

User manual and parts handbook

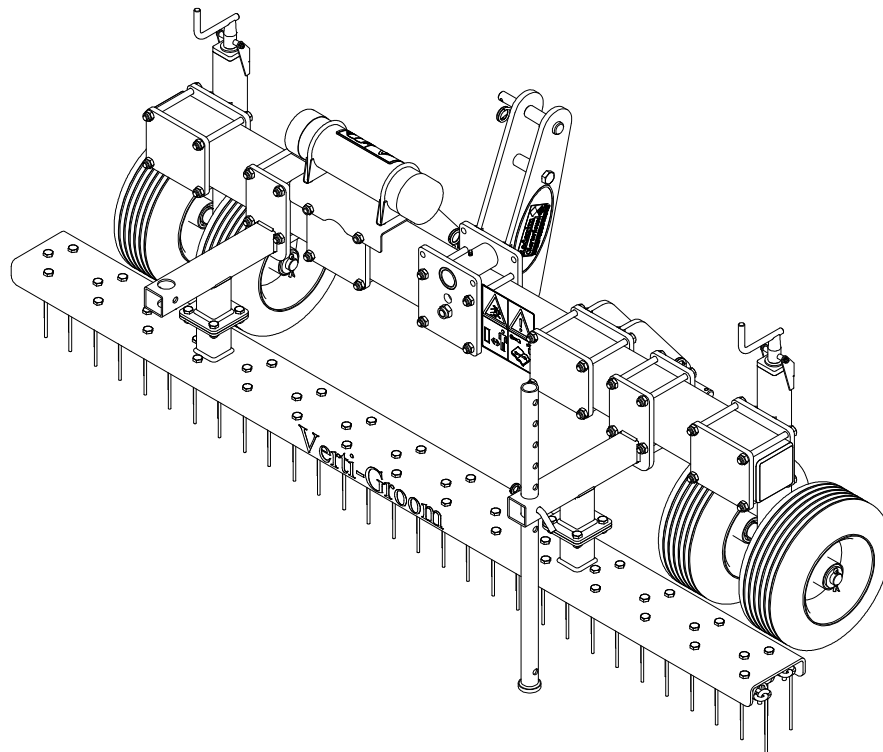
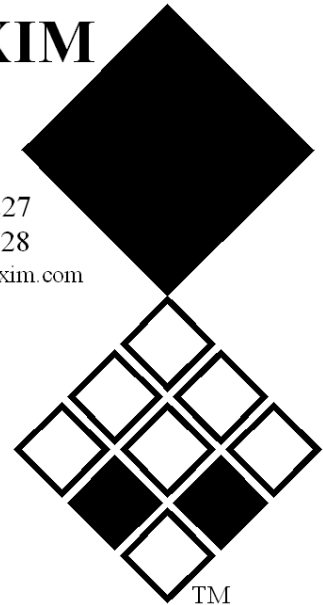
Verti-Groom 2000

Serial number:

Translation of the original operating instructions

REDEXIM

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ATTENTION:

TO ENSURE SAFE USE OF THIS MACHINE AND TO BE ABLE TO ACHIEVE THE BEST RESULTS, IT IS OF THE UTMOST IMPORTANCE TO READ THIS USER MANUAL THOROUGHLY BEFORE USING THE VERTI-GROOM.



FOREWORD

Congratulations on your purchase of the Verti-Groom. To ensure the long and safe use of this Verti-Groom, it is of the utmost importance for all those who will be using it to read and understand this user manual.

Operation of this machine is not safe without full knowledge of the contents of the manual.

The Verti-Groom is not an independently operating machine. The user is responsible for using the appropriate tractor. The user must also check the tractor/Verti-Groom combination for safety aspects, such as the noise level, adequate user instructions and possible risk factors.

On the next page, you will first find the general safety instructions. Every user must know and apply them. After this, a registration card is included. This card should be returned for handling any future claims.

This user manual offers many instructions numbered in sequence. This sequence should be observed. An  indicates a safety instruction. An  indicates a tip and/or note. All information and technical specifications provided at the moment that this document is published are the most recent ones. Design specifications may be changed without prior notice.

This document is a translation of the original operating instructions.
Upon request, the original operating instructions are available in Dutch.

GUARANTEE CONDITIONS

THIS VERTI-GROOM IS DELIVERED WITH A WARRANTY AGAINST DEFECTS IN MATERIALS. THIS GUARANTEE IS VALID FOR A PERIOD OF 12 MONTHS FROM THE PURCHASE DATE. VERTI-GROOM WARRANTIES ARE SUBJECT TO THE "GENERAL CONDITIONS FOR SUPPLY OF PLANT AND MACHINERY FOR EXPORT, NUMBER 188", WHICH ARE PUBLISHED UNDER THE AUSPICES OF THE UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE.

REGISTRATION CARD

For your own information, please complete the table below:

Serial number of machine	
Dealer's name	
Purchase date	
Remarks	

! SAFETY INSTRUCTIONS !

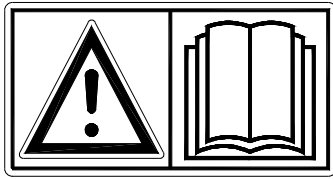


Fig. 1

The Verti-Groom is designed for safe use. However, this is only possible if the user fully observes the safety instructions given in this manual.

Read and understand (Fig. 1) the manual before starting to use the Verti-Groom. If the machine is not used as described in the manual, injury and/or damage to the Verti-Groom may result.

1. The machine must only be used by professionals and must first be professionally adjusted for use on the ground that is to be treated.

The manufacturer does not accept any liability with regard to damage resulting from non-professional use; all resulting risks are the responsibility of the user. Correct/professional use also includes following the manufacturer's instructions for use, maintenance and repair.

Before using the Verti-Groom, inspect the area to be treated. Remove any loose obstacles and avoid irregularities.

2. The Verti-Groom is constructed according to the latest technological knowledge and is safe to use.

Improper use, maintenance or repair of the machine may result in injury to both the user and others. **This must be avoided!**

Always use the Verti-Groom in combination with the proper tractor, as described in the technical data.

3. All persons whom the owner assigns to operate, maintain or repair the Verti-Groom must read and have completely understood the operating manual and in particular the **Safety Instructions** section.

The user is responsible for a **safe tractor/Verti-Groom combination. This unit must be tested** in terms of noise, safety and ease-of-use. In addition, user's instructions must be prepared.

4. Before using the Verti-Groom, the user is **obliged** to inspect it for **visible damage and defects**.

Any changes to the Verti-Groom (including its functioning) that may affect its safety must be corrected immediately.

For reasons of safety, it is in principle forbidden to make changes or additions to the Verti-Groom (with the exception of those approved by the manufacturer).

If any **modifications** are made to the Verti-Groom, the present CE certificate becomes null and void and the person who made the modifications must **himself** make sure a new **CE certificate** is granted.

Before each use, inspect the Verti-Groom for loose bolts/nuts/parts.

If present, inspect the hydraulic hoses regularly and replace them if they are damaged or show signs of wear. The replacement hoses must meet the manufacturer's technical specifications.

Always relieve the pressure from the hydraulic installation, if present, before carrying out any work on it.

NEVER use de Verti-Groom if its protective covers and safety stickers are missing.

NEVER crawl underneath the Verti-Groom.
If you need to access the bottom, tilt the Verti-Groom.

NEVER step off the tractor while the engine is still running.

When carrying out maintenance, adjustments or repairs, make sure the Verti-Groom is blocked from sagging/moving/sliding.

Before carrying out maintenance, adjustments and repairs **always first switch off the tractor motor and remove the tractor key from the ignition** (Fig. 4).

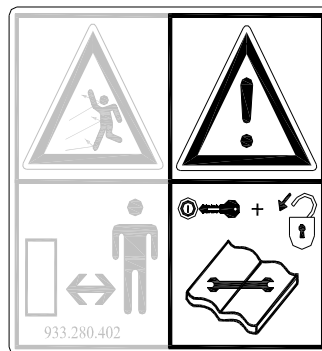


Fig. 2

Use only original Verti-Groom parts for maintenance or repairs.
This will ensure continued safety of the machine and its user.
Only authorised technical personnel may carry out adjustments and repair work on the Verti-Groom.

Keep an overview of repairs.

5. In addition to the instructions in this user manual, the generally applicable regulations with respect to safety and working conditions must be observed.

The relevant traffic rules also apply to use on public roads.

Transporting persons is not permitted!

Do not use the Verti-Groom when it is dark, during heavy rain/storms, or on slopes with a gradient greater than 20 degrees.

6. Before starting to work, all persons who will operate the Verti-Groom must be familiar with all its functions and controls.

Attach the Verti-Groom according to the instructions on the tractor.

(Danger of injury!)

Before driving off, make sure you have a clear view both nearby and far away.

Safety stickers (Figs. 2, 3, 4) with the same meaning are present on both sides of the Verti-Groom (Fig. 5). Ensure these safety stickers are always clearly visible and legible. Replace them if they are damaged.

During operation, make sure there are **NO persons in the danger area** of the Verti-Groom to prevent them from getting injured by ejected material (Fig. 4).



Fig. 3



Fig. 4

Keep a distance of at least 4 metres! (Fig. 6).

Be aware of the maximum lifting capacity of the towing vehicle.

Wear suitable clothing. Wear sturdy shoes with a steel tip, wear long trousers, tie up long hair and do not wear loose clothing.

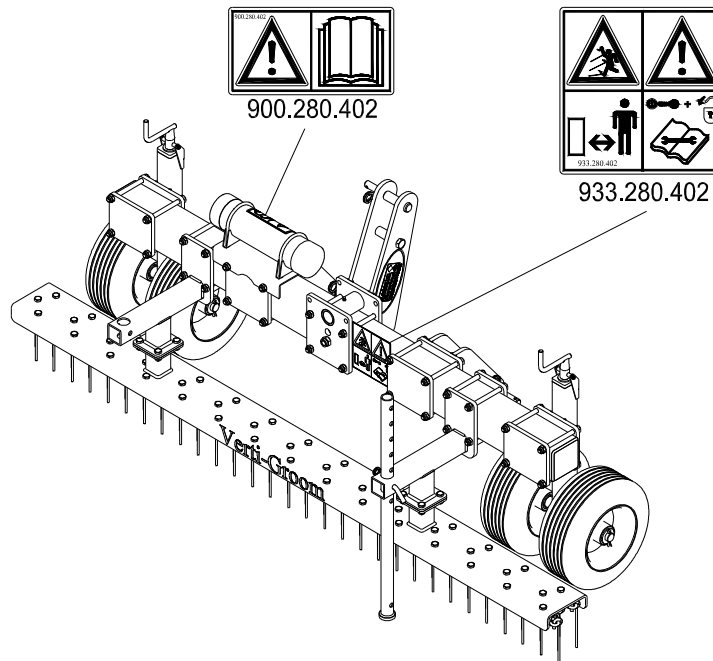


Fig. 5

(7) Location of safety stickers (Fig. 5).



EU DECLARATION

We,

Redexim BV
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declare – entirely on its own responsibility – that the product:

VERTI-GROOM WITH MACHINE NUMBER AS INDICATED ON THE MACHINE AND IN THIS MANUAL,

to which this declaration relates is according to the stipulation of the 2006/42/EC directive for machines.

Zeist, 01/10/09

A handwritten signature in blue ink, appearing to be 'A.C. Bos', written over a horizontal line.

A.C. Bos
Manager Operations & Logistics
Redexim Holland

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1.0 TECHNICAL DATA

Model	2000
Working width	2,045 m (76.7")
Working depth	0-35 mm (0"-1.38")
Driving speed	Max. 12 km/h (7.5 mph)
Weight	157 kg (346 lbs) Including a optional brush: 245 kg (540 lbs)
Recommended tractor	18 HP with minimum lifting capacity of 200 kg (441 lbs) Including a optional brush: 18 HP with minimum lifting capacity of 300 kg (661.4 lbs)
Maximum capacity (Theoretically at maximum speed, 12 km/h (7.5 mph))	24540 m ² /h (264146.4 ft ² /h)
Distance between pins	23 mm (0.9")
Shipping dimensions L x W x H	2250 x 900 x 830 mm (88.6" x 35.4" x 32.7") Including a optional brush: 2250 x 900 x 1950 mm (88.6" x 35.4" x 76.8")
3-point connection	CAT. 1-2
Lubricant	EP 2
Standard components	Running wheels adjustable in height Machine carrier including a support leg Verti-Groom heavy-duty pin section Toolbox including a manual
Optional	Verti-Groom light rake pin section Floating V-sliding brush of 2.2 m (86.6") Magnetic broom Towing hook

2.0 GENERAL DESCRIPTION

The Verti-Groom is a rake / brush machine for cultivating grass and natural grass.

3.0 FIRST INSTALLATION, REMOVING THE MACHINE FROM THE PALLET

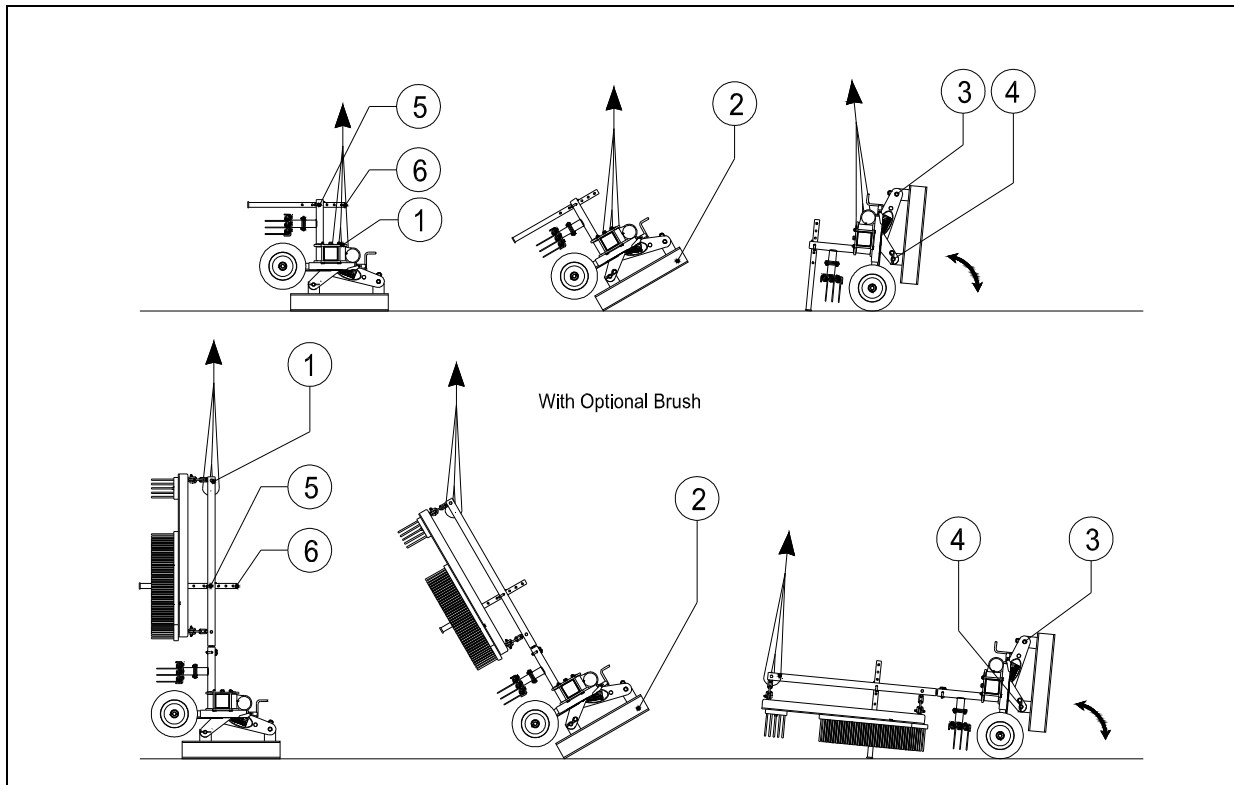


Fig. 6

The machine is standing vertically on the pallet. To remove the pallet and lay the machine horizontally on the ground, proceed as follows (see Fig. 6):

⚠!! NEVER NOT CRAWL UNDER THE MACHINE !!

1. If it has not yet been done, slide adjustable leg 5 downwards and lock it with pin 6 and the appropriate safety pin.
2. Fasten a cable to the lifting point (1).

⚠ Ensure that the cable/crane/lift can lift at least 300 kg (662 lbs).

3. Raise the machine, including the pallet, approx. 50 mm (2") from the ground.
4. Make sure that the machine is on the point of the pallet 2.
5. Gently lower the machine, in a controlled way, until it fully rests upon the ground.

⚠!! Be careful – KEEP YOUR DISTANCE – The machine MAY shift !!

6. Remove the top rod pin 3 and carefully rotate the pallet 2 around the bottom 3-point pins 4 until they are resting on the ground.
7. Remove the bottom 3-point pins 4 and remove the pallet 2.
8. Connect the machine to the tractor (see chapter 4.0).

⚠ Use the correct tractor. See the specifications.

Switch the tractor off and lock the tractor/Verti-Groom combination to prevent it from driving/sliding away.

4.0 CONNECTING TO THE TRACTOR

Inspection procedure before starting to connect the Verti-Groom.

- Visually inspect the Verti-Groom for signs of damage and repair them if they endanger the safe operation of the machine.
 - Make sure that all nuts and bolts are properly tightened.
 - Check whether all safety stickers are present and undamaged on the machine.
- The machine may **NEVER** be used if this is not the case.

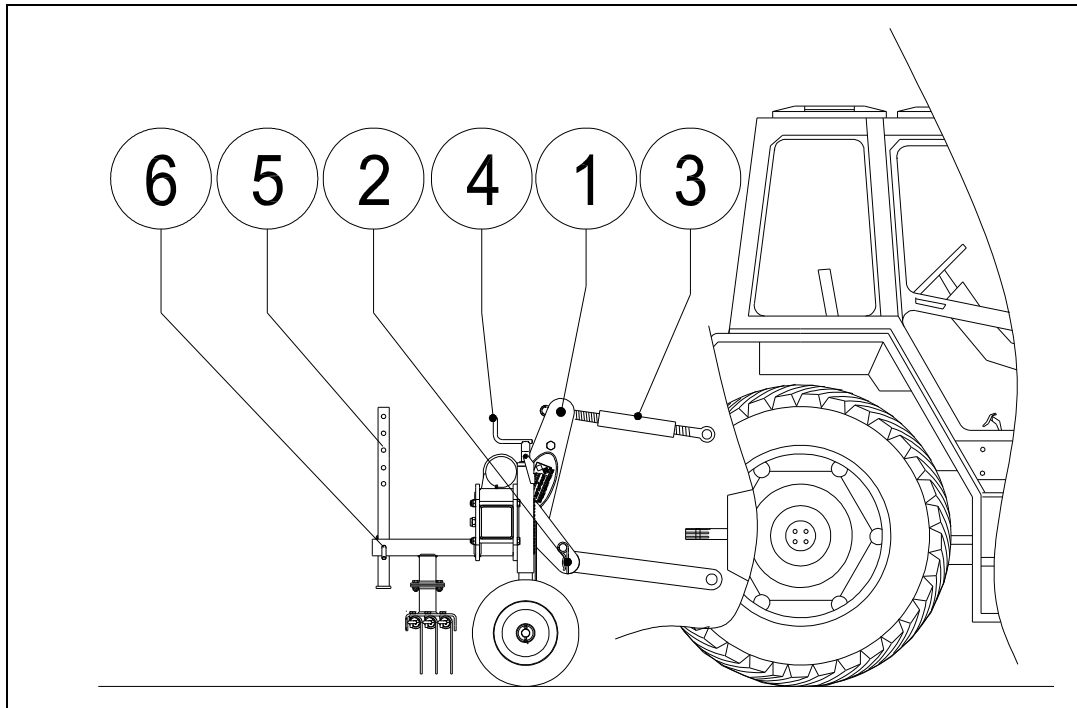


Fig. 8

The Verti-Groom can be connected to the tractor by means of the 3-point connection.

This is done as follows: (Fig 8.)


1. Remove the 3-point pins 1 and 2.
2. Drive the tractor carefully in reverse so that the low connection arms can be connected to the frame.
- ⚠!! **Ensure that the tractor is well blocked and cannot start moving by itself !!**
- ⚠!! **Switch the tractor off before dismounting !!**
3. Connect the lower connecting arms to the 3-point connecting plate pins 1 and secure them with the safety pins included.
4. Set the tractor's stabiliser to 100 mm of lateral movement.
5. Mount the top rod of your tractor and unscrew it until it has reached the same level as the 3-point stop connection of the Verti-Groom.
6. Connect the top rod 3 with pin 2 to the frame. Secure pin 2 using the safety pin included.
7. Screw the top rod 3 in to tension it.
- ⚠!! **Make sure that all mounting pins are securely locked!!**
8. Slide adjustable leg 5 upwards and lock it with pin 6 and the appropriate safety pin.
9. Start the tractor and raise the Verti-Groom from the ground.

5.0 ADJUSTING THE WORKING DEPTH

Adjust the working depth by turning the spindles 4 (Fig. 8) on the front of the machine, to adjust the running wheels.

Set both sides of the machine to the same height so the field will be cleaned as evenly as possible.

NEVER adjust the machine in such a manner that the ground surface might be damaged.

 **IMPORTANT ! Before using the machine, first check the working depth while the machine is stationary!**

6.0 TRANSPORTATION OF THE VERTI-GROOM

The user is responsible for the transport of the Verti-Groom behind the tractor when travelling on public roads. Check the national traffic rules.

On open fields while the machine is raised and if circumstances allow this, the maximum permitted speed is 20 km/h (12.4 mph) due to the weight of the Verti-Groom.

Higher speeds may endanger the driver and/or other people and even damage the machine.

 **When the machine is in the raised position, at least 20% of the weight of the tractor must be supported by the front axle.**

7.0 DRIVING SPEED

The driving speed is limited to 12 km/h (7.5 mph).

Higher speeds are not recommended in view of excessive wear and damage that may occur to the machine and the ground underneath.

8.0 OPERATION OF THE VERTI-GROOM

Before the Verti-Groom is used in the field, the following must be checked:

1. Are there any loose objects in the field? Remove these first.
2. Are there any slopes? The maximum slope this machine can work on is 20 degrees.
3. Always work downhill.
Is there any danger of flying objects, such as balls, which may distract the attention of the driver? If so, do NOT use the Verti-Groom.
4. Is there any danger of sinking or sliding away? If so, delay the work until the conditions are more favourable.
5. A field can be done several times in the same direction or different directions to achieve better cleaning.
6. Do not make sharp turns; preferably drive in straight lines to avoid damaging the machine and/or the ground.
7. Do not set the machine too deeply; this can result in undesired damage on the ground.

9.0 STARTING/STOPPING PROCEDURE

The starting procedure is **VERY** important. If this procedure is not followed exactly as described below, serious damage may occur to the ground underneath the machine.

The starting procedure is as follows:

1. Check the Verti-Groom thoroughly for loose parts and make sure all parts function properly.

⚠!! If parts are found that are loose or do not function properly, correct the situation before using the Verti-Groom!!

2. Drive to the place where the soil is to be treated.
3. Turn the top rod 3 in so that the machine is at right angles to the ground. (see fig. 8)
4. Adjust the working depth while the machine is stationary as described in chapter 6.0.

⚠!! Ensure that the tractor is well blocked and cannot start moving by itself !!

⚠!! Switch the tractor off before dismantling !!

5. Lower the machine until it hangs approximately 50 mm (2") above the ground.
6. Put the tractor in the correct gear.
7. Drive the tractor forward and lower the Verti-Groom smoothly onto the pre-adjusted running wheels.
8. Increase the driving speed to a maximum of 12 km/h (7.5 mph).

Stopping is done as follows:

1. While moving, raise the machine smoothly.
2. Drive to the following location and start again as described above.

10.0 DISCONNECTING THE VERTI-GROOM

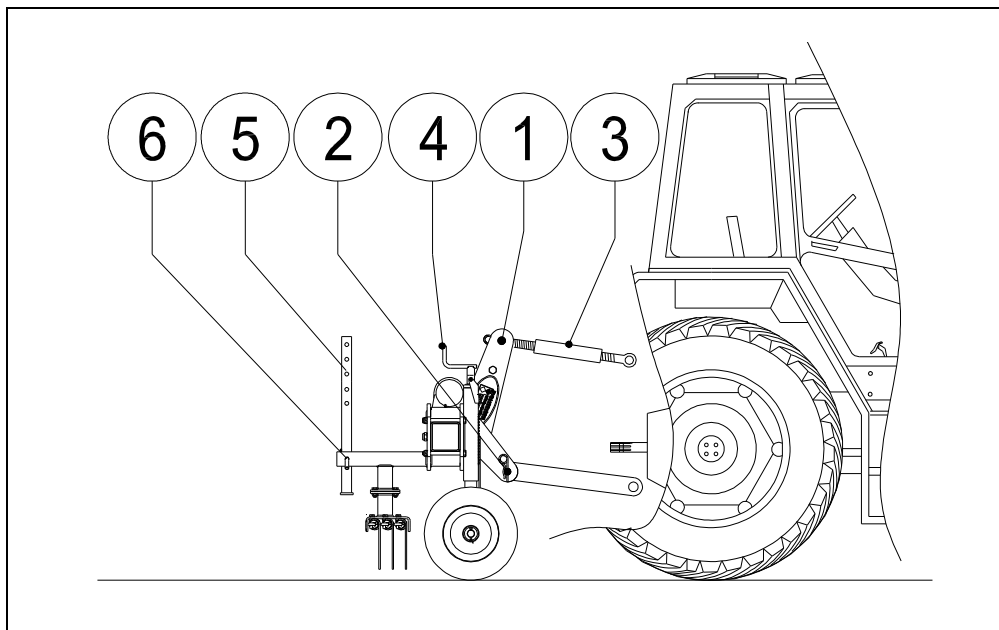


Fig. 9

The machine can be disconnected from the tractor as follows (see Fig 9):

1. Drive the Verti-Groom to its storage place, which must have a stable and flat ground.

⚠!! Ensure that the tractor is well blocked and cannot start moving by itself !!

⚠!! Switch the tractor off before dismounting !!

2. Unscrew the spindles 4 so that the running wheels are lower than the spring pins.
3. Lower the adjustable leg 5 and lock it with pin 6 and the appropriate safety pin.
4. Carefully lower the Verti-Groom onto the ground.
5. Release the top rod 3.
6. Remove the safety pin from pin 2. Remove the pin from the top-rod connection.
7. Remove the safety pins from pins 1 and remove the pins.
8. **⚠!! Make sure the Verti-Groom is stable and cannot roll/slide away!!**
9. Start the tractor and drive it away from the machine.



When placing in storage, it is recommended not to allow the spring pins/brush to touch the ground or other objects in order to prevent the spring pins/bristles from being bent.

11.0 TROUBLESHOOTING

Problem	Possible cause	Solution
Too little material loosened	Working depth is not set deeply enough.	Increase the working depth.
	Ground is too hard.	Drive a few more passes, each time with a deeper setting.
Poor appearance of field after completion.	Working depth is set too deeply.	Decrease the working depth.
	Drag brush does not drag over the ground	Decrease the working depth. Change length of top rod.
	Drag brush damaged.	Replace or repair.

12.0 MAINTENANCE

Time schedule	Check point/lubricating point	Method
Before each use	Check for loose bolts/nuts.	Tighten the loose bolts/nuts to the correct torque.
	Presence and legibility of safety stickers (Fig. 5).	Replace if damaged or missing.

13.0 OPTION: VERTI-GROOM LIGHT RAKE PIN SECTION

If the pin section is too forceful for the treatment, you can mount a lighter pin section with 3mm pins.

You can order this option under number 261.000.006.

See the parts manual for mounting this option on the Verti-Groom.

13.1 OPTION: V-SLIDING BRUSH

If brushing the surface is required after the treatment with the rake, the Verti-Groom can be equipped with a V-sliding brush.

You can order this option under number 261.000.010.

See the parts manual for mounting this option on the Verti-Groom.

13.2 OPTION: MAGNETIC BROOM

A magnetic broom is available in order to remove steel particles (such as nails, screws and shoe studs) from the ground. This magnetic broom can be continuously variable adjusted in height.

You can order this option under number 261.000.002.

See the parts manual for mounting this option on the Verti-Groom.

13.3 OPTION: TOWING HOOK

If the towing vehicle is not fitted with a three-point system to lift the Verti-Groom, the Verti-Groom can be equipped with a towing hook.

You can order this option under number 261.000.000.

See the parts manual for mounting this option on the Verti-Groom.