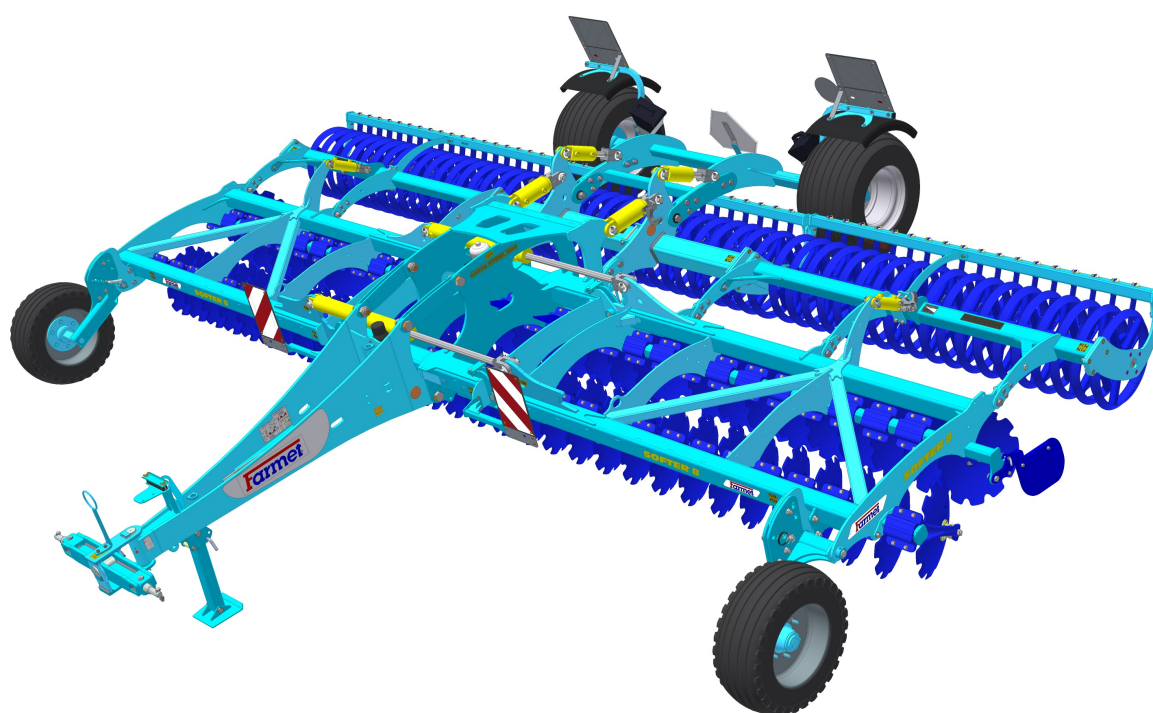


# OPERATING MANUAL

## **SOFTER**

**8 PS | 11 PS**



Edition: **3**

Effective from: **01.01.2017**

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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.

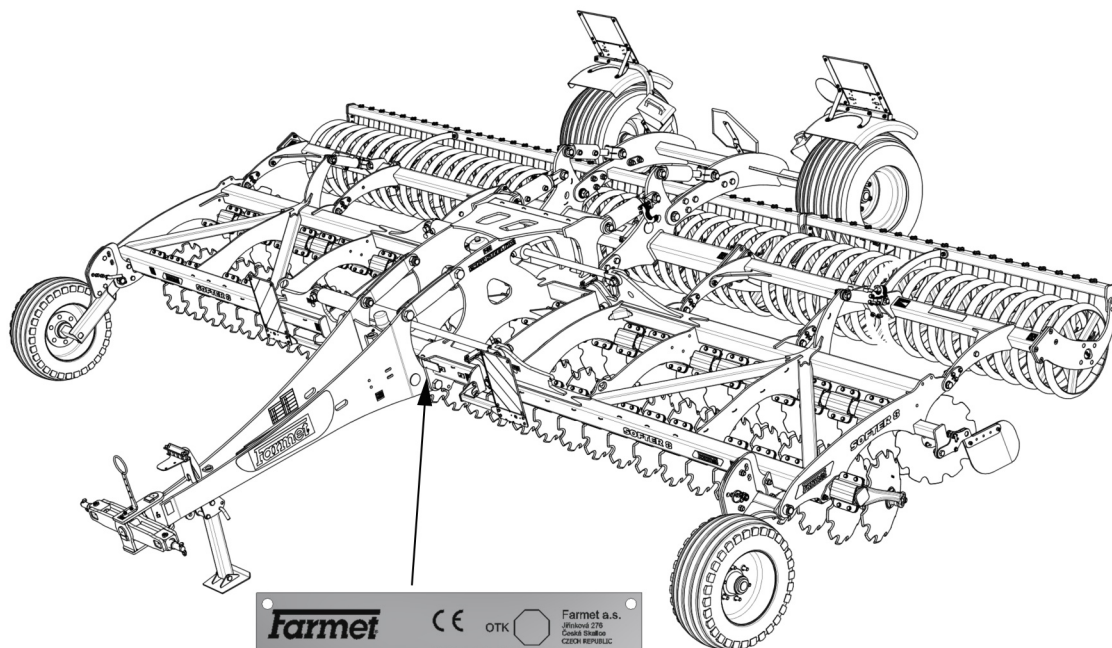
Use only spare parts for these machines according to the **Spare parts catalogue** officially issued by the manufacturer, Farmet a.s. Česka Skalice.

### Possibilities of use of the machine

The **SOFTER** disc plough-harrow is intended for ploughing all types of soil up to the depth of 120 mm (4.7 in).

### Your Machine Characteristics :

MACHINE TYPE :  
MACHINE SERIAL NUMBER :  
SPECIAL DESIGN OR ACCESSORIES :

<b>Farmet</b>	CE	OTK	Farmet a.s. Jihlavská 276 Česká Skalice CZECH REPUBLIC
TYP / VARIANTA	SOFTER / SOFTER 8 PS		
ČÍSLO SCHVÁLENÍ	7753-07		
ROK VÝROBY / VÝROBNÍ ČÍSLO	20YY / ZZZZ		
MAX. PŘÍPUSTNÁ HMOTNOST	6350	kg	
MAX. PŘÍPUSTNÁ HMOTNOST NA NÁPRAVĚ	4120	kg	

**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 12 cm (4.7 in) when agricultural soil cultivation. Another type of use exceeding the determined purpose is forbidden.
- The machine is only operated 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		SOFTER 8 PS	SOFTER 11 PS
Working width		7,65 m (25,1 ft)	10,88 m (35,7 ft)
Transport width		3 m (9,84 ft)	
Transport height		4 m (13,12 ft)	
Machine total length		5,9 m (19,36 ft)	
Working depth		3,5–12 cm (1,38-4,72 in)	
Number of discs ø510mm (ø20in) / ø560mm (ø22in)	front	31	45
	rear	31	45
Working performance		8–12 ha/h (19,8 – 29,6 ac/h)	11–16,5 ha/h (27,2 – 40,8 ac/h)
Towing means		200 – 300 kW (270 – 405 HP)*	240 – 330 kW (330 – 495 HP)*
Working speed		10–15 kph (6 - 9,5 mph)	
Maximum transport speed		20 kph (12,5 mph)	
Maximum slope grade		6°	
Tyre dimensions - transport Tyre pressure		500/50-17 350 kPa (51 Psi)	
Machine weight		6 350 kg (13 999 lb)**	8 860 kg (19 533 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.

\*\* Weight with the LTX roller

## 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 (Chapter 2 and 8). 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 climbing on the machine, do not step on the axle tyres, rollers, discs or other revolving 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, you need :



- close-fitting 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

The warning safety labels protect the operating staff

The following applies in general :

- Strictly observe the warning safety labels.
- All safety instructions also apply to other users.
- If the “SAFETY LABEL” located on the machine gets damaged or destroyed, THE OPERATING STAFF MUST REPLACE THE LABEL WITH A NEW ONE !!!
- The position, appearance and the precise meaning of the work safety labels on the machine are defined in the following tables and the figure.

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.	<b>P 1 H</b>
	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.	<b>P 2 H</b>
	Stay out of reach of the drawn-up machine. (SF4,5–6NS, SF-2,5–3,5N)	<b>P 4 H</b>
	Stay outside the reach of the tractor - agricultural machine set, if the tractor engine is in operation.	<b>P 6 H</b>
	Secure the side frames with the connecting rod prior to transport (4,5–6NS, SF4,5–11PS). Before commencing the machine transport, secure the axle with spherical valves against unexpected drop (4,5–6PS, 8–11PS). The frame of the twin roller must be secured with the stopper for transport. (SF 2,5N—SF3,5N).	<b>P 13 H</b>
	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.	<b>P 20 H</b>

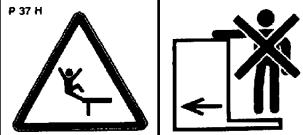

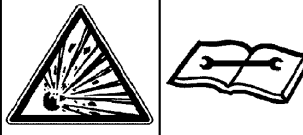


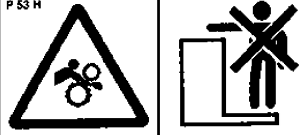

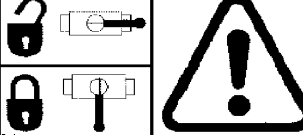
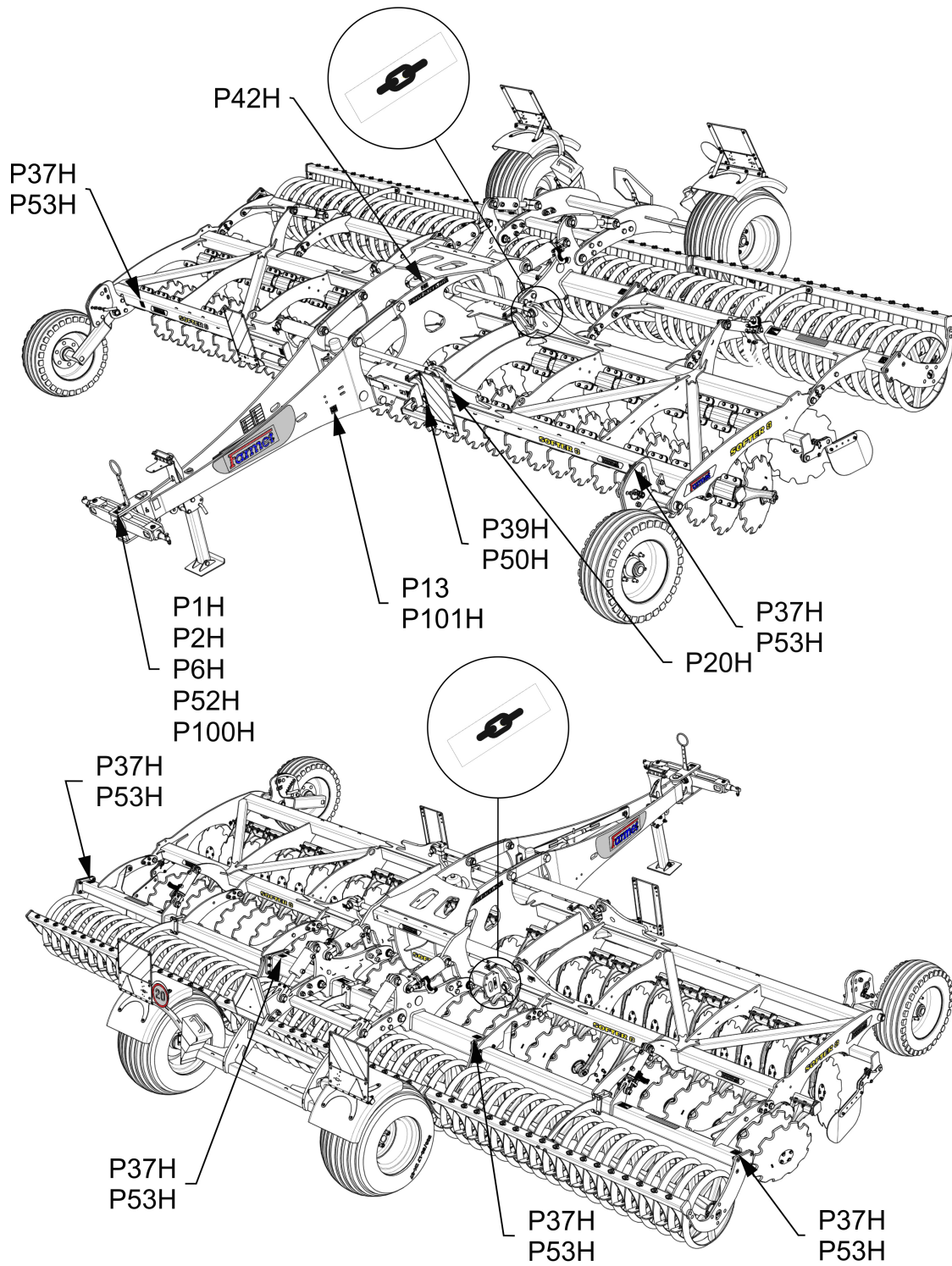
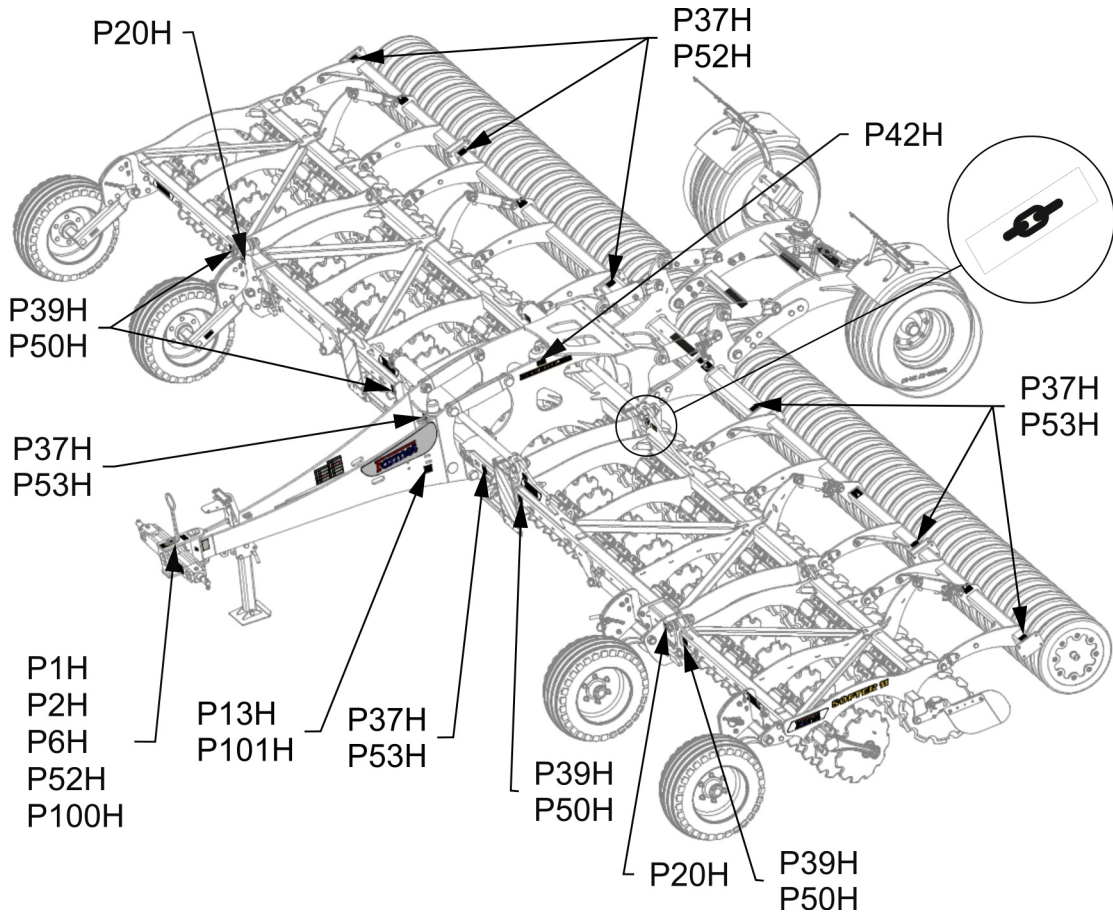
 <p>P 37 H</p>	<p>Travelling and transport on the machine structure is strictly forbidden.</p>	<p><b>P 37 H</b></p>
 <p>P 39 H</p>	<p>When working and transporting the machine, maintain safe distance from the electric appliances</p>	<p><b>P 39 H</b></p>
 <p>P 42 H</p>	<p>The pressure vessel is under gas and oil pressure. Execute disassembly and repairs only according to the instructions in the manual. (SF-8-11PS)</p>	<p><b>P 42 H</b></p>
 <p>P 50 H</p>	<p>When folding and unfolding the side frames, stay outside their reach.</p>	<p><b>P 50 H</b></p>
 <p>P 52 H</p>	<p>Secure the machine against unwanted movement by positioning on its working bodies.</p>	<p><b>P 52 H</b></p>
 <p>P 53 H</p>	<p>Stay outside the reach of the tractor - agricultural machine set, if the tractor engine is in operation.</p>	<p><b>P 53 H</b></p>
 <p>P 100 H</p>	<p>Before commencing the machine transport, secure the axle with spherical valves against unexpected drop.</p>	<p><b>P 100 H</b></p>
 <p>P 101 H</p>	<p>The shown positions of the lever and the function of the hydraulic spherical valve located on the piston rod. (SF4P-11PS)</p>	<p><b>P 101 H</b></p>

Fig. 1 - Location of safety labels on the machine

**SOFTER 8 PS**



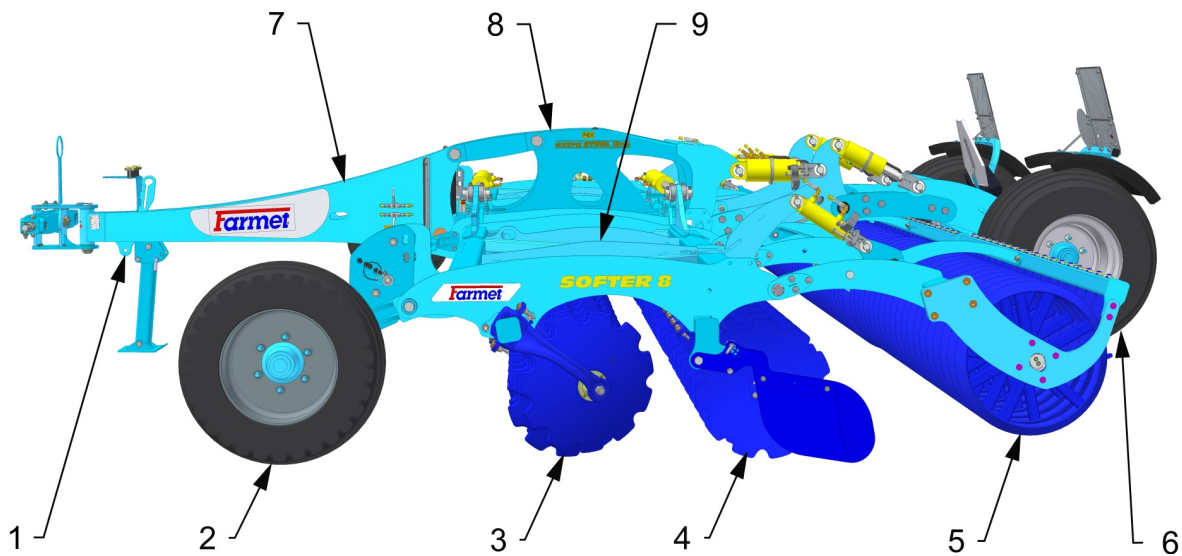
SOFTER 11 PS



## 6 DESCRIPTION

The **SOFTER 8 PS a 11 PS** machine is constructed as semi-carried. The basic version consists of a drawbar equipped with a three-point suspension rod, or a loop for the fixed suspension pin, a central frame with the transportation axle and two or four side frames. There are working discs in two rows on the central and side frames. There are rollers in the rear that compact the loosened soil.

### 6.1 Working parts of the machine

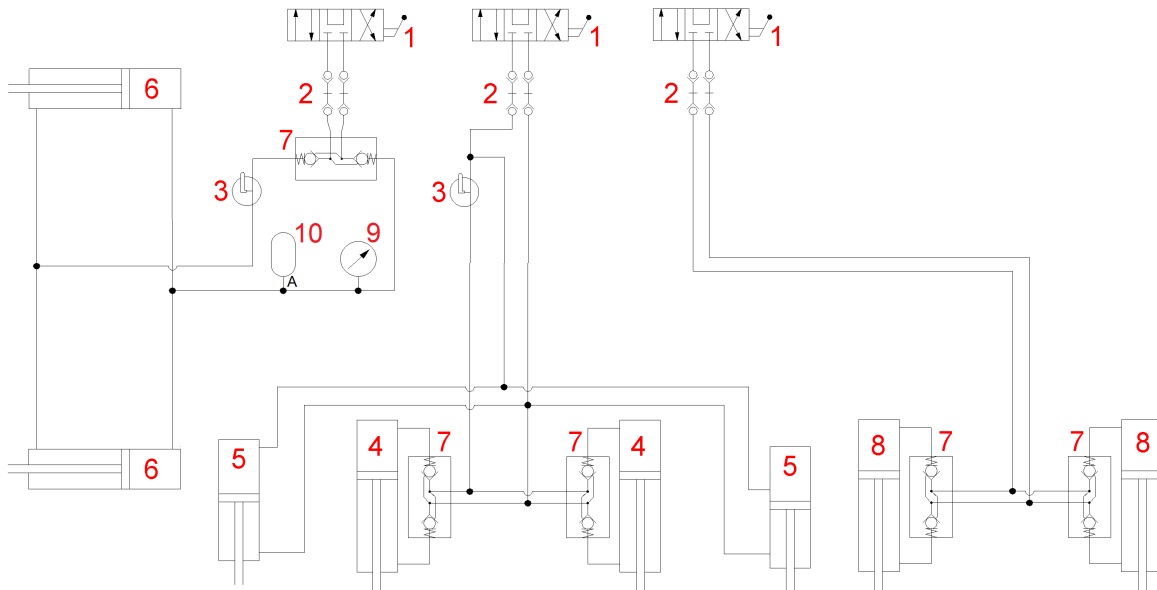


- 1 – Tractive pole with a folding leg
- 2 – Supporting wheel
- 3 – Front disc row
- 4 – Rear disc row
- 5 – Roller

- 6 – Transportation axle
- 7 – Tractive pole with a suspension bar
- 8 – Central frame
- 9 – Side frames

## 6.2 Hydraulics

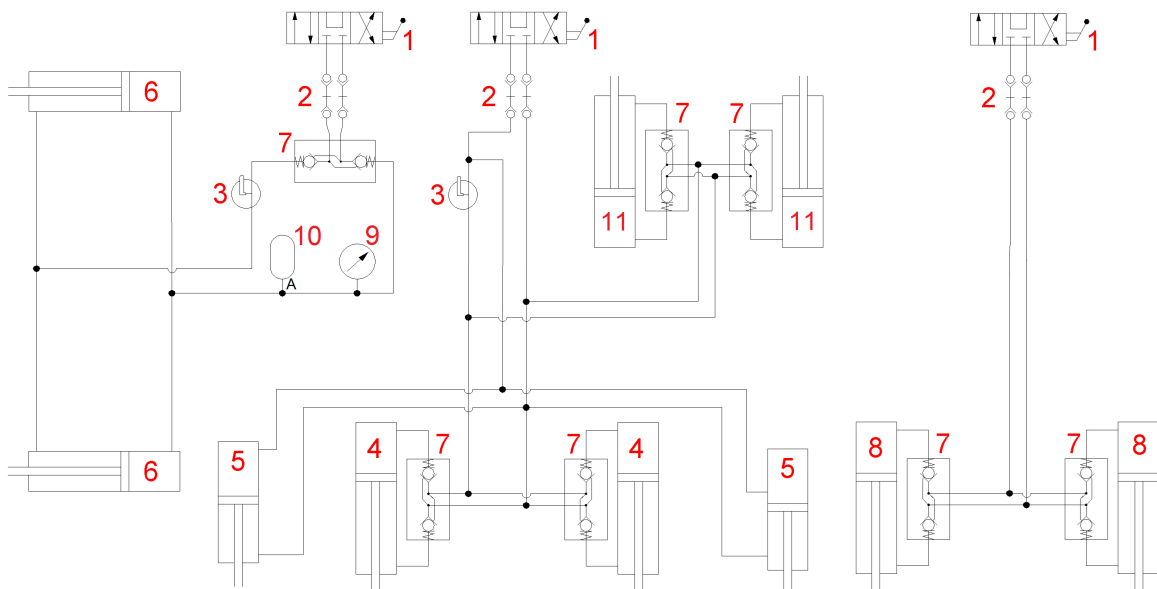
Hydraulic diagram of the machine SOFTER 8PS with a drawbar in the arms of the three-point suspension



- 1 – Control distributor (tractor)
- 2 – Hydraulic coupling
- 3 – Closing cock
- 4 – Hydraulic cylinder (central roller)
- 5 – Hydraulic cylinder (side rollers)

- 6 – Hydraulic cylinder (folding side frames)
- 7 – Hydraulic closing valve
- 8 – Hydraulic cylinder (axle)
- 9 – Pressure gauge
- 10 – Pressure accumulator

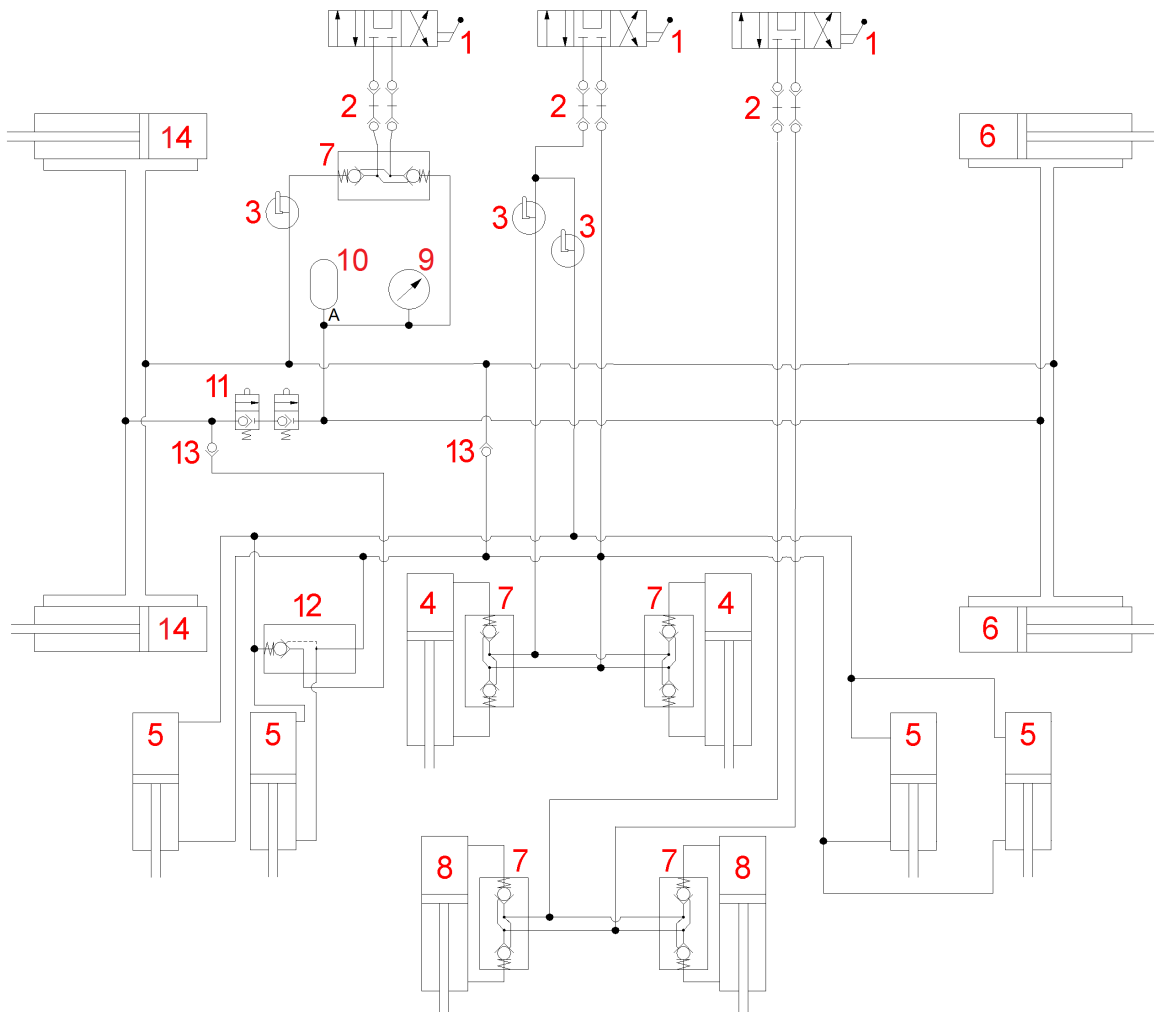
Hydraulic diagram of the machine SOFTER 8 PS with a drawbar in the bottom fixed suspension



- 1 – Control distributor (tractor)
- 2 – Hydraulic coupling
- 3 – Closing cock
- 4 – Hydraulic cylinder (central roller)
- 5 – Hydraulic cylinder (side rollers)
- 6 – Hydraulic cylinder (folding side frames)

- 7 – Hydraulic closing valve
- 8 – Hydraulic cylinder (axle)
- 9 – Pressure gauge
- 10 – Pressure accumulator
- 11 – Hydraulic cylinder (drawbar)

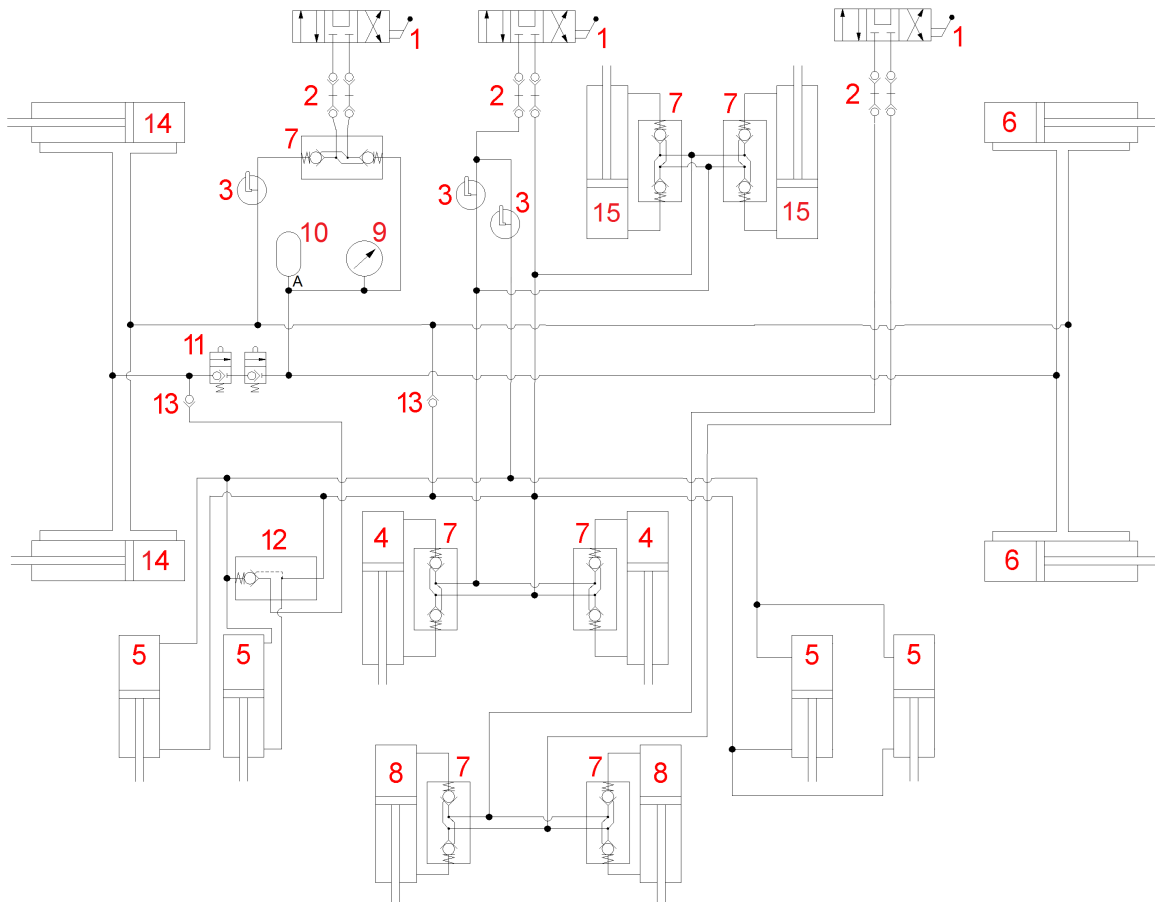
Hydraulic diagram of the machine SOFTER 11PS with a drawbar in the arms of the three-point suspension



- |  |  |
|--|--|
| 1 – Control distributor (tractor)                      | 8 – Hydraulic cylinder (axle)                        |
| 2 – Hydraulic coupling                                 | 9 – Pressure gauge                                   |
| 3 – Closing cock                                       | 10 – Pressure accumulator                            |
| 4 – Hydraulic cylinder (central roller)                | 11 – Bypass valve                                    |
| 5 – Hydraulic cylinder (side rollers)                  | 12 – Hydraulic single-sided shut-off valve           |
| 6 – Hydraulic cylinder (folding side frames – central) | 13 – Return valve                                    |
| 7 – Hydraulic closing valve                            | 14 – Hydraulic cylinder (folding side frames – side) |



Hydraulic diagram of the machine SOFTER11 PS with a drawbar in the bottom fixed suspension



- |  |  |
|--|--|
| 1 – Control distributor (tractor)                      | 9 – Pressure gauge                                   |
| 2 – Hydraulic coupling                                 | 10 – Pressure accumulator                            |
| 3 – Closing cock                                       | 11 – Bypass valve                                    |
| 4 – Hydraulic cylinder (central roller)                | 12 – Hydraulic single-sided shut-off valve           |
| 5 – Hydraulic cylinder (side rollers)                  | 13 – Return valve                                    |
| 6 – Hydraulic cylinder (folding side frames – central) | 14 – Hydraulic cylinder (folding side frames – side) |
| 7 – Hydraulic closing valve                            | 15 – Hydraulic cylinder (drawbar)                    |
| 8 – Hydraulic cylinder (axle)                          |  |

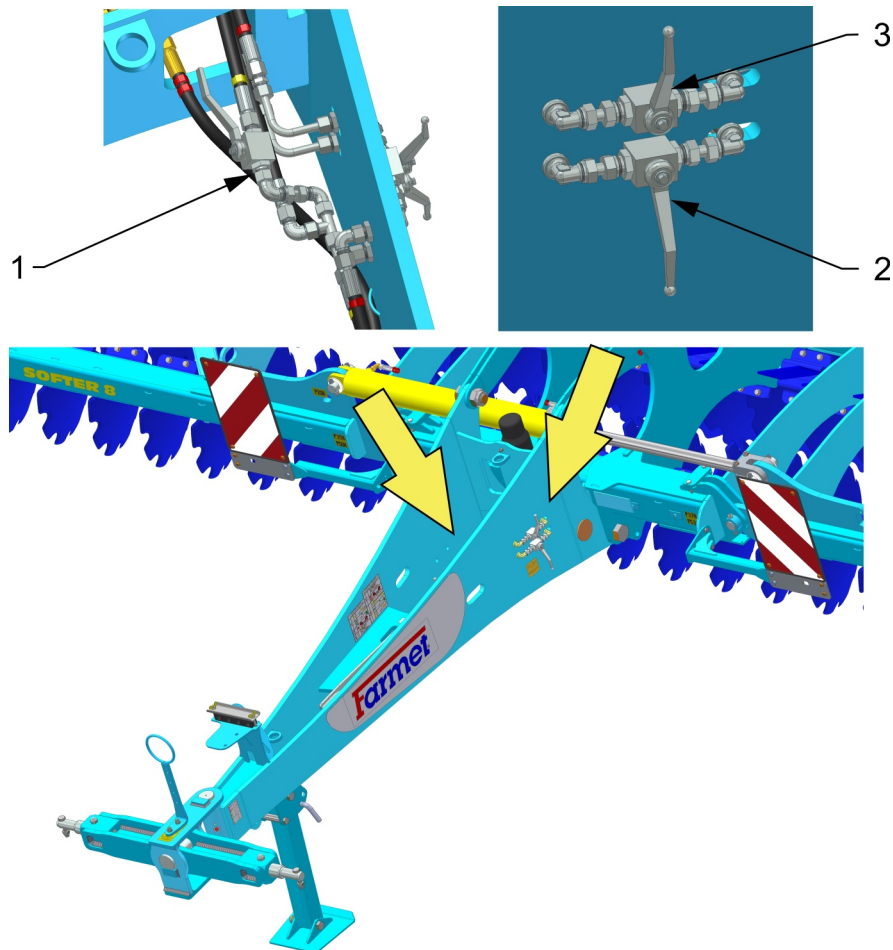
**⚠** Parts of the hydraulic system of the machine, which are under pressure, are forbidden to disassemble. Hydraulic oil that penetrates the skin under high pressure causes severe injuries. In case of injury, seek a physician immediately.



## 6.2.1 Closing (ball) valve function

- The machine SOFTER 8 PS is equipped with two closing (ball) valves on the inside the draft pole, see Fig.2
  - The machine SOFTER 11 PS is equipped with three closing (ball) valves: two on the outside and one inside the draft pole, see Fig.2
  - The external upper ball valve is used for closing the circuit for side frame unfolding (red circuit); its use is further described in Chapter 8.3.
  - The external bottom ball valve is used for closing the circuit controlling the rear roller piston-rod (including the axle) of the central frame (yellow circuit) and the drawbar piston-rods (when there is a drawbar in the bottom fixed hitch), its use is further described in Chapter 8.3.
- ⚠ • The internal ball valve is used for closing the circuit controlling the piston-rods of the side rollers (yellow circuit); this circuit must be always open in both transport and working position!!!

Fig. 2 - Closing (ball) valves




- 1 – Locking/unlocking side frame rollers (only for SOFTER 11 PS)
- 2 – Locking/unlocking the roller (axle) of the central
- 3 – Locking/unlocking side frame unfolding


**USE OF THE INTERNAL CLOSING (BALL) VALVE (SOFTER 11 PS)**

- ⓘ After a long downtime, one or both piston-rods of the central frame roller (including the axle) may decrease. In order to draw out the piston-rods to the limit position without the collision of the side frame rollers to transport the machine safely, it is thus necessary to close this internal ball valve.

**Procedure:**

1. Close the internal ball valve – lock side rollers
2. Open the external lower ball valve – open the circuit of the central roller
3. Draw out the piston-rods of the central roller into the limit position (maximum) – circuit 
4. Close the external lower ball valve – lock the circuit of the central roller
5. Open the internal ball valve – open the circuit of the side rollers

## 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 can be connected only to a tractor, whose curb weight is identical or higher than the overall weight of the connected machine.
- 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 suspension) 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 the machine		<b>SOFTER 8 PS</b>	<b>200 – 300 kW (270 – 405 HP)</b>
		<b>SOFTER 11 PS</b>	<b>240 – 330 kW (330 – 495HP)</b>
Requirement for tractor aggregation	Three-point suspension arms	Spacing of the lower suspension joints (measured at the joint axes)	<b>1010±1,5 mm (39,76 in), (possible to set also 910±1,5 mm / 35,83 in)</b>
		Øof the hole of the lower suspension joints for the machine suspension pivots	<b>37,5 mm (1,48 in)</b>
	Fixed suspension	Height of the bottom fixed suspension	<b>500 – 600 mm (19,7 - 23,6 in)</b>
		Mechanism of the aggregation of the bottom fixed suspension	<b>Pin Ø 50 mm (1,96 in)</b>
			<b>Pin Ø 70 mm (2,75 in)</b>
	<b>Ball K80</b>		
Requirement for the tractor's hydraulic system		Side frame folding circuit	<b>Circuit pressure 200 bar (2900Psi), 2 pcs of quick-coupler sockets ISO 12,5</b>
		Axle lifting circuit	<b>Circuit pressure 200 bar (2900Psi), 2 pcs of quick-coupler sockets ISO 12,5</b>
		Rollers lifting circuit	<b>Circuit pressure 200 bar (2900Psi), 2 pcs of quick-coupler sockets ISO 12,5</b>

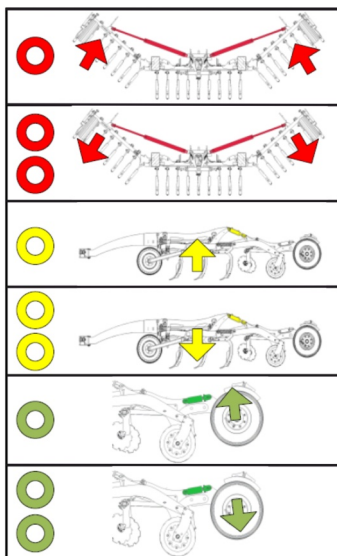
- Connect the machine using the TPS suspension bar to the lower arms of the rear TPS of the tractor, secure the TPS arms using pins against disconnecting, or connect the machine to the fixed bottom suspension and secure it against disconnecting.
- If the drawbar of the machine is equipped with a safety chain, attach 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.
- Connect the quick-couplers of the machine to the hydraulic circuits of the tractor so that the **RED DUST CAPS** for folding side frames is on one control circuit, the **YELLOW DUST CAPS** for lifting the machine on rollers (or rollers and drawbar) is on the second control circuit and the **GREEN DUST CAPS** for lifting the machine on the axle is on the third control circuit.



**RED DUST CAPS** – control of side frames folding  
 1 TAPE – folding side frames into the transport  
 2 TAPES – unfolding side frames into the work position

**YELLOW DUST CAPS** – control of the rollers  
 1 TAPE – drawing out roller piston-rods ⇒ shallowing the machine  
 2 TAPES – drawing in roller piston-rods ⇒ recess of the machine

**GREEN DUST CAPS** – control of axle  
 1 TAPE – drawing in axle piston-rods ⇒ machine lowering  
 2 TAPES – drawing out axle piston-rods ⇒ machine lifting

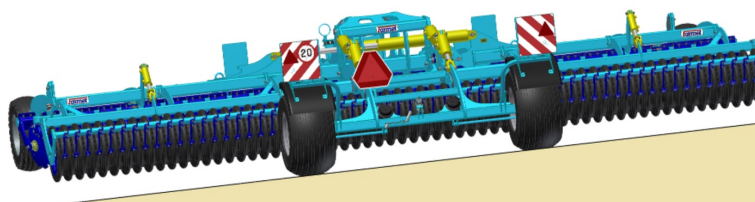
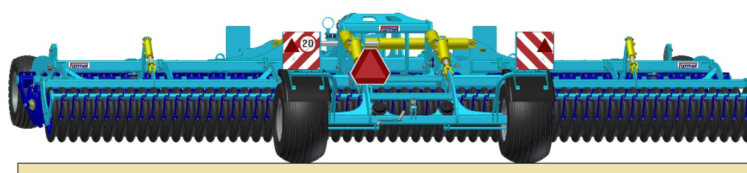
In order to prevent accidental or foreign person (children, passengers) caused movement of the hydraulics, the control switchboards on the tractor must be secured or blocked in the transport position.

**PRESSURE VESSEL**  
 Never open or adjust (welding, drilling etc.) the pressure vessel (pressure accumulator). The pressure vessel is still under gas pressure even after it has been emptied. Empty the pressure vessel in case of any work on the hydraulics of the machine. The manometer must not show any pressure, or the pressure on the manometer must decrease to 0 bars. Only then it is permitted to work on the hydraulic circuit.

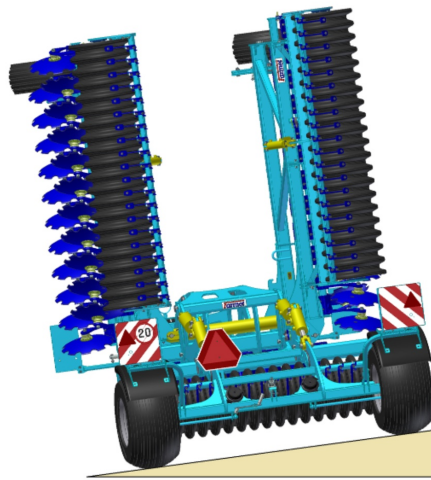
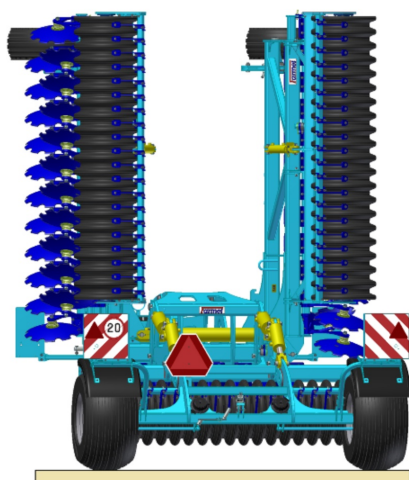
## 8.3 Folding and unfolding of the machine

- 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.
  - Execute the folding or unfolding only with a machine that is raised on the axle with the side rollers in the recessed position, i.e. their piston-rod should be drawn in.
  - 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, when the machine is folded and unfolded. Otherwise, the rollers may get damaged.**

### Machine position for folding



### Machine position for unfolding

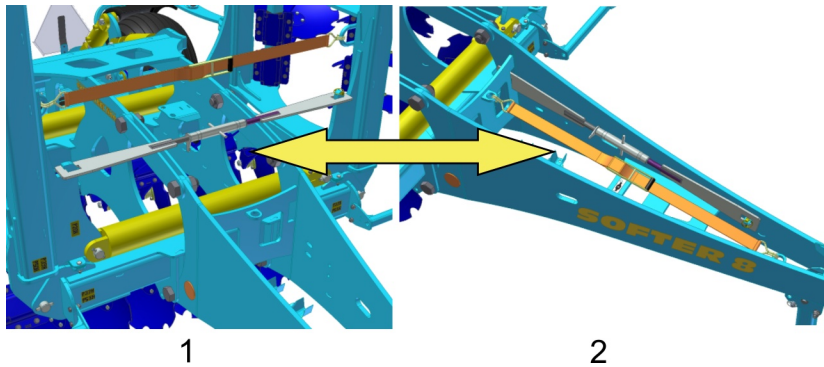


### 8.3.1 Machine unfolding procedure

Machine unfolding procedure – work position				
Initial position: The machine is lifted on the axle, the side frames are secured with the drawbar and belt, both ball valves outside are closed.				
1			Remove the drawbar securing, place them on the pole. Open both ball valves located on the drawbar.	
			Unfold the machine using the red circuit.	
2			Draw out the piston-rods of the side rollers using the yellow circuit into the marginal position, i. e. maximum release.	
			Draw in the piston-rods of the axle using the green circuit into the marginal position, i. e. maximum insertion. The machine will rest on all rollers equally.	
			Place the relevant number of spacer rings on the roller piston-rods and set the tracing wheel (according to the required recess of the machine). If the machine is equipped with a drawbar for fixed suspension, set the distance washers also on the drawbar piston rods. Draw in the piston-rods of all rollers (drawbar) using the yellow circuit. The machine is ready for work.	
<p>100 bar</p>		<b>SETTING THE DOWN PRESSURE OF SIDE FRAMES</b> <ul style="list-style-type: none"> <li>When the machine has been unfolded, the down pressure of the side frames must be adjusted to ensure optimal terrain tracing.</li> <li>Set the value of 100 bar (1450 Psi) on the pressure gauge using the circuit for unfolding.</li> </ul>		



- Remove the drawbar securing and the belt prior to unfolding the machine into the work position and place them to the pole.
- Use the drawbar and the belt to secure the side frames from spontaneous unfolding after you fold the machine into the transport position.



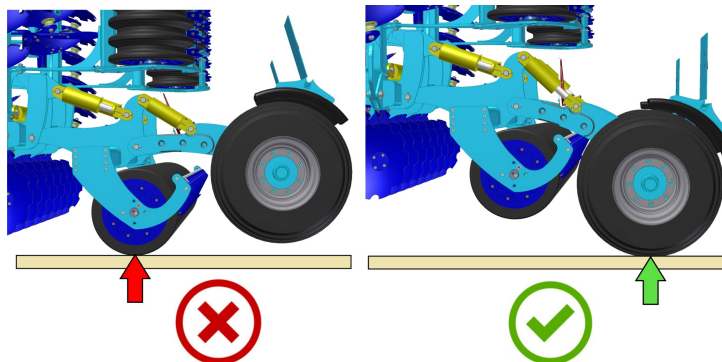
1 – Transport position  
2 – Work position

### 8.3.2 Machine Folding Procedure

Machine Folding Procedure – Transport Position				
Initial position: The machine is unfolded and recessed, both ball valves outside are opened.				
1				Lift the machine on the rollers (or rollers and drawbar), i.e. draw out the piston-rods of rollers (drawbar) using the yellow circuit into the marginal position, i. e. maximum release.
				Lift the machine on the axle, i.e. draw out the piston-rods of the axle using the green circuits into the marginal position, i. e. maximum release.
2				Close the ball valve of the circuit of the central roller – axle (lower) and fold the machine using the red circuit.
3				Close the ball valve of the folding circuit (upper) and draw in the piston-rods of the side rollers using the yellow circuit into the marginal position, i.e. maximum retraction. Note: As for SOFTER 11 PS, the piston-rods of the side rollers are automatically drawn in when the machine is folded.
			Secure the side frames with the securing drawbar and belt. The machine is ready for transport.	



**Warning!!!** The machine must only be transported by the axle, not rollers.



## 9 MACHINE TRANSPORT ON ROADS

### Transport position



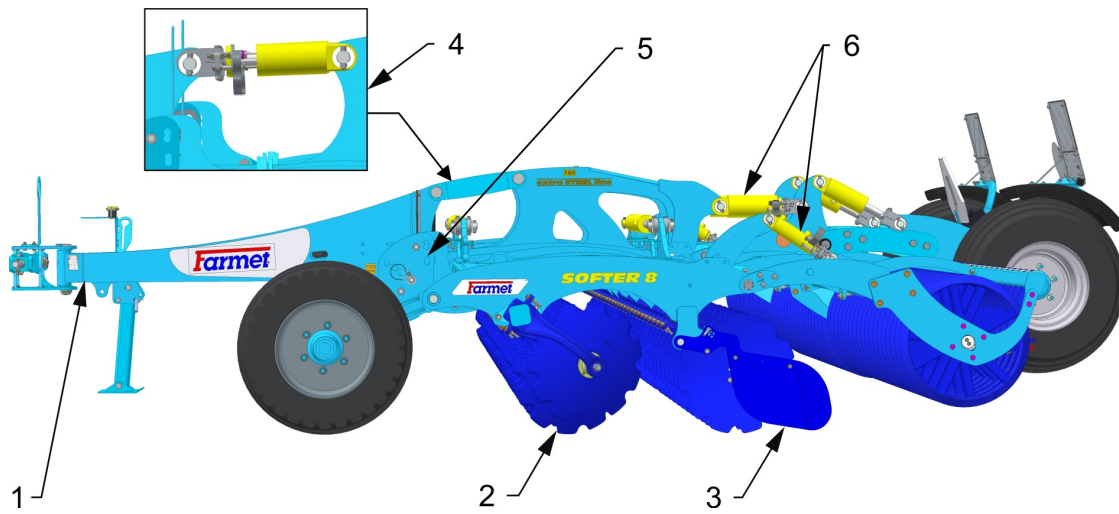
- Connect the machine by suspending on the tractor using the two-point suspension equipment (TPS 3), or the fixed bottom suspension using a pin or a ball.
- Bring the machine into the transport position (according to chapter 8.3.2.)
- The machine must be equipped with removable shields with marking of 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 **20 km/hod (12,5 mph)**.



### Ban of transport with decreased visibility!

- 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.
- Only machines with a valid technical certificate issued in accordance with the valid regulation on the approval of technical qualification and operation on public communications as amended may be transported on public communications. Machines without a valid technical certificate may only be transported on public communications when carried by a towed trailer or other approved means of transport in accordance with the valid regulation.
- 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.
- Clean the entire machine from any accumulated soil before the transportation on the road.

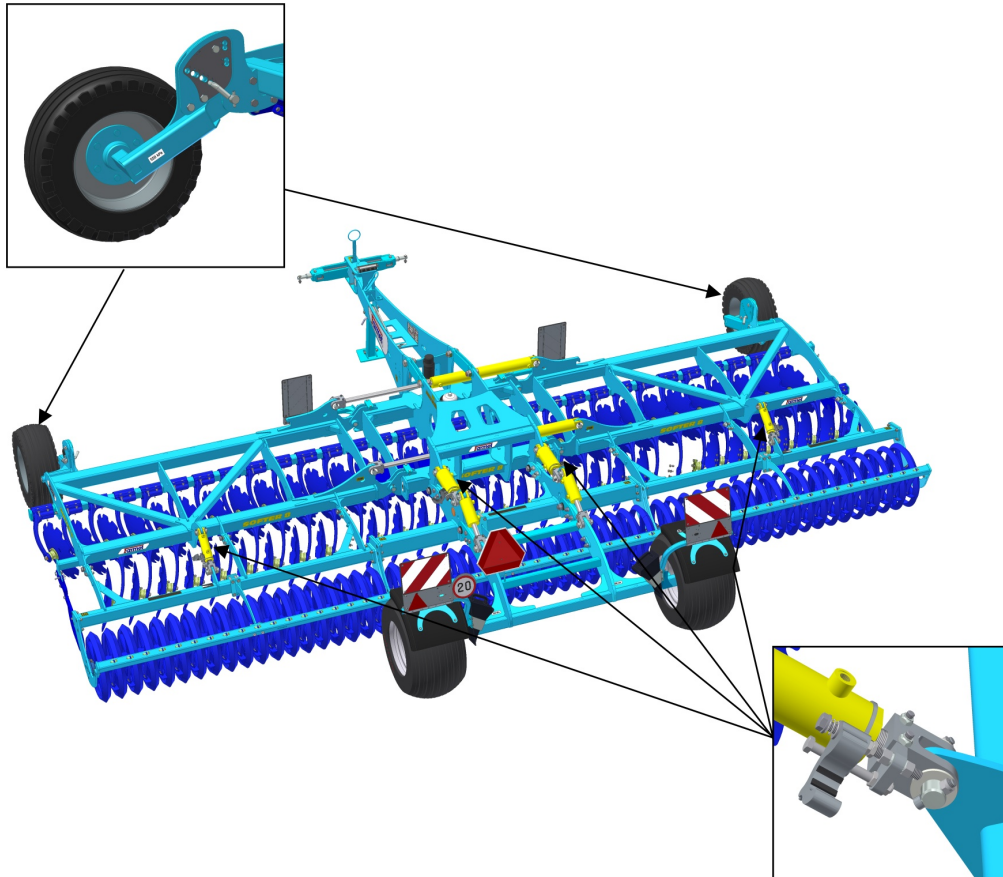
## 10 MACHINE ADJUSTMENT



- 1 – Tractive pole – Setting of machine longitudinal plane
- 2 – Edge discs – Connection of drives
- 3 – Side deflectors – Soil orientation
- 4 – Fixed suspension version, Depth setting
- 5 – Tracing wheels – side frame control
- 6 – Piston-rods of rollers - Spots for setting the working depths

### 10.1 Adjusting the working depth of the machine

- Setting the depth of soil processing is executed when the machine is lifted on the rollers by adding or removing distance washers on the piston rods of the rollers.
- When changing the depth of soil processing, the pins of the tracing wheels also have to be adjusted in the relevant positions.



- **The same number of washers must be set on all piston rods!!!**
- The change ratio between the thickness of the crossbars and the working depth is 1:3.
- Example: Adding or removing a washer with the thickness of 3mm (0.12in) changes the working depth of the machine by 8-9mm (0.32-0.35in).
- Tab.1 includes the individual working positions and the number of washers needed to achieve the required depth of the machine.
- The position of the tracing wheel for the individual depths is provided in Tab. 1 in the first column. The number of the position in the table corresponds with the number of the opening for the pin on the tracing wheel arm.
- 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.

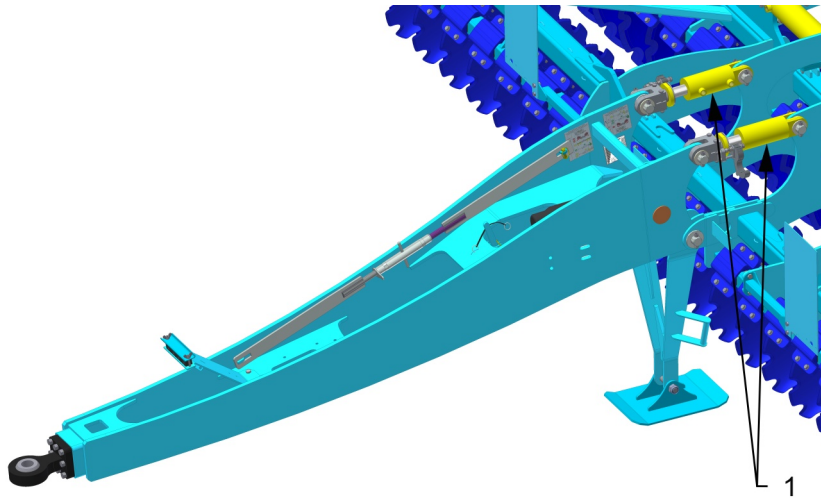
Tab.1 – Setting of working depth in mm/in

1		32 / 1.3
2		40 / 1.6
3		48 / 1.9
4		56 / 2.2
5		64 / 2.5
6		72 / 2.8
7		80 / 3.2
8		88 / 3.5
9		96 / 3.8
10		104 / 4.1
11		112 / 4.4
		120 / 4.7

- 1 – The position of the tracing wheel
- 2 – Number of washers
- 3 – Working depth

## 10.2 Drawbar for the bottom fixed hitch

- If the machine is equipped with a drawbar for the bottom fixed suspension, it is required to set the working depth using the spacing washers also on the piston rods of the drawbar as shown below.



1 – Depth adjustment on the drawbar

- When aggregating the machine to the tractor with a bottom hitch at the height of 600 mm (24 in) from the ground, use the same number of washers on the drawbar piston-rods as on the rear rollers; when the hitch is lower, the height has to be corrected using additional washers according to tab.2.

- 1 – Hitch height  $h = 600 \text{ mm} / 24 \text{ in}$   
Washers same as on rollers
- 2 – Hitch height  $h = 550 \text{ mm} / 22 \text{ in}$   
Washers same as on rollers + 6 ks
- 3 – Hitch height  $h = 500 \text{ mm} / 20 \text{ in}$   
Washers same as on rollers +12

Tab. 2 – Setting the working depth on the drawbar

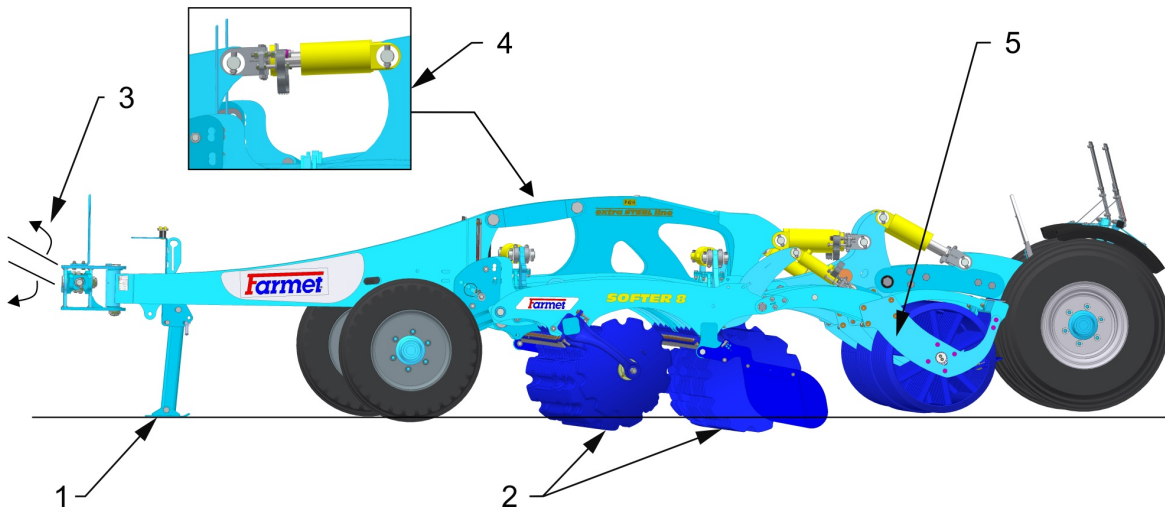
		h [mm/in]			
		600/24	550/22	500/20	
1					32 / 1.3
2			+6	+12	40 / 1.6
3					48 / 1.9
4					56 / 2.2
5					64 / 2.5
6					72 / 2.8
7					80 / 3.2
8					88 / 3.5
9					96 / 3.8
10					104 / 4.1
11					112 / 4.4
					120 / 4.7

Diagram of a tractor showing hitch height  $h$ .



### 10.3 Adjusting the longitudinal plane of the machine

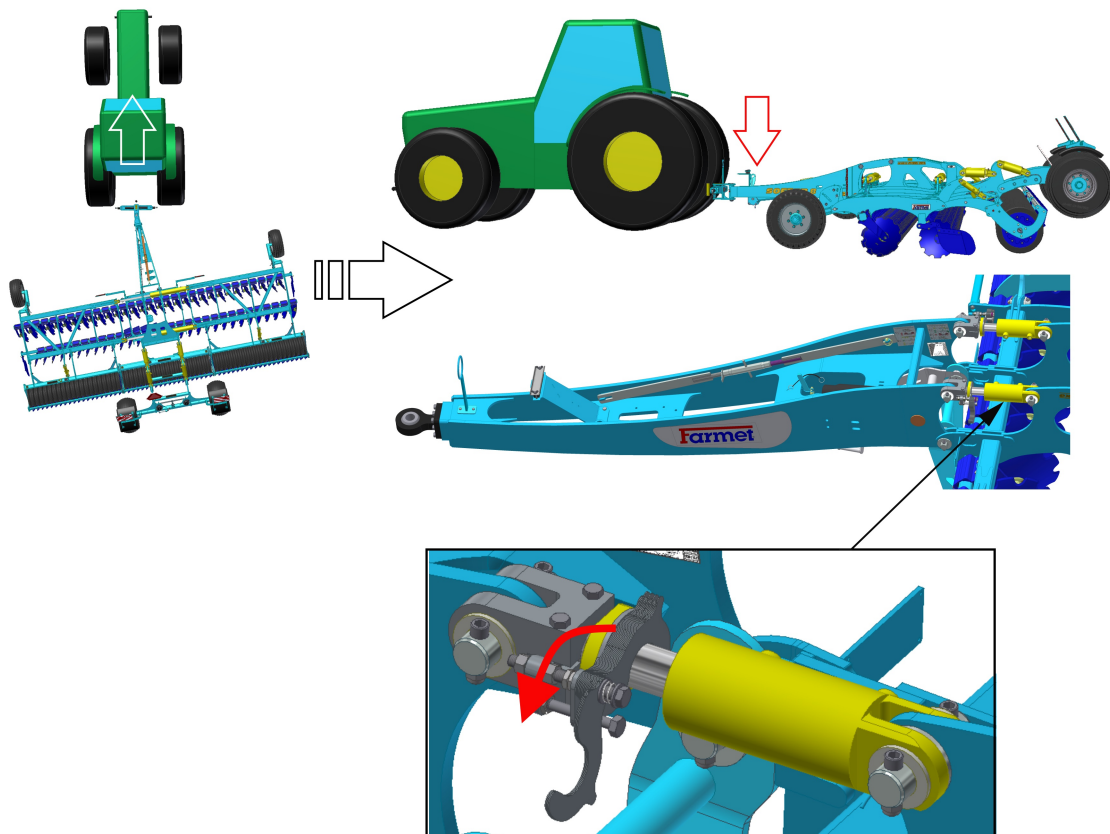
- With the use of the TBZ shoulders of the tractor, or the spacing washers on the piston rods of the drawbar, adjust the machine so that the front and rear row discs work in the same depth.



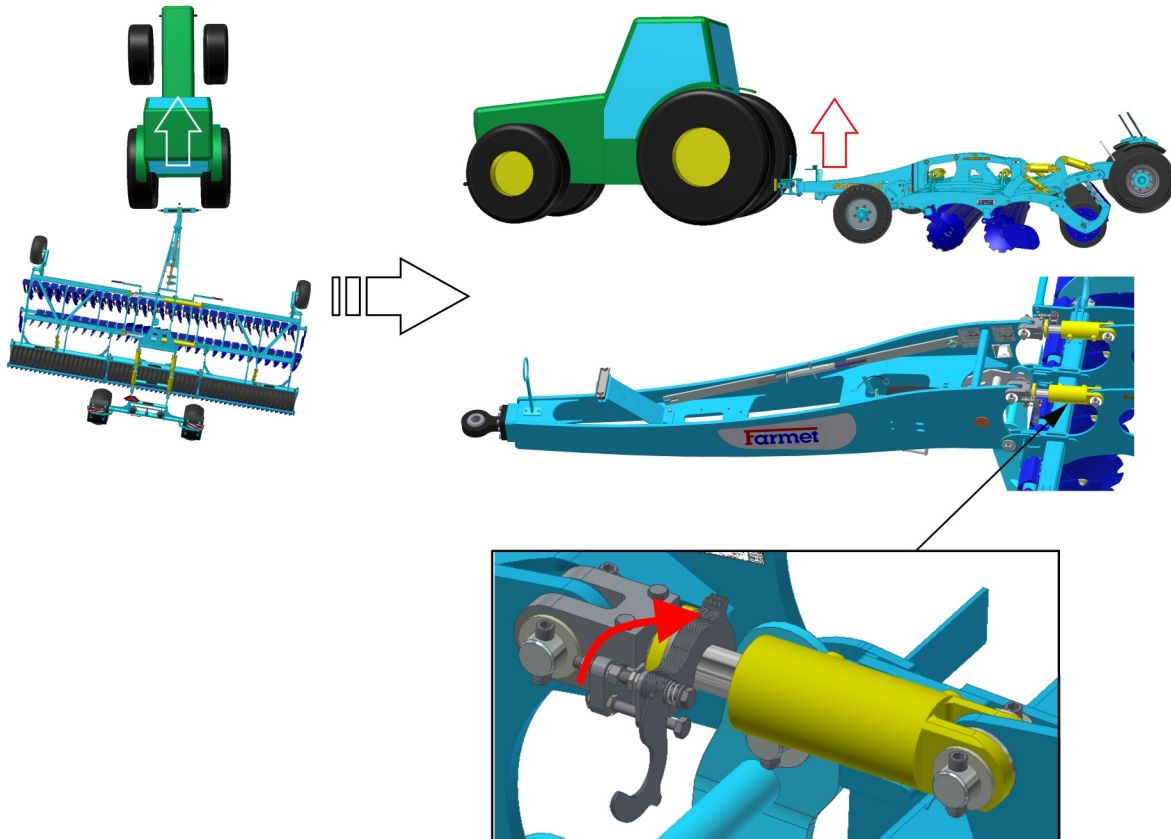
- 1 – Soil
- 2 – Setting the same depth for front and rear disc rows
- 3 – TBZ shoulders of the tractor
- 4 – Fixed suspension version, Depth setting
- 5 – Setting the depth by rear rollers

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 spacing washers on the drawbar piston rods:

- When the machine turns to the right-hand side, lift the machine in arms, or remove washers on the drawbar piston-rods



- When the machine turns to the left-hand side, lower the machine in arms, or add washers on the drawbar piston-rods

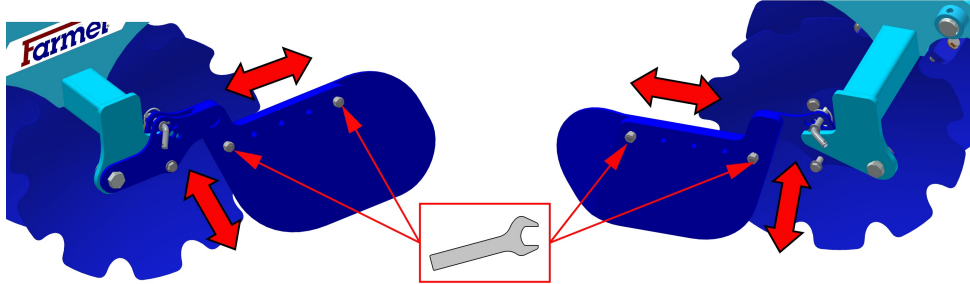




## 10.4 Setting side deflectors and edge discs

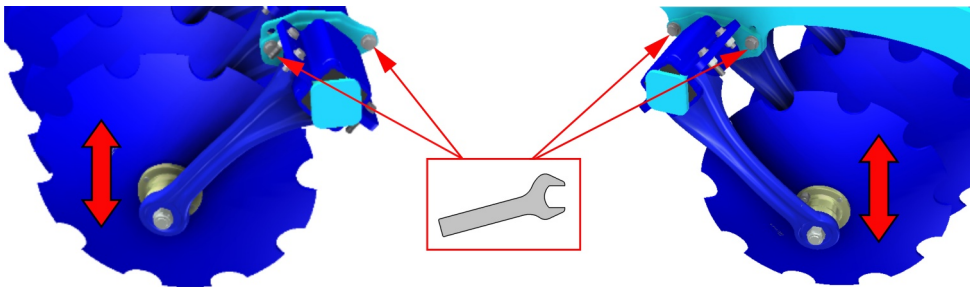
- According to the type and quantity of plant residues, it is necessary to set the side deflectors.

Options for side deflector settings



- The position of the edge discs is adjustable and they allow different recess against other discs. The adjustment is executed so that the working depth of the edge discs is lower (approx  $\frac{1}{2}$  -  $\frac{1}{4}$  of the depth of the other discs) so that no unevenness is created on the land.

Options for edge disc settings



## 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.
- Regularly check the prescribed pressure in the machine tyres and the condition of the tyres. Perform possible repairs of the tyres in an expert workshop.
- Keep the machine clean.

## 12 MACHINE STORAGE

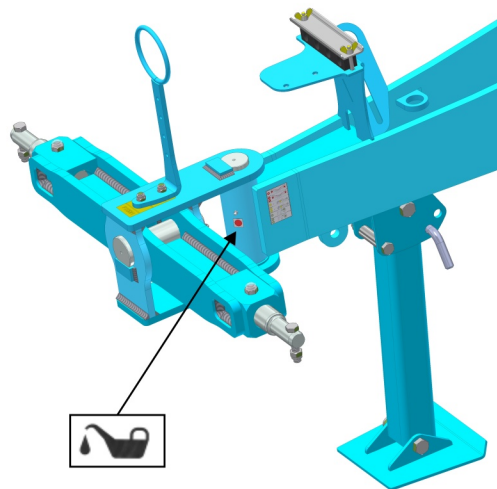
### Long-term machine shutdown :

- 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 rest on the working parts. It could damage the working parts of the machine.
- Secure the machine against access of unauthorised persons.

### 13 MACHINE LUBRICATION SCHEDULE

- During machine maintenance and its lubrication, it is necessary to observe the safety regulations.
- If the machine is equipped with a drawbar for the bottom fixed suspension, it is completely maintenance-free as far as lubrication is concerned.

LUBRICATION POINT	INTERVAL	LUBRICANT
Pole 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 according to 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.

## 14 ENVIROMENTAL PROTECTION

- Regularly check the tightness of the hydraulic system.
- Preventively replace or repair hydraulic hoses, possibly further parts of the hydraulic system showing signs of damage, before oil leaks occur.
- Check the condition of hydraulic hoses and perform their timely replacement. The service life of hydraulic hoses includes the time, when they were stored.
- Handle oils and greases according to valid waste laws and regulations.

## 15 MACHINE DISPOSAL AFTER SERVICE LIFE EXPIRY

- The operator must ensure 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.

## 16 SERVICING AND WARRANTY CONDITIONS

### 16.1 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.

### 16.2 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.

2011/001/03

**ⒸZ ES PROHLÁŠENÍ O SHODĚ**  
**ⒸGB CE CERTIFICATE OF CONFORMITY**  
**ⒸD EG-KONFORMITÄTSERKLÄRUNG**  
**ⒸF DÉCLARATION CE DE CONFORMITÉ**  
**ⒸRU СЕРТИФИКАТ СООТВЕТСТВИЯ ЕС**  
**ⒸPL DEKLARACJA ZGODNOŚCI WE**

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552 03 Česká Skalice  
Czech Republic  
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Tel/Fax: 00420 491 450136

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2. ⒸZ Strojní zařízení: - název : **Diskový podmítač**  
ⒸGB Machine: - name : **Disk plough-harrow**  
ⒸD Fabrikat: - Bezeichnung : **Kurzscheibenegge**  
ⒸF Machinerie: - dénomination : **Déchaumeur à disques**  
ⒸRU Сельскохозяйственная машина: - наименование : **Дисковый луцильник**  
ⒸPL Urządzenie maszynowe: - nazwa : **Talerzowy plug podorywkowy**
- typ, type : **SOFTER**  
- model, modèle : **SOFTER 4,5; 5; 6; 8; 11 PS**  
- ⒸZ výrobní číslo :   
- ⒸGB serial number :   
- ⒸD Fabriknummer :   
- ⒸF n° de production :   
- ⒸRU заводской номер :   
- ⒸPL numer produkcyjny:

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

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

ⒸZ Schválil ⒸGB Approve by dne: 01.02.2018  
ⒸD Bewilligen ⒸF Approuvé  
ⒸRU Утвердил ⒸPL Uchwałił

V České Skalici dne: 01.02.2018

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