



Translation of original Operating Instructions

TERRA SEED

497.001

From equipment I.D. No. :

Status :

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EC DECLARATION OF CONFORMITY

We

**Wiedenmann GmbH
Am Bahnhof
89192 Rammingen**

declare under our sole responsibility that the product

TERRA SEED

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

Rammingen, the 28.01.2010	Horst Wiedenmann
(Place and date of issue)	Managing Partner
	(Name, function and signature of authorised person)

Rammingen, the 28.01.2010	Peter Rischar
(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NOTE: The declaration of conformity is no longer valid if changes are made to the machine that have not been agreed with the manufacturer.



Declaration of conformity


We


**Wiedenmann GmbH
Am Bahnhof
89192 Rammingen**

hereby declare that the product

TERRA SEED

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

Rammingen, the 28.01.2010	 Karl Wiedenmann
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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 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" refer to the forward driving direction of the mounted equipment.

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 INITIAL OPERATION, please take into consideration and clarify the following:
"The maintenance requirement for synthetic turf fields differs depending on the layout and the used synthetic turf. We recommend that you consult with your groundsman or synthetic turf manufacturer to clarify the suitability of maintenance machines before usage."

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

DIE TERRA SEED IS DESIGNED SOLELY for commercial use and regular operation on flat and rough terrain in agriculture and forestry, the maintenance of grassy areas and parks, and for sowing seed (" INTENDED USE").

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 device to transport persons or things. It is not permitted to fill the device with any other materials.

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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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.



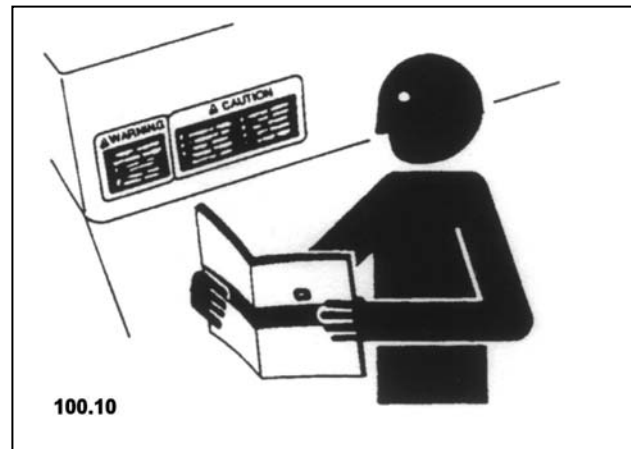
FOLLOW THE SAFETY INSTRUCTIONS

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.

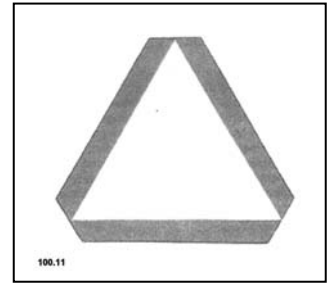
If you do not understand any part of these operating instructions and need assistance, please contact your dealer.



1.0. Safety Measures

OBSERVE THE ROAD TRAFFIC REGULATIONS

Always observe local road traffic regulations when using public roads.



WEAR PROTECTIVE CLOTHING

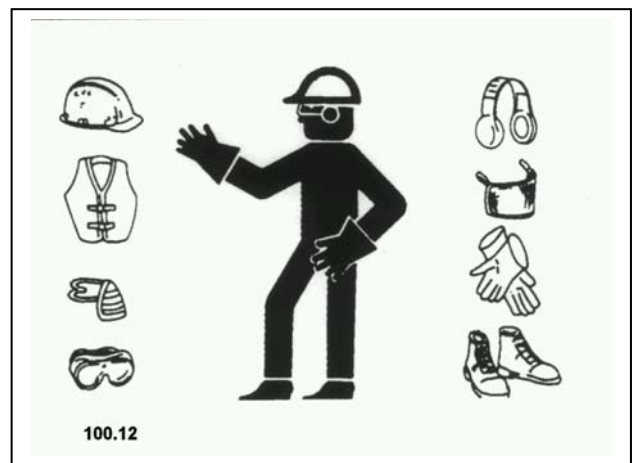
Wear close-fitting clothing and the appropriate safety equipment for the work at hand.

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.



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.

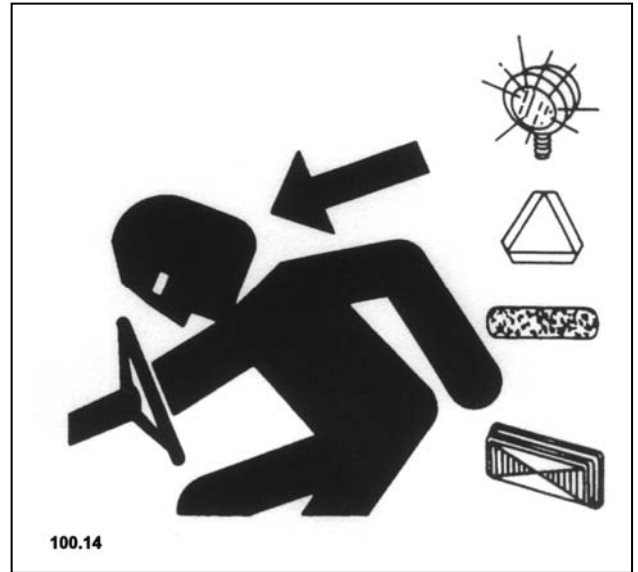
Doctors unfamiliar with this type of injury should reference a knowledgeable medical source.



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 pressurised fluid lines or other flammable materials. Pressurised lines can be accidentally cut through when heat goes beyond the immediate flame area.



1.0. Safety Measures

REMOVE PAINT BEFORE WELDING OR HEATING PARTS

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

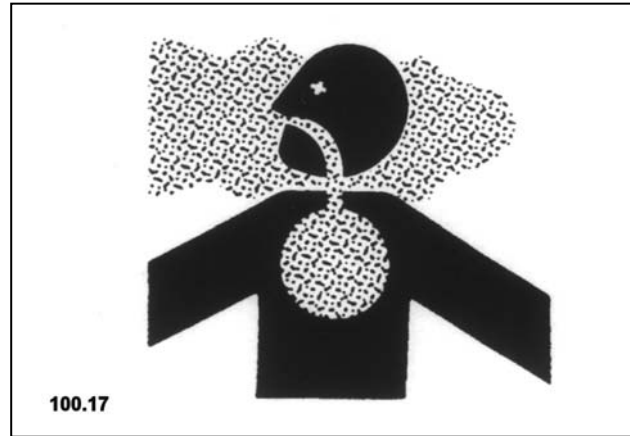
Avoid the formation of toxic fumes and dust.

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.



1.0. Safety Measures

1.1. Adhesive Safety Signs

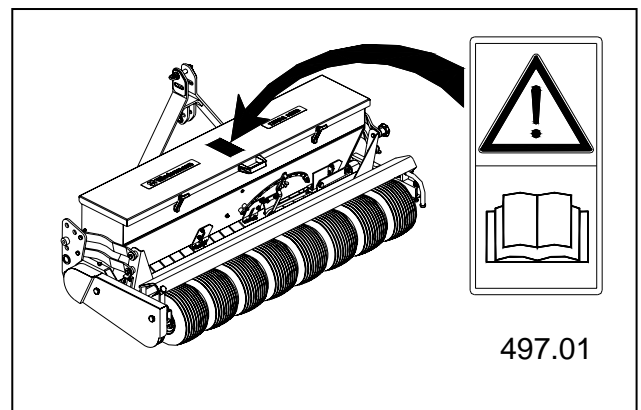
Warning symbols

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.



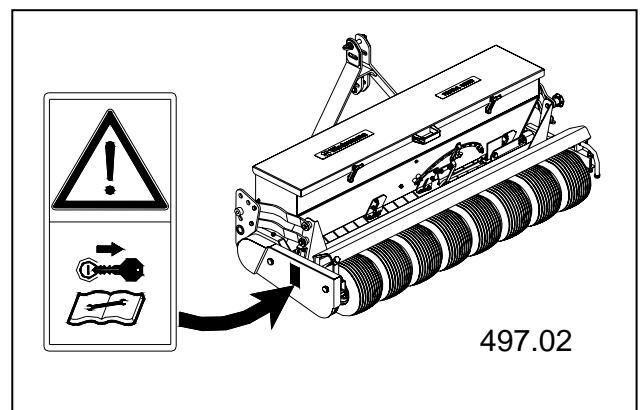
Operating instructions

These operating instructions contain all important information necessary for the safe operation of the machine. Carefully observe all safety rules to avoid accidents.



Maintenance

Before performing maintenance or repair work, shut off engine and remove key.



1.0. Safety Measures

1.2. Safety Equipment



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

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 the working area, the user is responsible for the safety of other persons.

The corresponding regulations must be observed on public roads!

Before starting check the close-up range (children!). See to it that you have a sufficient view!

Keep all persons clear of the danger zone of the machine!

Observe the max. permissible axle load of the tractor.

Always ensure there is sufficient front-axle load; the steering capability of the vehicle must be maintained.

2.0. Connecting to the Tractor

2.1. General



CAUTION :

The machine must only be connected when the engine is shut off and the PTO shaft drive is switched off.

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

When the machine is in transport position, always ensure that the side locking of the tractor three-point linkage is sufficiently secure.

Observe the max. permissible axle load of the tractor.

There a risk of injury through crushing or shearing in the area of the machine parts which can be raised.

The warning and information signs on the machine contain important information to ensure safe operation. Observe these instructions for your own safety!

When driving on roads, the machine must be raised and locked to prevent it sinking again.

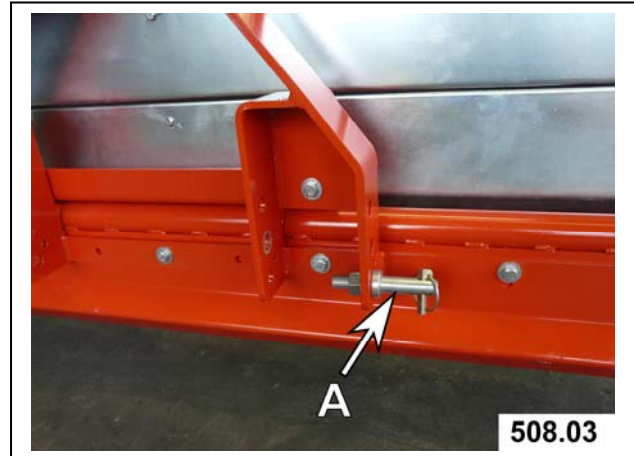
Before leaving the tractor, lower the mounted equipment to the ground. Take out the ignition key if necessary.

2.0. Connecting to the Tractor

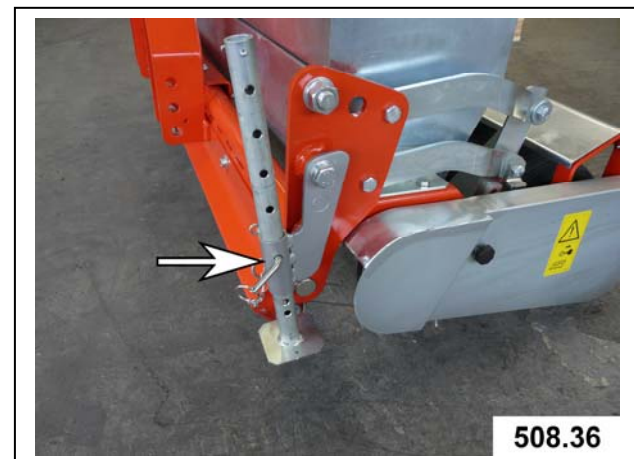
2.2. Mounting with cat.1

Mount the lower guide bolt on the outside in the lowest possible location bore. You thus achieve a maximum lift travel.

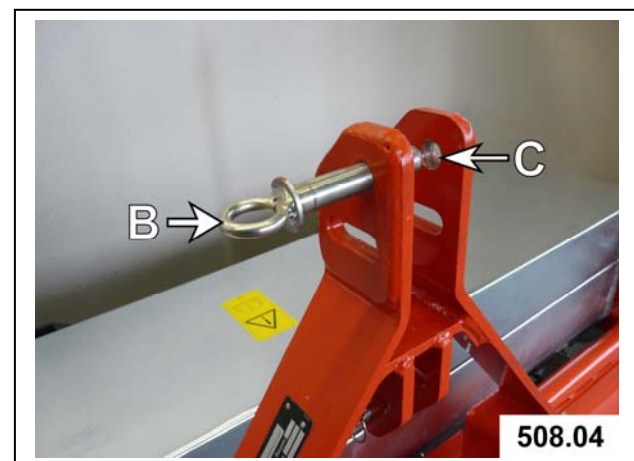
1. Mount lower guide to bolt (A) and secure with linch pin.
2. Slightly lift bottom handlebar to relieve supports.



3. Peg supports in the third bore from the bottom and secure.
4. Carefully lower bottom handlebar



5. Peg upper handlebar with bolts (B) on the three point frame in the bore (C) and secure with spring pins.
6. Tighten turnbuckles of the stabilisation chain.

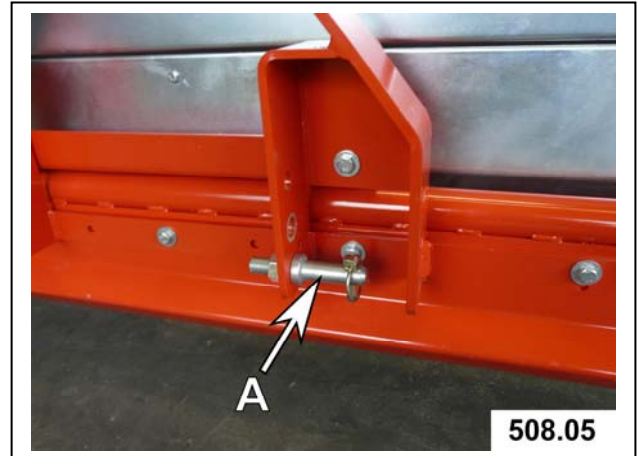


2.0. Connecting to the Tractor

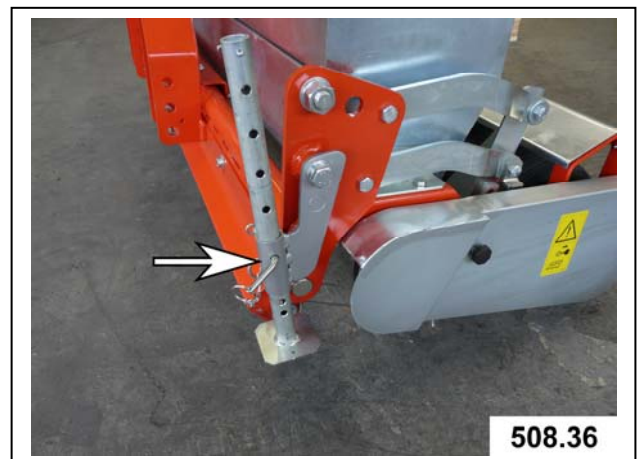
2.3. Mounting with cat.0

Mount the lower guide bar bolt on the inside in the lowest possible location bore. You thus achieve a maximum lift travel.

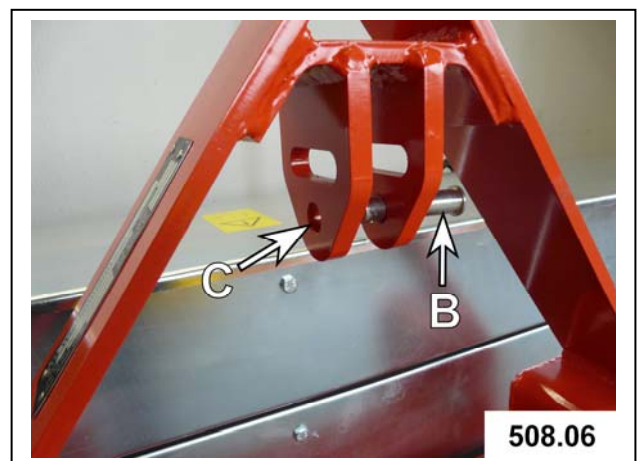
1. Mount lower guide to bolt (A) and secure with linch pin.
2. Slightly lift bottom handlebar to relieve supports.



3. Peg supports in the third bore from the bottom and secure.
4. Carefully lower bottom handlebar



5. Peg upper handlebar with bolts (B) on the three point frame in the bore (C) and secure with spring pins.
7. Tighten turnbuckles of the stabilisation chain.



3.0. Disconnecting from the Tractor

3.1. General



CAUTION :

When disconnecting the machine, always set it down on a firm and even surface.

The machine must only be disconnected when the engine is shut off and the PTO shaft drive is switched off.

Secure the attachment device against rolling away.

3.2. Dismantle the Terra Seed from the tractor

Proceed as follows for disconnection:

1. Lower Terra Seed to ground.
2. Release upper guide bar (A) and disconnect from three-point frame.
3. Lightly lift bottom handlebar.
4. Peg supports in the second bore from the top and secure.
5. Lower rear 3-point hitch of the tractor.
6. Switch off the tractor engine.
7. Activate hand brake.
8. Loosen turnbuckles of the stabilising chains
9. Remove lower guide bars from the bolts of three-point frame.



4.0. Before Initial Operation

4.1. General



CAUTION :

The user of the Terra Seed is responsible for the safety of third parties in the working area.

Do not operate the Terra Seed without safety devices. In doing so, you expose yourself and others to extreme danger.

When moving off, ensure that the immediate area of the machine is clear e.g. no children nearby!

Take particular care when working on a slope
-DANGER OF TILTING !

The warning and information signs attached to the machine contain important information to ensure safe operation. Observe these instructions for your own safety!

Beware of foreign bodies when working.

Always lift the Terra Seed before reversing.

Drive only with the protective guard lowered.

Ensure that the protective guard is secured on both sides with the clamping closure.

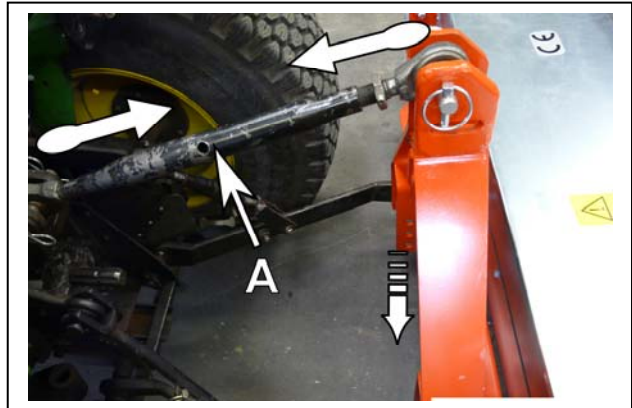
4.0. Before Initial Operation

4.2. Adjust the rough comb

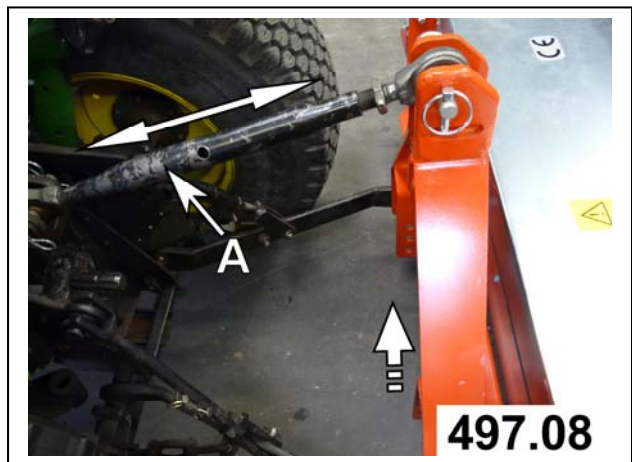
Adjustments can be made on the upper guide bar of the tractor.

- Lift out the Terra Seed slightly
- Adjust upper guide bar
- Lower the Terra Seed

Setting the upper guide bar (A) to short increases the pressure of the rough comb on the ground.

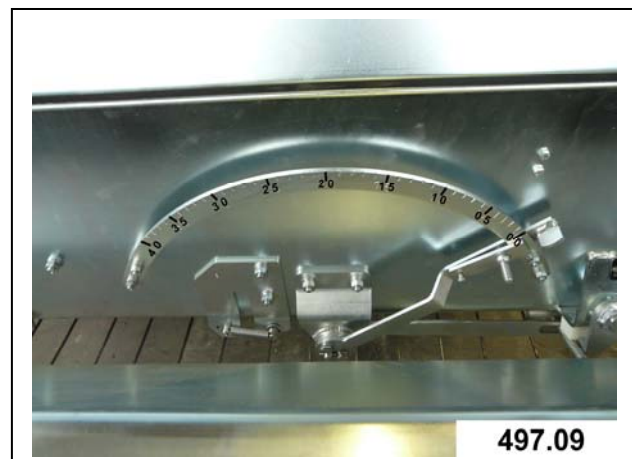


Setting the upper guide bar to (A) long reduces the pressure of the rough comb on the ground.



4.3. Adjusting for Transport

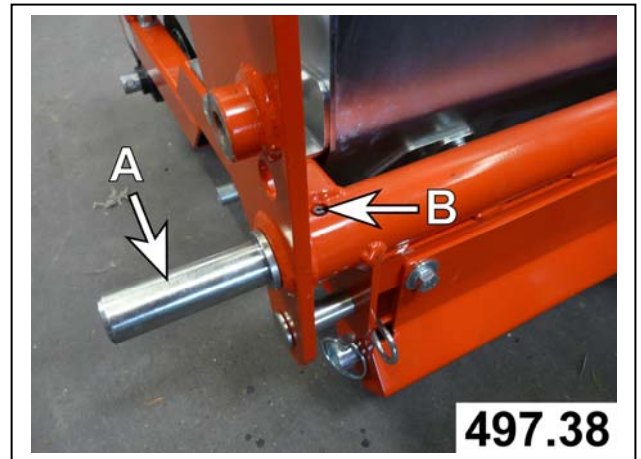
The control level on the seed box must be in the "0" position and secured.



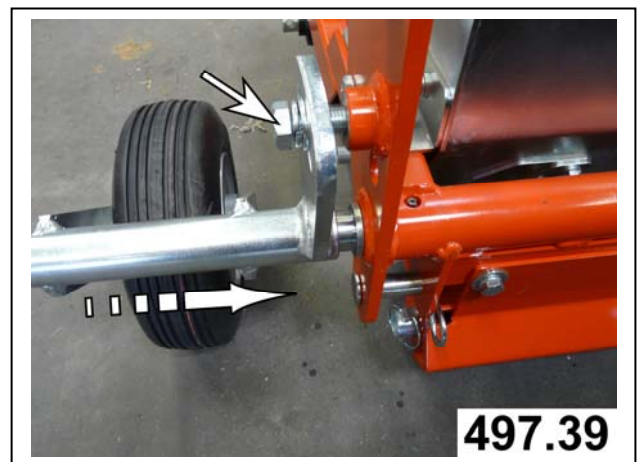
4.0. Before Initial Operation

4.4. Attaching the support wheels - optional

Insert bolt into bore and secure with clamp sleeve.



Push support wheel onto bolt.
Fasten with washer, lock washer
and SKT screw.



4.0. Before Initial Operation

4.5. Adjustment with support wheels -optional

Always carry out adjustments on a flat, paved surface.

Lift Terra Seed into the desired position using the tractor's rear hydraulic system.

Lower support wheels onto the ground.

Secure setting by tightening the fastening screw.




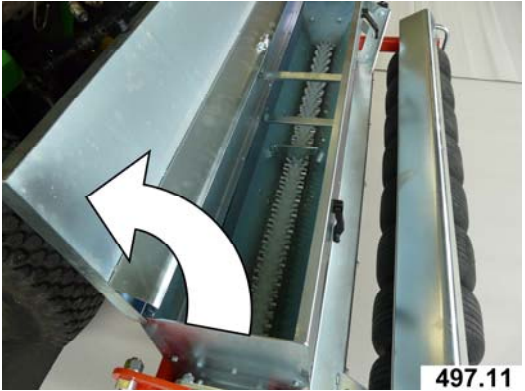
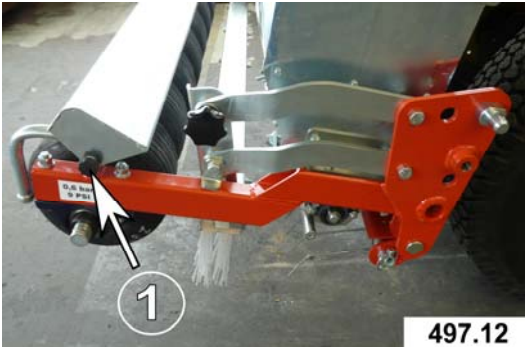
Insert upper guide with bolt into slotted hole on three-point frame and secure with linch pin.

Adjust the upper guide so that the bolt is located in the middle of the slotted hole in the working position.



4.0. Before Initial Operation

4.6. Prepare the Terra Seed for a trial run

<p>The trial run is used to determine the correct slider position for sowing the required amount of seed.</p>	
<p>The slider must be closed for filling, the adjusting lever must be in neutral position for this.</p>	 <p>497.10</p>
<p>Open lid</p> <p>Fill up with seed until the brush roller is covered.</p>	 <p>497.11</p>
<p>Lift out the Terra Seed for the purpose of adjusting.</p> <p>Remove the collecting pan by releasing the two star grips ①.</p>	 <p>497.12</p>


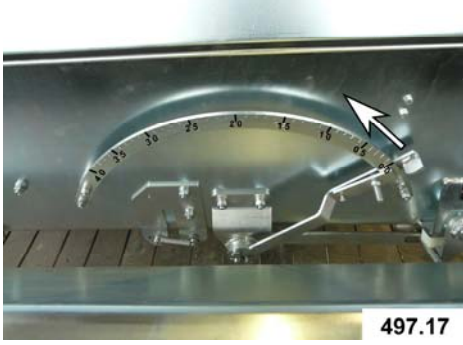


4.0. Before Initial Operation

4.6. Prepare the Terra Seed for a trial run

<p>Insert collection pan</p>	 <p>497.13</p>
<p>Attach collection pan ②</p>	 <p>497.14</p>
<p>Release crank lever and remove crank ③</p>	 <p>497.15</p>

4.0. Before Initial Operation

4.6. Prepare the Terra Seed for a trial run

<p>Insert crank onto shaft of drive wheels ④</p>	 <p>497.16</p>
<p>To check that the amount of a particular seed is correct, adjust the adjusting lever in accordance with the sowing table (see Chapter 4.6.).</p> <p>The specifications in the sowing table (see Chapter 4.6.) only serve as a guideline.</p>	 <p>497.17</p>
<p>Lift the brush strip ⑤.</p> <p>Lifting the brush strip will open the automatic catch of the seed box. With the brush strip lifted, rotate the shaft with the crank for the number of revolutions specified in the sowing table.</p>	 <p>497.18</p>
<p>To complete the adjustment, crank and collection pan must be fastened in their respective storing places again.</p> <p>Lower the Terra Seed</p>	 <p>497.19</p>

4.0. Before Initial Operation

4.7. Trial run

Terra Seed 160	Crank revolutions (revolutions of the wheel) with tyres 11x7-4AM	
Revolutions: :	8	16
Area:	10 m ²	20 m ²

The specified wheel revolutions allow for a medium wheel slip of 5%.

4.0. Before Initial Operation

4.8. Sowing table

Adjustment figure on the slider	Operating speed 4-8 km/h			
	Type of seed			
	Agrostis	Lolium	Regeneration grass seed mixture (Lolium / Poa)	Sports grass seed mixture (Festca / Lolium / Poa)
	stolonifera	perenne	(perenne/pratensis)	Spec./perenne/pratensis
4				
6				
8				
10	2,0			
11	4,0			
12	6,2			
13	8,2			
14	10,3			
15				
16				
17				
18		9,2	8,5	
19		11,8	10,8	
20		14,5	13,2	9,7
21		18,8	16,7	11,6
22		23,2	20,3	13,6
23		27,7	25,2	16,7
24		32,3	30,3	19,8
25		36,4	34,9	23,6
26		40,5	39,6	27,5
27				31,5
28				35,6
29				41,2
30				46,7
32				
34				
36				
38				
40				

The amounts specified in the sowing table (**g/m²**) only serve as a guideline. In order to determine the correct amount of seed, a trial run should be performed.

5.0. Operation

5.1. General



CAUTION :

The user of the Terra Seed is responsible for the safety of third parties in the working area.

Beware of foreign bodies when working.

Do not reverse when the TERRA SSEED is operating.
Avoid big changes in direction while using articulated tractors.

Drive only with the protective guard lowered.

The rear hydraulics of the tractor must always be in floating position for operation.

Ensure that the protective guard is secured on both sides with the clamping closure.

Mixtures of seeds with seed boosters may have a negative effect on the quality of operation.

5.0. Operation

5.2. Driving characteristics



CAUTION:

The driving and operating characteristics of the tractor can be influenced by the disconnection of the machine.

- Always adapt the driving speed to match the terrain and ground conditions.
- We recommend an operating speed of 4 - 8 km/h.
- Special care should be taken when working and turning on a slope.
 - **DANGER OF TOPPLING**

5.3. Working with the Terra Seed

The Terra Seed operator is responsible for persons located inside the working area.

Do not reverse when the TERRA SSEED is operating. Avoid big changes in direction while using articulated tractors.

Lower the Terra SEED onto the ground using the tractor's rear hydraulic system.

Lower the Terra SEED onto the ground using the tractor's rear hydraulic system.

6.0. Maintenance

6.1. General



CAUTION: The engine must be switched off during all maintenance work. The ignition key must be removed.



CAUTION: Once maintenance has been completed, all safety and protective devices must be reattached.



CAUTION: The machine must be connected to the tractor for all maintenance work.
- DANGER OF TOPPLING



When installing tools, precautions should be taken to prevent injury (e.g. wear gloves).

- The engine must be shut off and the ignition key must be removed for all lubrication work.
- Where required, lubricate more often than specified.
- Always keep all exposed machine parts, threaded spindles and guides lightly lubricated.
- Clean grease nipple before lubrication.
- Clean up leaking grease.
- Before starting the machine after a longer standstill, lubricate and maintain the entire machine.
- Only qualified personnel are permitted to perform maintenance, repair and disassembly tasks.
- Original parts and accessories authorised by the manufacturer serve your safety. The use of other parts can change the properties of the reseeding unit. We accept no liability for consequences which occur for this reason.

6.0. Maintenance

6.2. Cleaning the TERRA SEED



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:

- Seed container with brush roller
- Slide
- Brush strip

6.0. Maintenance

6.3. Faults and their elimination

Description	Cause	Remedy	
No or insufficient sowing of seed	Drive switched off.	Switch on drive, (see description in chapter 5.4.).	
	V-belt tension too low.	Retension V-belt (see Chapter 6.4.).	
	Incorrect setting of the opening slide	Check settings and adjust, if necessary	
	Some of the wheels do not touch the ground	Check attachment settings (see Chapter 2.0.).	
	Slider cannot be opened.		Remove any seed that is caught.
			Remove, clean and assemble the tension springs of the seed bar.
	Dirt in the grooves of the V-belt pulleys	Clean the groove of the V-belt pulleys,	
V-belt has jumped the groove	Apply V-belt and tension V-belt (see chapter 6.4.).		
Seed is leaking from the container.	Slider is not closed	Move lever into "0" position or lift device	
		Remove any seed that is caught.	
		Check the tension of the tension springs (see chapter 6.6.).	
	Slider does not close automatically.	Align the tension springs	
Clamp the fastening connections (bearings) of the brush.			
Streaking on the lawn	Rough brush set too deep	Check the settings and readjust them, if necessary (see Chapter 4.2.).	

6.0. Maintenance

6.4. Retensioning V-belts



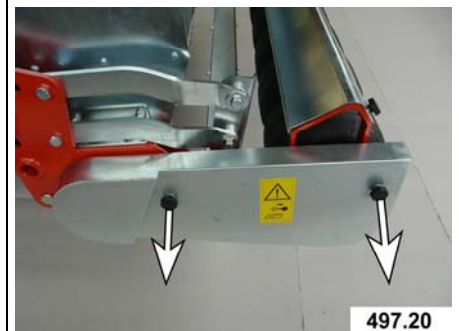
CAUTION:

The machine must be connected to the tractor for all maintenance work.
- DANGER OF TOPPLING

Proceed as follows to retension the V-belts:

1. Shut off the tractor and remove the ignition key.

2. Remove the drive guard

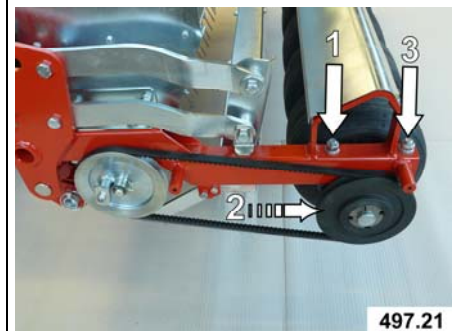


3. Loosen screw fittings ① ③ of both pillow block bearings.

4. Move both pillow block bearings evenly backwards ② to ensure a clean forward drive.

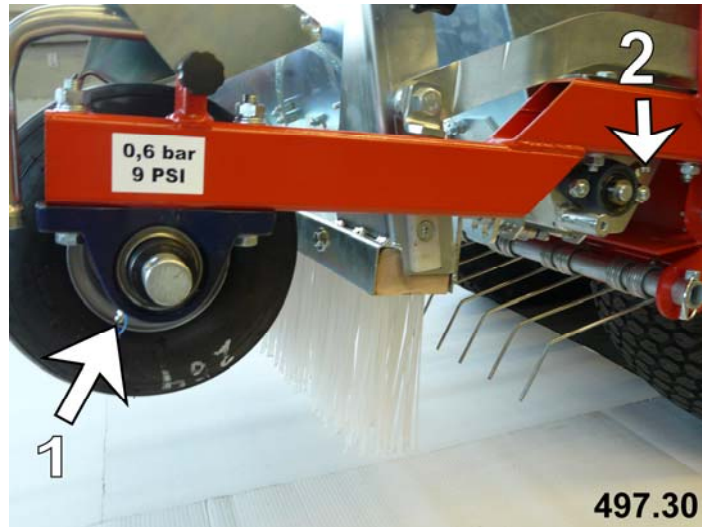
5. Tighten screw fittings ① ③.

6. After the adjustment is complete, mount the drive guard.



6.0. Maintenance

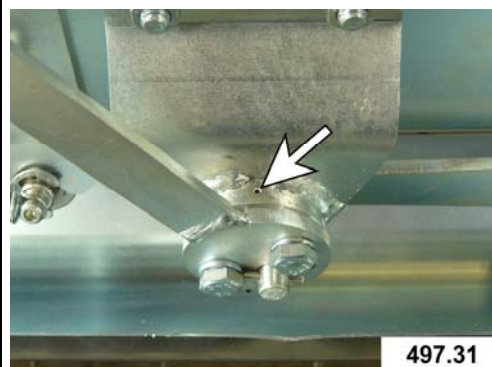
6.5. Maintenance and inspection list



Operating hours	Check	Procedure
20	Vertical bearing ① of the wheel axle	Lubricating
50	Flange bearing ② of the brush roller	Lubricating
	Grooves of the V-belt pulley	Check, clean if necessary
	V-belt pulley tensioning	Check, retension, if necessary (see Chapter 6.4.)

To ensure proper functioning of the slider the bearing must be checked regularly. Put a few drops of lubrication oil into the bore.

No not use adhesive lubricant !



6.0. Maintenance


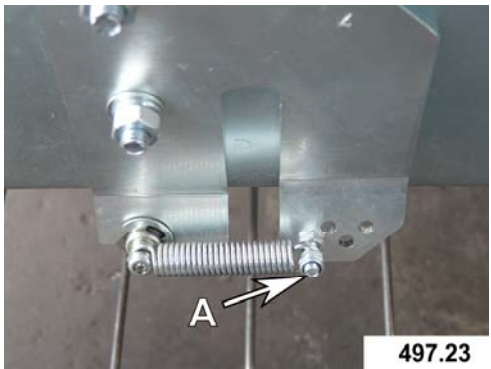
6.6. Adjust seed rail



CAUTION:

The tension springs are tensioned.

- RISK OF INJURY !

<p>The setting of the seed rail should be changed if seed is building up between the container and the rail.</p>	
<p>Lift out the Terra Seed using the rear hydraulic system of the tractor.</p>	
<p>To safeguard the attachment device from unintended lowering, two trestles must be inserted below the frame.</p>	
<p>To safeguard the attachment device from unintended lowering, two trestles must be inserted below the frame.</p>	

6.0. Maintenance

6.7. Removing and installing the seed rail

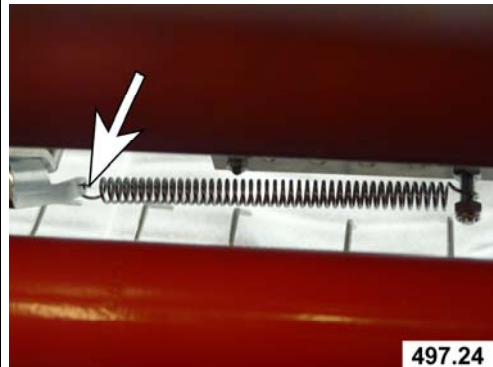


CAUTION:

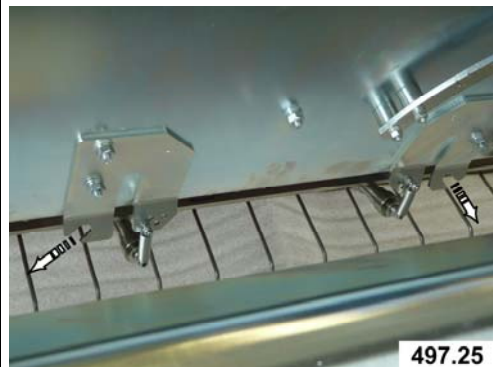
The tension springs are tensioned.

- RISK OF INJURY !

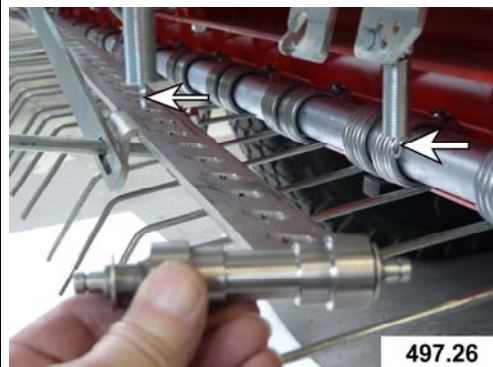
Unhinge tension spring at the front



Pull all guide rollers from the slotted hole in a diagonal downward direction.

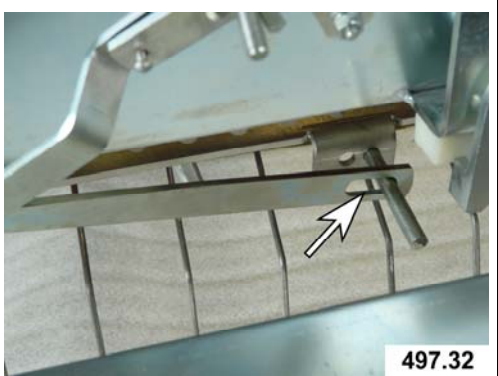

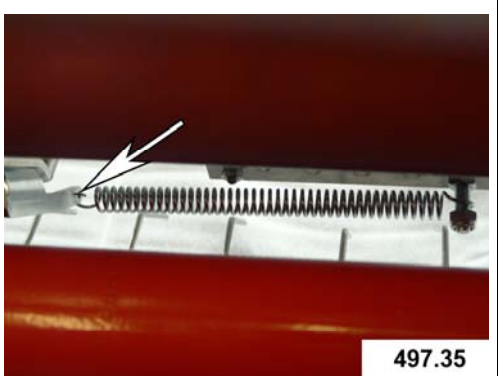


Pull all guide rollers from the slotted hole in a diagonal downward direction.



6.0. Maintenance

6.7. Removing and installing the seed rail

<p>When inserting the seed rail the bolt must be inserted in the slotted hole.</p>	 <p>497.32</p>
<p>Attach loose guide rollers to tension springs.</p> <p>Attach loose guide rollers to tension springs.</p>	
<p>When hinging the guide rollers, always ensure that the shim rings rest against the inside of the guide rollers on both sides.</p>	 <p>497.34</p>
<p>Hinge tension spring at the front</p>	 <p>497.35</p>

6.0. Maintenance

6.8. Wheels and Tyres

Regularly check the tyre pressure: **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.

6.9 Unauthorized modification and spare part manufacturing

Conversion and modifications to the TERRA SEED are permitted only after prior consultation with the manufacturer!

Original parts and accessories authorised by the manufacturer serve your safety. The use of other parts can change the properties of the Terra Seed. We accept no liability for consequences which occur for this reason.

6.0. Maintenance

6.10. Disassembly / Disposal



CAUTION:

Proceed carefully when disassembling the machine. Read the Section "Safety and Precautions" and observe local safety regulations.

The dangers are as follows:

- Heavy parts which could fall down after disassembly
- Sharp edges
- The parts might topple over and crush someone.

Disassembly for Disposal

1. Place the equipment on firm ground.
2. Disassemble the machine, working from top to bottom.

IMPORTANT:

Strictly observe the regulations and laws concerning the disposal of environmentally hazardous substances. Get detailed information about their disposal.

7.0. Equipment

7.1. Scope of Delivery

- Terra Seed with coarse finger-tine harrow, chassis and brush rail
- Three-point linkage frame for CAT.I and CAT.0
- Operating instructions, transfer declaration with guarantee card.

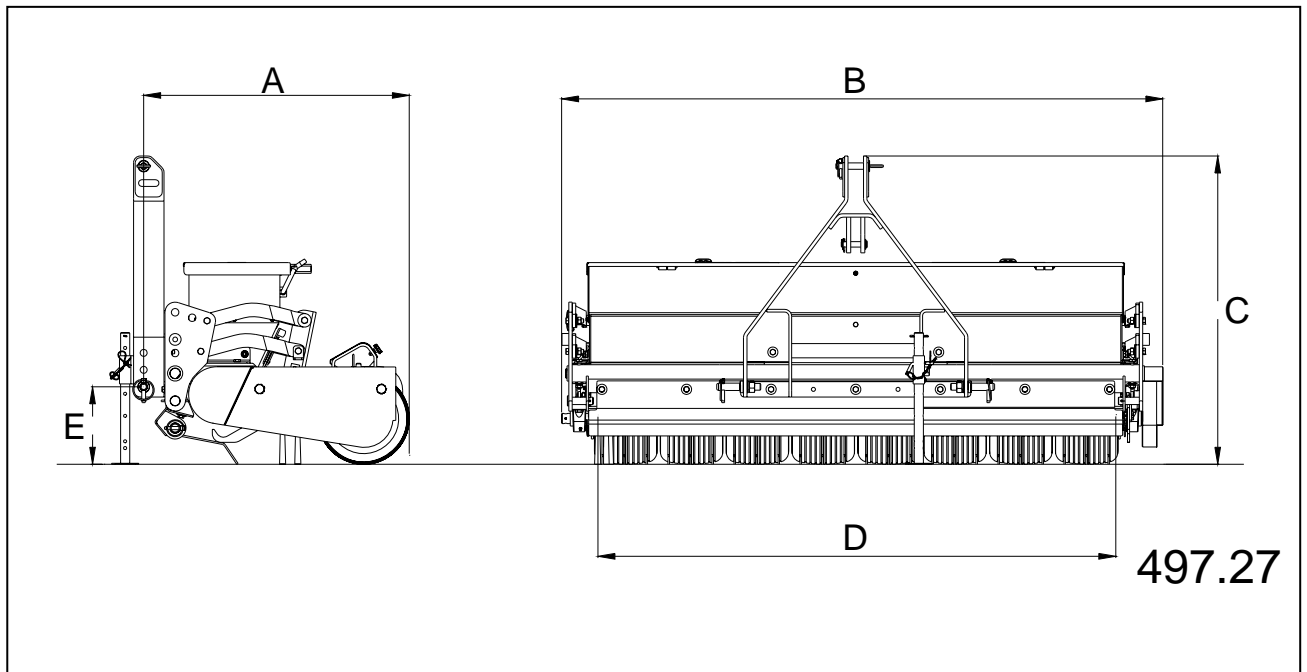
7.2. Special Equipment

Support wheel kit

9.0. Technical Specifications

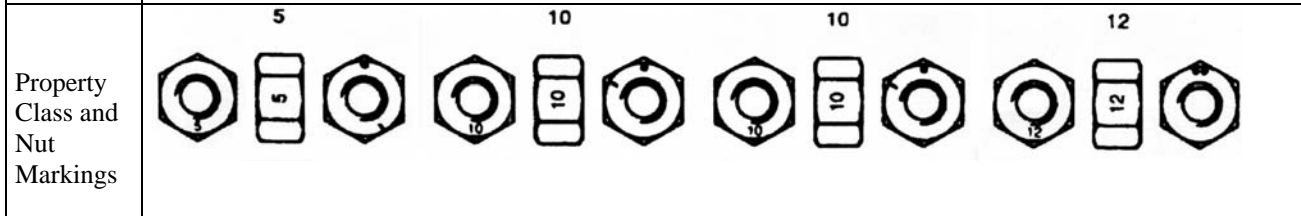
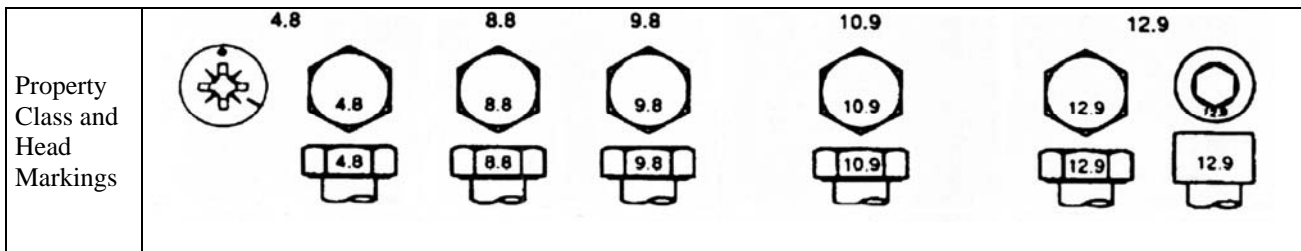
9.1. Technical Specifications

A Device length from lower guide bar connection	780 mm
B Machine width	1800 mm
Machine width with support wheel kit	2200 mm
C Machine height in parking position	925 mm
D Working width	1550 mm
E Height up to lower guide bar connection (bottom)	235 mm
Min. power required for tractor	15 KW / 20 PS
Operating speed	4 - 8 km/h
<hr/>	
Tyre equipment at back	11x7-4AM / 4PR
Diameter of tires	260 mm
Tyre pressure	0,6 bar
<hr/>	
Weight with three-point frame	215 kg
Container volume	120 l
Weight of the support wheel kit	15 kg



9.0. Technical Specifications

9.2. Metric bolt and cap screw torque values



Size	class 4.8				class 8.8 or 9.8				class 10.9				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

DO NOT use these values if a different torque value or tightening procedure is given for a specific application. Torque values listed are for general use only. Check tightness of fasteners periodically.

Shear bolts are designed to fail under predetermined loads. Always replace shear bolt with identical property class

Fasteners should be replaced with the same or higher property class. If higher property class fasteners used, these should only be tightened to the strength of the original.

Make sure fasteners threads are clean and that you properly start thread engagement. This will prevent them from failing when tightening.

Tighten plastic insert or crimped steel-type lock nuts to approximately 50 percent of the dry torque shown in the chart, applied to the nut, not to the bolt head. Tighten toothed or serrated-type lock nuts to the full torque value.

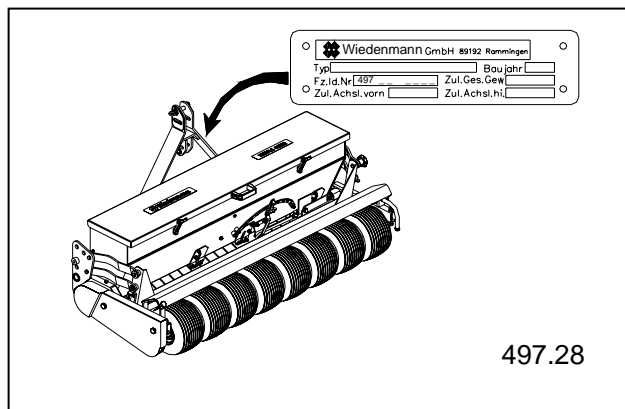
** "Lubricated" means coated with a lubricant such as engine oil, or fasteners with phosphates and oil coatings.

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

9.0. Technical Specifications

9.3. Chassis Number

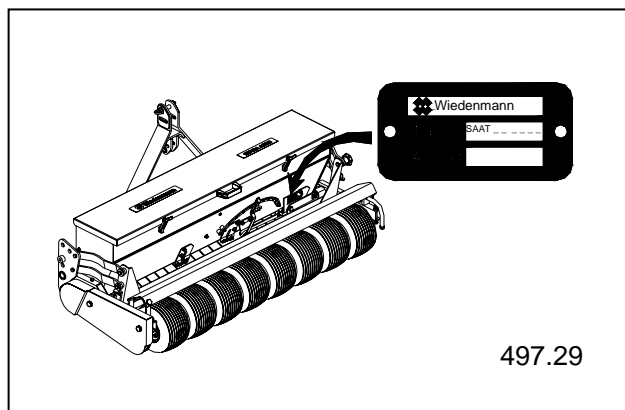
Enter the respective product identification no. in the space provided below. Always quote this number when ordering spare parts or in case of warranty claims.



Veh. Id. no. **.497** _ _ _ _ _

9.4. ID number for seed box

Enter the respective product identification no. in the space provided below. Always quote this number when ordering spare parts or in case of warranty claims.



Id. Nr. **.SAAT** _ _ _ _ _.