ORIGINAL INSTRUCTIONS - *according to Directive 2006/42/EC, Annex I 1.7.4.1*

VM-1
VM-2
VM-3
Other Hay Equipment

OPERATOR'S MANUAL

Part Number 91821643
1st edition English
July 2022

KONGSKILDE

Contents

Maintenance planning

After the first 10 hours

After the first 100 hours

Daily

Every 10 hours

Every 40 hours

Every 3 months

Every 250 hours

Every 2000 hours or every year

Every six years

As required

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 feeder is intended for mixing components for animal feed and for dispensing the finished feed mixture.

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

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.

Additional documents

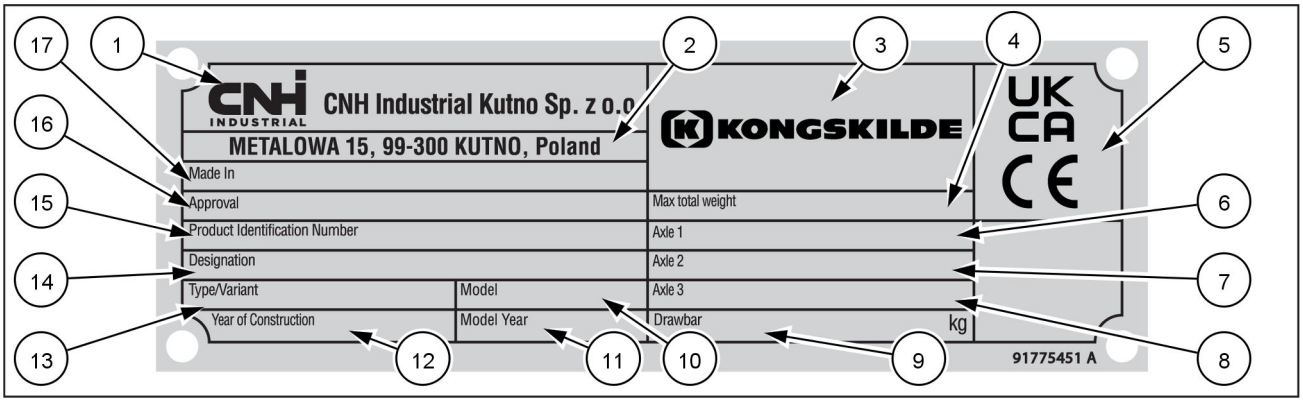
When required, the machine is delivered with an assembly instruction. The assembly instruction shows the packaging depending on the kind of shipment and the related procedure to assemble the received components.

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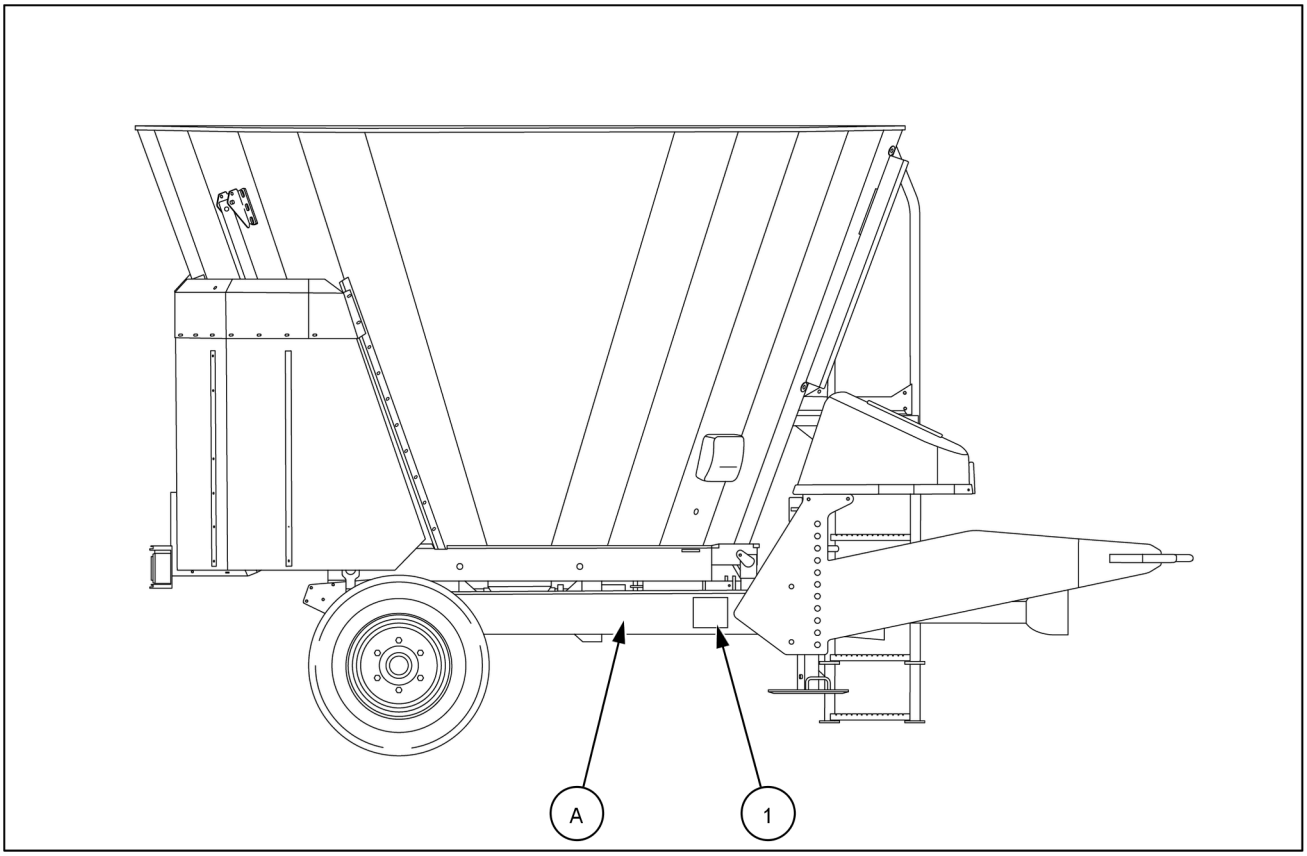
(1) Company name
(2) Mailing address
(3) Brand identification logo
(4) Maximum total weight
(5) Certification mark
(6) Permissible load axle 1
(7) Permissible load axle 2
(8) Permissible load axle 3
(9) Maximum permissible load on the drawbar
(10) Model
(11) Model year
(12) Year of construction
(13)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

Product identification (for VM-1 models)

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.

The PIN is also engraved on the chassis **(A)** at the PIN plate **(1)**.



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

Model _____

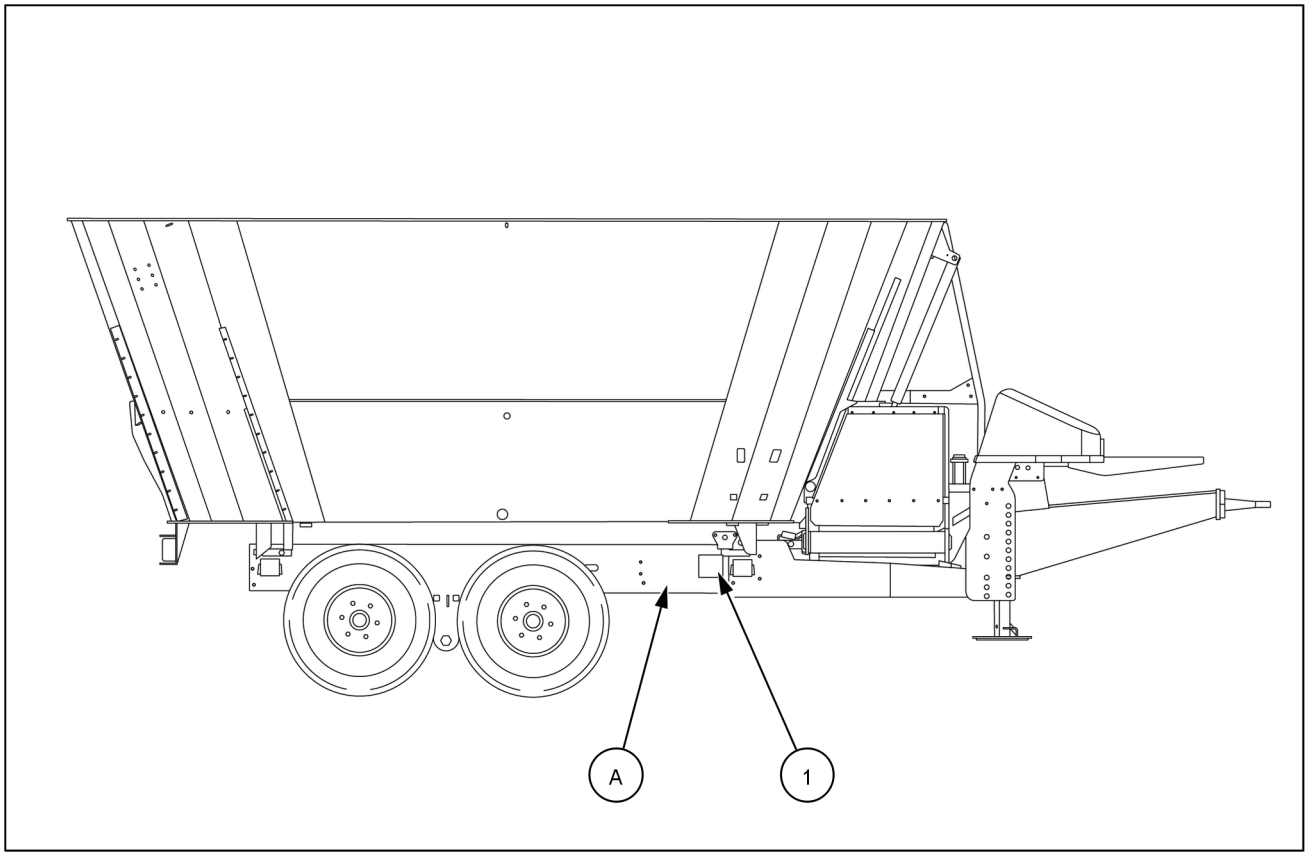
Product Identification Number (PIN) _____

Product identification (for VM-2 models)

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.

The PIN is also engraved on the chassis **(A)** at the PIN plate **(1)**.



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

Model _____

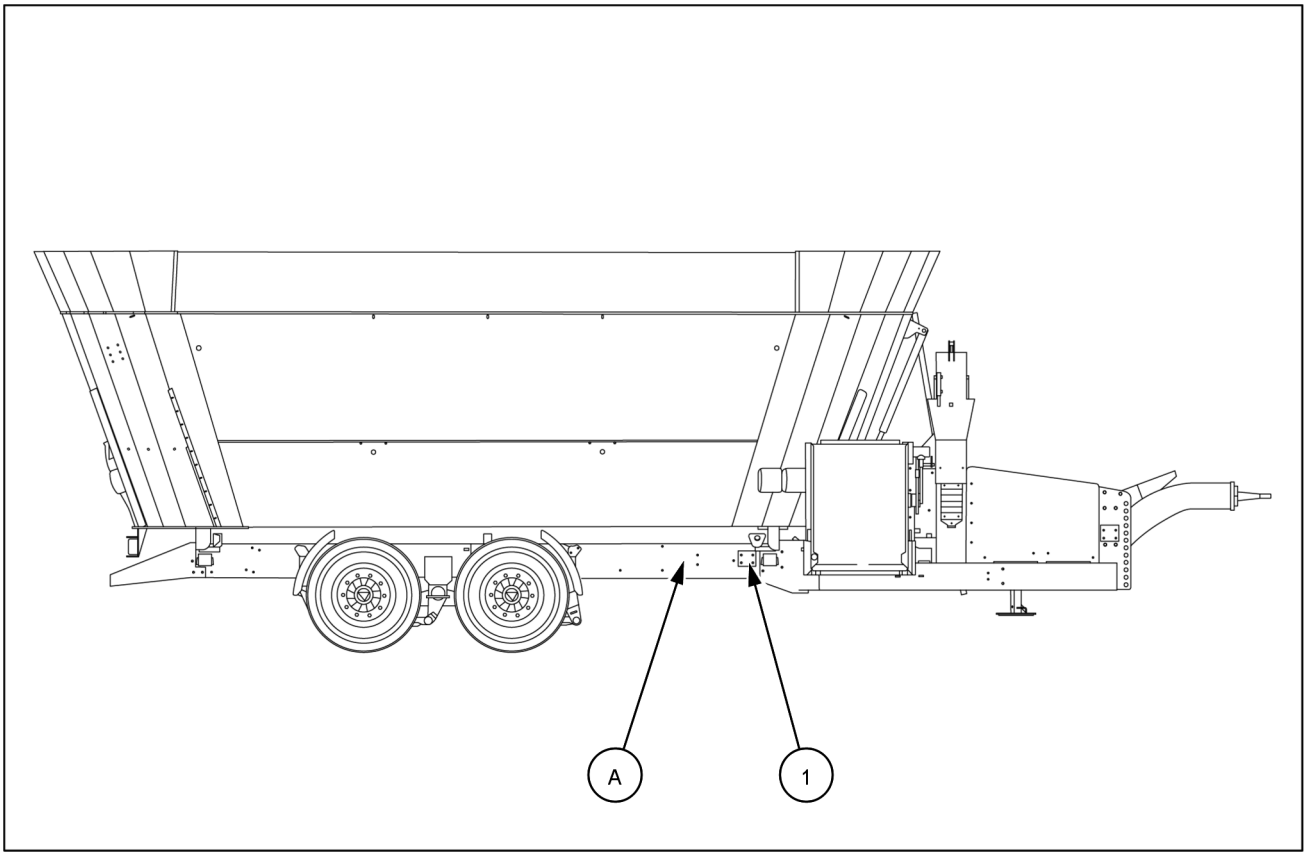
Product Identification Number (PIN) _____

Product identification (for VM-3 models)

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.

The PIN is also engraved on the chassis **(A)** at the PIN plate **(1)**.



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

Model _____

Product Identification Number (PIN) _____

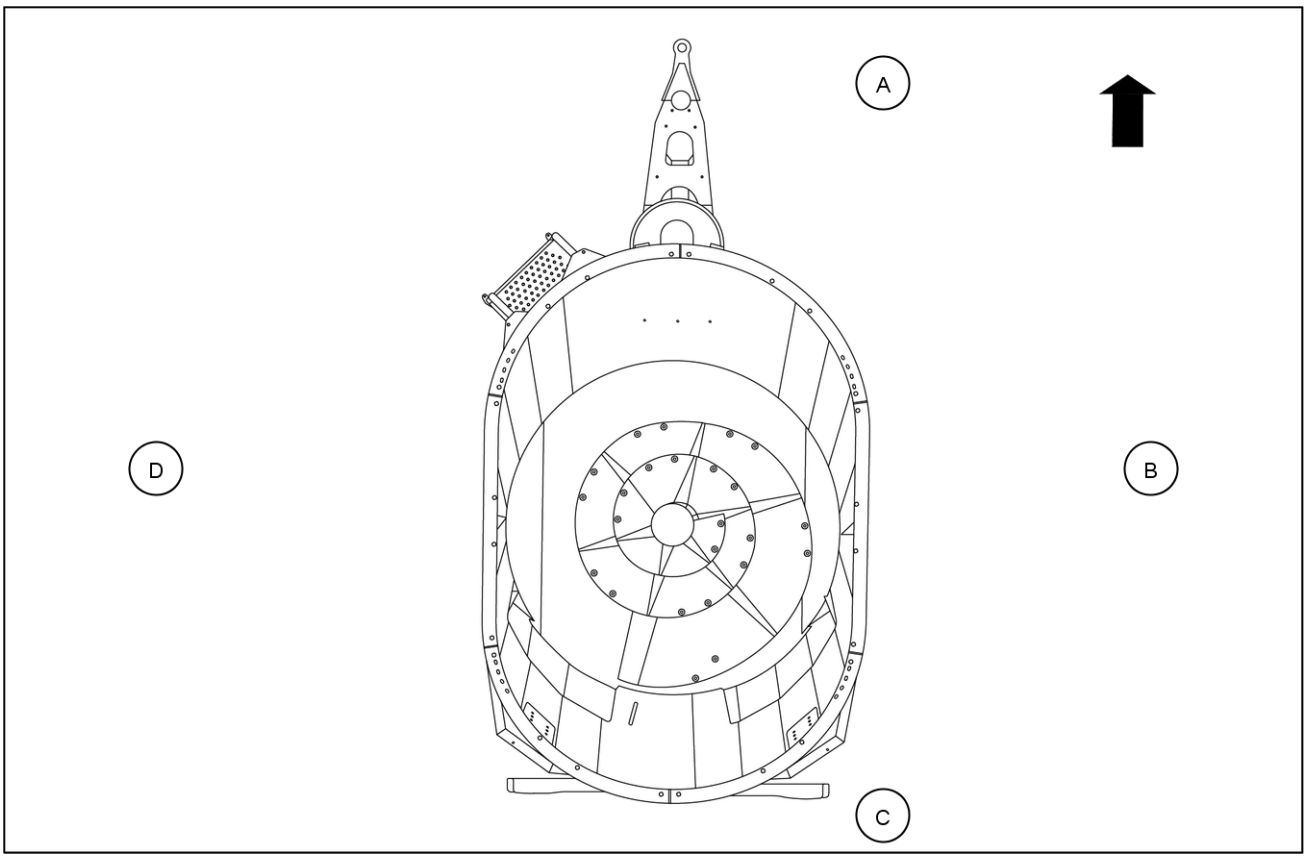
Operator's manual storage on the machine

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

Implement orientation (for VM-1 models)

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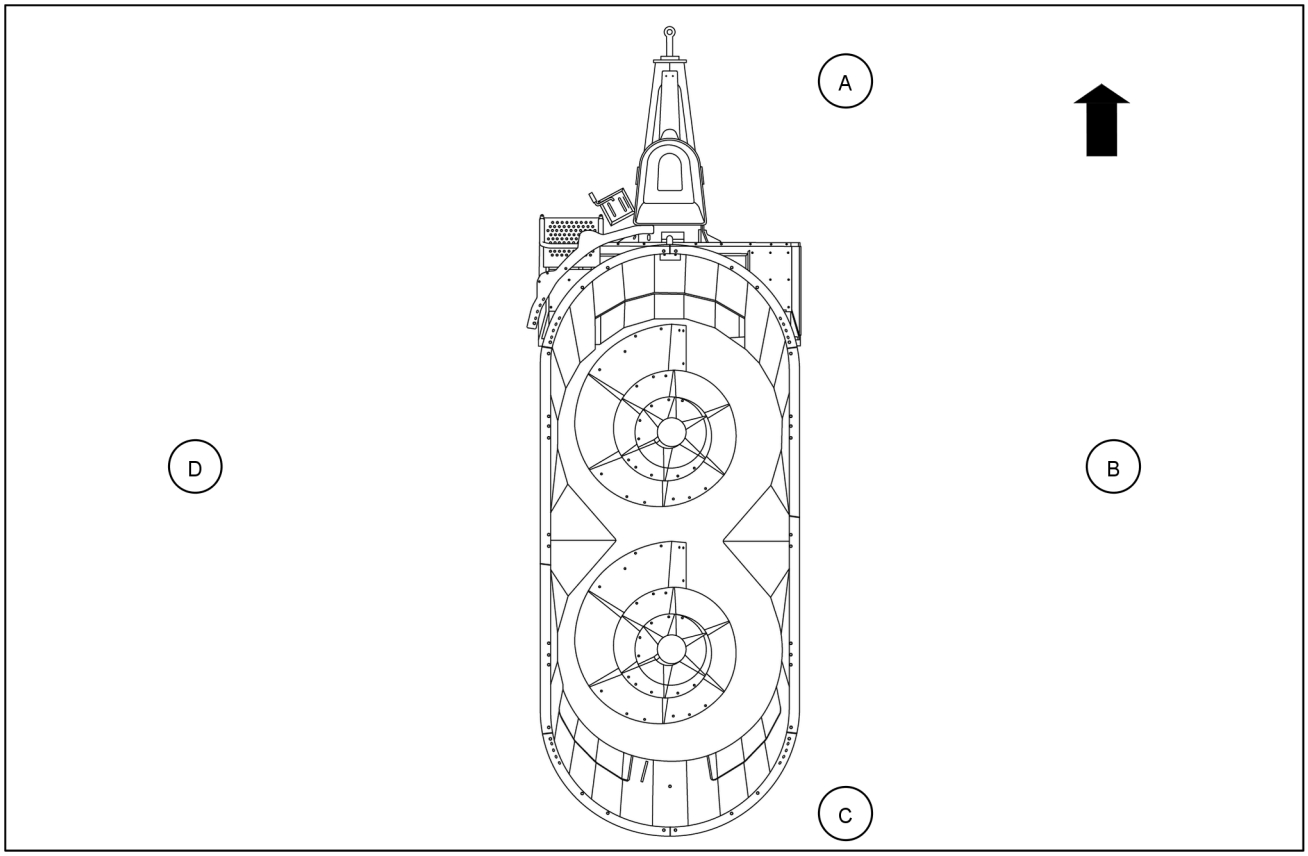
NOTE: *The arrow indicates the direction of the implement during working operation.*

(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 orientation (for VM-2 models)

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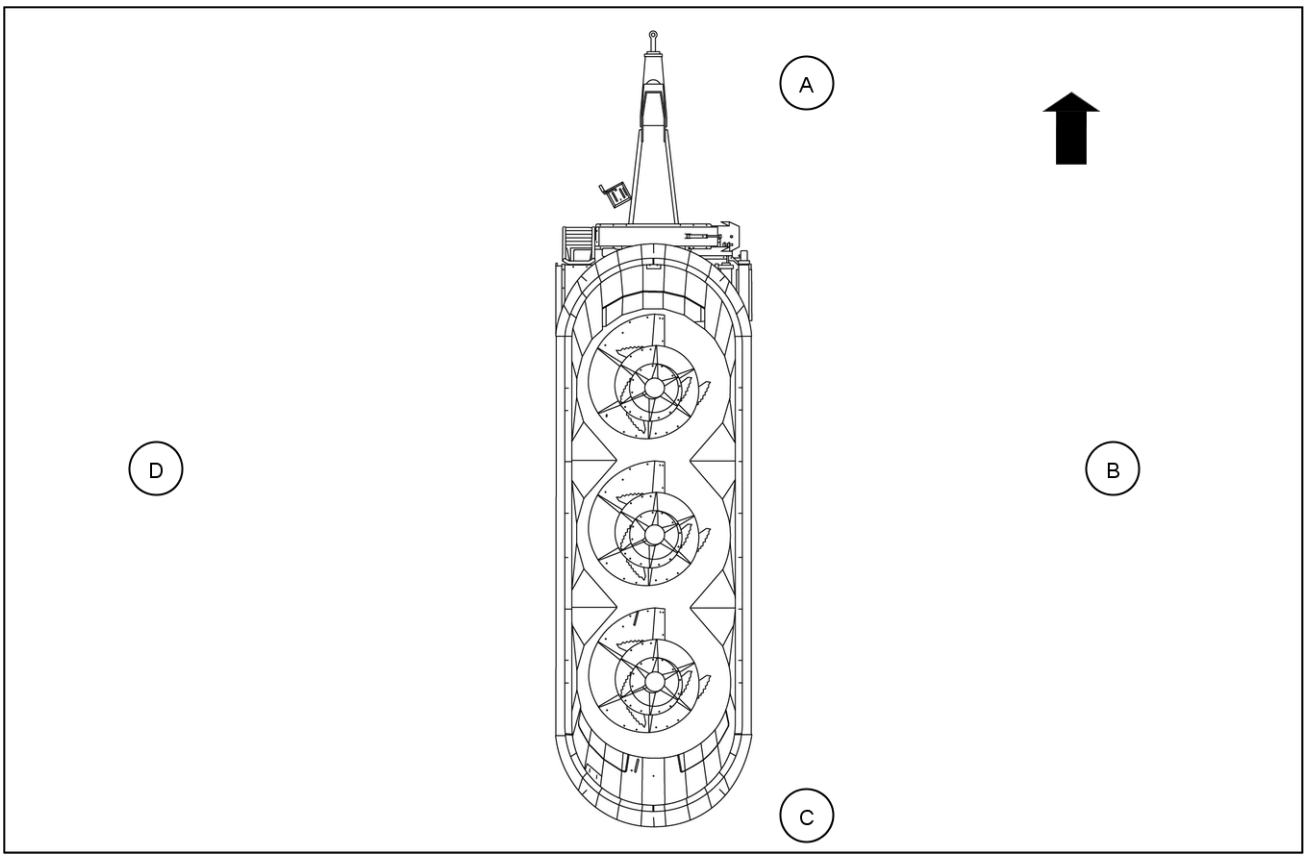
NOTE: *The arrow indicates the direction of the implement during working operation.*

(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 orientation (for VM-3 models)

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

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 harmfull 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.

Replace worn and damaged canvases before you work with 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 Power Take-Off (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 Power Take-Off (PTO) lock pin is properly engaged in the tractor Power Take-Off 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.

Traveling 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.

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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.

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

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

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

Engage the header lift lock valve when ever the implement is in the raised position for road transport. Failure to engage the header lift lock valve presents a crush hazard condition. When you transport the implement, a failure of the hydraulic system can cause the implement to drop onto the pavement, creating a loss of control hazard.

Engage the tongue swing cylinder lock prior to road transport. Failure to engage the tongue swing cylinder lock when you transport the implement could cause the implement to swing sideways into oncoming traffic, bridge or overpass abutments, other roadside obstacles, or ditches, if the tractor hydraulic system is accidentally engaged during transport.

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.*

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.

Before you swing the tongue, make sure that the implement will clear any obstructions. Make sure that bystanders are clear of the implement when you swing the tongue. Air in the hydraulic system or a high hydraulic flow rate can cause erratic operation.

Lower the header to working position before you start the power transmission. Operate only with an enclosed cab tractor.

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.

Before you raise or lower the header, check that nobody is near the implement or touches the implement.

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.

Set the header flotation correctly to ensure optimal operation in the field and to reduce the risk of damaging the cutter bar.

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

Avoid using the implement in unsuitable crop 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.

If the cutter bar or the conditioner is blocked because of foreign matter, stop the PTO of the tractor, activate the parking brake and wait until all revolving parts have stopped. Then try to remove the foreign matter.

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 stop the PTO when the PTO is not needed or when the PTO shaft is in an adverse position.

During the daily work you must consider that loose stones and foreign matter on the ground might get in contact with the revolving parts and get thrown out again at a very high speed. Therefore, before you operate the implement make sure that all safety guards are intact, properly fitted and secured.

In stony fields adjust the stubble height to maximum (horizontal cutter bar) and reduce the cutting angle as much as possible. This results in less wear of blades and stone guards and reduces the risk of loose stones being thrown out from the rotating parts of the implement.

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 mower, keep a safe distance from steep slopes and similar ground conditions, as the ground may be slippery and pull the mower 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.

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 before you open any of the guards. There are rotating parts under the guards which may continue rotating after the implement has been stopped. Keep a safe distance until the implement has come to a complete standstill. Look and listen for evidence of rotating parts before you open any of the guards.

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

Do not try to lift the canvas shields of the header until all revolving parts have stopped.

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.
- Always lower the header to the ground.
- 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.
- Make sure that the jack on the tongue of the implement is correctly fastened and locked when you park the implement.

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.
- Before you disconnect the lift cylinder hose, make sure that the header rests on the ground.
- 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.
- Always relieve the roll pressure before you remove a crop plug from the roller conditioner.
- Inflate the tires correctly. Do not exceed any recommended load or pressure. Follow the instructions in the operator's 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. Otherwise you risk that the header suddenly moves downward after you open the transport lock.

Noise emission

The measuring and reporting of the noise level were carried out according to **ISO 5131**.

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.

The measurement of the noise level took place in the tractor cabin, where usually is the head of the operator.

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 measurements were carried out with the Revolutions Per Minute (RPM) of the tractor engine adjusted so that the Power Take-Off (PTO) runs at **1000 RPM**:

Noise level in the driver cab of the tractor	Feeder coupled	Window closed	**76.5 dB** *
		Window open	**85.6 dB** *
	Feeder uncoupled	Window closed	**76.5 dB** *
		Window open	**80.7 dB** *

*The noise emission values are to be considered 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 dBa. 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

The vibration level for the arms to which the operator of this implement is exposed under normal operating conditions is below the **2.5 m/s²** (with an uncertainty of **0.25 m/s²**) weighted root mean square (RMS) value. The vibration level for the whole body when you work in the field is **0.5 m/s²** RMS value.

This information and measuring methods are in line with the European Machinery Directive 2006/42/EC paragraph 3.6.3.

These vibration data are only indicative numbers and only valid for one typical condition.

The properties of the track or field surface and the driving speed will be the predominant parameters.

In case of abnormal vibrations, contact your local KONGSKILDE dealer.

Ecology and the 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.

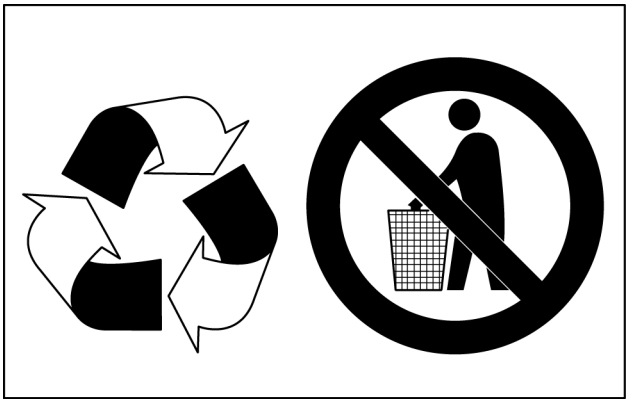
Familiarize yourself with the relative legislation applicable to your country, and make sure that you understand this legislation. Where no legislation exists, obtain information from suppliers of oils, filters, batteries, fuels, anti-freeze, cleaning agents, etc., with regard to the effect of these 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 decals 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.

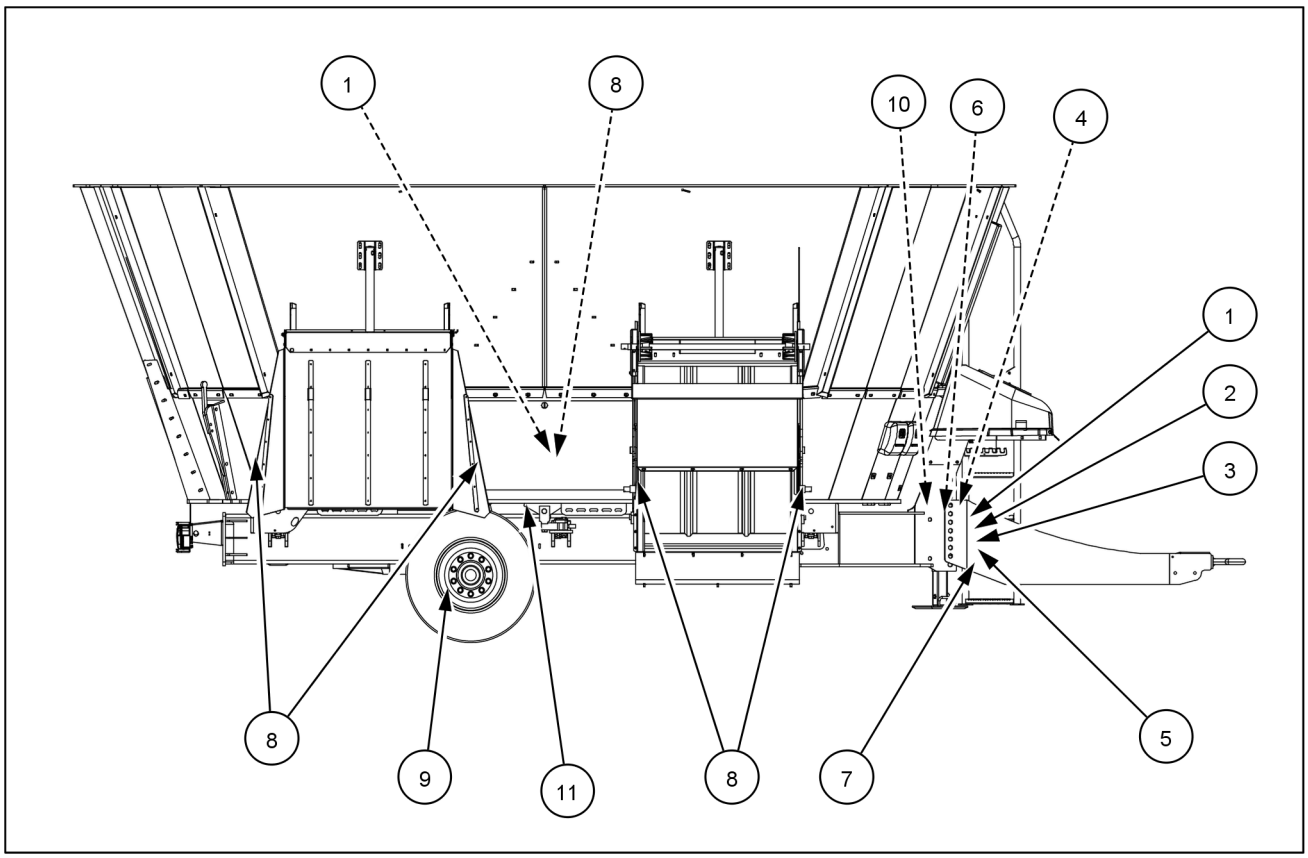
NOTICE: *Do not use solvent, gasoline, or other harsh chemicals. Solvents, gasoline, and other harsh chemicals may damage or remove the safety signs.*

The safety signs are located on both side of the implement.

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.

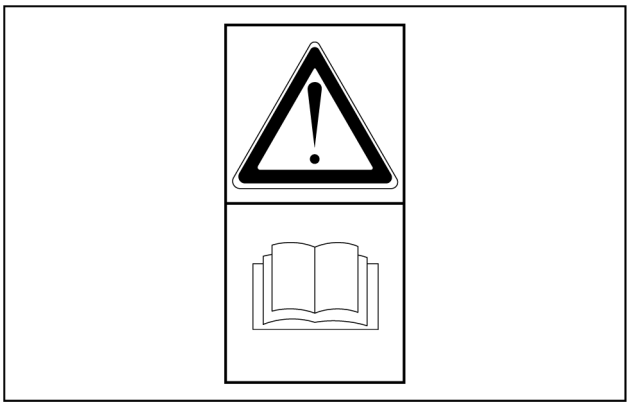
Safety signs that display the “Read operator’s manual” symbol direct you to the operator’s manual for further information regarding maintenance, adjustments, or procedures for particular areas of the implement. When a safety sign displays this symbol, consult the appropriate page of the operator’s manual.

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.



ZEIL21HT00174FA 1

Safety sign (1)



81PR80-0841 2

⚠ 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.

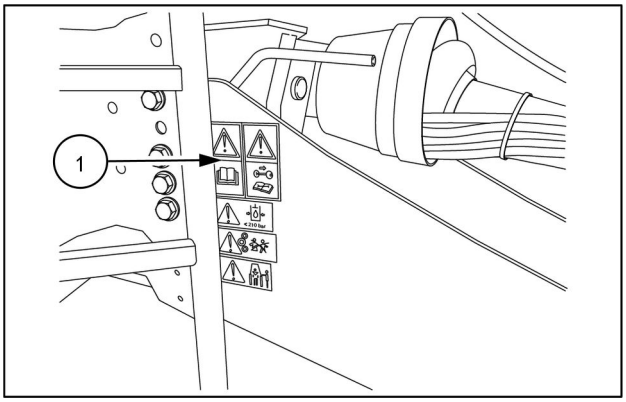
W0188A

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.

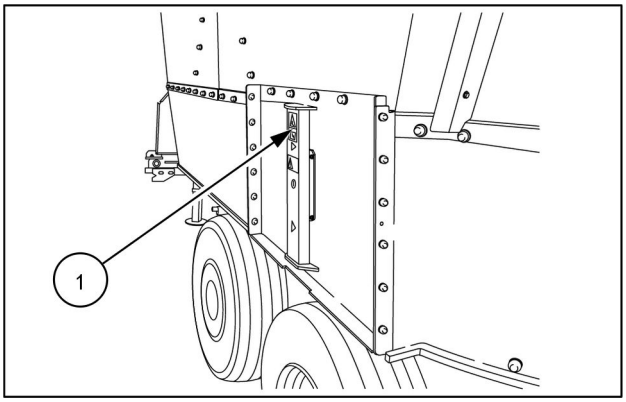
Part number: 81PR80-0841

Located on the right-hand side of the drawbar.



ZEIL22HT00047AA 3

Located on the guard for magnets.



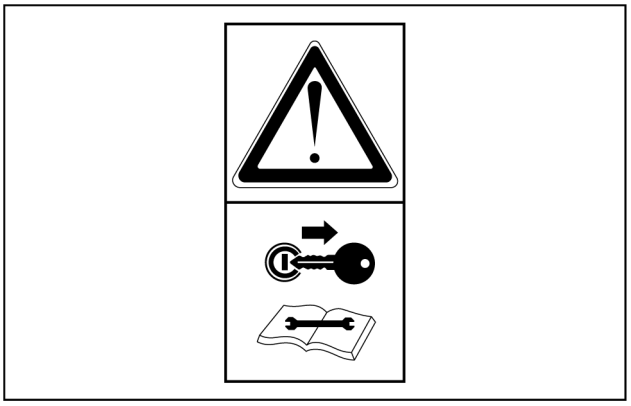
ZEIL22HT00050AA 4

Safety sign (2)

⚠ 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

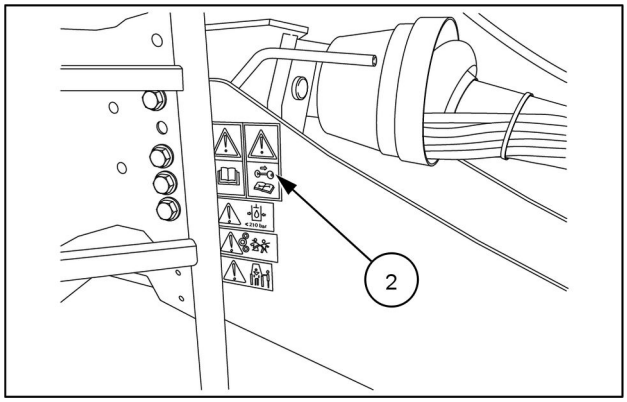


81PR80-0842 5

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

Located on the right-hand side of the drawbar.

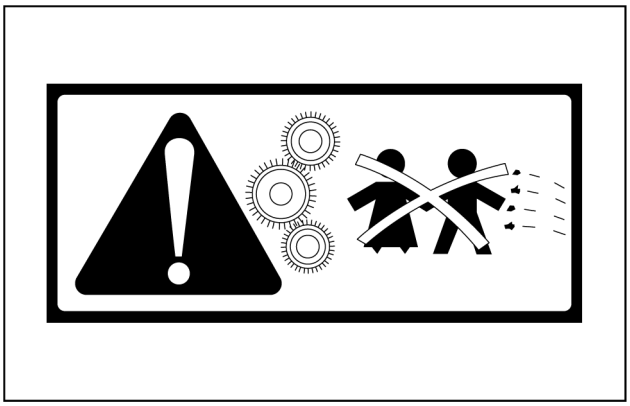


ZEIL22HT00047AA 6

Safety sign (3)

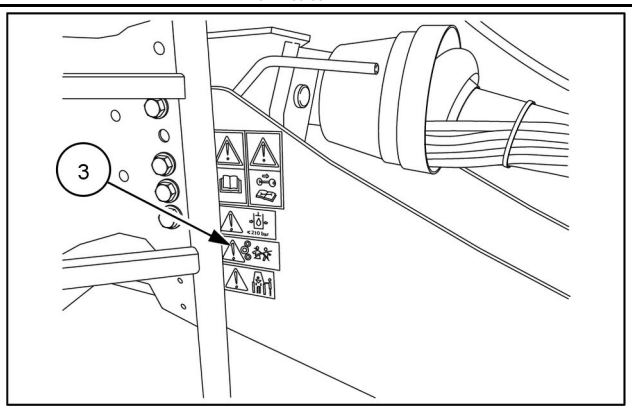
Never let children stand near the implement during operation. Especially not small children as they have a tendency to do unforeseen things.

Part number: 81PR80-0811



81PR80-0811 7

Located on the right-hand side of the drawbar.



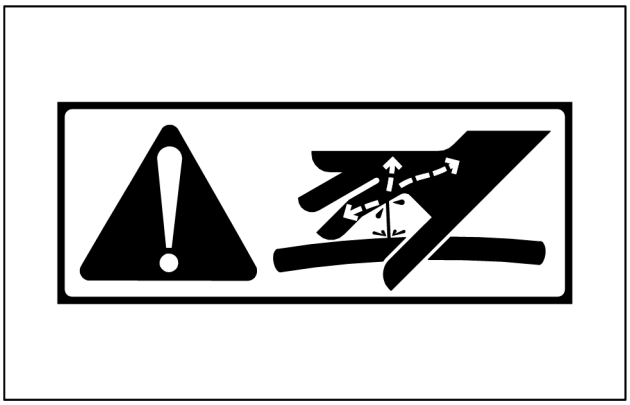
ZEIL22HT00047AA 8

Safety sign (4)

Avoid pressurized outflowing of liquid.

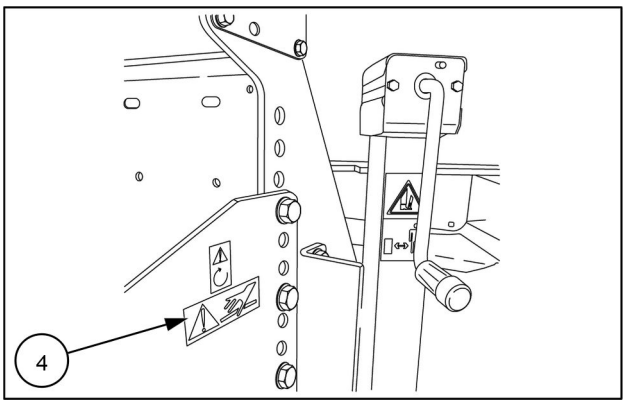
Danger generated by hydraulic oil out flowing under pressure. The danger may cause severe injuries to the entire body, with possible lethal effect. Before proceeding to maintenance procedures or repairs of the hydraulic system, make sure the system is depressurized. Do not try to seal hydraulic oil leaks using your hands or fingers.

Part number: PR80-0814



ZEIL21FR00033AA 9

Located on the left-hand side of the drawbar.



ZEIL22HT00042AA 10

Safety sign (5)

⚠ WARNING

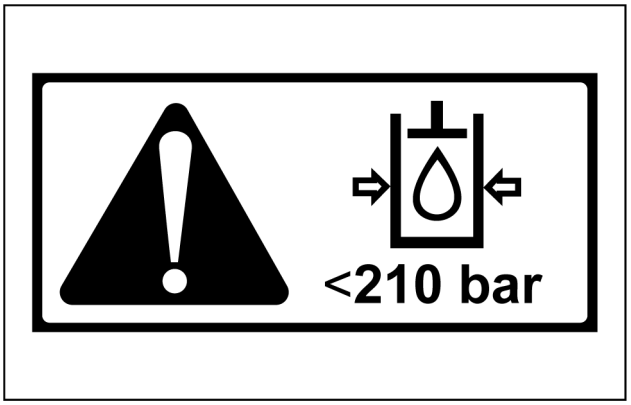
Avoid injury!
Do not exceed the maximum pressure shown on the decal. Never overload the machine hydraulic system.
Failure to comply could result in death or serious injury.

W1464A

Maximum **210 bar** (**3045 psi**).

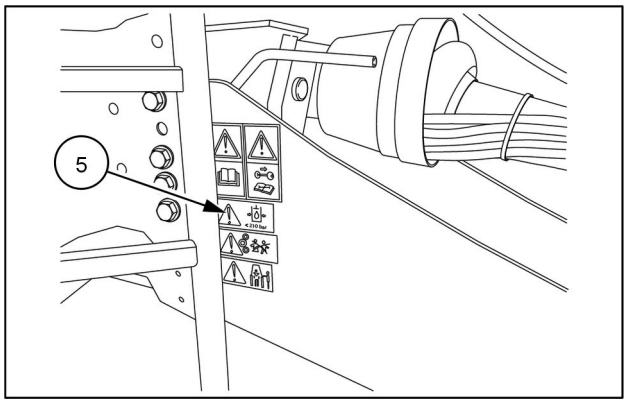
Make sure that the hydraulic components are not exposed to more pressure than maximum **210 bar** (**3045 psi**) as there could be a risk of explosive damage of parts. Hereby you expose yourself and others to serious danger of getting hit by metal parts with high speed or oil under high pressure and with high temperature.

Part number: 81PR80-0832



81PR80-0832 11

Located on the right-hand side of the drawbar.



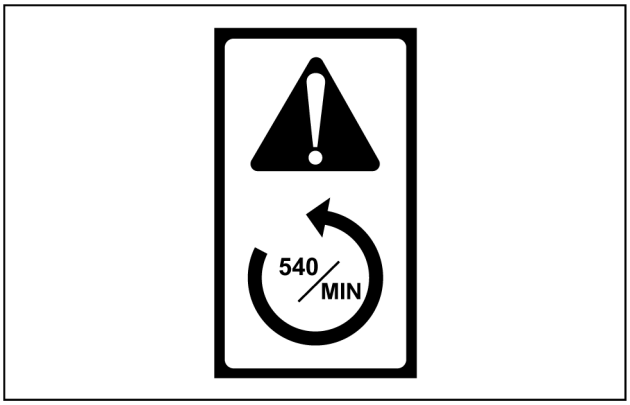
ZEIL22HT00047AA 12

Safety sign (6)

The number and the direction of rotations.

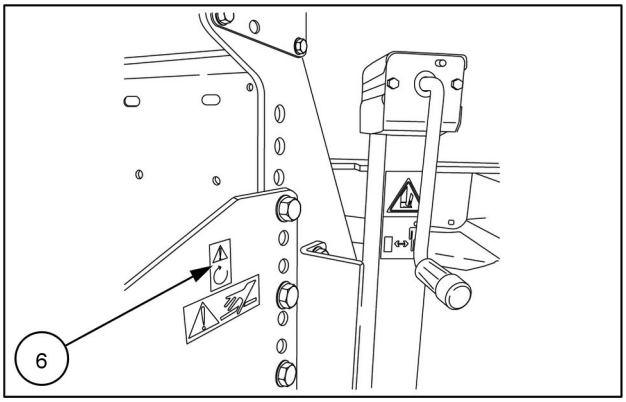
Check that the Power Take-Off (PTO) drive shaft runs with the right RPM and in the right direction. A wrong number of rotations and/or direction of rotation can damage the implement with the risk of personal injury as a result.

Part number: 81PR80-0804



81PR80-0804 13

Located on the left-hand side of the drawbar.



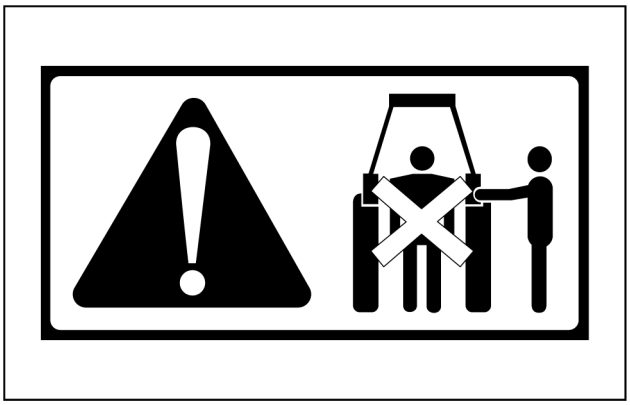
ZEIL22HT00042AA 14

Safety sign (7)

Risk of injury during the connection.

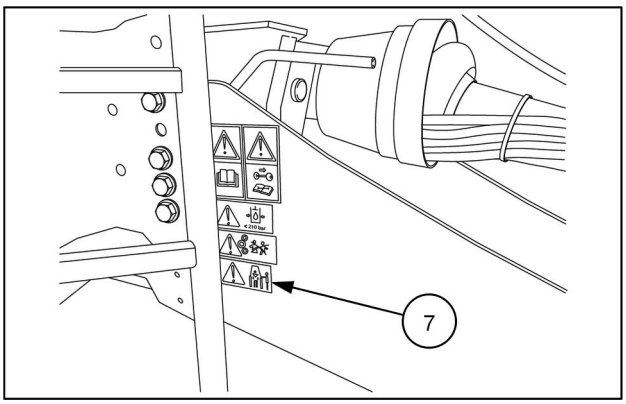
Never let anybody stand between the implement and the tractor after the connection. An unintentional manoeuvre may cause serious injury.

Part number: 81PR80-0809



81PR80-0809 15

Located on the right-hand side of the drawbar.



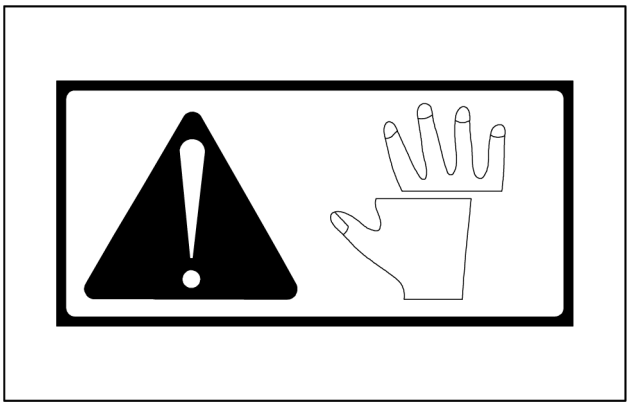
ZEIL22HT00047AA 16

Safety sign (8)

Risk of cutting.

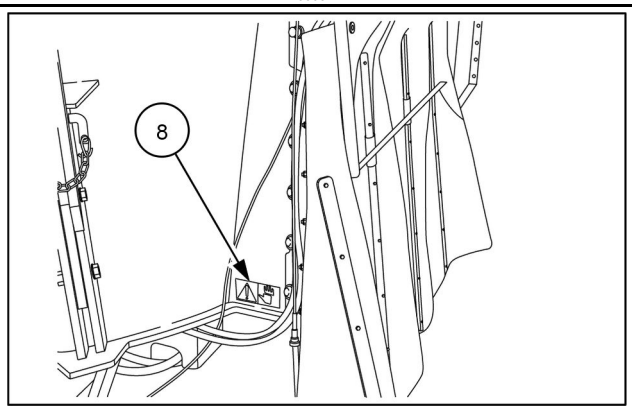
There is a risk of fingers becoming crushed in various parts of the machine. Be careful when the machine is coupled to the tractor and ready for use. The machine can easily crush or cut off any part of the body that might get caught in the machine.

Part number: 81PR80-0293



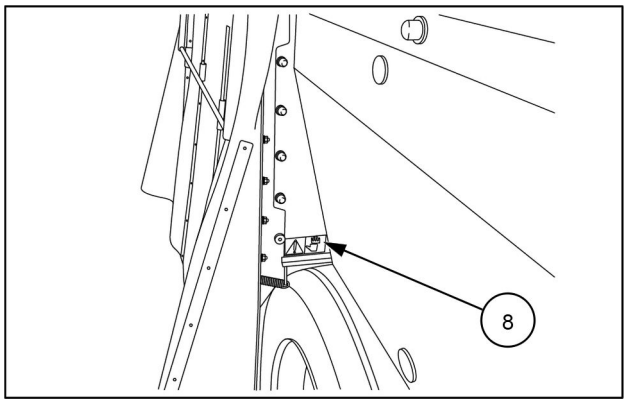
ZEIL21FR00032AA 17

Located on the left-hand side of the side door guard.



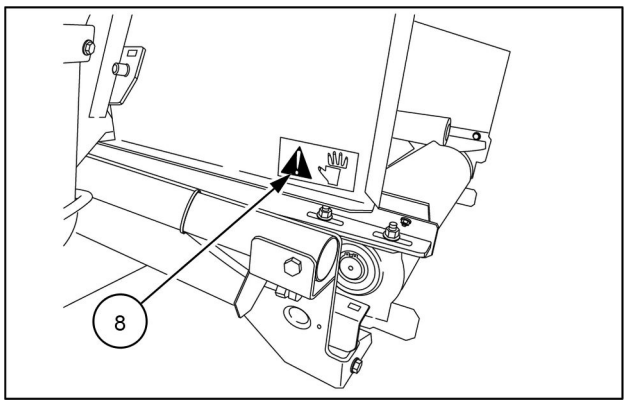
ZEIL22HT00056AA 18

Located on the right-hand side of the side door guard.



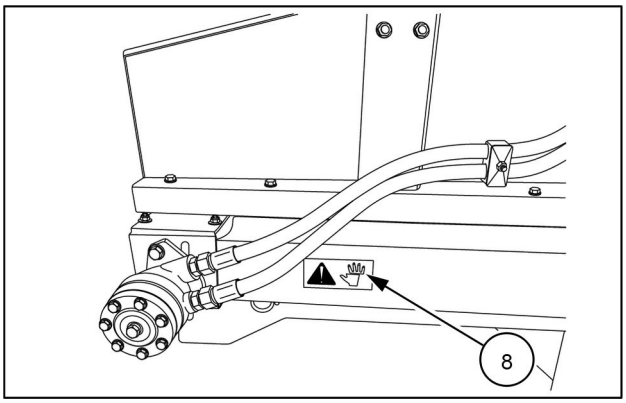
ZEIL22HT00057AA 19

Located on left-hand side of the conveyor.

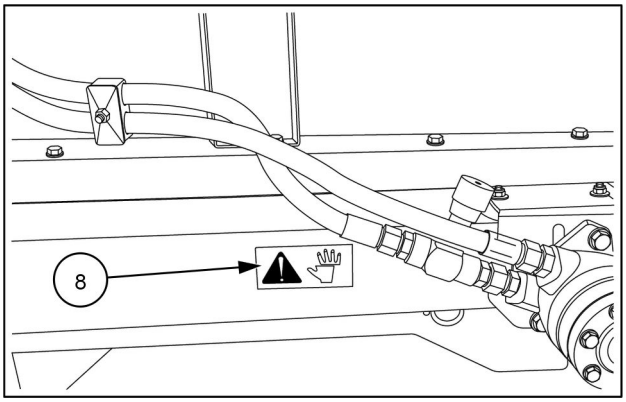


ZEIL22HT00046AA 20

Located on right-hand side of the conveyor.

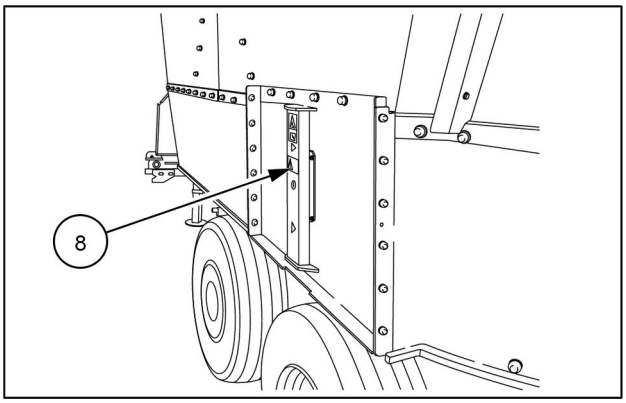


ZEIL22HT00048AA 21



ZEIL22HT00049AA 22

Located on the guard for magnets.



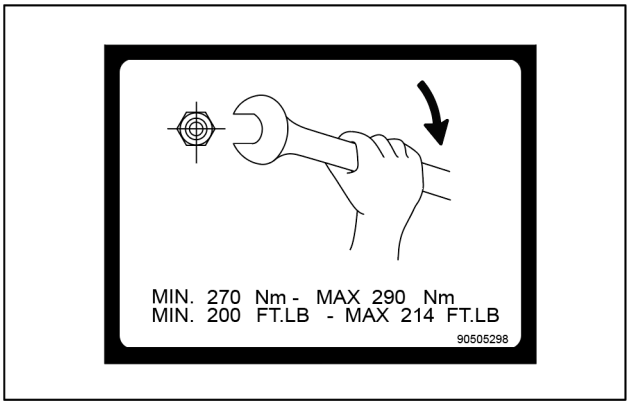
ZEIL22HT00050AA 23

Safety sign (9)

Wheel nuts tightening torque.

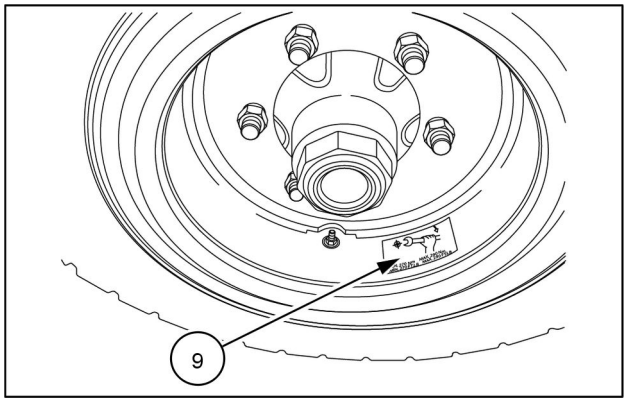
Never operate the machine with a loose wheel rim or disc. Always tighten nuts and/or bolts to the specified torque value and at the recommended intervals.

Part number: 90505298



ZEIL21TIL0198AA 24

Located on the wheels.

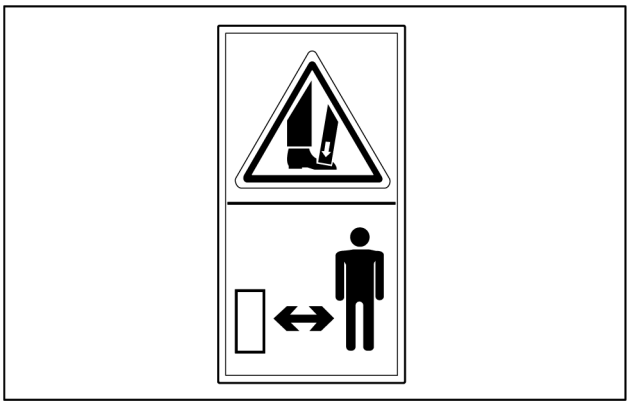


ZEIL22HT00043AA 25

Safety sign (10)

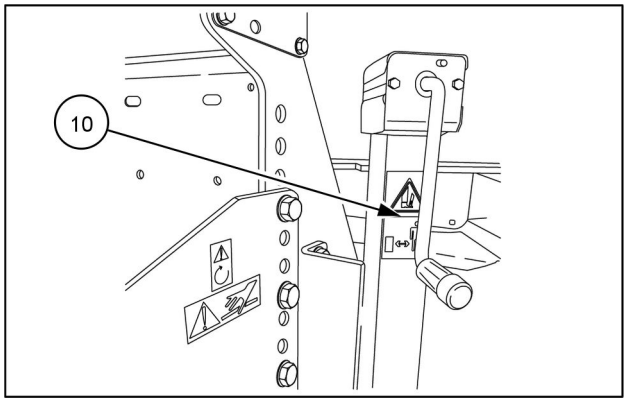
To define.

Part number: 81PR80-0838



ZEIL22HT00052AA 26

Located on the supporting leg.



ZEIL22HT00042AA 27

Safety sign (11)

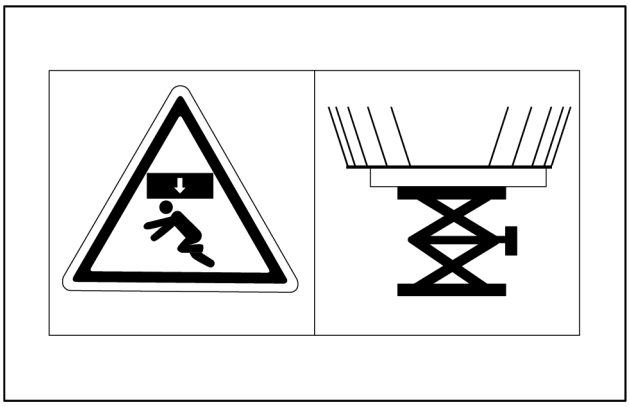
⚠ DANGER

Crushing hazard!
Keep away from the lift jack pad when you lower the jack. Make sure that your body is clear of the area underneath the lift jack pad.
Failure to comply will result in death or serious injury.

D0197A

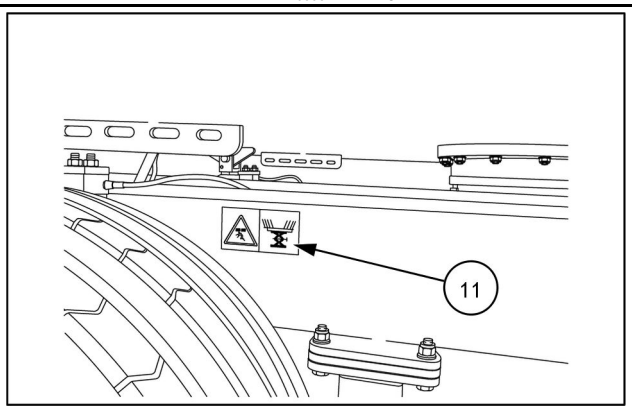
To define.

Part number: 81PR80-0839



ZEIL22HT00051AA 28

Located on the undercarriage.



ZEIL22HT00045AA 29

Instructional signs

Instructional decals on your implement serve as a guide to service location points, service information, operational indicators, adjustments, and settings. The placements of the instructional decals to the implement may have application to one or more locations. Most of the instructional decals description include the decal locations on the implement. Walk around the implement and note the intent and/or content and location of these instructional decals before operating your implement.

Review these instructional decals and the operating instructions detailed in this manual with the implement operators.

Keep the instructional decals clean and legible. If they become damaged or illegible, obtain replacements from your KONGSKILDE dealer.

Clean instructional decals with a cloth, water, and gentle detergent.

NOTICE: *Do not use solvent, gasoline, or other harsh chemicals. Solvents, gasoline, and other harsh chemicals may damage or remove instructional decals.*

If an instructional decal is on a part that is replaced, make sure the new part has the instructional decal.

Instructional decals that display the “Read operator’s manual” symbol direct you to the operator’s manual for further information with regard to maintenance, adjustments, or procedures for particular areas of the implement. When an instructional decal displays this symbol, consult the appropriate page of the operator’s manual.

Hand brake

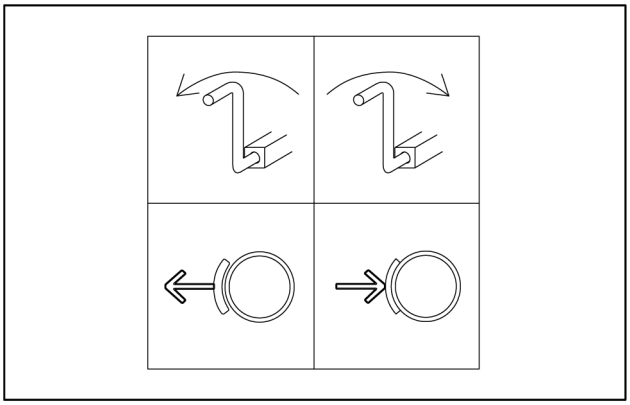
⚠ WARNING

Equipment rolling hazard!
Firmly apply the handbrake. Stop the engine before leaving the machine. The transmission will not prevent the machine from rolling when the engine is shut off.
Failure to comply could result in death or serious injury.

W1144A

Turn the lever clockwise to engage the hand brake.

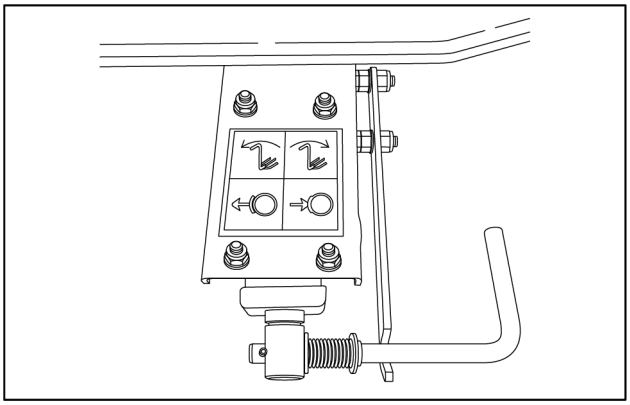
Turn the lever counterclockwise to disengage the hand brake.



ZEIL22HT00053AA 1

Part number: 81PR80-0963 .

Located on the hand brake.



ZEIL22HT00055AA 2

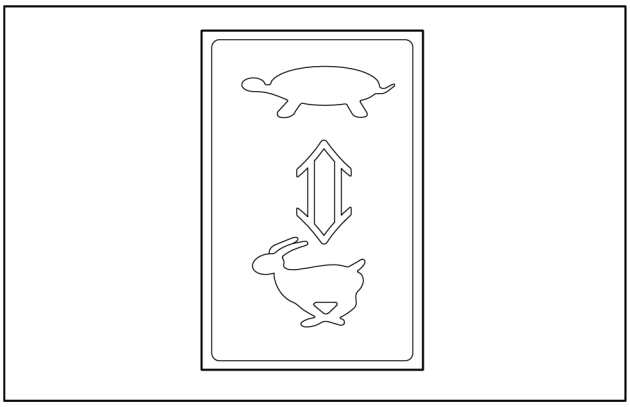
Power Take-Off (PTO) speed

⚠ WARNING

Machine damage can cause accidents!
Always use the recommended Power Take-Off (PTO) speed for the implement. Consult the implement operator's manual for the correct speed.
Failure to comply could result in death or serious injury.

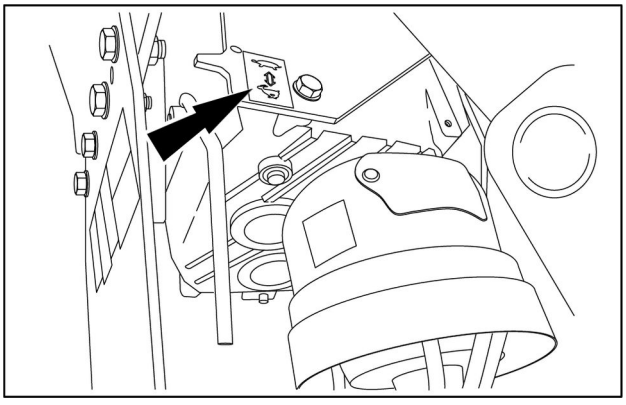
W0335A

Part number: 81PR80-0522.



ZEIL22HT00054AA 3

Located on the gearbox.



ZEIL22HT00058AA 4

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

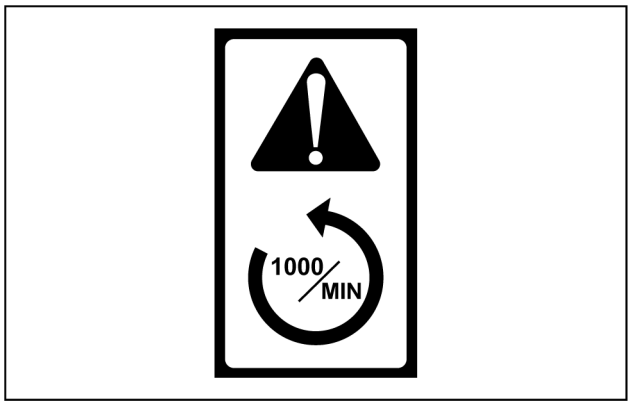
Commissioning the unit

Choice of tractor

Always follow the recommendations specified in the instruction manual of the tractor. If this is not possible, seek technical assistance.

Choose a tractor which provides at least:

- **35 – 45 kW** (**48 – 61 hp**) at the Power Take-Off (PTO) for VM-1 S 6.5/8/10 models.
- **50 – 60 kW** (**68 – 82 hp**) at the PTO for VM-1 10/12/14 models.
- **60 – 75 kW** (**82 – 102 hp**) at the PTO for VM-2 S 12/14/16/18/20 models.
- **80 – 100 kW** (**109 – 136 hp**) at the PTO for VM-2 20/22/27/30 and VM-3 S 21/24/26/28 models.
- **95 – 120 kW** (**129 – 163 hp**) at the PTO for VM-3 29/32/38/45 models.



81PR80-0805 1

A suitable tractor will have a good range of gears for travelling at speeds of between **5 – 12 km/h**.

The number and direction of rotation of the tractor must be clockwise seen from a position standing behind the tractor facing the direction of travel.

NOTICE: *A wrong number of rotations may result in reduced cutting and over a long period may damage the implement and at worst result in ejection of parts.*
Long-term overload may damage the implement and at worst may result in ejection of parts.

Tractors which are used to tow the feeder must also be equipped with rear view mirrors which afford visibility on both sides of the implement.

Choose a tractor with a suitable own weight and track width so that it can drive steadily on the ground.

Make sure that the link arms and towing hook of the tractor are intended to carry implements with the own weight in question.

Always choose a tractor with a closed cabin. If the rear window is broken it must be replaced by a new one before you continue the work with the implement.

Use a tractor with a cabin provided with safety glass. Furthermore, protect the glass of the cabin with polycarbonate plates inside or with a closemeshed net outside. Close the cabin when you work in the field.

Check before use

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

- Read this operator's manual carefully, especially the chapter headed ”Safety information”.
- Check the correct assembly of the implement. Also check that the implement is undamaged.
- Check that no parts have been tied up inside the implement in connection with the delivery of the implement.
- Check that the protection (shields and canvases) on the implement are complete, intact and correctly mounted, and that the side canvas shields are folded down. Canvases and shields secure against ejection of stones and foreign matter.
- Check the revolving parts. Replace damaged, worn or missing parts immediately.
- Make sure there is nobody behind the discharge of the implement due to the danger of being hit by metal parts from damaged blades.
- Check the correct installation of the safety devices. Also check if the safety devices are intact.
- Make sure that the transmission is not overloaded. Check that the Power Take-Off (PTO) shaft is therefore fitted with a shear-pin.
- Check that the PTO speed of the implement (and of the tractor) is correct. Too high PTO speed can be dangerous. Too low PTO speed causes blocking of the implement and high torque on the drive shafts.
- Make sure that the tractor is capable of maintaining the specified **1000 RPM** with no load on the implement.
- Make sure to keep distance from high-voltage lines.
- Check the length of the primary 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 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.
- Grease the implement before you start the operations. This is also necessary before you use the implement the first time. See Page **7-12**.
- Check that the oil levels in the gearboxes are correct. See Page **7-11**.
- Burnish the slip clutch. See Page **7-34**.
- Check the proper tightness of all the nuts and bolts.
- Check the tire pressure. See Page **9-30**.

NOTE: *Never start the feeder unless all guards are undamaged and fitted correctly.*

The implement was tested at the factory to ensure a proper operation. However, perform the following actions with the rear tractor window open and without hearing protection to check the operation of the implement.

1. Lower the header to working position before you start the power transmission.
2. Start the implement at a low number of Revolutions Per Minute (RPM).The value in the display must be 5.
3. With open rear window and without hearing protector, check that there are no unusual scratching or knocking sounds.
4. Increase the number of RPM, up to the rated speed of **1000 RPM**.
5. At the correct number of RPM, check if there are any noticeable vibrations. Check the guards for unusual vibrations.

NOTE: *If you are in doubt whether the implement is operating correctly, stop the tractor and the implement immediately.*

6. Disengage the PTO and turn off the tractor.
7. Turn the revolving parts with manual power to check if the implement can turn freely.
8. Check the implement visually to find possible errors (such as burnt or scraped paint).
9. If necessary, seek authorised assistance.

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.

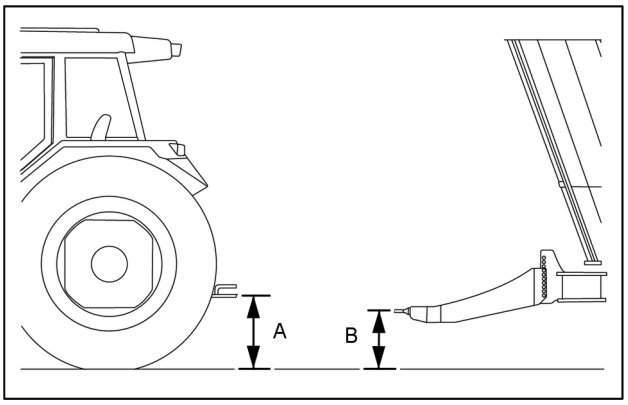
W1087A

NOTE: *Use original and correct coupling parts.*

To connect the implement to the tractor, proceed as follows:

1. Adjust the drive so that the mixing hopper is horizontal when the feeder is coupled to the tractor.

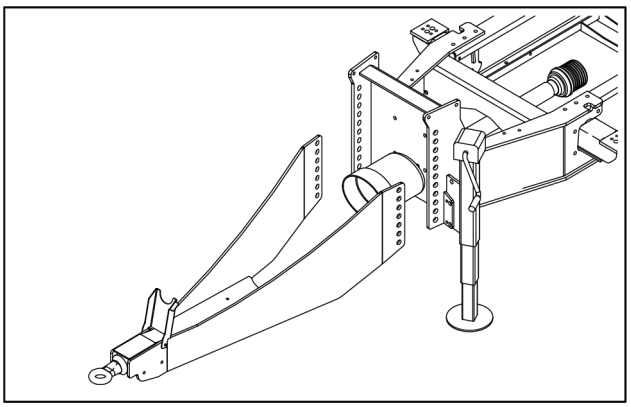
   NOTE: *The height of the drive can be adjusted on the undercarriage.*
2. Place the tractor and feeder on a smooth, horizontal surface.
3. Couple the feeder to the tractor drawing eye and measure how much the drawing eye is pushed downwards upon coupling.
4. Uncouple the feeder again and raise/lower the supporting leg until the hopper is horizontal.
5. Measure the height difference between the tractor **(A)** and the feeder coupling **(B)**. Include the measurement from the coupling.
   If the height difference is more than **50 mm** (**2 in**), the entire drive must be moved up or down where it is fitted to the undercarriage.



ZEIL21HT00116AA 1

6. Remove the bolts on the drawbar.
7. Move the drawbar to the nearest hole relative to the measured height difference.
8. Then fit the bolts so that they are at the greatest possible mutual spacing.
9. Connect the hydraulic hoses and electric plug.

NOTICE: *Make sure that the feeder is supported adequately before starting to remove the bolts on the drawbar. The drawbar is very heavy.*
A crane must therefore be used to lift the drawbar. Make sure that the drawbar is safely suspended from the crane before removing the bolts.



ZEIL21HT00117AA 2

Front Power Take-Off (PTO) drive shaft – Shorten

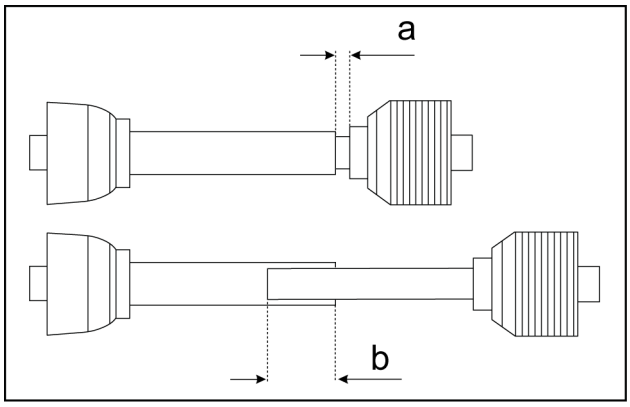
Power Take-Off (PTO) shaft length

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** (**8 in**) during normal operation.
- There must be a minimum of **30 mm** (**1.2 in**) of free PTO shaft length **(a)** to prevent the shaft from bottoming out.



NHIL12HT00307AA 1

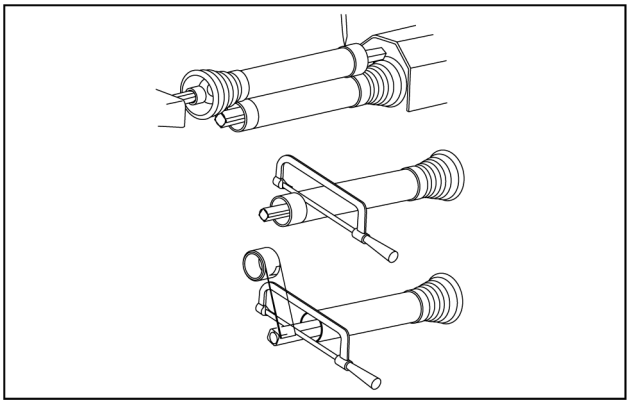
Determining the required shaft length

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 will bottom out in this position. If the PTO shaft will bottom out in this position or if the free length is less than **30 mm** (**1.2 in**), proceed with the procedure to shorten the PTO shaft.

Shortening the PTO drive shaft

To shorten the PTO shaft proceed as follows.



ZEIL18HT00013AA 2

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** (**8 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** (**1.2 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, check the minimum overlap and the minimum distance again if you operate the implement with a different tractor.*

Hydraulic connections

⚠ WARNING

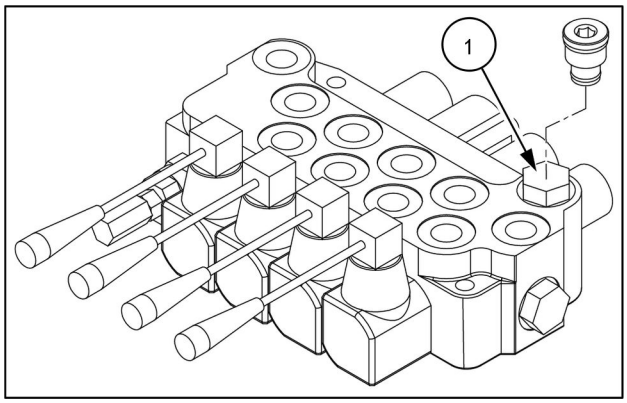
Escaping fluid!
Hydraulic fluid or diesel fuel leaking under pressure can penetrate the skin and cause infection or other injury. To prevent personal injury: Relieve all pressure before disconnecting fluid lines or performing work on the hydraulic system. Before applying pressure, make sure all connections 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

Connect the hydraulic hoses to the tractor outlets. Pressure hose (P) has a red cap, while the return hose (T) has a blue one.

If a tractor with a pressure-compensated pumping system is used, plug **(1)** must be replaced with a special plug.

NOTE: *The valve block for the elevator corresponds to the valve block with three functions.*



ZEIL21HT00119AA 1

Bleeding air from the lift cylinders

⚠ WARNING

Unexpected machine movement!
Air in the system or a high hydraulic flow rate can cause erratic operation. Before you swing the tongue, clear the area of all bystanders and obstructions.
Failure to comply could result in death or serious injury.

W0236B

Upon initial header lift circuit operation, activate the hydraulic remote valve to fully extend the lift cylinders. If there is still air in the hydraulic system, the implement will lift unevenly. Cycle the lift cylinder several times to bleed all air from the hydraulic system.

Electrical connections

Connect the electric plug for the weighing system and trailer lights to the tractor electrical output.
It is very important that the plug connection is sound, as the weighing system requires a good, stable power supply.

The electric plug should therefore always be handled carefully.

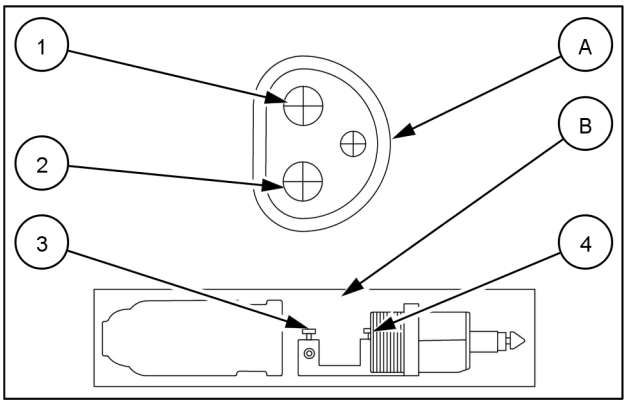
A three-pole plug is supplied as an alternative to the two-pole version. The tables illustrate how the cables should be connected.

COBO plug (A)	
	Terminal no.
Powersupply - **0 V** Wire 1	31 **(1)**
Powersupply - **+12 V** Wire 2	15/30 **(2)**

Bosch plug (B)	
	Terminal no.
Powersupply - **0 V** Wire 1	**(3)**
Powersupply - **+12 V** Wire 2	**(4)**

The system is operated electrically and is supplied with **12 V** DC by the tractor, via the 3-pin plug that is fitted.
The circulation pump and cooler ventilator are thermostat controlled and start independently when the oil reaches a temperature of **70°** and also switch off independently when the oil temperature falls below **60°**.

If the system does not operate as intended and the oil temperature exceeds **85°**, an acoustic alarm from the feeder will sound. The alarm will stop automatically again when the temperature drops below **76°**.



ZEIL21HT00120AA 1

Parking the unit

Disconnection and parking

⚠ WARNING

Unexpected machine movement!
Always secure the machine with wheel chocks to ensure that the machine cannot roll away when it is stopped or parked.
Failure to comply could result in death or serious injury.

W1353A

1. Turn off the tractor, and then remove the key.
2. Make sure that the feeder is on a solid and even surface with the hand brake on.
3. Lower the supporting leg until the feeder draw eye is clear of the tractor drawbar.
4. Fix correctly the supporting leg before parking, otherwise the implement may tip over during parking.
5. Chock the wheels to prevent any unexpected movement of the implement.
6. Place the wheel chocks as follows:
   - On a flat surface: one wheel chock in front of, and one behind a wheel.
   - On a slope: one wheel chock per wheel, either in front of, or behind the wheel, depending on the incline of the ground.
7. Disconnect the hydraulic hoses and electric plug.
8. Disconnect the implement from the tractor.

NOTE: *The hydraulic supporting leg can lift a maximum of* ***2800 kg*** *(****6173 lb****) at* ***100 bar*** *(****1450 psi****).*

5 - TRANSPORT OPERATIONS

Preparing for road transport

Travelling on public roads

⚠ WARNING

Transport hazard!
For speeds up to 32 km/h (20 mph), make sure that the weight of a trailed vehicle that is not equipped with brakes DOES NOT EXCEED 1.5 times the tractor weight. Stopping distance increases with increasing speed as the weight of the towed load increases, especially on hills and slopes.
Failure to comply could result in death or serious injury.

W0960B

Prepare the implement for road transport

1. Make sure that you connect all hydraulic connections are connected to the tractor remote outlets.

   NOTICE: *If the hoses are disconnected, either connect the hoses to the tractor or make sure that you position the hydraulic hoses in the hanger and secure the hoses to prevent damage.*

2. Before you drive on public roads, convert the implement from transport to working position and back again to ensure that there is no air in the hydraulic system.
3. Turn off the control unit using the button on the side of the control box, and disconnect the oil supply to the implement. This prevents faulty operation during transport.

   NOTE: *If the implement is fitted with an auto-hitch, activate the mechanical lock on the auto-hitch when driving while towing a trailer on public roads.*

Traffic marking

The owner is always obliged to ensure that the implement is equipped with correct lighting system and other traffic marking in accordance with the country's current rules.

NOTE: *Limit the transport speed to maximum* ***30 km/h*** *if the machine has not been marked with another maximum speed limit from the factory.*

NOTE: *The feeder must be fitted with a complete lighting system if it is to be towed on public roads.*

6 - WORKING OPERATIONS

General information

Implement overview

The KONGSKILDE VM Diet Mixer models allow to mix the chopped straw fodder quickly and efficiently with other types of feed.
The mixer shreds all types of bale - round as well as square. A unique concept combining feeding and straw bedding.

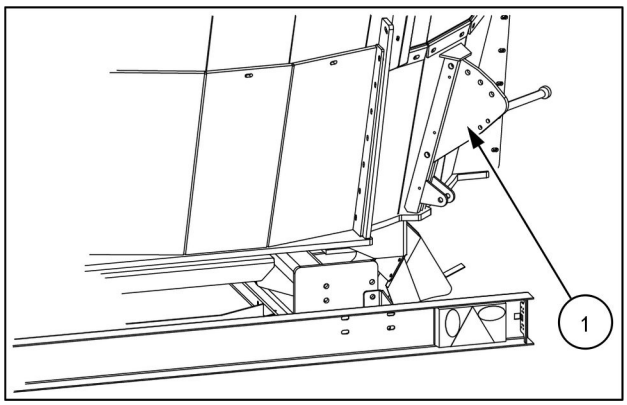
The models with cross conveyor are constructed by a modular system which enables to choose between different conveyor belt solutions.
The cross conveyor solutions are especially suitable for mixes with a high content of straw. Of course, all other mixes are handled just as easily.

The **122 cm** (**48 in**) wide opening ensures a high unloading capacity of dry feed. The conveyor belt pulls the dry feed out of the big opening.

All complete diet mixers can also be equipped with extra doors and different types of elevator.

The blades perform two functions: they slice up the material and have a transporting effect. The feeder power requirement increases when these blades are used.

Shear bars **(1)** are used when feed products are to be fine-chopped. These retard the material, so that the blades can slice through the material, cutting it up.



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When the material has been cut up, the shear bars should be disengaged. This will increase the mixing capacity.
Using the shear bars will also increase the power requirement.

It is often an advantage to have the shear bars only half engaged in order to prevent the bale from remaining in the corner for an extended period of time.

The hydraulically operated feed rotor ensures an even flow of straw to the turbine. If it is needed to pass an obstacle the rotor is interrupted and the straw flow stops.

The complete diet mixer is fitted with a stone trap to protect the surroundings. The stone trap is cleaned out from the side of the wagon without any tools.

Depending on the equipment, the feeder can be altered by adding or removing doors, superstructure, overflow rings, and others.
Such alterations must only be carried out by an authorised workshop to ensure that the work is carried out in a professional manner.

Clutch

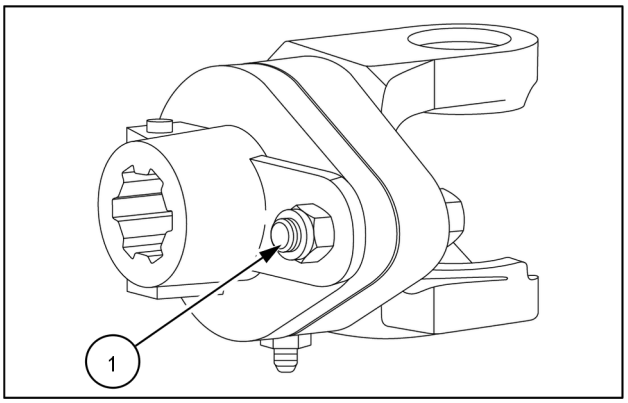
Shear bolt clutch

All drivelines for augers are equipped with shearbolt clutch **(1)** to ensure a long life for your tractor and implement.

The purpose of the shear bolt clutch is to protect the transmission from overload when you work in the field and when you start the implement (connection of the Power Take-Off (PTO)).

NOTE: *For VM-1 and VM-1 S the shear bolt is located on the first PTO (between tractor and implement).*

NOTE: *For all the other models the shear bolt is located on the second PTO.*



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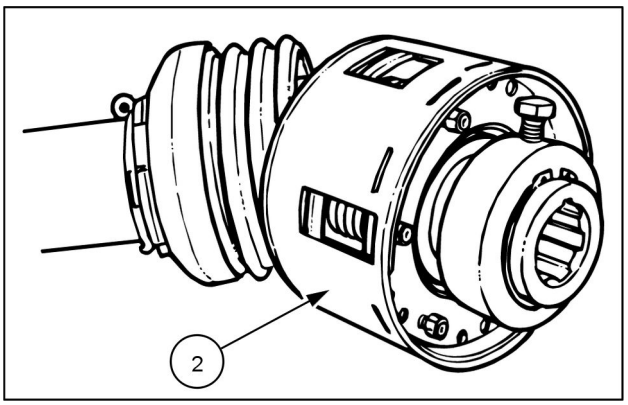
Friction clutch

For the Multi version (straw blower), the implement is equipped with an additional friction clutch **(2)** on the Power Take-Off (PTO) drive shaft between the tractor and the implement.

NOTICE: *If the clutch is overloaded by slipping for some time, it will get heated and thus be worn quickly. Overheating will damage the friction plates.*

NOTE: *If the clutch is blocked or partly put out of function in other ways, the factory guarantee will not apply.*



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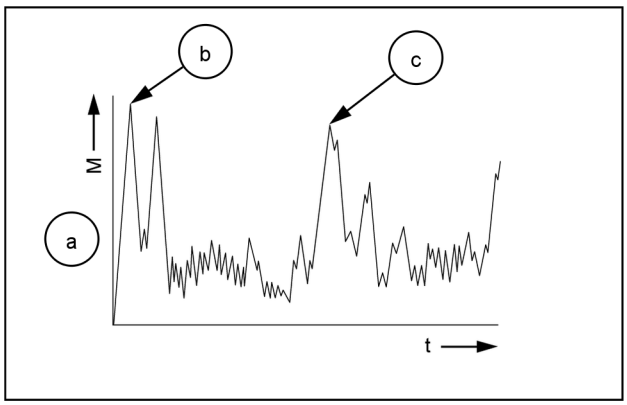
The next figures illustrate how the friction clutch protects the transmission against high torque peaks and at the same time is capable of transmitting the torque while it is in function (slips).

(a) Torque without clutch

(b) Starting torque

(c) Overload



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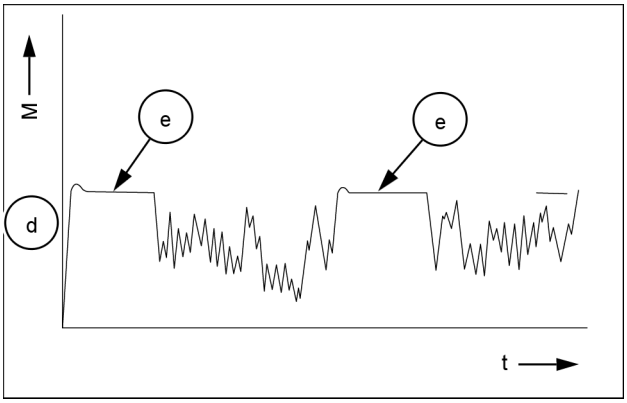
(d) Torque with clutch

(e) Adjustment of clutch



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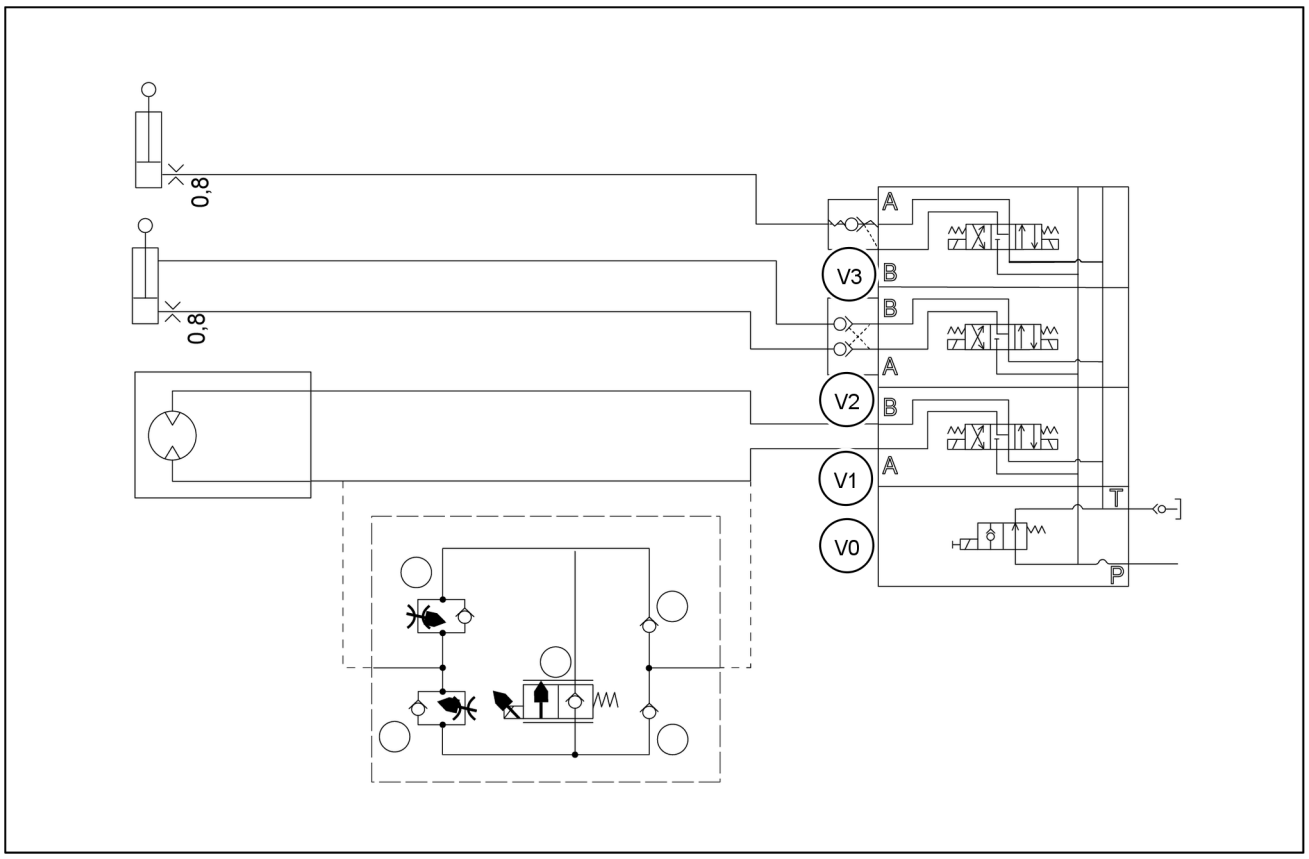
Transmission securing against overload

NOTE: *The tractor driver can secure the transmission against overload.*

When you use the implement, consider the following steps:

1. Always start the implement with the engine running at low speed. This especially applies to tractors with electro-hydraulic connection of the Power Take-Off (PTO) shaft.
2. When you start the work, make sure to place the implement in working position.
3. A sudden increase in the number of Revolution Per Minute (RPM) of the implement, for example when you drive into the field or after you turn in the field should also happen with the implement close to working position.
4. Listen to the RPM of the tractor when you work in the field. If the number of RPM falls slowly or is suddenly reduced it may be a sign of overload of the transmission due to too high driving speed or foreign matter in the header. In this case, the friction clutch will slip and you must disconnect the PTO immediately and let the implement “rest”.

Electro-Hydraulic (EH) controls



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The electric operating systems can operate between two and nine hydraulic functions. This is solved hydraulically by having a corresponding number of section valves, which are bolted together with a bypass valve **(V0)**.

There are three different types of bypass valve:

- Valve **(V1)**: For operating oil motors which, for example, drive the cross conveyor, elevators or gear change.
- Valve **(V2)**: For operating double-acting cylinders which, for example, are used to operate doors or block the flywheel.

  NOTE: *There are integrated non-return valves to ensure that the cylinder remains in the required position.*
- Valve **(V3)**: For operating single-acting cylinders in connection with blocking of flywheel.

In order to regulate the RPM of the oil motor electrically, a proportional valve can be connected.

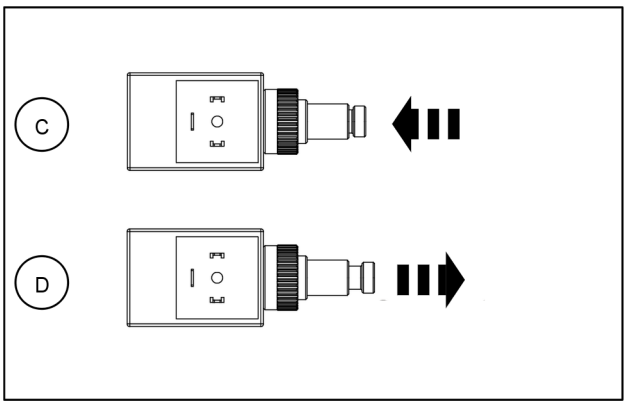
The symbols on the diagram represent:

- **(P)** : Pressure hose (red cap)
- **(T)** : Return hose (blue cap)
- **(A)** : inputs for the various hydraulic functions on the feeder
- **(B)** : outputs for the various hydraulic functions on the feeder

The hydraulic supporting leg is fitted with a ball valve for parking. There is also an integral double pilot-controlled non-return valve, which prevents the feeder from dropping in the event of a leak or hose rupture.

- "open center hydraulics" **(D)** (also known as "fixed pump").
- "closed center hydraulics" **(C)** (also known as "variable pump").

By default, the bypass valve operates with “center open”. However, it can also be set to “center closed” by locking the emergency operation system.



ZEIL21FR00065AA 2

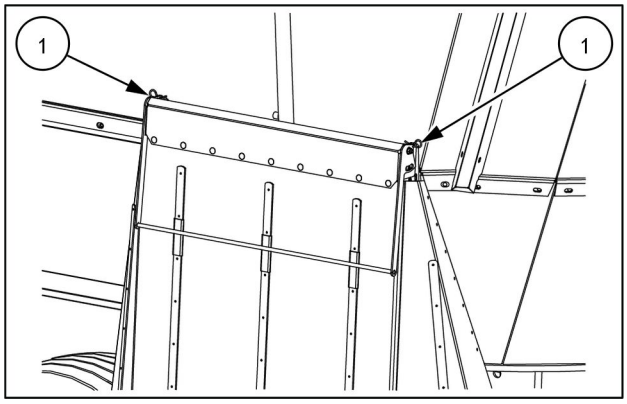
Feed dispensing

⚠ DANGER

IMPROPER OPERATION OF THIS MACHINE CAN CAUSE DEATH OR SERIOUS INJURY.
Keep all persons, including their clothing, away from the auger when the auger is in motion.
Failure to comply will result in death or serious injury.

D0199A

Before starting dispensing, remove cotter pins **(1)** from the side door guard to enable the rubber fabric to move freely.



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Start the Power Take-Off (PTO), open the door and drive the tractor forwards.

There are three options to adjust the feed quantity that is supplied:

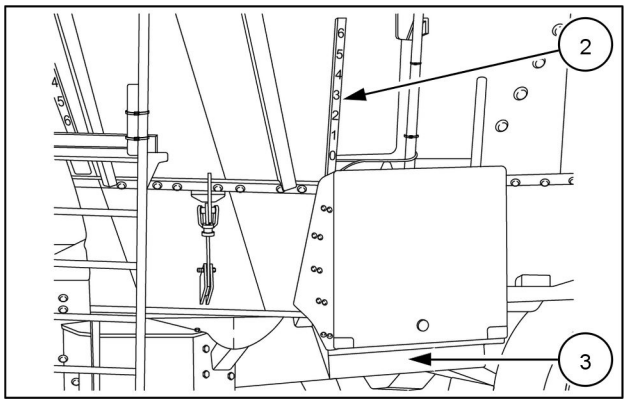
- Driving speed
- Opening of the door
- The RPM of the auger (a higher RPM enables more even feed dispensing)

The position of the door can be read on level indicator **(2)**, where 0 is closed and 6 is fully open. In order to distribute the feed as evenly as possible, read the display value on the weighing system before commencing feed dispensing.
Once half of the feed has been dispensed, the half of the distance should have been reached.

NOTE: *Use the weighing system unload function if desired.*

Once the hopper is nearly empty, the RPM can briefly be increased to **1000 RPM** in order to clean the augers of feed.

The slide **(3)** can be extended. This can to some extent prevent the feed from falling in front of the wheels.



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Cross conveyor

With the cross conveyor fitted to the feeder, it is possible to eject the feed away from the feeder, which prevents from driving over the feed, even when large quantities of feed are being dispensed.

In order for the cross conveyor to function correctly, the hydraulic hoses from the tractor must be fitted correctly, so that the pressure and return connections are connected correctly.
Check this by checking whether the conveyor rotates the right way relative to the operating panel when the cross conveyor is activated.

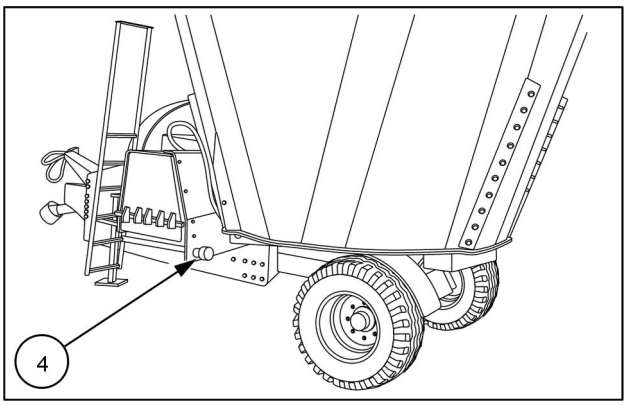
The cross conveyor can dispense feed either to the right or to the left. However, the ideal arrangement is to dispense feed to the side where the oil motor is located, so that the feed is pulled instead of being pushed.

NOTE: *If the feed is very heavy and moist, the hopper door should not be opened to more than position 4. This will prevent the belt from being blocked.*

The speed of the belt is very important in determining how the feed is distributed. The speed can be adjusted:

1. On the tractor, by adjusting the feeder oil volume.
2. Using regulating valve **(4)**, which is located next to the hydraulic motor on the side of the cross conveyor.
3. Via the electric remote control knob, which regulates the oil quantity via a proportional valve (extra equipment).

NOTE: *If a tractor with an oil flow of less than the recommended **35 L/min** (**9.2 US gpm**) is used, it may be necessary to reduce the conveyor speed, so that the door sensor can be used while the conveyor is operating.*



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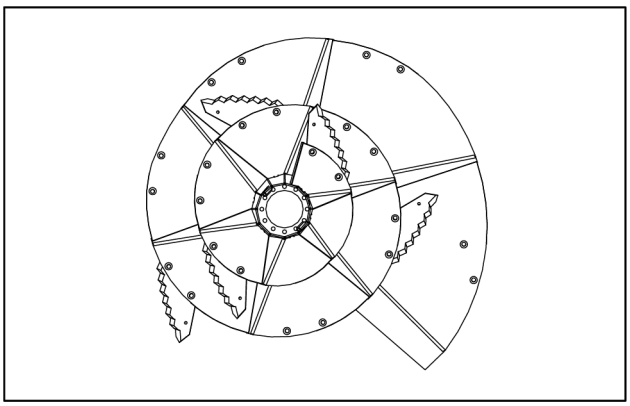
Blades

The compact auger also called the S auger is fitted in some types of feeders. It is fitted with five normal, hardened blades.
However, the auger is prepared for a further seven blades.



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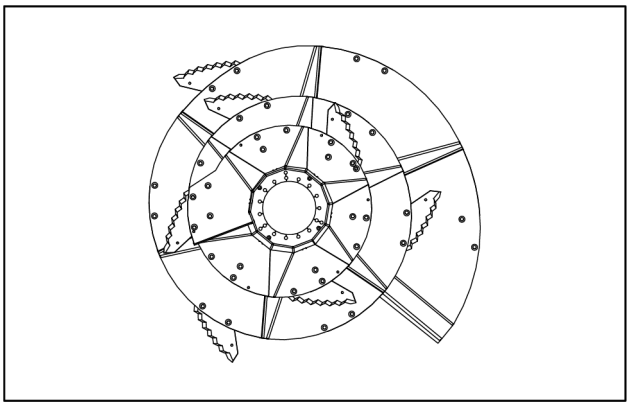
The normal auger is fitted in other types of feeders. Seven normal, hardened blades are fitted
However, the auger is prepared for a further nine blades.

This number was chosen in order to keep the power requirement to a minimum and to have a suitable shearing capacity, which is sufficient in the vast majority of cases.
If it should be insufficient, more blades can be added. However, this will increase the power requirement, all other factors being equal.

The lower blades in particular should be avoided, as these are the main reason behind the increase in the power requirement.



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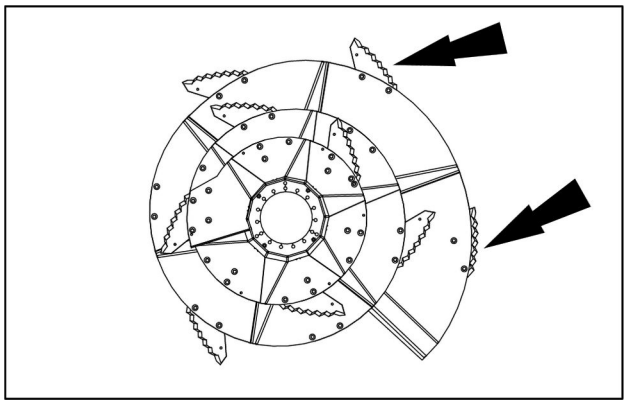
For both augers, the effectiveness of dicing of dissolved straw bales is increased by fitting blades to the lowest two positions. Note that these blades must be fitted in position 1.

Normal auger used in connection with frozen round bales. When cutting up frozen round bales, short blades fitted in the innermost position should be used. The uppermost auger winding can be fitted with a further three blades in this position.



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Long blade

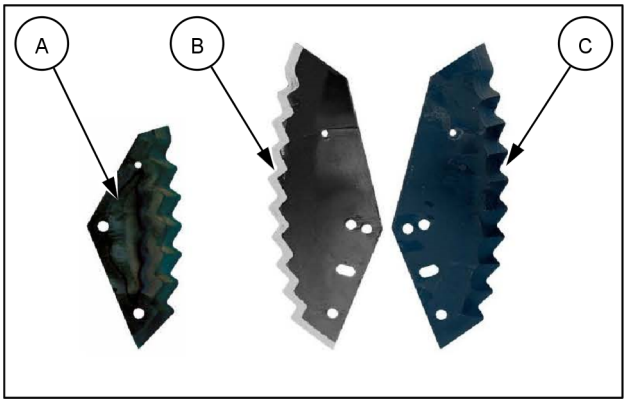
The long blade **(B)** is not just longer, but also tungsten-coated **(C)**, which is a major advantage in terms of wear. This blade is the right solution if large quantities of hay are used.

The blade can be fitted in two positions. Position **(1)** is recommended wherever possible. Position **(2)** is more aggressive and therefore requires considerably more power for operation.

Two long blades per auger will generally be sufficient to cut up whole balls. The long blade must not be fitted in the four lowermost holes on the auger.

NOTE: *The blade must be used with care. Do not use more than is necessary.*

NOTE: *However, if damp balls of grass silage are to be cut up, no more than five (compact auger) or seven (normal auger) long blades should be used per auger.*



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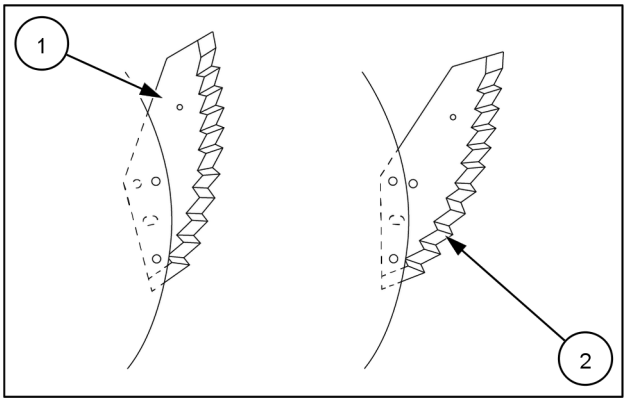

ZEIL21HT00133AA 5

Door indicator monitor display (for VM-2 and VM-3 models, if equipped)

Door indicator monitor display is a display for rear side doors and corner doors on two and three auger implements.

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Working in the field

⚠ DANGER

Pinch hazard!
Keep your hands, feet, and body clear of all moving parts and oscillating points.
Failure to comply will result in death or serious injury.

D0206A

⚠ WARNING

Cutting hazard!
Use care handling sharp components. Always wear appropriate Personal Protective Equipment (PPE), including heavy gloves.
Failure to comply could result in death or serious injury.

W1267A

⚠ WARNING

Rotating parts!
Before you remove any guards, stop the tractor and remove the key. Use lock-out tags or other procedures as required to prevent unanticipated machine operation. Do not operate the machine with removed guards.
Failure to comply could result in death or serious injury.

W1461A

Before using the feeder, consider the composition of the feed in order to adjust the feeder appropriately. See Page **6-1**.

Operation in the field

The RPM should be adjusted to suit the feed in the mixing hopper.

There are no actual requirements concerning the rotational shaft speed. When fine hopping feed products, the RPM must not exceed **540 RPM** which is what the feeder is designed for.
The RPM can then be reduced when adding the other components. Optimal mixing capacity is achieved at between **300 – 400 RPM**.

For short periods of time, the rotational speed of the feeder may be increased to **1000 RPM**, but only if the feeder and tractor are directly in line and only in order to empty the feeder completely at the end of feed dispensing.

In the case of the VM-3/3S/SB models with the large gearing reduction the speed must not exceed **1000 RPM**.

Filling of feed

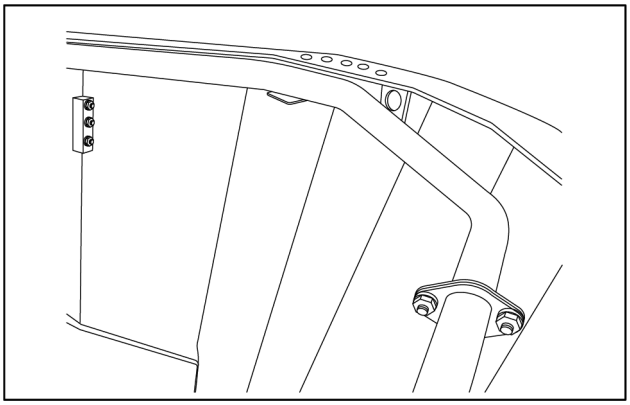
If adding whole bales, it is possible to start with these, as the feed volume will increase substantially once they have been shredded.
The RPM can be increased and the shear bars used to accelerate the shredding.

Once the required quantity of hay, grass silage or other has been added, the Power Take-Off (PTO) shaft RPM can be reduced to **300 – 400 RPM** and the shear bars disengaged before the remaining components are added.

If a lot of hay is used in a mixture, it can be an advantage to fit an overflow ring to the top of the hopper. This makes it possible to add large quantities of hay at a time without any spillages.
Other useful extra equipment includes hydraulic shear bars.

Generally start with the components which have the lowest density, followed by the heavier ones in order to “press” them down slightly. When mixing heavy silage, the weight reading may fluctuate slightly, as the feed “falls” around inside the mixing hopper.

If small feed products (such as compound feeds) are added, it may be an advantage to stop the augers during loading. It is therefore recommended that molasses, minerals, and others. should be amongst the first feed components to be added.
Add minerals directly to the shovel of the loader or use the mineral funnel (extra equipment).



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Weighing

ZEIL21HT00135AA 2

The feeder is fitted with a wireless weighing system, which consists of a large main terminal, which is usually located in the loading tractor, and one or more small hand terminals, that are typically placed in the tractor in front of the feed trailer, or it can be carried in the case of manual refilling.

The weighing instrument electronics have a short warm-up period, so that it can take up to a couple of minutes before the instrument can produce a completely stable reading.

It is therefore recommended that the weighing instrument be switched on a couple of minutes before refilling is commenced. This particularly applies when the temperature is below **15 °C**.

If the feeder is moved when fully loaded, slight variation in the weight display may occur. This is generally due to transport across uneven terrain.
The weighing system will still operate optimally, and you just have to “count” on from the value that is displayed.

The mixing hopper should be as horizontal as possible in order to achieve the most accurate weighing.

Feeders which are fitted with six or eight weighing cells are more affected by external forces. This means that vibrations can affect the weighing.
The accuracy is therefore around +/- **3%** with **1000 kg** (**2205 lb**) (a greater weight gives a greater accuracy).

NOTE: *When loading whole bales or silo blocks, the drawbar can tip upwards because of the uneven weight distribution.*

Using the weighing system with the tractor uncoupled

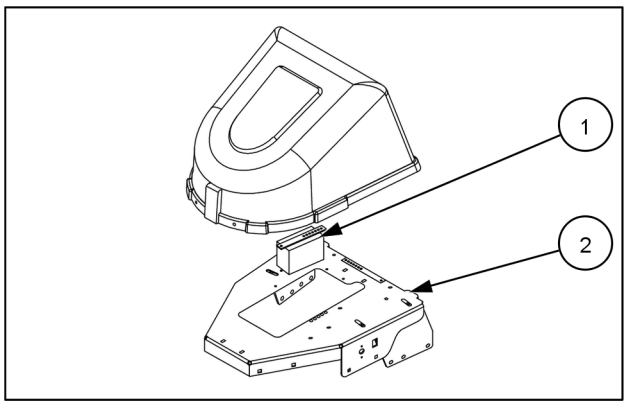
The feeder can be fitted with a battery to operate the weighing system, which enables the weighing system to be used without the feeder coupled to a tractor.

To install the battery in the equipment compartment, proceed as follows:

1. Use the bracket **(1)** to fit the battery.
2. Pull this bracket loose from the back of the equipment compartment **(2)**.
3. Connect cable **(3)** to the battery via the two-pole shoe, and feed to plug **(4)**, which is fitted on the back of the equipment compartment.
4. Feed cable **(5)** from plug **(4)**, to switch **(6)** which is pushed in from outside the back wall of the equipment compartment.
5. Feed cable **(9)** from junction box **(7)** for the lighting system and connect to cable **(8)** from the weighing cell box by removing the plug and joining the ends on the connecting blocks.

NOTE: *Plug **(4)** is used to recharge the battery, via either the tractor outlet or a charger.*

The battery should be recharged regularly to ensure stable operation of the weighing system. Follow the battery manufacturer charging instructions.



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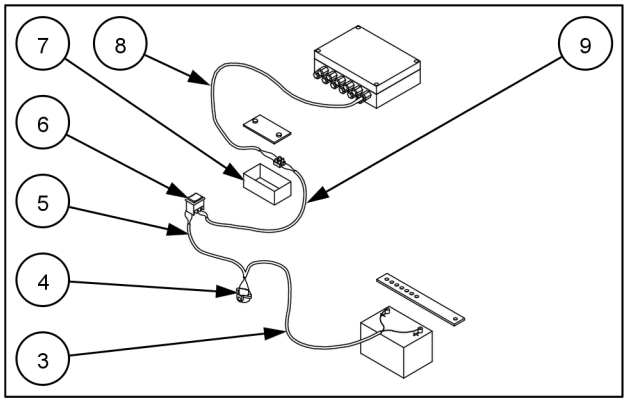

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Mixing

Mixing occurs fastest at **540 RPM**. Once the last feed component has been added, mix for around **5 min** .
However, the mixing time may vary depending on the composition of the feed. The best way of deciding whether the feed has been fully mixed is to look down into the hopper during mixing.
When the feed has a uniform appearance, it is time to dispense the feed. In connection with this, note that the power take-off shaft will only accept slight angling.

Make sure that the feeder and tractor are aligned relative to each other when the mixing augers are started. Take particular care when transporting the feeder during mixing.
If it is necessary to move the feeder during mixing and the mixing process cannot be interrupted during the movement, it may be necessary to replace the power take-off shaft with a wide angle shaft.

Operating the self steering shaft

The feed trailer can be supplied with a selfsteering shaft, so that the two rearmost wheels, and on the VM-3 with triple axle, the two foremost wheels, can be rotated.
This considerably extends the life of the tyres and protects the ground.

The selfsteering is hydraulically operated. When reversing with the feeder, the selfsteering effect must be locked, as the two rearmost wheels will otherwise end up oriented transversely.

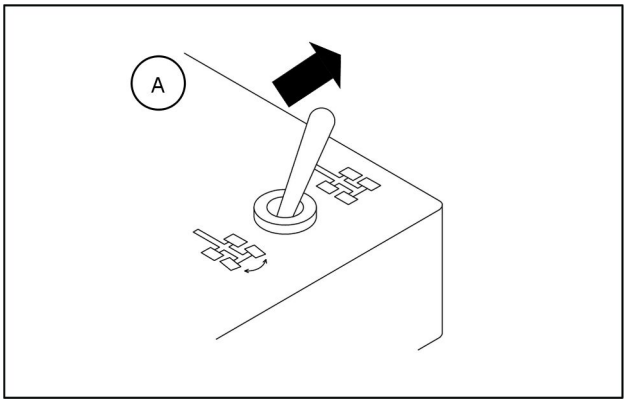
Always remember to lock the selfsteering before reversing with the trailer and to unlock it again before driving forwards.
This will minimise tyre wear and maximise their life.

The selfsteering is operated either electrically (extra equipment) or directly via one of the tractor's hydraulic outlets.

On the electric control unit there is a switch to lock the axle selfsteering.

The shaft selfsteering is locked by activating the switch (direction **(A)**) for at least **5 s**. This will send oil out into the cylinders and cause the wheels to line up.
When the switch is released, it will automatically return to the mid-position and the selfsteering will then be locked.

When the switch is pressed in the opposite direction **(B)** for at least **5 s**, the return flow from the selfsteering locking cylinders will open and the oil will flow back to the tractor. The axle/axles will then be in freewheel.



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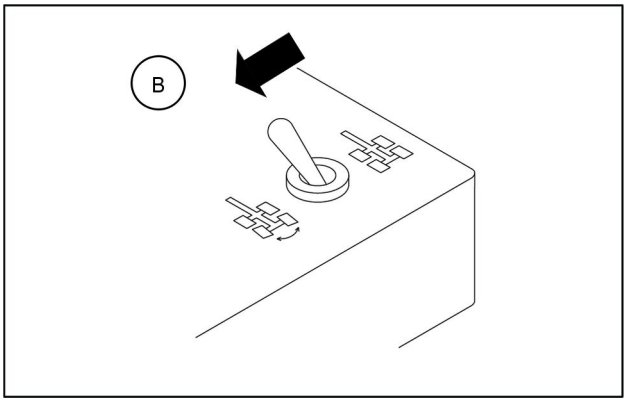

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Adjustments

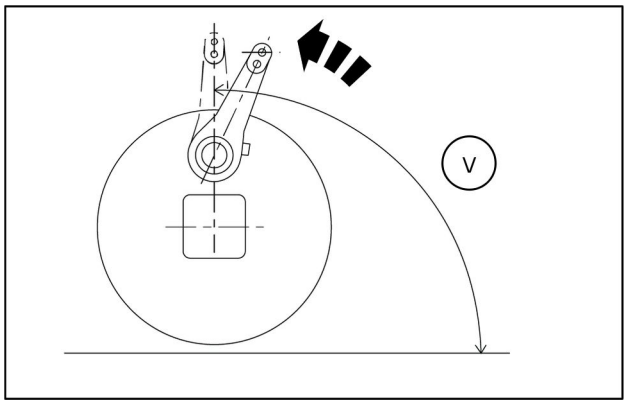
Brake settings

Setting the brake arms

The angle **(V)** must not exceed **90°** relative to the horizontal when the brakes are activated.

Adjustment can be carried out in one of two ways, depending on the brake arm design:

1. Either by rotating the brake arm one or more teeth backwards.
2. If the brake arm is fitted with a screw **(1)**, by rotating the screw until a suitable distance is achieved.



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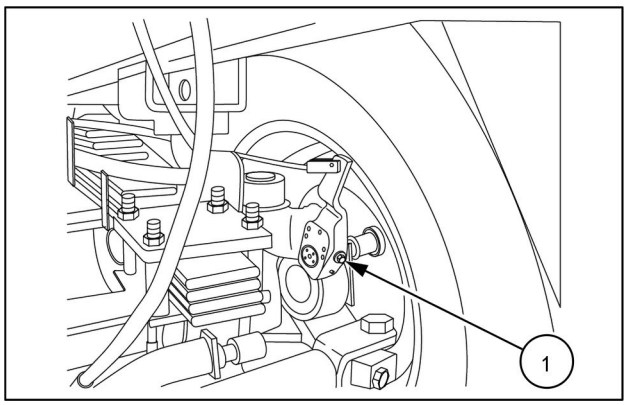

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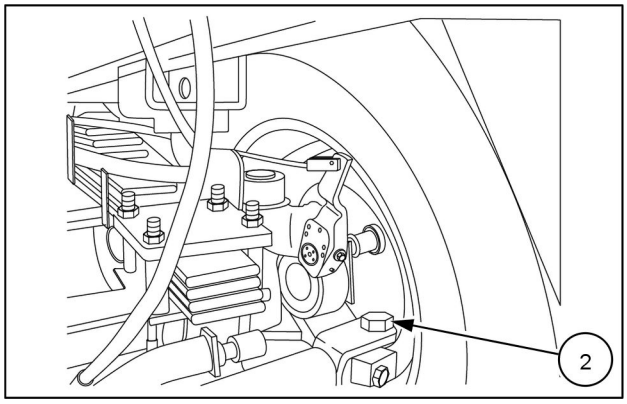
Adjusting the brake shoes

Adjust the brake blocks after carrying out any repairs to the brakes. This is done by tightening nut **(2)** while rotating the wheel in the direction of travel.
The brake must simultaneously be engaged gently using the brake arm. The nut must then be tightened.



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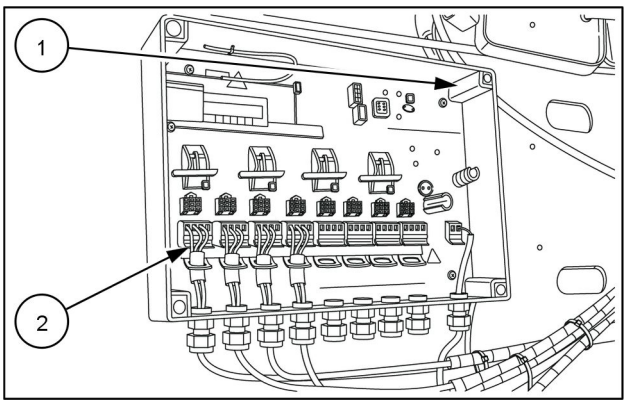
Repairs involving welding

If any repairs involving welding is carried out, electric current must never pass through a weighing cell. This can be avoided by opening junction box **(1)** and removing the cables for weighing cells **(2)**.

NOTE: *The welding apparatus' frame connection must also always be placed in the immediate vicinity of the welding area.*



ZEIL21HT00160AA 1

Replacement of blades

⚠ CAUTION

Cutting hazard!
Use care handling sharp components. Always wear appropriate Personal Protective Equipment (PPE), including heavy gloves.
Failure to comply could result in minor or moderate injury.

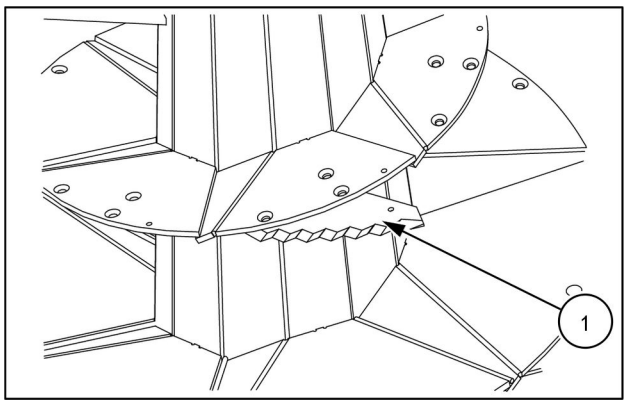
C0139A

The durability of the blades **(1)** will strongly depend on the feed products being used. The frequency of blade replacement will therefore depend on this.

Signs that the blades should be replaced:

- Noticeable increase in time spent dicing/tearing compared with new blades.
- Noticeable increase in power output required compared with new blades.

If the blades are worn, their life will be limited. This particularly applies to the long tungsten-coated blades.
Once the tungsten coating has worn off, the blades will become slack very quickly.

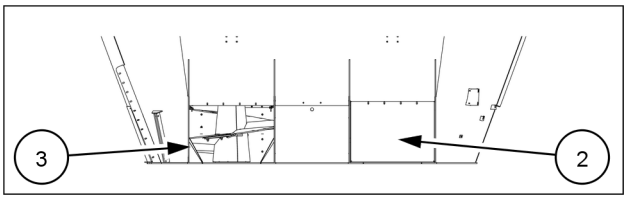


ZEIL21HT00161AA 1

To replace the blades in a two-auger feeder with standard blade fitting, proceed as follows:

1. Park the tractor if coupled and feeder.
2. Remove two cover plates **(2)**.
3. Remove as many worn blades as possible without crawling into the mixing hopper.
4. Rotate the augers manually so that no blades face out towards the opening which is used to crawl into the mixing hopper.
5. Crawl into mixing hopper **(3)**.
6. Fit guards **(4)** to the new blades. The guard is a plastic profile which must be pushed onto the blade.
7. Fit new blades and associated guards.
8. Remove guards **(4)**.
9. Crawl out of the mixing tank.
10. Fit the cover plates.

NOTE: *The principle is exactly the same for one- or three-auger feeders.*



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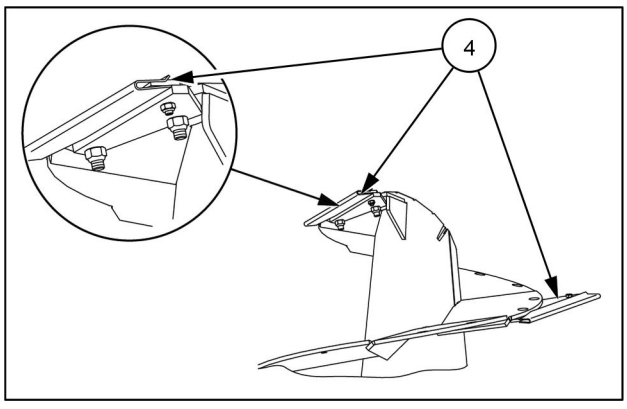


ZEIL21HT00162AA 3

Conveyor Adjustments

The conveyor should be adjusted if it is not operating correctly or is pushing against one side or slipping on the rollers. All conveyors should generally be tension in length:

- Standard conveyor: **1.0%**
- X-belt conveyor: **0.5%**

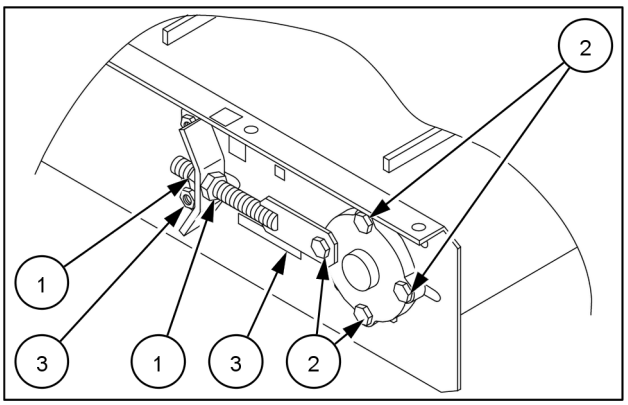
This adjustment is made by turning nuts **(1)** after screws **(2)** have been loosened.

Finally, adjust the scrapers for the rollers. Loosen screws **(3)** (nuts on an X-conveyor) and set the scrapers as close as possible to the rollers without actually touching them.

Prior to adjustment, the conveyor should be completely slackened and two marks then made at a spacing of **1000 mm** (**39.4 in**) on the conveyor.
When the conveyor is tensioned, these marks must have a spacing **(A)** of:

- Standard conveyor: **1010 mm** (**39.8 in**)
- X-belt conveyor: **1005 mm** (**39.6 in**)

The measurement **(A)** must be checked after the conveyor has rotated a few times.
Check that the conveyor does not migrate out towards one of the sides, but remains straight on the rollers.



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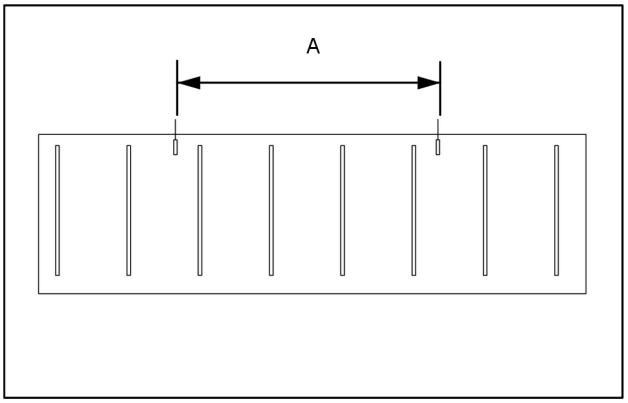


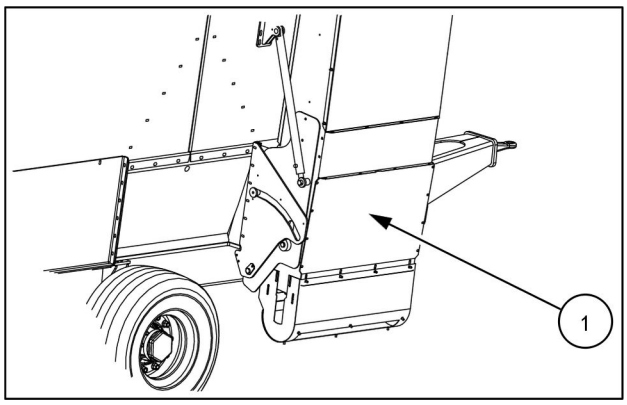
ZEIL21HT00164AA 2

Elevator belt adjustment

To access the tensioning screws, remove the cover plate **(1)**.

The elevator toothed belt can be tightened by turning tensioning screws **(2)** anticlockwise after the nuts have been loosened.
Tighten until the distance **(L)** across **(N)** ten teeth is about **504.0 mm** (**19.8 in**) and then test to see whether the belt runs correctly.

Correct tensioning is vital to ensure that the teeth run correctly on the drive wheels and that the maximum force can be transmitted from the drive wheels to the toothed belts. If the toothed belts are too tight or too loose, they will attempt to climb up onto the teeth on the drive wheels and end up running skew.



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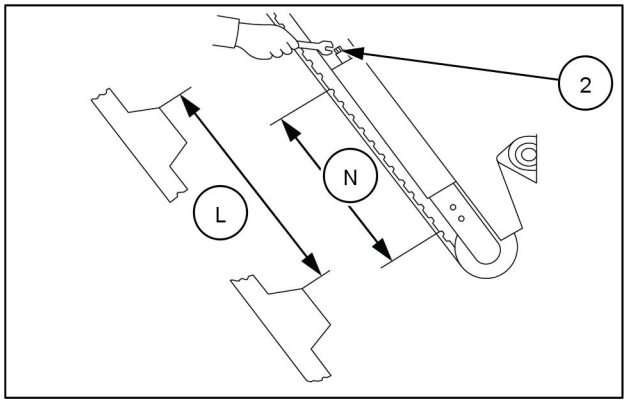


ZEIL21HT00166AA 2

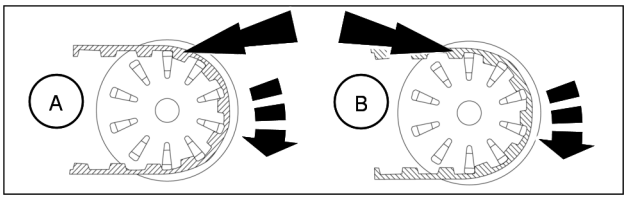
Fine adjustment of the tension

Rotate the axle with the drive wheels at least five revolutions in the direction **(A)** and **(B)**.
Always rotate in the same direction.

If the belts run towards the front of the drive wheel teeth, case **(A)**, the belts are too tight.
If the belts run hard towards the rear of the drive wheel teeth, the belts are too slack.

The belt is correctly tensioned when the belt teeth run midway between the drive wheel teeth, or slightly towards the rear of the drive wheel teeth.
Adjust the belt tension with a single turn of the tensioning screws between each attempt.

Refit the cover plate after the toothed belts have been adjusted.



ZEIL21HT00172EA 3

Wear plates (if equipped)

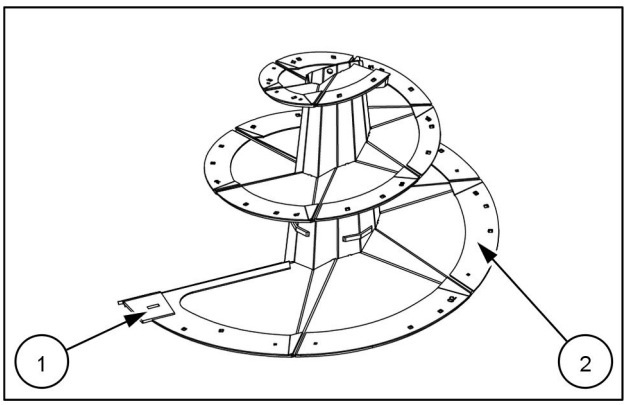
Both auger sizes can be fitted with the “Mix+” wear plate set **(2)** outermost on the windings. This considerably extends the life of the auger.

It is recommended that the wear plates be replaced before the outer edge has been worn down to the auger itself. A sharp outer edge on the auger gives a significantly better mixing effect.

Both sizes of auger can also be fitted with an “activity plate” A **(1)**, on the first auger winding towards the base plate. This is adjustable, so that the distance between the hopper and the auger can be reduced.
This will reduce the tendency for feed to form a bridge against the hopper sides, particularly at the front and back.

Bridge formation can particularly occur with “compact feeds” with a high water content.

There must be at least **5.0 mm** (**0.2 in**) between the activity plate and hopper, and an increase in power consumption of **10 – 15%** must be expected.



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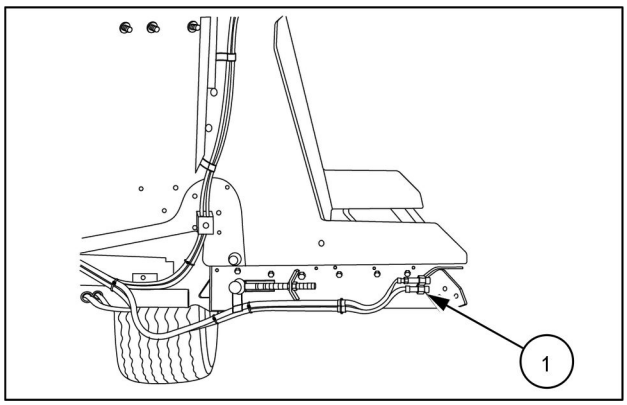
Conveyor accessories (if equipped)

Elevator



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The implement can be supplied with an elevator on the side, available in various lengths.
It is recommended to use a manually operated valve block or electrically operated hydraulics.

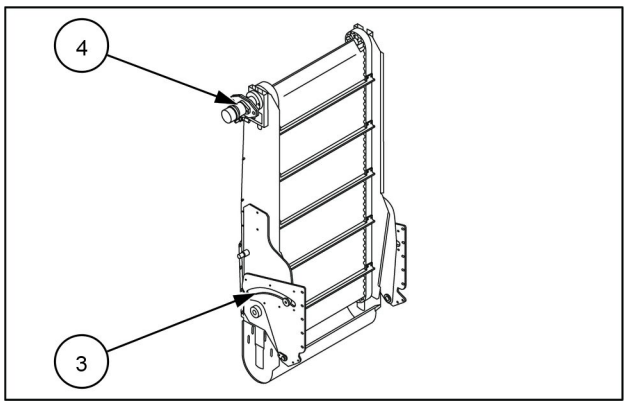
During transport, the elevator can be lifted all the way in to the mixing hopper.

NOTE: *The elevator must be lowered before use in order to prevent feed from being spilt between the elevator and the feeder. The elevator does not need to be lowered fully in order to dispense feed.*

If the feed is very dry, light and structure-rich, the elevator must be lowered further than when the feed is heavy and moist in order to achieve the same good feed dispensing. It may also be beneficial to limit the opening of the hopper door to position 4. See Page **6-7**.

The elevator discharge speed is adjusted using regulating valve **(1)** next to the hydraulic motor on the side of the elevator or via the knob on the remote control.

If it is needed to post-mix feed or discharge feed into a feed truck or similar, the implement can be supplied with an elevator on either the side or the back.
The elevator is operated via the hydraulic handles or the electro-hydraulic control system (extra equipment).

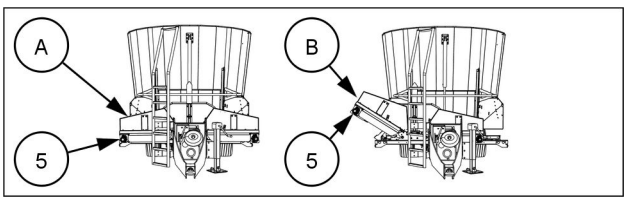


ZEIL21HT00140AA 2

If possible, the elevator should be lowered fully so that it rests in a stable manner on track **(3)** of the side plates.

The elevator discharge speed is adjusted using regulating valve **(4)** next to the hydraulic motor on the side of the elevator or via the knob on the remote control.

X - conveyor



ZEIL21HT00168EA 3

The X-conveyor is a universal discharge conveyor, which can be used as either movable cross conveyor **(A)** or as elevator **(B)**.
The cross unloader can dispense feed either to the right or to the left, and the conveyor will be pulled to either side, as two oil motors are fitted.

The conveyor speed is adjusted using valve **(5)**, which is located adjacent to one oil motor or, if electrical operation is fitted, with a knob (extra equipment).

The hopper door should only be opened sufficient to enable the conveyor to follow the feed dispensing and produce an even distribution of feed.

Reduction gear (if equipped)

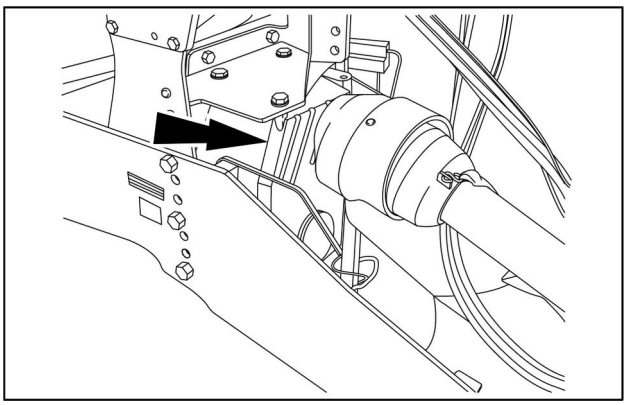
It is possible to have a reduction gear fitted as extra equipment.
A reduction gear enables a smaller tractor to be used to drive the feed trailer.

During the actual mixing process and at the start of feed dispensing, the reduction gear must be in the low gear (handle up). When the trailer is sufficiently empty for the tractor to pull the high gear, the gear should be changed (handle down) and the rest of the feed will then be dispensed.

A reduction gear reduces the power consumption by **20 – 35%** (depending on the reduction gear ratio).

NOTE: *In order to change gear, it is necessary to stop the Power Take-Off (PTO) shaft.*

Once the PTO shaft has stopped, the gear can be changed using the gear lever on the reduction gear. The PTO shaft can then be restarted.



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Hydraulic gear change (if equipped)

As extra equipment, it is possible for trailers with a reduction gear to be fitted with the hydraulic gear change (Hydrostep).
The hydraulic gear change makes it possible to change gear without leaving the tractor driver cab.

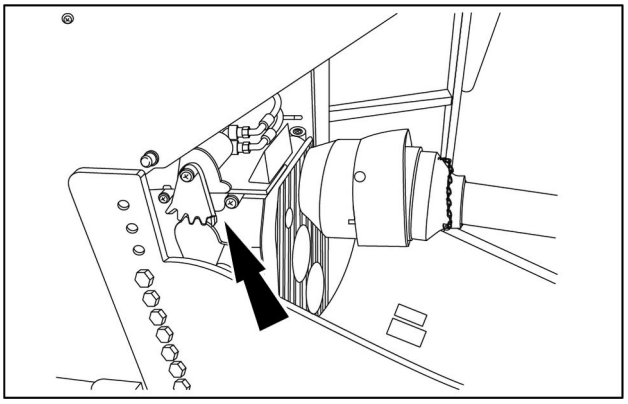
Hydrostep can be connected in one of two different ways. It can be connected to an existing hydraulic valve on the tractor or it can be combined with the electrical operation box.

On the electric control unit is a switch to activate the hydraulic gear change (Hydrostep).

In order to change gear, it is necessary to stop the Power Take-Off (PTO) shaft. Once the PTO shaft has stopped, the switch on the electric operating system can be activated. While the switch is activated, the PTO share can be restarted. The gear will then be changed.

NOTE: *It is recommended that the gear change be activated for no more than **60 s** on each occasion. It is therefore important to set the switch to neutral after the gear has changed.*

In some cases with a lot of heavy feed, the gear may not be disengaged. In this case, simply repeat the operating procedure.



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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.

Always replace worn or frayed belts before they fail.

Always replace canvas on the header that are worn or torn.

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

Hydraulic system

When you replace parts of the hydraulic system, always make sure that the header rests on the ground.

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

Hydraulic hoses must be checked 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

Pay special attention to the sliding profile tubes or splined shafts of the PTO shafts. They must be able to slide back and forth when the torque is heavy. If the profile tubes or splined shafts do not slide easily, the movement of the header is limited and the ground following abilities are reduced.

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.

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.

Gearboxes

Always clean the area around the gearbox dipsticks, the fill caps, and the check plugs when you check fluid levels. Failure to clean these areas may allow contamination to enter the system. Drain, flush, and refill the system whenever you suspect it is contaminated.

Use the indicated consumable to maintain the oil level in the gearboxes. Oil for the gearboxes is available from your KONGSKILDE dealer.

NOTICE: *Failure to use the correct specification of oil may lead to premature failure of the gearbox components.*

Torque

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

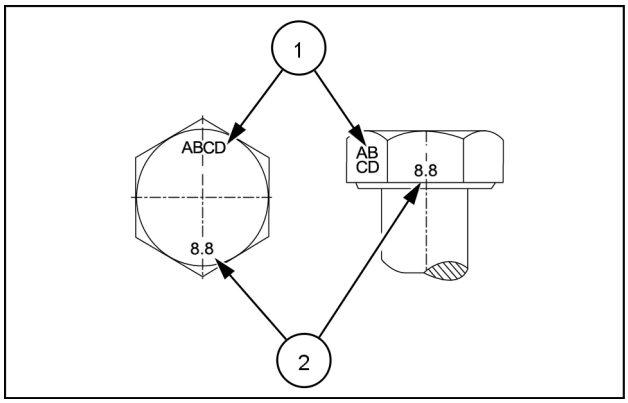
The minimum hardware tightening torque on drawings, in specifications, etcetera have priority.
In the following tables, torque specifications are shown following the standard **ENS7001**, applicable for material class 8.8 and material class 10.9.

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)	Class 12.9 in N m (lb in or lb ft)
M8	**25 N·m (18.1 lb ft)**	**33 N·m (24.3 lb ft)**	**40 N·m (29.5 lb ft)**
M10	**48 N·m (35.4 lb ft)**	**65 N·m (47.9 lb ft)**	**80 N·m (59.0 lb ft)**
M12	**80 N·m (59.0 lb ft)**	**120 N·m (88.5 lb ft)**	**135 N·m (99.6 lb ft)**
M12x1.25	**90 N·m (66.4 lb ft)**	**125 N·m (92.2 lb ft)**	**146 N·m (107.7 lb ft)**
M14	**135 N·m (99.6 lb ft)**	**180 N·m (132.8 lb ft)**	**215 N·m (158.6 lb ft)**
M14x1.5	**145 N·m (106.9 lb ft)**	**190 N·m (140.1 lb ft)**	**230 N·m (169.6 lb ft)**
M16	**200 N·m (147.5 lb ft)**	**280 N·m (207 lb ft)**	**325 N·m (240 lb ft)**
M16x1.5	**215 N·m (158.6 lb ft)**	**295 N·m (217.6 lb ft)**	**350 N·m (258.1 lb ft)**
M18	**270 N·m (199.1 lb ft)**	**380 N·m (280.3 lb ft)**	**440 N·m (324.5 lb ft)**
M20	**400 N·m (295.0 lb ft)**	**550 N·m (405.7 lb ft)**	**650 N·m (479.4 lb ft)**
M24	**640 N·m (472.0 lb ft)**	**900 N·m (663.8 lb ft)**	**1100 N·m (811.3 lb ft)**
M24x1.5	**690 N·m (508.9 lb ft)**	**960 N·m (708 lb ft)**	**1175 N·m (867 lb ft)**
M30	**1300 N·m (958.8 lb ft)**	**1800 N·m (1327.6 lb ft)**	**2300 N·m (1696.4 lb ft)**

Identification markings

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



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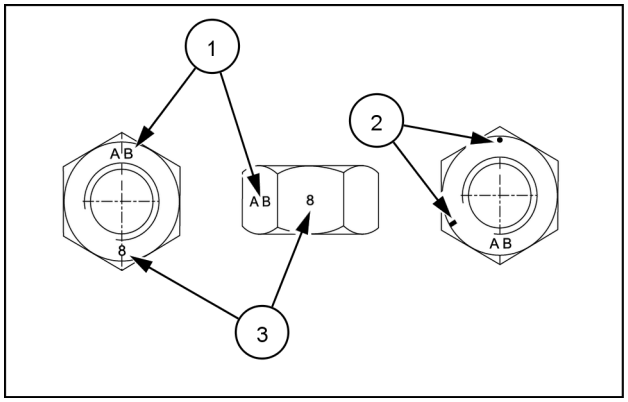
Metric bolt identification markings

1. Manufacturer's identification
2. Property class

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



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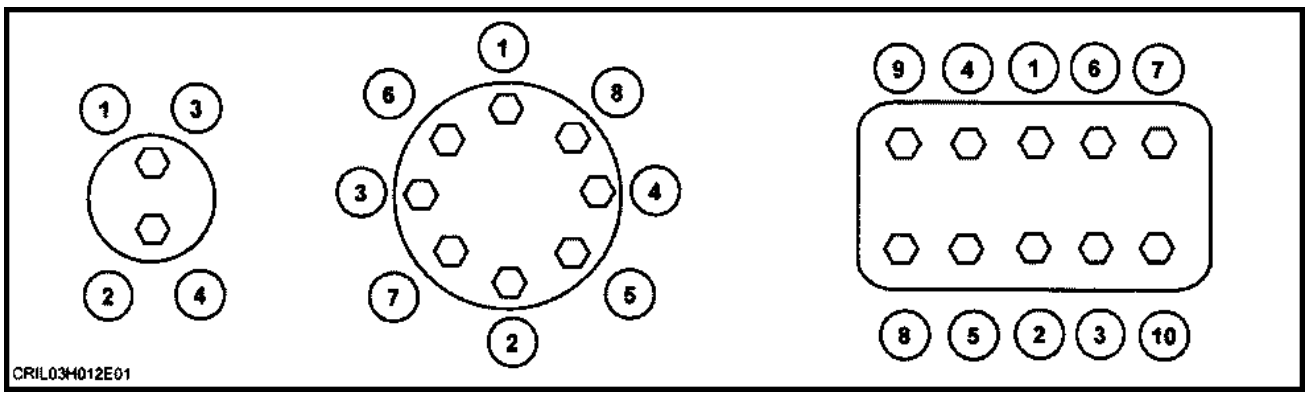
Metric hex nut identification markings

- **(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.*



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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.

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.

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:

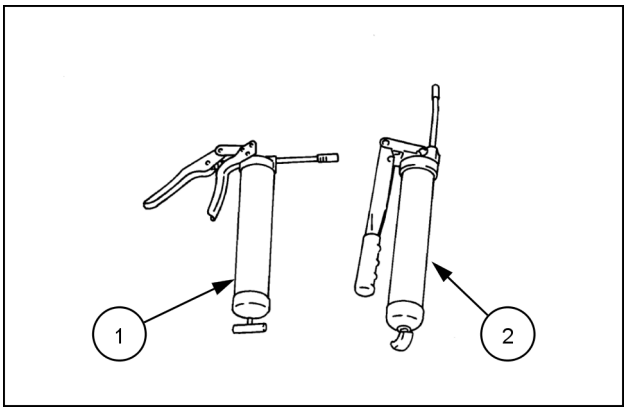
(1) Pistol grip-style grease gun

(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.



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Progressive lubrication block

The implement may be equipped with a progressive lubrication block.
This block ensures that the grease points connected receive the correct quantity of grease.
All guards have been fitted with locks for safety reasons.

Lubrication must be performed individually at the interval specified if the implement has not been fitted with a lubrication block.

Regular checks must be made to ensure that the lubrication hoses are intact and fitted correctly.

Grease specification

See Page **7-11** 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**	**M1C 137-A** **M1C 75-B**
Planet gearbox VM-1	**16 L** (**4.2 US gal**)	**PETRONAS GEAR SYN PAO 150** or **CASTROL ALPHASYN™ EP 150**	**DIN 51517-3** -
Planet gearbox VM-1 S	**10.8 – 14.0 L** (**2.9 – 3.7 US gal**)	**PETRONAS GEAR SYN PAO 150** or **CASTROL ALPHASYN™ EP 150**	**DIN 51517-3** -
Two planet gearbox VM-2 and VM-3	**10.8 – 23.0 L** (**2.9 – 6.1 US gal**) for each	**PETRONAS GEAR SYN PAO 150** or **CASTROL ALPHASYN™ EP 150**	**DIN 51517-3** -
Three planet gearbox VM-2 and VM-3	**14.0 – 23.0 L** (**3.7 – 6.1 US gal**) for each	**PETRONAS GEAR SYN PAO 150** or **CASTROL ALPHASYN™ EP 150**	**DIN 51517-3** -
Reduction gearbox	**10.5 L** (**2.8 US gal**)	**PETRONAS GEAR SYN PAO 150** or **CASTROL ALPHASYN™ EP 150**	**DIN 51517-3** -

Maintenance planning

Overview

Maintenance action	Check	Change fluid	Tighten	Grease	Replace	Adjust	Page no.
After the first 10 hours							
Wheels and tires - check	x						**7-13**
After the first 100 hours							
Reduction gear oil change		x					**7-13**
Planet gear oil change (for VM-1 models)		x					**7-14**
Planet gear oil change (for VM-2 and VM-3 models)		x					**7-15**
Daily							
Check bolted connections			x				**7-16**
Rotating parts - check	x						**7-16**
Hardware - Check	x						**7-16**
Every 10 hours							
10 hours grease fittings				x			**7-17**
Every 40 hours							
40 hours grease fittings				x			**7-19**
Every 3 months							
3 months grease fittings (for VM-2 models)				x			**7-22**
3 months grease fittings (for VM-3 models)				x			**7-24**
Wheels and tires - check	x						**7-25**
Every 250 hours							
Hydraulic hoses	x						**7-26**
250 hours grease fittings				x			**7-27**
Every 2000 hours or every year							
2000 hours grease fittings				x			**7-28**
Reduction gear oil change		x					**7-13**
Planet gear oil change (for VM-1 models)		x					**7-14**
Planet gear oil change (for VM-2 and VM-3 models)		x					**7-15**
Every six years							
Hydraulic hoses					x		**7-32**
As required							
Wheel hub lubrication – Grease					x		**7-33**
Friction slip clutch – Burnish (resurface)						x	**7-34**
Shear bolt clutch	x						**7-35**
Maintaining the friction clutch	x						**7-35**
Magnet on cover plate						x	**7-36**
Check the wheel bearing						x	**7-37**

After the first 10 hours

Wheels and tires - check

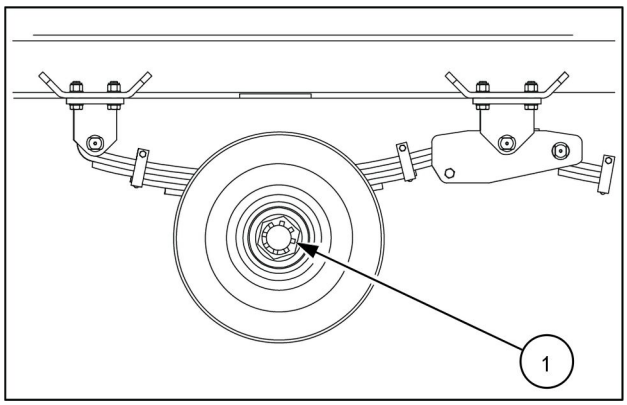
NOTICE: *Check the wheels and tires after the first **10 h** of operation. Make sure to torque the wheel hardware any time that you remove and install a wheel.*

NOTICE: *Do not substitute a tire of a different size. A substitute tire size may compromise the load-carrying capacity.*

1. Check the tire pressure and inflate the tires, if necessary. See Page **9-30** to check the recommended tire pressure.

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

2. Check the torque of the wheel hardware **(1)**.



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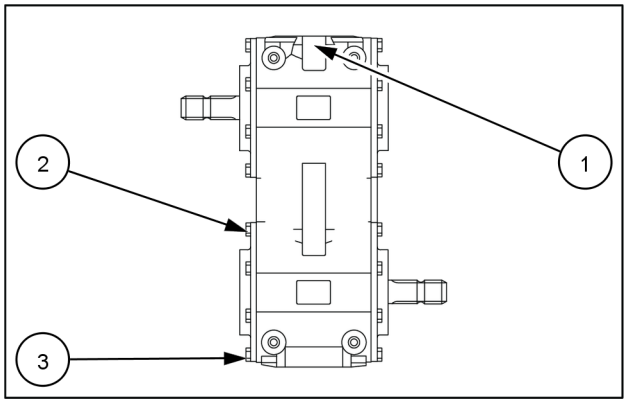
After the first 100 hours

Reduction gear oil change

Reduction gear

To change the gearbox oil, proceed as follows:

1. Place the implement on a level surface.
2. Place a suitable container below the drain plug **(3)** of the reduction gearbox.
3. Remove the drain plug **(3)** and drain all the oil from the reduction gearbox.
4. Reinstall the plug **(3)**.
5. Clean the area round the plug **(1)** and remove it.
6. Fill the gearbox with new oil through the plug **(1)**.
7. Clean and reinstall the plug **(1)**.
8. Check the oil level from the sight glass **(2)**.



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Oil specification

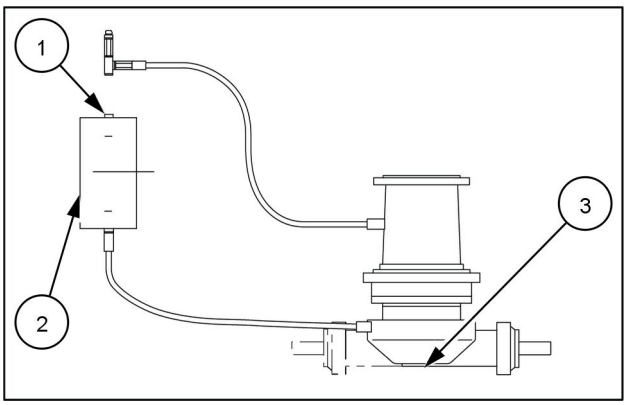
See Page **7-11** for the correct oil specification and capacity.

Planet gear oil change (for VM-1 models)

Planet gearbox VM-1

To change the gearbox oil, proceed as follows:

1. Place the implement on a level surface.
2. Remove the uppermost hose and the vent plug on the equalisation vessel.
3. Place a suitable container below the base plug **(3)** of the gearbox.
4. Remove the base plug **(3)** and drain all the oil from the gearbox.
5. Reinstall the plug **(3)**.
6. Clean the area round the plug **(1)** and remove it.
7. Fill the gearbox with new oil through the plug **(1)**.
8. Clean and reinstall the plug **(1)**.
9. Check the oil level from the sight glass **(2)**.



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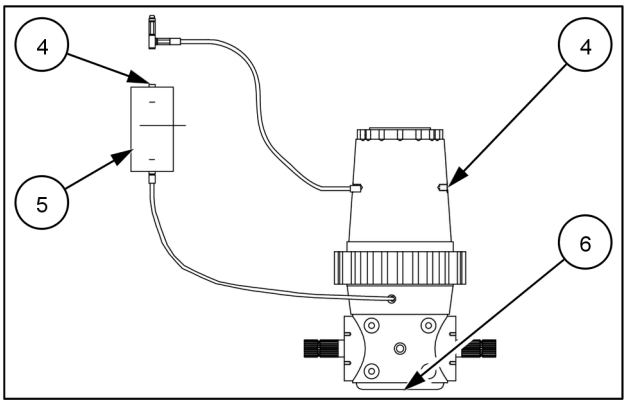
Planet gearbox VM-1 S

To change the gearbox oil, proceed as follows:

1. Place the implement on a level surface.
2. Remove the uppermost hose and the vent plug on the equalisation vessel.
3. Place a suitable container below the base plug **(6)** of the gearbox.
4. Remove the base plug **(6)** and drain all the oil from the gearbox.
5. Reinstall the plug **(6)**.
6. Clean the area round the plug **(4)** and remove it.
7. Fill the gearbox with new oil through the plug **(4)**.
8. Clean and reinstall the plug **(4)**.
9. Check the oil level from the sight glass **(5)**.



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Oil specification

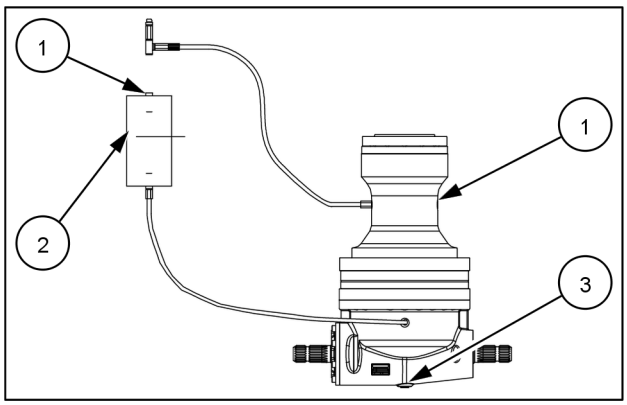
See Page **7-11** for the correct oil specification and capacity.

Planet gear oil change (for VM-2 and VM-3 models)

Two planet gears

To change the gearbox oil, proceed as follows:

1. Place the implement on a level surface.
2. Remove the uppermost hose and the vent plug on the equalisation vessel.
3. Place a suitable container below the base plug **(3)** of the gearbox.
4. Remove the base plug **(3)** and drain all the oil from the gearbox.
5. Reinstall the plug **(3)**.
6. Clean the area round the plug **(1)** and remove it.
7. Fill the gearbox with new oil through the plug **(1)**.
8. Clean and reinstall the plug **(1)**.
9. Check the oil level from the sight glass **(2)**.



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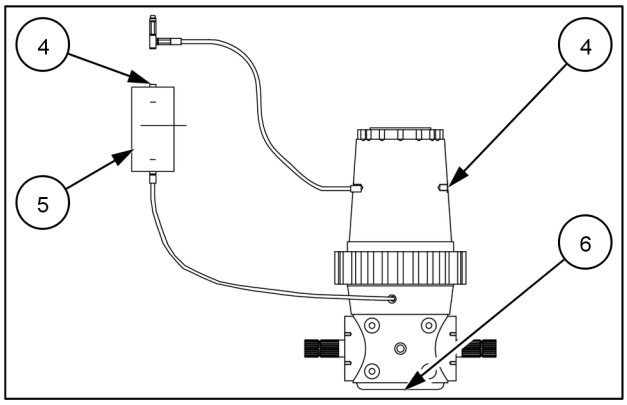
Three planet gears

To change the gearbox oil, proceed as follows:

1. Place the implement on a level surface.
2. Remove the uppermost hose and the vent plug on the equalisation vessel.
3. Place a suitable container below the base plug **(6)** of the gearbox.
4. Remove the base plug **(6)** and drain all the oil from the gearbox.
5. Reinstall the plug **(6)**.
6. Clean the area round the plug **(4)** and remove it.
7. Fill the gearbox with new oil through the plug **(4)**.
8. Clean and reinstall the plug **(4)**.
9. Check the oil level from the sight glass **(5)**.



ZEIL21HT00152AA 2

Oil specification

See Page **7-11** for the correct oil specification and capacity.

Daily

Check bolted connections

Torque again all the bolts, the nuts and the fasteners daily.

Rotating parts - check

During the season check daily that no blades, carriers, fingers of the conditioners or bolts are missing. If any of these parts are missing, install the missing parts before you continue the work.

Hardware - Check

Assorted types of hardware such as nuts, bolts, screws, cotter pins, and linchpins secure the assemblies and components of the implement.

Maintenance, service, and operational forces such as vibrations and revolving components can result loosened or missing hardware.

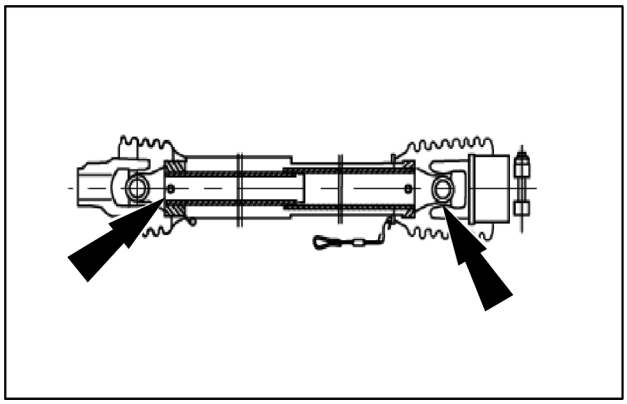
- Prior to daily operation, walk around the implement, and perform both a visual and hands-on check for loose or missing hardware. Wheel bolts and nuts and high-speed revolving disc head assemblies should be given extra attention to the presence and security of the hardware.
- During and after service of the implement, make sure that each piece of hardware that was removed is installed and tightened, as required, to the relevant torque specification.
- Tighten hardware to the nominal torque specification or specified torque specification.

Every 10 hours

10 hours grease fittings

Power Take-Off (PTO) shaft

1. Cross bearings in PTO shaft (x2)



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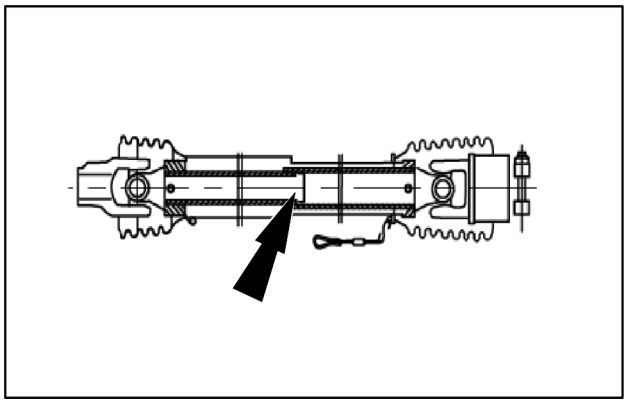
2. Profile tube in foremost PTO shaft



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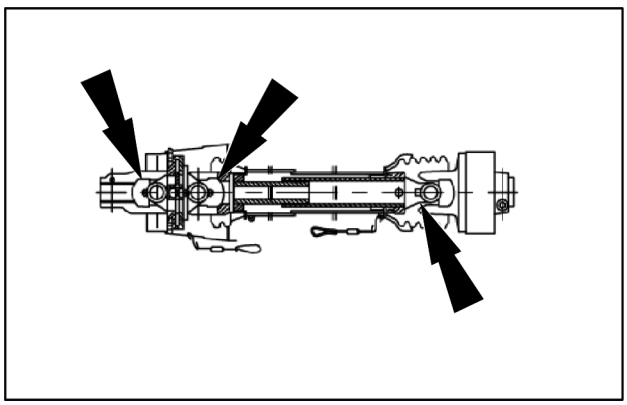
Wide angle shaft

3. Cross bearings in wide angle shaft (x3)



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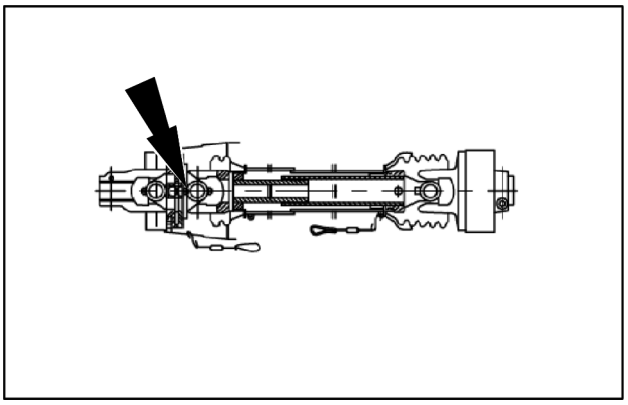
4. Double fork in wide angle shaft



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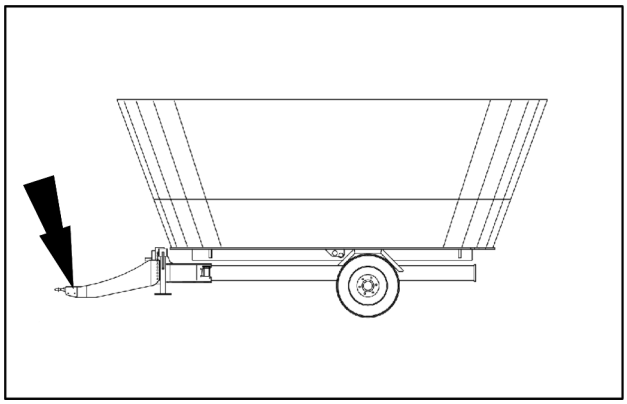
Every 40 hours

40 hours grease fittings

Drawbar

1. Hitch eye (1 x feeder)



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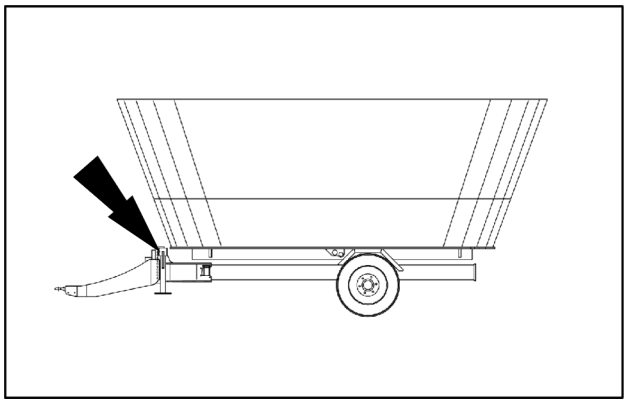
2. Supporting base (1 x feeder)



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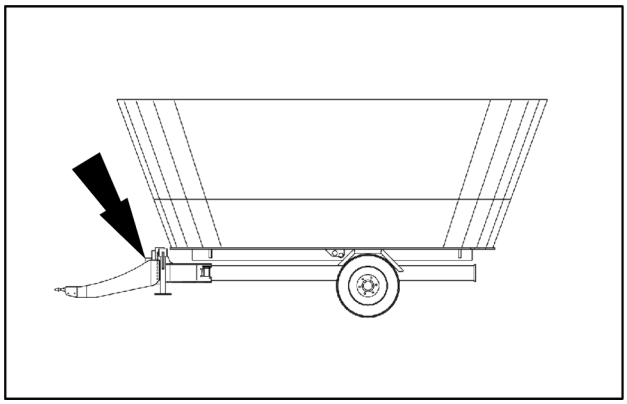
3. Input shaft (1 x feeder)



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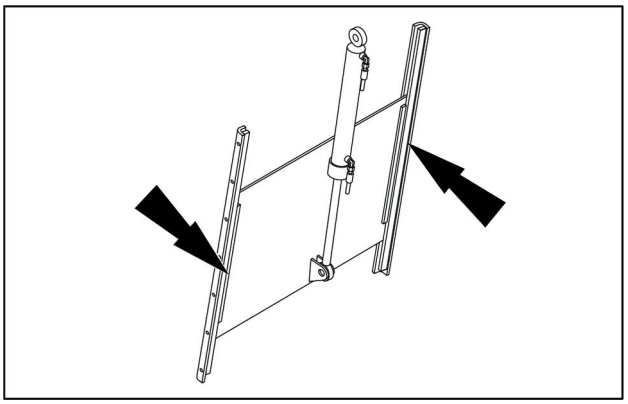
Doors

4. Guides for door (x4)



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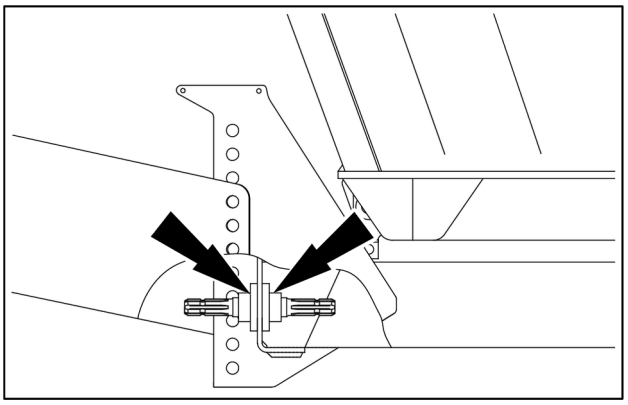
Input shaft

5. Input shaft fitted to feeders without reduction gear (2 x feeder)



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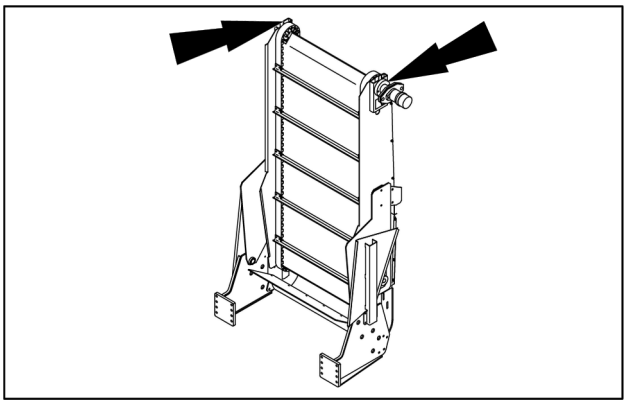
Discharge conveyor

6. Bearing housing adjacent to oil motor (2 x feeder)



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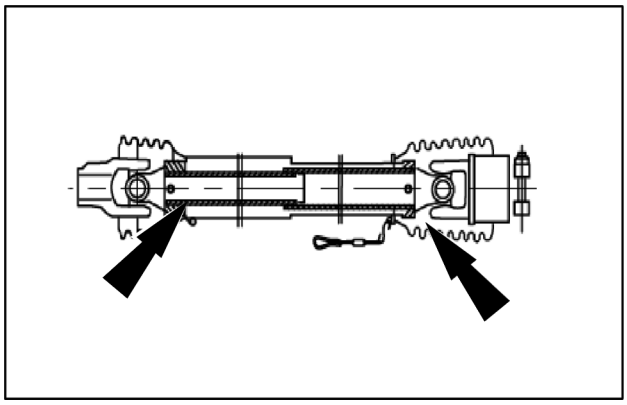
Power Take-Off (PTO) shaft

7. Guard (x2)



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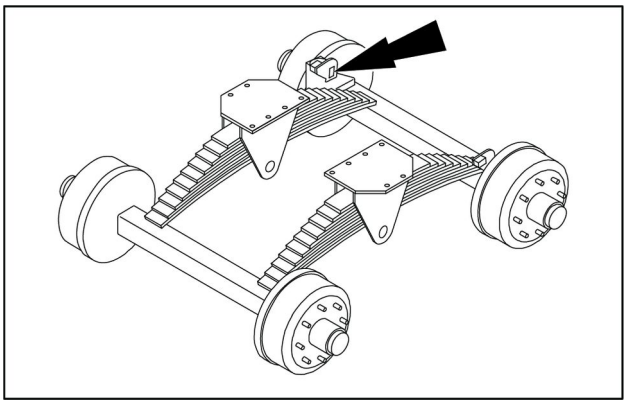
Every 3 months

3 months grease fittings (for VM-2 models)

Boogie

1. Pivot joint for self-steering (x4)



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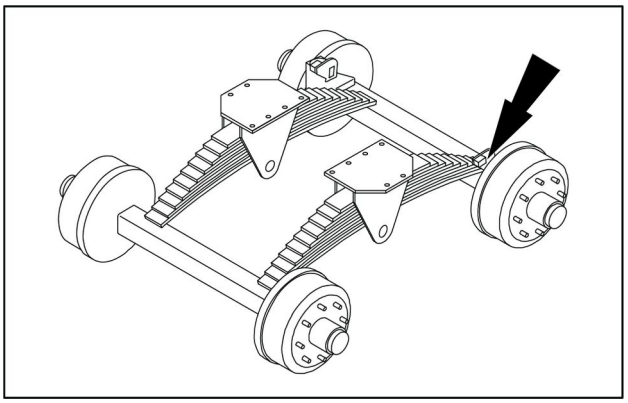
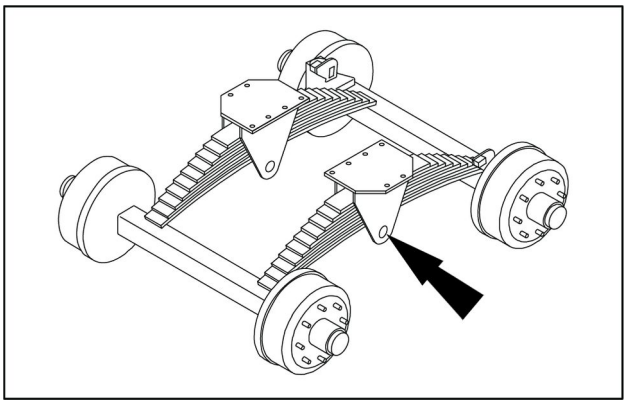
2. Bearings for brake arm (2 x brake arm)



ZEIL21HT00148AA 2

3. Swivel bearing for bogie springs (x2)



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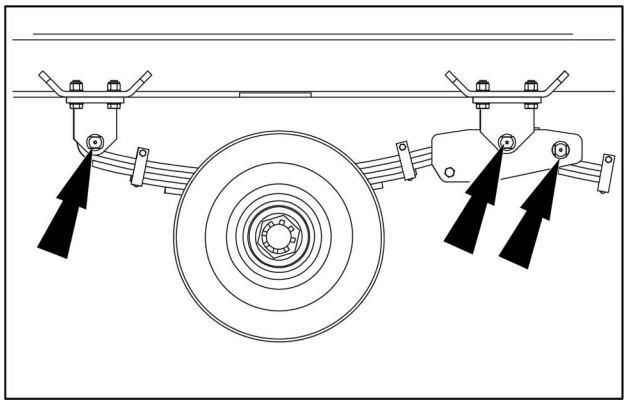
4. Tap for tandem or triple (x12)



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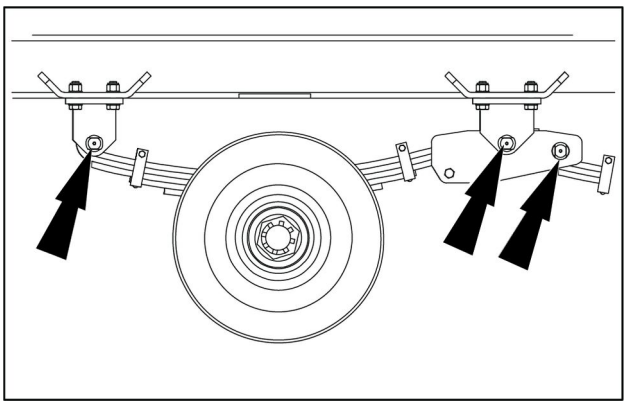
3 months grease fittings (for VM-3 models)

Tandem

1. Tap for tandem or triple (x12)



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Wheels and tires - check

Check the wheels and tires every **50 h** of operation. Perform a follow-up check of the wheel hardware torque after every **50 h** of operation. Make sure to torque the wheel hardware any time that you remove and install a wheel.

Every 250 hours

Hydraulic hoses

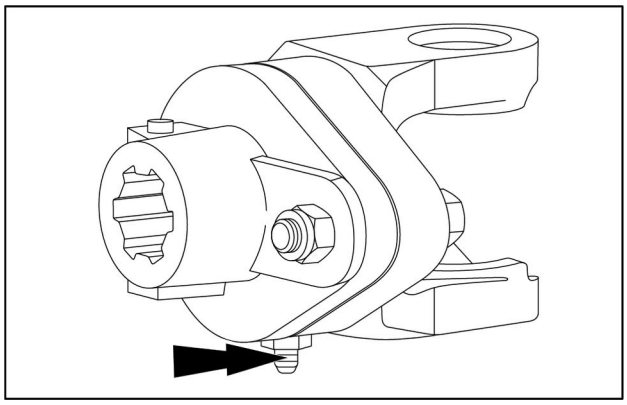
Periodically check the hydraulic hoses for leaks, damage, and maintain a hydraulic hose service-life awareness.

Check for the following:

- The dates on the crimped hose end fittings. See Page **7-32**.
- Leaks, damaged, or corroded fittings.
- Dry, hard, blistered, crushed, kinked, twisted, conditions along the length of the hose.
- Cuts or tears and/or a softening, loosening, or separation of the hose outer covering.
- Excessive dirt and debris collecting on or around the hoses and fittings.
- Damaged or missing hose retaining clamps, shielding, guards, or wear protection material or covering.

250 hours grease fittings

1. Shear bolt clutch



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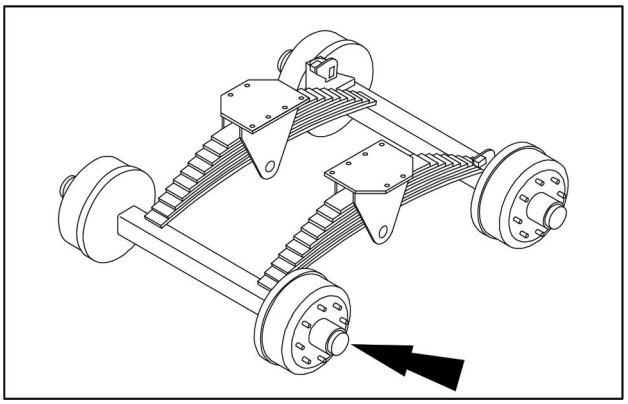
Every 2000 hours or every year

2000 hours grease fittings

Wheels

1. Wheel hub (x4)



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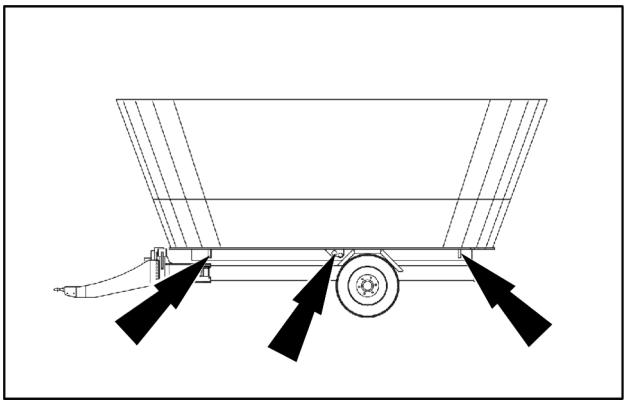
Weighing cells

2. Ball joint for weighing cells (1 x cell)



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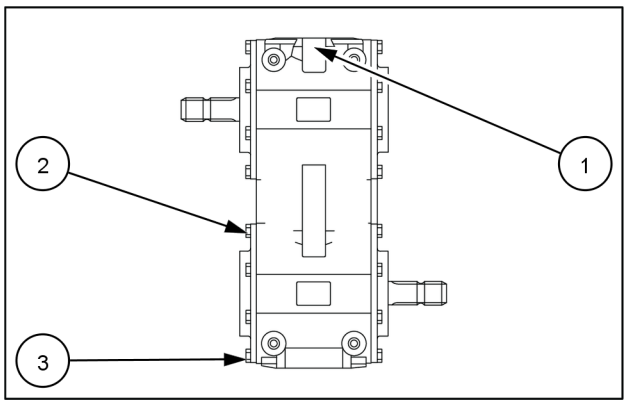
Reduction gear oil change

Reduction gear

To change the gearbox oil, proceed as follows:

1. Place the implement on a level surface.
2. Place a suitable container below the drain plug **(3)** of the reduction gearbox.
3. Remove the drain plug **(3)** and drain all the oil from the reduction gearbox.
4. Reinstall the plug **(3)**.
5. Clean the area round the plug **(1)** and remove it.
6. Fill the gearbox with new oil through the plug **(1)**.
7. Clean and reinstall the plug **(1)**.
8. Check the oil level from the sight glass **(2)**.



ZEIL21HT00149AA 1

Oil specification

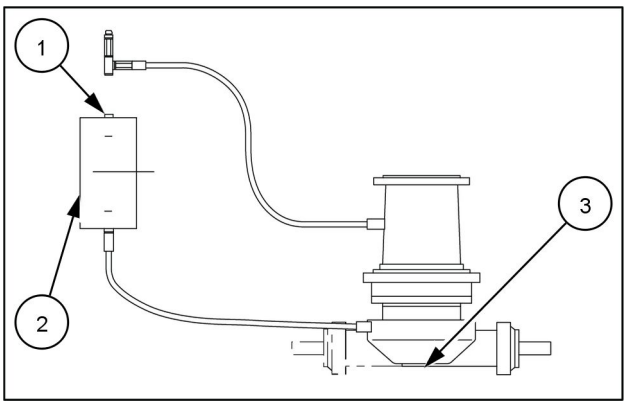
See Page **7-11** for the correct oil specification and capacity.

Planet gear oil change (for VM-1 models)

Planet gearbox VM-1

To change the gearbox oil, proceed as follows:

1. Place the implement on a level surface.
2. Remove the uppermost hose and the vent plug on the equalisation vessel.
3. Place a suitable container below the base plug **(3)** of the gearbox.
4. Remove the base plug **(3)** and drain all the oil from the gearbox.
5. Reinstall the plug **(3)**.
6. Clean the area round the plug **(1)** and remove it.
7. Fill the gearbox with new oil through the plug **(1)**.
8. Clean and reinstall the plug **(1)**.
9. Check the oil level from the sight glass **(2)**.



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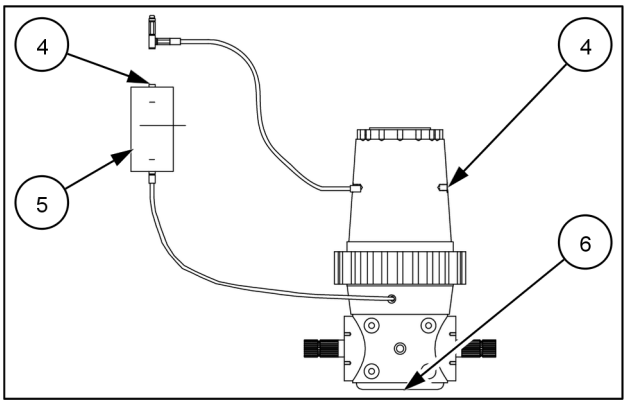
Planet gearbox VM-1 S

To change the gearbox oil, proceed as follows:

1. Place the implement on a level surface.
2. Remove the uppermost hose and the vent plug on the equalisation vessel.
3. Place a suitable container below the base plug **(6)** of the gearbox.
4. Remove the base plug **(6)** and drain all the oil from the gearbox.
5. Reinstall the plug **(6)**.
6. Clean the area round the plug **(4)** and remove it.
7. Fill the gearbox with new oil through the plug **(4)**.
8. Clean and reinstall the plug **(4)**.
9. Check the oil level from the sight glass **(5)**.



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Oil specification

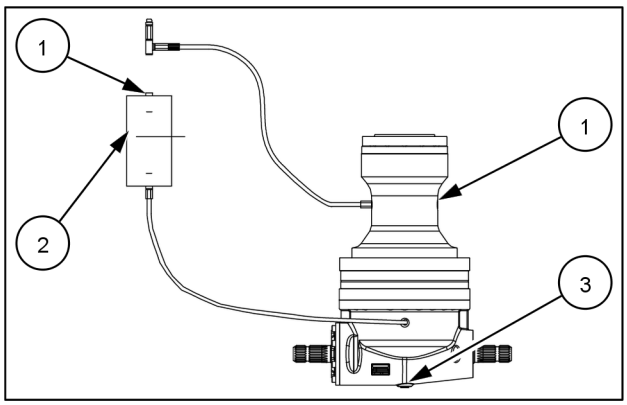
See Page **7-11** for the correct oil specification and capacity.

Planet gear oil change (for VM-2 and VM-3 models)

Two planet gears

To change the gearbox oil, proceed as follows:

1. Place the implement on a level surface.
2. Remove the uppermost hose and the vent plug on the equalisation vessel.
3. Place a suitable container below the base plug **(3)** of the gearbox.
4. Remove the base plug **(3)** and drain all the oil from the gearbox.
5. Reinstall the plug **(3)**.
6. Clean the area round the plug **(1)** and remove it.
7. Fill the gearbox with new oil through the plug **(1)**.
8. Clean and reinstall the plug **(1)**.
9. Check the oil level from the sight glass **(2)**.



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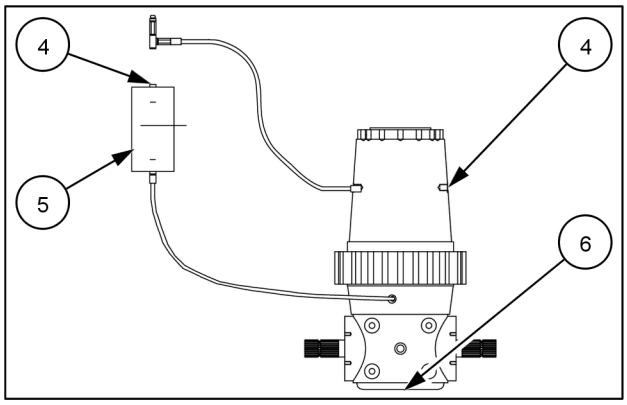
Three planet gears

To change the gearbox oil, proceed as follows:

1. Place the implement on a level surface.
2. Remove the uppermost hose and the vent plug on the equalisation vessel.
3. Place a suitable container below the base plug **(6)** of the gearbox.
4. Remove the base plug **(6)** and drain all the oil from the gearbox.
5. Reinstall the plug **(6)**.
6. Clean the area round the plug **(4)** and remove it.
7. Fill the gearbox with new oil through the plug **(4)**.
8. Clean and reinstall the plug **(4)**.
9. Check the oil level from the sight glass **(5)**.



ZEIL21HT00152AA 2

Oil specification

See Page **7-11** for the correct oil specification and capacity.

Every six 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

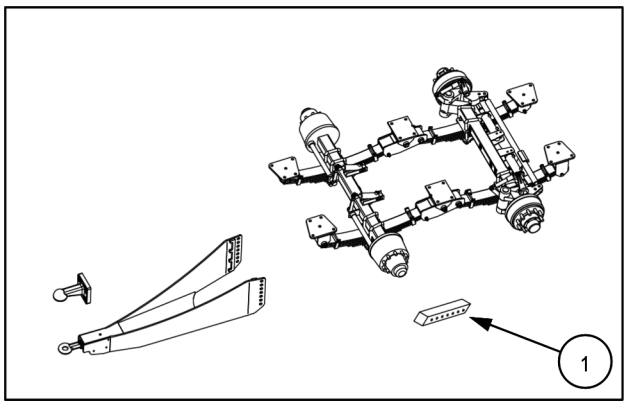
Wheel hub lubrication – Grease

To lubricate the wheel hubs, proceed as follows:

1. Disassemble the wheel hubs.
2. Clean the hubs thoroughly inside and out.
3. Clean and inspect both of the wheel bearings.
4. Refill new grease
5. Grease the wheel bearings with a **10.0 mm** (**0.4 in**) thick layer of grease.
6. After fitting and adjusting the play of the wheel bearings fill the hubcaps 3/4 full of grease and refit.

Central lubrication

With central lubrication, the axle system should be lubricated from lubricating block **(1)** on the side of the trailer.



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Friction slip clutch – Burnish (resurface)

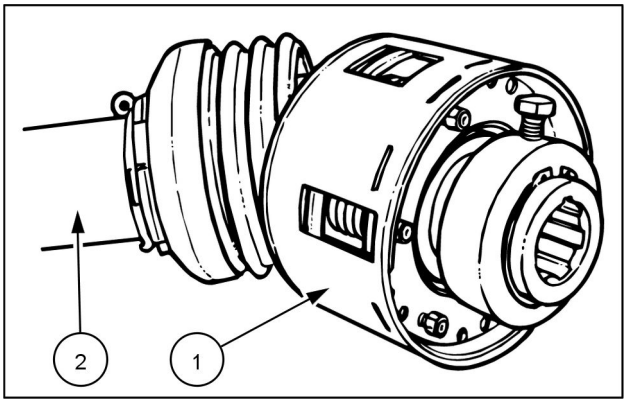
⚠ WARNING

Moving parts!
Disengage the Power Take-Off (PTO), turn off the engine, and remove the key. Wait for all movement to stop before you leave the operator's position. Never adjust, lubricate, clean, or remove a blockage of crop material when the engine is on.
Failure to comply could result in death or serious injury.

W0112B

NOTE: *The friction clutch is available only for Multi version (straw blower).*

The friction slip clutch **(1)** is part of the primary Power Take-Off (PTO) drive shaft **(2)** and mounts on the PTO drive shafts between the tractor and the implement. The difference between these is the direction in which the free-wheeling is running. The clutch protects the transmission against high torque peaks and at the same time is capable of transmitting the torque while it slips.



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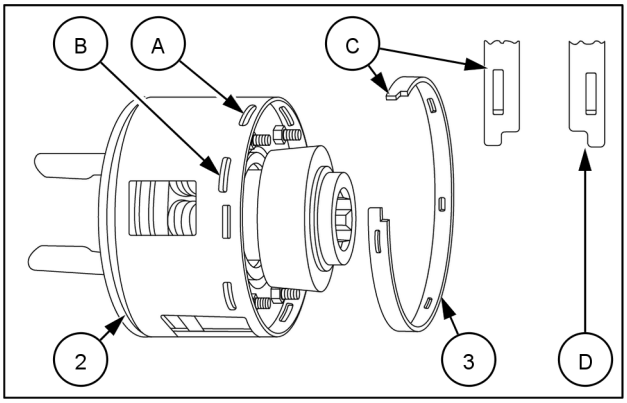
NOTE: *Clean the clutch at regular intervals in order to remove dirt and moisture that may stuck the clutch.*

To burnish the friction slip clutch proceed as follows:

1. Rotate the clutch for half a minute to remove dirt and possible rust on the plates.
2. Loosen all of the clutch nuts until they are at level with the threads of the bolts, and the springs can press on the clutch plates.
3. The torque in the friction clutch has four different torque adjustments. Adjust the torque by turning the adjustment ring and by choosing between two different positions in the clutch housing.
   - The adjustment ring has a minimum **(C)** and a maximum **(D)** position.
   - The clutch housing has two different sets of slots in the height into which the adjustment ring can be mounted, position **(A)** and position **(B)**.



ZEIL21FR00209AA 2

NOTE: *Make sure the six nuts are tightened during the adjustment. Loosen again all the nuts after the adjustment to the end of the bolt.*

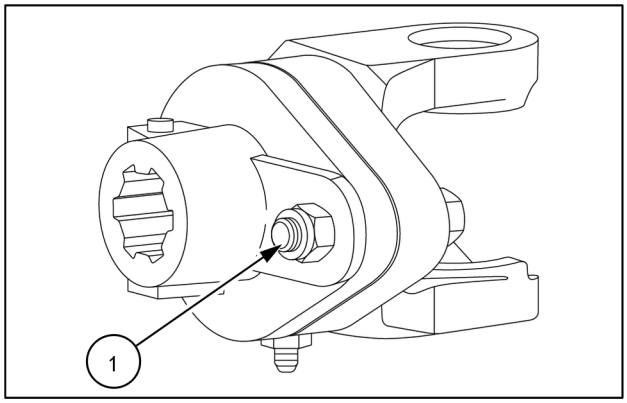
Torque		Adjustment ring	Clutch house
Step	%		Position
I	70	minimum **(C)**	**(A)**
II	80	maximum **(D)**	**(A)**
III	90	minimum **(C)**	**(B)**
IV	100	maximum **(D)**	**(B)**

Shear bolt clutch

In case of overloading, the shear bolt breaks and the power transmission is interrupted. In this case proceed as follows:

1. Replace the shear bolt **(1)** with a bolt of the same dimensions and strength class.

NOTE: *Pay attention to the thread length.*



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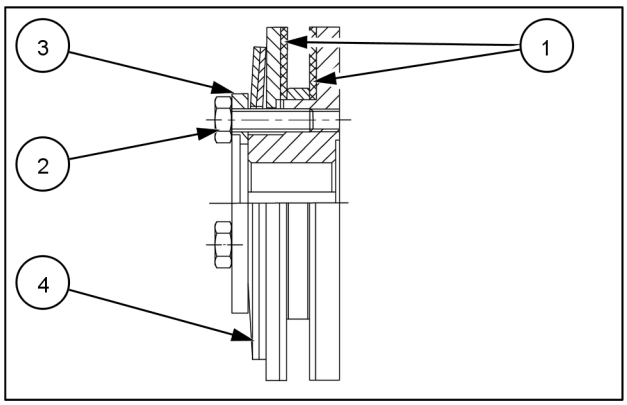
Maintaining the friction clutch

To maintain the friction clutch on the auger, proceed as follows:

1. Disassemble the clutch and clean all parts to remove any rust.
2. Check the clutch discs **(1)** for wear and replace if required.
3. Assemble and refit the clutch again.
4. Tighten the bolts **(2)** with normal torque as the flange **(3)** ensures the correct compression of the springs **(4)** and thus the correct torque setting.

NOTE: *If the clutch is overloaded by having longer glide times, it will become hot and quickly become worn.*



ZEIL21FR00289AA 1

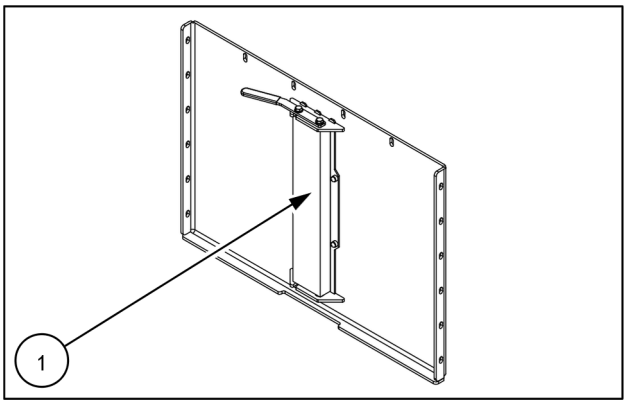
Magnet on cover plate

⚠ WARNING

Magnetic field!
Magnets could affect the functioning of pacemakers and implanted heart defibrillators. If you wear these devices, then keep sufficient distance from the magnets. Warn others who wear these devices to not get too close to magnets.
Failure to comply could result in death or serious injury.

W1321A

If large numbers of foreign bodies are present on the magnet **(1)** it should be cleaned.
This is done by removing the entire cover plate and not just the magnet. It is a very strong magnet and must be handled with great care.



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Check the wheel bearing

To adjust the play in the wheel bearing, proceed as follows:

1. Raise the axle off the ground until the wheel spins freely.
2. Take off the hub cap, remove the cotter pin and tighten the hub nut until there is noticeable resistance.
3. Rotate the hub nut backwards until the first cotter pin hole lines up.
4. Insert the cotter pin and bend it.
5. Fill up the hub cap 3/4 with new grease and refit.

Storage

End of season service

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

To prepare the implement for winter storage:

1. Clean the implement thoroughly. Dust and dirt absorb moisture and moisture increases the formation of rust.
2. Store the implement in a dry place, protected against wind and weather in the best possible way.
3. Grease all grease fittings after you clean the implement, according to the “Maintenance planning”.
4. 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.
5. Dismount the Power Take-Off (PTO) shafts, grease the profile tubes and keep them in a dry place.
6. Spray the implement with a coat of rust-preventing oil.
7. Parts polished with use and the piston rods of the hydraulic cylinder may get rusty. Clean and brush with grease parts polished with use and the piston rods to protect against wind and weather.
8. Change the oil in the hydraulic system and the gearboxes.
9. Remove the pressure from the drive belt.
10. Park the implement with the header lift lock valves engaged. If the pickup is lowered to the ground, place wood blocks under the pickup to prevent direct ground contact.
11. Check and adjust the tire pressure. See page **9-30**.
12. Support the implement to relieve the weight from the tires. 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.*

NOTE: *To prevent corrosion and seizure of the knives brush a light coat of all purpose grease onto the upper and lower blade surfaces of the blade.*

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 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.

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.

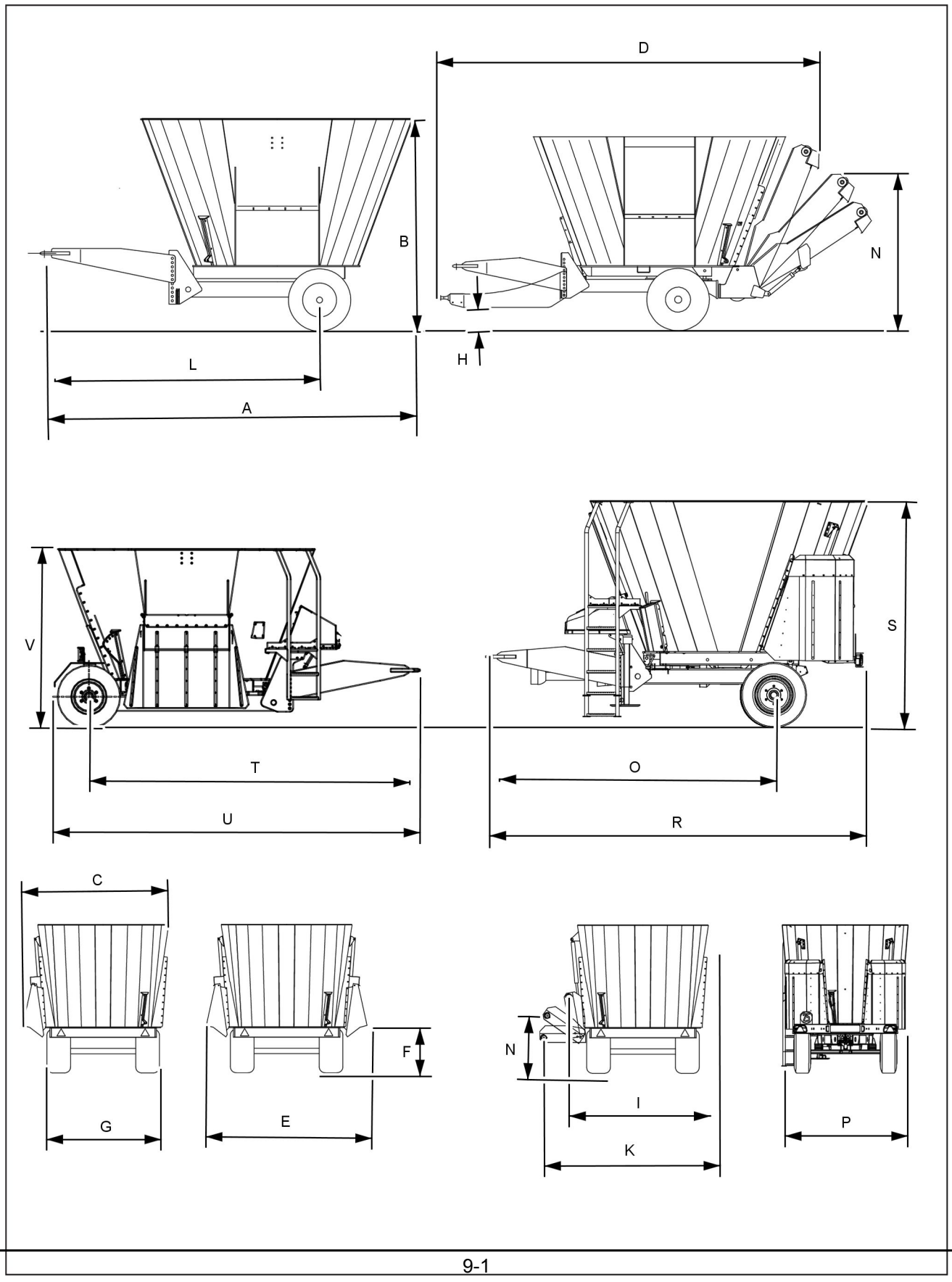
Troubleshooting

Problem	Possible Cause	Correction
Round bale sticking to right-hand side front corner or left-hand side rear corner when tearing apart.	The shearbars are activated/pushed all way in.	Deactivate the shearbars.
Long time to tear apart round bales.	Only the standard knives are mounted.	Add two long knives (option) to the auger placed in the middle position of height.
	Auger running too slow.	Speed up the auger. Suitable auger speed is **20 – 22 RPM** tearing apart round bales.
Feed mixture is sticking to back end or front end and not moving when mixing (especially when mixing whet mixture).	Mixture is building up on the angled front end and back end of the tub starting from the bottom plate.	Install activity plates (option) on the auger adjusted to the side (expect higher power requirement).
	Augers worn out.	Replace the augers.
Straw or Hay is pushed over the top.	The shearbars are activated/pushed all way in.	Deactivate the shearbars.
	Big quantity straw/hay.	Mount the option bale retaining ring.
Straw lumps in the unloaded feed.	Straw hanging around the counter knives and hereby not mixed into the mix (comes out at the end of the emptying the tub).	Deactivate the shearbars when bales are processed and before end mixing.
	Mixing time too short.	Longer processing of straw bale before adding next ingredients.
	Straw added too late.	Add the straw as first ingredient.
Need to cut material shorter.	Knives mounted too high on auger.	Add the standard knife on first or second position in lower part of auger.
When unloading mixture unloads in lumps (direct unload with side door).	Unload door wide open and auger running too slow.	Reduce unload door opening and speed up auger RPM.
	Very dry mixture.	Add the long knife at door level.
Weight on display is not stabile and moving up and down.	Showing too many registrations per second.	Adjust the weight speed down (see Page **6-12**).
	Weighing cell failure.	Contact your local dealer.
Shear bolt in main transmission brakes/is cut.	Too many long knives mounted.	Reduce the number of knives.
	Shear bolt holes on Power Take-Off (PTO) side wear out.	Change the PTO parts to renew.
	Wrong shear bolt fitted.	Replace the installed shear bolt with one shear bolt of the proper size and shape.

9 - SPECIFICATIONS

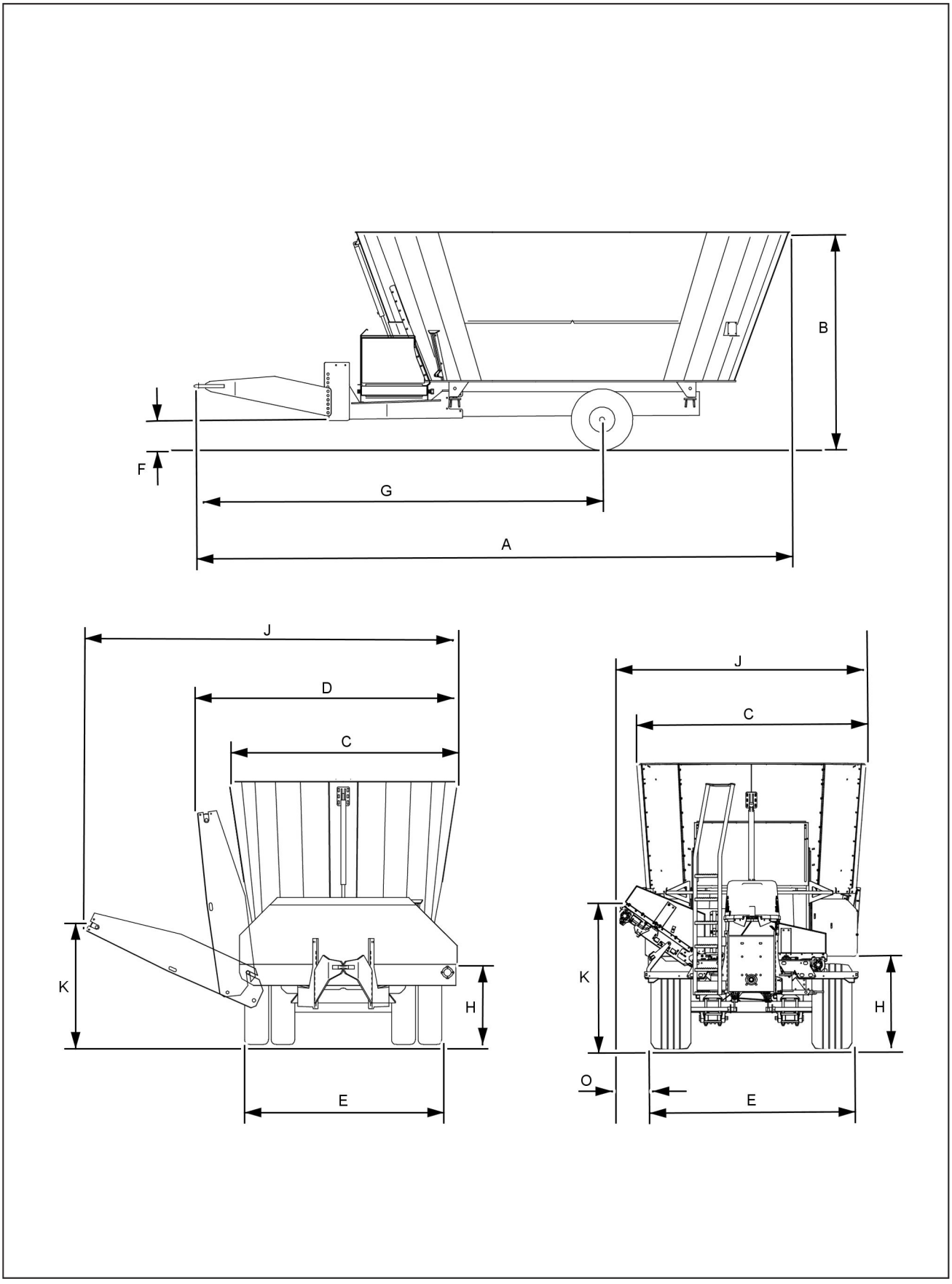
Dimensions (for VM-1 models)

VM-1 S and VM-1



Dimension	Description	VM 6.5-1 S	VM 8-1 S	VM 10-1 S	VM 10- 1	VM 12- 1	VM 14- 1
A	Total length, standard	**4.34 m (170.9 in)**	**4.4 m (173.2 in)**	**4.4 m (173.2 in)**	**4.66 m (183.5 in)**	**4.66 m (183.5 in)**	**4.66 m (183.5 in)**
D	Total length, long elevator	–	–	–	**5.42 m (213.4 in)**	**5.42 m (213.4 in)**	**5.42 m (213.4 in)**
R	Total length, corner doors (C)	–	**4.52 m (178.0 in)**	**4.52 m (178.0 in)**	–	–	–
U	Total length, Low version (L)	**4.38 m (172.4 in)**	**4.38 m (172.4 in)**	**4.38 m (172.4 in)**	–	–	–
L	Drive axle, standard	**3.3 m (129.9 in)**	**3.3 m (129.9 in)**	**3.3 m (129.9 in)**	**3.1 m (122.0 in)**	**3.1 m (122.0 in)**	**3.1 m (122.0 in)**
O	Drive axle, corner doors (C)	–	**3.16 m (124.4 in)**	**3.16 m (124.4 in)**	–	–	–
T	Drive axle, Low version (L)	**3.93 m (154.7 in)**	**3.93 m (154.7 in)**	**3.93 m (154.7 in)**	–	–	–
S	Height, Single axle. Tires 30x11.5-14.5	–	**2.48 m (97.6 in)**	**2.83 m (111.4 in)**	–	–	–
V	Height, Single axle. Tires 30x11.5-14.5	**2.04 m (80.3 in)**	**2.21 m (87.0 in)**	**2.56 m (100.8 in)**	–	–	–
B	Height, Single axle. Tires 30x11.5-14.5	**2.31 m (90.9 in)**	**2.48 m (97.6 in)**	**2.83 m (111.4 in)**	**2.56 m (100.8 in)**	**2.84 m (111.8 in)**	–
	Height, Single axle. Tires 400/60 -15.5	**2.44 m (96.1 in)**	**2.61 m (102.8 in)**	**2.96 m (116.5 in)**	**2.71 m (106.7 in)**	**2.99 m (117.7 in)**	–
	Height, Single axle. Tires 205/65 R17.5	**2.32 m (91.3 in)**	**2.49 m (98.0 in)**	**2.84 m (111.8 in)**	**2.58 m (101.6 in)**	**2.86 m (112.6 in)**	**3.16 m (124.4 in)**
	Height, Single axle. Tires 235/75 R17.5	**2.36 m (92.9 in)**	**2.53 m (99.6 in)**	**2.88 m (113.4 in)**	**2.63 m (103.5 in)**	**2.91 m (114.6 in)**	**3.21 m (126.4 in)**
	Height, Single axle. Tires 435/50 R19.5	–	–	–	**2.77 m (109.1 in)**	**3.05 m (120.1 in)**	**3.35 m (131.9 in)**
I	Transport width, with elevator (E08)	**2.5 m (98.4 in)**	**2.5 m (98.4 in)**	**2.5 m (98.4 in)**	**2.84 m (111.8 in)**	**2.84 m (111.8 in)**	**2.84 m (111.8 in)**
	Transport width, with elevator (E22)	–	–	–	**2.47 m (97.2 in)**	**2.47 m (97.2 in)**	**2.47 m (97.2 in)**
C	Transport width, one door	**2.29 m (90.2 in)**	**2.29 m (90.2 in)**	**2.29 m (90.2 in)**	**2.5 m (98.4 in)**	**2.5 m (98.4 in)**	**2.5 m (98.4 in)**
E	Transport width, two doors	**2.36 m (92.9 in)**	**2.36 m (92.9 in)**	**2.36 m (92.9 in)**	**2.54 m (100.0 in)**	**2.54 m (100.0 in)**	**2.54 m (100.0 in)**
P	Transport width, with corner doors (C)	–	**2.21 m (87.0 in)**	**2.21 m (87.0 in)**	–	–	–
G	Track width, Tires 30x11.5-14.5	**1.78 m (70.1 in)**	**1.78 m (70.1 in)**	**1.78 m (70.1 in)**	**1.88 m (74.0 in)**	**1.88 m (74.0 in)**	–
	Track width, Tires 400/60 R15.5	**1.94 m (76.4 in)**	**1.94 m (76.4 in)**	**1.94 m (76.4 in)**	**2.04 m (80.3 in)**	**2.04 m (80.3 in)**	–
	Track width, Tires 205/65 R17.5	**2.01 m (79.1 in)**	**2.01 m (79.1 in)**	**2.01 m (79.1 in)**	**2.11 m (83.1 in)**	**2.11 m (83.1 in)**	**2.11 m (83.1 in)**
	Track width, Tires 235/75 R17.5	**2.04 m (80.3 in)**	**2.04 m (80.3 in)**	**2.04 m (80.3 in)**	**2.14 m (84.3 in)**	**2.14 m (84.3 in)**	**2.14 m (84.3 in)**
	Track width, Tires 435/50 R19.5	–	–	–	**2.05 m (80.7 in)**	**2.05 m (80.7 in)**	**2.05 m (80.7 in)**
H	Clearance	**0.29 m (11.4 in)**	**0.29 m (11.4 in)**	**0.29 m (11.4 in)**	**0.29 m (11.4 in)**	**0.29 m (11.4 in)**	**0.29 m (11.4 in)**
K	Width in feed dispensing position, Elevator (E08)	**3.02 m (118.9 in)**	**3.02 m (118.9 in)**	**3.02 m (118.9 in)**	**3.32 m (130.7 in)**	**3.32 m (130.7 in)**	**3.32 m (130.7 in)**
	Width in feed dispensing position, Elevator (E16)	**3.71 m (146.1 in)**	**3.71 m (146.1 in)**	**3.71 m (146.1 in)**	**4.01 m (157.9 in)**	**4.01 m (157.9 in)**	**4.01 m (157.9 in)**
	Width in feed dispensing position, Elevator (E22)	–	–	–	–	–	–
P	Width in feed dispensing position, corner doors (C)	–	**2.21 m (87.0 in)**	**2.21 m (87.0 in)**	–	–	–
F	Height in feed dispensing position, Direct (base plate)	**0.75 m (29.5 in)**	**0.75 m (29.5 in)**	**0.75 m (29.5 in)**	**0.75 m (29.5 in)**	**0.75 m (29.5 in)**	**0.75 m (29.5 in)**
N	Height in feed dispensing position, Elevator (E08)	**0.68 – 1.02 m (26.77 – 40.16 in)**	**0.68 – 1.02 m (26.77 – 40.16 in)**	**0.68 – 1.02 m (26.77 – 40.16 in)**	**0.68 – 1.02 m (26.77 – 40.16 in)**	**0.68 – 1.02 m (26.77 – 40.16 in)**	**0.68 – 1.02 m (26.77 – 40.16 in)**
	Height in feed dispensing position, Elevator (E16)	**0.79 – 1.52 m (31.10 – 59.84 in)**	**0.79 – 1.52 m (31.10 – 59.84 in)**	**0.79 – 1.52 m (31.10 – 59.84 in)**	**0.79 – 1.52 m (31.10 – 59.84 in)**	**0.79 – 1.52 m (31.10 – 59.84 in)**	**0.79 – 1.52 m (31.10 – 59.84 in)**
	Height in feed dispensing position, Elevator (E22)	–	–	–	**1.64 – 2.10 m (64.57 – 82.68 in)**	**1.64 – 2.10 m (64.57 – 82.68 in)**	**1.64 – 2.10 m (64.57 – 82.68 in)**

VM-1 B and VM-1 B X



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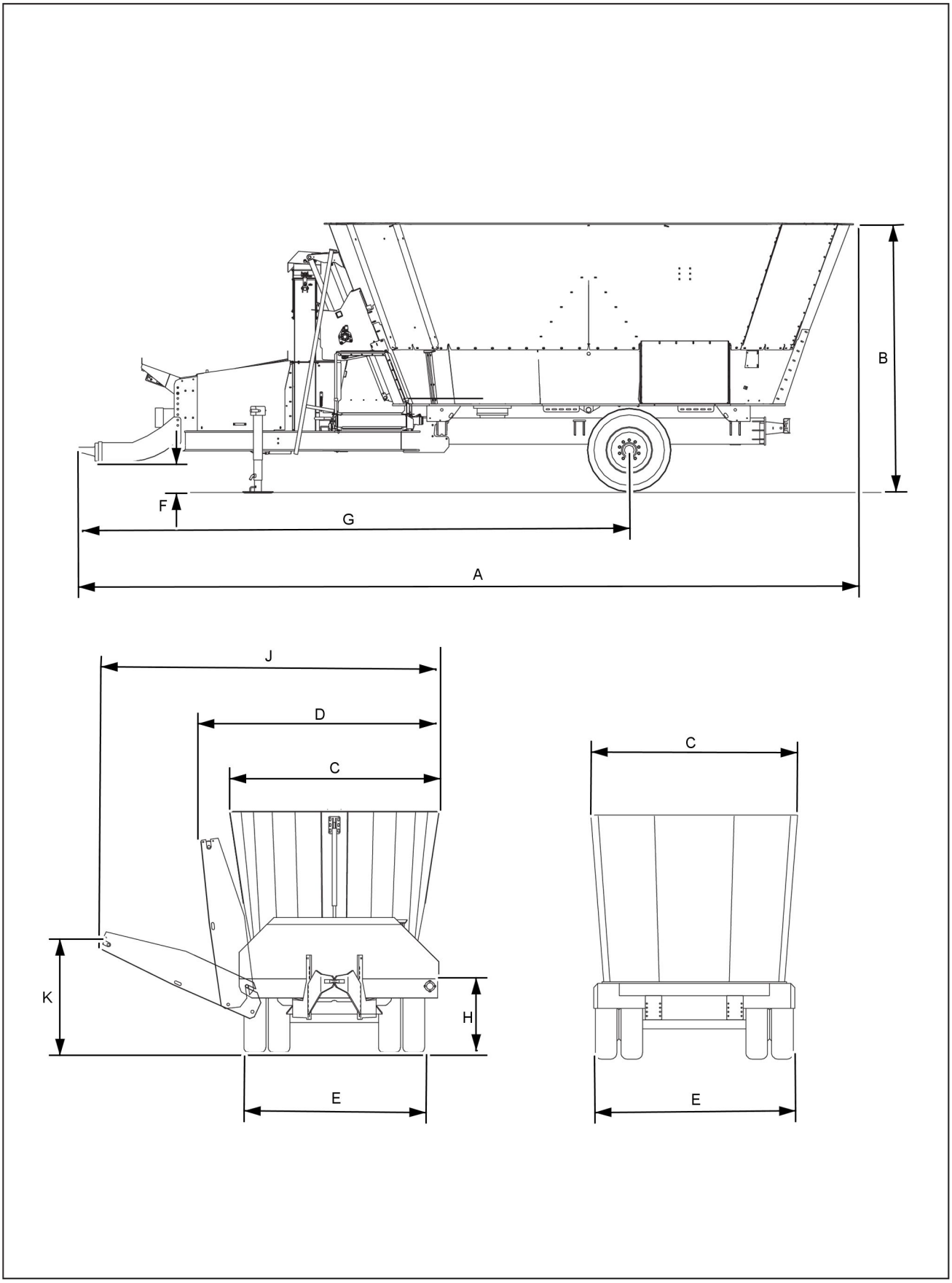
Dimension	Description	VM 10 -1 B	VM 12 -1 B	VM 14 -1 B	VM 10- 1 B X	VM 12- 1 B X	VM 14- 1 B X
A	Length, Models B and B X	**5.43 m (213.8 in)**	**5.43 m (213.8 in)**	**5.43 m (213.8 in)**	**5.43 m (213.8 in)**	**5.43 m (213.8 in)**	**5.43 m (213.8 in)**
G	Length, Models B and B X	**4.04 m (159.1 in)**	**4.04 m (159.1 in)**	**4.04 m (159.1 in)**	**4.04 m (159.1 in)**	**4.04 m (159.1 in)**	**4.04 m (159.1 in)**
B	Height, Single axle. Tires 30x11.5-14.5	**2.31 m (90.9 in)**	**2.48 m (97.6 in)**	**2.83 m (111.4 in)**	**2.56 m (100.8 in)**	**2.84 m (111.8 in)**	–
	Height, Single axle. Tires 400/60 -15.5	**2.44 m (96.1 in)**	**2.61 m (102.8 in)**	**2.96 m (116.5 in)**	**2.71 m (106.7 in)**	**2.99 m (117.7 in)**	–
	Height, Single axle. Tires 205/65 R17.5	**2.32 m (91.3 in)**	**2.49 m (98.0 in)**	**2.84 m (111.8 in)**	**2.58 m (101.6 in)**	**2.86 m (112.6 in)**	**3.16 m (124.4 in)**
	Height, Single axle. Tires 235/75 R17.5	**2.36 m (92.9 in)**	**2.53 m (99.6 in)**	**2.88 m (113.4 in)**	**2.63 m (103.5 in)**	**2.91 m (114.6 in)**	**3.21 m (126.4 in)**
	Height, Single axle. Tires 435/50 R19.5	–	–	–	**2.77 m (109.1 in)**	**3.05 m (120.1 in)**	**3.35 m (131.9 in)**
C	Transport width, B	**2.47 m (97.2 in)**	**2.47 m (97.2 in)**	**2.47 m (97.2 in)**	–	–	–
	Transport width, BX	–	–	–	**2.47 m (97.2 in)**	**2.47 m (97.2 in)**	**2.47 m (97.2 in)**
D	Transport width, with elevator (BE09)	**2.52 m (99.2 in)**	**2.52 m (99.2 in)**	**2.52 m (99.2 in)**	–	–	–
	Transport width, with elevator (BE16)	**2.58 m (101.6 in)**	**2.58 m (101.6 in)**	**2.58 m (101.6 in)**	–	–	–
E	Track width, Tires 30x11.5-14.5	**1.88 m (74.0 in)**	**1.88 m (74.0 in)**	–	**1.88 m (74.0 in)**	**1.88 m (74.0 in)**	–
	Track width, Tires 400/60 R15.5	**2.04 m (80.3 in)**	**2.04 m (80.3 in)**	–	**2.04 m (80.3 in)**	**2.04 m (80.3 in)**	–
	Track width, Tires 205/65 R17.5	**2.11 m (83.1 in)**	**2.11 m (83.1 in)**	**2.11 m (83.1 in)**	**2.11 m (83.1 in)**	**2.11 m (83.1 in)**	**2.11 m (83.1 in)**
	Track width, Tires 235/75 R17.5	**2.14 m (84.3 in)**	**2.14 m (84.3 in)**	**2.14 m (84.3 in)**	**2.14 m (84.3 in)**	**2.14 m (84.3 in)**	**2.14 m (84.3 in)**
	Track width, Tires 435/50 R19.5	**2.05 m (80.7 in)**	**2.05 m (80.7 in)**	**2.05 m (80.7 in)**	**2.05 m (80.7 in)**	**2.05 m (80.7 in)**	**2.05 m (80.7 in)**
F	Clearance	**0.3 m (11.8 in)**	**0.3 m (11.8 in)**	**0.3 m (11.8 in)**	**0.3 m (11.8 in)**	**0.3 m (11.8 in)**	**0.33 m (13.0 in)**
J	Width in feed dispensing position, Elevator (BE09)	**3.05 m (120.1 in)**	**3.05 m (120.1 in)**	**3.05 m (120.1 in)**	–	–	–
	Width in feed dispensing position, Elevator (BE16)	**3.71 m (146.1 in)**	**3.71 m (146.1 in)**	**3.71 m (146.1 in)**	–	–	–
	Width in feed dispensing position, with BX	–	–	–	**2.87 m (113.0 in)**	**2.87 m (113.0 in)**	**2.87 m (113.0 in)**
O	Width in feed dispensing position, with BX	–	–	–	**0.68 m (26.8 in)**	**0.68 m (26.8 in)**	**0.68 m (26.8 in)**
H	Height in feed dispensing position, with cross conveyor	**0.7 m (27.6 in)**	**0.7 m (27.6 in)**	**0.71 m (28.0 in)**	**0.7 m (27.6 in)**	**0.7 m (27.6 in)**	**0.7 m (27.6 in)**
K	Height in feed dispensing position, Elevator (BE09)	**0.78 – 0.96 m (30.71 – 37.80 in)**	**0.78 – 0.96 m (30.71 – 37.80 in)**	**0.79 – 0.97 m (31.10 – 38.19 in)**	–	–	–
	Height in feed dispensing position, Elevator (BE16)	**1.05 – 1.37 m (41.34 – 53.94 in)**	**1.05 – 1.37 m (41.34 – 53.94 in)**	**1.06 – 1.38 m (41.73 – 54.33 in)**	–	–	–
	Height in feed dispensing position, with BX	–	–	–	**1.2 m (47.2 in)**	**1.2 m (47.2 in)**	**1.2 m (47.2 in)**

VM-1 B M

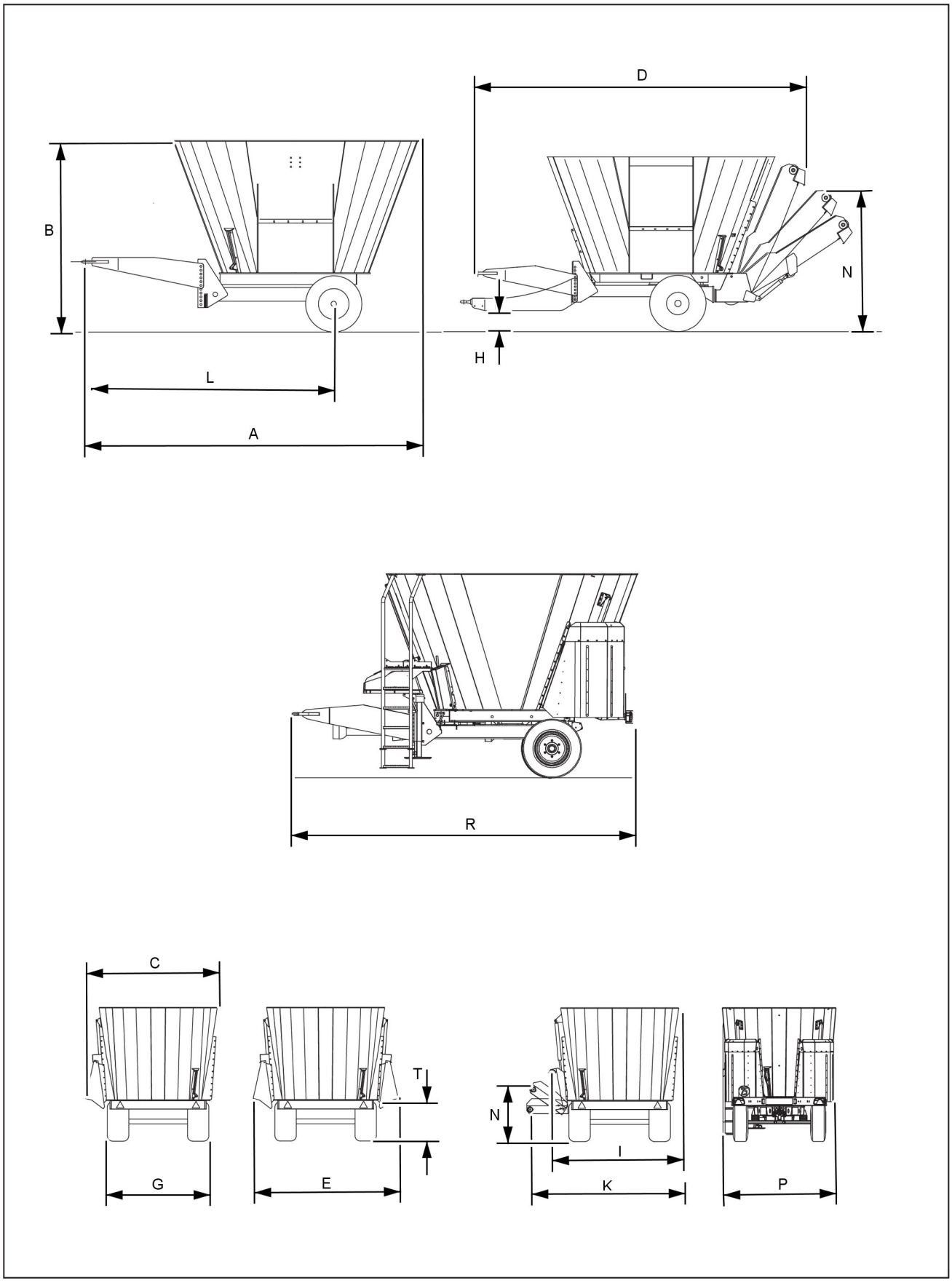


ZEIL21HT00177HA 3

Dimension	Description	VM 10 -1 B M	VM 12 -1 B M	VM 14 -1 B M
A	Length	**6.05 m** (**238.2 in**)	**6.05 m** (**238.2 in**)	**6.05 m** (**238.2 in**)
G	Length	**4.66 m** (**183.5 in**)	**4.66 m** (**183.5 in**)	**4.66 m** (**183.5 in**)
B	Height, Single axle. Tires 30x11.5-14.5	**2.56 m** (**100.8 in**)	**2.84 m** (**111.8 in**)	–
	Height, Single axle. Tires 400/60 -15.5	**2.71 m** (**106.7 in**)	**2.99 m** (**117.7 in**)	–
	Height, Single axle. Tires 205/65 R17.5	**2.58 m** (**101.6 in**)	**2.86 m** (**112.6 in**)	**3.16 m** (**124.4 in**)
	Height, Single axle. Tires 235/75 R17.5	**2.63 m** (**92.9 in**)	**2.91 m** (**114.6 in**)	**3.21 m** (**126.4 in**)
	Height, Single axle. Tires 435/50 R19.5	**2.77 m** (**92.9 in**)	**3.05 m** (**114.6 in**)	**3.35 m** (**131.9 in**)
C	Transport width, with cross conveyor	**2.47 m** (**97.2 in**)	**2.47 m** (**97.2 in**)	**2.47 m** (**97.2 in**)
D	Transport width, with elevator (BE09)	**2.52 m** (**99.2 in**)	**2.52 m** (**99.2 in**)	**2.52 m** (**99.2 in**)
	Transport width, with elevator (BE16)	**2.58 m** (**101.6 in**)	**2.58 m** (**101.6 in**)	**2.58 m** (**101.6 in**)
E	Track width, Tires 30x11.5-14.5	**1.88 m** (**74.0 in**)	**1.88 m** (**74.0 in**)	–
	Track width, Tires 400/60 R15.5	**2.04 m** (**80.3 in**)	**2.04 m** (**80.3 in**)	–
	Track width, Tires 205/65 R17.5	**2.11 m** (**83.1 in**)	**2.11 m** (**83.1 in**)	**2.11 m** (**83.1 in**)
	Track width, Tires 235/75 R17.5	**2.14 m** (**84.3 in**)	**2.14 m** (**84.3 in**)	**2.14 m** (**84.3 in**)
	Track width, Tires 435/50 R19.5	**2.05 m** (**80.7 in**)	**2.05 m** (**80.7 in**)	**2.05 m** (**80.7 in**)
F	Clearance	**0.3 m** (**11.8 in**)	**0.3 m** (**11.8 in**)	**0.3 m** (**11.8 in**)
J	Width in feed dispensing position, Elevator (BE09)	**3.05 m** (**120.1 in**)	**3.05 m** (**120.1 in**)	**3.05 m** (**120.1 in**)
	Width in feed dispensing position, Elevator (BE16)	**3.71 m** (**146.1 in**)	**3.71 m** (**146.1 in**)	**3.71 m** (**146.1 in**)
H	Height in feed dispensing position, with cross conveyor	**0.7 m** (**27.6 in**)	**0.7 m** (**27.6 in**)	**0.71 m** (**28.0 in**)
K	Height in feed dispensing position, Elevator (BE09)	**0.78 – 0.96 m** (**30.71 – 37.80 in**)	**0.78 – 0.96 m** (**30.71 – 37.80 in**)	**0.79 – 0.97 m** (**31.10 – 38.19 in**)
	Height in feed dispensing position, Elevator (BE16)	**1.05 – 1.37 m** (**41.34 – 53.94 in**)	**1.05 – 1.37 m** (**41.34 – 53.94 in**)	**1.06 – 1.38 m** (**41.73 – 54.33 in**)

Dimensions (for VM-2 models)

VM-2 S and VM-2

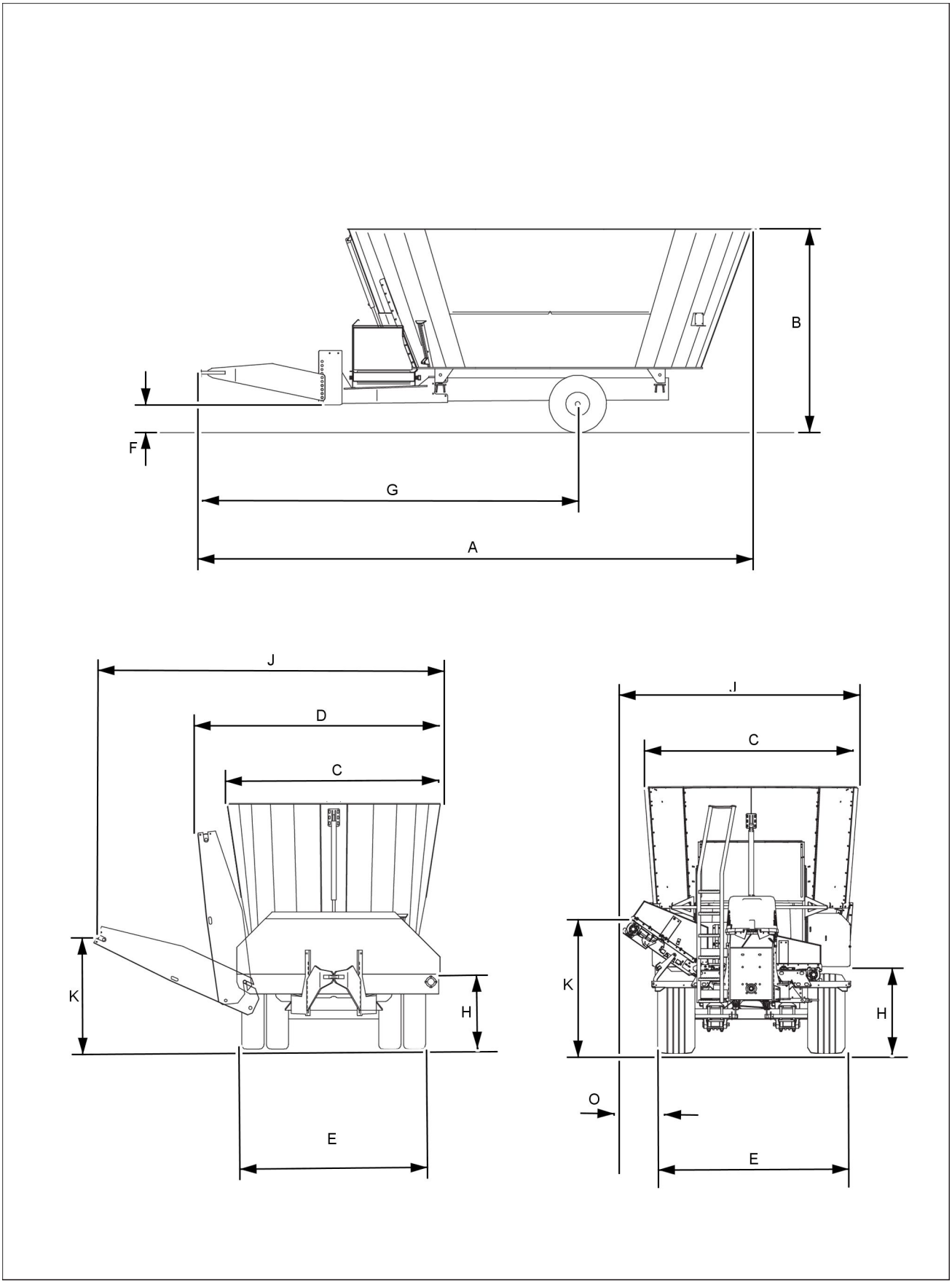


ZEIL21HT00178HA 1

Dimension	Description	VM 12-2 S	VM 14-2 S	VM 16-2 S	VM 18-2 S	VM 20-2 S	VM 20- 2	VM 22- 2	VM 27- 2	VM 30- 2
A	Length, standard	**6.25 m (246.1 in)**	**6.31 m (248.4 in)**	**6.31 m (248.4 in)**	**6.31 m (248.4 in)**	**6.5 m (255.9 in)**	**7.2 m (283.5 in)**	**7.2 m (283.5 in)**	**7.2 m (283.5 in)**	**7.31 m (287.8 in)**
L	Length, standard	**4.08 m (160.6 in)**	**4.08 m (160.6 in)**	**4.08 m (160.6 in)**	**4.08 m (160.6 in)**	**4.08 m (160.6 in)**	**4.68 m (184.3 in)**	**4.68 m (184.3 in)**	**4.68 m (184.3 in)**	**4.68 m (184.3 in)**
D	Length, with elevator	–	–	–	–	–	**7.88 m (310.2 in)**	**7.88 m (310.2 in)**	**7.88 m (310.2 in)**	**7.88 m (310.2 in)**
R	Length, with corner doors	**6.3 m (248.0 in)**	**6.3 m (248.0 in)**	**6.3 m (248.0 in)**	**6.3 m (248.0 in)**	**6.46 m (254.3 in)**	–	–	–	–
B	Height, Single axle. Tires 30x11.5-14.5	**2.34 m (92.1 in)**	–	–	–	–	–	–	–	–
	Height, Single axle. Tires 205/65 R17.5	–	**2.53 m (99.6 in)**	**2.71 m (106.7 in)**	**2.88 m (113.4 in)**	**3.03 m (119.3 in)**	–	–	–	–
	Height, Single axle. Tires 205/65 R17.5 Low version (L)	–	**2.47 m (97.2 in)**	**2.65 m (104.3 in)**	**2.82 m (111.0 in)**	**2.97 m (116.9 in)**	–	–	–	–
	Height, Single axle. Tires 235/75 R17.5	–	**2.57 m (101.2 in)**	**2.75 m (108.3 in)**	**2.92 m (115.0 in)**	**3.07 m (120.9 in)**	**2.67 m (105.1 in)**	**2.87 m (113.0 in)**	–	–
	Height, Single axle. Tires 425/40 B17	–	**2.38 m (101.2 in)**	**2.57 m (101.2 in)**	**2.75 m (108.3 in)**	–	–	–	–	–
	Height, Single axle. Tires 435/50 R19.5	–	**2.68 m (105.5 in)**	**2.86 m (112.6 in)**	**3.03 m (119.3 in)**	**3.18 m (125.2 in)**	–	**2.96 m (116.5 in)**	–	–
	Height, Bogie/ tandem. Tires 30x11.5-14.5	–	**2.65 m (104.3 in)**	**2.83 m (111.4 in)**	**3.0 m (118.1 in)**	**3.15 m (124.0 in)**	–	–	–	–
	Height, Bogie/ tandem. Tires 400/60 R15.5	–	**2.71 m (106.7 in)**	**2.89 m (113.8 in)**	**3.06 m (120.5 in)**	**3.21 m (126.4 in)**	–	–	–	–
	Height, Bogie/ tandem. Tires 435/50 R19.5	–	–	–	–	–	–	**3.08 m (121.3 in)**	**3.43 m (135.0 in)**	**3.63 m (142.9 in)**
I	Transport width, with elevator (E08)	**2.5 m (98.4 in)**	**2.5 m (98.4 in)**	**2.5 m (98.4 in)**	**2.5 m (98.4 in)**	**2.64 m (103.9 in)**	**2.77 m (109.1 in)**	**2.77 m (109.1 in)**	**2.77 m (109.1 in)**	**2.91 m (114.6 in)**
	Transport width, with elevator (E22)	**2.87 m (113.0 in)**	**2.87 m (113.0 in)**	**2.87 m (113.0 in)**	**2.87 m (113.0 in)**	**3.01 m (118.5 in)**	**3.15 m (124.0 in)**	**3.15 m (124.0 in)**	**3.15 m (124.0 in)**	**3.29 m (129.5 in)**
C	Transport width, one door	**2.29 m (90.2 in)**	**2.29 m (90.2 in)**	**2.29 m (90.2 in)**	**2.29 m (90.2 in)**	**2.36 m (92.9 in)**	**2.52 m (99.2 in)**	**2.52 m (99.2 in)**	**2.52 m (99.2 in)**	**2.77 m (109.1 in)**
E	Transport width, two doors	**2.36 m (92.9 in)**	**2.36 m (92.9 in)**	**2.36 m (92.9 in)**	**2.36 m (92.9 in)**	**2.36 m (92.9 in)**	**2.54 m (100.0 in)**	**2.54 m (100.0 in)**	**2.54 m (100.0 in)**	**2.77 m (109.1 in)**
P	Transport width, with corner doors	**2.24 m (88.2 in)**	**2.24 m (88.2 in)**	**2.24 m (88.2 in)**	**2.24 m (88.2 in)**	**2.36 m (92.9 in)**	–	–	–	–
G	Transport width, Single axle. Tires 30x11.5-14.5	**1.68 m (66.1 in)**	–	–	–	–	–	–	–	–
	Transport width, Single axle. Tires 205/65 R17.5	–	**1.91 m (75.2 in)**	**1.91 m (75.2 in)**	**1.91 m (75.2 in)**	**1.91 m (75.2 in)**	–	–	–	–
	Transport width, Single axle. Tires 235/75 R17.5	–	**1.94 m (76.4 in)**	**1.94 m (76.4 in)**	**1.94 m (76.4 in)**	**1.94 m (76.4 in)**	**2.25 m (88.6 in)**	**2.25 m (88.6 in)**	–	–
	Transport width, Single axle. Tires 435/50 R19.5	–	**1.85 m (72.8 in)**	**1.85 m (72.8 in)**	**1.85 m (72.8 in)**	**1.85 m (72.8 in)**	–	**2.15 m (84.6 in)**	–	–
	Transport width, Single axle. Tires 425/40 B17	**1.75 m (68.9 in)**	**1.75 m (68.9 in)**	**1.75 m (68.9 in)**	–	–	–	–	–	–
	Transport width, Bogie Tires 30x11.5-14.5	–	**1.68 m (66.1 in)**	**1.68 m (66.1 in)**	**1.68 m (66.1 in)**	**1.68 m (66.1 in)**	–	–	–	–
	Transport width, Bogie Tires 400/60 R15.5	–	**1.84 m (72.4 in)**	**1.84 m (72.4 in)**	**1.84 m (72.4 in)**	**1.84 m (72.4 in)**	–	–	–	–
	Transport width, Bogie Tires 435/50 R19.5	–	–	–	–	–	–	**2.2 m (86.6 in)**	**2.2 m (86.6 in)**	**2.2 m (86.6 in)**
H	Clearance	**0.32 m (12.6 in)**	**0.36 m (14.2 in)**	**0.36 m (14.2 in)**	**0.36 m (14.2 in)**	**0.41 m (16.1 in)**	**0.2 m (7.9 in)**	**0.28 m (11.0 in)**	**0.33 m (13.0 in)**	**0.33 m (13.0 in)**
K	Width in feed dispensing position, Elevator (E08)	**3.02 m (118.9 in)**	**3.02 m (118.9 in)**	**3.02 m (118.9 in)**	**3.02 m (118.9 in)**	**3.16 m (124.4 in)**	**3.31 m (130.3 in)**	**3.31 m (130.3 in)**	**3.31 m (130.3 in)**	**3.45 m (135.8 in)**
	Width in feed dispensing position, Elevator (E16)	**3.71 m (146.1 in)**	**3.71 m (146.1 in)**	**3.71 m (146.1 in)**	**3.71 m (146.1 in)**	**3.85 m (146.1 in)**	**4.0 m (157.5 in)**	**4.0 m (157.5 in)**	**4.0 m (157.5 in)**	**4.14 m (163.0 in)**
	Width in feed dispensing position, Elevator (E22)	**4.2 m (165.4 in)**	**4.2 m (165.4 in)**	**4.2 m (165.4 in)**	**4.2 m (165.4 in)**	**4.34 m (170.9 in)**	**4.49 m (176.8 in)**	**4.49 m (176.8 in)**	**4.49 m (176.8 in)**	**4.49 m (176.8 in)**
P	Width in feed dispensing position, corner doors	**2.24 m (88.2 in)**	**2.24 m (88.2 in)**	**2.24 m (88.2 in)**	**2.24 m (88.2 in)**	**2.35 m (92.5 in)**	–	–	–	–
T	Height in feed dispensing position, Direct (base plate)	**0.84 m (33.1 in)**	**0.84 m (33.1 in)**	**0.84 m (33.1 in)**	**0.84 m (33.1 in)**	**0.93 m (36.6 in)**	**0.81 m (31.9 in)**	**0.86 m (33.9 in)**	**1.05 m (41.3 in)**	**1.05 m (41.3 in)**

Dimen-sion	Description	VM 12-2 S	VM 14-2 S	VM 16-2 S	VM 18-2 S	VM 20-2 S	VM 20- 2	VM 22- 2	VM 27- 2	VM 30- 2
N	Height in feed dispensing position, Elevator (E08)	**0.77 – 1.11 m (30.31 – 43.70 in)**	**0.77 – 1.11 m (30.31 – 43.70 in)**	**0.77 – 1.11 m (30.31 – 43.70 in)**	**0.77 – 1.11 m (30.31 – 43.70 in)**	**0.86 – 1.2 m (33.86 – 47.24 in)**	**0.74 – 1.08 m (29.13 – 42.52 in)**	**0.79 – 1.13 m (31.10 – 44.49 in)**	**0.98 – 1.32 m (38.58 – 51.97 in)**	**0.98 – 1.32 m (38.58 – 51.97 in)**
	Height in feed dispensing position, Elevator (E16)	**0.88 – 1.61 m (34.65 – 63.39 in)**	**0.88 – 1.61 m (34.65 – 63.39 in)**	**0.88 – 1.61 m (34.65 – 63.39 in)**	**0.88 – 1.61 m (34.65 – 63.39 in)**	**0.97 – 1.7 m (38.19 – 66.93 in)**	**0.85 – 1.58 m (33.46 – 62.20 in)**	**0.9 – 1.63 m (35.43 – 64.17 in)**	**1.09 – 1.82 m (42.91 – 71.65 in)**	**1.09 – 1.82 m (42.91 – 71.65 in)**
	Height in feed dispensing position, Elevator (E22)	**1.66 – 2.12 m (65.35 – 83.46 in)**	**1.66 – 2.12 m (65.35 – 83.46 in)**	**1.66 – 2.12 m (65.35 – 83.46 in)**	**1.66 – 2.12 m (65.35 – 83.46 in)**	**1.75 – 2.21 m (68.90 – 87.01 in)**	**1.63 – 2.09 m (64.17 – 82.28 in)**	**1.68 – 2.14 m (66.14 – 84.25 in)**	**1.87 – 2.33 m (73.62 – 91.73 in)**	**1.87 – 2.33 m (73.62 – 91.73 in)**

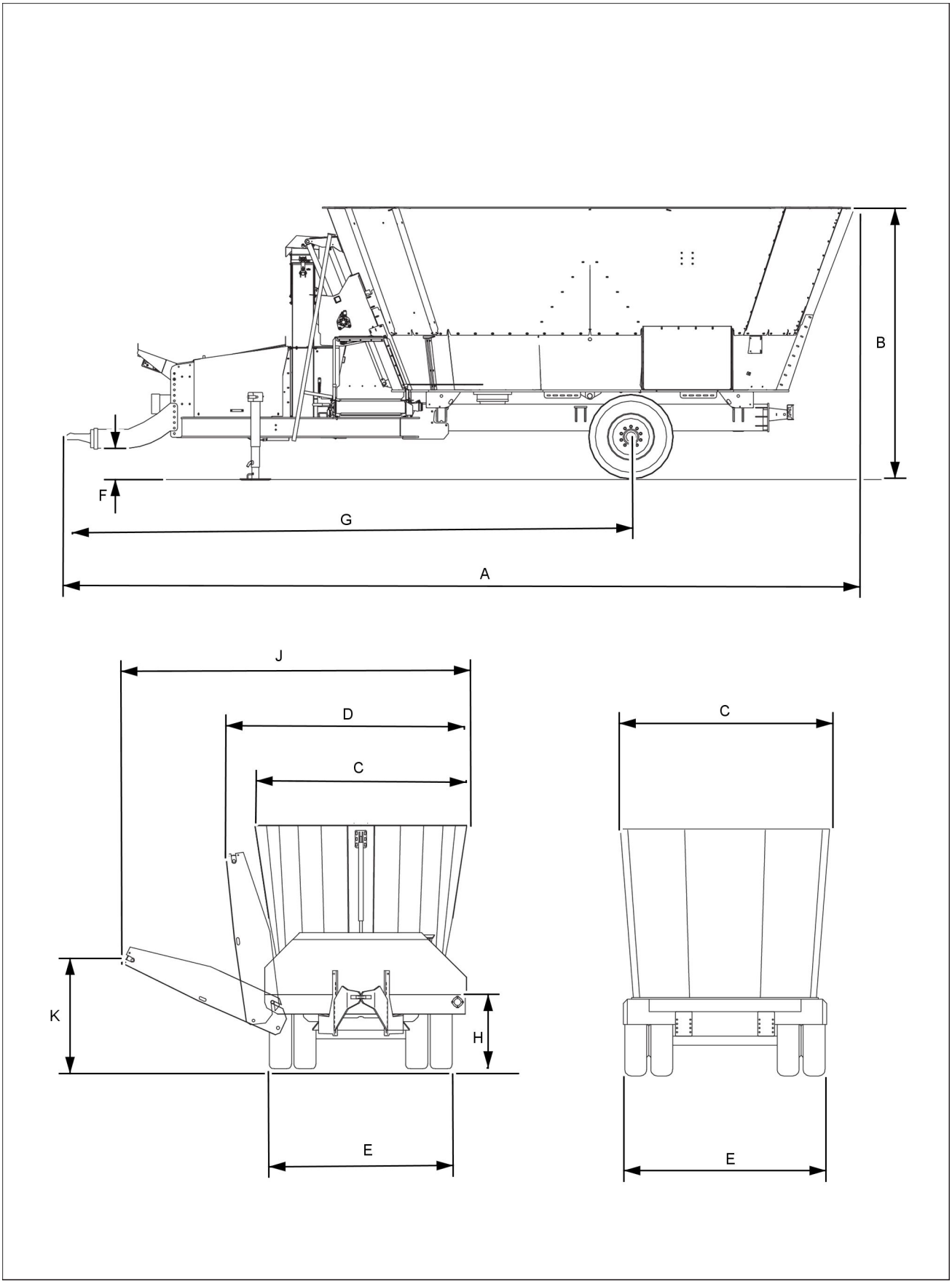
VM-2 SB and VM-2 SB X



ZEIL21HT00181HA 2

Dimension	Description	VM 14 -2 SB	VM 16 -2 SB	VM 18 -2 SB	VM 20 -2 SB	VM 14- 2 SB X	VM 16- 2 SB X	VM 18- 2 SB X	VM 20- 2 SB X
A	Length, Models SB and SB X	6.98 m (274.8 in)	6.98 m (274.8 in)	6.98 m (274.8 in)	7.18 m (282.7 in)	6.98 m (274.8 in)	6.98 m (274.8 in)	6.98 m (274.8 in)	7.18 m (282.7 in)
G	Length, Models SB and SB X	4.76 m (187.4 in)	4.76 m (187.4 in)	4.76 m (187.4 in)	4.76 m (187.4 in)	4.76 m (187.4 in)	4.76 m (187.4 in)	4.76 m (187.4 in)	4.76 m (187.4 in)
L	Length, with corner doors	6.94 m (273.2 in)	6.94 m (273.2 in)	6.94 m (273.2 in)	7.08 m (278.7 in)	–	–	–	–
B	Height, Single axle. Tires 205/65 R17.5	2.53 m (99.6 in)	2.71 m (106.7 in)	2.88 m (113.4 in)	3.03 m (119.3 in)	2.53 m (99.6 in)	2.71 m (106.7 in)	2.88 m (113.4 in)	3.03 m (119.3 in)
	Height, Single axle. Tires 205/65 R17.5 Low version (L)	2.47 m (97.2 in)	2.65 m (104.3 in)	2.82 m (111.0 in)	2.97 m (116.9 in)	2.47 m (97.2 in)	2.65 m (104.3 in)	2.82 m (111.0 in)	2.97 m (116.9 in)
	Height, Single axle. Tires 235/75 R17.5	2.57 m (101.2 in)	2.75 m (108.3 in)	2.92 m (115.0 in)	3.07 m (120.9 in)	2.57 m (101.2 in)	2.75 m (108.3 in)	2.92 m (115.0 in)	3.07 m (120.9 in)
	Height, Single axle. Tires 435/50 R19.5	2.68 m (105.5 in)	2.86 m (112.6 in)	3.03 m (119.3 in)	3.18 m (125.2 in)	2.68 m (105.5 in)	2.86 m (112.6 in)	3.03 m (119.3 in)	3.18 m (125.2 in)
	Height, Bogie Tires 30x11.5-14.5	2.65 m (104.3 in)	2.83 m (111.4 in)	3.0 m (118.1 in)	3.15 m (124.0 in)	2.65 m (104.3 in)	2.83 m (111.4 in)	3.0 m (118.1 in)	3.15 m (124.0 in)
	Height, Bogie Tires 400/60 R15.5	2.71 m (106.7 in)	2.89 m (113.8 in)	3.06 m (120.5 in)	3.21 m (126.4 in)	2.71 m (106.7 in)	2.89 m (113.8 in)	3.06 m (120.5 in)	3.21 m (126.4 in)
C	Transport width, SB	2.24 m (88.2 in)	2.24 m (88.2 in)	2.47 m (97.2 in)	2.35 m (92.5 in)	–	–	–	–
	Transport width, SBX	–	–	–	–	2.45 m (96.5 in)	2.45 m (96.5 in)	2.45 m (96.5 in)	2.45 m (96.5 in)
D	Transport width, with elevator (BE09)	2.45 m (96.5 in)	2.45 m (96.5 in)	2.45 m (96.5 in)	2.59 m (102.0 in)	–	–	–	–
	Transport width, with elevator (BE16)	2.54 m (100.0 in)	2.54 m (100.0 in)	2.54 m (100.0 in)	2.68 m (105.5 in)	–	–	–	–
	Transport width, with corner doors	2.24 m (88.2 in)	2.24 m (88.2 in)	2.24 m (88.2 in)	2.35 m (92.5 in)	–	–	–	–
E	Track width, Single axle. Tires 205/65 R17.5	1.91 m (75.2 in)	1.91 m (75.2 in)	1.91 m (75.2 in)	1.91 m (75.2 in)	1.91 m (75.2 in)	1.91 m (75.2 in)	1.91 m (75.2 in)	1.91 m (75.2 in)
	Track width, Single axle. Tires 235/75 R17.5	1.94 m (76.4 in)	1.94 m (76.4 in)	1.94 m (76.4 in)	1.94 m (76.4 in)	1.94 m (76.4 in)	1.94 m (76.4 in)	1.94 m (76.4 in)	1.94 m (76.4 in)
	Track width, Single axle. Tires 435/50 R19.5	1.85 m (72.8 in)	1.85 m (72.8 in)	1.85 m (72.8 in)	1.85 m (72.8 in)	1.85 m (72.8 in)	1.85 m (72.8 in)	1.85 m (72.8 in)	1.85 m (72.8 in)
	Track width, Bogie Tires 30x11.5-14.5	1.68 m (66.1 in)	1.68 m (66.1 in)	1.68 m (66.1 in)	1.68 m (66.1 in)	1.68 m (66.1 in)	1.68 m (66.1 in)	1.68 m (66.1 in)	1.68 m (66.1 in)
	Track width, Bogie Tires 435/50 R19.5	1.84 m (72.4 in)	1.84 m (72.4 in)	1.84 m (72.4 in)	1.84 m (72.4 in)	1.84 m (72.4 in)	1.84 m (72.4 in)	1.84 m (72.4 in)	1.84 m (72.4 in)
F	Clearance	0.33 m (13.0 in)	0.33 m (13.0 in)	0.33 m (13.0 in)	0.41 m (16.1 in)	0.33 m (13.0 in)	0.33 m (13.0 in)	0.33 m (13.0 in)	0.41 m (16.1 in)
J	Width in feed dispensing position, Elevator (BE09)	2.93 m (115.4 in)	2.93 m (115.4 in)	2.93 m (115.4 in)	3.07 m (120.9 in)	–	–	–	–
	Width in feed dispensing position, Elevator (BE16)	3.62 m (142.5 in)	3.62 m (142.5 in)	3.62 m (142.5 in)	3.76 m (148.0 in)	–	–	–	–
	Width in feed dispensing position, with SB X	–	–	–	–	2.6 m (102.4 in)	2.6 m (102.4 in)	2.6 m (102.4 in)	2.67 m (105.1 in)
O	Width in feed dispensing position, with SB X	–	–	–	–	0.55 m (21.7 in)	0.55 m (21.7 in)	0.55 m (21.7 in)	0.55 m (21.7 in)
M	Width in feed dispensing position, with corner doors	2.24 m (88.2 in)	2.24 m (88.2 in)	2.24 m (88.2 in)	2.35 m (92.5 in)	–	–	–	–
H	Height in feed dispensing position, Model SB	0.77 m (30.3 in)	0.77 m (30.3 in)	0.77 m (30.3 in)	0.81 m (31.9 in)	–	–	–	–
	Height in feed dispensing position, Model SB X	–	–	–	–	0.72 m (28.3 in)	0.72 m (28.3 in)	0.72 m (28.3 in)	0.72 m (28.3 in)
K	Height in feed dispensing position, Elevator (BE09)	0.79 – 1.04 m (31.10 – 40.94 in)	0.79 – 1.04 m (31.10 – 40.94 in)	0.79 – 1.04 m (31.10 – 40.94 in)	0.95 – 1.08 m (37.40 – 42.52 in)	–	–	–	–
	Height in feed dispensing position, Elevator (BE16)	1.0 – 1.45 m (39.37 – 57.09 in)	1.0 – 1.45 m (39.37 – 57.09 in)	1.0 – 1.45 m (39.37 – 57.09 in)	1.26 – 1.51 m (49.61 – 59.45 in)	–	–	–	–
	Height in feed dispensing position, with SB X	–	–	–	–	1.24 m (48.8 in)	1.24 m (48.8 in)	1.24 m (48.8 in)	1.24 m (48.8 in)

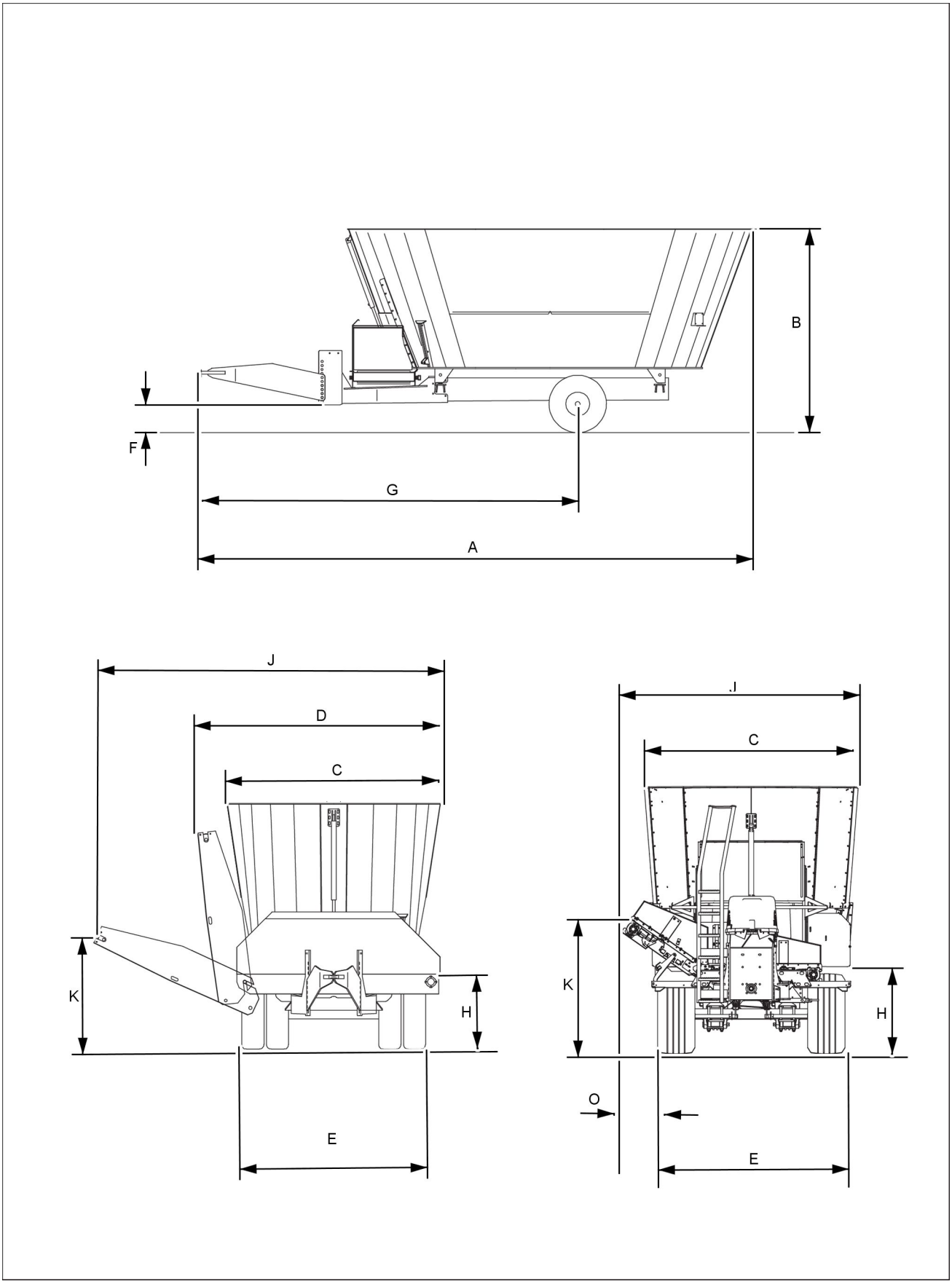
VM-2 SB M



ZEIL21HT00180HA 3

Dimension	Description	VM 14 -2 SB M	VM 16 -2 SB M	VM 18 -2 SB M	VM 20 -2 SB M
A	Length	**7.6 m (299.2 in)**	**7.6 m (299.2 in)**	**7.6 m (299.2 in)**	**7.8 m (307.1 in)**
G	Length	**5.38 m (211.8 in)**	**5.38 m (211.8 in)**	**5.38 m (211.8 in)**	**5.38 m (211.8 in)**
B	Height, Single axle. Tires 205/65 R17.5	**2.53 m (99.6 in)**	**2.71 m (106.7 in)**	**2.88 m (113.4 in)**	**3.03 m (119.3 in)**
	Height, Single axle. Tires 205/65 R17.5 Low version (L)	**2.47 m (97.2 in)**	**2.65 m (104.3 in)**	**2.82 m (111.0 in)**	**2.97 m (116.9 in)**
	Height, Single axle. Tires 235/75 R17.5	**2.57 m (101.2 in)**	**2.75 m (108.3 in)**	**2.92 m (115.0 in)**	**3.07 m (120.9 in)**
	Height, Single axle. Tires 435/50 R19.5	**2.68 m (105.5 in)**	**2.86 m (112.6 in)**	**3.03 m (119.3 in)**	**3.18 m (125.2 in)**
	Height, Bogie Tires 30x11.5-14.5	**2.65 m (104.3 in)**	**2.83 m (111.4 in)**	**3.0 m (118.1 in)**	**3.15 m (124.0 in)**
	Height, Bogie Tires 400/60 R15.5	**2.71 m (106.7 in)**	**2.89 m (113.8 in)**	**3.06 m (120.5 in)**	**3.21 m (126.4 in)**
C	Transport width, with cross conveyor SB	**2.24 m (88.2 in)**	**2.24 m (88.2 in)**	**2.24 m (88.2 in)**	**2.35 m (92.5 in)**
D	Transport width, with elevator (BE09)	**2.45 m (96.5 in)**	**2.45 m (96.5 in)**	**2.45 m (96.5 in)**	**2.59 m (102.0 in)**
	Transport width, with elevator (BE16)	**2.54 m (100.0 in)**	**2.54 m (100.0 in)**	**2.54 m (100.0 in)**	**2.68 m (105.5 in)**
E	Track width, Single axle. Tires 205/65 R17.5	**1.91 m (75.2 in)**	**1.91 m (75.2 in)**	**1.91 m (75.2 in)**	**1.91 m (75.2 in)**
	Track width, Single axle. Tires 235/75 R17.5	**1.94 m (76.4 in)**	**1.94 m (76.4 in)**	**1.94 m (76.4 in)**	**1.94 m (76.4 in)**
	Track width, Single axle. Tires 435/50 R19.5	**1.85 m (72.8 in)**	**1.85 m (72.8 in)**	**1.85 m (72.8 in)**	**1.85 m (72.8 in)**
	Track width, Bogie Tires 30x11.5-14.5	**1.68 m (66.1 in)**	**1.68 m (66.1 in)**	**1.68 m (66.1 in)**	**1.68 m (66.1 in)**
	Track width, Bogie Tires 400/60 R15.5	**1.84 m (72.4 in)**	**1.84 m (72.4 in)**	**1.84 m (72.4 in)**	**1.84 m (72.4 in)**
F	Clearance	**0.33 m (13.0 in)**	**0.33 m (13.0 in)**	**0.33 m (13.0 in)**	**0.41 m (16.1 in)**
J	Width in feed dispensing position, Elevator (BE09)	**2.93 m (115.4 in)**	**2.93 m (115.4 in)**	**2.93 m (115.4 in)**	**3.07 m (120.9 in)**
	Width in feed dispensing position, Elevator (BE16)	**3.62 m (142.5 in)**	**3.62 m (142.5 in)**	**3.62 m (142.5 in)**	**3.76 m (148.0 in)**
H	Height in feed dispensing position, with cross conveyor	**0.77 m (30.3 in)**	**0.77 m (30.3 in)**	**0.77 m (30.3 in)**	**0.81 m (31.9 in)**
K	Height in feed dispensing position, Elevator (BE09)	**0.79 – 1.04 m (31.10 – 40.94 in)**	**0.79 – 1.04 m (31.10 – 40.94 in)**	**0.79 – 1.04 m (31.10 – 40.94 in)**	**0.95 – 1.08 m (37.40 – 42.52 in)**
	Height in feed dispensing position, Elevator (BE16)	**1.0 – 1.45 m (39.37 – 57.09 in)**	**1.0 – 1.45 m (39.37 – 57.09 in)**	**1.0 – 1.45 m (39.37 – 57.09 in)**	**1.26 – 1.51 m (49.61 – 59.45 in)**

VM-2 B and VM-2 B X

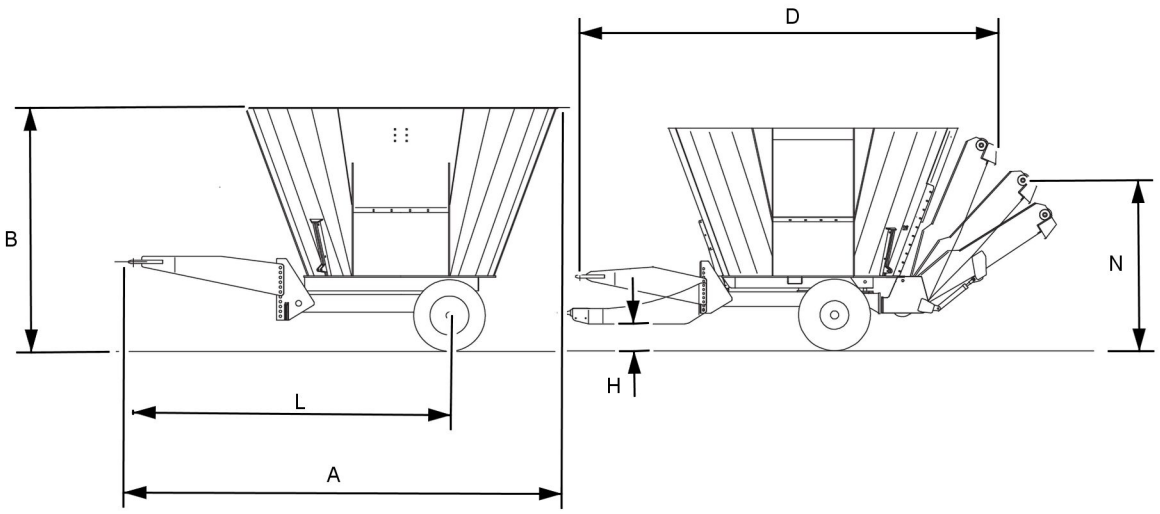


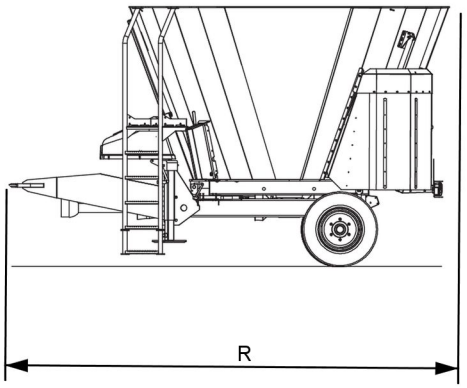
ZEIL21HT00181HA 4

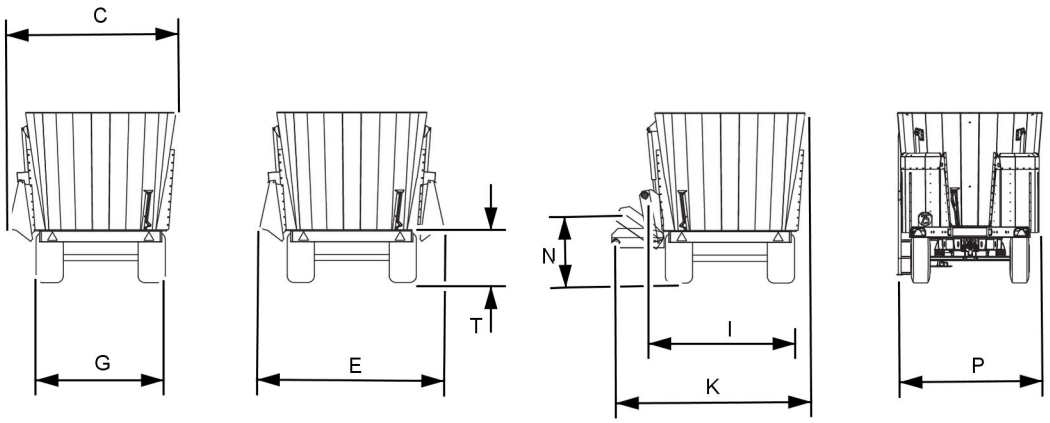
Dimension	Description	VM 20-2B	VM 22-2B	VM 27-2B	VM 30-2B	VM 20-2B X	VM 22-2B X	VM 27-2B X	VM 30-2B X
A	Length, Models B and B X	7.88 m (310.2 in)	7.88 m (310.2 in)	7.88 m (310.2 in)	7.88 m (310.2 in)	7.88 m (310.2 in)	7.88 m (310.2 in)	7.88 m (310.2 in)	7.88 m (310.2 in)
G	Length, Models B and B X	5.35 m (210.6 in)	5.35 m (210.6 in)	5.35 m (210.6 in)	5.35 m (210.6 in)	5.35 m (210.6 in)	5.35 m (210.6 in)	5.35 m (210.6 in)	5.35 m (210.6 in)
B	Height, Single axle. Tires 235/75 R17.5	2.75 m (108.3 in)	–	–	–	2.75 m (108.3 in)	–	–	–
	Height, Single axle. Tires 435/50 R19.5	2.81 m (110.6 in)	2.96 m (116.5 in)	–	–	2.81 m (110.6 in)	2.96 m (116.5 in)	–	–
	Height, Bogie/ tandem. Tires 435/50 R19.5	2.93 m (115.4 in)	3.08 m (121.3 in)	3.43 m (135.0 in)	3.63 m (142.9 in)	2.93 m (115.4 in)	3.08 m (121.3 in)	3.43 m (135.0 in)	3.63 m (142.9 in)
C	Transport width, B	2.49 m (98.0 in)	2.49 m (98.0 in)	2.49 m (98.0 in)	2.76 m (108.7 in)	–	–	–	–
	Transport width, B X	–	–	–	–	2.49 m (98.0 in)	2.49 m (98.0 in)	2.49 m (98.0 in)	2.76 m (108.7 in)
D	Transport width, with elevator (BE09)	2.53 m (99.6 in)	2.53 m (99.6 in)	2.53 m (99.6 in)	2.76 m (108.7 in)	–	–	–	–
	Transport width, with elevator (BE16)	2.58 m (101.6 in)	2.58 m (101.6 in)	2.58 m (101.6 in)	2.76 m (108.7 in)	–	–	–	–
E	Track width, Single axle. Tires 235/75 R17.5	2.3 m (90.6 in)	–	–	–	2.3 m (90.6 in)	–	–	–
	Track width, Single axle. Tires 435/50 R19.5	2.2 m (86.6 in)	2.2 m (86.6 in)	–	–	2.2 m (86.6 in)	2.2 m (86.6 in)	–	–
	Track width, Bogie/ tandem. Tires 435/50 R19.5	2.2 m (86.6 in)	2.2 m (86.6 in)	2.2 m (86.6 in)	2.2 m (86.6 in)	2.2 m (86.6 in)	2.2 m (86.6 in)	2.2 m (86.6 in)	2.2 m (86.6 in)
F	Clearance	0.28 m (11.0 in)	0.28 m (11.0 in)	0.24 m (9.4 in)	0.24 m (9.4 in)	0.28 m (11.0 in)	0.28 m (11.0 in)	0.24 m (9.4 in)	0.24 m (9.4 in)
J	Width in feed dispensing position, Elevator (BE09)	3.05 m (120.1 in)	3.05 m (120.1 in)	3.05 m (120.1 in)	3.2 m (126.0 in)	–	–	–	–
	Width in feed dispensing position, Elevator (BE16)	3.72 m (146.5 in)	3.72 m (146.5 in)	3.72 m (146.5 in)	3.87 m (152.4 in)	–	–	–	–
	Width in feed dispensing position, with SB X	–	–	–	–	2.87 m (113.0 in)	2.87 m (113.0 in)	2.87 m (113.0 in)	2.99 m (117.7 in)
O	Width in feed dispensing position, with SB X	–	–	–	–	0.49 m (19.3 in)	0.49 m (19.3 in)	0.54 m (21.3 in)	0.54 m (21.3 in)
H	Height in feed dispensing position, Model B, direct	0.93 m (36.6 in)	0.93 m (36.6 in)	1.03 m (40.6 in)	1.03 m (40.6 in)	–	–	–	–
	Height in feed dispensing position, Model B X, direct	–	–	–	–	0.91 m (35.8 in)	0.91 m (35.8 in)	1.01 m (39.8 in)	1.01 m (39.8 in)
K	Height in feed dispensing position, Elevator (BE09)	0.94 – 1.13 m (37.01 – 44.49 in)	0.94 – 1.13 m (37.01 – 44.49 in)	1.04 – 1.24 m (40.94 – 48.82 in)	1.04 – 1.24 m (40.94 – 48.82 in)	–	–	–	–
	Height in feed dispensing position, Elevator (BE16)	1.2 – 1.55 m (47.24 – 61.02 in)	1.2 – 1.55 m (47.24 – 61.02 in)	1.35 – 1.65 m (53.15 – 64.96 in)	1.35 – 1.65 m (53.15 – 64.96 in)	–	–	–	–
	Height in feed dispensing position, B X,	–	–	–	–	1.4 m (55.1 in)	1.4 m (55.1 in)	1.5 m (59.1 in)	1.5 m (59.1 in)

Dimensions (for VM-3 models)

VM-3 S and VM-3



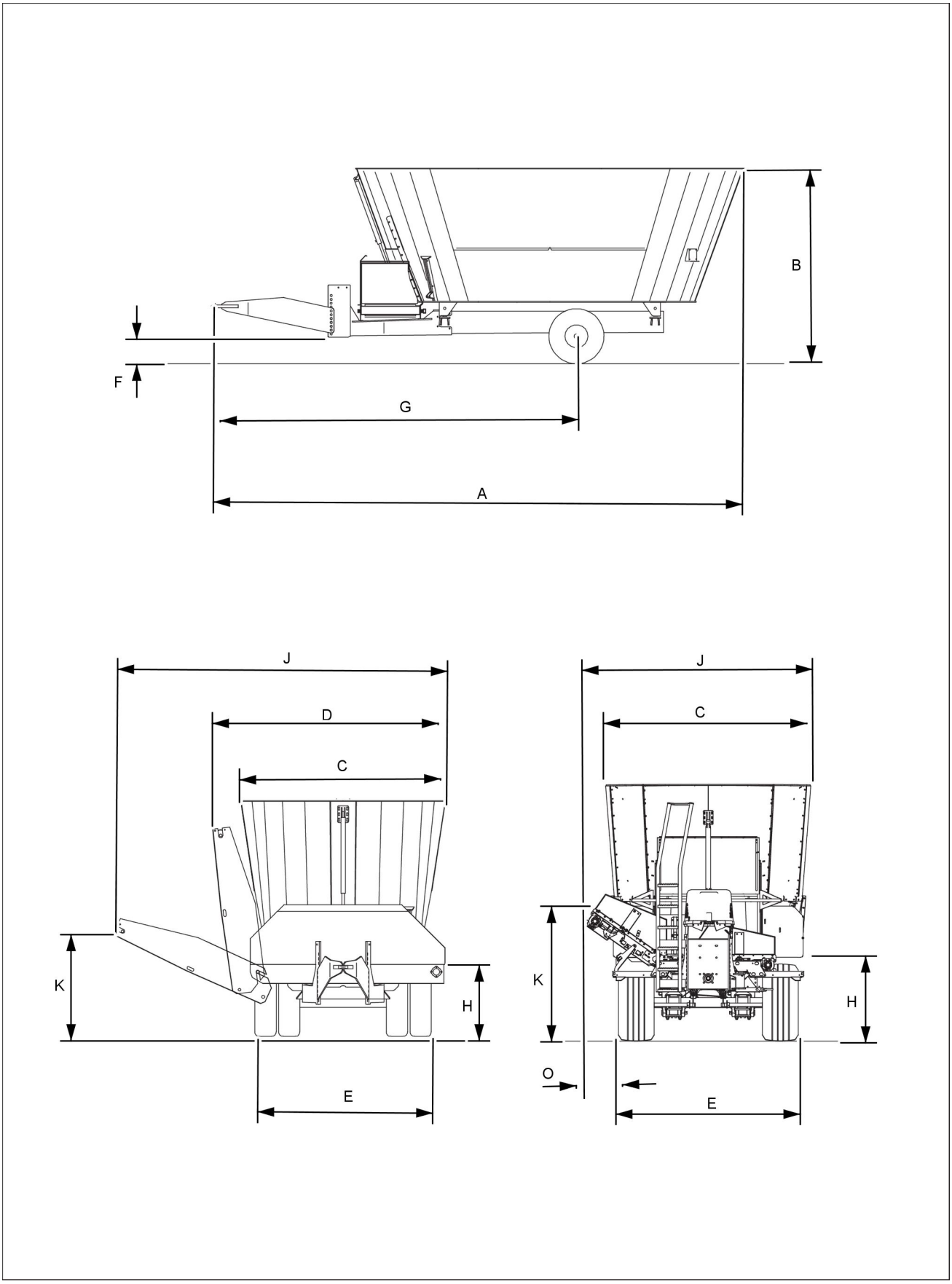




ZEIL21HT00183HA 1

Dimension	Description	VM 21-3 S	VM 24-3 S	VM 26-3 S	VM 28-3 S	VM 29- 3	VM 32- 3	VM 38- 3	VM 45- 3
A	Length, standard	8.61 m (339.0 in)	8.61 m (339.0 in)	8.61 m (339.0 in)	8.83 m (347.6 in)	9.34 m (367.7 in)	9.34 m (367.7 in)	9.34 m (367.7 in)	9.45 m (372.0 in)
D	Length, with elevator	9.3 m (366.1 in)	9.3 m (366.1 in)	9.3 m (366.1 in)	9.3 m (366.1 in)	10.03 m (394.9 in)	10.03 m (394.9 in)	10.03 m (394.9 in)	10.03 m (394.9 in)
L	Length, standard	5.29 m (208.3 in)	5.29 m (208.3 in)	5.29 m (208.3 in)	5.29 m (208.3 in)	5.59 m (220.1 in)	5.59 m (220.1 in)	5.59 m (220.1 in)	5.59 m (220.1 in)
B	Height, Single shaft. Tires 235/75R17.5	2.59 m (102.0 in)	–	–	–	–	–	–	–
	Height, Single shaft. Tires 435/50R19.5	2.68 m (105.5 in)	–	–	–	–	–	–	–
	Height, Tandem. Tires 305/55R22.5	–	2.89 m (113.8 in)	3.05 m (120.1 in)	3.2 m (126.0 in)	–	–	–	–
	Height, Bogie/ tandem. Tires 435/50 R19.5	–	2.89 m (113.8 in)	3.05 m (120.1 in)	3.2 m (126.0 in)	2.93 m (115.4 in)	3.08 m (121.3 in)	3.43 m (135.0 in)	3.63 m (142.9 in)
I	Transport width, with elevator (E08)	2.5 m (98.4 in)	2.5 m (98.4 in)	2.5 m (98.4 in)	2.69 m (105.9 in)	2.86 m (112.6 in)	2.86 m (112.6 in)	2.86 m (112.6 in)	3.0 m (118.1 in)
	Transport width, with elevator (E16)	2.62 m (103.1 in)	2.62 m (103.1 in)	2.62 m (103.1 in)	2.74 m (107.9 in)	2.88 m (113.4 in)	2.88 m (113.4 in)	2.88 m (113.4 in)	3.01 m (118.5 in)
	Transport width, with elevator (E22)	2.87 m (113.0 in)	2.87 m (113.0 in)	2.87 m (113.0 in)	3.01 m (118.5 in)	3.06 m (120.5 in)	3.06 m (120.5 in)	3.06 m (120.5 in)	3.19 m (125.6 in)
C	Transport width, one door	2.29 m (90.2 in)	2.29 m (90.2 in)	2.29 m (90.2 in)	2.35 m (92.5 in)	2.52 m (99.2 in)	2.52 m (99.2 in)	2.52 m (99.2 in)	2.77 m (109.1 in)
	Transport width, with elevator on the rear, without side door	2.22 m (87.4 in)	2.22 m (87.4 in)	2.22 m (87.4 in)	2.35 m (92.5 in)	2.5 m (98.4 in)	2.5 m (98.4 in)	2.5 m (98.4 in)	2.77 m (109.1 in)
E	Transport width, two doors	2.36 m (92.9 in)	2.36 m (92.9 in)	2.36 m (92.9 in)	2.36 m (92.9 in)	2.55 m (100.4 in)	2.55 m (100.4 in)	2.55 m (100.4 in)	2.77 m (109.1 in)
G	Track width, Single shaft, Tires 235/75R17.5	2.14 m (84.3 in)	–	–	–	–	–	–	–
	Track width, Single shaft, Tires 435/50 R19.5	2.05 m (80.7 in)	–	–	–	–	–	–	–
	Track width, Tandem axle. Tires 305/55R22.5	–	1.91 m (75.2 in)	1.91 m (75.2 in)	1.91 m (75.2 in)	–	–	–	–
	Track width, Tandem axle. Tires 435/50 R19.5	–	2.05 m (80.7 in)	2.05 m (80.7 in)	2.05 m (80.7 in)	2.2 m (86.6 in)	2.2 m (86.6 in)	2.2 m (86.6 in)	2.2 m (86.6 in)
H	Clearance	0.36 m (14.2 in)	0.18 m (7.1 in)	0.18 m (7.1 in)	0.18 m (7.1 in)	0.24 m (9.4 in)	0.24 m (9.4 in)	0.24 m (9.4 in)	0.24 m (9.4 in)
K	Width in feed dispensing position, Elevator (E08)	3.02 m (118.9 in)	3.02 m (118.9 in)	3.02 m (118.9 in)	3.16 m (124.4 in)	3.31 m (130.3 in)	3.31 m (130.3 in)	3.31 m (130.3 in)	3.45 m (135.8 in)
	Width in feed dispensing position, Elevator (E16)	3.71 m (146.1 in)	3.71 m (146.1 in)	3.71 m (146.1 in)	3.85 m (151.6 in)	4.0 m (157.5 in)	4.0 m (157.5 in)	4.0 m (157.5 in)	4.14 m (163.0 in)
	Width in feed dispensing position, Elevator (E22)	4.2 m (165.4 in)	4.2 m (165.4 in)	4.2 m (165.4 in)	4.34 m (170.9 in)	4.49 m (176.8 in)	4.49 m (176.8 in)	4.49 m (176.8 in)	4.49 m (176.8 in)
T	Height in feed dispensing position, Direct (base plate)	0.86 m (33.9 in)	0.96 m (37.8 in)	0.96 m (37.8 in)	0.96 m (37.8 in)	1.05 m (41.3 in)	1.05 m (41.3 in)	1.05 m (41.3 in)	1.05 m (41.3 in)
N	Height in feed dispensing position, Elevator (E08)	0.79 – 1.13 m (31.10 – 44.49 in)	0.89 – 1.23 m (35.04 – 48.43 in)	0.89 – 1.23 m (35.04 – 48.43 in)	0.89 – 1.23 m (35.04 – 48.43 in)	0.98 – 1.32 m (38.58 – 51.97 in)	0.98 – 1.32 m (38.58 – 51.97 in)	0.98 – 1.32 m (38.58 – 51.97 in)	0.98 – 1.32 m (38.58 – 51.97 in)
	Height in feed dispensing position, Elevator (E16)	0.9 – 1.13 m (35.43 – 44.49 in)	1.0 – 1.23 m (39.37 – 48.43 in)	1.0 – 1.23 m (39.37 – 48.43 in)	1.0 – 1.23 m (39.37 – 48.43 in)	1.09 – 1.82 m (42.91 – 71.65 in)	1.09 – 1.82 m (42.91 – 71.65 in)	1.09 – 1.82 m (42.91 – 71.65 in)	1.09 – 1.82 m (42.91 – 71.65 in)
	Height in feed dispensing position, Elevator (E22)	1.68 – 2.14 m (66.14 – 84.25 in)	1.78 – 2.24 m (70.08 – 88.19 in)	1.78 – 2.24 m (70.08 – 88.19 in)	1.78 – 2.24 m (70.08 – 88.19 in)	1.87 – 2.33 m (73.62 – 91.73 in)	1.87 – 2.33 m (73.62 – 91.73 in)	1.87 – 2.33 m (73.62 – 91.73 in)	1.87 – 2.33 m (73.62 – 91.73 in)

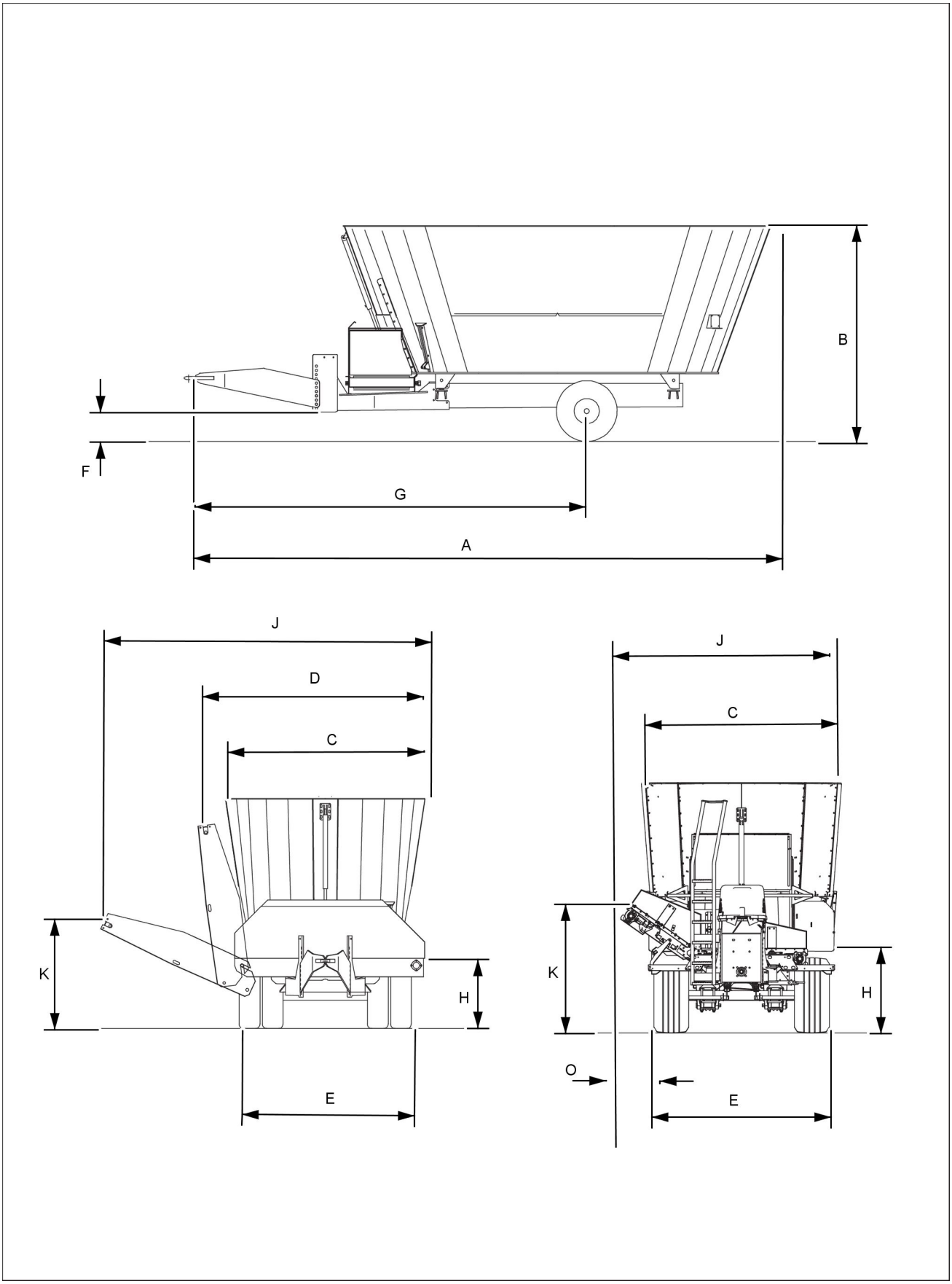
VM-3 SB and VM-3 SB X



ZEIL21HT00184HA 2

Dimension	Description	VM 21 -3 SB	VM 24 -3 SB	VM 26 -3 SB	VM 28 -3 SB	VM 21 -3 SB X	VM 24- 3 SB X	VM 26- 3 SB X	VM 28- 3 SB X
A	Length, Models SB and SB X	9.09 m (357.9 in)	9.09 m (357.9 in)	9.09 m (357.9 in)	9.29 m (365.7 in)	9.09 m (357.9 in)	9.09 m (357.9 in)	9.09 m (357.9 in)	9.29 m (365.7 in)
G	Length, Models SB and SB X	5.77 m (227.2 in)	5.77 m (227.2 in)	5.77 m (227.2 in)	5.77 m (227.2 in)	5.77 m (227.2 in)	5.77 m (227.2 in)	5.77 m (227.2 in)	5.77 m (227.2 in)
L	Length, with corner doors	9.09 m (357.9 in)	9.09 m (357.9 in)	9.09 m (357.9 in)	9.29 m (365.7 in)	9.09 m (357.9 in)	9.09 m (357.9 in)	9.09 m (357.9 in)	9.29 m (365.7 in)
B	Height, Single axle. Tires 235/75 R17.5	2.59 m (102.0 in)	–	–	–	2.59 m (102.0 in)	–	–	–
	Height, Single axle. Tires 435/50 R19.5	2.68 m (105.5 in)	–	–	–	2.68 m (105.5 in)	–	–	–
	Height, Tandem. Tires 305/55R22.5	–	2.89 m (113.8 in)	3.05 m (120.1 in)	3.2 m (126.0 in)	–	2.89 m (113.8 in)	3.05 m (120.1 in)	3.2 m (126.0 in)
	Height, Tandem. Tires 435/50 R19.5	–	2.89 m (113.8 in)	3.05 m (120.1 in)	3.2 m (126.0 in)	–	2.89 m (113.8 in)	3.05 m (120.1 in)	3.2 m (126.0 in)
C	Transport width, SB	2.24 m (88.2 in)	2.24 m (88.2 in)	2.24 m (88.2 in)	2.35 m (92.5 in)	–	–	–	–
	Transport width, SBX	–	–	–	–	2.45 m (96.5 in)	2.45 m (96.5 in)	2.45 m (96.5 in)	2.45 m (96.5 in)
D	Transport width, with elevator (BE09)	2.45 m (96.5 in)	2.45 m (96.5 in)	2.45 m (96.5 in)	2.59 m (102.0 in)	–	–	–	–
	Transport width, with elevator (BE16)	2.54 m (100.0 in)	2.54 m (100.0 in)	2.54 m (100.0 in)	2.68 m (105.5 in)	–	–	–	–
	Transport width, with corner doors	2.24 m (88.2 in)	2.24 m (88.2 in)	2.24 m (88.2 in)	2.35 m (92.5 in)	–	–	–	–
E	Track width, Single axle. Tires 235/75 R17.5	2.14 m (84.3 in)	–	–	–	2.14 m (84.3 in)	–	–	–
	Track width, Single axle. Tires 435/50 R19.5	2.05 m (80.7 in)	–	–	–	2.05 m (80.7 in)	–	–	–
	Track width, Tandem. Tires 305/55R22.5	–	1.91 m (75.2 in)	1.91 m (75.2 in)	1.91 m (75.2 in)	–	1.91 m (75.2 in)	1.91 m (75.2 in)	1.91 m (75.2 in)
	Track width, Tandem. Tires 435/50 R19.5	–	2.05 m (80.7 in)	2.05 m (80.7 in)	2.05 m (80.7 in)	–	2.05 m (80.7 in)	2.05 m (80.7 in)	2.05 m (80.7 in)
F	Clearance	0.36 m (14.2 in)	0.18 m (7.1 in)	0.18 m (7.1 in)	0.18 m (7.1 in)	0.36 m (14.2 in)	0.18 m (7.1 in)	0.18 m (7.1 in)	0.18 m (7.1 in)
J	Width in feed dispensing position, Elevator (BE09)	2.93 m (115.4 in)	2.93 m (115.4 in)	2.93 m (115.4 in)	3.07 m (120.9 in)	–	–	–	–
	Width in feed dispensing position, Elevator (BE16)	3.62 m (142.5 in)	3.62 m (142.5 in)	3.62 m (142.5 in)	3.76 m (148.0 in)	–	–	–	–
	Width in feed dispensing position, with SB X	–	–	–	–	2.6 m (102.4 in)	2.6 m (102.4 in)	2.6 m (102.4 in)	2.67 m (105.1 in)
O	Width in feed dispensing position, with SB X	–	–	–	–	0.44 m (17.3 in)	0.55 m (21.7 in)	0.55 m (21.7 in)	0.55 m (21.7 in)
M	Width in feed dispensing position, with corner doors	2.24 m (88.2 in)	2.24 m (88.2 in)	2.24 m (88.2 in)	2.35 m (92.5 in)	–	–	–	–
H	Height in feed dispensing position, Model SB	0.78 m (30.7 in)	0.78 m (30.7 in)	0.78 m (30.7 in)	0.91 m (35.8 in)	–	–	–	–
	Height in feed dispensing position, Model SB X	–	–	–	–	0.73 m (28.7 in)	0.86 m (33.9 in)	0.86 m (33.9 in)	0.86 m (33.9 in)
K	Height in feed dispensing position, Elevator (BE09)	0.78 – 1.03 m (30.71 – 40.55 in)	0.91 – 1.16 m (35.83 – 45.67 in)	0.91 – 1.16 m (35.83 – 45.67 in)	0.91 – 1.16 m (35.83 – 45.67 in)	–	–	–	–
	Height in feed dispensing position, Elevator (BE16)	0.99 – 1.44 m (38.98 – 56.69 in)	1.16 – 1.57 m (45.67 – 61.81 in)	1.16 – 1.57 m (45.67 – 61.81 in)	1.16 – 1.57 m (45.67 – 61.81 in)	–	–	–	–
	Height in feed dispensing position, with SB X	–	–	–	–	1.25 m (49.2 in)	1.38 m (54.3 in)	1.38 m (54.3 in)	1.38 m (54.3 in)

VM-3 B and VM-3 B X



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Dimension	Description	VM 29-3B	VM 32-3B	VM 38-3B	VM 45-3B	VM 29-3B X	VM 32-3B X	VM 38-3B X	VM 45-3B X
A	Length, Models B and B X	9.96 m (392.1 in)	9.96 m (392.1 in)	9.96 m (392.1 in)	10.15 m (399.6 in)	9.96 m (392.1 in)	9.96 m (392.1 in)	9.96 m (392.1 in)	10.15 m (399.6 in)
G	Length, Models B and B X	10.51 m (413.8 in)	10.51 m (413.8 in)	10.51 m (413.8 in)	10.51 m (413.8 in)	10.51 m (413.8 in)	10.51 m (413.8 in)	10.51 m (413.8 in)	10.51 m (413.8 in)
B	Height, Tandem/ tridem. Tires 435/50 R19.5	2.93 m (115.4 in)	3.08 m (121.3 in)	3.43 m (135.0 in)	3.63 m (142.9 in)	2.93 m (115.4 in)	3.08 m (121.3 in)	3.43 m (135.0 in)	3.63 m (142.9 in)
C	Transport width, B	2.49 m (98.0 in)	2.49 m (98.0 in)	2.49 m (98.0 in)	2.76 m (108.7 in)	–	–	–	–
	Transport width, B X	–	–	–	–	2.49 m (98.0 in)	2.49 m (98.0 in)	2.49 m (98.0 in)	2.76 m (108.7 in)
D	Transport width, with elevator (BE09)	2.53 m (99.6 in)	2.53 m (99.6 in)	2.53 m (99.6 in)	2.76 m (108.7 in)	–	–	–	–
	Transport width, with elevator (BE16)	2.58 m (101.6 in)	2.58 m (101.6 in)	2.58 m (101.6 in)	2.76 m (108.7 in)	–	–	–	–
E	Track width, Tandem/ tridem. Tires 435/50 R19.5	2.2 m (86.6 in)	2.2 m (86.6 in)	2.2 m (86.6 in)	2.2 m (86.6 in)	2.2 m (86.6 in)	2.2 m (86.6 in)	2.2 m (86.6 in)	2.2 m (86.6 in)
F	Clearance	0.24 m (9.4 in)	0.24 m (9.4 in)	0.24 m (9.4 in)	0.24 m (9.4 in)	0.24 m (9.4 in)	0.24 m (9.4 in)	0.24 m (9.4 in)	0.24 m (9.4 in)
J	Width in feed dispensing position, Elevator (BE09)	3.05 m (120.1 in)	3.05 m (120.1 in)	3.05 m (120.1 in)	3.2 m (126.0 in)	–	–	–	–
	Width in feed dispensing position, Elevator (BE16)	3.72 m (146.5 in)	3.72 m (146.5 in)	3.72 m (146.5 in)	3.87 m (152.4 in)	–	–	–	–
	Width in feed dispensing position, with SB X	–	–	–	–	2.87 m (113.0 in)	2.87 m (113.0 in)	2.87 m (113.0 in)	2.99 m (117.7 in)
O	Width in feed dispensing position, with SB X	–	–	–	–	0.54 m (21.3 in)	0.54 m (21.3 in)	0.54 m (21.3 in)	0.54 m (21.3 in)
H	Height in feed dispensing position, Model B, direct	1.05 m (41.3 in)	1.05 m (41.3 in)	1.05 m (41.3 in)	1.05 m (41.3 in)	–	–	–	–
	Height in feed dispensing position, Model B X, direct	–	–	–	–	1.02 m (40.2 in)	1.02 m (40.2 in)	1.02 m (40.2 in)	1.02 m (40.2 in)
K	Height in feed dispensing position, Elevator (BE09)	1.04 – 1.24 m (40.94 – 48.82 in)	1.04 – 1.24 m (40.94 – 48.82 in)	1.04 – 1.24 m (40.94 – 48.82 in)	1.04 – 1.24 m (40.94 – 48.82 in)	–	–	–	–
	Height in feed dispensing position, Elevator (BE16)	1.35 – 1.65 m (53.15 – 64.96 in)	1.35 – 1.65 m (53.15 – 64.96 in)	1.35 – 1.65 m (53.15 – 64.96 in)	1.35 – 1.65 m (53.15 – 64.96 in)	–	–	–	–
	Height in feed dispensing position, B X,	–	–	–	–	1.51 m (59.4 in)	1.51 m (59.4 in)	1.51 m (59.4 in)	1.51 m (59.4 in)

Technical data (for VM-1 models)

VM-1 S

Type	VM 6.5-1 S (1 SL)	VM 8-1 S (1 SL)	VM 10-1 S (1 SL)
Volume	**6.5 m³** (**229.5 ft³**)	**8 m³** (**282.5 ft³**)	**10 m³** (**353.1 ft³**)
Power output requirement at **540 RPM** on Power Take-Off (PTO)	**35 kW** (**48 hp**)	**40 kW** (**54 hp**)	**45 kW** (**61 hp**)
Electrical system requirement on tractor	**12 V**		
Number of augers	1		
Number of blades	12		
Number of shear bars	2		
Tire, reference	30x11.5 – 14.5 or 400/60 – 15.5		
Tire, twin wheel	235/75 R17.5 or 205/65 R17.5		
Tare weight	**2460 kg**	**2560 kg**	**2750 kg**
Average payload	**2600 kg**	**3200 kg**	**4000 kg**
Maximum axle load	**6000 kg**		
Maximum supporting load	**1200 kg**		
Wireless weighing system	Standard		
Hydraulic brake	Standard		
Reduction gear ratio	1.5:1		
Battery	Accessories		
Overrunning brakes	Accessories		
ProFeed+ for Feed Manager	Accessories		
Light equipment	Accessories		

VM-1 / VM-1 B / VM-1 B X / VM-1 B M

Type	VM 10-1 VM 10-1 B VM 10-1 B X VM 10-1 B M	VM 12-1 VM 12-1 B VM 12-1 B X VM 12-1 B M	VM 14-1 VM 14-1 B VM 14-1 B X VM 14-1 B M
Volume	**10 m³** (**353.1 ft³**)	**12 m³** (**423.8 ft³**)	**14 m³** (**494.4 ft³**)
Power output requirement at **540 RPM** on Power Take-Off (PTO)	**50 kW** (**68 hp**)	**55 kW** (**75 hp**)	**60 kW** (**82 hp**)
Oil volume, minimum	**35.0 L/min** (**9.2 US gpm**)		
Electrical system requirement on tractor	**12 V**		
Number of augers	1		
Number of blades	16		
Number of shear bars	2		
Tire, reference	30x11.5 – 14.5 or 400/60 – 15.5 or 435/50 R19.5		435/50 R19.5
Tire, twin wheel	235/75 R17.5 or 205/65 R17.5		205/65 R17.5 or 235/75 R17.5
Tare weight, door model	**3200 – 3600 kg**	**3300 – 3700 kg**	**3500 – 3900 kg**
Tare weight model B and BX	**3600 – 3900 kg**	**3800 – 4100 kg**	**3900 – 4200 kg**
Tare weight model BM	**4400 – 4700 kg**	**4600 – 4900 kg**	**4700 – 5000 kg**
Average payload	**4000 kg**	**4800 kg**	**5600 kg**
Maximum axle load at **25.0 km/h** (**15.5 mph**)	**8000 kg**	**8000 kg**	**9000 kg**
Maximum axle load at **25.0 km/h** (**15.5 mph**) and with Technischer Überwachungsverein (TÜV) approval	**6800 kg**		
Maximum supporting load	**1200 kg**		
Wireless weighing system	Standard		
Hydraulic brake	Standard		
Reduction gear ratio	1.5:1		
Battery	Accessories		
Overrunning brakes	Accessories		
ProFeed+ for Feed Manager	Accessories		
Light equipment	Accessories		

Technical data (for VM-2 models)

VM-2S / VM-2 SB / VM-2 SB X / VM-2 SB M

Type	VM 12-2 S	VM 14-2 S VM 14-2 SB VM 14-2 SBX VM 14-2 SBM	VM 16-2 S VM 16-2 SB VM 16-2 SBX VM 16-2 SBM	VM 18-2 S VM 18-2 SB VM 18-2 SBX VM 18-2 SBM	VM 20-2 S VM 20-2 SB VM 20-2 SBX VM 20-2 SBM
Volume	**12 m³ (423.8 ft³)**	**14 m³ (494.4 ft³)**	**16 m³ (565.0 ft³)**	**18 m³ (635.7 ft³)**	**20 m³ (706.3 ft³)**
Power output requirement at **540 RPM** on Power Take-Off (PTO)	**55 kW (75 hp)**	**60 kW (82 hp)**	**65 kW (88 hp)**	**70 kW (95 hp)**	**75 kW (102 hp)**
Oil volume, minimum	**35.0 L/min (9.2 US gpm)**				
Electrical system requirement on tractor	**12 V**				
Number of augers	2				
Number of blades	24				
Number of shear bars	2				
Tire, reference	425/40 B17	235/75 R17.5			–
Tire single axle	30x11.5–14.5	435/50 R 19.5 or 205/65 R17.5			435/50 R 19.5 or 205/65 R17.5 or 235/75 R17.5
Tire bogie	–	400/60 – 15.5 or 30x11.5–14.5			
Tare weight model S	**4300 – 4450 kg**	**4450 – 4850 kg**	**4600 – 5000 kg**	**4720 – 5120 kg**	**4840 – 5240 kg**
Tare weight models SB and SBX	–	**4700 – 5150 kg**	**4850 – 5300 kg**	**4970 – 5420 kg**	**5090 – 5540 kg**
Tare weight model SBM	–	**5500 – 5950 kg**	**5550 – 6100 kg**	**5770 – 6220 kg**	**5890 – 6340 kg**
Average payload	**4800 kg**	**5600 kg**	**6400 kg**	**7200 kg**	**8000 kg**
Maximum axle load (single axle) at **25.0 km/h** (**15.5 mph**)	**11000 kg**				
Maximum axle load at **25.0 km/h** (**15.5 mph**) and with TÜV approval	**8800 kg**				
Maximum combined axle load (bogie axle)	–			**14000 kg**	
Maximum supporting load	**1200 kg**				
Wireless weighing system	Standard				
Hydraulic brake	Standard				
Reduction gear ratio	1.5:1				
Battery	Accessories				
ProFeed+ for Feed Manager	Accessories				
Light equipment	Accessories				

VM-2 / VM-2 B / VM-2 B X

Type	VM 20-2 VM 20-2 B VM 20-2 BX	VM 22-2 VM 22-2 B VM 22-2 BX	VM 27-2 VM 27-2 B VM 27-2 BX	VM 30-2 VM 30-2 B VM 30-2 BX
Volume	**20 m³** (**706.3 ft³**)	**22 m³** (**776.9 ft³**)	**27 m³** (**953.5 ft³**)	**30 m³** (**1059.4 ft³**)
Power output requirement at **540 RPM** on Power Take-Off (PTO)	**80 kW** (**109 hp**)	**85 kW** (**116 hp**)	**95 kW** (**129 hp**)	**100 kW** (**136 hp**)
Oil volume, minimum	**32.0 L/min** (**8.5 US gpm**)			
Electrical system requirement on tractor	**12 V**			
Number of augers	2			
Number of blades	32			
Number of shear bars	2			
Tire single axle, reference	435/50 R19.5		–	–
Tire single axle, twin wheel	235/75R17.5		–	–
Tire bogie, reference	–	–	435/50 R19.5	
Tire bogie	–	435/50 R19.5	–	–
Tare weight. door model	**6600 – 7900 kg**	**6800 – 8100 kg**	**7900 kg**	**8100 kg**
Tare weight models B and BX	**6900 – 8200 kg**	**7100 – 8400 kg**	**8200 kg**	**8400 kg**
Average payload	**8000 kg**	**8000 kg**	**10800 kg**	**12000 kg**
Maximum combined axle load (bogie axle) at **25.0 km/h** (**15.5 mph**)	**12800 kg**			
Maximum supporting load	**1500 kg**			
Wireless weighing system	Standard			
Hydraulic brake	Standard			
Reduction gear ratio	1.8:1			
Battery	Accessories			
ProFeed+ for Feed Manager	Accessories			
Light equipment	Accessories			

Technical data (for VM-3 models)

VM-3 S / VM-3 SB / VM-3 SB X

Type	VM 21-3 S VM 21-3 SB VM 21-3 SBX	VM 24-3 S VM 24-3 SB VM 24-3 SBX	VM 26-3 S VM 26-3 SB VM 26-3 SBX	VM 28-3 S VM 28-3 SB VM 28-3 SBX
Volume	**21 m³** (**741.6 ft³**)	**24 m³** (**847.6 ft³**)	**26 m³** (**918.2 ft³**)	**28 m³** (**988.8 ft³**)
Power output requirement at **540 RPM** on Power Take-Off (PTO)	**85 kW** (**116 hp**)	**90 kW** (**122 hp**)	**100 kW** (**136 hp**)	**105 kW** (**143 hp**)
Oil volume, minimum	**35.0 L/min** (**9.2 US gpm**)			
Electrical system requirement on tractor	**12 V**			
Number of augers	2			
Number of blades	36			
Number of shear bars	2			
Tire single axle	435/50 R19.5	–		
Tire single axle, twin wheel, reference	235/75R17.5	–		
Tire tandem, reference	–	305/55 R22.5		
Tire tandem	–	435/50R19.5		
Tare weight model S	**6800 – 7100 kg**	**7800 – 8100 kg**	**7900 – 8200 kg**	**8100 – 8400 kg**
Tare weight models SB and SBX	**7100 – 7400 kg**	**8100 – 8400 kg**	**8200 – 8500 kg**	**8400 – 8700 kg**
Average payload	**8400 kg**	**9600 kg**	**10400 kg**	**11200 kg**
Maximum combined axle load at **25.0 km/h** (**15.5 mph**)	**12800 kg**	**16000 kg**		
Maximum supporting load	**1500 kg**			
Wireless weighing system	Standard			
Hydraulic brake	Standard			
Reduction gear ratio	1.57:1, 3.26:1			
Battery	Accessories			
ProFeed+ for Feed Manager	Accessories			
Light equipment	Accessories			

VM-3 / VM-3 B / VM-3 B X

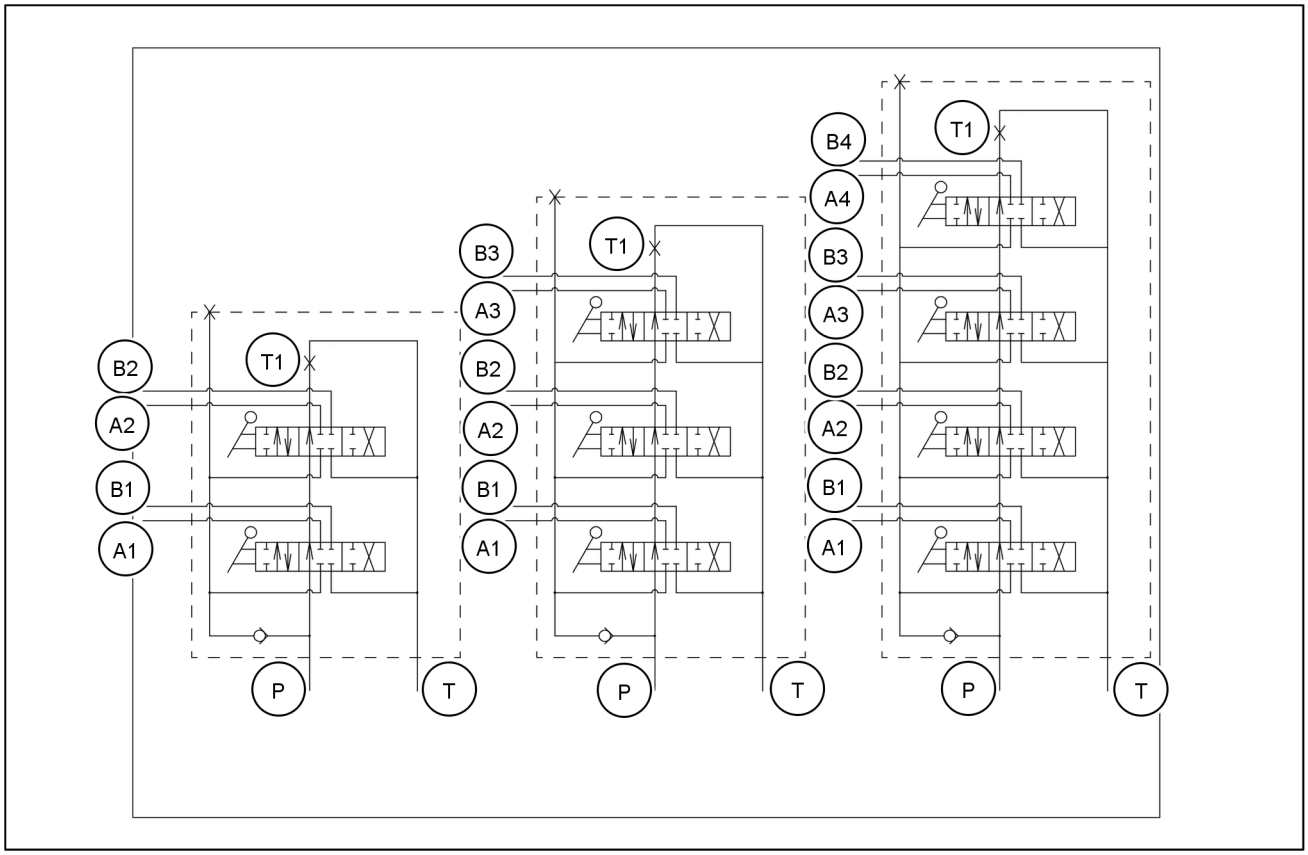
Type	VM 29-3 VM 29-3 B VM 29-3 BX	VM 32-3 VM 32-3 B VM 32-3 BX	VM 38-3 VM 38-3 B VM 38-3 BX	VM 45-3 VM 45-3 B VM 45-3 BX
Volume	**29 m³** (**1024.1 ft³**)	**32 m³** (**1130.1 ft³**)	**38 m³** (**1342.0 ft³**)	**45 m³** (**1589.2 ft³**)
Power output requirement at **540 RPM** on Power Take-Off (PTO)	**95 kW** (**129 hp**)	**100 kW** (**136 hp**)	**110 kW** (**150 hp**)	**120 kW** (**163 hp**)
Oil volume, minimum	**35.0 L/min** (**9.2 US gpm**)			
Electrical system requirement on tractor	**12 V**			
Number of augers	3			
Number of blades	48			
Number of shear bars	2			
Tire reference	435/50 R19.5			
Tare weight. door model	**10700 kg**	**11000 kg**	**12500 kg**	**12900 kg**
Tare weight models B and BX	**11100 kg**	**1140 kg**	**12900 kg**	**13300 kg**
Average payload	**11600 kg**	**12800 kg**	**15200 kg**	**18000 kg**
Maximum combined axle load (bogie axle) at **25.0 km/h** (**15.5 mph**)	**18000 kg**		**27000 kg**	
Maximum supporting load	**1800 kg**			
Wireless weighing system	Standard			
Hydraulic brake	Standard			
Reduction gear ratio	1.8:1			
Battery	Accessories			
ProFeed+ for Feed Manager	Accessories			
Light equipment	Accessories			
Electric/hydraulic operation	Accessories			

Fluids, lubricants, and capacities

Application	Capacity	Product name	Specification(s)
Grease fittings	-	**TUTELA MULTI-PURPOSE GR-9 GREASE** or **TUTELA 75 MD GREASE**	**M1C 137-A** **M1C 75-B**
Planet gearbox VM-1	**16 L** (**4.2 US gal**)	**PETRONAS GEAR SYN PAO 150** or **CASTROL ALPHASYN™ EP 150**	**DIN 51517-3** -
Planet gearbox VM-1 S	**10.8 – 14.0 L** (**2.9 – 3.7 US gal**)	**PETRONAS GEAR SYN PAO 150** or **CASTROL ALPHASYN™ EP 150**	**DIN 51517-3** -
Two planet gearbox VM-2 and VM-3	**10.8 – 23.0 L** (**2.9 – 6.1 US gal**) for each	**PETRONAS GEAR SYN PAO 150** or **CASTROL ALPHASYN™ EP 150**	**DIN 51517-3** -
Three planet gearbox VM-2 and VM-3	**14.0 – 23.0 L** (**3.7 – 6.1 US gal**) for each	**PETRONAS GEAR SYN PAO 150** or **CASTROL ALPHASYN™ EP 150**	**DIN 51517-3** -
Reduction gearbox	**10.5 L** (**2.8 US gal**)	**PETRONAS GEAR SYN PAO 150** or **CASTROL ALPHASYN™ EP 150**	**DIN 51517-3** -

Hydraulic diagram FCT 1060

The following scheme of the hydraulic diagram is present as a representative and is applicable for the FCT 1060.



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Item	Description
(P)	Pressure hose
(T)	Return hose
(T1)	Prop plug
(A1)	Input for hydraulic function
(A2)	Input for hydraulic function
(A3)	Input for hydraulic function
(A4)	Input for hydraulic function
(B1)	Output for hydraulic function
(B2)	Output for hydraulic function
(B3)	Output for hydraulic function
(B4)	Output for hydraulic function

Tires

The implement is as standard equipped with wide tires which provide extra large carrying capacity and thus a low ground pressure.

The following table specifies the recommended tire pressure ranges for the various tire sizes.

Tire dimension	Recommended tire pressure
30x11.5–14.5	Maximum **8 bar** (**116.0 psi**)
400/60-15.5 14PR	Maximum **5 bar** (**72.5 psi**)
205/65 R17.5	Maximum **8.5 bar** (**123.2 psi**)
425/40B17	Maximum **9 bar** (**130.5 psi**)
235/75 R17.5	Maximum **8.5 bar** (**123.2 psi**)
435/50 R19.5	Maximum **9 bar** (**130.5 psi**)
235/75 R17.5	Maximum **8.5 bar** (**123.2 psi**)
305/55 R22.5	Maximum **7 bar** (**101.5 psi**)
435/50 R19.5	Maximum **9 bar** (**130.5 psi**)

Tire pressures should be reduced slightly if the feeder is to be towed across fields. Lower tire pressures may cause the feeder to behave in a slightly more lively manner during mixing.

NOTICE: *If a lower tire pressure is used than recommended the life of the tires will be reduced.*

Minimum tire pressure can be used when you drive in areas where extra large carrying capacity is required (meadows, sandy areas or the like).

NOTE: *Check the tire pressure regularly.*

10 - ACCESSORIES

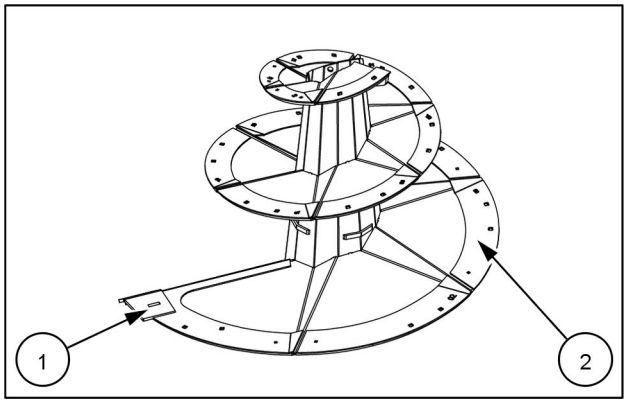
General information

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.

Wear plates

Both auger sizes can be fitted with the “Mix+” wear plate set **(2)** outermost on the windings. This considerably extends the life of the auger.

Both sizes of auger can also be fitted with an “activity plate” A **(1)**, on the first auger winding towards the base plate in order to reduce the distance between the hopper and the auger.



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Conveyor accessories

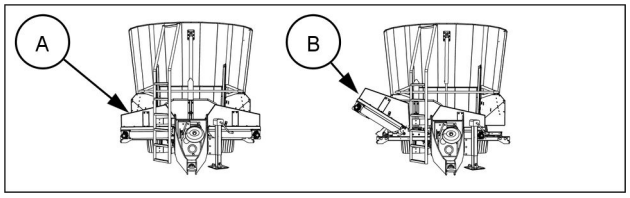
Elevator

The implement can be supplied with an elevator on the side, available in various lengths.
It is recommended to use a manually operated valve block or electrically operated hydraulics.

If it is needed to post-mix feed or discharge feed into a feed truck or similar, the implement can be supplied with an elevator on either the side or the back.
The elevator is operated via the hydraulic handles or the electro-hydraulic control system (extra equipment).

X - conveyor

The X-conveyor is a universal discharge conveyor, which can be used as either movable cross conveyor **(A)** or as elevator **(B)**.
The cross unloader can dispense feed either to the right or to the left, and the conveyor will be pulled to either side, as two oil motors are fitted.



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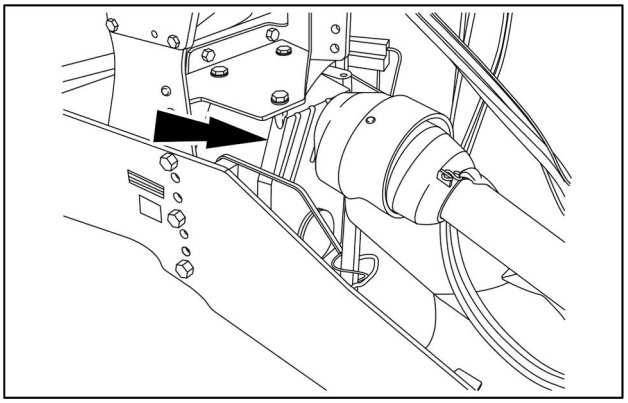
Reduction gear

It is possible to have a reduction gear fitted as extra equipment.
A reduction gear enables a smaller tractor to be used to drive the feed trailer.



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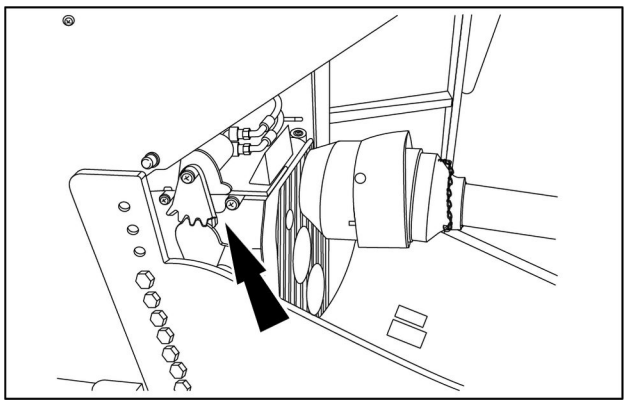
Hydraulic gear change

As extra equipment, it is possible for trailers with a reduction gear to be fitted with the hydraulic gear change (Hydrostep).
The hydraulic gear change makes it possible to change gear without leaving the tractor driver cab.



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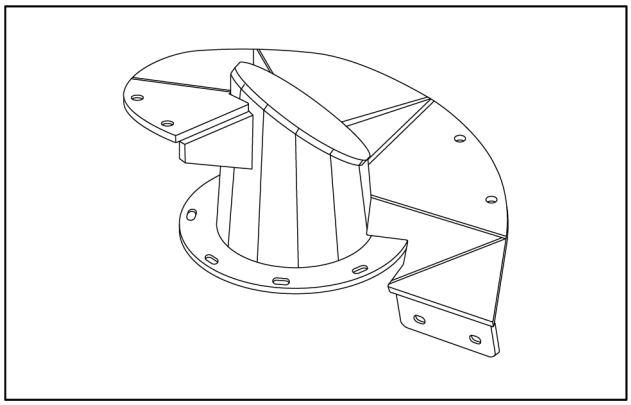
Auger extension

Auger extension extends the standard auger with **35.0 cm** (**13.8 in**) in height (additional ¾ winding) and includes one standard knife (two extra knives positions).



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Slow-Moving Vehicle (SMV) sign

⚠ WARNING

Collision hazard!
Collision of high speed road traffic and slow moving machines can cause death or personal injury. On roads use transport lighting according to local laws. Make sure the Slow Moving Vehicle (SMV) emblem is visible.
Failure to comply could result in death or serious injury.

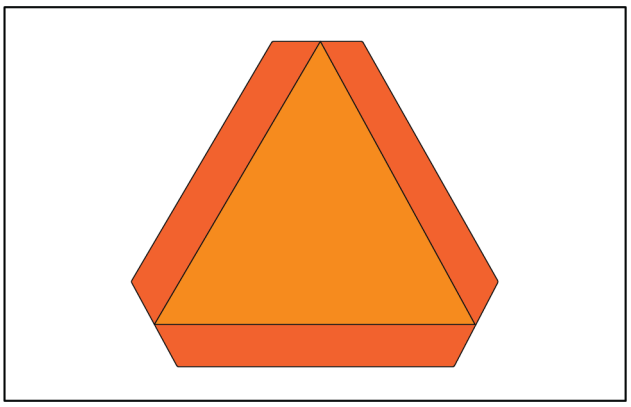
W0115A

The Slow-Moving Vehicle (SMV) emblem and the mounting bracket are furnished as optional equipment.

Used for extra visibility and width definition to passing vehicles and to indicate a possible slower rate of speed than the posted speed limit.

Some states and provinces require SMV emblem on machines traveling at speeds under **40 km/h** (**25 mph**).

Consult local regulations for specific information and mounting requirements.



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Signal plates

A signalization kit is optionally available for implements wider than **2.55 m** (**100.39 in**).

Signal plates are handled by technical constraints and will be assigned depending on the choice of equipment

11 - FORMS AND DECLARATIONS

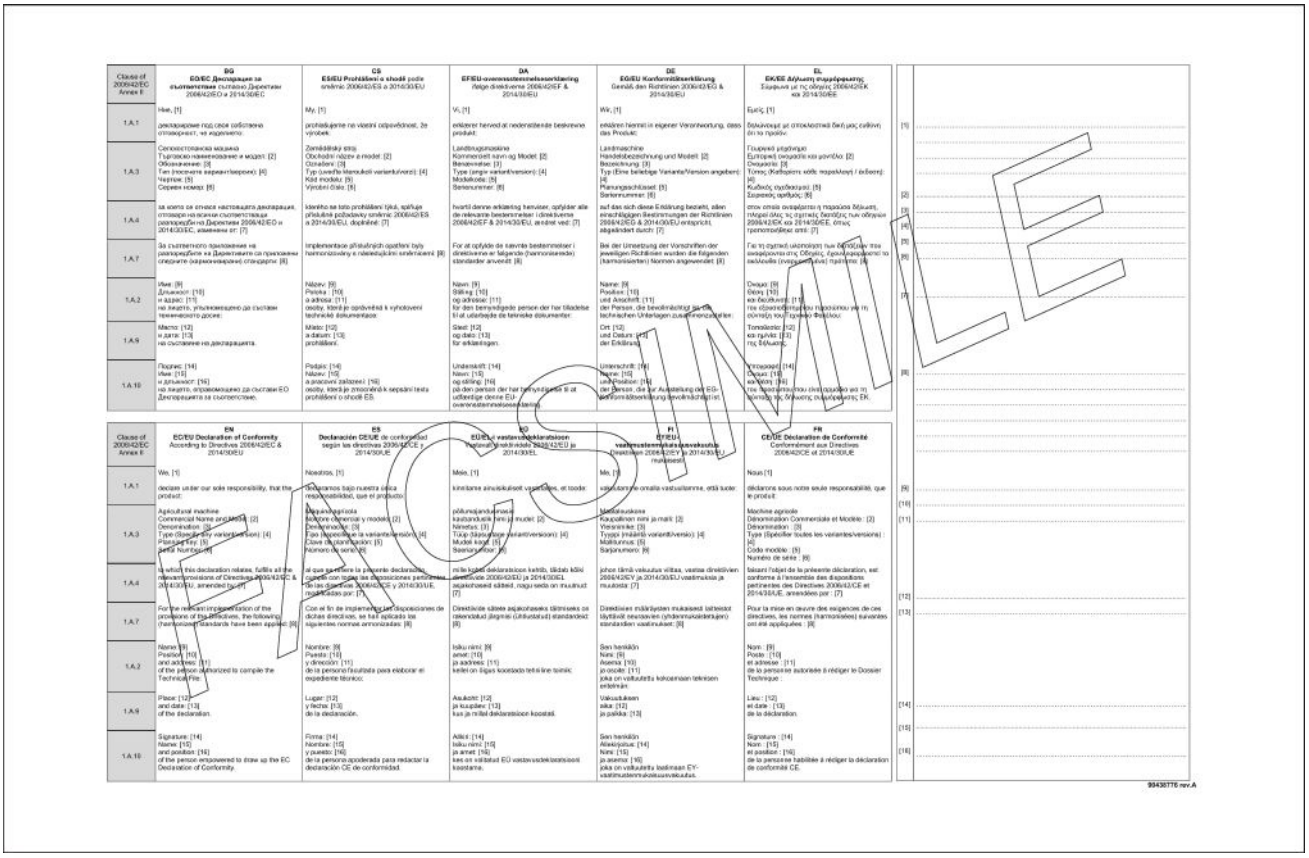
European Community (EC) Declaration of Conformity

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.



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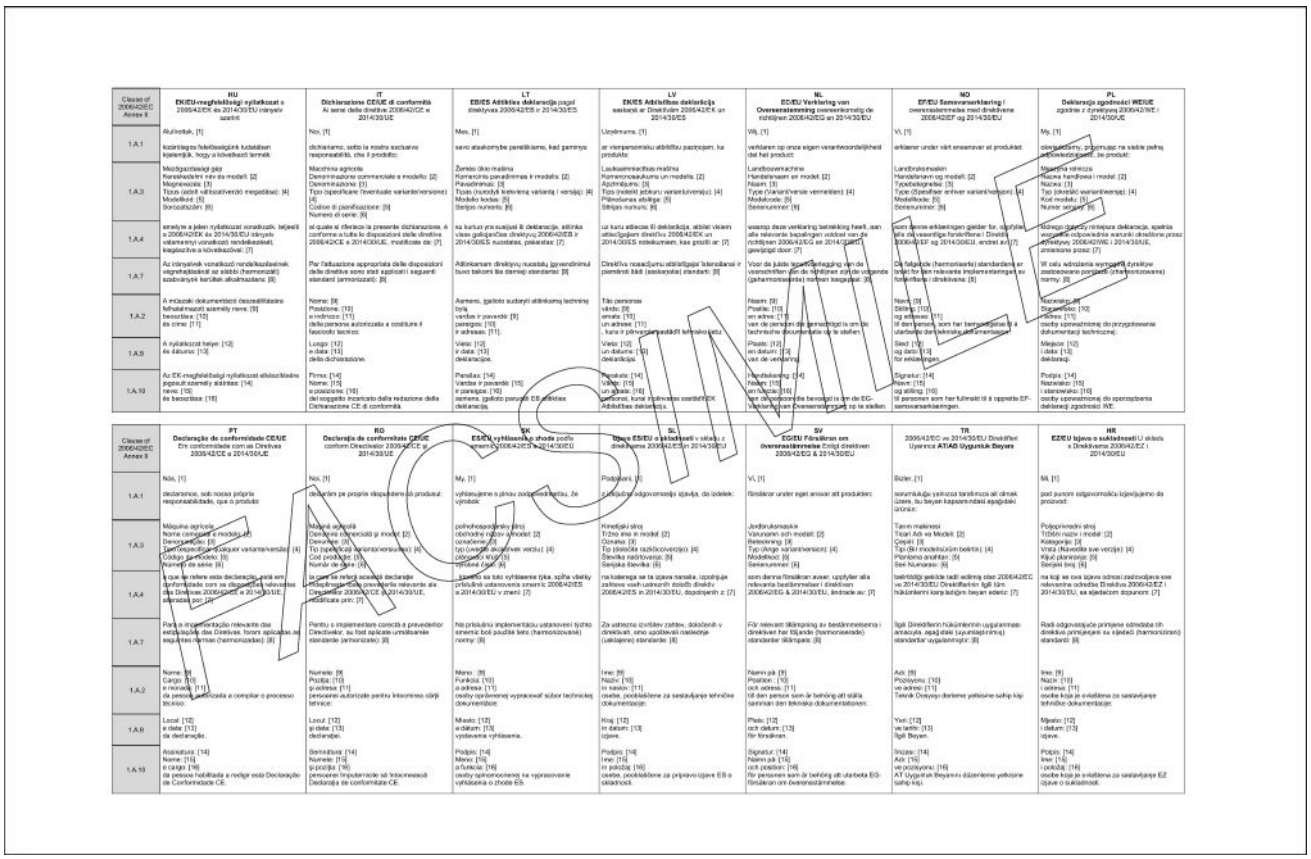

Classe of 2006/42/EC Annex II	HU **EK/EU-megfelelőségi nyilatkozat a 2006/42/EK és 2014/30/EU irányelv szerint**	IT **Dichiarazione CE/UE di conformità** Ai sensi delle direttive 2006/42/CE e 2014/30/UE	LT **EB/ES Atitikties deklaracija** pagal direktyvas 2006/42/EB ir 2014/30/ES	LV **EK/ES Atbilstības deklarācija** saskaņā ar Direktīvām 2006/42/EK un 2014/30/ES	NL **EG/EU Verklaring van Overeenstemming** overeenkomstig de richtlijnen 2006/42/EG en 2014/30/EU	NO **EF/EU Samsvarserklæring /** overensstemmelse med direktivene 2006/42/EF og 2014/30/EU	PL **Deklaracja zgodności WE/UE** zgodnie z dyrektywą 2006/42/WE i 2014/30/UE
1.A.1	Alulírottak, [1] kizárólagos felelősségünk tudatában kijelentjük, hogy a következő termék:	Noi, [1] dichiariamo, sotto la nostra esclusiva responsabilità, che il prodotto:	Mes, [1] savo atsakomybe pareiškiame, kad gaminys:	Uzņēmums, [1] ar vienpersonisku atbildību paziņojam, ka produkts:	Wij, [1] verklaren op onze eigen verantwoordelijkheid dat het product:	Vi, [1] erklærer under vårt eneansvar at produktet:	My, [1] oświadczamy, pod naszą na wyłączną odpowiedzialność, że produkt:
1.A.3	Mezőgazdasági gép Kereskedelmi név és modell: [2] Megnevezés: [3] Típus (adott változat/verzió megadása): [4] Modellkód: [5] Sorozatszám: [6]	Macchina agricola Denominazione commerciale e modello: [2] Denominazione: [3] Tipo (specificare l'eventuale variante/versione): [4] Codice di pianificazione: [5] Numero di serie: [6]	Žemės ūkio mašina Komercinio pavadinimas ir modelis: [2] Pavadinimas: [3] Tipas (nurodyti konkretų variantą / versiją): [4] Modelio kodas: [5] Serijos numeris: [6]	Lauksaimnieciskas masina Komercnosaukums un modelis. [2] Apzimejums: [3] Tips (noteikt jotkuru variantu/versiju): [4] Pilnvarotaas atsilgie: [5] Sērijas numurs: [6]	Landbouwmachine Handelsnaam en model: [2] Naam: [3] Type (Variant/versie vermelden): [4] Modelcode: [5] Serienummer: [6]	Landbruksmaskin Handelsnavn og modell: [2] Typebetegnelse: [3] Type (Spesifiser enhver variant/versjon): [4] Modellkode: [5] Serienummer: [6]	Maszyna rolnicza Nazwa handlowa i model: [2] Nazwa: [3] Typ (określić wariant/wersję): [4] Kod modelu: [5] Numer seryjny: [6]
1.A.4	amelyre a jelen nyilatkozat vonatkozik, teljesíti a 2006/42/EK és 2014/30/EU irányelv vállamennyi vonatkozó rendelkezését, kivéglezítve a következőket: [7]	al quale si riferisce la presente dichiarazione, è conforme a tutte le disposizioni delle direttive 2006/42/CE e 2014/30/UE, modificate da: [7]	su kuriuo yra susijusi ši deklaracija, atitinka visas galiojančias direktyvų 2006/42/EB ir 2014/30/ES nuostatas, pakeistas: [7]	uz kuru attiecas šī deklarācija, atbilst visiem attiecīgajiem direktīvu 2006/42/EK un 2014/30/ES noteikumiem, kas grozīti ar: [7]	waarop deze verklaring betrekking heeft, aan alle relevante bepalingen voldoet van de richtlijnen 2006/42/EG en 2014/30/EU, gewijzigd door: [7]	som denne erklæringen gjelder for, oppfyller alle de vesentlige forskriftene i Direktiv 2006/42/EF og 2014/30/EU, endret av: [7]	Wyrobu, którego niniejsza deklaracja, spełnia wszystkie odpowiednie warunki określone przez dyrektywy 2006/42/WE i 2014/30/UE, zmienione przez: [7]
1.A.7	Az irányelvek vonatkozó rendelkezéseinek végrehajtásaként az alábbi (harmonizált) szabványok kerültek alkalmazásra: [8]	Per l'adozione appropriata delle disposizioni delle direttive sono stati applicati i seguenti standard (armonizzati): [8]	Atitinkamam direktyvų nuostatų įgyvendinimui buvo taikomi šie darniejі standartai: [8]	Direktīvu nosacījumu atbilstīgajai īstenošanai ir piemēroti šādi (saskaņoti) standarti: [8]	Voor de juiste toepassing/uitlegging van de voorschriften van de richtlijnen zijn de volgende (geharmoniseerde) normen toegepast: [8]	De følgende (harmoniserte) standardene er brukt for den relevante implementeringen av forskriftene i direktivene: [8]	W celu wdrożenia wymogów dyrektyw zastosowano poniższe (zharmonizowane) normy: [8]
1.A.2	A műszaki dokumentációt összeállításáért felhatalmazott személy neve: [9] beosztása: [10] és címe: [11]	Nome: [9] Posizione: [10] e indirizzo: [11] della persona autorizzata a costituire il fascicolo tecnico:	Asmens, įgalioto sudaryti atitikmenų techninį bylą vardas ir pavardė: [9] pareigos: [10] ir adresas: [11]:	Tās personas vārds: [9] amats: [10] un adrese: [11] , kura ir pilnvarota sastādīt tehnisko lietu	Naam: [9] Positie: [10] en adres: [11] van de persoon die gemachtigd is om de technische documentatie op te stellen:	Navn: [9] Stilling: [10] og adresse: [11] til den person, som har bemyndigelse til å utarbeide den tekniske dokumentasjon:	Nazwisko: [9] Stanowisko: [10] i adres: [11] osoby upoważnionej do przygotowania dokumentacji technicznej:
1.A.5	A nyilatkozat helye: [12] és dátuma: [13]:	Luogo: [12] e data: [13] della dichiarazione.	Vieta: [12] ir data: [13] deklaracijos.	Vieta: [12] un datums: [13] deklarācija:	Plaats: [12] en datum: [13] van de verklaring:	Sted: [12] og dato: [13] for erklæringen:	Miejsce: [12] i data: [13] deklaracji.
1.A.10	Az EK-megfelelőségi nyilatkozat elkészítésére jogosult személy aláírása: [14] neve: [15] és beosztása: [16]	Firma: [14] Nome: [15] e posizione: [16] del soggetto incaricato della redazione della Dichiarazione CE di conformità.	Parašas: [14] Vardas ir pavardė: [15] ir pareigos: [16] asmens, įgalioto parengti EB atitikties deklaraciją.	Paraksts: [14] Vārds: [15] un amats: [16] personai, kura ir pilnvarota sastādīt EK Atbilstības deklarāciju.	Handtekening: [14] Naam: [15] en functie: [16] van de persoon die bevoegd is om de EG-Verklaring van Overeenstemming op te stellen.	Signatur: [14] Navn: [15] og stilling: [16] til personen som har fullmakt til å opprette EF-samsvarserklæringen.	Podpis: [14] Nazwisko: [15] i stanowisko: [16] osoby upoważnionej do sporządzenia deklaracji zgodności WE.

Classe of 2006/42/EC Annex II	PT **Declaração de conformidade CE/UE** Em conformidade com as Directivas 2006/42/CE e 2014/30/UE	RO **Declarația de conformitate CE/UE** conform Directivelor 2006/42/CE și 2014/30/UE	SK **ES/EÚ vyhlásenie o zhode** podľa smerníc 2006/42/ES a 2014/30/EÚ	SL **Izjava ES/EU o skladnosti** v skladu z direktivama 2006/42/ES in 2014/30/EU	SV **EG/EU Försäkran om Överensstämmelse** Enligt direktiven 2006/42/EG & 2014/30/EU	TR 2006/42/EC ve 2014/30/EU Direktifleri Uyarınca **ATAB Uygunluk Beyanı**	HR **EZ/EU Izjava o sukladnosti** U skladu s Direktivama 2006/42/EZ i 2014/30/EU
1.A.1	Nós, [1] declaramos, sob nossa própria responsabilidade, que o produto:	Noi, [1] declarăm pe proprie răspundere că produsul:	My, [1] vyhlasujeme s plnou zodpovednosťou, že výrobok:	Podjetnik, [1] z izključno odgovornostjo izjavlja, da izdelek:	Vi, [1] försäkrar under eget ansvar att produkten:	Biziler, [1] sorumluluğa yalnızca tarafımıza ait olmak üzere, bu beyan kapsamındaki aşağıdaki ürünün:	Mi, [1] pod punom odgovornošću izjavljujemo da proizvod:
1.A.3	Máquina agrícola Denominação comercial e modelo: [2] Denominação: [3] Tipo (especificar qualquer variante/versão): [4] Código de modelo: [5] Número de série: [6]	Mașină agricolă Denumire comercială și model: [2] Denumire: [3] Tip (specificați orice variantă/versiune): [4] Cod producător: [5] Număr de serie: [6]	poľnohospodársky stroj obchodný názov a model: [2] označenie: [3] typ (uviesť akúkoľvek verziu): [4] výrobný kód: [5] výrobné číslo: [6]	Kmetijski stroj Trgno ime in model: [2] Oznaka: [3] Tip (določite različico/verzijo): [4] Številka naročnika: [5] Serijska številka: [6]	Jordbruksmaskin Varunamn och modell: [2] Beteckning: [3] Typ (Ange variant/version): [4] Modellkod: [5] Serienummer: [6]	Tarım makinesi Ticari Adı ve Modeli: [2] Cinsi: [3] Tipi (Bir model/sürüm belirtin): [4] Planlama anahtarı: [5] Seri Numarası: [6]	Poljoprivredni stroj Trgovački naziv i model: [2] Kategorija: [3] Vrsta (Navedite sve verzije): [4] Ključ planiranja: [5] Serijski broj: [6]
1.A.4	a que se refere esta declaração está em conformidade com as disposições relevantes das Diretivas 2006/42/CE e 2014/30/UE, alterada(s) por: [7]	la care se referă această declarație este în conformitate cu prevederile relevante ale Directivelor 2006/42/CE și 2014/30/UE, modificate prin: [7]	ktorého sa toto vyhlásenie týka, spĺňa všetky príslušné ustanovenia smerníc 2006/42/ES a 2014/30/EÚ v znení: [7]	na katerega se ta izjava nanaša, izpolnjuje zahteve vseh ustreznih določb direktiv 2006/42/ES in 2014/30/EU, dopolnjenih z: [7]	som denna försäkran avser, uppfyller alla relevanta bestämmelser i direktiven 2006/42/EG & 2014/30/EU, ändrade av: [7]	bahsi geçtiği şekilde tadil edilmiş olan 2006/42/EC ve 2014/30/EU Direktiflerinin ilgili tüm hükümlerini karşıladığını beyan ederiz: [7]	na koji se ova izjava odnosi,zadovoljava sve relevantne odredbe Direktiva 2006/42/EZ i 2014/30/EU, sa sljedećom dopunom: [7]
1.A.7	Para a implementação relevante das estipulações das Diretivas, foram aplicadas as seguintes normas (harmonizadas): [8]	Pentru o implementare corectă a prevederilor Directivelor, au fost aplicate următoarele standarde (armonizate): [8]	Na príslušnú implementáciu ustanovení týchto smerníc boli použité tieto (harmonizované) normy: [8]	Za ustrezne izvrševanje zahtev, določenih v direktivah, smo uporabili naslednje (usklajene) standarde: [8]	För relevant tillämpning av bestämmelserna i direktiven har följande (harmoniserade) standarder tillämpats: [8]	İlgili Direktiflerin hükümlerinin uygulanması amacıyla, aşağıdaki uyumlaştırılmış) standartlar uygulanmıştır: [8]	Radi odgovarajuće primjene odredaba tih direktiva primijenjeni su sljedeći (harmonizirani) standardi: [8]
1.A.2	Nome: [9] Cargo: [10] e morada: [11] da pessoa habilitada a compilar o processo técnico:	Numele: [9] Poziția: [10] și adresa: [11] persoanei autorizate pentru întocmirea sării tehnice:	Meno : [9] Funkcia: [10] a adresa: [11] osoby oprávnenej vypracovať súbor technickej dokumentácie:	Ime: [9] Naziv: [10] in naslov: [11] osebe, pooblaščene za sestavljanje tehnične dokumentacije:	Namn på: [9] Position : [10] och address. [11] till den person som är behörig att ställa samman den tekniska dokumentationen:	Adı: [9] Pozisyonu: [10] ve adresi: [11] Teknik Dosyayı derleme yetkisine sahip kişi:	Ime: [9] Naziv: [10] i adresa: [11] osobe koja je ovlaštena za sastavljanje tehničke dokumentacije:
1.A.6	Local: [12] e data: [13] da declaração.	Locul: [12] și data: [13] declarației.	Miesto: [12] a dátum: [13] vydavania vyhlásenia.	Kraj: [12] in datum: [13] izjave.	Plats: [12] och datum: [13] för försäkran.	Yer: [12] ve tarih: [13] İlgili Beyan.	Mjesto: [12] i datum: [13] izjave.
1.A.10	Assinatura: [14] Nome: [15] e cargo: [16] da pessoa habilitada a redigir esta Declaração de Conformidade CE	Semnătura: [14] Numele: [15] și poziția: [16] persoanei împuternicite să întocmească Declarația pe conformitate CE.	Podpis: [14] Meno: [15] a funkcia: [16] osoby oprávnenej na vypracovanie vyhlásenia o zhode ES.	Podpis: [14] Ime: [15] in položaj: [16] osebe, pooblaščene za pripravo izjave ES o skladnosti.	Signatur: [14] Namn på: [15] och position: [16] för personen som är behörig att utarbeta EG-försäkran om överensstämmelse.	İmzası: [14] Adı: [15] ve pozisyonu: [16] AT Uygunluk Beyanını düzenleme yetkisine sahip kişi.	Potpis: [14] Ime: [15] i položaj: [16] osobe koja je ovlaštena za sastavljanje EZ izjave o sukladnosti.

For your better and easier understanding of the document, you will find the text reproduced hereafter.

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: Mixer

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 Conformityof 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]	[8]
1.A.4	to which this declaration relates, fulfills all the relevant provisions of these Regulations.	
1.A.7	For the relevant implementation of the provisions of these Regulations, the following published (designated) standards have been applied: [8]	[9] [10] [11]
1.A.2	Name: [9] Position: [10] and address: [11] of the person authorized to compile the Technical File:	[12] [13]
1.A.9	Place: [12] and date: [13] of the declaration.	[14]
1.A.10	Signature: [14] Name: [15] and position: [16] of the person empowered to draw up the UKCA Declaration of Conformity.	[15] [16]

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Dealer's stamp

CNH Industrial Belgium N.V reserves the right to make improvements in design and changes in specifications at any time without notice and without incurring any obligation to install them on units previously sold. Specifications, descriptions, and illustrative material herein are as accurate as known at the time of publication, but are subject to change without notice.

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.

KONGSKILDE