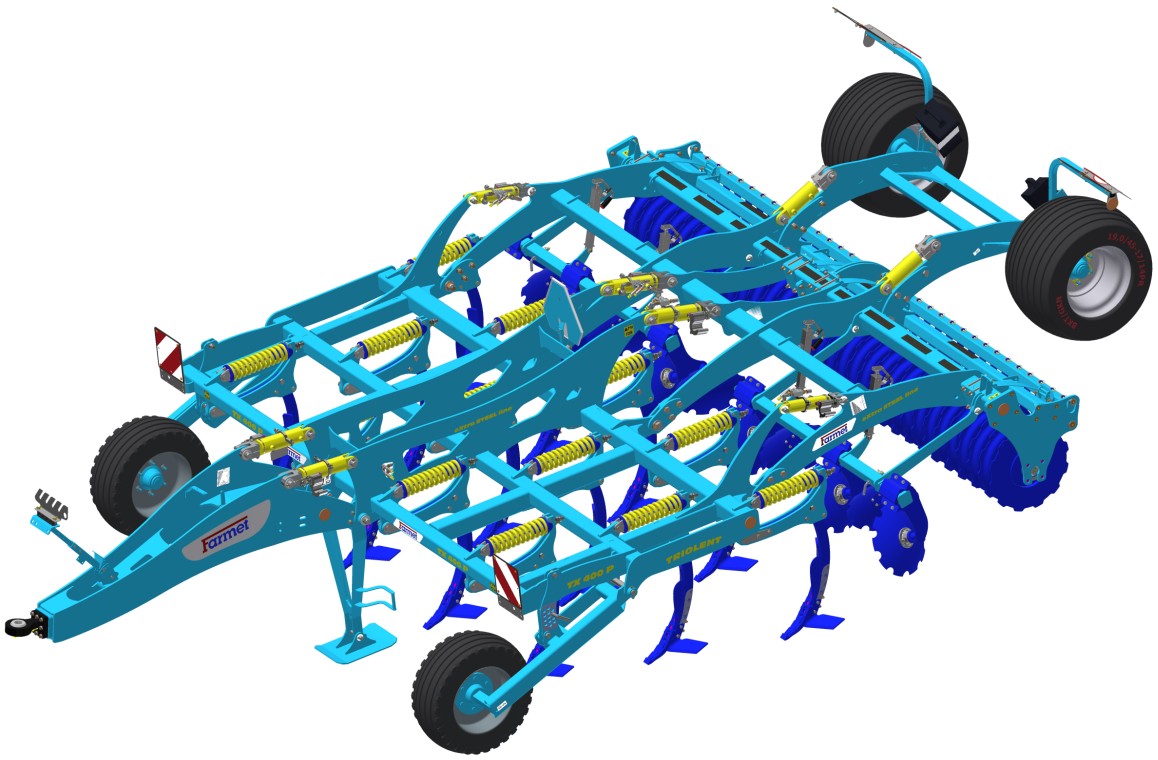
OPERATING MANUAL

TRIOLENT

TX 300 P | TX 400 P



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PREFACE

Dear customer,

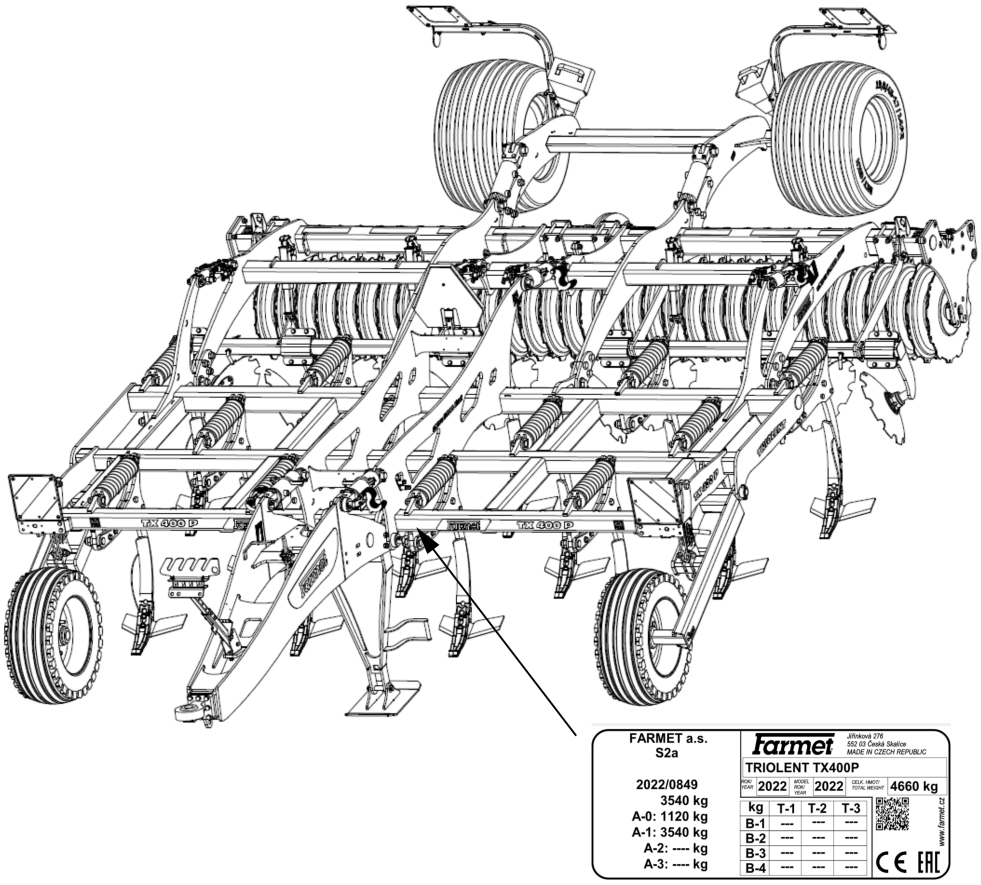
The agricultural machine you have purchased is a high-quality product of Farmet a.s. Česká Skalice.
You can fully utilise the advantages of your machine after thoroughly studying the operating manual.
The serial number of the machine is punched on the production label and written in the operating manual (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 YOUR MACHINE

The cultivator **TRIOLENT** is designed for cultivation of all types of soils.

YOUR MACHINE CHARACTERISTICS:

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



IMPORTANT

READ CAREFULLY BEFORE USE

KEEP FOR FUTURE REFERENCE

Contents

1 MACHINE LIMIT PARAMETERS

- The machine is designed for soil cultivation up to a depth of 30 cm (11,8 in) when agricultural soil cultivation. Another type of use exceeding the determined purpose is forbidden.
- Machine operation is performed by one person – the tractor operator.
- 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	TRIOLENT TX 300 P	TRIOLENT TX 400 P FIX
Working width	3 m (9,8 ft)	4 m (13,1 ft)
Transport width	3 m (9,8 ft)	4 m (13,1 ft)
Transport height	1,4 m (4,6 ft)	
Machine total length	7,5 m (24,6 ft)	
Working depth	6 – 30 cm (2,4- 11,8 in)	
Number of shares	10	14
Working performance	2,4–3,6 ha/h (5,9-8,9 ac/h)	3,2–4,8 ha/h (7,9-11,9 ac/h)
Towing means	110-165 kW (150–225 HP)*	125–190 kW (170–255 HP)*
Working speed	8–12 km/h (5 - 7,5 mph)	
Maximum transport speed	25 km/h (15,5 mph)	
Maximum slope grade	6 (°)	
Tyre dimensions - transport (Tyre pressure)	19.0/45–17 14 PR (400 kPa (58 Psi))	
Machine weigh	3 750 kg (8 267 lb)**	4 260 kg (9391,7 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.

**Depends on the equipment of the machine.

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.

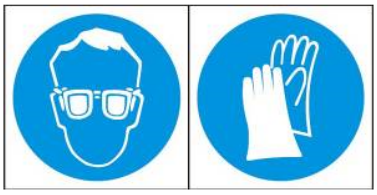
- The operator must have the Operating Manual with the work safety requirements available at any time when working with the machine.

- 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.

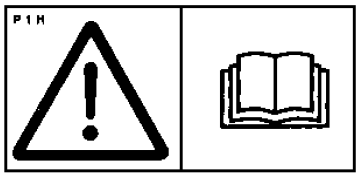
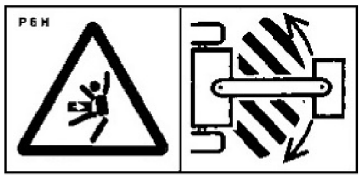
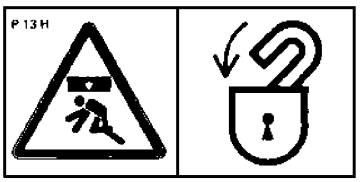
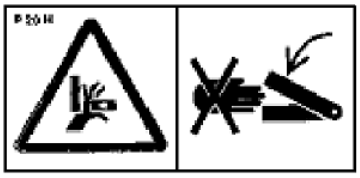
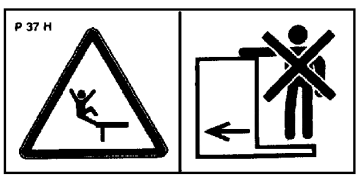
- Machine fastening for handling may only be performed in places designed for that and marked with self-adhesive labels showing the "chain" symbol.
- After fastening (suspending) at designated points, it is forbidden to move in the space of possible reach of the handled machine.

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 the precise meaning of the work safety labels on the machine are determined 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.	**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**
	The side extensible disc must be secured with the stopper for transport and during work. The rear twin roller must be secured with the stopper for transport. Before commencing the machine transport, secure the axle with spherical valves against unexpected drop.	**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**

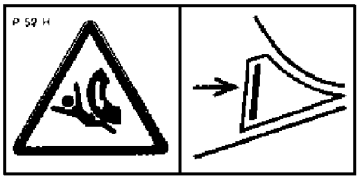
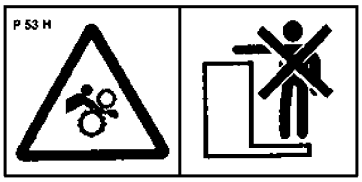
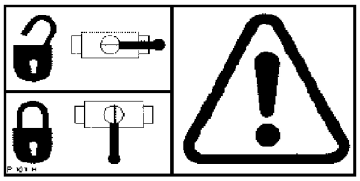
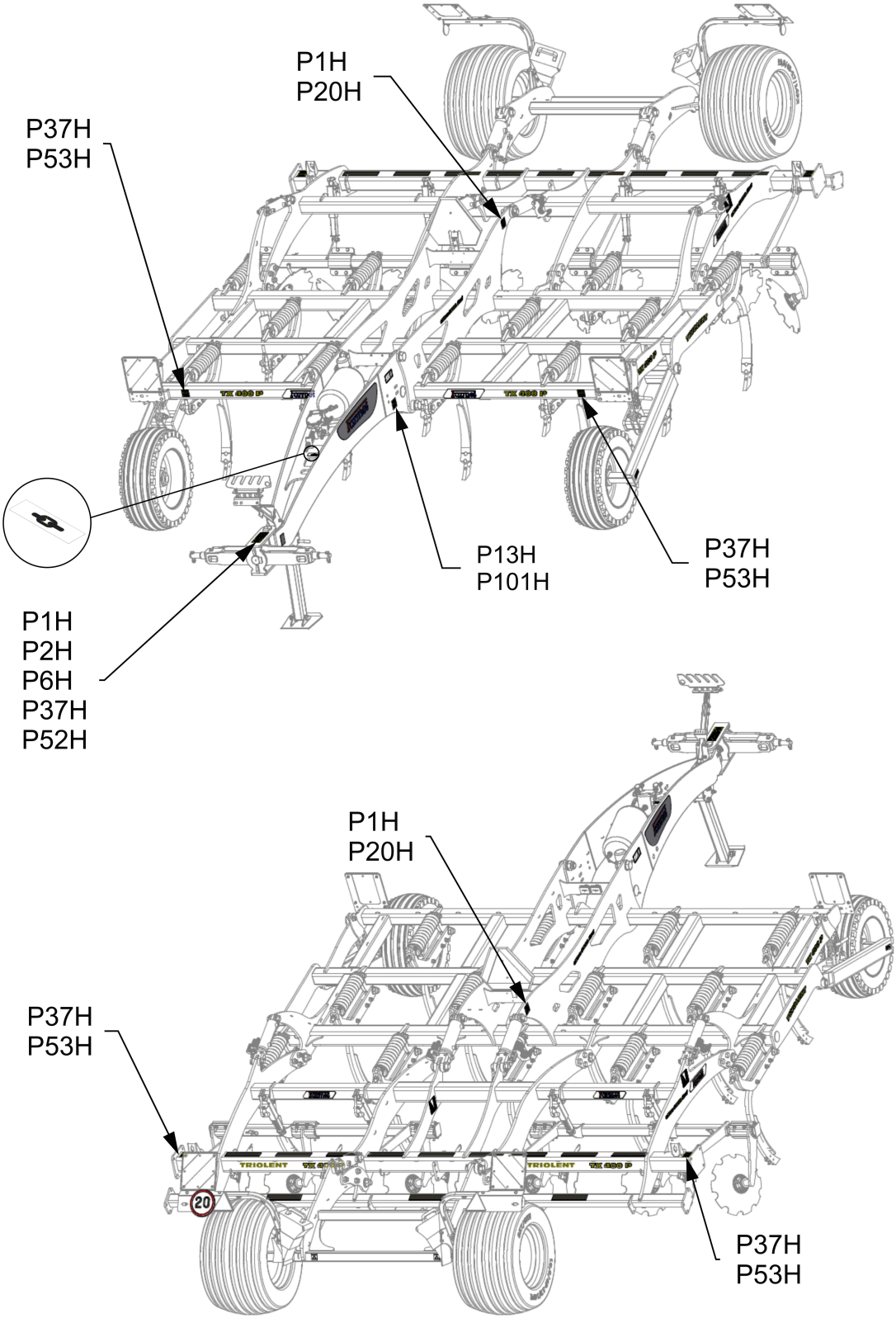
	Secure the machine against unwanted movement by positioning on its working bodies (shares).	**P 52 H**
	Do not approach the rotary parts of the machine, if these are not at rest, i. e. they do not turn.	**P 53 H**
	The shown positions of the lever and the function of the hydraulic spherical valve located on the piston rod.	**P 101 H**

Fig. 1 - Location of safety labels on the machine



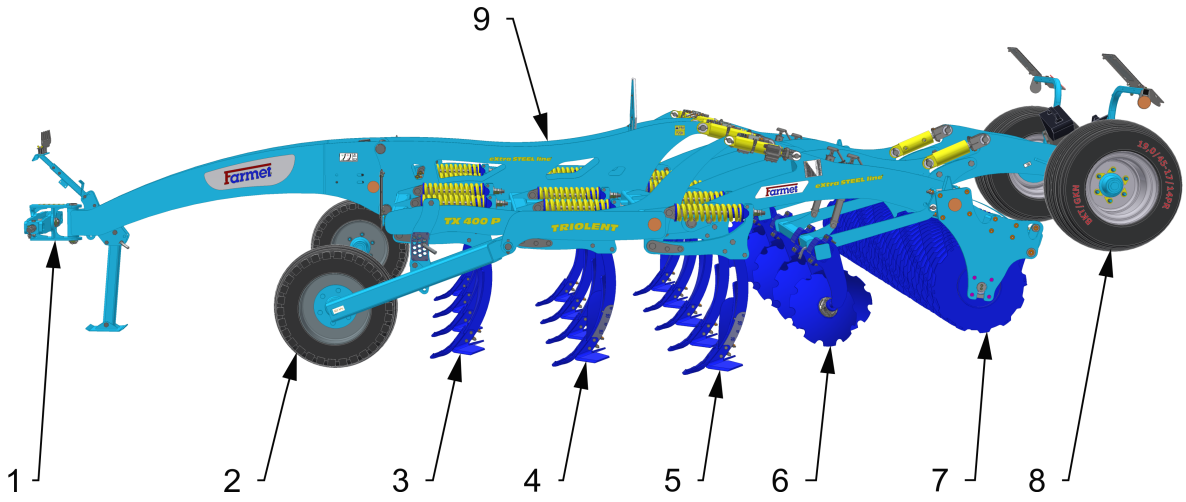
6 DESCRIPTION

The machine**TRIOLENT TX 300 P, TX 400 P FIX** is constructed as semi-carried.

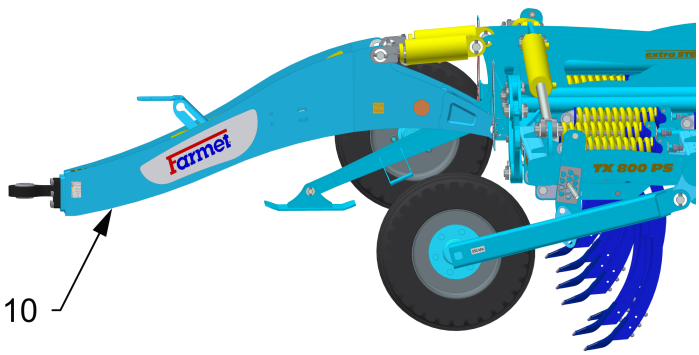
The basic version consists of a tow bar with a TPS suspension bar with pivots for the TPS 3 or TPS 4 category (resp. draught eye Ø40, 50 and 70 mm or hinge Ø 80 mm), a central frame with the transportation axle. There are three rows of shares with automatic spring protection located on the central frame. There is a row of rectifying discs that level out the soil. There are rollers in the rear that compact the loosened soil..

6.1 Working parts of the machine

Fig. 2 - Working parts of the machine

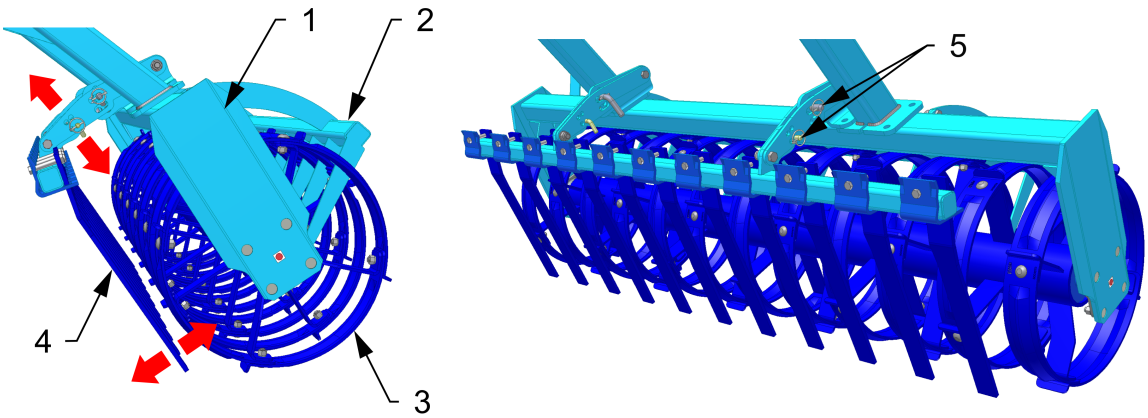


1 – Tow bar with draught bar
2 – Copy wheel
3 – Front shares row
4 – Second shares row
5 – Third shares row
6 – Levelling discs
7 – Roller for soil compaction
8 – Transport axle
9 – Main frame
10 – Tow bar with draught eye



6.1.1 Description and setting of the ring roller

The roller with wheels consisting of ring segments is attached to the frame. There is a row of leveller blades in front of the roller. The height as well as angle of the blades can be adjusted. The correct setting of the blades is essential for the correct function of the roller. The setting of the blades must be first tested and adjusted under factual conditions.

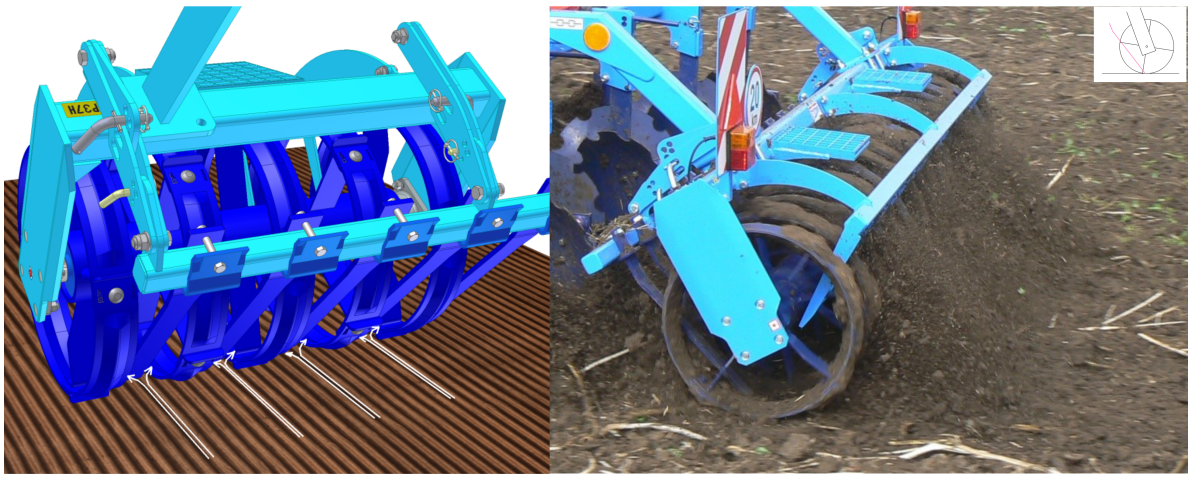


1. Roller frame
2. Roller cleaner
3. Roller
4. Front leveller blades
5. Bolts for adjusting leveller blades

Possibilities for setting front leveller blades

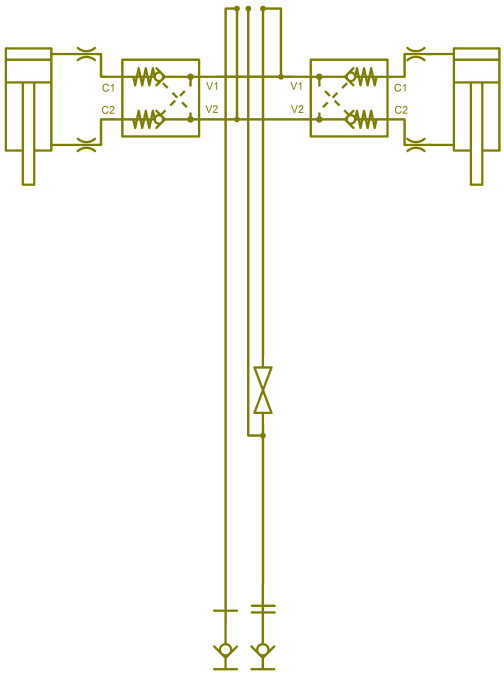
1. Front leveller blades located in front of the roller wheels throw clods directly under the wheels that crush them.

2. Front leveller blades located between the roller wheels throw soil inside the wheels. Clods of soil are thus partially crushed by the wheels and partially crushed inside the wheels. With this setting, the surface is covered with soft soil after work.

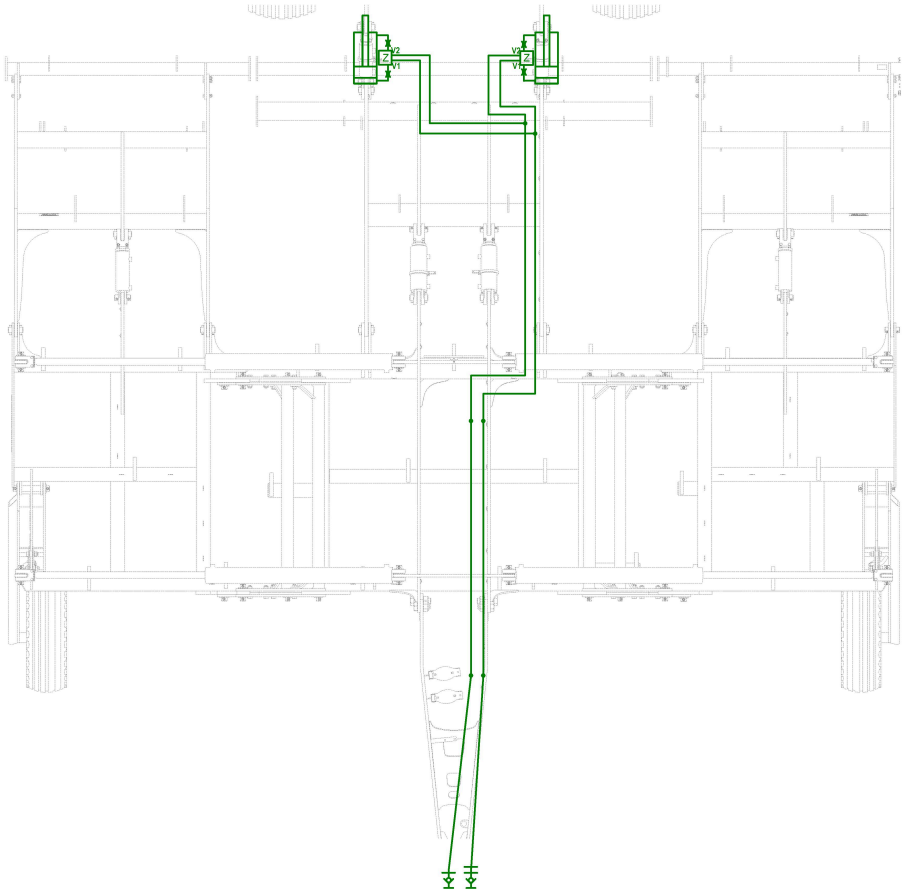


6.2 Hydraulics

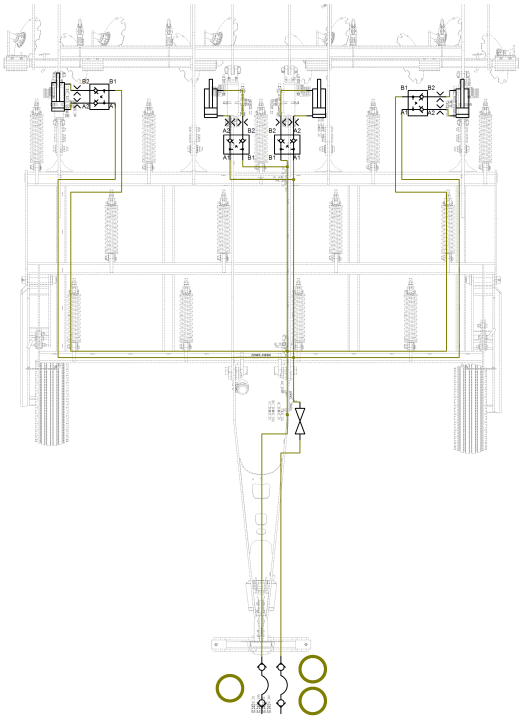
HYDRAULIC DISTRIBUTION - RECESSING DRAWBAR TRIOLENT TX400P



HYDRAULIC AXLE DISTRIBUTION TRIOLENT TX400P:



HYDRAULIC DISTRIBUTION - RECESSING – MACHINE TRIOLENT TX400P:



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. cap.**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 200KPA (29 PSI)

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

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 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 cultivator	**TX 300P**	**110 - 165 kW* (150 - 225 HP)***
	TX 400 P	**125 - 190 kW* (170 - 255 HP)***
Requirement for the tractor's TPS	Spacing of the lower suspension joints (measured at the joint axes)	**1010±1,5 mm (39,76 in)**
		(possible to set also 910±1,5 mm/35,83 in)
	Øof the hole of the lower suspension joints for the machine suspension pivots	**Ø37,5 mm (1,476 in)**
Requirement for the tractor's hydraulic system	Side frame folding circuit	**Circuit pressure 200bar (2900 Psi), 2 pcs of quick-coupler sockets ISO 12,5**
	Circuit for lifting the machine on the rollers	**Circuit pressure 200bar (2900 Psi), 2 pcs of quick-coupler sockets ISO 12,5**
	Axle lifting circuit	**Circuit pressure 200bar (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 (87 Psi) – max. 8,5 bar (123 Psi), 2 pcs coupling head of single-hose brakes**

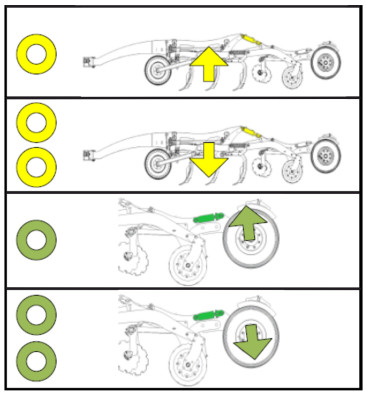
- Connect the machine using the TPS suspension bar to the lower arms of the rear TPS of the tractor, secure the TPS arms using pins against disconnecting.

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

HYDRAULIC OIL SPECIFICATIONS
The hydraulic circuit of the machine is filled with oil at the factory:
Performance level: API GL 5; SAE 10W-30; SAE 80 Manufacturer’s specification: ALLISON C4; CATERPILLAR TO-4; VOLVO VCE WB 101; 97303 JONH DEERE 20C/20D ZF TE-ML 03E/05F/ 06E/06F/06K/17E/21F PARKER DENISON HF-0/HF-1/HF-2 New HOLLAND NH 420A/410B MASSEY FERGUSON M1135/M1141/ M1143/ M1145 KUBOTA UDT Fluid CASE IH MS-1204/MS-1206/ MS-1207/MS-1209 FORD M2C134D M2C86B/C CNH MAT 3525/ MAT3526 SPERRY VICKERS/EATON M2950S,I-280-S SAUER SUNDSTRAND(DANFOSS) Hydro Static Trans fluid; CASE CNH MAT 3540(CVT), Claas(CVT), AGCO CVT; ML200, Valtra G2-10(XT-60+)

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 machine lifting (**YELLOW CIRCUIT**) on the first control circuit and the separate axle control (**GREEN CIRCUIT**) on the second control circuit.



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

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.

9 MACHINE TRANSPORT ON ROADS

Transport position of TRIOLENT TX 300 P, 400 P

- Connect the machine by suspending on the tractor using the two-point suspension equipment (TPS 3).
- 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.
- 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 **25 kph (15,5 mph)**

Ban of transport with decreased visibility!

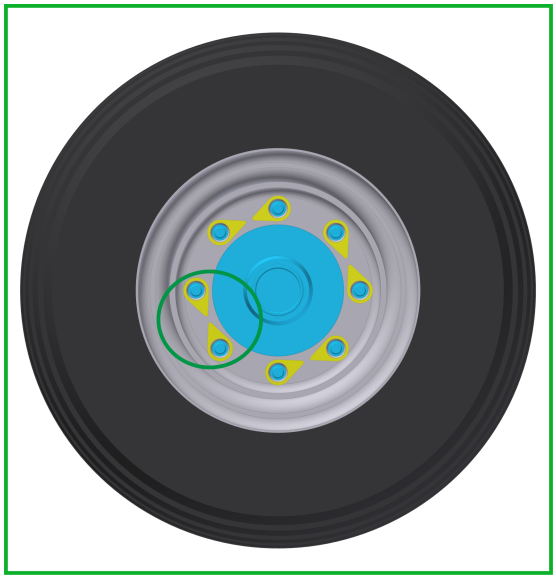
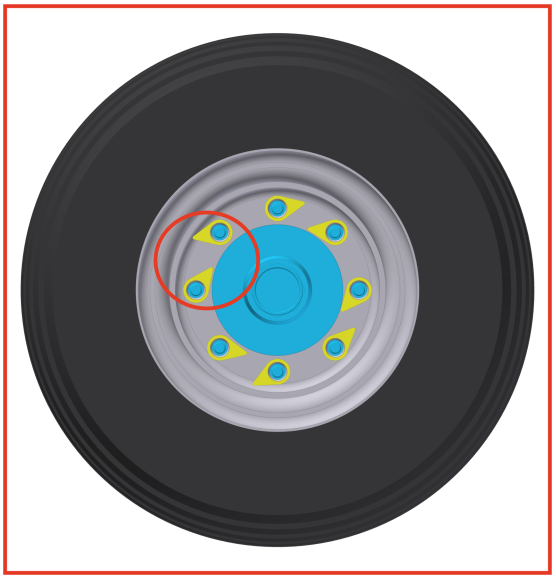
- Bring the machine into the transport position.
- The operator is obliged to pay increased attention during transport on roads, due to the transport dimensions of the machine.
- The operator must observe the valid regulations for transport on roads (laws, decrees) after connecting the machine to the 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 present the machine certificate of roadworthiness as needed, according to the valid regulations for road traffic (decree, law) (only in the Czech Republic).
- 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 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

	
INITIAL POINT-TO-POINT CONFIGURATION	**DANGER-WHEEL NUTS HAVE LOOSENED!**

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!!**

Fig. 3 - Tine machines

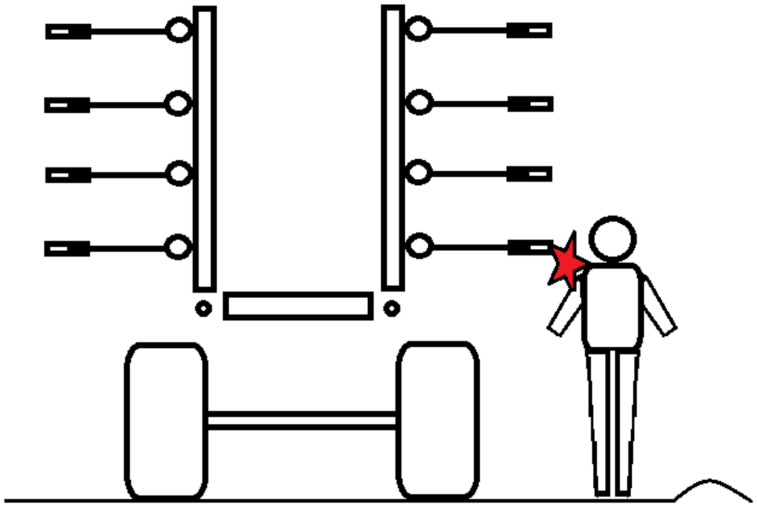
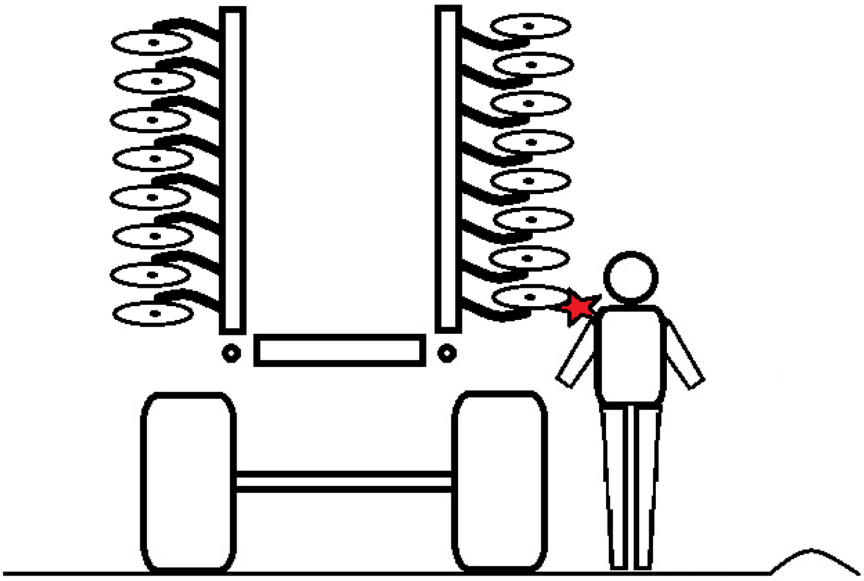
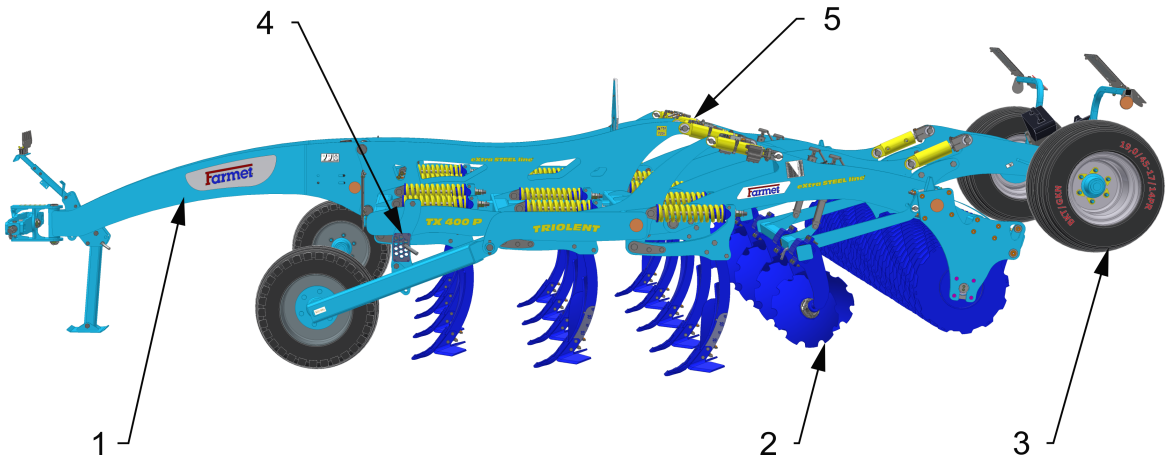


Fig. 4 - Disc machines



10 MACHINE ADJUSTMENT

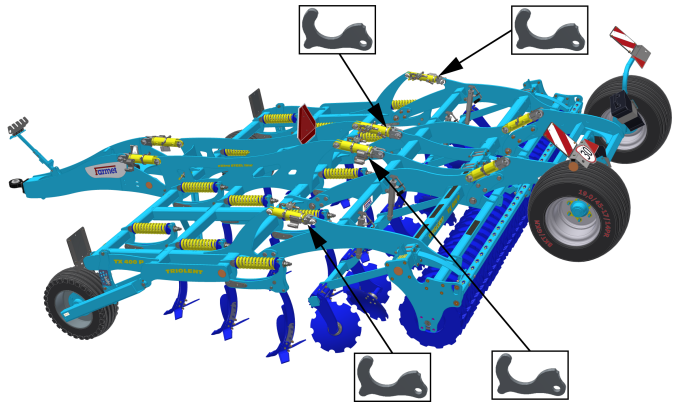


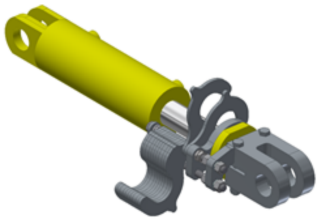
1 – Tow bar – Adjustment of machine longitudinal plane
2 – Levelling discs
3 – Axle – lifted for work
4 – Setting the working depth of tracing wheels
5 – Spots for setting the working depths

10.1 Machine working depth adjustment

• The working depth of the machine must be set so that the spring protection of the working tools (tines) does not unlock frequently. The spring protection should only release very sporadically. Unlocking can occur on a maximum of one working tool (tine) on the entire machine after a 100 - 200 m drive. If unlocking is more frequent, it is necessary to reduce the working depth or use narrow chisels. Due to the frequent release of the spring protection, excessive wear of the pins and other parts of the spring protection can occur. In this case, their more frequent replacement is necessary

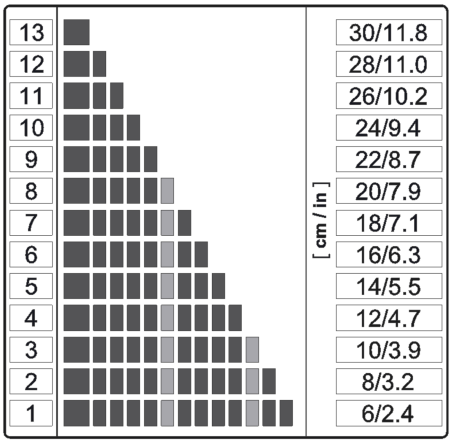
• Setting of soil processing depth is executed on lifted machine through adding or removing of distance washers on hydraulic cylinders.





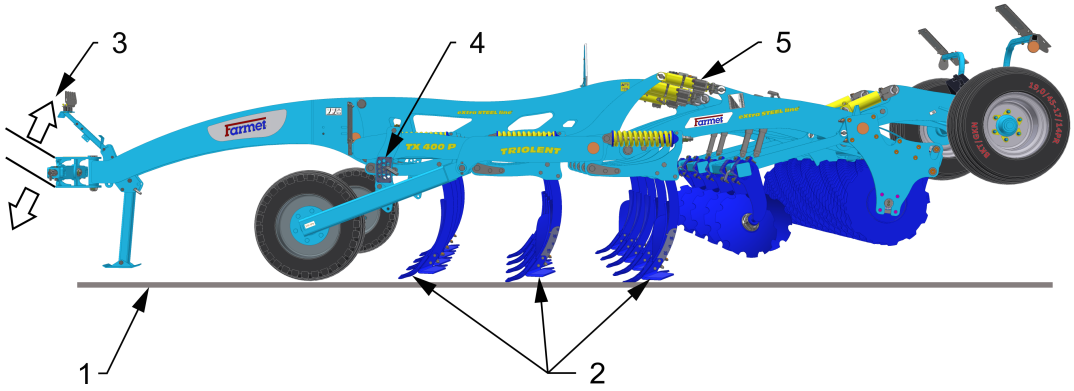
- **The same number of washers must be set on all piston rods!!!**

- The table shows the individual working positions and number of washers needed to achieve the required machine depth.
- Specified working depths at individual positions are only for information. They may vary according to particular soil conditions. It is possible to add or remove a required number of washers as needed.



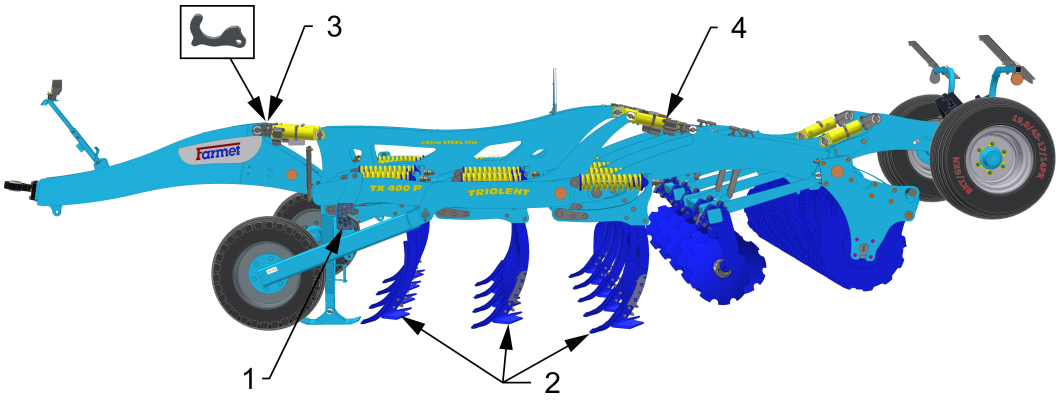
10.2 Machine adjustment using tractoŕs TPS arms

Use the TPS arms of the tractor to set the machine so that the shares in all rows work in the same depth.



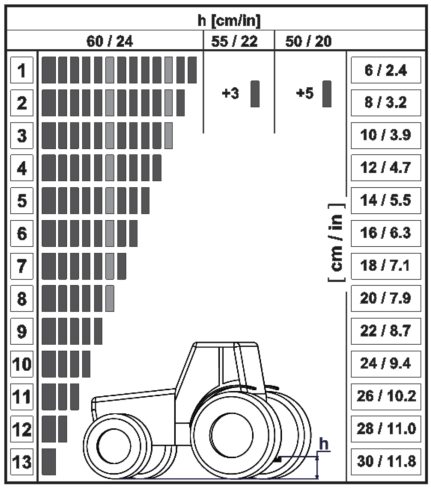
1 – Soil
2 – Machine frame on the plane – same depth in all rows
3 – TPS tractor arms – height adjustment
4 – Setting the depth of the tracing wheels
5 – Setting the depth of the rollers

Machine adjustment on the bar to lower hitch



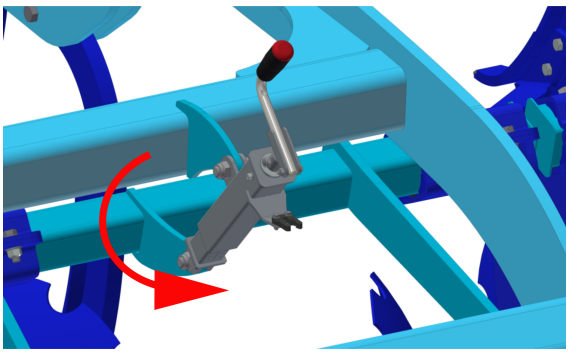
1 – Setting the depth of the tracing wheels
2 – Machine frame on the plane – same depth in all rows
3 – Setting the depth of the tow bar
5 – Setting the depth of the rollers

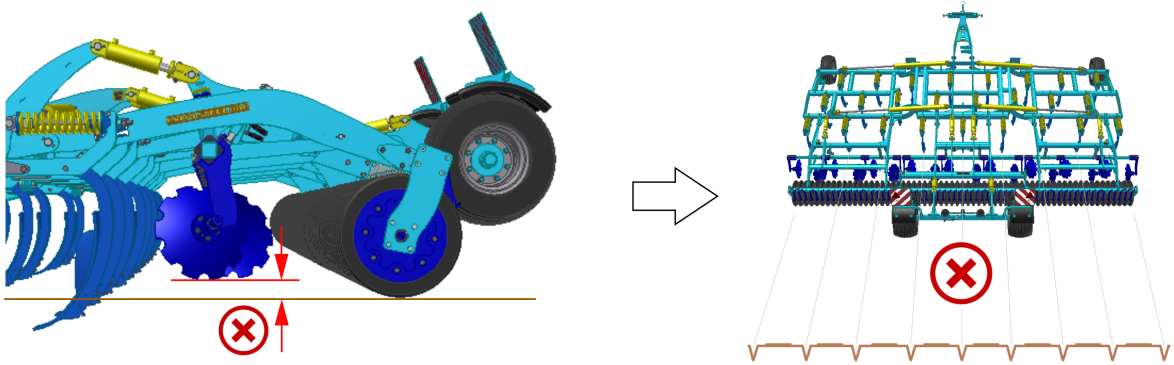
- The table provides information about the individual operating positions and the number of washers required to achieve a horizontal plane of the machine (i.e. the same depth of all working parts).
- **Always use the same number of washers on both drawbar piston-rods!!!!**

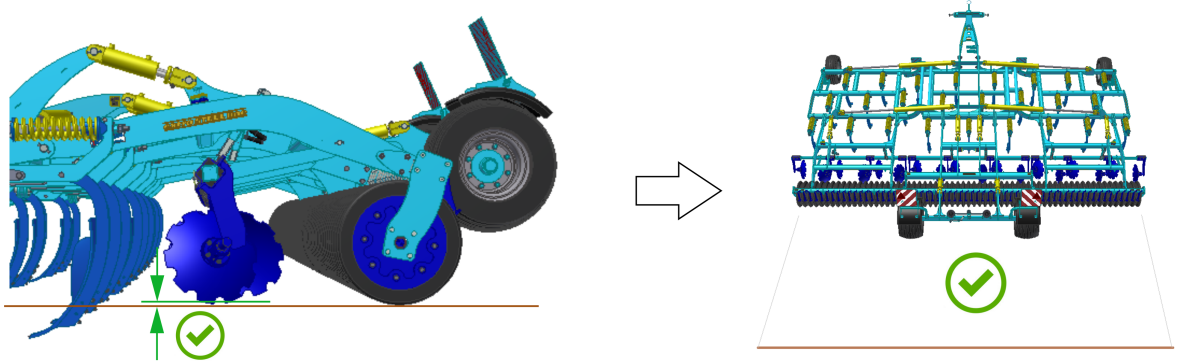


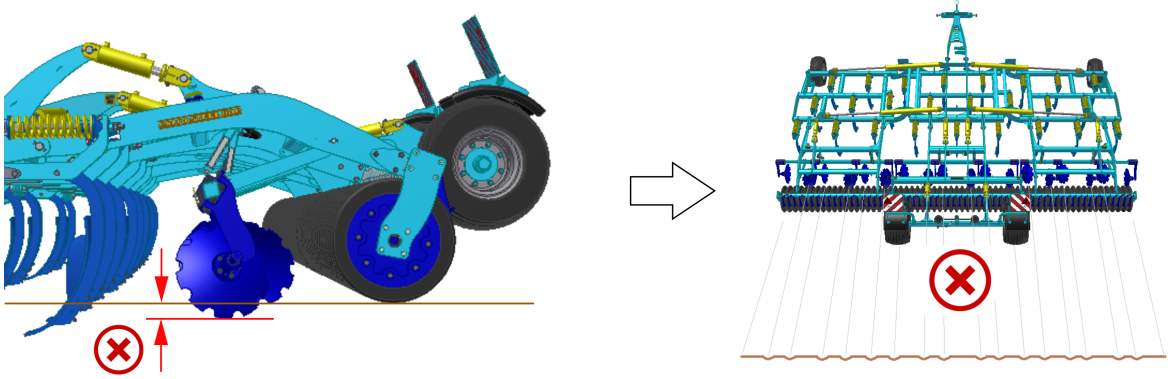
10.3 Setting the leveling discs

- Set the working depth of the levelling discs by using the lever for setting discs. Be careful when executing the adjustment.
- Correctly set discs will provide the perfect levelling and overlapping with soft soil along the entire width of the working coverage. Too shallow disc setting leaves lines after the rear ploughshares; too deep disc setting creates traces of accumulated soil after the machine. Check the correct disc setting during work – the setting may differ according to the soil conditions and disc wear and tear.



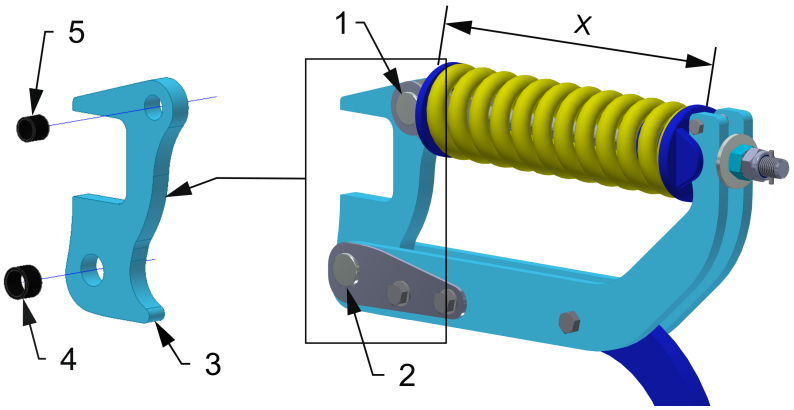






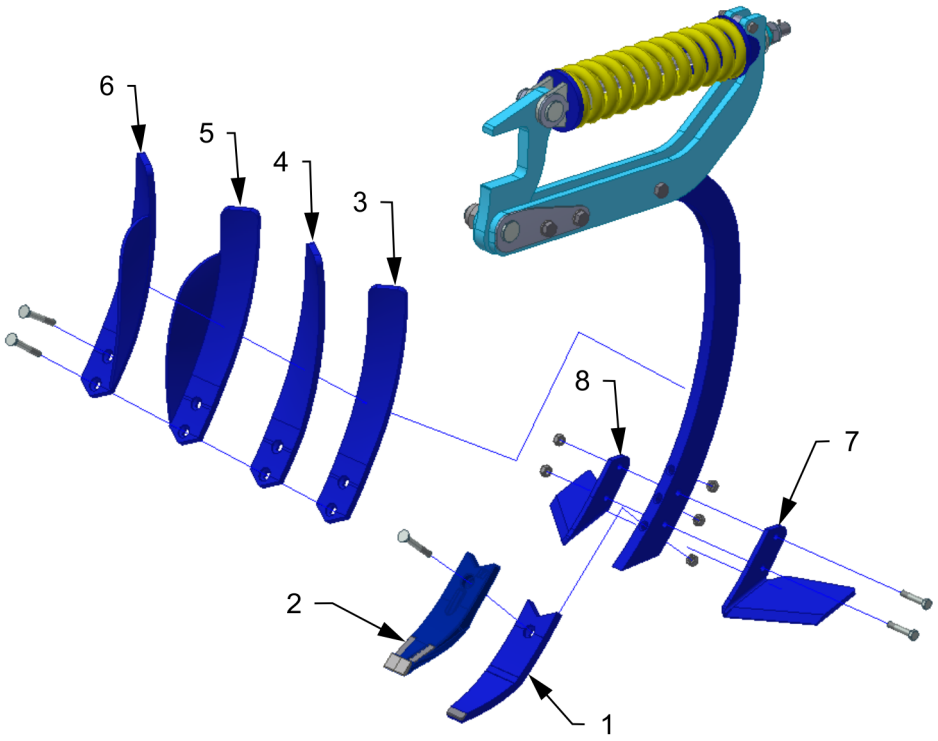
10.4 Share securing

- The basic setting of the securing spring is performed by the manufacturer at **395 ± 5 mm**so it is horizontal.
- Regularly check the nut tightening of the lower and the upper pivot of the securing, tighten as needed.
- Regularly check the nut tightening of the securing rod.



1 – Upper pivot
2 – Lower pivot
3 – Safety back stop
4 – Lower hardened case
5 – Upper hardened case

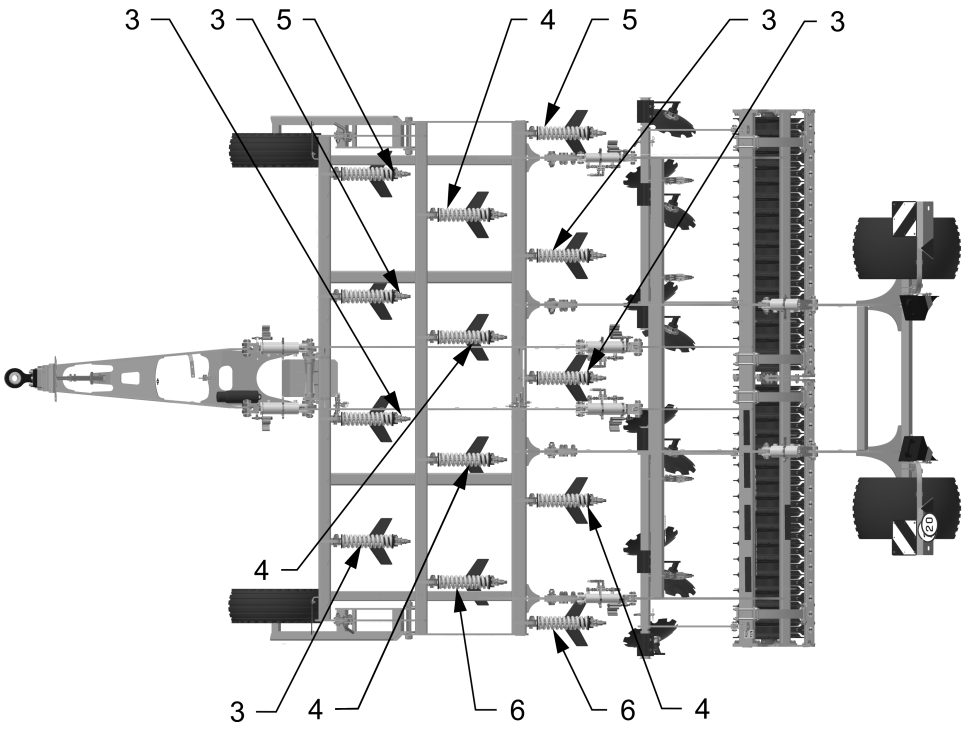
SHARES



Shares - nomenclature			
Pos.	**Title**	**Pos.**	**Title**
1	Lower share SK	5	Top right share with deflector
2	Lower share MULTICARBIDE	6	Top left share with deflector
3	Top right share	7	Left wing
4	Top left share	8	Right wing

10.5 Placement of top left and right shares on the machine

TRIOLENT TX 400 P



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 Þ 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.

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

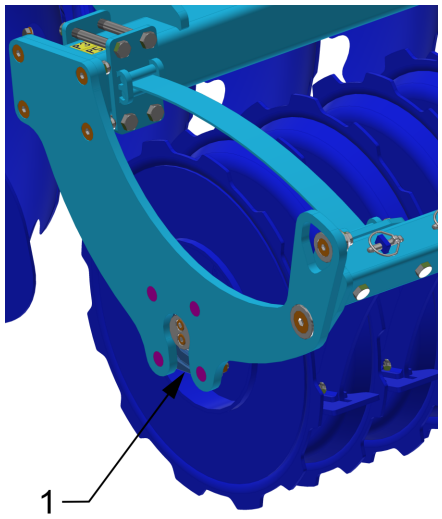
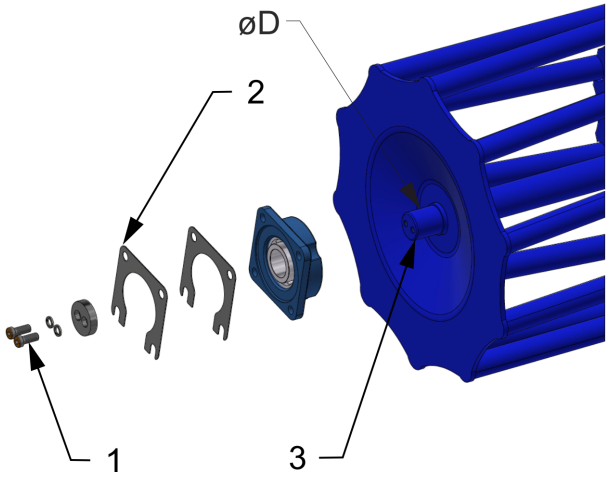
11.1 Replacement of the working roller bearings

- Always follow the safety regulations and directives when replacing the bearings of rollers.

- The machine must be aggregated with the tractor according to Chapter “8.1” when replacing the bearings. The tractor engine must be switched off for the replacement of bearings and the operator, or repairman, must prevent any access to unauthorised persons to the tractor

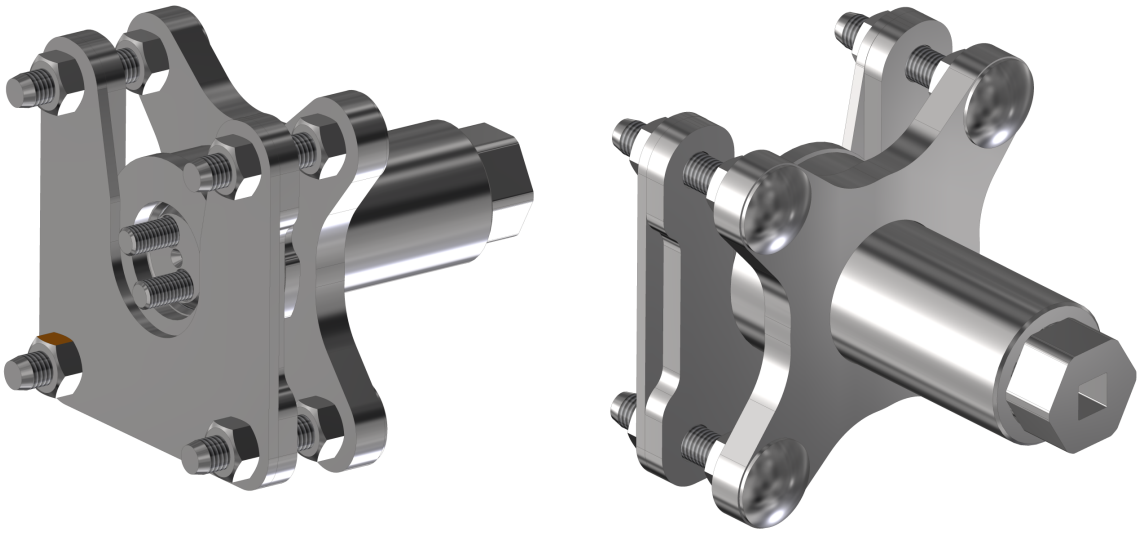
- Only replace the roller bearings on a solid and flat ground and when the machine is in standstill.

- In the case of leaks in the tractor hydraulic system, you are required to provide mechanical supports under the machine drawbar.

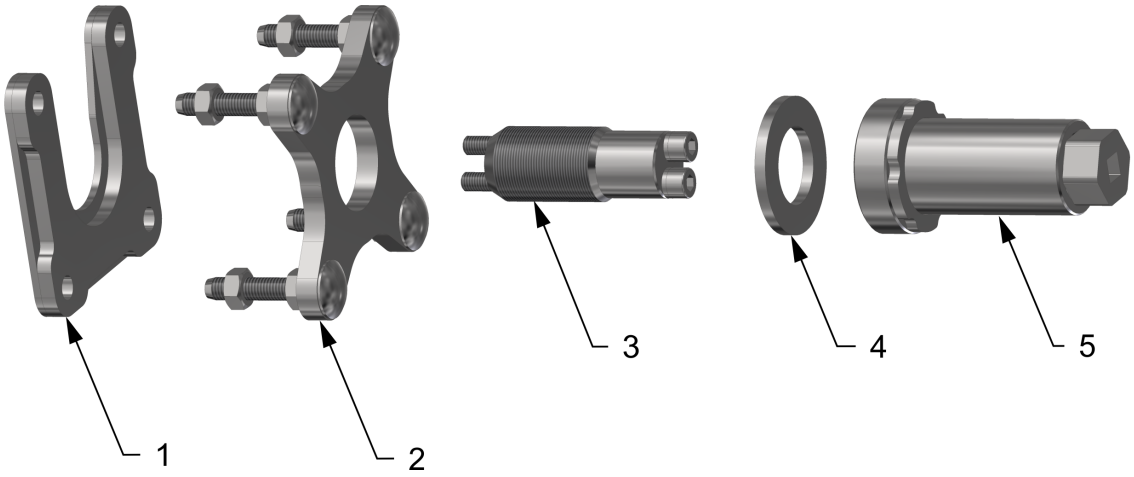
	
1 – Roller bearing	1 – Bolt 2 – Spacers 3 – Pin cylinder øD – 40 mm – Bolt M10 (50 Nm) / M8 (20 Nm) øD – 45 mm – Bolt M12 (86 Nm) / M10 (20 Nm) øD – 50 mm – Bolt M12 (86 Nm) / M10 (20 Nm) øD – 60 mm – Bolt M12 (86 Nm) / M10 (20 Nm)

11.1.1 Using the tool for bearing disassembly and assembly

- The location of the equipment on the machine can be found in the spare parts catalogue.



Tool parts

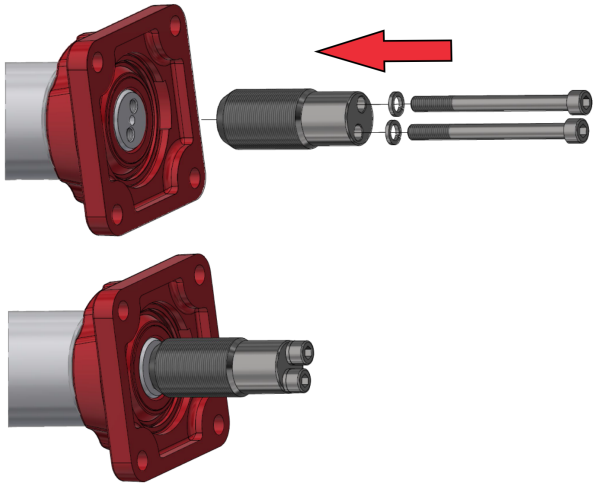


1 – Part for disassembling the bearing ring
2 – Part for disassembling the bearing or bearing ring
3 – Tool pin + bolts
4 – Liner
5 – Tool body

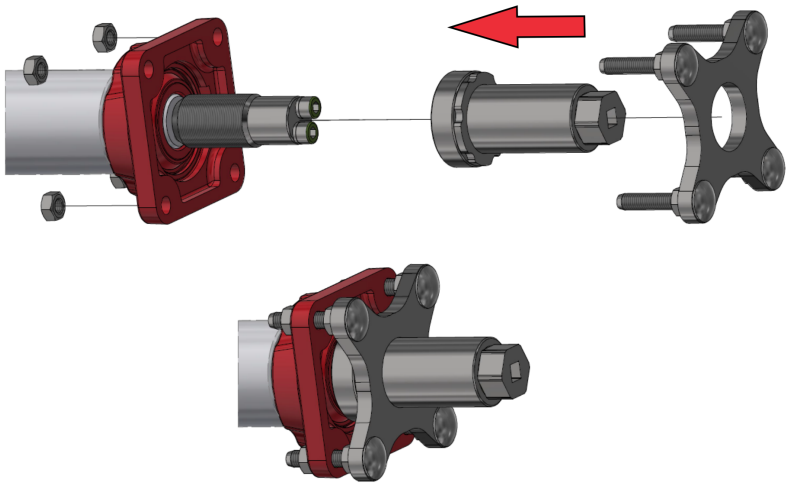
11.1.1.1 Complete bearing disassembly

- Procedure:

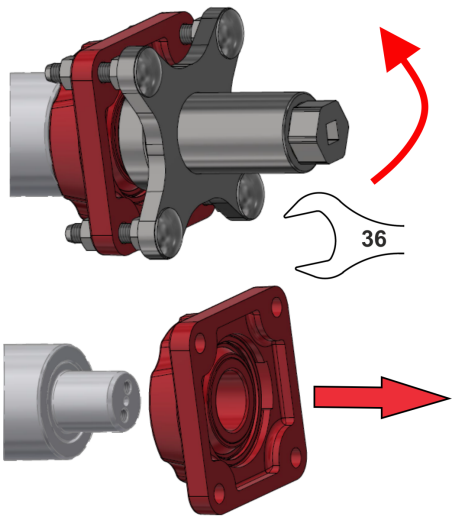
1. Mount and screw the tool pin onto the cylinder pin



2. Screw the tool body in, insert the part for bearing disassembly and mount onto the bearing using the nuts



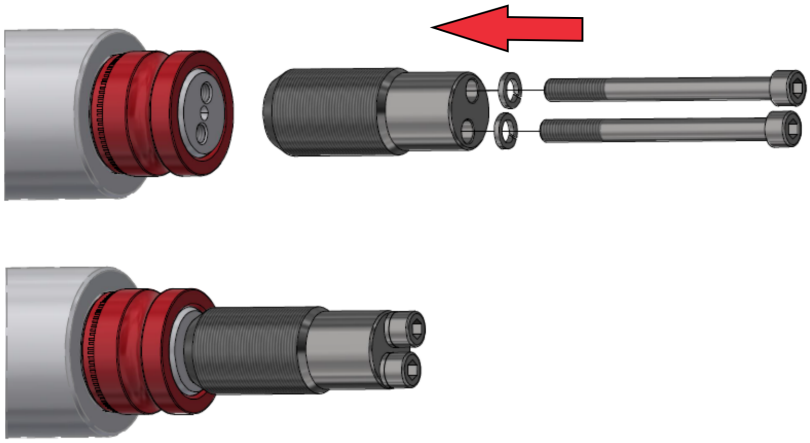
3. Disassemble the bearing by screwing the tool body using spanner size 36



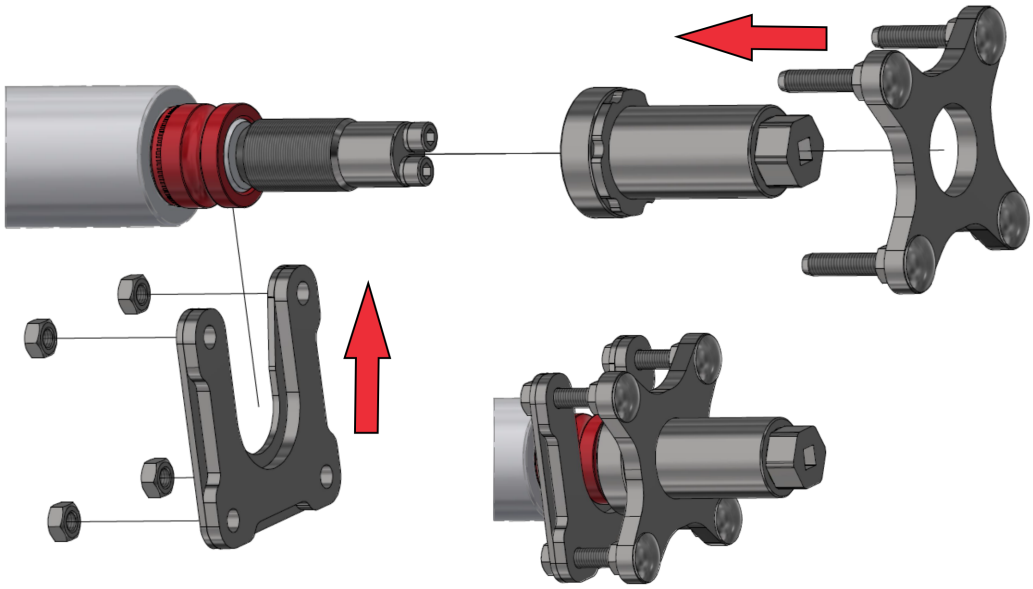
11.1.1.2 Disassembly of the ring

- Procedure:

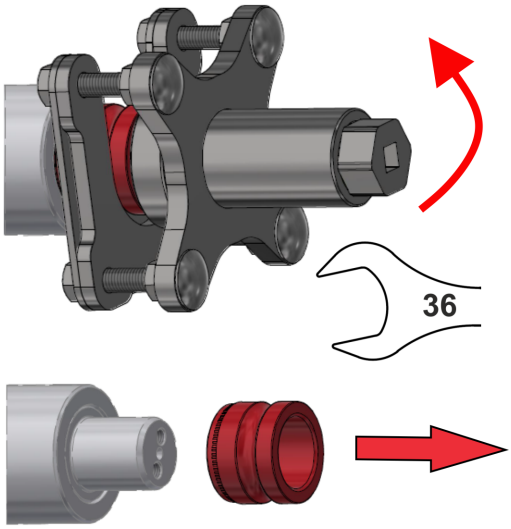
1. Mount and screw the tool pin onto the cylinder pin



2. Screw the tool body, mount the part for disassembling the bearing, mount the part for disassembling the ring and attach it using the nuts



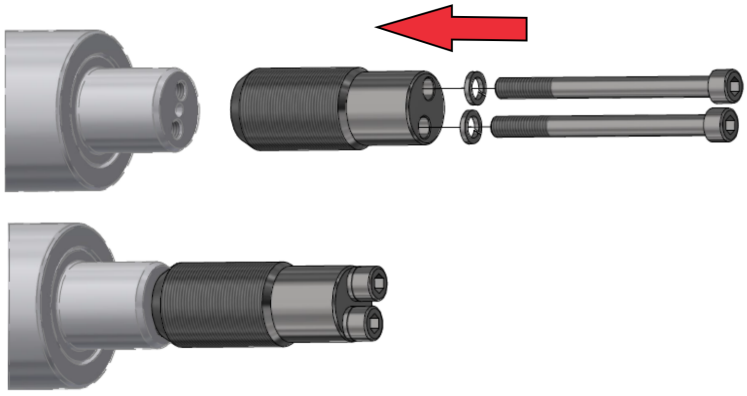
3. Disassemble the ring by screwing the tool body using spanner size 36



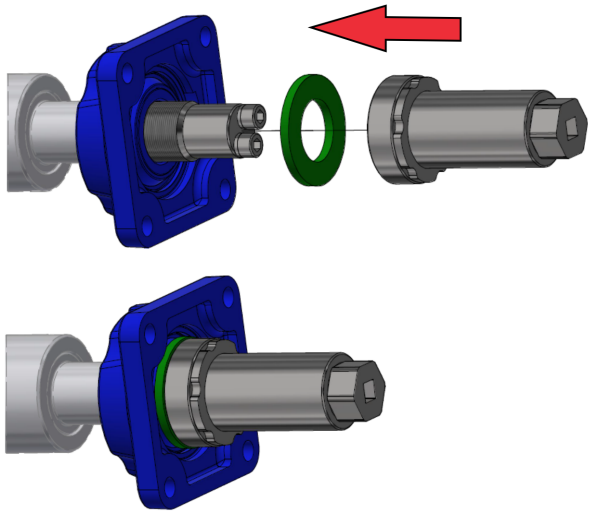
11.1.1.3 Assembling bearings onto pins

- Procedure:

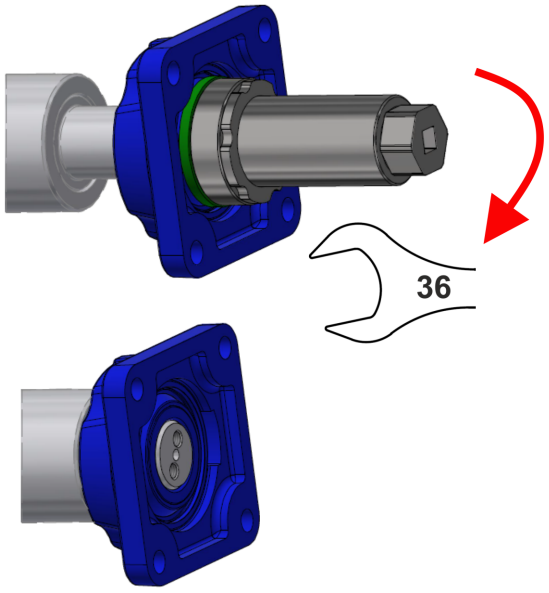
1. Mount and screw the tool pin onto the cylinder pin



2. Mount the bearing + liner and screw the tool body in



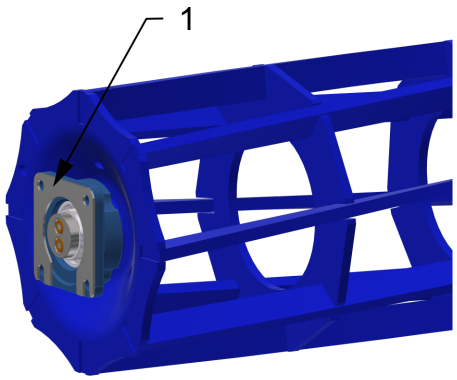
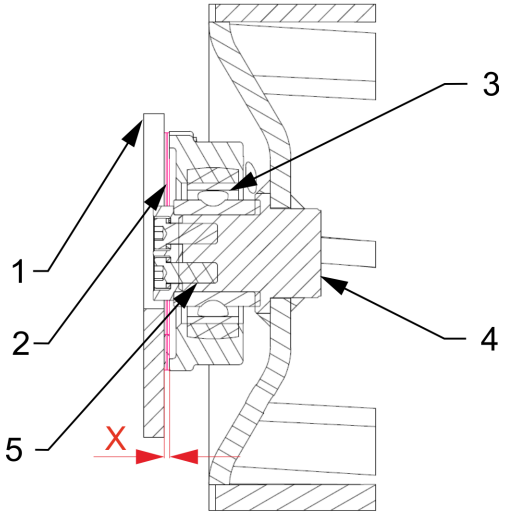
3. Assemble the bearing by screwing the tool body using spanner size 36



11.1.2 Using spacers

The spacers are used for defining production tolerances. Therefore, they do not have to be always used.

- Mount the house bearings to the rollers
- Insert the roller with the bearings between the frame side plates and assess whether you need to use the SPACERS

	
1 – Spacers	1 – Side plates 2 – Spacers 3 – House bearing 4 – Pin cylinder 5 – Bolt **Parameter "X" = is there a gap?** YES = Use spacers NO = Do not use spacers

12 MACHINE STORAGE

Long-term machine shutdown:

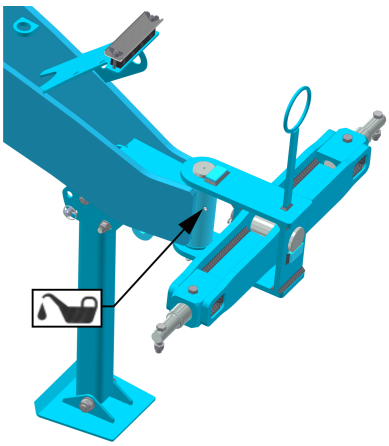
- Store the machine under a roof if possible.
- Store the machine on a flat and solid surface with sufficient load capacity.
- Clean the machine before storing and conserve so that it is not damaged in any way during storage. Pay special attention to all marked lubrication points and properly lubricate 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 MACHINE LUBRICATION SCHEDULE

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

LUBRICATION POINT		INTERVAL	LUBRICANT
Tow bar joint	Fig. 3	- Daily, always before the work with the machine. - Always after the end of the season and before storing the machine	Plastic grease

Fig. 5 - Tow bar joint



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 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.

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 basic warranty for the product for a period of 12 months. In the case of immediate registration of the sale to the end customer, including their valid contact details, the end customer receives an extended warranty of 36 months. The warranty is provided from the date the product is handed over to the end user (buyer). The registration must be completed by the seller (sales representative) on the My Farmet online portal. Upon correct registration, the end user will gain access to the My Farmet portal and all the benefits of the extended warranty.

2. The warranty covers hidden defects that manifest during the warranty period under proper use of the machine and in compliance with the conditions specified in the Operating Manual.

3. The warranty does not cover consumable spare parts, i.e., normal mechanical wear and tear of replaceable working parts (shares, discs, harrow tines, roller bearings, etc.).

4. The warranty is tied to the machine and does not terminate with a change of ownership. The extended warranty is conditional upon registering the new owner's contact details in the My Farmet portal.

5. The warranty is limited to disassembly and assembly, replacement, or repair of the defective part. The decision on whether the defective part will be replaced or repaired lies with the manufacturer, Farmet.

6. During the warranty period, repairs or other interventions on the machine may only be carried out by an authorized service technician of the manufacturer. Otherwise, the warranty will not be recognized. This provision does not apply to the replacement of consumable spare parts (see point 3).

7. The warranty is conditional upon the use of original spare parts supplied by the manufacturer.

2021/003/02

(CZ) 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

1. (CZ) My (GB) We (D) Wir (F) Nous (RU) Мы (PL) My:

Farmet a.s.
Jiřinková 276
552 03 Česká Skalice
Czech Republic
DIČ: CZ46504931
Phone: +420 491 450 111

(CZ) Vydáváme na vlastní zodpovědnost toto prohlášení. (GB) Hereby issue, on our responsibility, this Certificate. (D) Geben in alleiniger Verantwortung folgende Erklärung ab. (F) Publions sous notre propre responsabilité la déclaration suivante. (RU) Под свою ответственность выдаем настоящий сертификат. (PL) Wydajemy na własną odpowiedzialność niniejszą Deklarację Zgodności.

2.

(CZ) Strojní zařízení:	- název	:	**Dlátový kypřič**
(GB) Machine:	- name	:	**Chisel cultivator**
(D) Fabrikat:	- Bezeichnung	:	**Meißelgrubber**
(F) Machinerie:	- dénomination	:	**Cultivateur à siceaux**
(RU) Сельскохозяйственная машина:	- наименование	:	**Чизельный культиватор**
(PL) Urządzenie maszynowe:	- nazwa	:	**Spulchniarka dłutowa**
	- typ, type	:	**TRIOLENT**
	- model, modèle	:	**TX 300 P | 400 P**
	- **PIN/VIN**	:	
	- (CZ) výrobní číslo	:	
	- (GB) serial number		
	- (D) Fabriknummer		
	- (F) n° de production		
	- (RU) заводской номер		
	- (PL) numer produkcyjny		

3. (CZ) 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. (CZ) 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.

(CZ) Schválil (GB) Approve by
(D) Bewilligen (F) Approuvé
(RU) Утвердил (PL) Uchwalił

date: 02.01.2024

Ing. Petr Lukášek
Technical director

V České Skalici

date: 02.01.2024

Ing. Tomáš Smola
Director of the Agricultural Technology Division