

ORIGINAL INSTRUCTIONS - according to Directive 2006/42/EC, Annex I 1.7.4.1 and according to Supply of Machinery (Safety) Regulations 2008, Annex I 1.7.4.1

OPERATOR'S MANUAL

Stonebear 4000

Stonebear 5200

Stone collector

PIN KTNKA801A00001749 and above

Contents

1 GENERAL INFORMATION

Note to the owner.....	1-1
Intended use.....	1-4
Prohibited usage	1-5
Electro-Magnetic Compatibility (EMC)	1-6
Manual scope and required training level	1-7
Product Identification Number (PIN).....	1-9
Homologation plate.....	1-10
Product identification	1-11
Operator's manual storage on the machine	1-12
Implement orientation	1-13
Implement components.....	1-14

2 SAFETY INFORMATION

Safety rules and signal word definitions	2-1
General recommendations	2-2
Illustrations	2-3
Local obligations.....	2-3
Fire or explosion prevention	2-3
Hazardous chemicals.....	2-4
Starting up the implement safely	2-5
Travelling on public roads	2-6
Operating the implement safely	2-8
Stopping the implement safely	2-10
Maintenance.....	2-11
Personal Protective Equipment (PPE)	2-12
Safety requirements for fluid power systems and components - hydraulic systems	2-13
Noise emission	2-14
Vibration levels	2-14
Ecology and environment	2-15
Safety signs	2-16
Road travel lights, signs, and reflectors	2-30

3 CONTROLS AND INSTRUMENTS

Information

Operating principles	3-1
----------------------------	-----

4 OPERATING INSTRUCTIONS

Commissioning the unit

Check before use.....	4-1
Choice of the tractor.....	4-3

Starting the unit

Connection to the tractor	4-4
---------------------------------	-----

Power Take-Off (PTO) connection.....	4-7
Power Take-Off (PTO) drive shaft – Shorten	4-8

Parking the unit

Disconnection and parking	4-10
Jack point locations.....	4-11

5 TRANSPORT OPERATIONS

Preparing for road transport

Transport position	5-1
--------------------------	-----

Shipping transport

Lifting the implement	5-3
-----------------------------	-----

6 WORKING OPERATIONS

General information

Implement overview	6-1
Hydraulic rake control	6-2
Drive belt transmission	6-3
Rake transmission.....	6-4
Collecting drum transmission.....	6-5
Working depth	6-6
Rock picking	6-7
Selection of screen size	6-8
Stone size effect on handling.....	6-9
Blocking up collecting drum	6-9
Removal of stuck stones	6-10
Filling and emptying the hopper	6-10
When to collect stones	6-11
Practical working instructions.....	6-12
Rotation and driving speed	6-12
Miscellaneous driving instructions.....	6-13
Light kit extension	6-14

7 MAINTENANCE

General information

General	7-1
Torque	7-4
Grease fittings and intervals.....	7-7
Pressure washing	7-8
Fluids, lubricants, and capacities	7-9

Maintenance planning

Overview	7-10
----------------	------

After the first 2 hours

Nuts and bolts	7-11
----------------------	------

After the first 20 hours

Gearbox oil – Change	7-11
----------------------------	------

Daily

Rakes	7-12
Screen	7-12
Collecting drum	7-12
Gearbox oil level - Check	7-13

Weekly

Check for leaks	7-14
Nuts and bolts	7-14
Collecting drum spring tine	7-14

Every 10 hours

10 hours grease fittings	7-15
--------------------------------	------

Every 20 hours

20 hours grease fittings	7-16
--------------------------------	------

Every 50 hours

50 hours grease fittings	7-18
--------------------------------	------

Every 100 hours

100 hours grease fittings	7-19
Gearbox oil – Change	7-19

Every 500 hours

Lining thickness	7-20
------------------------	------

Every 6 years

Hydraulic hoses	7-21
-----------------------	------

As required

Working brake	7-22
Brake drum	7-22
Bearing play	7-23
Tire and rim service	7-24
Rake drive belts	7-25
Collecting drum drive belts	7-25

Collecting drum spring tine	7-26
Conical sleeve and belt pulley	7-27

Storage

End of season service	7-29
Implement long-term storage and/or disposal	7-30
Ordering parts and / or accessories	7-32
Preseason service	7-33

8 TROUBLESHOOTING

Fault code resolution

General	8-1
Troubleshooting chart	8-1

9 SPECIFICATIONS

Standard equipment	9-1
Technical data	9-2
Fluids, lubricants, and capacities	9-3

10 ACCESSORIES

General information	10-1
Power Take-Off (PTO)	10-1
Rear wheels	10-1
Screen size	10-2
Service wear parts	10-2
Drawbar	10-3
Rake guard	10-4
Transport wheels	10-4
End outline marker	10-5
Slow-Moving Vehicle (SMV) sign	10-5
Safety chain	10-5

11 FORMS AND DECLARATIONS

European Community (EC) Declaration of Conformity	11-1
---------------------------------------------------------	------

1 - GENERAL INFORMATION

Note to the owner

This manual has been prepared to assist you in the correct procedure to run in, to drive, to operate, to adjust and to maintain your new implement.

This implement has been designed and built to give maximum performance, economy and ease of operation under a wide variety of conditions.

Prior to delivery, your implement was carefully inspected both at the factory and by your dealer to make sure that it reaches you in optimum condition. To maintain this condition and assure trouble-free operation it is important that routine services, as specified in this manual, are carried out at the recommended intervals.

Read this manual carefully (especially Chapter 2 that covers the safety information) and keep this manual in a convenient place for future reference. DO NOT operate or permit anyone to operate or service this implement until you and/or other persons have read this manual. Read the manual, it will save you time and hassle later. Lack of knowledge can lead to accidents. Employ only trained operators who have demonstrated the ability to operate and service this implement correctly and safely. Contact your dealer for assistance providing the required training to your operators. Contact your dealer to obtain additional manuals or alternate language versions.

If at any time you require advice that concerns your implement, do not hesitate to contact your authorized dealer. He has factory-trained personnel, genuine service parts and the necessary equipment to carry out your service requirements.

NOTICE: *This implement has been designed and built in line with the requirements put forward by the European Directives 2006/42/EC and 2014/30/EU.*

Always use genuine KONGSKILDE Service Parts or parts that match at least the same quality, reliability and functionality as the equivalent original Service Parts when you service and repair your implement and do not modify your implement without a written permission of the manufacturer. Failure to do so will void the responsibility of the manufacturer.

Check local road legislation before you drive the implement on public roads.

When you operate interchangeable implement, make sure that the implement is CE approved.

As this publication is distributed throughout our international network, the implement illustrated, either as standard or as an accessory, may vary according to the country in which the implement is to be used. Low specification configurations, as chosen by the customer, may deviate from the specifications given.

Several figures in this operator's manual show the safety guarding or the additional guards, legally required by certain countries, open or removed to better illustrate a particular feature or adjustment. The implement must not be used in this condition. For your own safety, make sure that all guards are closed or replaced before you operate the implement.

OWNER ASSISTANCE

We at KONGSKILDE and your KONGSKILDE dealer want you to be completely satisfied with your investment. Normally, your dealer's Service Department will handle any problems with your implement. Sometimes however, misunderstanding can occur. If your problem has not been handled to your satisfaction, we suggest you to contact the owner or General Manager of the dealership, explain the problem and request assistance. When additional assistance is needed, your dealer has direct access to our branch office.

COMPANY POLICY

Company policy, which is one of continuous improvement, reserves the right to make changes in design and specification at any time without notice and without obligation to modify units previously built.

All data given in this book is subject to production variations. The information in this publication is provided on the basis of information that was available at the time that the manual was written. Settings, procedures and other items can change. These changes can affect the service that is given to the implement.

Dimensions and weights are approximate only and the illustrations do not necessarily show the implement in standard condition. For exact information about any particular implement please consult your dealer. Make sure that you have the most current and complete information from your dealer before you start any job.

ACCESSORIES AND OPTIONS

Your implement has been designed to operate in a wide variety of soils/crops and conditions. Nevertheless additional equipment may, in certain cases, be required to improve the implement performance. A list of this additional equipment is given in the "Accessories" chapter in this manual. Use only those accessories designed for your implement.

PARTS AND ACCESSORIES

Genuine KONGSKILDE parts and accessories have been specifically designed for KONGSKILDE implements.

We would like to point out that "non-genuine" parts and accessories have not been examined and released by KONGSKILDE. The installation and/or use of such products could have negative effects upon the design characteristics of your implement and thereby affect its safety. KONGSKILDE is not liable for any damage caused by the use of "non-genuine" parts and accessories.

Rely on your authorized dealer to supply you with genuine KONGSKILDE parts only. These parts are covered by our warranty and will give you the best performance.

See the parts catalog or browse the KONGSKILDE portal to find service parts for your implement.

When you order service parts, always quote the model and serial number printed on the Product Identification Number (PIN) plate.

LUBRICANTS

Your dealer sells a selection of specially formulated lubricants based on own engineering specifications.

Recommended lubricants for your implement are listed in the maintenance chapter.

WARRANTY

Your implement is warranted according to legal rights in your country and the contractual agreement with the selling dealer. No warranty shall, however, apply if the implement has not been used, adjusted and maintained according to the instructions given in this operator's manual.

It is prohibited to carry out any modifications to the implement unless specifically authorized, in writing, by a KONGSKILDE representative.

CLEANING YOUR IMPLEMENT

When you use a high pressure washer, do not stand too close to the implement and avoid directing the jet at electronic components, electrical connections, breathers, seals, filler caps, and so on.

Clean decals only with a soft cloth, water and a gentle detergent. DO NOT use solvent, gasoline or other harsh chemicals to clean decals. Decals could be removed or get damaged.

DISASSEMBLY OR SCRAPPING

The critical condition of the equipment is the complete wear and tear of all components. When the costs of repair, restoration or replacement of the individual components and/or assemblies become economically impractical, a decision is made on decommissioning the equipment.

When your implement is taken out of service because it is damaged beyond repair or has reached the end of its useful life, disassembly, scrapping and/or recycling of components must be performed only by a qualified technician with service instructions, and in compliance with local law and regulations.

Intended use

The KONGSKILDE stonebear can only perform the usual work in agriculture. Only connect the stonebear to a tractor that corresponds with the specifications of the implement and is legal to use. Only the Power Take-Off (PTO) of the tractor can drive the attached stonebear.

The stonebear is a unique implement that collects stones within a **4 m** operational width in only one pass. The stonebear is equipped with a two pieces stone rakes and a rotating collecting drum, which feeds the stones into the hopper.

The work must occur under reasonable conditions, or thorough agricultural knowledge and authorised operation, on a normal field that has a reasonable extension without foreign matter and the like. The performance of the implement will depend on the condition of the field, the ground, and finally the weather.

Intended use implies that you observe the prescriptions concerning adjustment, operation and maintenance in the instruction manual. Observed altogether the safety instructions as well as common rules concerning technical safety, working practices and road safety. Also read the spare parts catalog and use original spare parts. If necessary contact an authorised workshop.

If you notice degradation of performance, contact your dealer for assistance. He may have useful information for improvements, or a kit may be available to enhance the performance.

With respect for the routine maintenance and with operating conditions, the assigned service life for the implement is minimum seven years.

Prohibited usage

NOTICE: *Do not use this implement for another purpose than intended by the manufacturer (as described in the manual, shown by the decals, or in other product safety information provided with the implement). These information sources define the intended use of the implement.*

Do not use the stonebear for collecting stones with a diameter greater than **30 mm (1.2 in)**. Remove these stones from the soil before you use the stonebear.

Any other use beyond the intended use is regarded as misuse and requires the authorization of the manufacturer. The manufacturer is not responsible for any damage that results from the improper use of the implement. The user bears that risk.

Contact your local dealer when you are not sure about the use or function of your implement in a particular application (for example crop, variety, unique conditions, etcetera) or you do not know if there is a need for special equipment or special precautions.

No parts must be fitted to this implement, which have not been released by KONGSKILDE. They might affect the implement operation, safety of the user or other people, stability or wear characteristics of the implement. They may also void the homologation approval obtained for your country and compliance with EC directives.

Do not make changes to the implement and its construction without the permission from the manufacturer. The manufacturer does not accept any responsibility for damages that results from unauthorized modification.

Electro-Magnetic Compatibility (EMC)

This machine complies strictly with the European Regulations on electro-magnetic emissions. However, interference may arise as a result of add-on equipment which may not necessarily meet the required standards. As such interference can result in serious malfunction of the unit and/or create unsafe situations, you must observe the following:

- Ensure that each piece of non- KONGSKILDE equipment fitted to the machine bears the CE mark.
- The maximum power of emission equipment (radio, telephones, etc.) must not exceed the limits imposed by the national authorities of the country where you use the machine.
- The electro-magnetic field generated by the add-on system should not exceed **24 V/m** at any time and at any location in the proximity of electronic components.

Failure to comply with these rules will render the KONGSKILDE warranty null and void.

Manual scope and required training level

Introduction to this manual

This manual gives information about the use of your KONGSKILDE machine as intended and under the conditions foreseen by KONGSKILDE during normal operation, routine service, and maintenance.

This manual does not contain all the information that relates to periodic service, conversions, and repairs that only trained service personnel can perform. Some of these activities may require appropriate facilities, technical skills, and/or tools that KONGSKILDE does not supply with the machine.

The manual contains the chapters as shown on the Contents pages. See the Index at the end of this manual to locate specific items about your KONGSKILDE machine.

Normal operation

Normal operation consists of the use of this machine for the purpose KONGSKILDE intends by an operator that:

- Is familiar with the machine and any mounted equipment or towed equipment
- Complies with the information on operation and safe practices as specified by KONGSKILDE in this manual and by the signs on the machine

Normal operation includes:

- Preparation and storage of the machine
- Addition and removal of ballast
- Connection and disconnection of mounted equipment and/or towed equipment
- Adjustment and configuration of the machine and equipment for the specific conditions of the job site, field, and/or crop
- Movement of components into and out of working positions

Routine service and maintenance

Routine service and maintenance consists of the daily activities necessary to maintain the proper machine function. The operator must:

- Be familiar with the machine characteristics
- Comply with the information on routine service and safe practices as specified by KONGSKILDE in this manual and by the signs on the machine

Routine service can include:

- Fueling
- Cleaning
- Washing
- Topping up fluid levels

- Greasing
- Replacing consumable items such as light bulbs

Periodic service, conversions, and repairs

Periodic service consists of activities that are necessary to maintain the expected life of the KONGSKILDE machine. These activities have defined intervals.

Trained service personnel familiar with the machine characteristics must perform these activities at the defined intervals. Trained service personnel must comply with the information on periodic service and safe practices as partly specified by KONGSKILDE in this manual and/or other company literature.

Periodic service includes:

- Oil change service for the engine, hydraulic circuits, or transmission
- Periodic exchange of other substances or components as required

Conversion activities rebuild the KONGSKILDE machine in a configuration that is appropriate for a specific job site, crop, and/or soil conditions (e.g., installation of dual wheels). Conversion activities must be done:

- By trained service personnel familiar with the machine characteristics
- By trained service personnel that comply with the information on conversion as partly specified by KONGSKILDE in this manual, assembly instructions, and/or other company literature

Repair activities restore proper function to a KONGSKILDE machine after a failure or degradation of performance. Dismantling activities occur during the scrapping and/or dismantling of the machine.

Trained service personnel familiar with the machine characteristics must perform these activities. Trained service personnel must comply with the information for repair as specified by KONGSKILDE in the service manual.

Before you operate

Read this manual before you start the engine or operate this KONGSKILDE machine. Contact your KONGSKILDE dealer if:

- You do not understand any information in this manual
- You need more information
- You need assistance

All persons training to operate, or who will operate this KONGSKILDE machine should be old enough to possess a valid local vehicle operating permit (or meet other applicable local age requirements). These persons

must demonstrate the ability to operate and service the KONGSKILDE machine in a correct and safe manner.

aging depending on the kind of shipment and the related procedure to assemble the received components.

Additional documents

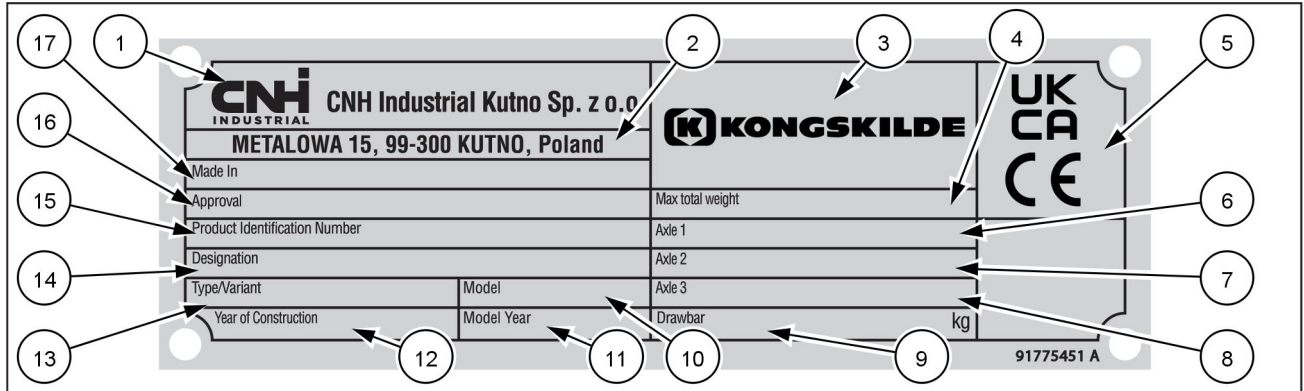
When required, the machine is delivered with an assembly instruction. The assembly instruction shows the pack-

Product Identification Number (PIN)

The Product Identification Number (PIN) is a serial number that identifies the implement.

The serial number, model, and other specifications, are on the PIN plate.

Provide your KONGSKILDE dealer with the model and PIN when you order spare parts.



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- | | | | |
|-----|-----------------------------------------|------|-------------------------------------|
| (1) | Company name | (10) | Model |
| (2) | Mailing address | (11) | Model year |
| (3) | Brand identification logo | (12) | Year of construction |
| (4) | Maximum total weight | (13) | Type / Variant |
| (5) | Certification mark | (14) | Designation |
| (6) | Permissible load axle 1 | (15) | Product Identification Number (PIN) |
| (7) | Permissible load axle 2 | (16) | Approval |
| (8) | Permissible load axle 3 | (17) | Made in (country of origin) |
| (9) | Maximum permissible load on the drawbar | | |

Homologation plate

NOTE: The homologation plate is used only for trailed implements type approved according to (EU) 167/2013.

CNH Industrial Kutno Sp. z o.o.			T-1	T-2	T-3
Category		B-1	—	—	— kg
EU Type Approval		B-2	—	—	— kg
VIN (ISO 10261)		B-3	—	—	— kg
Laden Mass	kg	B-4	—	—	— kg
A-0	kg				
A-1	kg				
A-2	kg				

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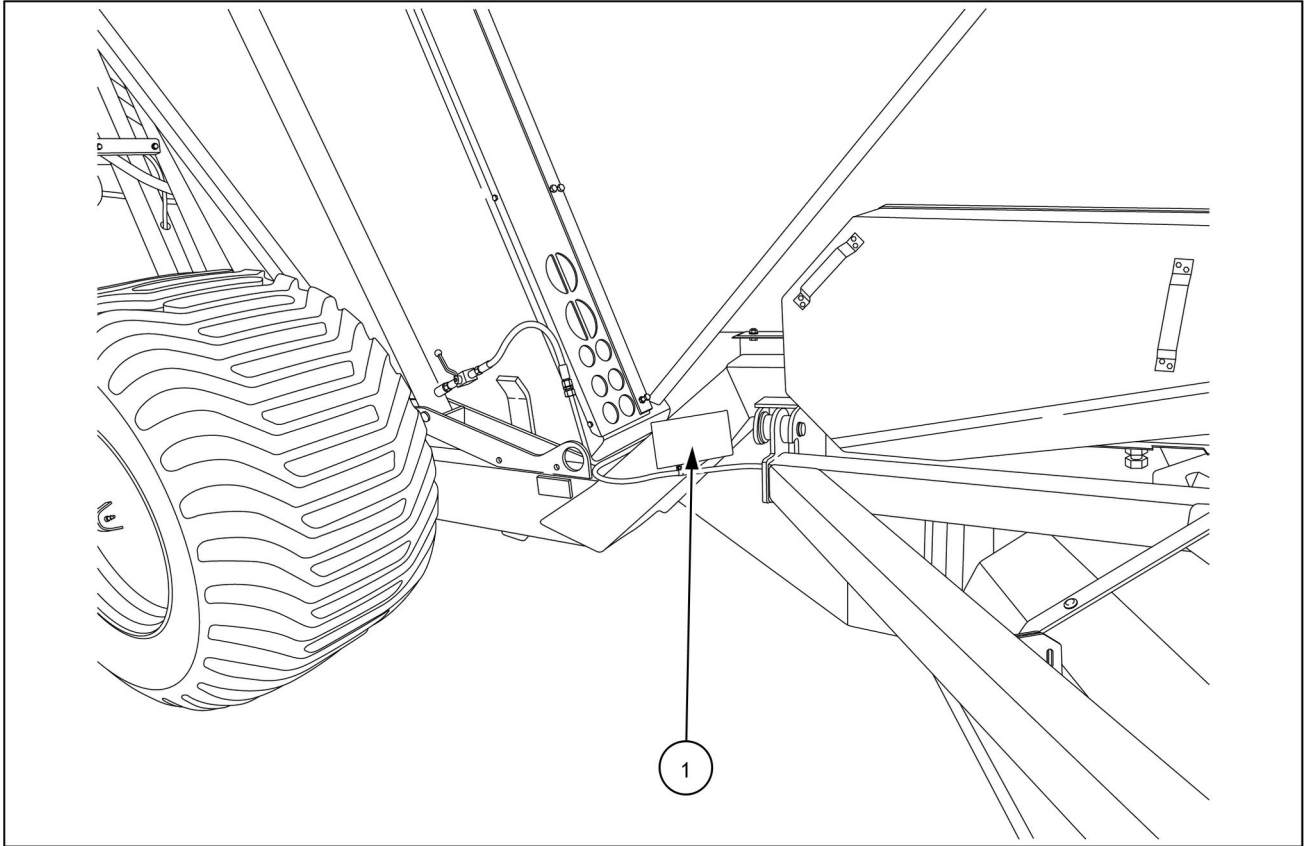
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- | | |
|-------------------------------------|-------------------------------------------------------|
| (1) Company name | (9) Permissible load axle 3 |
| (2) Un-braked towable mass | (10) Permissible load axle 2 |
| (3) Inertia-braked towable mass | (11) Permissible load axle 1 |
| (4) Drawbar | (12) Maximum permissible laden mass |
| (5) Rigid drawbar | (13) Vehicle Identification Number (VIN) (ISO 10261) |
| (6) Centre-axle | (14) Type approval |
| (7) Towable braked mass (pneumatic) | (15) Category |
| (8) Towable braked mass (hydraulic) | |

Product identification

NOTE: Do not remove or change the Product Identification Number (PIN) plate (1) on the implement.

The PIN plate (1) is on the right-hand side of the implement.



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For future reference, record your implement model and PIN in the spaces below.

Model

Product Identification Number (PIN)

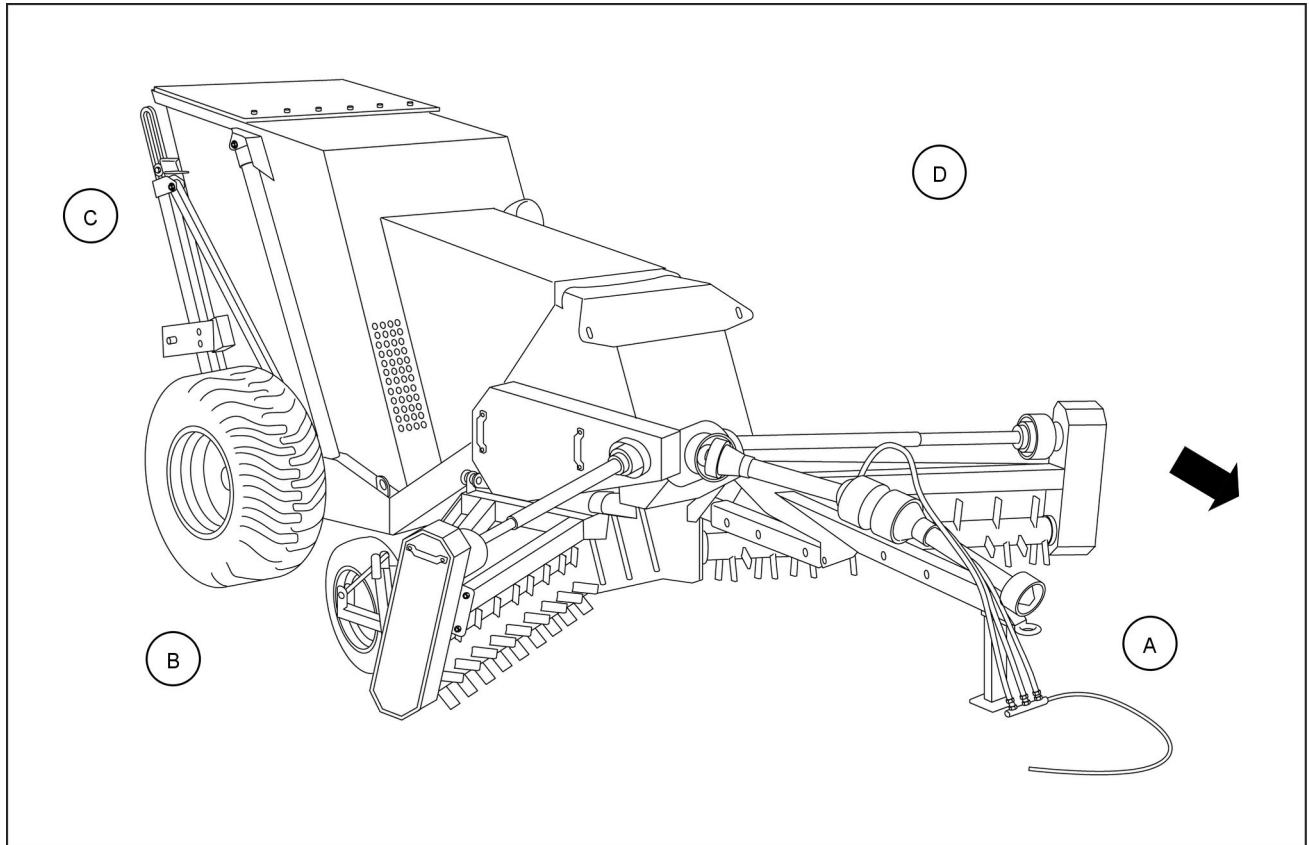
Operator's manual storage on the machine

Keep this operator's manual protected and accessible on the tractor whenever you transport or operate the implement.

Implement orientation

NOTE: To determine the left-hand side and the right-hand side of the implement, stand behind the implement and face the direction of travel during working operation.

The following overhead view illustration is a general representation of the implement. The illustration indicates the sides, front, and rear orientations of the implement as referred to throughout this operator's manual.

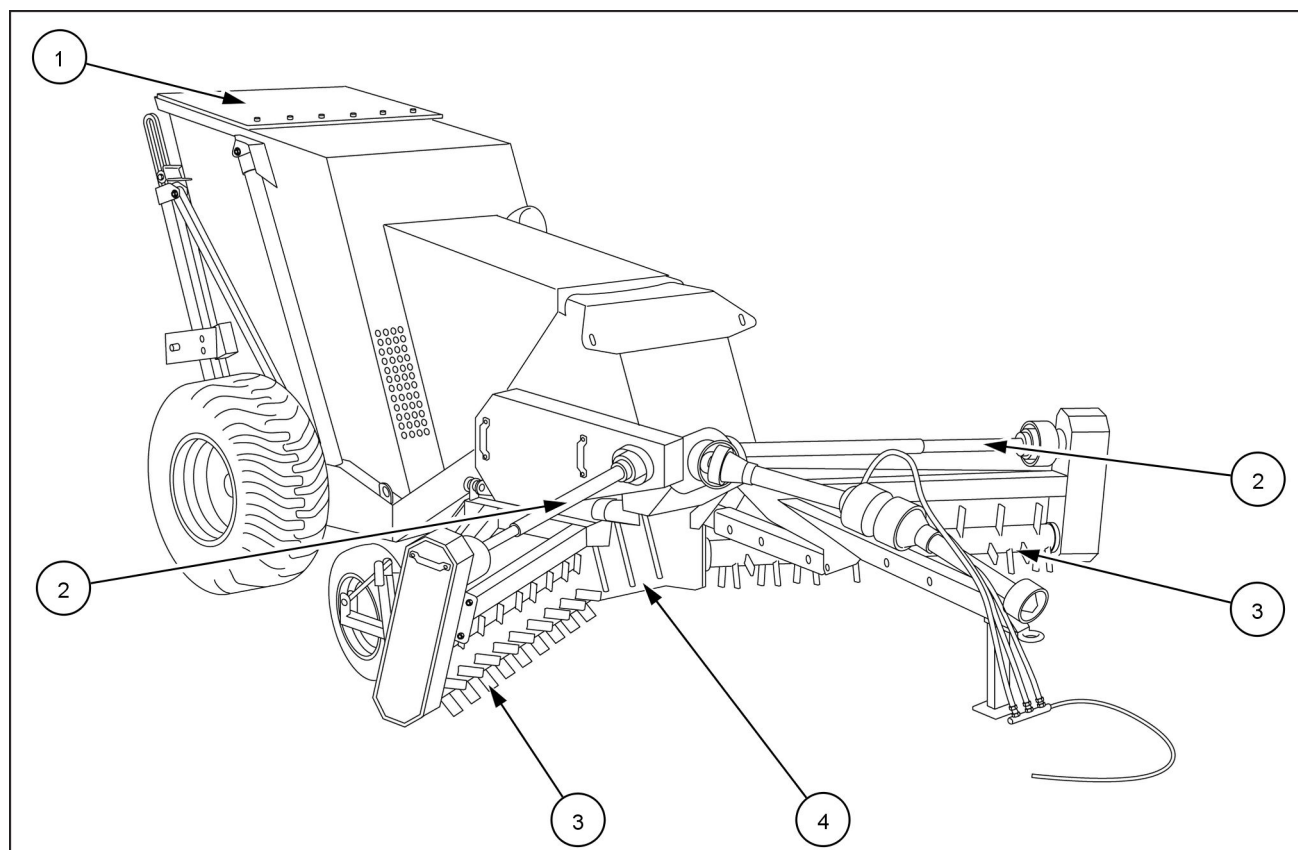


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NOTE: The arrow indicates the direction of the implement during working operation.

- (A) Front of the implement
- (B) Right-hand side of the implement
- (C) Rear of the implement
- (D) Left-hand side of the implement

Implement components



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Item	Description	Item	Description
(1)	Hopper	(3)	Rakes
(2)	Power Take-Off (PTO)	(4)	Lifting rotor, tines and sieve

2 - SAFETY INFORMATION

Safety rules and signal word definitions


Personal safety





This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible death or injury.

Throughout this manual you will find the signal words DANGER, WARNING, and CAUTION followed by special instructions. These precautions are intended for the personal safety of you and those working with you.

Read and understand all the safety messages in this manual before you operate or service the machine.

 DANGER indicates a hazardous situation that, if not avoided, will result in death or serious injury.

 WARNING indicates a hazardous situation that, if not avoided, could result in death or serious injury.

 CAUTION indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

FAILURE TO FOLLOW DANGER, WARNING, AND CAUTION MESSAGES COULD RESULT IN DEATH OR SERIOUS INJURY.

Machine safety

NOTICE: Notice indicates a situation that, if not avoided, could result in machine or property damage.

Throughout this manual you will find the signal word Notice followed by special instructions to prevent machine or property damage. The word Notice is used to address practices not related to personal safety.

Information

NOTE: Note indicates additional information that clarifies steps, procedures, or other information in this manual.

Throughout this manual you will find the word Note followed by additional information about a step, procedure, or other information in the manual. The word Note is not intended to address personal safety or property damage.

General recommendations

You can avoid most farm machinery accidents with the observance of a few simple safety precautions.

- This operator's manual contains important information concerning operation, maintenance and adjustment of the implement. Furthermore, this operator's manual mentions and emphasizes all the safety instructions.
- Read the operator's manual thoroughly before you start, operate, service, or carry out any other operation on the implement. Even though you have been driving a similar implement before, you must read the manual. This is a matter of your own and other people safety. A few minutes reading will save you time and hassle later. Lack of knowledge can lead to accidents.
- Your implement was designed with safety in mind. However, there is no real substitute for caution and attention when you need to prevent an accident. Once an accident has occurred, it is too late to think about what you should have done. This means that it is very important that you as user of the implement pay attention and use the implement correctly and thereby avoid exposing yourself and others to unnecessary danger.
- In case of an accident, stop the tractor, turn off the engine and remove the key from the contact, assess the situation and call emergency services when required.
- The implement must be operated only by responsible persons who have been adequately trained and authorized to use the implement. Never leave the implement to others before you have made sure that they have the necessary knowledge to operate the implement safely.
- Never let the implement run without supervision.
- Always keep a first aid kit handy.
- The implement has only one operator station and this is the cab of the tractor, which is a one man operated implement. Never permit anyone to ride on or in an implement. Do not allow riders on the implement or tractor; do not allow people to stand on the ladder or steps. Your view to the left or right will be obstructed and a rider risks to fall from the implement or tractor during unforeseen or abrupt movements. There is no need for other people on or around the implement during normal operation.
- Do not use this implement as a lift, ladder or platform to work at heights.
- Before you work on the implement, disengage all drives, stop the engine and remove the ignition key. Wait for the rotating parts to run down.
- Never work around the implement with loose clothing, jewelry, watches, long hair and other loose or hanging items can be pulled in by the moving parts of the implement.
- Keep hands away from moving parts of the implement.
- Never attempt to carry out any adjustments on the implement while the implement is in motion or while the Power Take-Off (PTO) shaft is engaged.
- PTO driven implement can cause death or serious injury. Before you work on or near the PTO shaft or service or clear the driven implement, disengage the PTO, stop the engine and remove the ignition key.

Illustrations

WARNING

Illustrations in this manual may show protective shielding open or removed to better illustrate a particular feature or adjustment.
Replace all shields before operating the machine.
Failure to comply could result in death or serious injury.

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NOTE: Some of the illustrations in this manual have been obtained by photographing prototypes. Standard production machines may differ in some details.

Local obligations

Your machine may be equipped with special guarding or other devices in compliance with local legislation. Some of these require active action by the operator.

Therefore, check local legislation on the usage of this machine.

Fire or explosion prevention

1. Crop material, trash, debris, bird nests or flammable material can ignite on hot surfaces.
2. Inspect the electrical system for loose connections or frayed insulation. Repair or replace loose or damaged parts.
3. Do not store oily rags or other flammable material on the implement.
4. Do not weld or flame cut any items that contain flammable material. Clean items thoroughly with non-flammable solvent before you weld or cut with a flame.
5. Do not expose the implement to flames, burning brush or explosives.
6. Promptly investigate any unusual smells or odors that may occur during the operation of the implement.

Hazardous chemicals

1. If you are exposed to or come in contact with hazardous chemicals you can be seriously injured. The fluids, lubricants, paints, adhesives, coolant, etcetera. required for the function of your machine can be hazardous. They may be attractive and harmful to domestic animals as well as humans.
2. Material Safety Data Sheets (MSDS) provide information about the chemical substances within a product, safe handling and storage procedures, first aid measures and procedures to be taken in the event of a spill or accidental release. MSDS are available from your dealer.
3. Before you service your machine check the MSDS for each lubricant, fluid, etcetera. used in this machine. This information indicates the associated risks and will help you service the machine safely. Follow the information in the MSDS, on manufacturer containers, as well as the information in this manual when you service the machine.
4. Dispose of all fluids, filters and containers in an environmentally safe manner in accordance with local laws and regulations. Check with local environmental and recycling centers or your dealer for correct disposal information.
5. Store fluids and filter in accordance with local laws and regulations. Use only appropriate containers for the storage of chemicals or petrochemical substances.
6. Keep out of reach of children or other unauthorized persons.
7. Additional precautions are required for applied chemicals. Obtain complete information from the manufacturer or distributor of the chemicals before you use them.

Starting up the implement safely

Before you attach the implement to the tractor, ensure that the tractor is in good working order and that the brakes are efficient, particularly if you operate on hilly ground. Also, ensure that the hydraulic or pneumatic system is compatible with that of the implement.

When you attach the implement to the tractor:

- Never allow anyone to stand between the tractor and the implement. An unintentional manoeuvre with the tractor may cause serious injury.
- Never go under an unsupported implement.

Install all the guards correctly before you use the implement.

Make sure that you are thoroughly familiar with the instruments and controls before you engage the Power Take-Off (PTO) drive for the first time.

The PTO shaft has its own instruction manual that the manufacturer supply with the implement. To ensure the correct use of the shaft, follow all the instructions of the manufacturer manual. Pay particularly close attention to the safety and maintenance instructions, in order to prevent unintentional injury and damage.

Do not use the PTO drive shafts with other specifications than the shaft which was supplied with the implement.

Before you install the PTO drive shaft, check that the Revolutions Per Minute (RPM) and direction of the PTO on the tractor match those of the PTO on the implement.

Repair immediately a damaged PTO shaft before you work with the implement.

Always stop the PTO and the tractor engine and remove the ignition key before you connect the PTO drive shafts.

After you attach the implement to the tractor, ensure that the PTO lock pin is properly engaged in the tractor PTO shaft. An incorrectly locked PTO shaft could work loose and cause accidents or damage to the implement.

Make sure to install and secure the PTO drive shaft correctly. Check that the lock pin is in mesh. Fasten the support chain at both ends.

Always make sure that the guard tubes do not separate at the maximum working or transport length of the PTO drive shaft. Check also that the guard tubes do not jam at the minimum working or transport length of the PTO drive shaft.

Unless the protective guards, the PTO drive shaft may cause serious injury. Be careful not to damage the guards when you connect the PTO drive shaft to or from the tractor.

Fit correctly the guards on the PTO drive shaft. Secure the guard of the PTO shaft with the chain.

Before you start up the implement (for example the first time after a long standstill period), make sure that there are no detached loose parts on the drive line area and on the moving parts of the implement.

Travelling on public roads

Comply with the relevant traffic regulations

WARNING

Loss of control hazard!
Uneven brake force exists on left-hand and right-hand brakes. Always use brake pedal coupler when traveling on public roads to ensure brakes are actuated together.
Failure to comply could result in death or serious injury.

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WARNING

Impact hazard!
Take care when making turns. The machine rear end swings out when changing direction.
Failure to comply could result in death or serious injury.

W0089A

The implement is built according to the homologation requirements of your country. Do not modify the implement in a sense that would conflict with the national regulations.

If you wish to transport the implement on the public road, make sure that the combination tractor and implement observes the traffic rules in your country. This gives you and your surroundings the best possible safety.

The operators must observe relevant statutory or other national regulations that deal with road safety and labor safety issues.

Before you drive the implement on public roads:

- Check the allowable transport dimensions and weights.
- Install correctly the lighting and the warning panels.
- Check the condition of the reflectors.
- Make sure that the slow vehicle triangle and the reflectors are plainly visible.

Always observe the principles for permissible axle loads, the total unit mass and the transport gauge.

Observe the tractor manufacturer regulations and recommendations, specifically those relating to maximum transport loads and maximum speed.

Even in similar circumstances, the maximum allowed speed can vary depending on which country you travel in.

Always drive with the statutory lights and safety marking during transport on public road and at night.

Install all the required signs that indicate the vehicle width. Also install all the required lights that indicate the vehicle width during the nightly transport. If in doubt, contact your government department responsible for road transport.

Travel may be restricted to certain road types. Transport may be restricted to daytime or outside peak traffic hours. However plan your route to avoid heavy traffic and peak traffic hours.

Passengers

Do not allow passengers to ride in the tractor unless a specific seat is provided.

During transport, the transportation of people on top of the implement is strictly forbidden.

Transport safety

Switch off the power transmission.

Transport the implement only in transport position. Secure the implement for transport. Always activate the mechanical transport safety devices before transport.

Secure the connection between the implement and the tractor with the safety chain.

Make sure to fit all the hitch pins with retaining pins correctly. Mechanically secure the hydraulic cylinders to prevent cylinders from creeping.

Drive safe

Do not drive under the influence of alcohol or drugs.

Never travel at speed in crowded areas.

When you maneuver the tractor with the implement, always be aware and conscious of its size. The implement is long and does not completely follow the tractor in sharp turns. Avoid that the implement rear end hits an obstacle.

The tractor driver must not leave the cabin during transport.

Always consider other road users.

Always adopt safe driving practices. Slow down and signal before turning. Give way to oncoming traffic in all situations, including narrow bridges, intersections etcetera. Pull over to allow faster traffic to pass.

If the implement is marked with a maximum speed limit, never exceed this maximum speed limit.

Always adjust the driving speed to the road and weather conditions. In case of bad road conditions and high driving speeds, big forces may occur and cause overload of tractor and implement.

Drive at a safe speed to ensure control and ability to stop in an emergency.

Lock the tractor brake pedals together. Never use independent breaking at transport speeds.

Trailed implements and ballast weights influence the driving, steering and braking capacity of the tractor. Make sure that the additional weight of the implement on the linkage does not compromise driving, steering and braking capacity of the tractor. Install front weights or repair the brakes if the tractor is not safe to drive.

Reduce speed during turns. Tractors have not been designed for fast turning. Avoid that the rear end of the implement hits an obstacle.

When you turn during transport, pay attention to the overhang and/or oscillating weight of the implement.

Use engine braking when you drive down hills. Do not coast.

Watch for obstructions, particularly if over-width. Observe any load ratings applicable on bridges.

After you finish the transport, before you leave the tractor, always lower the implement to the ground in parking position, turn off the tractor engine, pull the parking brake, and remove the key from the ignition.

Operating the implement safely

⚠ WARNING

Rotating parts!
Keep clear of all drives and rotating components.
Failure to comply could result in death or serious injury.

W1101A

⚠ WARNING

Entanglement hazard!
Make sure all people and obstructions are clear of the implement before engaging the tractor Power Take-Off (PTO).
Failure to comply could result in death or serious injury.

W1378A

⚠ WARNING

Hazard to bystanders!
Always sound the horn before starting the machine. Make sure the work area is clear of other persons, domestic animals, tools, etc. before you operate the machine. Never allow anyone in the work area during machine operation.
Failure to comply could result in death or serious injury.

W0304A

NOTE: Only put the implement into operation according to the instructions from the dealer, to maintain safety of the operator and ensure the long working life for the implement.

When you use the stonebear, take the immediate operating conditions (temperature, soil moisture, etc.) into consideration and adjust accordingly.

Never operate the implement under the influence of alcohol, drugs, or while otherwise impaired.

Keep people away from the implement during operation. Ask bystanders to leave the field. There is the risk for bystanders to be overrun by the implement. Stop the implement immediately if someone approaches.

The tractor or its implement may strike or crush against a person or pet within the operator area of the tractor. Do not allow anyone to enter the work area. Make sure that the area is clear and operation is safe before you move the implement.

Before you switch on the Power Take-Off (PTO) shaft, take care that no one stays in the danger zone of the implement.

Always start the implement with the engine running at low speed.

Whenever a PTO is in operation, a guard must be in place to prevent death or injury to the operator or bystanders.

When you operate the implement, always remain seated in the tractor cab. Operate controls only when seated in the tractor seat, except for those controls expressly intended for use from other locations.

The transportation of people on top of the implement is strictly forbidden at all times.

Avoid using the implement in unsuitable field and weather conditions. It is better to stop work temporarily rather than to operate in such conditions.

Do not operate the implement during a thunderstorm. If you are on the ground during a thunderstorm, stay away from machinery and equipment. Seek shelter in a permanent, protected structure.

If a lightning from a thunderstorm should strike during operation, remain in the tractor cab. Do not leave the cab. Do not make contact with the ground or objects outside the machine.

Never attempt to remove crop or residues from an implement while the implement runs. Such an imprudence could cost life or limb. Always disengage the PTO, switch off the tractor engine and apply the parking brake before you remove crop or residues.

Always operate the implement at a safe speed in accordance with the ground conditions. On uneven ground, proceed with the utmost caution to ensure proper stability.

When you turn on hillsides always be careful when you lift or swing the implement because there is a risk of overturning. Adjust the speed to these conditions.

Drive in a low tractor gear if you work on hillsides.

When you drive up and down and across hillsides, avoid sharp turns.

When you turn during operation, pay attention to the overhang and/or oscillating weight of the implement.

Avoid changing direction abruptly, especially when you reverse, to avoid dangerous pitching of the implement.

When you work with a stonebear, keep a safe distance from steep slopes and similar ground conditions, as the ground may be slippery and pull the stonebear and the tractor sideways. Also remember to adjust the speed for sharp turns when you drive on hillsides.

Pay the necessary attention while you operate next to public roads or footpaths.

When you operate the stonebear, stones may be thrown from the screen slots or the tipping hatch. This is why per-

sonnel standing near the implement must be warned of flying stones. The minimum safe distance is **20 m (66 ft)**.

Always empty the hopper on a firm and even surface. Avoid sudden movements while the container is raised. Always close the hopper cylinder safety valves when you work under the container. Remember to re-open the hopper cylinder safety valves before you lower the hopper. Always move the implement when the container is completely down.

Danger of death by electrocution!

Pay special attention to the overhead power lines. Always ask the owner of the field about the presence of overhead power lines. Make sure the implement has sufficient clearance to pass in all directions (also with raised or opened implement components). Also think of the radio aerial(s) or any other accessory or parts which may have been added afterwards.

High voltage lines may require significant clearance for safety. Contact local authorities or utilities to obtain safe clearance distances from high voltage power lines.

Should a contact between the implement and an electric power line occur, then the following precautions must be taken: Stop the implement movement immediately, stop the tractor engine and apply the tractor handbrake.

Check if you can safely leave the cab or your actual position without direct contact with electric wires. If not, stay in your position and call for help. If you can leave your position without touching the lines, jump off the last step or support position and make sure that there is no contact between any part of your body, the tractor and the ground at the same time. Never touch the tractor or the implement afterwards until power to the lines has been shut off. When people approach the tractor or the implement, warn them not to touch the tractor or the implement but to ask the electric power supply company to shut off the power to the lines.

Stopping the implement safely

WARNING

Moving parts!

Some components may continue to run after disengaging the drive systems. Make sure all drive systems are fully disengaged and all movement has stopped before servicing the machine.

Failure to comply could result in death or serious injury.

W0002A

Always interrupt the operation of the implement before you leave the tractor seat.

For safety's sake never leave the tractor cab without first to disengage the Power Take-Off (PTO) drive mechanism and to stop the tractor engine. Furthermore, if you leave the tractor unattended, always remove the ignition key.

Stop the tractor engine and the PTO drive and wait until the implement has completely stopped. There are rotating parts that may continue rotating after the implement has been stopped. Keep a safe distance until the implement has come to a complete standstill.

Never leave the tractor before the engine of the tractor has stopped, and the parking brake has been activated. This is the only way to perform a safe operation.

Make sure to secure the tractor by means of the hand brake and/or stop blocks if you need to stand between the tractor and the implement.

When, due to exceptional circumstances, you decide to keep the tractor engine running after you leave the tractor cab, proceed as follows:

- Bring the tractor engine to low idle speed.
- Disengage all drive systems.
- Shift the tractor transmission into neutral.
- Apply the parking brake.

When you park the implement, there are some operational risks which may cause personal injury. Therefore, you must:

- Make sure that the ground is firm and even during parking.
- Make sure that tractor and implement cannot move.
- Stop the tractor engine and remove the ignition key.
- Use correct support or transport safety device when the implement is parked. Make sure that the jack is secured.

When you detach the implement from the tractor:

- Never allow anyone to stand between the tractor and the implement. An unintentional manoeuvre with the tractor may cause serious injury.
- Always stop the PTO and the tractor engine and remove the ignition key before you disconnect the PTO drive shafts.
- Unless the protective guards, the PTO drive shaft may cause serious injury. Be careful not to damage the guards when you disconnect the PTO drive shaft from the tractor.
- Never allow the PTO drive shaft guards to fall into the implement or drop to the ground, damage will almost certainly occur.
- After you remove the PTO shaft, place the guard on the tractor PTO.
- Always detach the implement carefully and on a flat surface to prevent damage.
- Never go under an unsupported implement.

Maintenance

WARNING

Maintenance hazard!

Before you start servicing the machine, attach a DO NOT OPERATE warning tag to the machine in a visible area.

Failure to comply could result in death or serious injury.

W0004A

- Follow the maintenance schedule with regard to the implement servicing intervals. Remember that the implement requires attention from time to time. Also remember that the maintenance will greatly extend the life of the implement.
 - Take the necessary precautions: not to spill any oil, fuel or grease. To avoid oil and grease contact with your skin, wear protective gloves.
 - Service the implement on a firm level surface.
 - Do not attempt to remove material from any part of the implement, clean, lubricate or carry out any adjustments on the implement while it is in use.
 - Keep hands, feet and/or garments away from parts which move. Check that all rotating parts have a suitable protective guard.
 - Raised implement and/or loads can fall unexpectedly and crush persons underneath. Never enter or allow anyone to enter the area underneath raised implement during operation. Unsupported hydraulic cylinders can lose pressure and drop the implement and cause a crushing hazard. Do not leave the implement in a raised position while parked or during service, unless securely blocked on wooden blocks.
 - Never work under a raised implement unless a support chain or other mechanical securing device secure the link arms of the tractor so that the implement cannot move to a lower position unintentionally.
 - Relieve the pressure, stop the engine and remove the ignition key, before you connect or disconnect fluid lines.
 - Before you adjust, clean, lubricate or you carry out repairs on the implement, stop the engine and remove the ignition key.
 - Never adjust the implement while the Power Take-Off (PTO) drive shaft is engaged. Do not to remove the guards until all revolving parts have stopped.
 - Any leakage of hydraulic oil or fuel under pressure may cause severe harm, so always use a shielding, goggles and gloves when you trace oil or fuel leaks.
- Do not use your hand to check for leaks. Use a piece of cardboard or paper.
 - Continuous long term contact with hydraulic fluid may cause skin cancer. Avoid long term contact and wash the skin promptly with soap and water.
 - If hydraulic fluid or diesel penetrates the skin, seek medical care immediately.
 - Observe all recommendations that are mentioned in this manual such as service intervals, torques, lubricants, etcetera.
 - Always replace all parts that have damage or wear.
 - Never build flexible hose assemblies from hoses that were previously part of a hose assembly.
 - Never weld to the tubes.
 - Always use gloves when you work with parts on the implement as the parts can have sharp edges.
 - Transmission and hydraulic lines may become hot during operation. Be careful when you service such components. Allow surfaces to cool before you handle or disconnect hot components. Wear protective equipment when required.
 - Make sure that tires are correctly inflated. Do not exceed any recommended load or pressure. Over pressure could cause explosion hazard, with risk of death or serious injury. Follow the instructions in the manual for proper tire inflation
 - Tires are heavy. Always handle the tires with proper equipment. Failure to comply could cause death or serious injury.
 - Never weld on a wheel with a tire installed. Always remove the tire completely from the wheel before you weld.
 - Always have a qualified tire technician service the tires and wheels. If a tire has lost all pressure, take the tire and wheel to a tire shop or your dealer for service. Explosive separation of the tire can cause serious injury.
 - Do not weld to a wheel or rim until the tire is completely removed. Inflated tires can generate a gas mixture with the air that can be ignited by high temperatures from welding procedures performed on the wheel or rim. Removing the air or loosening the tire on the rim (breaking the bead) will not eliminate the hazard. This condition can exist whether tires are inflated or deflated. The tire must be completely removed from the wheel or rim prior to welding the wheel or rim.

Personal Protective Equipment (PPE)

Wear Personal Protective Equipment (PPE) such as protective clothing, eye protection, hearing protection, dust mask, hard hat, heavy gloves, work boots, and/or any other PPE that provides for the safety and protection of the individual that operates this equipment.



NHIL13RB00001AA 1

Safety requirements for fluid power systems and components - hydraulic systems

⚠ WARNING

Escaping fluid!

Hydraulic fluid or diesel fuel leaking under pressure can penetrate the skin and cause infection or other injury. To prevent personal injury: Relieve all pressure before disconnecting fluid lines or performing work on the hydraulic system. Before applying pressure, make sure all connections are tight and all components are in good condition. Never use your hand to check for suspected leaks under pressure. Use a piece of cardboard or wood for this purpose. If injured by leaking fluid, see your doctor immediately.

Failure to comply could result in death or serious injury.

W0178A

Before you start the engine or pressurize the hydraulic system, install and tight correctly all the hydraulic couplings. Check that all hoses and fittings are undamaged. Replace immediately damaged components.

Only connect the hydraulic hoses to the tractor outlets if the tractor and the implement are pressure-free. If the hydraulic system of the tractor is activated, the hydraulic system may lead to uncontrolled movements which may cause secondary damage.

Make sure that no persons are near the implement when you start the implement, as there might be air in the hydraulic system which might lead to sudden movements.

When the tractor engine has stopped, activate the tractor hydraulic spool valves to make sure that there is no pressure in the hydraulic hoses.

To expel all the air from the oil in the hydraulic cylinders, test all the functions after you connect the hydraulic connections to the tractor, especially before you enter or drive on the public roads.

Noise emission

The noise is measured with the engine and all mechanisms engaged and running at normal operating speed for the specified use of the product. These are maximum values which in normal operating conditions will never be exceeded.

To enable measurement of noise level at the operator seat produced by the tractor - implement combination, it must be noted that the airborne noise produced by the implement attached to the tractor is measured at a distance of **200 mm (7.9 in)** behind the rear window position of an average tractor suitable for operating the implement.

The noise emission is between **68.8 – 71.8 dB (A)** with an uncertainty of **1.5 dB**.

On tractors with cab provided all windows, doors and other possible openings are kept closed; it is obvious that

the real noise level at the operator's seat will be significantly lower. The exact level will depend on the noise insulation qualities of the cab.

On tractors without a cab or when you work with the cab doors or windows open, it is recommended to use ear protection equipment when the noise level exceeds **90 dB (A)**. In several countries this is mandatory, so check local legislation.

Always use hearing protectors if the noise from the implement is annoying or if you work with the implement for a considerable period in a tractor that has not an adequate soundproof cabin.

NOTICE: *The level of noise for the operator could be less or greater depending upon the towing tractor.*

Vibration levels

Install all the revolving parts correctly before you start the implement. An unbalance can create vibrations that damage the implement.

NOTE: *Check that all the parts are in the correct position before you start the implement.*

NOTICE: *If the vibrations or the noise of the implement increase considerably during the operation, stop the work immediately. Correct the fault before you continue the work.*

Ecology and environment

Soil, air, and water quality is important for all industries and life in general. When legislation does not yet rule the treatment of some of the substances that advanced technology requires, sound judgment should govern the use and disposal of products of a chemical and petrochemical nature.

Familiarize yourself with the relative legislation applicable to your country, and make sure that you understand this legislation. Where no legislation exists, obtain information from suppliers of oils, filters, batteries, fuels, anti-freeze, cleaning agents, etc., with regard to the effect of these substances on man and nature and how to safely store, use, and dispose of these substances. Your KONGSKILDE dealer can also provide assistance.

Helpful hints

- Avoid the use of cans or other inappropriate pressurized fuel delivery systems to fill tanks. Such delivery systems may cause considerable spillage.
- In general, avoid skin contact with all fuels, oils, acids, solvents, etc. Most of these products contain substances that may be harmful to your health.
- Modern oils contain additives. Do not burn contaminated fuels and or waste oils in ordinary heating systems.
- Avoid spillage when you drain fluids such as used engine coolant mixtures, engine oil, hydraulic fluid, brake fluid, etc. Do not mix drained brake fluids or fuels with lubricants. Store all drained fluids safely until you can dispose of the fluids in a proper way that complies with all local legislation and available resources.
- Do not allow coolant mixtures to get into the soil. Collect and dispose of coolant mixtures properly.
- Do not open the air-conditioning system yourself. It contains gases that should not be released into the atmosphere. Your KONGSKILDE dealer or air-conditioning specialist has a special extractor for this purpose and can recharge the system properly.
- Repair any leaks or defects in the engine cooling system or hydraulic system immediately.
- Do not increase the pressure in a pressurized circuit as this may lead to a component failure.

Battery recycling

Batteries and electric accumulators contain several substances that can have a harmful effect on the environment if the batteries are not properly recycled after use. Improper disposal of batteries can contaminate the soil, groundwater, and waterways. KONGSKILDE strongly recommends that you return all used batteries to a KONGSKILDE dealer, who will dispose of the used batteries or recycle the used batteries properly. In some countries, this is a legal requirement.



NHIL14GEN0038AA 1

Mandatory battery recycling

NOTE: The following requirements are mandatory in Brazil.

Batteries are made of lead plates and a sulfuric acid solution. Because batteries contain heavy metals such as lead, CONAMA Resolution 401/2008 as amended by CONAMA Resolution 424/2010 requires you to return all used batteries to the battery dealer when you replace any batteries. Do not dispose of batteries in your household garbage.

Points of sale are obliged to:

- Accept the return of your used batteries
- Store the returned batteries in a suitable location
- Send the returned batteries to the battery manufacturer for recycling

Safety signs

The following safety signs are on your implement as a guide for your safety and for the safety of those who work with you.

Walk around the implement and note the content and location of all safety signs before you operate your implement. Read all the safety signs adhered to the implement and follow the instructions.

Keep all safety signs clean and legible. Clean safety signs with a soft cloth, water, and a gentle detergent.

NOTICE: *Do not use solvent, gasoline, or other harsh chemicals. Solvents, gasoline, and other harsh chemicals may damage or remove the safety signs.*

Replace all safety signs that are damaged, missing, painted over, or illegible. If a safety sign is on a part that you or your dealer replaces, make sure that you or your dealer install the safety sign on the new part. Contact your dealer for the replacement of the safety signs.

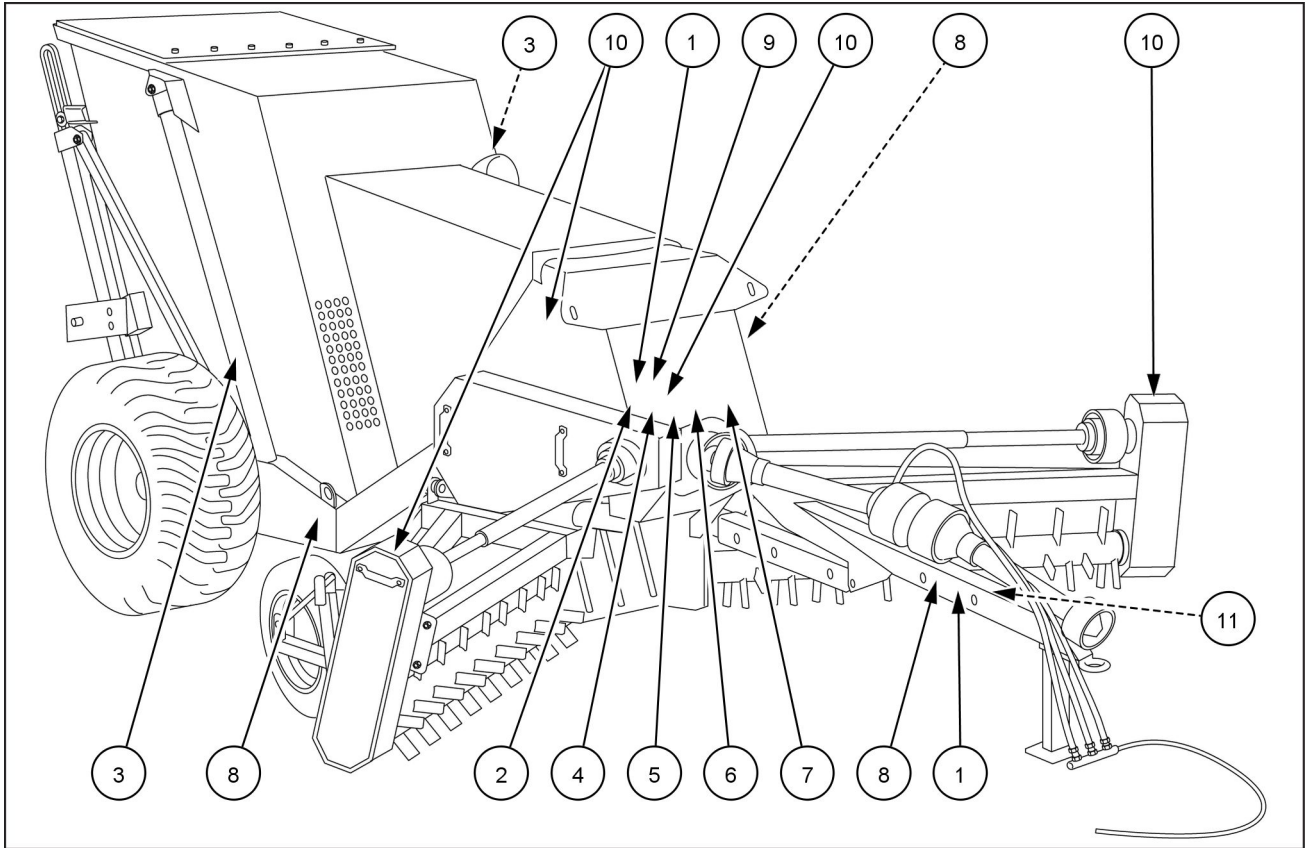
Safety signs that display the “Read operator’s manual” symbol direct you to the operator’s manual for further information regarding maintenance, adjustments, or procedures for particular areas of the implement. When a safety sign displays this symbol, consult the appropriate page of the operator’s manual.



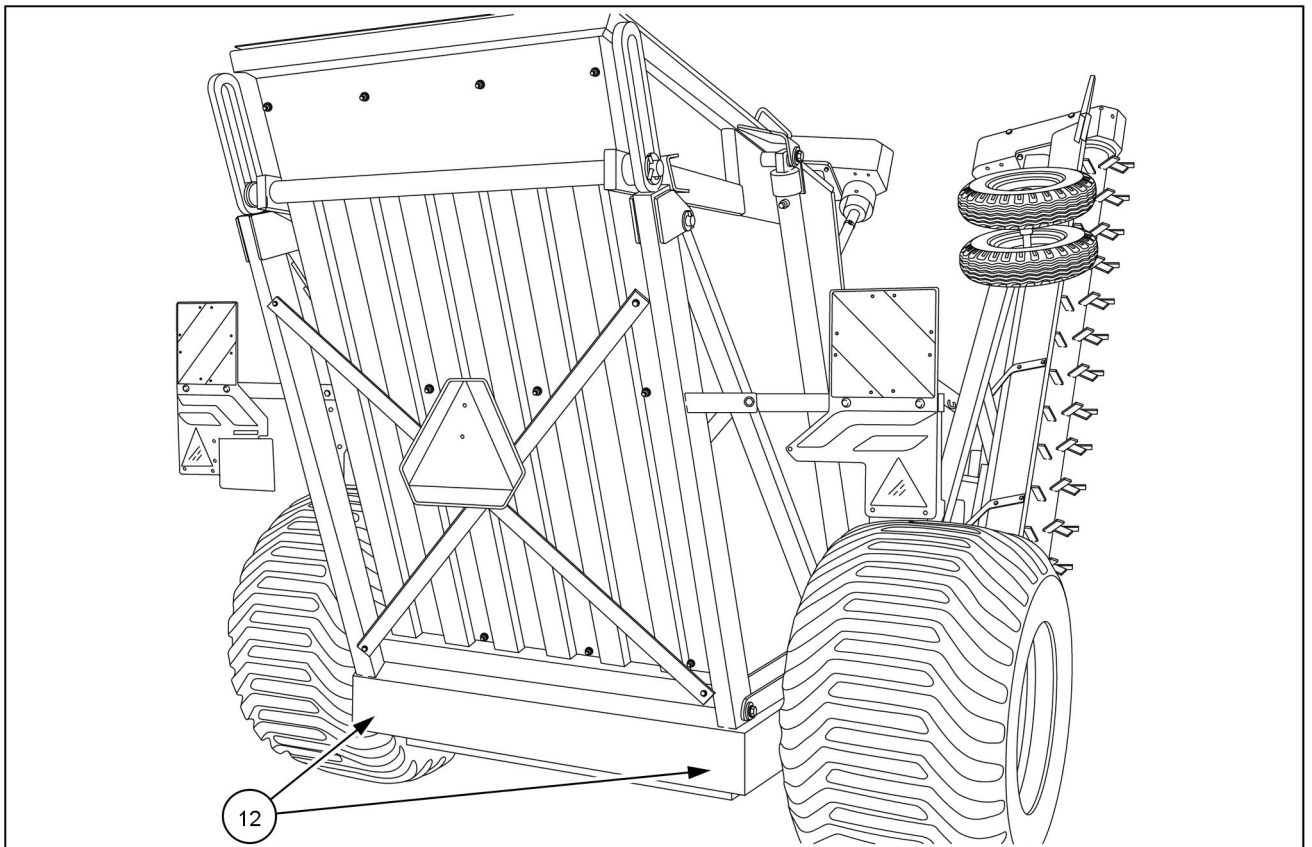
Safety signs that display the “Read service manual” symbol direct you to the service manual. If you doubt your ability to perform service operations, contact your dealer.



2 - SAFETY INFORMATION



ZEIL17TIL0126FA 1



ZEIL22TIL0223FA 2

Safety sign (1)

⚠ WARNING

IMPROPER OPERATION OF THIS MACHINE CAN CAUSE DEATH OR SERIOUS INJURY.

MAKE SURE THAT EVERY OPERATOR:

- is instructed in the safe and proper use of this machine.
- reads and understands the operator's manual for this machine.
- reads and understands ALL safety signs on the machine.

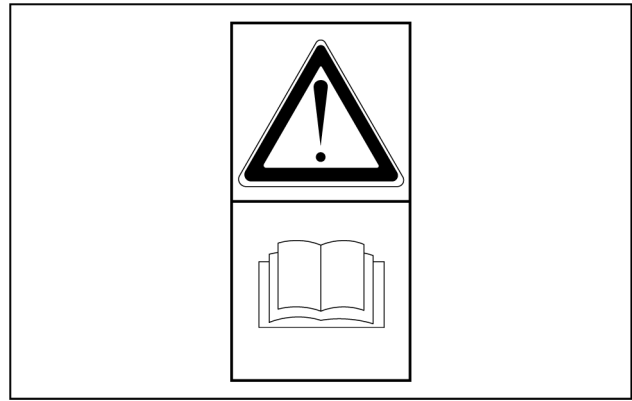
Failure to comply could result in death or serious injury.

W0188A

Read the operator's manual and the safety instructions before you operate the implement.

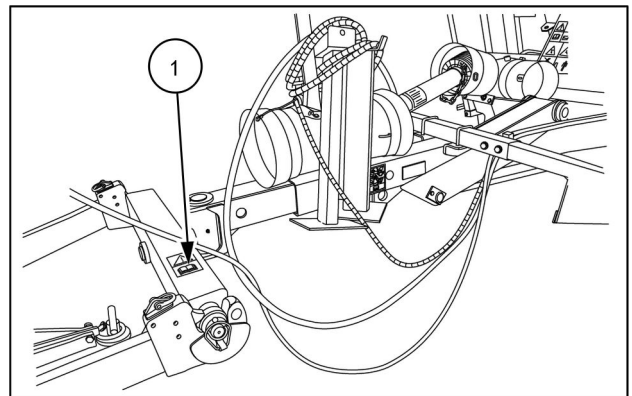
Read the delivered manuals to operate the implement correctly and to avoid unnecessary accidents and implement damage.

Part number: 81PR80-0841



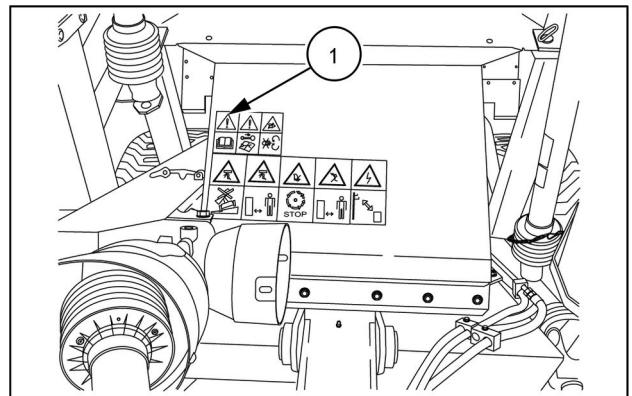
81PR80-0841 3

Located on the drawbar. Depending on the kind of the drawbar, the decal can be positioned in a different position.



ZEIL22TIL0229AA 4

Located on the front cover.



ZEIL22TIL0228AA 5

Safety sign (2)

⚠ WARNING

Roll-over hazard!

Special care is required when operating the machine on slopes or in a tilted position. A wrong maneuver or unexpected event could create a dangerous situation.

Failure to comply could result in death or serious injury.

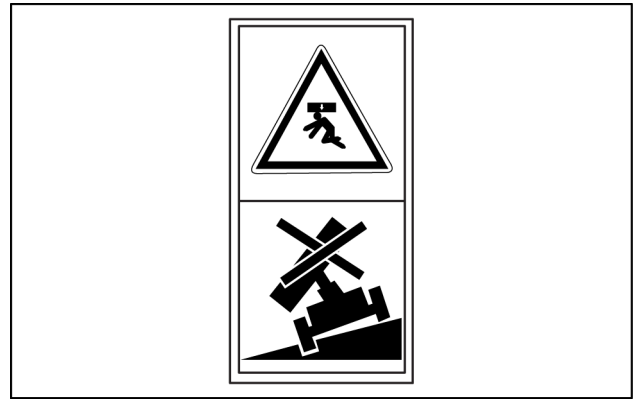
W0207A

A hazard to your body and limbs if the implement falls when tipping.

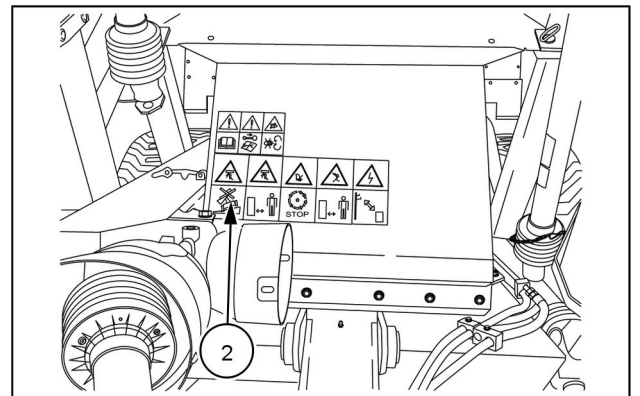
Always make sure that the tipping is done on a level and hard ground. Also check if the material in the hopper will exit smoothly. Uneven discharge can also cause instability.

Part number: 500008862

Located on the front cover.



500008862 6



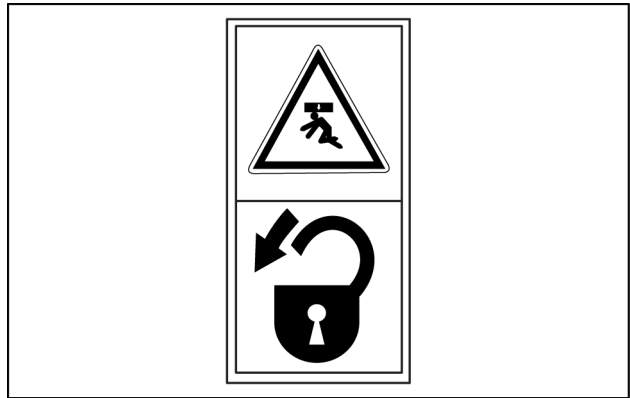
ZEIL22TIL0228AA 7

Safety sign (3)

Hazard of your body parts being crushed causing severe injuries, with possible lethal effect.

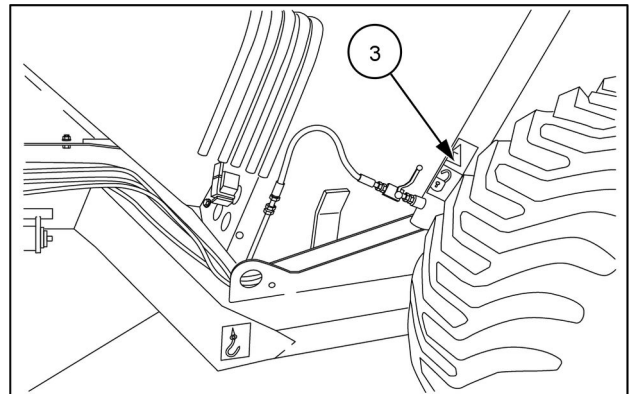
Make sure that the wing hooks are safely locked during transport, operation and maintenance.

Part number: 500008863



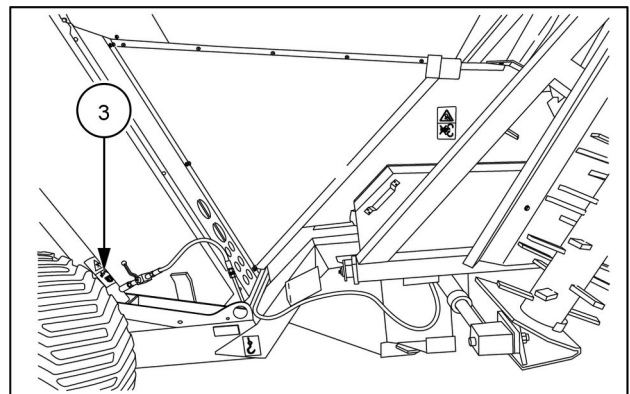
500008863 8

Located on the left-hand cylinder.



ZEIL22TIL0226AA 9

Located on the right-hand cylinder.



ZEIL22TIL0231AA 10

Safety sign (4)

⚠ WARNING

Falling object hazard!

Loss of hydraulic pressure or movement of a control can cause raised equipment to fall. Never work under an implement or attachment supported only by the hydraulic system. Always use suitable equipment to support an implement or attachment that must be serviced in a raised position.

Failure to comply could result in death or serious injury.

W0325A



500008864 11

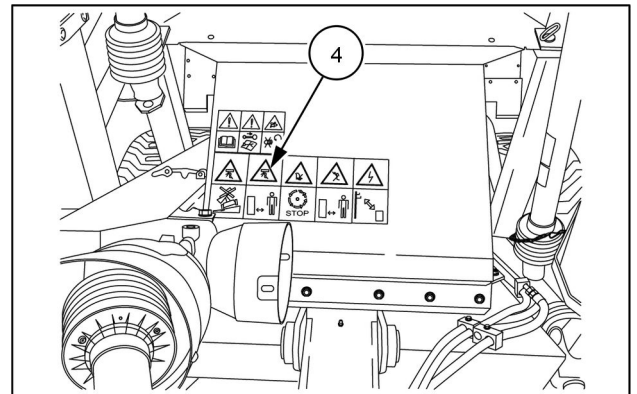
A hazard of your body being crushed by lowered unit elements.

The hazard may cause severe injuries to the entire body.

Keep clear of the hazard zone of the implement and pay attention to all other people standing next to the unit. Make sure that there is no one in hazard zones before attempting any actions.

Part number: 500008864

Located on the front cover.



ZEIL22TIL0228AA 12

Safety sign (5)

⚠ WARNING

Pinch hazard!
Wait for all movement to stop before you service
or adjust the machine or equipment.
Failure to comply could result in death or serious
injury.

W1420A

A hazard to your body and limbs being crushed if in contact with moving parts.

The hazard may cause severe injuries to the entire body, with possible lethal effect.

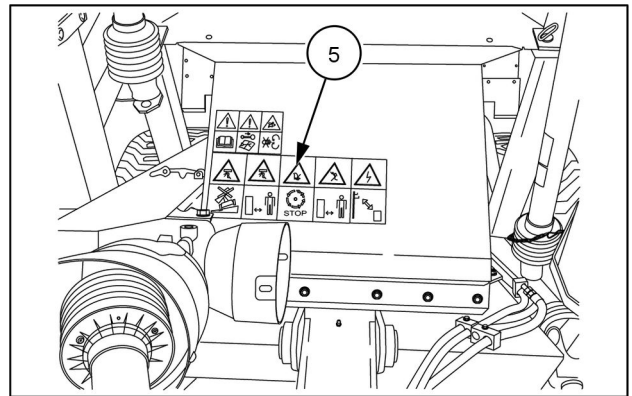
To avoid the hazards, wait until all moving elements have stopped completely before you touch them.

Part number: 500008868



500008868 13

Located on the front cover.



ZEIL22TIL0228AA 14

Safety sign (6)

⚠ WARNING

Flying debris!

Wear eye protection and protective clothing during the cleaning process. Clear the area of bystanders.

Failure to comply could result in death or serious injury.

W0364A

A hazard to your body being hit by flying objects kicked up by the implement.

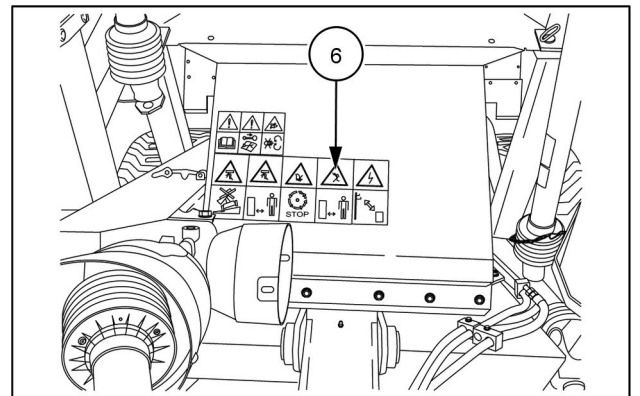
Always keep a safe distance from the implement, minimum **20 m (66 ft)**.

Part number: 500008869

Located on the front cover.



500008869 15



ZEIL22TIL0228AA 16

Safety sign (7)**⚠ WARNING****Electrocution hazard!**

Contact with overhead power lines can cause severe electrical burns or death from electrocution. Make sure there is enough clearance between equipment and overhead power lines. Failure to comply could result in death or serious injury.

W0040A

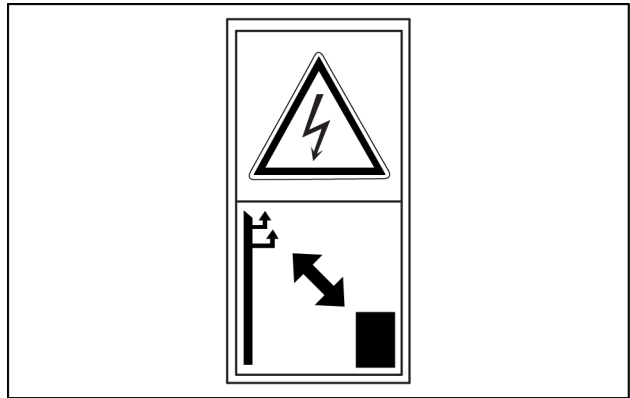
Hazard of being electrocuted or fire hazard caused by accidental hooking onto overhead electrical lines or by unacceptable approximation to live-current overhead electrical lines.

The hazard may cause severe injuries to the entire body, with possible lethal effect.

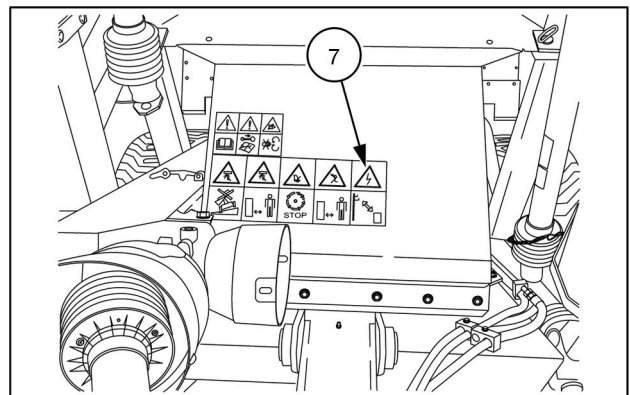
Maintain a safe distance to any electrical wires when you fold, unfold and travel in the vicinity of electrical lines.

Part number: 500008873

Located on the front cover.



500008873 17



ZEIL22TIL0228AA 18

Safety sign (8)

⚠ WARNING

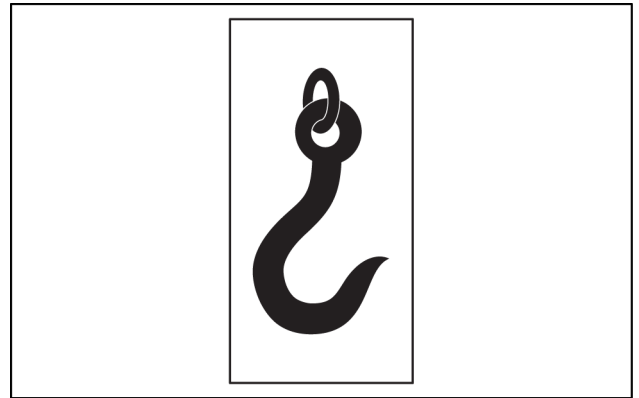
Crushing hazard!

Use the machine lifting points when you lift and/or move the machine with heavy handling equipment. Lift the machine only from the indicated lifting eye hookup points. Always use adequate lifting equipment.

Failure to comply could result in death or serious injury.

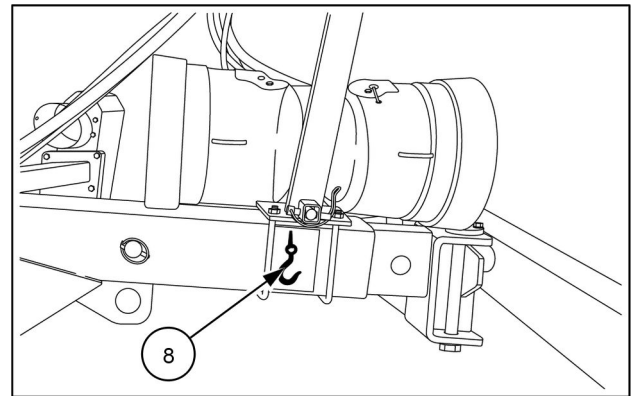
W1432B

Part number: 500008544



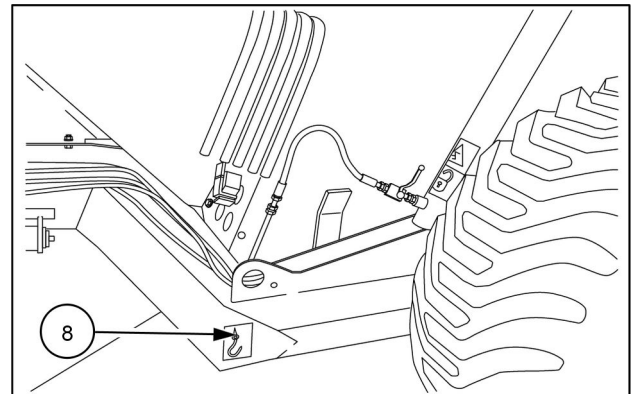
500008544 19

Located at the front of the drawbar.



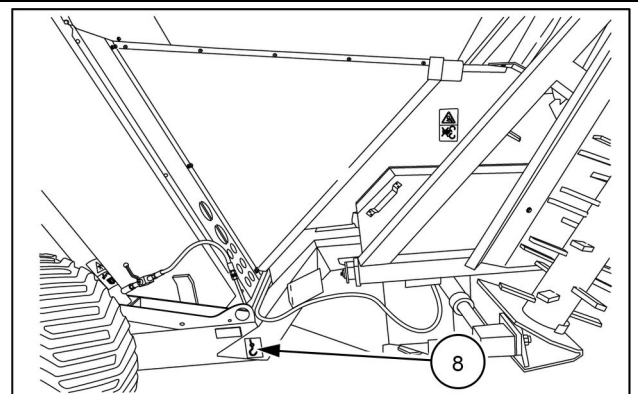
ZEIL22TIL0225AA 20

Located on the left-hand side of the main frame.



ZEIL22TIL0226AA 21

Located on the right-hand side of the main frame.



ZEIL22TIL0231AA 22

Safety sign (9)**⚠ WARNING**

Avoid injury! Always do the following before lubricating, maintaining, or servicing the machine.

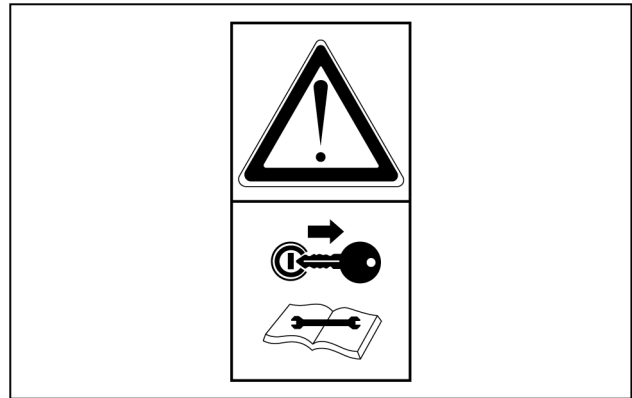
1. Disengage all drives.
2. Engage parking brake.
3. Lower all attachments to the ground, or raise and engage all safety locks.
4. Shut off engine.
5. Remove key from key switch.
6. Switch off battery key, if installed.
7. Wait for all machine movement to stop.

Failure to comply could result in death or serious injury.

W0047A

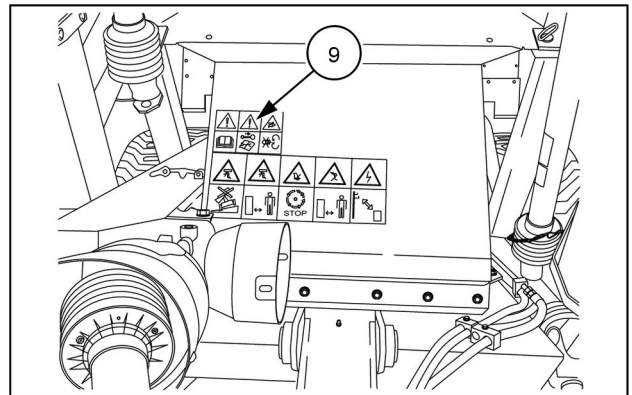
Stop the tractor engine and remove the ignition key before you touch the implement. Always remember to stop the tractor engine you adjust, maintain, repair, or lubricate the implement. Also remember to remove the ignition key. Make sure that nobody starts the engine, until you have finished.

Part number: 81PR80-0842



81PR80-0842 23

Located on the front cover.



ZEIL22TIL0228AA 24

Safety sign (10)

⚠ WARNING

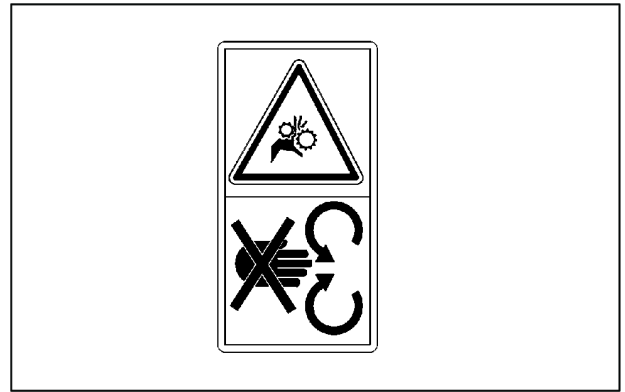
Rotating parts!
Keep clear of all drives and rotating components.
Failure to comply could result in death or serious injury.

W1101A

Hazard of your body parts being crushed or pulled into moving elements causing severe injuries, with possible lethal effect.

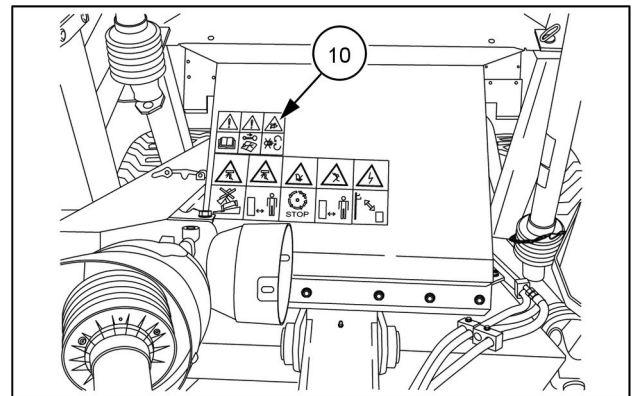
Make sure that all elements of the implement have stopped before you open the covers. Do not touch any elements if there is a risk they will rotate.

Part number: 84014114



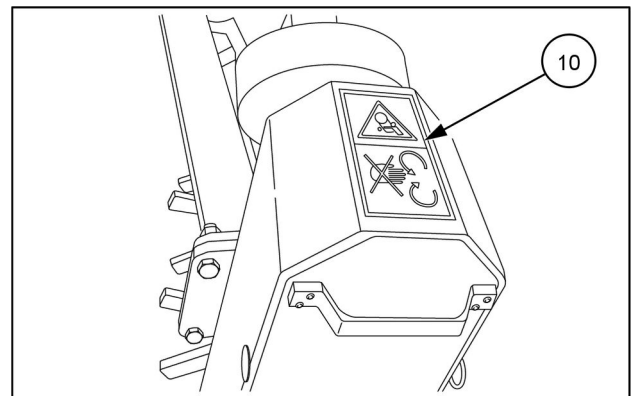
84014114_2 25

Located on the front cover.



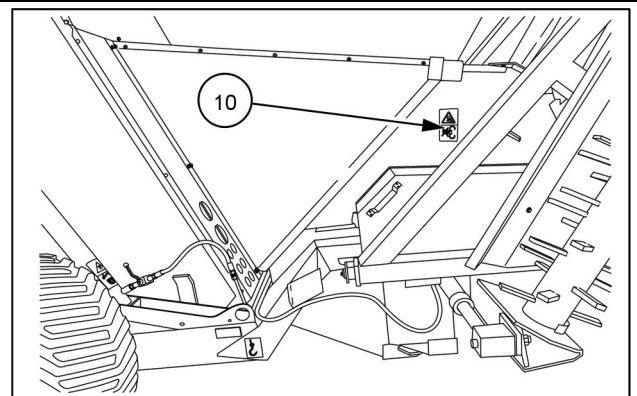
ZEIL22TIL0228AA 26

Located on top of the harrow drive guard (on both sides).



ZEIL22TIL0224AA 27

Located on the right-hand side guard.



ZEIL22TIL0231AA 28

Safety sign (11)

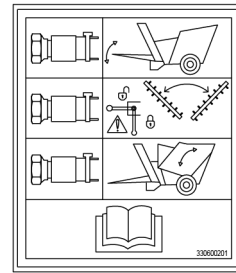
Unexpected machine movement can cause death or serious injury.

Make sure the implement is connected to a stable device when activating the hydraulics to fold and unfold the wings. Follow the correct operating procedure.

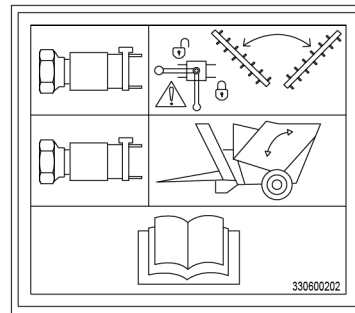
When working underneath the wings, when transporting, or when leaving the implement wings up for any extended length of time, make sure the valve which preventing from accidental unfolding is closed.

Part number: 330600201 (only for implement with hydraulic drawbar adjustment system).

Part number: 330600202 (only for implement without hydraulic drawbar adjustment system).

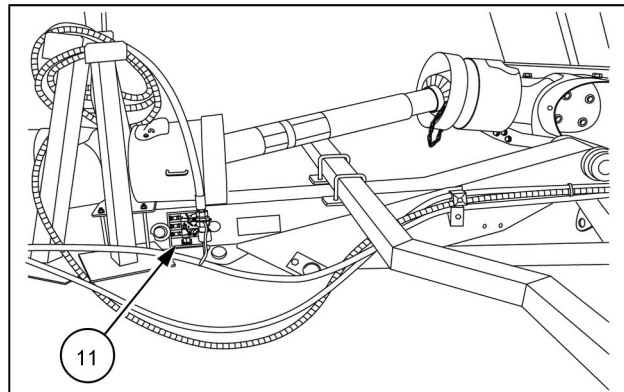


330600201 29



330600202 30

Located on front left-hand side of the drawbar.



ZEIL22TIL0227AA 31

Safety sign (12)**⚠ WARNING****Crushing hazard!**

Unit could fall if not properly supported. Follow jacking instructions provided for the unit. Use suitable jack stands. Be sure to position them properly.

Failure to comply could result in death or serious injury.

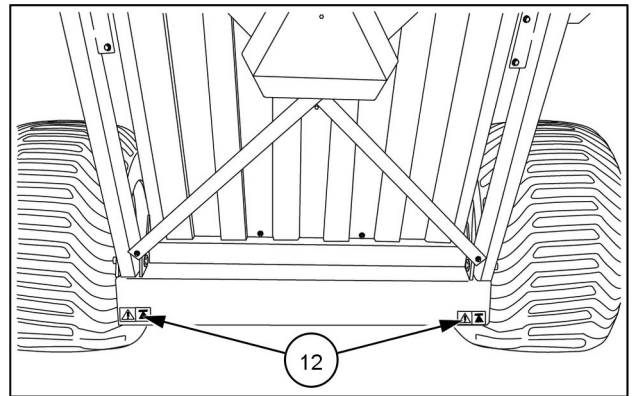
W0919A

Part number: 84389459



84389459 32

Located on the back of the main frame.

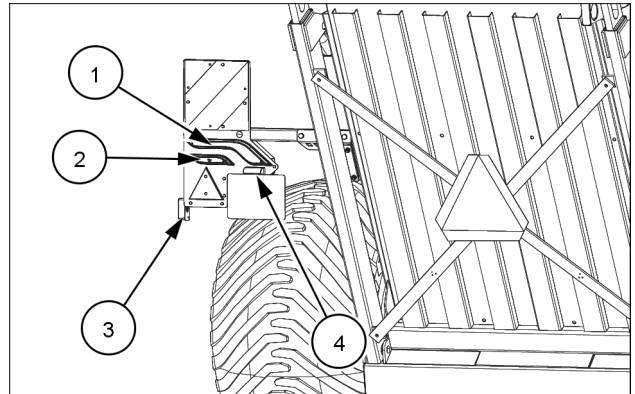


ZEIL22TIL0230AA 33

Road travel lights, signs, and reflectors

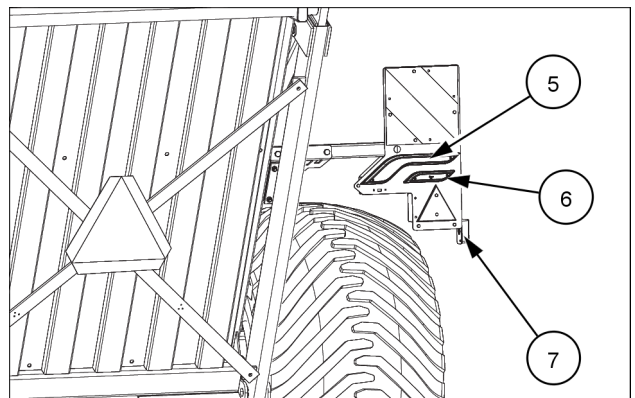
Road lights

- Rear position and stop lights **(1)** left-hand side
- Rear direction indicator light **(2)** left-hand side
- End outline marker light **(3)** left-hand side (if equipped)
- License plate light **(4)**



ZEIL22TIL0249AA 1

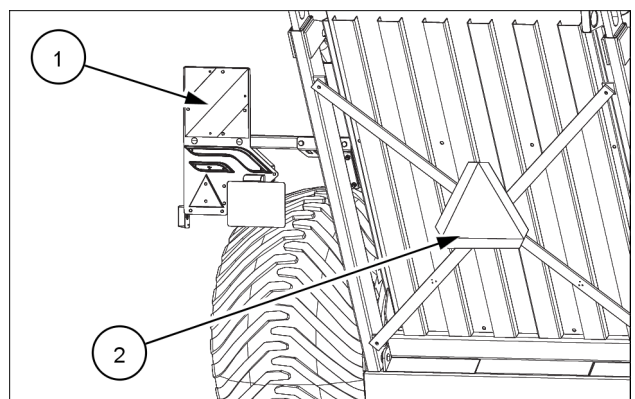
- Rear position and stop lights **(5)** right-hand side
- Rear direction indicator light **(6)** right-hand side
- End outline marker light **(7)** right-hand side (if equipped)



ZEIL22TIL0250AA 2

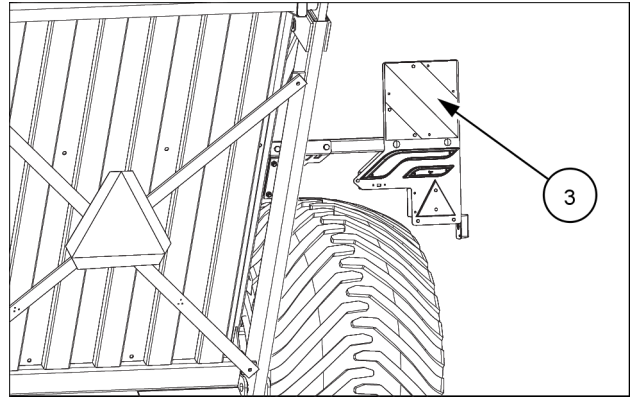
Signal plates

- Rear signal plate **(1)** left-hand side
- Slow-Moving Vehicle (SMV) sign **(2)** (if equipped)



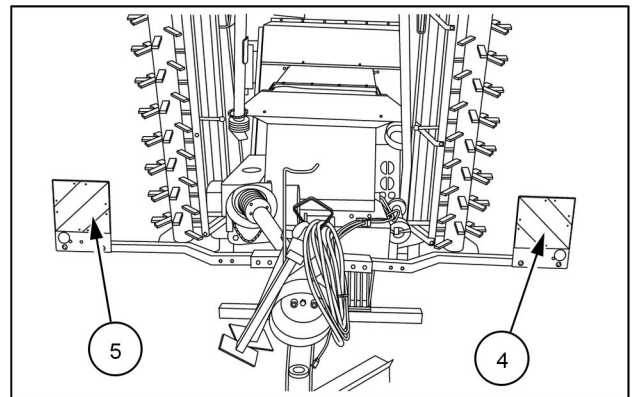
ZEIL22TIL0249AA 3

- Rear signal plate **(3)** right-hand side



ZEIL22TIL0250AA 4

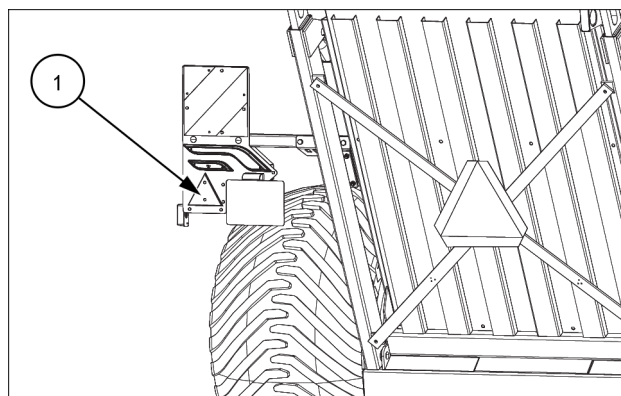
- Front signal plate **(4)** left-hand side
- Front signal plate **(5)** right-hand side



ZEIL22TIL0234AA 5

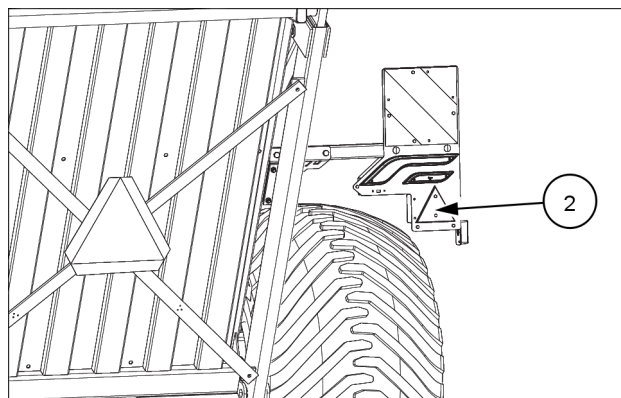
Reflectors

- Rear reflector **(1)** left-hand side



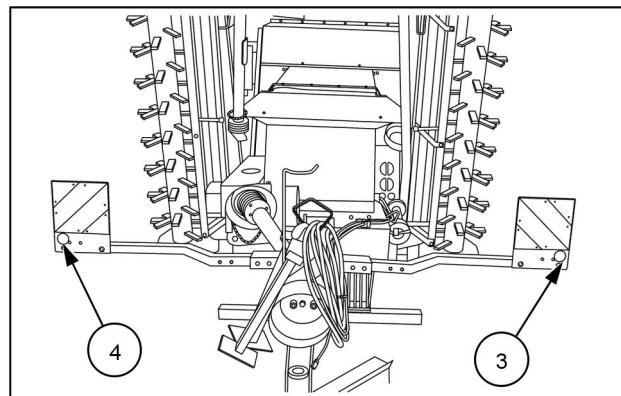
ZEIL22TIL0249AA 6

- Rear reflector **(2)** right-hand side



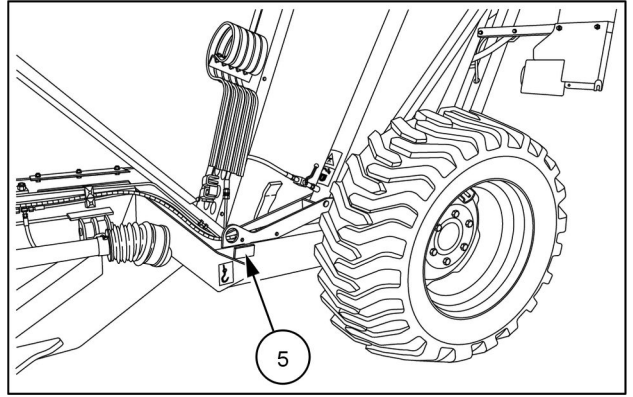
ZEIL22TIL0250AA 7

- Front reflector **(3)** left-hand side
- Front reflector **(4)** right-hand side

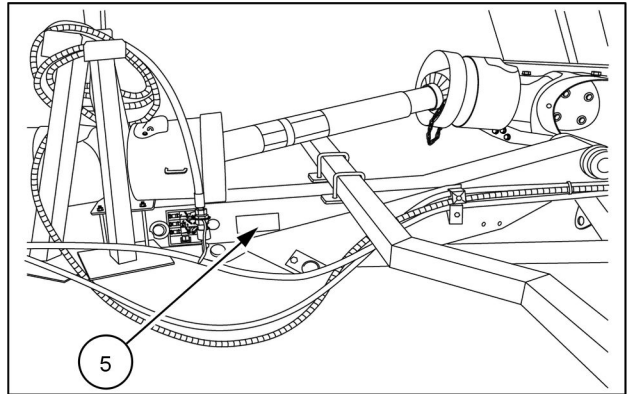


ZEIL22TIL0234AA 8

- Side reflectors **(5)** left-hand side

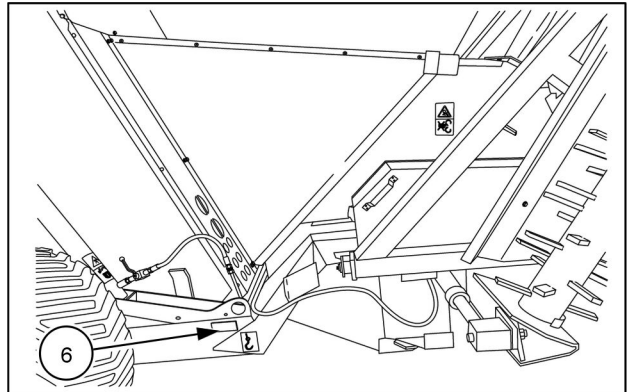


ZEIL22TIL0235AA 9

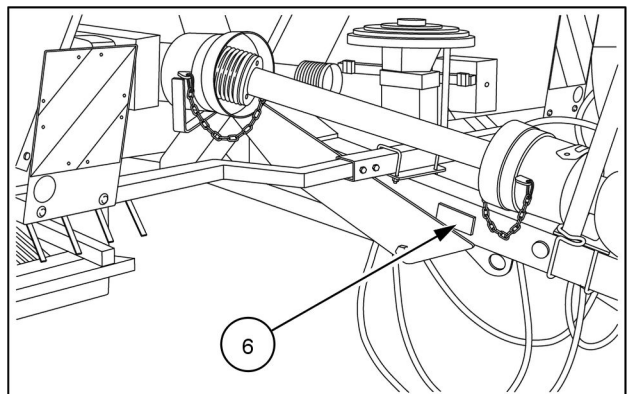


ZEIL22TIL0227AA 10

- Side reflectors **(6)** right-hand side



ZEIL22TIL0231AA 11



ZEIL22TIL0236AA 12

3 - CONTROLS AND INSTRUMENTS

Information

Operating principles

For all information related to the description and the location of the controls to use your implement, see chapter “Controls and Instruments” in the operator’s manual of your vehicle.

4 - OPERATING INSTRUCTIONS

Commissioning the unit

Check before use

Before you operate the stonebear for the first time, perform the following items:

- Read this operator's manual carefully, especially the chapter headed "Safety information".
- Check that no parts have been tied up inside the implement in connection with the delivery of the implement.
- Check the correct assemblage of the implement. Also check that the implement is undamaged.
- Check the tire air pressure.
- Check wheel and screen mounting screw tensions.
- Check the collecting drum spring tine mounts. Rubber plate compression should be **1.5 – 2 mm (0.06 – 0.08 in)**.
- Check that the Power Take-Off (PTO) speed of the implement (and of the tractor) is correct.
- Check the movements of the PTO shaft. If the PTO shafts is too short or too long it may damage the tractor as well as the implement considerably. Check that the protection tubes do not get jammed or damaged in any position. Secure the safety chains of the protection tubes properly. Check that the safety chains do not in any position get too tight or damaged.
- Check the correct connection and tightening of the hydraulic components.
- Check the condition of the hydraulic hoses and connections.
- Check that the hydraulic hoses are long enough for the movements of the implement in relation to the tractor.
- Check the length of the hydraulic hoses when the implement is in working position. Check that the hydraulic hoses are not too tense.
- Check the gearbox oil level. Refill if necessary.
- Grease sufficiently the implement (see Page **7-10**).
- Check the collecting drum drive belts. Adjust the tension if necessary.
- Check the rake drive belts. Adjust the tension if necessary.
- Check the proper tightness of all the nuts and bolts.

Although the nut torque is set during implement assembly, it will take a few hours before the parts on a new implement settle into place.

The implement has been factory tested and preset by KONGSKILDE for average use, but It is possible to perform any extraordinary conditional adjustments to achieve an optimal results upon implementation.

After you check the implement, if you wish to test the implement for a long time, close the rear window or wear hearing protector. If there is any doubt, stop the tractor and the implement immediately.

Choice of the tractor

The stonebear operates with tractors with the following requirements.

Requirement	SB 4000	SB 5200
Power	55 kW (75 hp)	60 kW (82 hp)
Power supply	12 V	
Power Take-Off (PTO) speed	350 RPM	
Hydraulic outlets	Two single and one double acting outlets	
Minimum oil flow rate	30.0 L/min (7.9 US gpm)	
Hydraulic brake	Available as option	

Starting the unit

Connection to the tractor

⚠ WARNING

Avoid injury!

Always stay clear of the implement operating area. In particular, DO NOT stand between the tractor and the trailed vehicle or either three-point linkage when operating lift controls. Make sure no bystanders are within or near these operating areas.

Failure to comply could result in death or serious injury.

W1087A

It is possible to connect the implement to the tractor in three alternative ways.

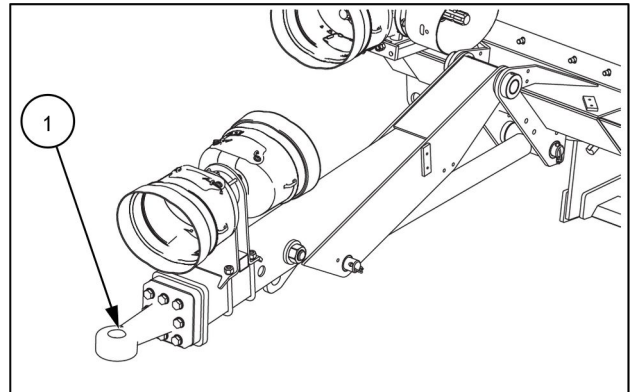
- With the **50 mm** hook (standard)
- With the two point drawbar Cat II (option).
- With the two point drawbar Cat II with hydraulic cylinder (option).

50 mm hook

The drawbar hitch (**1**), standard on the implement, is connected directly to the tractor's draw hook. The implement will follow smoothly the tractor movements.

The depth of the collecting drum share is adjusted hydraulically with a cylinder fitted under the drawbar. When you disconnect the implement, lock the cylinder with a bracket.

The drawbar hitch has a telescopic adjustment in length. It gives more space for turning when for example dual wheels are fitted in tractor.



ZEIL22TIL0274AA 1

Two point drawbar Cat II

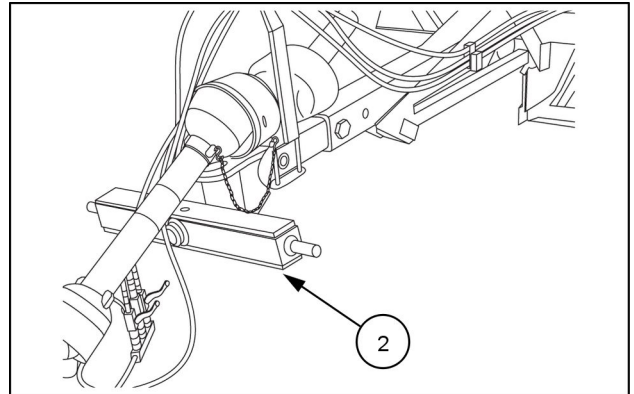
As option, the implement can be equipped with a two point drawbar Cat II (2). The drawbar is connected directly to the tractor linkage. The implement will follow well the linkage and turnings will result easy, especially in headlands.

The working depth is controlled by the tractor linkage and the range of working depth adjustment is smaller than the range of the tractor hitch up and down adjustment. Furthermore, if the range of working depth adjustment on the implement is not suitable to the tractor hitch, the tie-rod under the drawbar must be readjusted.

NOTE: In uneven conditions this may cause more variation in depth.

NOTICE: Make sure not to exceed the available range of adjustment on the implement otherwise the Power Take-Off (PTO) shaft will be damaged.

An adjustable tie-rod instead of the cylinder is mounted in a standard configuration.



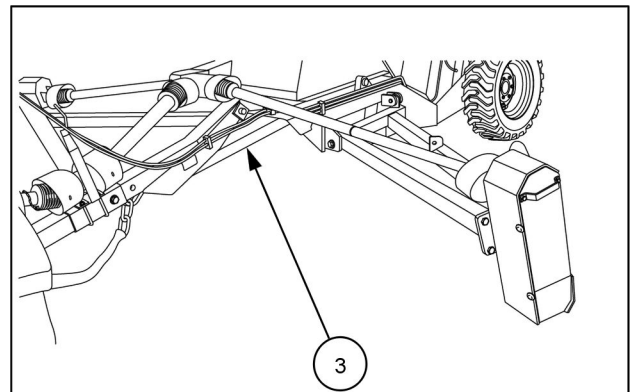
ZEIL17TIL0106AA 2

Two point drawbar hitch Cat. II with hydraulic cylinder

As option, the implement can be equipped with a two point drawbar Cat II equipped with an hydraulic cylinder (3).

NOTE: If the implement is equipped with the hydraulic cylinder, it is recommended to adjust the working depth only by the cylinder and not by the tractor hitch.

NOTICE: Make sure not to damage the PTO shaft during lifting operation of the tractor hitch.



ZEIL21TIL0493AA 3

Hydraulic system

NOTICE: When you connect or disconnect hydraulic hoses or connections, make sure that the system is depressurized both in the tractor and in the implement. There is a risk of infection from the side of the outflowing pressurized oil.

Prior to connecting the implement to the hydraulic system:

1. Verify if the oil used in the tractor hydraulics and the implement hydraulics matches.
2. Verify that the quick-couplers are properly clean; if not, clean them.
3. Verify that the connection are properly tightened.
4. Set the tractor's steering implement in the neutral position.

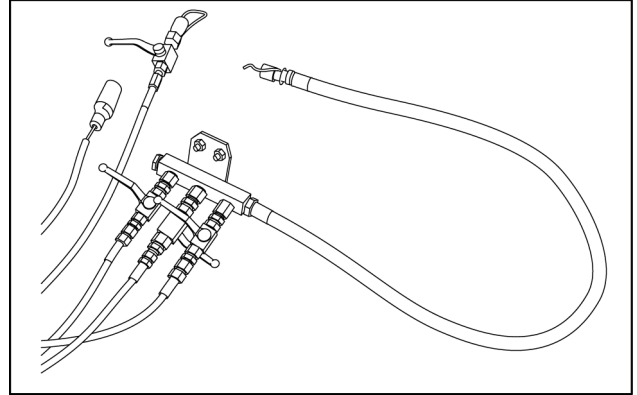
NOTICE: Only qualified servicing personnel may perform adjustment and repair of the hydraulic system.

Before you connect the implement to the tractor:

1. Verify if the connection matches the three-point suspension system of the implement and the tractor.
2. Perform all the necessary adjustments if the connection is inconsistent.
3. Make sure that the implement is standing on firm ground and is secured against unintentional rolling.

The implement requires two single acting valves and one double acting valve if the hydraulic cylinder under the drawbar is added. They are for the hopper tipping cylinders, the rake lifting and the depth control cylinder under the drawbar.

NOTE: Approximately **2.5 L (0.66 US gal)** of oil will remain in the hoses when the hopper is in lower position.

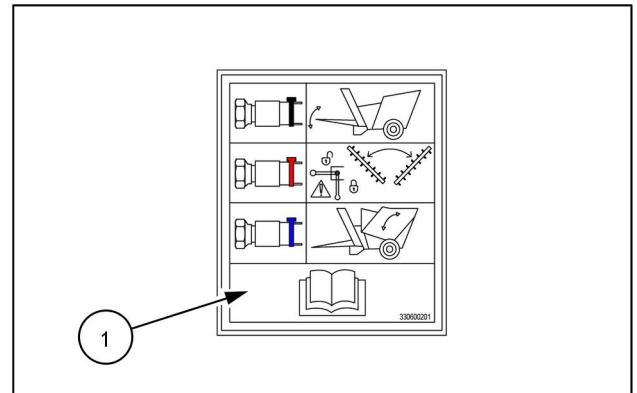


ZEIL17TIL0108AA 4

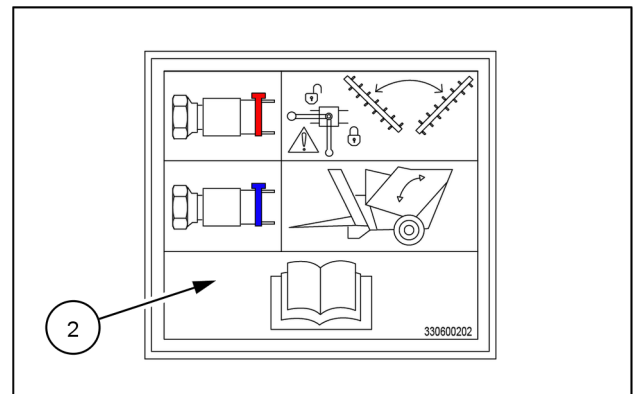
Hydraulic connections are marked with the following colors:

- Black – the line operating the drawbar (applicable only for implement equipped with the hydraulic drawbar adjustment system).
- Red – the line operating the folding and unfolding of the rotors.
- Blue – the line operating the folding and unfolding of the chest.

NOTE: Depending on the drawbar version, refer to decal (1) or (2) to identify the hydraulic hoses.



ZEIL22TIL0232AA 5



ZEIL22TIL0233AA 6

Power Take-Off (PTO) connection

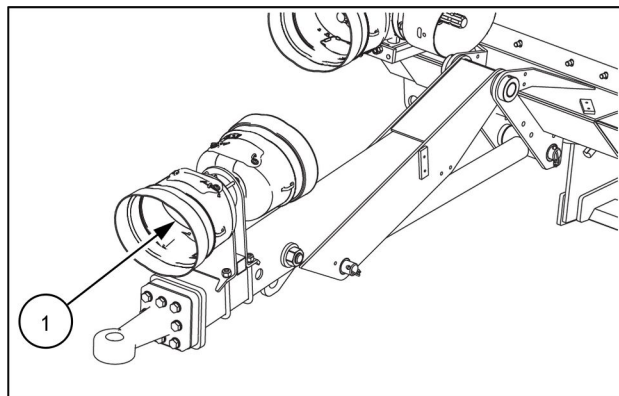
NOTICE: The implement is only intended for **350 RPM**. Make sure not to use the wrong Power Take-Off (PTO) by mistake.

The stonebear is equipped with a PTO shaft (**1**) as standard. Before you connect the PTO shaft, make sure that the PTO shaft has the correct length. The PTO shaft is connected between the tractor power take off axle and the axle fitted on the implement drawbar.

The connection of the stonebear PTO shaft to different type of tractors is easier when you can adjust the axle and bearing fitted on the drawbar.

If the inner and outer tubes have an overlap of less than **15 cm (5.9 in)** in its longest position, the shaft is too short. If the PTO shaft needs to be shortened, file down the edges, remove the filings, and lubricate the telescopic tube.

When you use the swivel hitch connection, set the working height of the tractor linkage so that the drawbar does not touch the shaft. Also make sure that the linkage is not raised too far, when you reverse.



ZEIL22TIL0274AA 1

Power Take-Off (PTO) drive shaft – Shorten

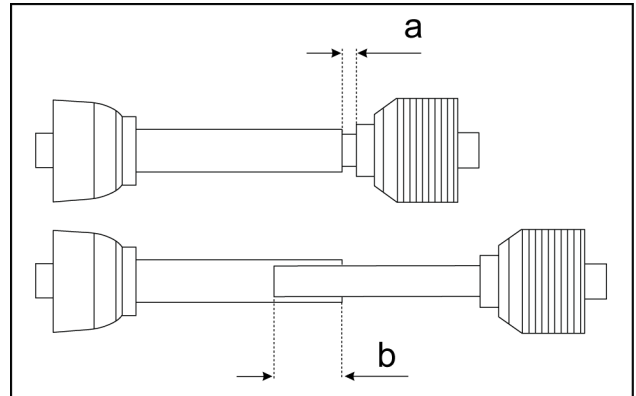
Power Take-Off (PTO) shaft length

NOTE: Do not shorten your new Power Take-Off (PTO) shaft until you are certain that it is necessary. From the factory the distance from PTO to Power Input Connection (PIC) is standard on most tractor brands.

Check the length of the PTO shaft for each tractor prior to first use.

If it is still necessary to shorten the PTO shaft, the profile tubes of the PTO shaft must fully comply with the following overlapping measures:

- The sliding tubes must have as much overlap as possible, with an acceptable minimum overlap (**b**) of **200 mm (7.87 in)** during normal operation (Top Safe extension links in the normal position).
- There must be a minimum of **30 mm (1.18 in)** of free PTO shaft length (**a**) to prevent the shaft from bottoming out.



NHIL12HT00307AA 1

Determining the required shaft length

When you determine that you must shorten the PTO shaft, select the length so that the telescoping members never close completely or bottom out when in use. The PTO length must never be smaller than the minimum distance between the joints.

1. Attach the implement to the tractor without the PTO shaft.
2. Adjust the three-point hitch so that the PTO shaft is parallel with the ground.
3. Stop the tractor and engage the parking brake.
4. Determine if the PTO shaft bottoms out in this position. If the PTO shaft bottoms out in this position or if the free length is less than **30 mm (1.18 in)**, proceed with the procedure to shorten the PTO shaft.

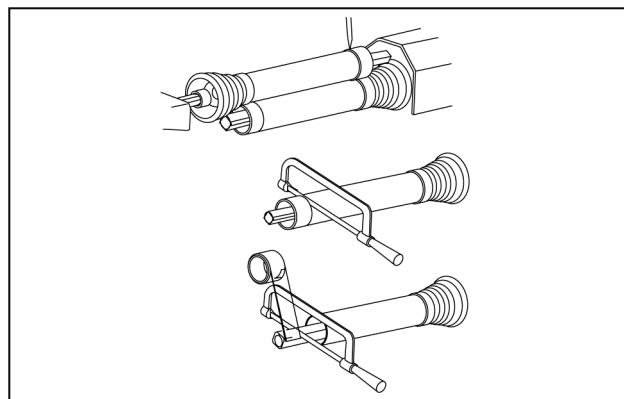
Shortening the PTO drive shaft

To shorten the PTO shaft proceed as follows.

1. Fasten the PTO drive shaft half parts to the PTO (on the tractor) and the PIC (on the implement). The PTO drive shaft half parts must be at the same horizontal level, opposite each other at the shortest distance from the tractor.
2. Make sure that a minimum overlap of **200 mm (7.87 in)** exists.
3. Check that the PTO shaft does not bottom out at one end. Keep the shaft ends parallel to each other and mark the minimum distance of **30 mm (1.18 in)**. Only cut enough PTO shaft off to achieve this minimum free shaf length. This will maintain the maximum amount of PTO shaft overlap.
4. Shorten all four tubes equally.
5. Round off the ends of the profile tubes and remove the burrs carefully.
6. Remove the metal shavings.

NOTICE: To avoid big friction forces, grease the tube carefully before you reassemble it. Use **TUTELA MULTI-PURPOSE GR-9 GREASE**.

NOTE: If you shorten the PTO shaft, then you must check the minimum overlap and the minimum distance again if you operate the implement with a different tractor.



ZEIL18HT00013AA 2

Parking the unit

Disconnection and parking

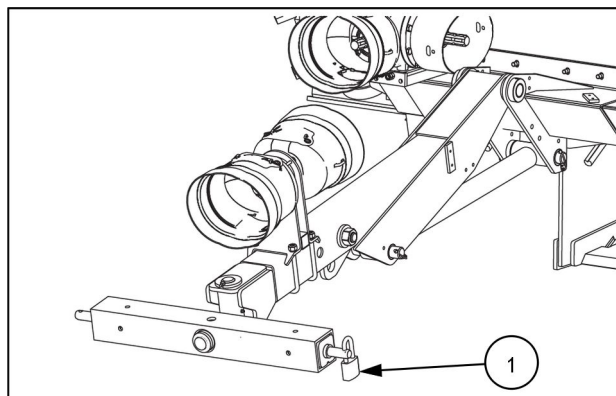
1. Place the implement on a firm and level ground.
2. Clear the area of bystanders and remove foreign objects from the implement and working area
3. Stop the tractor, set the controls in neutral, set the hand brake and remove the ignition key.
4. Depressurize the hydraulic system before you disconnect the implement.
5. Disconnect the other hydraulic connections and inspect them for leaks.
6. Disconnect the Power Take-Off (PTO) shaft.
7. Disconnect the unit lighting and inspect the light operation.
8. Use the draw bar cylinders to lower the implement. Make sure that no one is in the working area during the disconnection.
9. Disconnect the coupling. Release the implement from the tractor.

Anti-theft protection

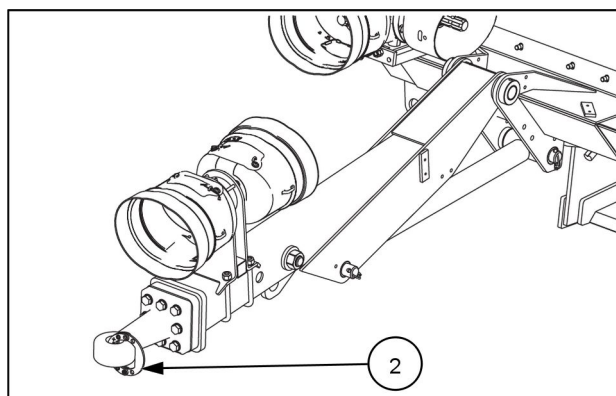
The implement is fitted with a device against unauthorized use, to be used at the end of the work shift, during parking or during downtime, to prevent it from being hooked to a tractor and reducing the risk of unauthorized use.

Depending on the equipped front couplings listed below, use the proper device against unauthorized use:

- Two point drawbar **(1)**
- Towing eye hook **50 mm (2)**



ZEIL22TIL0245AA 1



ZEIL22TIL0246AA 2

Jack point locations

⚠ WARNING

Jack stands can slip or fall over. Dropping, tipping, or slipping of machine or its components is possible.

DO NOT work under a vehicle supported by jack stands only. Park machine on a level surface. Block wheels. Support machine with safety stands.

Failure to comply could result in death or serious injury.

W0069A

⚠ WARNING

Crushing hazard!

Unit could fall if not properly supported. Follow jacking instructions provided for the unit. Use suitable jack stands. Be sure to position them properly.

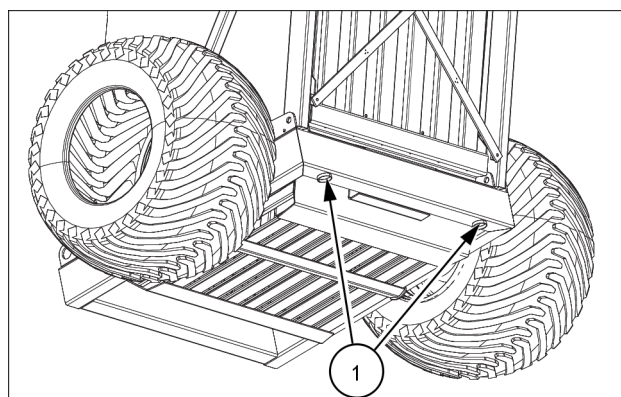
Failure to comply could result in death or serious injury.

W0919A

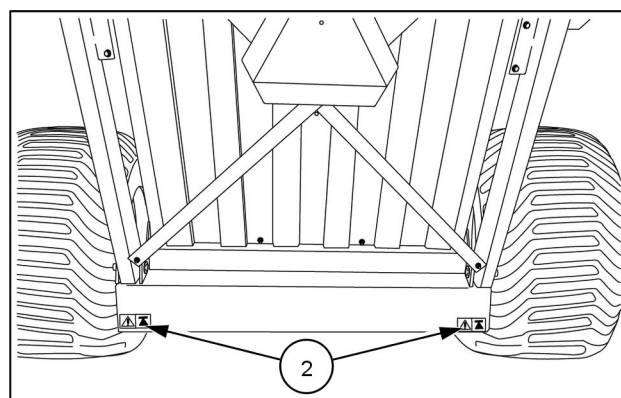
To jack the implement in a correct way, proceed as follows:

1. Park the implement on a firm and level ground.
2. Place the jack under the jack point **(1)** of the implement.

NOTE: The safety decals **(2)** highlight the correct position.



ZEIL22TIL0248AA 1



ZEIL22TIL0230AA 2

5 - TRANSPORT OPERATIONS

Preparing for road transport

Transport position

NOTICE: *Never raise the rakes when the articulated shafts are in working position.*

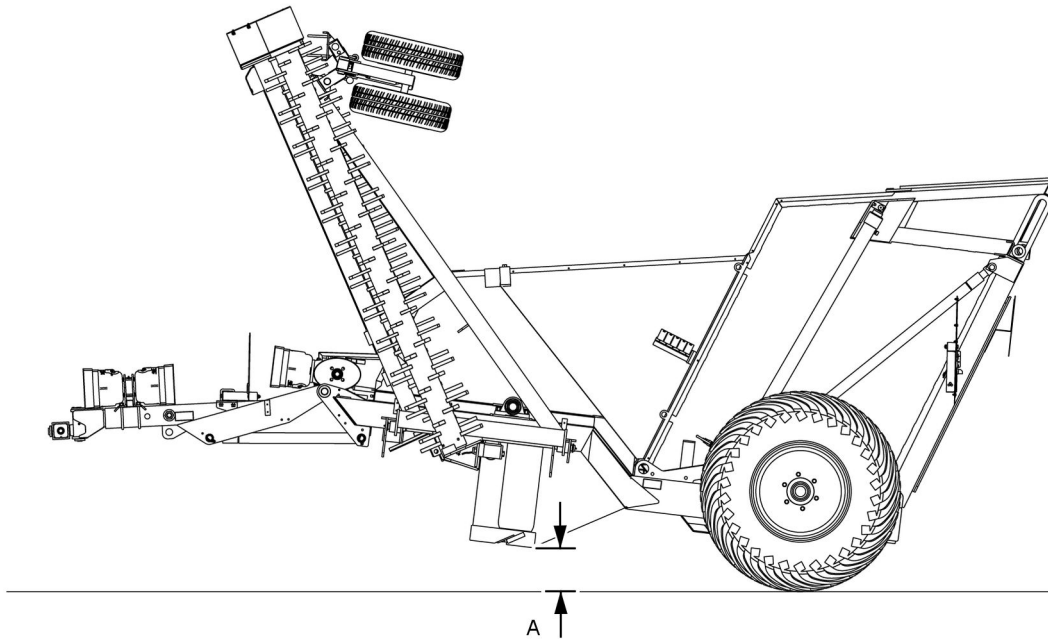
NOTICE: *Make sure that the hopper is completely empty and in lower position.*

NOTICE: *Make sure that the hopper is completely empty and in lower position.*

To fold the implement in transport position, proceed as follows:

1. Stop the Power Take-Off (PTO) and wait until all revolving parts have stopped.
2. Activate the tractor hand brake.
3. Whenever raising the rakes into their transport position, first release the PTO shafts from the implement side ends and connect them to the mounting pins on the rake frame.
4. Fold up the rakes hydraulically.
5. Lock the rakes with the use of the safety pins. Check that the rake lifting cables do not hang too low.
6. Only for implement equipped with the hydraulic cylinder under the drawbar, secure the cylinder to the dedicated bracket in order to provide a constant drawbar position.

7. Verify that the dimension **(A)** is **260.0 mm (10.2 in)**.
If the dimensions **(A)** is not the required value, adjust the height of the implement by adjusting the height of the two point linkage connection.
8. Check that all the lights work properly, are clearly visible and perpendicular as much as possible to the ground.
9. Make sure that the implement is secure, that nothing falls off, including big lumps of soil, during transport.



ZEIL22TIL0238FA 1

Shipping transport

Lifting the implement

⚠ WARNING

Crushing hazard!

The lifting systems must be operated by qualified personnel who are aware of the correct procedures to follow. Make sure all lifting equipment is in good condition, and all hooks are equipped with safety latches.

Failure to comply could result in death or serious injury.

W0256A

⚠ WARNING

Crushing hazard!

Use the machine lifting points when you lift and/or move the machine with heavy handling equipment. Lift the machine only from the indicated lifting eye hookup points. Always use adequate lifting equipment.

Failure to comply could result in death or serious injury.

W1432B

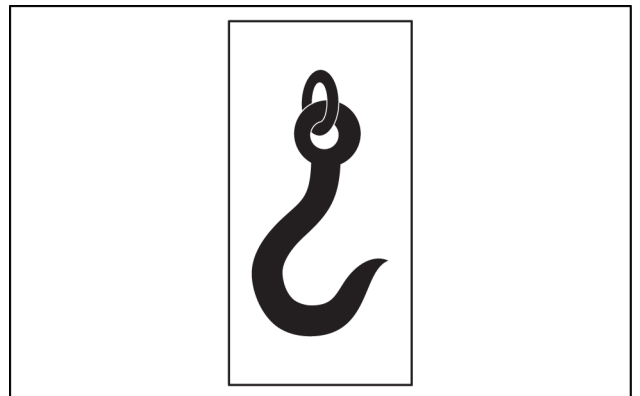
NOTICE: When you lift the implement, always make sure that there are no personnel under the implement at any time.

NOTICE: Use extreme caution when you use a forklift or similar lifting device. Forklift or similar lifting devices are not recommended.

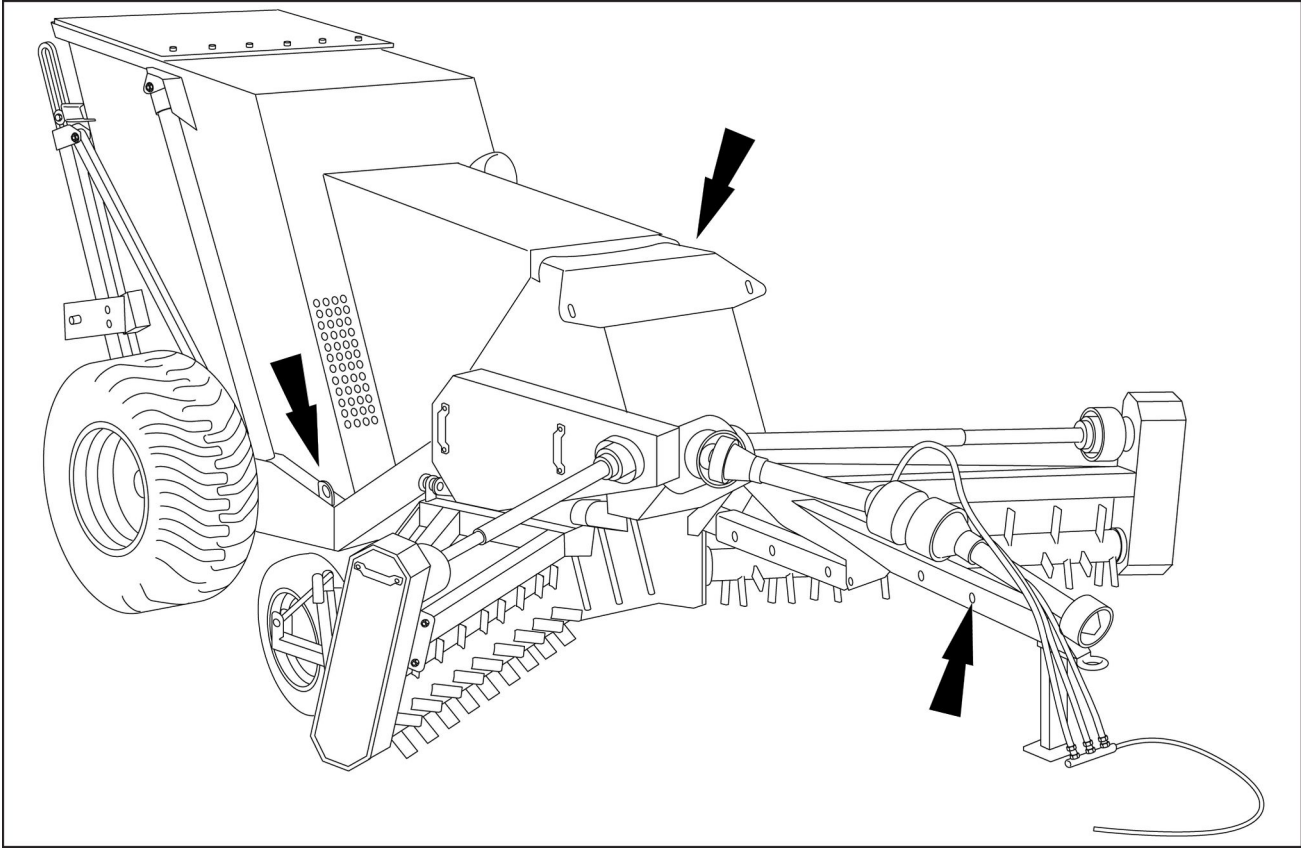
When you place the stonebear on a truck or trailer, observe all traffic regulations. Check the load overall height and fastening carefully.

When you transport or carry the stonebear by equipment other than a tractor, observe the following guidelines.

The stonebear lifting points consist of three welded hooks (see Figure 2): two at the center point on both sides of the implement and one on the drawbar. The lifting points are marked with the relevant decal (1).



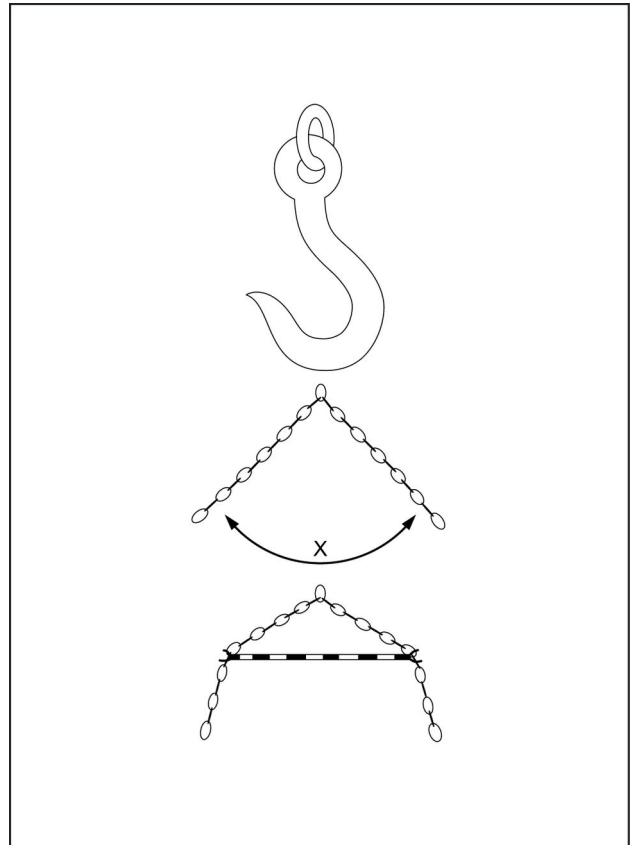
500008544 1



ZEIL17TIL0126FA 2

The lifting equipment must be rated to handle at least twice the weight listed on the Product Identification Number (PIN) plate of the implement.

Lifting chains or straps must be of an adequate length to avoid abrading or otherwise damaging the stonebear. Lifting chains or straps must be with an angle X of at least **90°**.



ZEIL17TIL0104BA 3

6 - WORKING OPERATIONS

General information

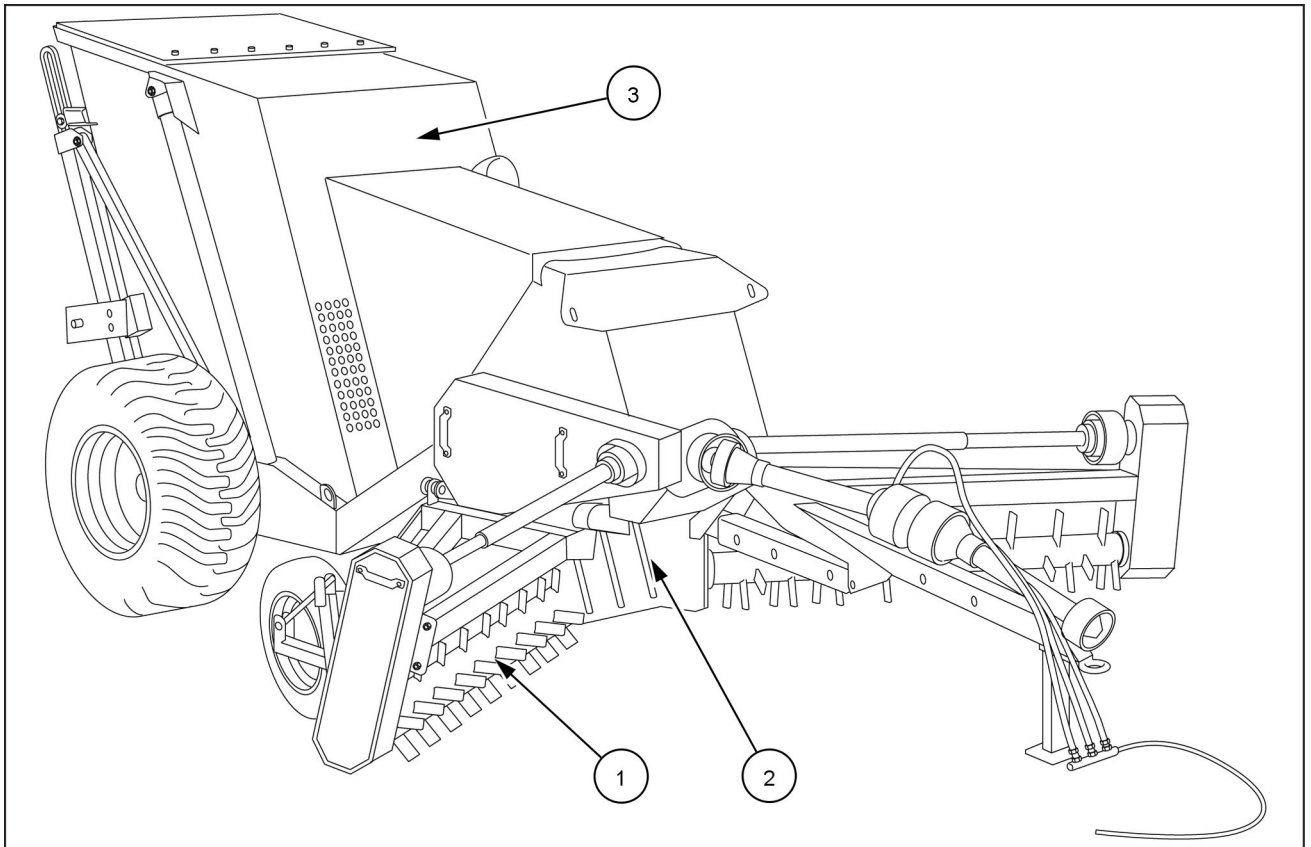
Implement overview

The stonebear have two stone rakes (1) with adjustable depth control wheel that allow to follow the contours of uneven fields.

The stone rakes (1), equipped with wear-resistant pins, rotate against the driving direction and with the angle toward the stonebear. The stone rakes (1) windrow the stones to the centerline of the implement.

When the stones reach the centerline, the stones are lifted by the ground resistance onto the screen share. Then, the stones are conveyed along the screen by the help of rotating spring tines (2), and loose soil together with small stones, according to the screen size, drop back on to the ground. After the sieving, the spring tines throw the stones into the hopper (3).

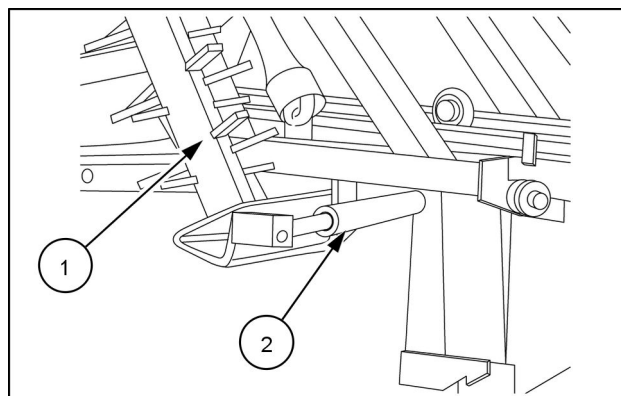
When the hopper is full, the hopper can be tipped hydraulically and emptied. When you transport the stonebear, the rakes are raised and locked in an upright position. Thus, the implement total width is made suitable for driving on public roads.



ZEIL17TIL0126FA 1

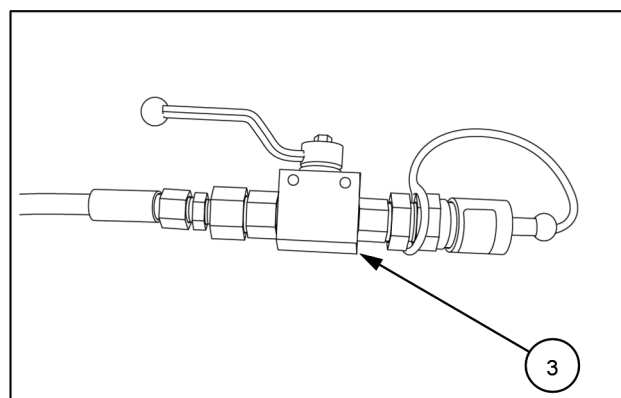
Hydraulic rake control

In transport position, the rakes **(1)** are raised in an upright position with the hydraulic cylinders **(2)**.



ZEIL17TIL0112AA 1

Connect the hydraulic hose with the ball valve **(3)** directly to the hydraulic output on the tractor.



ZEIL22TIL0126AA 2

Drive belt transmission

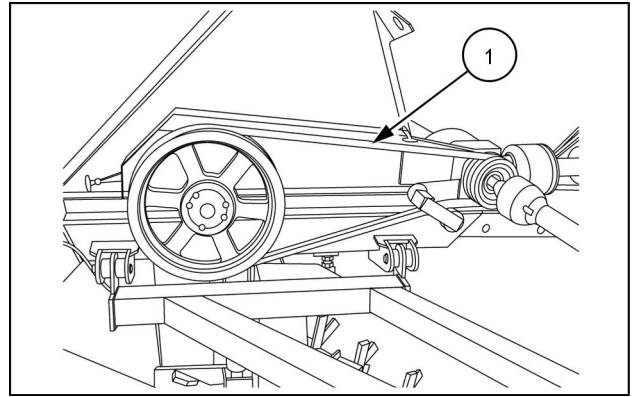
NOTICE: The slip limit may suddenly drop if the belts are muddy or wet. If this happens, do not increase tension, simply clean and dry the belts.

The stonebear transmission is designed to endure impact with stones on its own. However, to avoid potential damages caused by overload, the transmission is also well protected.

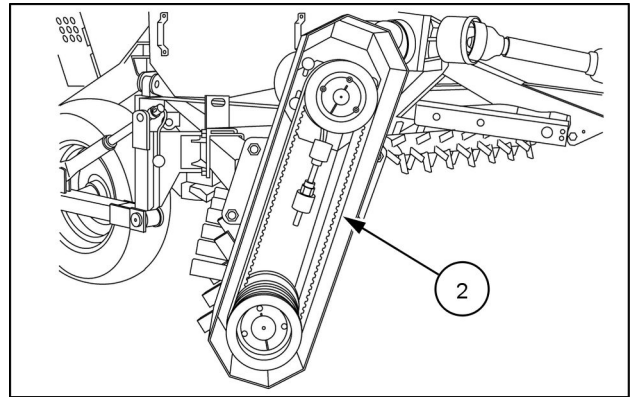
When the collecting drum (1) and rakes (2) rotate among stones, the transmission will be subject to short, irregular load peaks. To reduce the effects of the load peaks, the entire stonebear transmission is driven by drive belts. The drive belts also reduce the load peaks affecting the tractor Power Take-Off (PTO) axle.

In possible overload situations, the drive belts slip and thus even out the stresses being placed on the transmission. But keep in mind that over-tensioning the belts will not increase power, instead another point in the transmission will be placed under strain in place of the protective equipment.

During long storage periods, the belt grooves may be subject to rust. The rust could increase the slip limit by nearly three times the norm. As a result, start the implement slowly and allow the belt grooves to become polished. The rust can also be removed using sandpaper while the stonebear is turned off.



ZEIL17TIL0115AA 1



ZEIL17TIL0114AA 2

Rake transmission

The belt transmission (1), which consist of five cogged belts, serves as a rake overload protector.

When the rake transmission works under too great load, the belts will begin to slip, according to their tension.

Possible causes for overload are the following:

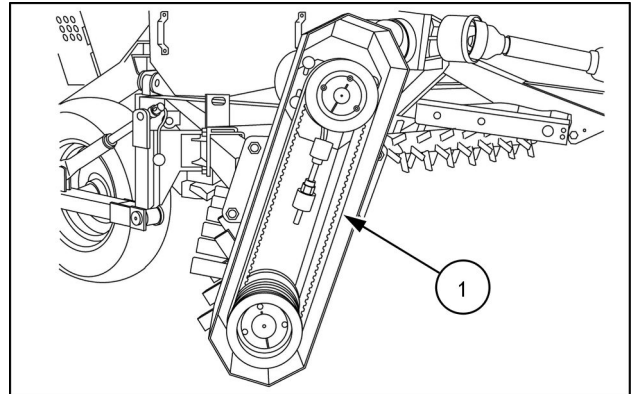
- Oversize or lodged stones.
- Excessive working depth.
- High moisture content in the topsoil

If the belts begin to slip, raise the stonebear off the ground or stop the stonebear immediately.

The belts do not necessarily have to be tensioned. Instead, to protect the transmission and avoid further slippage, perform the following operations:

- Cultivate the field well prior to stone harvesting.
- Guide large stones **20 – 25 cm (7.9 – 9.8 in)** to the center of the collecting drum.
- Operate at a shallower working depth, such as **5 cm (2 in)**.
- Allow the field to dry before stone collecting.
- Reduce the driving speed.

If the above mentioned guidelines have been followed, but the belts slip repeatedly, adjust the belt tension (see Page **7-25**).



ZEIL17TIL0114AA 1

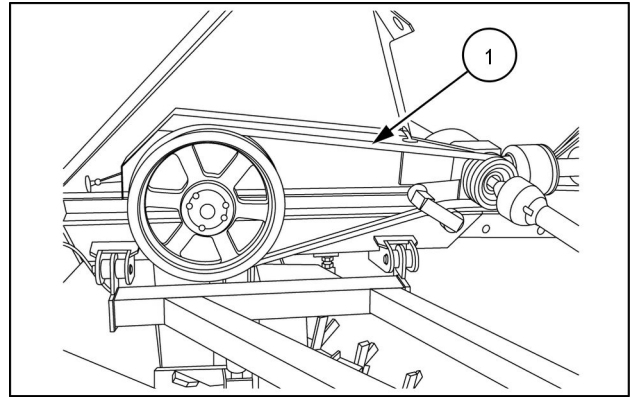
Collecting drum transmission

The stonebear collecting drum also operates with a drive belt transmission **(1)**, which also functions as an overload protector.

NOTE: The stonebear SB 4000 has two C-belts while the stonebear SB 5200 has three C-belts.

The C-belt transfer the rotation from the gearbox to the collecting drum via the auxiliary shaft and belt pulleys.

If the collecting drum clogs or is otherwise overloaded, the belts will begin to slip from the larger belt pulleys. Stop the stonebear immediately not to wear down the belts. To set the collecting drum drive belts, see Page **7-25**.



ZEIL17TIL0115AA 1

Working depth

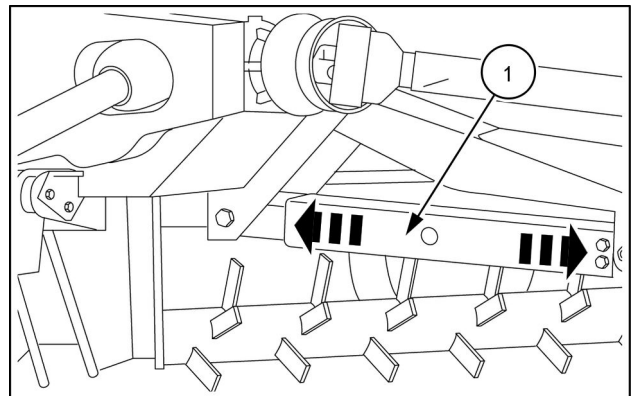
It is possible to set the working depth of the stonebear at **0 – 13 cm (0 – 5.1 in)**. But the length of the rake tines structurally limits the working depth of the stonebear. However, use the full working depth only in specific circumstances. Practically, the maximum possible working depth is **7 cm (2.8 in)**.

Field stone content, soil type, and soil moisture content limit the practical working depth. Because the working depth otherwise affects the practical driving speed and work performance, it is generally not recommended to harvest stones any deeper.

The most highly recommended method of stones harvesting is the surface harvesting, which only occurs at a depth of **0 – 7 cm (0 – 2.8 in)**. The screen is also designed to function in an optimal way in this operating position.

To set the stonebear working depth, adjust the length of the drawbar **(1)** with the hydraulic cylinder. If the optional swivel hitch is used, adjust the working depth with the tractor links.

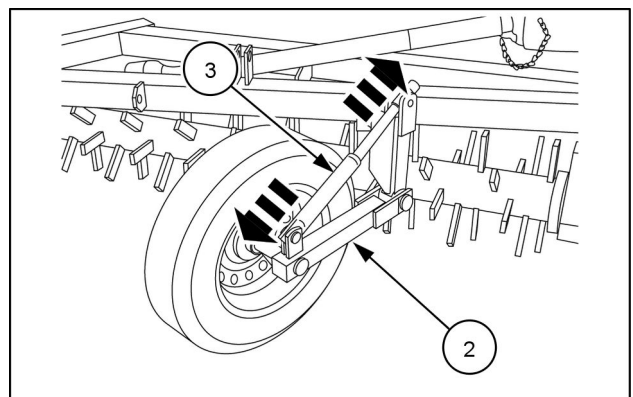
Based on the working depth, the screen share and rake depth are set at the same level.



ZEIL17TIL0118AA 1

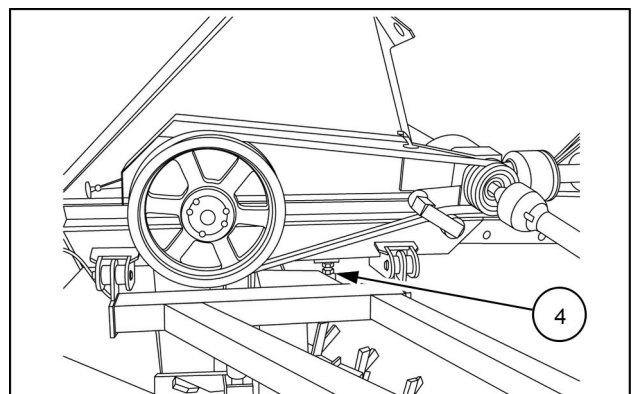
To set the rake working depth, adjust the height of the rake support wheels **(2)** with the adjusting screws **(3)**. Monitor the working depth constantly.

Taking the conditions into account, an excessive working depth means that the stonebear will not be able to move stones and earth to the center of the implement rakes quickly enough, and will instead push them in front of the screen. The amount of soil entering the hopper along with the stones will also increase considerably.



ZEIL17TIL0119AA 2

It is possible to set the rakes so that the rakes point downward from the horizontal level to follow the contours of the field. To limit the downward movement of the rake, use the adjusting screws **(4)**, located on the outer side of the rake frame.



ZEIL17TIL0115AA 3

Rock picking

The stonebear collects rocks from the topsoil cultivation layer to a depth of **0 – 7 cm (0 – 3 in)**. To improve the rock picking and its effectiveness, adhere to the following guidelines:

- Remove the stones larger than **20 cm (8 in)** from the soil before you operate the stonebear.
- The topsoil must be well cultivated. The soil is even and stones are loose in the aerated surface layer.
- The topsoil surface layer must be dry.
- In fields with a great amount of stones, prepare several areas for unloading. The hopper may be full after only **50 m (164 ft)**.
- The most effective unloading method is to collect the stones picked by the stonebear in a tractor trailer.
- There is little or no solid rock in the field.
- There are no root clods, tree roots, or thick root weeds in the field.
- Stones are only harvested to a working depth of **7 cm (3 in)** maximum.

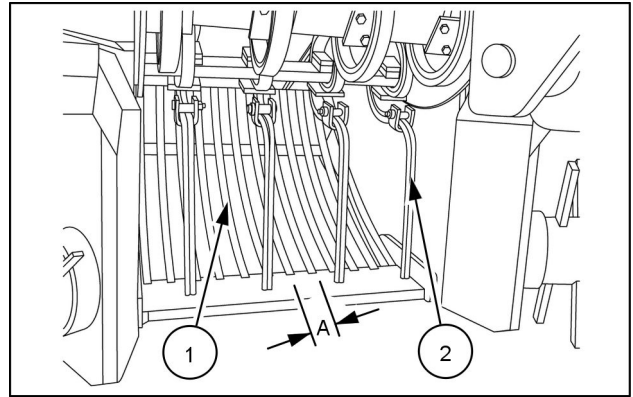
Selection of screen size

Select the stonebear screen according to the desired harvest and field stone content. The purpose of the screen is to sieve out as much soil being pulled up by the collecting drum tines as possible. The screen is comprised of longitudinally arched, welded steel bars **(1)**, between which the spring tines **(2)** rotate. The bar spacing **A** determines the degree of harvest.

Depending on the various screen sizes, the bar spacing **A** can be:

- **28 mm (1.1 in)**
- **35 mm (1.4 in)**
- **40 mm (1.6 in)**
- **50 mm (2 in)**
- **70 mm (2.8 in)**

The **40 mm (1.6 in)** screen is most often a standard equipment on the stonebear, as it is well suited to a wide variety of conditions. When you clear land and on grain fields, use a screen with **50 mm (2 in)** bar spacing. For replanting lawns and on beet fields, a **40 mm (1.6 in)** screen is ideal. Use the tightest bar spacing of the **28 mm (1.1 in)** or **35 mm (1.4 in)** screens primarily for potato crops, basic parkland maintenance, and on road construction sites.



ZEIL17TIL0121AA 1

Stone size effect on handling

NOTICE: *Single large stones are not to be guided to the collecting drum with the rakes. Instead, the share must be guided directly behind the stones, according to the above instruction.*

Although the collecting drum can handle approximately **30 cm (12 in)** stones, the largest recommended stones must be **20 cm (8 in) - 25 cm (10 in)**.

There are two reasons for this. First, stones being passed along the screen will move unhindered with a wider, more open passage. Second, the size of the stone also affects wear on the collecting drum spring tines. For this reason, it is recommended that the collecting drum rotational speed is reduced, if the stone size is **20 cm (8 in) - 25 cm (10 in)**.

Single large stones with a maximum diameter of **30 cm (12 in)**, are to be collected as follows: stop the collecting drum, move the front edge of the screen share under the stone, and carefully turn the transmission back on. However, avoid collecting oversize stones as they will become lodged in the implement.

Blocking up collecting drum

WARNING

Avoid injury!

Use Personal Protective Equipment (PPE), including protective goggles, gloves, and safety footwear.

Failure to comply could result in death or serious injury.

W1036A

NOTICE: *Dismantling of a clogged collecting drum while the drive Power Take-Off (PTO) is switched on while you reverse the tractor is expressly forbidden.*

Monitor the collecting drum function during operation. If the drum stops, turn off the PTO immediately. If the collecting drum is blocked up with oversize stones or earth clods, reverse slightly while turning the transmission quickly on and off. This shaking out of the block up is the best method to use, as the constant slippage of the drive belts wears them down unnecessarily.

Also check that the hopper is not too full. If the level of stones exceeds the screen rear edge by **20 cm (7.9 in)**, empty the hopper.

If the drum repeatedly stops due to block up, reduce the working depth and/or the driving speed. Check if the stones have got stuck in the screen bar spaces (this may occasionally stop the collecting drum). Also check the tightness of the collecting drum drive belts.

Removal of stuck stones

The collecting drum may occasionally stop due to over-sized stones or stones which have got stuck between the screen and spring tines. Reverse slightly and raise the screen share off the ground (maximum **10 cm (3.9 in)**). Carefully turn the transmission on and off to try and release the stone or move it gradually past the screen halfway point, which is the tightest point in the collecting drum.

The collecting drum can also be rotated manually using an iron bar or similar, whereupon the stone will usually be released. Ensure that the screen bars have not bent. Stones can often be broken using a hammer; use protective eye protectors to prevent eye injury from flying stone chips.

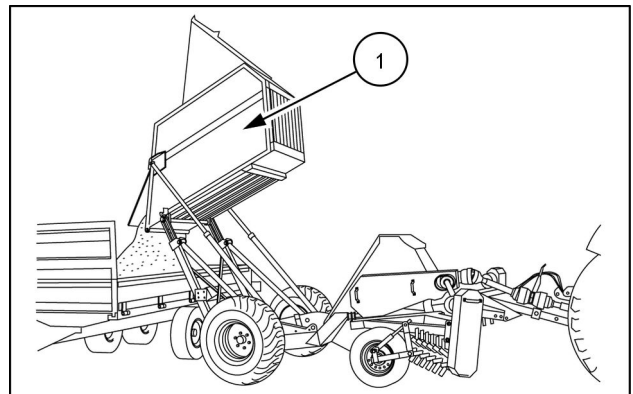
If the stone is so large that it extends over the screen share, lower the stonebear against the ground and by moving forward and backward, rub the stone loose.

Filling and emptying the hopper

NOTICE: Always empty the hopper on a stable and level surface. Moving the stonebear while the container is raised is expressly forbidden.

During the operation, control the filling of the hopper. When the stonebear hopper is filled up, the collecting drum tines will no longer through stones into the hopper. The stones instead return onto the screen or in front of the share. Then turn off the transmission and empty the hopper.

To empty the stonebear hopper **(1)**, tip to the rear the hopper into a trailer or directly onto a tip near the field. When you empty the hopper into a trailer, ensure that there is not too much strain placed on the trailer by a sudden or heavy load.



ZEIL17TIL0122AA 1

When to collect stones

Stones are usually collected from grain fields prior to seeding. In this case, the field must be allowed to dry for cultivation before you use the stonebear. This will decrease the amount of soil compaction caused by the stonebear as well as making stone harvesting quicker and more effective. Excessive soil moisture content will also increase the amount of soil harvested with the stones as well as causing soil to gather at the center of the implement, thus resulting in an uneven track.

In practice, the soil must be cultivated at least once prior to stone harvesting. Driving directly on plowed land is not recommended. Cultivation of the field before stone harvesting loosens stones in the cultivation layer, levels the topsoil, and speeds drying. Thus, the actual performance of stone collecting is made significantly easier. A cultivated field must be allowed to dry before commencing stone collecting with the stonebear.

Another possibility for removal of stones from the topsoil surface layer is to harvest stones just after seeding, and prior to germination. As a result, the working depth must be set lower than the seeding depth (nearly at the surface of the topsoil), so that the seeds will not be removed from their moist seed beds. This is advantageous in that there are no delays in seeding times and stone collecting can be performed more quickly as the stone content is small. Moisture is also preserved for seed germination. The disadvantage to this method is the degree of accuracy it requires as well as the disturbance of seeding by stones in the cultivation layer.

In other cases, such as on fallow fields and in the clearing of virgin land, stone collecting can be performed in the summer, as there are more daylight hours and the conditions for harvesting are generally better. Furthermore, the operational hours of the stonebear can be maximized.

Practical working instructions

Whenever collecting stones, the operator should avoid placing any unnecessary strain on the stonebear. Operation of the stonebear demands caution, as the tractor usually has much more power than is required for stone picking.

Rotation and driving speed

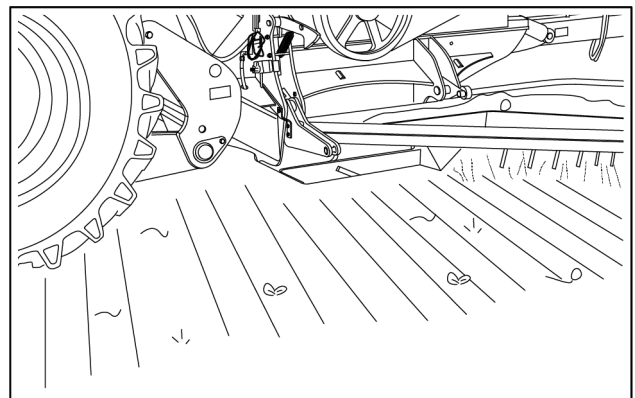
NOTICE: Under no circumstances must the rotation rate of the tractor Power Take-Off (PTO) axle exceed **350 RPM**.

The stonebear transmission is designed so that the recommended PTO is **300 – 350 RPM**. Thus, the engine rotation rate is, depending on the tractor, **1000 – 1400 RPM**.

An excessively high rotation rate usually indicates that the rakes are beginning to throw stones backward as the stonebear passes over them. In addition, too high rotation rate will throw rocks to hopper ceiling instead back wall will eventually cause rupture of covers and metal sides. An excessive amount of soil may also be gathering at the center of the implement, and an exceptionally high driving speed may damage the tines or belts, or cause an extraordinary wearing.

Depending on the rock content and conditions of the field, the driving speed can be **0 – 5 km/h (0 – 3 mph)**. If there is a high solid rock content or **15 – 30 cm (6 – 12 in)** stones, the driving speed should be minimal (**0 – 2 km/h (0 – 1 mph)**). In fields without solid rock and a general stone size of **4 – 10 cm (2 – 4 in)**, the driving speed can be **3 – 6 km/h (2 – 4 mph)**. Always begin at an adequately slow driving speed.

When the right driving speed and rotation rate are set, the soil surface should have so called fishbone pattern after driving.



ZEIL18TIL0115AA 1

Miscellaneous driving instructions

When driving on sloping terrain, the direction of travel should be either uphill or at an angle towards the peak of the slope. If required to drive downhill, one should begin with an empty hopper. If the hopper is full, the stones will not fall out but will instead rotate in the collecting drum and cause unnecessary wearing.

When clearing new land or in the thorough renovation of fallow fields, stone collecting and cultivation should be performed several times in alternation. Thus, the stonebear will harvest only the topsoil surface and the stones are loosened using a rake or cultivator. Old stone deposits are to be dispersed over a wide area prior to mechanical stone collecting.

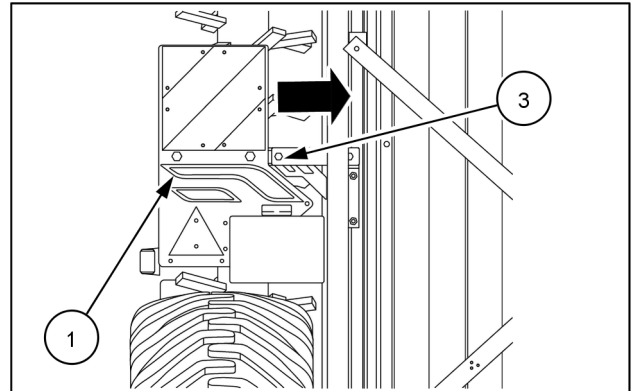
Light kit extension

Rear lights

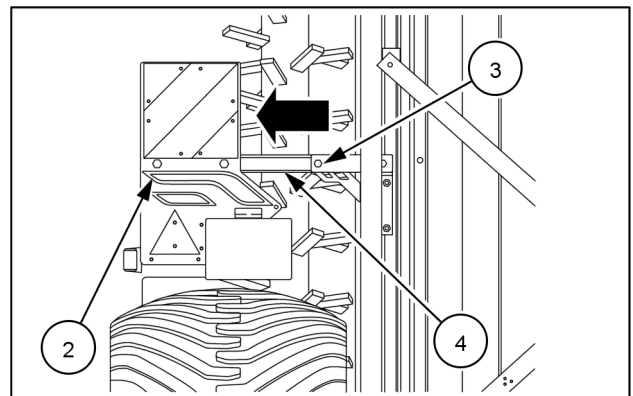
- Rear lights position **(1)** with **500 mm** wheels.
- Rear lights position **(2)** with **700 mm** wheels.

To switch between the two positions described above, proceed as follows:

1. Remove the screw **(3)**.
2. Depending on the position required, push or pull the bar **(4)**.
3. Install the screw **(3)** into the free hole.



ZEIL22TIL0240AA 1



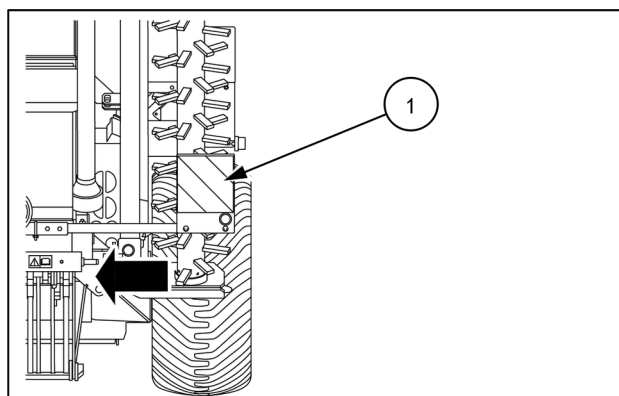
ZEIL22TIL0241AA 2

Front beam

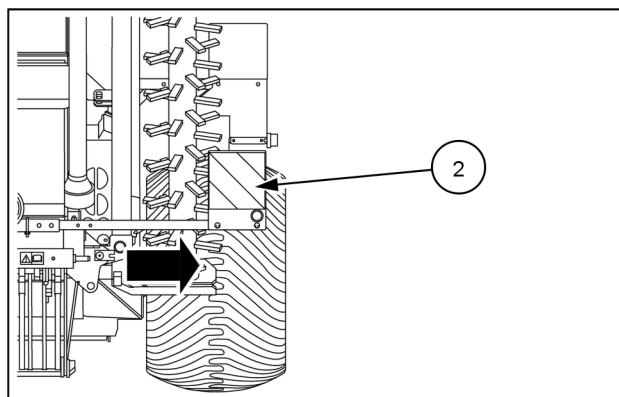
- Front beam position **(1)** with **500 mm** wheels.
- Front beam position **(2)** with **700 mm** wheels.

To switch between the two positions described above, proceed as follows:

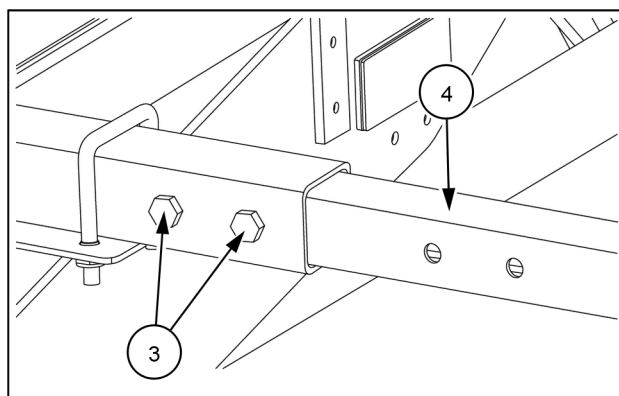
1. Remove the screws **(3)**.
2. Depending on the position required, push or pull the bar **(4)**.
3. Install the screws **(3)** into the free hole.



ZEIL22TIL0242AA 3



ZEIL22TIL0244AA 4



ZEIL22TIL0243AA 5

7 - MAINTENANCE

General information

General

⚠ WARNING

Improper operation or service of this machine can result in an accident.

If you do not understand a maintenance procedure, or doubt your ability to perform a maintenance procedure correctly, see your authorized dealer.

Failure to comply could result in death or serious injury.

W0157A

⚠ WARNING

Avoid injury! Always do the following before lubricating, maintaining, or servicing the machine.

1. Disengage all drives.
2. Engage parking brake.
3. Lower all attachments to the ground, or raise and engage all safety locks.
4. Shut off engine.
5. Remove key from key switch.
6. Switch off battery key, if installed.
7. Wait for all machine movement to stop.

Failure to comply could result in death or serious injury.

W0047A

⚠ WARNING

Moving parts!

Some components may continue to run after disengaging the drive systems. Make sure all drive systems are fully disengaged and all movement has stopped before servicing the machine.

Failure to comply could result in death or serious injury.

W0002A

NOTICE: Be sure that all the service operations in this chapter are carried out punctually at the intervals given, in order to ensure optimum performance levels and maximum safety when using the implement.

Adequate lubrication and maintenance on a regular schedule is vital to maintain your implement. To ensure long service and efficient operation, follow the lubrication and maintenance schedules outlined in this operator's manual. The use of proper oils, grease, and filters, as well as keeping the systems clean, will also extend the implement and components life.

NOTICE: Failure to complete the required maintenance at the recommended intervals can cause unnecessary downtime.

Use the intervals listed in the maintenance chart as guidelines when you operate in normal conditions. Adjust the intervals when you operate in adverse environmental and working conditions. Shorten the intervals for sandy, dusty, and extremely hot operating conditions.

NOTICE: *While any company can perform necessary maintenance or repairs on your implement, KONGSKILDE strongly recommends that you use only authorized KONGSKILDE dealers and products that meet given specifications. Improperly or incorrectly performed maintenance and repair voids the equipment warranty and may affect service intervals.*

When you repair or maintain the implement it is especially important to ensure the correct personal safety. Therefore, always park the tractor (if mounted) and the implement safely (see Page **2-10**).

Always disengage the Power Take-Off (PTO) drive shaft, activate the parking brake and stop the tractor engine before you:

- Lubricate the implement.
- Clean the implement.
- Disassemble any part of the implement.
- Adjust the implement.

NOTE: *If the implement is connected to the tractor and raised during the repair and maintenance, secure the link arms with the support chains.*

Observe the recommended greasing, replacement and inspection intervals to prevent secondary damages.

Only use original KONGSKILDE spare parts to avoid unintentional risks and damages.

Install the used spare parts correctly and torque all the bolts and nuts to the correct tightening torque.

The rake tines, screen, and collecting drum spring tines are the stonebear parts that are under an extremely wear. They all are made of special steel metal, specifically designed for their respective purposes. The rake tines can also be extended by welding. The screen and collecting drum spring tines are designed as wearing parts, to be replaced as necessary.

Tubes, hoses, electrical wiring, etcetera that are worn or damaged must be replaced immediately.

Hydraulic system

Remember to relieve the oil pressure before you work with the hydraulic system.

Check hydraulic hoses before each use, and minimum once a year. If necessary, replace the hydraulic hoses. All hoses are marked with date of production. The working life of hydraulic hoses should not exceed 6 years, including maximum 2 years of storage.

When you replace hoses, always use hoses which comply with the requirements stated by the manufacturer.

Power Take-Off (PTO) drive shaft

The following maintenance instructions concern all PTO shafts on the stonebear.

Always grease the sliding profile tubes or splined shafts sufficiently, to avoid high frictional forces (seizing) which will damage the profile tubes or splined shafts and in time also connecting shafts and gearboxes.

In normal working conditions, grease the PTO shafts according to the frequency outlined. Clean and grease again the PTO shafts that have been unused for a longer time. Grease the inside of the outer form tube.

Unless the protective guards, the PTO drive shaft may cause serious injury. Keep all the guards in a proper condition. All the safety guard must be intact. Inspect the guards frequently. Replace the defective guard immediately.

Always make sure that the sliding surfaces of the guard tubes are clean and the guard bearings lubricated.

When you replace worn or damaged sections of the guard, use special tools available from the manufacturer.

Lubrication

NOTICE: Keep lubricant out of contact with rubber parts.

NOTICE: Grease the rake bearings with extreme caution not to breach the bearing seals.

Some of the stonebear joints and bearings are equipped with grease fittings that must be greased regularly.

When you grease, check that feed grease press nozzle and grease fittings are clean. Clean or replace clogged grease fittings. The lubricant is injected into the grease fitting until its overflow (clean grease) is visible at the edges of the bearing, bushing, or other. Wipe off any excess grease.

Torque

Minimum hardware tightening torques (in N m or lb in /lb ft) for normal assembly applications unless otherwise stated

The minimum hardware tightening torque on drawings, in specifications, etcetera have priority.

In the following tables, torque specifications are shown following the standard **ENS7001**, applicable for material class 8.8 and material class 10.9.

Hex head bolts

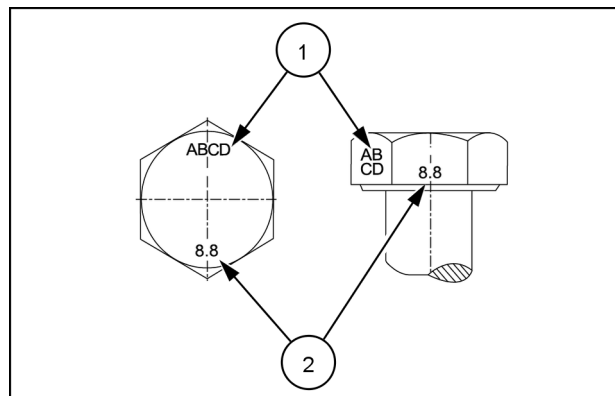
Nominal Size	Class 8.8 in N m (lb in or lb ft)			Class 10.9 in N m (lb in or lb ft)		
	Plated nut	Lock nut	Hardened nut/Oiled plated nut	Plated nut	Lock nut	Hardened nut/Oiled plated nut
M3	1.3 N·m (11.5 lb in)	0.7 N·m (6.2 lb in)	1.2 N·m (10.6 lb in)	1.8 N·m (15.9 lb in)	0.9 N·m (8.0 lb in)	1.6 N·m (14.2 lb in)
M4	2.9 N·m (25.7 lb in)	1.6 N·m (14.2 lb in)	2.6 N·m (23.0 lb in)	4.2 N·m (37.2 lb in)	2.3 N·m (20.4 lb in)	3.7 N·m (32.7 lb in)
M5	5.9 N·m (52.2 lb in)	3.2 N·m (28.3 lb in)	5.3 N·m (46.9 lb in)	8.5 N·m (75.2 lb in)	4.6 N·m (40.7 lb in)	7.6 N·m (67.3 lb in)
M6	10.1 N·m (89.4 lb in)	5.5 N·m (48.7 lb in)	9.1 N·m (80.5 lb in)	14.5 N·m (10.7 lb ft)	7.9 N·m (69.9 lb in)	13 N·m (9.6 lb ft)
M8	24.5 N·m (18.1 lb ft)	13.5 N·m (10.0 lb ft)	22 N·m (16.2 lb ft)	35.1 N·m (25.9 lb ft)	19.3 N·m (14.2 lb ft)	31.5 N·m (23.2 lb ft)
M10	48.7 N·m (35.9 lb ft)	26.8 N·m (19.8 lb ft)	43.8 N·m (32.3 lb ft)	69.5 N·m (51.3 lb ft)	38.2 N·m (28.2 lb ft)	62.5 N·m (46.1 lb ft)
M12	85 N·m (62.7 lb ft)	46.7 N·m (34.4 lb ft)	76.5 N·m (56.4 lb ft)	121 N·m (89.2 lb ft)	66.5 N·m (49.0 lb ft)	108.9 N·m (80.3 lb ft)
M14	135 N·m (99.6 lb ft)	74.2 N·m (54.7 lb ft)	121.5 N·m (89.6 lb ft)	193 N·m (142.3 lb ft)	106.1 N·m (78.3 lb ft)	173.7 N·m (128.1 lb ft)
M16	210 N·m (154.9 lb ft)	115.5 N·m (85.2 lb ft)	189 N·m (139.4 lb ft)	301 N·m (222 lb ft)	165.5 N·m (122.1 lb ft)	270.9 N·m (199.8 lb ft)
M18	299 N·m (220.5 lb ft)	164.4 N·m (121.3 lb ft)	269.1 N·m (198.5 lb ft)	414 N·m (305.4 lb ft)	227.7 N·m (167.9 lb ft)	372.6 N·m (274.8 lb ft)
M20	425 N·m (313.5 lb ft)	233.72 N·m (172.4 lb ft)	382.5 N·m (282.1 lb ft)	587 N·m (432.9 lb ft)	322.8 N·m (238.1 lb ft)	528.3 N·m (389.7 lb ft)
M22	579 N·m (427 lb ft)	318.4 N·m (234.8 lb ft)	521.1 N·m (384.3 lb ft)	801 N·m (590.8 lb ft)	440.5 N·m (324.9 lb ft)	720.9 N·m (531.7 lb ft)
M24	735 N·m (542.1 lb ft)	404.2 N·m (298.1 lb ft)	661.5 N·m (487.9 lb ft)	1016 N·m (749.4 lb ft)	558.8 N·m (412.1 lb ft)	914.4 N·m (674.4 lb ft)
M27	1073 N·m (791.4 lb ft)	590.1 N·m (435.2 lb ft)	967.5 N·m (713.6 lb ft)	1486 N·m (1096 lb ft)	817.3 N·m (602.8 lb ft)	1337 N·m (986.1 lb ft)
M30	1461 N·m (1077.6 lb ft)	803.5 N·m (592.6 lb ft)	1315 N·m (969.9 lb ft)	2020 N·m (1489.9 lb ft)	1111 N·m (819.4 lb ft)	1818 N·m (1340.9 lb ft)

Flange head bolt/Flange nut

Nominal Size	Class 10.9 in N·m (lb ft)
M3	2.0 N·m (1.5 lb ft)
M4	4.6 N·m (3.4 lb ft)
M5	9.4 N·m (6.9 lb ft)
M6	15.9 N·m (11.7 lb ft)
M8	38.7 N·m (28.5 lb ft)
M10	76.5 N·m (56.4 lb ft)
M12	134 N·m (98 lb ft)
M14	213 N·m (157 lb ft)
M16	331 N·m (244 lb ft)
M18	455 N·m (336 lb ft)
M20	645 N·m (476 lb ft)
M22	881 N·m (650 lb ft)
M24	1118 N·m (824 lb ft)
M27	1635 N·m (1206 lb ft)
M30	2222 N·m (1639 lb ft)
M36	3880 N·m (2862 lb ft)

Identification markings

Metric hex head, flange hex head and carriage bolts,
Classes (CL) 5.6 and upward

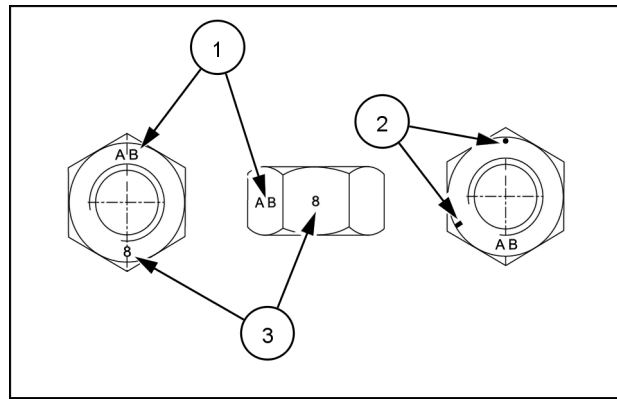


NHIL14RB00662AA 1

Metric bolt identification markings

1. Manufacturer's identification
2. Property class

Metric hex nuts and locknuts, Classes (CL) 05 and upward



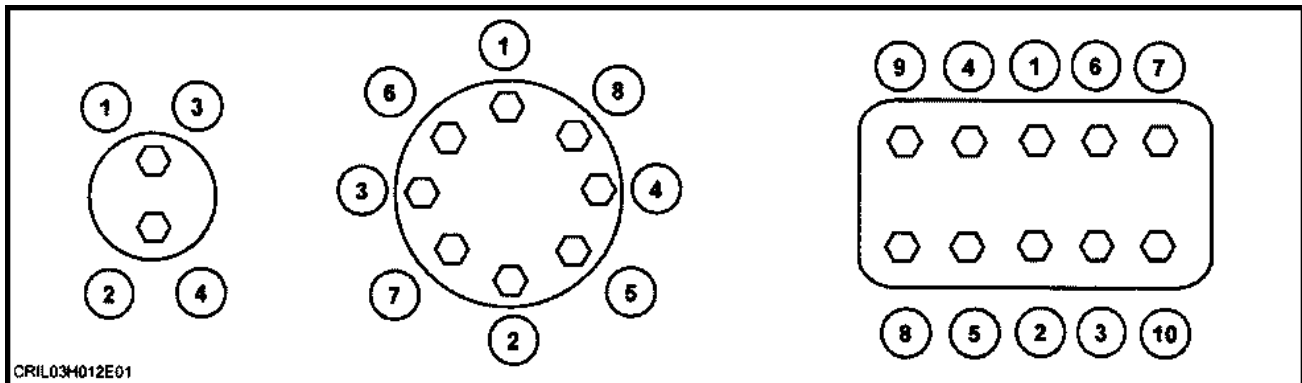
NHIL14RB00663AA 2

Metric hex nut identification markings

- **(1)** – Manufacturer's identification
- **(3)** – Property class
- **(2)** – Clockwise type markings indicate property class and may include manufacturer identification (if applied),
Example: property marks **240°** apart (shown) at the eight o'clock position indicate a Class 8 property, and marks **300°** apart at the ten o'clock position indicate a Class 10 property.

Torque tightening sequence

NOTICE: Shown below is the suggested initial torque tightening sequences for general applications, tighten in sequence from item 1 through to the last item of the hardware.



CRIL03H012E01

DF5019-1 3

Grease fittings and intervals

Regular lubrication is the best insurance against delays and repairs. Proper lubrication will extend the life of the implement.

Grease fittings

On new implements, the grease fitting may be covered with paint. Remove the paint to ensure the grease fitting can accept grease.

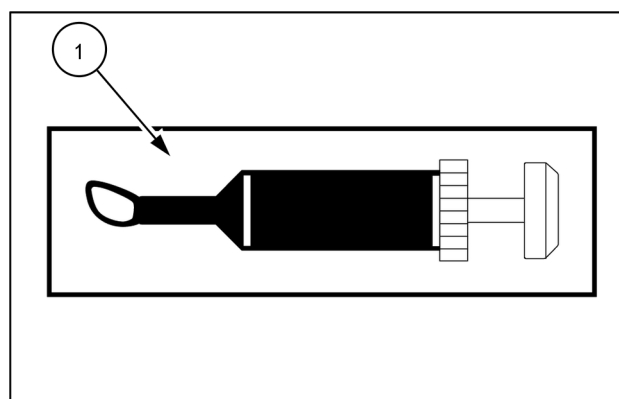
Wipe the dirt from all of the fittings and from the grease gun nozzle before you grease the implement to minimize the chance of contamination.

Pump fresh grease into the fitting to adequately lubricate the component and force out any contamination from the grease passage. Wipe off any excess grease.

Follow the lubrication schedule outlined in this operator's manual. Refer to the illustrations to identify each grease fitting on this implement.

All grease fittings are labeled with the sticker **(1)**.

Not all grease fittings are readily visible. Various grease fittings can only be accessed through the removal of shields or guards. Always install the shields or guards before you operate the implement.



ZEIL20TIL0006AA 1

Grease guns

Different types of grease guns provide a different amount of grease per pump of the handle.

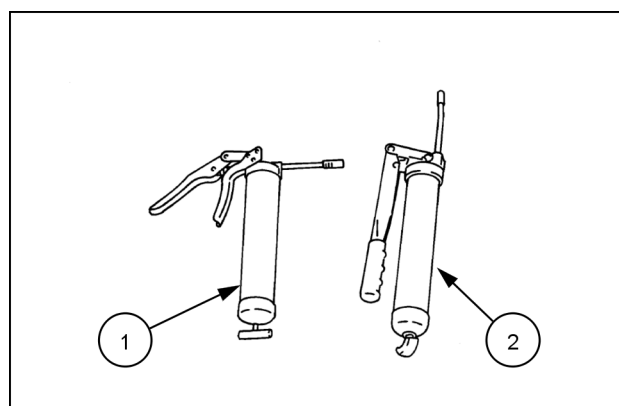
Two commonly used grease gun types are as follows:

- (1)** Pistol grip-style grease gun
- (2)** Lever-style grease gun

In general, a pistol grip-style grease gun injects half of the amount of grease per pump as a lever-style grease gun.

For listed components to grease on this implement, the number of pumps of grease for each grease location are based on the use of a pistol grip-style grease gun **(1)**.

If you use a lever-style grease gun, use only half of the indicated number of pumps of grease.



1431-2-58N 2

Grease specification

See Page **7-9** for the correct grease specification.

Pressure washing

WARNING

Flying debris!

Always wear protective clothing and safety glasses or a face shield when using a steam cleaner or power washer.

Failure to comply could result in death or serious injury.

W0314A

NOTE: Legislation in certain countries and good practice requires special treatment of waste water through sedimentation and oil separation and controlled removal of residues.

Before you use pressure washing, clean the implement with compressed air.

Avoid pressure washing at ambient temperatures below **10 °C (50 °F)** or when the implement is wet. Place the implement in a heated workshop or dry barn for at least **24 h**. Clean the implement only when fully dry.

Be careful when you clean the implement with a high pressure washing. Avoid to direct water jets on electric equipment, bearings, seals, gearboxes, etcetera.

Grease all grease fittings carefully after you clean the implement to press possible water outside bearings.

When you use a high pressure washer:

- Keep a minimum distance of **30 cm (12 in)** between the spray gun and the surface to be cleaned.
- Spray under an angle of minimum **25°** (do not spray straight at the implement).
- Maximum water temperature: **60 °C (140 °F)**.
- Maximum water pressure: **60 bar (870 psi)**.
- Do not use chemicals.

NOTICE: On the cylinders, do NOT direct the stream of a high pressure washer at the wiper seal. Water could come through the rod guide and create corrosion. This corrosion could generate pollution and seizing of the cylinder rod and the rod guide.

Fluids, lubricants, and capacities

Application	Capacity	Product name	Specification(s)
Grease fittings	-	TUTELA MULTI-PURPOSE GR-9 GREASE or TUTELA 75 MD GREASE	NLGI 2 M1C 137-A or M1C 75-B
Gearbox	1.5 L (0.4 US gal)	TUTELA HYPOIDE EP 80W-90 NT	SAE 80W-90 API GL-5

Maintenance planning

Overview

Maintenance action	Check				Lubricate				Page no.
	Cleaning				Replace				
	Change fluid				Adjust				
	Tighten								
After the first 2 hours									
Nuts and bolts	x								7-11
After the first 20 hours									
Gearbox oil – Change	x								7-11
Daily									
Rakes			x						7-12
Screen			x						7-12
Collecting drum				x					7-12
Gearbox oil level - Check				x					7-13
Weekly									
Check for leaks				x					7-14
Nuts and bolts	x								7-14
Collecting drum spring tine				x					7-14
Every 10 hours									
10 hours grease fittings					x				7-15
Every 20 hours									
20 hours grease fittings					x				7-16
Every 50 hours									
50 hours grease fittings					x				7-18
Every 100 hours									
100 hours grease fittings					x				7-19
Gearbox oil – Change		x							7-19
Every 500 hours									
Lining thickness				x					7-20
Every 6 years									
Hydraulic hoses						x			7-21
As required									
Working brake							x		7-22
Brake drum						x			7-22
Bearing play				x					7-23
Tire and rim service				x					7-24
Rake drive belts							x		7-25
Collecting drum drive belts							x		7-25
Collecting drum spring tine						x			7-26
Conical sleeve and belt pulley						x			7-27

After the first 2 hours

Nuts and bolts

Torque again all the bolts, the nuts and the fasteners after the first **2 h** of work.

After the first 20 hours

Gearbox oil – Change

Perform the first oil change of the gearbox after the first **20 h** of work. See Page **7-19**.

Daily

Rakes

Clear the rakes of any tangled roots, bale strings, or the like.

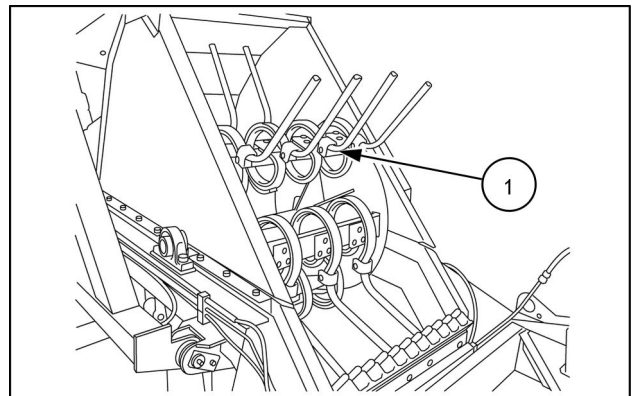
Screen

Remove any stones or wood pieces stuck in the screen (as soon as noticed).

Collecting drum

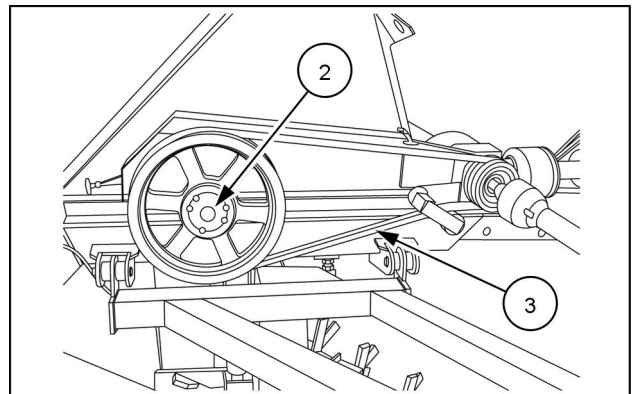
NOTICE: The collecting drum spring tines may not be out of their mounting points. The rubber plate should be evenly compressed **1.5 – 2 mm (0.06 – 0.08 in)**.

1. Check the tightness of the collecting drum spring tines **(1)**. Tighten if necessary.



ZEIL17TIL0124AA 1

2. Check the tightness of the conical sleeves **(2)**. Tighten if necessary.
3. Check the tension of the collecting drum belts **(3)**. Adjust the tension if necessary.

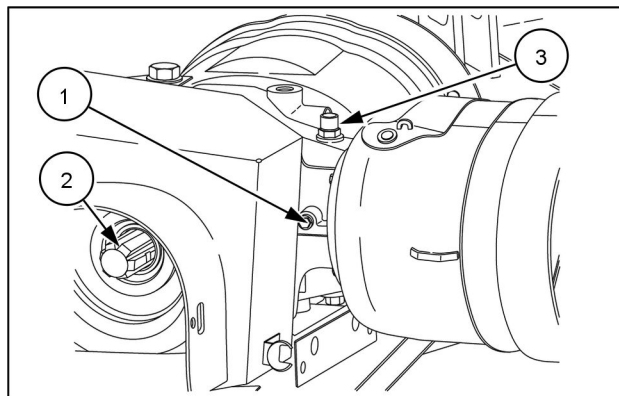


ZEIL17TIL0115AA 2

Gearbox oil level - Check

To check the oil level of the gearbox, proceed as follows:

1. Open the check screw **(1)** located behind the pulley **(2)** on the right-hand side of the gear box.
2. If the oil level is visible through the hole of the check screw **(1)** or oil runs out when the check screw **(1)** is opened, the oil level is correct. Otherwise, add oil through the breather **(3)**.



ZEIL19TIL0485AA 1

Oil specification

See Page 7-9 for the correct oil specification and capacity.

Weekly

Check for leaks

Check that there are no oil leaks in the gearbox and in the hydraulic equipment.

Nuts and bolts

Check the tightness of all the bolts, the nuts and the fasteners weekly. Torque again to the correct tightening torque if necessary.

Collecting drum spring tine

Check for collecting drum spring tine and screen wear.

It is absolutely required that the spring tines reach in the screen bar spaces.

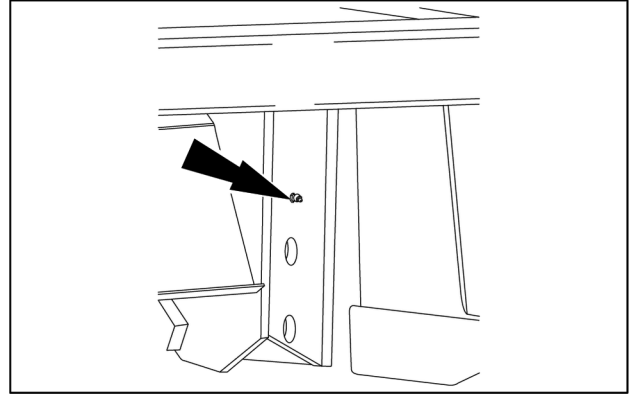
Rotate the collecting drum. If the spring tines do not reach the halfway point of the screen, extend the spring tines or preferably change the spring tines to a new ones.

Every 10 hours

10 hours grease fittings

Center

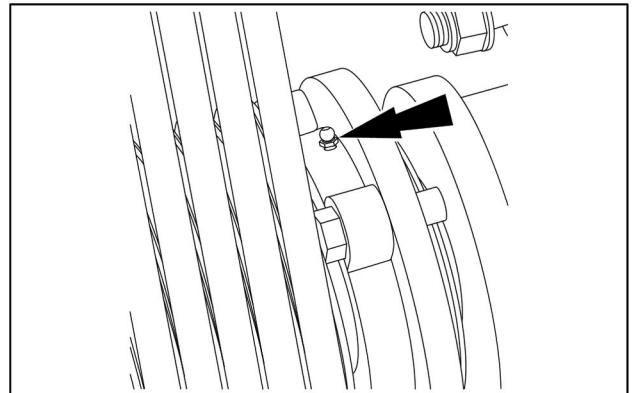
1. Rake inner bearing. Two grease fittings, one on each side.



ZEIL19TIL0496AA 1

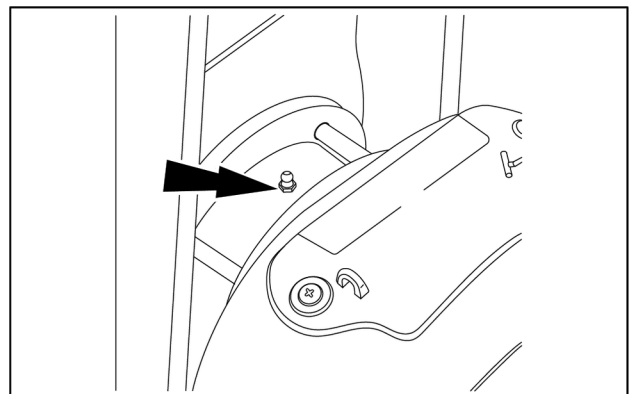
Front

2. Rake outer bearing. Two grease fittings, one on each side.



ZEIL19TIL0495AA 2

3. Main shaft support bearing (1x).



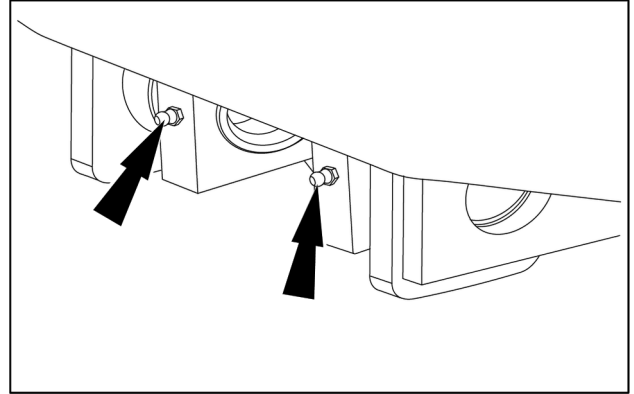
ZEIL19TIL0490AA 3

Every 20 hours

20 hours grease fittings

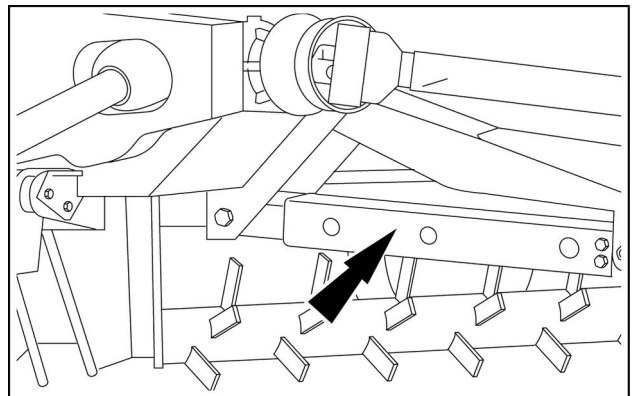
Front

1. Drawbar pivot (2x).



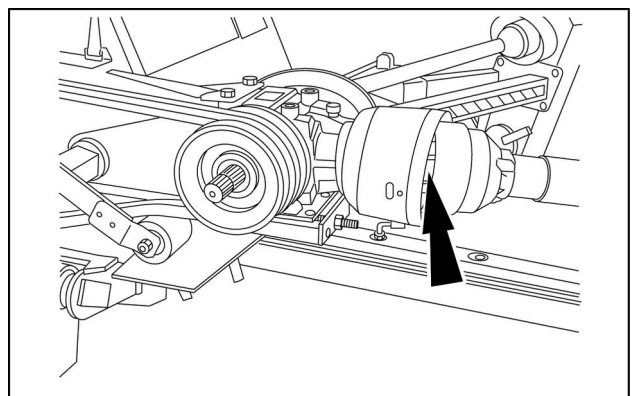
ZEIL19TIL0492AA 1

2. Draw bar cylinder (2x).



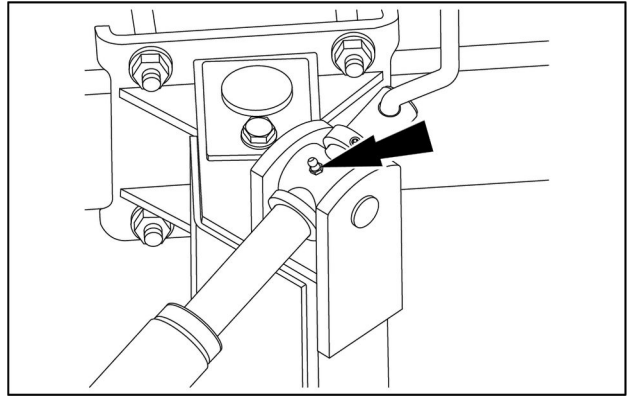
ZEIL17TIL0118AA 2

3. Power Take-Off (PTO) shaft joints (8x).



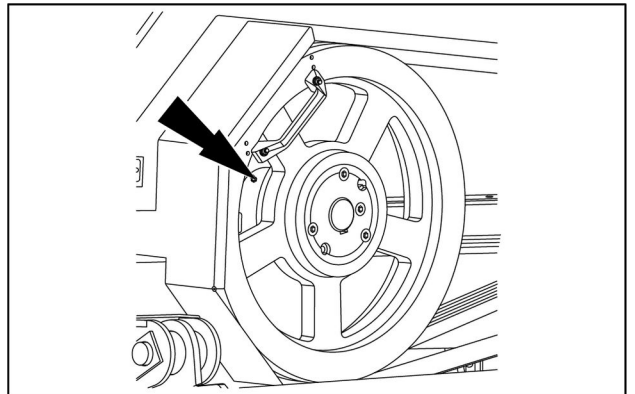
ZEIL17TIL0116AA 3

4. Rake height adjustment (6x).



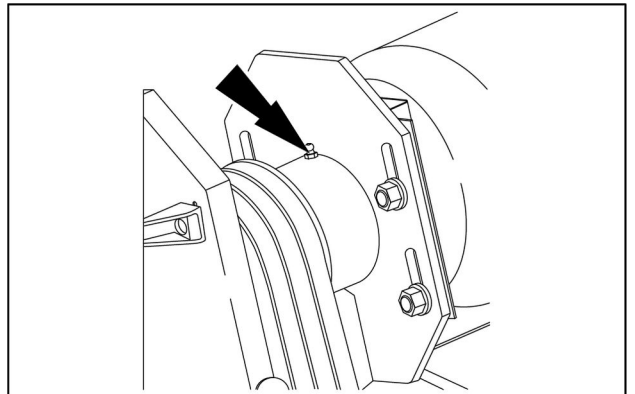
ZEIL19TIL0497AA 4

5. Collecting drum bearing.



ZEIL19TIL0493AA 5

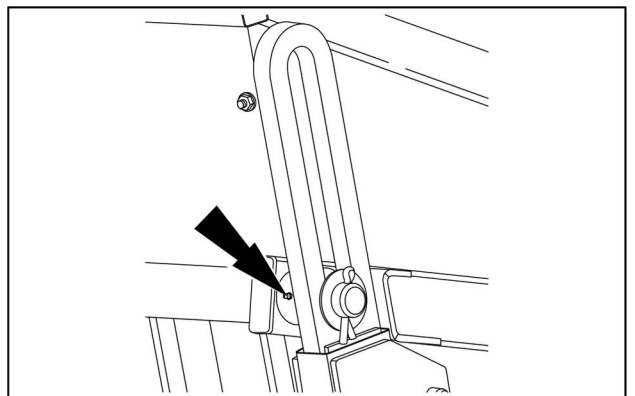
6. Rake drive shaft bearing. One grease fitting on each side.



ZEIL19TIL0489AA 6

Rear

7. Hopper tipping pivot. One grease fitting on each side.

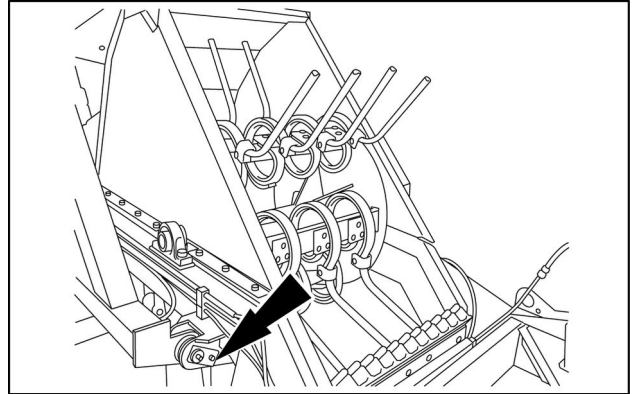


ZEIL19TIL0494AA 7

Every 50 hours

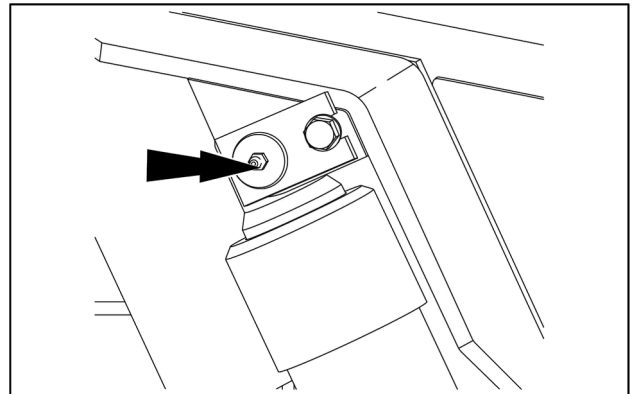
50 hours grease fittings

1. Rake folding links. Two grease fittings on each side.



ZEIL17TIL0124AA 1

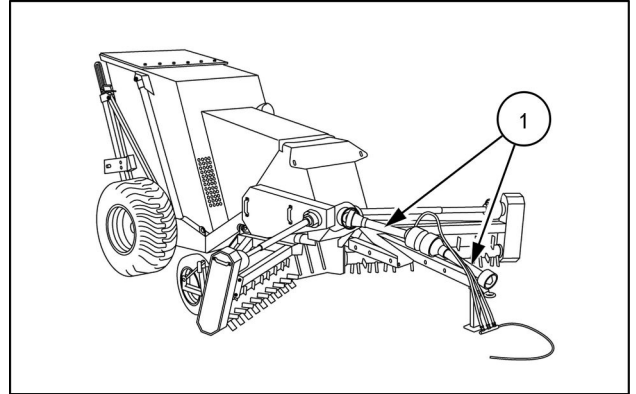
2. Hopper cylinders. Two grease fittings on each side.
Top and bottom ends of the cylinder.



ZEIL19TIL0491AA 2

Every 100 hours**100 hours grease fittings**

1. Front Power Take-Off (PTO) shaft **(1)** sliding tubes.

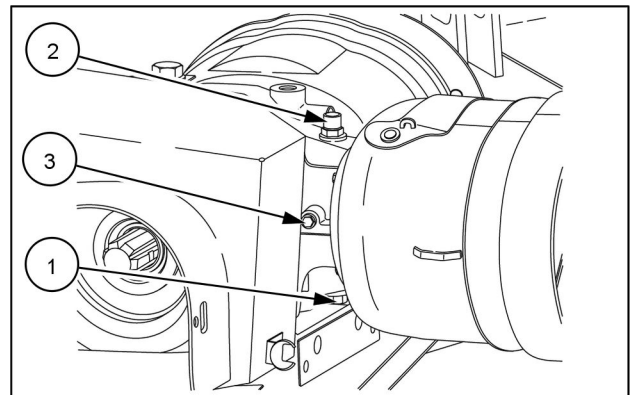


ZEIL17TIL0120AA 1

Gearbox oil – Change

To change the oil of the gearbox, proceed as follows:

1. Position a catch pan under the gearbox.
2. Remove the lower bolt **(1)** from the gearbox.
3. Allow all of the gear oil to drain out. Dispose of the oil in accordance with local environmental regulations.
4. Reinstall the lower bolt **(1)**.
5. Remove the upper bolt **(2)** and add oil through the breather.
6. Check the oil level through the hole of the check screw **(3)**. The oil should run out from the hole.
7. Reinstall the check screw **(3)**.
8. Reinstall the upper bolt **(2)**.



ZEIL19TIL0485AA 1

Oil specification

See Page **7-9** for the correct oil specification and capacity.

Every 500 hours

Lining thickness

NOTE: Check the thickness of the linings every **500 h** of work. This period is a recommended period, whereas in the case of working on inclined terrain or with frequent use of the brakes, shorten the period accordingly.

To check the thickness of linings, proceed as follows:

1. Disassemble the brake drum.
2. Replace the brake calipers after they reach the minimum thickness of **2.0 mm (0.1 in)**. Use only original calipers. If necessary, replace the caliper tension springs.

Every 6 years

Hydraulic hoses

⚠ WARNING

Escaping fluid!

Do not disconnect hydraulic quick coupler under pressurized conditions. Make sure all hydraulic pressure is removed from the system before disconnecting hydraulic quick coupler.

Failure to comply could result in death or serious injury.

W0095A

⚠ WARNING

Escaping fluid!

Hydraulic fluid or diesel fuel leaking under pressure can penetrate the skin and cause infection or other injury. To prevent personal injury: Relieve all pressure before disconnecting fluid lines or performing work on the hydraulic system. Before applying pressure, make sure all connections are tight and all components are in good condition. Never use your hand to check for suspected leaks under pressure. Use a piece of cardboard or wood for this purpose. If injured by leaking fluid, see your doctor immediately.

Failure to comply could result in death or serious injury.

W0178A

Hydraulic hoses are important safety elements in modern machinery. However, over the years, hose characteristics alter under pressure, thermal load and UV light. Therefore, most hoses now have a production date printed on the metal clamp bushing which allows to determine the age.

Legislation in certain countries and good practice require that hydraulic hoses are replaced when they become 6 years old.

As required

Working brake

Check if the brakes are properly adjusted two times per year.

When the stonebear work on inclined terrain and when you use the brakes very often, inspect the brakes more often.

Adjust the brake to avoid permanent friction of linings, which results in the risk of overheating and faster wear of the brake drum.

Brake drum

Disassembly of the brake drum

1. Demount the wheel observing all applicable safety principles.
2. Unscrew the hub cover, remove the pin and unscrew the cap.
3. Detach the brake drum. Use a dedicated clip.
4. Protect the linings against grease and other pollutions.

Assembly of the brake drum

1. Prior to assemble, clean the parts.
2. Reverse the directions of the disassembly procedure to perform the assembly.
3. Do not smear the brake linings with grease.
4. After you install the drum and tighten the castle nut, apply lubricant.

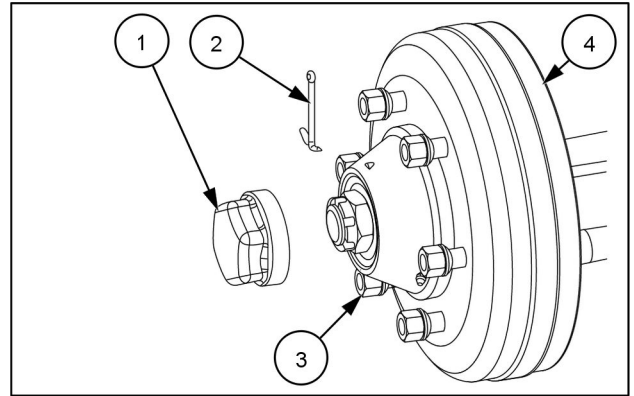
Bearing play

Before you eliminate the bearing play:

1. Lift the wheel from the ground to be able to turn the wheel freely.
2. Move the wheel crosswise to the wheel axle. If you detect noticeable play, proceed with the play elimination procedure.

To eliminate the bearing play, proceed as follows:

1. Remove the wheel.
2. Unscrew the hub cover **(1)** and remove the pin **(2)**.
3. Torque the castle nut **(3)** to allow the wheel to move freely and to allow for re-installing pin **(2)**.
4. If necessary, apply lubricant.
5. Re-install and tighten the hub cover **(1)**.
6. Re-install the wheel.



ZEIL18TIL0114AA 1

Tire and rim service

Check the rims and tires regularly during the season.

1. Check the tire pressure regularly. If necessary, inflate the tires to the recommended pressure of **2.8 – 3.2 bar (40.6 – 46.4 psi)**.

Make sure that both tires are set to the same tire pressure.

NOTICE: *Inflate the tires correctly. If the pressure is too high the tires may crack. If the pressure is too low the tires may be damaged due to deformation of the tire wall.*

2. Check the torque of the rim hardware regularly. Make sure to torque the rim hardware any time that you remove and install the rim.

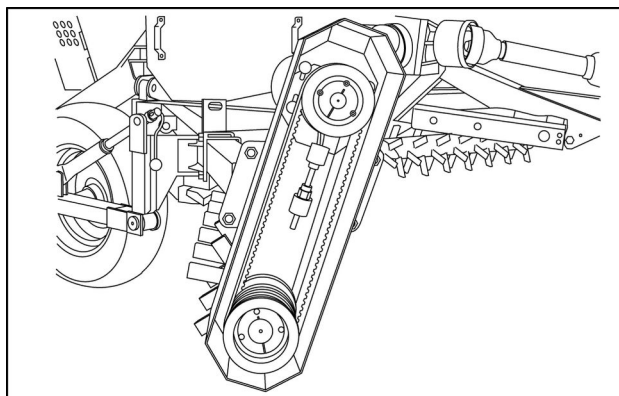
NOTICE: *Do not install a tire of a different size. Use only original KONGSKILDE spare parts.*

NOTICE: *Do not repair the tire while the tire is still mounted on the rim. It will be impossible to inspect the interior of the tire and, in addition, the pressurized tire may explode.*

Rake drive belts

If necessary, the rake drive belt tension can be set as follows.

1. Open the rake end box cover.
2. Loosen the four mounting screws on the upper axle bearing.
3. Tighten the belts with vertical bolt to the tightening torque of **75.0 – 80.0 N·m (663.8 – 708.1 lb in)**.
4. Tighten the axle bearing mounting nuts.
5. When tightening the belts, also check the conical sleeve tension.
6. Close the cover.



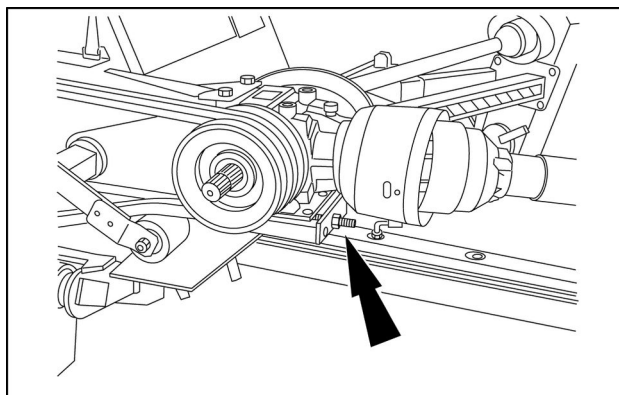
ZEIL17TIL0114AA 1

Collecting drum drive belts

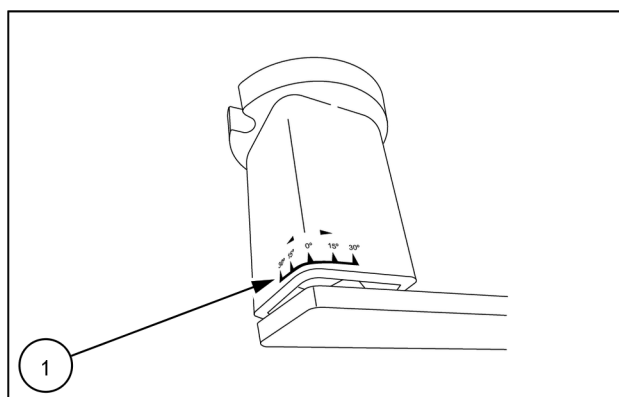
NOTICE: When replacing belts, ensure that they are in the correct position. Driving with new belts on must always be started carefully and the belt tension must be initially checked at regular hourly intervals.

The collecting drum drive belt tension can be set as follows.

1. Remove the belt guard.
2. Tighten the belts with the two adjustment bars in front of the gear box and the bar nuts (**19 mm** wrench), until the tension roller scale (**1**) is in an angle of 15°.
3. When tightening the belts, check the belt pulley alignment.
4. When using the above settings, the belt will slip when overloaded.
5. After setting, tighten the adjustment container locking nuts.
6. Also check the conical sleeve tension when tightening the belts.



ZEIL17TIL0116AA 1



ZEIL22TIL0127AA 2

Collecting drum spring tine

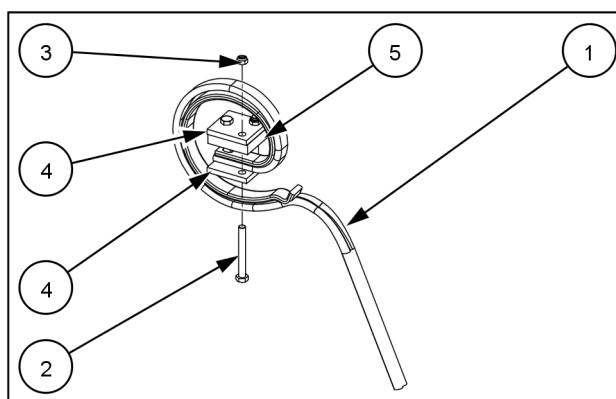
The collecting drum spring tines are made especially for the stonebear. Broken springs cannot be repaired by welding, but must be replaced.

Only original stonebear spring tines are suitable for the intended purpose in regards to the special shape and their durability.

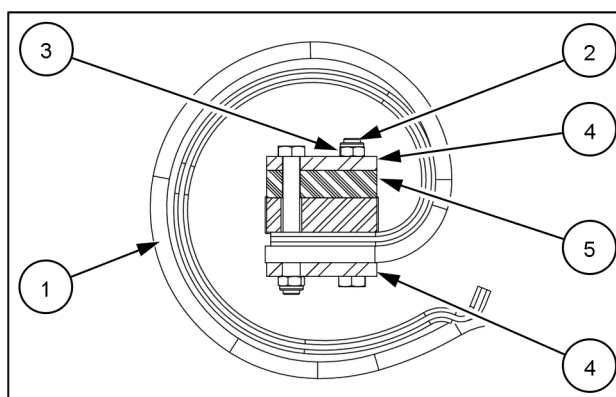
The collecting drum spring tines get shorter with wear. The spring tine should be replaced when it no longer reaches in the bar spacing of the screen. Too short, bent and broken spring tines will not collect stones efficient enough causing the increase of strain for the other spring tines. Because of that reason the injured tines have to be replaced immediately.

To replace the spring tine, proceed as follows:

1. Unbolt the bolt (2).
2. Remove the damage tine (1).
3. Install the new tine.
4. Tighten three bolts (2) evenly by reaching the distance between bolt (2) and nut (3) of **8.0 – 12.0 mm (0.3 – 0.5 in)**.
5. Install correctly the steel plate (4) and the rubber plate (5).



ZEIL22TIL0128AA 1



ZEIL22TIL0129AA 2

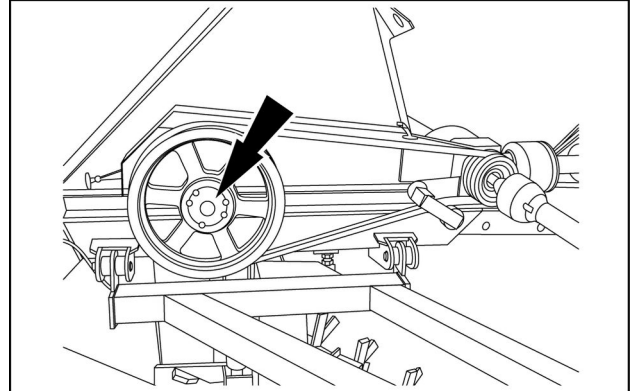
Conical sleeve and belt pulley

NOTICE: The stonebear V-belt pulleys are mounted on the axles by means of conical sleeves.

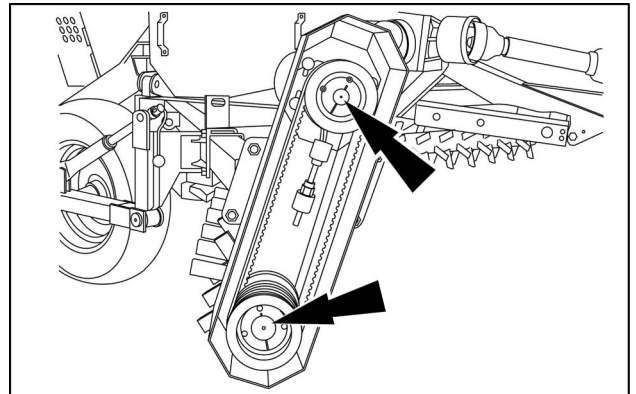
Removal of conical sleeve

NOTICE: There are always one or two unused holes in the conical sleeve (threads on the sleeve side), which are only intended for removal of the sleeves. Under no circumstances should any screws be inserted in these holes while the sleeve is mounted. The mounting hole threads are located on the belt pulley side.

1. Remove the mounting screws and screw one or two of them into the extraction hole(s). The extraction hole threads are facing the conical sleeve.
2. Tighten the extraction screws evenly, until the sleeve releases from its boss.
3. Remove the belt pulley from its axle.



ZEIL17TIL0115AA 1



ZEIL17TIL0114AA 2

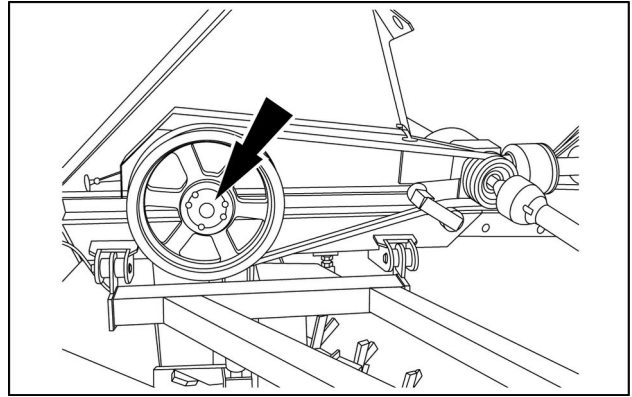
Installation of conical sleeve

1. Carefully remove the protective grease on the new sleeve and belt pulley boss.
2. Place the sleeve on the belt pulley boss and align the holes.
3. Grease the mounting screws and screw them gently into place, with the mounting holes facing the belt pulleys. The mounting screws are not to be screwed into the extraction holes.
4. Clean the axle and mount the belt pulley and conical sleeve into place. When you install the belt pulley, remember that first, the sleeve is attached to the axle and then the pulley is moved slightly toward the sleeve.
5. Torque the screws with the key to the correct tightening torque.

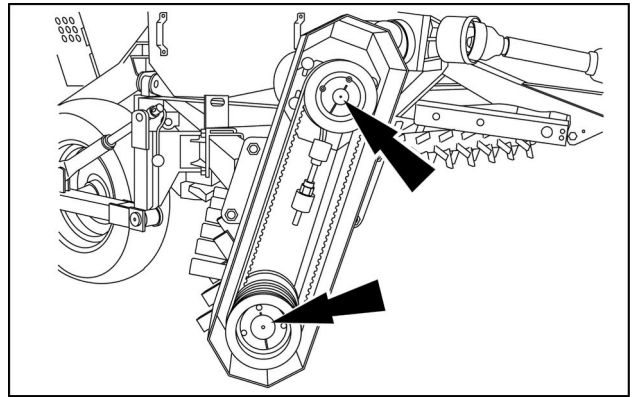
Pulley type	Tightening torque
Drum pulley	112.0 N·m (991.3 lb in)
Small pulley on rake	35.0 – 40.0 N·m (309.8 – 354.0 lb in)
Big pulley on rake	90 N·m (796.6 lb in)

NOTE: Use strong thread locker when tightening the screws.

6. Tap the sleeve lightly and re-tighten the screws. Repeat this several times to ensure that the sleeve is tightly in place.
7. Check the screw tightness regularly.
8. Fill the extraction holes with grease to prevent dirt to enter.



ZEIL17TIL0115AA 3



ZEIL17TIL0114AA 4

Storage

End of season service

When the season is over, prepare the implement for the storage immediately.

To prepare the implement for winter storage, proceed as follows:

1. Completely empty the hopper of all remaining stones and soil.
2. Clean the implement thoroughly. Dust and dirt absorb moisture and moisture increases the formation of rust.
3. Store the implement in a dry place, protected against wind and weather in the best possible way.
4. Grease all grease fittings after you clean the implement, according to the "Overview". See Page 7-10.
5. Check the implement for damaged parts, loose screw-joints, leakage, wear and other defects carefully before the storage. If there is any damage, it may be forgotten during the storage and result in problems the following season. Note down the necessary parts you will need before the next season and order the spare parts.
6. Dismount the Power Take-Off (PTO) shafts, lubricate the profile tubes and keep them in a dry place.
7. Spray the implement with a coat of rust-preventing oil.
8. The piston rod of the hydraulic cylinders may get rusty. Clean with brush and grease the components in order to protect them against wind and weather.
9. Change the oil in the hydraulic system and the gearbox.
10. Support the implement to relieve the weight from the tires. Leave tires inflated. Tire and rubber components life will be extended if protected from sunlight during storage.

NOTE: Periodic checks will help to keep your implement maintenance and repairs to a minimum and avoid costly breakdowns during the season. Therefore, it is good practice to have the implement inspected at the end of the season.

Implement long-term storage and/or disposal

When the implement reaches the end of its useful life, observe the following recommendations for disposal:

- See your KONGSKILDE dealer to make an agreement for your dealer to properly dispose of the implement, or
- Sell the implement to a company that specializes in the proper disposal of industrial machinery.

If you want to keep the implement on your premises (for spare parts or other reusable components, etc.) you must observe the following instructions:

1. Park the implement on hard and level ground. Bring all moveable components to the lowest position and/or safest position.
2. Store the implement with the axles on wooden blocks in order to keep the implement upright, as the tires will deflate over time.
3. Drain the oil from gearbox, and hydraulic systems into appropriate containers. Take the oil to your local waste recycling facility. Pay attention to local rules that may require you to store the different types of oils separately. Remove the filters (if available).

NOTE: *The implement is now ready for a long-term storage and/or for scrapping after the removal of reusable components.*

Long-term storage

The assigned storage life for the implement is minimum seven years, during this time the implement must be packed in a dry and clean place without condensation.

NOTE: *All the requirements for the storage of the implement must be met.*

Scrapping

When you scrap the vehicle, you must keep materials apart. Separate the following:

- Plastics
- Rubber hoses
- Belts
- Electric and electronic components
- Tires
- Wiring harnesses
- Sheet metal
- Castings
- Weld assemblies
- Aluminium
- Any other additional category

NOTE: *See your local waste recycling facility for specific rules on how to deliver the scrapped materials.*

When you dismount mechanical systems, make sure that there is no risk of residual energy (such as compressed springs in belt variators). If you do not have the proper tools or instructions to disassemble a system or component, contact your KONGSKILDE dealer to perform this service.

NOTE: *Make sure that the implement maintains stability during the dismantling process.*

Ordering parts and / or accessories

When you prepare the implement for storage, check thoroughly for any parts that may have become worn and need replacing.

Order and install the spare parts and/or accessories at once before the next season.

When you order spare parts, always make sure to give your KONGSKILDE dealer the model number and the Product Identification Number (PIN) of your implement. See "Product identification" in Chapter 1 of this operator's manual.

Insist on genuine KONGSKILDE "quality" spare parts as they will give the best performance and are covered by our warranty.

For best performance, have your implement serviced by an authorized KONGSKILDE dealer.

Preseason service

Follow the steps outlined below at the beginning of each season to ensure the implement is in good condition and ready for use.

1. Check the tire air pressure.
2. Check the condition of bearings. If necessary, replace the worn bearings.
3. Check the gearbox oil level. Refill if necessary.
4. Check the screw and nut tensions.
5. Check the condition of hydraulic hoses and connections.
6. Check the implement lubrication.
7. Adjust the collecting drum drive belts.
8. Adjust the rake drive belts.
9. If necessary, replace all parts that have damage or wear.

8 - TROUBLESHOOTING

Fault code resolution

General

This chapter describes the easy diagnostic methods for generic problems and the related remedies for them. If you cannot find the cause of a problem or solve a problem, consult the KONGSKILDE dealer.

Troubleshooting chart

Problem	Possible Cause	Correction
Stones left on the field.	Shallow working depth.	Slightly increase working depth.
	Screen bar spacing too wide.	Replace with narrower screen.
	Screen bars damaged.	Fix, or replace if necessary.
	Rotation rate too high.	Reduce rotation rate.
Stones not entering stonebear.	Working depth too shallow.	Slightly increase working depth.
	Collecting drum tines missing.	Replace missing spring tines.
	Collecting drum tines bent.	Replace damaged spring tines.
	Low stone content.	Slightly increase driving speed.
Soil taken in with stones.	Working depth too deep.	Reduce working depth.
	Soil moisture content too high.	Allow soil to dry.
	Excessively worn rake tines.	Weld extensions onto tines.
	Screen bar spacing too narrow.	Replace with wider screen.
	Rotation rate too high.	Reduce driving speed.
Rakes stop during operation.	Soil moisture content is too high.	Allow soil to dry.
	Drive belts are too loose.	Slightly tension and test.
	Bearings are damaged.	Replace bearings with new.
	Blocking between axle and frame.	Clean the rake axle and frame.
	Working depth too deep.	Reduce working depth.
	Drive belt broken.	Replace all belts.
	Oil on belt pulleys.	Remove and clean belt pulleys.
	Belt pulleys or belts are worn.	Replace with new.
Rake drive belts are breaking.	Soil or dirt in the boxes.	Clean end boxes.
	Drive belts too tight.	Loosen drive belts.
	Belts incorrect length.	Replace all belts.
Collecting drum stops.	Belts too loose.	Tighten belts.
	Belts are broken.	Replace both belts.
	Too many stones on the screen.	Reduce driving speed.
	Tension roller too loose.	Adjust roller until tight.
Collecting drum belts are breaking.	Belts are too tight.	Loosen belts.
	Stones between belts and pulleys.	Reduce rotation rate.
	Stones get stuck in screen.	Reduce rotation rate and driving speed.
Collecting drum belts turn up and down in belt pulley grooves.	Belts are too loose.	Replace with new and check tension.
	Belts are worn out.	Replace both belts with new.
Hopper lowers slowly or is stuck when being lowered.	Quick-release coupler buttons worn.	Replace both couplers.
	Hydraulic hoses/lines pinched.	Replace pinched hoses/lines.
	Security valves broken/ blocked.	Clean/replace security valves.
	Security valves close too easily.	Replace security valves.

8 - TROUBLESHOOTING

Problem	Possible Cause	Correction
	Sliding surfaces dry.	Grease sliding surfaces.
Lights do not work.	Fuse burned out.	Replace fuse.
	Contact problem in connection.	Open and clean connections.
	Breaks in the lead.	Replace with new lead.
	Electrical problem in tractor.	Repair tractor electrical system.

9 - SPECIFICATIONS

Standard equipment

The stonebear is equipped with following standard equipment.

- Draw hook hitch.
- Drawbar, adjustable in length.
- Hydraulic depth adjustment.
- Power Take-Off (PTO) shaft.
- Transmission with non-crossing V-belts.
- Rakes folded with cables.
- Depth control wheels for rakes.
- Collecting drum with tines in 5 rows.
- 18 spring tines with assisting springs.
- 5 spare spring tines.
- **40 mm (1.6 in)** screen.
- Tipping hopper.
- Screen in the bottom of the hopper.
- Absorbing rear wall in the hopper.
- Rear lights.

Technical data

Technical data	SB 4000	SB 5200
Working capacity	0.5 – 1.0 Ha/hr	0.6 – 1.2 Ha/hr
Working width	4.0 m (157.5 in)	5.2 m (204.7 in)
Working depth	0 – 7 cm (0 – 2.8 in)	
Driving speed	1 – 6 km/h (0.6 – 3.7 mph)	
Collected stone size	2.8 – 30.0 cm (1.1 – 11.8 in)	
Number of tines	18	24
Screens, standard	40 mm (1.6 in)	
Screens, other sizes	28 mm (1.1 in), 35 mm (1.4 in), 50 mm (2 in), and 70 mm (2.8 in)	
Hopper capacity (practical)	1.8 m ³ (63.6 ft ³)	
Tipping height	2.3 m (90.6 in)	
Length	5.9 m (232.3 in)	
Transport width*	2.5 – 3.0 m (98.4 – 118.1 in)	
Transport height	3.2 m (126.0 in)	
Weight	3350 kg (7385 lb)	3620 kg (7981 lb)
Rear wheels	500/60 - 22.5 in 700/40 - 22.5 in	
Rake wheels	185/70 R14	

* The value depends on the installed rear wheels.

NOTE: The capacities are only for indication, are dependent on the soil and the working conditions.

Fluids, lubricants, and capacities

Application	Capacity	Product name	Specification(s)
Grease fittings	-	TUTELA MULTI-PURPOSE GR-9 GREASE or TUTELA 75 MD GREASE	NLGI 2 M1C 137-A or M1C 75-B
Gearbox	1.5 L (0.4 US gal)	TUTELA HYPOIDE EP 80W-90 NT	SAE 80W-90 API GL-5

10 - ACCESSORIES

General information

Accessories or optional equipment listed hereafter may be part of the standard equipment for certain countries. Some of these accessories or options may not be available in certain markets.

Power Take-Off (PTO)

It is possible to install two different kind of Power Take-Off (PTO):

- PTO shaft with wide angle and six splines
- PTO axle with eight splines

Rear wheels

There is a choice between rear wheels with the sizes that follows:

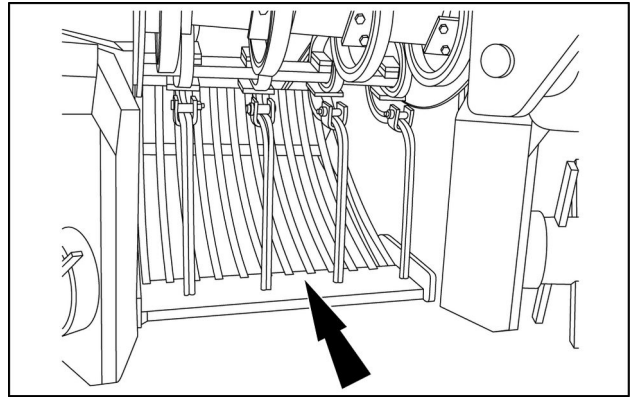
- RW 500/60 - 22.5 (standard)
- RW 700/45 - 22.5 (wide wheels optional)

Screen size

It is possible to choose between different screen sizes:

- 28 mm (1.1 in) screen
- 35 mm (1.4 in) screen
- 40 mm (1.6 in) screen (standard)
- 50 mm (2 in) screen
- 70 mm (2.8 in) screen

NOTE: The dimension refer to the distance between the bars.



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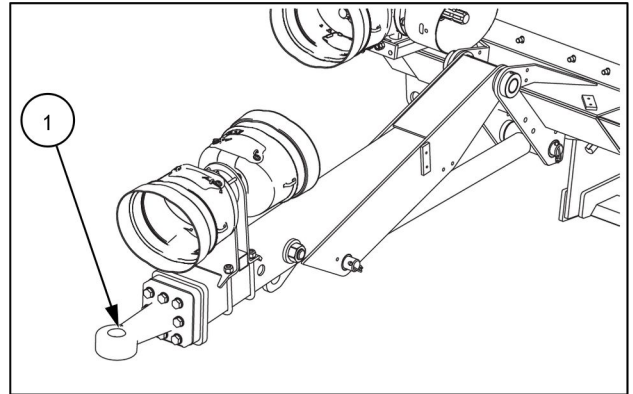
Service wear parts

The service part kit contain items needed to repair the stonebear like the belts, the bearings, the tines, and the clamps.

Drawbar

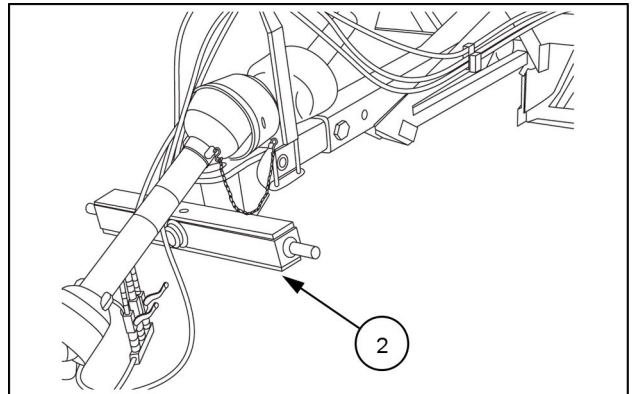
There is a choice between three types of drawbars:

- **50 mm hook (1)**



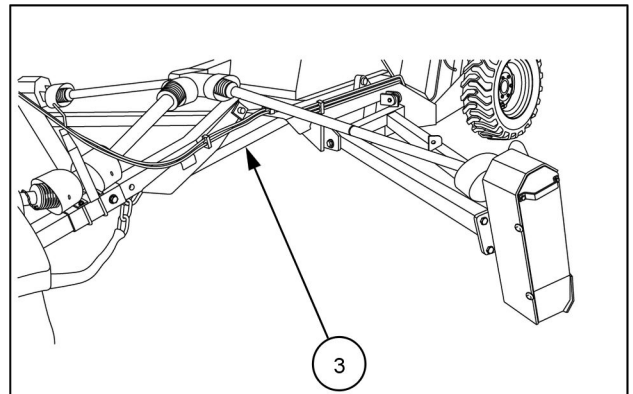
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- **Two point drawbar Cat II (2)**



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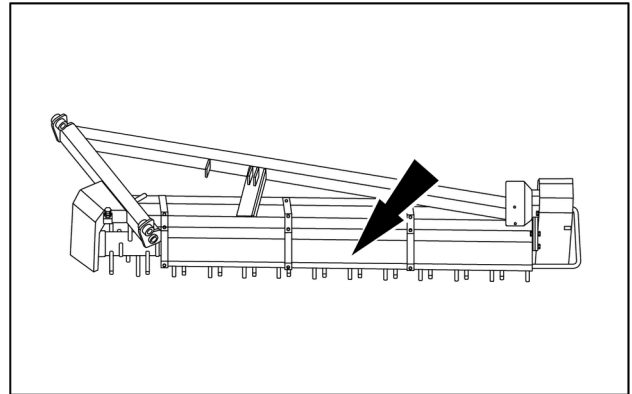
- **Two point drawbar Cat II with hydraulic cylinder (3)**



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Rake guard

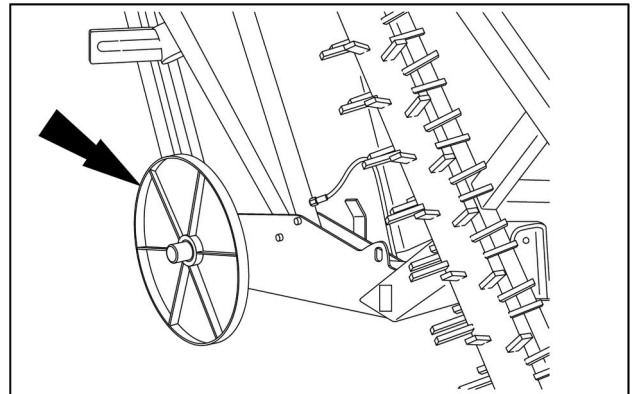
As an option, the stonebear can be equipped with guards that protect the rakes against stone impacts. This option allows also to keep the implement cleaner because less soil is being thrown up.



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Transport wheels

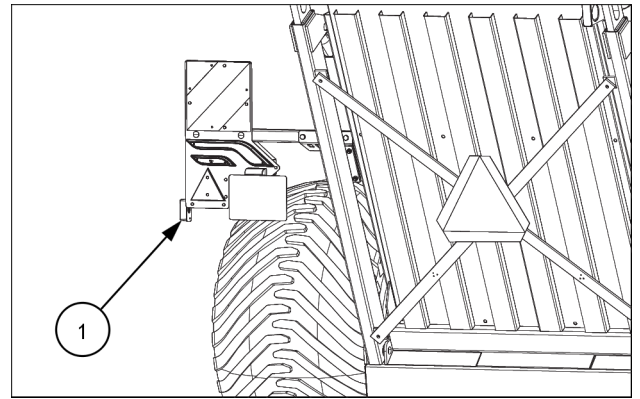
In case of container shipment of the implement, the rear wheels need to be replaced with a set of steel wheels with the diameter of **820 mm (32.3 in)**. These transport wheels decrease the height of the implements in order to place it into a container.



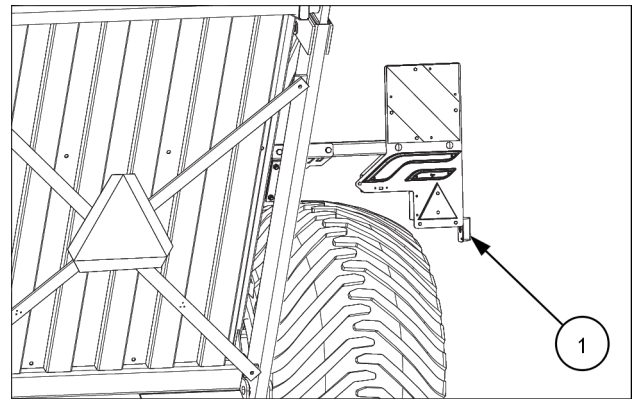
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End outline marker

The implement can optionally be equipped with the end outline markers **(1)**.



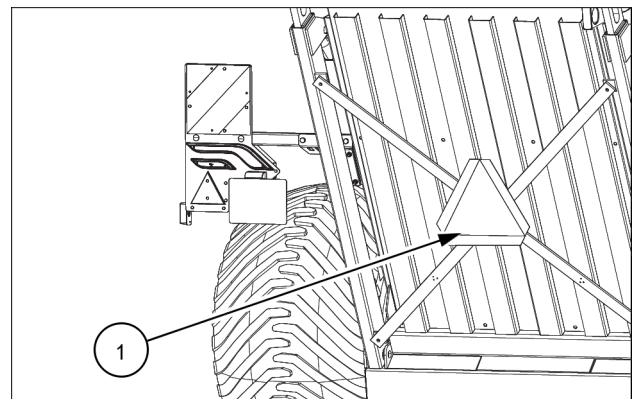
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Slow-Moving Vehicle (SMV) sign

The implement can optionally be equipped with the Slow Moving Vehicle (SMV) sign **(1)**.



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Safety chain

The safety chain is offered and it is mandatory for all units without brakes. The chain hooks from the drawbar of the implement and to the tractor.

11 - FORMS AND DECLARATIONS

European Community (EC) Declaration of Conformity

ACCORDING TO DIRECTIVES 2006/42/EC & 2014/30/EU

Inside the European Community and for some specific countries, an EC Declaration of Conformity is separately delivered with your implement. The EC Declaration of Conformity is the manufacturer's declaration about equipment compliance to relevant European Union (EU) provisions.

Store the EC Declaration into a safe place like the storage box for your operator's manual. Local authorities may require you to show this document in order to assure compliance of your equipment.

Translation of this declaration in your own country language is provided on the original document.

Class of 2006/42/EC Annex I	BG ЕОЕС Декларация за съответствие съгласно Директивите 2006/42/ЕО и 2014/30/ЕО	CS EÚES Prohlášení o shodě podle směrnice 2006/42/EU a 2014/30/EU	DA EØEU overensstemmelseserklæring ifølge direktivene 2006/42/EF & 2014/30/EU	DE EØEU Konformitätserklärung Gemäß den Richtlinien 2006/42/EG & 2014/30/EG	EL ΕΚΕΣ Δήλωση συμμόρφωσης Σύμφωνα με τις οδηγίες 2006/42/ΕΚ και 2014/30/ΕΚ
1.A.1	Имя [1] декларация под мою собственную ответственность, за соответствие	Mj [1] prohláším na vlastní odpovědnost, že výrobek	Vj [1] erklærer hermed at nedenstående bestemte produkt	Wj [1] erkläre hermit in eigener Verantwortung, dass das Produkt	Επ[1] Συμμερίζομαι την αποκλειστική ευθύνη, relative αν το προϊόν
1.A.3	Сведения о товаре Типовое наименование и модель [2] Обозначение [3] Тип (или иные варианты/вариантов) [4] Серийный номер [5]	Identifikace výrobku Obchodní název a model [2] Označení [3] Typ (nebo jiné varianty/varianty) [4] Sériové číslo [5]	Identifikation des Produkts Kommersielles Name und Modell [2] Bezeichnung [3] Type (einschließlich Varianten/Varianten) [4] Seriennummer [5]	Identifikation Handelsbezeichnung und Modell [2] Bezeichnung [3] Typ (Einschließlich Varianten/Varianten) [4] Seriennummer [5]	Τύπος μηχανήματος Ευρωπαϊκό, μεσογειακό και ποσειδών [2] Ονομασία [3] Τύπος (Είδη, εκδόσεις, παραλλαγές / εναλλακτικές) Κατηγορία, επιλογές [4] Σειριακός αριθμός [5]
1.A.4	за кого се издава настоящата декларация, съгласно на която съответността декларирани на Директивите 2006/42/ЕО и 2014/30/ЕО, означава от [7]	Identifikace osoby, pro kterou se vydává prohlášení shody Kdo je výrobce nebo poskytovatel [7]	für wen diese Erklärung herausgegeben wird Hersteller oder Lieferant der Waren [7]	auf das sich diese Erklärung bezieht, allein verantwortlich bestimme(n) (den/deren) 2006/42/EG & 2014/30/EG umfasst	от когото издава декларацията изпълнител, доставчик, износител, вносител, дистрибутор, вносител, експлуататор на оборудване [7]
1.A.7	да съответства декларацията на декларацията на Европейския съюз, издадена от Европейския съюз	implikace prohlášení shody byly harmonizované s relevantními ustanoveními	For all applicable EU standards	bei der Umsetzung der Vorschriften der jeweiligen Richtlinien wurden die folgenden (harmonisierten) Normen angewendet [8]	Το έγγραφο, изготвящо тази декларация, е в съответствие със съответните изисквания на директивите 2006/42/ΕΚ и 2014/30/ΕΚ
1.A.2	Имя [9] Должность [10] и адрес [11] на лица, уполномощен да издава технически документи	Podpis [9] Přechod [10] a adresa [11] osoby, která je oprávněná k vydávání technické dokumentace	Styl [9] Stellung [10] an address [11] für den beauftragte Person der für die Unterfertigung des technischen Dokumentes	Name [9] Position [10] und Anschrift [11] der Person, die beauftragte ist, die technischen Unterlagen zu unterschreiben	Όνομα [9] Επίσημο [10] και διεύθυνση [11] του εξουσιοδοτημένου (πρόσωπου) να εκδώσει τεχνικά έγγραφα
1.A.5	Имя [12] и адрес [13] на человека, на которого издается декларация	Misto [12] a adresa [13] osoby, která je deklarací prohlášena	Styl [12] an address [13] für die Erklärung	Ort [12] und Adresse [13] der Erklärung	Όνομα [12] Επίσημο [13] και διεύθυνση [13] του, за когото се издава декларацията
1.A.10	Подпись [14] Имя [15] и адрес [16] на лица, уполномощен да издава Декларацията за съответствие	Podpis [14] Misto [15] a adresa [16] osoby, která je oprávněná k vydávání deklarace ES	Unterschrift [14] Name [15] an address [16] für den Person, der für die Unterfertigung der EU-Konformitätserklärung	Unterschrift [14] Name [15] an Address [16] der Person, die für die Unterfertigung der EU-Konformitätserklärung	Υπογραφή [14] Όνομα [15] και διεύθυνση [16] του, на когото издава декларацията

Class of 2006/42/EC Annex I	EN EC Declaration of Conformity According to Directives 2006/42/EC & 2014/30/EU	ES Declaración CE de conformidad según las directivas 2006/42/CE y 2014/30/UE	FR EUEE déclaration de conformité selon les directives 2006/42/CE et 2014/30/UE	IT Dichiarazione di conformità secondo le direttive 2006/42/CE e 2014/30/UE	PT Declaração de Conformidade de acordo com as Diretivas 2006/42/CE e 2014/30/UE
1.A.1	Wj [1] I declare under our sole responsibility, that the product	Yo [1] Declaro bajo nuestra única responsabilidad, que el producto	Mes [1] Je déclare sous notre seule responsabilité, que le produit	Io [1] Dichiaro sotto la nostra esclusiva responsabilità, che il prodotto	Nós [1] Declaramos sob a nossa exclusiva responsabilidade, que o produto
1.A.3	Informational machine Commercial Name and Model [2] Designation [3] Type (specifying all variants/versions) [4] Serial Number [5]	Información máquina Nombre comercial y modelo [2] Designación [3] Tipo (especificando todas las variantes/versiones) [4] Número de serie [5]	Machine agricole Désignation Commerciale et Modèle [2] Désignation [3] Type (Spécifier toutes les variantes/versions) [4] Numéro de série [5]	Macchinaria agricola Denominazione Commerciale e Modello [2] Designazione [3] Tipo (Specificare tutte le varianti/versioni) [4] Numero di serie [5]	Máquina agrícola Designação Comercial e Modelo [2] Designação [3] Tipo (Especificar todas as variantes/versões) [4] Número de série [5]
1.A.4	When this declaration relates, fully all the harmonized provisions of Directives 2006/42/EC & 2014/30/EC, amended text [7]	Al que se refiere la presente declaración, cumple con todas las disposiciones armonizadas de las Directivas 2006/42/CE y 2014/30/UE, modificadas por [7]	En ce qui concerne la présente déclaration, elle satisfait pleinement les dispositions harmonisées des directives 2006/42/CE et 2014/30/UE, amendées par [7]	Per la presente dichiarazione, ho assicurato che il prodotto rispetta integralmente tutte le disposizioni armonizzate delle direttive 2006/42/CE e 2014/30/UE, modificate da [7]	Para a presente declaração, asseguramos que o produto cumpre integralmente todas as disposições harmonizadas das diretivas 2006/42/CE e 2014/30/UE, alteradas por [7]
1.A.7	For the implementation of the provisions of the directives, the following harmonized standards have been applied [8]	Con el fin de implementar las disposiciones de las directivas, se han aplicado las siguientes normas armonizadas [8]	Pour la mise en œuvre des exigences de ces directives, les normes (harmonisées) suivantes ont été appliquées [8]	Per l'attuazione delle disposizioni delle direttive, sono state applicate le seguenti norme armonizzate [8]	Para a implementação das disposições das diretivas, foram aplicadas as seguintes normas harmonizadas [8]
1.A.2	Name [9] Position [10] and address [11] of the person authorized to compile the Technical file	Nombre [9] Puesto [10] y dirección [11] de la persona autorizada para elaborar el expediente técnico	Nom [9] Poste [10] et adresse [11] de la personne habilitée à rédiger le Dossier Technique	Sen herlemb Nomi [9] Asteve [10] e indirizzo [11] della persona autorizzata a compilare il file tecnico	Nome [9] Cargo [10] e endereço [11] da pessoa autorizada a elaborar o arquivo Técnico
1.A.5	Place [12] and date [13] of the declaration	Lugar [12] y fecha [13] de la declaración	Lieu [12] et date [13] de la déclaration	Luogo [12] e data [13] della dichiarazione	Lugar [12] e data [13] da declaração
1.A.10	Signature [14] Name [15] and address [16] of the person empowered to draw up the EC Declaration of Conformity	Firma [14] Nombre [15] y puesto [16] de la persona autorizada para redactar la declaración CE de conformidad	Signature [14] Nom [15] et adresse [16] de la personne habilitée à rédiger la déclaration de conformité CE	Sen herlemb Alaqa [14] Nomi [15] e indirizzo [16] della persona autorizzata a compilare la dichiarazione di conformità CE	Assinatura [14] Nome [15] e endereço [16] da pessoa autorizada a elaborar a declaração de conformidade CE

11 - FORMS AND DECLARATIONS

Class of 2004/2005 Annex I	EU ENKES-meghatározó nyilatkozat a 2004/2005 és 2014/30/EU irányelv szerint	IT Dichiarazione CEUE di conformità Ai sensi della direttiva 2004/2005/CE e 2014/30/UE	LT ENKES Atitikties deklaravimas pagal direktyvas 2004/2005 ir 2014/30/ES	LV ENKES Atbilstības deklarācija saskaņā ar Direktīvu 2004/2005/EK un 2014/30/ES	NL EG-Verklaring van overeenstemming overeenkomstig de richtlijnen 2004/2005 en 2014/30/EG	NO EFUEU Sammenhengende / Overensstemmende erklæring 2004/2005 og 2014/30/EFUEU	PL Deklaracja zgodności WEUE zgodnie z dyrektywami 2004/2005/WE i 2014/30/WE
1.A.1	Autotransp. [1] Közlekedési járművel kapcsolatos tudatossági nyilatkozat, hogy a következők szerint:	Nem [1] dichiarano, sotto la nostra esclusiva responsabilità, che il prodotto:	Nem [1] savo atitikties pareikšioms, kad patvirtu:	Uzdevums [1] ir vienpersonu atbilstību pabeigot, ka produkts:	Va [1] verklaren op onze eigen verantwoordelijkheid dat het product:	Va [1] erklære under eget ansvar at produktet:	My [1] oggettively, påminnet på våre egne ansvar, at produktet:
1.A.2	Autotransp. [1] Közlekedési járművel kapcsolatos tudatossági nyilatkozat, hogy a következők szerint:	Matrica agricola Dichiarazione commerciale a modello [2] Dichiarazione [3] Tipo (specificare l'eventuale variante) [4] Modello [5] Numero di serie [6]	Matrica agricola Dichiarazione commerciale a modello [2] Dichiarazione [3] Tipo (specifiuoti kilmavietis, variantis) [4] Modelio kodas [5] Serijos numeris [6]	Autotransp. [1] Kontaktpersons uzdevums ir modelis [2] Deklarācija [3] Tipa (norādīt konkrētu variantu) [4] Modelis [5] Serijs numurs [6]	Landbouwverkeer Handwritten en model [2] Handwritten [3] Type (specificeer eventuele varianten) [4] Modelnummer [5] Seriënummer [6]	Landbruksmiddel Handwritten en model [2] Handwritten [3] Type (specifiser eventuelle varianter) [4] Modelnummer [5] Serienummer [6]	Mašins transportas Mašina transporto modelis [2] Mašina [3] Tipa (specifiuoti kilmavietis, variantis) [4] Autotransp. [1] Autotransp. [1]
1.A.4	Autotransp. [1] Közlekedési járművel kapcsolatos tudatossági nyilatkozat, hogy a következők szerint:	ai quale si riferisce la presente dichiarazione è conforme a tutte le disposizioni della direttiva 2004/2005 e 2014/30/UE, modificata da [7]	su kuriai yra nurodyti šios deklaracijos atitikties visos galiojančios direktyvos 2004/2005 ir 2014/30/ES nuostatos, patvirtant: [7]	un kura atbilstoši šīs deklarācijas atbilstošajai direktīvai 2004/2005/EK un 2014/30/ES noteikumiem, kas grozīti ar [7]	waarsp deze verklaring betrekking heeft, aan alle wetten inzake keuringen uitdrukt een ja antwoord 2004/2005/EG en 2014/30/EG	denne erklæring gjelder for, og gjelder alle tilsvarende bestemmelser i Direktiv 2004/2005/EF og 2014/30/EF, endret av [7]	Konkreto produkto atitikties deklaracija, apimanant, jog šis produktas atitinka visus galiojančius direktyvų 2004/2005/WE ir 2014/30/WE, išnagrinėjus pakeičius
1.A.7	Autotransp. [1] Közlekedési járművel kapcsolatos tudatossági nyilatkozat, hogy a következők szerint:	Per l'adesione appropriata delle disposizioni della direttiva sono stati applicati i seguenti standard armonizzati [8]	Atitiktumui derinčių nuostatų įgyvendinimui buvo taikomi šie derinę standartai [8]	Deklarācijai noteikumiem atbilstošajai tehniskajai ir pamatnei 888 (atbilstošajai) standart: [8]	Voor de juiste toepassing van de voorschriften die de afgegeven verklaring onder (afhankelijk van de afgegeven verklaring) moeten begripen [8]	De afgegeven (afhankelijk van de afgegeven verklaring) onder (afhankelijk van de afgegeven verklaring) moeten begripen [8]	Višes atitikties vyriausybės direktyvų sąlygoms atitiktis patvirtinama šios deklaracijos pildymo (atitiktis) nurodymais [8]
1.A.2	Autotransp. [1] Közlekedési járművel kapcsolatos tudatossági nyilatkozat, hogy a következők szerint:	Nome [9] Prestare [10] e indirizzo [11] della persona autorizzata a compilare il fascicolo tecnico	Asmens, įgaliojantis atlikti šios deklaracijos, vardas ir pavardė [9] pasirašo [10] ir adresas [11]	Tie personas, vārds, uzvārds [9] amats [10] un adrese [11] kurš ir atbildīgs par šīs deklarācijas izstrādāšanu	Naam [9] Plaats [10] en adres [11] van de persoon die de verklaring op de technische documenten op te stellen	Navn [9] Sted [10] og adresse [11] af den person, som har foretaget undersøgelsen af tekniske dokumenter	Asmens, įgaliojantis atlikti šios deklaracijos, vardas ir pavardė [9] pasirašo [10] ir adresas [11] kurš yra atsakingas už šios deklaracijos išpildymą
1.A.5	Autotransp. [1] Közlekedési járművel kapcsolatos tudatossági nyilatkozat, hogy a következők szerint:	Logo [12] e data [13] della dichiarazione	Vardas [12] ir data [13] dėklaracijos	Vārds [12] ir datums [13] dēklarācijai	Plaats [12] en datum [13] van de verklaring	Sted [12] og dato [13] for erklæringen	Logo [12] ir data [13] dėklaracijos
1.A.10	Autotransp. [1] Közlekedési járművel kapcsolatos tudatossági nyilatkozat, hogy a következők szerint:	Firma [14] Nome [15] e posizione [16] della persona autorizzata a compilare il fascicolo tecnico	Pastabas [14] Vardas ir pavardė [15] ir padėtis [16] asmens, įgaliojantis atlikti šios deklaracijos	Pastaba [14] Vārds ir uzvārds [15] ir padzīme [16] personai, kas atbildīga par šīs deklarācijas izstrādāšanu	Handwritten [14] Handwritten [15] Handwritten [16]	Signature [14] Name [15] og adresse [16] af den person, som har foretaget undersøgelsen af tekniske dokumenter	Pastaba [14] Vardas ir pavardė [15] ir padėtis [16] asmens, įgaliojantis atlikti šios deklaracijos
Class of 2004/2005 Annex I	IT Dichiarazione di conformità CEUE En conformità con la Direttiva 2004/2005/CE e 2014/30/UE	RO Declarație de conformitate CEUE conform Directivei 2004/2005/CE și 2014/30/UE	UK EG-Verklaring af overensstemmelse i henhold af direktivene 2004/2005/EF og 2014/30/EF	ES EG-Verklaring af overensstemmelse i henhold af direktivene 2004/2005/EG og 2014/30/EG	SV EG-Verklaring af överensstämmelse enligt direktiven 2004/2005/EG och 2014/30/EG	TR 2004/2005 ve 2014/30/EU Direktifleri Uygunluk Beyanı	EE EG-Verklaring af overensstemmelse i henhold af direktivene 2004/2005/EF og 2014/30/EF
1.A.1	Autotransp. [1] Közlekedési járművel kapcsolatos tudatossági nyilatkozat, hogy a következők szerint:	Nem [1] dichiarano, sotto la nostra esclusiva responsabilità, che il prodotto:	My [1] virkavimas, kad šis produktas atitiktis visoms galiojančioms direktyvoms 2004/2005/EF ir 2014/30/EF	Uzdevums [1] ir vienpersonu atbilstību pabeigot, ka produkts:	Va [1] verklaren op onze eigen verantwoordelijkheid dat het product:	Beyan [1] erklære under eget ansvar at produktet:	My [1] oggettively, påminnet på våre egne ansvar, at produktet:
1.A.2	Autotransp. [1] Közlekedési járművel kapcsolatos tudatossági nyilatkozat, hogy a következők szerint:	Matrica agricola Dichiarazione commerciale a modello [2] Dichiarazione [3] Tipo (specificare l'eventuale variante) [4] Modello [5] Numero di serie [6]	Matrica agricola Dichiarazione commerciale a modello [2] Dichiarazione [3] Tipo (specifiuoti kilmavietis, variantis) [4] Modelio kodas [5] Serijos numeris [6]	Autotransp. [1] Kontaktpersons uzdevums ir modelis [2] Deklarācija [3] Tipa (norādīt konkrētu variantu) [4] Modelis [5] Serijs numurs [6]	Landbouwverkeer Handwritten en model [2] Handwritten [3] Type (specificeer eventuele varianten) [4] Modelnummer [5] Seriënummer [6]	Landbruksmiddel Handwritten en model [2] Handwritten [3] Type (specifiser eventuelle varianter) [4] Modelnummer [5] Serienummer [6]	Mašins transportas Mašina transporto modelis [2] Mašina [3] Tipa (specifiuoti kilmavietis, variantis) [4] Autotransp. [1] Autotransp. [1]
1.A.4	Autotransp. [1] Közlekedési járművel kapcsolatos tudatossági nyilatkozat, hogy a következők szerint:	ai quale si riferisce la presente dichiarazione è conforme a tutte le disposizioni della direttiva 2004/2005 e 2014/30/UE, modificata da [7]	su kuriai yra nurodyti šios deklaracijos atitikties visos galiojančios direktyvos 2004/2005 ir 2014/30/ES nuostatos, patvirtant: [7]	un kura atbilstoši šīs deklarācijas atbilstošajai direktīvai 2004/2005/EK un 2014/30/ES noteikumiem, kas grozīti ar [7]	waarsp deze verklaring betrekking heeft, aan alle wetten inzake keuringen uitdrukt een ja antwoord 2004/2005/EG en 2014/30/EG	denne erklæring gjelder for, og gjelder alle tilsvarende bestemmelser i Direktiv 2004/2005/EF og 2014/30/EF, endret av [7]	Konkreto produkto atitikties deklaracija, apimanant, jog šis produktas atitinka visus galiojančius direktyvų 2004/2005/WE ir 2014/30/WE, išnagrinėjus pakeičius
1.A.7	Autotransp. [1] Közlekedési járművel kapcsolatos tudatossági nyilatkozat, hogy a következők szerint:	Per l'adesione appropriata delle disposizioni della direttiva sono stati applicati i seguenti standard armonizzati [8]	Atitiktumui derinčių nuostatų įgyvendinimui buvo taikomi šie derinę standartai [8]	Deklarācijai noteikumiem atbilstošajai tehniskajai ir pamatnei 888 (atbilstošajai) standart: [8]	Voor de juiste toepassing van de voorschriften die de afgegeven verklaring onder (afhankelijk van de afgegeven verklaring) moeten begripen [8]	De afgegeven (afhankelijk van de afgegeven verklaring) onder (afhankelijk van de afgegeven verklaring) moeten begripen [8]	Višes atitikties vyriausybės direktyvų sąlygoms atitiktis patvirtinama šios deklaracijos pildymo (atitiktis) nurodymais [8]
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1.A.5	Autotransp. [1] Közlekedési járművel kapcsolatos tudatossági nyilatkozat, hogy a következők szerint:	Logo [12] e data [13] della dichiarazione	Vardas [12] ir data [13] dėklaracijos	Vārds [12] ir datums [13] dēklarācijai	Plaats [12] en datum [13] van de verklaring	Sted [12] og dato [13] for erklæringen	Logo [12] ir data [13] dėklaracijos
1.A.10	Autotransp. [1] Közlekedési járművel kapcsolatos tudatossági nyilatkozat, hogy a következők szerint:	Firma [14] Nome [15] e posizione [16] della persona autorizzata a compilare il fascicolo tecnico	Pastabas [14] Vardas ir pavardė [15] ir padėtis [16] asmens, įgaliojantis atlikti šios deklaracijos	Pastaba [14] Vārds ir uzvārds [15] ir padzīme [16] personai, kas atbildīga par šīs deklarācijas izstrādāšanu	Handwritten [14] Handwritten [15] Handwritten [16]	Signature [14] Name [15] og adresse [16] af den person, som har foretaget undersøgelsen af tekniske dokumenter	Pastaba [14] Vardas ir pavardė [15] ir padėtis [16] asmens, įgaliojantis atlikti šios deklaracijos

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EC/EU Declaration of Conformity
According to Directives 2006/42/EC & 2014/30/EU

We,

declare under our sole responsibility, that the product:

Agricultural machine

Commercial Name KONGSKILDE and Model: ...

Denomination: Tillage

Type (Specify any variant/version): ...

Planning key: ...

Serial Number: ...

to which this declaration relates, fulfills all the relevant provisions of
Directives 2006/42/EC & 2014/30/EU, amended by: -

For the relevant implementation of the provisions of the Directives, the
following (harmonized) standards have been applied:

- EN ISO 4254-1: 2015

Name, position, and address of the authorized person to compile the
Technical Construction File:...

Place and date of the declaration:

Signature, name and position of person empowered to draw up the EC
Declaration of Conformity:

NOTE: Only for United Kingdom.

	Declaration of Conformity of the Machinery according to Supply of Machinery (Safety) Regulations 2008 n.1597 and Electromagnetic Compatibility Regulations 2016 n.1091	[1]
1.A.1	We, [1] declare under our sole responsibility, that the product:	[2] [3] [4] [5] [6]
1.A.3	Agricultural machine Commercial Name and Model: [2] Denomination: [3] Type (Specify any variant/version): [4] Planning key: [5] Serial Number: [6]	[7] [8] [9] [10] [11] [12] [13] [14] [15] [16]
1.A.4	to which this declaration relates, fulfills all the relevant provisions of these Regulations.	[17] [18] [19] [20] [21] [22] [23] [24] [25] [26] [27] [28] [29] [30] [31] [32] [33] [34] [35] [36] [37] [38] [39] [40] [41] [42] [43] [44] [45] [46] [47] [48] [49] [50] [51] [52] [53] [54] [55] [56] [57] [58] [59] [60] [61] [62] [63] [64] [65] [66] [67] [68] [69] [70] [71] [72] [73] [74] [75] [76] [77] [78] [79] [80] [81] [82] [83] [84] [85] [86] [87] [88] [89] [90] [91] [92] [93] [94] [95] [96] [97] [98] [99] [100]
1.A.7	For the relevant implementation of the provisions of these Regulations, the following published (designated) standards have been applied: [8]	[101] [102] [103] [104] [105] [106] [107] [108] [109] [110] [111] [112] [113] [114] [115] [116] [117] [118] [119] [120] [121] [122] [123] [124] [125] [126] [127] [128] [129] [130] [131] [132] [133] [134] [135] [136] [137] [138] [139] [140] [141] [142] [143] [144] [145] [146] [147] [148] [149] [150] [151] [152] [153] [154] [155] [156] [157] [158] [159] [160] [161] [162] [163] [164] [165] [166] [167] [168] [169] [170] [171] [172] [173] [174] [175] [176] [177] [178] [179] [180] [181] [182] [183] [184] [185] [186] [187] [188] [189] [190] [191] [192] [193] [194] [195] [196] [197] [198] [199] [200]
1.A.2	Name: [9] Position: [10] and address: [11] of the person authorized to compile the Technical File:	[201] [202] [203] [204] [205] [206] [207] [208] [209] [210] [211] [212] [213] [214] [215] [216] [217] [218] [219] [220] [221] [222] [223] [224] [225] [226] [227] [228] [229] [230] [231] [232] [233] [234] [235] [236] [237] [238] [239] [240] [241] [242] [243] [244] [245] [246] [247] [248] [249] [250] [251] [252] [253] [254] [255] [256] [257] [258] [259] [260] [261] [262] [263] [264] [265] [266] [267] [268] [269] [270] [271] [272] [273] [274] [275] [276] [277] [278] [279] [280] [281] [282] [283] [284] [285] [286] [287] [288] [289] [290] [291] [292] [293] [294] [295] [296] [297] [298] [299] [300]
1.A.9	Place: [12] and date: [13] of the declaration.	[301] [302] [303] [304] [305] [306] [307] [308] [309] [310] [311] [312] [313] [314] [315] [316] [317] [318] [319] [320] [321] [322] [323] [324] [325] [326] [327] [328] [329] [330] [331] [332] [333] [334] [335] [336] [337] [338] [339] [340] [341] [342] [343] [344] [345] [346] [347] [348] [349] [350] [351] [352] [353] [354] [355] [356] [357] [358] [359] [360] [361] [362] [363] [364] [365] [366] [367] [368] [369] [370] [371] [372] [373] [374] [375] [376] [377] [378] [379] [380] [381] [382] [383] [384] [385] [386] [387] [388] [389] [390] [391] [392] [393] [394] [395] [396] [397] [398] [399] [400]
1.A.10	Signature: [14] Name: [15] and position: [16] of the person empowered to draw up the UKCA Declaration of Conformity.	[401] [402] [403] [404] [405] [406] [407] [408] [409] [410] [411] [412] [413] [414] [415] [416] [417] [418] [419] [420] [421] [422] [423] [424] [425] [426] [427] [428] [429] [430] [431] [432] [433] [434] [435] [436] [437] [438] [439] [440] [441] [442] [443] [444] [445] [446] [447] [448] [449] [450] [451] [452] [453] [454] [455] [456] [457] [458] [459] [460] [461] [462] [463] [464] [465] [466] [467] [468] [469] [470] [471] [472] [473] [474] [475] [476] [477] [478] [479] [480] [481] [482] [483] [484] [485] [486] [487] [488] [489] [490] [491] [492] [493] [494] [495] [496] [497] [498] [499] [500]

90498853 rev.A

Index

	1	
100 hours grease fittings		7-19
10 hours grease fittings		7-15
	2	
20 hours grease fittings		7-16
	5	
50 hours grease fittings		7-18
	B	
Bearing play		7-23
Blocking up collecting drum		6-9
Brake drum		7-22
	C	
Check before use		4-1
Check for leaks		7-14
Choice of the tractor		4-3
Collecting drum		7-12
Collecting drum drive belts		7-25
Collecting drum spring tine		7-14, 7-26
Collecting drum transmission		6-5
Conical sleeve and belt pulley		7-27
Connection to the tractor		4-4
	D	
Disconnection and parking		4-10
Drawbar		10-3
Drive belt transmission		6-3
	E	
Ecology and environment		2-15
Electro-Magnetic Compatibility (EMC)		1-6
End of season service		7-29
End outline marker		10-5
European Community (EC) Declaration of Conformity		11-1
	F	
Filling and emptying the hopper		6-10
Fire or explosion prevention		2-3
Fluids, lubricants, and capacities		7-9, 9-3
	G	
Gearbox oil – Change		7-11, 7-19
Gearbox oil level - Check		7-13
General		7-1, 8-1
General information		10-1
General recommendations		2-2
Grease fittings and intervals		7-7
	H	
Hazardous chemicals		2-4
Homologation plate		1-10
Hydraulic hoses		7-21
Hydraulic rake control		6-2

I	
Illustrations	2-3
Implement components	1-14
Implement long-term storage and/or disposal	7-30
Implement orientation	1-13
Implement overview	6-1
Intended use	1-4
J	
Jack point locations	4-11
L	
Lifting the implement	5-3
Light kit extension	6-14
Lining thickness	7-20
Local obligations	2-3
M	
Maintenance	2-11
Manual scope and required training level	1-7
Miscellaneous driving instructions.	6-13
N	
Noise emission	2-14
Note to the owner.	1-1
Nuts and bolts	7-11, 7-14
O	
Operating principles.	3-1
Operating the implement safely.	2-8
Operator's manual storage on the machine.	1-12
Ordering parts and / or accessories	7-32
Overview	7-10
P	
Personal Protective Equipment (PPE)	2-12
Power Take-Off (PTO).	10-1
Power Take-Off (PTO) connection.	4-7
Power Take-Off (PTO) drive shaft – Shorten	4-8
Practical working instructions.	6-12
Preseason service	7-33
Pressure washing.	7-8
Product identification	1-11
Product Identification Number (PIN).	1-9
Prohibited usage	1-5
R	
Rake drive belts	7-25
Rake guard	10-4
Rakes.	7-12
Rake transmission	6-4
Rear wheels	10-1
Removal of stuck stones.	6-10
Road travel lights, signs, and reflectors	2-30
Rock picking	6-7
Rotation and driving speed.	6-12
S	
Safety chain	10-5
Safety requirements for fluid power systems and components - hydraulic systems	2-13
Safety rules and signal word definitions	2-1
Safety signs	2-16
Screen	7-12
Screen size	10-2

Selection of screen size	6-8
Service wear parts	10-2
Slow-Moving Vehicle (SMV) sign	10-5
Standard equipment	9-1
Starting up the implement safely	2-5
Stone size effect on handling	6-9
Stopping the implement safely	2-10

T

Technical data	9-2
Tire and rim service	7-24
Torque	7-4
Transport position.	5-1
Transport wheels	10-4
Travelling on public roads	2-6
Troubleshooting chart	8-1

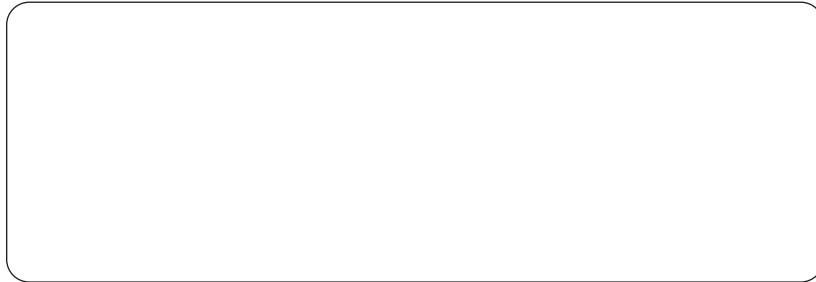
V

Vibration levels	2-14
----------------------------	------

W

When to collect stones	6-11
Working brake	7-22
Working depth	6-6

Dealer's stamp



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Availability of some models and equipment builds varies according to the country in which the equipment is being used. For exact information about any particular product, please consult your Kongskilde dealer.



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