawbar into fixed hitch / pneumatic roller



- | | |
|---|-----------------------------------|
| 1 – Control distributor (tractor) | 7 – Hydraulic closing valve |
| 2 – Hydraulic coupling | 8 – Safety valve |
| 3 – Closing cock | 9 – Hydraulic cylinder (axle) |
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| 5 – Hydraulic cylinder (side Rubber-tyred roller) | 11 – Hydraulic accumulator |
| 6 – Hydraulic cylinder (folding side frames) | 12 – Manometer |



Parts of the hydraulic system of the machine, which are under pressure, are forbidden to disassemble. Hydraulic oil that penetrates the skin under high pressure causes severe injuries. In case of injury, seek a physician immediately.

7 MACHINE ASSEMBLY AT THE CUSTOMER

- The operator must perform the assembly according to the instructions of the producer, best in cooperation with the expert servicing technician determined by the producer.



- The operator must secure a functional test of all assembled parts after the completion of the machine assembly.
- The operator must secure that the handling of the machine using lifting equipment during its assembly is in accordance with chapter „4“.

8 COMMISSIONING

- Before taking over the machine, test and check, whether damage occurred during transport and whether all parts contained in the bill of delivery were supplied.



- Before commissioning the machine, carefully read this operating manual, especially Chapters 1–5. Before the first use of the machine, familiarise yourselves with its controls and overall function.
- During work with the machine, observe not only the instructions of this operating manual but also generally valid regulations of work safety, health protection, fire and transport safety, and environmental protection.
- The operator must check the machine before every use (commissioning) from the standpoint of completeness, work safety, work hygiene, fire safety, transport safety, and environmental protection. A machine showing signs of damage must not be commissioned.
- Aggregation of the machine with the tractor is to be performed on a flat and hardened surface.
- When working on slopes, observe the lowest allowable slope grade of the set **TRACTOR - MACHINE**.
- Before starting the tractor motor, check whether no person or animal is in the working space of the set and push the warning sound signal.
- The operator is responsible for the safety and all damage caused by the operation of the tractor and the connected machine.
- The operator is obliged to adhere to the technical and safety regulations of the machine determined by the producer when working.
- The operator is obliged to retract the working bodies of the machine from the ground when turning at the headland.
- The operator is obliged to observe the prescribed working depths and speeds stated in the manual in. chap.1.
- The operator is obliged to lower the machine to the ground and secure the set against movement before leaving the tractor cabin.

DECREASE OF SOIL PRESSURE TO A VALUE LOWER THAN 200 KPA (29 PSI)

To decrease the specific pressure on soil (lower than 200 kPa / 29 Psi) at the turns on the headland, raise the machine on the pole by using the hydraulic tractor shoulders and rear rollers. Turn around when the machine is unfolded and resting on rollers.

8.1 Agregation to a tractor

- The machine may only be connected to a tractor with a service weight and parameters allowing for safe work with the attached machine and its safe transportation on roads.
- The machine operator must observe all generally valid regulations of work safety, health protection, fire safety, and environmental protection.
- The operator may connect the machine exclusively to a tractor that is equipped with a rear three-point suspension (or bottom fixed hitch) and a functional undamaged hydraulic system.
- The table of requirements for the towing means for work with the machine:

Requirement for the tractor engine power for disc plough-harrow		DISKOMAT 5 PS	150 – 220 kW (200 – 300 HP)
		DISKOMAT 6 PS	180 – 260 kW (240 – 350 HP)
		DISKOMAT 8 PS	240 – 300 kW (320 – 400 HP)
Requirement for the tractor's TPS	Three-point hitch arms	Spacing of the lower suspension joints (measured at the joint axes)	1010±1,5 mm (39,76 in)
		Øof the hole of the lower suspension joints for the machine suspension pivots	37,5 mm (1,48 in)
	Fixed hitch	Height of the bottom fixed hitch	500 – 600 mm (19,7 - 23,6 in)
		Mechanism of aggregation of the bottom fixed hitch	Pin Ø 50 mm (1,96 in)
			Pin Ø 70 mm (2,75 in)
			Ball K80
Requirement for the tractor's hydraulic system		Side frame folding circuit	Circuit pressure 200 bar (2900 Psi), 2 pcs of quick-coupler sockets ISO 12,5
		Circuit for lifting the machine on the rollers	Circuit pressure 200 bar (2900 Psi), 2 pcs of quick-coupler sockets ISO 12,5
		Axle lifting circuit*	Circuit pressure 200 bar (2900 Psi), 2 pcs of quick-coupler sockets ISO 12,5
Requirement for the pneumatic tractor system		Machine axle braking circuit	Circuit pressure min. 6 bar – max. 8,5 bar (87-123 Psi), 1 pc coupling head of single-hose brakes

* not valid for machines with double pneumatic-tyred rollers

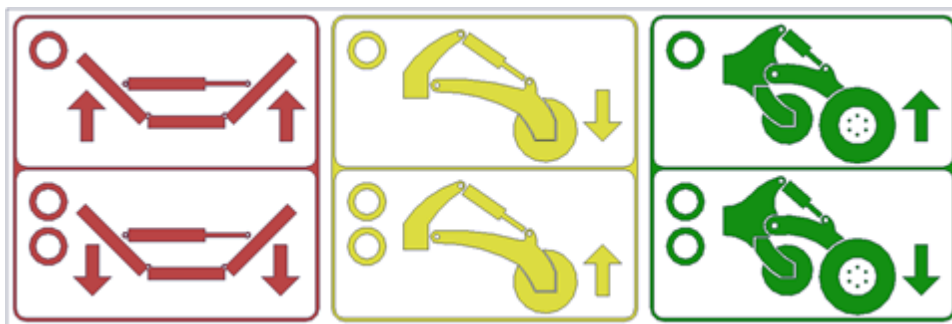
- Connect the machine using the TPS suspension bar to the lower arms of the rear TPS of the tractor, secure the TPS arms using pins against disconnecting, or connect the machine to the bottom fixed hitch and secure it against disconnecting.
- If the drawbar is equipped with a safety chain, connect it to the tractor.



When connecting, no persons may stay in the space between the tractor and the machine.

8.2 Hydraulics connection

- Connect the hydraulics only when the hydraulic circuits of the machine and the tractor (aggregate) are in a pressure-less condition.
- The hydraulic system is under high pressure. Regularly check for leaks and immediately remove obvious damage of all lines, hoses, and pipe unions.
- When seeking and removing leaks, use only the suitable tools.
- For connecting the hydraulic system of the machine to the tractor, use the plug (on the machine) and the socket (on the tractor) of the quick-couplers of the same type. Perform the connection of the quick-couplers of the machine to the hydraulic circuits of the tractor so that the folding of the side frames (RED CIRCUIT) is on one control circuit, axle lifting (or lifting the axle and the drawbar) (YELLOW CIRCUIT) on the other control circuit, or the separate circuit of the axle (GREEN CIRCUIT) on the third control circuit.



Red Circuit 1 tape – for folding side frames into the transport position 2 tapes – for unfolding side frames into the working position	Yellow Circuit 1 tape – lifting the machine 2 tapes – recessing the machine	Green Circuit 1 tape – lowering the machine from the axle 2 tapes – lifting the machine on the axle Separate axle circuit (for all types of cylinders except pneumatic):
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In order to prevent accidental or foreign person (children, passengers) caused movement of the hydraulics, the control switchboards on the tractor must be secured or blocked in the transport position.

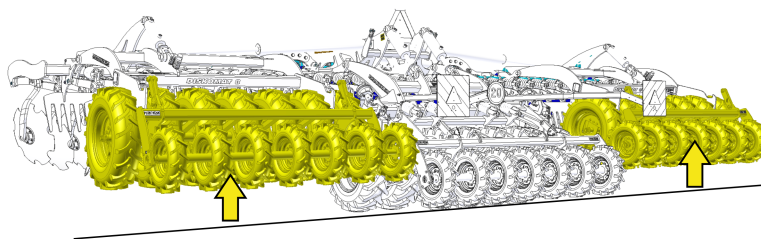
8.3 Folding and unfolding of the machine

- The hydraulics for the folding and unfolding must be connected to the double-action control unit.
- ⚠ • The operator must ensure that during folding and unfolding of the side frames, no person or animal is within their reach (i.e. at the place of their impact) or vicinity.
- ⚠ • Perform folding and unfolding on flat and solid surfaces or laterally to the slope with the fully open control unit.
- Only perform folding or unfolding with a machine that is lifted on the axle and the side rubber-tyres of the rollers are recessed, i.e. their piston-rods are retracted.
- Remove stuck soil from folding points, soil may impair function and cause damage to the mechanics.
- During folding or unfolding, check the side frames and have them continuously fold into the end position to the stoppers.

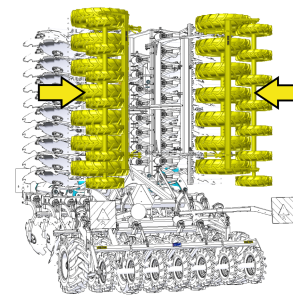


CAUTION!!! The machine must be lifted on the axle and the side rubber-tyres of the rollers must be recessed, i.e. their piston-rods must be retracted, when the machine is folded and unfolded. Otherwise, the wheels on the side rollers may get damaged.

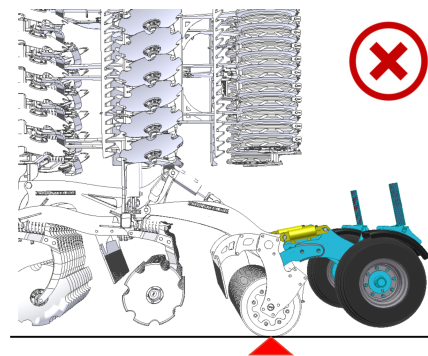
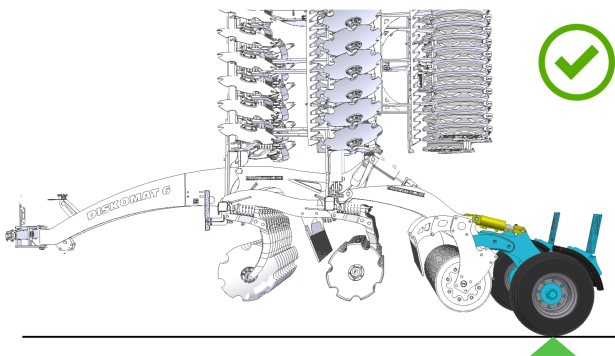
machine prepared for folding



machine prepared for unfolding

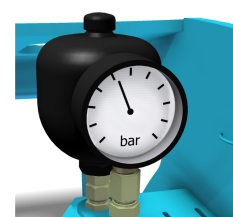


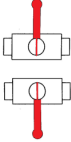
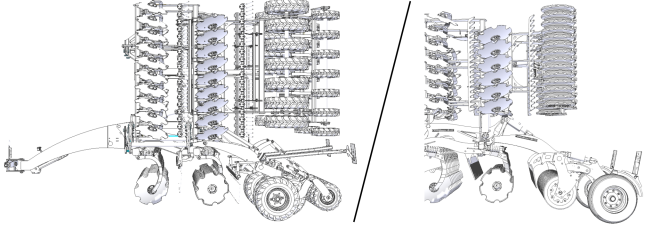
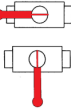
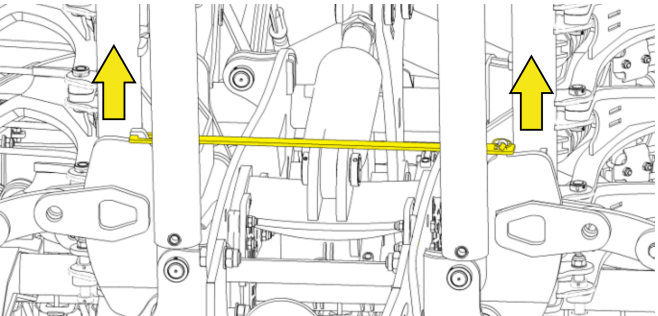
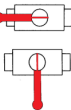
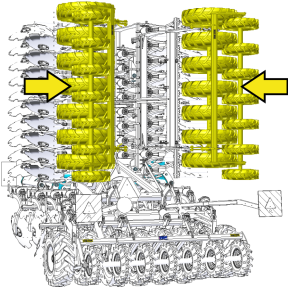
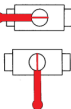
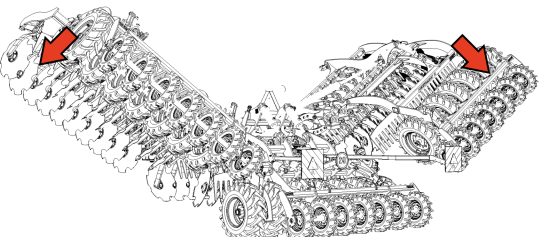
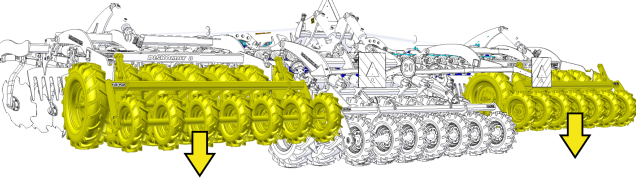
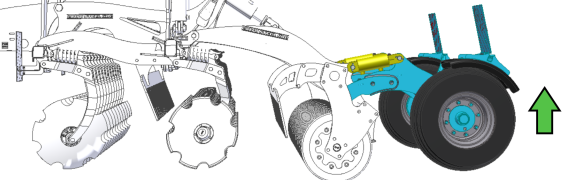
CAUTION!!! If the machine has a separate axle, it always has to be lifted on the axle prior to the start of folding and when folded!

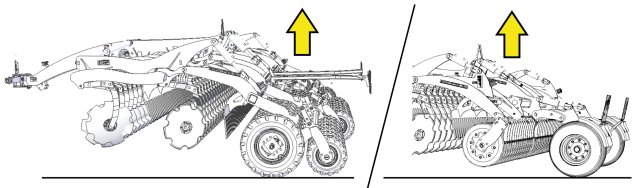
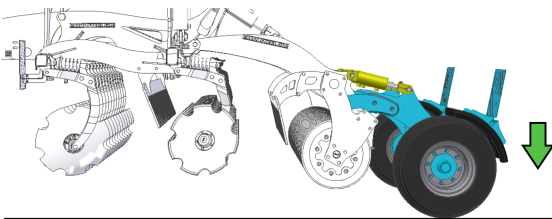
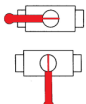
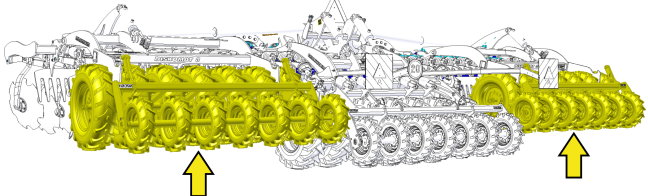
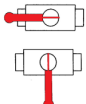
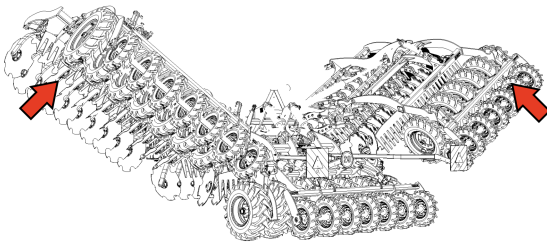
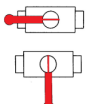
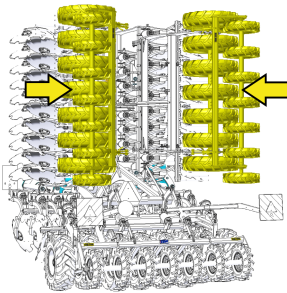
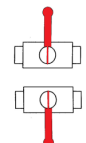
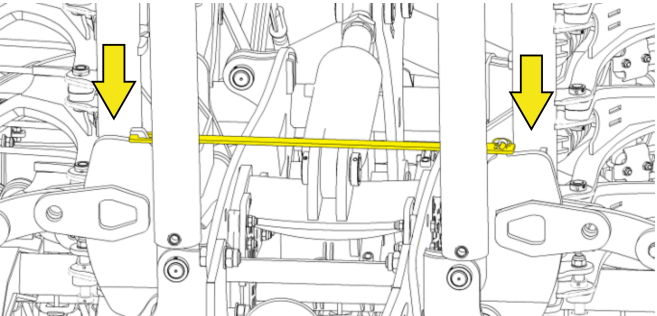


SETTING THE DOWN PRESSURE OF SIDE FRAMES

- When the machine has been unfolded, the down pressure of the side frames must be adjusted to ensure optimal terrain tracing.
- Set the value of 165 bar (2393 Psi) on the pressure gauge using the circuit for unfolding.



PROCEDURE FOR UNFOLDING OF THE MACHINE			
Description of the task	Position of ball valves	Pressure in the hose	Schema
1. The folded machine must be lifted on the axle (or on the axle and the drawbar) and the axle ball valve of the central roller (bottom valve) must be closed.			
2. Remove the side frame securing rod and secure it on the machine pole for work.			
3. The side rollers must be "recessed", i.e. their piston-rods must be retracted.			
4. Unfold the machine			
5a. Lower the side rollers to the ground so that the machine evenly stands on all rollers.			
5b. When the machine is equipped with a separate axle, insert the piston-rods of the axle until the machine rests on the rollers.			

PROCEDURE FOR FOLDING THE MACHINE			
Description of the task	Position of ball valves	Pressure in the hose	Schema
1a. Lift the unfolded machine on all rollers, or on rollers and the drawbar.			
1b. When the machine is equipped with a separate axle, lift the machine also on the axle.			
2. Close the ball valve of the axle – the central roller (bottom valve) and use the yellow circuit to lift the side rollers so that the machine is standing.			
3. Fold the machine			
4. Check that the side rollers are correctly folded.			
5. Secure the side frames by the securing rod in the front, close ball valves.			

9 MACHINE TRANSPORT ON ROADS

Transport position of the machine



- Connect the machine to the tractor using the two-point suspension device (TPS 3), or to the fixed bottom hitch using a pin or a ball.
- Connect the machine brakes to the tractor with the use of the brake head: release the brakes before raising the machine on the axle.
- Lift the machine on the axle, set the spherical valve of the axle into the closed position.
- Fold the side frames into the transportation position.
- The machine must be equipped with removable shields with marking of contours, functional lighting, and the board of the rear marking for slow vehicles (according to ECE No. 69).
- The lighting must be activated during travelling on roads.
- The tractor must be equipped with a special light device of an orange colour, which must be activated during travelling on roads.
- The maximum transport speed during travelling on roads is **25km/h (15mph)**.



Ban of transport with decreased visibility!

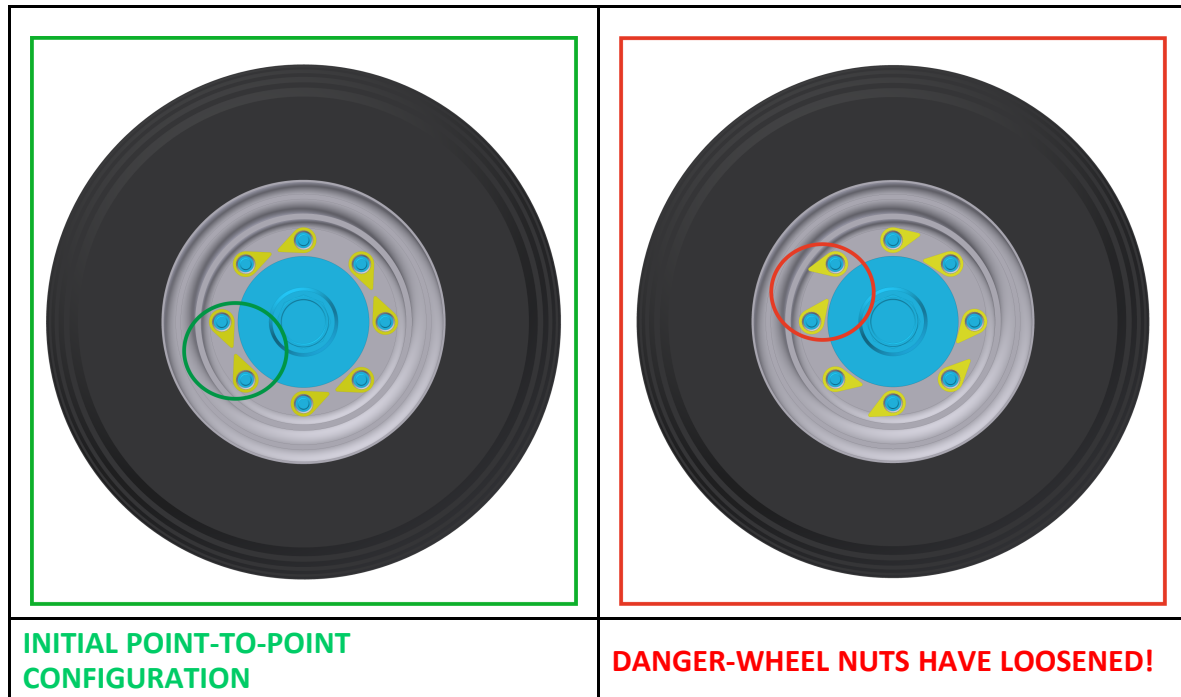
- Bring the machine into the transport position.
- The operator is obliged to pay increased attention during transport on roads, due to the transport dimensions of the machine.
- The operator must observe the valid regulations for transport on roads (laws, decrees) after connecting the machine to the tractor, for reason of a change of the axle load. The driving properties of the set also change depending on the terrain nature, adapt the manner of driving to these conditions.
- The operator is obliged to secure sufficient outlook during reversing from his position of the tractor driver. In case of insufficient outlook, the operator is obliged to call a competent and informed person.
- The operator must fold the side frames for transport and secure them against unwanted unfolding by disconnecting the hydraulic circuit of the machine and the tractor.
- The operator must secure the arms of the rear TPS of the tractor in the transport position during road transport, i.e. prevent unexpected arm drop using the hydraulic arm control lever. At the same time, the arms of the rear TPS of the tractor must be secured against side swinging.
- During machine transport on roads, the operator must observe the valid laws and decrees that deal with this topic and which specify the relationships of the tractor axle load depending on transport speed.

Checking the nuts on the transport axle

- Use the plastic arrow “Check Point” to check for loose nuts. It promptly shows the condition of the nuts, whether they are loose or not.
- Always check the Check Points before driving.
- When the arrows are not facing one another, the nuts have to be tightened to the required torque and the Check Point arrows have to point against one another as shown in the green picture.

Torque for the axle nuts:

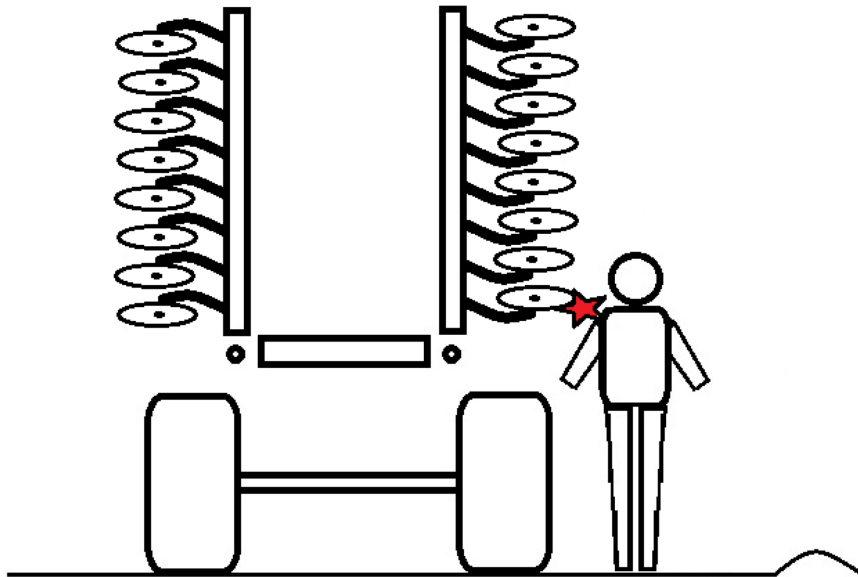
- M18x1,5 - 265 Nm
- M20x1,5 - 343 Nm
- M22x1,5 - 440 Nm



9.1 Sharp machine projections



- The machine contains sharp structural projections
- **It is prohibited to operate and transport the machine on roads when visibility is reduced!!** - Persons or objects, or other road traffic participants could get caught.
- **The machine operator must be extra cautious when driving on roads and consider the width of the machine and safe distance from persons, vehicles and objects, or other road traffic participants!!**

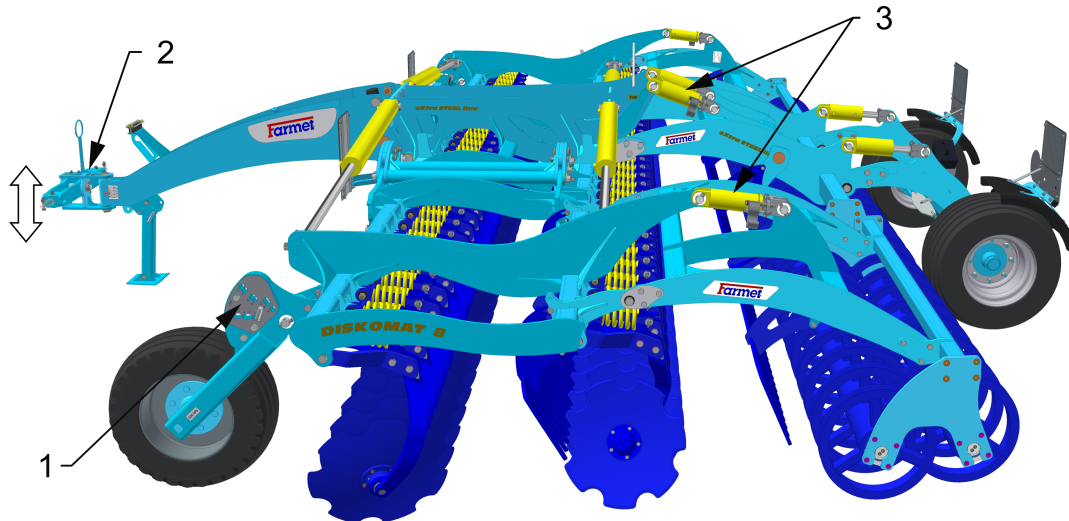


10 MACHINE ADJUSTMENT

The operating depth is adjusted in the following way:

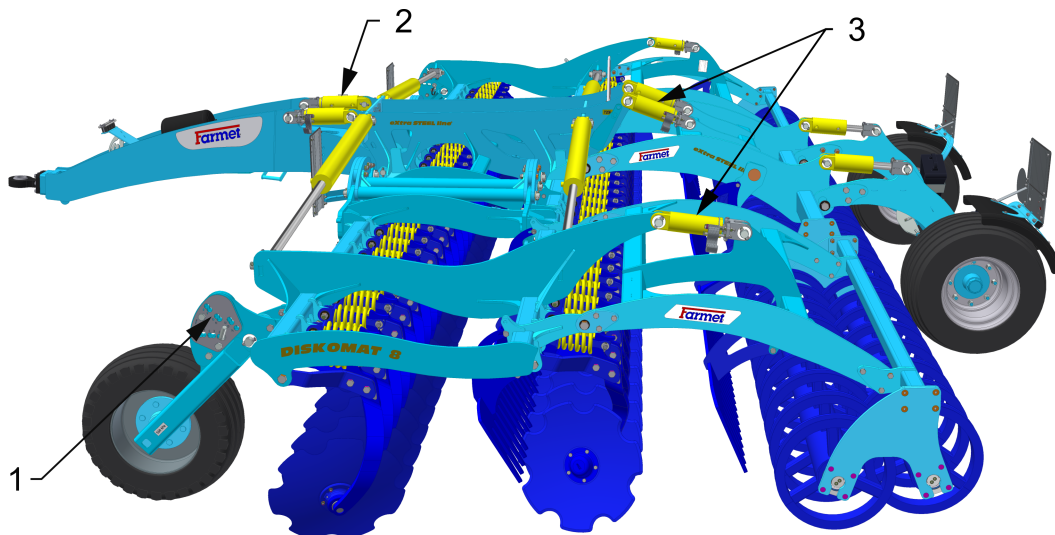
- 1) By setting the depth on the piston rods of the rear rollers
- 2) By setting the depth of the front part of the machine
 - a) On the pole
 - b) On the tracing wheels

Machine adjustment with pole in the tractor shoulders (TPS3-4)



- 1 – Adjusting depth of tracing wheels
- 2 – Adjusting pole height by tractor shoulders
- 3 – Adjusting machine depth by rollers

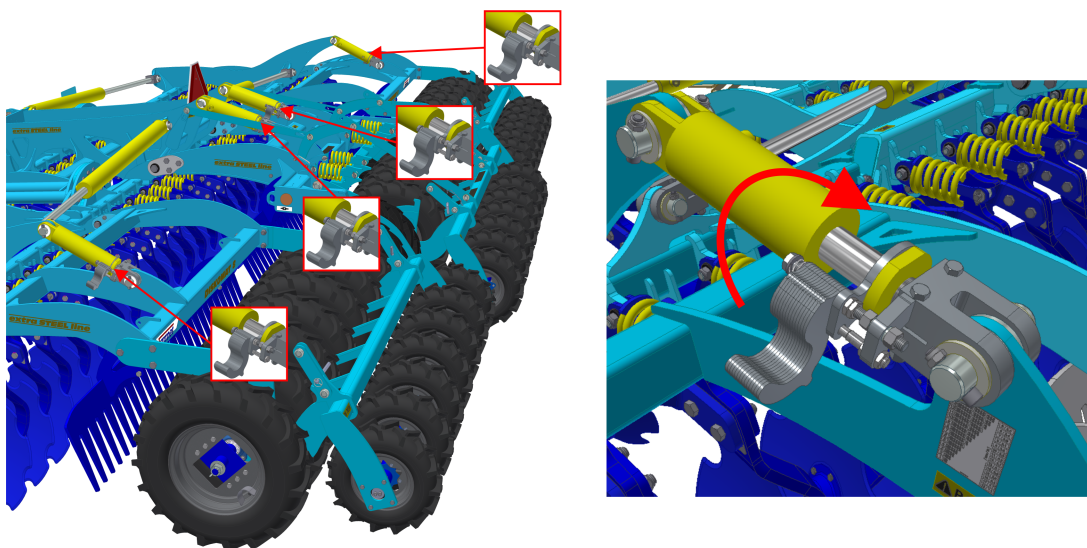
Adjusting machine with pole in the fixed tractor hitch



- 1 – Adjusting depth of tracing wheels
- 2 – Adjusting depth by hydraulic pole
- 3 – Adjusting machine depth by rollers

10.1 Machine working depth adjustment

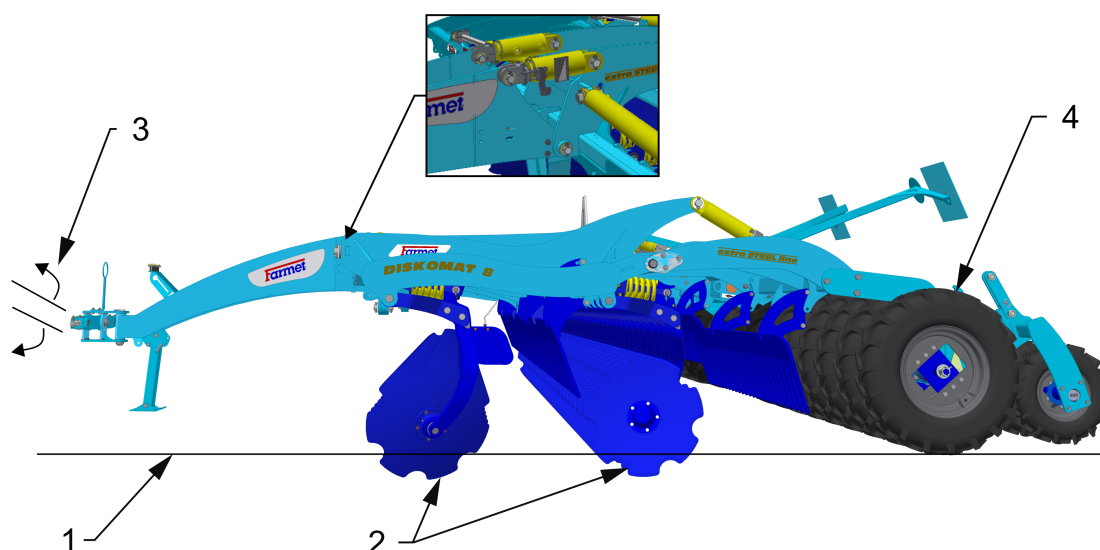
- Setting of soil processing depth is executed on lifted machine through adding or removing of distance washers on hydraulic cylinders.



- The same combination of washers (number and force) must be set on all piston rods!!!**
- The chart on the machine specifies the individual operating positions and combinations of the distance washers.
- Specified working depths at individual positions are only for information. They may vary according to particular soil conditions. Required number of distance washers may be added/removed as needed.

10.2 Adjusting the longitudinal plane of the machine

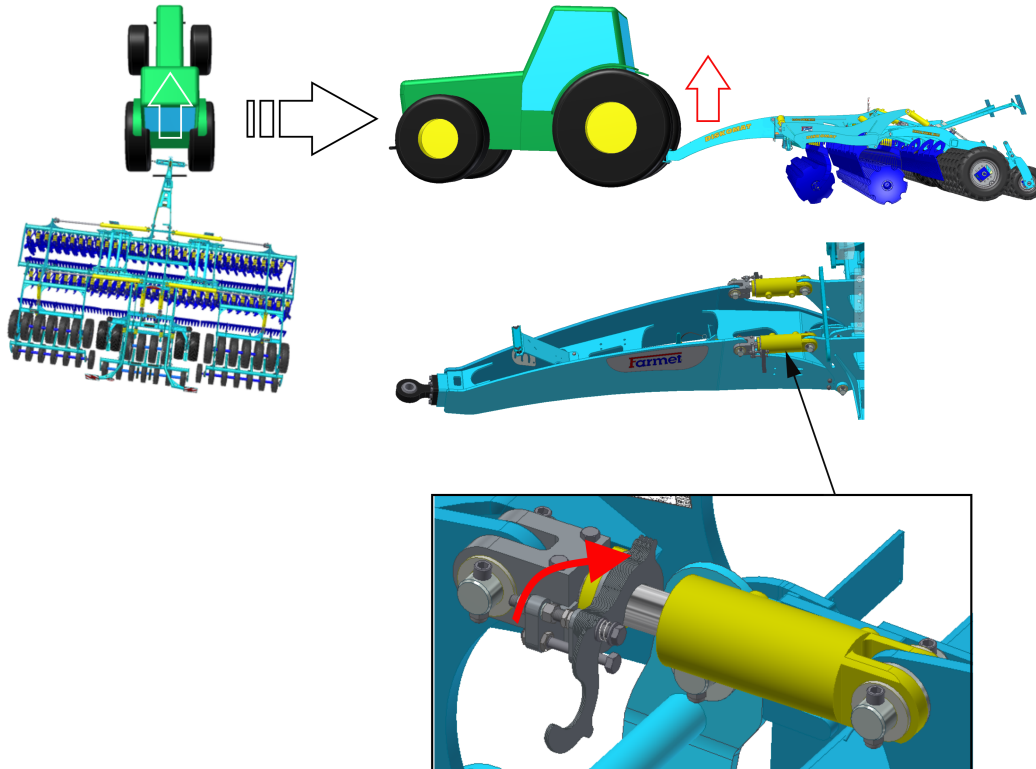
- Using the TPS arms of the tractor, or the spacers on the piston-rods of the drawbar, set the machine so that the discs of the front and rear row work at the same depth.



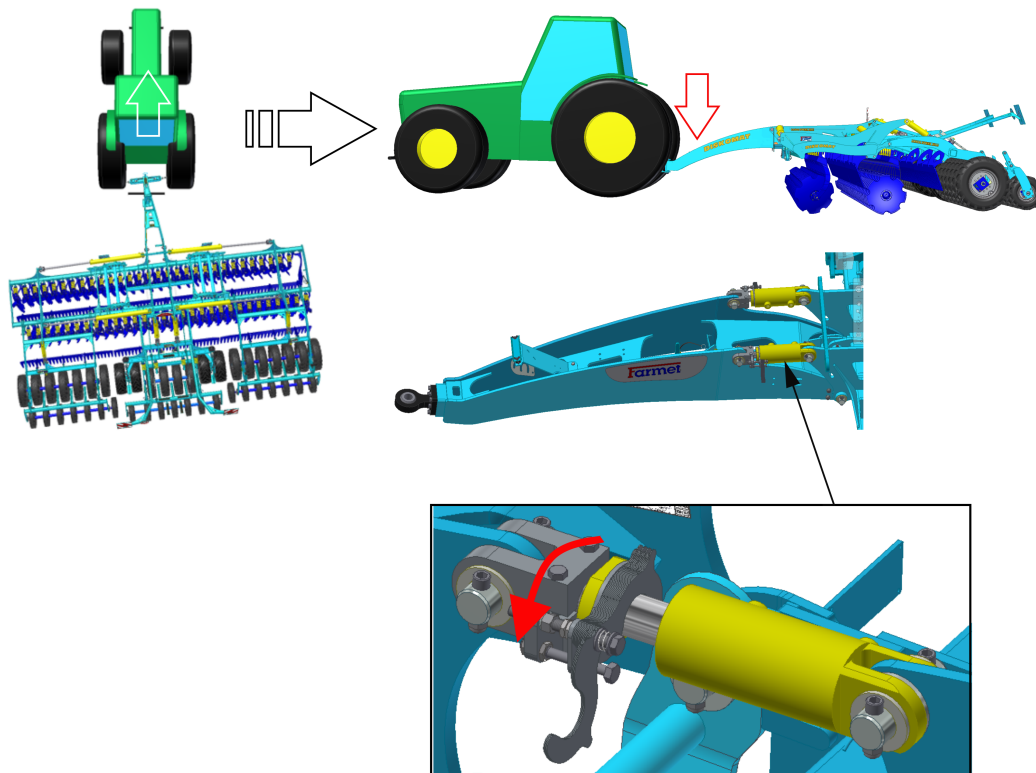
- 1 – Soil
- 2 – The machine frame on one level with the soil
- 3 – TBZ shoulders of the tractor
- 4 – Setting the depth by the transportation axle and rear rollers

The machine features high stability during operation. However turning of machine to one side may occur with fault adjusted longitudinal plane (particularly in heavy soils). This is removed by modification of tractor arm height as follows, or by adding or removing the spacers on the piston-rods of the drawbar of the machine.

- When the machine turns to the left-hand side, lift the machine in arms, or add spacers on the piston-rods of the drawbar.



- When the machine turns to the right-hand side, lower the machine in arms, or remove spacers on the piston-rods of the drawbar.

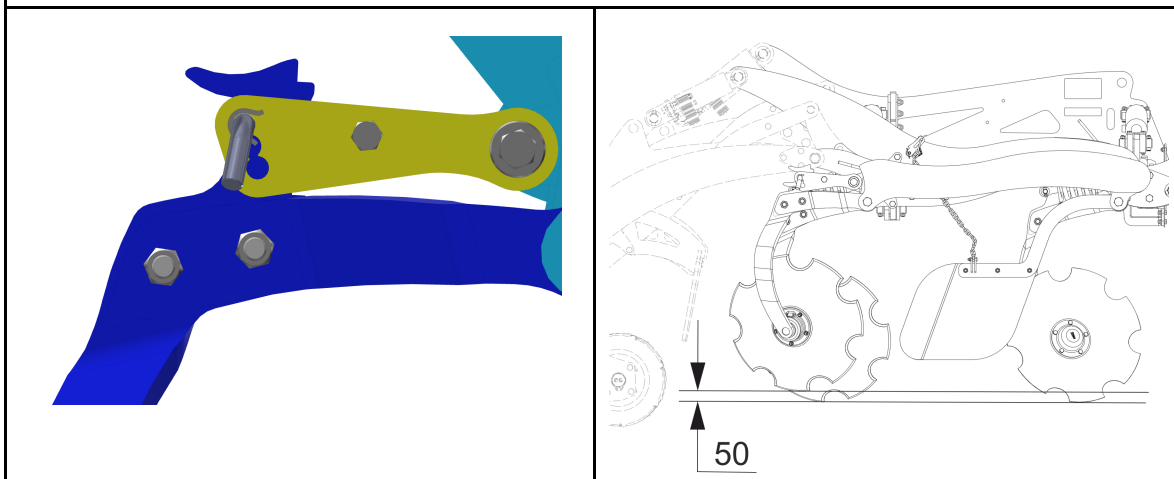


10.3 Setting the right edge disc

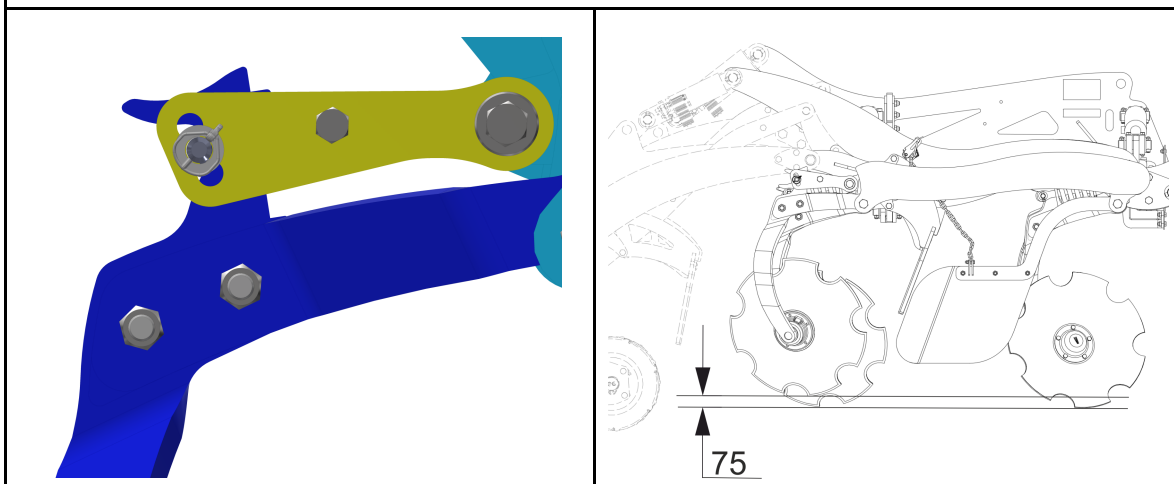
The adjustable right edge disc is used as a rotary deflector with the aim to direct the flow of the processed soil to prevent the formation of a furrow between the individual passes. The disc can be set at three depth levels thanks to drawbars.

The following drawbar setting options are available:

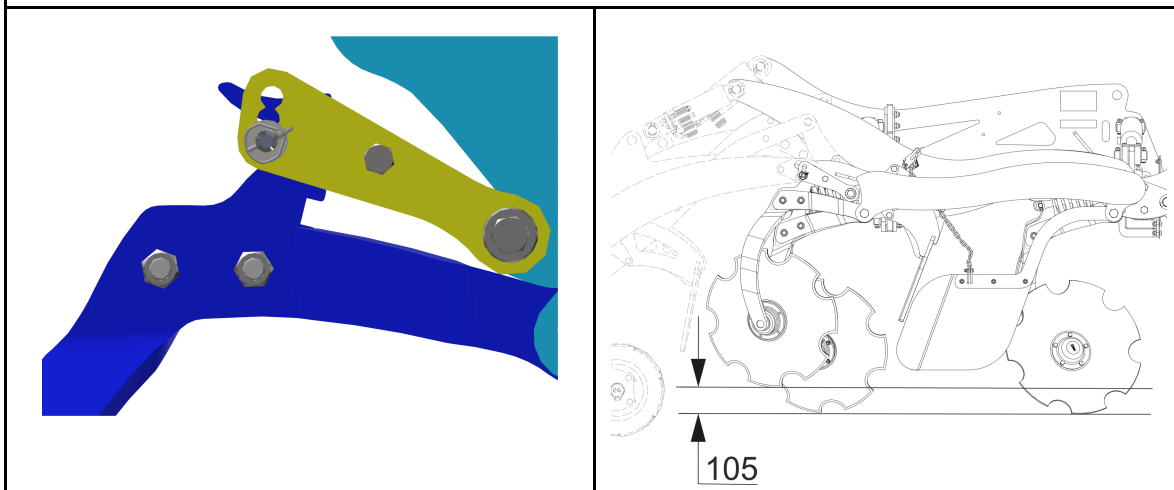
- 1) Pin in the top hole** = 50 mm above the bottom edge of the discs in standard working units.
Recommended for processing depth of 5-8 cm (may differ in relation to the soil conditions).



- 2) Pin in the middle hole** = 75mm above the bottom edge of the discs in standard working units.
Recommended for processing depth 9-13 cm (may differ in relation to the soil conditions).

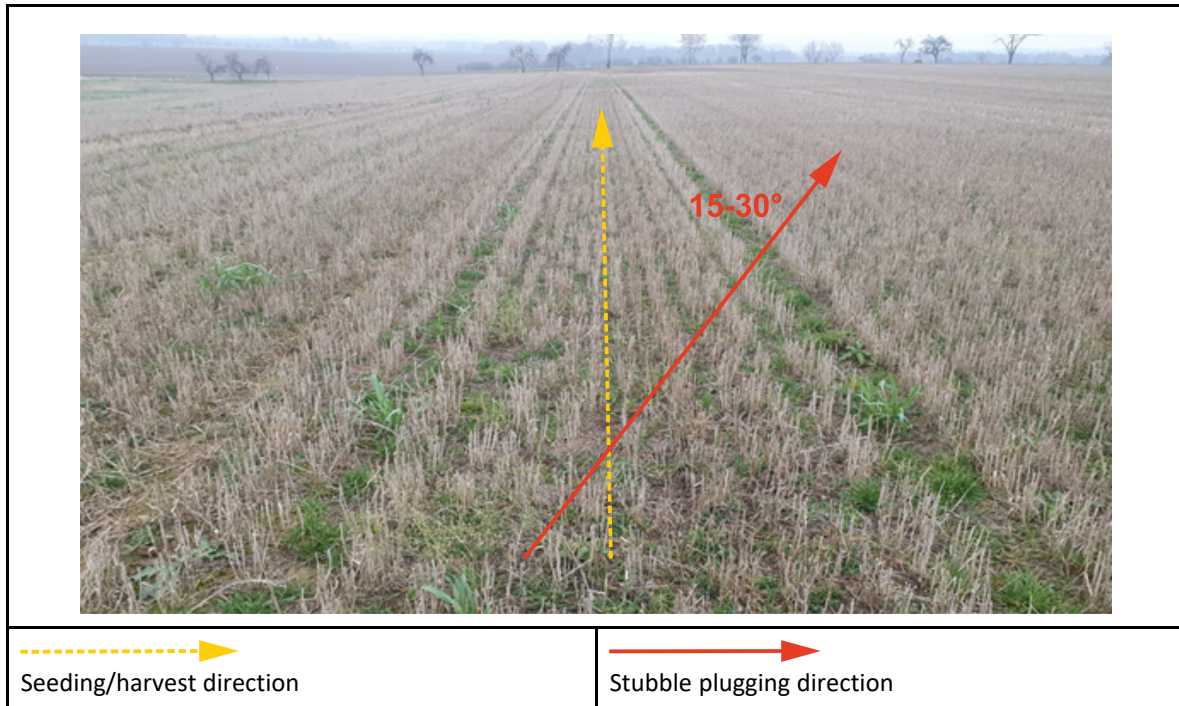


- 3) Pin in the bottom hole** = 105mm above the bottom edge of the discs in standard working units.
Recommended for processing depth 14-18cm (may differ in relation to the soil conditions).



10.4 Machine travelling direction at work

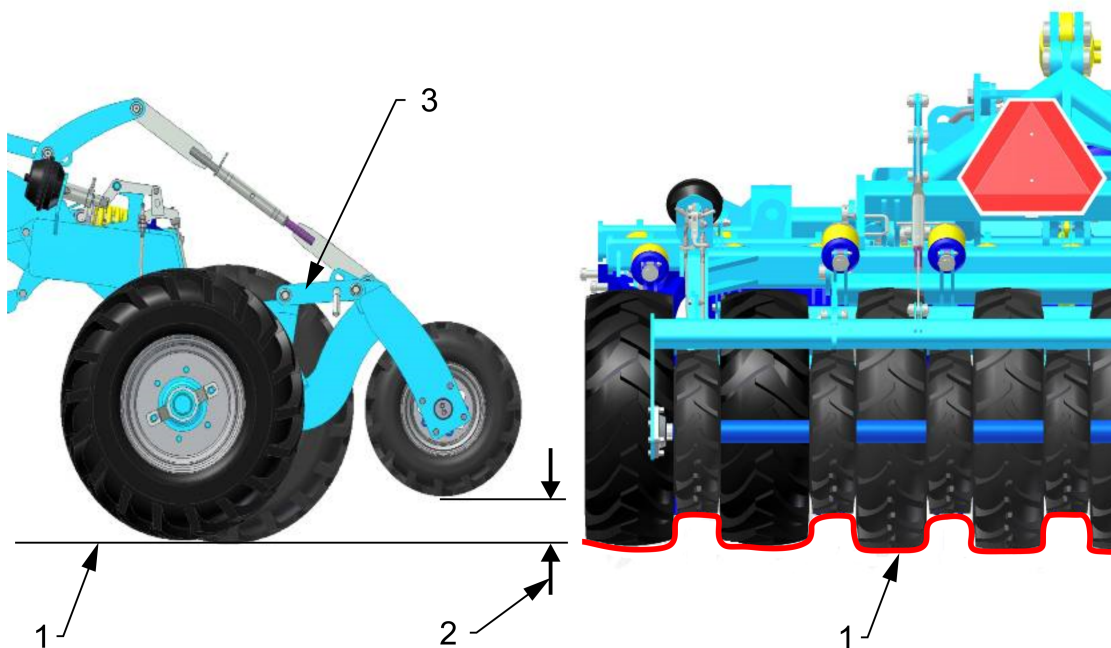
Change the direction of work with the machine by 15-30° to the previous seeding/harvest operation. That will help you achieve the best work results with the machine: a high crop residue throughput, mixing crop residue in and the levelling effect (levelling the tracks from previous operations)



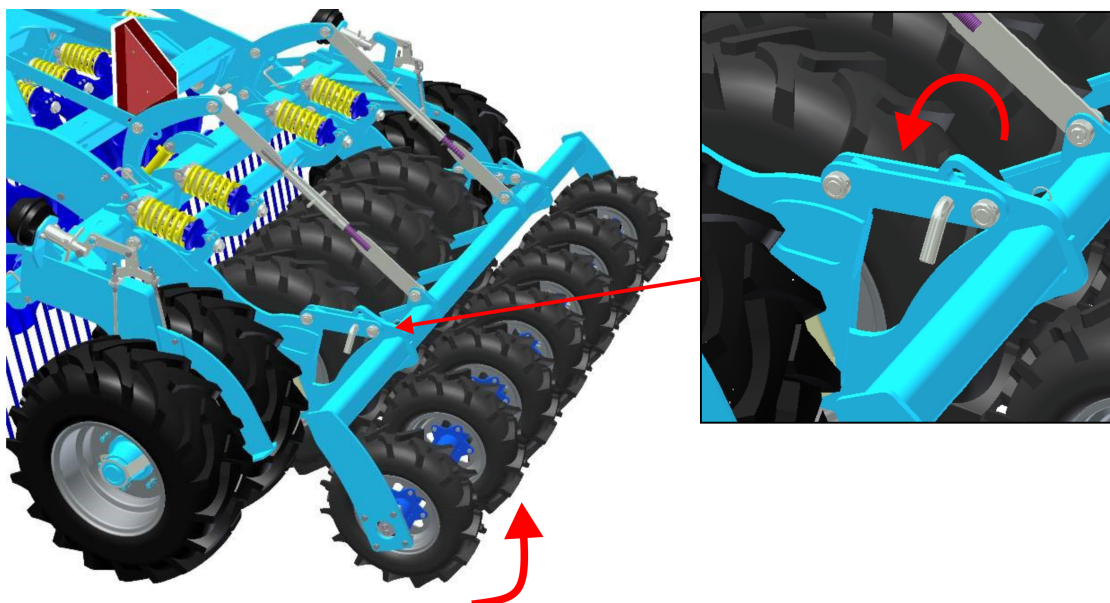
When the machine works in the same direction as in the previous operations (seeding/harvest), it can get clogged, which reduces the quality of work and the levelling effect of the machine.

10.5 Exclusion of rear rubber-tyred rollers

- Raising the rear rubber-tyred rollers is important for the preparation of soil for winter.
- By raising the rear rubber-tyred rollers, you will ensure the formation of ridges: the soil surface remains undulating after the machine passes over it which creates a large area that positively influences faster drying of the soil in spring.
- The rear roller can be secured when the machine is fully lifted on the rubber-tyred rollers and on the tractor hydraulics, or the machine lifted on pneumatic rollers and the drawbar hydraulics. When the machine is lifted in this way, the rear rubber-tyred rollers can be simply secured by changing the position of the rear roller rod. The rear rubber-tyred rollers secured in this way will be lifted above the soil when the machine is recessed and the soil will only be compacted by the front rollers.



- 1 – Soil
2 – Raised rear rubber-tyred roller
3 – Drawbar of the protection of the raised rear roller



11 MACHINE MAINTENANCE AND REPAIRS



Observe the safety instructions for treatment and maintenance.

- If it is necessary to weld during the repair and have the machine connected to the tractor, it must have disconnected supply cables from the alternator and the accumulator.
- Check the tightening of all screw and other assembly connections at the machine before every use of the machine, furthermore continuously as needed.
- Continuously check the wear of the working bodies of the machine, possibly replace these worn working bodies with new ones.
- Adjustment, cleaning, and lubrication of the machine may only be performed with the machine at rest (i.e. the machine is standing and not working).
- When working on a lifted machine, use suitable support equipment supported at marked points or at points suitable for that.
- During adjustment, cleaning, maintenance, and repair of the machine, you must secure those parts of the machine that could endanger the operator by falling or another movement.
- For catching the machine during handling using lifting equipment, use only the places marked with self-adhesive labels with the chain sign. —○—
- Upon a failure or damage of the machine, immediately turn off the tractor's engine and secure against restarting, secure the machine against movement □ only then you can remove the failure.
- During repairs of the machine, use exclusively the genuine spare parts, suitable tools and protective equipment.
- Keep the machine clean.



Do not clean bearings with a high-pressure cleaner or direct water stream. The seals and bearings are not watertight at high pressure.

11.1 Maintenance plan

MAINTENANCE PLAN					
Perform the planned maintenance according to the instructions:					
Maintenance Task	Daily (season)	Once a week	Before season	After season	Time interval
Machine in general					
• Visual inspection of the machine • Checking for any undesirable sounds, vibrations and excessive wear	X				
• Checking crucial nodes: pins, bearings, rollers, working parts	X		X	X	
• Machine cleaning • Storing the machine under roof, if possible • Recording the mileage of the machine/season (ha)		X		X	
• Comprehensive inspection • Checking the frame	X			X	
 Do not use a high-pressure cleaner or direct stream of water to clean the hydraulic rollers, bearings, electric and electronic parts. The seals and bearings are not waterproof at high pressure.					
Hydraulic system					
Checking the function, tightness, mounting and worn spots of all hydraulic parts and hoses		X	X		
Hydraulic hoses – replacement: • Damaged external casing of the hose (mechanically or blistered) • Fluid seepage (especially the end piece) • Bumps or blisters on the hose • Deformed or corroded end piece • Loose end piece – the hose spins	X			X	
Hydraulic hoses - replacement: • Expired service life of the hose  					6 years
!!!PREVENTION means removing the problem according to the plan, outside the season, without stress and comfortably before a secondary problem, an accident or a health hazard arises.					

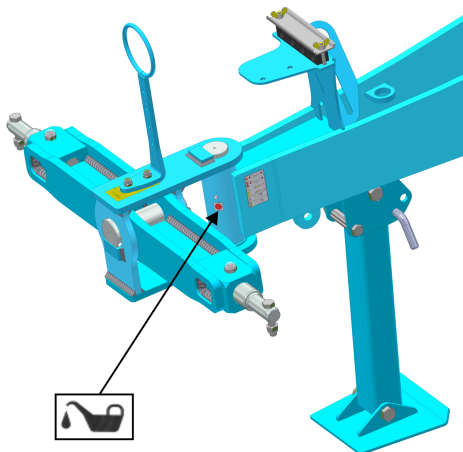
MAINTENANCE PLAN					
Perform the planned maintenance according to the instructions:					
Maintenance Task	Daily (season)	Once a week	Before season	After season	Time interval
Bolt connections					
Visual inspection of bolt and hydraulic joints, tighten any loose joints using a corresponding torque (see the torque chart)	X			X	
Towing lug – check, tighten if needed M 16 – 10.9. – 300 Nm M 20 – 10.9. – 560 Nm 		X	X		
Wheels – tighten all wheel nuts - First time: after 10 hours of operation - Wheel replacement : after 10 hours of operation M 18 x 1,5 – 300 Nm M 20 x 1,5 – 400 Nm M 22 x 1,5 – 500 Nm		X	X		
Brake system					
Brake line and hoses – check the function, tightness, mounting and clamping, or breaking	X		X	X	
Brake components – check the function, tightness, mounting	X		X	X	
Air nozzle – drain using the draining valve		X		X	
Draining valve – check the function, clean and replace sealing			X	X	
Pipe filter – clean			X	X	
Brake/parking brake – check the function, escapement setting 25-45mm	X				
Brake lining – check the condition of the brake lining, min. thickness of 3mm				X	
Wheels/axle					
Checking the tyre pressure	X			X	
Transport axle DSK 5–8 PS – 19,0/45-17 14 PR, pressure 400 kPa					
Tracing wheels DSK 5 – 8 PS – 10,0/75 – 15,3 14 PR, pressure 550 kPa					
Axle – Double rubber-tyred roller DSK 5 – 8 PS – 10,0/75 – 15,3 10 PR, pressure 400 kPa					
Transport axle bearings – check and adjust allowance if needed (in the workshop)				X	

MAINTENANCE PLAN					
Perform the planned maintenance according to the instructions:					
Maintenance Task	Daily (season)	Once a week	Before season	After season	Time interval
Electric cables					
Check for any damage, replace if needed		X	X		
Safety measures					
Lighting and safety hatched boards – check the condition, function and cleanliness	X		X		
Hazard and safety labels – check that they are installed and legible		X			
Machine lubrication plan					
Drawbar joint / lifting loop – grease	X			X	
Handbrake bolt – grease or suitable oil	X			X	
Axle bearings – grease with Lithium content – check, refill if needed				X	
After season					
Entire machine - Treat and clean the machine; do not spray oil or similar agents on the plastic parts - Spray the piston-rods of the hydraulic cylinders with suitable anti-corrosion agents - Check the tightness of all bolt and plug-in connections (see the torque chart) - Check for any damage of the electric cables and replace if needed					
Brake system - Preserve the anti-freeze fluid for air-brake systems (about 0.1 l), ethanol-free, before the last ride, use fluid recommended by the tractor manufacturer. - Secure the machine against movement by Scotch blocks. - Release the parking brake, release air from the air nozzle and close the brake lines. The service brake must be released during winter so that it does not get stuck on the brake drum.					
Points of lubrication Grease the points of lubrication according to the lubrication plan, use grease KP2P-20 Likx, under DIN 51 502					
!!! PREVENTION means removing the problem according to the plan, outside the season, without stress and comfortably before a secondary problem, an accident or a health hazard arises.					

11.2 Machine lubrication shedule

- During machine maintenance and its lubrication, it is necessary to observe the safety regulations.

LUBRICATION POINT	INTERVAL	LUBRICANT
Tow bar joint	Daily, always before the work with the machine. Always after the end of the season and before storing the machine	Plastic grease KP2P-20 Likx DIN 51 502



Lubricant handling:

- Protect yourselves against direct contact with oils by using gloves or protective creams.
- Thoroughly wash oil spots on the skin using warm water and soap.
- Do not clean the skin with petrol, engine diesel fuel or other solvents.
- Oil is poisonous. If you swallowed the oil, immediately seek a physician.
- Protect the lubricants against children.

12 MACHINE STORAGE

Long-term machine shutdown :

- Store the machine under a roof if possible.
- Store the machine on a flat and solid surface with sufficient load capacity.
- Clean the machine before storing and conserve so that it is not damaged in any way during storage. Pay special attention to all marked lubrication points and properly lubricate them according to the lubrication plan.
- Store the machine in the position with folded frames in the transport position. Store the machine on the axle and the storage leg, secure the machine against spontaneous movement using scotches or another suitable tool. When storing, lower the machine into the lower position using hydraulics.
- The machine must not lean on the discs as the working discs of the machine could be damaged.
- Secure the machine against access of unauthorised persons.

13 ENVIROMENTAL PROTECTION

- Handle oils and greases according to valid waste laws and regulations.

14 MACHINE DISPOSAL AFTER SERVICE LIFE EXPIRY

- The operator must secure during machine disposal that steel parts and parts, in which hydraulic oil or lubricating grease moves are differentiated.
- Steel parts must be cut by the operator while observing safety regulations and handed over to the secondary raw material collection point. He must proceed with other parts according to valid laws about waste.

15 SERVICING AND WARRANTY CONDITIONS

15.1 Servicing

Servicing is secured by the dealer after consulting with the manufacturer, possibly directly by the manufacturer. Spare parts then using the sales network by individual sellers in the entire country. Use only the spare parts according to the spare parts catalogue officially issued by the manufacturer.

15.2 Warranty

1. The manufacturer provides a warranty of 24 months for these machine parts: main frame, axle, and machine tow bar. For other parts of the machine, the manufacturer provides a warranty of 12 months. The warranty is provided from the date of sale of the new machine to the end user (consumer).
2. The warranty applies to hidden defects that will show in the warranty period with proper use of the machine and while fulfilling the conditions stated in the operating manual.
3. The warranty does not apply to wearable spare parts, i. e. regular mechanical wear and tear of replaceable parts of the working sections (shares, edges, etc.).
4. The warranty does not apply to indirect consequences of possible damage, such as service life decrease etc.
5. The warranty is bound to the machine and is not void upon an owner change.
6. The warranty is limited to the disassembly and assembly, possibly replacement or repair of the defective part. The decision, whether to replace or repair the defective part, is up to the contractual workshop of Farmet.
7. During the warranty period, only the authorised servicing technician of the manufacturer may perform repairs or other interventions into the machine. In the opposite case, the warranty will not be acknowledged. This provision does not apply to the replacement of wearable spare parts (see point 3).
8. The warranty is conditioned by using the genuine spare parts of the manufacturer.

2010/005/04

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DÉCLARATION CE DE CONFORMITÉ
СЕРТИФИКАТ СООТВЕТСТВИЯ ЕС
DEKLARACJA ZGODNOŚCI WE

1. ☒ My ☐ We ☐ Wir ☐ Nous ☐ Мы ☐ My: **Farmet a.s.**
 Jiřínková 276
 552 03 Česká Skalice
 Czech Republic
 DIČ: CZ46504931
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2. ☒ Strojní zařízení: - název : **Diskový podmítač**
☐ Machine: - name : **Disk plough-harrow**
☐ Fabrikat: - Bezeichnung : **Kurzscheibenegge**
☐ Machinerie: - dénomination : **Déchaumeur à disques**
☐ Сельскохозяйственная машина: - наименование : **Дисковый луцильник**
☐ Urządzenie maszynowe: - nazwa : **Talerzowy plug podorywkowy**
- typ, type : **DISKOMAT**
 - model, modèle : **DISKOMAT 5 PS | 6 PS | 8 PS**
 - PIN/VIN :
- ☒ výrobní číslo :
☐ serial number
☐ Fabriknummer
☐ n° de production
☐ заводской номер
☐ numer produkcyjny:

3. ☒ Příslušná nařízení vlády: č.176/2008 Sb. (směrnice 2006/42/ES). ☐ Applicable Governmental Decrees and Orders: No.176/2008 Sb. (Directive 2006/42/ES). ☐ Einschlägige Regierungsverordnungen (NV): Nr.176/2008 Slg. (Richtlinie 2006/42/ES). ☐ Décrets respectifs du gouvernement: n°.176/2008 du Code (directive 2006/42/CE). ☐ Соответствующие постановления правительства: № 176/2008 Сб. (инструкция 2006/42/ES). ☐ Odpowiednie rozporządzenia rządowe: nr 176/2008 Dz.U. (Dyrektywa 2006/42/WE).

4. ☒ Normy s nimiž byla posouzena shoda: ☐ Standards used for consideration of conformity: ☐ Das Produkt wurde gefertigt in Übereinstimmung mit folgenden Normen: ☐ Normes avec lesquelles la conformité a été évaluée: ☐ Normы, на основании которых производилась сертификация: ☐ Normy, według których została przeprowadzona ocena: ČSN EN ISO 12100, ČSN EN ISO 4254-1.

☒ Schválil ☐ Approve by date: 01.01.2022
☐ Bewilligen ☐ Approuvé
☐ Утвердил ☐ Uchwalił

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V České Skalici date: 01.01.2022

Ing. Karel Žďárský
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