

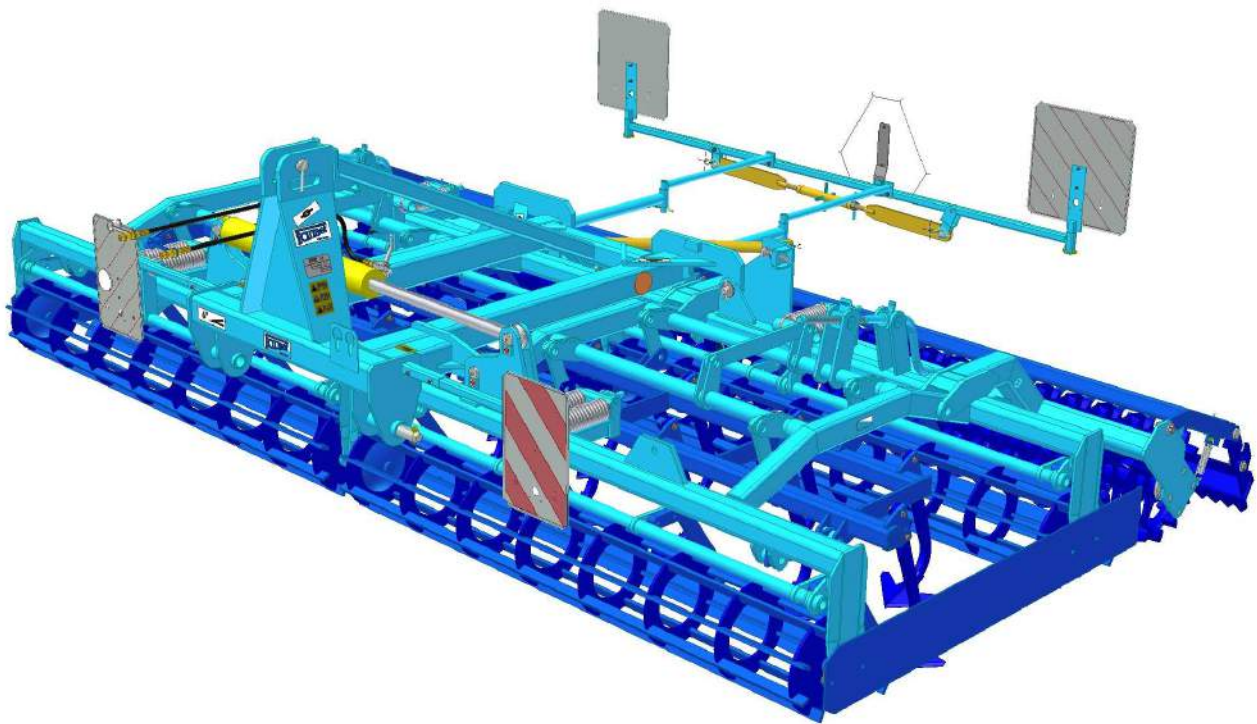


The effective technology

OPERATING MANUAL

MOUNTED UNFOLDING KOMPAKTOMAT

LK400NS, LK500NS



Farmet a.s.

Jiřinková 276
552 03 Česká Skalice
Czech Republic

Tel: 00420 491 450 140

00420 491 450 122

Fax: 00420 491 450 136

E-mail: farmet@farmet.cz

obchod@farmet.cz

[http: www.farmet.cz](http://www.farmet.cz)



Dear Customer,

The **LK Series** Mounted unfolding "Kompaktomats" are quality products by Farmet a.s., Česká Skalice, Czech Republic.

The advantages of your machine can be fully utilized after studying this Operating manual.

The serial number of the machine is stamped on the index plate and mentioned in the Operating manual (see Tab. 1). This serial number should be mentioned for reference when ordering spare parts. The index plate is located on the bearing (middle) frame near the upper suspension.

All spare parts should be ordered according to the official **Spare Part Catalogue** issued by Farmet a.s., Česká Skalice, Czech Republic.

The Use of Your Cultivator

The cultivator is designed for soil preparation before sowing and for follow-up operations after ploughing or stubble ploughing. Use the machine with the tractors the output of which is 75 to 110 kW (Chapter E.3/Pages5). For the optimum soil cultivation keep the working speed between 12 to 14 km p.h.

Tab. 1 – Machine Profile

MACHINE MODEL	
MACHINE SERIAL NUMBER	
SPECIAL MODEL OR ACCESSORIES	
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A. LIMITING PARAMETERS

- A.1** ⁽¹⁾ Operator(s) may use the machine for agricultural purposes only as an exchangeable implement aggregated with a tractor.
- A.1.1** ⁽²⁵⁾ Operator(s) may use the machine only for soil preparation before sowing as a follow-up operation after ploughing or stubble ploughing in the field.
- A.2** ⁽³⁾ Operator(s) must not use the machine for other purposes, especially:
- ⁽⁴⁾ Transporting persons on the machine,
 - ⁽⁵⁾ Transporting loads on the machine,
 - ⁽⁶⁾ Aggregating the machine with a towing vehicle other than that mentioned in Chapter E.3.
- A.3** ⁽⁷⁾ The person authorized to work with the machine must:
- ⁽⁸⁾ A person has to be a bearer of the driving licence of the respective category.
 - ⁽⁹⁾ Provably be acquainted with the Operating Manual, Labour-protection Rules command must have a good practical command of operating the machine,
 - ⁽¹⁰⁾ The machine must not be operated by young person(s),
 - ⁽¹¹⁾ Know the meaning of the safety signs located on the machine and observe them for safe and reliable machine operation.
- A.4** ⁽¹²⁾ Servicing and maintaining the machine can only be carried out by:
- ⁽¹³⁾ A person authorized by the owner,
 - ⁽¹⁴⁾ A person trained in agricultural machinery repairs,
 - ⁽¹⁵⁾ A person provably acquainted with the respective safety rules,
 - ⁽¹⁶⁾ When repairing the machine coupled with the tractor, a person has to be a bearer of the driving licence of the respective category.
- A.5** ⁽¹⁷⁾ When operating the machine, the machine operator must ensure safety of other persons.
- A.6** ⁽¹⁸⁾ When working in the field, the operator is not required to be on the machine. He or she must control the machine from the tractor cab.
- A.7** ⁽¹⁹⁾ The machine operator may step onto the machine if it is at rest and if the machine is secured against undesirable spontaneous movement for the following reasons only:
- ⁽²⁰⁾ Adjustment of the machine working tools,
 - ⁽²¹⁾ Repairs and maintenance,
 - ⁽²⁵⁾ Unlocking the safety pawls and the connecting rod before unfolding the lateral frames,
 - ⁽³⁰⁾ Unlocking the ball valve and the connecting rod before unfolding the lateral frames,
 - ⁽²⁸⁾ Setting-up the working parts of the machine after unfolding the lateral frames.
- A.8** ⁽²²⁾ Any and all modifications or changes in the machine design may only be made with the written consent of the manufacturer. The manufacturer bears no responsibility for any damage arisen as a consequence of breaching this instruction. The machine should be provided with the prescribed accessories and equipment including the labour-protection stickers. All the labour-protection stickers and signs should be in their places and kept readable. Damaged or lost stickers or signs must immediately be renewed.
- A.9** ⁽²³⁾ When operating the machine, the Operating Manual along with the Labour- protection rules should be available at any time so that the operator can consult them if necessary.
- A.10** ⁽²⁴⁾ When operating the machine, the operator is not allowed to drink alcoholic beverages, to take drugs or other intoxicating or hallucinogenic substances that could affect attention and coordination of movements. Should the operator takes any drugs prescribed by the doctor or any medicines available without prescription, he or she must be informed by the doctor whether or not he or she is able to operate the machine safely and responsibly.

B. TRANSPORTATION

- B.1** ⁽¹⁾ The loading capacity of the vehicle, truck or freight car to transport the machine must be at least the same as the weight of the machine. The total weight of the machine is stated on the index plate.
- B.2** ⁽²⁾ The dimensions of the machine including the transporting vehicle must meet the respective regulations.
- B.3** ⁽³⁾ The transported machine must be fastened to the transporting vehicle carefully and safely to avoid any undesirable and spontaneous loosening.
- B.4** ⁽⁴⁾ The damages incurred by loosening the poorly or incorrectly fastened machine is responsibility of the carrier.

C. LIFTING DEVICE OPERATION

- C.1** ⁽¹⁾ The minimum loading capacity of the lifting device and the slinging means intended for manipulation of the machine should be the same as the weight of the machine.
- C.2** ⁽²⁾ The machine should be slung in the proper points that are marked with a "chain" sticker if it is to be safely hoisted.
- C.3** ⁽³⁾ When the machine to be hoisted is slung in the proper points, it is strictly prohibited to enter.

D. ASSEMBLY AT THE CUSTOMER'S PLACE

- D.1** ⁽¹⁾ The operator should assemble the machine according to the manufacturer's instructions. Cooperation with a serviceman/technician authorized by the manufacturer is advisable.
- D.2** ⁽²⁾ After the assembly is completed, the operator should ensure that all the assembled parts are functional and work smoothly.
- D.3** ⁽³⁾ The operator should ensure that handling the machine by using the hoisting mechanism when assembling it is in compliance with Chapter C above.

E. AGGREGATION WITH THE TRACTOR

- E.1** ⁽¹⁾ The operator must observe all general labour-safety, fire-protection and environmental regulations.
- E.2** ⁽²⁾ The operator may hitch up the machine solely to such a tractor that is provided with a rear three-point suspension and a functional undamaged hydraulic system.
- E.3** ⁽³⁾ Towing vehicle requirements:

⁽⁵⁾ Tractor Engine Output Requirements for Towing the LK-400NS Machine		75-90 kW
⁽⁵⁾ Tractor Engine Output Requirements for Towing the LK-500NS Machine		90-110 kW
⁽⁶⁾ Tractor three-point suspension requirements	⁽⁷⁾ Lower suspension joints spacing (measured on the joint axes)	1010+/- 1,5 mm
	⁽⁸⁾ Diameter of the hole in the lower suspension joints for the machine suspension hinged pins	Ø37,5 mm
	⁽¹⁸⁾ The upper suspension joint hole diameter	Ø32,5 mm

(9) Tractor hydraulic system requirements	(10) The lateral frame spread-out circuit	(14) The minimum pressure in the circuit: 125 bar; the maximum pressure in the circuit: 160 bar, two ISO 12.5 quick coupler sockets
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E.4 (4) Before aggregating the machine with the tractor (especially with those not provided with a quick suspension device), the operator must secure the tractor against undesirable movement. Especially with tractors not provided with a quick suspension device, the operator should arrange for another trained person to cooperate. Such a person must not step into the suspension area before the tractor is secured against undesirable movement. With tractors provided with a quick suspension device, this operation can be made by the operator from the tractor driver's seat.

E.5 (17) Aggregating the hydraulic system of the machine with the hydraulic system of the tractor should be performed according to Chapter 5.9 (Page 13) of this operating manual.

F. FOLDING AND UNFOLDING THE MACHINE

F.1 (1) Before starting the folding of the machine, the operator(s) must lift the machine on the three-point suspension, to secure it against lowering or even falling down on the ground and lock the set against undesirable motion. Only then may the operator(s) start to fold the lateral frames.

F.2 (2) Operator(s) must ensure that no person or animal is within the reach of the lateral frames when folding and/or unfolding them. Nobody should insert the fingers into the joint space.

F.3 (7) Before unlocking the ball valve and the connection rod, the operator(s) must secure the set against undesirable motion and check (from the tractor cab) by using the hydraulic system control levers whether or not there is oil in the piston rods. Only after the operator is sure that there is oil in the piston rod, may he proceed to unlocking the ball valves, safety pawls and the connection rod.

G. ROAD TRANSPORTATION

G.1 (1) The transportation speed of the tractor with the machine should not exceed the maximum transport speed and the maximum slope accessibility indicated.

G.2 (2) When transported on public roads, increased guardedness should be observed due to the machine dimensions.

G.3 (4) When transporting on public roads the machine should be provided with a functional set of warning lights that must be on. If possible, the highest point of the set (usually the tractor roof) should be provided with a yellow flashing beacon. Moreover, the machine should be provided with the "maximum-speed" sign, with red-and-white-hatched boards at the machine contours and with rear reflectors and reflecting board according to the respective regulations.

G.4 (5) Using international highways and 1st-class highways for transportation of the machine towed by a tractor is prohibited. These may be only crossed.

G.5 (6) The machine should not be transported at poor visibility.

G.6 (7) Note that the driving properties of the set change when towed by a tractor on the road due to different axle loads. Please have this in mind when transporting the machine. The respective road-transport rules should be strictly observed.

G.7 (8) The operator is obliged to produce the respective certificate of roadworthiness (the MOT Certificate) if necessary.

- G.8** ⁽⁹⁾ When transporting the machine on public roads, all the respective traffic rules and traffic signs should be observed.
- G.9** ⁽¹⁰⁾ When making U-turns or driving reverse gear, be especially careful. Ensure a good outlook from the tractor cab and use another (instructed and authorized) person if necessary.
- G.10** ⁽¹¹⁾ When transporting the machine off public roads, operator(s) should not exceed the lowest maximum transport speed and the lowest maximum slope accessibility indicated wherever on the set.
- G.11** ⁽²⁵⁾ When transporting the LK400NS, LK500NS machine on public roads, the operator(s) must lock the folded lateral frames with the ball valve and the connecting rod to prevent them from undesirable unfolding.
- G.13** ⁽¹⁷⁾ When transporting the machine off the public roads, the lowest transport speed and the lowest slope accessibility of the whole set should be maintained.

H. OPERATING THE MACHINE IN THE FIELD

- H.1** ⁽¹⁾ The operator should acquaint himself with the machine controls before the first use of the machine.
- H.2** ⁽²⁾ Before setting the machine to work, please read the Operating Manual carefully. Pay attention to labour protection, safe operation and transportation, environmental protection, setting the machine and its maintenance.
- H.3** ⁽³⁾ The operator is responsible for all damages incurred by improper operation of the tractor and the coupled machine.
- H.4** ⁽⁴⁾ When operating the machine, the operator is obliged to observe all the technical and safety regulation set by the manufacturer.
- H.5** ⁽⁵⁾ When turning the machine at the headland, the machine working tools should be lifted.
- H.6** ⁽⁶⁾ When operating the machine, the operator should observe the prescribed working depths and speeds given in Chapter 2/Page 11 of this manual.
- H.7** ⁽⁷⁾ When leaving the tractor cab, the operator is obliged to lower the machine onto the ground and secure it against undesirable motion.

I. MACHINE ADJUSTMENTS

- I.1** ⁽¹⁾ When adjusting the working tools of the machine, the operator should follow the values recommended in Chapter 8/Pages 14 to 15. Please observe the labour safety principles.
- I.2** ⁽²⁾ The machine working tools may be adjusted at rest only with the machine secured against undesirable motion.
- I.3** ⁽³⁾ Working tools adjustments should be done on a flat and paved surface so that the soil cultivation is performed evenly.

J. STORAGE

- J.1** ⁽¹⁾ Before storing the machine, the machine should be thoroughly cleaned and preserved in such a manner that no damage can occur. Special attention should be paid to all the lubrication points indicated. These points should be lubricated thoroughly according to the Lubrication Chart (Chapter 11/Pages 17 to 18).
- J.2** ⁽⁴⁾ To extend the service life, the machine should be stored in a roofed place in the working position, i.e. the machine should rest on the rollers (not on the axles). The machine should be secured against undesirable motion.

- J.3** ⁽³⁾ The operator is obliged to secure the storage place against unauthorized persons' entrance.

K. MACHINE REPAIRS

- K.1** ⁽¹⁾ Servicing and maintaining the machine can only be carried out by qualified persons duly authorized by the operator, see Chapter **A.4**.
- K.2** ⁽²⁾ Any machine repairs may only be made at rest, i.e. the machine does not work. If it is necessary for the machine to be coupled with the tractor during the repair, the ignition key must be removed from the switchbox.
- K.3** ⁽⁵⁾ All kinds of the machine hydraulic circuit repairs may only be made under the following conditions:
- ⁽⁶⁾ The lateral frames are unfolded,
 - ⁽⁷⁾ The machine must rest on the shares and rollers,
 - ⁽⁸⁾ The machine must be secured against undesirable motion,
 - ⁽⁹⁾ The machine hydraulic circuit must be disconnected from the tractor hydraulic circuit,
 - ⁽¹⁰⁾ The machine vicinity must be protected from being contaminated by hydraulic oil.
- K.4** ⁽³⁾ Any machine repairs should be made in service shops.
- K.5** ⁽¹²⁾ Before repairing the machine hydraulic circuits, the repairman must eliminate pressure in the hydraulic circuits with the control levers in the tractor cab. This should be done by moving the levers to their extreme positions back and forth (approx. five times) with the tractor engine stopped.
- K.6** ⁽⁴⁾ When handling the machine with a lifting device, the regulations set forth in Chapter **C** should be strictly observed.

L. REPLACEMENT OF WORN-AND-TORN SHARES

- L.1** ⁽¹⁾ The shares should be replaced by the serviceman or operator on a flat and paved surface only.
- L.2** ⁽²⁾ When replacing the shares, the machine must be aggregated with the tractor according to Chapter **E**. When replacing the shares, the tractor engine must be stopped and the tractor cab secured against unauthorized entrance or operation.
- L.3** ⁽³⁾ Operator(s) or the repairman must secure the machine against a fall in case of unexpected pressure drop in the tractor's hydraulic circuit.
- L.4** ⁽⁴⁾ Operator(s) or the repairman may replace the worn-and-torn shares only after having the machine placed in the position according to paragraphs **L.1, L.2, L.3**.
- L.5** ⁽⁶⁾ Replacement of the worn-and-torn shares on the lateral frames.
- L.5.1** ⁽¹⁴⁾ Before replacing the worn-and-torn shares on the lateral frames the operator(s) or repairman must unfold the machine into the working position.
- L.5.2** ⁽⁸⁾ When replacing the worn-and-torn shares, the operator(s) or repairman must start to replace them at the outer edge of the lateral frames and to continue step by step up to the middle of their swath.
- L.5.3** ⁽⁹⁾ When replacing the remaining worn-and-torn shares on the lateral frames, the operator(s) or repairman may continue only after having folded them into the transport position and locked them against unfolding. All the labour safety regulations according Chapter **F** should be observed.

M. MACHINE DISPOSAL AFTER ITS SERVICE LIFE

- M.1** ⁽¹⁾ The operator must ensure that the machine is secured against undesirable motion before starting the disposal operations.

- M.2** ⁽²⁾ The operator must ensure that metal parts are separated from those parts that contain hydraulic oil or grease.
- M.3** ⁽³⁾ Steel parts must be cut up and delivered to the respective salvage point. The other secondary raw materials should be disposed according to the applicable waste management regulations.
- M.4** ⁽⁴⁾ The operator should ensure that handling the machine with the lifting device is in compliance with Chapter C.
- M.5** ⁽⁵⁾ Before disposing the machine hydraulic circuits, the repairman must eliminate pressure in the hydraulic circuits with the control levers in the tractor cab. This should be done by moving the levers to their extreme positions back and forth (approx. five times) with the tractor engine stopped.

N. LABOUR-PROTECTION STICKERS



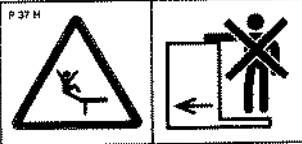


The labour-protection stickers protect operators.

Generally:

- A) Strictly adhere to the labour-protection stickers instructions
- B) All the labour-protection stickers instructions apply to other users as well
- C) In case of damaging or destroying a **labour-protection sticker** located on the machine, operators are obliged to **replace it or provide the machine with a new one immediately.**

The position, design and exact meaning of the labour-protection stickers located on the machine are given in the following tables (Tab. 2) and in Figure 1.

Table 3- Labour-protection plates (stickers) and their meanings

GRAPHIC DESIGN	DESCRIPTION	LOCATION ON THE MACHINE
	<p>Read the Operating manual carefully before operation.</p> <p>When operating the machine, observe all the related safety instructions and regulations.</p>	P 1 H
	<p>Keep away of the reach of the lateral frames when folding or unfolding them</p>	P 50 H
	<p>Transportation on the machine is strictly forbidden.</p>	P 37 H
	<p>Do not step between the tractor and the machine when coupling or uncoupling.</p> <p>Do not step between the tractor and the machine until they are at rest and the engine turned off.</p>	P 2 H
	<p>Keep away from the reach of the tractor + machine if the tractor engine is running or the set moving.</p>	P 6 H



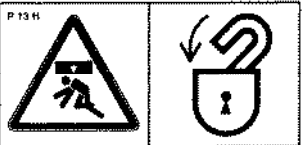

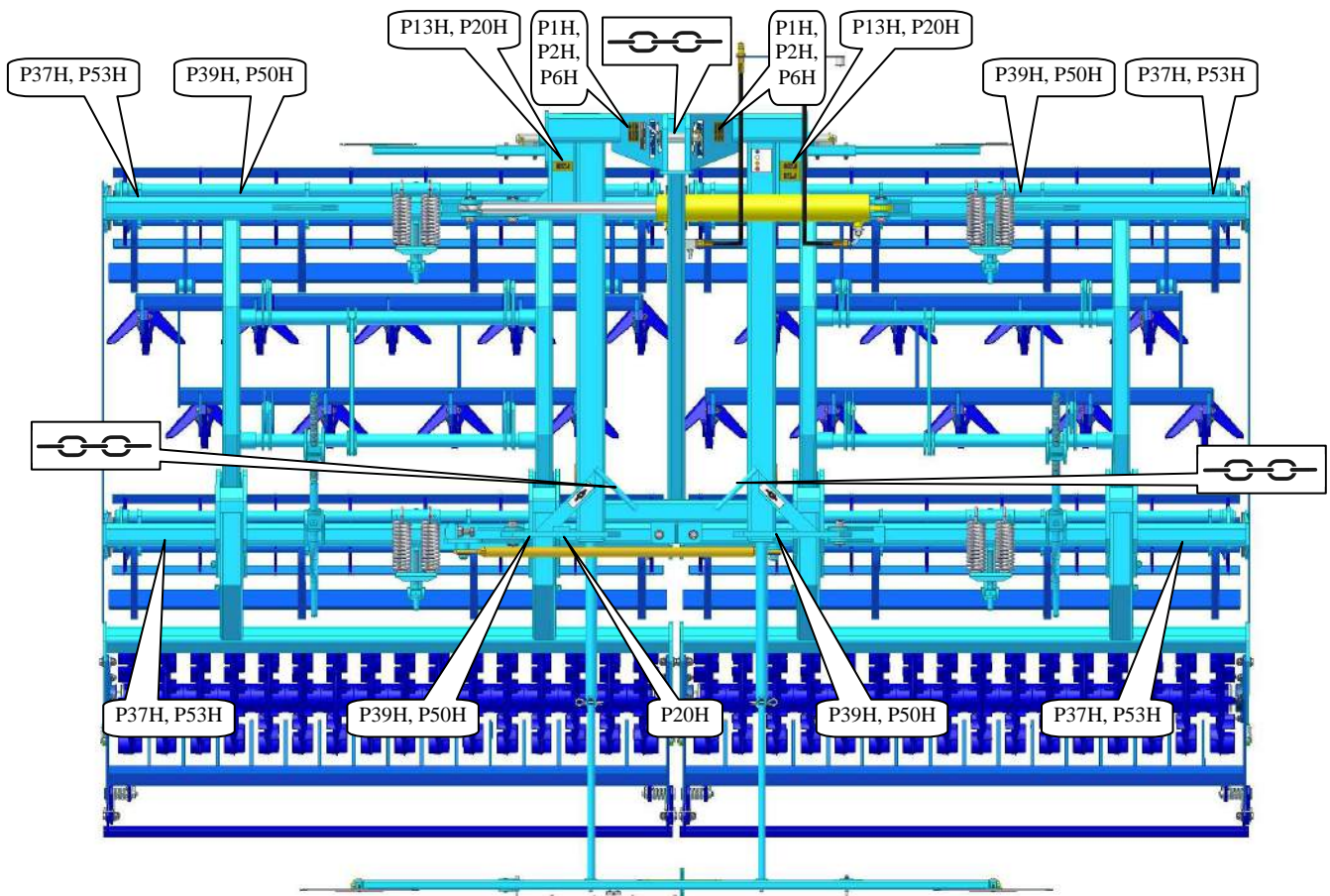
	<p>Do not insert your hands in the lateral and central frames contact space when unfolding the lateral frames into the working position</p>	<p>P 20 H</p>
	<p>Keep away from rotating parts of the machine unless they are at rest</p>	<p>P 53 H</p>
	<p>Secure the lateral frames with the connecting rod against undesirable unfolding before transporting the machine.</p>	<p>P 13 H</p>
	<p>Keep a safe distance from electric devices when working with the machine or transporting it.</p>	<p>P 39 H</p>

Fig. 1 - Labour-protection stickers locations on the machine LK400NS, LK500NS



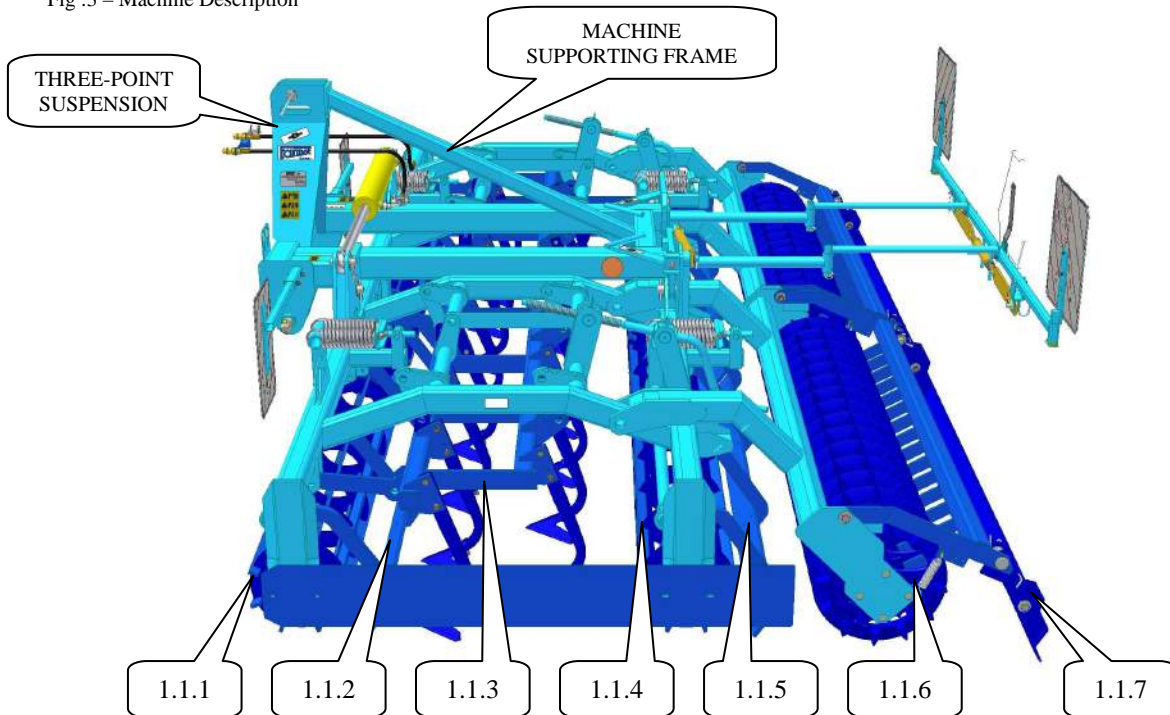
1. MACHINE DESCRIPTION

The machine is designed as a mounted unfolding. The basic model of the machine consists of a three-point suspension. The working parts of the machine are located on the lateral frames (See Fig.3).

1.1 WORKING TOOLS OF THE MACHINE

- 1.1.1 Front Ø 300 Bar Roller
- 1.1.2 Spring Mounted Front Drag – Adjustable height, spring preloadable at its lowest position
- 1.1.3 Share Section – Adjustable height
 - 1.1.3.1 Two Rows of Duckfoot Shares Fastened with Fixed Frogs
 - 1.1.3.2 Three Rows of Chisel-shaped Shares
- 1.1.4 Rear Ø 300 Bar Roller
- 1.1.5 Spring Mounted Rear Drag – Adjustable height, spring preloadable at its lowest position
- 1.1.6 Additional Rear Ø 400 CROSSKILL Roller with a Cleaner – Floating position
- 1.1.7 Rear Drag

Fig .3 – Machine Description



2. SPECIFICATIONS

Tabl. 4 – Machine Specifications

PARAMETERS	K400NS	K500NS
Operating Width (mm)	4026	4910
Transport Width (mm)	2400	
Operating Depth (mm)	30 – 135	
Number of Shares (duckfoot/chisel-shaped)	18 / 39	20 / 47
Operating Performance (Hectares per Hour)	4	5
Towing Vehicle (kW)	75 – 90	90 – 110
Operating Speed (km per hour)	12 – 14	
Max. Transport Speed (km.p.h.)	20	
Maximum Slope Accessibility (°)	6	
Total Length (mm)	2780	
Maximum Weight (with the CROSSKILL Roller (kg))	2300	2870

3. OPERATIONAL SAFETY RULES

- Before you take over the Cultivator, please check that it has not been damaged during transportation and that all its parts have been supplied according to the delivery note.
- Before setting the machine to work, please read the operating manual carefully. Pay special attention to Chapters A through N /Pages 4-10. Before starting to work, please acquaint yourself with the overall functioning of the machine and its controls.
- When operating the machine, please observe not only the rules of these instructions but also general labour-protection, fire-protection and environment-protection regulations as well as transportation safety rules.
- The person authorized to work with the Cultivator must meet the conditions set forth in Chap. A.3 /Page 4.
- Before setting the Machine to work, please check its condition. In case of showing any signs of damaging, the Machine must not be operated.
- When coupling the Machine with the tractor, follow the instructions set forth in Chapter E/Page.5-6.
- Coupling and uncoupling should be done on a flat and paved surface.
- Before uncoupling the tractor and the machines in the transport position, the machine must be secured against accidental and undesirable unfolding, i.e. the folded lateral frames must be locked by the connecting bar and by having the ball valve in **POSITION CLOSED** (see Fig. 4,5)

Fig.4 – BALL VALVE POSITION CLOSED

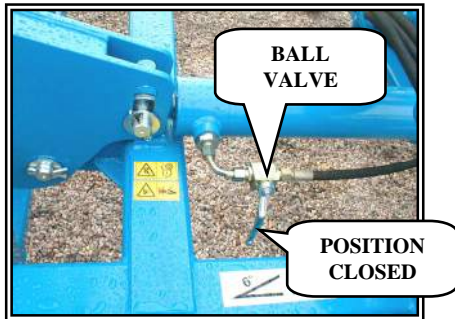
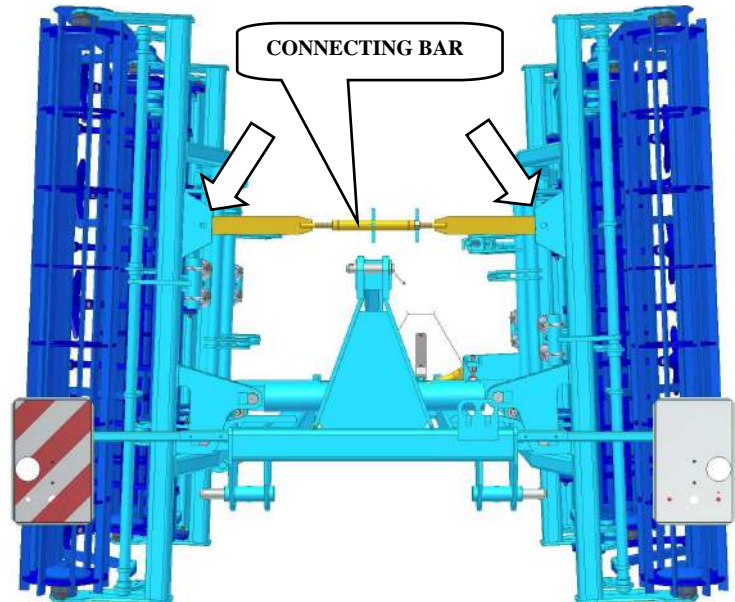


Fig.5 – Securing the frames against accidental unfolding



- When working on slopes, observe the slope accessibility of the whole **TRACTOR-MACHINE** set.
- Before starting up the tractor, check that there is no unauthorized person within the operating reach of the set and sound the horn.
- Operators should pay attention to any person's not approaching the machine during operation in the field.
- It is forbidden to dismantle the parts of the machine hydraulic system that are under pressure.
- Hydraulic oil penetrating the skin under high pressure causes serious injuries. Should this happens, call the doctor immediately.

4. ROAD TRANSPORT RULES

4.1 The transportation speed of the tractor with the Machine should not exceed **20 km p.h.**

4.2 When transporting the machine on roads, the operators must follow the instructions given in Chapter G. / Pages 6 and 7, i.e. the lateral frames must be secured against accidental and undesirable unfolding with the ball valve in **POSITION CLOSED** (See Fig. 4) and the connecting bar (See Fig. 5)

4.3 When transporting the machine on public roads, the arms of the rear three-point suspension must be locked in the transporting position. That means that undesirable lowering the arms must be prevented by using the hydraulic control lever. At the same time, the arms of the rear three-point suspension must be locked to prevent lateral swing.

4.4 When transporting the machine on roads, the operator(s) should observe the applicable law and regulations including those specifying the tractor axle load depending on the transport speed.

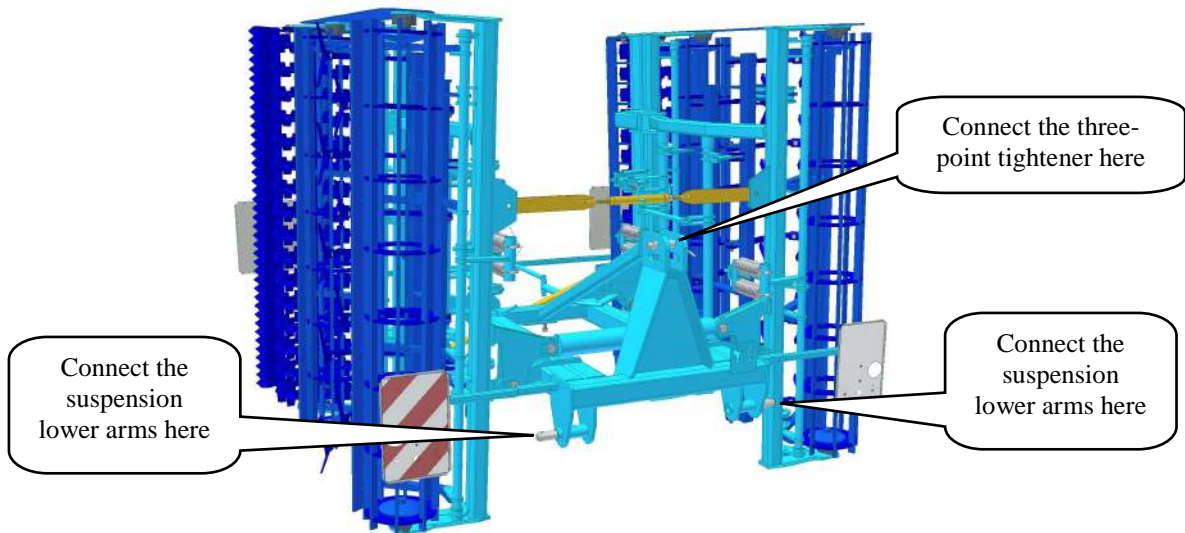
4.5 Considering the size of the machine, the operator transporting the machine must be very careful and considerate to other road users.

5. SETTING TO WORK

5.1 When aggregating the machine with the tractor and setting it to work, the steps given in Chapter **E, F** /Page 5 to 6 should be followed.

5.2 The Machine should be coupled with the tractor through the rear three-point suspension according to the instructions given in Chapter **E**/Page 5 of these Instructions and according to the hereinafter-provided information.

Fig.6



5.3 The machine aggregated with the tractor changes the weight distribution among individual tractor axles. The front axle will be lighter and thus control will be impaired. Also the braking properties of the tractor are affected.

5.4 For safety reasons, the loading capacity of the axles, tires and the tractor suspension must be kept. The category of the Machine suspension and the tractor's three-point suspension must be the same. To ballast the front axle of the tractor, use the weights prescribed by the tractor manufacturer only.

5.5 After aggregating the machine and the tractor, adjust the length of the tractor's three-point tightener. For work in the field, the tightener should be set in the oval hole in such a manner that that the suspension pin is in the middle of the hole (Fig. 7, 8), the machine must rest on the working rollers. The tightener adjusted in this manner will ensure trouble-free operation and makes certain that the machine will be copying the terrain when working.

Fig. 7 – Setting the long length of the tightener

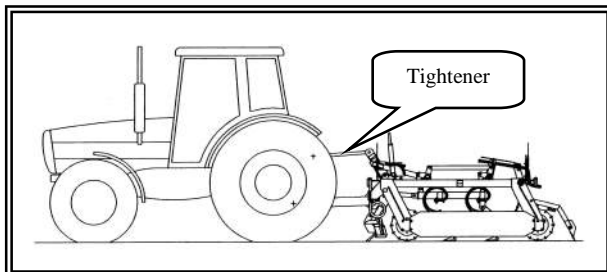
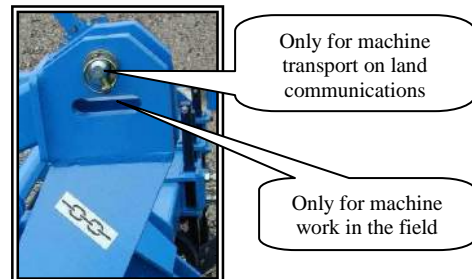


Fig. 8 – Upper machine suspension



5.6 Continuous terrain copying during work behind the tractor is ensured by the oval hole in the upper machine suspension (Fig. 8).

5.7 Before leaving the tractor, lower the machine's shares onto the ground, switch off the engine and secure the set against undesirable and accidental moving.

5.8 Before starting up the tractor, check that there is no person or animal within the operation area of the set and sound the horn.

5.9 To interconnect the hydraulic systems, use the quick-couplers of the identical model (the socket on the machine and the plug on the tractor). The quick-couplers should be connected to the tractor hydraulic circuits in such a manner that tilting the lateral frames (*the blue and white quick-coupler dust caps*) is on one hydraulic circuit.

5.9.1 Blue dust cap - the Dn8 circuit for shifting out the piston rod and folding the lateral frames

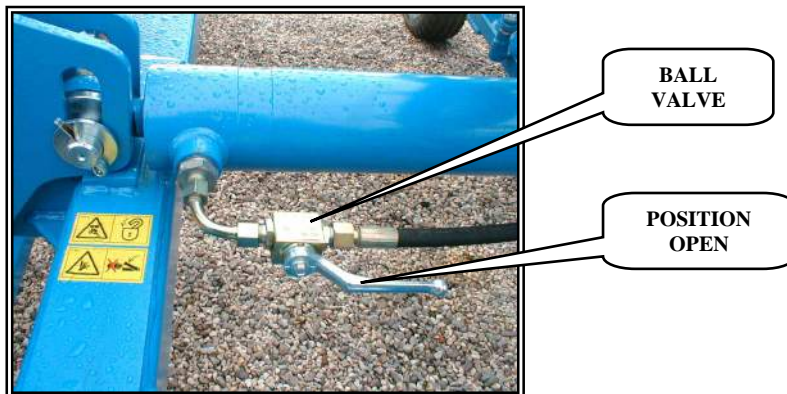
5.9.2 White dust cap - the Dn8 circuit for shifting in the piston rod and folding the lateral frames

5.10 It is forbidden to dismantle the parts of the machine hydraulic system that are under pressure.

5.11 Hydraulic oil penetrating the skin under high pressure causes serious injuries. Should this happens, call the doctor immediately.

5.12 After having the machine's hydraulic circuits connected to the tractor's circuits, the operator(s) must follow the instructions under **F.1**. Only then can the operator(s) overturn the ball valve lever into **POSITION OPEN** (see Fig. 9) and release the connecting bar.

Fig. 9 - Ball valve **POSITION OPEN**



6. AGGREGATION WITH TRACTOR

- For safe aggregation, observe the regulations given in Chapter **E** / Page 5.
- The machine should only be aggregated with the tractor as described in **E** even if the machine is just to be transported.
- The machine may only be aggregated with such a tractor the unladen weight of which is equal or higher than the total weight of the aggregated machine.
- As additional load to the tractor (counterweight) only the weights prescribed by the manufacturer should be used.

7. ENVIRONMENTAL PROTECTION

- Check tightness of the hydraulic system regularly.
- All the hydraulic hoses and the other parts of the hydraulic system showing signs of damage should be replaced or repaired.
- Remember that the service life of the hydraulic hoses includes their storage time before they were used.
- Dispose the oils and greases used in the Machine according to the applicable waste disposal laws and regulations.

8. SETTING THE WORKING TOOLS

When adjusting and setting the working tools of the machine, follow the safety rules given in Chapters **A** to **N**/Pages 4 to 10.

8.1 SETTING THE FRONT AND REAR DRAGS (Fig.10,11)

The drags consist of two identical spring-mounted sections. Vertical setting is made centrally by turning the setting lever (Fig. 10, 11/page 15). The setting of the drags depends on the soil quality (the size of clods).

The drags should be set on a paved and smooth surface and all the related safety rules must be observed. The position and depth may be set on the machine that has been both coupled with and uncoupled from the tractor. The drag height should be set within the range from **3 to 8 cm** above the ground with the rollers resting on the ground.

Fig. 10- Setting the drag height

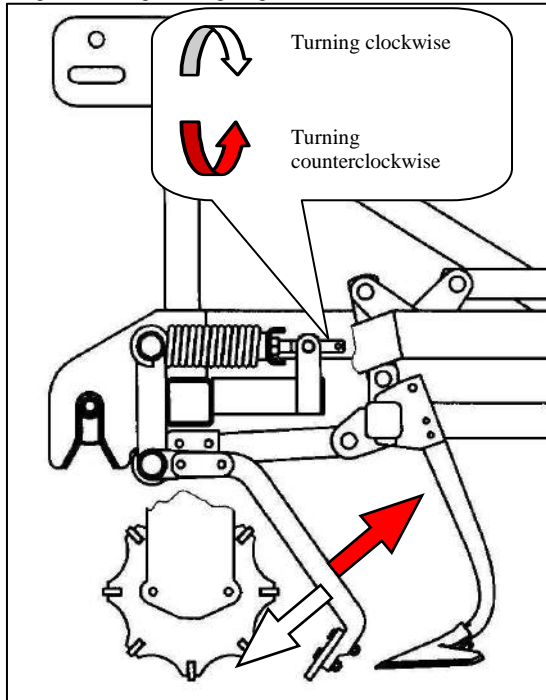
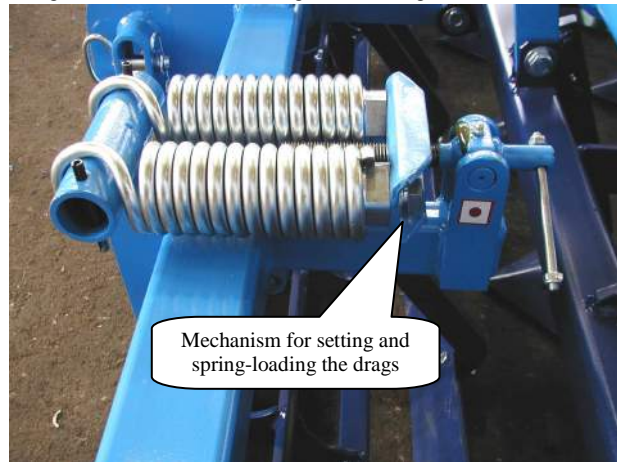


Fig. 11 – Mechanism for setting and spring-loading the drags



8.2 SETTING THE DRAG SECTION (Fig.12)

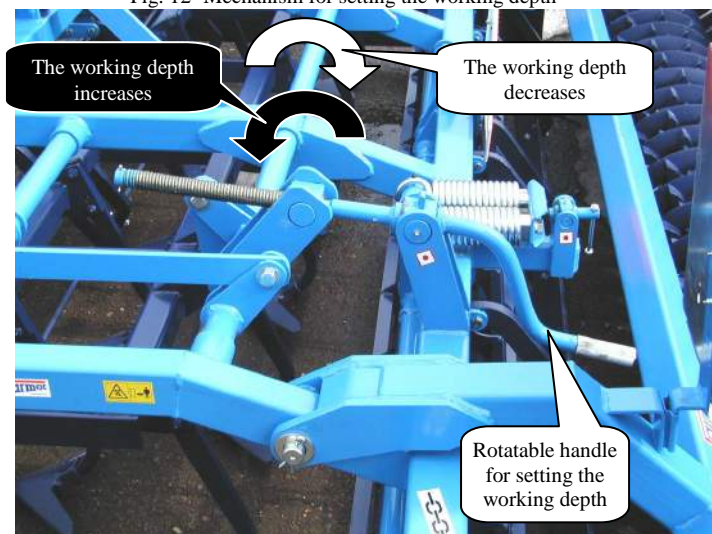
To set the working depth of the shares, turn the handle located on the machine's supporting frame. The handle is provided with a depth indicator with an informative scale. By turning the handle clockwise the depth increases, by turning the handle counterclockwise the depth decreases. Recommended values for setting the working depth depending on the kind of crop are given in Table 4.

The working depth should be set on a paved and smooth surface and all the related safety rules must be observed. The machine must be coupled with the tractor, hoisted in the transport position and secured against accidental fall.

Table 4 – Recommended values of the working depth

CROP	WORKING DEPTH
Beet	2-3 cm
Rape	3-5 cm
Grain crops	5-8 cm

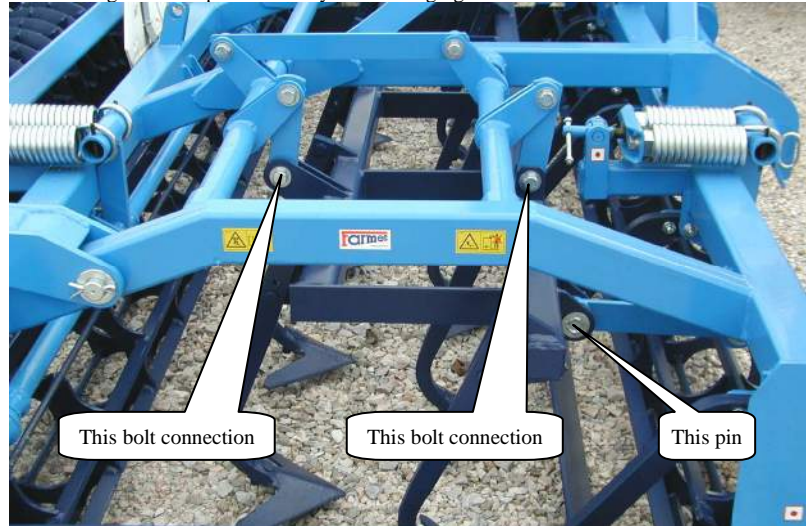
Fig. 12- Mechanism for setting the working depth



9. EXCHANGING THE WORKING TOOLS

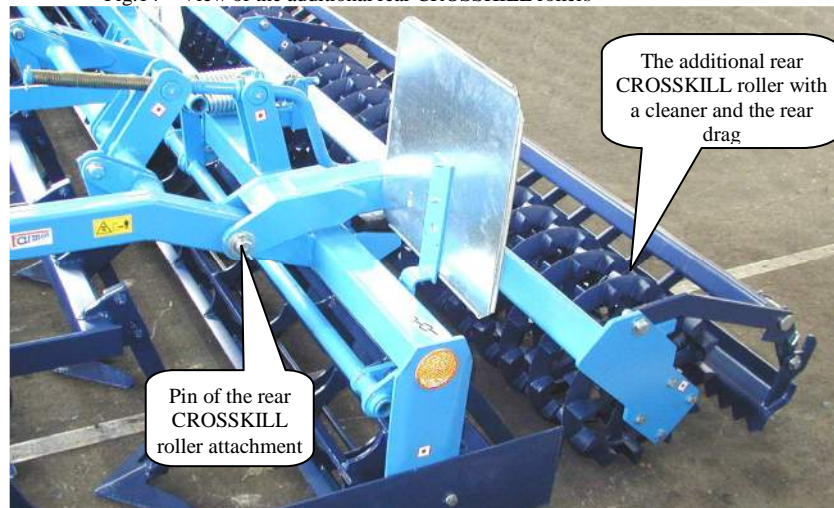
- 9.1 When replacing the worn-and-torn shares or any working tools, the safety rules given under **A through N**/Page.4 to 10 of these manual must be strictly observed. The replacement procedure should especially follow Chapters **C**/Page .5, **K**/Page 8, **L** /Page 8.
- 9.2 The machine design enables operators to replace the duckfoot-share sections Chap. 1.1.3.1/Page 11 by the chisel ones Chap. 1.1.3.2/Page 11 and vice versa. To replace them eject the pull-rods pins ⇒ remove the original share sections ⇒ and replace them by the new ones. See Fig 13.

Fig. 13 - The pins necessary for exchanging the share sections



- 9.3 The machine design enables operators to attach the additional CROSSKILL roller (Fig. 14)

Fig.14 – View of the additional rear CROSSKILL rollers



10. MAINTENANCE AND REPAIRS

- When making any repairs, strictly observe the labour-protection rules mentioned in Chapters **A** through **N** / Pages 4 through 10.
- After the first 20 hours of operation, check all the mechanical parts connected with bolts.
- Lubricate the machine in the lubrication points according to the lubrication chart.
- Check the wear and tear of the working tools from time to time. If worn and torn excessively, replace them by new ones.
- Setting, cleaning and lubricating operations may only be carried out at rest. The tractor engine must be turned off and secured against starting.
- If the work is to be done on the lifted machine, suitable supports placed in marked points or other suitable points must be used.

- When setting, maintaining or repairing the machine, secure reliably those parts of the machine that could cause accidents by falling or moving.
- If hoisted with a suspension lifting mechanism (a crane), hang the machine in the marked points only. These points are marked with the "chain" stickers (See Fig. 15,16).
- If you find any defect on the Machine, switch off the tractor engine immediately and secure it against undesirable starting ⇒ only then you are allowed to repair the defect.
- When repairing the Machine, use the appropriate tools and protective aids and the original spare parts only.
- If the machine is coupled with the tractor while being repaired, disconnect the tractor alternator and accumulator cables before you start welding.
- Regularly check the prescribed pressure in the machine axle tyres and the tyre condition. Possible repairs of tyres are to be performed in an expert workshop while adhering to the safety regulations.
- Keep the Machine clear.

Fig. 15 – Marking the gripping point on the machine's suspension

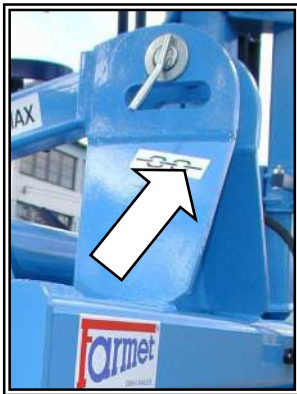
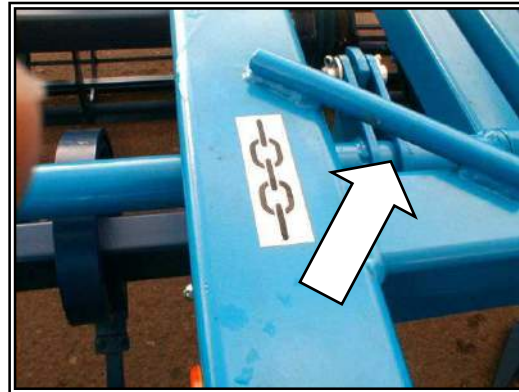


Fig. 16 - Slings point on the frame



11. LUBRICATION CHART

LUBRICATION POINT		INTERVAL	LUBRICANT
Roller Bearings	Fig.17	- Daily - Every time before starting to work with the machine - Every time after finishing the work with the machine - Keep required lubrication interval.	Plastic Lubricant AK – 2
Control Handle	Fig.18		
Drag control handle	Fig.19		

Fig.17 – Lubrication of roller bearings

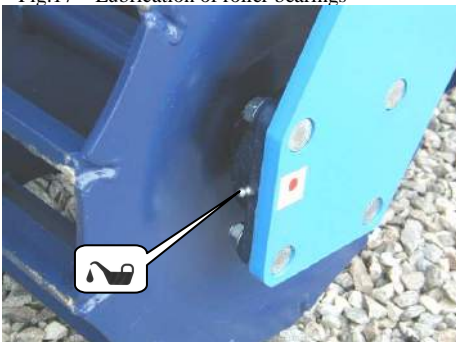


Fig. 18 – Lubrication of depth-setting mechanism – handle

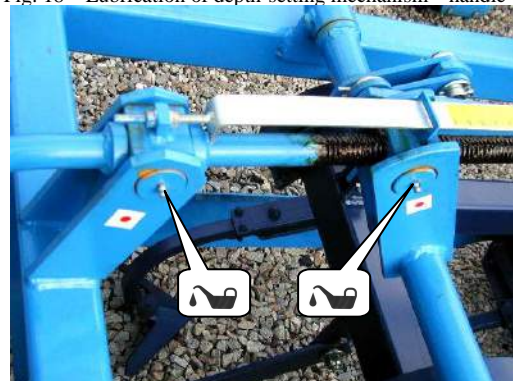
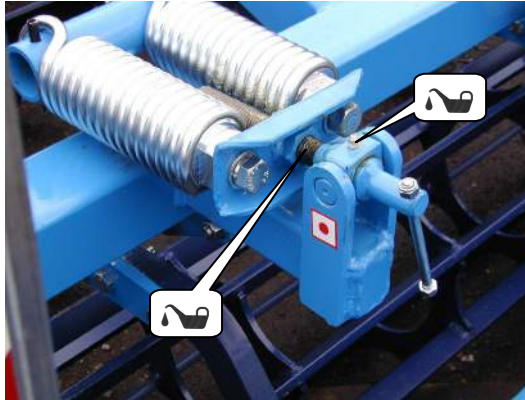


Fig. 19- Lubrication of the drag(s) depth-setting mechanism



12. MACHINE DISPOSAL AFTER ITS SERVICE LIFE

When disposing the machine, follow the instructions given in Chapter M/page 8-9 of the Manual.

13. SERVICES AND WARRANTY CONDITIONS

13.1 SERVICES

After-sale service is ensured by the sales representative after consultation with the manufacturer or directly by the manufacturer. Spare parts are supplied by individual sellers via the nationwide sales network. Spare parts should be ordered according to the official spare-part catalogue issued by the manufacturer.

13.2 WARRANTY

- 13.2.1** The manufacturer gives a 24-month warranty for the following machine parts: The main frame, the axle and the shaft (tow bar). The warranty period for the other parts of the machine is 12 months. The warranty period starts on the date of sale of a new machine to the end user.
- 13.2.2** The warranty applies to hidden defects that become evident within the warranty period provided that the machine has been properly used and maintained according to the Operating manual.
- 13.2.3** The warranty does not apply to common mechanical wear and tear of the exchangeable parts (e.g. shares, blades etc.)
- 13.2.4** The warranty does not apply to indirect consequences (such as a lower service life, etc.) resulting from a possible damage.
- 13.2.5** The warranty is engaged on the particular machine and does not become extinct with changing the owner.
- 13.2.6** The warranty is limited to dismantling and assembling or possibly to replacement or repair to the given defective part. The decision on replacing or repairing the defective part is the sole responsibility of the workshop authorized by Farmet.
- 13.2.7** For the time of the warranty period, only an authorised servicing technician of the producer may perform repairs or other interventions into the machine. Otherwise the warranty will not be acknowledged. This provision does not apply to the replacement of wearable spare parts (see point 13.2.3).
- 13.2.8** The warranty is conditioned by using original spare parts of the manufacturer.

Farmet a. s.
Jiřinková 276
ČESKÁ SKALICE 552 03



Tel.: 00420 491 45 01 40
45 01 22
Fax.: 00420 491 45 01 36

LETTER OF GUARANTEE

Machine Model:

YEAR OF PRODUCTION/SERIAL NUMBER: _____

TECHNICAL INSPECTION: _____

BUYER (ADDRESS): _____

SELLER (ADDRESS): _____

WARRANTY:

- I. The manufacturer gives a 24-month warranty for the following machine parts: The main frame, the axle and the shaft (tow bar). The warranty period for the other parts of the machine is 12 months. The warranty period starts on the date of sale of a new machine to the end user.
- II. The warranty applies to hidden defects that become evident within the warranty period provided that the machine has been properly used and maintained according to the Operating manuals.
- III. The warranty does not apply to common mechanical wear and tear of the exchangeable parts (shares, blades, etc.).
- IV. The warranty does not apply to indirect consequences (such as a lower service life, etc.) resulting from a possible damage.
- V. The warranty is engaged on the particular machine and does not become extinct with changing the owner.
- VI. The warranty is limited to dismantling and assembling or possibly to replacement or repair to the given defective part. The decision on replacing or repairing the defective part is the sole responsibility of the workshop authorized by Farmet.
- VII. For the time of the warranty period, only an authorised servicing technician of the producer may perform repairs or other interventions into the machine. Otherwise the warranty will not be acknowledged. This provision does not apply to the replacement of wearable spare parts (see point III).
- VIII. The warranty is conditioned by using original spare parts of the manufacturer.

MANUFACTURER

SELLER

DATE

DATE OF THE FIRST SALE



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2004/007/02

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ⒸD Fabrikat: - Bezeichnung : **Leicht Kompaktomat**
ⒸF Machinerie: - dénomination : **Léger Compactomat**
ⒸRU Сельскохозяйственная машина: - наименование : **Лёгкий компактомат**

- typ, type : **LK 400 NS**
- model, modèle : **LK 400 NS II.**
- ⒸZ výrobní číslo :
- ⒸGB serial number
- ⒸD Fabriknummer
- ⒸF n° de production
- ⒸRU заводской номер

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V České Skalici dne: 20.03.2009

Ing. Nýč Michal
technický ředitel
Technical director

Farmet a.s.
Jiřinková 276
552 03 Česká Skalice
DIČ CZ46504931

38
Ing. Karel Žďárský
generální ředitel společnosti
General Manager



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38

Ing. Karel Žďárský
generální ředitel společnosti
General Manager