

VERTI-TOP 1200-1800



Translation of the original user manual



2201 English 953.120.000 EN

EU – DECLARATION OF CONFORMITY



We,

Redexim Handel- en Exploitatie Maatschappij B.V.

Kwekerijweg 8

3709 JA Zeist, The Netherlands

declare that this “EU - DECLARATION OF CONFORMITY” is issued under our sole responsibility and belongs to the following product:

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

to which this declaration refers, complies with stipulation of:

2006/42/EC Machinery Directive

and with the standards:

- **ISO 12100-1:2010** Safety of machinery - General principles for design - Risk assessment and risk reduction
- **ISO 13857:2019** Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs
- **ISO 4254-1:2015** Agricultural machinery - Safety - Part 1: General requirements

Zeist, 03-01-2022

A handwritten signature in blue ink, appearing to be 'C.H.G. de Bree', written in a cursive style.

C.H.G. de Bree

Redexim Handel- en Exploitatie Maatschappij B.V.

UK – DECLARATION OF CONFORMITY



We,

Redexim Handel- en Exploitatie Maatschappij B.V.
Kwekerijweg 8
3709 JA Zeist, The Netherlands

declare that this “UK - DECLARATION OF CONFORMITY” is issued under our sole responsibility and belongs to the following product:

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

to which this declaration refers, complies with stipulation of:

S.I. 2008 No. 1597 HEALTH AND SAFETY The Supply of Machinery (Safety) Regulations 2008

and with the standards:

- **ISO 12100-1:2010** Safety of machinery - General principles for design - Risk assessment and risk reduction
- **ISO 13857:2019** Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs
- **ISO 4254-1:2015** Agricultural machinery - Safety - Part 1: General requirements

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C.H.G. de Bree



Redexim Handel- en Exploitatie Maatschappij B.V.

FOREWORD

Congratulations on your Verti-Top purchase! For safe and long-lasting operation of this Verti-Top, it is necessary to read and to understand this user manual. It is impossible to work safely with this machine *without* complete knowledge of the content of the user manual.

The Verti-Top is not a machine that works independently. It is the user's responsibility to use the correct tractor. The user must also check the tractor/Verti-Top combination on safety aspects such as noise level, user instructions and risk analysis.

The following pages deal initially with the general safety instructions. Every user should know these safety instructions and apply them. At the end of this page, a registration card is inserted. This registration card should be returned to enable us to deal with potential future claims

This user manual lists many instructions that are numbered in sequence. You should follow this sequence. A  is an indication of a safety instruction. A  means 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.

WARRANTY CONDITIONS

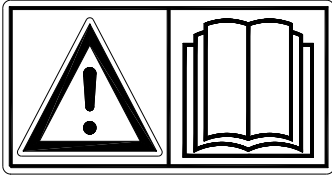
WITH DELIVERY THIS VERTI-TOP IS GUARANTEED AGAINST MATERIAL DEFECTS. THIS WARRANTY IS VALID FOR A PERIOD OF 12 MONTHS FROM THE PURCHASE DATE. VERTI-TOP WARRANTIES ARE SUBJECT TO THE 'GENERAL CONDITIONS FOR SUPPLY OF PLANT AND MACHINERY FOR EXPORT, NUMBER 188' THAT ARE PUBLISHED UNDER THE AUSPICES OF THE UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE.

REGISTRATION CARD

For your own information, fill in the table below:

Serial number of the machine	
Dealer name	
Date of purchase	
Remarks	

! SAFETY INSTRUCTIONS !

 <p>Figure 1</p>	<p>The Verti-Top is designed for safe use. This can only be achieved if you completely follow the safety instructions described in this manual. Read and understand (Figure 1) the manual <i>before</i> you start using the Verti-Top. If the machine is not used as described in this manual, this can result in injuries and/or damage to the Verti-Top.</p>
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1. The user must be an expert in using the machine. The machine should be professionally adjusted for cultivating the subsoil.

The manufacturer will not accept any liability for unprofessional use and its resulting damage. All risks occurring with this are entirely at the expense of the user. Following the use, maintenance and repair instructions prescribed by the manufacturer is also considered professional use of this machine.

Inspect the area to be treated *before* using the Verti-Top.
Remove loose obstacles and avoid irregularities.

2. The Verti-Top is manufactured according to the latest technical understanding and is safe to use.

When unskilled people use, maintain or repair the machine, this could result in injuries to the user *and* to third parties. **This must be avoided!**

Always use the Verti-Top in combination with the correct tractor as described in the technical data.

3. All persons assigned to operate, maintain and repair the Verti-Top by the owner must completely read and understand the operation manual and in particular the chapter of **Safety Instructions**.

The user is responsible for a **safe Tractor / Verti-Top combination**. **This entire combination must be tested** for noise, safety, risk and user friendliness. User instructions should also be drafted.

4. The user is **obliged to check** the Verti-Top for **visible damage and defects** before using the Verti-Top.

Modifications to the Verti-Top (including its operations) that have a negative impact on safety must be rectified immediately.

For safety reasons it is in principle not permitted to make changes or adjustments to the Verti-Top (except those approved by the manufacturer).

If **modifications** to the Verti-Top have been made, then the current CE marking is cancelled. The person that has made these modifications has to apply for a new **CE marking himself**.

Check the Verti-Top for loose bolts, nuts and components *before* every operation.

NEVER use the Verti-Top in the absence of protective guards and safety stickers.

The inspection hatch **MUST** be closed when using the Verti-Top. (Figure 2).

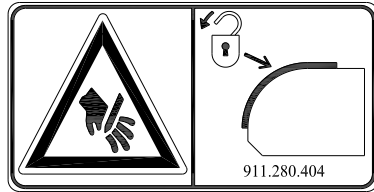


Figure 2



Figure 3

BE CAREFUL not to get any parts of your body jammed! (Figure 3).

NEVER crawl under the Verti-Top.

If necessary, tilt the Verti-Top.

NEVER step off the tractor while the motor is running.

In case of maintenance, adjusting and repairs, it is necessary to block the Verti-Top in order to prevent sinking away, driving off and/or sliding off.

Always switch off the tractor motor, take the tractor's key out of the ignition and disconnect the PTO in case of maintenance, adjusting and repairs. (Figure 4)

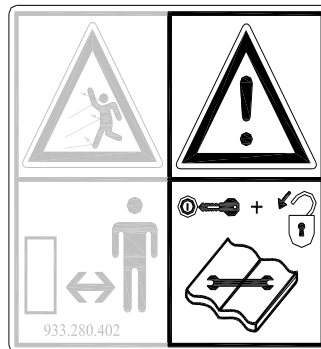


Figure 4

With regards to the safety of the machine and the user, use only original Verti-Top parts for maintenance and repairs.

Only authorised technical personnel may carry out repairs to the Verti-Top.

Keep a record of the repair activities.

5. The general applicable health & safety (Dutch: ARBO) regulations must also be followed in addition to the instructions in this user manual.

Relevant traffic regulations also apply in case of using public roads.

Transporting persons is not permitted!

Do not use the Verti-Top in the dark, in heavy rain/storm or on slopes with an angle larger than 20 degrees.

- All persons that are going to operate the Verti-Top must be familiar with all the functions and control elements of the Verti-Top *before* starting any work activities.

Attach the Verti-Top to the towing vehicle according to the regulations.

(Danger of injuries!)

Check whether you have a clear field of vision – both close by and far away – *before* you depart.

Safety stickers (Figure 2, 3, 4, 5 and 6) with an identical meaning are attached to the sideboard and to the rear cover (Figure 7) of the Verti-Top. These safety stickers must always be clearly visible and legible and must be replaced if they have become damaged.

During operation, **NO persons without the proper protection gear are allowed within the danger zone** of the Verti-Top, because there is danger of physical injuries caused by flying particles or substances. (Figure 5).



Figure 5



Figure 6

Keep a distance of minimum 4 metres! (Figure 6).

Pay attention to the permitted lifting capacity of the towing vehicle.

Dress appropriately. Wear sturdy shoes with steel toecaps, long trousers and tie up long hair. Do not wear loose clothing.

Use the proper personal protection gear according to the applicable health & safety (Dutch acronym: ARBO) and safety regulations.

Used oil/grease is harmful to the environment. Dispose of these substances according to the regulations that apply in your location.

7. Location of the Verti-Top 1200 safety stickers (Figure 7a)
 Location of the Verti-Top 1800 safety stickers (Figure 7b)

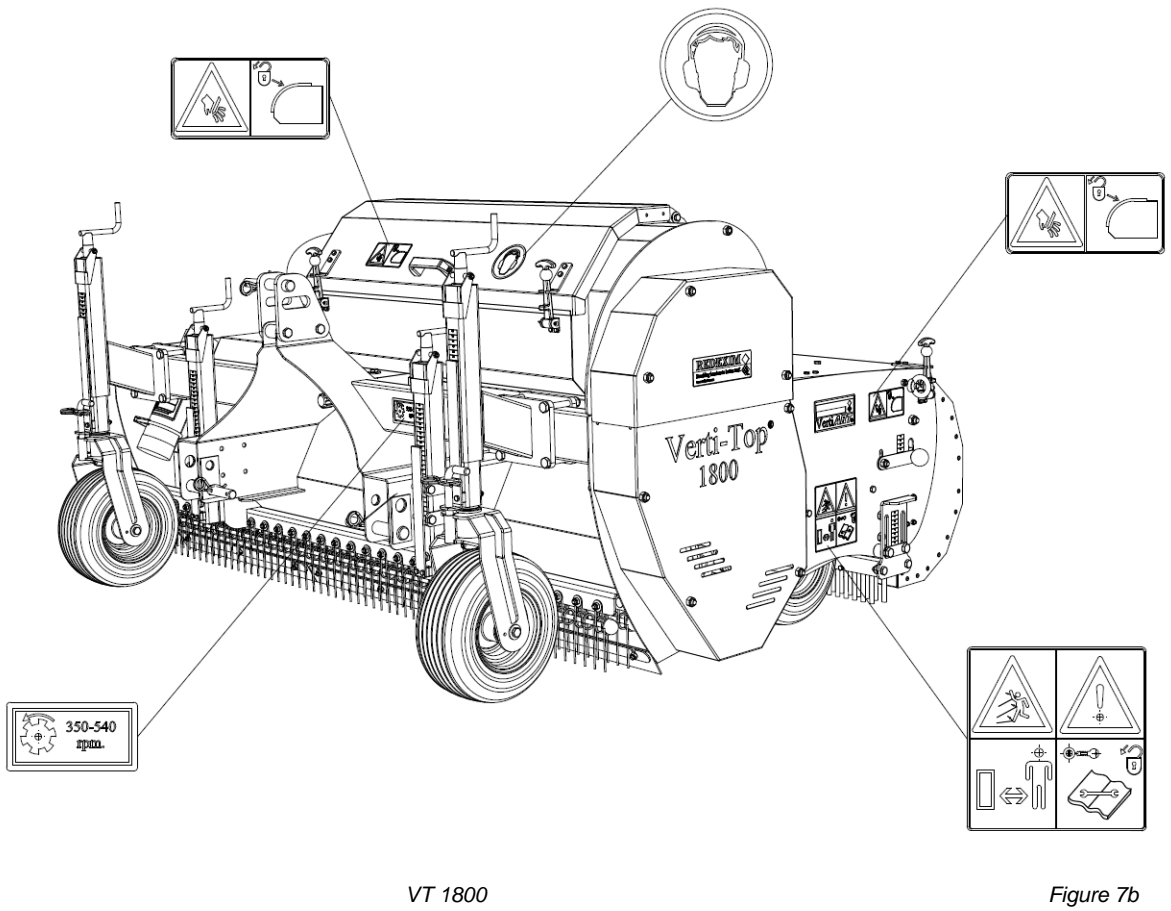
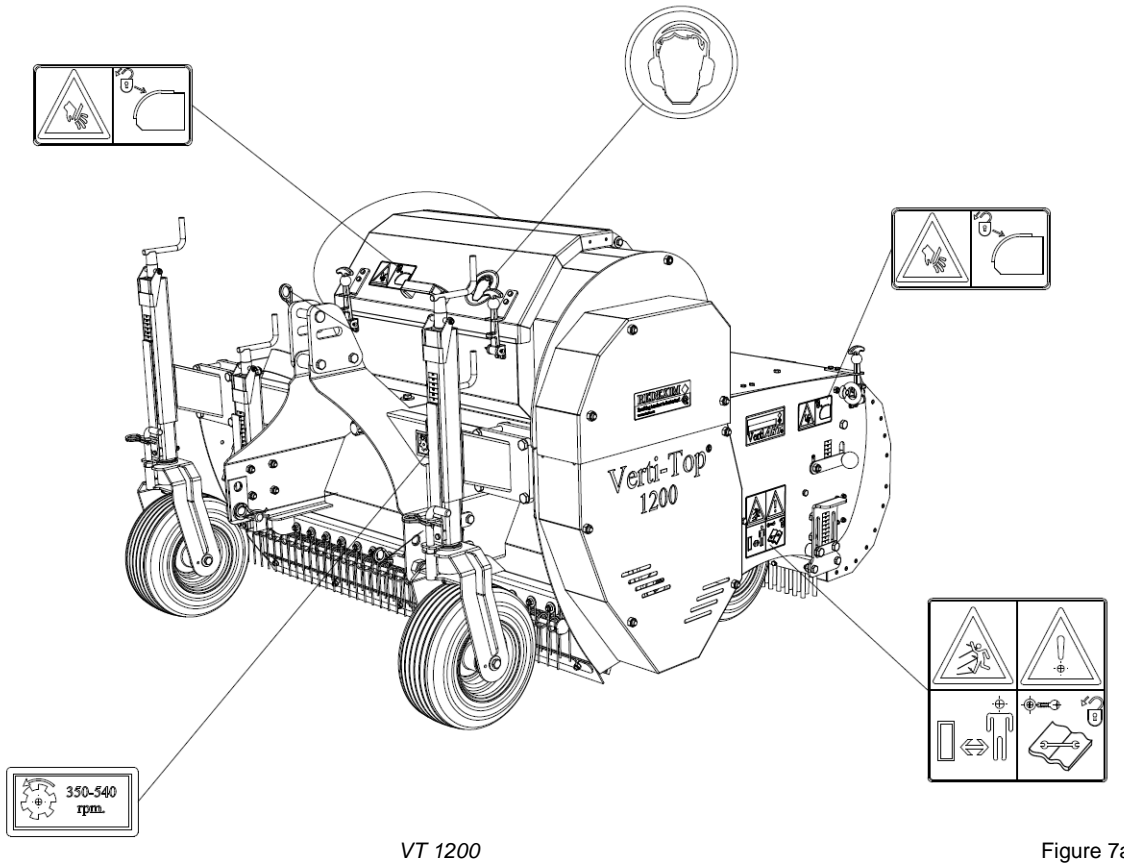


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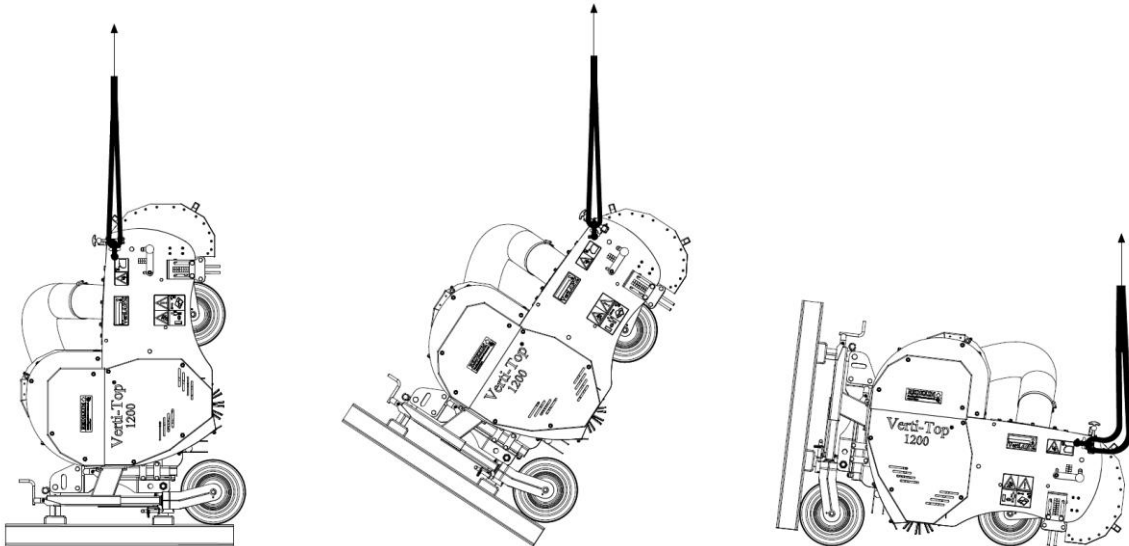
1.0 TECHNICAL DATA

	<u>1200</u>	<u>1800</u>
Working width	1.2m (47.2")	1.8m (70.9")
Working depth	Up to 26mm (1.02")	Up to 26mm (1.02")
Speed	Maximum 12 km/h (7.5 mph)	Maximum 12 km/h (7.5 mph)
Working speed	The working speed depends on the conditions and the required result. It is maximum 5km/h (1.8 mph).	The working speed depends on the conditions and the required result. It is maximum 5km/h (1.8 mph).
Weight in kg	360 Kg (794lbs)	440 Kg (970lbs)
Recommended tractor	25 HP with minimum lifting capacity of 400 kg	25 HP with minimum lifting capacity of 480 kg
Content of the receptacle	2x 27 litres (0.95 cu.ft.)	3x 27 litres (0.95 cu.ft.)
Maximum capacity (Theoretical at maximum speed of 5 km/h [1.8mph])	6000m ² (64583ft ²)	9000m ² (96875ft ²)
Mesh width of jiggging sieve (supplied standard)	5 mm x 5 mm (0.2" x 0.2")	5 mm x 5 mm (0.2" x 0.2")
Three-point connection	Cat. 1	Cat. 1, Cat. 2
Oil gearbox	SAE 90	SAE 90
Grease	EP 2	EP 2
PTO revs	540 rpm	540 rpm
Standard items	<ul style="list-style-type: none"> - Easy to change and adjust the jiggging sieve 5 mm x 5 mm (0.2" x 0.2") - Sliding brush - Integrated adjustable rake - 2 waste receptacles - PTO axle 	<ul style="list-style-type: none"> - Easy to change and adjust the jiggging sieve 5 mm x 5 mm (0.2" x 0.2") - Sliding brush - Integrated adjustable rake - 3 waste receptacles - PTO axle
Optional	Jiggging sieves: <ul style="list-style-type: none"> - 3.2mm x 3.2mm (0.13" x 0.13") - 4mm x 4mm (0.16" x 0.16") - 5 mm x 5 mm (0.2" x 0.2") - 5.5mm x 5.5mm (0.22" x 0.22") - 6mm x 6mm (0.24" x 0.24") 	Jiggging sieves: <ul style="list-style-type: none"> - 3.2mm x 3.2mm (0.13" x 0.13") - 4mm x 4mm (0.16" x 0.16") - 5 mm x 5 mm (0.2" x 0.2") - 5.5mm x 5.5mm (0.22" x 0.22") - 6mm x 6mm (0.24" x 0.24")

2.0 GENERAL DESCRIPTION

The Verti-Top is a machine for treating artificial grass fields by removing, cleaning and redistributing rubber.

3.0 FIRST INSTALLATION – TAKING THE MACHINE OFF THE PALLET



Shown version: VT 1200 (The same principle applies to the VT 1800.)

Figure 8

The machine is placed vertically on the pallet. To remove the pallet and to place the machine horizontally on the ground, take the following steps (see Figure 8):

⚠ !! NEVER CRAWL UNDER THE MACHINE !!

1. Attach a cable to the lifting eyes on both sides of the machine.

⚠ Make sure that the cable/crane/lift can hoist minimum twice the weight of the machine. (See Chapter 1.0 Technical Data for the weights.)

2. Lift the machine including the pallet of approx. 50 mm (2") off the ground.
3. Make sure that the machine is standing on the edge of the pallet.
4. Lower the machine controlled and calmly until it stands completely on the ground.

⚠ !! CAREFUL: THE MACHINE CAN SLIDE !!

5. Remove the pallet by removing the top rods and then lower the pallet.
6. Attach the machine to a tractor. (See Chapter 4.0 for instructions about attaching to the tractor.)

⚠ Use the proper tractor (please refer to the specifications).

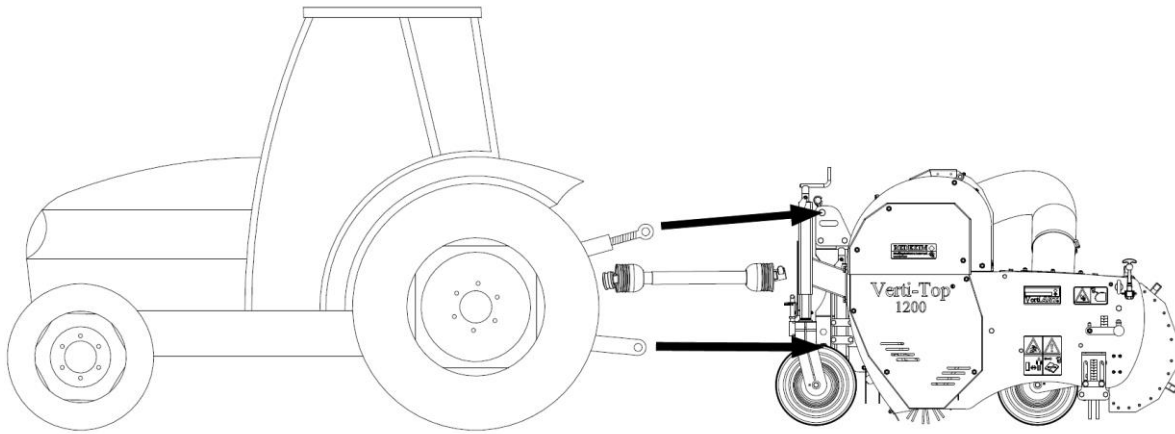
⚠ Turn off the tractor and secure the tractor/Verti-Top combination against driving off and/or sliding off.

7. Fit the PTO to the Verti-Top/tractor combination (please refer to Chapter 5.0).

4.0 ATTACHING THE MACHINE TO THE TRACTOR

Checking procedure before starting to attach the Verti-Top:

- Check the Verti-Top for visually discernable damage and repair this if safe operation of the machine is no longer guaranteed.
- Check whether all the nuts and bolts are tight.
- Check whether all safety stickers are present on the machine and are not damaged.
NEVER use the machine without these items.



Shown version: VT 1200 (The same principle applies to the VT 1800.)

Figure 9

The Verti-Top can be attached to the tractor by means of the 3-point attachment.

The procedure is as follows: (Figure 9)

1. Drive the tractor carefully backwards so that the lower connecting arms can be attached to the frame.



!! Make sure that the tractor is blocked well and cannot move on its own accord !!



!! Switch off the tractor before descending !!

2. Connect the lower connecting arms to the 3-point pins and secure these with the supplied locking pins.
3. Set the stabilizer of the tractor to 100 mm lateral stroke.
4. Mount the top rod of your tractor and turn it outward until it reaches the same height as the 3-point stop connection (3) (transport position) of the Verti-Top.
5. Connect the top rod to the frame with the pin; secure the pin with the supplied locking pin.
6. Twist the top rod into it until the top rod is just under pressure.
7. Mount the PTO to the PTO axle of the tractor and the Verti-Top.

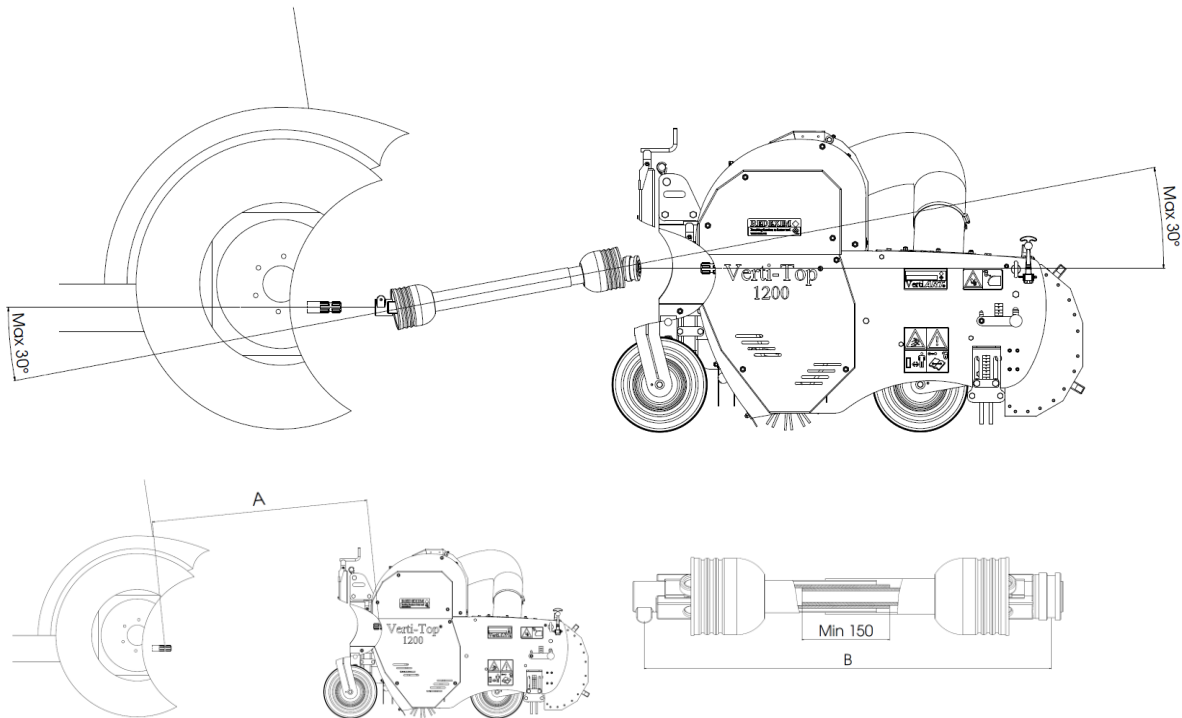


!! Make sure that all the securing pins are locked !!

8. Start the tractor and lift the Verti-Top off the subsoil.

5.0 THE PTO

The PTO is a very important component that takes care of the drive from the tractor. It also takes care of safe use of the machine, provided it is installed and maintained in the correct manner. The PTO has its own CE certification. Read the PTO manual. This manual is located on the PTO.



Shown version: VT 1200 (The same principle applies to the VT 1800.)

Figure 10

5.1 LENGTH OF THE PTO

The length of the PTO is very important. If it is too long, it can damage the drive of the tractor and/or the Verti-Top. If the overlapping length of the cylinders becomes less than 150 mm (6") at any time, it can damage the PTO.



The length changes when the machine is lifted or when a different tractor is used.

In order to set the PTO on the correct length, when a new one has been purchased or when a different tractor is used, follow these steps: (Figure 10)

1. Measure the distance between the PTO's connection to the tractor and to the Verti-Top, from groove to groove (Figure 10, A), when the machine is connected to the tractor and positioned on the ground at the right angle.
2. Measure the distance (Figure 10, B) of the PTO in its shortest position from the locking pin to the locking bolt.
3. Divide the PTO in two parts and remove the protection cap at both ends.
4. The ends of the cylinders and the ends of the protection caps must be made shorter: $(B - A) + 75 \text{ mm (3")}$.
5. Smooth off all components, use some grease, and then assemble all components.
6. Mount the PTO with the slip coupling at the Verti-Top side.



The torque of the locking bolt must be 80 Nm (700 lb.in.) and should be checked every 40 hours.

7. Attach the other end of the PTO to the tractor.
8. Check the overlap of the cylinders.



Never use the machine if it has a damaged PTO protection cap. First replace any damaged parts!

5.2 Using the PTO

The following items must be checked for correct use of the PTO:

1. While working the angle of the pivot pins may not exceed 30 degrees.
2. The pivot pins must always be aligned.
3. The overlap of the cylinders must always be minimum 150 mm.
4. Never use the machine if it has a damaged PTO protection cap.
5. For lubrication, please refer to Chapter 12.0 'Maintenance'.

5.3 PTO INFORMATION AND MAINTENANCE

Concise maintenance schedule of the PTO

Scheduled maintenance:

- Grease the grease points every 100 hours of operation or after the PTO has been standing still for a long time.
- Check the PTO for damage to the protection caps and replace these caps if they are not satisfactory.
- Check whether the safety stickers on the PTO are still present and intact.

Annual maintenance:

- Disconnect the PTO from the machine.
- Inspect all the components of the PTO.
- All the damaged components should be replaced.
- Lay down all the components and look at them meticulously.
- If components are damaged or worn out, replace them.
- Clean all interlocking components.
- Reassemble all components.
- Grease both cylinders and reassemble both PTO parts.
- Assemble the PTO and mount it on the machine.



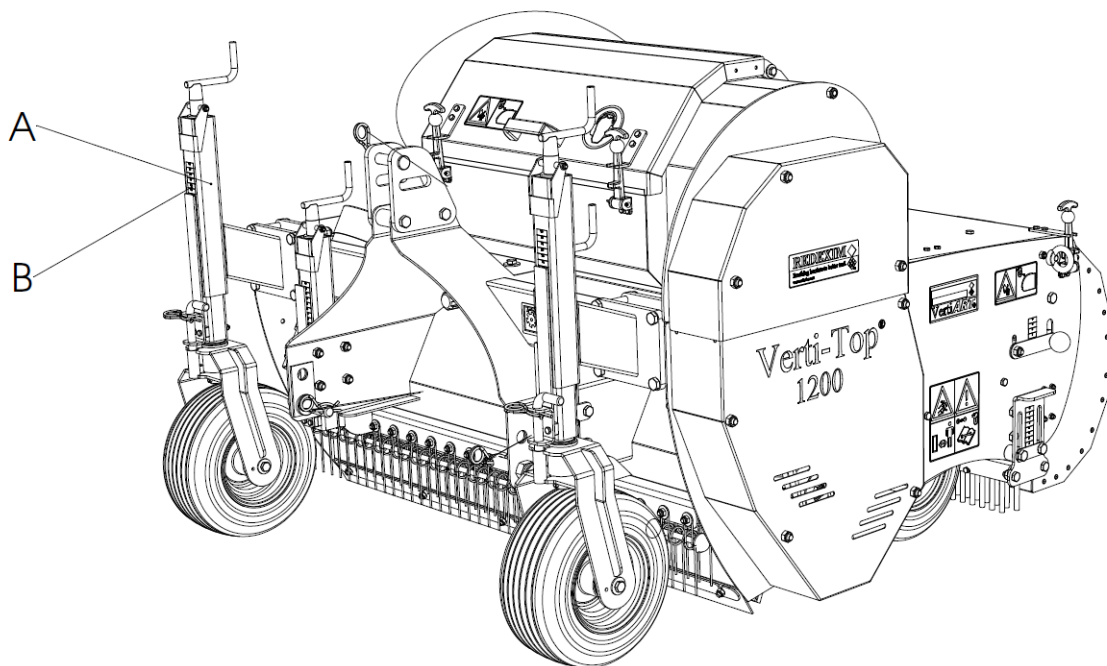
Please refer to the manual supplied with the PTO for further information about maintenance and disassembly of the PTO.



If the PTO is shortened incorrectly or if another tractor is used, the gearbox may be overloaded. This can damage the tractor and the Verti-Top!

6.0 ADJUSTING THE WORKING DEPTH OF THE BRUSH

The working depth of the brush can be adjusted by adjusting the wheels by turning the spindles at the front side of the machine.



Shown version: VT 1200 (The same principle applies to the VT 1800.)

Figure 11

The start procedure is as follows:

- ⚠ **!! Make sure that the tractor/Verti-Top is blocked well and cannot move on its own accord !!**
- ⚠ **!! Switch off the tractor before descending !!**
- 1. Turn the spindles until the correct height is achieved (Figure 11, A).
- 2. Set both sides of the machine at the same height so that it is possible to clean the field evenly. For this purpose, use the indication stickers (Figure 11, B).

NEVER adjust the machine in such a way that it could damage the subsoil.

⚠ ! IMPORTANT !

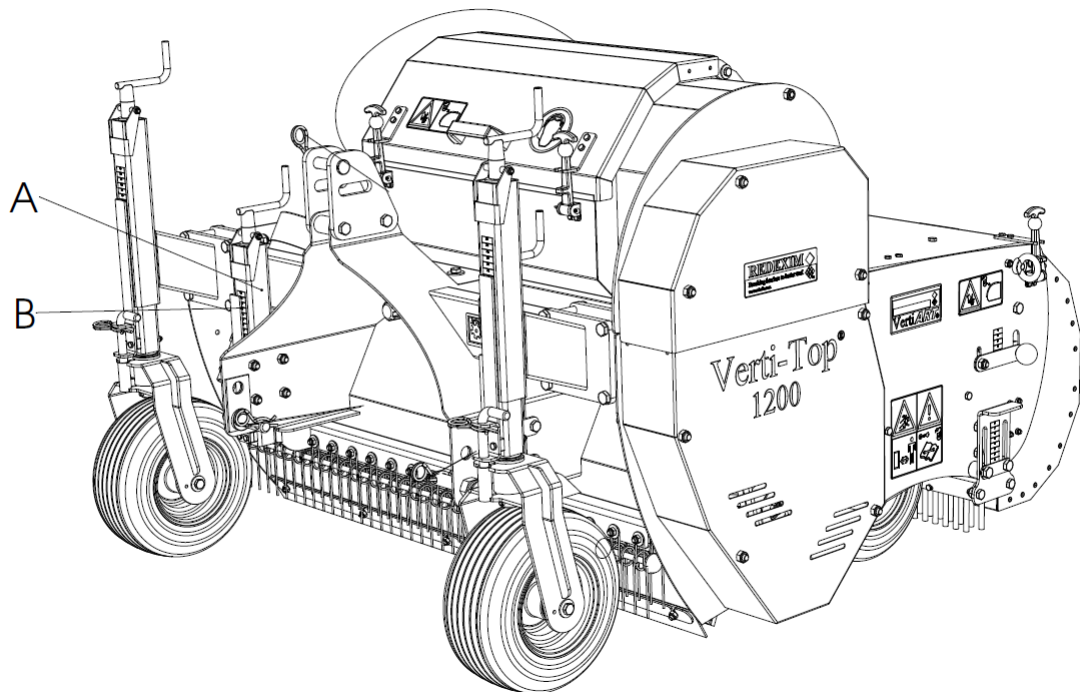
First check the working depth on the subsoil statically *before* using the machine!



Experience shows that the machine adjustment for top-layer cleaning is best if the brush hairs just don't touch the grass fibres.

6.1 ADJUSTING THE WORKING DEPTH OF RAKE

The working depth of the rake can be adjusted by turning the spindles at the front side of the machine.



Shown version: VT 1200 (The same principle applies to the VT 1800.)

Figure 12

The start procedure is as follows:



!! Make sure that the tractor / Verti-Top is blocked well and cannot move on its own accord !!



!! Switch off the tractor before descending !!

1. Turn the spindles until the correct height is achieved (Figure 12, A).
2. At both sides of the machine, adjust the rake at the same height. For this purpose, use the indication stickers (Figure 12, B).

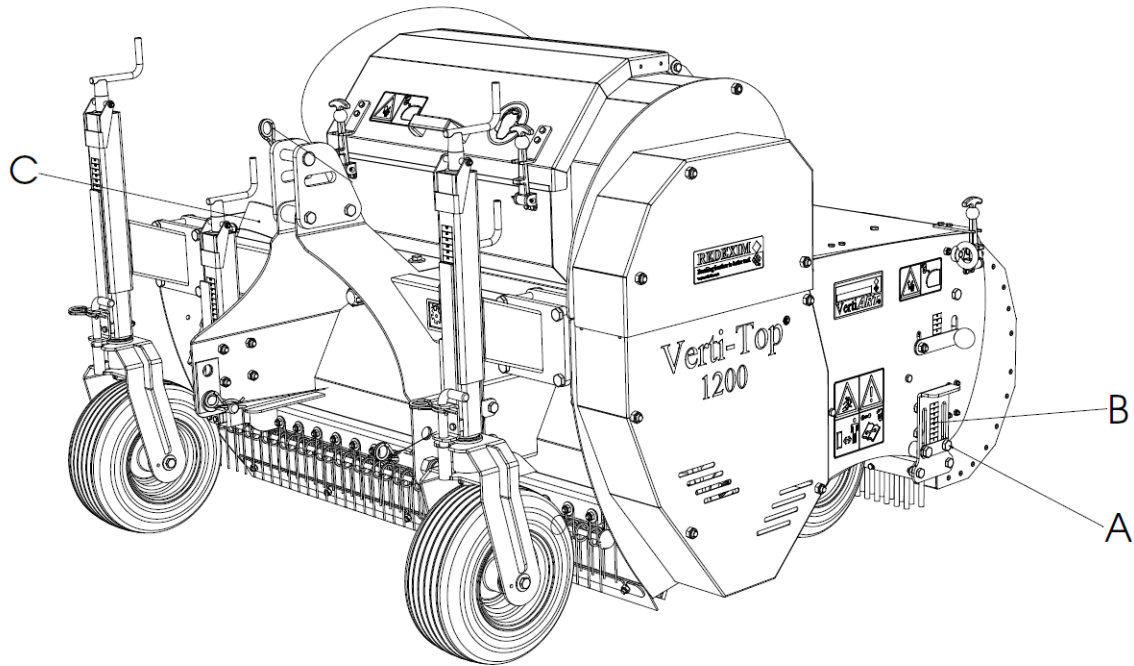
NEVER adjust the machine in such a way that it could damage the subsoil.

 **! IMPORTANT !**

First check the working depth on the subsoil statically *before* using the machine!

6.2 ADJUSTING THE WORKING DEPTH OF THE REAR BRUSH

The working depth of the brush at the rear of the machine can be adjusted by sliding the fastening plate at the side of the machine up or down,



Shown version: VT 1200 (The same principle applies to the VT 1800.)

Figure 13

The start procedure is as follows:

 **!! Make sure that the tractor / Verti-Top is blocked well and cannot move on its own accord !!**

 **!! Switch off the tractor before descending !!**

1. At both sides of the machine, unscrew the bolts (Figure 13, A) a few turns.



A set of keys is supplied with the machine; these are located in the toolbox (Figure 13, C).

2. At both sides of the machine, adjust the brush at the same height. For this purpose, use the indication stickers (Figure 13, B).
3. Screw the bolts on both sides of the machine tight.

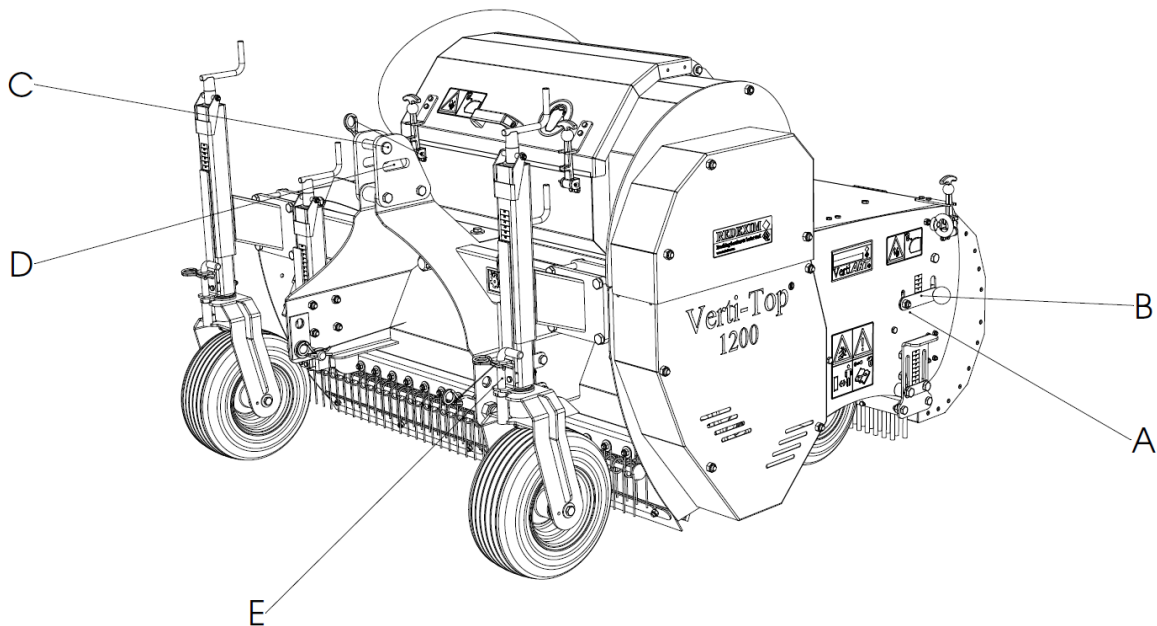
NEVER adjust the machine in such a way that it could damage the subsoil.

 **! IMPORTANT !**

First check the working depth on the subsoil statically *before* using the machine!

7.0 ADJUSTING THE ANGLE OF THE JIGGING SIEVE

If material (rubber) does not pass the sieve and falls into the receptacle, you can prevent this by adjusting the angle of the sieve. You can adjust the angle of the sieve by sliding the handle at the side of the machine up or down.



Shown version: VT 1200 (The same principle applies to the VT 1800.)

Figure 14

The start procedure is as follows:



!! Make sure that the tractor / Verti-Top is blocked well and cannot move on its own accord !!



!! Switch off the tractor before descending !!

1. At both sides of the machine, unscrew the bolts (Figure 14, A) a few turns.



A set of keys is supplied with the machine; these are located in the toolbox (Figure 13, C).

2. Adjust the angle of the sieve equally at both sides of the machine. For this purpose, use the indication stickers (Figure 14, B).
3. Screw the bolts on both sides of the machine tight.

NEVER adjust the machine in such a way that it could damage the subsoil.

! IMPORTANT !

First check the working depth on the subsoil statically *before* using the machine!

8.0 TRANSPORTING THE VERTI-TOP

The user is responsible for transporting the Verti-Top in back of the tractor over public roads. Verify the national legislation regarding the regulations.

On open fields while the machine is raised and if circumstances allow this, the maximum permitted speed is 12 km/h (7.5 mph) due to the weight of the Verti-Top.

A higher speed can be dangerous for the driver and/or the public and can even damage the machine.



Ensure that the top rod is attached and under pressure.



When the machine is raised off the ground, the front axle of the tractor has to support minimum 20% of its weight.



The machine must be attached while it is in the 'transport' position (Figure 14, C).

9.0 USING THE VERTI-TOP

Before using the Verti-Top in a location, you should check the following items:

1. Are there loose objects in the field? First remove these objects.
2. Are there slopes? The maximum slope is 20 degrees for this machine.
3. Always go from top to bottom.
4. Is there danger of flying objects (e.g., balls) that distract the attention of the driver? If so, the Verti-Top **CANNOT** be used.
5. Is there danger of sinking/sliding away? If so, postpone the processing until conditions improve.
6. If the soil is wet, postpone the activities until conditions improve.
7. If the machine vibrates too severely, reduce the PTO speed.
8. Do not make sharp bends and preferably, drive in straight lines; otherwise you might damage the subsoil.

10.0 START/STOP PROCEDURE

The start procedure is **VERY** important. If this procedure is not executed as described below, it might result in serious damage to the machine.

The start procedure is as follows:

1. Check the Verti-Top for loose components and look whether all components function properly. Check whether the locking pins (Figure 14, D) are in the correct position so that the wheels are secure.




!! If loose components are observed or components do not function properly, the problems must be solved *before* using the Verti-Top !!

2. Drive to the spot where the processing should take place.
3. Carefully drop the Verti-Top to the subsoil.
4. Set the working depth of the machine statically as described in Chapter 6.

 **!! Make sure that the tractor is blocked well and cannot move on its own accord !!**

 **!! Switch off the tractor before descending !!**

5. If required, the top rod can be placed in the terrain-following operating position. For that purpose, place the top rod in the slotted hole (Figure 14, D).
6. Raise the Verti-Top slightly and drive to the starting point.
7. Let the machine drop until the machine hovers above the ground at approx. 50mm.
8. Engage the tractor in the correct gear.
9. Switch on the PTO with a low number of motor revolutions.
10. Raise the number of PTO revolutions to approx. 300 rpm.
11. Set the tractor in forward motion and let the Verti-Top sink onto the pre-adjusted wheels with a smooth movement.
12. Drive forwards and increase the rotational speed until the PTO rotational speed of 540 rpm is achieved.

 **!! The rotational speed may not exceed 540 rpm. More rotations per minute can severely damage the machine !!**

Stopping occurs as follows:

1. While driving, raise the machine until it hovers above the ground at approx. 50mm
2. Stop the PTO and raise the machine even further.
3. Drive to the next location and start the operation as described above.

11.0 DETACHING THE VERTI-TOP

The machine can be detached from the tractor in the following manner (See Figure 12):

1. Drive the Verti-Top to a parking area with a firm/flat surface.

 **!! Make sure that the tractor is blocked well and cannot move on its own accord !!**

 **!! Switch off the tractor before descending !!**

2. Adjust the height of the wheels so that the rake and brushes stand free from the ground (see Chapter 6.0).
3. Lower the machine onto the ground.
4. Make sure that the machine cannot move on its own accord by blocking the wheels.
5. Remove the top rod.
6. Disconnect the PTO.
7. Disconnect the lower connecting arms of the tractor.

 **!! Make sure that the Verti-Top stands stable and cannot roll away and/or slide off !!**

8. Start the tractor and drive off.

Optional:

1. Remove the locking pins (Figure 14, E) so that the wheels can swing around.
2. Push the Verti-Top to a parking area.



When putting away the machine, it is advised not to have the brush touch the subsoil or any other objects in order to prevent the risk of bending the brush hairs.

12.0 TROUBLE SHOOTING (PROBLEM ANALYSIS)

Problem	Possible cause	Solution
The waste receptacle has collected too much material that needs to be cleaned	<p>Too high PTO rpm.</p> <p>Jigging sieve is adjusted too flat</p> <p>Working depth is adjusted too deep</p> <p>Jigging sieve is clogged</p> <p>Driving speed is too low</p> <p>Surroundings are too wet</p>	<p>Lower the PTO rpm.</p> <p>Adjust the jigging sieve more under an angle. (see Ch. 7.0)</p> <p>Adjust the machine to less depth.</p> <p>Open the jigging sieve.</p> <p>Increase the driving speed.</p> <p>Wait till surroundings are dried up. Use a sieve with a larger mesh.</p>
Too little cleaning	<p>Working depth is adjusted too shallow.</p> <p>Driving speed is too high.</p> <p>Sieve with too large a mesh</p> <p>Brush is worn out.</p> <p>PTO speed is too low.</p> <p>Outlet opening of the brush is blocked.</p> <p>V-belts are slipping.</p>	<p>Adjust the machine to more depth.</p> <p>Lower the driving speed.</p> <p>Replace sieve with a smaller meshed sieve.</p> <p>Replace brush.</p> <p>Increase PTO speed. (Maximum 540 rpm)</p> <p>Remove blockage.</p> <p>Tighten the V-belts (see Ch. 16.1)</p>
Sloppy image of the field after processing	<p>Machine is adjusted too deep.</p> <p>Sliding brush is not properly adjusted.</p> <p>Sliding brush is damaged.</p>	<p>Adjust the machine to less depth.</p> <p>Adjust the sliding brush correctly.</p> <p>Replace or repair the sliding brush.</p>
Squeaking noises during the machine's operation	Bearings need greasing or are worn out.	Grease the bearings with EP2 grease or replace them.

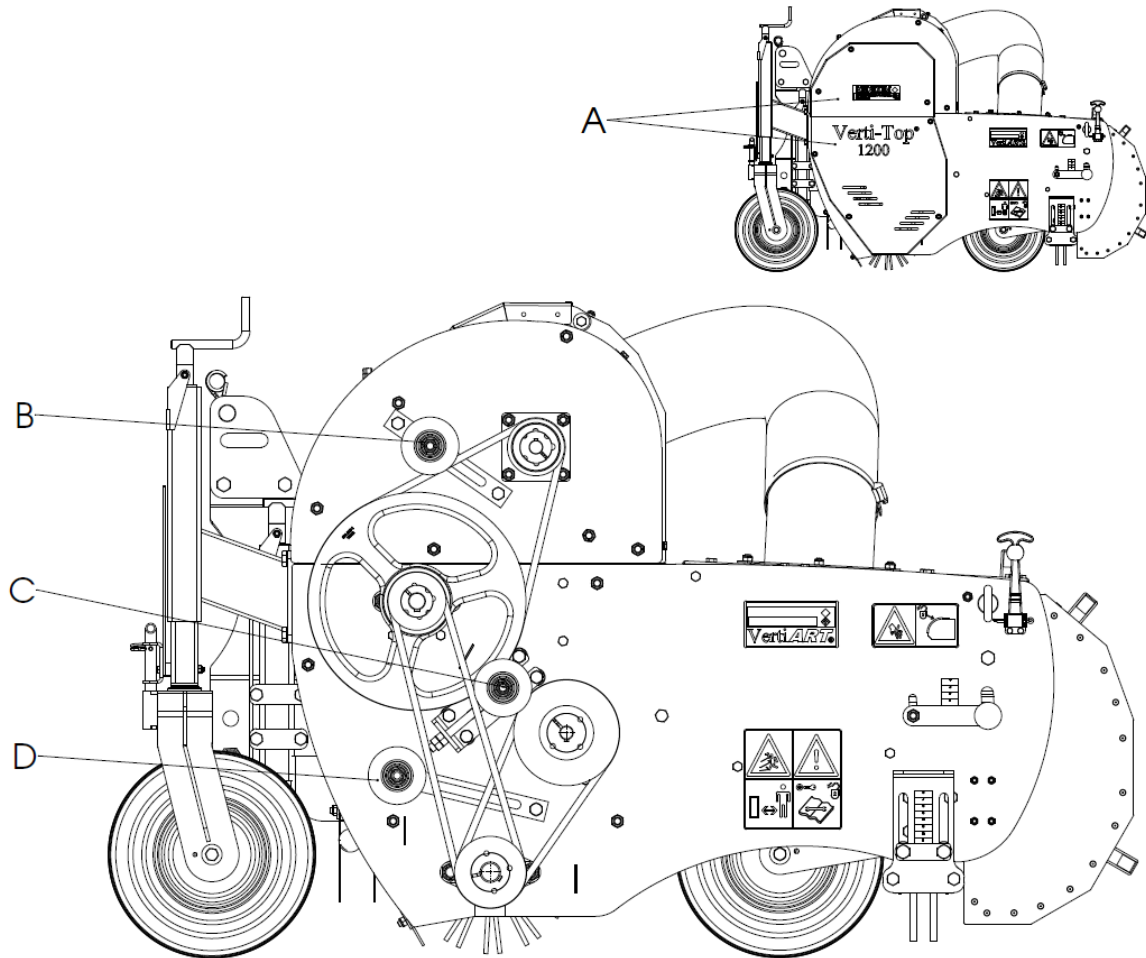
13.0 MAINTENANCE

Time schedule	Check / Grease point	Method
Before every use	<p>Check for loose bolts / nuts.</p> <p>Presence and readability of the safety stickers (Figure 5)</p>	<p>Tighten loose bolts / nuts with the correct tightening moment.</p> <p>Replace these if not present or damaged.</p>
After the first 20 working hours (new or repaired)	<p>Check for loose bolts / nuts.</p> <p>Check the tension of the V-belts</p>	<p>Tighten loose bolts / nuts with the correct tightening moment.</p> <p>If necessary, adjust the tension of the V-belts (see Section 16.1)</p>
After every 50 working hours or annually	<p>Check the roller bearings and the driveline.</p> <p>Check the gearbox for oil leakage</p> <p>Check the oil level in the gearbox</p> <p>Check for loose bolts / nuts.</p> <p>Check the tension of the V-belts / wear & tear</p> <p>Check the wear of the brushes</p> <p>Check and grease the PTO axle</p>	<p>Use EP2 grease</p> <p>Replace or repair</p> <p>If necessary, top it up until the edge of the filling opening</p> <p>Tighten loose bolts / nuts with the correct tightening moment.</p> <p>Adjust the tension of the V-belts (see Ch. 16.1) or – if required – replace the V-belts</p> <p>Rotating brush: If necessary, replace the brush.</p> <p>Sliding brush: If necessary, replace or repair</p> <p>See the PTO manual</p>

13.1 ADJUSTING THE TENSION OF THE V-BELTS

The Verti-Top is standard equipped with adjustable tension pulleys that keep the V-belts taut. Depending on the intensity of using the machine, the driveline could be affected by wear and tear.



This can result in slipping of the V-belts; they should then be tightened.



Shown version: VT 1200 (The same principle applies to the VT 1800.)

Figure 16

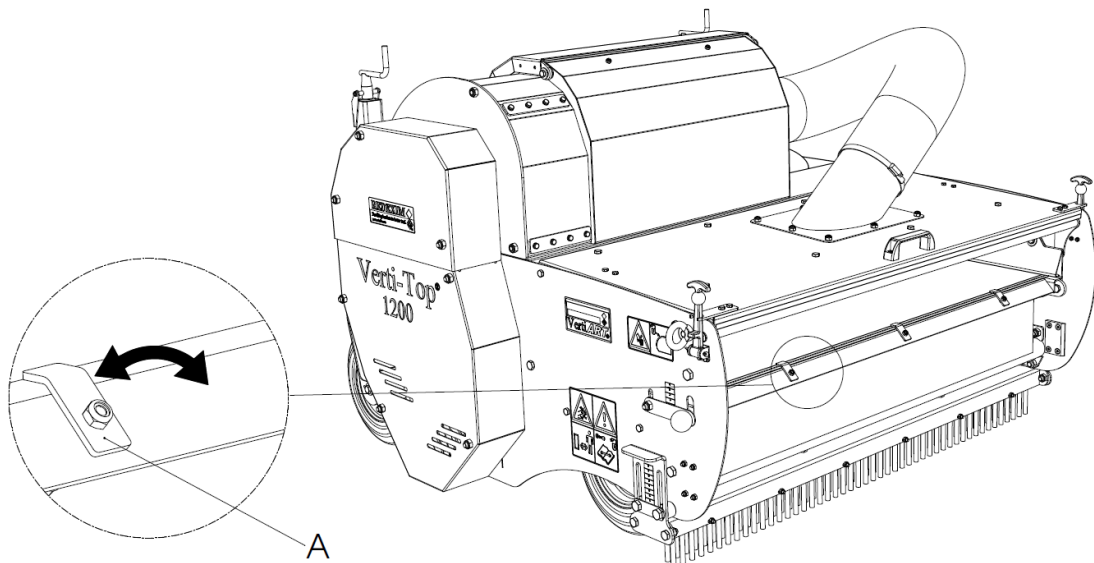
The tensioning procedure is as follows:

-  **!! Make sure that the Verti-Top is blocked well and cannot move on its own accord !!**
-  **!! Make sure that the PTO axle is detached from the Verti-Top !!**

1. Remove the safety caps (Figure 16, A).
2. The upper tensioner (Figure 16, B): Loosen the nut in the roll and tension the V-belt. Check the tension by pushing the centre of the V-belt with a force of 5 kg (11 lbs). The stretch should be 2.5mm (0.10”).
3. The upper tensioner (Figure 16, C): Loosen the nut in the roll and tension the V-belt by turning the spanning nuts. Check the tension by pushing the centre of the V-belt with a force of 5 kg (11 lbs). The stretch should be 4.3mm (0.17”).
4. The bottom tensioner (Figure 16, D): Loosen the nut in the roll and tension the V-belt. Check the tension by pushing the centre of the V-belt with a force of 5 kg (11 lbs). The stretch should be 2.8mm (0.11”).
5. Place the safety caps back.

13.2 CHANGING THE JIGGING SIEVE


The Verti-Top is standard equipped with a jiggling sieve that has a mesh of 5mm x 5mm. Different circumstances may require sieves with a different mesh.



Shown version: VT 1200 (The same principle applies to the VT 1800.)

Figure 17

Changing the sieve is done as follows:

-  **!! Make sure that the Verti-Top is blocked well and cannot move on its own accord !!**
-  **!! Make sure that the PTO axle is detached from the Verti-Top !!**

1. Open the hatch and remove the receptacles.
2. Turn the clips a quarter of a turn. This will allow the sieve to slide out of the machine.
3. Change the sieve and close the clips.
4. Return the receptacles and close the hatch.

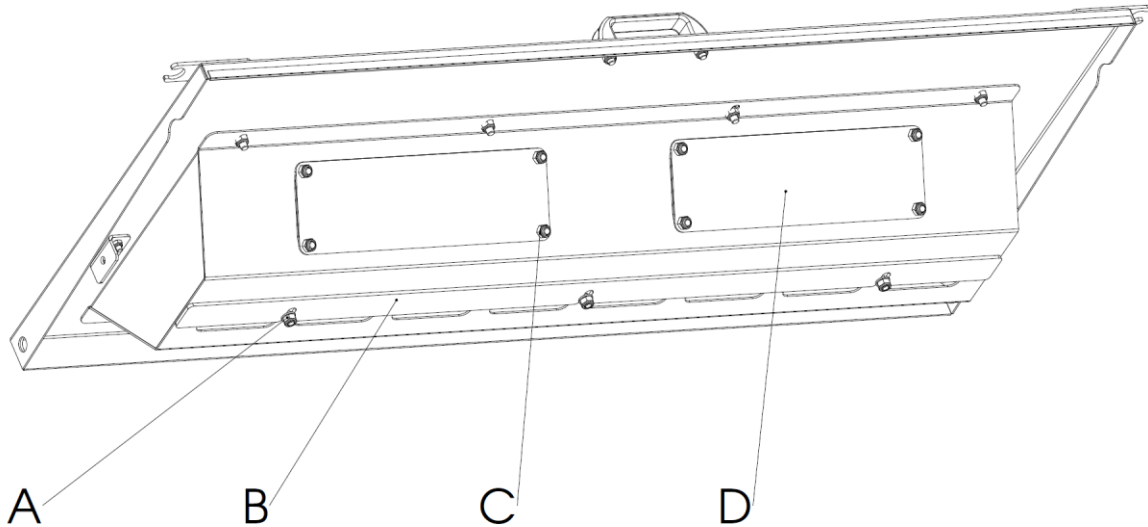
Optionally, there are several types of sieves available:

- 3.2mm x 3.2mm (0.13" x 0.13")
- 4mm x 4mm (0.16" x 0.16")
- 5mm x 5mm (0.2" x 0.2")
- 5.5mm x 5.5mm (0.22" x 0.22")
- 6mm x 6mm (0.24" x 0.24")

Please refer to the spare parts manual for the article numbers.

14.0 ADJUSTING THE SUCTION FORCE

The suction force of the Verti-Top can be adjusted to meet the various circumstances.



Shown version: VT 1200 (The same principle applies to the VT 1800.)

Figure 18

Adjusting the suction force is done as follows:



!! Make sure that the Verti-Top is blocked well and cannot move on its own accord !!



!! Make sure that the PTO axle is detached from the Verti-Top !!

1. Open the hatch.
2. Loosen the bolts (Figure 18, A).
3. Slide the adjustment strip (Figure 18, B) in the required position.
(Larger opening = less suction force)
4. Tighten the nuts.
5. Close the hatch.

15.0 CLEANING THE EXHAUST HOOD

In the course of time, dirt can accumulate in the exhaust hood. Then it should be cleaned. Cleaning the exhaust hood is done as follows:



!! Make sure that the Verti-Top is blocked well and cannot move on its own accord !!



!! Make sure that the PTO axle is detached from the Verti-Top !!

1. Open the hatch.
2. Loosen the bolts (Figure 18, D) and remove the inspection covers (Figure 18, D).
3. Look through the window and remove any dirt.
4. Return the inspection covers and tighten the nuts.
5. Close the hatch.