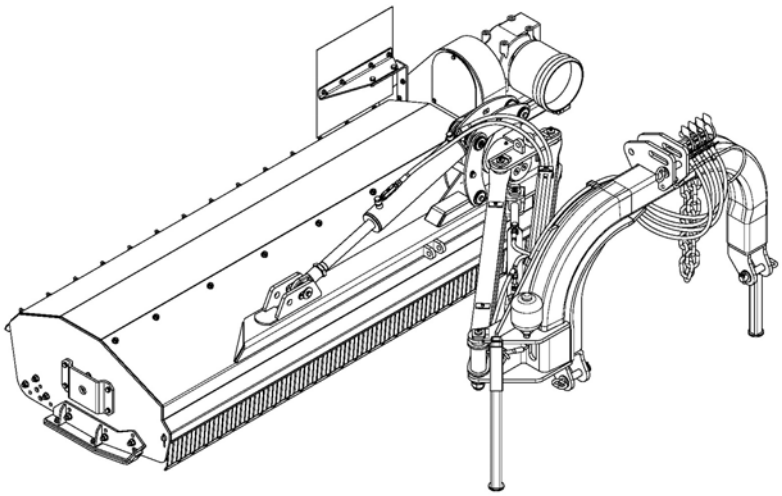
OPERATOR'S MANUAL

kverneland group

TOPPER SE2000P



Instruction manual

Translation of original instructions

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READ AND KEEP THE MANUAL

Kubota

Machine identification

In order to help you as quickly as possible, the retailer will need some details of your machine. Use the spaces below to record this information.

Designation	SE2000P
Working width	
Weight	
Machine number	
Accessories	
Address of supplier	
Address of manufacturer	Kverneland Group Ravenna Srl Via Alcide De Gasperi 34 48026 - Russi (RA) Italy

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Table of contents

Introduction to the manual

This manual provides the information necessary for the use and the routine and non-routine maintenance of the machine.

For this reason, the following data are **ALWAYS AND EXCLUSIVELY** intended for specialised users who have been properly trained, and are capable of interacting with the product in a manner that is safe for themselves, for third parties, and for the environment.

The diagnostic interpretation of any faults and anomalous conditions must be carried out by following the functional verification and intervention operations in full compliance with the regulations provided in this document.

The use, maintenance, detachment, reattachment, disassembly and assembly procedures have been prepared according to the following criteria:

- safety of exposed persons and the environment;
- optimisation of response times;
- reliability of interventions;

without prejudice to the requirements and recommendations described herein, the use of adequate tools and equipment, and the necessary diagnostic/organisational planning and spare parts provisioning capabilities.

The technical/documentary relationship with the Manufacturer, and the consequent updating of the technical documentation (Operator's Manual and Spare Parts Manual) validated and disseminated by Kverneland Group, allow for both the services required by the user and those provided under warranty to reduce the negative impact of “downtime”, to satisfy Customers in terms of delivery speed and price/quality ratio, as well as to confirm the workshop's added value.

In order to ensure the product's proper use and handling, it is necessary to guarantee the legibility and proper preservation of the manual for future reference.
In the case of deterioration, or even for mere technical and operational updating purposes, please contact the Kverneland Group Service Department directly.

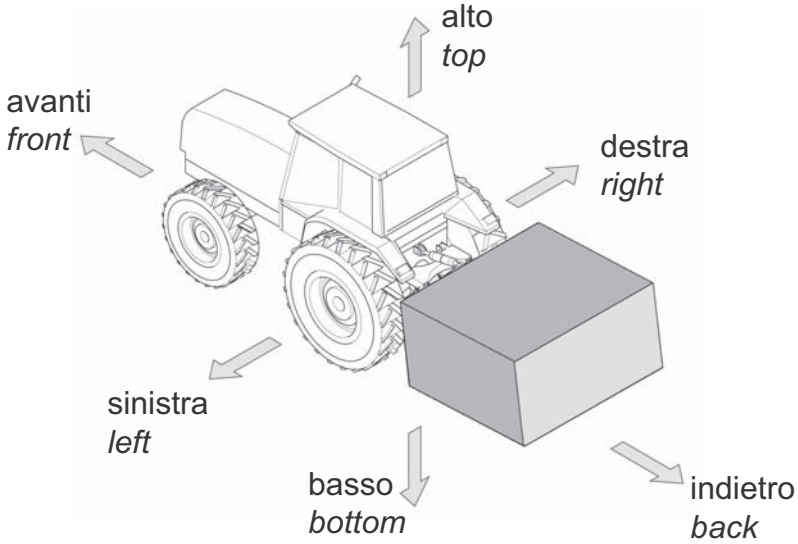
This document is not contractually binding; Kverneland Group is committed to a policy of continuous improvement and reserves the right to change the information contained in this document at any time without prior notice.

The procedures and illustrations contained in the manual have been established based on the information available at the time at which the document itself was prepared. There could therefore be inconsistencies between the instructions contained in the Operator's Manual and the models in your possession.

REPRODUCTION PROHIBITED
The reprinting, copying and translation of this document (even partially) without the written permission of the manufacturer is strictly prohibited.

Reference standards

For any information regarding usage or maintenance interventions not expressly indicated and/or described within this document, always contact exclusively the Kverneland Group Service Department.
Before proceeding with consultation, be sure to identify the model by using the identification plate affixed to the machine itself.
With the exception of certain situations or wherever expressly indicated, all the units of measurement are expressed according to the International System.
The left and right side indications contained within the manual refer to the sides identifiable by the operator while seated in the driver's seat.



Symbols used

In order to facilitate the reading of the Operator's Manual, appropriate symbols have been included in order to highlight any warnings, risk situations, recommendations, requirements, practical advice, and simple clarifications.

SAFETY FIRST

This symbol, the industry's "Safety Alert Symbol", is used throughout this manual and on the labels affixed to the machine itself in order to warn of the possibility of personal injury. Read these instructions carefully. It is essential that you read the instructions and safety regulations before attempting to assemble or use this unit.

Any failure to observe this safety information could result in:

- Serious machine malfunctions
- Damage to the machine
- Personal injury or accidents.

DANGER

Indicates an imminently hazardous situation which, if not avoided, could result in death or serious injury.

WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury.

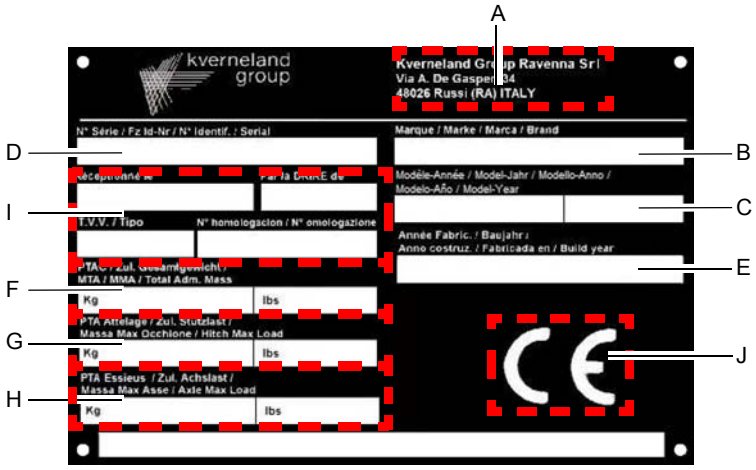
NOTICE

This symbol indicates critical technical and operating information concerning the safety of individuals or the machine itself.

Tecnico esperto

This symbol indicates operations to be carried out EXCLUSIVELY by authorised technicians with the necessary skills in the relevant sector.

Manufacturer and machine identification



The displayed identification plate is directly affixed to the front of the machine. It contains the traceability information and the references to be used when requesting technical support and/or ordering spare parts.
The identification plate also specifies the minimum instructions necessary for coupling the machine to the tractor.

A) Manufacturer ID
B) Machine brand
C) Machine and year model
D) Serial number
E) Year of manufacture
F) Total weight (kg/lbs)
G) Mass on lifting eyelet (kg/lbs)
H) Mass on axle (kg/lbs)
I) EC Marking
J) Type-approval data

Important
(*) The data vary according to the current regulations in force in the country of use.

Procedure for requesting technical assistance

If technical support is required, contact your local authorised dealer.
If requesting technical support concerning the machine, specify the data indicated on the identification plate, the approximate hours of use, and the type of problem encountered.

Warranty conditions

Any improper use, unauthorised changes, and/or improper or overdue maintenance operations will render the warranty null and void.

Annexed documentation

The specified documentation is supplied together with the manual and/or as an annex.

- Declaration of conformity
- Testing certificate
- Documentation of installed commercial components (e.g., regarding the PTO shaft)

Glossary and terminology

Certain terms that are widely used throughout the manual are described below in order to better explain their meanings.

- **Training:** a process aiming at transferring the knowledge, skills and behaviours required to work in an autonomous, correct and hazard-free manner.
- **Routine maintenance:** these are the normal machine control and maintenance operations that do not require any particular mechanical skills or knowledge on the part of the operator. These operations include: lubrication, greasing, replacing components that are subject to wear and tear ,and re-tightening and re-tensioning where necessary; such operations may be carried out at regular intervals since they are all foreseeable.
- **Non-routine maintenance:** the operations aimed at restoring the safety and/or functionality of one or more of the machine's parts with component replacement or repair interventions. These interventions must be performed by personnel with specific technical skills at workshops that are properly equipped and authorised by the manufacturer.
- **Operator:** in accordance with the provisions of the harmonised standard EN ISO12100 e 2006/42/CE, an operator is defined as the person or persons assigned to install, operate, adjust, maintain, clean, repair, handle and move the machine.
- **Experienced maintenance personnel:** personnel who are authorised to perform routine and non-routine maintenance interventions upon the machine, with the technical and professional skills necessary to operate in a correct and risk-free manner.
- **Authorised workshop:** a workshop that has been selected and officially authorised by the manufacturer to perform routine and non-routine maintenance operations.
- **Danger zone:** (in accordance with the terms set-out in the directives 2006/42/EC) a danger area is defined as any area inside and/or near the machine where the presence of persons may represent a risk for their health and safety.
- **Risk:** the combination of the overall probability and the severity of the potential injuries and/or damage in any given hazardous situation.
- **Hazard:** situations or actions that could give rise to injuries or damage to persons, animals or property.
- **Exposed persons:** (in accordance with the terms set-out in the directives 2006/42/EC) any person wholly or partially in a danger zone.
- **Protection:** safety measures that involve implementing specific technical solutions, defined as protection devices (guards, safety devices), in order to protect personnel from hazards that cannot reasonably be eliminated or sufficiently limited during the design phase.

- **Safety device:** electrical or mechanical device designed to protect persons and property from injury and/or damage; such devices may be designed to be operated intentionally by an operator, or to operate automatically in the presence of a hazard (by opening a protection device, accessing a certain area, etc.).

Purpose of this manual

- This manual is intended to provide the operator with the “User instructions” necessary to prevent and minimise the risks during human-machine interactions.
  The operator must be properly trained in order to acquire the skills necessary to carry out the work operations under safe conditions. This manual also includes information for the maintenance technician who is authorised to carry out routine maintenance interventions.
- All the information is provided in the Manufacturer’s native language (Italian) and can be translated into other languages in order to meet the legislative and/or commercial requirements.
- The translations into the language of the country of use, provided by the manufacturer, have been carried out directly using the “ORIGINAL INSTRUCTIONS”.
  If the translations have been performed by an agent or the subject that has introduced the machine into the linguistic zone in question, the translation must be carried out using the original instructions, and must contain the following message: “TRANSLATION OF THE ORIGINAL INSTRUCTIONS”.
- The information is intended to raise the users' awareness so that they will pay special attention to all the foreseeable risks. Always use maximum caution. Safety is also in the hands of any personnel who interact with the machine throughout its service life.

NOTICE

Be sure to carefully read the instructions contained in the supplied manual, as well as those affixed directly to the machine; make sure that you have understood them fully, especially the safety instructions.

- Be sure to dedicate the necessary time to reading the instructions in order to prevent unfortunate accidents. Once an accident occurs, it is too late to remind you that should have behaved differently.

NOTICE

Keep this manual in a well-known and easily-accessible place in order to ensure that it is always at your disposal for consultation. The Operator’s Manual, which constitutes an integral part of the machine, MUST ALWAYS BE KEPT IN THE CAB of the tractor to which the machine is connected.

- In order to easily locate the specific topics of interest, please refer to the table of contents and the index.
- Certain items of information contained in the manual may not entirely correspond to the actual configuration of the delivered machine. This does not however affect their comprehension and does not compromise the level of safety.
- The manufacturer reserves the right to modify the manual without providing advance notice, provided that this does not compromise the health and safety of the workers.
- In order to highlight certain essential parts of the text, and to indicate important specifications, a number of symbols have been adopted, whose meanings are described in the specific chapter.

General safety regulations

General precautions

NOTICE

Be sure to read the following information carefully.

- Always make sure that you have fully understood the contents of the Operator's Manual before performing any operations.

DANGER

Any failure to comply with procedures, recommendations, requirements, or health and safety regulations described and/or referenced (together with standards of good practice) could result in situations of risk for people, property, and the surrounding environment. Unreliable interventions could pose a potential hazard to the User/Operator.

- The machine must be stored and maintained in dedicated areas, the conditions of which have been found to comply with the current health and safety regulations.
- Define the areas to be used by the maintenance personnel by providing sufficient areas for all the necessary intervention, tooling, and disengagement activities.
- Follow the procedures contained in the following chapters, and always be sure to verify the efficiency and reliability of instruments and equipment to be utilised in advance.
- Handling and lifting operations (if necessary) must be performed by qualified personnel, in accordance with the following instructions, and in compliance with the current accident prevention regulations.

NOTICE

Any other uses or functions not included or expressly indicated in the following pages are to be considered PROHIBITED.
It is STRICTLY PROHIBITED to make any changes to the product, its components, and/or the technical characteristics declared by the Manufacturer.

- When designing and manufacturing the machine, the manufacturer paid special attention to the aspects that could pose potential risks to the health and safety of the individuals working with the machine.
- In addition to ensuring compliance with the laws in force, the Manufacture also applied all "good manufacturing techniques", including the EC machinery directive and the applicable ASABE/SAR standards.
- Be sure to carefully read the instructions contained in the supplied manual, as well as those affixed directly to the machine; make sure that you have understood them fully, especially the safety instructions.

- Be sure to dedicate a bit of time to reading the instructions before performing any usage or maintenance operations.
- Always respect the current workplace safety laws, accident-prevention regulations, and the highway code.
- Pay attention to the instructional and safety labels affixed directly to the machine. The instructional and safety labels can have different colours and shapes to indicate dangers, obligations, prohibitions and instructions.
- The instructional and safety labels must be kept legible and the instructions specified therein must be respected.
- If any of the instructional and safety labels are damaged, be sure to have them immediately replaced by contacting the manufacturer.
- Do not tamper with, circumvent, remove, or bypass any of the safety devices installed on the machine. Any failure to observe this requirement could seriously compromise the health and safety of the individuals present.
- All the personnel called upon to perform any types of interventions upon the machine throughout the its entire service life must have recognised competence and skills in the specific sector. If these requirements are not met, the health and safety of the individuals present could be compromised.

NOTICE

Any failure to observe the information provided could pose risks to the health and safety of individuals and could result in unforeseen expenses.

Safety regulations for loading and unloading

- The personnel in charge of loading, unloading and handling the machine must have the skills and expertise necessary for the specific sector, and must be fully qualified to use the relative equipment.
- If the machine ever needs to be loaded and unloaded from a means of transport during the course of its service life, the personnel in charge must comply with the information directly indicated upon the machine itself, as well as on its packaging and in the user manual.
- Lift and transport the machine using suitable means with an adequate capacity.
- Disconnect the power take-off shaft from the tractor before loading the machine using the tractor.
- Before disconnecting the machine from the tractor, position the support leg in such a way as to facilitate its subsequent reconnection.
- Before transferring the machine onto a means of transport, make sure that the machine and its components have been properly secured, and that their encumbrance does not exceed the maximum foreseen overall dimensions. Arrange for appropriate

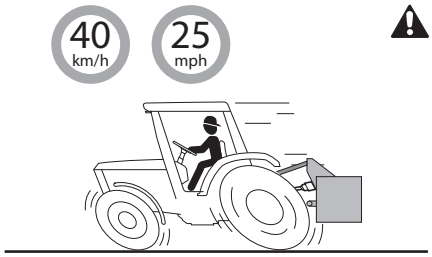
signage, if necessary.

NOTICE

Any failure to observe the information provided could pose risks to the health and safety of individuals and could result in unforeseen expenses.

Safety regulations for road travel

- The machine may ONLY travel on the road if it has been type-approved in accordance with the highway code in force in the country of use.
- Always remove any product residues and dirt from the machine so that they will not be dropped along the roadway, as these could pose a risk of accidents for other drivers.
- In the case of road travel, the driver must comply with the traffic regulations in force in the machine's country of use, and must drive in such a way as to ensure the safety of other drivers on the roadway.



- Always comply with the speed limits, and adapt your speed based on the general driving conditions (heavy traffic, winding roads, etc.).
- Do NOT drive the machine “recklessly”.
- Do not use the machine as a means for transporting people or objects.
- Road transfers (even for short journeys) may ONLY be performed with the machine properly attached to the tractor.
- Before moving, check the area around the machine.
  Make sure that no one is present within its operating area, since they could become entangled in its moving parts and seriously injured or even killed.
- Before road use, check to make sure that the PTO shaft has been correctly connected to the power take-off, which must be disengaged.

NOTICE

Any failure to observe the information provided could pose risks to the health and safety of individuals and could result in unforeseen expenses.

- Apply/install any signage and any lighting and protective devices necessary.
- If the hydraulic tubes or cylinders are equipped with ball valves, they must be closed during road transport in order prevent the tractor distributors from being activated inadvertently, causing the machine to move. This may result in damage to the machine or accidents.

- All remote control devices (control cables, electrical cables, hoses, etc.) must be positioned so that cannot activate the devices they are connected to unexpectedly.
  In particular, the control cables hang loose in such a way that it is impossible for them to activate the quick release coupling automatically. Failure to comply with this may result in the machine disengaging automatically from the three-point linkage.

Connection

WARNING

There is a high risk of injury while connecting the machine to the tractor.

- When connecting the two units together, make sure that they are positioned on level, flat solid ground.
- Block the tractor so that it cannot start moving unexpectedly (hand brake on, wheels blocked).
- The category of tractor and machine must be identical.
- Do not loiter on the tractor or machine when making the connections.
- Activate the three-point hydraulic lifter slowly and proceed with the utmost caution.

DANGER

Failure to comply may result in serious injury or death.

Only make any electrical connections necessary after installation is complete
When mounting the electrical devices the electrical power supply must not be connected to the tractor. Failure to comply may result in short circuits and damage to the electronic components.

Only connect the hydraulic components when they are not pressurised (if fitted)
Connect the hydraulic hoses to the tractor hydraulic system only if both hydraulic systems (tractor and machine) are de-pressurised. If either of the hydraulic systems is pressurised, it could cause the machine to move unexpectedly.

High pressure present within hydraulic system
High pressures are present inside the hydraulic system. Check for leaks and external damage to the cables, hoses and screw connectors at regular intervals. Use suitable products only when searching for leaks. Repair any damage immediately. Oil leaks can cause serious injuries and burns. In the event of injuries, seek medical assistance immediately.

Coloured indicators on hydraulic hoses
In order to avoid malfunctions, identify the sleeves and corresponding hydraulic coupling joints between the tractor and machine with different colours. If the hydraulic hoses are not connected correctly, the machine may not operate as expected.

Drive shafts
Before connecting or disconnecting a transmission shaft, disengage the power take-off, switch off the engine and remove the ignition key.

Safety regulations for use and operation

- The operator must read and fully understand every part of the Operator’s Manual.
- The machine's operator (driver) must have the expertise and skills necessary for the type of work to be carried out and must be in the appropriate conditions to perform the activity in a safe manner.
- In addition to being properly trained and documented to use the machine, upon first use the operator must simulate certain test manoeuvres in order to identify its main controls and functions.
- The machine must NEVER be used by any operators who are insufficiently trained, unauthorised, or unable to read and understand the manual.
- During normal working conditions, the machine must be driven by a single operator (driver) in the tractor driver’s seat. The operator is responsible for driving the machine and operating the various controls to activate its functions.
- The machine has been designed and manufactured to meet all the operating conditions indicated by the manufacturer. Tampering with any devices in order to obtain different performance characteristics could compromise the health and safety of individuals and could result in unforeseen expenses.
- Do not tamper with any devices in order to obtain different performance characteristics to those foreseen by the Manufacturer.
- The machine must only be coupled to tractors of an appropriate category and with appropriate characteristics in order to avoid altering its stability, weight distribution and braking functions.
- Wear appropriate personal protective equipment.
- Make sure that the coupling pins are properly inserted and locked using the special locking pins in order to prevent accidental disconnections.
- Do NOT connect or disconnect the machine from the tractor without ensuring the necessary safety conditions to prevent the risk of crushing. A risk of crushing may occur if the operator remains in the area while the machine is being connected to or disconnected from the tractor.
- Be sure to connect the PTO shaft correctly and with the safety devices functioning properly.
- Connect the PTO shaft FIRST to the machine, and then to the tractor's power take-off.
- ALWAYS connect the safety chains properly in order to prevent the PTO shaft's protection devices from rotating.
- Most accidents (including fatal ones) are caused by improperly installed and poorly maintained safety devices.
- Make sure that the PTO shaft complies with all the current safety standards and regulations.
- Only use the PTO shaft supplied along with the machine or an original replacement part. Do not use shafts supplied with other machines.
- Before installing the PTO shaft, disengage the power take-off, lower all the implements to the ground, place all the controls in their neutral or park positions, engage the parking brake, stop the tractor, and remove the ignition key.
- Before engaging the PTO, make sure that the PTO shaft has been correctly installed and that the direction of rotation and maximum

speed comply with the machine's operating parameters.

- Do not exceed the maximum recommended power take-off speed of 540 rpm. Operating the PTO above this speed will damage the machine.
- Never engage the PTO when the tractor's engine is off and while the PTO shaft is connected. In the event of an accidental engine start-up, the safety conditions are no longer suitable to ensure the safety of the individuals in the machine's vicinity.
- Further information regarding the PTO shaft can be found in the manual issued by its manufacturer.
- The machine must only be used for the purposes indicated by the manufacturer. The machine's improper use could pose risks to the health and safety of individuals and could result in unforeseen expenses.
- Before using the machine, make sure that the guards are perfectly installed and that all of the guards' blocking devices are properly engaged.
- Do not use the machine if the safety devices are not properly installed and maintained. Any failure to meet this requirement could pose serious risks to the health and safety of individuals.
- ALWAYS wear the personal protective equipment indicated in the Operator's Manual and that required by the current workplace safety regulations.
- ONLY wear approved shoes and clothing in order to activate the controls properly and to avoid becoming entangled in the moving parts.
- Do NOT carry people (especially children or handicapped persons), pets, or other objects in the tractor's cab or on parts of the machine.
- Children's safety: never assume that children will remain where you last saw them.
  Be alert and shut down the machine immediately if any children enter the work area.
  Never allow children to play on or operate the machine.
- Do NOT continue using the machine if any anomalies are encountered: stop the tractor and only restart it once the normal operating conditions have been restored.
  Continuing to use the machine in this condition may damage it or cause accidents.
- Do not allow any unauthorised persons (especially children, the elderly, and domestic animals) to approach the operating area while the machine is in use. If necessary, stop the machine immediately and instruct the unauthorised individuals to leave the hazardous areas.
- Do not leave the machine unattended while the tractor is running.
- The machine must always be used with the personal protective equipment indicated in the manual, and that required by the current workplace safety regulations.
- Before operating the machine, check to make sure that all the protection devices have been properly installed and are functioning correctly, and that all the hook-ups and connections (hydraulic, electrical, etc.) have been carried out in a suitable manner. Furthermore, the notification and signalling devices must be clearly visible and working properly.
- Always disengage the power take-off to stop the machine's

functions during reverse driving, transfers, or manoeuvres involving excessive steering.

- In the case of steep terrain, adapt the machine's speed based on the slope and stability of the terrain itself.
- Be very careful when working on steep terrain to avoid the risk of overturning.
- Do NOT drive the tractor “recklessly”. Always adjust the speed to the conditions of the terrain.
- Do NOT turn suddenly or at excessively high speeds in order to avoid loss of stability and the risk of the machine overturning.
- When moving the machine, always stay clear of the live, aerial electrical power lines.
  Risk of electrical discharges. In the event of contact between the machine and a live, aerial electrical power line:
  - remain inside the tractor cabin
  - do not touch any metallic parts of the tractor
  - do not create an earth discharge connection
  - warn other personnel not to approach the tractor or the machine
  - await the arrival of qualified rescue personnel, since, before taking any other measures, it is necessary to deactivate the live, aerial electrical line.
- Wear approved hearing protection if you are exposed to continuous and /or high noise levels; in Italy, according to Legislative Decree no. 81 of 9 April 2008 (the Consolidated Law on health and safety in the workplace), noise is considered detrimental to hearing when it exceeds the limit of 85 dB (A) Leq; always refer to the national regulations in force in the country where the machine is in use

.

NOTICE

Any failure to observe the information provided could pose risks to the health and safety of individuals and could result in unforeseen expenses.

Information for the employer

- The employer must train the operator on the skills required to interact with the machine in a suitable and risk-free manner.
- This training must be planned based on the operator's experience and in accordance with the current laws applicable at the workplace.
- The operator must be informed about any REASONABLY FORESEEABLE MISUSE and RESIDUAL RISKS.
- The operator must demonstrate that he/she has acquired the relevant skills and has understood the “Operator’s Manual” in such a way as to carry out his/her activities in a safe manner.
- The operator must be able to recognise the safety signals and demonstrate that he/she is in suitable condition to carry out the assigned duties.

Important
The employers must document the operators’ training appropriately so that the relative documents can be produced in the case of controversy.

Preliminary maintenance operations

- The machine must be kept and maintained in dedicated areas whose suitability has been found to comply with the current health and safety regulations.
- Do not use gasoline, diesel fuel or other flammable liquids to wash or degrease any of the machine's parts.
- Never use open flames.
- Do not perform any maintenance operation with the engine running (without prejudice to the necessities and requirements described on the following pages). Wherever necessary, always prepare the exhaust fume evacuation system in advance and make use of the necessary Personal Protective Equipment.

DANGER

Before carrying out any maintenance work or inspections on the machine, make sure that it is resting on a flat, solid surface, the power take-off is deactivated, the engine is switched off, and the ignition key is not inserted.
When two or more people are working together, each must pay close attention to the others' safety.

NOTICE

Only use the special equipment indicated wherever required.
Mark the positions on all connection joints (pipes, cables, etc.) before disconnecting them and identify them with distinctive markings.
The bearings must rotate freely with no hardness and/or noise, otherwise they must be replaced.

Reference operators

Any maintenance work is to be completed exclusively by properly trained, educated, and qualified personnel. These are the types of technicians who can intervene upon the vehicle in order to perform the various maintenance operations described in this manual.

Operator
This is the machine's operator, who must have received the proper training before operating and using the machine in the field.
The operator can perform the machine's regular and routine maintenance operations.

Maintenance technician specialist
This is the maintenance technician of reference, a specialised technician who has been trained and qualified by Kverneland Group Srl to service the machine.
The maintenance technician specialist is also the individual who performs the non-routine maintenance or replacement operations that require an in-depth knowledge of the machine and the mechanical specifications for this type of product.

Employer
This is the person who employs the worker/operator or, in any case, the person responsible for the organisation or the production unit in question (based on the type and structure of the organisation where

the employee works), as they exercise decision-making and spending powers.

CAUTION

In the event that multiple people need to work on the vehicle at once, the skills of each must be defined in advance in a clear and unequivocal manner.

Personal protective equipment

WARNING

In order to work in full compliance with the safety standards, it is necessary to wear protective clothing, as required by law, and to ensure that they are always in perfect condition

The personal protective equipment consists of:

- ☑ Overalls or other comfortable garments that are not too large, and with no possibility that their parts could become caught in the machine's moving elements;
- ☑ Safety shoes;
- ☑ Safety gloves.
- ☑ Safety glasses (with side shields) or a face mask for eye protection;

In addition to standard PPE, the following specific equipment is also required for maintenance:

- ☑ Hard hat
- ☑ Safety glasses (with side shields) or a face mask for eye protection;
- ☑ Respirators (or anti-dust masks);
- ☑ Earplugs or headphones for hearing protection

Under particular environmental conditions, if you are performing the activities outside, the following equipment may be required:

- ☑ Reflective harness;
- ☑ A raincoat for bad weather;
- ☑ High boots for bad weather

WARNING

Do not wear rings, watches, jewellery, or unfastened or dangling garments, such as, for example, ties, torn garments, scarves, unbuttoned jackets, or blouses with open zippers that could get caught in moving parts.
It is nevertheless recommended to use garments approved for accident prevention.
Check with your employer about the current safety regulations and accident prevention devices.

Safety regulations for maintenance and adjustments

- Keep the machine in properly maintained condition and carry out the routine maintenance recommended by the manufacturer. Proper maintenance will ensure the machine's best possible performance, an extended service life, and constant compliance with the safety requirements.
- Furthermore, proper maintenance will help to prevent the risk of fires during the machine's operating phases.
- Before performing any maintenance and adjustment interventions, be sure to activate all the machine's safety devices.
- Before performing any maintenance interventions in areas of the machine that are hazardous or not easily accessible, prearrange for suitable safety conditions in compliance with the current workplace health and safety regulations.
- Disengage the power take-off.
- Wait until all parts are completely stationary and never intervene when the machine is running.
- Disconnect the power supply before working on the electrical system in order to avoid the risk of personal injury or damage to the machine itself.
- Do not attempt to carry out any welding operations without prior, written authorisation from the manufacturer. If such authorisation is granted, disconnect the tractor battery and alternator before carrying out electro-welding on the machine while connected to the tractor.
- Disconnect the machine from tractor before performing maintenance and adjustment operations, if this is not possible, ensure the machine placed on a level surface, with the power take-off deactivated, all the controls in their neutral positions, the engine off, the ignition key removed, and the lifter and wheels securely blocked.
- During adjustment and maintenance operations on the machine, use proper clothing and/or the personal protective equipment specified by the manufacturer and required by the current workplace safety regulations.
- ONLY replace the components with ORIGINAL spare parts or parts with IDENTICAL designs and functional features.
- DO NOT replace the components with non-original spare parts or spare parts with different design and functional features.
- The use of similar but not identical spare parts could lead to non-compliant repairs, altered performance levels, and property damage.
- Use the oil recommended by the manufacturer. Do not mix oils of different brands or with incompatible chemical-physical properties.
- Only replace the SAFETY DEVICES with original spare parts in order to avoid altering the required safety levels.
- Regularly check the fastening screws for the main components, and tighten them in order to prevent them from becoming dangerously loose.
- Never use the PTO shaft as a pedestal for performing any types of interventions upon the machine.
- Do not disperse pollutant materials into the environment. Dispose of them in compliance with the relevant legislation in force.

- Pressure washing with water may only be done on the machine's external parts, and only at the specified pressures.
- DO NOT pressure wash the seals of the gaskets and bearings.
- DO NOT clean or wash the machine with aggressive products in order to avoid damaging the components.
- DO NOT use alcohol and ammonia-based detergents or other aggressive chemical products, as these could irreversibly damage the guards.
- Non-routine maintenance operations must only be carried out by authorised personnel, who must prearrange for all the necessary safety conditions and comply with the specified procedures.
- DO NOT carry out checks or adjustments while the machine is in motion or with an operator on board.

NOTICE

Any failure to observe the information provided could pose risks to the health and safety of individuals and could result in unforeseen expenses.

- We recommend changing the hydraulic hoses once every six years. The hydraulic hoses may deteriorate with age, even if they do not display any external signs of wear and tear. Damaged hydraulic hoses can cause serious injuries or death.

Hydraulic safety instructions

De-pressurise the hydraulic system
Ensure that the tractor and machine hydraulic systems are completely de-pressurised before working on them.
A pressurised hydraulic system can cause machine components to start moving unexpectedly, resulting in serious injuries to personnel and damaging the machine itself.
Such injuries may even be fatal.

Take care during welding operations
Do not carry out any welding operations in the vicinity of hydraulic hoses.
Hydraulic oil may be highly inflammable.

Cleaning the hydraulic system
Carefully close or disconnect the quick-release couplings.
Remove all traces of dirt or air from inside the hydraulic system.
Failure to do so may result in serious damage to the hydraulic system.
Such damage may also result in damage to property and/or injuries to personnel.

Collect the used oil
In order to avoid harming the environment, used oil must be collected and disposed of in accordance with the applicable national legislation.

Distance from centre of gravity

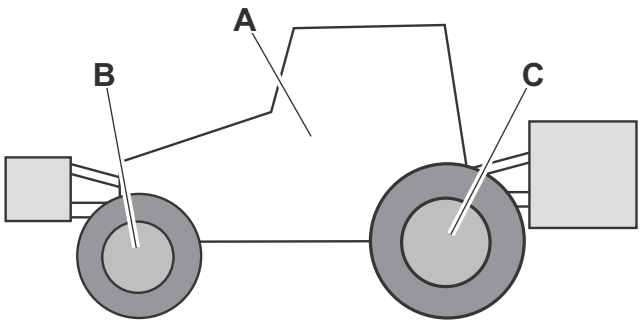
Respect the maximum weight, the axle and tyre load bearing capacities, and the minimum counter-weights.
The front or rear machine coupling device must not result in the overall machine weight, or the axle or tractor tyre load bearing capacity limits being exceeded. In order to guarantee safe steering capacity, the load on the front axle must be equivalent to at least 20% of the unladen weight of the tractor.

By carrying out a few simple calculations it is possible to determine:

- the overall weight
- the loads per axle
- the weight-bearing capacity of the tyres
- the minimum counterweights

In order to carry the calculations, the following data are necessary:

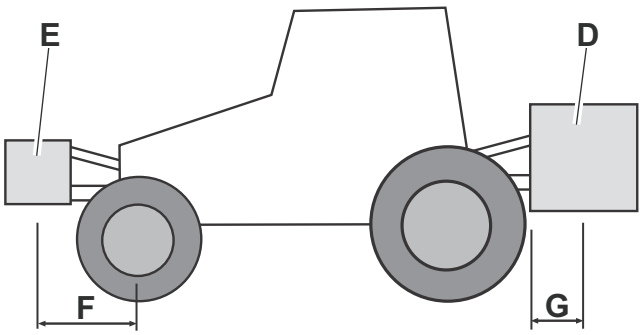
Data available in tractor instruction manual:



- (A) Unladen weight
- (B) front axle load
- (C) rear axle load

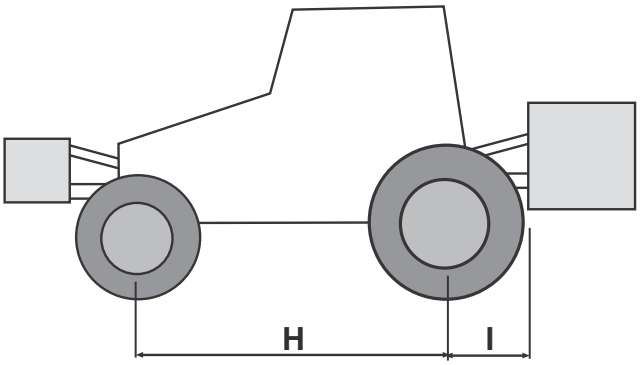
it is also necessary to take into account such factors as: the weight of the water in the tyres, the accessories and other additional equipment.

Data available in this instruction manual:



- (D) overall weight of the machine with rear coupling device. In the case of towed equipment, take into account the drawbar load
- (E) overall weight of the machine with front coupling device
- (F) distance between the machine centre of gravity and the centre of the front axle (front mounting)
- (G) distance between the lower coupling bearings and the machine centre of gravity (rear mounting). With towed equipment G=0

Data obtained from measurements:



- (H) tractor wheelbase
- (I) Distance between the centre of the rear axle and the centre of the lower coupling bearings

Calculation

The resulting values may now be used to calculate the formulas.

Counterweight with front-mounted weights

Calculation for the **counterweight with front-mounted weights** in the case of machines fitted with rear coupling devices.
Front counterweight (kg) =

$$\frac{D \times (I + G) - (B \times H) + (0,2 \times A \times H)}{F + H}$$

Counterweight with rear-mounted weights

Calculation for the **counterweight with rear-mounted weights** in the case of machines fitted with front coupling devices.

$$\text{Rear counterweight (kg)} = \frac{(E \times F) - (C \times H) + (0,45 \times A \times H)}{H + I + G}$$

Front axle load

Calculation for the **effective load on the front axle**

$$\text{Front axle load (kg)} = \frac{E \times (F + H) + (B \times H) - D \times (I + G)}{H}$$

Total weight

Calculation for the **effective total weight**

Gross weight = E + A + D

Rear axle load

Calculation for the **effective load on the rear axle**
Rear axle load (kg) = effective total weight - effective load on rear axle

Tyre weight-bearing capacity

For information regarding the weigh-bearing capacity of the front and rear tyres, consult the documentation supplied by the tyre manufacturer.

- in the presence of two wheels, the weight-bearing capacity of the front tyres is equivalent to twice the permitted capacity for one front tyre.
- in the presence of two wheels, the weight-bearing capacity of the rear tyres is equivalent to twice the permitted capacity for one rear tyre.

Evaluation

Make sure that the following conditions are satisfied:

- the effective rear axle load values must be less than the permitted values specified in the tractor instruction manual.
- the weight-bearing capacity of the tyres must be greater rear axle load values specified in the instruction manual.
- The total effective weight must be less than the permitted total effective weight specified in the tractor instruction manual.

If these conditions are not satisfied, DO NOT attach the machine to the tractor.

If a weighbridge with sufficient measuring capacity is not available, it is possible to determine the total weight and the rear axle load by weighing them.

Sample calculation

Calculation for **counterweight with front mounted weights** in the case of machines with front coupling devices.

D = 2100 kg (4629.7 lbs)
I = 1180 mm (46.457 in)
G = 650 mm (25.59 in)
B = 2520 kg (5555.6 lbs)
H = 2720 mm (107.086 in)
A = 6300 kg (13889 lbs)
F = 1367 mm (53.82 in)

$$Kg= \frac{2100x(1180 + 650) - (2520x2720) + (0,2x6300x2720)}{1367 + 2720} =102h$$

Safety rules for the protection of the environment



- Waste consisting of Electrical and Electronic Equipment may contain substances with potentially harmful effects on the environment and on people's health. Be sure to dispose of such waste correctly.
- When the machine is dismantled, sort all the components according to their chemical characteristics and collect them separately in compliance with the laws in force.
- In reference to the WEEE Directive (Waste Electrical and Electronic Equipment), during the decommissioning process the user must separate the electrical and electronic components and dispose of them at the appropriate authorised collection centres, or else return them to the seller upon making a new purchase.
- All the components that must be separated and disposed of in a specific manner must be identified with a special marking.
- The unauthorised disposal of Waste Electrical and Electronic Equipment (WEEE) is penalised by the laws in force in the territory where the offence is committed.

NOTICE

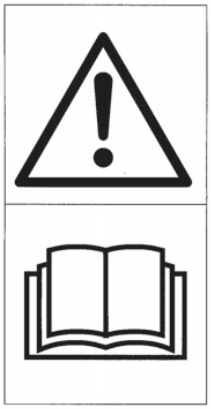
Any failure to observe the information provided could pose a risk to the health and safety of individuals and could result in unforeseen expenses.

Danger, warning and caution labels

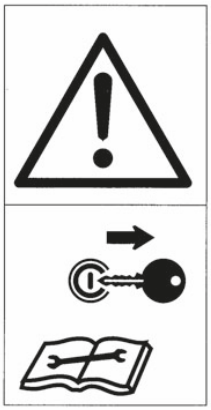
Decal descriptions

The illustrations show the safety and information signs applied to the machine. The meaning of each signal is explained at the side.

Read the instructions
Read the instructions manual and safety information carefully before attempting to use the machine for the first time, and keep them in a safe place.



Switch off the engine and remove the key
Before attempting to carry out any maintenance or repair work, switch off the engine and remove the ignition key, then consult the instruction manual.



Do not approach the machine components until they are completely stationary
Rotating machine components hazard.
Keep hands and feet away from the machine until it is completely stationary.



Do not approach moving parts
Danger of crushing.
Keep hands away from the danger zone..
Wait until all moving parts are completely stationary.



Do not approach hot surfaces
Remain at a safe distance from hot surfaces.



Moving parts
Do not lean over transmission components when in motion.
Do not open or remove the safety devices while the engine is running.



Flying debris danger
Do not approach the machine while it is working or in rotation.
Maintain the safety distance.



Moving parts danger
Maintain the safety distance from the operating area of the moving parts.



Do not loiter in the packing area

There is a risk of serious injury from swinging or tilting components in this area.



Moving parts danger

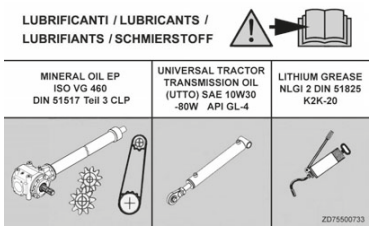
Do not approach the machine while it is working or in rotation: rotating parts danger.
Keep hands and feet away from the machine until it is completely stationary.



Tractor power take-of revolution indicator speed indicator



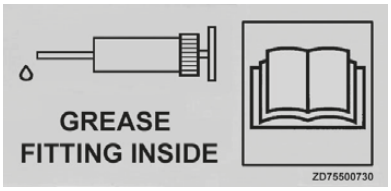
Oil specifications



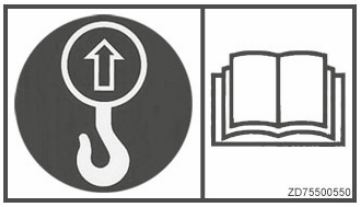
Screws and bolts tightening torque check warning signal



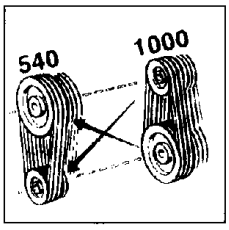
Greasing point indicator



Hooking/lifting point



Position of pulleys based on speed



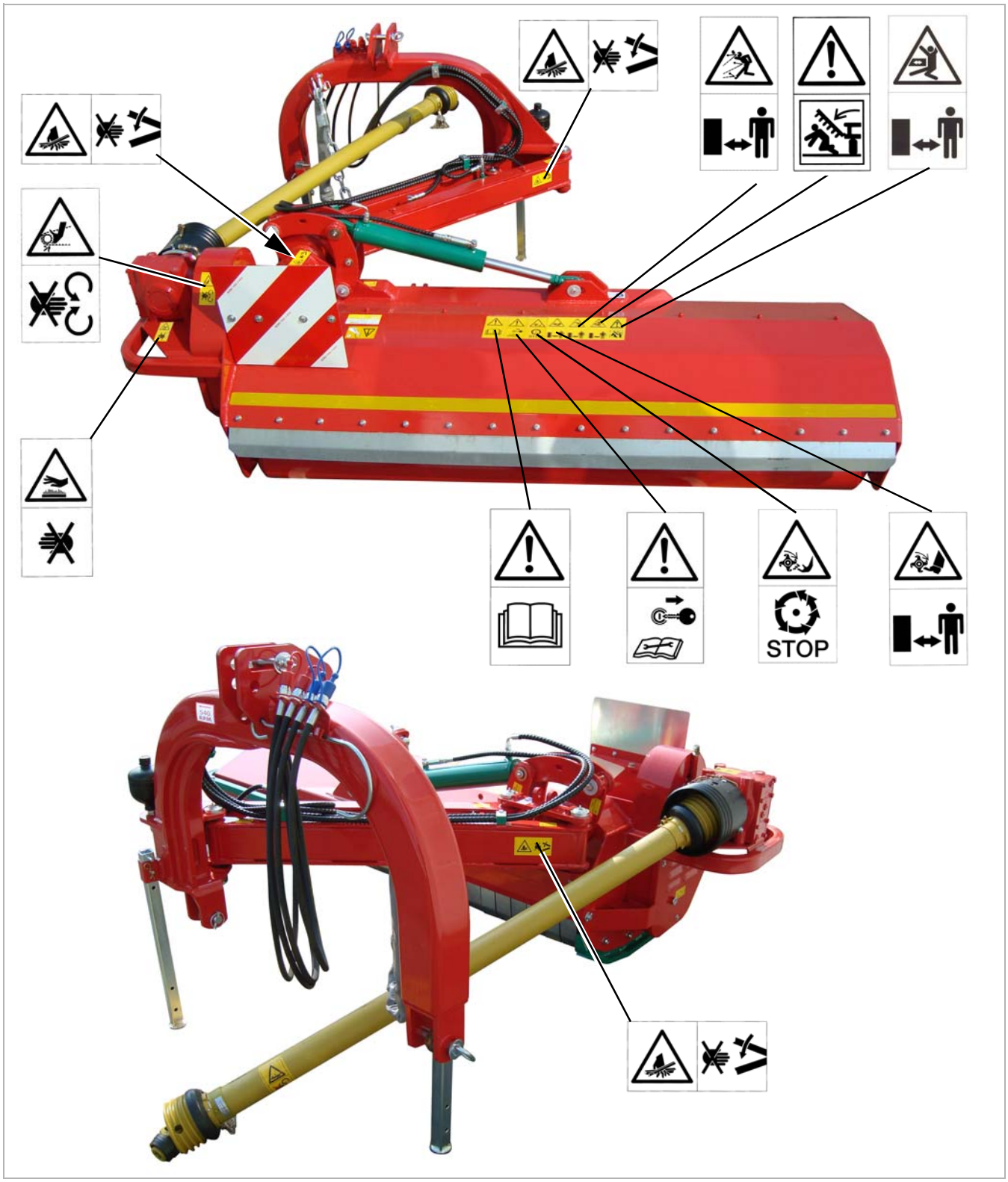
CAUTION

Make sure that all the decals are legible. If they are not, clean or replace them as required, and make sure that the new ones are placed in the original positions.

CAUTION

Non-original components may be stamped with the component manufacturer's instructions.
These instructions are not covered in this manual.

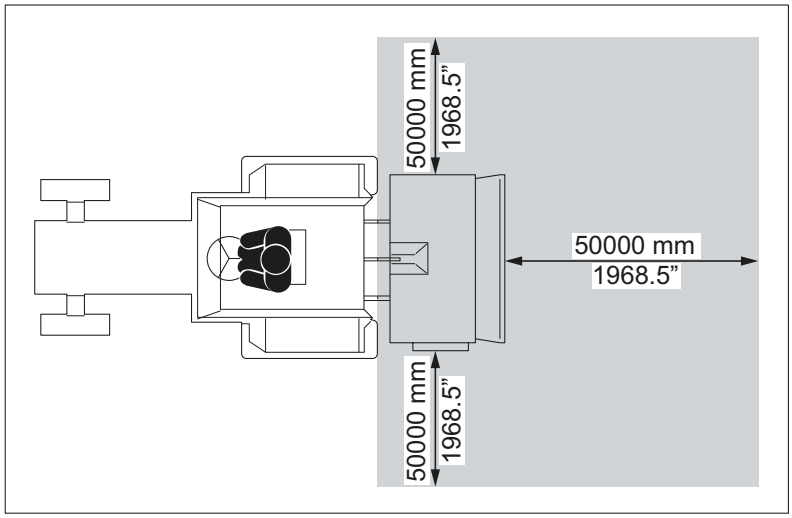
Locations of the safety decals



Danger zones

WARNING

The illustration shows the danger zones where no-one should be while the machine is in use. It is the operator's duty to keep such zones out of bounds; if necessary, he/she must turn the engine off and clear the danger zone.



Before starting and operating the machine, make sure that there are no persons, animals and/or objects within the danger area.
Under unfavourable circumstances debris may be ejected from the machine at high speed. Using the machine without checking the danger zone first may result in serious injuries or death.

Safety devices on board the machine

DANGER

Check carefully that all the safety guards are present and correctly installed on the implement.
Periodically check that the safety guards are in good working order.

NOTICE

ONLY replace sheared “shear bolts” with original spare parts that comply with the requirements.

Working at night

WARNING

The machine can also be used at night. Working under such conditions involves an number of increased risks. In order to avoid endangering the health and safety of individuals, all the lighting devices installed on the tractor must be in good working order.

WARNING

If the work area's conditions require it, a preliminary inspection must be carried out in order to identify any hazardous areas (steep terrain, proximity to precipices, etc.) and mark them adequately.

CAUTION

Adjustment, maintenance and inspection operations may only be performed upon the machine at night if the safety and lighting conditions are suitable.

Improper use

Any use of the machine for purposes other than those envisaged by the manufacturer is to be considered IMPROPER USE.

- Do not use the machine as a means for transporting people or objects.
- Do not couple the machine to tractors whose category and features are not suitable.
- Do not use the machine to carry out any other operations than those it is intended for.

WARNING

In the case of improper machine use, the operator assumes all responsibility (moral, civil and criminal) for any resulting personal injuries and/or property damage.

Residual risks

Even though the manufacturer has complied with the laws in force and adopted the appropriate standards, the residual risks listed below still remain.

- Danger of lethal “whiplash” if the correct procedures and sequence for connecting the PTO shaft are not respected and the PTO is accidentally engaged.

DANGER

Do not connect the PTO shaft while the tractor's engine is running, while the ignition key is inserted, and while the PTO is engaged.

- Danger of crushing and impacts during machine coupling operations.

WARNING

DO NOT connect or disconnect the machine to the tractor without ensuring the safety conditions necessary to avoid any crushing risks, by stopping the engine or engaging the parking brake for example.

- Danger of entanglement and dragging due to the use of inappropriate clothing.

WARNING

Danger of entanglement in the PTO shaft if the protective devices are damaged or are not installed correctly. Install and use proper PTO guards.

- If the operators uses the machine at speeds that are not suitable for the ground conditions (steep terrain) and/or with slopes greater than the maximum permitted, the machine could become unstable and/or overturn.

WARNING

Do not use the machine on terrain characterised by risks of instability and/or overturning, such as for example: close to ditches, precipices, loose soil, steep slopes, etc. If the aforesaid conditions are present, take all the necessary measures to avoid the relative risks.

WARNING

Danger of running over people, animals or objects when reversing or carrying out manoeuvres without evaluating the required space correctly, without the necessary care and attention, or when distracted. Use caution when reversing and always look back before reversing.

WARNING

Danger of contact between the upper limbs or other body parts and the machine's components during maintenance operations requiring checks to be carried out while the machine's parts are in motion. Respect the maintenance procedures.

WARNING

DO NOT work with an insufficient field of view or in the presence of people within the machine’s range of action or objects nearby. Use caution when reversing and always look back before reversing.

WARNING

Risk of injury when fitting/removing parts, accessories or components without the use of the prescribed personal protective equipment (hard hat, safety gloves and shoes, etc.).

- Risk of collision with fixed structures (e.g. doors and gates) along route if the machine is not configured correctly for transport after use.
- Risk of collisions with fixed and mobile elements of infrastructure (e.g. parked and moving vehicles) present along the route if the machine is not correctly centred with respect to the tractor.
- Risk of collisions with fixed and mobile elements of infrastructure present along the route, if the safety locks are not inserted in all the mobile parts, accessories and devices where there use is indicated.

WARNING

Risk of the machine collapsing, with resulting crushing hazard if:

- non-original spare parts or components are fitted on the machine;
- operations that have not be authorised by the manufacture are carried out;
- operations are carried out at non-authorised workshops.

General description

This product is classified as interchangeable equipment in conformity with directive 2006/42 / EC and as an agricultural implement in conformity with ASABE S390.

- This implement is intended for cutting and shredding plant material (grass, crop stalks, small shrubs and vine shoots).
- According to the different production requirements, the machine can be configured in different versions and models (See “Technical Data”).
- Only one operator is required on the tractor (driver) in order to use and operate the machine. The drivers must meet all the necessary requirements and must be suitably trained in the safe operation of the machine. Your authorised dealer may be able to assist with training.
- The tractor must be equipped with PTO, electrical system, and hydraulic system couplings.

WARNING

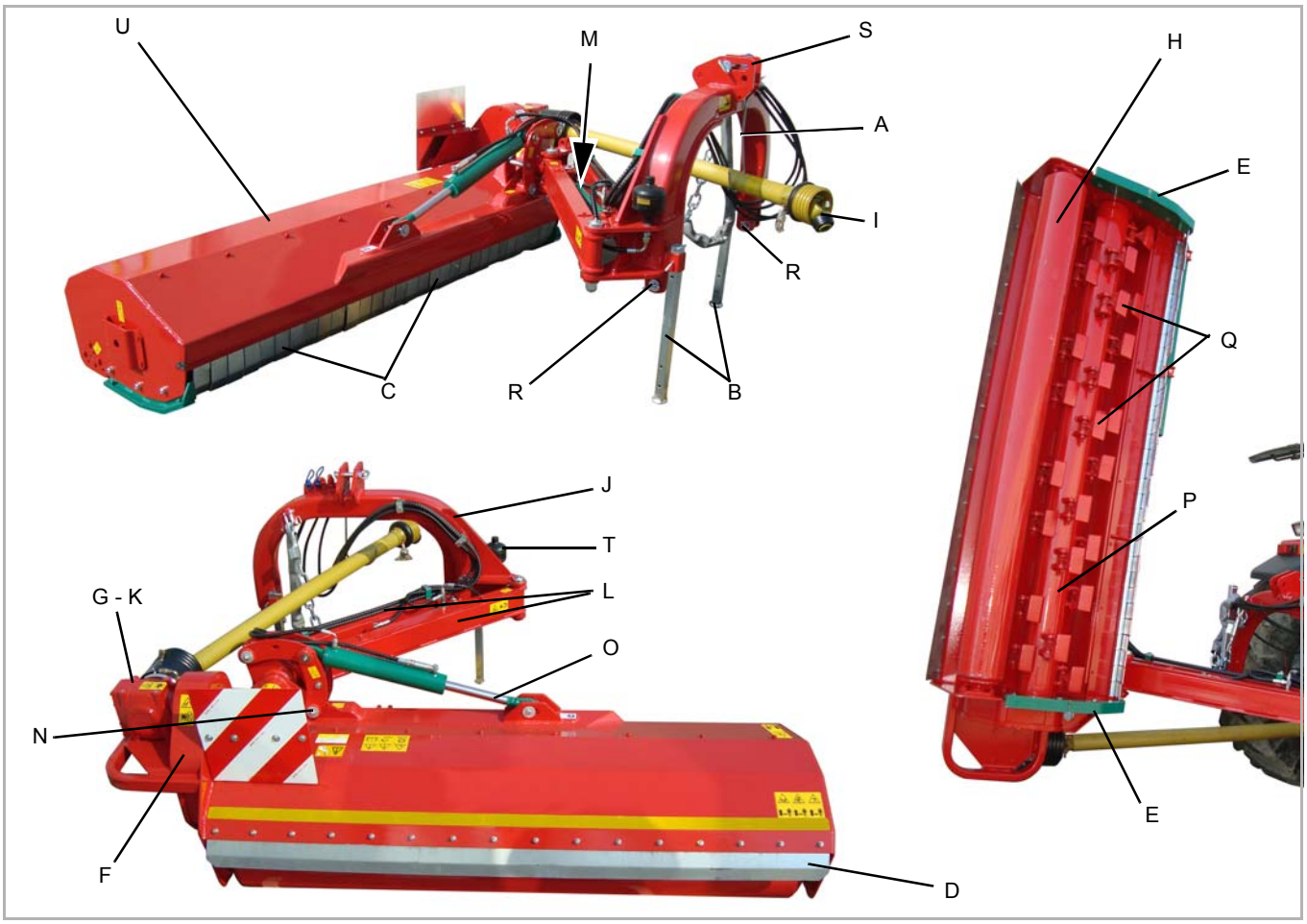
Wear appropriate personal protective equipment.

As operating conditions may vary widely, the operator must always take care not to exceed the performance limits of the implement.
At the first sign of overloading, the implement must be stopped immediately.

The implement is also available in a configuration permitting lateral adjustment for working even more precisely and quickly.

You may set the position of the three-point linkage yourself provided that you have the necessary skills. If not, have this done by an authorized service center.

Main components



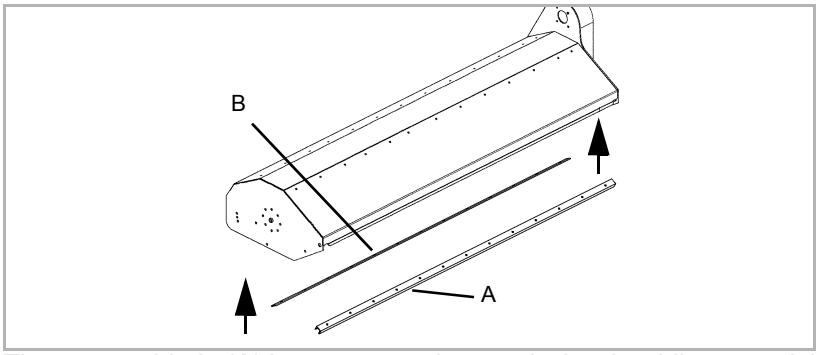
A) Drive shaft mounting
B) Support foot
C) Front safety guards
D) Rear deflector
E) Skids
F) Lateral transmission panel
G) PTO shaft guard
H) Rear roller
I) PTO shaft
J) Three-point linkage
K) Multiplication gear with PTO guard
L) Joint for lateral adjustment
M) Lateral adjustment cylinder
N) Machine orientation joint
O) Machine orientation cylinder
P) Blade holder rotor
Q) Blades
R) Attachment for lower arms
S) Attachment for upper arms
T) Obstacle safety guard
U) Frame

Accessories
Toppers may also be equipped with optional accessories orderable from your dealer.

Accessories and Optionals

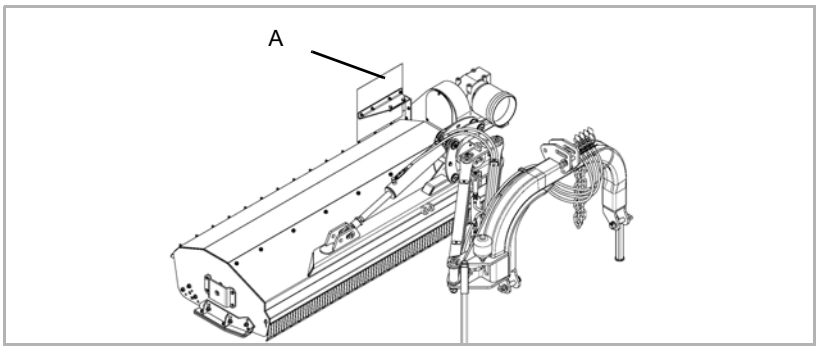
Optional items requested after purchase of the machine must be fitted by the dealer.

Counterblade



The counter-blade (**A**) improves topping results by shredding material more uniformly.
The second counterblade (**B**) is an optional extra.

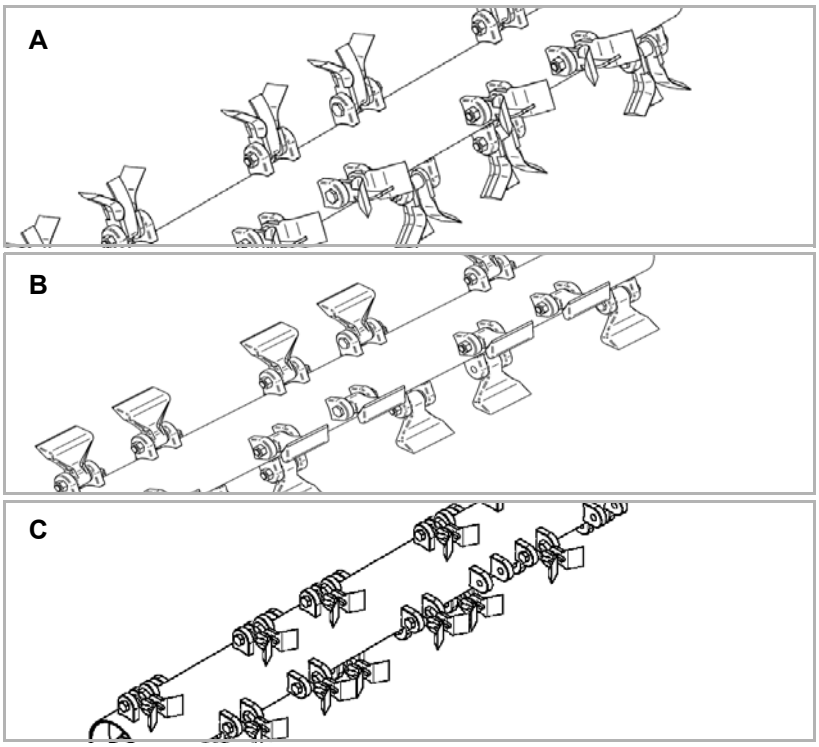
Signalling panel



For countries where this is an optional feature, a signalling panel can be fitted on the rear part of the implement.

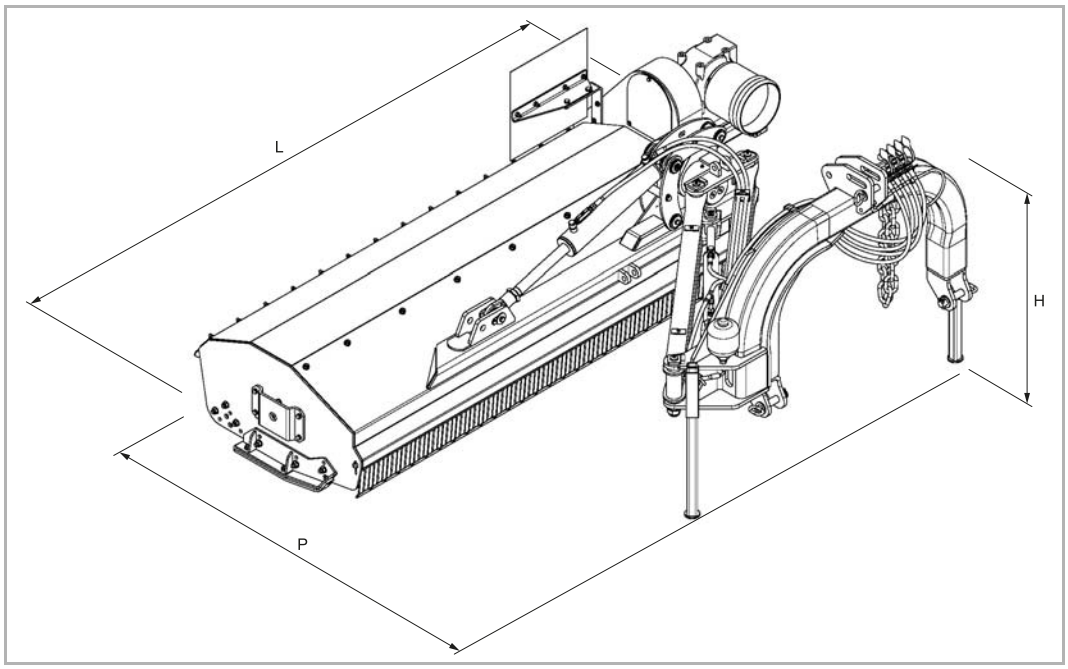
Tool types

The various models are equipped with multi-purpose rotors, which means that it is possible to mount a wide range of tools.



Ref.	Blade	Usage
A	Universal blade	Suitable for cutting grass, shrubs and vine shoots.
B	Hammer	Particularly suitable for shredding orchard and vineyard trimmings and for mowing grass.
C	Flail blade	Suitable for rocky terrain. The articulation allows the blade to float, making it suitable for rocky terrain.

Specifications



Description	Unit of measurement	200	230	250
Width (L)	mm (in)	2600	2900	3100
Depth (P)	mm (in)		2035	
Height (H)	mm (in)		1130	
Working width	mm (in)	2000	2300	2500
Min-max cutting height	mm (in)		30 - 70 (1.18” - 2.76”)	
Weight (with roller, without PTO drive shaft)	kg (lb)	900	960	1000
Distance from the centre of gravity of the implement to the centre of the lower coupling bearings	mm (in)		1010	
PTO rotation speed	rpm		540	
Rotor speed	rpm		1858	
Absorbed power				
Minimum	HP - kW	35	40	45
Maximum permissible	HP - kW		82	
Hitch category			Cat. II	
Number of blades				
Universal blade		52	60	65
hammers		26	30	32

Specifications

Description	Unit of measurement	200	230	250
Blades for stony ground		52	60	65
Number of drive belts			4	
Sound level detected at driver's seat	db(A)		< 70	

Handling and loading instructions

CAUTION

Perform the handling and loading operations in accordance with the information supplied by the manufacturer, which can be found on the machine and in the user instructions. If necessary, the individuals authorised to perform these operations must prepare a “safety plan” in order to protect those who are directly involved.

Packing and unpacking

Depending on the destination, the loading and transport operations can be carried out using different means.
The packaging conditions depend directly on the shipping method and the dimension of the items to be shipped.

When removing packaging, we recommend using suitable personal protective equipment (PPE) that has been approved for the purpose and is in good condition, in order to prevent injuries to hands, feet, head, etc.

NOTICE

Remove the component parts of the packaging, separating the various materials used to protect the machine by type. Do not dispose of packaging, dust, waste materials, chemical products, etc. in the surrounding environment. Dispose of materials in accordance with the locally applicable regulations.

NOTICE

Upon receipt, check that the machine and its components are not damaged. In the case of damage or missing parts, call the manufacturer or your local dealer to agree upon the procedures to be adopted.

Lifting and transporting the machine

CAUTION

Ensure that you comply with all the general and specific regulations and standards relating to lifting equipment and the operations of handling and transportation, even when not expressly mentioned in the present document.

WARNING

Ensure that any lifting gear is capable of supporting the weights to lifted and moved.

WARNING

Lifting and handling gear must be operated by personnel who are authorised and trained to use such equipment.
The owner shall be responsible for ensuring the availability of suitable lifting gear, and of personnel who are qualified to operate it.
The Manufacturer declines all responsibility in the event of failure to use suitable lifting gear.

Always use lifting accessories that are in good condition and working order, and that are capable of supporting the weight of the machine, or the components to be handled.
During lifting and moving operations, ensure the areas where the manoeuvres are to take place are free from material, objects or other personnel.
During lifting and moving operations, adopt all the precautions necessary to avoid dropping the parts being handled and/or tipping over the lifting gear..

WARNING

Proceed very slowly when moving the machine. Avoid collisions or jolts and lift the parts only as far as necessary off the ground.

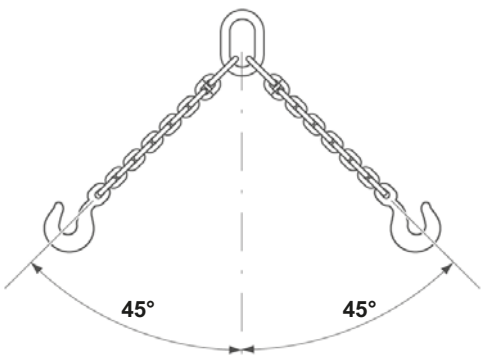
All personnel, including the operator, must remain at a safe distance. The safe distance must take into account hazardous situations that may arise as a consequence of an unexpected event, such the breakage of a lifting chain or lug, resulting in the load tipping over.

CAUTION

Always wear the appropriate PPE during lifting operations.

CAUTION

Lifting and slinging accessories must be maintained in perfect condition, be capable of supporting the weight of the parts to be lifted, conform to the locally applicable regulations, and be used in conformity the Manufacturer's instructions and/or the respective technical standards.



CAUTION

It is essential to ensure that the angle between the lifting chains and the vertical DOES NOT exceed 45°.
An angle in excess of 45° will place considerable stress on both the slinging lines and the hooking points, so that there is a high risk of damage or breakages.

Essential ambient conditions

During lifting and moving operations, always take into account the available space and the type of terrain, especially when installing machines and plant on building sites.
During lifting and moving operations, take extreme care to avoid any obstacles present in the vicinity of the manoeuvring area.
This is especially important in the presence of electrical lines, particularly on building sites.
When lifting and moving the machine, make sure the manoeuvring area is free from material and other objects.

Designated lifting points

CAUTION

Remove any accessories fitted to the implement before lifting it.

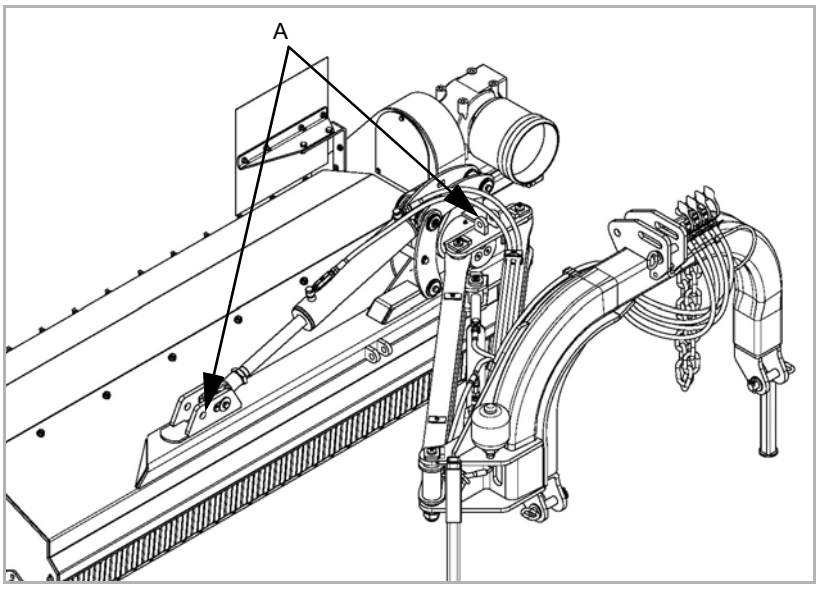
When lifting and moving the machine, always use the lifting points designated by the Manufacturer.
The lifting points are marked by a pictogram so that they are easy to identify.

WARNING

If damaged, the lifting point pins, hooks and chains are extremely dangerous since they make break or give way at any moment, and without any prior warning.
If such accessories are damaged in any way (twisted, stretched, dented, corroded, etc.) scrap and replace them immediately in order to prevent anyone else, who may not have noticed such damage, from using them and placing themselves, and others, at risk.
Never use accessories if you are not certain of their condition.

When using a crane or other suitable hoisting equipment, the implement must be secured correctly at the specific hoisting points (**A**) as shown in the figure.

Install hoisting eye-bolts and pins in the specific holes.



WARNING

The jack for lateral movement of the top link must be closed.

Handling and storage

Transportation and lifting operations must be carried out by specialised firms that are active in the machinery transportation sector; it is not possible to guarantee complete safety when carrying out such operations, unless they are performed using the appropriate equipment, and by fully qualified personnel.

During the lifting operations, always:

- proceed with the utmost care
- move all personnel away from the areas where the operations are to be carried out
- prevent personnel from transiting or loitering under and/or in the vicinity of suspended loads
- lift the loads as little as possible off the ground
- move loads slowly, avoiding collisions and jolts
- ensure the areas where the manoeuvres are to take place are free from material or objects
- use bars of sufficient length to guide the load

All personnel, including the operator, must remain at a safe distance. The safe distance must take into account hazardous situations that may arise as a consequence of an unexpected event, such the breakage of a lifting chain or lug, resulting in the load tipping over.

WARNING

Never lift the machine or install it in tilted position using spacers as this would render it unstable.

Preliminary checks and inspections

Upon receipt, perform a thorough inspection in order to make sure that there are no damaged parts or defects.
Also very the receipt of all the components necessary for its use, including both standard and optional equipment.

NOTICE

If any damaged parts, defects, or deficiencies are encountered in relation to the machine, whether due to transport or other causes, contact the manufacturer immediately in order to have the issues immediately resolved.

WARNING

Never use the machine if it does not appear to be fully consistent with the usage and safety characteristics, as the minimum necessary safety requirements could be compromised.

The machine, and all its components, are fully functional when they leave the Manufacturer's premises.
When delivering the machine to the Customer, the Dealer shall be responsible checking that:

- the three-point linkage is mounted correctly
- that the oil levels in the gearbox and upper transmission case are correct
- all the lubricators present on the machine have been filled with grease
- all the safety labels described in this manual are present and legible
- all nuts and bolts have been tightened correctly
- that all guards are in place and fitted correctly
- the overall appearance of the machine is free from defects

NOTICE

The Retailer must draw the user's attention to this manual and the drive shaft manual also provided, which must both be kept by the user throughout the implement's service life. The Retailer is also responsible for recommending that the user reads these manuals carefully.

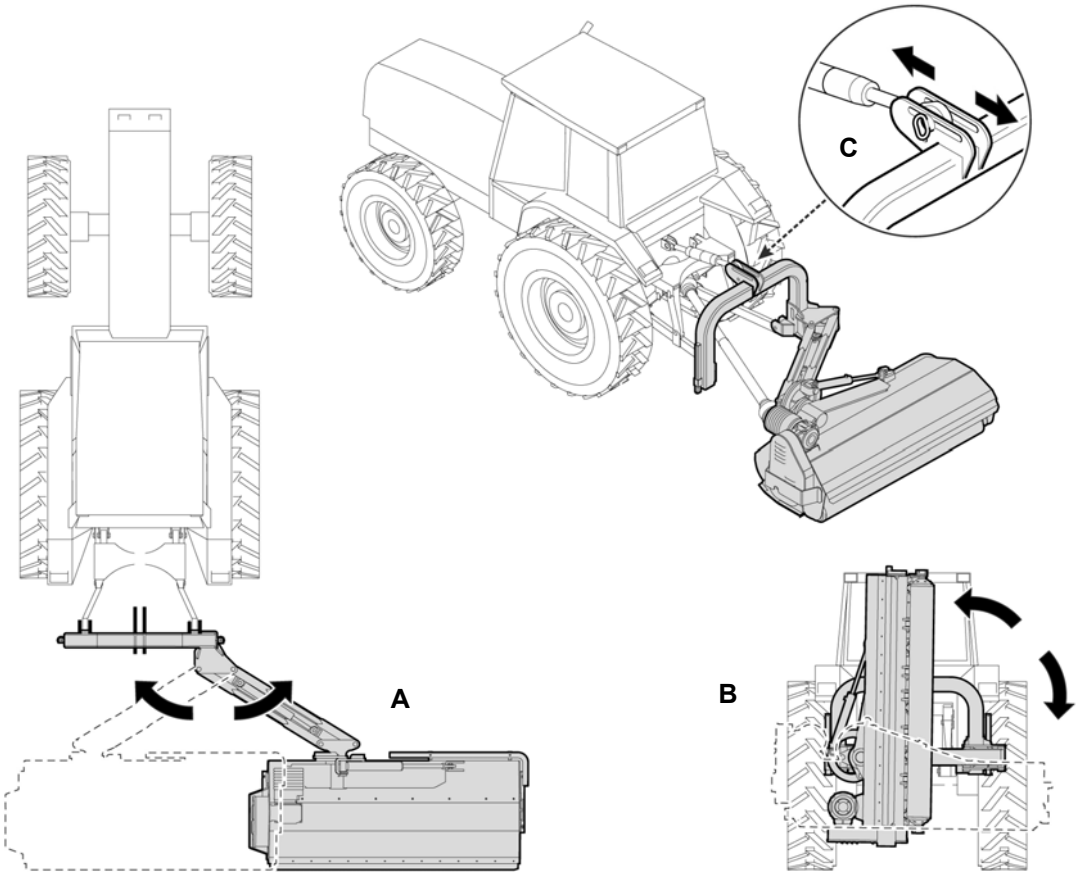
Installing the components

NOTICE

For shipping purposes, certain components may not be installed on the machine. You may attempt to carry out these operations autonomously, provided you have the necessary skills. Otherwise, contact your local dealer.

machine-tractor combination

The chopper models in this manual are equipped with a three-point linkage allowing the device to be hitched to the rear of the tractor only.

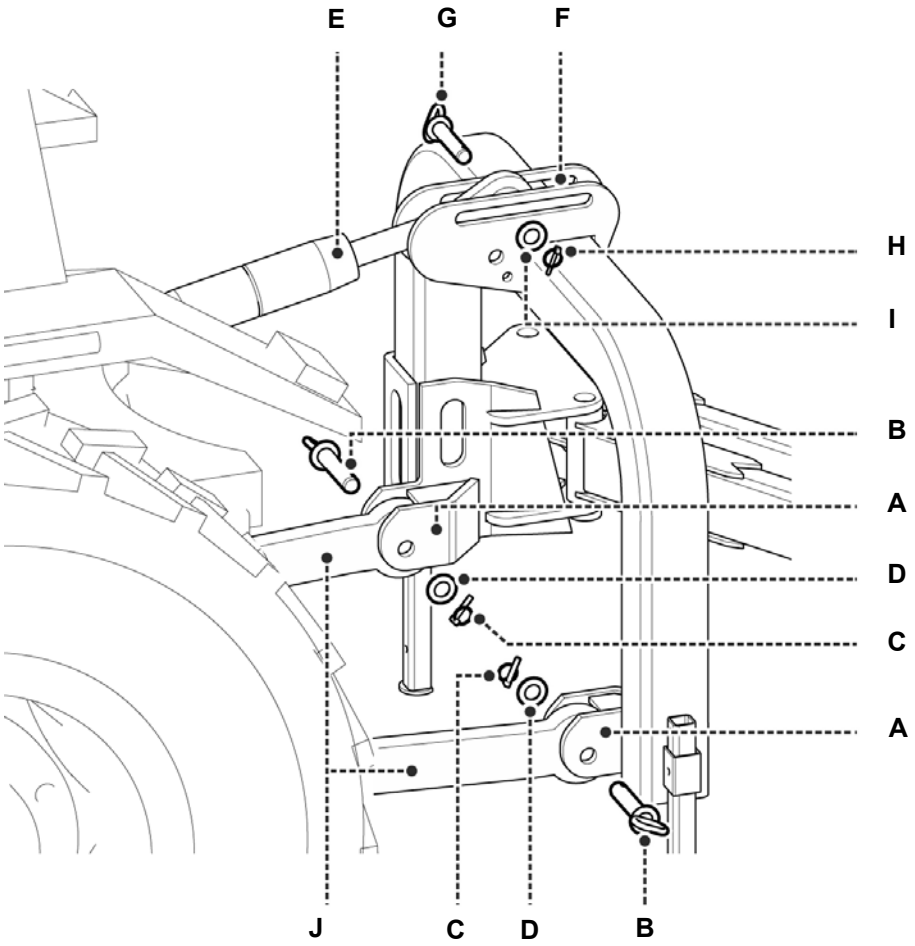


The implement is equipped with hydraulic systems for lateral adjustment (**A**) and for adjusting the angle of the implement relative to the three-point linkage (**B**).
The upper mounting (**C**) allows the implement to swing independently of the tractor lift arms.

- Upon receiving the machine, check the category and characteristics of the tractor to which it is to be coupled in order to ensure its stability and proper functionality.
- The length of the PTO drive shaft included with the machine is only suitable for the machine-tractor combination specified by the customer when ordering the machine itself.

WARNING

Read and comply fully with the safety instructions given in this manual.



- Align the tractor with the machine, making sure that the latter is resting on the ground in a stable position.
- Fit the lower lift arms into the relative hitch points (**A**) of the tractor.
- Lock the arms with the locking pins (**B**) and secure them with the lynch pins (**C**) inserting the washers (**D**) between them.

NOTICE

Attachment is made easier if the lateral stabilisers of the tractor hoist arms can move freely.
Once the implement is hitched to the tractor, adjust the stabilizers to limit oscillation (note that oscillation at all is permitted when transporting).

- Slide the tractor three-point linkage (**E**) into the slot (**F**) on the upper part of the chopper coupling point, insert the securing pin (**G**) and lock it with the lynch pin (**H**), inserting the (**I**) between them.
- Adjust the tie-rods (**J**) of the lift arms to that the tractor PTO is horizontal when the implement is used.

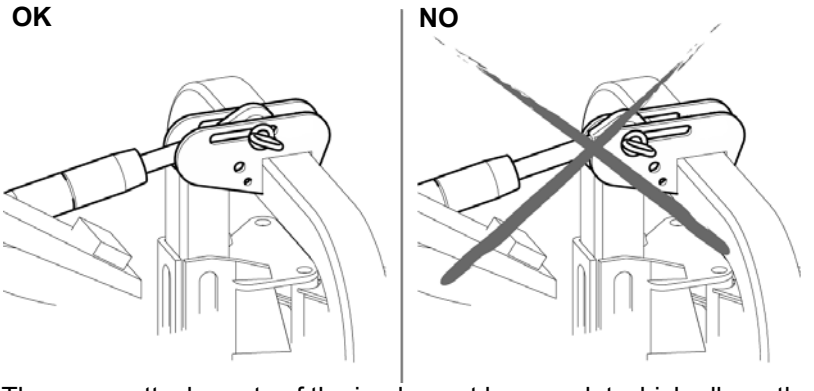
NOTICE

- Ensure that the cutting rotor is parallel to the ground.

NOTICE

When the machine is connected to the tractor, verify that the direction of rotation of the PTO is as shown on the label affixed to the machine (ANTICLOCKWISE looking at the machine PTO from the rear).

Adjusting the top link tie rod



The upper attachments of the implement have a slot which allows the implement to absorb any differences in the evenness of the ground, so it continues to support the roller correctly.
After setting the work height, adjust the top link tie-rod appropriately to ensure that the implement will work correctly.

NOTICE

The tie-rod is connected correctly when the fastener pin is at the innermost extremity of the slot.

Connecting the PTO shaft

WARNING

Switch the engine off and ensure it is in the safe condition. Before getting down from the tractor:

- **Disengage the power take-off.**
- **Lower all the tools to the ground.**
- **Set all controls to the neutral or park position.**
- **Put the hand brake on.**
- **Switch the tractor off.**
- **Remove the keys from the ignition.**
- **Make sure that the tractor cannot move unexpectedly.**

WARNING

Read the manual supplied with the PTO shaft carefully. Do not use PTO shafts that are different to that supplied with the machine.

The dealer adapts the PTO shaft to ensure it is compatible with the specific tractor.

DANGER

The PTO shaft must be connected first to the machine PTO, and then to the tractor PTO.
This helps to prevent the possibility of lethal “whiplash” in the event that the tractor's PTO is unexpectedly activated.
The PTO shaft's constant velocity joint must be facing the tractor's PTO.

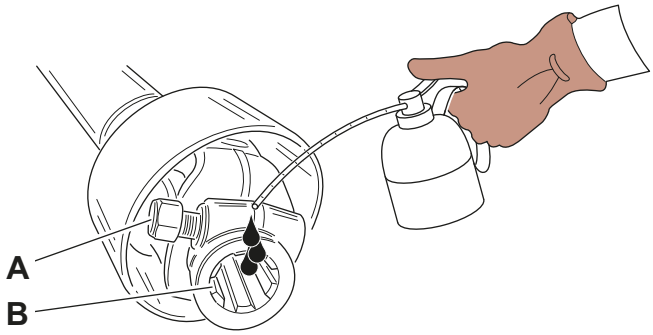
- Connect the protection device safety chains: connect one chain to a part of the tractor and connect the other to the top link bush or to the PTO guard.

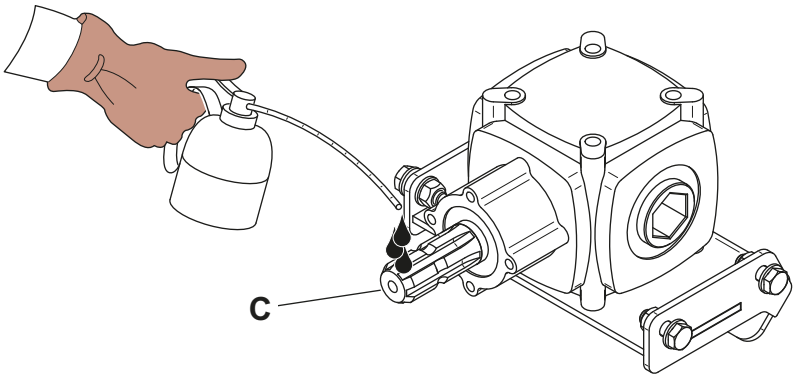
Connecting the shaft to the machine

NOTICE

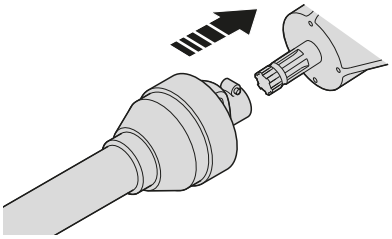
The PTO shaft is normally secured to the machine PTO by means of a retaining screw; however, in certain cases it may be necessary to use a coupling collar or a push-button release coupling. In this case, the mounting proceed is as described in the following paragraph.

The PTO shaft is normally already connected to the machine. However, in the event it is necessary to replace the PTO shaft, or carry out maintenance work, it must be reconnected to the machine .





- Carefully clean and lubricate the coupling on the PTO shaft (**B**) and the corresponding joint on the machine (**C**).
- Loosen and remove the retaining screw (**A**).



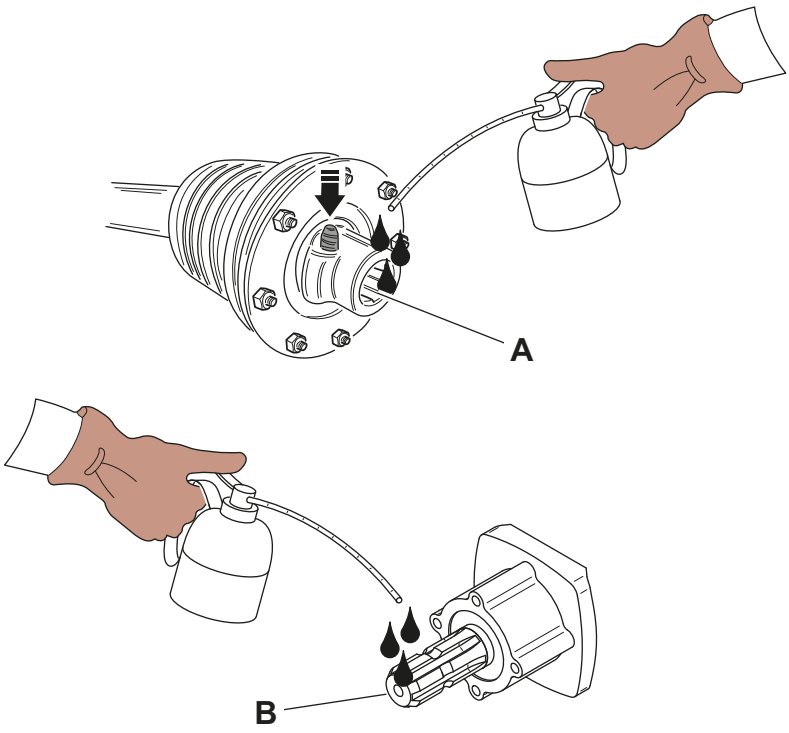
- Push the PTO shaft onto the joint on the machine.
- Re-insert the retaining screw (**A**). Move the PTO shaft gently back and forth until the retaining screw is inserted correctly in the groove on the joint.
- Tighten the retaining screw (**A**), applying a torque of approximately:
  - 54-60 Nm for M10 screws
  - 93-101 Nm for M12 screws
  - 146-155 Nm for M14 screws

Connecting the shaft to the tractor

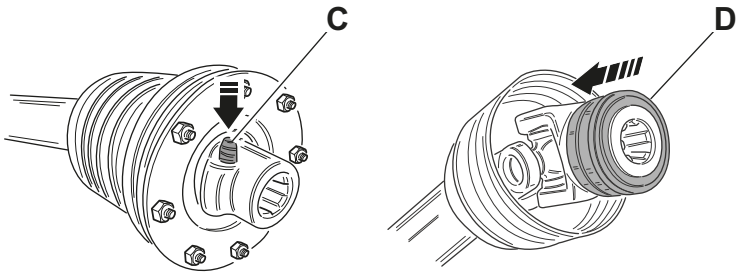
NOTICE

Before connecting the PTO shaft to the tractor power take-off, check that the rotation speed and direction are compatible with the those of the device.

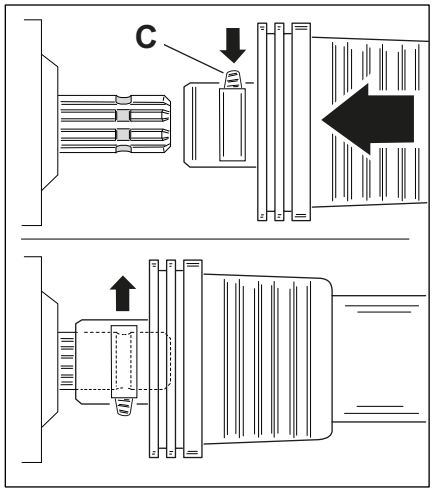
Connect the PTO shaft to the power take-off of a tractor running at 540 rpm.



- Carefully clean and lubricate the coupling on the PTO shaft (**A**) and the power take-off (**B**).



- Press button (**C**) or allow the PTO collar (**D**) to slide as shown in the figure.

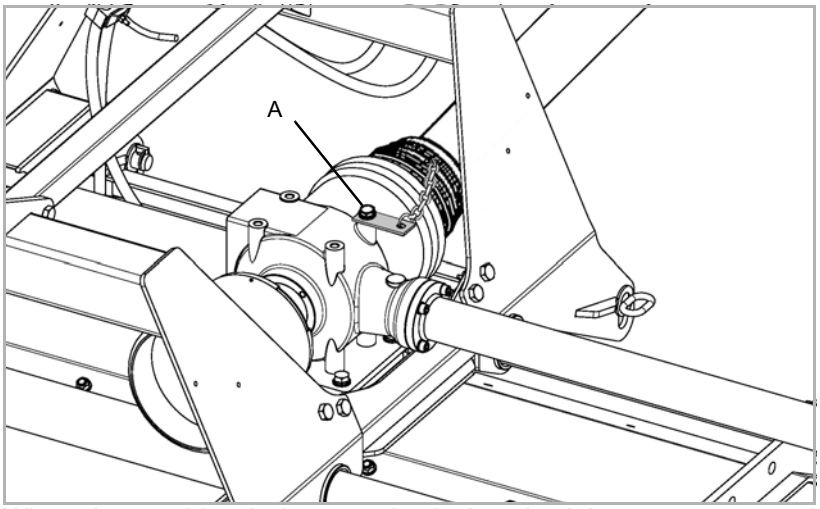


- Slide the coupling onto the power-take-off until the shaft of the push-button (**C**) or the bearings in the collar are aligned with the groove on the shaft.

- Release the push-button or the collar while moving the coupling gently.
- Make sure that the push-button or collar bearings are inserted correctly in the groove on the shaft, and that the PTO shaft is connected correctly.

Once the two ends of the PTO shaft have been connected, check that the two semi-protection panels rotate freely and independently, then connect the supporting chains for the protection tubes.

The carrier chain of the PTO drive shaft guard tube on the implement side may be attached to the hole in the bracket (**A**) on the assembly.



When the machine is in use, check that the joints are connected correctly at regular intervals.

NOTICE

If it is necessary to use a different tractor, it may also be necessary to replace or adapt the PTO joint.
In this case, check that the dimensions of the PTO shaft are compatible and that its length is suitable for use with the specific tractor.

The length of the two axle shafts must be such that, during operation:

- the PTO shaft tubes overlap by at least 1/3 of their length;
- they never separate, irrespective of the working conditions;
- the ends of the axle shafts never come into contact with the end stops, irrespective of the working conditions;
- the difference between the lengths of the protection tubes and the axle shaft tubes must be maintained, making sure that maximum coverage of the moving parts is guaranteed at all times.

NOTICE

If it is necessary to shorten the PTO shaft, contact your local dealer or an authorised service centre; do not attempt to carry out this operation yourself.

Hydraulic connection

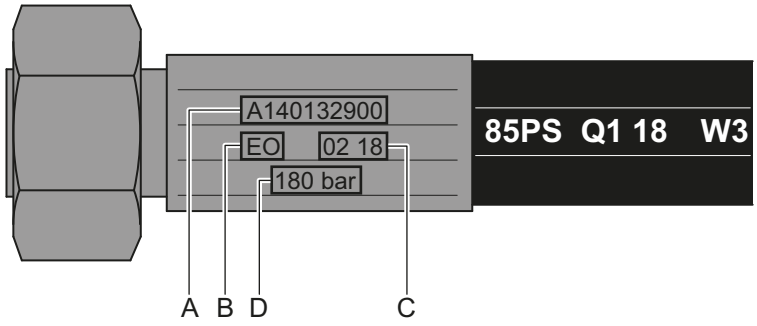
WARNING

Stop the tractor and release the pressure from the hydraulic system before starting any work on the hydraulic system. Hydraulic oil is dangerous, avoid all contact. Furthermore, highly pressurised oil easily penetrates skin and clothes and can cause serious injury.

NOTICE

The hydraulic system hoses are marked with the following information: maximum pressure, manufacturer, date of manufacture, reference code.

The following is an example of how this information is indicated on a hydraulic hose.



Reference	Meanings
A	Hydraulic hose code number
B	Manufacturer's marking
C	Date of manufacture of the hydraulic hose
D	Maximum working pressure

For more information about connecting the hydraulic hoses to the tractor, refer to the hose connection labels applied to the machine. Each hose is identified by clamps that vary in colour depending on its use.

Connect the quick release couplings of the hydraulic top link adjustment system lines to the corresponding couplings of the hydraulic distributor on the tractor.

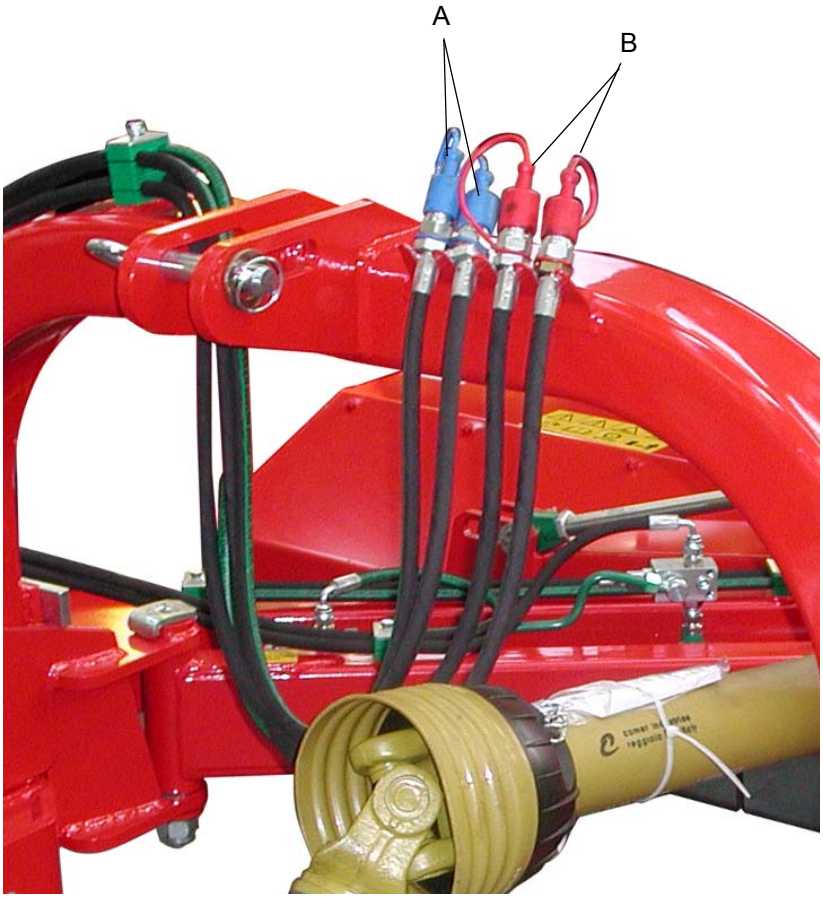
NOTICE

Check that the type of hydraulic connection between the machine and the hydraulic couplers on the tractor will not allow the top link to move when the relative distributor is not operated.

To connect correctly, refer to the coloured caps protecting the quick connectors of the topper hydraulic hoses.

A) Blue caps: hoses for implement adjustment function

B) Red caps: hoses for implement rotation.



Adjustments

WARNING

When carrying out these operations, personnel may be exposed to the risk of crushing, cutting and amputation: proceed with the utmost care and implement all the measures necessary to avoid hazardous situations.

WARNING

The machine and its components must be immobilised and placed on suitable supports.

WARNING

When carrying out the adjustments, always work on a flat, horizontal solid surface.

Adjusting the working height

Setting the working height of the implement correctly will maximize productivity and ensure better results.

In order to work correctly, the implement must be parallel to the ground and the rotor must operate at the right distance from the soil.

The PTO of the tractor must also be as horizontal as possible while the implement is in use.

To adjust the working height, proceed as follows:

- set the roller position as required
- lower the lift arms of the tractor to bring the roller or the wheels into contact with the ground
- adjust the height of the lift arms so that the frame of the implement is parallel with the ground, as described previously
- check the distance between the blades and the ground: in general, this should be approximately 6 cm when the implement is set correctly

NOTICE

Increase the distance from the ground of the blades when working in rocky or uneven terrain conditions.

CAUTION

The blades must never be less than 3 cm from the ground.

Adjusting the position of the roller

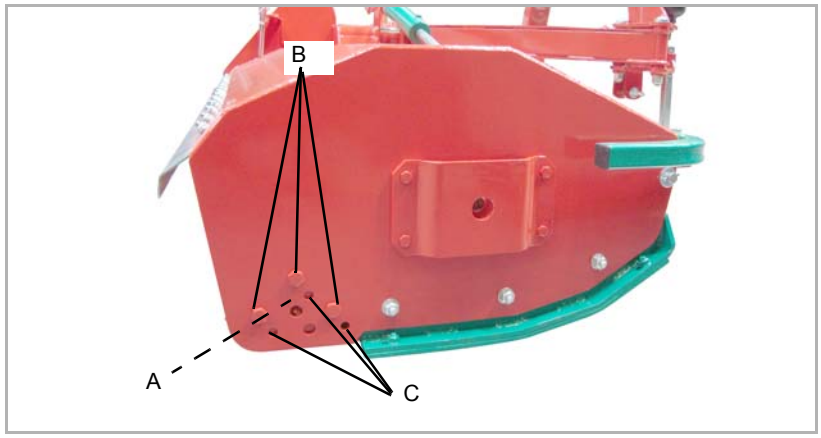
NOTICE

The blades must be at least 3 cm from the ground when in operation.

NOTICE

The skids must be at least 2 cm from the ground when in operation.

Proceed as follows:



- Raise the machine and block it in position.
- Undo and remove the screws (**B**), with the relative washers and nuts, fastening the roller (**A**) at the ends.
- Adjust the position of the roller by refitting the screws (**B**) into one of the other position setting holes (**C**), and then refit the relative washers and nuts.
- Tighten all the nuts.

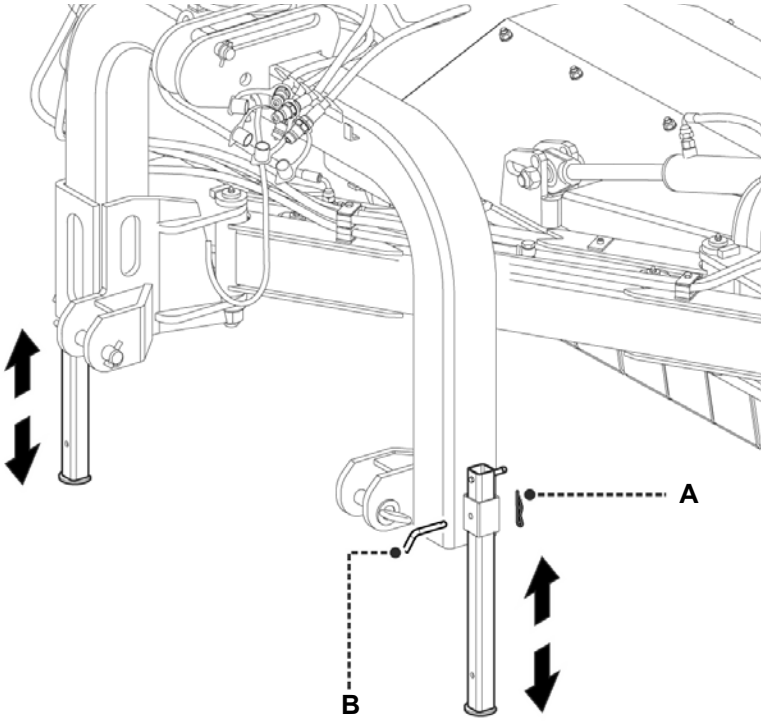
NOTICE

The roller must be adjusted in the same way on both sides.

Adjustment of the supporting feet

The implement is equipped with two adjustable feet near the tractor hitch to ensure that the implement itself stands securely on the ground.

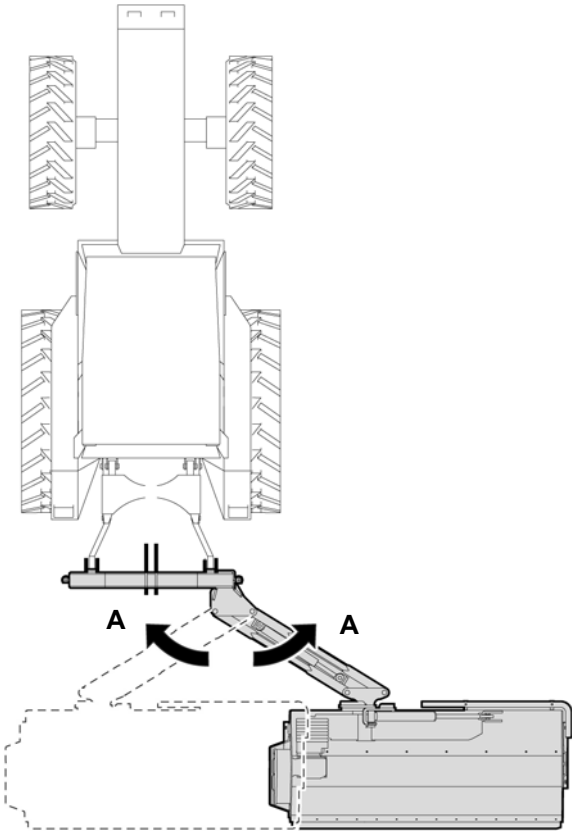
Proceed as follows:



- Remove the safety pins (**A**).
- Remove the pins (**B**).
- Move the foot into the required position and refit the pins (**B**) and the relative safety pins.

Adjusting lateral position

The three-point linkage of the implement allows a certain degree of lateral adjustment (**A**) where needed for the job in hand.
Simply use the relative function of the tractor distributor to adjust the lateral position as needed.

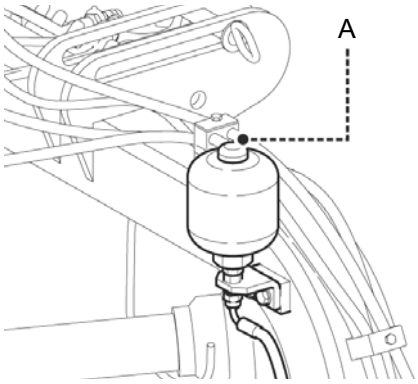


WARNING

This procedure must be carried out with the implement lifted from the ground to avoid damaging the implement itself.

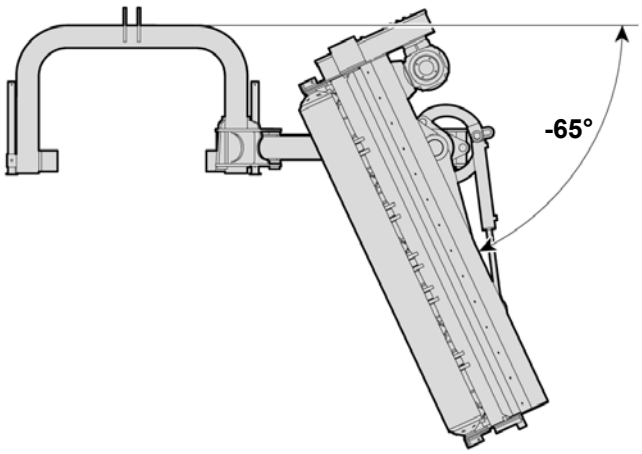
Obstacle safety

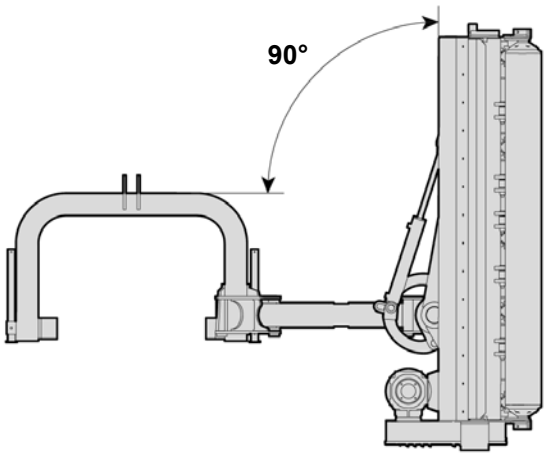
The implement is equipped with an automatic device (**A**) which allows the arms to fold back partially in the event of a collision with an obstacle while working to absorb the impact.



Adjusting inclination angle

The inclination angle of the implement is adjustable to suit the job in hand.
Simply use the relative function of the tractor distributor.
The inclination angle may be set from -60° to 90° relative to the horizontal.





Uncoupling the machine from the tractor

WARNING

Turn off the engine, engage the parking brake, and remove the ignition key.
Disconnect the machine in a level and stable area that can only be accessed by authorised operators, in such a way as not to create an obstacle. It will make it easier to reconnect the machine to the tractor if it is left in a position where it will remain stable when it is disconnected.

Proceed as follows:

- place the machine, with its frame horizontal, on a solid, flat, horizontal base;
- disconnect the PTO shaft from the tractor;
- disconnect any hydraulic hoses from the tractor;
- disconnect any electrical cables;
- disconnect the machine three-point linkage from the tractor.

Storing the machine at the end of season

WARNING

Do not allow children to play on or around the machine. Ensure that unauthorised personnel do not have direct access to the storage area. Metallic edges and working tools can cause serious injuries.

NOTICE

Before storing the machine, it is recommended to carry out a number general maintenance operations, which will help to ensure its proper functionality when the new harvest begins.

The machine must be parked on solid, flat, horizontal base, in covered, dry location, and immobilised by means of suitable supports; all the moving parts must locked in position so that they cannot endanger people or animals.

Before placing it in storage, we recommend:

- Disconnecting the machine from the tractor (See “Disconnecting the machine from the tractor”).
- Eliminating all traces of dust and product from the machine and its parts.

NOTICE

Avoid spraying pressurised jets of water onto the seals of the bearings.

- Check the tightening torque on the nuts and bolts and hydraulic couplings.
- Check the functionality of all the machine's parts and replace them

with original spare parts if necessary.

- Check that the PTO shaft is properly connected to the machine and that it is resting on the dedicated support with all the protection elements intact and working properly.
- Grease all the components fitted with greasers.
- Check the oil level in the unit and the lateral transmission.
- Lubricate all the sliding surfaces, especially the hydraulic cylinders' rods.
- Apply an anti-rust treatment to all the unpainted parts.
- Protect any electrical wiring connectors using the appropriate caps.
- Protect any hydraulic hose quick release couplings using the appropriate caps.

Putting the machine back into service

NOTICE

Before using the machine after an extended period of inactivity, carefully check to make sure that its main components are working properly.

In particular, carry out the following operations:

- Check for any liquid leaks.
- Check the general conditions of the hydraulic hoses.
- Check the functionality of all the safety devices.
- Lubricate all the greasing points.
- Check the oil level in the unit and the lateral transmission.
- Carry out any necessary maintenance operations.
- Check that the PTO shaft is correctly installed, and that all the PTO guards are undamaged and working properly.
- Check the tightening torque of the fastening screws.
- Check the condition of the tools.
- Connect the machine to the tractor (See “Coupling the machine to the tractor”).

Placing the machine in storage

WARNING

During the storage phase, make sure that the machine is in the safe condition.

WARNING

In order to avoid potential hazards for individuals and the environment, be sure to disconnect and render all the power sources unusable (electrical, pneumatic, hydraulic, etc.) and drain any liquids (lubricants, oils, etc.) that may be present.

WARNING

Store the machine in a suitable area that cannot be easily accessed, and that's properly fenced off in order to prevent anyone from gaining access to it.

Machine demolition

- If necessary, the individuals responsible for carrying out the machine's demolition operations must implement a “safety plan” in order to protect all the individuals directly involved, and must rigorously apply all the current safety regulations applicable to work environments and mobile work sites.
- During the demolition activities, sort all the components according to their chemical characteristics, and dispose of them in accordance with the current applicable regulations.

CAUTION

Do not dispose of non-biodegradable products, lubricating oils and non-ferrous materials (rubber, PVC, resins, etc.). These materials must be disposed of in accordance with the current regulations.

Machine disposal

CAUTION

Dispose of the machine by sorting the demolished parts based on their materials, and dispose of each of the components in accordance with the current waste disposal regulations in the machine's country of use.

Recommenda-tions for use and operation

WARNING

The incidence of accidents caused by the use of machinery or tools depends on many factors that cannot always be prevented and controlled. Some accidents can depend upon unforeseeable environmental factors, while others mainly depend upon the operator's conduct.

WARNING

In addition to being authorised and properly trained, if necessary, the operator must also perform certain manoeuvres in order to identify the main functions and controls when using the machine for the first time. Prior to use, the operator must check that the safety devices are properly installed and functioning. In addition to meeting these requirements, the operator must also apply all the current safety regulations.

- The operators must read and fully understand all the contents of the user manual in order to become familiar with all the machine or tool controls and operating functions.
- The User Manual must be kept in a known and easily-accessible location in order to ensure that it is always available for consultation.

CAUTION

Although the machine has been designed and manufactured to operate under harsh environmental conditions, the scheduled maintenance interventions must nevertheless be carried out regularly. Proper maintenance will ensure the machine's best possible performance, an extended service life, and constant compliance with the safety requirements.

WARNING

In addition to personal experience and knowledge of all the safety details, the suggestions and instructions contained herein must also be taken into account in order to improve the safety conditions while the machine is in function. Check that the PTO shaft is correctly installed, and that all the PTO guards are undamaged and working properly.

DANGER

The PTO shaft must be connected first to the machine PTO, and then to the tractor PTO. This helps to prevent the possibility of lethal “whiplash” in the event that the tractor's PTO is unexpectedly activated.

WARNING

Never use the PTO shaft as a pedestal when performing any type of operation.

Always disable the machine functions by deactivating the PTO when transporting it, especially on public roads.

Make sure the nuts and bolts used to secure the main machine parts are tightened correctly at regular intervals.

Check that the hydraulic system's hoses are undamaged and do not show any signs of oil leaks.

Check the work area in order to assess the most suitable conditions (slope, roughness of the terrain etc.) for operating the machine safely.

Make sure that all the lighting devices installed on the tractor function correctly in order to allow them to be utilised under conditions of reduced visibility, at night, and on the road.

In the case of collisions with foreign objects, stop the machine, turn off the tractor engine, check for any damage incurred, and carry out the necessary repairs.

Do not allow unauthorised personnel to approach the work area while the machine is in use. If necessary, stop the machine immediately and instruct the unauthorised individuals to leave the hazardous areas.

Road travel

WARNING

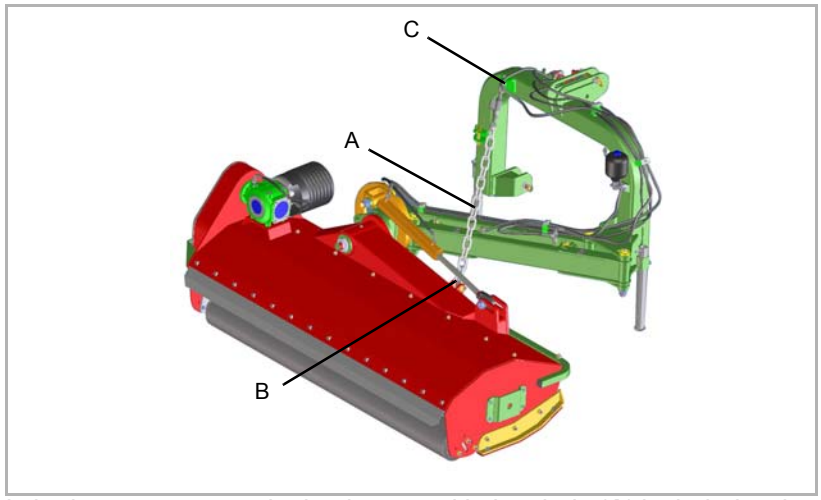
Check that the width of the implement is compatible with the applicable regulations regarding transport of agricultural equipment on the road.

- The tractor driver must be legally authorised to perform the duties assigned to him/her.

WARNING

The implement comes with a chain to be fixed to the structure while driving on the road to avoid movements that could cause damage or accidents.

If it is necessary to load the implement onto a truck, ensure that all parts are positioned safely and mechanically immobilized to prevent the risk of damage or danger.
The implement may be transported either horizontally or vertically when connected to the tractor.



In both cases, secure the implement with the chain (**A**) included, using the relative spring pin (**B**) and clip (**C**).

WARNING

Only a part of the full length of the chain must be used to ensure the necessary chain tension to secure the implement. Fit the pin on the implement frame through the appropriate chain link to use the correct length of chain.

The end of the chain secured to the frame when the implement is transported must be placed on the hoop of the top link while the implement is in use, as shown in the figure.

CAUTION

Before allowing the tractor to circulate on public roads with the machine connected to it, ensure that the following road use regulations are respected:

- **installation of illumination, indicator and protection devices**
- **respect of transport widths/weights, loads per axle, load-bearing capacity of tyres and permitted total weights**
- **the tractor steering capacity must not be limited; a sufficient loading weight must be applied to the steering axle, even when the machine is in the closed position.**

- Check that all the moving parts on the machine have been locked in position correctly, in order to avoid hazardous situations during transport on public roads.
- Centre the machine with respect to the headstock, in order to reduce the overall dimensions during road transport, and make sure that the tractor and number plate lights are clearly visible. If it is not possible to see them clearly, mount the lights and the number plate on the machine.
- Remove any residues of the working process, stones and clods of earth in order to avoid leaving them on the public roads.
- Make sure the tractor's PTO is disengaged.

WARNING

Drive carefully and moderate your speed on rough roads. Take curves with caution in order to avoid compromising the machine's stability.

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General warnings

Before using the machine you must have read and understood the preceding sections, in particular the section entitled "Safety".

WARNING

Before starting and operating the implement, and during operation, check the danger zone surrounding the implement itself. Maintain appropriate safety distances in relation to the overall dimensions of the implement with any accessories installed.

WARNING

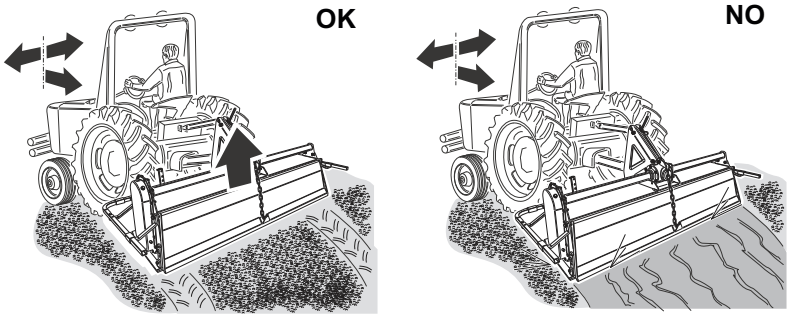
Before starting, unfolding and operating the implement, and during operation, check the danger zone surrounding the implement itself. Ensure good visibility.
Only start if there are no persons, animals or objects in the danger zone.
In unfavourable circumstances, objects may be thrown from the implement at high speed.

WARNING

Do not lift the implement excessively when the transmission is running: this may cause the PTO drive shaft to tilt at an excessively large angle and fail, causing serious injury to the operator and damage to the implement itself.
The maximum permitted tilt angle of the PTO drive shaft is 25°.
When lifting, always ensure that the PTO is disconnected when this value is approached or when there is a risk of exceeding it.

WARNING

The implement must only be in the working position when the vehicle is moving forwards. The implement must be raised when reversing.
Keeping the implement in the working position while reversing can seriously damage the implement itself.



WARNING

Pay particular attention when using on uneven and/or sloping terrain, or when close to ditches or banks.
Adapt the speed and driving style to the conditions of the terrain.
Always check the stability of the tractor and implement.
Using the implement without ensuring the stability of the tractor/implement combination may cause serious accidents or death.

WARNING

Make sure that there is no scrap or rubble (wood, metal, plastic, glass etc.) in the work area, which may be projected from the implement or damage the implement itself.

WARNING

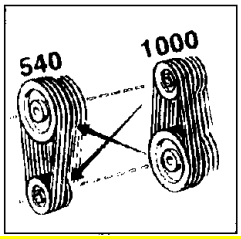
Do not perform lateral movement when the implement is in contact with the ground.
This could lead to stress being exerted which could cause damage.

- **Lift the implement**
- **Operate the distributor to adjust the implement as required.**
- **Lower the implement**

CAUTION

Do not use the hydraulic side-shift of the machine when it is resting on the ground.

This could overload the bearings of the roller, potentially causing damage.
For correct use, first raise the machine, carry out the shift, then lower the machine back onto the ground and continue working.



CAUTION

Make sure the pulleys are positioned correctly in relation to the PTO speed.
If they are not positioned properly, contact an authorised service centre to have them configured.

NOTICE

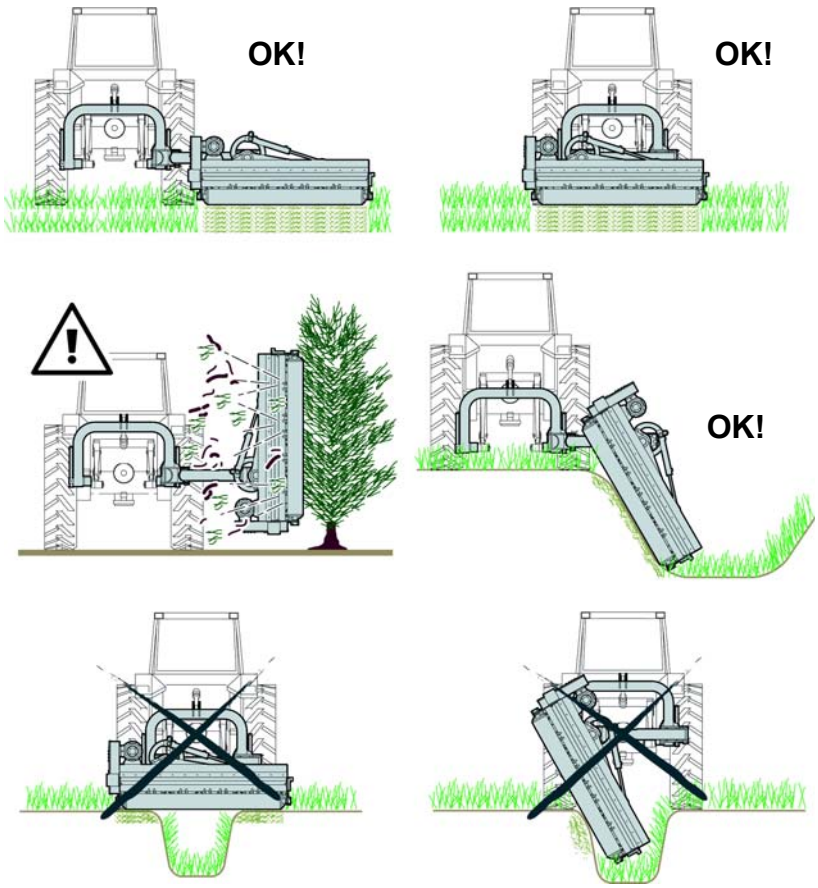
Use the topper in the central configuration horizontally only. Only use the chopper in an inclined position when it is laterally extended.

DANGER

Never use the implement with the tractor straddling a ditch.

WARNING

The topper may be used in a vertical position for cutting hedges.
Ensure that there are no persons, animals or property in the immediate vicinity, to avoid causing injury or damage.
As the risks associated with projected objects and trimmings cannot be limited when using the machine for cutting hedges, all persons, animals and objects must be kept out of the danger area.



DANGER

Overturning hazard.
Never allow the implement to take the weight of the tractor/ implement combination to maintain stability when working on inclined surfaces (ditches, slopes etc.), as this may cause the tractor to overturn.



WARNING

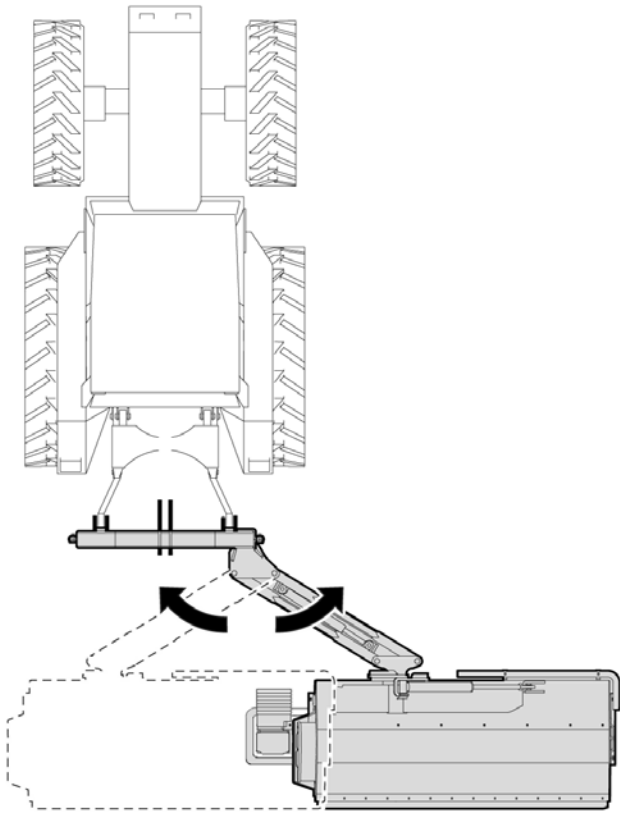
Contact between PTO drive shaft and implement carrier structure.
Work with caution to avoid contact with the PTO drive shaft at the adjustment limits of the implement.

When the implement is used in combination with certain tractors and in extreme conditions, the PTO drive shaft (**A**) may come into contact with the lateral joint (**B**) of the top link.
This may occur in the following conditions while the implement is at maximum lateral adjustment:

- when implement is inclined
- when the tractor lift is used

In these conditions, take particular care to prevent the movements of the PTO drive shaft from causing the shaft itself to come into contact with the structure as the implement approaches its maximum permitted travel.

Contact may cause severe damage to the PTO drive shaft and the implement and is dangerous.



Starting up

- Raise the implement slightly so that it is not in contact with the ground when it starts.
- Engage the PTO and increase rotation speed slowly.
- Lower the implement to the working position is reached and increase the PTO speed progressively to the required working speed.
- Move off with the tractor and maintain an appropriate, moderate speed for the terrain conditions.

Working speed

Adjust ground speed in accordance with the following criteria:

- the type and conditions of the material to be cut
- the desired fineness of the worked material

NOTICE

The higher the working speed, the lower the quality of the work.

NOTICE

Working at an excessive ground speed may damage the implement and produce unsatisfactory results.

Obstruction

Working with excessively dense, wet vegetation or at an excessive ground speed may cause the implement to clog.

Clogging causes the motor speed of the tractor to drop and poor chopping results.

At the first signs of obstruction:

- reduce the working speed of the tractor
- raise the implement slightly

If the implement does not clear automatically, see the section “Maintenance”.

Finishing work

To stop the implement, reduce the tractor's engine speed and remove the PTO.

WARNING

The implement rotor continues to turn by inertia for a few moments after the PTO is disengaged. Wait until all parts have stopped moving completely.

Vibration and noise

If any abnormal noise or vibration is noted during use, stop the implement immediately and, once safe to do so, identify and eliminate the cause. If you cannot resolve the issue yourself, contact your dealer.

WARNING

Periodically check that the safety guards are in place and installed correctly on the implement.
Periodically check the condition of the safety guards and replace them immediately if they are damaged.
In particular:

- **the PTO cover**
- **the drive shaft guards**
- **the front and side safety guards**

Recommendations for adjustments

WARNING

Except when expressly specified, every intervention and adjustment must be performed with the PTO disengaged, the tractor's engine off, the parking brake engaged, and the ignition key removed and in the driver's possession.

WARNING

All personnel authorised to carry out adjustments must take all the necessary precautions to perform them correctly and in accordance with the current workplace safety regulations.

WARNING

Upon completing the operations, and before reactivating the machine, check to make sure that no tools, rags, or other materials have been left near the machine's moving parts or in hazardous areas.

Recommendations for maintenance

WARNING

While the implement has been designed and built to operate in harsh environmental conditions, all scheduled maintenance procedures must be carried out exactly as indicated. Proper maintenance will ensure the machine's best possible performance, an extended service life, and constant compliance with the safety requirements.

WARNING

Before carrying out any maintenance operations, activate all the required safety devices and, if necessary, advise any other personnel working on the machine or in its vicinity. In particular, be sure to properly demarcate the surrounding areas and to prevent access to any devices that, if activated, could create unexpected hazards or risks to the health and safety of individuals.

WARNING

Except when expressly indicated, every intervention must be performed with the PTO disengaged, the tractor's engine off, and the ignition key removed and in the driver's possession. Persons authorized to perform the aforementioned work must take all measures necessary to ensure the safety of all persons involved in compliance with applicable work safety legislation.

Recommendations for part replacements

WARNING

Except when expressly indicated, every intervention must be performed with the PTO disengaged, the tractor's engine off, and the ignition key removed and in the driver's possession. All personnel authorised to perform the aforementioned interventions must take the necessary precautions to ensure the safety of everyone involved, in full compliance with the current workplace health and safety requirements.

- Before carrying out any part replacement operations, activate all the required safety devices and, if necessary, advise any other personnel working on the machine or in its vicinity.
- If any worn components need to be replaced, only use original spare parts. The manufacturer shall bear no responsibility for any personal injuries or property damage resulting from the use of non-original spare parts and any non-routine or emergency interventions that may have modified the safety requirements without the manufacturer's express authorisation. To order spare parts, follow the instructions provided in the spare parts catalogue.

Scheduled maintenance intervals chart

The chart indicates all the maintenance intervals recommended by the manufacturer in order to maintain the machine in a good work condition and to prevent the excessive wear of each individual component.

The intervals indicated are for moderate use of the implement. Shorter service intervals are necessary in the case of more intensive usage (e.g. use by contractors.
Shorter service intervals may also be necessary in extreme operating conditions, such as when working in a very dusty environment.

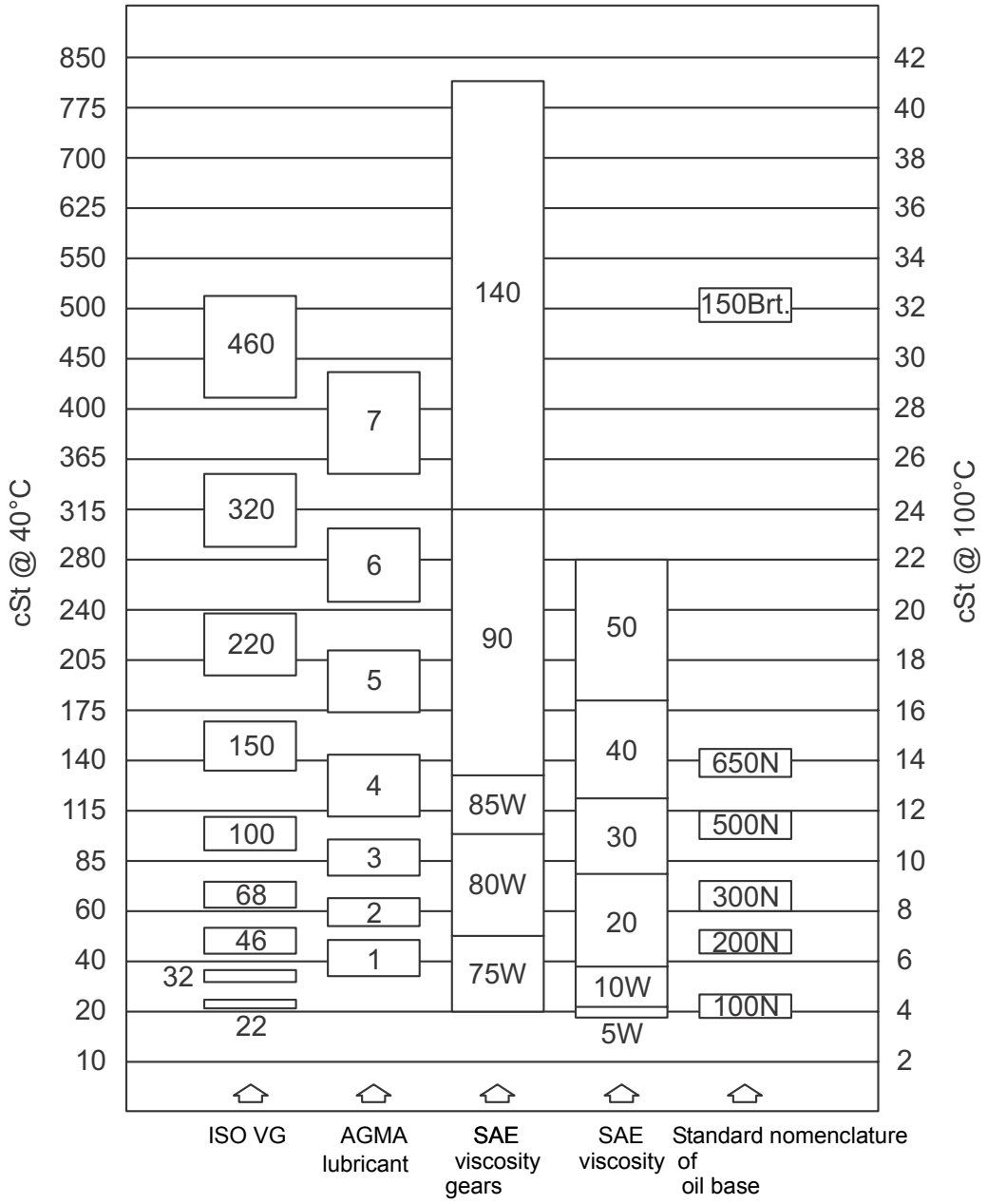
	after the first few hours of use	once a day	after 30 hours of use	after 100 hours of use	after 250 hours of use	once a season	when necessary	when worn	lubricate / oil / grease	check	replacement	cleaning
General details												
Re-tighten all screws	•					•	•					
Visual inspection	•	•										
Hydraulics												
Hydraulic hoses, every 3 years											•	
Hydraulic hoses, in general		•					•			•		
							•	•			•	
Tightening hydraulic connections	•					•	•			•		
Drive belts												
Check tension	•		•				•			•		
Replacement							•				•	
Blades												
Fixing devices on the rotor		•								•		
Conditions, wear		•								•		•
Lubrication												
Rotor bearings			•						•			
Roller bearings			•						•			
Lateral movement joints			•				•		•			
Rotation joint			•				•		•			
Movement and rotation jack joints			•				•		•			
Drive shaft[(1)]							•		•			
Multiplier unit oil		•					•			•		
				•	•						•	

[(1)] Refer to maintenance advice laid out in the documentation provided with the drive shaft.

Lubricant table

Important
Use oils and lubricants with specifications identical to those indicated in the table.

Specifications	Parts to lubricate	Working width	
		200	230
ENI BLASIA 320 ISO-L-CKD DIN 51517 teil 3 CLP	Upper transmission	-	-
	Gearbox	2.1 lt	2.1 lt
NLGI 2 DIN 51825 K2K-20	Drive shaft	-	



Tightening torque table

Check all the fastening elements of the machine's various components with a torque spanner. Respect the torque values indicated in the table..

CAUTION

Replace any fastening elements that have deteriorated.

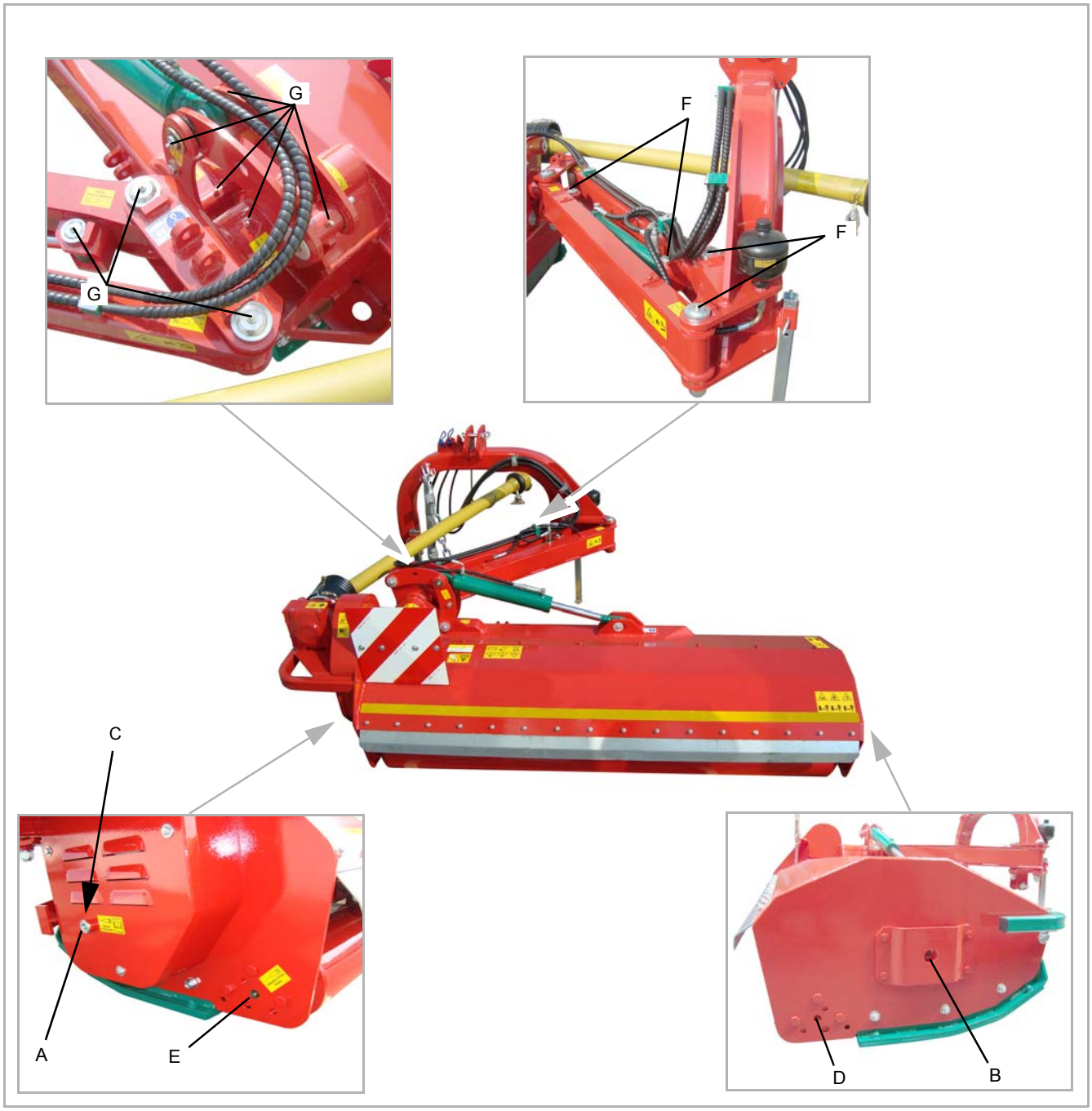
NOTICE

These values were obtained experimentally, and for serial applications it is recommended to check them by conducting field tests.

Classe di resistenza	8.8						10.9						12.9		
Materiale	SS400, S20C						S43C, S48C						SCr435, SCM435		
Tipo di filettatura	Filettatura a passo "grosso"			Filettatura a passo "fine"			Filettatura a passo "grosso"			Filettatura a passo "fine"			Filettatura a passo "grosso"		
Unità di misura / Diametro	N-m	kgf-m	ft-lbs	N-m	kgf-m	ft-lbs	N-m	kgf-m	ft-lbs	N-m	kgf-m	ft-lbs	N-m	kgf-m	ft-lbs
M6 (6 mm, 0.24 in.)	8.5 ÷ 10	0.9 ÷ 0.1	5.8 ÷ 6.9				12 ÷ 15	1.2 ÷ 1.5	8.3 ÷ 10.4				14 ÷ 18	1.4 ÷ 1.8	9.7 ÷ 12.5
M8 (8 mm, 0.31 in.)	20 ÷ 25	2.0 ÷ 2.5	13.8 ÷ 17.3	22 ÷ 27	2.2 ÷ 2.7	15.2 ÷ 18.7	29 ÷ 35	2.9 ÷ 3.5	20.1 ÷ 24.2	31 ÷ 38	3.2 ÷ 3.9	21.5 ÷ 26.3	34 ÷ 42	3.4 ÷ 4.3	23.5 ÷ 29.1
M10 (10 mm, 0.39 in.)	40 ÷ 50	4.1 ÷ 5.1	27.7 ÷ 34.6	42 ÷ 53	4.3 ÷ 5.4	29.1 ÷ 36.7	57 ÷ 70	5.8 ÷ 7.1	39.5 ÷ 48.5	59 ÷ 74	6.0 ÷ 7.5	40.8 ÷ 51.2	68 ÷ 84	6.9 ÷ 8.6	47.1 ÷ 58.1
M12 (12 mm, 0.47 in.)	69 ÷ 85	7.0 ÷ 8.7	47.8 ÷ 58.8	72 ÷ 89	7.3 ÷ 9.1	49.8 ÷ 61.6	97 ÷ 119	9.9 ÷ 12.1	67.1 ÷ 82.4	101 ÷ 125	10.3 ÷ 12.7	69.9 ÷ 86.5	116 ÷ 143	11.8 ÷ 14.6	80.3 ÷ 99
M14 (14 mm, 0.55 in.)	110 ÷ 135	11.2 ÷ 13.8	76.1 ÷ 93.4	118 ÷ 148	12.0 ÷ 15.1	81.7 ÷ 102.5	154 ÷ 190	15.7 ÷ 19.3	106.6 ÷ 131.5	166 ÷ 208	16.9 ÷ 21.2	114.9 ÷ 144	185 ÷ 228	18.8 ÷ 23.2	128 ÷ 157.8
M16 (16 mm, 0.63 in.)	128 ÷ 216	13.1 ÷ 22.0	88.6 ÷ 149.5	180 ÷ 226	18.4 ÷ 23.1	124.6 ÷ 156.4	240 ÷ 298	24.5 ÷ 30.4	166.1 ÷ 206.3	253 ÷ 318	25.8 ÷ 32.4	175.1 ÷ 220.1	287 ÷ 357	29.3 ÷ 36.4	198.7 ÷ 247.1
M18 (18 mm, 0.71 in.)	235 ÷ 290	24.0 ÷ 29.6	162.7 ÷ 200.8	248 ÷ 310	25.3 ÷ 31.6	171.3 ÷ 214.6	330 ÷ 402	33.7 ÷ 41.2	228.4 ÷ 278.3	349 ÷ 436	35.6 ÷ 44.5	241.6 ÷ 301.8	397 ÷ 490	40.5 ÷ 50	274.8 ÷ 339.2
M20 (20 mm, 0.78 in.)	332 ÷ 413	33.9 ÷ 42.1	229.8 ÷ 285.9	347 ÷ 436	35.4 ÷ 44.5	240.2 ÷ 301.8	467 ÷ 580	47.6 ÷ 59.2	323.3 ÷ 401.5	489 ÷ 614	49.9 ÷ 62.6	338.5 ÷ 425	561 ÷ 697	57.2 ÷ 71.2	388.4 ÷ 482.5
M22 (22 mm, 0.86 in.)	454 ÷ 568	46.3 ÷ 57.9	314.3 ÷ 393.2	474 ÷ 597	48.4 ÷ 60.9	328.1 ÷ 413.3	639 ÷ 798	65.2 ÷ 81.4	442.4 ÷ 552.5	666 ÷ 840	67.9 ÷ 85.7	461.1 ÷ 581.5	767 ÷ 958	78.2 ÷ 97.7	531 ÷ 663.2
M24 (24 mm, 0.94 in.)	574 ÷ 714	58.6 ÷ 72.8	397.4 ÷ 494.3	617 ÷ 781	62.9 ÷ 79.7	427.1 ÷ 540.7	808 ÷ 1004	82.4 ÷ 102.4	559.4 ÷ 695.1	868 ÷ 1098	88.5 ÷ 112	600.9 ÷ 760.1	969 ÷ 1204	98.2 ÷ 122.8	670.8 ÷ 833.5
M27 (27 mm, 1.06 in.)	840 ÷ 1050	85.7 ÷ 107.1	581.5 ÷ 726.9	897 ÷ 1139	91.5 ÷ 116.2	621 ÷ 788.5	1181 ÷ 1477	120.5 ÷ 150.7	817.6 ÷ 1022.5	1261 ÷ 1602	128.7 ÷ 163.5	873 ÷ 1109.1	1418 ÷ 1772	144.6 ÷ 180.8	981.7 ÷ 1226.7
M30 (30 mm, 1.18 in.)	1146 ÷ 1429	116.9 ÷ 145.8	793.4 ÷ 989.3	1248 ÷ 1590	127.3 ÷ 162.2	864 ÷ 1100.8	1611 ÷ 2009	164.4 ÷ 205	1115.3 ÷ 1387.4	1754 ÷ 2236	178.9 ÷ 228.1	1214.3 ÷ 1548	1993 ÷ 2411	197.2 ÷ 246	1338.2 ÷ 1669.1

Lubricating and greasing

Greasing point diagram



A) LH rotor bearing
B) RH rotor bearing
C) Plug
D) RH roller bearing
E) LH roller bearing
F) Lateral adjustment joint
G) Lateral adjustment joint

NOTICE

The grease nipple for the rotor bearing on the lateral transmission side is located under to the lower cap on the transmission cover.

WARNING

Make sure the tractor's PTO is disengaged.
Turn off the engine, engage the parking brake, and remove the ignition key.

Lubricate all points of the implement which require lubrication.
Usually, grease points are situated near joints, sliding surfaces and bearings.
For this reason, please check the entire implement for greasing points.

NOTICE

Before lubricating, thoroughly clean the parts involved and the greasers to prevent any impurities from mixing with the lubricant.

CAUTION

Do not mix different types of lubricant.
Use of unauthorised lubricant mixtures may damage the machine components.

CAUTION

Take care to use the correct quantities.
Check the levels at regular intervals.
If the levels are too low or too high it may damage the machine.

Lubricating bearings

The bearings should be lubricated on a regular basis:

- as per the maintenance table,
- after particularly heavy duty usage,
- at least once per season.

Bearings that do not need maintenance work should not be lubricated.

Greasing the PTO drive shaft

See the service instructions in the documentation included with the PTO drive shaft.

Safety when handling oils and lubricants

WARNING

The additives present in lubricants may have harmful effects on health.

Protect the skin with cream or safety gloves when handling lubricants. Lubricants may be harmful to health.
Seek medical immediate attention in the event of any skin injury caused by lubricants.

Never use lubricants to clean hands. Shavings and other materials present in these substances can cause injury.

Change clothing that has been contaminated with lubricant as soon as possible. Lubricants may be harmful to health.

Cleaning of machine

As a rule, clean the implement thoroughly at the end of each work day or shift.

CAUTION

Clean the machine with the tractor motor switched off and with the machine itself shut off safely.

In order to properly clean the machine, follow the instructions below.

- Cover all the electrical and hydraulic connections with the appropriate plugs.
- Do not aim pressurized water at rotating parts, bearings, gaskets, hydraulic hoses, cases etc.
- Don’t use any solvents or aggressive products that could deteriorate the machine's painted surfaces, hydraulic hoses, or rubber parts and seals.
- Preferably dry the machine carefully with compressed air after washing.
- After washing, grease all parts of the machine which require grease.

NOTICE

Cleaning is also an opportunity to inspect the implement for damage or faults: check for and repair/rectify any faults or damage found.

Non-standard maintenance

WARNING

While the implement has been designed and built to work in difficult environmental conditions, a number of additional special maintenance procedures are required after a few years of operation to keep the implement in proper working order and ensure its safety.

WARNING

These interventions must be performed by personnel with specific technical skills at workshops that are properly equipped and authorised by the manufacturer.

WARNING

The flexible hoses in the hydraulic system must be replaced every 6 years from the date of production, or earlier if signs of wear or degradation are encountered. These components are subject to stress caused by ageing.

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Problems - Causes - Solutions

- The purpose of the following information is to identify and correct any possible operational issues that may be encountered when using the machine.
- In the case of any anomalies that are not specified in the table, the operator can communicate these to the manufacturer in order to actively contribute to the development of new solutions, as well as technical and design improvements.
- Certain malfunctions can be resolved by the operator; others require specific technical expertise or particular skills, and must only be carried out by qualified personnel with recognised experience acquired within the specific sector of intervention.
- For any queries, please contact the manufacturer's After-Sales Service, your local dealer, or an authorized workshop, providing the following information.
  - type of implement
  - serial number
  - hours of use
  - implement working conditions
  - symptoms of the problem

Troubleshooting table

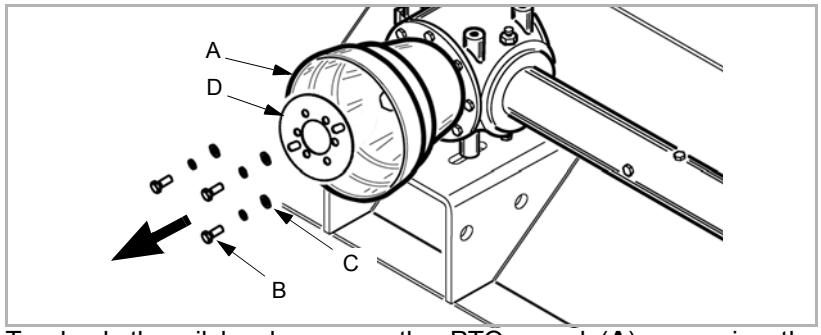
Problem	Cause	Remedy
Drive belts slipping	The blades are touching the ground	Adjust the wheels or skids correctly
	Drive belts worn	Replace the drive belts
	Drive belt tensioner faulty	Replace the damaged components
	Obstruction	Clean the machine from material build-up
Broken drivebelt	Incorrect pulley alignment	Align the pulleys
	Failure to replace the belt tensioner spring at the required intervals	Replace the belt tensioner spring and the drivebelts
Excessive vibration of the machine	Worn blades	Replace the blades
	Missing blades	
	Broken blades	
	Rotor bearings worn	Replace the bearings
	Extraneous material wound around the rotor	Remove
	Loose parts	Tighten bolts and screws
	Incorrect tractor PTO speed	Select correct rpm
Excessive blade wear	The blades are touching the ground	Check and adjust the cutting height

Problem	Cause	Remedy
Machine tears instead of cutting cleanly, uneven distribution of chopped material	Travel speed too high	Reduce the travel speed
	Cutting height too low	Adjust the cutting height
	Excessive accumulation of cuttings under the chopper	Clean the chopper
	Obstruction	Clean the machine from material build-up
Roller blocked	Insufficient lubrication	Lubricate according to the instructions
	Roller bearings worn	Replace the bearings
	Deformation of roller or bearings	Replace the damage parts
Noise from the drive shaft	Insufficient lubrication	Apply grease as indicated by drive shaft manufacturer
	Worn trunnion bearings	Replace the bearings
	Drive shaft length incorrect	Adjust length, replacing any components cut to wrong length where necessary
Drive shaft wear	Insufficient lubrication	Apply grease as indicated by drive shaft manufacturer
	Operating angle incorrect	Reduce the operating angle
	Overload	Avoid overloading the shaft and starting the machine under load
Breakage or deformation of drive shaft	Overload	Avoid overloading the shaft and starting the machine under load
	Operating angle incorrect	Reduce the operating angle
Gearbox overheating	Insufficient oil in the gearbox	Check seals and gaskets and replace any that are damaged
		Top up oil
	Incorrect oil type	Replace with oil of the prescribed type
	Excessive oil	Restore correct oil level
	Overload	Observe the prescribed speed and power conditions
Lateral adjustment and/or inclination angle adjustment functions not working correctly	Hoses connected incorrectly to tractor distributor	Connect correctly
	Faulty distributor or hydraulic pump on tractor	Check and arrange for repair
	Oil leak	Check the connections and tighten if necessary
		Check the hydraulic hoses and replace if necessary

Checking and changing the gearbox oil

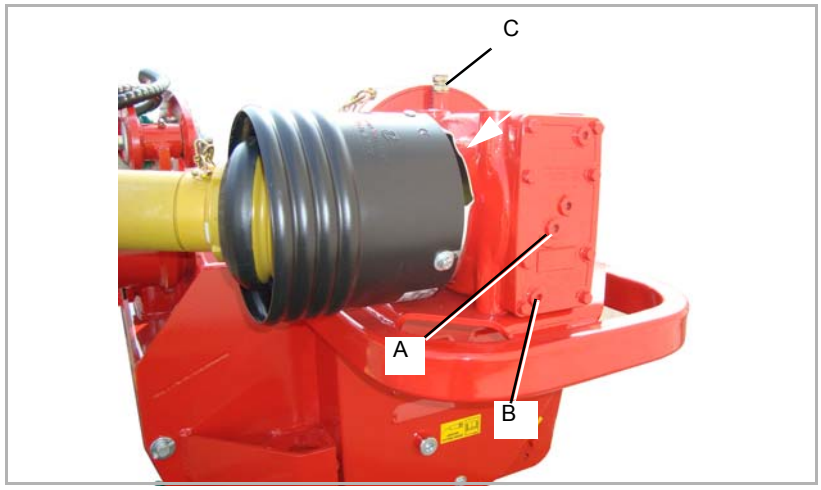
WARNING

Make sure the tractor's PTO is disengaged.
Turn off the engine, engage the parking brake, and remove the ignition key.



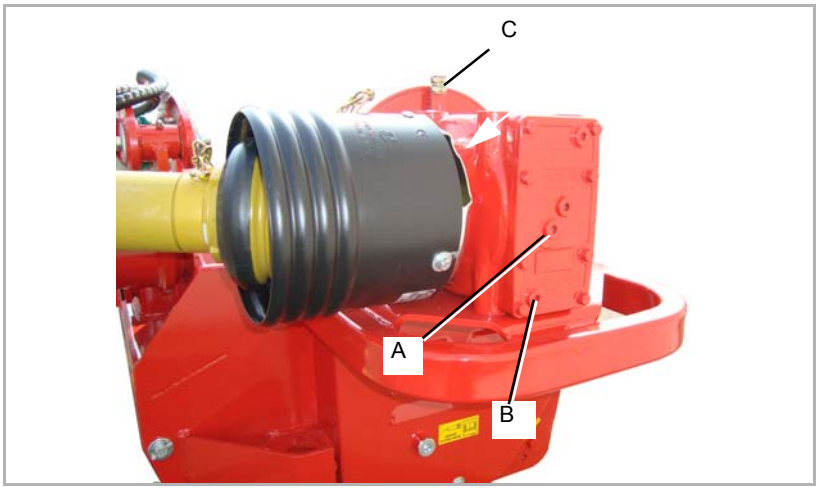
To check the oil level, remove the PTO guard (**A**), removing the screws (**B**), the washers (**C**) and the fastener flange (**D**).

Checking



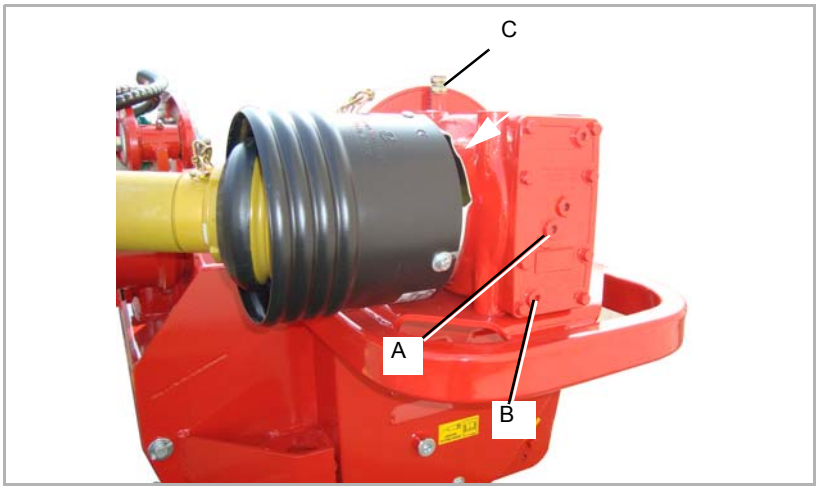
- Position the machine horizontally on a flat surface.
- Unscrew and remove the plug to check the level (**A**): the oil level should reach the lower edge of the hole.
- Refit and tighten the plug (**A**), refitting the seal washer correctly if originally fitted.

Top up



- Position the machine horizontally on a flat surface.
- Unscrew the plug to check the level (**A**).
- Unscrew the filler cap (**C**).
- Fill with the specified oil using a funnel until the oil reaches the lower edge of the inspection port (**A**).
- Refit and tighten the level inspection plug (**A**), refitting the seal washer correctly if originally fitted.
- Replace the filler cap (**C**).

Replacement



- Position the machine horizontally on a flat surface.

NOTICE

Use an oil siphon pump to drain the oil from the gearbox. If oil were to start escaping from the inspection window when the implement tilted, this could cause accidents and damage the implement.

- Position a tank under the drain plug (**B**) in order to collect the waste oil.
- Unscrew the plug to check the level (**A**).
- Unscrew the filler cap (**C**).
- When all the old oil has drained out, replace the drain plug (**B**).
- Fill to the correct level with new oil of the type specified in the table.
- Replace the cap (**C**).

- Check the level.

NOTICE

Use oils with characteristics identical to those specified in the “Lubricant table”.

CAUTION

Never attempt to drain oil from the level inspection port by tilting the machine. This is extremely dangerous as it may cause the machine to overturn.

CAUTION

Do not disperse pollutant materials into the environment. Dispose of them in compliance with the relevant legislation in force.

Checking and replacing the blades

The blades must be checked before each use of the machine. Inspecting the blades thoroughly and regularly is vital for cutting quality and, above all, for the safety of the machine itself.

The blades must be replaced if:

- they are damaged
- they are very worn
- if the hole in the blade is worn
- the fixing nuts or screws are worn

DANGER

Do not replace the blades while the machine is held off the ground by the tractor lift only.
Do not attempt to tip the machine over by hand as you may be crushed under the machine itself.

DANGER

In order to work in safe conditions, we recommend that the machine is raised using suitable lifting equipment when replacing the blades.
In the absence of suitable lifting equipment, the blades may be replaced with the machine resting on the ground.
To facilitate this operation, adjust the roller to the position for maximum working height.

CAUTION

The rotor must always be correctly balanced.

Therefore:

- always replace blades with new blades of the same type,
- always replace the blades on the opposite sides of the rotor in pairs,
- if it is necessary to replace all the blades at the same time (due to wear, for example), have the procedure performed by an authorized dealer.
  The rotor will need to be readjusted after the blades have been replaced.

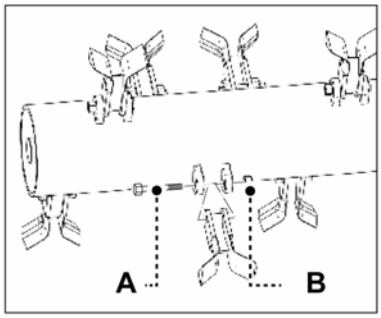
WARNING

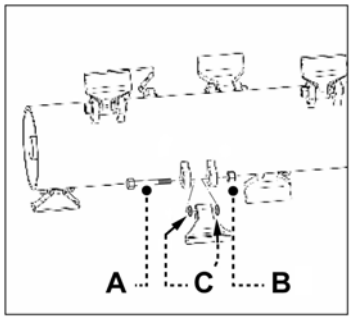
Make sure the tractor's PTO is disengaged.
Turn off the engine, engage the parking brake, and remove the ignition key.

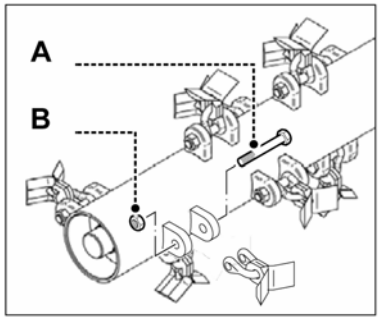
DANGER

The implement and its components must be immobilized and supported with suitable supports.

To replace a blade:







- Undo the screw (**A**).
- Remove the old blade.
- Fit the new blade.
- Retighten the bolt (**A**) being careful to replace the washers correctly, if present; also replace the bolt if it shows signs of wear.
- Always replace the nut (**B**).

NOTICE

Use bolts of the same size as those being replaced.

NOTICE

If spacer washers are fitted, check for wear and, if necessary, replace with new washers, fitting them correctly.

Checking and replacing the belts

WARNING

Make sure the tractor's PTO is disengaged.
Turn off the engine, engage the parking brake, and remove the ignition key.

Checking

Check the tension of the drive belts after the first 10 hours of use and subsequently every 30 hours, or when necessary.

Excessive or inadequate tension will significantly reduce the lifespan of the belts.

The drive belts must always be replaced as a set, not individually; this is to ensure that the belts are all tensioned equally.

To check the belt tension correctly:

- Remove the housing that covers the lateral transmission, unscrewing and removing the fixing screws.

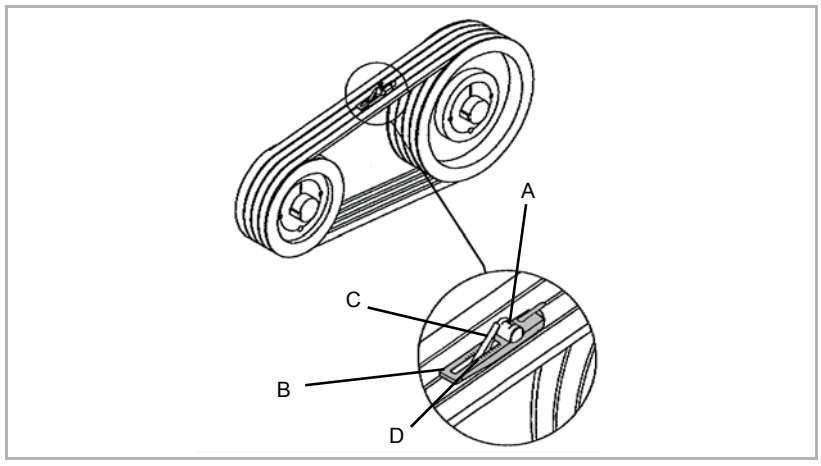
Drive belt tension can be controlled in several ways.
From this point, two possible methods are outlined, using:

A) the instrument provided by the belt manufacturer

B) a belt frequency meter

Using instrument provided by belt manufacturer

The diameter of the smallest pulley and the characteristics of the belt must be known to use this method.



- Make sure that the belts are completely stationary.
- Place the instrument against the mid-point of one of the belts.

NOTICE

The indicator arm must be pushed down into the body of the instrument.

- Push the button (**A**) down slowly and firmly with your finger.
- Stop pressing as soon as you hear a click, and remove the instrument.

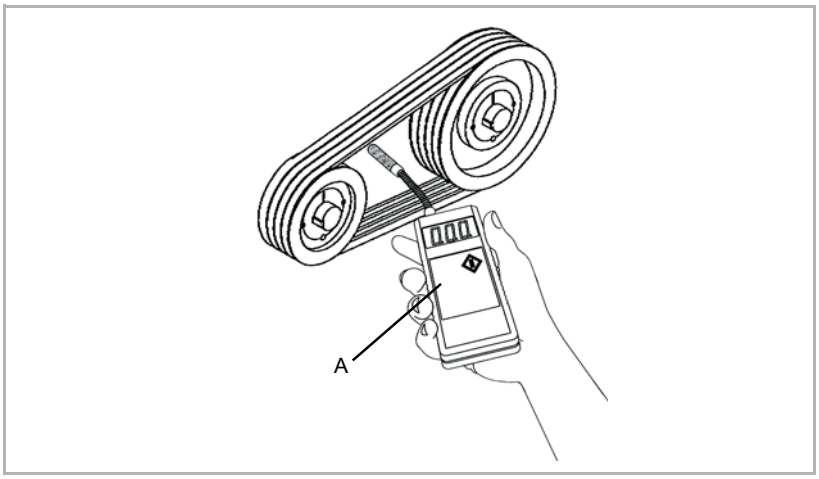
- Read the value on the graduated scale of the instrument (**B**) at the exact point where the top of the indicator arm (**C**) crosses the scale (**D**).
- Refer to the tension table provided with the instrument to determine the tension.

In general, correct tension values are approximately:
600 N after initial installation
460 N after testing/running in

NOTICE

Do not touch the indicator arm during this procedure as this will produce an incorrect reading.

frequency meter



- Ensure that the drive belts are completely still.
- Hold the frequency meter (**A**) near the belts and, if possible, hold the meter against a fixed surface to prevent your hand from moving and producing an incorrect reading.
- Touch the belt to make it vibrate.
- Read the belt response frequency on the display.

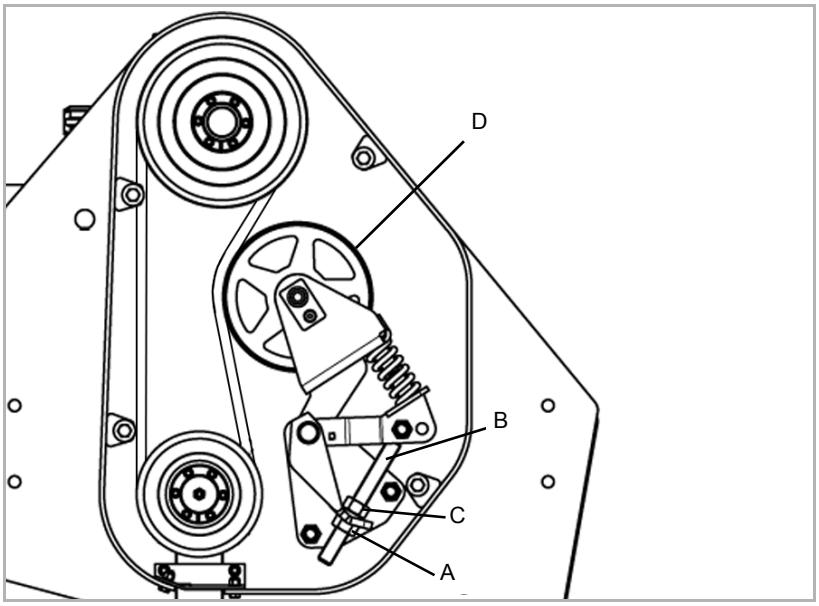
The correct frequency is approximately:
86 Hz after initial installation
72 Hz after testing/running in

NOTICE

For both methods, measure the tension of all the belts if possible and calculate the average value.

Adjusting the tension

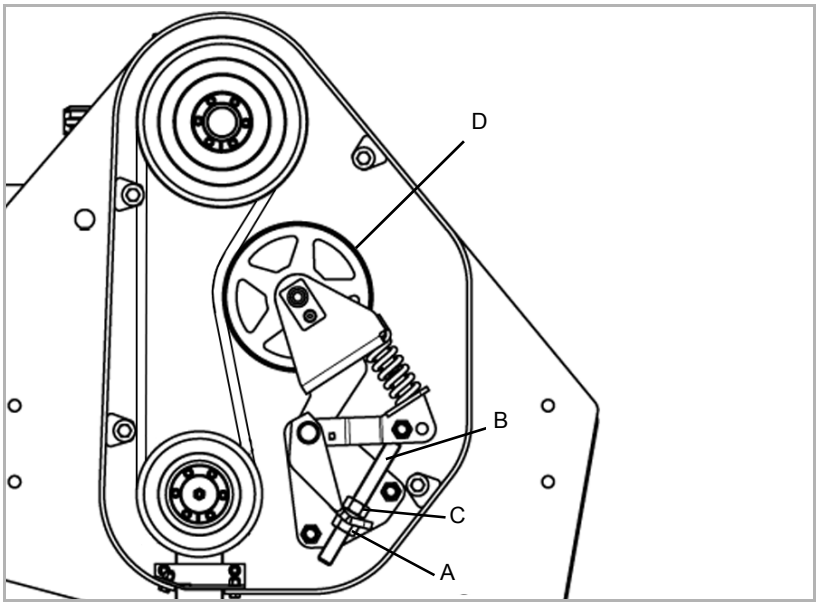
To adjust the tension of the drive belts, proceed as follows:



- Remove the lateral transmission cover, undoing and removing the fastener screws and the relative washers.
- Loosen the check-nut (**A**) securing the thrust rod (**B**) adjuster nut.
- Turn the thrust rod adjuster nut (**C**) to set the correct tension value.
- Tighten the check-nut.
- Refit the cover, refitting the washers and screws and tightening correctly.

Replacement

When replacing belts, first loosen the belt tension to permit removal of the belts themselves.



- Remove the lateral transmission cover, undoing and removing the fastener screws and the relative washers.
- Loosen the check-nut (**A**) securing the thrust rod (**B**) adjuster nut.
- Loosen the pressure of the tensioner roller (**D**) by turning the adjuster nut (**C**) on the thrust rod.
- Remove the belts.
- Fit the new belts.
- Turn the thrust rod adjuster nut to bring the tensioner roller (**D**) back into contact with the belts and set the correct belt tension.
- Tighten the check-nut.
- Refit the cover, refitting the washers and screws and tightening correctly.

Once replacement is complete, adjust the tension and check it again after the first couple of hours of use. Then check it again at the specified intervals.

NOTICE

The drive belts must always be replaced as a set, not individually; this is to ensure that the belts are all tensioned equally.

Replacing the skid runners

The shoes protect the implement against direct contact with the ground. These tend to wear out, and must be replaced promptly in order to avoid damage to other parts of the implement.

WARNING

Make sure the tractor's PTO is disengaged.
Turn off the engine, engage the parking brake, and remove the ignition key.

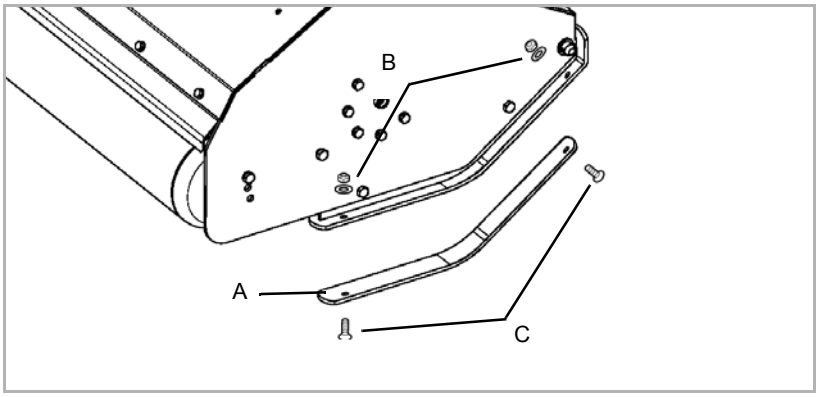
DANGER

In order to work in safe conditions, we recommend that the machine is raised using suitable lifting equipment when replacing the runners.
In the absence of suitable lifting equipment, the blades may be replaced with the machine resting on the ground.
To facilitate this operation, adjust the roller to the position for maximum working height.

NOTICE

The fixing screws on the skid runners are positioned differently on the two sides of the device: on the right side they can be found on the outside of the device, and on the left side they are positioned internally.

Proceed as follows:



- Remove the nuts and washers (B) and the fastener screws (C), and replace the shoes (A).
- Fit the new shoe.
- Insert the new screws and washers.
- Fasten the screws with new nuts.

Cleaning in the case of obstruction

DANGER

Make sure the tractor's PTO is disengaged.
Turn off the engine, engage the parking brake, and remove the ignition key.

Use a suitably sized metal bar or wooden stake to clear accumulated debris.

WARNING

Do not carry out the operation manually.

If the implement has been clogged with compacted dirt or shredded vegetation, clean with a pressure washer.

NOTICE

Shredded debris may build up on the top left hand side of the machine. Check regularly and clean when necessary.

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1	**Kverneland Group Ravenna Srl** Via Alcide De Gasperi 34 - 48026 - Russi (RA) - ITALY
2	**SE1000 - SE1001 - SE2000 - SE2000P - SE3000 - SE4000 - SE5000 - SE6000 - SE7000 - SE8000**
3	**KB177001 - KB190000**
4	**Mr. Filippo GALLIERI**

Mr. Filippo GALLIERI-General Manager of Kverneland Group Ravenna Srl

Russi, 18/06/2018

IT

DICHIARAZIONE CE DI CONFORMITÀ

L'Azienda **(1) dichiara** sotto la propria responsabilità che la macchina agricola con funzione di **TRINCIATRICE** realizzata nei modelli elencati **(2)** ognuno dei quali identificabile da un numero di serie compreso fra i valori **(3)** **è conforme** alle **Direttive Europee**: **2006/42/CE** e successive modifiche - **2004/108/CE** e successive modifiche - **2002/96/CE** e successive modifiche - **97/23/CE** e successive modifiche

Responsabile (4), autorizzato a costituire il **Fascicolo Tecnico**

EN

EC DECLARATION OF CONFORMITY

The Company **(1) declares**, under its sole responsibility, that the agricultural machinery with the function of, **CHOPPER** manufactured in the listed models **(2)** each of them is identified by a serial number included between values **(3) complies with** the following **European Directives**: **2006/42/EC** and subsequent amendments - **2004/108/EC** and subsequent amendments - **2002/96/EC** and subsequent amendments - **97/23/EC** and subsequent amendments

Responsible (4), authorised to manufacture the **Technical File**

FR

DECLARATION DE CONFORMITE CE

L'Entreprise **(1) déclare** sous sa seule responsabilité que la machine agricole faisant fonction de **HACHEUSE** réalisée selon les modèles spécifiés **(2)** chacun desquels se caractérise par un numéro de série compris entre les valeurs **(3) est conforme** aux **Directives Européennes** suivantes: **2006/42/CE** et ses modifications successives - **2004/108/CE** et ses modifications successives - **2002/96/CE** et ses modifications successives - **97/23/CE** et ses modifications successives

Responsable (4) autorisé à rédiger le **Dossier Technique**

DE

EU-KONFORMITÄTSERKLÄRUNG

Die Firma **(1) erklärt** unter eigener Verantwortung, dass die landwirtschaftliche Maschine mit den folgenden Funktionen **SCHLEGELMÄHER** in den aufgeführten Modellen **(2)**, die jeweils durch eine Seriennummer zwischen den Werten **(3)** gekennzeichnet sind, **entspricht** den folgenden **Europäischen Richtlinien**: **2006/42/EG** und den darauffolgenden Abänderungen - **2004/108/EG** und den darauffolgenden Abänderungen - **2002/96/EG** und den darauffolgenden Abänderungen - **97/23/EG** und den darauffolgenden Abänderungen

Bevollmächtigter (4) zur Erstellung der **technischen Unterlagen**

DA

EF-OVERENSSTEMMELSESERKLÆRING

Firmaet **(1) erklærer** under eget ansvarat landbrugsmaskinen med funktionen **SLAGLEKLIPPER** produceret i følgende modeller **(2)** og som hver især identificeres af et serienummer indenfor værdierne **(3) opfylder** følgende **Europæiske Direktiver**: **2006/42/EF** og senere ændringer - **2004/108/EF** e successive modifiche - **2002/96/EF** og senere ændringer - **97/23/EF** og senere ændringer

Ansvarlig (4), bemyndiget til udarbejdelsen af det **tekniske dossier**

ES

DECLARACIÓN DE CONFORMIDAD CE

La empresa **(1) declara** bajo su responsabilidad que la máquina agrícola con funciones de **COSECHADORA DE FORRAJE** realizada en los modelos indicados **(2)**, donde cada modelo se puede identificar mediante un número de serie incluido entre los valores **(3) cumple** las siguientes **Directivas Europeas**: **2006/42/CE** y sucesivas modificaciones - **2004/108/CE** y sucesivas modificaciones -
2002/96/CE y sucesivas modificaciones - **97/23/CE** y sucesivas modificaciones

Responsable (4), autorizado para realizar el **Expediente Técnico**

ET

EÜ VASTAVUSDEKLARATSIOON

Ettevõte **(1) deklareerib** omal vastutusel, et põllumajandusmasin, mille funktsioon on **PERUSTAJA** mida valmistatakse loendis **(2)** toodud mudelitena, millest igaüks on identifitseeritav seerianumbri abil, mis jääb väärtuste **(3)** vahele, **vastab** järgmistele **Euroopa direktiividele**: **2006/42/EÜ** (muudetud kujul) - **2004/108/EÜ** (muudetud kujul) - **2002/96/EÜ** (muudetud kujul) - **97/23/EÜ** (muudetud kujul)

Vastutav isik (4), kellel on volitused **tehnilise dokumentatsiooni** koostamiseks

FI

EY:N DIREKTIIVIEN

Yritys **(1) vakuuttaa** omalla vastuullaan, että maatalouskone, jonka käyttötarkoitus on **SILPPURI** josta on valmistettu luettelossa mainitut mallit **(2)**, joista jokainen on tunnistettavissa sarjanumerosta, joka on arvoltaan välillä **(3)**, **noudattaa** seuraavien **eurooppalaisten direktiivien** vaatimuksia: **2006/42/EY** ja myöhemmät muutokset - **2004/108/EY** ja myöhemmät muutokset - **2002/96/EY** ja myöhemmät muutokset - **97/23/EY** ja myöhemmät muutokset

Teknisen asiakirja-aineiston laatimiseen valtuutettu **henkilö (4)**

NL

EG-CONFORMITEITSVERKLARING

Het Bedrijf **(1) verklaart** geheel onder eigen verantwoordelijkheid dat de landbouwmachine met de functie van **MAAIER** vervaardigd in de vermelde modellen **(2)** waarvan elk model geïdentificeerd kan worden aan de hand van een serienummer tussen de waarden **(3) in overeenstemming** is met de volgende **Europese Richtlijnen**: **2006/42/EG** en latere wijzigingen daarop - **2004/108/EG** en latere wijzigingen daarop - **2002/96/EG** en latere wijzigingen daarop - **97/23/EG** en latere wijzigingen daarop

Verantwoordelijke (4) die bevoegd is het **Technische Dossier** samen te stellen

PT

DECLARAÇÃO CE DE CONFORMIDADE

A empresa **(1) declara** sob a sua responsabilidade que a máquina agrícola com função de **TRITURADORA** realizada nos modelos enumerados **(2)**,cada um dos quais identificável por um número de série, compreendido entre os valores **(3)**, **está conforme** com as seguintes **Directivas Europeias**: **2006/42/CE** e sucessivas alterações - **2004/108/CE** e sucessivas alterações - **2002/96/CE** e sucessivas alterações - **97/23/CE** e sucessivas alterações

Responsável (4), autorizado a preencher o **Processo Técnico**.

BG

ДЕКЛАРАЦИЯ НА ЕО ЗА СЪОТВЕТСТВИЕ

Фирмата **(1) декларира** на собствена отговорност,че селскостопанската машина работеща като **бумагорезка** произведена в изброените модификации **(2)** всяка от които се различава по сериен номер в рамките на стойностите **(3) отговаря** на следните **Европейски Директиви**: **2006/42/CE** и последващите промени - **2004/108/CE** и последващите промени - **2002/96/CE** и последващите промени - **97/23/CE** и последващите промени

Отговорно лице (4), упълномощено да състави **техническото досие**.

CS

PROHLÁŠENÍ O SHODĚ PODLE EC

Firma **(1)** na vlastní zodpovědnost **prohlašuje**, že zemědělský stroj s funkcí **шредер** vyrobený v uvedených modelech **(2)**, z nichž každý je označen sériovým číslem o hodnotě mezi **(3), je v souladu** s následujícími **evropskými směrnicemi**: **2006/42/ES** v platném znění - **2004/108/ES** v platném znění - **2002/96/ES** v platném znění - **97/23/ES** v platném znění

Zodpovědná osoba (4) zmocněná vypracováním **technické složky**

CS

ES PROHLÁŠENÍ O SHODĚ

Společnost **(1) prohlašuje** na svou výlučnou odpovědnost, že zemědělský stroj s funkcí **ŘEZAČKA**, realizovaný v uvedených modelech **(2)**, z nichž každý je identifikovatelný prostřednictvím sériového čísla, které se pohybuje v hodnotách **(3), splňuje požadavky Evropských Směrnic**: **2006/42/ES** v platném znění - **2004/108/ES** v platném znění - **2002/96/ES** v platném znění - **97/23/ES** v platném znění

Odpovědná osoba (4), pověřená sestavením **Technické dokumentace**

HR

IZJAVA O SUKLADNOSTI CE

Poduzeće **(1) izjavljuje** s punom odgovornošću, da se svaki poljoprivredni stroj **SHREDDER**, koji se nalazi realiziran u popisu modela **(2)**, može identificirati serijskim brojem između **(3) i da je u skladu s Evropskim Direktivama**: **2006/42/CE** i slijedećim promjenama - **2004/108/CE** i slijedećim promjenama - **2002/96/CE** i slijedećim promjenama - **97/23/CE** i slijedećim promjenama

Odgovoran (4), je ovlašten sastaviti **Tehničku Dokumentaciju**

1	**Kverneland Group Ravenna Srl** Via Alcide De Gasperi 34 - 48026 - Russi (RA) - ITALY
2	**SE1000 - SE1001 - SE2000 - SE2000P - SE3000 - SE4000 - SE5000 - SE6000 - SE7000 - SE8000**
3	**KB177001 - KB190000**
4	**Mr. Filippo GALLIERI**

SL

IZJAVA ES O SKLADNOSTI

Podjetje **(1) izjavlja** pod lastno odgovornostjo, da je kmetijski stroj s funkcijo **DROBILNIK** v navedenih modelih **(2)**, ki jih je mogoče identificirati na podlagi serijske številke med vrednostmi **(3) v skladu** s sledečimi **evropskimi direktivami**: **2006/42/CE** in s kasnejšimi spremembami - **2004/108/CE** in s kasnejšimi spremembami - **2002/96/CE** in s kasnejšimi spremembami - **97/23/CE** in s kasnejšimi spremembami

Odgovorna oseba (4), pooblaščena za sestavo **Tehničnega zvezka**

NO

EF-SAMSVARSERKLÆRING

Selskapet **(1) bekrefter** under dets ansvar at landbruksmaskinene med funksjonene **KUTTEMASKIN** realisert med modellene som er oppført **(2)** som hver kan identifiseres av et serienummer blandt verdiene **(3) i samsvar** med følgende **EU-direktiv**: **2006/42/EF** og senere endringer - **2004/108/EF** og senere endringer - **2002/96/EF** og senere endringer - **97/23/EF** og senere endringer

Ansvarlig (4), som er autorisert til å endre og opprette de **tekniske dokumenter**.

HU

EK MEGFELELŐSÉGI NYILATKOZAT

A Cég **(1) saját** felelőssége tudatában kijelenti, hogy a mezőgazgasági gép, a **SZÁRZÚZÓ** a **(2)** felsorolt tipusokban készített amelyeknek mindegyike a **(3)** értékei közötti sorozatszámmal azonosítható **konformis** a következő **Európai Irányelvekkel**: **2006/42/EK** és következő módosításai - **2004/108/EK** és következő módosításai - **2002/96/EK** és következő módosításai - **97/23/EK** és következő módosításai

A **Műszaki Dokumentáció** összeállításáért **Meghatalmazott (4)**

LT

EB ATITIKTIES DEKLARACIJA

Įmonė **(1)** prisiimdama atsakomybę **pareiškia**, kad žemės ūkio mašina, kurioje yra šios funkcijos **SMULKINTUVAS** pagaminta išvardytais modeliais **(2)**, kurių kiekvienas identifikuojamas serijos numeriu, atitinkančių šias vertes **(3)**, **atitinka** šias **ES direktyvas**: **2006/42/CE** ir jų pakeitimus - **2004/108/CE** ir jų pakeitimus - **2002/96/CE** ir jų pakeitimus - **97/23/CE** ir jų pakeitimus

Techninę bylą sudaryti įgaliotas atsakingas **asmuo (4)**

LV

EK ATBILSTĪBAS DEKLARĀCIJA

Uzņēmums (1) **deklarē** zem savas atbildības, ka lauksaimniecības mašīna ar funkciju **SMALCINĀTĀJS** kas ir izveidota uzrādītajos modeļos (2), katrs no kuriem ir atpazīsatams ar sērijas numuru starp vērtībām (3) **atbilst** sekojošām **Eiropas Direktīvām**: **2006/42/EK** un talākām izmaiņām - **2004/108/EK** un talākām izmaiņām - **2002/96/EK** un talākām izmaiņām - **97/23/EK** un talākām izmaiņām

Atbildīgā persona (4), kurai ir atļauts sastādīt **Tehnisko Mapi**.

SV

EG-FÖRSÄKRAN OM ÖVERENSSTÄMMELSE

Företaget **(1) försäkrar** under eget ansvar att jordbruksmaskinen med funktion som **FÄLTHACK** som har tillverkats i de nämnda modellerna **(2)** som var och en kan identifieras av ett serienummer som innefattas mellan värdena **(3) överensstämmer** med följande **Europeiska Direktiv**: **2006/42/CE** och senare tillägg - **2004/108/CE** och senare tillägg - **2002/96/CE** och senare tillägg - **97/23/CE** och senare tillägg

Ansvarig (4), auktoriserad att sammanställa den **Tekniska Specifikationen**

EL

ΔΗΛΩΣΗ ΣΥΜΜΌΡΦΩΣΗΣ ΕC

Η Επιχείρηση **(1) δηλώνει** με δική της ευθύνη ότι η γεωργική μηχανή με λειτουργία **τεμαχισμού** πραγματοποιημένη στα απαριθμημένα μοντέλα **(2)** καθένα από τα οποία προσδιορίζεται με έναν αριθμό σειράς μεταξύ των τιμών **(3) συμφωνεί** στις παρακάτω **Ευρωπαϊκές Οδηγίες**: **2006/42/EK** και επόμενες τροποποιήσεις - **2004/108/EK** και επόμενες τροποποιήσεις - **2002/96/EK** και επόμενες τροποποιήσεις - **97/23/EK** και επόμενες τροποποιήσεις

Υπεύθυνος (4), εξουσιοδοτημένος να πραγματοποιήσει το **Τεχνικό Φυλλάδιο**

PL

DEKLARACJA ZGODNOŚCI WE

Firma **(1) deklaruje** na własną odpowiedzialność, że maszyna rolnicza działająca jako **KOSIARKO-ROZDRABNIACZ** wykonana w wymienionych modelach **(2)**, z których każdy można zidentyfikować dzięki numerowi seryjnemu zawaremu między wartościami **(3) spełnia wymogi** następujących **Dyrektyw Europejskich**: **2006/42/WE** i ich kolejnych poprawek - **2004/108/WE** i ich kolejnych poprawek - **2002/96/WE** i ich kolejnych poprawek - **97/23/WE** i ich kolejnych poprawek

Osoba (4), upoważniona do sporządzania **Dokumentacji Technicznej**

RO

DECLARAŢIE DE COMFORMITATE CE

Firma **(1) declară** pe propria răspundere că maşina agricolă cu funcţia de **TOCĂTOR** realizată în modelele enumerate **(2)** fiecare identificabil printr-un număr de serie cuprins între valorile **(3) este conform** următoarelor **Directive Europene**: **2006/42/CE** şi modificărilor succesive - **2004/108/CE** şi modificărilor succesive - **2002/96/CE** şi modificărilor succesive - **97/23/CE** şi modificărilor succesive

Responsabil (4), autorizat să constituie **Dosarul Tehnic**

SK

PREHLÁSENIE O ZHODE S ES

Firma **(1)** na vlastnú zodpovednosť **prehlasuje**, že poľnohospodársky stroj s funkciou **DRVIČ** vyrobený v uvedených modeloch **(2)**, z ktorých každý je označený sériovým číslom s hodnotou medzi **(3)**, **je v súlade** s nasledujúcimi **európskymi smernicami**: **2006/42/ES** v platnom znení - **2004/108/ES** v platnom znení - **2002/96/ES** v platnom znení - **97/23/ES** v platnom znení

Zodpovedná osoba (4) zmocnená vypracovaním **technickej zložky**

TR

AT UYGUNLUK BEYANI

Üretici Firma **(1)** kendi sorumluluğu altında aşağıdaki işlevlere sahip **PARÇALAYICI** her biri **(3)** değerleri arasında bir seri numarası ile tanımlanabilen ve listelenen modellerde **(2)** üretilen tarım makinesinin

- **2006/42/CE, 2004/108/CE, 2002/96/CE, 97/23/CE** **Avrupa Direktiflerine** ve takip eden değişikliklerine **uygun olduğunu beyan eder**.

Teknik Fasikül'ü hazırlama yetkisine sahip **yetkili (4)**

MT

DIKJARAZZJONI TA' KONFORMITÀ TAL-KE

Il-Kupanija **(1) tiddikjara** fuq ir-responsabbiltà unika tagħha li l-makkinarju agrikolu li jintuża bhala **IMQATTA** indikat fil-mudelli elenkati **(2)** kull wieħed minnhom identifikabbli b'numru tas-serje bejn il-valuri **(3) huwa konformi** mad-**Direttiva Ewropea**: **2006/42/KE** u emendi sussegwenti - **2004/108/KE** u emendi sussegwenti - **2002/96/KE** u emendi sussegwenti - **97/23/KE** u emendi sussegwenti

Responsabbli (4), awtorizzat li jikkostitwixxi l-**Fajl Tekniku**

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