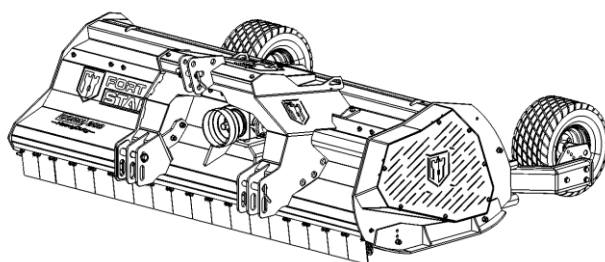
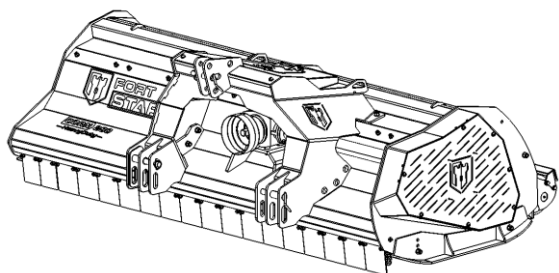


Part List No. 10

OPERATING INSTRUCTIONS WARRANTY CARD

FLAIL MOWER

CORN 260 HEAVY DUTY, CORN 280 HEAVY DUTY



**BEFORE STARTING WORK, READ THE
OPERATING INSTRUCTIONS**

UAB „AGROTEKAS”
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Issue date: 15.12.2025

Edition 1, Lithuania 2025

*Original instructions
Language: English*



WARRANTY CARD

Flail mower

Serial number

Production date

Controller's signature

Date of sale

Seller's signature

.....
Seller's stamp

.....
Manufacturer's stamp

ATTENTION: The purchaser shall require the seller to complete the warranty card and warranty claim forms accurately and legibly. Failure to provide, for example, the date of sale or the stamp of the point of sale may result in the user's warranty claims being rejected. A warranty card containing amended entries or completed illegibly shall be considered invalid.

Warranty claim procedure

1. The term "user" shall mean the natural or legal person purchasing the machine; the term "seller" shall mean the commercial entity supplying the machine to the user; and the term "manufacturer" shall mean the manufacturer of the machine.
2. The Manufacturer guarantees the good quality and proper operation of the machine covered by this warranty.
3. Defects or damage to the machine shall be repaired free of charge for a period of **12 months** from the date of sale.
4. Any defects or damage discovered shall be reported using the warranty claim form, either in person, by post, by e-mail, or by telephone.
5. If, during the warranty period, three warranty repairs become necessary and the machine continues to exhibit defects preventing its use for its intended purpose, the purchaser shall be entitled to have the machine replaced with a new, defect-free unit or to receive a refund.
6. If the Manufacturer, seller, and user do not agree on a different time limit for processing the warranty claim, replacing the machine, or issuing a refund, the relevant action shall be completed within 14 days from the date on which the user submits the claim.
7. The following repairs shall not qualify as warranty repairs:
 - repairs resulting from use of the machine contrary to the operating instructions or its intended purpose,
 - repairs resulting from fortuitous events or other circumstances for which the Manufacturer is not responsible.Such repairs may only be carried out at the expense of the user or purchaser.
8. The warranty does not cover machine parts and components that are subject to wear under normal operating conditions, regardless of the warranty period. This group includes, among others, the following parts/components:
 - cutting blades,
 - guards,
 - bearings,
 - transmission components.
9. Any modifications to the machine without the written consent of the Manufacturer are prohibited. In particular, welding, reaming, cutting, or heating of the machine's main structural components that directly affect the safety of machine operation is prohibited.
10. The Manufacturer reserves the right to cancel the machine warranty in the event of:
 - unauthorized structural modifications,
 - unauthorized repairs carried out without prior agreement with the machine Manufacturer,
 - use of an inappropriate PTO shaft,
 - use of non-original spare parts,
 - failure to perform regular lubrication / oil changes,
 - damage caused by fortuitous events,
 - failure to make the required entries in the warranty card or unauthorized completion of such entries,
 - use of the machine contrary to its intended purpose or the operating instructions.

Claim voucher no. 1

Flail mower

Serial No. Purchase date

No. of complaint protocol

.....
signature and stamp of the seller

Claim voucher no. 2

Flail mower

Serial No. Purchase date

No. of complaint protocol

.....
signature and stamp of the seller

Claim voucher no. 3

Flail mower

Serial No. Purchase date

No. of complaint protocol

.....
signature and stamp of the seller

Technical equipment in working order, received after repair

On.....

.....
user's signature

Notes

.....
.....
.....

Technical equipment in working order, received after repair

On.....

.....
user's signature

Notes

.....
.....
.....

Technical equipment in working order, received after repair

On.....

.....
user's signature

Notes

.....
.....
.....

IDENTIFICATION FLAIL MOWER

The flail mower is equipped with a nameplate located on the machine frame. The nameplate contains the basic data used to identify the machine: manufacturer's name, machine designation, serial number, and year of manufacture.

The data provided on the nameplate are used to identify the machine and should correspond to the data entered below at the time of sale.

Symbol

Year of production

Serial No.

UAB „AGROTEKAS“ K. Donelaičio g. 62-1, LT-44248 Kaunas, Lithuania			
FLAIL MOWER			
Model:		Type:	
Year:		Weight:	
Serial N.:		QC:	

**THE SUPPLIER OF MACHINERY, BOTH NEW AND USED, MUST HAVE A SIGNED
CONFIRMATION FROM THE PURCHASER ACKNOWLEDGING RECEIPT OF THE
FLAIL MOWER OPERATING INSTRUCTIONS.**



**THE FLAIL MOWER OPERATING INSTRUCTIONS ARE AN ESSENTIAL
PART OF THE MACHINE'S EQUIPMENT!**



ATTENTION!

When lending the machine, remember to provide the operating instructions for the flail mower and the PTO shaft together with the machine.



ATTENTION!

The use of an unsuitable PTO shaft (WPT) or non-original spare parts will result in loss of the warranty!



REMEMBER

Before commencing work, check that the PTO shaft (WPT) is correctly compatible with the tractor. The length of the WPT must be adjusted to the tractor by changing the length of the telescopic tubes — see the PTO shaft operating instructions.

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1. INTRODUCTION

This operating manual is supplied with each machine in order to familiarize the user with the construction, operation, and adjustment of the flail mower. It is also intended to provide warnings concerning existing or potential hazards. The manual also contains information on preparing the flail mower for operation and transport.

Strict compliance with the recommendations contained in this manual will ensure long-term, trouble-free operation and contribute to reducing the machine's operating costs.

The individual chapters of this manual discuss the relevant subjects in detail. If the manual contains information that is unclear to the user or if difficulties arise in the operation or use of the machine, the user may obtain comprehensive explanations by writing to the manufacturer's address (the address is provided on the cover). In such cases, the following information must be provided: the purchaser's full address, machine designation, serial number, year of manufacture, and year and issue number of the operating manual.

The terms used in this operating manual: left-hand side, right-hand side, rear, and front refer to the position of the operator facing in the direction of travel of the machine. Whenever the terms "machine" or "mower" are used in this operating manual, they shall be understood to mean the flail mower.

The warranty procedure and the rights arising therefrom are specified in the warranty card.

2. INTENDED USE OF THE FLAIL MOWER

The flail mower is intended exclusively for mowing grass and weeds on permanent grassland (meadows), mowing road verges, squares, and green areas, mowing and shredding plant material in areas where occasional small branches (up to 10 mm in diameter) are present, and shredding crop residues after maize and other crops.

Prohibited uses of the flail mower:

- transporting persons, animals, or objects on the machine,
- operating on stony or rocky terrain,
- operating in areas where thick branches are present,
- shredding branches (using the machine as a branch shredder or wood chipper),
- shredding branches arranged in longitudinal windrows,
- mowing plant material in wetland and marshy areas or in areas with loose soil,
- operating with the rear flaps open.

Compliance with the requirements concerning the use of the machine, including its operation and repair in accordance with the manufacturer's recommendations, and strict adherence to these requirements constitute a condition for use in accordance with the intended purpose. Anyone who uses the mower contrary to its intended purpose assumes full responsibility for all consequences arising from such improper use.

The machine may only be used and operated by persons familiar with its detailed characteristics and acquainted with the applicable safety procedures. Accident-prevention regulations and all basic occupational health and safety regulations, as well as road traffic and transport regulations, must always be observed. Any violation of these regulations shall be regarded by the Manufacturer as use contrary to the intended purpose.

The flail mower shall be driven by means of a PTO shaft (WPT) with the parameters specified in Table 5. The flail mower may only be operated in combination with agricultural tractors recommended by the Manufacturer (see Table 5), equipped with the appropriate category of three-point hitch system and standard front-axle and rear-wheel ballast weights to maintain the required steering coefficient ($W_s \geq 20\%$). The steering coefficient may be calculated in accordance with Annex D of standard PN-EN ISO 4254-1:2016-02 or Annex A of this manual.

3. SAFETY NOTES AND WARNINGS

3.1. Symbols: meaning and use

Symbols are used in this manual to draw the user's attention to and emphasize certain particularly important aspects requiring explanation.



DANGER

This word indicates a hazard involving a potential serious risk of an accident. Failure to follow the instructions marked with this symbol may result in a situation involving a serious risk of injury to the operator and/or persons in the vicinity! These instructions must be strictly observed!



ATTENTION!

This word indicates the possibility of damage to the machine or objects in the surrounding area and requires caution. It refers to an important instruction requiring particular attention!



REMEMBER

This word indicates an instruction or note concerning key functions or useful information relating to the proper operation of the machine.

3.2. Intended use of the rotary mower

The rotary mower is intended exclusively for mowing grass and weeds on permanent grassland (meadows), in orchards and plantations, and for mowing and shredding plant material in areas where small branches occur occasionally (with a diameter of up to 10 mm).

The rotary mower may be operated on terrain with a slope of up to 8.5°. The rotary mower may only be operated with agricultural tractors recommended by the Manufacturer – see Table 5.



REMEMBER

The regulations concerning the intended use and configurations specified for this machine are the only permissible ones. The machine must not be used for purposes other than those for which it is intended. The regulations cited in this operator's manual do not replace the obligations arising from applicable statutory regulations concerning safety and accident prevention, but merely summarize them.

3.3. Description of residual risk

Residual risk results from incorrect or improper behavior of the operator of the rotary mower. The greatest hazards may occur during the following activities:

- operation of the machine by minors, as well as by persons who have not read the operator's manual or who are not authorized to operate the agricultural tractors with which the rotary mower may be used,
- operation of the machine by persons who are ill, under the influence of alcohol, or after taking intoxicating substances,
- transport and operation without taking appropriate safety precautions,
- coupling the machine to the tractor when the operator is positioned between the machine and the tractor while the tractor engine is running,
- operation when children, bystanders, or animals are within the operating range of the machine,
- maintenance and adjustment work on the machine when the tractor engine is running,
- maintenance work while the moving components of the mower are rotating,
- operation without guards or with damaged or incomplete guards,
- operation of the mower contrary to its intended purpose,
- being on the machine during operation or transport,
- failure to maintain a safe distance from hazardous areas or entering such areas while the machine is operating.

When describing the residual risk of the rotary mower, the mower is treated as a machine which, from the commencement of production, has been designed and manufactured in accordance with the current state of the art.

3.4. Assessment of residual risk

During operation of the rotary mower, hazards and residual risks can be reduced to a minimum provided that the following recommendations are observed:

- carefully reading the operator's manual,
- using the machine in accordance with its intended purpose,
- prohibiting persons from being on the machine during operation and transport,
- prohibiting persons from remaining between the tractor and the machine while the tractor engine is running,
- performing all machine adjustments, maintenance, and lubrication regularly and only with the tractor engine switched off,
- having machine repairs carried out only by persons who have been appropriately trained,
- allowing the machine to be operated only by persons who have read the operator's manual,
- maintaining a safe distance between bystanders and the operating machine – min. 50 m,
- operating the machine with all guards installed, undamaged, and complete,
- preventing access to the machine by children,
- using protective gloves and protective clothing without loose parts.

Although UAB “AGROTEKAS” accepts responsibility for the design and construction of the machine with the aim of eliminating hazards and residual risks, certain risks associated with operating the rotary mower cannot be completely avoided.



1) Danger of cutting or severing by the rotating tines of the stone burier during operation and after turning off the machine's drive and shutting off the tractor engine, during work related to replacing the tines.



2) Danger of snagging or injury by protruding elements of the machine, especially the sharp ends of the stone burier tines, during operation, repairs, maintenance, working, and during hitching or changing the position of machine components.



3) Danger of crushing during hitching, lifting, and lowering the machine, as well as during work with the machine raised. While performing these activities, exercise extreme caution, maintain a safe distance, and use necessary safeguards.



4) Danger of cuts or abrasions by machine components during operation, repairs, and adjustments.



5) Danger of loss of stability during storage and transport. During storage, to maintain stability, the machine should stand on a flat, hard, level surface.



6) Danger of drawing in or entanglement by rotating components. Maintain a safe distance when rotating components are in motion and use all guards and safety devices. Bystanders should not approach the machine while it is operating.



7) Danger of being struck by thrown hard objects (e.g., stones) during operation. Exercise extreme caution and maintain a safe distance during machine operation (min. 50 m). Bystanders should not approach the machine while it is operating.

3.5. Occupational health and safety regulations



ATTENTION!

In order to avoid hazards, before commencing work with the stone burier, it is necessary to read this operator's manual and observe the following rules regarding hazards and precautions:

General regulations

- In addition to this operator's manual, road traffic regulations and occupational health and safety regulations must be observed, as well as the instructions contained in the operator's manual for the agricultural tractor and those provided by the manufacturer of the PTO shaft.
- The pictograms placed on the machine provide safety instructions for the user and third parties and are intended to help prevent accidents.
- When travelling on non-public roads, comply with the provisions of the Road Traffic Code of the country in which the machine is operated.
- Before each start-up of the machine, check that all machine components are in good condition. Any damage must be repaired immediately and any missing components must be replaced.
- Avoid entering the operating area of the rotary mower.
- Before leaving the agricultural tractor cab and before carrying out any work on the machine, switch off the tractor engine, remove the ignition key, lower the machine to the ground, and make sure that all rotating assemblies have come to a complete stop.
- The mower must be stored in a dry room on a hard, level surface. Exercise particular caution when lowering the machine to the ground. Risk of injury!!!
- The operator's manual must be kept with the machine and be readily accessible. A special holder is provided on the machine for storing the manual.
- When lending the machine, it must be provided in proper working order together with the operator's manual and PTO shaft.
- Additional ballasting of the machine is prohibited!
- Starting the mower while it is raised is prohibited!

- Do not place hands or feet under the machine body while the blades are rotating! After the mower drive and tractor engine have been switched off, the cutting blades continue to rotate. Wait until the blades have come to a complete stop!
- Careless or improper use and operation of the machine, as well as failure to comply with the recommendations contained in this operator's manual, creates a risk to the health and life of the operator and bystanders.
- Operation without guards, or with incomplete or damaged guards, is prohibited. If guards are damaged or lost, they must be replaced with new ones.
- The mower may only be operated with a suitable PTO (power take-off) shaft (WPT) supplied by the Manufacturer or with parameters specified in Table 5.
- Wearing loose clothing, loose belts, or anything else that could be caught by the rotating PTO shaft is prohibited. Contact with a rotating PTO shaft may result in entanglement or being caught, posing a serious risk to the health and life of the operator! Approaching a rotating WPT is prohibited!
- The operator's manual must be read both before the machine is put into operation for the first time and after a prolonged interruption in operation.

Coupling

- Exercise particular caution when coupling the machine to the tractor and when disconnecting it.
- Remaining between the machine and the tractor while the tractor engine is running is prohibited.
- When coupling the machine to the tractor, switch off the tractor engine, remove the ignition key, and apply the tractor parking brake.
- The hitch system pins of the mower may only be secured using standard retaining devices in the form of lynch pins.
- The mower must only be coupled to an agricultural tractor recommended by the Manufacturer and equipped with standard front-axle and rear-wheel ballast weights. The agricultural tractor must be fully operational.
- The machine may only be operated by a person holding valid qualifications authorizing them to operate agricultural tractors.
- Do not allow untrained persons or bystanders who are unfamiliar with the operator's manual to operate the machine.
- Use the recommended PTO (power take-off) shaft (WPT). Operation with a PTO shaft without a guard, with a damaged or incomplete guard, or with a damaged shaft is prohibited. Risk of entanglement by the rotating WPT.
- The PTO shaft housing bears markings indicating which end of the shaft must be connected to the tractor and which end to the machine.
- Passing over or under the PTO shaft and standing on the shaft are prohibited, both during operation and when the machine is stationary.
- When coupling the machine, observe the minimum front-axle load of the tractor, as the suspended machine in the transport position may affect the stability and steering of the tractor. Maintaining tractor steering ability and stability requires a front-axle load, with the machine attached, of at least 20% of the tractor's own mass.
- Placing, laying, or hanging objects on the PTO shaft connected to the tractor and mower is prohibited.
- After completing work, disconnect the PTO shaft from the tractor and place it on the special holder provided on the mower.
- The mower may only be operated with agricultural tractors equipped with a complete and undamaged operator's cab.
- All operations involving the lever for adjusting the position of the links of the tractor's three-point hitch must be performed exclusively from the operator's seat. Operating the lever after leaving the tractor operator's seat is prohibited.

- On tractors equipped with EHR (electronic hitch control), the tractor linkage is controlled by means of buttons located outside the agricultural tractor cab. Exercise particular caution when performing this operation. Risk of crushing!
- After the PTO shaft (WPT) has been fitted to the tractor PTO (power take-off) shaft stub and to the machine's PPM (power input) shaft stub, its locking pin must be seated in the shaft groove. Check that the WPT is correctly fitted and secured.
- When using a different PTO shaft (WPT), ensure the required overlap between the PTO shaft guards and the PPM and PTO guards. The guard overlap must be at least 50 mm when the WPT is positioned in a straight line.
- Connecting the mower to a tractor is prohibited if the mower's hitch system is not compatible with the category of the tractor's hitch system.



ATTENTION!

Operating with a tractor other than one recommended by the Manufacturer may create a risk of loss of stability – risk of the tractor-machine unit overturning!
The front axle load of the tractor must not be less than 20% of its own mass.

Operation

- The machine may only be operated by a person holding valid qualifications authorizing them to operate agricultural tractors and who is familiar with the machine operator's manual and road traffic regulations.
- Do not allow bystanders who are unfamiliar with the operator's manual to operate the mower.
- Do not allow children or persons under the influence of alcohol to operate the machine.
- The mower must be raised on the tractor's three-point hitch (3-point linkage) smoothly, without jerking or vibration.
- Always raise the mower when reversing.
- Before performing a reversing manoeuvre and before starting work, always use the tractor's audible warning signal to warn bystanders in the vicinity of the machine of the danger.
- Operating the tractor with the machine attached on slopes exceeding 8.5° is prohibited. Risk of the tractor-machine unit overturning!
- Whenever the operator leaves the tractor, switch off the tractor engine and leave the mower in the lowered position on the ground.
- Blockages occurring during machine operation that require operator intervention may only be removed after switching off the agricultural tractor engine, removing the ignition key, and disconnecting the PTO shaft from the tractor.
- Reverse gear must not be used during operation when the machine is in the working position. Risk of machine damage!
- All servicing operations (lubrication, repairs, cleaning, etc.) must be performed with the machine lowered onto the ground, the tractor engine switched off, the ignition key removed, the parking brake applied, and the WPT disconnected from the tractor. The tractor-machine unit must be secured against rolling.
- Persons operating the machine must wear work clothing and safety footwear, as well as personal protective equipment appropriate to the hazards present.
- Whenever repairing a machine raised on the three-point hitch, it must be secured against falling by means of a stable, robust, approved support and a chain.
- Supporting a raised machine with fragile objects, e.g. bricks or hollow blocks, is prohibited.
- During every work break, switch off the tractor engine, remove the ignition key, and lower the machine onto the ground.
- Before starting work, check that there are no low-hanging power lines in the working area.
- Exercise particular caution when working on sloping terrain and near ditches.
- In the event of damaged, lost, or worn guards, replace them with new ones.

Transport

- Transport of the mower on transport vehicles from the Manufacturer to the seller or customer is described in detail in the “Transport” chapter. Observe the safety rules during loading and ensure that the machine is properly secured on the vehicle trailer. The attachment points for ropes or chains are marked with pictograms.
- Transporting the mower attached to the tractor on public roads is prohibited. The machine must be transported to the work site using other means of transport. Driving a tractor with the machine attached on public roads may cause a road accident!
- Do not climb onto the operating machine or transport persons, animals, or objects on the mower during operation or transport.
- Pay attention to the machine's swing-out due to the width of the mower and its rigid connection to the tractor, particularly when turning around during operation and when cornering during transport.
- Exercise particular caution when turning the tractor with the machine attached, both during transport and when performing turning manoeuvres, especially when people or objects are nearby.
- The tractor travel speed with the mower during transport on non-public roads must not exceed:
 - when travelling on paved roads with a flat surface – 15 km/h,
 - when travelling on field roads – 10 km/h.

Storage

- The mower may only be disconnected from the tractor after switching off the tractor engine, removing the ignition key, and applying the parking brake.
- The mower should be stored in locations where there is no possibility of people or animals being accidentally injured.
- During storage, the machine should stand on a flat, paved surface, supported by two side skids and the support wheel, preferably under a roof.
- The mower must be stored in a dry room on a hard, level surface. Exercise particular caution when lowering the mower to the ground – there is a risk of injury!



DANGER

Exercise particular caution when performing any activities around the machine. The blades have sharp edges – there is a risk of injury! Incorrect positioning of the mower in the storage position may cause an accident!

Fire safety regulations

- Fire-fighting equipment should be provided as part of the tractor's equipment and kept in the tractor cab (ABC fire extinguisher).
- Smoking and the use of open flames in the vicinity of the operating machine are prohibited.
- Repairs, particularly welding work, must not be carried out without first cleaning the machine of residues of material that could cause a fire.
- Before commencing welding work, disconnect the tractor battery, and protect the electrical and hydraulic lines against damage.
- Operating on areas covered with dry grass and in the vicinity of forested areas constitutes a fire hazard.
- Before starting work with the machine, check whether a high fire-risk level is in force in the area. Operation in such areas is prohibited!



REMEMBER

As the user, remember that occupational health and safety requirements and fire safety regulations must be strictly observed!

Other

- The mower must not be used for purposes other than those specified in the operator's manual.



ATTENTION!

Failure to comply with the above rules may create hazards to the operator and bystanders and may also result in damage to the machine. The user shall bear sole responsibility for any damage resulting from failure to comply with these rules.

3.6. Compliance with standards

The machine has been designed and manufactured in accordance with the standards concerning safety in the machinery industry that were applicable on the date the flail mower was placed on the market. In particular, the following legal acts and harmonized standards have been taken into account:

- 2006/42/EC - Machinery Safety Directive, implemented by the Regulation of the Minister of Economy of 21.10.2008 (Journal of Laws 2008 No. 199, item 1228).
- PN-EN ISO 12100:2012 - Safety of machinery. General principles for design. Risk assessment and risk reduction.
- PN-EN ISO 4254-1:2016-02 – Agricultural machinery. Safety. Part 1: General requirements.
- PN-EN ISO 4254-12:2012 - Agricultural machinery. Safety. Part 12: Rotary disc and drum mowers and flail mowers.
- PN-EN ISO 4254-12:2012/A1:2017-10 - Agricultural machinery. Safety. Part 12: Rotary disc and drum mowers and flail mowers.
- ISO 3600:2022 – Tractors, machinery for agriculture and forestry, powered lawn and garden equipment. Operator's manuals. Content and format.
- PN-EN ISO 20607:2019-08 - Safety of machinery. Instruction handbook. General drafting principles.
- PN-ISO 11684:1998 – Tractors, machinery for agriculture and forestry, powered lawn and garden equipment. Safety signs and hazard pictorials. General principles.
- PN-ISO 17101-2 - Agricultural machinery. Thrown-object test and acceptance criteria -- Part 2: Rotary flail mowers.
- PN-ISO 730:2018-02 - Wheeled agricultural tractors. Rear-mounted three-point linkage. Categories N1, 1, N2, 2, N3, 3, N4 and 4.
- PN-ISO 730:2018-02/A1:2018-06 - Wheeled agricultural tractors. Rear-mounted three-point linkage. Categories N1, 1, N2, 2, N3, 3, N4 and 4.
- ISO 2332:2009 - Agricultural tractors and machinery. Connection of implements via three-point linkage. Clearance zone around implement.

3.7. Pictograms

Machines manufactured by UAB "AGROTEKAS" are equipped with all devices necessary to ensure safe operation. Where hazardous areas cannot be completely guarded due to the proper functioning of the machine, warning signs – pictograms – are provided. These indicate the possibility of a hazard occurring and show how to avoid it.

Table 1 lists the pictograms placed on the machine and provides their meanings. Safety pictograms must be protected against loss and loss of legibility. Lost or illegible pictograms must be replaced with new ones.

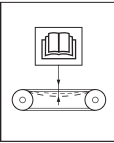
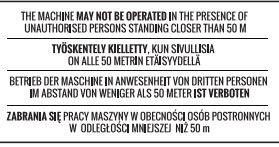
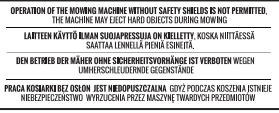
Any new assemblies installed during repairs must be marked with all safety pictograms specified by the Manufacturer.

Pictograms can be purchased by writing to the Manufacturer's address or by sending an e-mail, specifying the sign number (according to Table 1), as well as the version and year of issue of the manual.

Table 1. Pictograms

No.	Pictogram	Meaning	Location on the machine
1	2	3	4
1.		Read the operating manual before starting work	Mower body
2.		Do not stand near the lift linkage while controlling the lift	Mower body
3.		Caution! Before starting maintenance, turn off the engine and remove the key from the ignition	Mower body
4.		Maintain a safe distance from the machine – risk of crushing fingers or feet	Side sections of the mower body.
5.		Maintain a safe distance from the machine – risk of fingers or feet being cut by the blades	Mower body (front and rear)
6.		Do not touch machine components until all assemblies have come to a complete stop	Mower body (front and rear)
7.		Maintain a safe distance from the machine (min. 50 m) – risk of objects being ejected	Mower body
8.		Do not open or remove the safety guards while the tractor engine is running	Belt drive guard
9.		Do not ride on the machine during operation or transport	Mower body
10.		Do not reach into the crushing zone if components may move	Frame with mounting system
11.		Do not touch the rotating PTO shaft.	Mower body

Table 1 (continued)

1	2	3	4
12.		Tyre pressure of the support wheels	Wheel support bracket (<i>applies to the version equipped with support wheels</i>)
13.		Information on the rotational speed and direction of rotation of the power take-off (PTO) shaft	On the WPM guard (<i>power take-off shaft</i>)
14.		Adjustment of the belt drive tension must be carried out in accordance with the instructions in the operating manual	Belt drive guard
15.		Lubrication point markings	Side plate of the body (right-hand side) Side plate of the body (left-hand side, from the inside) Belt drive guard Side plates of the following roller (<i>applies to the mower equipped with a following roller</i>) Support wheel brackets (<i>applies to the mower equipped with support wheels</i>)
16.		Designation of loading attachment points	Frame with three-point linkage Upper three-point linkage attachment point
17.		Designation of oil filling points	Angular gearbox housing
18.	 IT IS PROHIBITED TO DRIVE THE MACHINE ON PUBLIC ROADS JULKISILLA TEILLÄ AJOKIELLETTY NICHT AUF ÖFFENTLICHEN STRASSEN FAHREN ZAKAZ PRZEJAZDU PO DROGACH PUBLICZNYCH	Travel on public roads is prohibited.	Mower body
19.	 THE MACHINE MAY NOT BE OPERATED IN THE PRESENCE OF UNAUTHORISED PERSONS STANDING CLOSER THAN 50 M TYÖSKENTELY KIELLETTY, KUIN SVUULLISIA ON ALLE 50 METRIN ETÄSYYDELLÄ BETRIEB DER MASCHINE IN ANWESENHEIT VON DRITTEN PERSONEN IM ABSTAND VON WENIGER ALS 50 METER IST VERBOTEN ZABRANIA SIĘ PRACY MASZYNY W OBECNOŚCI OSÓB POSTRONNYCH W ODLEGŁOŚCI MNIJSZEJ NIŻ 50 m	Operation of the machine in the presence of bystanders at a distance of less than 50 m is prohibited.	Mower body
20.	 OPERATION OF THE MOWING MACHINE WITHOUT SAFETY SHIELDS IS NOT PERMITTED. THE MACHINE MAY EJECT HARD OBJECTS DURING MOWING LÄRTIEN KÄYTTÖ KUN SUOJAUSKILPIT ON KIELLETTY. KOSKA NIITÄSSÄ SAATTAA LÖNNÄÄ PIRUA SUOJIT, DEN BETRIEB DER MÄHNER OHNE SICHERHEITSVORHÄNGE IST VERBOTEN WEGEN UNTERSCHLEUDERTE GEGENSTÄNDE PRACA KOSIARKI BEZ OŚLON JEST NIEPOPUŚCZALNA. GÓRY PODCZAS KOSZENIA ISTNIEJE NIEBEZPIECZESTWO WYRZUCENIA PRZECZ MASZYNĘ TWARDYCH PRZEDMIOTÓW	Operating the mower without guards is prohibited.	Mower body
21.	 PRACA KOSIARKĄ Z OTWARTYMI TYLNYMI KLAPAMI JEST ZABRONIONA!	Operation of the mower with the rear flaps open is prohibited!	Rear flaps

3.8. Manufacturer's liability and warranty

With regard to the machine types described in this manual, UAB "AGROTEKAS" accepts no civil liability in the event of:

- improper use of the machine or use contrary to the Manufacturer's recommendations,
- use of the machine in a manner that violates national laws concerning safety and accident prevention,
- failure to comply with, or incorrect compliance with, the regulations specified in this manual,
- unauthorized modifications to the machine,
- operation of the machine by untrained personnel,
- use of spare parts that are not original parts.

If the purchaser wishes to make use of the warranty, they must strictly comply with the recommendations and regulations specified in the operator's manual for the mower and the agricultural tractor. In particular:

- they must operate the machine only within the specified operating ranges,
- they must always carry out thorough maintenance,
- they must allow only operators with the appropriate skills and qualifications to operate the machine,
- they must use only original spare parts recommended by the Manufacturer.

3.9. Noise and vibration

During operation of the mower, the operator is not exposed to a noise hazard that could contribute to hearing loss, as the operator's workplace is located in the tractor cab. To reduce the noise level while operating the machine, the windows and doors of the agricultural tractor cab must be closed.

During measurement of the sound pressure level carried out with the machine stationary (the machine was operating without a load), in accordance with Annex B of PN-EN ISO 4254-1:2016-02, at the nominal engine speed of the tractor and the nominal rotational speed of the tractor PTO shaft, the noise level was 76 ± 3.2 dB.

During operation of the mower, there are no hazards caused by vibration, as the operator's workplace is located in the tractor cab, where the seat is suspended and ergonomically designed.



ATTENTION!

If the noise level in the agricultural tractor cab at the operator's workplace exceeds 85 dB, the operator should wear hearing protection.

3.10. Hazard zone

When operating the flail mower, it is important to avoid entering the machine's hazard zone, which is marked in yellow in Figures 1a and 1b. The hazard zone is the area within a radius of 50 m around the machine in which persons may be injured due to:

- moving/rotating machine components,
- ejected stones,
- unintended lowering or raising of the machine,
- unintended rolling of the tractor with the machine.

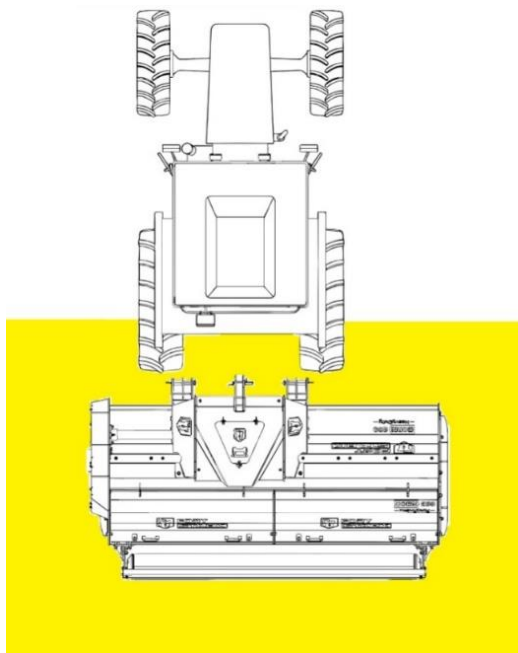


Figure 1a.

Machine hazard zone (mower version with following roller)

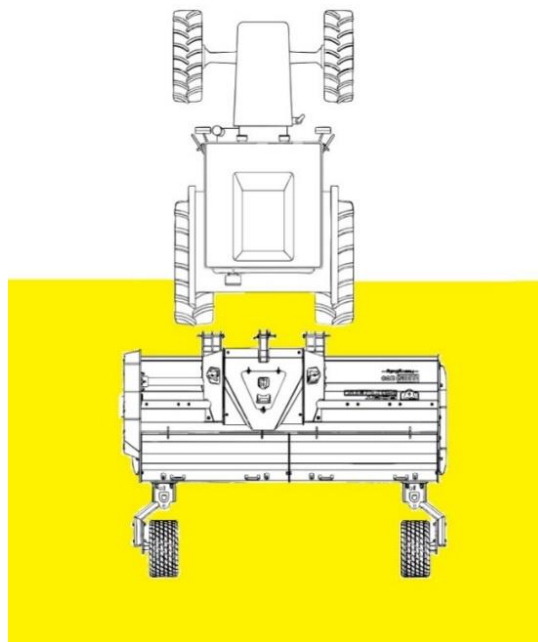


Figure 1b.

Machine hazard zone (mower version with support wheels)

The machine's hazard area contains locations where continuous or unexpected hazards may occur. These locations are marked with signs warning of residual hazards that cannot be eliminated by design. Special safety regulations specified in the relevant sections shall apply in these areas.

No persons may remain within the machine's operating areas:

- while the tractor engine remains running,
- until the tractor and machine have been secured against unintended starting and rolling.

Hazardous areas are located:

- between the tractor and the flail mower, in particular during coupling and uncoupling,
- in the area of moving/rotating components, e.g. the working shaft, PTO shaft, etc.,
- under a raised and unsecured machine or raised machine component.



ATTENTION!

Being present in the flail mower's hazard zone during operation exposes the operator or bystanders to the risk of being struck, cut, injured or exposed to other unforeseen hazards. Maintain a safe distance from the machine (min. 50 m)!

4. INFORMATION ON USE

4.1. General information

Flail mowers are designed to operate on slopes not exceeding 8.5° and are compatible with agricultural tractors having the parameters specified in Table 5. The mower may only be operated on the tractor's rear three-point linkage.

4.2. Machine construction and operation

The flail mower is a mounted machine attached to the tractor's rear three-point linkage. The flail mower is available in two configurations (versions) – it may be equipped with a following roller or support wheels. The construction of the flail mower is shown in Figures 2a, 2b and 2c.

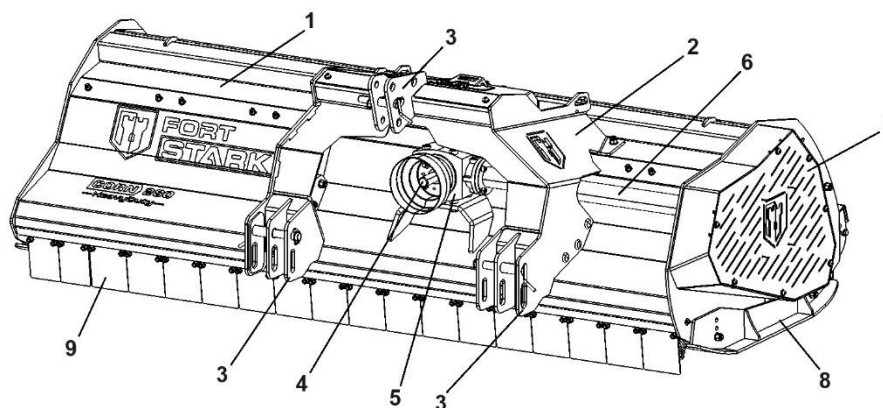


Figure 2a. Flail mower – general construction: 1 – body, 2 – frame with three-point linkage, 3 – three-point linkage system, 4 – power take-off shaft (PTO), 5 – angular gearbox, 6 – intermediate shaft, 7 – belt drive, 8 – skids, 9 – split front guard

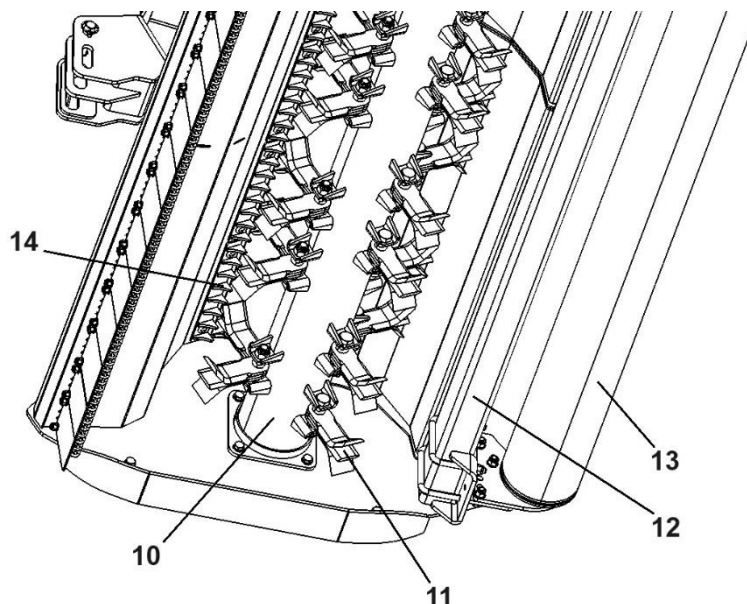


Figure 2b. Flail mower – general construction: 10 – working shaft, 11 – cutting blade set, 12 – rear beam of the mower, 13 – following roller, 14 – counter-cutting bar with blades

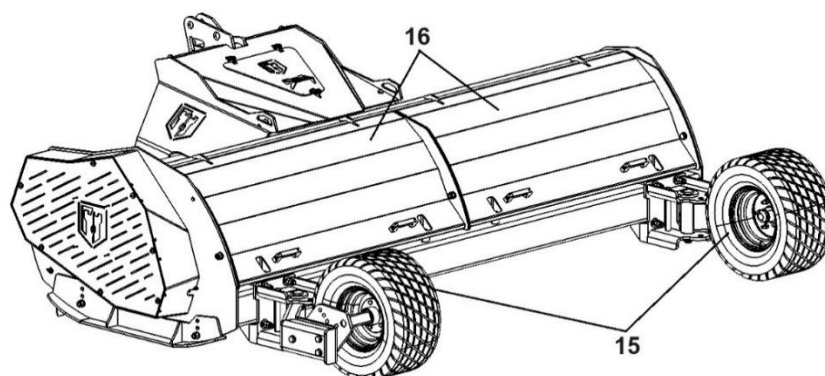


Figure 2c. Flail mower – general construction: 15 – support wheels, 16 – opening rear flaps

The flail mower body (1) is a welded assembly that forms a fixed guard for the working shaft (10) with mounted sets of cutting blades (11). Each set of cutting blades consists of two “Y”-type blades and one straight blade. The frame with the three-point linkage system (2), which is equipped with a Category II and III three-point linkage system (3), enables the machine to be mounted on the tractor's rear three-point linkage. The working shaft, fitted with pivot-mounted sets of cutting elements in the form of “Y”-type blades and straight blades, is mounted in bearings in the side plates of the body. As the blades rotate around the horizontal axis, they cut and shred plant material. The counter-cutting bar with blades (14) ensures uniform shredding of all plant material. Two skids (8) are located on the sides of the mower body.

The mower's working shaft with cutting blades is driven from the tractor's PTO through the PTO shaft (WPT), which is connected to the power take-off shaft (WPM) (4), forming part of the angular gearbox (5), and then through the intermediate drive shaft (6) to the belt drive (7). The belt drive consists of two pulleys, five V-belts and a tensioning system with a roller, located in a separate guard on the side of the machine.

A split front guard (9) is located at the front of the mower, consisting of a combination of a sheet-metal guard and a guard made of link chain.

Depending on the configuration, a following roller (13) or support wheels (15) may be mounted on the rear beam of the mower (12).

The following roller presses down the cut plant material and is also used to adjust the cutting height. The support wheels are swivel-mounted, which improves manoeuvrability at the headlands and also serves to adjust the cutting height.

The mower is equipped with a support bracket for supporting the PTO shaft disconnected from the tractor.

The flail mowers are equipped with two opening rear flaps (16). The opening rear flaps provide better access to the working shaft with cutting blades during servicing, repair or maintenance work.

4.3. Equipment of the flail mower

The manufacturer supplies the flail mower for sale in assembled condition. Together with the machine, the manufacturer supplies the following basic equipment: PTO shaft (WPT), flail mower operating manual together with the warranty card.

The flail mower is available in two configurations (versions) – it may be equipped with a following roller or support wheels. The type of equipment installed is specified by the Customer when ordering the machine. The Customer receives the machine in only one configuration (version), in accordance with the order placed.



REMEMBER

The flail mower operating manual is an essential part of the machine's equipment.

4.4. Preparing the tractor for operation

Preparing the tractor for operation with the mower consists of checking its overall condition in accordance with the tractor operating manual (particular attention should be paid to the proper operation of the braking system, suspension and three-point linkage lift). The machine shall be coupled to the recommended tractors equipped with standard front axle and rear wheel ballast weights in accordance with the data specified in the tractor's technical specifications. The agricultural tractor must be equipped with a complete and undamaged operator's cab.

The air pressure in all tractor tyres should be the same in both wheels on each axle and comply with the tractor operating manual.

Before mounting the machine, the lower lift links of the tractor's three-point linkage system should be moved to the lower position and set to the same height (the distance between the hitch points and the ground must be at least 200 mm). Lift links set at the same height above the ground facilitate mounting the machine on the tractor.

4.5. Preparing the flail mower for operation

Preparing the flail mower for operation and after a period of storage (e.g. after winter) consists of checking its technical condition, particularly the integrity of the connections of the working components. If any components are found to be damaged or worn, they must be replaced with new ones. Otherwise, this may result in reduced machine performance.



ATTENTION!

All inspection activities on the flail mower must be carried out before mounting it on the tractor.



ATTENTION!

The operator is prohibited from remaining in the space between the tractor and the machine while the tractor engine is running. Danger to the operator's life! The machine must be raised smoothly, without jerking or vibration.



ATTENTION!

Protective gloves must be worn when preparing the flail mower for operation – risk of cuts!

In addition:

- check the bolted connections; if any are found to be loose, tighten all bolts and nuts,
- check that the working shaft rotates freely and without binding; if binding occurs, check the condition of the bearings and replace them if necessary,
- check the condition of the cutting blades; if any damage is found, replace them with new ones,
- check the condition of the bolts and nuts securing the cutting blades to the working shaft; if any damage is found, replace them with new ones,
- check the condition of the guards,
- check that the rear flaps are closed and secured in this position,
- check the condition and adjustment of the skids,
- check the oil level in the angular gearbox,
- lubricate the machine in accordance with the recommendations given in the “Lubrication” section.

4.6. Coupling the flail mower to the tractor

When coupling the flail mower to the tractor, perform the following operations:

- drive the tractor sufficiently close to the machine,
- **switch off the tractor engine, remove the ignition key and apply the parking brake,**
- fit the tractor's lower links onto the lower hitch points of the machine and secure them with standard locking pins,
- connect the tractor's top link with a pin to the upper hitch point on the machine's mounting frame and secure it with a standard locking pin,
- slightly tension the chains of the tractor's lower links, maintaining the symmetry of the machine's attachment relative to the tractor.

Disconnect the machine from the tractor in the reverse order of coupling; lower the machine to the ground, release the locking devices from the lower link pins and the top link pin.



ATTENTION!

Connecting the machine to the tractor while the tractor engine is running is prohibited. The use of any securing elements for the machine's three-point linkage system other than those recommended by the manufacturer is prohibited. This may result in an accident or damage to the machine!

When coupling the machine to the tractor, the appropriate holes in the three-point linkage hitch points must be selected. For transporting the mower mounted on the tractor, the pins must be placed in the holes in the three-point linkage system intended for transport (Fig. 3). Before starting work, the pins must be placed in the appropriate holes in the three-point linkage hitch points so that the machine operates in the floating position – see section 5.10.

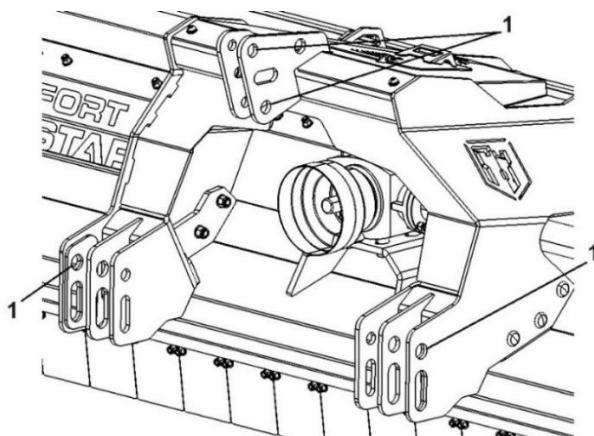


Figure 3. Coupling the machine for transport: 1 – holes in the three-point linkage system intended for transport

4.7. Rotary mower adjustment procedures

Before starting work with the machine, it must be properly adjusted. Adjustment consists of setting the required cutting height and levelling the machine laterally and longitudinally.

The cutting height is adjusted by changing the position of the rear support wheel.

Lateral levelling ensures a uniform cutting height and is carried out using the tractor's right-hand lift-link hanger.

Longitudinal levelling ensures that the machine's side skids are positioned parallel to the ground. Longitudinal levelling of the machine is carried out by shortening or lengthening the tractor's top link. Incorrect longitudinal levelling may result in damage to the PTO shaft (operating angle less than 25°).



WARNING

Adjusting the mower while the tractor engine is running is prohibited.

4.8. Operating the flail mower

A properly mounted and adjusted flail mower should move evenly behind the tractor during operation and maintain a uniform cutting height across the entire working width of the machine. The mower's operating speed must not exceed 15 km/h. The operating speed and the adjustment of the mower components affect the intensity of material shredding.



ATTENTION!

Before connecting the PTO shaft, check its length in the working position. The length of the PTO shaft must be adjusted to the tractor in accordance with the shaft manufacturer's recommendations, i.e. if the shaft is too long, the telescopic tubes must be shortened to the appropriate length. The shaft must be shortened in accordance with the instructions contained in the PTO shaft operating manual.



REMEMBER

The telescopic tubes of the PTO shaft (WPT) must overlap by at least 1/2 of their length under normal operating conditions and by at least 1/3 of their length under all extreme operating conditions. Even when the WPT is not rotating, the telescopic tubes must overlap sufficiently to prevent binding.

Before starting work, perform the following operations:

- **switch off the tractor engine, remove the ignition key and apply the parking brake,**
- perform longitudinal levelling using the top link (the side skids must be positioned parallel to the ground),
- set the support wheels to the working position (applies to the version equipped with support wheels),
- adjust the cutting height,
- adjust the position of the side skids,
- check the technical condition of the mower, in particular the condition and wear of the cutting blades, the security of their attachment, the condition of the bolts and nuts securing the blades, the condition of the guards, and the correct attachment of the machine to the tractor,
- ensure that there are no bystanders (especially children) or animals within the hazard zone,
- check that the rear flaps are closed and secured in this position,
- remove the PTO shaft (WPT) from its support bracket and connect it to the tractor's power take-off (PTO),
- attach the anti-rotation chains of the WPT guard to the brackets located on the bell guard mounted on the angular gearbox, as well as to fixed, stationary components of the tractor.

After connecting the PTO shaft, make sure that it is correctly and securely connected to both the tractor and the mower. An improperly secured WPT may cause an accident!

Before starting work, also inspect the area to be mowed. If there are stones, thick branches or hard objects in the area that could block or damage the mower, they must be removed without fail.



REMEMBER

After completing work, always switch off the tractor engine, remove the ignition key, disconnect the PTO shaft from the tractor and place it on the support bracket located on the machine.



ATTENTION!

Exercise particular caution when working on sloping terrain and near ditches. No bystanders may be present near the operating machine! Driving diagonally across a slope is prohibited due to the risk of the tractor and mower overturning! Never leave an operating agricultural tractor unattended. When leaving the tractor-machine combination unattended, always switch off the engine, remove the ignition key and lower the machine to the ground.



ATTENTION!

Starting the flail mower while it is raised is prohibited! Mowing may only be started once the mower has been lowered to the ground. Operating the mower with the rear flaps open is prohibited. There is a risk of hard objects being ejected, posing a hazard to the health and life of the operator and bystanders!



ATTENTION!

Before starting the mower, ensure that there are no bystanders (especially children) or animals within the hazard zone. The machine operator is responsible for ensuring adequate visibility around the machine and the working area.

Before starting work, a test run must be performed in order to determine the optimum operating parameters of the machine. The travelling speed must be selected according to the terrain conditions and the type of material being mowed, as improper selection of the mower's operating parameters may lead to clogging or damage to the machine. The best mowing results are achieved when the grass is dry. Cutting wet grass may cause the mower to become clogged. When mowing very tall grass, mowing in two stages is recommended. First, perform the initial cut

at the highest cutting height setting, and then perform the second cut at the selected lower cutting height. It is recommended that the first and second mowing operations be carried out at least one day apart to allow the cut material to dry. After starting the mower, the shaft with the cutting blades must reach maximum rotational speed before the machine enters the material to be mowed. Starting the machine under load is prohibited! This may cause damage to the machine! Mowing may only be started once the tractor's power take-off (PTO) has reached its nominal rotational speed – see Table 5. Operating the machine at a tractor PTO rotational speed other than that specified in Table 5 is prohibited. Risk of machine damage! During mowing, the control lever of the tractor's three-point linkage lift should be set to the floating position. When shredding dense plant material, reduce the tractor speed to prevent clogging.



ATTENTION!

The tractor must not be operated in reverse while the machine is in the working position – risk of machine damage!

5. TECHNICAL MAINTENANCE

To ensure long-term and trouble-free operation of the mower, the condition of all bolted connections must be checked and any loose connections must be tightened. After completing work, the machine must be thoroughly cleaned.

Worn or damaged machine components must be replaced in accordance with the following recommendations:

- all working components and their fastening elements must be replaced when wear or damage is detected,
- observe the specified oil change intervals,
- check the condition and completeness of the guards,
- check the condition of the chain guards.

Only original spare parts ensuring proper quality may be used for replacement; this is one of the conditions for maintaining the validity of the warranty.

5.1. Instructions for maintaining the flail mower

Each time work is completed, the machine must be cleaned of soil and plant residues, after which the connections of the parts and assemblies must be inspected. Machine maintenance consists of checking the condition of the bearings, V-belts of the drive, and cutting blades together with their securing bolts and nuts, as well as checking the fastening of bolted and pinned connections. Lost, damaged and worn parts must be replaced with new ones. All loose bolted connections must be tightened. Broken, damaged or worn blades must be replaced with new ones – due to rotor balancing, two sets of cutting blades must always be replaced, i.e. two sets located on opposite sides of the rotor in the nearest planes to each other. One set of cutting blades consists of two “Y”-type blades and one straight blade. The pins of the machine's three-point linkage system should not be lubricated; they must be kept clean and dry.

If it is necessary to carry out repairs, maintenance, cleaning or adjustment under the raised machine, the machine must be secured against falling with a stable, strong, certified support and a chain. The flail mowers are equipped with opening rear flaps, which facilitate servicing, repair or maintenance work on the working shaft with cutting blades. All servicing, repair or maintenance operations may be carried out after opening the rear flaps and securing them against falling.

5.2. Off-season maintenance

After completing work, the machine must be thoroughly cleaned of contaminants and carefully washed, particularly the underside of the mower body. After cleaning, the entire machine must be inspected and the technical condition of the individual components visually checked. Worn or damaged working components must be replaced and all loose bolted connections must be tightened.

Any missing areas in the paint coating must be cleaned and restored by applying a fresh layer of protective paint; the machine must then be lubricated in accordance with the lubrication instructions.

During washing, a strong jet of water must not be directed at the warning pictograms or bearings. The nozzle of the pressure washer must be kept at a minimum distance of 30 cm from the surface being cleaned.

5.3. Storage of the rotary mower

After completing work, the machine must be thoroughly cleaned of contaminants and washed thoroughly, particularly the underside of the mower body. After cleaning, the entire machine must be inspected and the technical condition of its individual components checked. Worn or damaged working components must be replaced and all loose bolted connections must be tightened.

After being detached from the tractor, the mower should rest on the two side skids and the support wheel. The machine should be stored under cover on a flat, hard surface, in rooms with a temperature above 5°C and relative humidity not exceeding 70%. If no covered storage area is available, the machine may be stored outdoors for a short period of time, provided that it is protected against the effects of weather conditions. During prolonged outdoor storage, preservation of the working components must be repeated if the protective coating has been washed off.

ATTENTION!



The mower should be stored in a location that does not pose a hazard to people or the surrounding area. During storage, the machine must rest on the ground on the two side skids and the support wheel.

Incorrect positioning and securing of the machine in the storage position may result in an accident – overturning of the machine!

5.4. Replacing the cutting blades

The flail mower may require replacement of a set of cutting blades. One set of cutting blades consists of two “Y”-type blades and one straight blade. Flail mowers are equipped with opening rear flaps, which provide free access to the cutting blades. The raised rear flaps must be secured against falling by means of bolts and nuts.

ATTENTION!



All activities related to replacing the cutting blades must be carried out on hard, level ground, when the machine is not connected to the tractor, and with the use of appropriate safeguards and protective equipment (e.g. gloves). The machine must be secured against movement.



ATTENTION!

Replacement of the cutting blades under a raised machine is prohibited! Crushing hazard!

**ATTENTION!**

The condition of the cutting blades must be checked periodically. Damaged, bent or worn cutting blades must be replaced with new ones, as there is a risk of a damaged cutting blade being ejected, which poses a hazard to the health and life of the operator and bystanders.

All cutting blades must be of the same type and have the same mass. If necessary, they must be replaced with new ones. Due to rotor balancing, two sets of cutting blades should always be replaced, i.e. two sets located on opposite sides of the rotor in the planes closest to each other. One set of cutting blades consists of two “Y”-type blades and one straight blade. New cutting blades can be purchased from the mower manufacturer – “UAB AGROTEKAS”.

**ATTENTION!**

The condition of the bolts and nuts securing the cutting blades on the working shaft must be checked periodically. Damaged, defective or worn bolts and nuts securing the cutting blades must be replaced with new ones, as there is a risk of a blade being ejected, which poses a hazard to the health and life of the operator and bystanders. The use of bolts with a strength class lower than 10.9 is prohibited.

In order to replace the cutting blades:

- position the machine on hard, level ground and secure it against movement,
- unscrew the fastening bolts (Fig. 4, item 1) of the rear flaps,
- unscrew the bolts with nuts (Fig. 4, item 2),
- raise the rear flaps (Fig. 4, item 3) by gripping the handles (Fig. 4, item 4),
- secure the flaps against falling by means of the bolts with nuts (Fig. 4, item 2), placing them in the holes in the side guard (Fig. 4, item 5) (the raised flaps must be locked in one of the four available adjustment holes to ensure free access to the rotor with the blades (Fig. 4, item 6)),
- position the working shaft with the cutting blades (Fig. 4, item 7) so that the set of blades to be replaced is easily accessible,
- unscrew the nut (Fig. 5, item 8) and remove the fastening bolt (Fig. 5, item 9),
- remove the cutting blades (Fig. 5, items 10 and 11) together with the bushings (Fig. 5, item 12),
- replace the cutting blades with new ones, paying attention to the correct installation of the individual blades (the straight blade must be positioned between two “Y”-type blades),
- insert the bushings,
- insert the bolt and screw on the nut,
- tighten the fastening nut,
- unscrew the bolts with nuts securing the raised rear flaps,
- lower the rear flaps,
- secure the flaps with the bolts and bolts with nuts in the closed position.
- The nuts of the bolts must be tightened in such a way as to allow the flail blades to move freely in the lugs of the working shaft.



ATTENTION!

When replacing working components, use appropriate tools and protective gloves – risk of injury from cuts! When replacing worn or damaged components, use only original spare parts. The use of non-original parts may result in improper operation of the machine or damage to the machine!

Due to rotor balancing, two sets of cutting blades should always be replaced, i.e. two sets located on opposite sides of the rotor in the planes closest to each other. One set of cutting blades consists of two “Y”-type blades and one straight blade. When replacing a set of cutting blades, pay attention to the correct installation of the individual blades so that the straight blade is positioned between two “Y”-type blades.

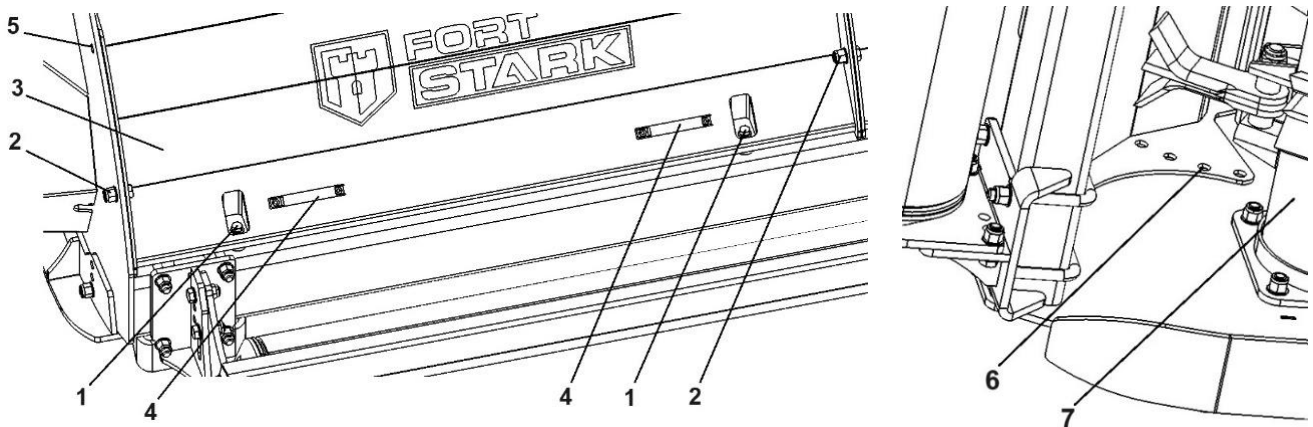


Figure 4. Opening the rear flaps: 1 – fastening bolts, 2 – bolts with nuts, 3 – rear flap, 4 – handles, 5 – hole in the side guard, 6 – adjustment holes, 7 – working shaft with cutting blades

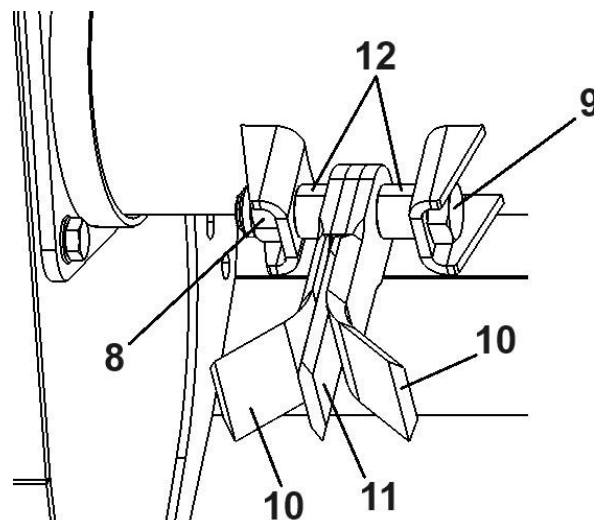


Figure 5. Replacing the cutting blades: 8 – fastening nut, 9 – fastening bolt, 10 – “Y”-type blade, 11 – straight blade, 12 – bushing



ATTENTION!

The condition of the cutting blades and their mounting must also be checked each time after the machine strikes a hard, fixed obstacle, e.g. a stone, concrete, metal component, etc.

The dimensions of the cutting blades used are shown in Figures 6 and 7.

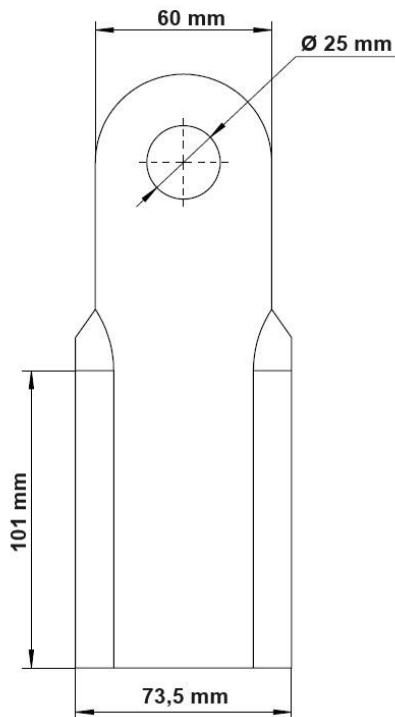


Figure 6. Dimensions of straight cutting blades

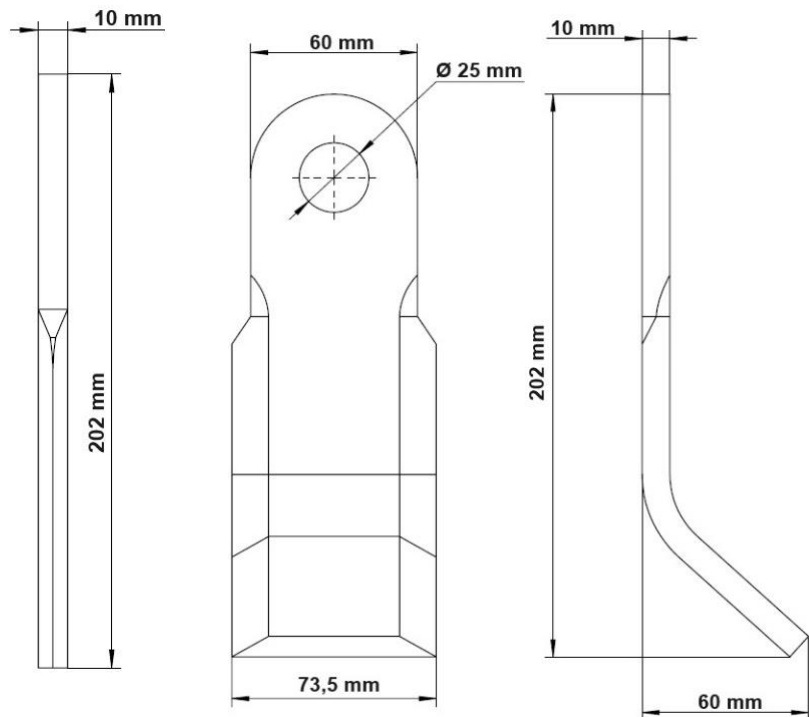


Figure 7. Dimensions of "Y"-type cutting blades

5.5. Cutting height adjustment

5.5.1. Mower equipped with a following roller

In a flail mower equipped with a following roller, which presses the cut plant material, the cutting height is adjusted by changing the position of the following roller. The following roller can be set in one of three positions.

When changing the cutting height, the position of the side skids must also be changed. The skids can be set in one of three positions. Remember to ensure that the left and right skids are set to the same position and that their lower surfaces are parallel to the ground. The skids protect the machine in the event of striking an obstacle.



ATTENTION!

All activities related to adjusting the position of the following roller must be carried out on hard, level ground and with the tractor engine switched off. During adjustment of the following roller position, the machine must be secured against falling with a stable, strong, certified support and a chain.

To adjust the position of the following roller, proceed as follows (Fig. 8):

- couple the machine to the tractor and raise it,
- **switch off the tractor engine, remove the key from the ignition switch and apply the parking brake,**
- secure the machine against falling,
- disconnect the PTO shaft from the tractor,
- loosen the nuts (1),
- unscrew the nuts (2) and remove the bolts (3),
- change the position of the following roller (4),
- insert the bolts into the appropriate adjustment hole (5) and screw the nuts onto the bolts,
- tighten all nuts on the fastening bolts,
- lower the machine onto the ground,
- connect the PTO shaft to the tractor.

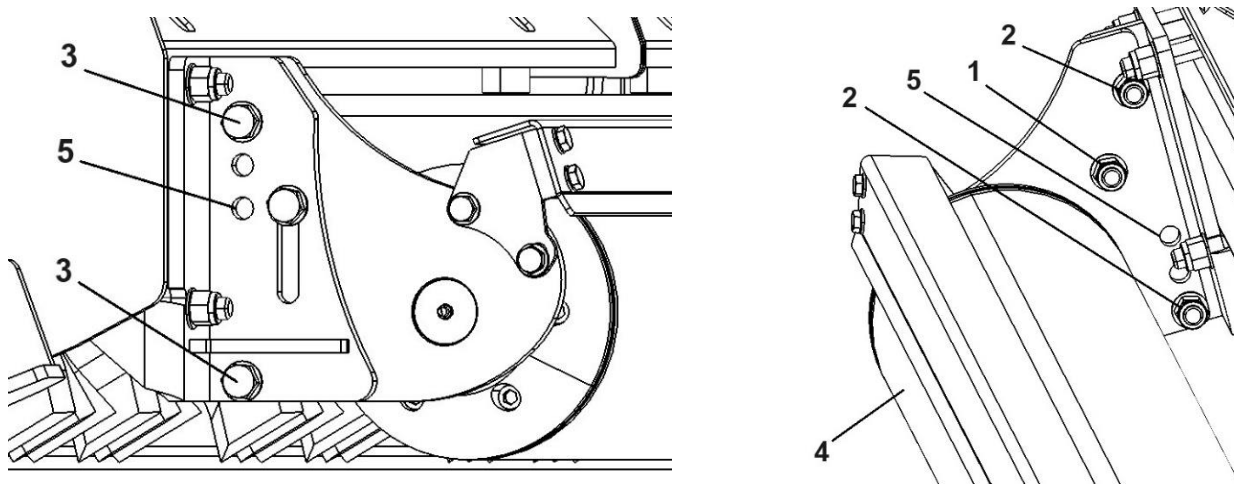


Figure 8. Adjusting the position of the following roller: 1 – nut, 2 – nut, 3 – bolt, 4 – following roller, 5 – adjustment holes



ATTENTION!

Protective gloves must be worn when adjusting the position of the following roller – risk of injury from cuts! It is recommended that two people carry out the adjustment of the following roller position.

Approximate cutting height depending on the selected adjustment hole of the following roller (Fig. 9).

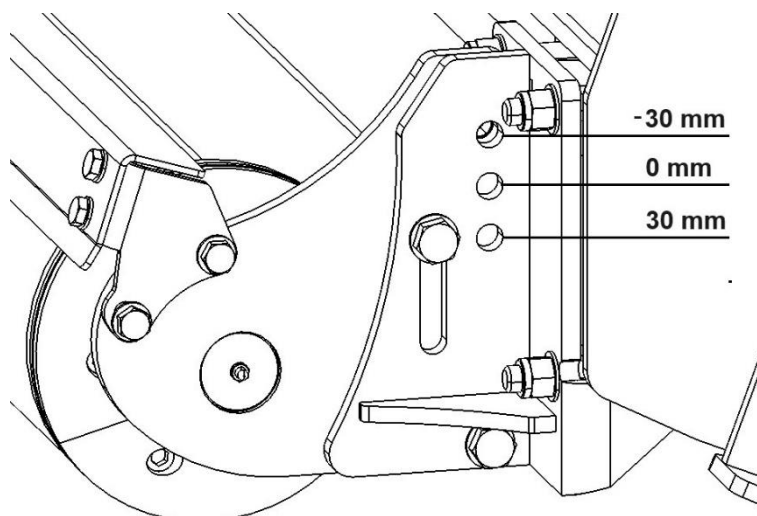


Figure 9. Approximate cutting height depending on the selected adjustment hole of the following roller

5.5.2. Mower equipped with support wheels

In a flail mower equipped with support wheels, the cutting height is adjusted by changing their position. The support wheels can be set in one of five positions.

When changing the cutting height, the position of the side skids must also be changed. The skids can be set in one of three positions. Remember to ensure that the left and right skids are set to the same position and that their lower surfaces are parallel to the ground. The skids protect the machine in the event of striking an obstacle.



ATTENTION!

All activities related to adjusting the position of the support wheels must be carried out on hard, level ground and with the tractor engine switched off. During adjustment of the support wheel position, the machine must be secured against falling with a stable, strong, certified support and a chain.

To adjust the position of the support wheels, proceed as follows (Fig. 10):

- couple the machine to the tractor and raise it,
- switch off the tractor engine, remove the key from the ignition switch and apply the parking brake,
- secure the machine against falling,
- disconnect the PTO shaft from the tractor,
- set the support wheels to the working position,
- loosen the nuts (1),
- unscrew the nuts (2) and remove the bolts (3),
- change the position of the adjustment plate (4) with the support wheel (5) attached,
- insert the bolts into the appropriate adjustment holes (6) and screw the nuts onto the bolts,
- tighten all nuts on the fastening bolts,
- lower the machine onto the ground,
- connect the PTO shaft to the tractor.

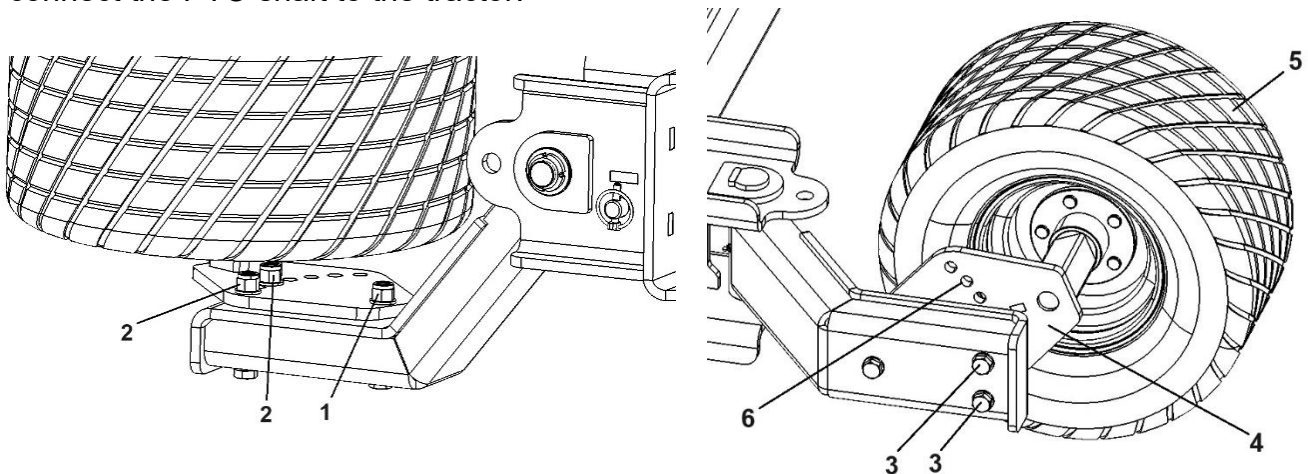


Figure 10. Adjusting the position of the support wheels: 1 – nut, 2 – nut, 3 – bolt, 4 – adjustment plate, 5 – support wheel, 6 – adjustment holes



ATTENTION!

Protective gloves must be worn when adjusting the position of the support wheels – risk of injury from cuts!

Approximate cutting height depending on the selected adjustment hole of the support wheels (Fig. 11).

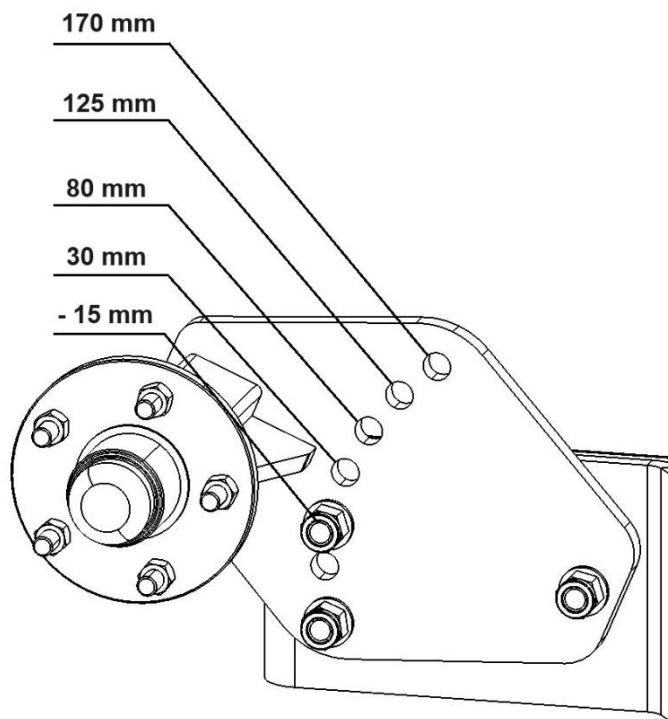


Figure 11. Approximate cutting height depending on the selected adjustment hole of the support wheels

5.6. Adjustment of the side skid position

The skids can be set in one of three positions. Remember to ensure that the left and right skids are set to the same position and that their lower surfaces are parallel to the ground.

When changing the position of the following roller or support wheels, depending on the machine configuration, the position of the side skids must also be changed.



ATTENTION!

All activities related to adjusting the position of the side skids must be carried out on hard, level ground and with the tractor engine switched off. During adjustment of the side skid position, the machine must be secured against falling with a stable, strong, certified support and a chain.

To adjust the position of the side skids, proceed as follows (Fig. 12):

- couple the machine to the tractor and raise it,
- **switch off the tractor engine, remove the key from the ignition switch and apply the parking brake,**
- secure the machine against falling,
- disconnect the PTO shaft from the tractor,
- unscrew the nuts (1) and remove the bolts (2),
- change the position of the skid (3) by selecting the appropriate adjustment hole (4),
- insert the bolts and screw on the nuts,
- tighten all nuts,
- connect the PTO shaft to the tractor,
- lower the machine onto the ground.

Ensure that both skids are set to the same position after adjustment.

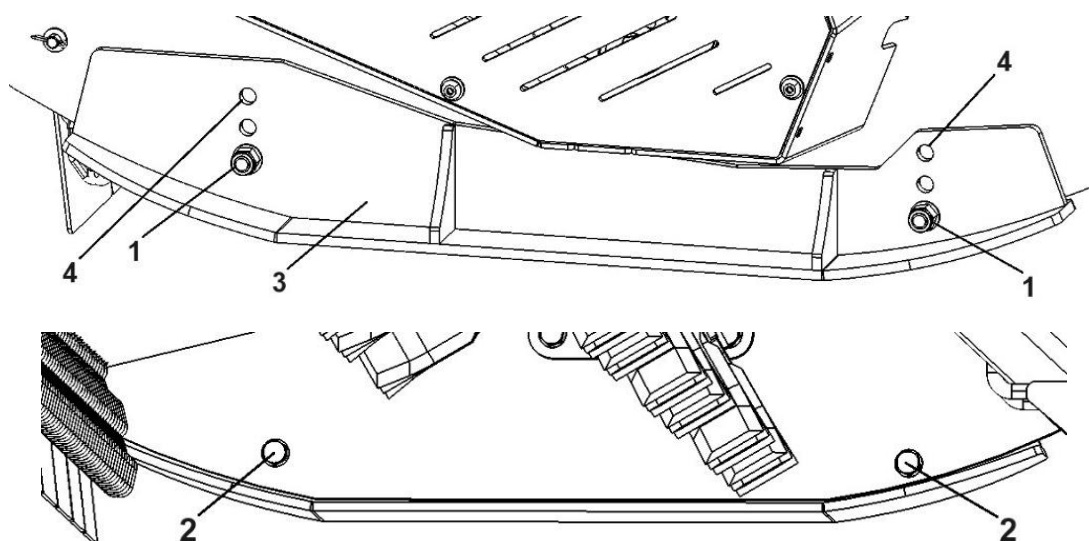


Fig. 12. Adjusting the position of the side skids: 1 – fastening nuts, 2 – fastening bolts, 3 – skid, 4 – adjustment holes



ATTENTION!

Protective gloves must be worn when adjusting the position of the side skids – risk of injury from cuts! Ensure that the side skids are set to the same position.

5.7. Maintenance of the angular gearbox



ATTENTION!

All activities related to servicing the angular gearbox must be carried out on hard, level ground, when the machine is not connected to the tractor, and with the use of appropriate safeguards and protective equipment (e.g. gloves). The machine must be secured against movement.



ATTENTION!

When servicing the angular gearbox, use appropriate tools and protective gloves – risk of injury from cuts! The use of inappropriate types of oil may result in improper operation of the machine or damage to the machine!

The basic maintenance activities include topping up the oil and observing the oil change intervals for the angular gearbox. The oil filling point of the angular gearbox is marked with an appropriate pictogram and is shown in Figure 13. The oil in the angular gearbox must be changed in accordance with Table 2.

Table 2. Oil filling/change points

No.	Service point	Frequency	Oil type
1.	Angular gearbox	1st change after 20 h. 2nd change after 60 h. Subsequent changes every 200 h.	Gear oil SAE 80W90 (CORN 260 – approx. 1.7 l) (CORN 280 – approx. 1.7 l)

The oil level in the angular gearbox must be checked before each start of operation and, if necessary, the oil must be topped up without fail. When checking the oil level, the machine should be level. The oil level is checked using the inspection plug, which must be unscrewed; the oil should then reach the lower edge of the opening.

Used oils must be handed over to collection points where they are processed for reuse.



REMEMBER

The oil should be changed after the machine has been operating for an extended period, when the oil is warm (heated) but not hot! Protective goggles and appropriate protective gloves must be worn due to the risk of burns!

As new gears wear in during operation, metal filings are produced and accumulate in the angular gearbox. When mixed with the oil, these filings may contribute to accelerated wear of the gear teeth and bearings. In order to remove the filings produced during the initial operating period of the angular gearbox, the first and second oil change intervals must be strictly observed. Before filling with new oil, the angular gearbox must be flushed with machine oil in order to remove contaminants.

When changing the oil in the gearbox, proceed as follows (Fig. 13):

- position the machine on hard, level ground and secure it against movement,
- remove the locking pin with spring ring (1),
- open the upper frame guard (2),
- unscrew the oil filler plug with breather (3),
- place a container for used oil under the inspection plug (4),
- unscrew the inspection plug,
- remove the old oil using an oil pump,
- screw in the inspection plug,
- fill the gearbox with machine oil,
- flush the gearbox with machine oil by manually turning the cutting rotor several times,
- unscrew the inspection plug,
- remove the contaminated machine oil using an oil pump,
- screw in the inspection plug,
- fill the gearbox with new gear oil up to the level of the lower edge of the inspection plug opening,
- screw in the oil filler plug,
- close the upper frame guard and secure it with the locking pin with spring ring.

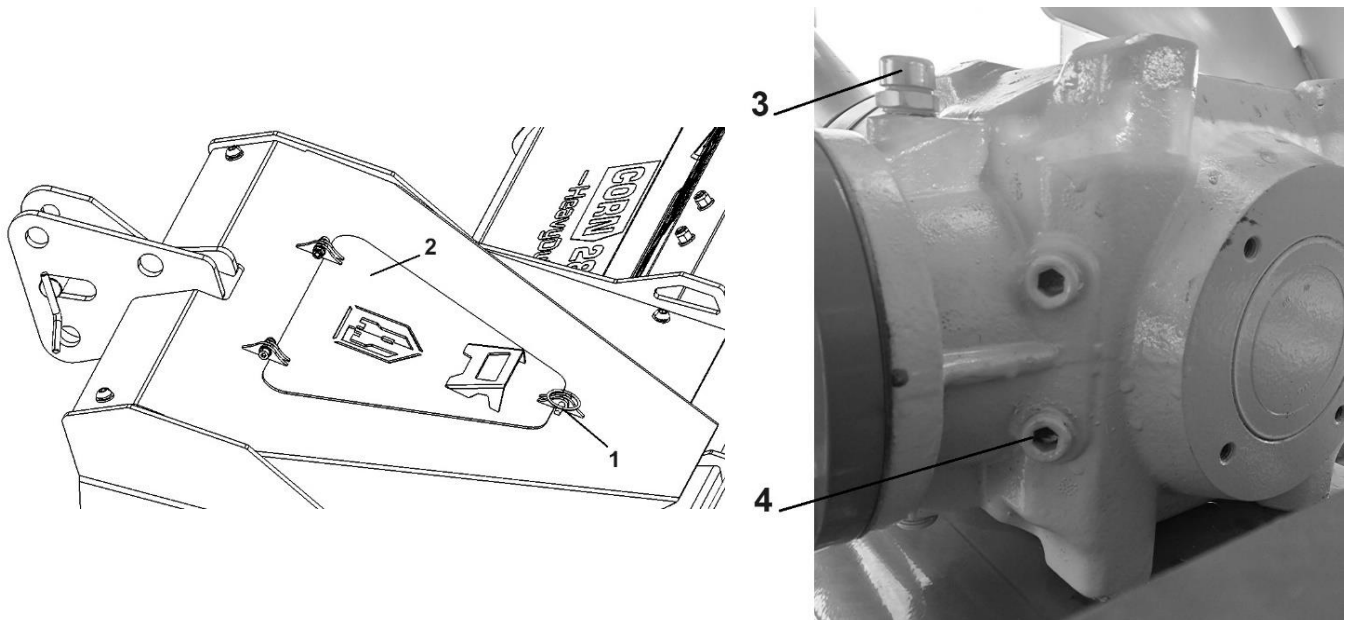


Figure 13. Changing the oil in the angular gearbox: 1 – locking pin with spring ring, 2 – upper frame guard, 3 – oil filler plug with breather, 4 – inspection plug

5.8. Maintenance of the belt drive



ATTENTION!

All activities related to servicing the belt drive must be carried out on hard, level ground, when the machine is not connected to the tractor.

The basic maintenance activities for the belt drive include regular inspection of the condition of the drive belts and their tension.

To adjust the belt tension, proceed as follows (Fig. 14):

- unscrew the fastening bolts (1) of the belt drive guard,
- remove the belt drive guard (2),
- check the belt tension (when the V-belt is pressed with a finger at the midpoint between the pulleys with a force of 75 N, the belt should deflect by approx. 10 mm) (Fig. 15),
- if it is necessary to increase the belt tension, turn the tensioning nut (Fig. 15, item 1) the required number of turns until the required belt tension is achieved,
- install the belt drive guard and secure it with the bolts.

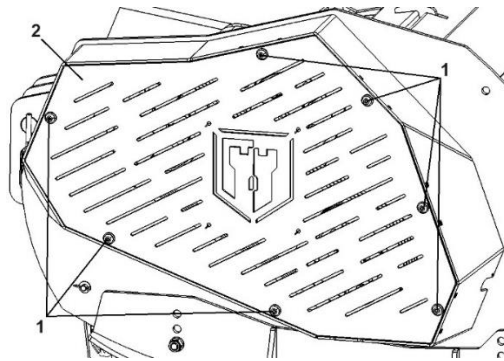


Figure 14. Adjusting the belt drive tension: 1 – fastening bolts, 2 – belt drive guard

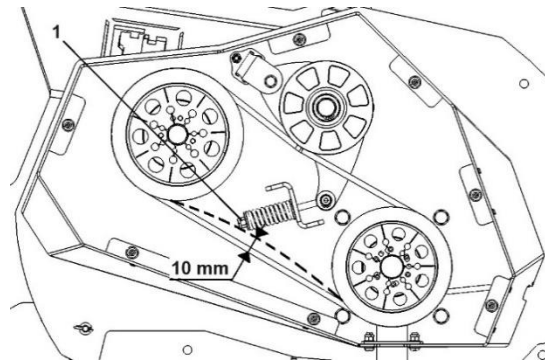


Figure 15. Belt drive tension: 1 – tensioning nut

If one of the belts is damaged or it is not possible to increase the belt tension, all V-belts must be replaced with new ones.

To replace the V-belts:

- unscrew the fastening bolts of the belt drive guard (Fig. 14, item 1),
- remove the belt drive guard (Fig. 14, item 2),
- loosen the tensioning nut (Fig. 15, item 1) so that the belts can be removed,
- remove the V-belts,
- install new V-belts,
- use the tensioning nut to set the required belt tension,
- install the belt drive guard and secure it with the bolts.

5.9. Support wheels

5.9.1. Replacing the support wheel

The flail mower may be equipped with support wheels mounted on the rear beam of the machine. The rear support wheels are swivel-mounted, which improves manoeuvrability at the headlands and also serves to adjust the cutting height. In the event of damage to a support wheel or any of its components, the entire wheel must be replaced with a new one without delay.



ATTENTION!

All activities related to replacing the support wheel must be carried out on hard, level ground and with the tractor engine switched off.

All repairs to the tyres of the support wheels may only be carried out by a tyre service. Carrying out independent tyre repairs is prohibited! This will result in loss of warranty.

To replace the support wheel, proceed as follows (Fig. 16):

- couple the machine to the tractor and raise it,
- **switch off the tractor engine, remove the key from the ignition switch and apply the parking brake,**
- set the wheels to the working position,
- lower the machine onto the ground,
- loosen the nuts (1),
- start the tractor and raise the machine again,
- **switch off the tractor engine, remove the key from the ignition switch and apply the parking brake,**
- secure the machine against falling,
- disconnect the PTO shaft from the tractor,
- unscrew the nuts (1),
- remove the support wheel (2),
- install the new support wheel,
- screw the nuts onto the hub studs all the way to the end of the stud,
- lower the machine onto the ground.
- tighten the wheel nuts to the appropriate torque (approx. 100 Nm),
- connect the PTO shaft to the tractor.

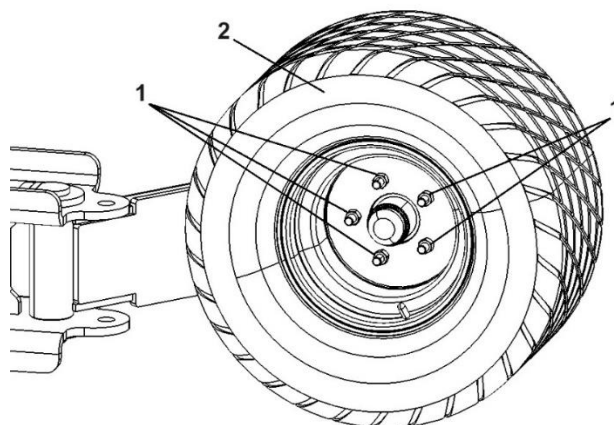


Figure 16. Replacing the support wheel: 1 – nuts, 2 – support wheel



ATTENTION!

During repairs, maintenance, servicing or adjustment with the machine raised, it must be secured against falling with a stable, strong, certified support and a chain.

5.9.2. Moving to the transport position

The flail mower may be equipped with support wheels mounted on the rear beam of the machine. The rear support wheels are swivel-mounted, which improves manoeuvrability at the headlands and also serves to adjust the cutting height.

After completing work, the support wheels must be moved to the transport position for transporting the machine attached to the tractor.

To move the support wheels to the transport position:

- raise the machine,
- **switch off the tractor engine, remove the key from the ignition switch and apply the parking brake,**
- secure the machine against falling,
- disconnect the PTO shaft from the tractor,
- remove the pins with locking pins (Fig. 17, item 1) from the hole intended for positioning the pin during operation,
- rotate the support wheel brackets (Fig. 17, item 2) towards the centre of the machine (Fig. 18),
- lock the support wheels by inserting the pin into the hole in the bracket (Fig. 17, item 3) intended for positioning the pin during transport,
- secure the pins with locking pins.

To move the wheels to the working position, carry out the above operations in reverse order.

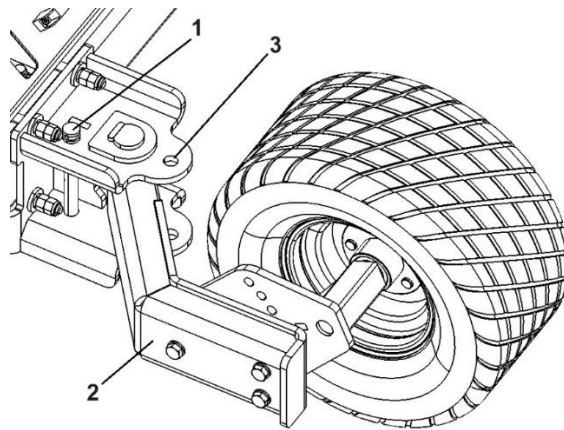


Figure 17. Moving the support wheels to the transport position: 1 – pin with locking pin (hole in the bracket for the working position), 2 – support wheel bracket, 3 – hole in the bracket for the transport position

The correct position of the wheels in the transport position is shown in Figure 19.

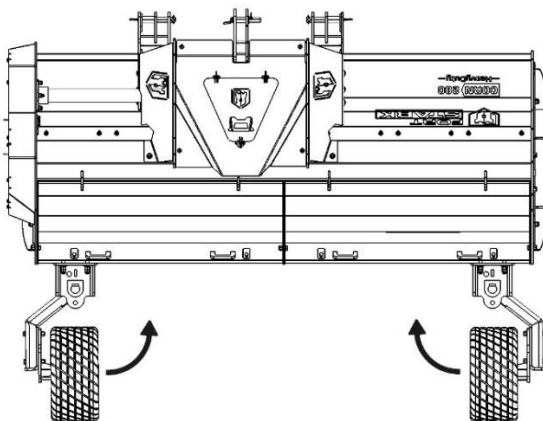


Figure 18. Rotating the support wheel bracket towards the centre of the machine

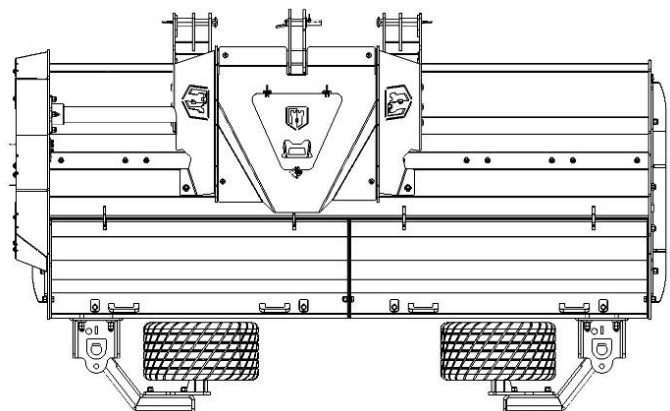


Figure 19. Position of the wheels in the transport position

5.10. Floating position

The machine can operate in the floating position by placing the pins in the appropriate points of the three-point linkage. This allows the machine to follow the ground contour during operation. The floating position provides flexibility and freedom of movement of the machine.

To set the machine to the floating position, carry out the following operations (Fig. 20):

- lower the machine onto the ground,
- **switch off the tractor engine, remove the key from the ignition switch and apply the parking brake,**
- disconnect the PTO shaft from the tractor,
- remove the tractor lower links from the lower attachment points of the machine's three-point linkage,
- disconnect the tractor top link from the upper attachment point of the machine,
- remove the pins with locking pins from the attachment points of the three-point linkage,
- insert the pins into the appropriate holes in the lower attachment points of the three-point linkage that allow the machine to operate in the floating position (1),
- attach the tractor lower links to the lower attachment points of the machine's three-point linkage and secure them with locking pins,
- connect the upper attachment point of the machine's three-point linkage to the top link using a pin, which must be inserted into the appropriate hole in the three-point linkage (1),
- slightly tension the chains of the tractor lower links, maintaining symmetry of the machine's attachment relative to the tractor,
- adjust the length of the top link so that the pin is located in the centre of the hole in the three-point linkage,
- install the PTO shaft.

To set the machine without the floating position for transport while attached to the tractor, carry out the above operations in reverse order.

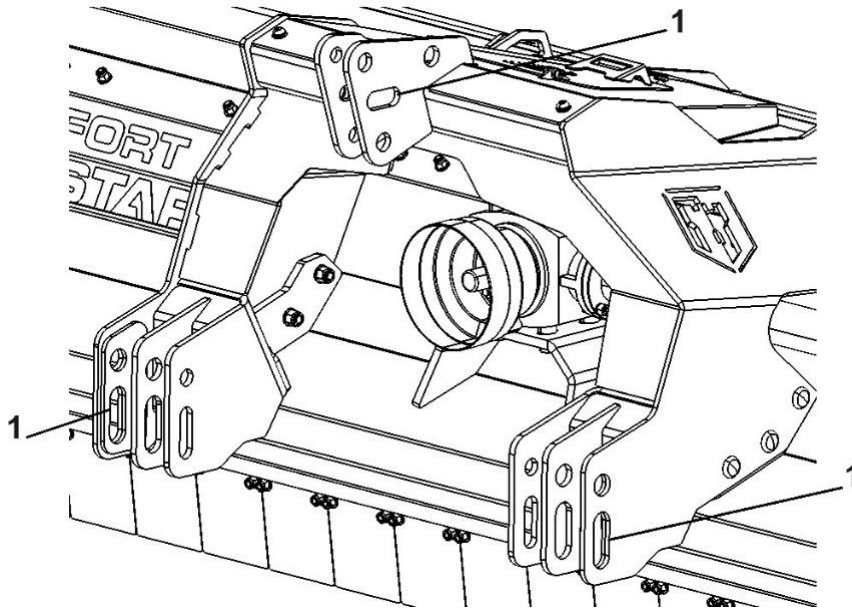


Figure 20. Floating position of the machine: 1 – holes in the three-point linkage provided for operation of the machine in the floating position

5.11. Clearing blockages

If the machine becomes clogged with plant residues during operation, disengage the mower drive (tractor PTO shaft), raise the mower, reverse several metres, lower the mower onto the ground and re-engage the mower drive, then slowly move forward and continue operation. If the working shaft with the cutting blades still does not rotate, clean the working shaft as described below.

If plant material becomes wrapped around the working shaft, proceed as follows (Fig. 21):

- stop the tractor immediately,
- disengage the tractor power take-off (PTO),
- lower the machine onto the ground,
- switch off the tractor engine,
- remove the key from the ignition switch,
- apply the parking brake,
- disconnect the PTO shaft from the tractor,
- unscrew the fastening bolts (1) of the rear flaps,
- unscrew the bolts with nuts (2),
- raise the rear flaps (3) by gripping the handles (4),
- secure the flaps against falling by means of the bolts with nuts (2), placing them in the holes in the side guard (5) (the raised flaps must be locked in one of the four available adjustment holes to ensure free access to the working shaft with the blades (6)).
- clean the working shaft with the cutting blades (7),
- unscrew the bolts with nuts (2) securing the raised rear flaps,
- lower the rear flaps,
- secure the flaps with the bolts (1) and bolts with nuts (2) in the closed position,
- connect the PTO shaft to the tractor.

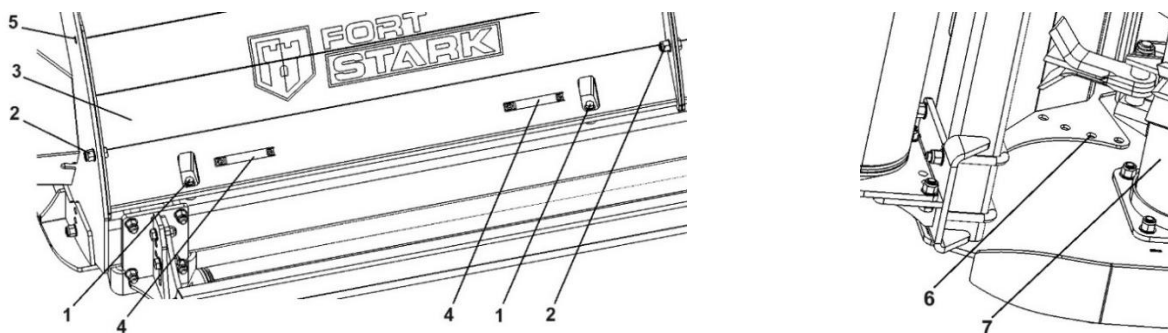


Figure 21. Clearing blockages: 1 – fastening bolts, 2 – bolts with nuts, 3 – rear flap, 4 – handles, 5 – hole in the side guard, 6 – adjustment holes, 7 – working shaft with cutting blades

During this operation, personnel should use protective gloves to prevent hand injuries. It is prohibited to leave the tractor with the machine on a slope or other inclined terrain without securing it against uncontrolled rolling.



ATTENTION!

Any blockages that occur during mower operation and require operator intervention must be cleared only after switching off the tractor engine, removing the key from the ignition switch, applying the parking brake, disconnecting the PTO shaft from the tractor and securing the tractor against rolling. Protective gloves must be worn when clearing blockages – risk of injury from cuts! Clearing blockages while the tractor engine is running may result in the operator being drawn in or caught by the machine!



ATTENTION!

The tractor must not be operated in reverse while the mower is in the working position. The mower must be raised smoothly, without jerking or vibration.

5.12. Rear flaps

Flail mowers are equipped with two opening rear flaps. The opening rear flaps provide better access to the working shaft with cutting blades during servicing, repair or maintenance work. Before starting work, always check that the rear flaps are closed and secured in this position.



ATTENTION!

Operation of the mower with the rear flaps open is prohibited, as there is a risk of hard objects being ejected, posing a hazard to the health and life of the operator and bystanders!

When carrying out servicing work on the mower with the flaps raised, always secure them against falling using bolts with nuts.

To open the rear flaps, perform the following operations (Fig. 22):

- unscrew the fastening bolts (1) of the rear flaps,
- unscrew the bolts with nuts (2),
- raise the rear flaps (3) by grasping the handles (4),
- secure the flaps against falling using the bolts with nuts (2), placing them in the holes in the side guard (5) (the raised flaps must be locked in one of the four available adjustment holes (6)).

To close the rear flaps, perform the following operations (Fig. 22):

- unscrew the bolts with nuts (2) securing the raised rear flaps,
- lower the rear flaps,
- secure the flaps with bolts (1) and bolts with nuts (2) in the closed position.

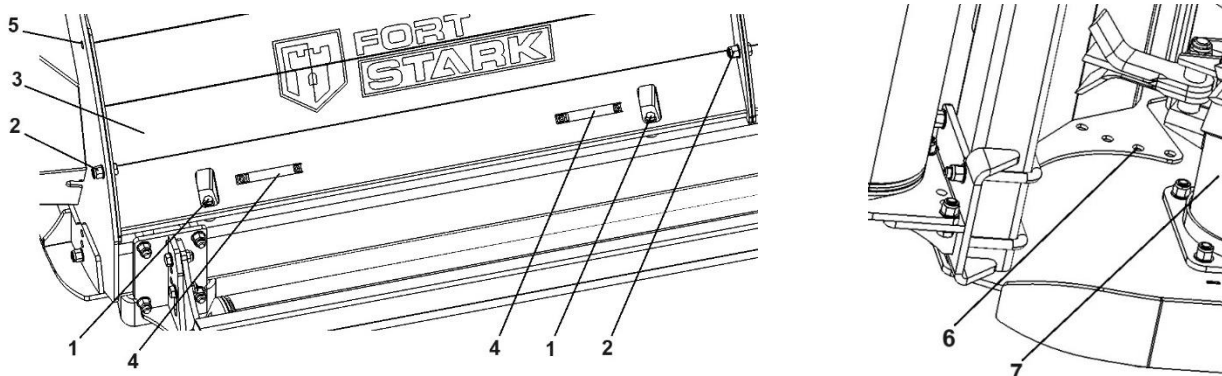


Figure 22. Opening the rear flaps: 1 – fastening bolts, 2 – bolts with nuts, 3 – rear flap, 4 – handles, 5 – hole in the side guard, 6 – adjustment holes



ATTENTION!

Before carrying out any servicing, repair or adjustment work on the mower coupled to the tractor, disengage the PTO drive, lower the machine onto the ground, switch off the tractor engine, remove the key from the ignition switch and disconnect the PTO shaft from the tractor. The entire mower–tractor unit must be secured against unintended rolling.

5.13. Lubrication



ATTENTION!

When lubricating, use appropriate tools and protective gloves – risk of injury! Using unsuitable types of grease may result in improper machine operation or damage to the machine!

Basic maintenance operations include observing the lubrication intervals and using the appropriate types of grease. Before lubrication, all lubrication points must be cleaned of

contaminants. All lubrication points on the machine are marked with appropriate pictograms and are shown in Figure 23. The machine must be lubricated in accordance with Table 3. Used lubricants must be delivered to collection points where they are processed for reuse. The lubrication frequency of the PTO shaft specified in its operating manual must also be observed. The PTO shaft must also be lubricated before and after the storage period. After completing the lubrication work, remove any excess grease or oil.

Table 3. Lubrication points

No.	Lubrication point	Frequency	Type of grease
1.	Belt drive tension adjustment mechanism	every 8 operating hours	LT 43 grease
2.	Bearings of the working shaft with flails	every 8 operating hours	LT 43 grease
3.	Intermediate shaft bearing with the belt drive pulley mounted on it	every 8 operating hours	LT 43 grease
4.	Bearings of the following roller (applies to mower equipped with a following roller)	every 8 operating hours	LT 43 grease
5.	Support wheel bracket bushing (applies to mower equipped with support wheels)	every 8 operating hours	LT 43 grease

When lubricating the bearing of the working shaft with flails, take care not to introduce too much grease. Excess grease may reach the drive belts, causing them to slip and become damaged, as well as resulting in improper machine operation. To control lubrication of the bearing, remove the belt drive guard and, if necessary, wipe off excess grease.

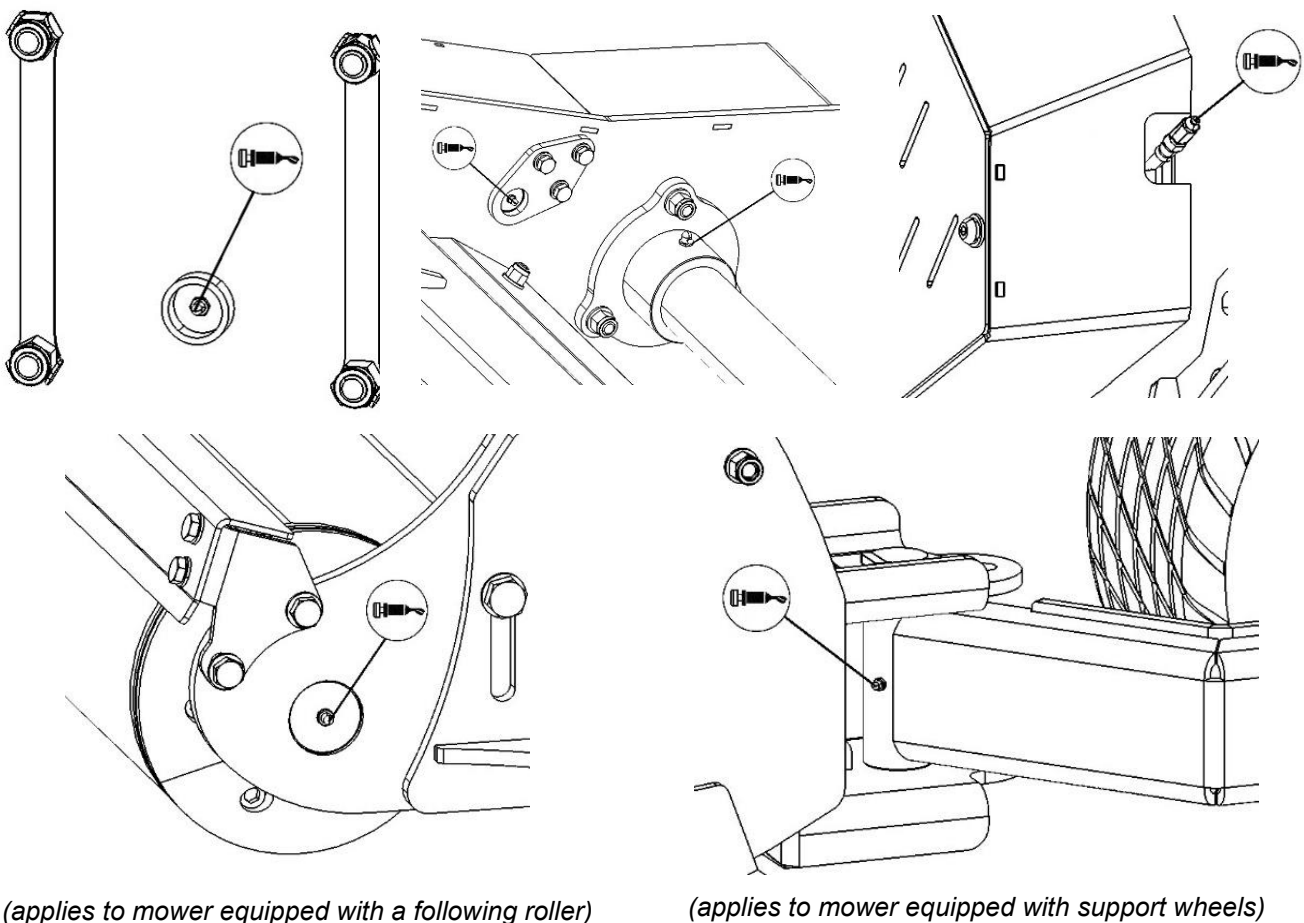


Figure 23. Lubrication points for grease

5.14. Troubleshooting

During operation, malfunctions may occur that can adversely affect the quality of flail mower operation, increase operating costs, and also lead to damage to both the machine and the tractor. In the event of unexpected failures or malfunctions, immediately stop work and switch off the tractor engine. The operator should contact the manufacturer; the contact details are provided on the cover of the operating manual. Possible causes of malfunctions and methods of eliminating them are presented in Table 4.



REMEMBER

Operating a malfunctioning or improperly adjusted machine may lead to serious hazards to the operator and bystanders and may result in damage to the machine. Any detected malfunctions and damage must be rectified immediately.

Table 4. Causes of malfunctions and methods of eliminating them

Symptoms	Cause	Corrective action
Front of the tractor tends to lift	Insufficient front ballast. IMPORTANT: The front axle load of the tractor must not be less than 20% of its own mass	Check whether the tractor power complies with the recommendations in the operating manual. If not – change the tractor. If so – check and, if necessary, add the appropriate number of front axle ballast weights
Mower does not cut	V-belts slipping	Adjust the tension of the belt drive belts
	Worn or damaged drive belts	Replace the drive belts with new ones
	Broken belt drive belts	Check the condition of the belts and replace them with new ones
	Damaged angular gearbox	Check the condition of the gears and replace them with new ones
	Missing cutting blades	Install new cutting blades
	Worn cutting blades	Replace the cutting blades with new ones
	Incorrectly installed cutting blades	Install the cutting blades according to the recommendations in the operating manual
	Working shaft blocked	Remove foreign objects from the working shaft
Excessive vibrations during operation	Damaged cutting blades	Replace the cutting blades with new ones
	Bent PTO shaft	Check the condition of the PTO shaft and replace it if necessary
	Missing cutting blade	Install new cutting blades
Uneven cutting height	Mower not levelled relative to the ground	Level the mower in accordance with the instructions provided in the operating manual
	Worn, cracked or damaged cutting blades	Replace the cutting blades with new ones
	Belt drive belts too loose	Adjust the tension of the belt drive belts
Uneven distribution of the cut material	Excessive amount of shredded material from the previous mowing operation has accumulated under the mower body	Thoroughly clean and wash the underside of the mower body
	Worn, cracked or damaged cutting blades	Replace the cutting blades with new ones
Mower operates noisily	Excessive play in moving components	Check the play and tighten
	Hard object under the mower body	Stop operating the mower and remove the foreign object

After eliminating the malfunction, check the correct operation of the unloaded machine by carrying out a short test run to ensure that all machine assemblies are operating correctly.

6. TRANSPORT

6.1. Transport of the flail mower on transport vehicles

Flail mowers may be transported from the manufacturer to the dealer or customer and to the place of work on the trailer of a transport vehicle. Flail mowers are transported to the dealer or customer assembled and ready for operation. The machines must be loaded onto transport vehicles using lifting equipment after ropes or chains have been attached at the points designated by the manufacturer with appropriate pictograms and shown in Figure 24. Flail mowers together with their equipment should be immobilised on the transport vehicles; the person responsible for transporting the machine is responsible for its proper fastening and securing.

The machine should be secured to the transport vehicle using straps or chains equipped with a tensioning mechanism. The securing devices must have a valid safety certificate. To keep the raised machine in the correct orientation, the use of an additional guy line is recommended.

Lifting equipment with a lifting capacity greater than the weight of the mower specified on the rating plate must be used. This also applies to the ropes and chains used for lifting.

During loading and unloading of the mower, general occupational health and safety rules for loading and unloading operations must be followed. Persons operating loading and unloading equipment must have the required authorisations to use such equipment.



ATTENTION!

When loading the machine onto transport vehicles, ropes or chains must be attached exclusively at the points designated by the manufacturer with pictograms. Particular caution must always be exercised during transport and movement. Persons are prohibited from staying under the raised machine or within the manoeuvring area! Crushing hazard!

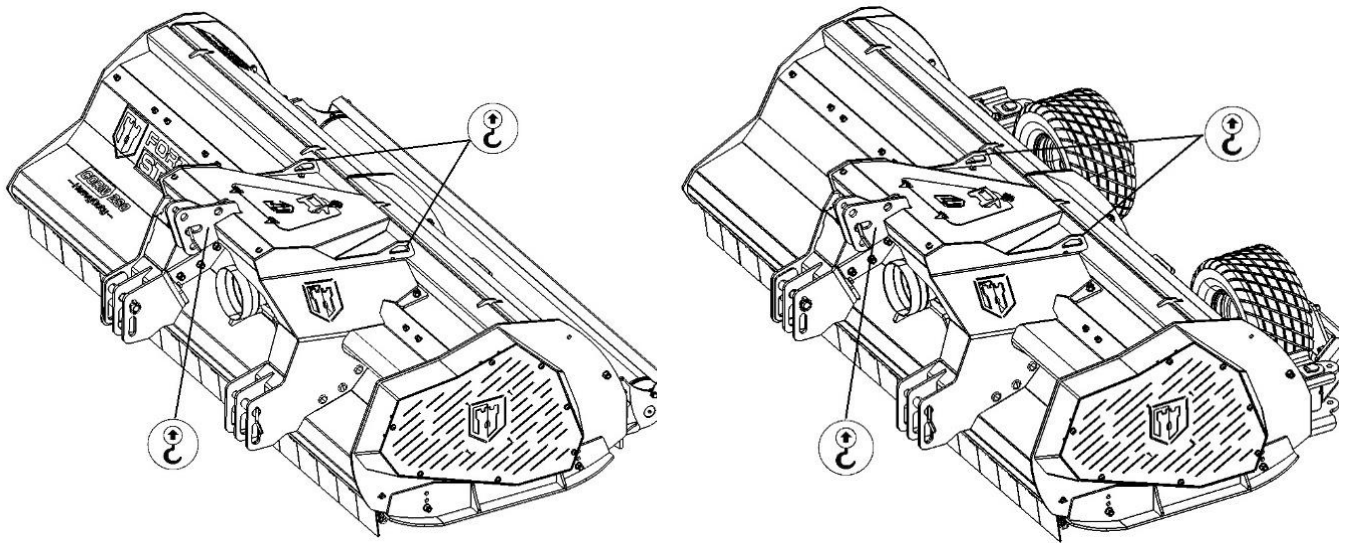
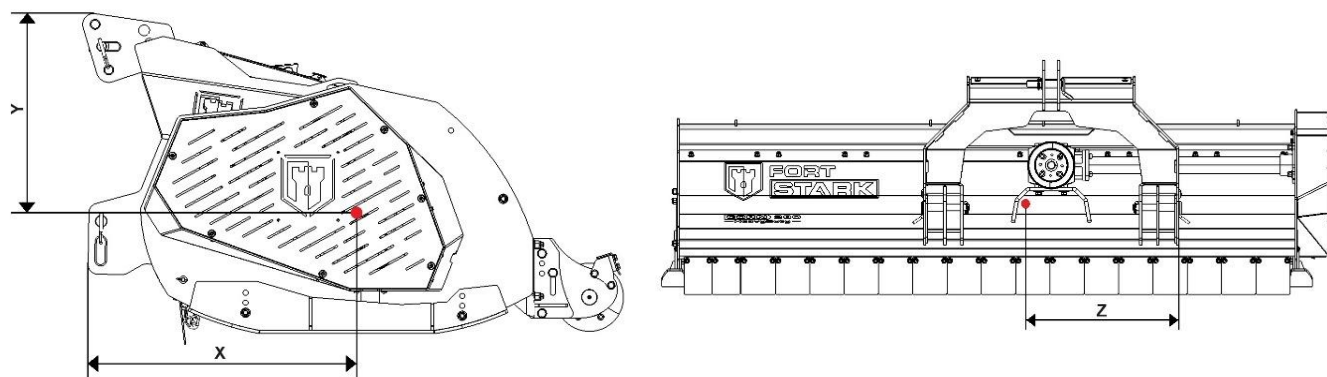


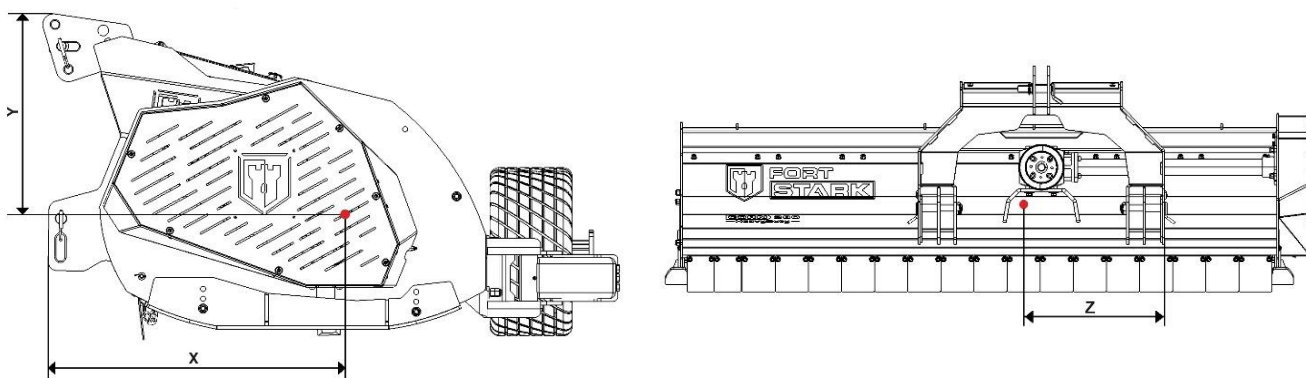
Figure 24. Lifting equipment attachment points

The position of the machine's centre of gravity is shown in Figures 25 and 26.



CORN 260 Heavy Duty	X = 859 mm	Y = 647 mm	Z = 596 mm
CORN 280 Heavy Duty	X = 864 mm	Y = 650 mm	Z = 681 mm

Figure 25. Centre of gravity position for the mower equipped with a following roller



CORN 260 Heavy Duty	X = 862 mm	Y = 638 mm	Z = 594 mm
CORN 280 Heavy Duty	X = 863 mm	Y = 640 mm	Z = 678 mm

Figure 26. Centre of gravity position for the mower equipped with support wheels

6.2. Transport of the flail mower mounted on the tractor

A flail mower mounted exclusively on the tractor's rear three-point linkage may only be transported on non-public roads.

During transport, the mower should be raised to a position providing the required transport ground clearance (min. 300 mm).

The tractor on which the machine is mounted must meet the stability requirements – see Annex A of this manual.

The machine must be transported to the place of work using other means of transport. Driving a tractor with a mounted flail mower on public roads may cause a road accident!

The tractor speed with the mounted machine must always be adapted to the current road and weather conditions when travelling on non-public roads.

For transport travel, disconnect the PTO shaft from the tractor and place it on the support bracket. It is prohibited to use the WPT chains (WPT guard anti-rotation chains) to support the shaft during storage or transport of the machine on the tractor.

In the case of a mower equipped with support wheels, move them to the transport position – see section 5.9.2.

**ATTENTION!**

Transporting a mower mounted on a tractor on **non-public roads** is permitted only with the mower attached to the tractor's rear three-point linkage!

Driving a tractor with a mounted mower is prohibited during periods of limited visibility.

It is prohibited to leave the raised machine in the transport position while the tractor is stationary. During stops, the machine must be lowered onto the ground.

**ATTENTION!**

When turning, pay particular attention to the machine's "cutting in" effect. Risk of impact!

**ATTENTION!**

Driving a tractor with a mounted flail mower on public roads is prohibited.

Driving a tractor with a mounted flail mower on public roads and driving at excessive speed may cause an accident!

Transporting persons, animals or objects on the machine is prohibited.



7. DISMANTLING

**ATTENTION!**

All activities related to dismantling the machine must be carried out on a hard, level surface when the machine is not connected to the tractor.

When dismantling the machine, use appropriate tools and protective gloves – risk of injury!

The machine must be secured against movement.

**ATTENTION!**

Before commencing dismantling of the machine, completely drain the oil from the angular gearbox.

The machine should be dismantled by persons previously familiar with its construction. These activities must be carried out after placing the machine on a level, hard surface and using personal protective equipment – gloves. In the case of worn components, proceed in accordance with the section “Scrapping”. Due to the weight of some machine components exceeding 20 kg, lifting equipment must be used during dismantling.

**ATTENTION!**

Lifting equipment used during dismantling may only be operated by a person holding the appropriate authorisations and qualifications.

All fastening components are made of standardised components designed for metric tools. Adequate clearance is provided for tool movement, ensuring that nuts and bolts can be freely unscrewed.

During dismantling, appropriate tools must be used, as well as the necessary personal protective equipment, such as protective clothing, footwear, gloves, safety glasses, etc.

Avoid contact of oil with the skin. Do not allow oil to spill. Slip hazard!

8. SCRAPPING

If the user decides to scrap the machine, the regulations concerning the scrapping and recycling of machines withdrawn from service in the country where the machine was operated must be followed.

Before commencing dismantling of the machine, completely drain the oil from the angular gearbox. Oils and lubricants must be delivered through the network of collection points where they are processed for reuse. Plastic components must be delivered to facilities specialising in the disposal of this type of material.

The flail mower must be scrapped only after it has been completely dismantled and the machine components have been inspected. During dismantling, parts must be sorted according to material type. Ferrous metal components must be sorted and delivered to ferrous metal collection points.

**REMEMBER**

Burning plastic materials in equipment not designed for this purpose causes environmental pollution and violates applicable regulations.

9. TECHNICAL SPECIFICATIONS

The technical data of the flail mowers are presented below in Table 5.

Table 5. Technical specifications

Specification	Unit	Manufacturer's data			
Symbol	-	CORN 260 Heavy Duty (version with following roller)	CORN 260 Heavy Duty (version with support wheels)	CORN 280 Heavy Duty (version with following roller)	CORN 280 Heavy Duty (version with support wheels)
Working width	mm	2600		2600	
Machine type	-	mounted			
Min. cutting height	mm	-30	-15	-30	-15
Max. cutting height	mm	30	170	30	170
Overall dimensions:					
- length	mm	1735	2335	1735	2335
- width	mm	2837	2837	3037	3037
- height	mm	1026	1026	1026	1026
Machine weight	kg	1424	1408	1502	1471
Working elements:					
- blade type	-	“Y”-type blades and straight blades			
- total number of blades	pcs.	84 (56 “Y”-type blades and 28 straight blades)		96 (64 “Y”-type blades and 32 straight blades)	
Belt drive:					
- number of V-belts	pcs.	5			
- belt designation	-	BX 17x1727			
Power requirement	kW	136		163	
Three-point linkage category	-	II / III			
Working speed	km/h	up to 15			
Tractor PTO speed	rpm	540			
Support wheels:					
- tyre size	-	-	22x11-10	-	22x11-10
- nominal pressure	bar		0,69		0,69
PTO shaft (WPT):					
- torque	Nm	620		620	
- transmitted power	kW	35		35	
- end (splines):					
- tractor side	-	1”3/8-Z6			
- machine side	-	1”3/8-Z6			
- WPT length	mm	1000		1000	
- overload clutch	-	No			
The WPT shafts used must bear the CE marking.					

The geometric dimensions and masses specified in the technical specifications are given with an accuracy of $\pm 1\%$.

ANNEX A: STABILITY OF THE TRACTOR-MACHINE COMBINATION

This chapter draws the user's special attention to information concerning the influence of the weight of a mounted machine on the maneuverability and stability of the tractor. It highlights the possibility of loss of tractor steering control due to the weight of the machine mounted at the rear on the tractor's three-point hitch. The tractor should be equipped with a sufficient number of front weights to ensure proper steering and braking performance. The load on the front axle of the tractor with a machine mounted on the rear hitch must be at least 20% of the tractor's own weight (see Figure A).

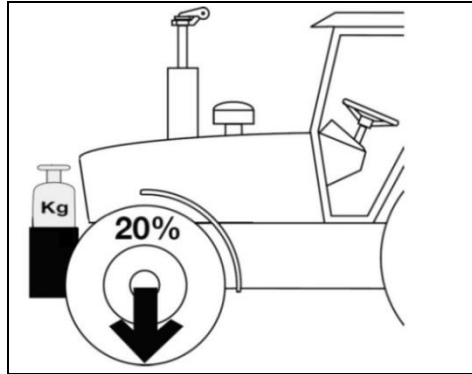


Figure A. Minimum load on the tractor front axle

It must be remembered that the road surface and the machine mounted on the rear TPL of the tractor affect the driving characteristics. The driving speed must be adapted to the terrain conditions and the type of surface (type of soil). When making turns with a mounted or trailed machine, special attention must be paid to the "swing" of the machine.

The tractor with the mounted machine **must strictly meet** the condition of safe stability, i.e., the load on the front axle of the tractor must be equal to or greater than 20% of the tractor's unladen weight [$W_s \geq 20\%$]. To calculate the stability index W_s , it is first necessary to measure the tractor's axle loads. We must weigh the tractor itself ready for operation T_c , and then weigh the front axle load of the tractor T_p with the machine mounted on the rear three-point linkage. Having the individual weights, we can calculate the steering ratio from the formula:

$$W_s = \frac{T_p}{T_c} \times 100 \geq 20\%$$

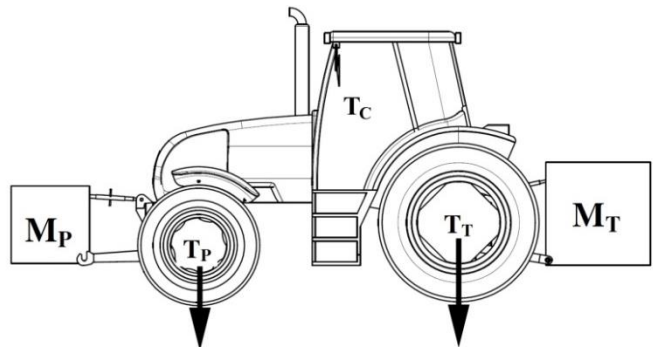


Figure B. Determination of the unit stability

- W_s [%] - stability coefficient
- T_c [kg] - empty tractor weight
[$T_{P1} + T_{T1}$ – tractor axle loads without machine, ready for operation]
- T_p [kg] - load on the front axle of the loaded tractor
- T_T [kg] - load on the rear axle of the loaded tractor
- M_T [kg] - total weight of the rear-mounted machine
- M_P [kg] - total weight of the front weights

If the front axle load of the tractor with the machine attached to the rear three-point linkage is too low ($W_s < 20\%$), it is **essential** to increase the weight of the front weights M_p in order to increase the front axle load of the tractor and to achieve a steering ratio above 20%.

MACHINE HANDOVER PROTOCOL

The protocol constitutes an integral part of the warranty card.

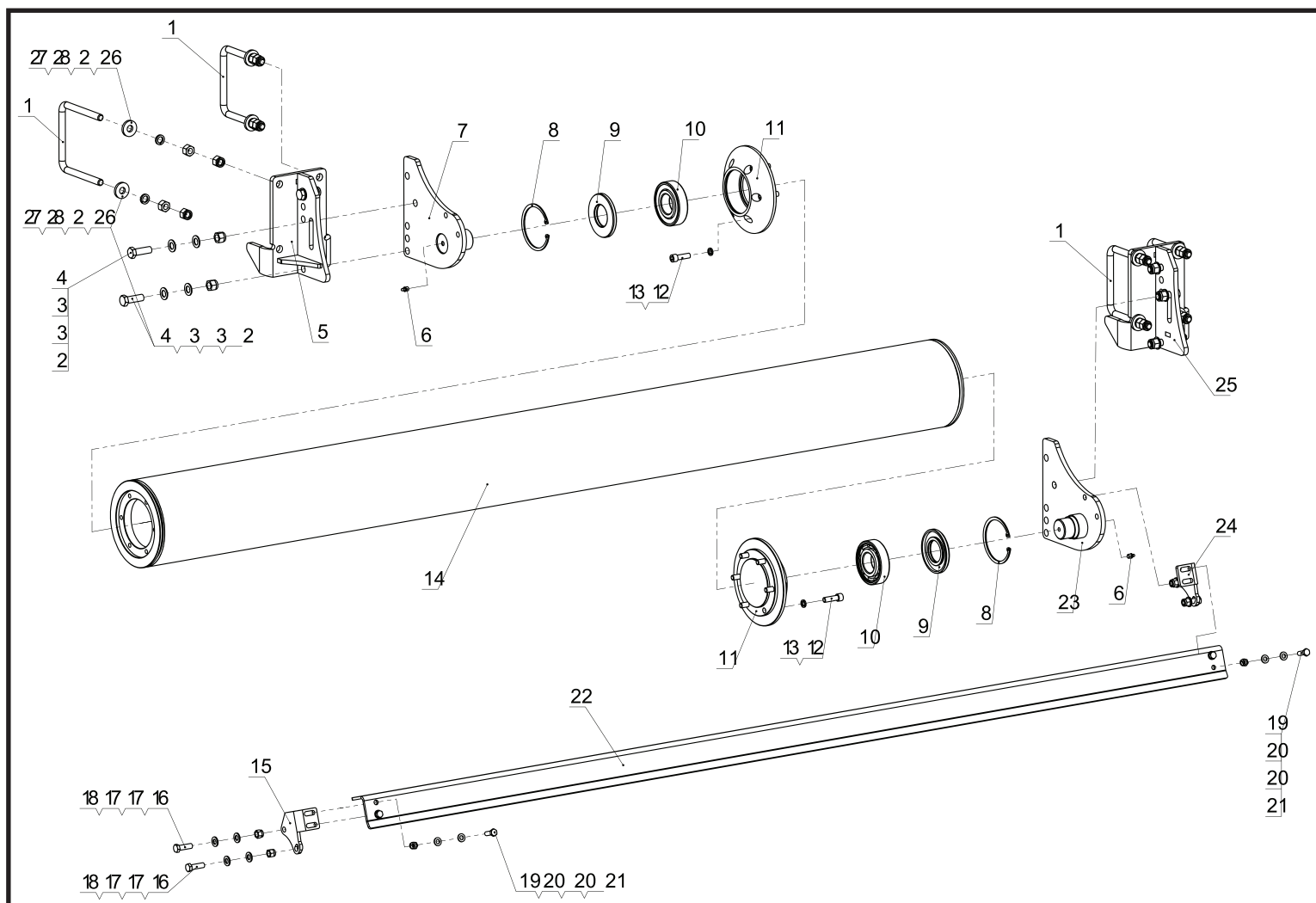
Failure to correctly or legibly complete the protocol results in the loss of warranty! The parties signing this protocol (seller and purchaser) hereby declare:

- The machine is delivered to the purchaser in an assembled state and ready for operation
- The purchaser has been informed by the seller about the proper handling of the machine, its operation and maintenance, as well as the applicable occupational health and safety regulations, in accordance with the operator's manual provided to the purchaser
- The purchaser has been informed by the seller about the warranty conditions
- The purchaser confirms receipt of the operator's manual

SELLER	BUYER
FIRST NAME	FIRST NAME
LAST NAME	LAST NAME
STREET	STREET
CITY	CITY
SIGNATURE AND DATE	SIGNATURE AND DATE

THE SELLER IS OBLIGED TO KEEP THE MACHINE HANDOVER PROTOCOL PROPERLY COMPLETED AND SIGNED.

ASSEMBLY DRAWING LIST

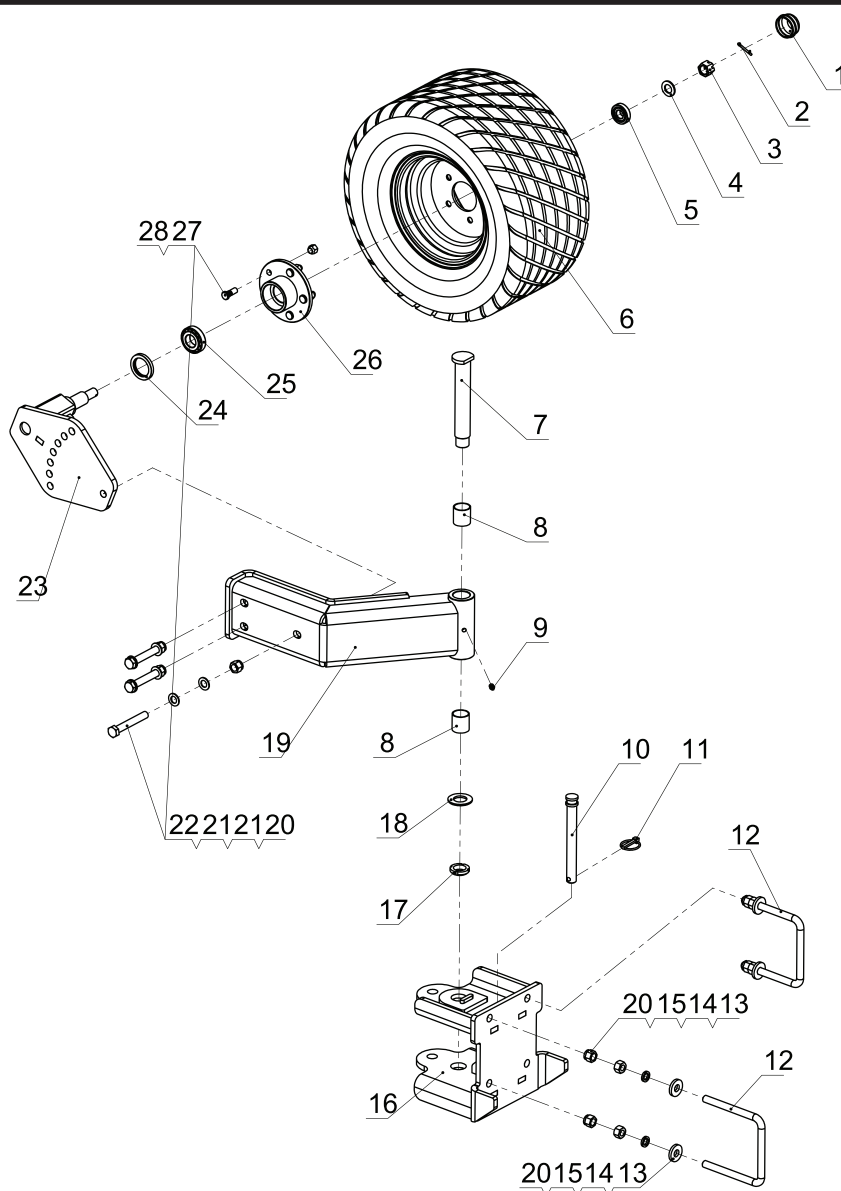


CORN PROFI back roller

Ser. No	Code	Name & Specification	Quantity
1	210052	U form fastening	4
2	N000033	Lock nut M16	14
3	W000017	Washer M16	12
4	B000104	Bolt M16×50	6
5	210053	Roller plate Holder (Left)	1
6	600078	Grease Nipples M10	2
7	210054	Roller connect plate (Left)	1
8	S000001	Circlip for hole 110	2
9	OS000012	Oil seal 55×110×10	2
10	220009	Bearing 6310-RZ	2
11	210055	Back roller bearing block	2
12	B000133	Bolt M12×40	12
13	W000002	Spring washer M12	12
14	210056	Back roller for 260	1
	210057	Back roller for 280	1
15	210058	Scraper Holder (Left)	1
16	B000086	Bolt M12×40	4
17	W000015	Washer M12	8
18	N000031	Lock nut M12	4
19	B000076	Bolt M10×30	4
20	W000014	Washer M10	8

CORN PROFI back roller			
Ser. No	Code	Name & Specification	Quantity
21	N000030	Lock nut M10	4
22	210059	Scraper for 260	1
	210060	Scraper for 280	1
23	210061	Roller connect plate (Right)	1
24	210062	Scraper Holder (Right)	1
25	210063	Roller plate Holder (Right)	1
26	180036	Round plate Sleeve	8
27	W000004	Spring washer M16	8
28	N000004	Lock nut M16	8

ASSEMBLY DRAWING LIST

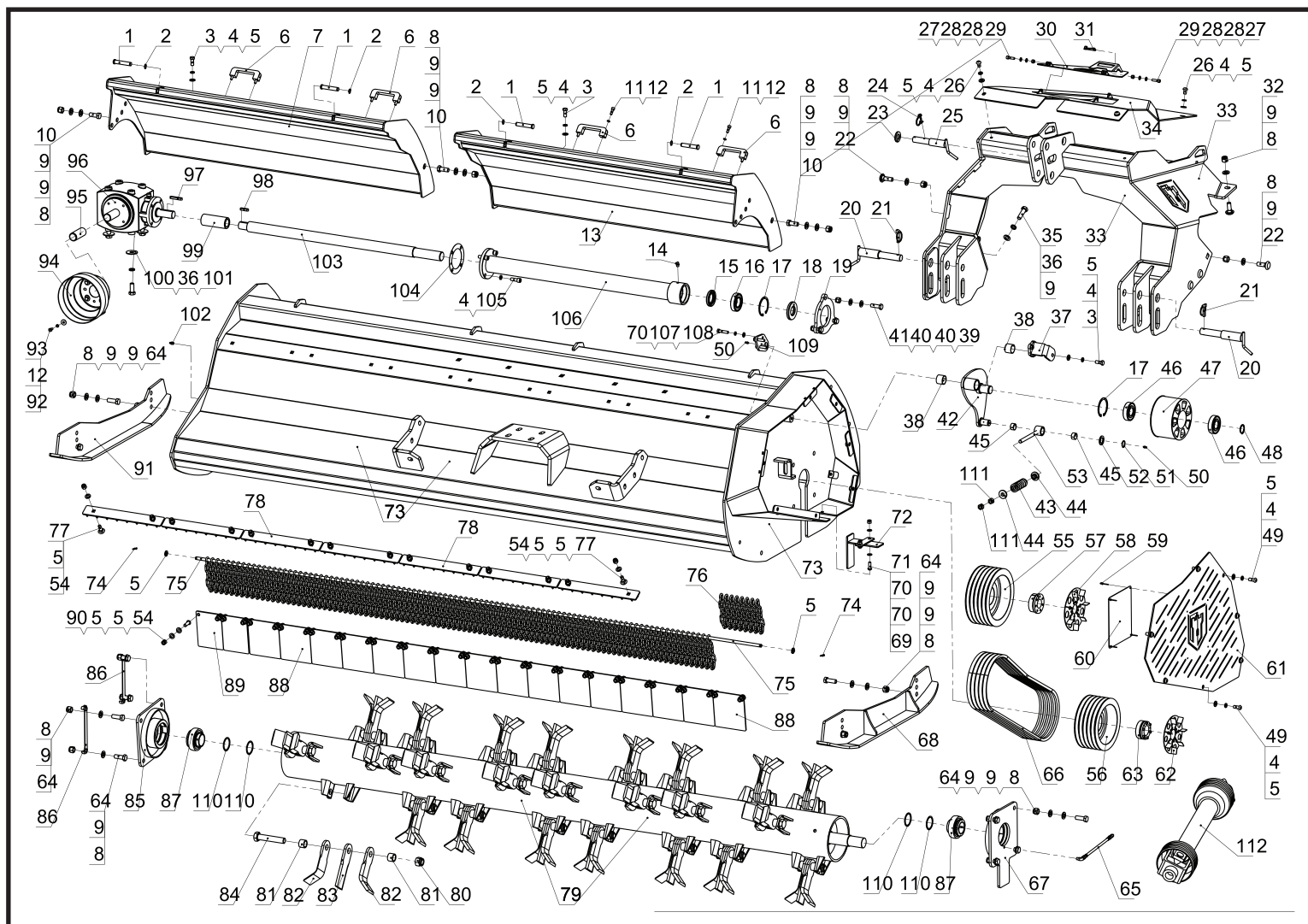


CORN PROFI back roller

Ser. No	Code	Name & Specification	Quantity
1	140024	Wheel cover	1
2	P000007	Cotter pin 4×35	1
3	210064	Slotted nut M20	1
4	W000026	Washer M20	1
5	210065	Bearing 30204	1
6	210066	Wheels 22×11-10	1
7	210067	Wheel chassis pin	1
8	210068	Self-lubricating bearing SF-2 3540	2
9	600078	Grease Nipples M10	1
10	210069	Fixate pin	1
11	210008	Lock pin 8×45	1
12	210052	U form fastening	2
13	180036	Round plate Sleeve	4
14	W000004	Spring washer M16	4
15	N000004	Lock nut M16	4
16	210070	Wheels connecting holder	1

CORN PROFI back roller			
Ser. No	Code	Name & Specification	Quantity
17	210071	Special lock nut M30×1.5	1
18	W000020	Washer M30	1
19	210072	Wheels connecting device	1
20	N000033	Lock nut M16	7
21	W000017	Washer M16	6
22	B000041	Bolt M16×110	3
23	210073	Wheel axle holder	1
24	OS000018	Oil seal 45×62×8	1
25	210074	Bearing 30206	1
26	210075	Wheel bearing seat	1
27	210076	Wheel mounting bolt	5
28	210077	Taper Nut M12	5

ASSEMBLY DRAWING LIST



CORN PROFI back tire

Ser. No	Code	Name & Specification	Quantity
1	210001	Rear cover connection pin	4
2	S000026	Circlip for hole 15	4
3	B000084	Bolt M12×30	5
4	W000002	Spring washer M12	20
5	W000015	Washer M12	88/104
6	150035	Plastic handle	4
7	210002	Right rear door for 260	1
	210003	Right rear door for 280	1
8	N000033	Lock nut M16	26
9	W000017	Washer M16	39
10	B000102	Bolt M16×40	3
11	B000436	Bolt M8×25	8
12	W000008	Spring washer M8	12
13	210004	Left rear door for 260	1
	210005	Left rear door for 280	1
14	180015	Grease Nipples M10 Corner	1
15	OS000015	Oil seal 45×72×10	1
16	400070	Bearing 6208-2RZ	1
17	S000009	Circlip for hole 80	2
18	OS000011	Oil seal 40×80×10	1

CORN PROFI back tire			
Ser. No	Code	Name & Specification	Quantity
19	220026	Drive shaft support plate	1
20	800032	Lower linkage pin	2
21	100003	Lock pin	2
22	B000354	Special bolt M16×50	6
23	800037	Linkage pin washer 24	1
24	400034	Lock pin 4.5	1
25	800036	Upper linakge pin	1
26	B000262	Special bolt M12×20	4
27	N000039	Lock nut M8	2
28	W000021	Washer M8	4
29	B000434	Bolt M8×30	2
30	210007	Linkage hood	1
31	210008	Lock pin 8×45	1
32	B000353	Special bolt M16×45	5
33	210009	Linkage	1
34	210010	Linkage top cover	1
35	B000360	Bolt M16×55	2
36	W000004	Spring washer M16	6
37	220031	Tensioning bracket	1
38	210011	Self-lubricating bearing 35×39×30	2
39	N000032	Lock nut M14	3
40	W000016	Washer M14	6
41	B000098	Bolt M14×45	3
42	210012	Tensioning device	1
43	210013	Tensioning spring	1
44	210014	Moving spring support	2
45	210015	Self-lubricating bearing 25×28×15	2
46	220029	Bearing 6307-2RZ	2
47	210016	Tension wheel	1
48	S000011	Circlip for hole 35	1
49	B000263	Special bolt M12×30	7
50	000094	Grease Nipples M6	2
51	S000030	Circlip for hole 25	1
52	210017	Spacer washer	1
53	210018	Tension spring rod	1
54	N000031	Lock nut M12	42/50
55	210019	Big pulley	1
56	210020	Small pulley	1
57	400083	Tension 40×80	1
58	210021	Upper fan impeller	1
59	B000148	Rivet Ø4×8	4
60	210022	Plate for belt protection	1
61	210023	Belt cover for CORN	1
62	210024	Lower fan impeller	1
63	210025	Tension 45×80	1
64	B000103	Bolt M16×45	12
65	210026	Lubrication hose	1
66	210027	Belt 17×1727	5
67	210028	Main roller bearing block (Left)	1
68	210029	Adjust plate (Left)	1
69	N000030	Lock nut M10	2
70	W000014	Washer M10	7
71	B000260	Bolt M10×30	2

CORN PROFI back tire			
Ser. No	Code	Name & Specification	Quantity
72	210030	T cover	1
73	210131	Main body	1
	210132	Main body	1
74	P000005	Cotter pin 4×25	2
75	210033	Baffle shaft for 260	1
	210034	Baffle shaft for 280	1
76	220051	Protective chain	98/106
77	B000009	Special bolt M12×35	14
78	210035	Fixed blade for 260	7
	210036	Fixed blade for 280	7
79	210037	Main roller for 260	1
	210038	Main roller for 280	1
80	N000036	Lock nut M24	28/32
81	210039	Y blade Connector	56/64
82	210040	Y Blade	56/64
83	210041	Blade Central	28/32
84	B000061	Bolt M24×130 (10.9 Level)	28/32
85	210042	Main roller bearing block (Right)	1
86	210043	Double-sided nut lock	2
87	210044	Bearing UK211+H2311	2
88	210045	Baffle for CORN260	14
	220054	Baffle for KDXB250-270HD, CORN280	16
89	220055	Baffle for KDXB250HD, CORN280	2
90	B000261	Bolt M12×35	28/36
91	210046	Adjust plate (Right)	1
92	W000013	Big washer 8	4
93	B000109	Bolt M8×16	4
94	000024	PTO protection	1
95	000030	Gearbox shaft cover	1
96	210147	Gearbox 1000RPM	1
97	K000012	Key A10×60	1
98	K000001	Key A10×40	1
99	100060	Drive shaft tube	1
100	W000012	Big washer 16	4
101	B000127	Bolt M16×1.5×40	4
102	600078	Grease Nipples M10	1
103	210148	Drive shaft for CORN	1
104	100030	Paper washer	1
105	B000146	Bolt M12×35	4
106	210150	Drive shaft cover for CORN	1
107	W000001	Spring washer M10	3
108	B000221	Bolt M10x45	3
109	220027	Grease Nipples protection	1
110	210051	Adjust washer	4
111	N000003	Nut M14	2
112	400093	PTO Shaft 05B1000	1