Wiedenmann®

Translation of original Operating Instructions

Turf Aerator Terra Float Air

494.000

From equipment I.D. No. :

Status : February 2017

494 99 01

EC DECLARATION OF CONFORMITY

We

Wiedenmann GmbH
Am Bahnhof
89192 Rammingen

declare under our sole responsibility that the product

Turf Aerator Terra Float Air

to which this declaration refers, corresponds with the relevant basic safety and health requirements of the machinery directive 2006/42/EC.

Rammingen, the 21.02.2017	**Horst Wiedenmann**
(Place and date of issue)	**Managing Partner**
	(Name, function and signature of authorised person)

Rammingen, the 21.02.2017	**Markus Remmele**
(Place and date of issue)	**Technical office manager Authorised representative for tech. documentation**
	(Name, function and signature of authorised person)

NOTE: The declaration of conformity is no longer valid if changes are made to the machine that have not been agreed with the manufacturer.

Alle Informationen, Abbildungen und technische Angaben in dieser Publikation entsprechen dem neuesten Stand zum Zeitpunkt der Veröffentlichung. Konstruktionsänderungen jederzeit und ohne Bekanntgabe vorbehalten.

Declaration of conformity

We

Wiedenmann GmbH
Am Bahnhof
89192 Rammingen

hereby declare that the product

Turf Aerator Terra Float Air

referred to by this declaration complies with the requirements of Machinery Directive 2006/42/EC.

Rammingen, the 21.02.2017	**Karl Wiedenmann**
(Place and date of issue)	**Sales Manager**
	(Name, function and signature of authorised person)

Rammingen, the 21.02.2017	**Harald Reuen**
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Preface

READ THESE OPERATING INSTRUCTIONS CAREFULLY to familiarise yourself with the correct way to operate and service your machine, and to prevent personal injury or damage to the machine.
These operating instructions and the adhesive safety signs on your machine can also be obtained in other languages (your dealer can order these for you).

THESE OPERATING INSTRUCTIONS ARE a permanent part of your machine and should be handed over to the new owner if the machine is sold.

MEASUREMENTS in these operating instructions are given in the metric system. Only use suitable parts and screws. Different wrenches are required for metric and inch screws.

THE DESIGNATIONS "RIGHT" AND "LEFT" are based on the forward direction of travel of the mounted equipment or attached machine.

ENTER THE PRODUCT IDENTIFICATION NUMBERS in the appropriate "Technical data" or "Product - Identification Number" sections. Please ensure that all figures are accurately entered. These numbers can be of invaluable assistance for tracing the machine should it be stolen. Your dealer also needs these numbers when you order spare parts. We recommend that you additionally file these identification numbers in a secure place away from the machine.

BEFORE DELIVERY OF THIS MACHINE, your dealer performed a pre-delivery inspection to ensure optimal performance.

THIS DEVICE IS EXCLUSIVELY DESIGNED for commercial use and use in green areas and grounds maintenance, to improve and maintain the condition of golfing greens, tees and other sports turf and create a smooth finish on ground that is not stony or frozen
("SPECIFIED USE")

The optional reseeding units are used exclusively for spreading free-flowing seed.

Usage for any other purpose beyond this is considered as contrary to the intended use. The manufacturer accepts no liability for damage or injury resulting from this improper use. These risks are borne solely by the user. Compliance with and strict adherence to the operating, maintenance and repair conditions as specified by the manufacturer also form essential elements of the intended usage.

FORESEEABLE INCORRECT USE/MISUSE. It is not permitted to use the attached or trailed device to transport persons or things.

Pay attention to the axle loads of the carrier vehicle. The carrier vehicle requires an on-board power supply of at least 12-15 volts and a current rating of 24 A when using the precise overseeding unit.

THIS MACHINE MUST ONLY BE operated, maintained and repaired by persons familiar with all its particular characteristics and acquainted with the relevant safety regulations.
The relevant accident prevention regulations, all other generally recognised safety-related, occupational medicine and road traffic regulations must be adhered to.
Any modifications carried out to this machine without the express approval of the manufacturer excludes the manufacturer of all liability for any resulting damage.

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TABLE OF CONTENTS

Page

Alle Informationen, Abbildungen und technische Angaben in dieser Publikation entsprechen dem neuesten Stand zum Zeitpunkt der Veröffentlichung. Konstruktionsänderungen jederzeit und ohne Bekanntgabe vorbehalten.

T A B L E OF C O N T E N T S Page

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1.0. Safety Measures

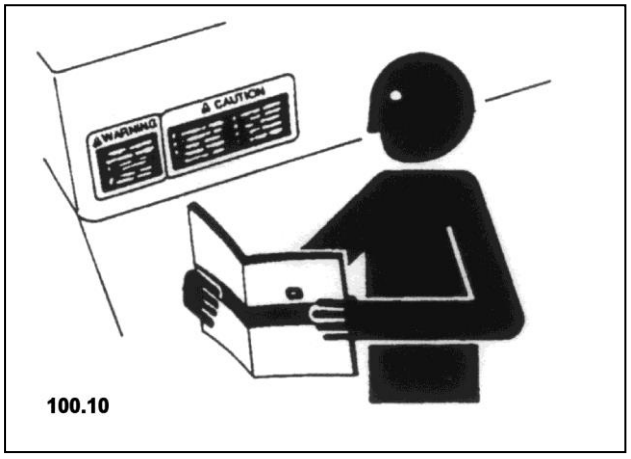
RECOGNISE WARNING SYMBOLS

This symbol draws your attention to the safety instructions attached to the machine or contained in these operating instructions. It means that there is a risk of injury.

Follow all recommended safety instructions as well as the accident prevention regulations.

FOLLOW THE SAFETY INSTRUCTIONS

Ensure that you carefully read all safety instructions contained in these operating instructions as well as all those attached to the machine. The warning signs must be kept in good condition, i.e. readable. Replace missing or damaged warning signs. Ensure that new equipment and spare parts are provided with the appropriate safety signs. Replacement warning signs are available from your dealer.



Familiarise yourself with the operation of the machine and its control devices before working with the machine. Never allow a person without the appropriate knowledge to operate the machine.

Keep your machine in good working order. Unauthorised modifications to the machine can impair the function, operational reliability and service life of the machine.

If you do not understand any part of these operating instructions and need assistance, please contact your dealer.

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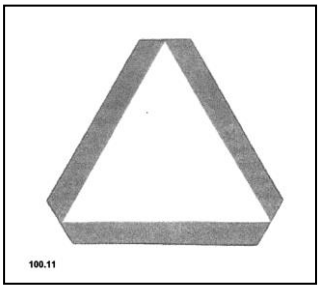
1.0. Safety Measures

OBSERVE THE ROAD TRAFFIC REGULATIONS

Always observe local road traffic regulations when using public roads.



WEAR PROTECTIVE CLOTHING

Wear close-fitting clothing and the appropriate safety equipment for the work at hand.

Prolonged exposure to loud noise can result in impairment or loss of hearing.

Wear a suitable hearing protective device such as earmuffs or earplugs.

A safe operation of the machine requires the full attention of the operator. Do not wear radio or music headphones while operating the machine.

STAY CLEAR OF ROTATING DRIVE SHAFTS

Carelessness in the area of the rotating drive shafts can result in serious injury or even death.

Always ensure that all shaft protection devices are fitted i.a.w. regulations and that the universal-joint shaft sheath tubing can turn freely. Wear close-fitting clothing. Shut off the engine and wait until all moving parts are at a standstill before adjusting or cleaning as well as connecting or disconnecting the PTO-driven machines.

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1.0. Safety Measures

SAFETY AND PROTECTIVE DEVICES

Safety and protective devices must be kept in proper working order and be fitted to the relevant location.

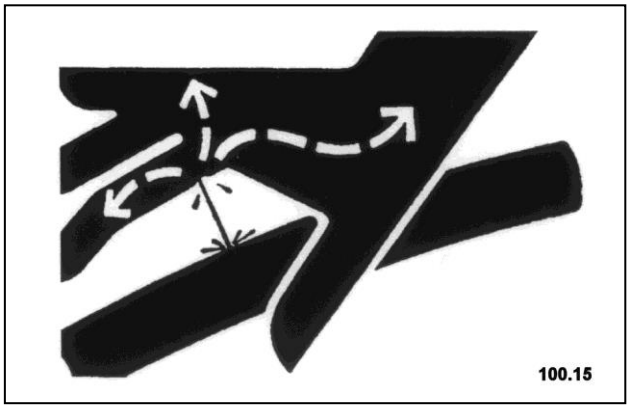
Always disengage the drive sections and shut off the engine before removing any of the safety and protective devices.

Keep hands, feet and clothing away from moving parts.

EXERCISE CAUTION IN THE CASE OF LINE LEAKAGE

Leaking high-pressure fluids can penetrate the skin and cause serious injury.

For this reason, depressurise the system before disconnecting lines. Ensure that all line connections are leak-proof before the pressure builds up again in the system.



It is difficult to see hydraulic oil leaking from a small opening. For this reason, use a piece of cardboard when searching for leaks. Protect the hands and body from high-pressure fluids.

If any fluid penetrates the skin, this must be immediately removed by a doctor who has experience with this kind of injury. Failure to seek medical attention can lead to serious infection.

Doctors unfamiliar with this type of injury should reference a knowledgeable medical source.

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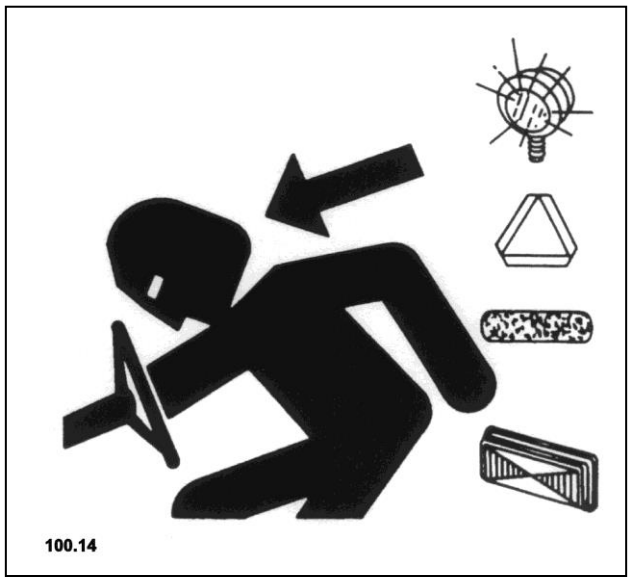
1.0. Safety Measures

USE SAFETY LIGHTS AND EQUIPMENT

Avoid collisions with other road users. Slow moving tractors with mounted or towed equipment, and self-propelled machines on public roads pose a specific danger. Frequently check for traffic coming behind you, especially when making turns. Ensure safe traffic conditions by using hand signals or indicators.

Use headlights, hazard warning lights, indicators and other safety equipment i.a.w. the respective legal provisions. Keep safety equipment in good working order. Replace missing or damaged parts. A set of safety lights is available from your dealer.



AVOID HEAT DEVELOPMENT NEAR PRESSURISED FLUID LINES

A highly flammable mist can form due to heat development near pressurised fluid lines. This can result in severe burns. Do not cause heat development by welding, soldering or using a welding torch near pressurized fluid lines or other flammable materials. Pressurised lines can be accidentally cut through when heat goes beyond the immediate flame area.

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REMOVE PAINT BEFORE WELDING OR HEATING PARTS

Welding should only be carried out by persons with a relevant qualifying certificate i.a.w. EN287.

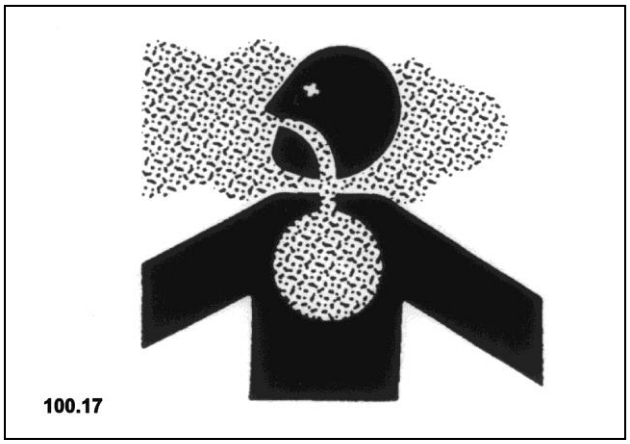
Avoid the formation of toxic fumes and dust.

Hazardous fumes can be generated when paint is heated due to welding, soldering, or using a welding torch.

All work is to be performed outdoors or in a well-ventilated area. Dispose of paints and solvents i.a.w. the appropriate regulations.

Remove paint before welding or heating parts:

- The dust generated due to the sandblasting or grinding of parts must not be inhaled. For this reason, wear suitable breathing protection.
- Where a solvent or paint stripper is used, it must be rinsed off using water and soap before carrying out any welding. Then wait at least 15 minutes before welding or heating for the fumes to disperse.



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1.0. Safety Measures

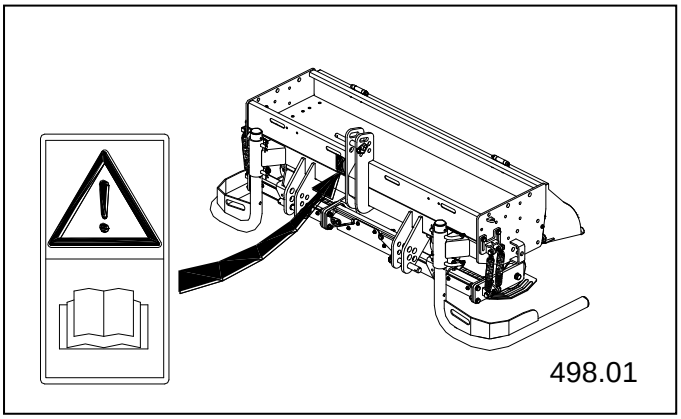
1.1. Adhesive Safety Signs

Warning symbols

Warning signs serving to draw your attention to dangers are attached to the machine at several important positions. The hazard is identified via a warning triangle. A second symbol informs you how the injury can be prevented by acting appropriately. These warning signs, their placement on the machine and a brief explanation are given below.

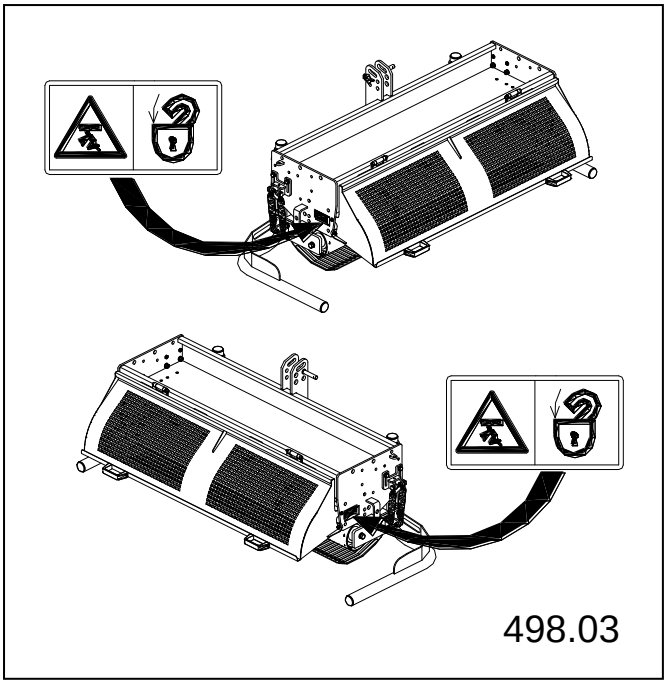
Operating instructions

These operating instructions contain all important information necessary for the safe operation of the machine. Carefully observe all safety egulations in order to prevent accidents.



Protective cover

Protective cover prevents access to tools. The protective cover is secured on both sides for safeguarding.



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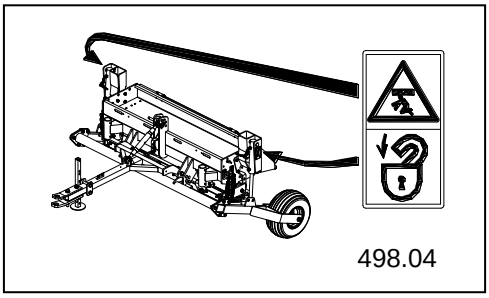
1.0. Safety Measures

1.1. Adhesive Safety Signs

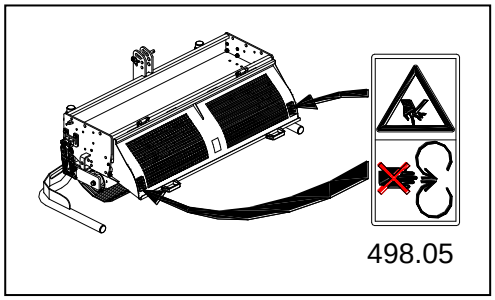
Parking safeguard

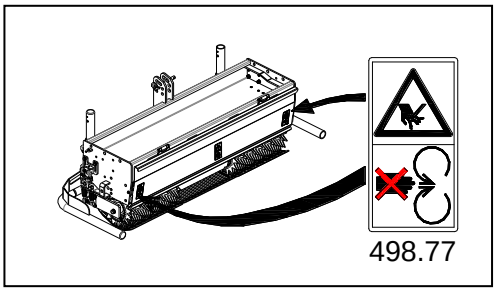
Before placing the machine on the ground, the ball cock on both hydraulic cylinders must be locked to prevent lowering.



Tools

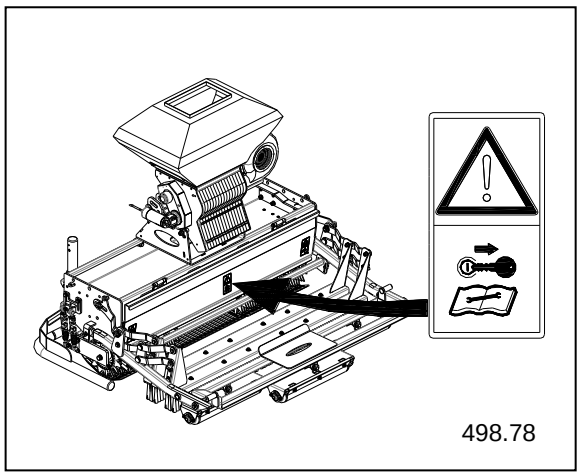
Never touch the moving parts of the machine. Wait until they have come to a complete standstill.

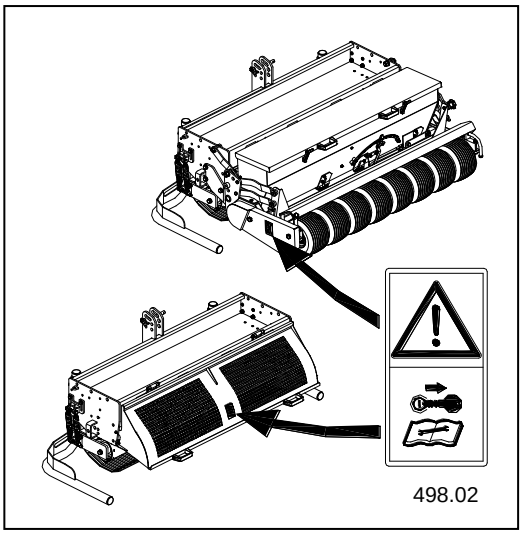




Protective covering

Never reach into crushing hazard zones while parts located there can still move.





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1.0. Safety Measures

1.2. Safety Equipment

GENERAL SAFETY SIGN REQUIREMENTS

A safety sign with the following safety practices or similar information shall be provided on the machine. The label should preferably be visible from the operator's position.

a) Read the operating instructions.

b) Do not operate the machine without safeguards, shields, and where the safety devices are not in place and working.

c) Do not operate the machine when children and others are nearby.

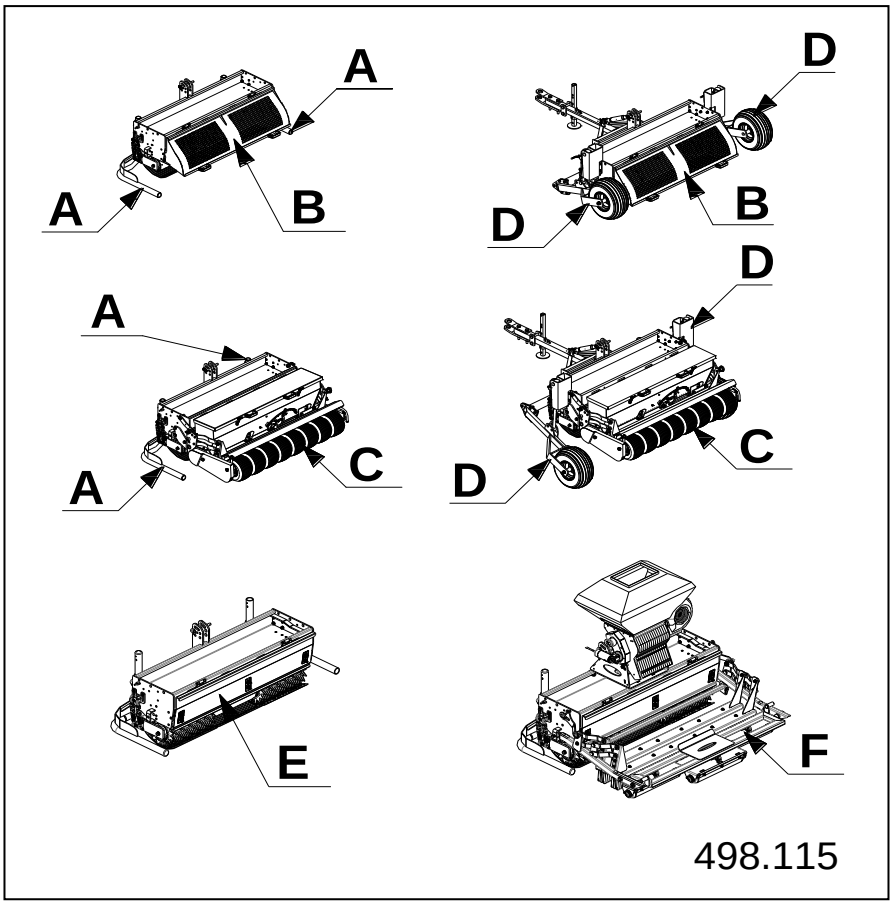
d) Do not allow untrained personnel to operate the machine.

ATTENTION DANGER !

Never use the TERRA FLOAT without safety equipment. Otherwise, you expose yourself and others to extreme danger.

⇒ Moving parts can result in serious injuries.

Where to find safety equipment on your machine



A = Undetachable parking supports inserted as spacers on the right and left .

B = Protective cover, can only be removed with tools.

C = the reseeding unit assumes the function of the protective cover when attached

D = Chassis securely attached as spacer on the right and left ..

E = Safety latch replaces the protective cover **(B)** and must be installed together with the brush unit **(F)**.

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1.0. Safety Measures

1.3. Safety instructions

- In addition to the information provided in these Operating Instructions, please also observe generally applicable safety and accident-prevention standards !
- Familiarise yourself with all equipment and operating elements and their functions before starting work. Ensure that all protective equipment has been properly installed. It is too late to do this when you have started work !
- In the working area, the user is responsible for the safety of other persons !
- Before moving off, ensure that the immediate area of the machine is clear e.g. no children nearby.
  Ensure that your visibility is not impaired !
- Keep all persons clear of the danger zone of the machine !
- Switch off the machine and the tractor motor when performing any maintenan.
- Special care should be taken when working and turning on a slope.
  - DANGER OF TOPPLING !
- CAUTION !
  The equipment version with a drawbar is **NOT** approved for travel on public roads!

2.0. Assembly

2.1. General Information

Place the TERRA FLOAT on the ground with parking supports in topmost position.

For this work, please use your personal protective equipment (PSA) such as: gloves, goggles, ear protectors Gegenstände als Ballast eingelegt werden ist folgendes zu beachten :

protectors.

If, instead of Wiedenmann additional weights, any random objects are inserted as ballast, the following must be observed:

1. The permissible weight according to the information provided in the technical data must be complied with.
2. The objects must be firmly attached to the ballast frame so as to prevent shifting.

2.2. Mounting Additional Weight

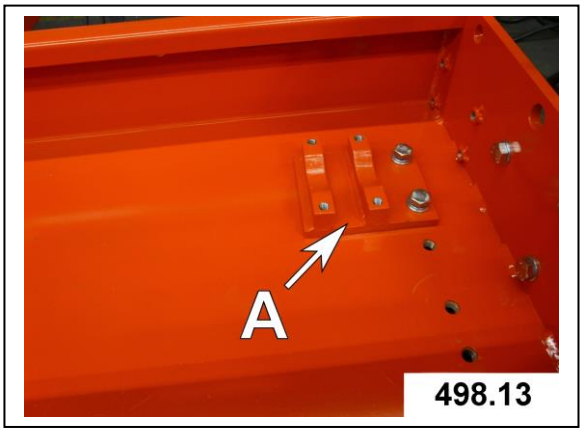
ATTENTION !

Only carry out mounting work when the machine is connected. Lower the connected machine onto the ground.

Switch off the tractor and secure it against unintentional start up.

Attach retainers (A) manually on both sides of the ballast frame.

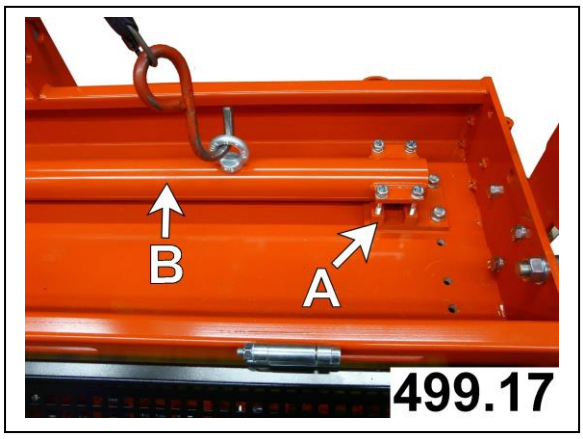
Connect suspension to ring bolts of the additional weight.



Lift additional weight onto mounting position using an auxiliary device.

Installation without auxiliary devices requires 2 persons. Installation load is 22 kg.

Fasten all fixing screws tightly.



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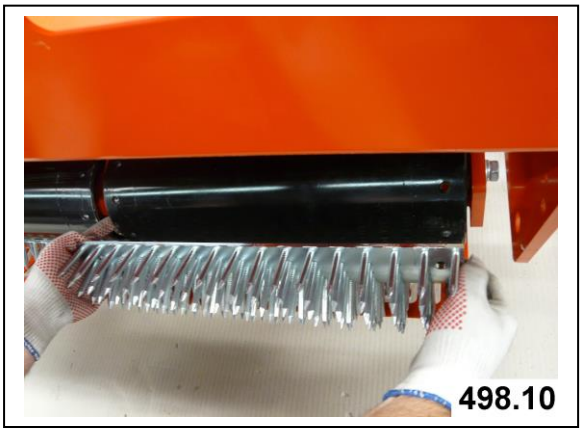
2.0. Assembly

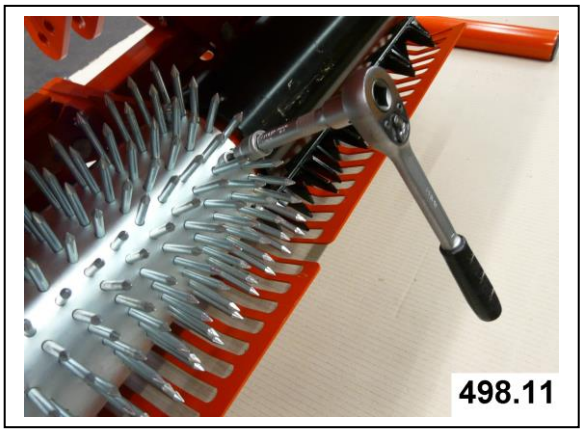
2.3. Mounting the half shell tools

Position half shell with both hands at the bottom and place on roller.

Align all six bores with the threads on the roller.



NOTE:
Use a ratchet with extension or a long Allen key to attach the half shell.



CAUTION:
The roller with the half shell attached will tilt downwards. There is a risk of injury due to the tools.

NOTE
for dismounting the half shells:

- Release all screws
- Always hold half shell firmly in position with one hand
- Remove screw with tools
- Lift off half shell with both hands

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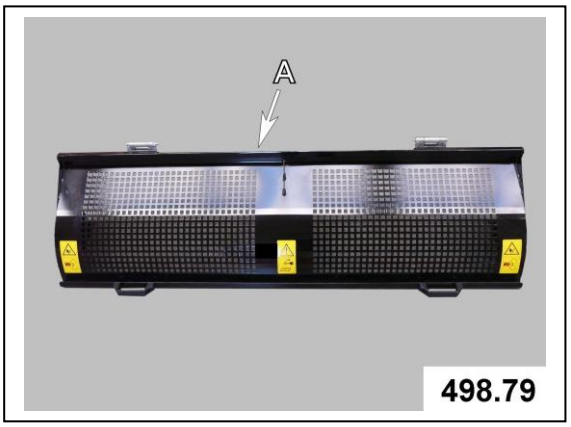
2.0 Assembly

2.4.1. Attaching the brush unit

Attachment without auxiliary devices requires two persons.

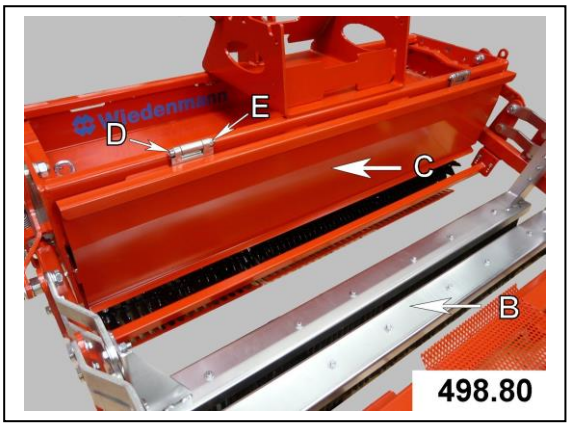


Version with black protective cover:

Remove the protective cover **(A)**

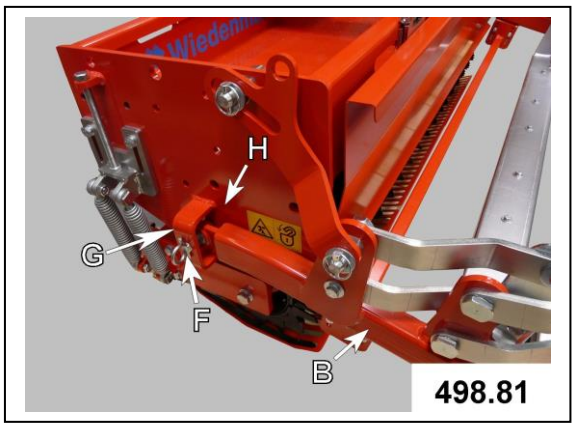
Note:

Once the brush unit has been removed, the protective cover (A) can be replaced by the safety latch (C).

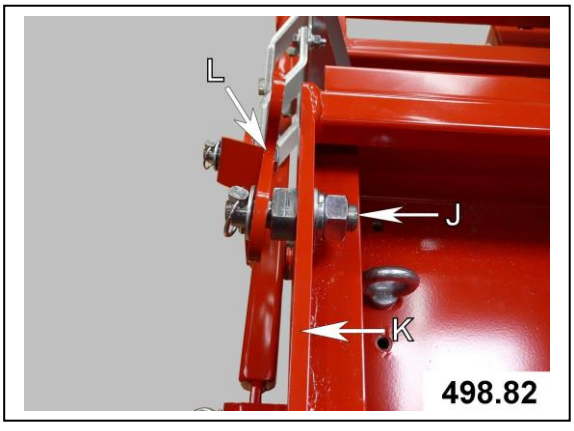


Fit the safety latch **(C)** and secure with a bolt **(D)** and nut **(E)**.

Fix in place on the left- and right-hand sides using a bolt, lock washer and U-washer.



Insert bolts **(F)** on both sides of the brush unit **(B)** between the fastening clamp **(G)** and the frame **(H)**, and secure on the inside of the frame **(H)** with a U-washer and a spring clip.



Fit the threaded bolt **(J)** to the frame **(K)** with a nut and lock washer, and fit the bracket **(L)**

Secure the bracket **(L)** with a U-washer and linch pin.

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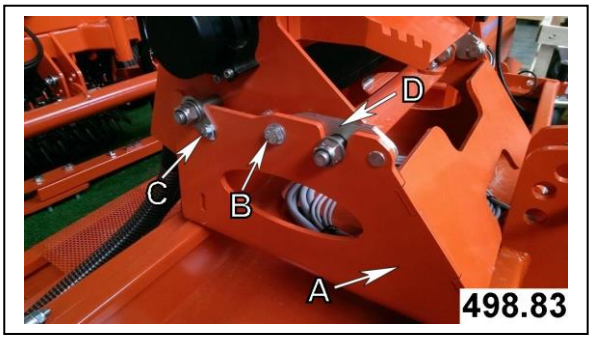
2.0. Assembly

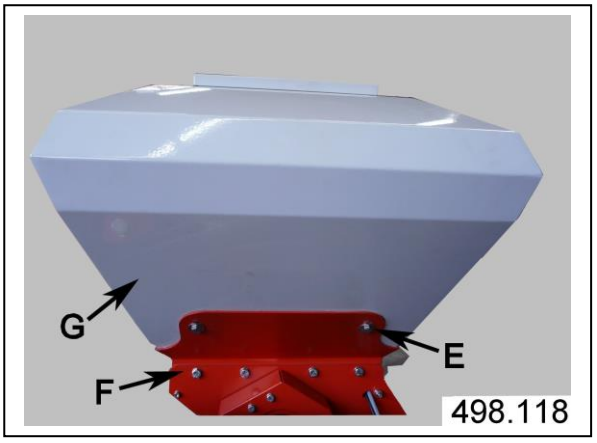
2.4.2. Attaching the precise overseeding unit

Place the bracket **(A)** on the Terra Float, push it in on the rear bar of the frame, and centre. Secure to the front bar of the frame using two bolts including U-washers and nuts.

Remove bolts **(B;C)** and open the fasteners **(D)** on both sides.



Remove the screws **(E)** on both sides of the sowing unit **(F)** and lift the container **(G)** off the sowing unit **(F)**.



Attach the sowing unit **(F)** to a crane, lift from the transport rack **(H)** and place onto the bracket **(A)**.

Fix the sowing unit in place using the fasteners **(D)** and secure with bolts **(B;C)**.

Tighten all screw connections.

Then place the container **(G)** back on the sowing unit and secure with the screws **(E)**.

Note:

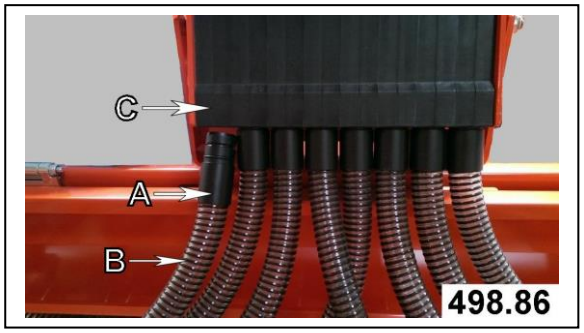
Please keep the shipping pallet and the transport frame (H) in a safe place, as these will need to be used for storage and secure transportation after disassembly.

All information, illustrations and technical specifications in these operating instructions are based on the latest information available at the time of publication. We reserve the right to make design changes at any time without prior notification.

2.0. Assembly

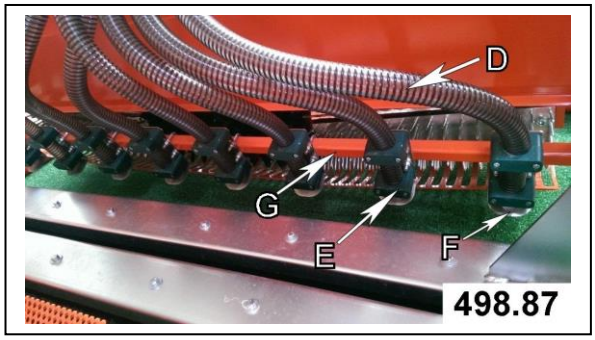
2.4.2. Attaching the precise overseeding unit

Screw the hose fittings **(A)** onto the hoses **(B)** and push them into the socket **(C)** until they engage.



Route the hoses **(D)** and adjust to the right length.

Connect the hoses, clamps **(E)** and baffle plates **(F)** to the hose bracket **(G)**, following the required spacing.

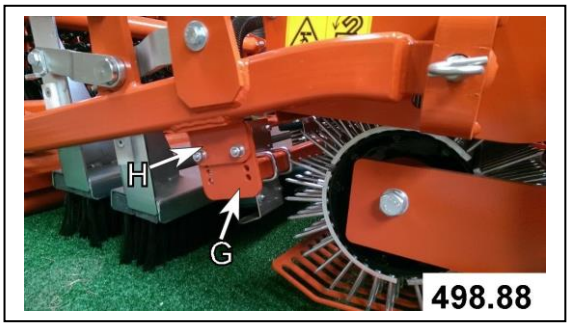


Note:

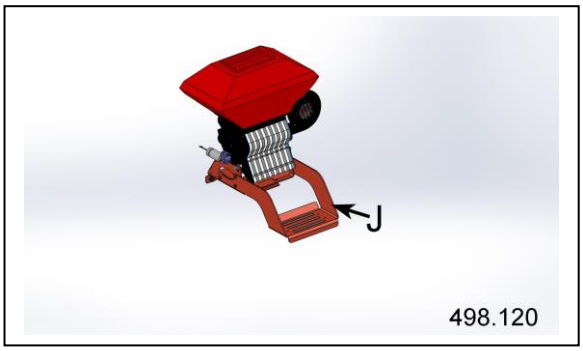
The two hoses in the middle should cross over one another to ensure that the seed is well distributed.

Fit the hose bracket **(G)** on the frame of the brush unit **(H)**.

Position evenly at the required height using the mounting holes on the left- and right-hand sides.



Install the steps (J) using the bolts provided on the perforated.



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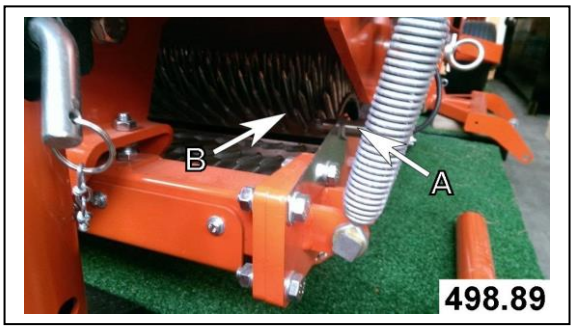
2.4.2. Attaching the precise overseeding unit

Install the speed sensor **(A)** at a maximum distance of 4 mm from the spiked roller or star roller **(B)**.

Note:

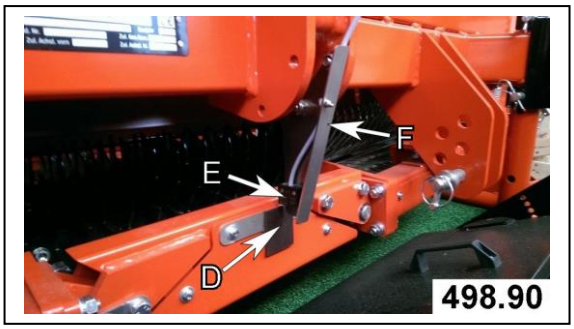
Please check that there is contact around the entire circumference of the roller (LED lights up on the sensor) and readjust if necessary.



Insert the sensor cable in connection 6 on the control panel **(C)** (see Chapter 7.5.1).

Fit the VGM magnet **(D)** to the middle roller mounting.

Secure the VGM sensor **(E)** to the support **(F)** provided on the frame and position at a maximum distance of 8 mm from the magnet **(D)**



2.0. Assembly

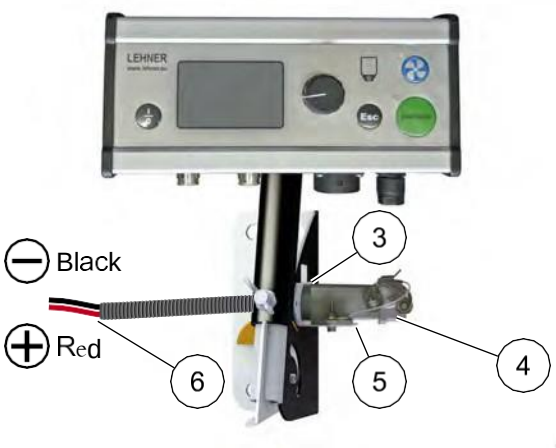
2.4.2. Attaching the precise overseeding unit

3.1 Install the control panel

Install the universal holder supplied in the package in the working range of the driver.

The installation is specifically dependent upon the carrier vehicle provided, and must be adapted to its conditions.

.. Secure the universal holder to the vehicle using point (1) and (2)



Thread the battery connection cable (6) through the opening (3).

Secure the battery cable plug (4) to the holder (5).

Note

Protect the control panel against damage and moisture

Route all the electrical cables in such a manner that they are not damaged during operation.

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2.0. Assembly

2.4.3. Electric connection to battery

CAUTION DANGER:

Risk of short-circuit and injury when working on the battery and electrical system! Electrical current flowing through the body can cause cramps, ventricular fibrillation, heart stoppage and internal burns. Risk of burns due to arcing caused by short circuits.

- Protect the battery against damage and moisture.
- Disconnect the electrical power supply before starting work on the battery and electrical system.
- Use suitable tools so as to avoid short circuits.
- Sure that the cables are routed without tension, kinking and chafing, and also avoid bending them around sharp edges.
- During all work on the battery, please comply with the regulations of the vehicle manufacturer in question.
- Only use original cables, or ones approved by the manufacturer.
- Always push on the cap and lock it to protect electrical connections against damage.jalk

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Advice

Faulty cables or cables with incorrect dimensions can lead to malfunctions and damage to the spread- er. Any changes to cable or plug connections without factory approval automatically invalidates the entire warranty.

Changes to cables undertaken by the customer are taken into account in the case of repair. Only use original ca- bles, or ones approved by the manufacturer. You must consult with the manufacture before carrying out any cable modifications. Power loss must be taken into account when extending cables. A poor power supply may prevent you from achieving the desired blower speed. Also, this could lead to intermittent complete failure.

Technical data, electrical system

Operating voltage	12.5 to 15 V
Fuse	40 A
Speed range	20 to 120 rpm
Power consumption of motor	10 A
Total Power consumption of Vento® II 8-Row	33 A
Total Power consumption of Vento® II 16-Row	45 A
Operating temperature	-10 to +50 °C
Storage temperature	-10 to +50 °C
Battery cable	minimum 6 mm²

2.0. Assembly

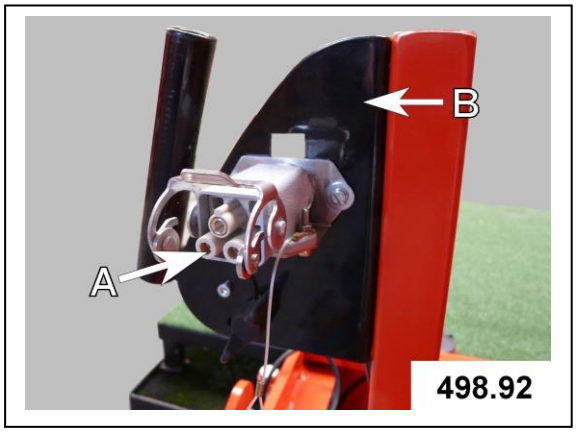
2.4.3. Electric connection to battery

CAUTION DANGER

Only appropriately qualified professionals may carry out the connection work.

To guarantee an optimum power supply, you must use the battery cable provided.

Mount the three-pin socket **(A)** together with the bracket **(B)** at a suitable location near the driver's seat. (see 2.4.2. Install the control panel).

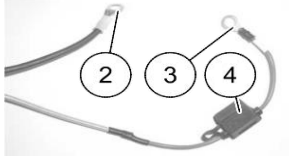


Route the cable **(C)** from the three-pin socket **(A)** to the battery.

Connect the ring shoe of line 3 (red) to the positive terminal of the battery.

Protection is provided by a 40 A fuse (4)

Connect the ring shoe of line 2 (black) to the negative terminal of the battery.



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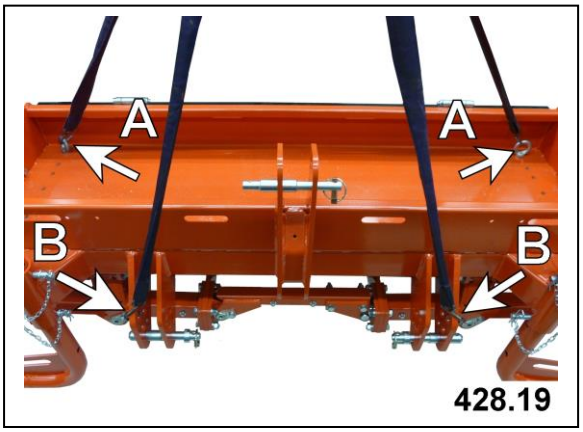
2.0. Assembly

2.5. Mounting the chassis with drawbar

Installation without auxiliary devices requires 2 persons. Installation load is 25 kg..

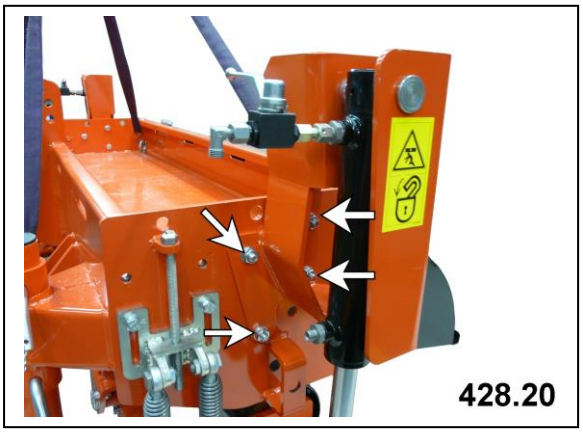
Hang basic unit on points **(A and B)** .



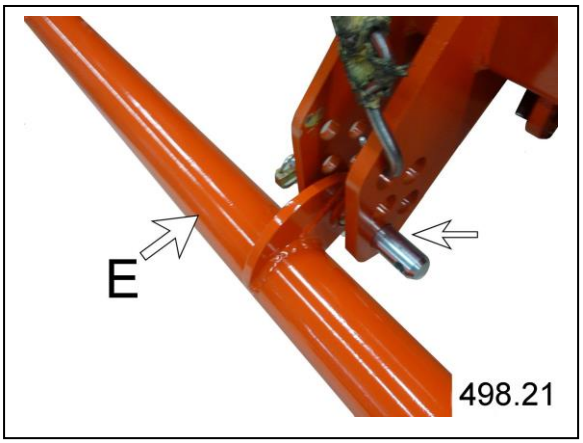
Attach cylinder bearing **(C)** to frame in the correct hole pattern on both sides.

Knock out clamping sleeve on the two parking supports.

Lift basic unit, using an auxiliary device, to dismantle parking supports.

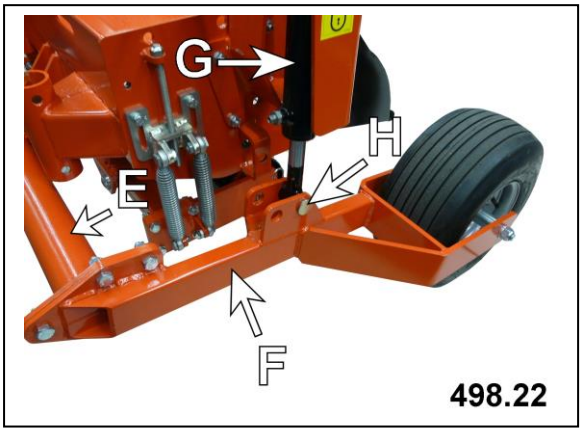


Insert crossmember **(E)** into the lowermost bores of the attachment brackets as shown in illustr. **499.24** and secure.



Attach wheels **(F)** to crossbar **(E)**, using the mounting supports.

Insert hydraulic cylinder **(G)** into the bore **(H)** of the wheel mounting support **(F)** and secure.

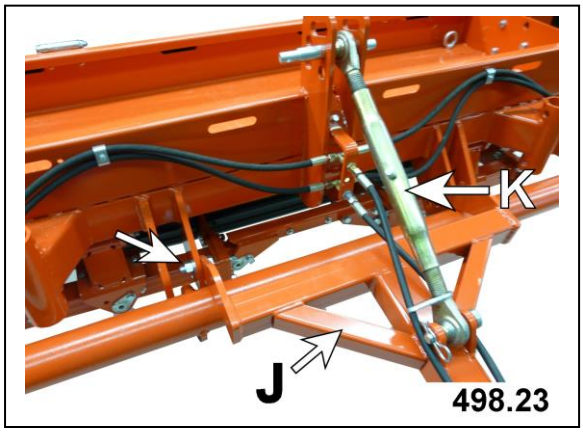


2.0. Assembly

2.5. Mounting the chassis with drawbar

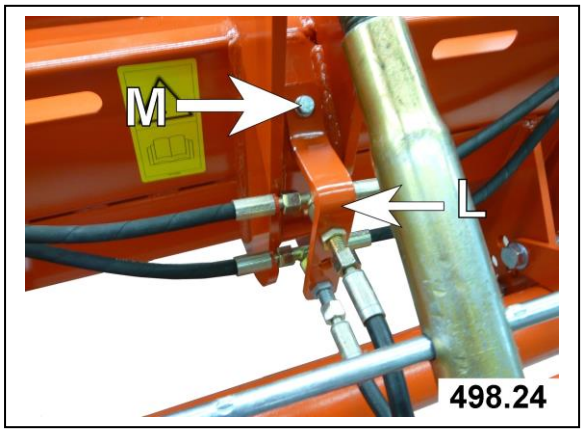
Attach drawbar **(J)** to the topmost bores of the inner attachment brackets, ensuring that the drawbar is movable.

Insert upper guide bar **(K)** into the topmost bore and secure.



Attach retainer **(L)** to frame with screw **(M)**.

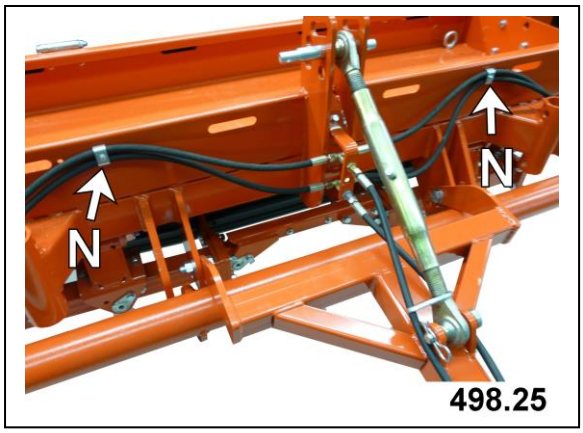
Attach hydraulic pipe to frame using fastening clamps **(N)**.

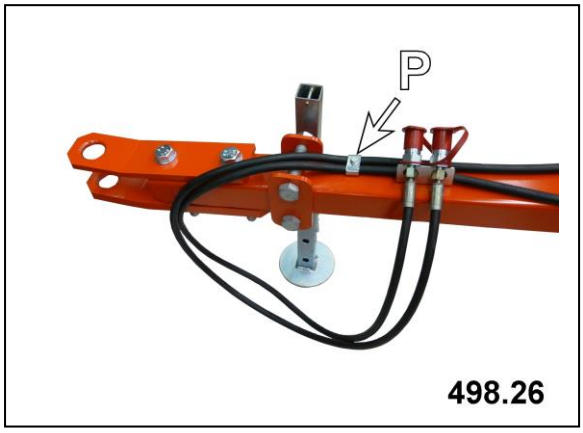


Fasten the lines for the tractor connection on the drawbar, using the fastening clamp **(P)** .

When connecting the hydraulic pipes, the following must be observed:

- that length is sufficient to allow movement
- that none of the pipes may be damaged by the movements.





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3.0. Transport

3.1. General Information

CAUTION DANGER

- TERRA FLOAT is delivered secured to a transport frame.
- Only use fork lifts, cranes or hoisting gear with sufficient lifting capacity.
- Never stand under lifted loads. There is an imminent danger to life if the

Improper transport and mounting of TERRA FLOAT can result in:

- injury to persons
- damage to property.

Pay special attention to the direction of approach when lifting TERRA FLOAT with the transport frame.

We do not accept any liability for damage resulting from improper handling.

3.0. Transport

3.2. Transporting the TERRA FLOAT

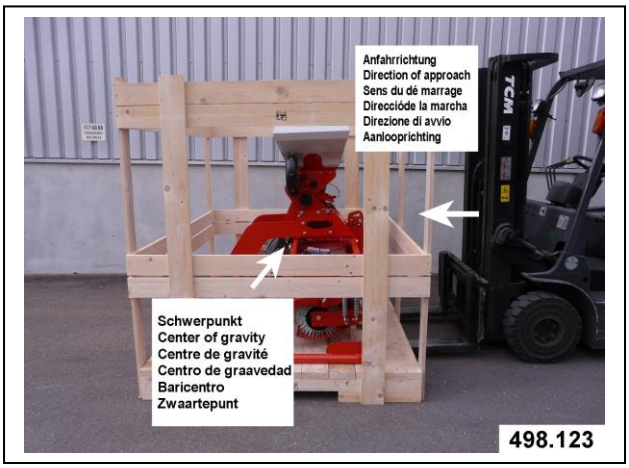
CAUTION DANGER

Caution must be excercised when cutting through the securing straps. Risk of injury due to ends "springing open".

3.2.1. Transport Using a Forklift

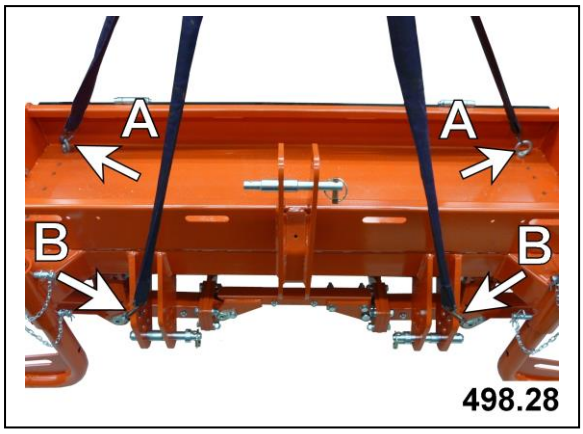
If the TERRA FLOAT is still secured to the transport frame:

- Insert the forks under the transport frame (pay attention to the direction of approach),
- carefully lift the transport frame,
- unload the TERRA FLOAT from the transport device when it is balanced.
- cut through the securing straps,
- connect TERRA FLOAT to the tractor and lift it from the transport frame. (See item 4.3.)



3.2.2. Transport Using a Crane

- Hook ropes or carrying loops into the ring bolts (A) and the topmost bore (B) of the outer connecting plates.
- Unload the TERRA FLOAT when it is securely suspended.



NOTE:

Transportation damage and missing parts must be immediately reported in writing to the transport company and Wiedenmann GmbH or the supplier.

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3.2. Transporting the TERRA FLOAT

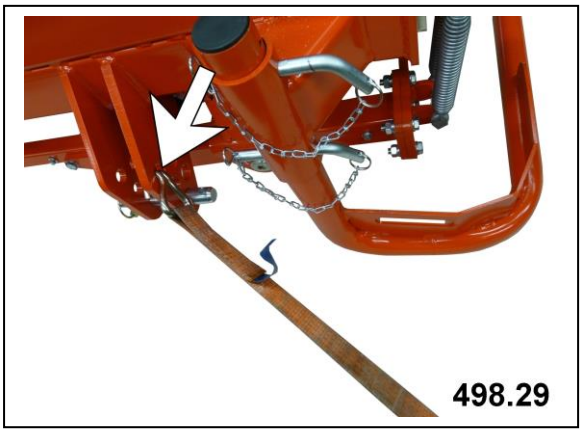
3.2.3. Mounting point for transport on a trailer

CAUTION DANGER :

Please note the removal instructions in Chapter 5.2. - DANGER OF TOPPLING!

Tighten tie-down straps evenly, alternating diagonally across.

- **Hooking points for straps on the front of the Terra FLOAT**



- **Hooking points for straps on the rear of the Terra FLOAT**

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3.0. Transport

3.3. Transportation with three-point hitch

Raise the attached equipment with the tractor rear hydraulic system and secure against inadvertent lowering.

When driving on public roads, please observe the swivel range of the attached TERRA FLOAT.

3.4. Transportation with drawgear

Lower the chassis of the attached device hydraulically to the stop by pressing downwards and secure against accidental lowering.

CAUTION !
The equipment version with a drawbar is **NOT** approved for travel on public roads!

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4.0. Connecting to the Tractor

4.1. General Information

CAUTION DANGER :

Do not exceed the max. authorized axle load of the tractor.

Ensure that there is sufficient front axle load to maintain steerability (where required attach ballast weights i.a.w. the tractor's operating instructions).

Always pay attention to:

- The load of the lower guide bar connection.

Only attach the TERRA SLIT if:

- when the engine is switched off,
- and the PTO shaft is stationary.

4.2. Ballast

When mounting equipment at the rear, always ensure there is sufficient front axle load; steering must remain supported. Loads must always be attached to the mounting points provided in accordance with regulations.

When selecting the front axle load, ensure that the permissible axle load weight, as well as the permissible overall weight including the mounted equipment, is not exceeded.

ATTENTION !

Specifications in the Operating Instructions for the tractor must be observed.

4.3. Connecting to the tractor

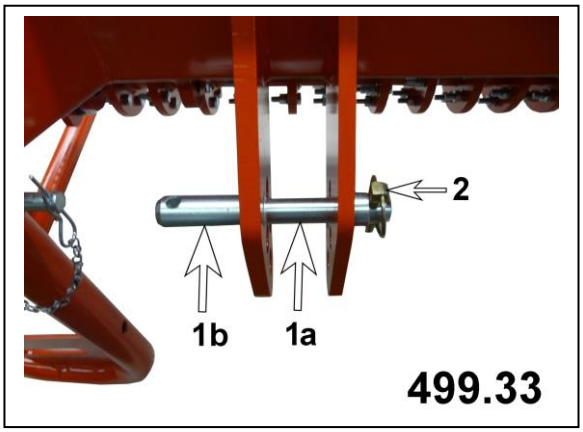
Prerequisite for connecting:

- a three-point hitch.

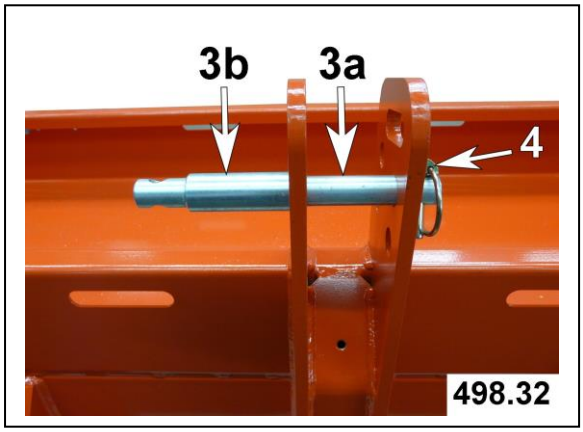
NOTE :
With the three-point linkage it is essential that the assembly categories of the tractor and machine match each other.

Connection procedure:

1. Insert lower guide bar into bolts (1a for cat.1 or 1b for cat.2) and secure with linch pin (2).

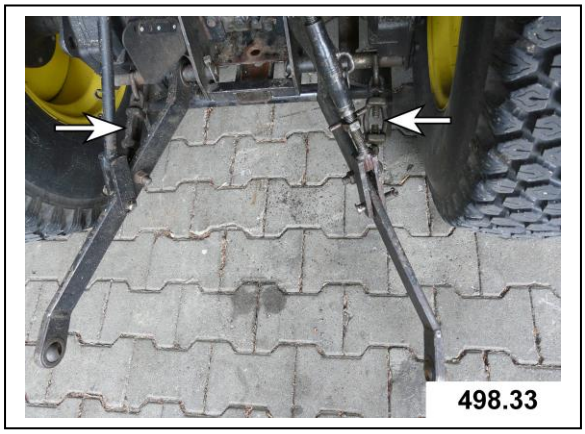


2. Mount top guide, depending on the tractor, the bolt for cat.1 with a diameter (3a) must be inserted and secured using lynch pin (4).
   For disconnecting from cat. 2 the diameter (3b) must be used.



3. Tighten the tension jack (5) of the stabilising chain.
4. Insert the two parking supports in the top position and secure.

   In the operating position, the parking supports function as protective bars.



CAUTION DANGER :

Check for correct connections before initial operation.

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4.0. Connecting to the Tractor

4.4. Hitching to the tractor

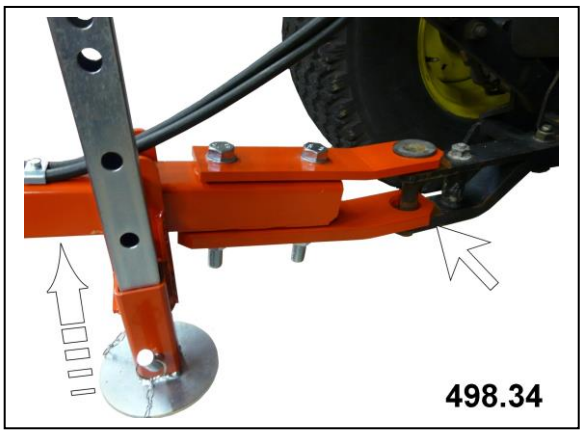
The following is required for attaching the machine:

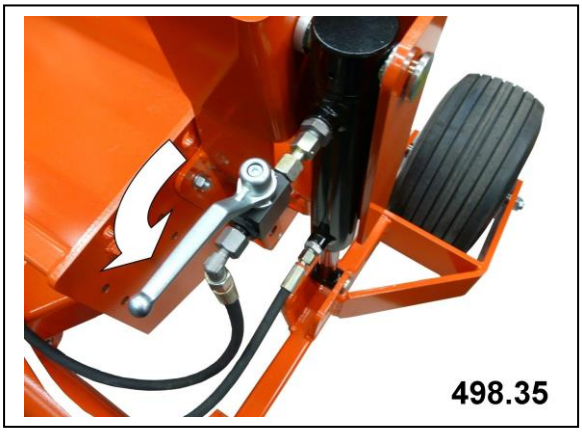
- **An adjustable drawbar or a trailer hook coupling.**
- **Hydraulic connection on the rear of the tractor**

If your tractor is not equipped with such a socket, please contact your dealer.

Peg out drawbar on tractor and secure.

The hydraulic system is connected to the hydraulic sockets at the rear of the tractor.





Avoid tight bends and chafing of the hydraulic lines.

Move ball cock into opened position.

4.5. Support for drawbar

Push supports into the most upper position, peg out and secure.

5.0. Disconnecting from the Tractor

5.1. General Information

Only set the TERRA SLIT down:

- **on a firm, stable and even surface and**
- **if parking supports are fully lowered.**

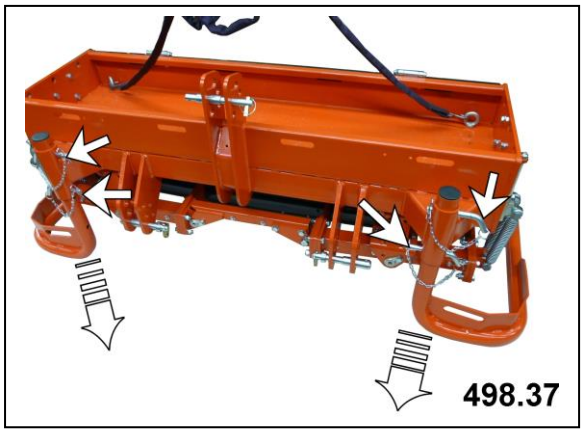
This ensures the TERRA SLIT is securely positioned
The tools will not be damaged

5.2. Dismantling the TERRA FLOAT

The TERRA FLOAT must only be stored on the parking supports.

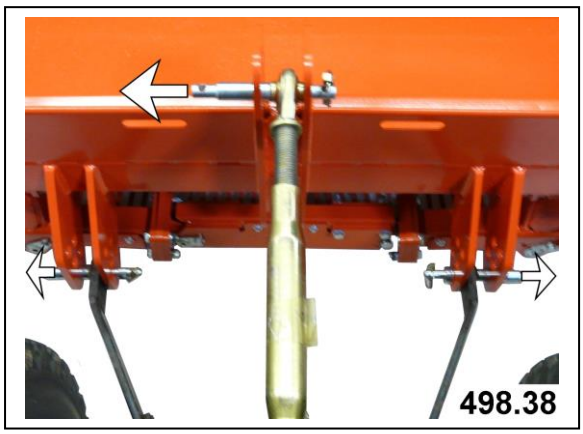
Insert parking supports in the lowermost position and secure.

Lower the TERRA FLOAT to the ground.



Slacken upper guide bar and release on the attachment device.

Release turnbuckles of lower guide bar. Remove location bolt from lower guide bar.



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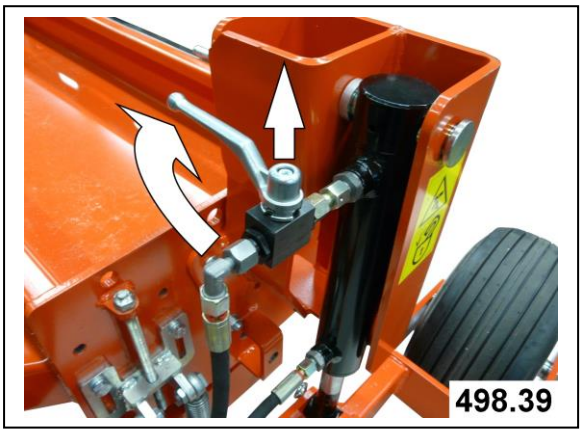
5.0. Disconnecting from the Tractor

5.3. Disconnecting the TERRA FLOAT

Lower the chassis of the attached device hydraulically to the stop.

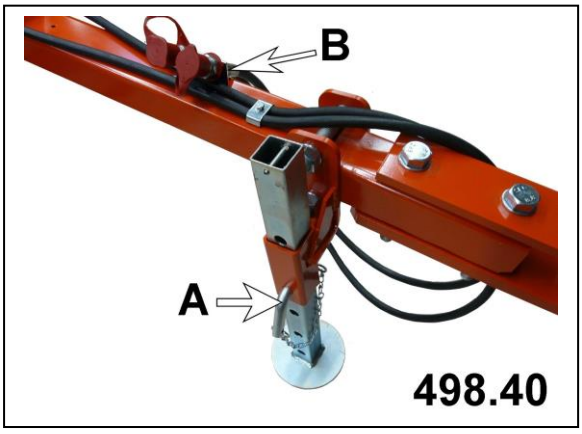
Move ball cock to the "OFF" position to safeguard the device against accidental lowering.



Relieve hydraulic pressure in the lines.

Lower parking support on the drawbar and secure with bolt (A).

Disconnect hydraulic lines and clip into bracket (B).



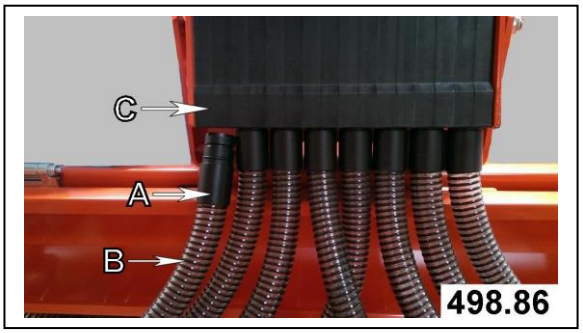
Disconnect drawbar from tractor.

5.0. Removal from tractor

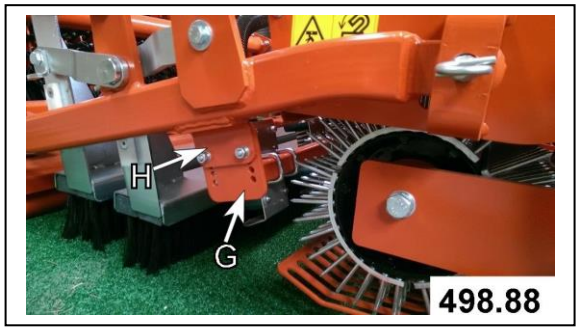
5.4.1. Disconnecting the precise overseeding unit

The sowing unit should be completely emptied before removal (see Chapter 7.5.5.10)

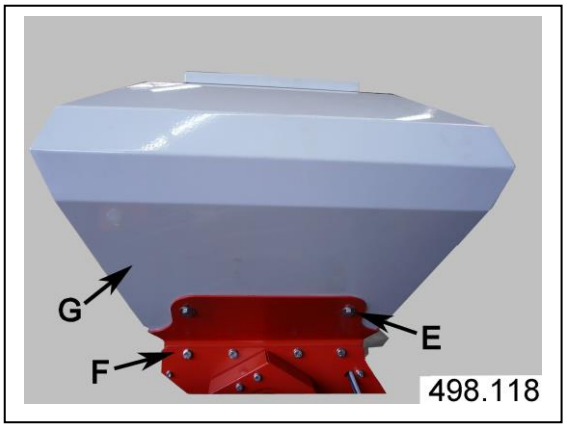
Pull the hose fittings **(A)** out of the sockets **(C)**



Remove the hose bracket **(G)** from the frame **(H)** of the brush unit and remove together with the hoses.



Remove the screws **(E)** on both sides of the sowing unit **(F)** and lift the container of.



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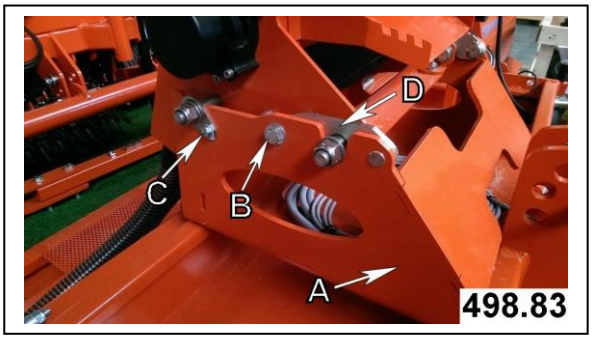
5.0. Disconnecting from the tractor

5.4.1. Disconnecting the precise overseeding unit

Undo and remove all the bolts **(B;C)** on the bracket **(A)**. Opens the fasteners **(D)** on both sides.



Lift the sowing unit out of the bracket **(A)** and onto the transport frame **(H)** using a crane and secure in place.

Then place the container back on the sowing unit and secure with the screws.

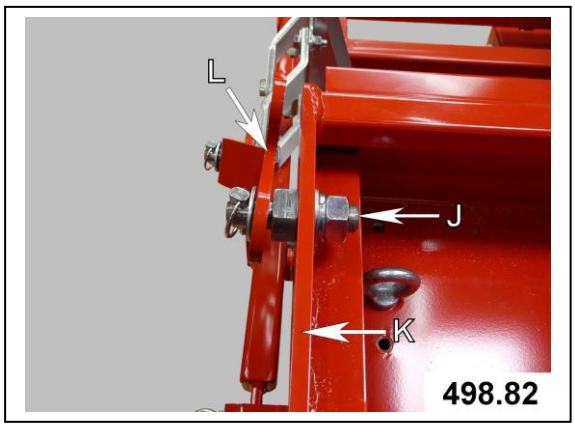
CAUTION:

Only store and transport the precise overseeding unit on the transport frame (H) provided.

5.4.2. Removing the brush unit

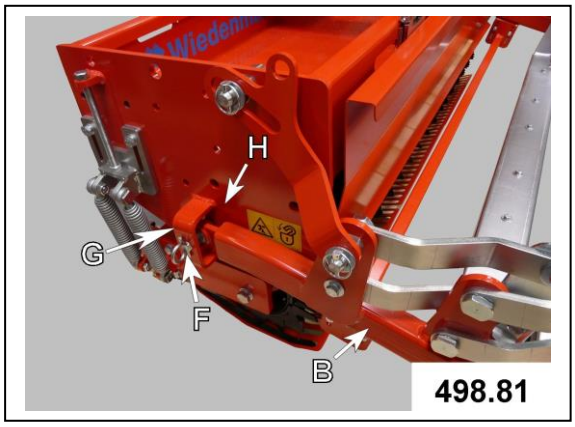
Disconnecting without auxiliary devices requires two persons.

Remove the linch pin and U-washer and pull the bracket **(L)** out of the threaded bolt **(J)**.



Remove the spring clip and U-washer from the inside of the frame **(H)** and pull out the bolt **(F)** .

Pull the brush unit **(B)** off towards the rear.



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6.0. Before initial operation

6.1. General Information

CAUTION DANGER :

It is important to become familiar with all equipment and operating elements as well as their function before operating the machine. Make sure that all protective devices have been properly mounted. It will be too late for this during operation!

In addition to the information contained in these operating instructions, also pay attention to the general safety and accident prevention regulations!

The equipment version with a drawbar is **NOT** approved for travel on public roads!

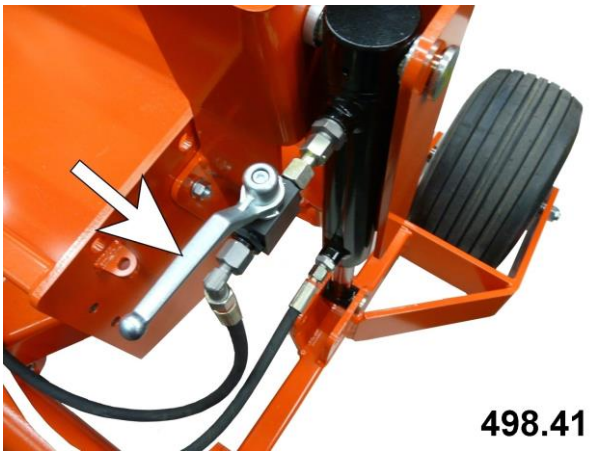
Ensure that there is sufficient front axle load to maintain steerability (where required attach ballast weights i.a.w. the tractor's operating instructions).

Special care should be taken when working and turning on a slope. **- DANGER OF TOPPLING !**

6.2. Displays and adjustment elements

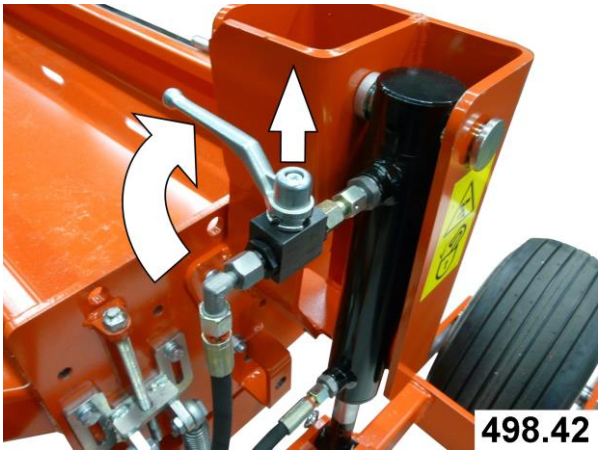
Ball cock located on both hydraulic cylinders to keep chassis in position during transportation and maintenance.

Position: “OPEN“



498.41

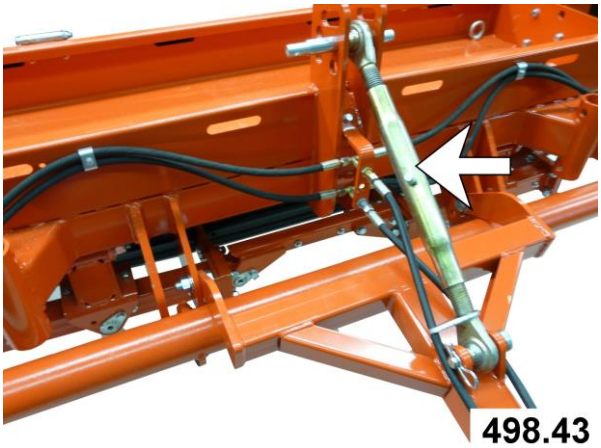
Position: “CLOSED“



498.42

Upper guide bar going from the drawbar to the frame of the basic unit.

The upper guide bar is used to adjust the horizontal working position.



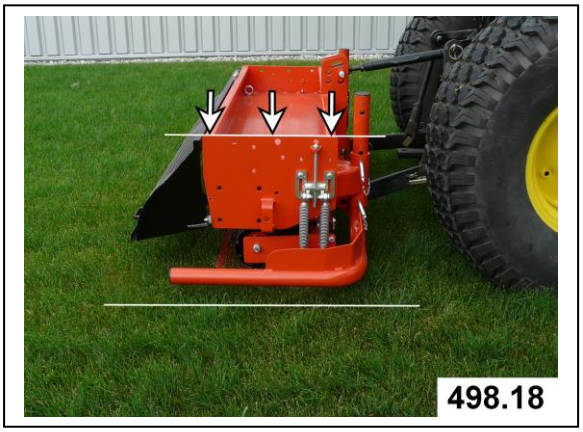
498.43

All information, illustrations and technical specifications in these operating instructions are based on the latest information available at the time of publication. We reserve the right to make design changes at any time without prior notification.

6.3. Adjusting the TERRA FLOAT

Lower TERRA FLOAT into working position on a level surface.

Adjust the upper guide bar so that the upper edge of the frame is parallel to the ground.

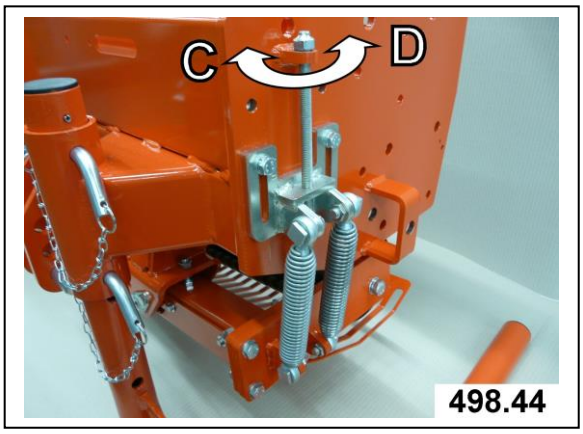


For adjusting the tension springs,

tension the threaded rod **(B)** as follows :

Rotating direction **C** = increasing tension

Rotating direction **D** = decreasing tension

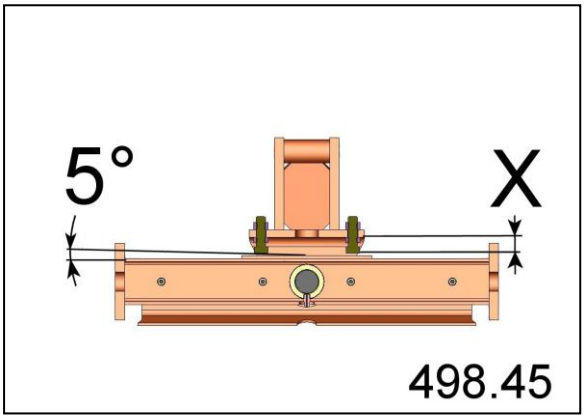


Adjusting the adjustment screws

Screws must be adjusted so as to prevent the rollers from colliding.

The adjustment screws are set to the measurement **"X" = 20 mm**.

This allows each roller to rock from side to side by approx. 5 degrees.



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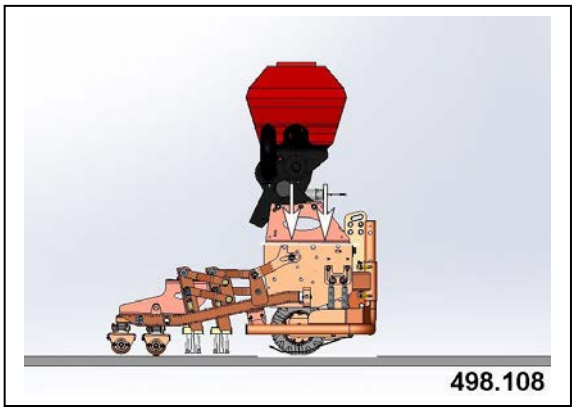
6.0. Before initial operation

6.4.1. Preparing the precise overseeding unit

Lower the Terra Float with precise overseeding unit into the working position on a level surface.

Adjust the upper guide bar so that the upper edge of the frame is parallel to the ground.



Note

The precise overseeding unit is a pneumatic pellet feeder for sowing seed.

Seed is regulated precisely by a rotary feeder that is controlled depending on driving speed.

Automatic seed regulation takes place using a speed sensor.

The spreader has an agitator for grit that flows with difficulty. The grit is spread through eight hoses by a stream of air.

6.4.2. Filling the precise overseeding unit

ATTENTION:

Risk of injury during operation if the spreading material hopper is open, due to spread- ing material being thrown out and rotating parts.
This can cause injuries to the eyes and crushing injuries.

- Wear appropriate working and protective clothing during all work.
- Always switch off the spreader and blower before opening the spreading material hopper

Advice:

Make sure that no foreign bodies (e.g. packaging material) get into the hopper, in order to avoid malfunc- tions.

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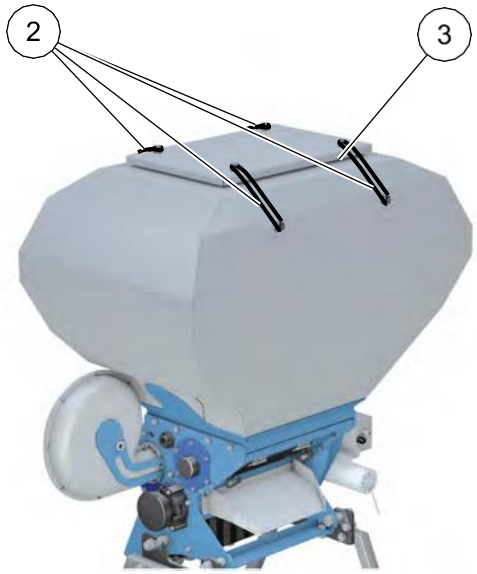
6.0. Before initial operation

6.4.2. Filling the precise overseeding unit

Before starting, ensure that the hopper on the **Vento® II** is completely secure.

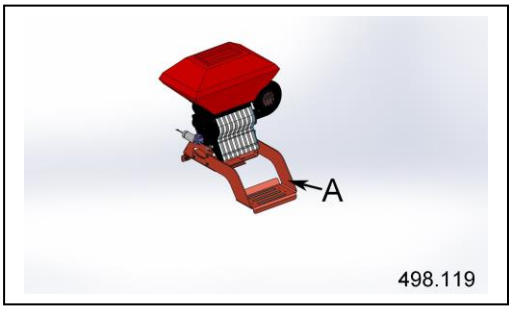


Filling

1. Make sure that the spreader and blower are switched off.
2. To fill the spreader release the rubber straps (2) on the hopper and remove the cover (3).
3. Make sure that suitable rotary valves are fitted ac- cording to the spreading material table, and that the load relief roof of the agitator has been mounted cor- rectly.
4. Fill the spreading material, making sure that no for- eign bodies or impurities get into the hopper.
5. Before closing the hopper, make sure that the seal is in place all round between the hopper and the hopper cover.
6. Seal the hopper using the four rubber straps (2).

CAUTION:

Use the steps (A) to fill the container



Irregular feed regulation caused by incorrect filling.

The container lid must be closed during use to avoid irregular feed regulation.

6.4.3. Precise overseeding unit Sowing table

Lolium Perene (Perennial rye-grass)

	Rotary feeders per hose outlet 1 x blue	Rotary feeders per hose outlet 2 x blue
Speed [rpm]	1023,00 g calibration sample	2047,00 g calibration sample
5	51,15 g/min	102,35 g/min
10	102,30 g/min	204,70 g/min
20	204,60 g/min	409,40 g/min
30	306,90 g/min	614,10 g/min
40	409,20 g/min	818,80 g/min
50	511,50 g/min	1023,50 g/min
60	613,80 g/min	1228,20 g/min
70	716,10 g/min	1432,90 g/min
80	818,40 g/min	1637,60 g/min
90	920,70 g/min	1842,30 g/min
100	1023,00 g/min	2047,00 g/min
110	1125,30 g/min	2251,70 g/min
120	1227,60 g/min	2456,40 g/min

Agrostis stolonifera (Creeping bent)

	Rotary feeders per hose outlet 2 x black	
Speed [rpm]	**490,25 g** calibration sample	
2	9,81 g/min	
4	19,61 g/min	
5	24,51 g/min	
6	29,42 g/min	
10	49,03 g/min	
20	98,05 g/min	
30	147,08 g/min	
40	196,10 g/min	
50	245,13 g/min	
60	294,15 g/min	
70	343,18 g/min	
80	392,20 g/min	
90	441,23 g/min	
100	490,25 g/min	
110	539,28 g/min	
120	588,30 g/min	

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6.0. Before initial operation

6.4.3. Precise overseeding unit Sowing table

TERRA FLOAT Air Conversion table

1 Gramm 0,00220 lb
1 m² 10,76391 sq.ft
1ha = 10.000 m² = 2,47 acres
1 acre = 43560 sq ft

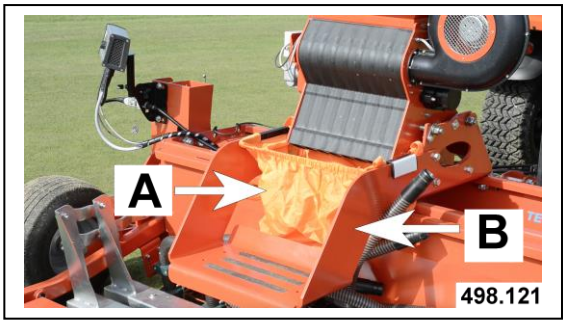
Gramm/ m²	lb per 1000 sq.ft.	lb per sq.ft.	lb per acre			
1	0,20	0,000205	8,92	Rotary feeder shaft black, 2x 0,25		
2	0,41	0,000410	17,84			
3	0,61	0,000614	26,77			
4	0,82	0,000819	35,69		Rotary feeder shaft blue, 1x 5,0	
5	1,02	0,001024	44,61			
6	1,23	0,001229	53,53			
7	1,43	0,001434	62,45			
8	1,64	0,001639	71,37			Rotary feeder shaft blue, 2x 5,0
9	1,84	0,001843	80,30			
10	2,05	0,002048	89,22			
11	2,25	0,002253	98,14			
12	2,46	0,002458	107,06			
13	2,66	0,002663	115,98			
14	2,87	0,002867	124,91			
15	3,07	0,003072	133,83			
16	3,28	0,003277	142,75			
17	3,48	0,003482	151,67			
18	3,69	0,003687	160,59			
19	3,89	0,003892	169,51			
20	4,10	0,004096	178,44			
21	4,30	0,004301	187,36			
22	4,51	0,004506	196,28			
23	4,71	0,004711	205,20			
24	4,92	0,004916	214,12			
25	5,12	0,005120	223,04			
26	5,32	0,005325	231,97			

6.4.4. Trial run

Use the "Easy Shopper" provided for the trial run (see 7.5.5.4. Trial run)

Before starting the trial run:

- Remove the hoses from the hose socket (see 5.4.1.)
- Clip the "Easy Shopper" (A), under the ejector of the hose socket, on the steps (B).



7.0. Operation

7.1. General Information

ATTENTION:

The TERRA FLOAT operator is responsible for persons located inside the working area.

Never operate the TERRA FLOAT without its safety devices. If you do operate the TERRA SPIKE without safety devices, you expose yourself and others to extreme danger.

Always check the immediate surroundings when starting to drive (Caution - CHILDREN!).

Do not drive backwards when the TERRA FLOAT is operating. Avoid big changes in direction while using yielding tractors.

The equipment version with a drawbar is **NOT** approved for travel on public roads!

In the case of the equipment version with a three-point frame, the rear hydraulic system of the tractor must always be in the floating position during operation.

7.2. Driving characteristics

CAUTION !

- **When the TERRA FLOAT has been installed, this may have an influence on the driving and operational qualities of the tractor.**
- **Always adapt your driving style to match the terrain and ground conditions.**
- **Special care should be taken when working and turning on a slope.**
  - DANGER OF TOPPLING !

A better result is obtained at low speeds.

Do not make any sharp turns.

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7.0. Operation

7.3. Working with the Terra FLOAT

Sequence: Three-point version
NOTE: **Lower the attached TERRA FLOAT only:** • **on the area to be worked on**
1. Lower the TERRA FLOAT to the ground. 2. Set tractor rear hydraulic system to floating position

Sequence: Attachment version
NOTE: **Lower the detached TERRA FLOAT only:** • **on the area to be worked on**
1. Lower the TERRA FLOAT to the ground. 2. Lift chassis off the ground 3. Lock hydraulic ball cock to safeguard the chassis against accidental lowering

Stop after several metres to check the working depth across the entire working width.		
NOTE: The tension springs must be adjusted so as to suit the particular lawn surfaces.		
If the working depth is even	**=**	the tension springs are tensioned correctly.
If the inner working depth is shallower than the outer working depth	**=**	Increase the tensioning on the tension springs
If the outer working depth is shallower than the inner working depth	**=**	Decrease the tensioning on the tension springs

7.0. Operation

7.4. Readjusting the tension springs

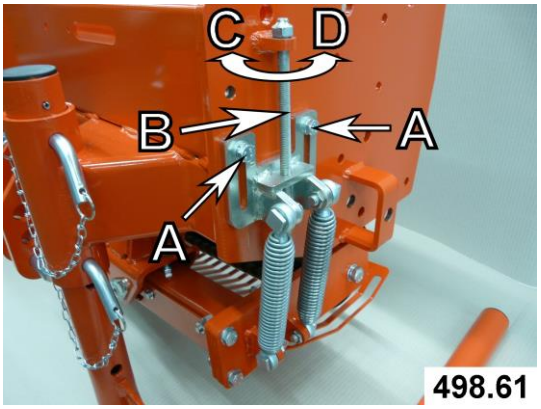
Release the screws **(A)**.

The tension springs are adjusted with a threaded rod **(B)**.

Turning the threaded rod **(B)** in :

Rotating direction **C** = increasing tension

Rotating direction **D** = decreasing tension



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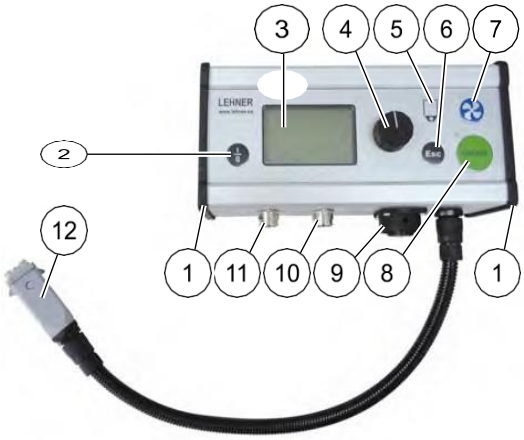
7.0. Operation

7.5. Operating the precise overseeding unit

7.5.1. Controls on the control panel



Controls

1 Side cover with blower opening

2 On/Off key

3 Graphic display

4 Turn-and-push button (encoder) for menu guide through the program

5 Empty indicator

- Red LED lit: small residual amount in hopper

6 Escape (back key)

7 Blower On/Off key and selector for blower power setting

Orange LED lit: blower inactive

Blue LED flashes: blower power setting not yet reached

Blue LED lit: blower running at power setting

8 Start/Stop key

Orange LED lit: Stop is active

Blue LED flashes: Start selected but not yet possi- ble

Blue LED lit: Start active

Connections

9 Socket for spreader control cable

10 7-pole socket for EHR magnetic sensor, Y cable or 7-pole connection cable

11 5-pole socket for wheel sensor or GPS receiver

12 6 mm² connection cable for battery cable

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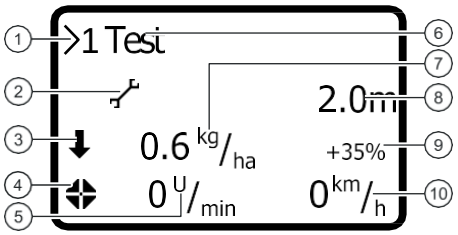
7.0. Operation

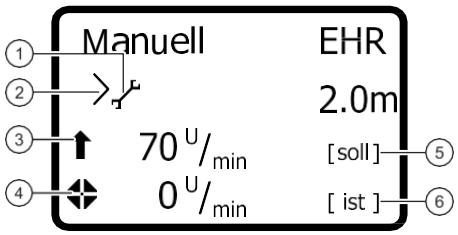
7.5. Operating the precise overseeding unit

7.5.2 Information shown on the display



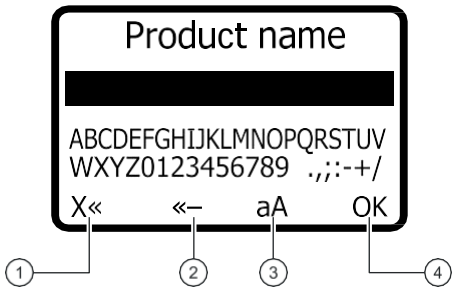
Automatic mode

1 Cursor
2 Main menu symbol
3 EHR symbol
4 Cellular rotor symbol
5 Cellular rotor speed
6 Selected calibration test
7 Output rate
8 Working width
9 Qty. adaptation
10 Travel speed



Manual

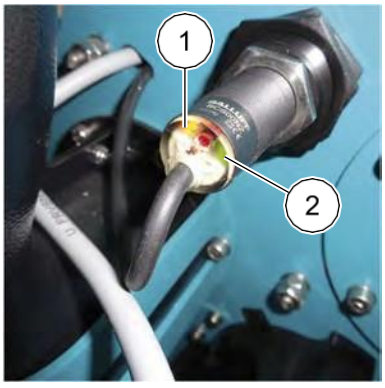
1 Main menu symbol
2 Cursor
3 EHR symbol
4 Cellular rotor symbol
5 Cellular rotor desired speed
6 Cellular rotor actual speed



Entry box

1 Delete single letters
2 Delete complete text
3 Higher/Lower case
4 Continue to calibration test

7.5.3. Information shown on the unit



1 LED lit: Empty indicator detects material in the hop- per.
2 LED lit: empty indicator is ready.

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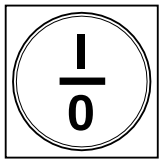
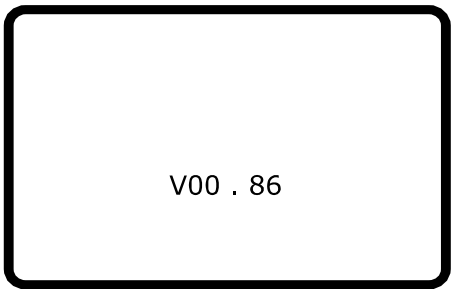
7.0. Operation

7.5. Operating the precise overseeding unit

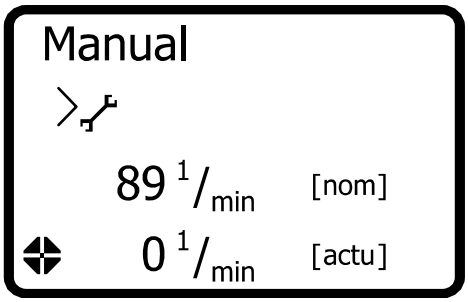
7.5.4. Swich on



1. Press On/Off key.



-
- "The appropriate software version" appears in the display.



- The last operating mode to be set will appear as the start screen.

.

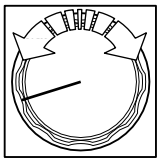
7.5. Operating the precise overseeding unit

7.5.5. General setting possibilities and displays

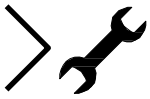
The control element can be used to make the following settings:

- Quantity adaptation (only possible in automatic mode)
- Hectare counter (only possible in automatic mode)
- Service query
- Calibration test
- Operating mode
- Calibration run
- Speed pulse
- EHR signal
- Working width
- Residual discharge
- Error memory
- Language
- Units
- Blower

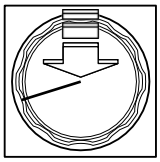
Select main menu:



1. Turn the turn-and-push button.



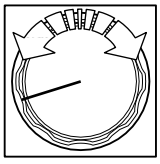
2. Select the "Main menu" symbol.



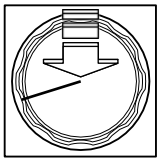
3. Push the turn-and-push button.

➢ The main menu will be displayed.

Select a menu point:



1. Select main menu.
2. Turn the turn-and-push button.



Push the turn-and-push button. The

➢ menu point will be displayed

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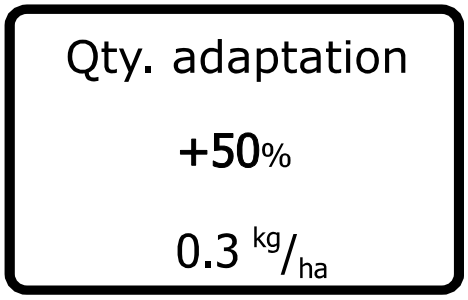
7.5. Operating the precise overseeding unit

7.5.5.1. Qty. adaptation

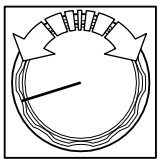
Advice

- The Qty. adaptation Can only be selected if automatic mode is selected.
- The quantity can only be adapted if at least one product has been created. see 7.5.5.4. "Calibration test".

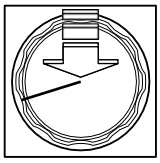


1. Select "Qty. Adaptation" menu point.

➢ The current value will be displayed.



2. Set the required value by turning the turn-and-push button.



3. Press the turn-and-push button to save the set Qty. adaptation.

➢ The entry will be confirmed.

➢ The main menu will be displayed.

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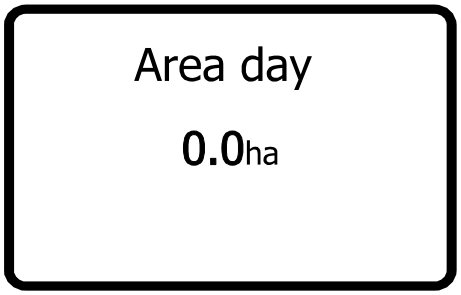
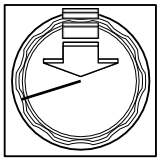
7.5. Operating the precise overseeding unit

7.5.5.2. Hectare counter

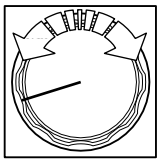


1. Select "Hectare counter" menu point.

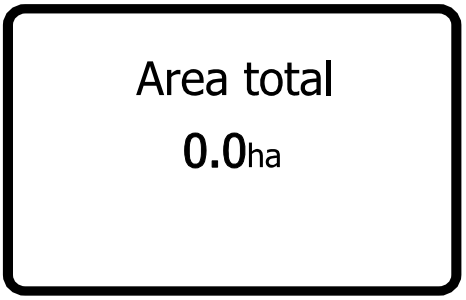
➢ The value for "Area day" will be displayed.



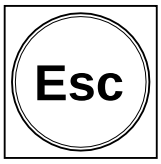
► Press and hold the turn-and-push button for 2 seconds to reset the daily area.



2. Turn the turn-and-push button clockwise.



➢ The value for "Area total" will be displayed.



3. Press the ESC key.

➢ The main menu will be displayed.

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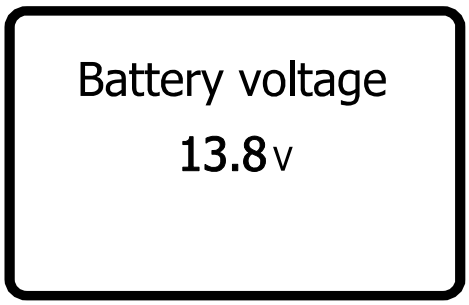
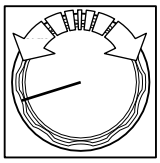
7.5. Operating the precise overseeding unit

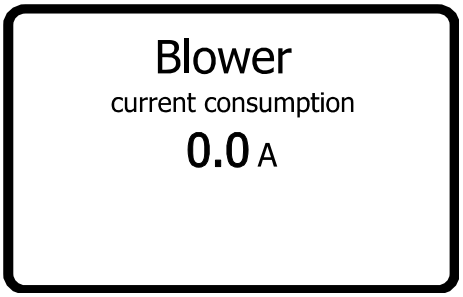
7.5.5.3. Service query



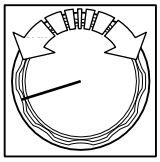
1. Select "Service query" menu point.
- The value for "Battery voltage" will be displayed.



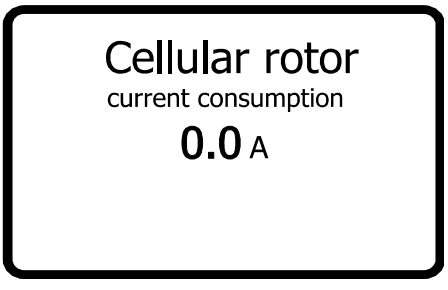
2. Turn the turn-and-push button clockwise.



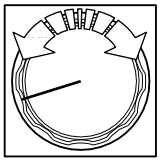
- The value for "Blower current consumption" will be displayed.



3. Turn the turn-and-push button clockwise.



- The value for "Cellular rotor current consumption" will be displayed.



4. Turn the turn-and-push button clockwise.

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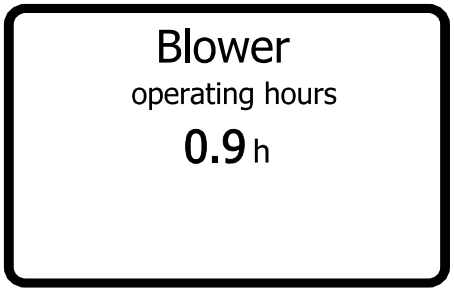
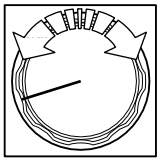
7.5. Operating the precise overseeding unit

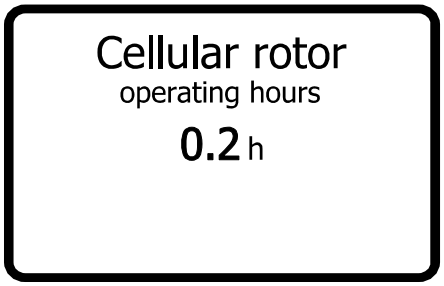
7.5.5.3. Service Abfrage



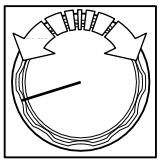
- The value for "Blower operating hours" will be displayed.



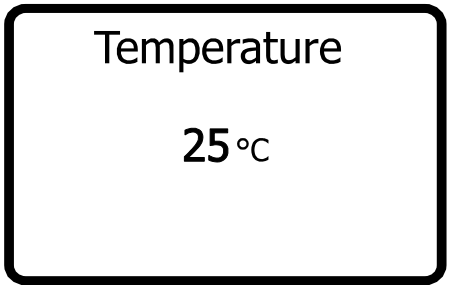
5. Turn the turn-and-push button clockwise.



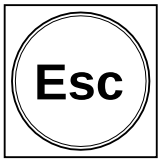
- The value for "Cellular rotor operating hours" will be displayed.



6. Turn the turn-and-push button clockwise.



- The current temperature of the ambient air at the control panel is displayed.



7. Press the ESC key.
- The main menu will be displayed.

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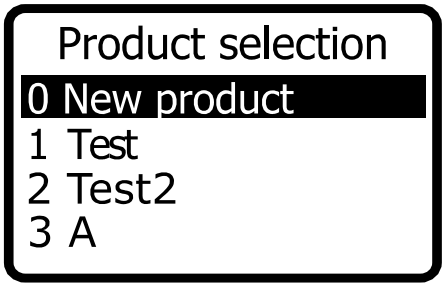
7.5. Operating the precise overseeding unit

7.5.5.4. Calibration test

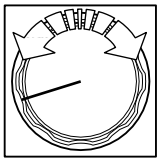
Advice

- A maximum of 75 products can be saved.
- Saved products can be overwritten but not deleted.



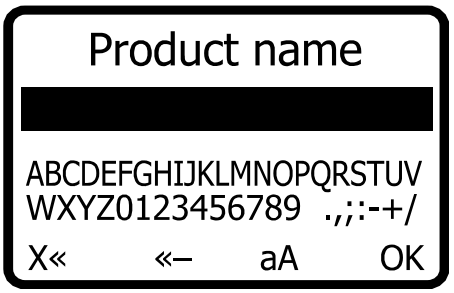
1. Pull off all hoses on the spreader.
2. Place a container under the outlets.
3. Select "Calibration test" menu point.

➢ "Product selection" is displayed.



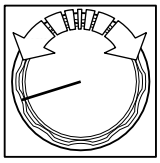
4. Turn the turn-and-push button to choose between "New product" and "Products already created".

New product:

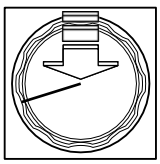


5. Select "New product".

➢ The entry box for the product name appears.



6. Turn the turn-and-push button to select the symbols required for the product name.



7. Push the turn-and-push button to confirm the selected symbol.

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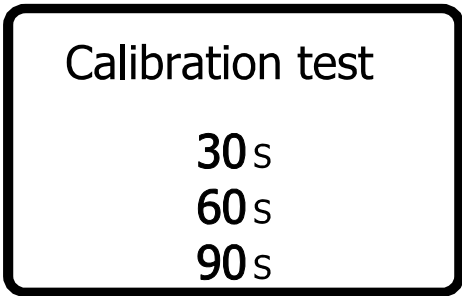
7.5. Operating the precise overseeding unit

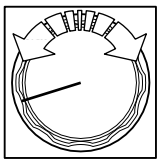
7.5.5.4. Calibration test

8. Select "OK" and confirm to save the product name.

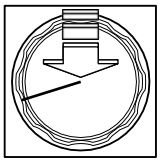


9. Select the duration of the calibration test.

Advice
The accuracy of the calibration test increases with its duration and the grain size of the material.
Fine material = Less time
Coarse material = More time

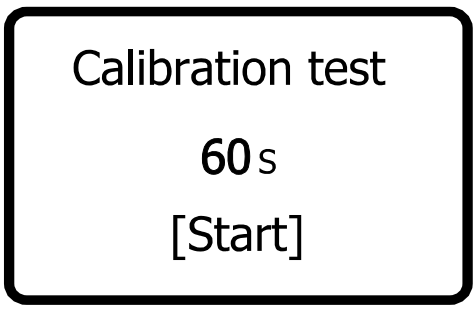


10. Turn the turn-and-push button to select the duration of the calibration test.



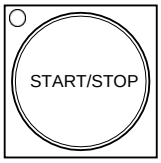
11. Save the entry by pressing the turn-and-push button.

➢ The entry will be confirmed.



➢ The start menu for the calibration test appears.

Advice
By turning the turn-and-push button quickly to the left or right, you can skip the countdown and the weight can be entered or edited in the program.



12. Press the "Start/Stop" key or external Start/Stop button on the unit.

➢ The calibration test will be started.

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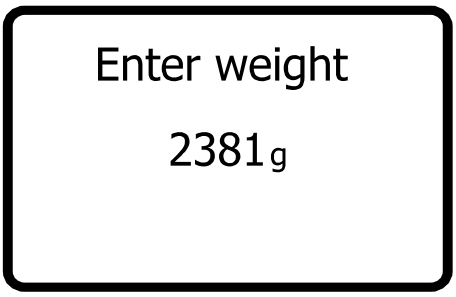
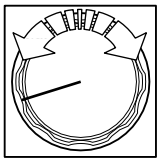
7.5. Operating the precise overseeding unit

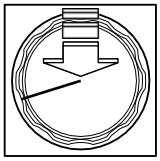
7.5.5.4. Calibration test



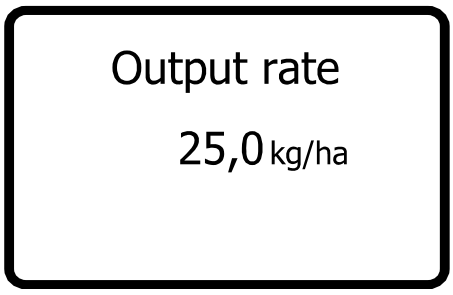
- After 60 seconds have passed, the "Enter weight" menu will appear.



13. Enter the collected weight by turning the turn-and-push button.

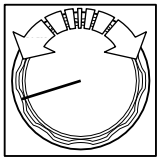


14. Save the entry by pressing the turn-and-push button.
- The entry will be confirmed.

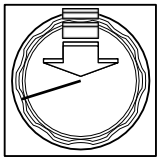


- The "Output rate" menu will appear.

Advice
The fixed output rate may be saved from the calibration test. However, the output rate may be edited at any time.



15. Enter the output rate by turning the turn-and-push button.



16. Save the entry by pressing the turn-and-push button.
- The entry will be confirmed.
- The main menu will be displayed.

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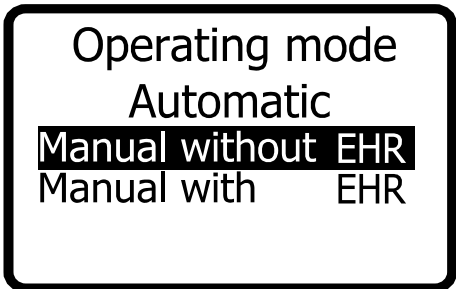
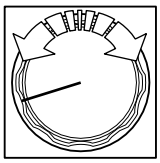
7.5. Operating the precise overseeding unit

7.5.5.5. Operating mode

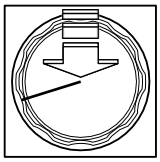


1. Select "Operating mode" menu point.

➢ The possible operating modes will be displayed.



2. Turn the turn-and-push button to select an operating mode.



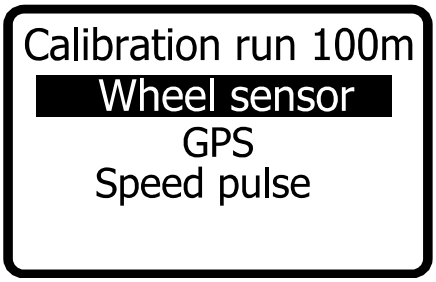
3. Save your selection by pressing the turn-and-push button.

➢ The selection will be confirmed.

➢ The main menu will be displayed.

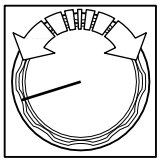
7.5.5.6. Calibration run

Advice
A measured distance of exactly 100 m must be covered in the calibration run.

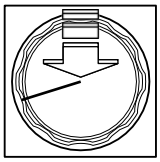


1. Select "Calibration run" menu point.

➢ The sensors for calibration will be displayed.



2. Turn the turn-and-push button to select a sensor.



3. Confirm your selection by pressing the turn-and-push button.

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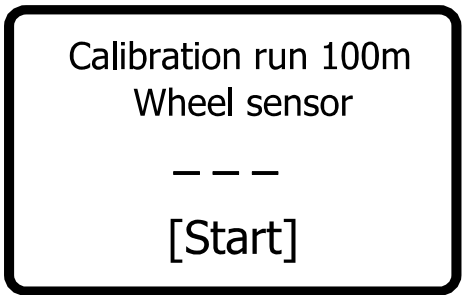
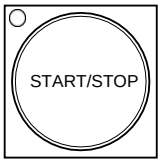
7.5. Operating the precise overseeding unit

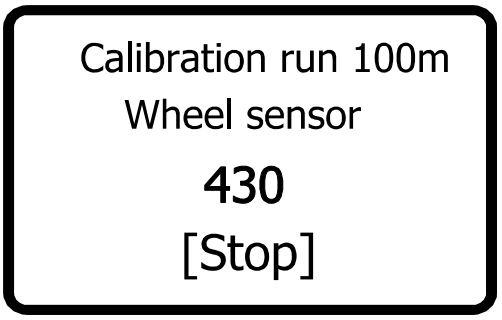
7.5.5.6. Calibration run



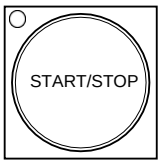
- The start menu for the calibration run appears.



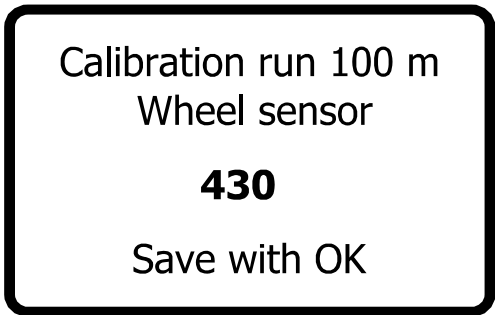
4. Press the "Start/Stop" Key to start the calibration run.



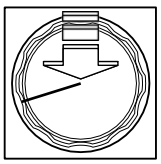
5. Cover a distance of 100 m with the vehicle



6. Press the "Start/Stop" Key to end the calibration run.



- The "Save with OK" menu will appear.



7. Save the measured distance by pressing the turn-and-push button.
- The entry will be confirmed.
- The main menu will be displayed.

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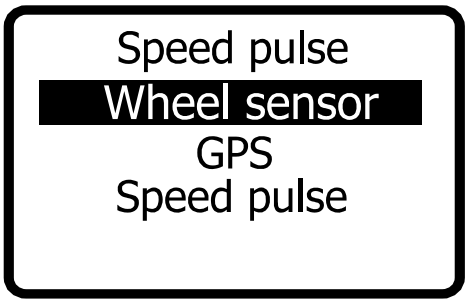
7.0. Operation

7.5. Operating the precise overseeding unit

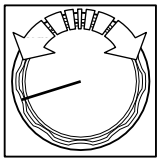
7.5.5.7. Speed pulse

1. Select "Speed pulse" menu point.

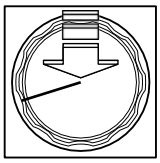
Advice
After completing the calibration run, the number of pulses recorded is automatically saved in this menu, point 3.5.7. The controller calculates the speed using these pulses.



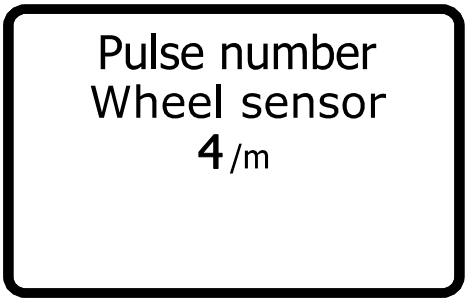
- The selection of the sensors is displayed.



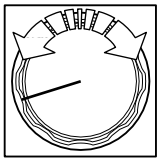
2. Turn the turn-and-push button to select a sensor.



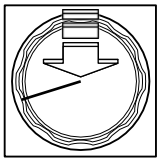
3. Confirm your selection by pressing the turn-and-push button.



- The current pulse number will be displayed.



4. Turn the turn-and-push button to change the pulse number.



5. Confirm your selection by pressing the turn-and-push button.
- The entry will be confirmed.
- The main menu will be displayed.

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We reserve the right to make design changes at any time without prior notification.

7.5. Operating the precise overseeding unit

7.5.5.8. EHR Function

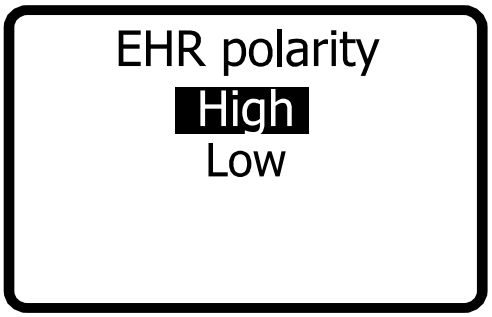
The spreader is fitted with EHR signal communication (socket) at the factory. The hydraulic signal is taken from the sensor attached to the middle roller (see 2.4.2)

Depending on the carrier vehicle, the signal is output on lifting or on lowering. Check the EHR signal is set correctly and correct it if necessary.

The spreader is stopped automatically when the front or rear hydraulics of the carrier vehicle are lifted. The spreader can be stopped manually at any time using the control panel.

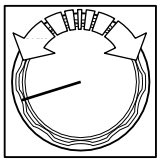
If the sensor is **active** when the linkage is raised, set the EHR polarity to "High".

If the sensor is **inactive** when the linkage is raised, set the EHR polarity to "Low".

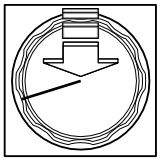


1. Select "EHR signal" menu point.

➢ The EHR polarity selection menu will be displayed.



2. Turn the turn-and-push button to choose between "High" and "Low".



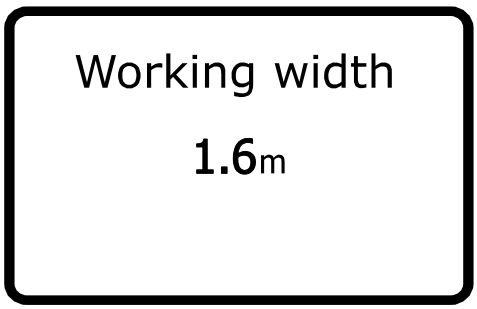
3. Confirm your selection by pressing the turn-and-push button.

➢ The entry will be confirmed.

➢ The main menu will be displayed.

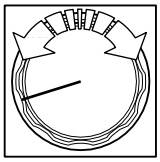
7.5. Operating the precise overseeding unit

7.5.5.9. Working width

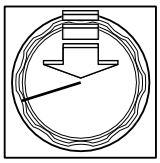


1. Select "Working width" menu point.

➢ The current working width will be displayed.



2. Turn the turn-and-push button to change the working width.



3. Confirm your selection by pressing the turn-and-push button.

➢ The entry will be confirmed.

➢ The main menu will be displayed.

7.5.5.10. Residual discharge

Advice

To avoid damage to property after completing work, always perform a complete residual discharge of the spreader.

Even if a visual inspection indicates that the spreader is empty, it can be expected that there will still be a quantity left in the spreader.

The residual amount of granulate must be collected in containers with a sufficient capacity.

Empty larger amounts through the residual discharge hatch, see Chapter 8.10..2, "Spreading material hopper".

Residual discharge for smaller amounts:

1. Pull off all hoses on the spreader.
2. Place a container under the outlets.
3. Select "Residual discharge" menu point.

➢ "Residual discharge start" will be displayed.

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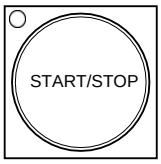
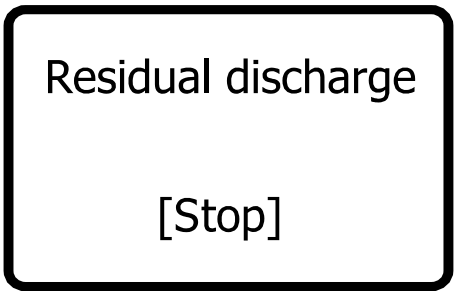
7.5. Operating the precise overseeding unit

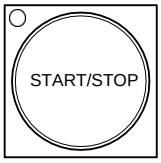
7.5.5.10. Residual discharge



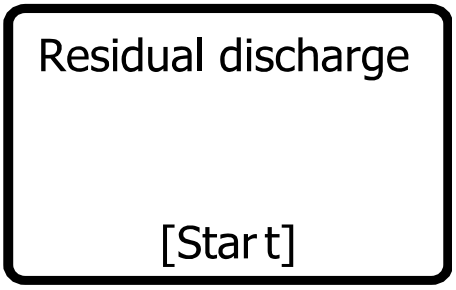
4. Press the "Start/Stop" key or external Start/Stop button on the unit.
- The residual discharge will be started.



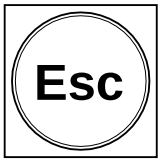
- "Residual discharge stop" will be displayed.



5. Press the "Start/Stop" key or external Start/Stop button on the unit.
- The residual discharge will be stopped.



- "Residual discharge start" will be displayed.



6. Press the ESC key.
- The main menu will be displayed.

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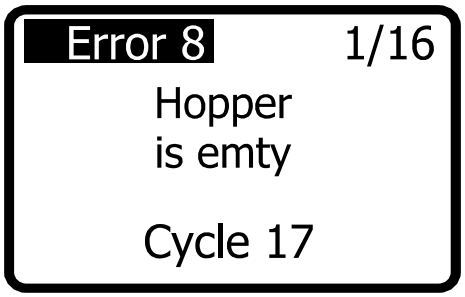
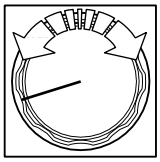
7.5. Operating the precise overseeding unit

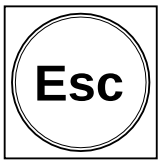
7.5.5.11. Error memory



1. Select "Error memory" menu point.
   - The list of errors will be displayed.

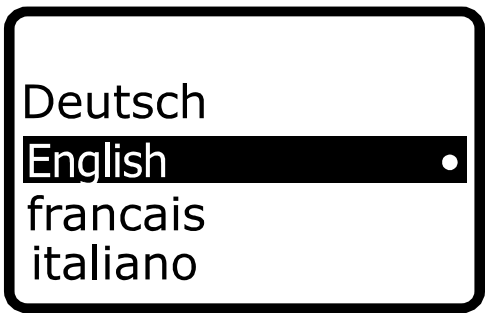


2. Turn the turn-and-push button.
   - The error messages will be displayed in sequence.

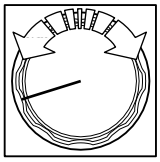


3. Press the ESC key.
   - The main menu will be displayed.

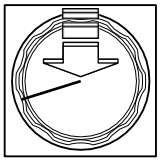
7.5.5.12. Language



1. Select "Language" menu point.
   - The languages will be displayed.



2. Select a language by turning the turn-and-push button.



3. Save your selection by pressing the turn-and-push button.
   - The entry will be confirmed.
   - The main menu will be displayed.

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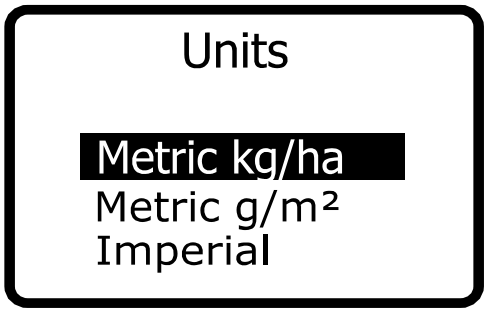
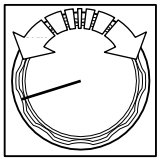
7.5. Operating the precise overseeding unit

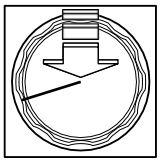
7.5.5.13. Units



1. Select "Units" menu point.
   - The units will be displayed.



2. Select a unit by turning the turn-and-push button.



3. Save your selection by pressing the turn-and-push button.
   - The entry will be confirmed.
   - The main menu will be displayed.

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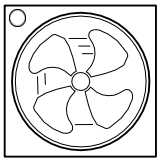
7.0. Operation

7.5. Operating the precise overseeding unit

7.5.5.14. Blower

Advice
Setting a high blower power increases energy consumption.
Lateral distribution can be varied by means of the blower power.

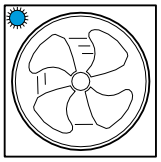


To switch on blower:

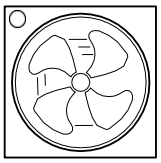
1. press blower button.

➢ The blue status LED will flash.

➢ The blower will accelerate to the last setting.



➢ After reaching this setting, the blue status LED will be lit.

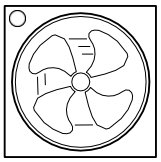


To switch off blower:

1. press and hold the blower key for 3 seconds.

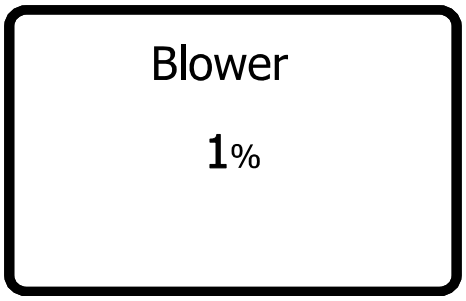
➢ The blower will switch off.

➢ The orange status LED will be lit.

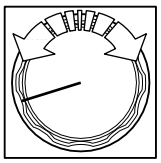


To set the blower:

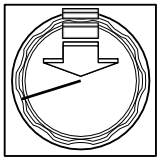
1. press the blower key whilst the blower is operating.



➢ The current setting will be displayed.



2. Set the required value by turning the turn-and-push button.



3. Confirm your selection by pressing the turn-and-push button.

➢ The entry will be confirmed.

➢ The start menu will be displayed.

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7.5. Operating the precise overseeding unit

7.5.6. Automatic dosing

With automatic dispensing, the speed of the cellular rotor is calculated according to the following values:

- Speed
- Output rate
- Qty. adaptation
- Working width
- Calibration value of the spreading material

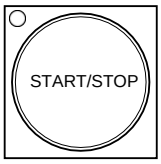
The calibration value can be stored in a calibration test, see Chapter 7.5.5.4, "Calibration test".

The output rate and product can be set directly, see Chapter 7.5..5, "General setting possibilities and displays".

Starting automatic dosing:

Warning!
Risk of injury!
Make sure that no other persons or animals are in the danger zone during operation.

The automatic dosing system will only start if there is a speed signal, a linkage signal is being output and there is material in the hopper, see Chapter 7.5.5.11, "Error memory".



1. Press the Start/Stop key.

➢ The blower will start, the blue blower LED and the blue LED in the Start/Stop key will flash until the set speed has been reached, see Chapter 7.5.5.14, "Blower".

➢ The LED in the Start/Stop key will turn orange when the blower speed has been reached.

2. Only press the "Start/Stop" when the speed is greater than 2 km/h and the hydraulics are lowered.

➢ The dosing system will start.

➢ The blue LED in the Start/Stop key will be lit.

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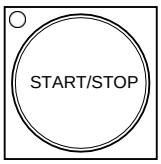
7.5. Operating the precise overseeding unit

7.5.6. Automatic dosing

Stopping automatic dosing:

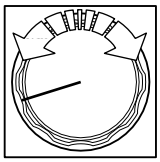
The dosing system will be stopped automatically when the hydraulics are raised or the travel speed is less than 1.5 km/h. The spreading procedure restarts when both signals are received again.



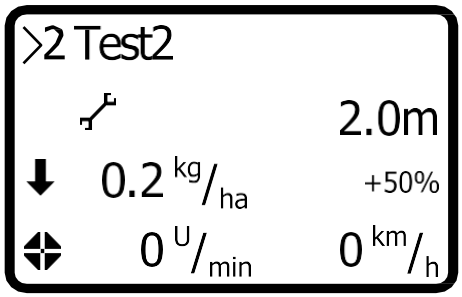
1. The spreading procedure can be stopped at any time by pressing the Start/Stop key.

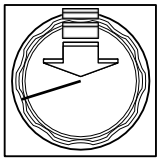
Possible settings in automatic mode,

The output rate and product can be set at any time. A product change is only possible if several products have already been stored, see Chapter 4.5.4, "Calibration test"

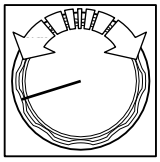


1. Select a product or output rate by turning the turn-and-push button.

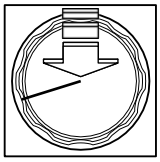




2. Push the turn-and-push button to edit the product selection or output rate.



3. Turn the turn-and-push button to choose between the products or values.



4. Push the turn-and-push button to confirm the product selection or output rate.

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7.5. Operating the precise overseeding unit

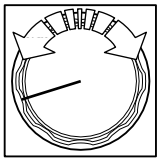
7.5.7. Manual without EHR

Warning!
Risk of injury!
Make sure that no other persons or animals are in the danger zone during operation.

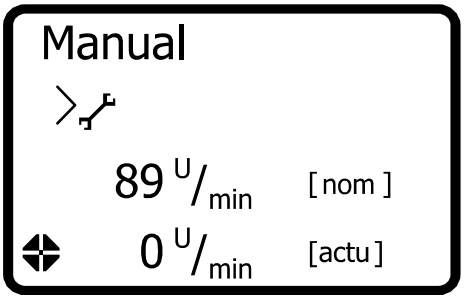
The motor to power the cellular rotor and blower can be switched on and off at any time.

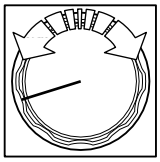
The speed of the cellular rotor can be adjusted manually at any time.

To adjust the speed of the cellular rotor:



1. Select a desired speed by turning the turn-and-push button.



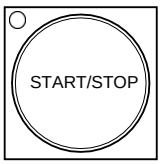


2. Turn the turn-and-push button to select a desired speed.

Blower:

1. To switch the blower on/off, see 7.5.5.14. "Blower".

Start/Stop the cellular rotor drive motor:



1. Press the Start/Stop Key to switch the motor on and off.

7.5.8. Manual with EHR

The motor to power the cellular rotor and lower can be switched on and off manually when the EHR signal is being received from the carrier vehicle or a linkage sensor. see 7.5.7. "Manual without EHR"

The speed of the cellular rotor can be adjusted manually.

When an EHR signal from the carrier vehicle or the signal from a lifting gear sensor is received, see 7.5.5.8. "Electronic link- age control (EHR) function"the spreader will stop automatically when the hydraulics are raised.

Dosing starts automatically when the hydraulics are lowered.

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7.0. Operation

7.5. Operating the precise overseeding unit

7.5.9. Error message

Message on the display	Error No.	Explanation
Cellular rotor blocked	1	• Check cellular rotor shaft for foreign bodies and remove blockage
Cellular rotor not responding	2	• The control cable for the spreader is not connected to the control panel • Check the control cable for damage • Check the connection cable for the cellular rotor drive unit • Check the plug on the control cable for damage
Blower blocked	3	• Check the blower for blockages
Excess voltage	4	• Max. voltage supply 15.5 V
Inadequate voltage	5	• Check voltage supply (min. 12.5 V) • Have you used our original 6 mm² battery cable?
Travel speed too high	7	• Maximum cellular rotor speed reached • Reduced travel speed or use a larger cellular rotor
Hopper empty	8	• Residual quantity (approx. 2 l) in the hopper
Speed signal missing	9	• No speed signal detected • Faulty contact or cable break on speed sensors
Overheating	10	• Allow the control unit to cool • Check the ventilation openings on the side covers to ensure they are clear • Keep the control unit out of direct sunlight • Check the power supply, is sufficient voltage being supplied (min. 12.5 V)

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7.5. Operating the precise overseeding unit

7.5.10. Troubleshooting

No signal from the wheel sensor	• Check the distance between the sensor and wheel nuts and adjust if necessary. Distance should be less than or equal to 4 mm. • Check the wheel sensor/control panel plug connection. • Check the counting points. • Check the cables.
No signal from the linkage magnetic sensor	• Distance between the sensor and magnet too large. • Note the installation direction of the sensor, see 2.4.2. „VGM Magnet”. • Check the cables.
Output rate excessive/insufficient	• Perform a calibration test, enter the correct value and confirm. • Check the quantity adaptation. • Check the cellular rotor for contamination. • Check the brushes for signs of damage and contamination. see 8.10.5. "Brushes".

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7.0. Operation

7.6. Malfunctions and troubleshooting

7.6.1. Basic unit plus chassis

Description	Cause	Remedy
Different working depths achieved by the perforation tools across the working width	The side tension springs are too powerful. Perforation tools work deeper in the centre	Release tension springs so that an even hole pattern is achieved across the entire working width.
	The side tension springs are too weak. Perforation tools work deeper on the outside	Tighten tension spring so that an even hole pattern is achieved across the entire working width.
Perforation tools are rubbing on the frame or central receptacle brackets	The inner and outer adjustment screws are incorrectly adjusted	Adjust adjustment screws (see Section 6.3.)
	Adjustment screws are worn in	Readjust screws to measure
Pressure pads leave tracks on the lawn surface.	Pressure pads are putting pressure onto half shells	Reduce additional weight
Perforation tools are tearing	Tools are working too low	Reduce the working depth
Working depth is set too low	Ground is too dry	Use extra additional weight. NOTE observe the overall permissible weight.
Perforation tools are bent	Stony ground	Replace tools
Perforation tools (nails) have too much clearance	Knock out bores in the half shells	Replace half shells
	Imprints in the roller tube too deep	Replace roller tube
Half shells are impossible to mount	Bores are not aligned	Premount 4 screws, push half shell in one direction, tension the 4 screw. Then insert the remaining 2 screws and tension

7.6. Malfunctions and troubleshooting

7.6.2. Precise overseeding unit with brush unit

Description	Cause	Remedy
Poor continuous flow, output rate too low or rotary feeder shaft does not turn	Spreading material contaminat- ed or clumpy, foreign bodies in the spreading material hopper (e.g. packaging material)	Check the spreading material (re- move through the discharge hatch, see Chapter 8.10.2. "Spreading material hopper"). Do not use spreading material with impurities or clumps. Check the hopper and rotary feed- er shaft for contamination, clean if necessary, see Chapter 8.10.3. "Rotary feeder shaft".
Rotary feeder shaft does not turn	Hopper, rotary feeders or brushes heavily contaminated Drive belt wear	Check hopper, rotary feeders or brushes for contamination and clean if necessary, see Chapter 8.10. "Main- tenance and cleaning" Check drive belt and renew if neces- sary, see Chapter 8.10.4, "Drive belt"
Blockage of particular hoses	Excessive differences in hose length means the air flow in the blocked hose is too low	Install the hose at the far left. Discuss the problem with the prod- uct specialist, possibly install cus- tomer-specific throttle orifices to control the air flows
	Hose routed with excessively tight bending radius	Route the hose with the largest pos- sible bending radius and as few curves as possible
Blower does not function	Heavy contamination leads to blockage	Clean the blower when dry, see Chapter 8.10,6 "Blower".
Hose grommet does not stay in place or fails to engage	Pressure element in the holder contaminated	Renew the pressure element if nec- essary..
No signal from the wheel sensor	Distance between the sensor and wheel nuts too large	Check the distance and set if neces- sary. Distance should be less than or equal to 4 mm.
	Contact problems	Check the wheel sensor/control pan- el plug connection. Check the cables..
		Check the counting points.
No signal from the lifting gear mag- netic sensor	Distance between the sensor and magnet too large	Check the distance and set if neces- sary. Distance should be less than or equal to 8 mm.
	Sensor installed in wrong direction	Note the installation direction of the sensor..
		Check the cables

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8.0 Maintenance

8.1. General Information

CAUTION DANGER :

Only qualified personnel are permitted to perform maintenance, repair and disassembly tasks.

Only perform maintenance work when the device is attached. Turn off the tractor and secure it against being unintentionally switched on.

For this work, please use your personal protective equipment (PSA) such as: gloves, goggles, ear protectors.

Use **only original parts.** Third-party parts often do not match the required quality and thus endanger your safety. Moreover, the sustained warranty and recognition of justified warranty claims can only be guaranteed, if you exclusively use **original parts from Wiedenmann.** We expressly point out to you that non-original parts that have not been delivered by Wiedenmann also have not been approved and released by Wiedenmann. The installation and/or use of such products may actually have a negative impact on the constructional properties of your vehicle and thus may affect the active and/or passive safety. Damages arising from the use of non-original parts are excluded from the scope of the manufacturer's liability.

After maintenance, remove all parts not belonging to the TERRA FLOAT. Then reinstall all safety covers/guards. (See Section " Safety Equipment" item 1.2.).

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8.2. Maintenance and inspection list

8.2.1. Basic unit

Working hours	Check	Procedure
40	Receptacles of the two outer oscillating units	Lubricating
100	Check the clearance of the central universal joint (left-hand side)	If clearance >2 mm, the plain bearing bushings must be replaced
	Check the clearance of the plain bearings (right-hand side)	If clearance >2 mm, the plain bearing bushings must be replaced

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8.0 Maintenance

8.3. Lubrication

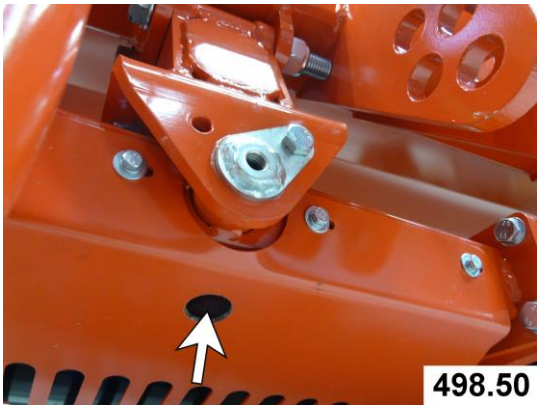
• Only carry out maintenance work when machine is connected. Turn off the tractor and secure it against being unintentionally switched on.		• Clean up leaking grease.
		• Before starting the machine after a longer standstill, lubricate and maintain the entire machine
• Lubricate more often, if required, (until all lubrication points are sufficiently lubricated).		• Keep all exposed machine parts, threaded spindles and guides slightly lubricated.
• Clean lubrication nipple before use.		

Points for manual lubrication

See illustrations.

The illustrations only show one of several corresponding assembly groups with lubrication points.

Bearing for the retainer of the outer roller



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8.4. Cleaning the TERRA FLOAT

CAUTION:
Cleaning must only be carried out using hand brushes, suction devices or air
- never with bare hands.
- RISK OF INJURY!

Clean the machine daily when work is completed to ensure a faultless function during the next usage.

NOTE:
empty the seed hopper before cleaning.

Main cleaning points are:

- Tool rollers
- Seed container
- Brush strip

Clean the TERRA FLOAT regularly. You will prolong the service life of expensive components and simultaneously detect:

- Loose components
- Damaged cables or lines
- Wear and unintended collision points.

8.4. Cleaning the TERRA FLOAT

NOTE:
Do not bring plastic and sealing elements in contact with aggressive fluids (e.g. carbon tetrachloride, tri, benzene, caustic solutions,acids etc.).

Bind drops of oil with a binding agent and dispose of it according to the regulations. Eliminate the cause.

Only use wire brush and caustic solutions in case of emergency.

Auxiliaries and application

Cleaning with water

- All dirty parts, but use caution:

  ⇒ water causes rust.

Cleaning with dry cloth

- All signs and inscriptions

Cleaning with compressed air

ATTENTION !

Exercise caution when using compressed air. Put on safety glasses! Without safety glasses you risk eye injuries! Furthermore you blow dirt into the guides and bearings. For this reason, avoid this cleaning method.

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8.5. Care and maintenance of the hydraulic system

Suitable for hydraulic fluids based on mineral, glycol and synthetic oils.

Examine hydraulic hose lines regularly for damage and ageing and replace if necessary

According to the manufacturer's specifications, the replacement period for hydraulic lines is 6 years.

CAUTION !
The hydraulic system is not approved for the use of BIO oils !

CAUTION !

High-pressure fluids leaking under high pressure can penetrate the skin, causing serious injury. For this reason, depressurise the system before disconnecting lines. Before building up pressure in the system again, ensure that all line connections are leak-tight. It is difficult to see hydraulic oil leaking from a small opening. For this reason, use a piece of cardboard when searching for leaks. Protect the hands and body from high-pressure fluids.

If a fluid has penetrated the skin, this must be removed immediately by a doctor familiar with this type of injury; otherwise serious infections are possible. Doctors who are unfamiliar with this type of injury should obtain the relevant information from a competent medical source.

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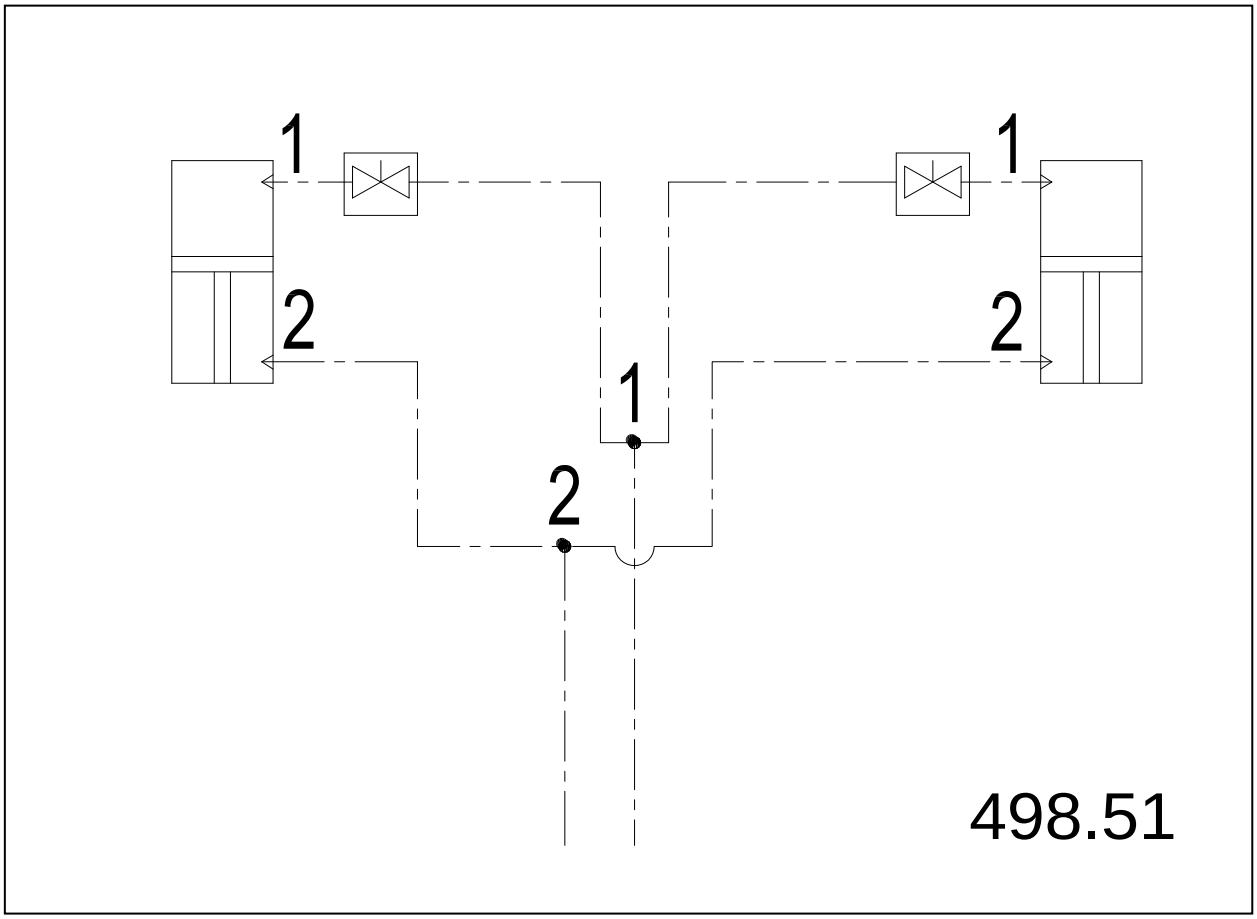
8.6. Hydraulic connection diagram



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8.7. Wheels and Tyres

Regularly check the tyre pressure:
Wheels of chassis……..…..**250 kPa**
Wheels of reseeding unit……**60 kPa**

CAUTION:
Serious or fatal injuries can be caused by the explosion-type bursting of the tyres and by the rim parts.

Only carry out tyre installation if you have appropriate experience and equipment.

Always adhere to the recommended tyre pressure. Never inflate the tyres over the recommended pressure. Do not heat the wheels or tyres or carry out welding on them. Heating the tyres can lead to explosion-type tyre bursts as the pressure in the tyre thereby becomes very high. Welding can lead to deformations or damage of the wheel.

When inflating the tyres, select a filling connection with a safety clip and an extension hose with sufficient length so that you can stand to one side when inflating the tyres. Never stand in front of or on the tyre. If available, use a safety cage.

Check wheels and tyres daily for low pressure, slits, bulges, damaged rims, missing wheel bolts or –nuts.

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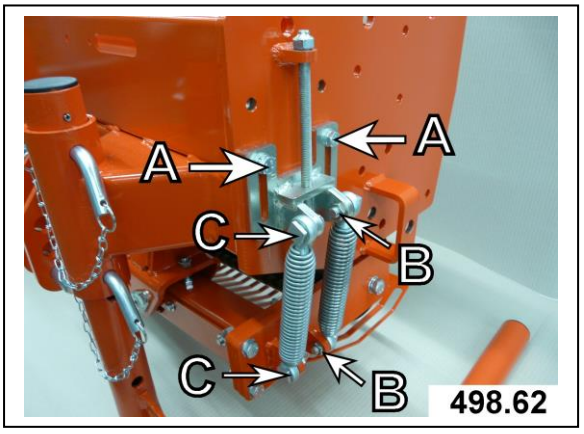
8.8. Replacing the tension springs

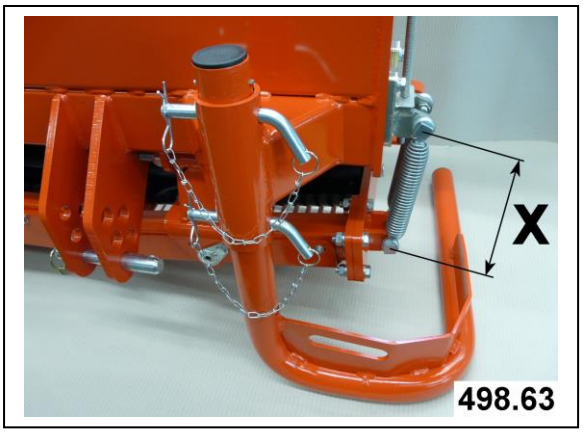
- Remove the screws **(A)**.
- Release the tension springs.
- Remove bolts **(B)**
- Remove tension spring together with bolt **(C)**
- Insert bolt **(C)** along with the new tension spring into the receptacles and secure with nut **(B)** .
- Adjust tension springs to the **measure X** .
- Insert the screws **(A)** and tighten.



Basic setting:

Adjust tension spring to the **measure X = 250 mm**

To do so, the attachment device must be moved into working position. All rollers must rest evenly on the ground.



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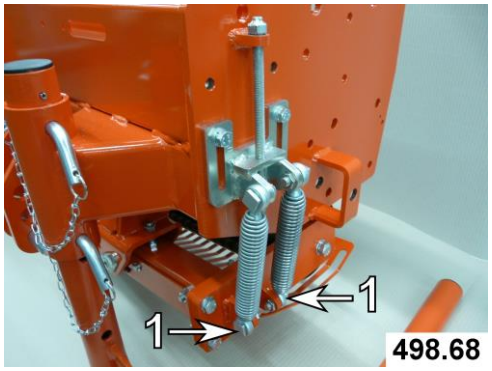
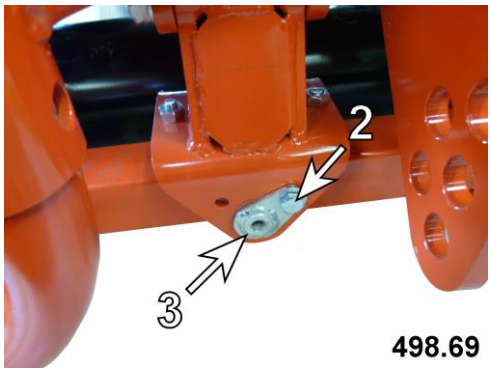
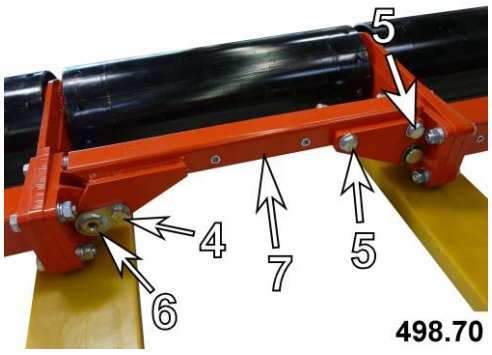
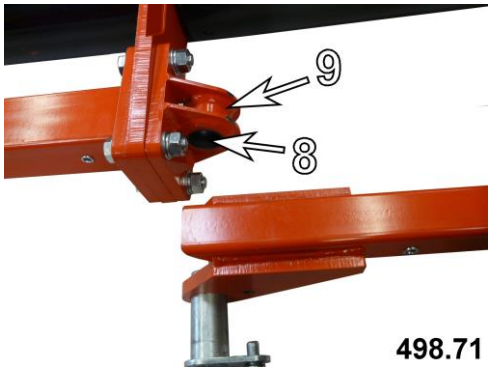
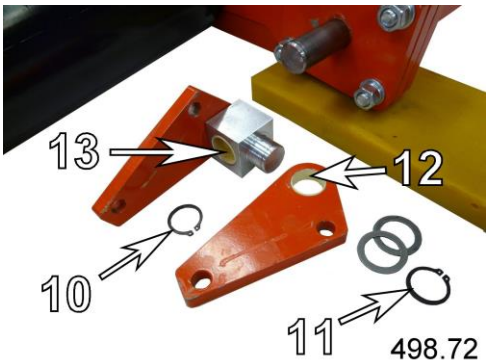
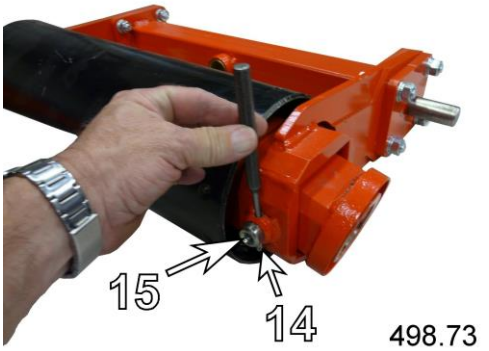
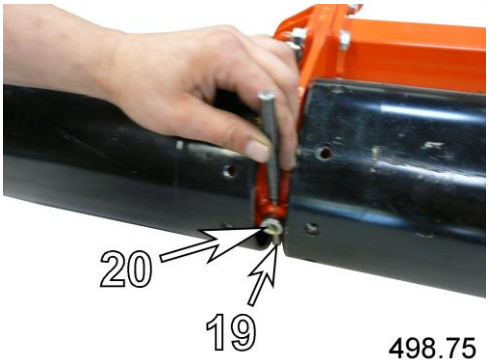
8.9. Replace the plain bearing bushes

The Terra Float must either be attached to the tractor or your garage has a suitable crane system.

1. Release tension spring 2. Remove lower bearing bolts **(1)** from tension springs 3. Push parking supports up and secure 4. Dismantle pressure pads 5. Dismantle half shells	
Carefully lower the Terra Float onto the ground. Place a mat under the connection points as it will make it easier to remove the bolts.	
6. Remove the protective screw **(2)** 7. Remove the bearing bolt **(3)** 8. Lift the support box and remove	
9. Remove the protective screw **(4)** 10. Remove the attachment screws **(5)** 11. Remove the bearing bolt **(6)** 12. Remove the inside support frame **(7)**	
13. Renew the plain bearing bushings **(8)** on the rotating base **(9)** 14. Pull the left roller outwards	

8.9. Replace the plain bearing bushes

15. Remove the circlips **(10 and 11)**. 16. Renew the plain bearing bushings of the screw brackets **(12)** and in the bearing block **(13)** 17. Assemble bearing block and screw brackets and attach to the rotor shaft	 498.72
18. Remove the clamping sleeve **(14)** 19. Withdraw the bearing bolt **(15)**	 498.73
20. Renew the plain bearing bushings **(16)** of the inside guide**(17)** 21. Peg guide on the inside with the bearing bolt **(15)** and driven in clamping sleeve **(14)** to secure 22. Push the left roller inwards. When doing so, take care that the bearing bolt **(15)** is positioned in the slotted hole **(18)** of the roller shaft.	 498.74
23. Remove the clamping sleeve **(19)** 24. Withdraw the bearing bolt **(20)** 25. Pull the right roller outwards	 498.75

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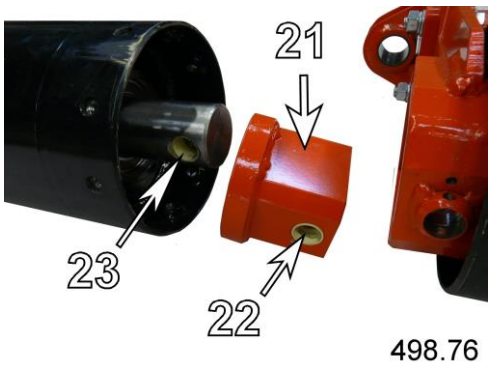
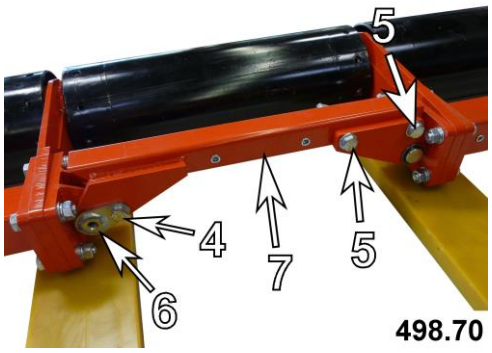
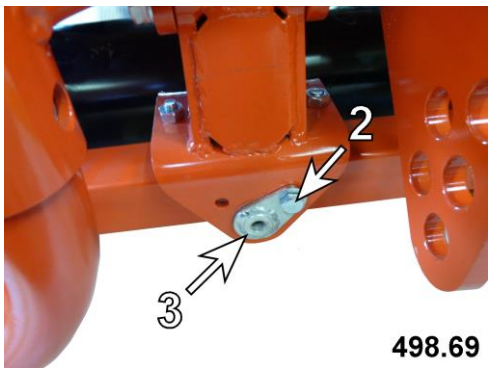
8.9. Replace the plain bearing bushes

26. Withdraw the inside guide **(21)** from the shaft of the central roller 27. Renew the plain bearing bushings of the inside guide **(22)** and the roller shaft **(23)** 28. Slide inside guide **(21)** onto the roller shaft 29. Push the right roller inwards 30. When mounting the bearing bolt **(20)**, ensure that the bores are aligned correctly. 31. Drive in clamping sleeve **(19)** to secure	 498.76
32. Insert support frame on the inside **(7)** together with the bearing bolt **(6)** and secure with screw **(4)** 33. On the left-hand side, attach the inside support frame **(7)** to the screw brackets using the screws **(5)**.	 498.70
34. Lift support box onto the roller units. 35. Mount bearing bolts **(3)** and secure with protective screw **(2)** 36. Insert the lower bearing bolts **(1)** with tension springs 37. Adjust tension spring to previous setting	 498.69
38. Lift support box together with the roller unit, fold out parking supports and secure 39. Half shell tools (see Section 2.3.) 40. Align pressure pads with tools and attach to the roller unit	

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8.0 Maintenance

8.10. Maintaining and cleaning the precise overseeding unit

Attention:
Risk of injury during maintenance work.

This can lead to crushing due to inadvertent start-up of the machine or short circuit.

- **Disconnect the electrical power supply before starting maintenance, repair and cleaning work.**
- **Wear appropriate working and protective clothing during all work.**

Attention:
Risk of injury due to high suction power of the blower. Long hair or loose objects can be snagged in the blower.

- **Keep loose objects away from the area in front of the intake grille.**
- **Tie up long hair.**

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Advice
Clean the hopper, rotary feeder shafts, agitator and blower in dry condition! Never clean the spreader with a high-pressure cleaner or highly acidic cleaning agents. Do not use any greases or oils. Note the instructions from the manufacturers.

8.10.1 Maintenance schedule

Maintenance activity	Interval	Remark
Calibration test	At the beginning of a season or fol- lowing a product or product batch change	See 7.5.5.4. "calibration test"
Check the rotary feeder shafts for contamination and wear	After 20 operating hours and at the end of the season	Cleaner or renew the rotary feeders, see 8.10.3 "Rotary feeder shaft"
Check brushes for contamination or wear, clean or renew if necessary	After each product change	See 8.10.5 "Brushes"
Clean the container and agitator	After each season or product chang	See 8.10.2 "Spreading material hopper"
Check the seal between the hopper and spread	When the hopper is removed/re-newed and at the end of the season	Visual inspection: seal must be in contact all the way around, see 8.10..2 "Spreading material hopper"
Check drive belt for wear	After 100 operating hours or every month and at the end of the season	See 8.10.4 "Drive belt"
Check all felt seals for wear	After 100 operating hours or every month and at the end of the season	See 8.10.7-9 “Spare Parts”

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8.0 Maintenance

8.10. Maintaining and cleaning the precise overseeding unit

8.10.2. Spreading material hopper

Advice
Clean the hopper, rotary feeder shafts, agitator and blower in dry condition!
Never clean the spreader with a high-pressure cleaner or highly acidic cleaning agents. Do not use any greases or oils. Note the instructions from the manufacturers

Cleaning the hopper

Clean the hopper and spreader at the end of the season. The hopper can be nearly completely emptied by means of the residual discharge, see 7.5.5.10 "Residual discharge". If there are larger quantities of spreading material or mal- functions in operation, the hopper can also be emptied via a hatch, see Emptying the hopper through the residual discharge hatch.

All residues that build up during cleaning of the spreader must be collected and disposed of ac- cording to the regulations valid in the particular country.

Attention:
Risk of injury during maintenance work.

This can lead to crushing due to inadvertent start-up of the machine or short circuit.

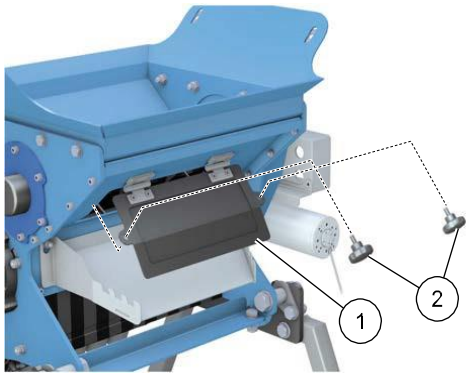
- Disconnect the electrical power supply before starting maintenance, repair and cleaning work.
- Wear appropriate working and protective clothing during all work.

1. Empty the hopper if necessary, see Emptying the hopper.
2. Remove the agitator and clean it, see Cleaning the agitator.
3. Clean the hopper, agitator and spreader in dry condition or, if required, with a damp cloth and suitable cleaning agent.
4. Reassemble the spreader.

Emptying the hopper through the residual dis- charge hatch

The hopper can be emptied through the hatch (1).

1. Switch off the Saateinheit.
2. Place a collecting container under the hatch (1).
3. Unscrew the knurled screws (2) and open the hatch.
4. After emptying, close the hatch (1) again



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8.0 Maintenance

8.10. Maintaining and cleaning the precise overseeding unit

8.10.2. Spreading material hopper

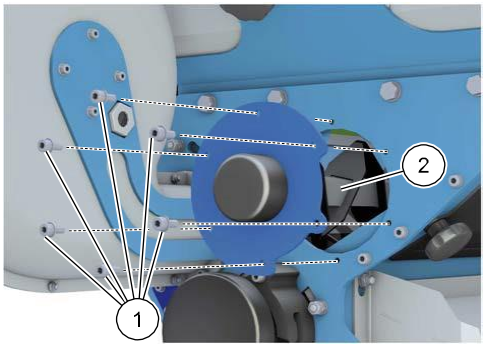
ACHTUNG:
Risk of injury during maintenance work.

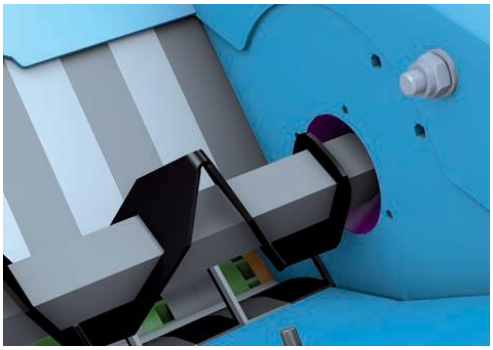
This can lead to crushing due to inadvertent start-up of the machine or short circuit.

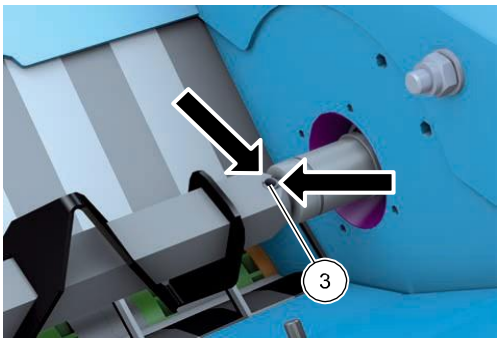
- Disconnect the electrical power supply before starting maintenance, repair and cleaning work.
- Wear appropriate working and protective clothing during all work.

Cleaning the agitator

1. Unscrew 6 screws (1).
2. Pull out agitator (2).
3. Clean agitator (2) and check for wear.
4. When installing the agitator, push the groove onto the pin (arrows, 3).
5. Reattach the agitator in the correct position with the 6 screws (1).

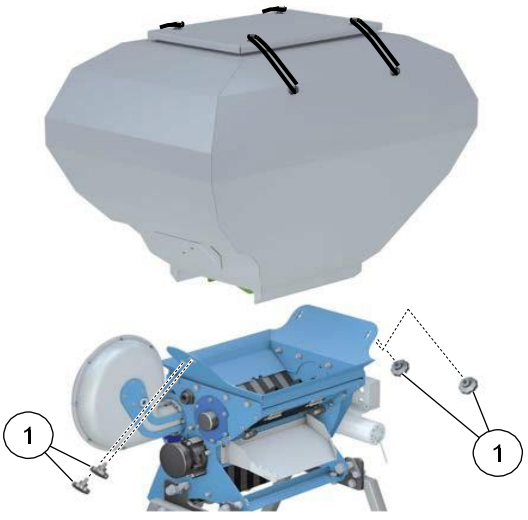






Removing/mounting the hopper

1. Unscrew 6 screws (1).
2. Pull out agitator (2).
3. Clean agitator (2) and check for wear.
4. When installing the agitator, push the groove onto the pin (arrows, 3).
5. Reattach the agitator in the correct position with the 6 screws (1).



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8.0 Maintenance

8.10. Maintaining and cleaning the precise overseeding unit

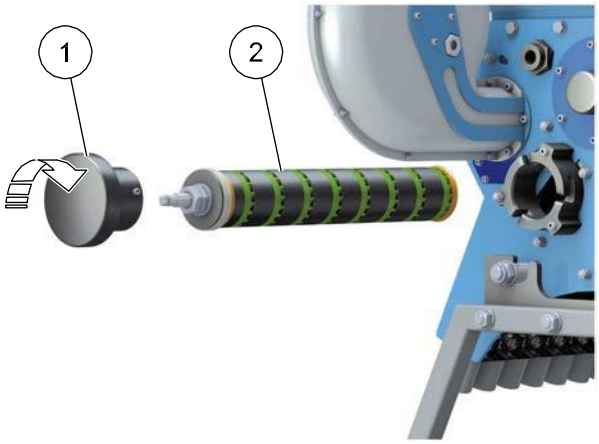
8.10.3. Rotary feeder shaft

Advice

Different spreading material may require special rotary feeders. For changing, it is recommended that you keep pre-assembled shafts available according to the size of the rotary feeders, and always exchange the entire shaft.

Removing the rotary feeder shaft

1. Press pressure piece **(1)** of the shaft, turn the right and remove.
2. Pull out shaft **(2).** If not possible, please us the sup- plied tool



Cleaning rotary feeders

- Pull the rotary feeders off the shaft and clean them. Check individual parts for damage and wear, renew if necessary.
- When dismantling the shaft, identify the sequence of components, and push back onto the shaft in reverse order when assembling. During assembly, make sure that the rotary feeders are mounted offset in relation to one an- other..
- Rotary feeder shaft structure, see:

  8.10.7. "Spare parts for rotary feeder shaft blue, 1 x 5,0 ccm"

  8.10.8. " Spare parts for rotary feeder shaft blue, 2 x 5,0 ccm"

  8.10.9. " Spare parts for rotary feeder shaft black, 2 x 0,25 ccm"

Installing the rotary feeder shaft

1. Insert the shaft into the holder as far as the stop

   If this is difficult (e.g. because the rotary feeder shaft is new), the supplied tool can be used as assistance, by performing slight rotating movements.
2. Put on the cover and turn to the left to lock

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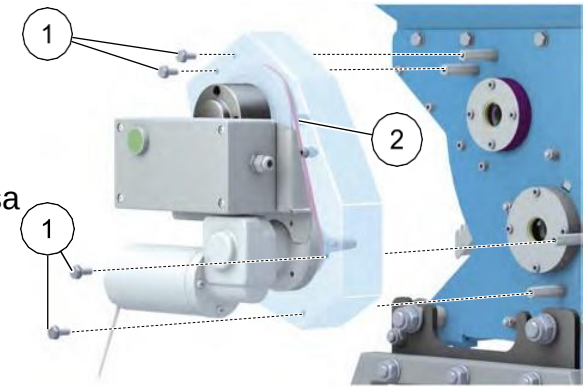
8.0 Maintenance

8.10. Maintaining and cleaning the precise overseeding unit

8.10.4. Install / Remove drive unit

Check the drive belt for wear every month, after 100 op- erating hours and at the end of each season; renew if necessary.

Checking/renewing the drive belt

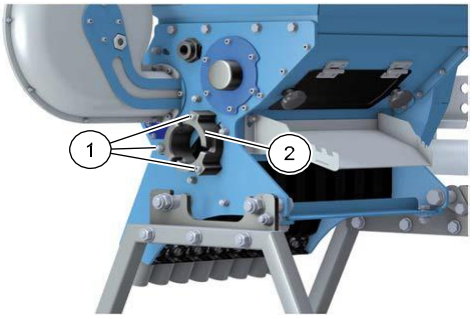


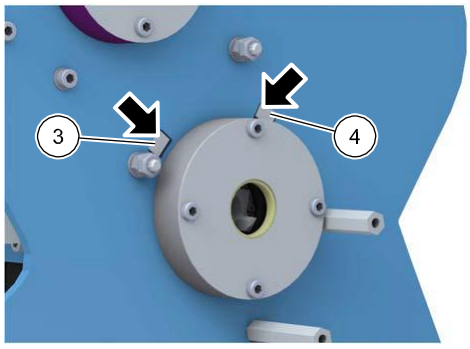
1. Unscrew 4 screws (1).
2. Remove drive (2) completely.
3. Checking the drive belt and renewing if necessa
4. Reinstall drive (2).

8.10.5. Brushes

After each product change, check the two brushes on the shaft and the rotary feeders for contamination and wear. Clean or renew the brushes if necessary

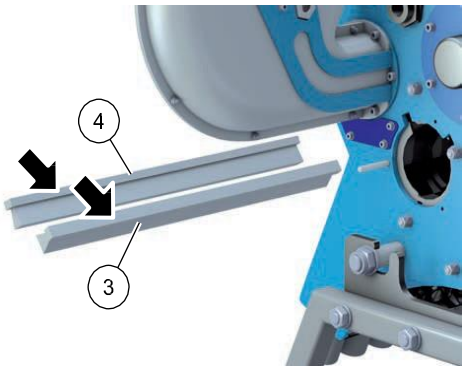
Removing and installing brushes





1. Removing the rotary feeder shaft, see 8.10.3. Removing the rotary feeder shaft.
2. Undo 2 screws and one cap nut (1) and remove holder (2).
3. Removing the drive, see "8.10.4 Install/Remove drive unit".
4. Apply pressure with a flat tool (e.g. Allen key) to push the brushes (3 = crinkled fibres, 4 = smooth fibres) a short distance from the drive end to the blower end.
5. Pull out brushes (3 = crinkled fibres, 4 = smooth fibres) straight on the blower end.
6. Check the brushes and clean or renew them if nec- essary.
7. Push the brushes back in, at least until they are flush.

Caution: Different brushes, make sure the arrange- ment is correct!



8. Reattach the holder with the 3 screws (1).
9. Reinstall the drive and rotary feeder shaft

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8.0 Maintenance

8.10. Maintaining and cleaning the precise overseeding unit

8.10.6. Blower

Attention:

Risk of injury due to high suction power of the blower. Long hair or loose objects can be snagged in the blower.

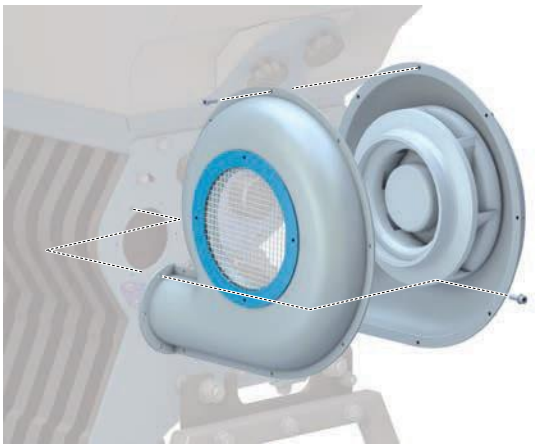
- Keep loose objects away from the area in front of the intake grille.
- Tie up long hair.

The blower does not require maintenance.

If there is a malfunction, check the blower for blockages due to contamination. Clean the blower in dry condition if necessary, and check it can turn freely.

.

The blower cover with the intake grille can be removed for cleaning if necessary, by unscrewing the screws. Re- new the self-locking screws when reinstalling the cover



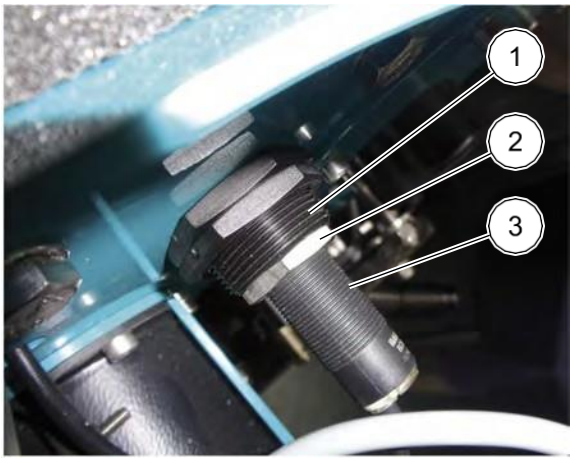
8.0 Maintenance

8.10. Maintaining and cleaning the precise overseeding unit

8.10.7. Install / Remove emty indicator

Removal

1. Strip and expose the cable.
2. Undo the lock nut (2).
3. Unscrew the sensor (3) from the housing (1).



Installation

1. Screw the new sensor (3) into the housing (1) until you feel resistance.

➢ Only tighten the sensor by hand, risk of damage.

2. Tighten the lock nut (2).
3. Route and connect the cable.

8.10.8. Storage and disposal

Storage

Before storing the spreader, empty it completely and clean it, see 8.10.2 "Spreading material hopper".

The spreader should be stored in a

- dry place,
- without exposure to direct sunlight,
- at a temperature range from -10 to +50 °C.

Disposal

Dispose of the spreader according to local regulations and laws

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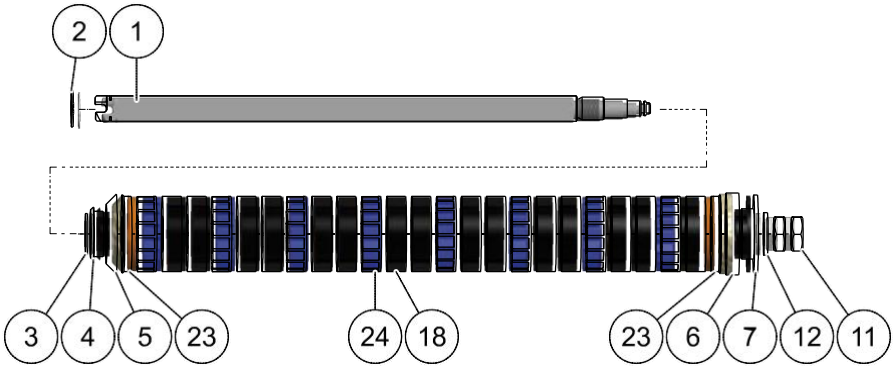
8.0 Maintenance

8.10. Maintaining and cleaning the precise overseeding unit

8.10.7. Rotary feeder shaft blue, 1 x 5,0 ccm

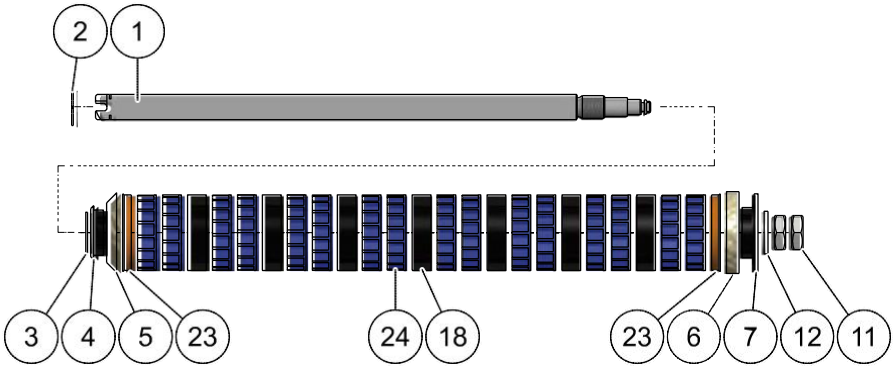


Object	Number	Description
		Rotary feeder shaft 1 x 5.0 ccm, Rotary feeder shaft fully assembled, comprising items 1-24
1	1	Rotary feeder shaft
2	1	Circlip DIN 471 - 25 x 1.2
3	1	Rotary feeder shaft end disc
4	1	Rotary feeder shaft felt ring holder motor end
5	1	Felt ring 65-36-10-45°
6	1	Felt ring 65.2-40-10
7	1	Rotary feeder shaft felt ring holder pressure piece end
11	2	Hexagon nut DIN 439 - M18 x 1.5
12	1	Washer DIN 125 - A 19
18	15	Rotary feeder 0 ccm
23	2	Rotary feeder distance 7 mm
24	8	Rotary feeder 5.0 ccm

8.0 Maintenance

8.10. Maintaining and cleaning the precise overseeding unit

8.10.8. Rotary feeder shaft blue, 2 x 5,0 ccm



Object		Number	Description
			Rotary feeder shaft 2 x 5.0 ccm, Rotary feeder shaft fully assembled, comprising items 1-24
1		1	Rotary feeder shaft
2		1	Circlip DIN 471 - 25 x 1.2
3		1	Rotary feeder shaft end disc
4		1	Rotary feeder shaft felt ring holder motor end
5		1	Felt ring 65-36-10-45°
6		1	Felt ring 65.2-40-10
7		1	Rotary feeder shaft felt ring holder pressure piece end
11		2	Hexagon nut DIN 439 - M18 x 1.5
12		1	Washer DIN 125 - A 19
18		7	Rotary feeder 0 ccm
23		2	Rotary feeder distance 7 mm
24		16	Rotary feeder 5.0 ccm

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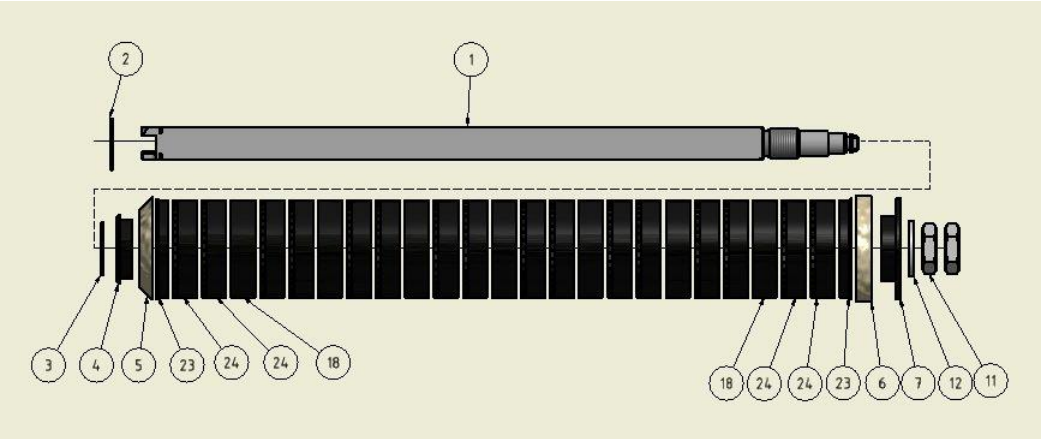
8.0 Maintenance

8.10. Maintaining and cleaning the precise overseeding unit

8.10.9. Rotary feeder shaft black, 2 x 0,25 ccm



Object		Number	Description
			Rotary feeder shaft 2 x 0,25 ccm, Rotary feeder shaft fully assembled, comprising items 1-24
1		1	Rotary feeder shaft
2		1	Circlip DIN 471 - 25 x 1.2
3		1	Rotary feeder shaft end disc
4		1	Rotary feeder shaft felt ring holder motor end
5		1	Felt ring 63,5-36-8-45°
6		1	Felt ring 65.2-40-10
7		1	Rotary feeder shaft felt ring holder pressure piece end
11		2	Hexagon nut DIN 439 - M18 x 1.5
12		1	Washer DIN 125 - A 19
18		7	Rotary feeder 0 ccm
23		2	Rotary feeder distance 7 mm
24		16	Rotary feeder 0,25 ccm

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8.11. Replacing strip brushes

the strip brushes must always be replaced in sets.

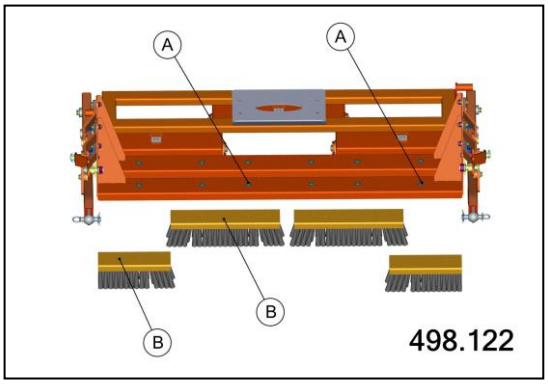
Undo the hexagon head bolts (A) and replace strip brushes (B).

Fit the long brushes in the middle and the short brushes on the outside (see Fig. 498.122)

Screw in the hexagon head bolts (A) manually.

Align the strip brushes.

Tighten the hexagon head bolts.



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8.0 Maintenance

8.12. Disassembly / Disposal

CAUTION !

Exercise caution when disassembling the TERRA FLOAT. Please refer to the chapter "Safety measures" and local safety regulations.

The dangers are as follows:

- **residual pressure in lines and components,**
- **Heavy parts might fall down after being disconnected**
- **sharp edges,**
- **The machine might tilt and crush someone.**

Disassembly for disposal :

1. Set the TERRA FLOAT down on stable ground.
2. Drain hydraulic oil.
3. Disassemble TERRA FLOAT from the top downwards.

IMPORTANT

Specifications and laws concerning the disposal of hazardous substances and pollutants must be observed in all cases. Familiarize yourself completely with the procedure for disposal.

8.13. Unauthorised modification and spare part manufacturing

- **Conversions or modifications to TERRA FLOAT are only authorised with the agreement of the manufacturer!**
- **Original spare parts and accessories authorised by the manufacturer guarantee your safety. The use of other parts might change the characteristics of the TERRA FLOAT. We accept no liability for consequences which occur for this reason.**

9.0. Additional Equipment

9.1. Scope of Delivery

Basic unit

for three-point installation

with a 3-part oscillating tool roller

Operating instructions, transfer declaration with guarantee card.

9.2. Permissible equipment combinations

Three-point version	1	2	3	4	5	6
Basic unit	S	S	S	S	S	S
Shells with nail D= 5 x 65	W	W	W	W	W	W
Shells with nail D= 8 x 65	W	W	W	W	W	W
Shells with star profile	W	W	W	W	W	W
1 to 3 additional weights		O			O	O

Trailer version	7	8	9	10	11	12
Basic unit	S	S	S	S	S	S
Shells with nail D= 5 x 65	W	W	W	W	W	W
Shells with nail D= 8 x 65	W	W	W	W	W	W
Shells with star profile	W	W	W	W	W	W
Chassis with drawbar	O	O	O	O	O	O
1 to 3 additional weights		O			O	O

S = Standard	W = selective	O = optional

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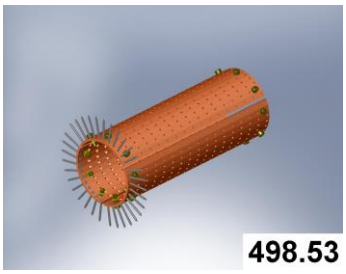
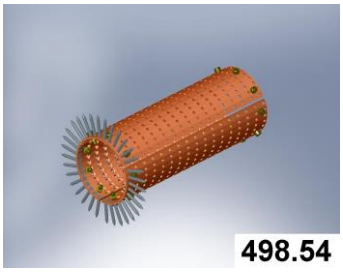
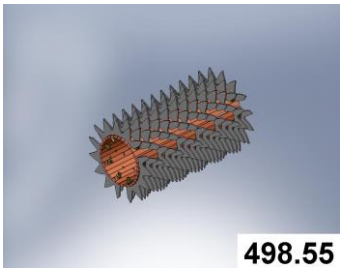
9.0. Additional Equipment

9.3. Werkzeuge

		Max. working depth	Holes per sqm.	Slits per m²
	Shells with nail D= 5 x 65	30 mm	1500	
	Shells with nail D= 8 x 65	30 mm	1500	
	Shells with star profile	30 mm		500

9.4. Special equipment

TERRA FLOAT	Three-point version	Trailer version
One additional weight compl.	X	X
Two additional weights compl.	X	X
Three additional weights compl.	X	X
Chassis with drawbar	- - -	X
Precise overseeding unit with brush unit	X	X
Brush set white	X	X
Brush set yellow	X	X

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10.0. Technical Specifications

10.1.1. Technical Data

Three-point version with precise overseeding unit:

A	Equipment length with protective cover	mm	870
B	Machine length with precise overseeding unit and brush unit	mm	1410
C	Unit width incl. parking supports	mm	1960
D	Machine height in parking position with precise overseeding unit	mm	1510
E	Height up to lower pull rod connection (down)	mm	265
F	Height up to lower pull rod connection (up)	mm	355
G	Height as far as middle of upper guide bar connection bottom	mm	720
H	Height as far as middle of upper guide bar connection top	mm	760
J	Working width	mm	1500
	Max. working depth	Siehe Kapitel 9.3.	
	Min. power required for tractor	KW(PS)	22 (30)
	Min. lifting power of tractor with standard fittings	kg	1000
	Precise overseeding unit container volume	Liter	120
	Weights:		
	Basic unit with protective cover	kg	314
	Basic unit without protective cover	kg	298
	Half shells with nail 5 x 65	kg	18
	Half shells with nail 8 x 65	kg	24
	Star shells	kg	24
	Complete precise overseeding unit	kg	85
	Brush unit	kg	262
	Wiedenmann additional weights ……..1 pc ……..2 pcs ……..3 pcs	kg kg kg	48 96 144
	Permissible additional weight on ballast frame	kg	300
	Overall permissible weight of the TERRA FLOAT	kg	1000
	The sounds are drowned by the tractor's engine.		

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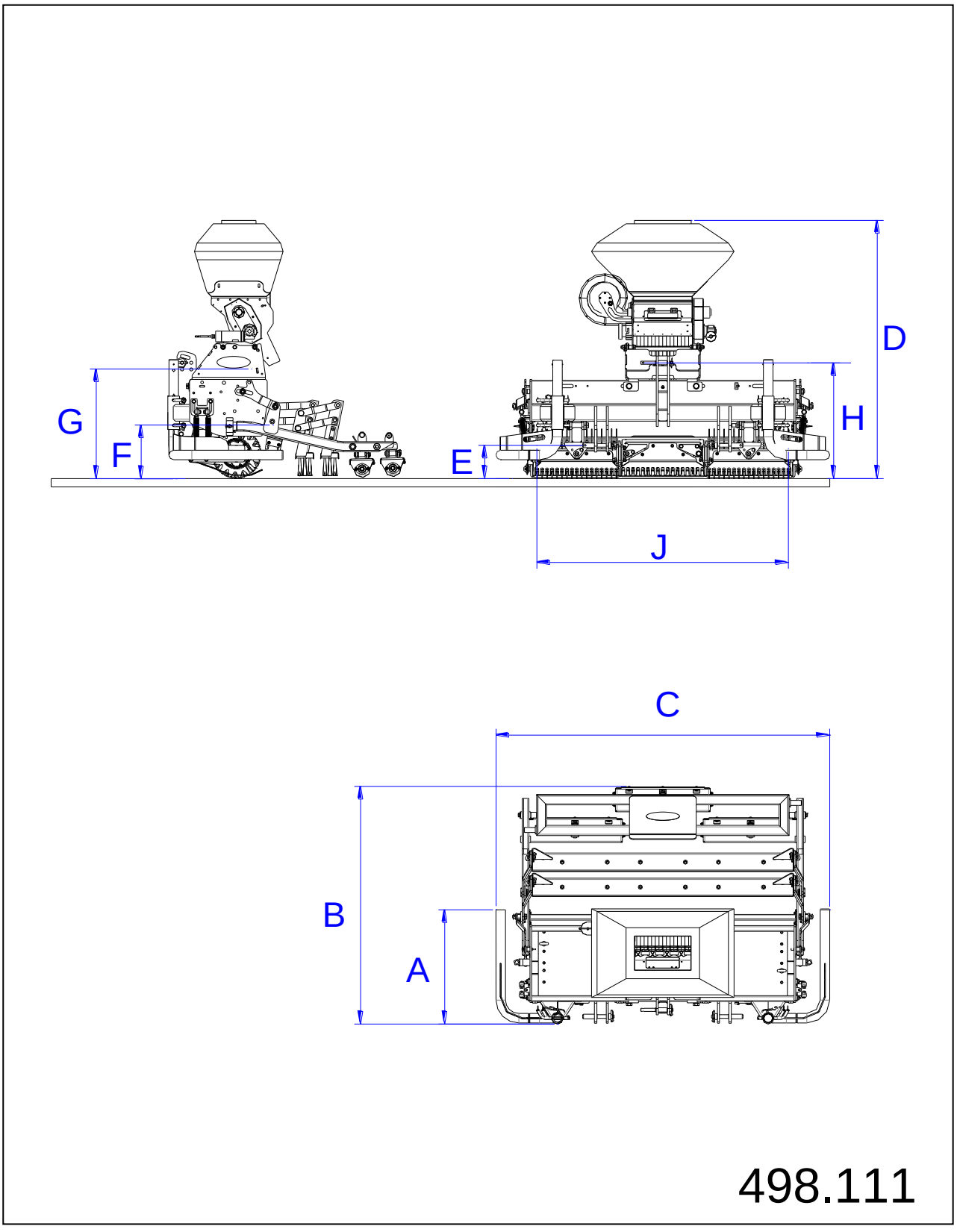
10.0. Technical Specifications

10.1.1. Technical Data

Three-point version with precise overseeding unit:



10.0. Technical Specifications

10.1.2. Technical Data

Trailer version with precise overseeding unit :

A	Equipment length with chassis	mm	2300
B	Equipment length with chassis and Brush unit	mm	2710
C	Width of device	mm	2460
D	Machine height in parking position	mm	1510
D1	Machine height in the raised position	mm	1875
E	Min. height for drawbar connection	mm	230
F	Max. height for drawbar connection	mm	550
G	Working width	mm	1500
	Max. working depth	Siehe Kapitel 9.3.	
	Min. power required for tractor	KW(PS)	22 (30)
	Min. hydraulic operating pressure	bar	140
	Max. hydraulic operating pressure	bar	175
	Tyres	18 x 8.50-8 / 6PR	
	Tyre pressure	bar	2,5
H	Track width	mm	2130
	Number of axles	Stück	2
	Number of wheels per axle	Stück	1
	Permissible drawbar load	kg	190
	Container volume of Precise overseeding unit	Liter	120
	Weights:		
	Basic unit with protective cover	kg	290
	Basic unit without protective cover	kg	274
	Half shells with nail 5 x 65	kg	18
	Half shells with nail 8 x 65	kg	24
	Star shells	kg	24
	Chassis with drawbar	kg	184
	Complete precise overseeding unit	kg	85
	Brush unit	kg	262
	Wiedenmann additional weights ……..1 pc ……..2 pcs ……..3 pcs	kg kg kg	48 96 144
	Permissible additional weight on ballast frame	kg	200
	Overall permissible weight of the TERRA FLOAT	kg	1000
	The sounds are drowned by the tractor's engine..		

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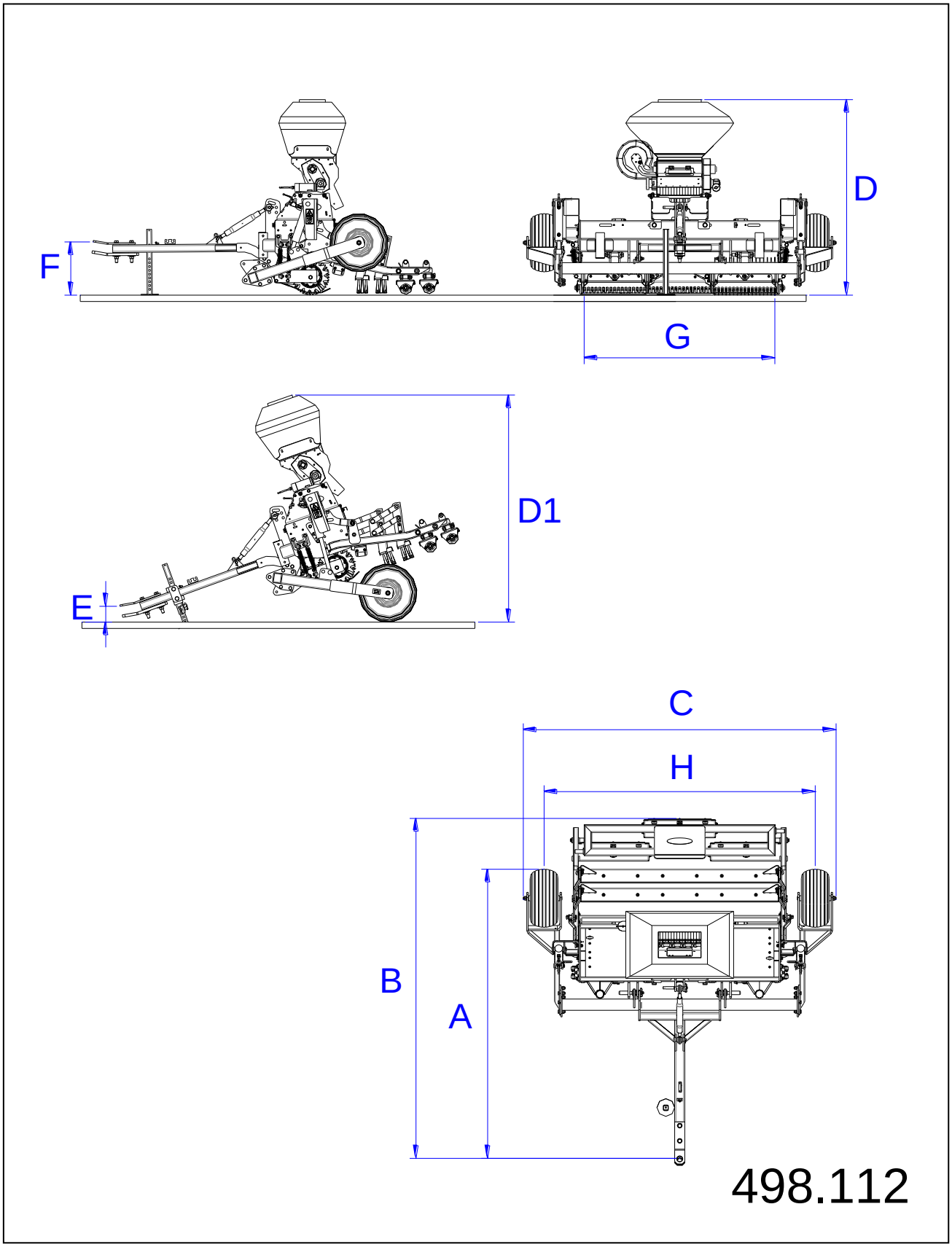
10.0. Technical Specifications

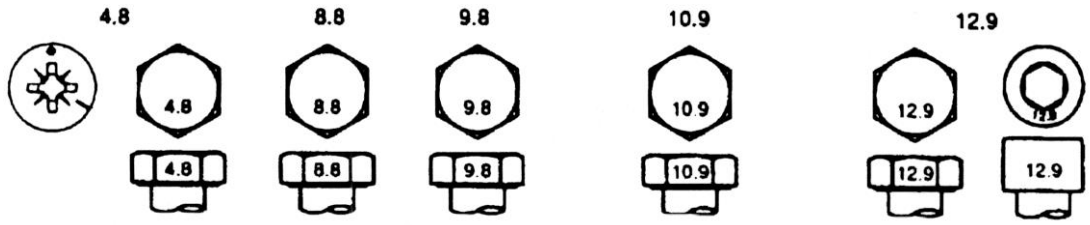
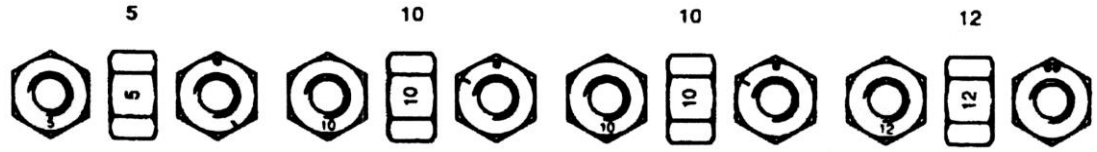
10.1.2. Technical Data

Trailer version with precise overseeding unit:



10.0. Technical Specifications

10.2. Metric bolt and cap screw torque values

Quality class and head markings	
Quality class and head markings	

Size	Quality class 4.8				Quality class 8.8 or 9.8				Quality class 10.9				Quality class 12.9			
	Lubricated *		Dry **		Lubricated *		Dry **		Lubricated *		Dry **		Lubricated *		Dry **	
	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft
M6	4,8	3,5	6	4,5	9	6,5	11	8,5	13	9,5	17	12	15	11,5	19	14,5
M8	12	8,5	15	11	22	16	28	20	32	24	40	30	37	28	47	35
M10	23	17	29	21	43	32	55	40	63	47	80	60	75	55	95	70
M12	40	29	50	37	75	55	95	70	110	80	140	105	130	95	165	120
M14	63	47	80	60	120	88	150	110	175	130	225	165	205	150	260	190
M16	100	73	125	92	190	140	240	175	275	200	350	255	320	240	400	300
M18	135	100	175	125	260	195	330	250	375	275	475	350	440	325	560	410
M20	190	140	240	180	375	275	475	350	530	400	675	500	625	460	800	580
M22	260	190	330	250	510	375	650	475	725	540	925	675	850	625	1075	800
M24	330	250	425	310	650	475	825	600	925	675	1150	850	1075	800	1350	1000
M27	490	360	625	450	950	700	1200	875	1350	1000	1700	1250	1600	1150	2000	1500
M30	675	490	850	625	1300	950	1650	1200	1850	1350	2300	1700	2150	1600	2700	2000
M33	900	675	1150	850	1750	1300	2200	1650	2500	1850	3150	2350	2900	2150	3700	2750
M36	1150	850	1450	1075	2250	1650	2850	2100	3200	2350	4050	3000	3750	2750	4750	3500

The torques specified in the table are guide values. DO NOT use these values if a different torque value is given in these operating instructions for a specific application. Check tightness of screws and bolts regularly.

Shear bolts are designed to fail at predetermined loads. Always replace a shear bolt with an identical quality class

Screws and bolts should be replaced with the same or a higher quality class. If higher quality class bolts or screws are used, these should only be tightened to the strength of the screw/bolt they are replacing.

Make sure that the threads are clean and that the screws are correctly connected. This will prevent them from being damaged during tightening.

Tighten plastic insert or crimped steel-type locknuts to approximately 50 percent of the dry torque shown in the table. Tighten toothed or serrated-type locknuts to the full torque value.

* "Lubricated" means coated with a lubricant such as engine oil, or that phosphate and oil coated screws are used.

** "Dry" means plain or zinc plated screws without any lubrication.

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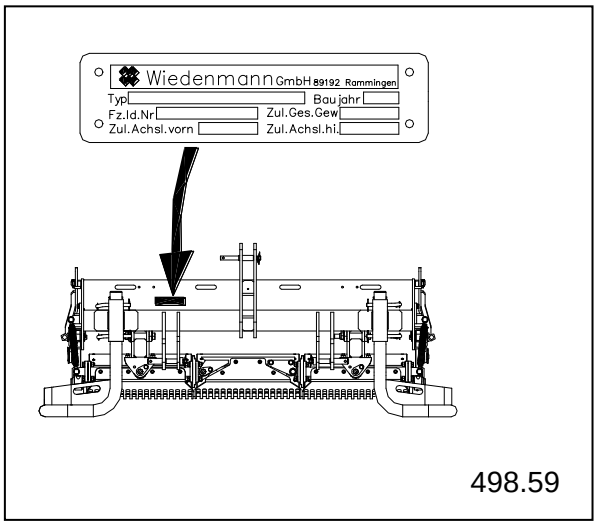
10.0. Technical Specifications

10.3. Chassis Number

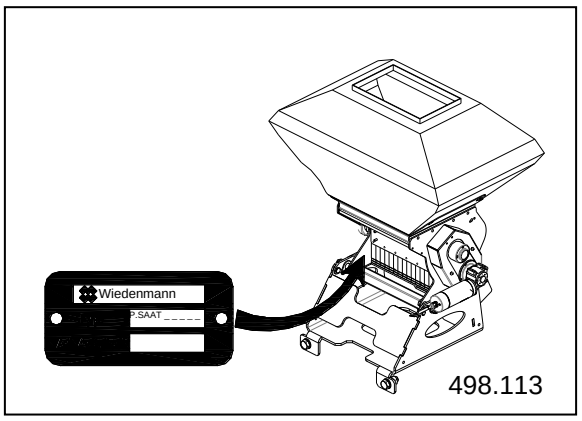
Enter the respective product identification no. in the space provided below. The number is required when ordering spare parts or making warranty claims.



Product Id. Number.....

10.4. ID number for precise overseeding unit

Enter the respective product identification no. in the space provided below. The number is required when ordering spare parts or making warranty claims.



Product Id. Number..**P.SAAT_ _ _ _ _ _.**