



Scarivator 2100

Redexim 

USER MANUAL



Translation of the original user manual

Version: UM164.210.001EN-2444

Applies to:

164.210.001 Scarivator 2100

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We,

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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:

SCARIVATOR 2100 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

ISO 4254-5:2018 Agricultural machinery - Safety - Part 5: Power-driven soil-working machine

Zeist, 03-01-2022

A handwritten signature in blue ink, appearing to read 'C.H.G. de Bree', with a horizontal line underneath.

C.H.G. de Bree

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SCARIVATOR 2100 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

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C.H.G. de Bree
Redexim B.V.

FOREWORD

Congratulations on your Scarivator 2100 purchase. For safe and long-lasting operation of this machine, 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.

This machine does not operate independently! It is the user's responsibility to use the correct tractor or other towing vehicle. The user should check the combination of the towing vehicle and the machine with regard to various aspects, such as noise level and safety risks. In addition, the user should comply with the user instructions of the vehicle and spare parts that are used.

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.

You can contact your sales point or dealer if you have questions and/or if there are ambiguities in this manual or about the machine concerned.

This document is a translation of the original user manual.
Upon request, the original user manual is available in Dutch.

WARRANTY CONDITIONS

The warranty, which applies to this product, is described in the "General sales and warranty conditions" under article 12 "Warranties" and is available on the Redexim website. You can use the QR code or URL below for this purpose.



<https://www.redexim.com/general-sales-and-delivery-conditions/>

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1. SAFETY INSTRUCTIONS

This machine is designed for safe use. This can only be achieved if you completely follow the safety instructions described in this manual.

Read and understand the manual before you start using this machine.

If the machine is not used as described in this manual, this can result in injuries and/or damage to the machine.

This user manual lists 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.

1.1. Obligations of the user

The main purpose is to effectively remove organic material and loosen soil for thorough renovation on hybrid surfaces without causing damage to the synthetic fibers that remain in their fixed position thereby extending the hybrid surface's lifespan. Any other use is improper. The manufacturer will not accept any liability for damage resulting from improper use. All risks occurring with this are entirely at the expense of the user.

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

Modifications to the machine that have a negative impact on the safety must be rectified immediately.

The user is obliged to check the machine for visible damage and defects before using the machine.

For safety reasons it is not permitted to make changes or adjustments to the machine (except those approved by the manufacturer). If modifications to the machine have been made, then the current CE / UKCA marking is cancelled. The person that has made these modifications has to apply for a new CE / UKCA marking himself.

Following the use, maintenance and repair instructions prescribed by the manufacturer is also considered proper use of this machine.

The user is responsible for the safe combination of the machine and the towing vehicle, which comply with the requirements as described in the Technical Data (see Chapter 2). This entire combination should be tested for noise, safety, risk and user friendliness. User instructions should also be drafted.

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

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.

1.2. Maintenance, repairs and adjustments

Keep a record of the repair activities.

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

Use only original Redexim parts for maintenance or repairs because of the safety of the machine and of the user.

Only authorised technical personnel may carry out repairs to the machine.

When carrying out maintenance, adjustments and repairs, it is necessary to block the machine in order to prevent it from sinking away, driving off and/or sliding off.

If a hydraulic installation is present, you should always make it pressure-free before working on this installation.

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

1.3. Using the machine

Attach the machine to the towing vehicle according to the regulations. Pay close attention to the risk of injury!

Never use the machine in the absence of protective guards and safety stickers.

Check the machine for loose bolts, nuts and components before every operation.

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

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

Never crawl under the machine! If necessary, tip over the machine to work at the bottom side.

If present, check the hydraulic hoses regularly and replace these when the hydraulic hoses are damaged or appear old.

2. TECHNICAL DATA

Type	2100
Recommended vehicle	40HP with minimal lifting capacity 626kg (1380lbs) 610mm (24") behind the lifting eyes
Required PTO power	>30HP
PTO speed	540RPM (CCW)
Working width	2.13m (83.9")
Working depth	0-35mm (0"-1.38")
Recommended working speed	1-3km/h (0.62-1.86mph) Depending on the conditions and the required result
Weight	626kg (1380lbs)
Dimensions (LxWxH)	2.68x1.18x0.85m (105.5"x46.5"x33.5")
Three-point system	Cat. 1-2
Number of rakes	2
Number of tines per rake	30
Total number of tines	60
Tine pitch per rake	70mm (2.76")
Tine pitch overall	35mm (1.38")
Tine diameter	8mm (0.31")
Tine stroke	65mm (2.56")
Grease bearings	EP2
Options	- None

3. GENERAL DESCRIPTION

The main purpose of the Scarivator 2100 is to effectively remove organic material and loosen soil for thorough renovation on hybrid surfaces without causing damage to the synthetic fibers that remain in their fixed position thereby extending the hybrid surface's lifespan and save money.

4. SAFETY STICKERS

Safety stickers are attached on the machine. These safety stickers must always be clearly visible and legible and must be replaced if they have become damaged (Fig. 1).

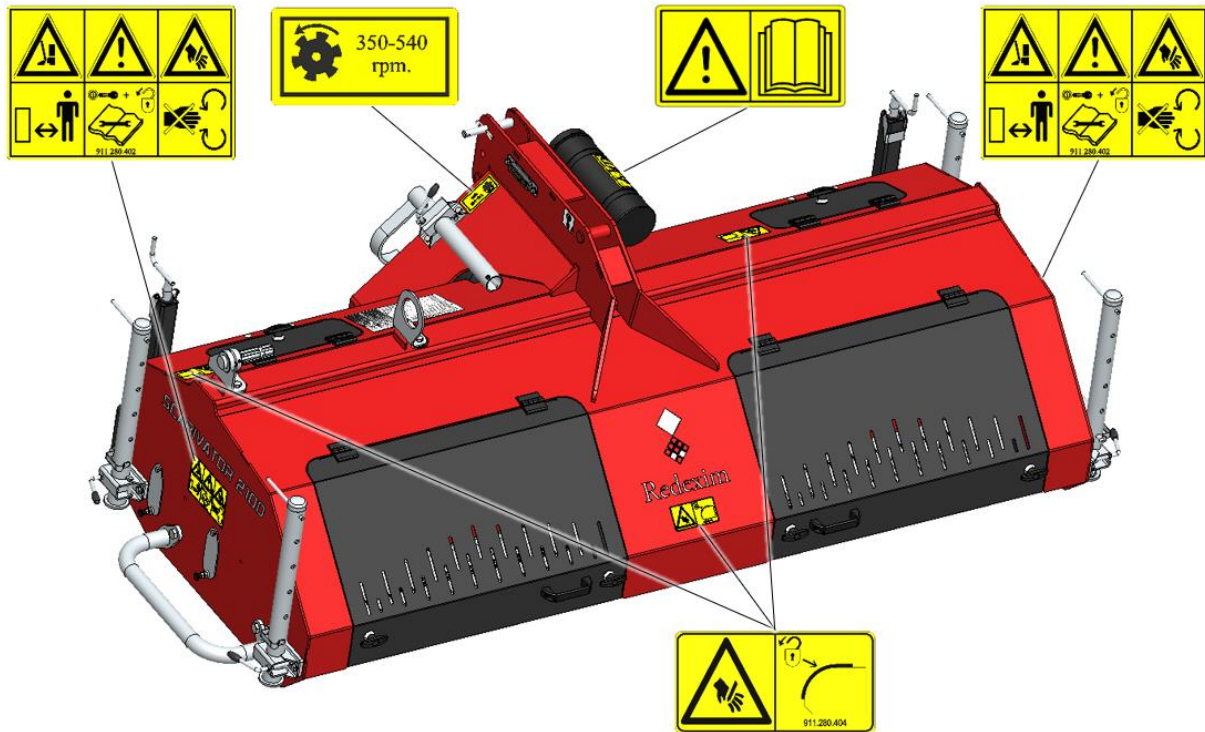






Fig. 1

 <p>911.280.402</p>	<ul style="list-style-type: none"> - In case of maintenance, adjustments and repair, always switch off the engine of the towing vehicle and the PTO. Prevent the combination from driving and/or sliding away. - Keep a distance of minimum 4 metres if the machine is operating (except the operator sitting in the towing vehicle). - During operation, no persons are allowed within the danger zone of the machine, because there is danger of physical injuries caused by moving components.
 <p>900.280.402</p>	<ul style="list-style-type: none"> - Prior to using the machine, the operators of the machine must read the user manual carefully.
 <p>900.260.422</p>	<ul style="list-style-type: none"> - You can operate the machine safely, if the PTO does not exceed 540 rpm.
 <p>911.280.404</p>	<ul style="list-style-type: none"> - Close and lock the cover before use. Be careful not to get any parts of your body jammed.

5. FIRST INSTALLATION

The machine should be prepared for use as follows (see Fig. 2 and Fig. 3):

⚠ Make sure that the cable/crane/lift can lift at least 2x the weight of the machine.

For the correct machine weight, see chapter 2 "Technical data".

1. Remove the two rear support legs (1) from the support leg clamps and place them a safe distance away from the machine.
2. Attach one cable to the lifting point (2) and two cables to the side barriers (3).

⚠ Keep a safe distance. The machine turns / slides away during hoisting / lifting.

⚠ Never crawl under the machine.

3. Carefully lift the machine with the pallet so that it is about 100mm (4") off the ground.
4. Release the pallet (5) by removing the pins (4).
5. Lift the machine up and away from the pallet..
6. Slowly lower and tilt the machine until the machine hangs in its horizontal working position (Figure 3).
7. Mount the two rear support legs (1) back into the support leg clamps.
8. Adjust the four support legs to the same height so that only these rest on the ground and reinsert the locking pins (6) under the clamps.

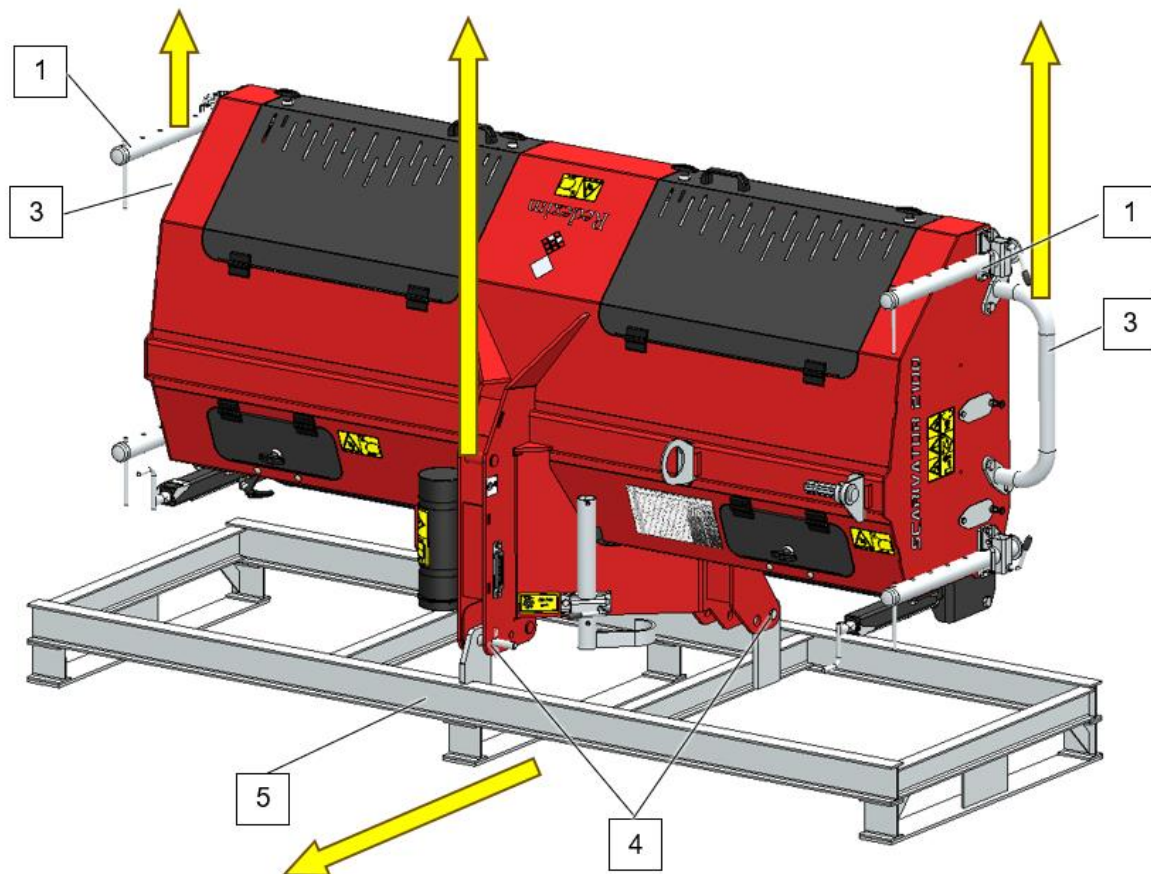


Fig. 2

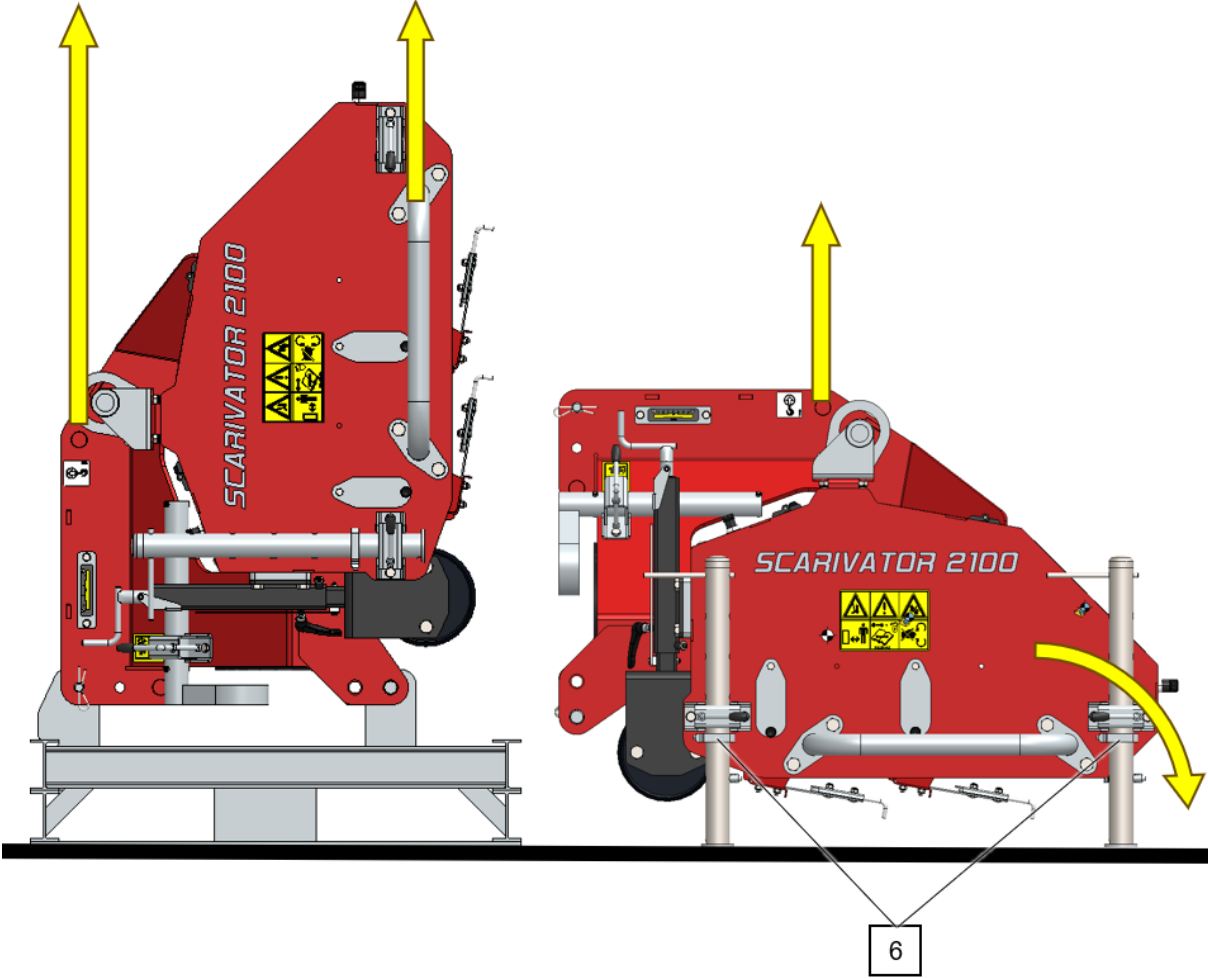



Fig. 3

6. THE PTO SHAFT

 The description below is only an indication of how to customise the PTO shaft. The instructions described in the specific manual supplied with the PTO shaft are always leading.

The PTO shaft is a very important component that takes care of the drive from the tractor to the machine. The PTO shaft ensures safe use of the machine on condition that it is properly installed and maintained. The PTO has its own CE certification and manual. These are delivered together with the PTO shaft. For specific adjustments see the details given on the PTO page in the parts book. Do not exceed the given values. This can lead to an unsafe situation and overload the machine, resulting in damage.

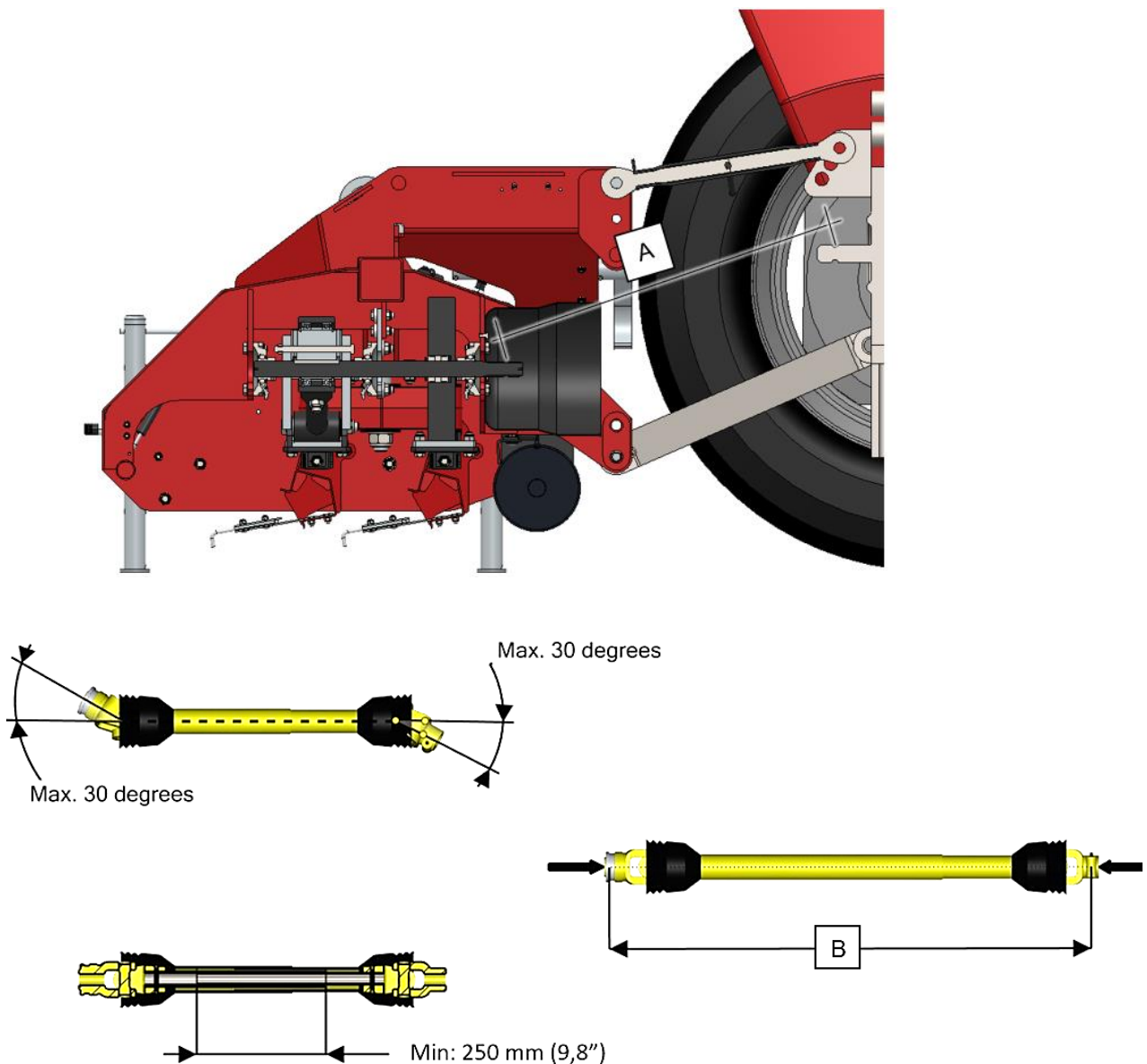


Fig. 4

6.1. Length of the PTO shaft

The length of the PTO shaft is very important. If it is too long, it can damage the drive of the tractor and/or the machine. If the overlapping length of the cylinders becomes less than 250 mm (9.8") at any time, it can damage the PTO shaft. The required length changes when the machine is lifted or when a different tractor is used! If a new machine is purchased or if another towing vehicle is used, the length of the PTO shaft should be checked and, if necessary, shortened (Fig. 4).

1. Measure the distance 'A' (from groove to groove) between the tractor's PTO and the machine's connection point, when the machine is horizontal on the ground and the tractor is attached.
2. Measure the distance 'B' of the PTO shaft in its shortest position from the locking pin to the locking bolt.
3. Divide the PTO shaft in two parts and remove the protection cap at both ends.
4. The ends of the cylinders and the protection caps should be shortened: $(B-A) + 125 \text{ mm}$ (4.9").
5. Smooth off all components and then assemble all components. For this purpose, use lubrication grease.
6. Mount the PTO shaft including the slip coupling at the machine side.
7. Attach the other end of the PTO shaft to the tractor.
8. Check the overlap of the cylinders.



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



If the PTO is not shortened correctly or used in combination with a different vehicle this may cause damage to the gearbox.

6.2. Using the PTO shaft

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

1. The angle of the rotation points should always be smaller or equal to 30 degrees during work activities.
2. The PTO shaft of the tractor must be parallel to the PTO shaft of the machine.
3. The overlap of the cylinders must always be minimum 250mm (9.8").
4. Never use the machine if it has a damaged PTO protection cap.
5. See the PTO manual for information about lubrication.

7. ATTACHING AND DETACHING THE MACHINE

Attaching and detaching the machine has to be done carefully. Follow the instructions below:

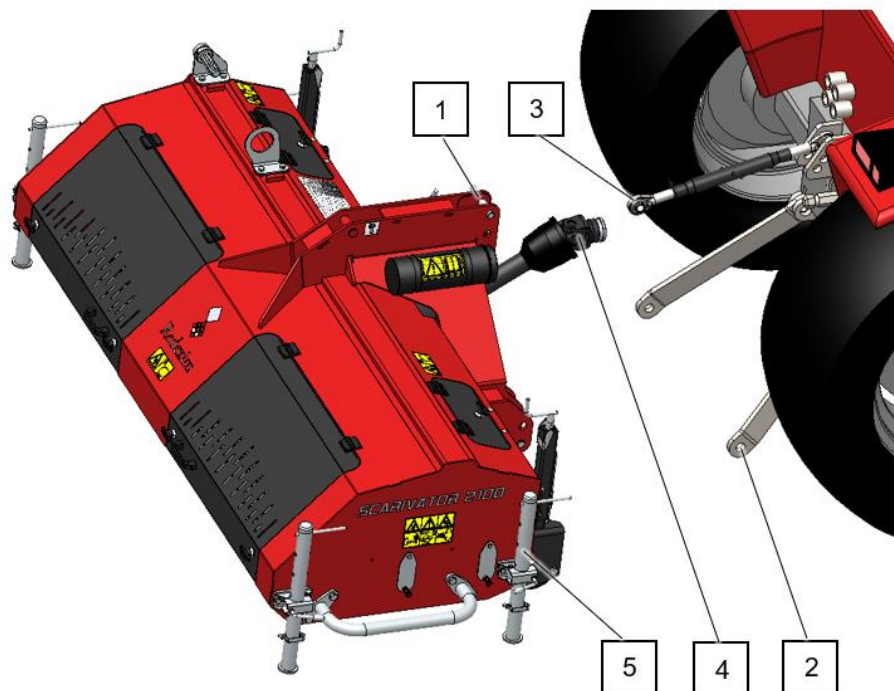


Fig. 5

7.1. Attaching the machine

Controleer de machine vóór het aankoppelen op de volgende punten:

- Check whether the machine is undamaged and whether it is safe to attach and use the machine.
- Check fasteners for the correct fastening torque
- Check whether all safety stickers are on the machine and whether these are undamaged and easily readable.

The machine should be attached to the tractor in the following manner: (Fig. 5)

1. Remove the top 3-point pin (1) from the machine.
2. Carefully drive the tractor backwards until the lifting arms (2) can be attached to the machine.



Make sure that the tractor and the machine cannot move while you are attaching them.



Switch off the tractor engine before attaching the machine.

3. Attach the lifting arms (2) to the machine using the 3-point pins. Lock the pins using the clips.
4. Set the stabilizer of the lifting arms (2) to 100 mm lateral stroke.
5. Mount the top rod (3) onto the tractor and attach it to the machine.



If the machine is not correctly mounted behind the tractor, different PTO angles can cause vibrations in the machine's drivetrain. These vibrations can damage the machine.

6. Connect the PTO (4) between the machine and the tractor. (free-running clutch on machine side).



Make sure that the 3-point pins are locked using the clips.

7. Start the tractor and lift the machine.
8. Put the supports (5) in the upper position.
9. Adjust the length of the top rod until the machine is horizontal.

7.2. Detaching the machine

The machine should be detached in the following manner: (Fig. 5)

1. Take the attached machine to the storage location.



Make sure the storage location has a stable level surface and can support the machine weight.



Make sure that the tractor and machine cannot move uncontrolled.



Switch off the tractor's engine and PTO before getting off the tractor.

2. Place the machine gently onto the surface.



Check again if surface can support the machine weight.

3. Disconnect the top rod (3) and remove this.
4. Disconnect the lifting arms (2).
5. Disconnect the hydraulic hoses (4) from the tractor and store these.
6. Disconnect the PTO shaft (5) from the tractor.
7. Start the tractor and drive carefully away from the machine.

7.3. PTO storage

After detaching the machine, put the PTO into the PTO hook (Fig. 6 (1)) and The PTO part of the tractor side can be attached to the PTO storage bracket (2) on the machine.

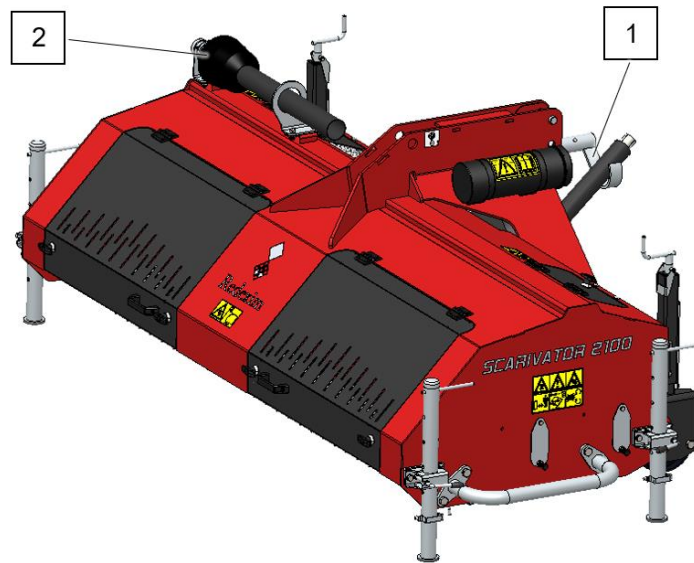



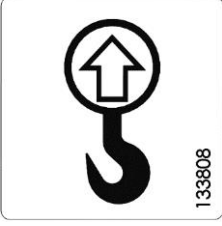
Fig. 6

8. TRANSPORT


The user is responsible for transporting the machine on public roads. Verify the national legislation regarding the regulations. In view of the machine's weight, it is not advised to drive faster than 20 km/h (12.4mph with a raised machine). Higher speeds can lead to hazardous situations and result in damage to the machine and tractor.

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

If the machine is not transported by being towed by the tractor, the machine may be secured / hoisted at the following points (Fig. 7):

	<p>Hoisting points located near these stickers.</p>
---	---

1. Hoisting points (2x), for hoisting the machine.

-  **Keep a safe distance, the machine may turn or slide away during hoisting.**
2. Points for securing the machine (2 and 3), are positioned at both sides and at the front of the machine.

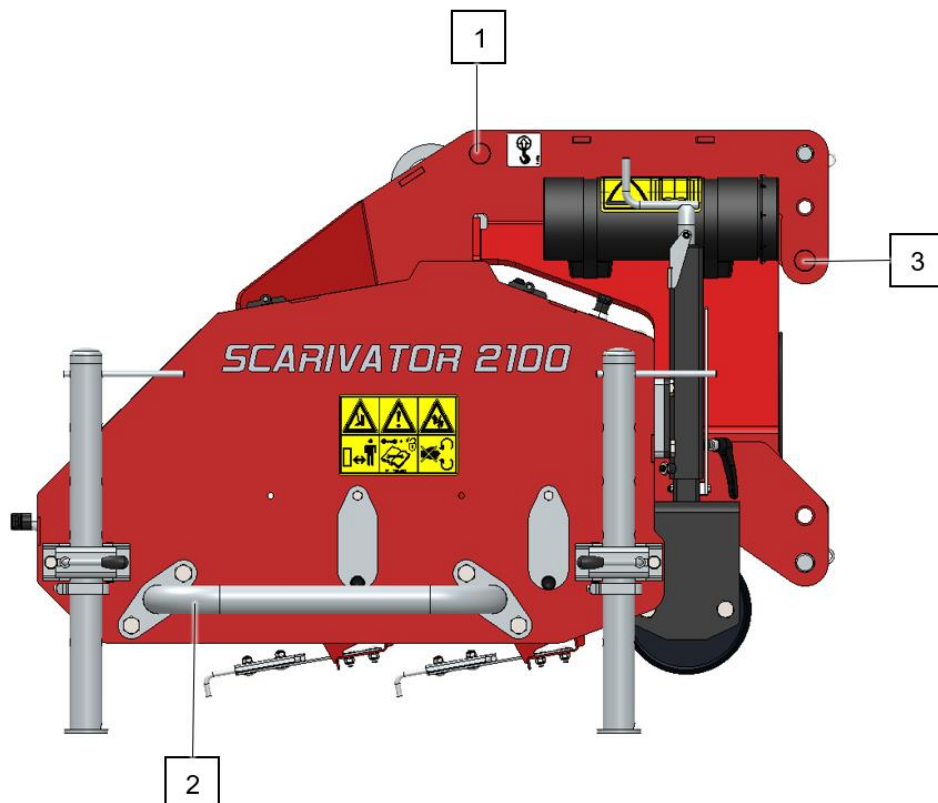


Fig. 7

9. PUTTING THE MACHINE INTO OPERATION

9.1. Safety

Before starting to use the machine, check the following:

1. Are there any loose objects on the field, other than what this machine is intended for? Remove them first or keep a sufficient distance from them.
2. Are there are persons within the danger zone of the machine, postpone the work or keep sufficient distance.



Check the compatibility of the drive system and vehicle at first use. Working at full PTO rpm in the wrong driving direction (CCW or CW) may cause damage to the rotor.



If the machine cannot be operated safely, postpone the work.

3. Are there slopes? The maximum slope is 20 degrees for this machine. Always work from the top down.
4. Make sure to always have the working area in sight.
5. Are there firm object above ground? If so, use the machine with adjusted speed and work around them or lift the machine.
6. Is there danger of objects or distraction of the driver? If so, the machine cannot be used.
7. Is there danger for sinking/sliding away or damaging the soil? If so postpone the work.
8. Do not make sharp turn when the machine is touching the ground.
9. The Scarivator 2100 may only be driven at a speed of max. 540 rpm. Higher speeds are not permitted. Carefully engage the PTO clutch at the lowest possible speed.
10. The drive has a certain inertia. To avoid overloading during start-up, engage the PTO carefully. Then bring the machine up to operating speed at a leisurely pace.

9.2. Working speed

The machine's maximum working speed depends on the soil conditions, working depth and the required result.

The ideal working speed is between 1 and 3 km/h (0.62 – 1.86 mph). Faster is not recommended because of poorer processing rate. In addition, it causes excessive wear and damage to the machine.

Fig. 8 shows the machining image at different driving speeds in combination with the PTO speed. However, this is only an initial indication. To achieve the desired result, the correct settings will always have to be determined in practice.













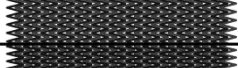





Scarivator travel speed (km/h - m/h) / PTO conversion table to create "zigzag" pattern													
Redexim 964.340.000	PTO speed (RPM)										Pattern		
	540	530	520	510	500	490	480	470	460	450	Driving direction	90 deg detail	
Pattern cycles between beam 1 and 2	1,5	6,16	6,04	5,93	5,81	5,70	5,59	5,47	5,36	5,24	5,13		
		3,83	3,75	3,68	3,61	3,54	3,47	3,40	3,33	3,26	3,19		
	2,5	3,69	3,63	3,56	3,49	3,42	3,35	3,28	3,21	3,15	3,08		
		2,30	2,25	2,21	2,17	2,13	2,08	2,04	2,00	1,96	1,91		
	3,5	2,64	2,59	2,54	2,49	2,44	2,39	2,35	2,30	2,25	2,20		
		1,64	1,61	1,58	1,55	1,52	1,49	1,46	1,43	1,40	1,37		
	4,5	2,05	2,01	1,98	1,94	1,90	1,86	1,82	1,79	1,75	1,71		
		1,28	1,25	1,23	1,20	1,18	1,16	1,13	1,11	1,09	1,06		
	5,5	1,68	1,65	1,62	1,59	1,55	1,52	1,49	1,46	1,43	1,40		
		1,04	1,02	1,00	0,99	0,97	0,95	0,93	0,91	0,89	0,87		
	6,5	1,42	1,39	1,37	1,34	1,32	1,29	1,26	1,24	1,21	1,18		
		0,88	0,87	0,85	0,83	0,82	0,80	0,78	0,77	0,75	0,74		
	7,5	1,23	1,21	1,19	1,16	1,14	1,12	1,09	1,07	1,05	1,03		
		0,77	0,75	0,74	0,72	0,71	0,69	0,68	0,67	0,65	0,64		
	8,5	1,09	1,07	1,05	1,03	1,01	0,99	0,97	0,95	0,93	0,91		
		0,68	0,66	0,65	0,64	0,63	0,61	0,60	0,59	0,58	0,56		
	9,5	0,97	0,95	0,94	0,92	0,90	0,88	0,86	0,85	0,83	0,81		
		0,60	0,59	0,58	0,57	0,56	0,55	0,54	0,53	0,51	0,50		

Fig. 8

9.3. 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 machine for any loose components and look whether all components function properly.



If loose components are observed or components do not function properly, the problems must be solved before using the machine.



Always lower the machine carefully.

2. Drive to the location where the work should take place.
3. Make sure that the supports are fully raised so that they cannot come into contact with the field to be worked.
4. Slowly lower the machine to the ground.
5. Adjust the tractor engine to around 1200 rpm.
6. Switch on the PTO.
7. Put the tractor in the correct gears and drive forwards.
8. While it turns, lower the machine carefully into the ground during the forward drive.
9. Increase the PTO's revolutions to the maximum allowed value of 540 RPM.
10. Check the result and adjust the RPM and driving speed if necessary.

The stop procedure is as follows:

1. Reduce the PTO rpm.
2. Disengage the PTO and lift the machine.
3. Go to the next location and start again as described.

10. TECHNICAL INFORMATION

In general the Scarivator 2100 is not a complicated machine. A number of technical items will be explained. If you have further questions regarding this machine, please contact your dealer.

10.1. Adjusting the working depth

The working depth can be adjusted by changing both the front roller and the rake bar. With the height of the front roller, you also indirectly determine the entry angle of the tines. The lower the front roller, the more aggressive the angle of entry of the tines will be. Setting up works as follows (Fig. 9 and Fig. 10):

Base depth and tine angle setting

1. Lower the machine at the hitch of the tractor onto the front roller and onto a hard flat surface and turn off the tractor.



Switch off the tractor's engine and PTO before descending.



Make sure that the tractor and machine cannot move uncontrolled.

2. Determine the height of the front roller by first releasing the tensioner (1), lifting the safety plate (2) and then turning the spindles (3).
3. Make sure both spindles indicate the same height.
4. Level the machine by using the top link on the tractor. Read the spirit level (4) on the machine.
5. Open the hatches (5 and 6) and the side access (7) to create better accessibility and visibility.
6. Loosen the bolts (8 and 9) on the rake beam on both sides and tilt the beam so that the tines make contact with the hard surface.

Fine adjustment of working depth

7. For fine adjustment, a wrench 17 can also be placed on the hexagonal shaft (10). There is also a position indicator (11) on the beam which can be used to adjust the beams evenly.

To do this, do first temporarily re-tighten the bolts (8 and 9) to prevent movement of the basic setting during lifting.



Take care not to place the tines deeper than 35mm (1.38") relative to the front roller to avoid damage to the machine and field.

8. Retighten the bolts (8 and 9), close the hatches (5 and 6), the side access (7) and secure the front roller by means of the tensioner (1) and the safety plate (2).

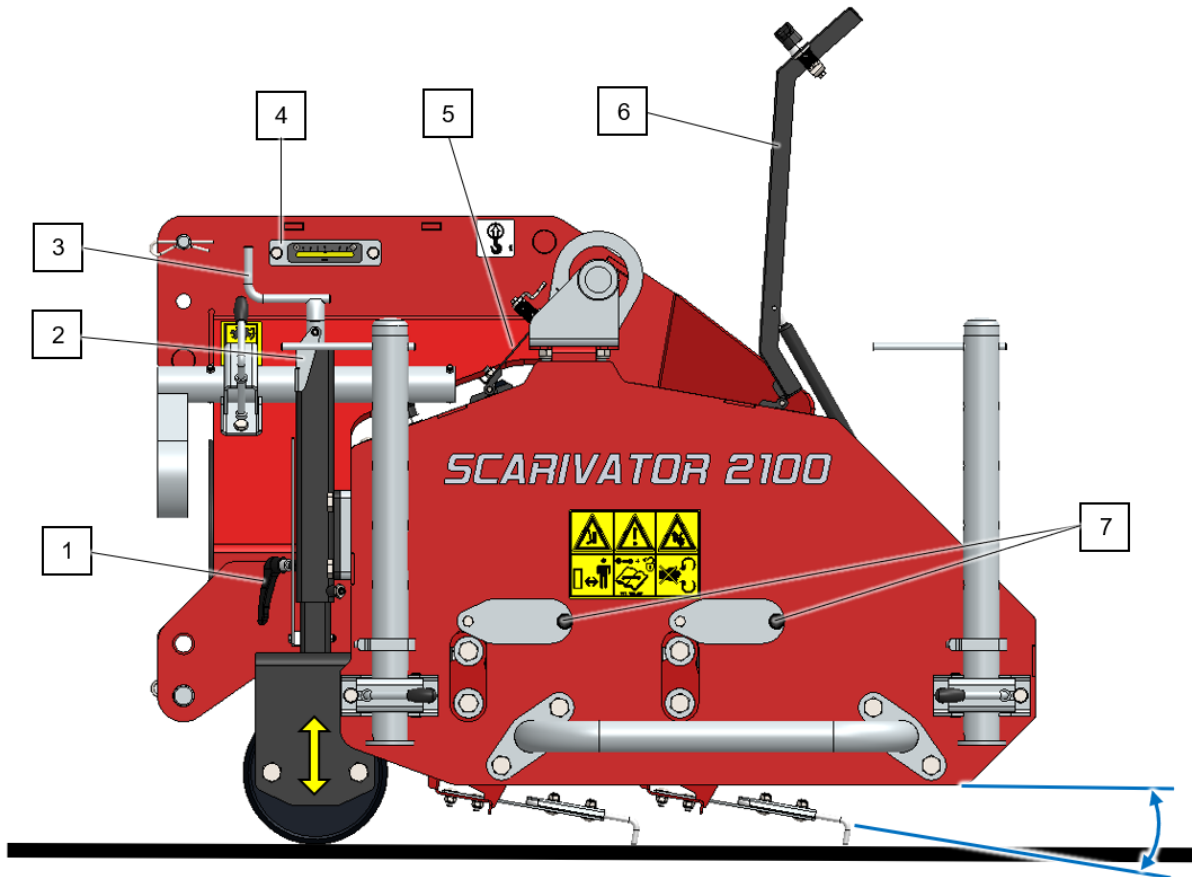


Fig. 9

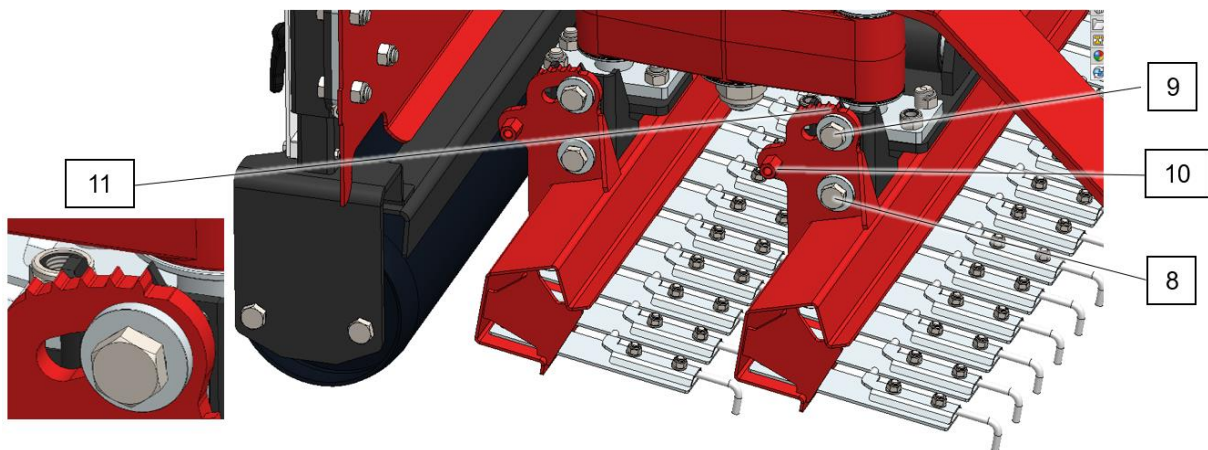


Fig. 10

10.2. Replacing the tines and leaf springs

The timely replacement of the tines is important to guarantee an even treatment of the surface. Tines can bend, break or wear excessively due to a hard or poor surface. These damaged tines must then be replaced/removed immediately.

The replacement is as follows (Fig. 11):



Switch off the tractor's engine and PTO before descending.



Make sure that the tractor and machine cannot move uncontrolled.

1. Open the hatches for better accessibility.
2. Loosen the two nuts (1) and remove the tine holder (2).
3. Remove the tine (3) and tine holder (2) from the leaf spring (5) and/or:
4. Remove the bolts/nuts (4) and the leaf spring (5) if they need to be replaced.
5. Install the new parts in reverse order as described above.
6. Close the access hatches again.

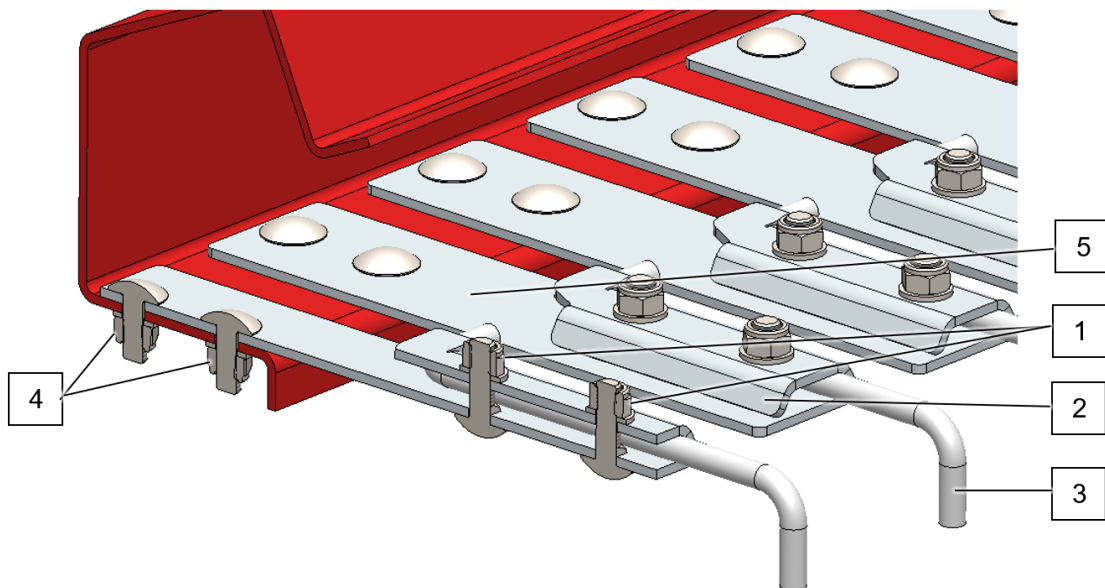


Fig. 11

11. MAINTENANCE

11.1. Maintenance schedule

Time schedule	Check point	Work activities
Before every use	Check for loose parts.	Tighten loose parts in the correct way.
	General check	Attach the machine to the tractor and operate the machine for 5 minutes. Listen and observe any strange movements / sounds.
	Check the condition of the tines and leaf springs.	If damaged, replace the relevant tine or leaf spring.
	Safety stickers	Presence and readability of the safety stickers. Replace these if not present or damaged.
	Loose hanging parts around the PTO.	Tighten the parts so that they cannot reach the PTO.
After the first 20 working hours (new or repaired)	Lubricate the PTO, bearings.	Use 2 shots of EP2 grease. See 11.3 for the positioning of the grease points.
	Check for loose parts.	Tighten loose parts in the correct way.
	General check	Attach the machine to the tractor and operate the machine for 5 minutes. Listen and observe any strange movements / sounds.
	Loose hanging parts around the PTO.	Tighten the parts so that they cannot reach the PTO.
After every 50 working hours	Lubricate the PTO, bearings.	Use 2 shots EP2 grease. See 11.3 for the positioning of the grease points.
	Check for loose parts.	Tighten loose parts in the correct way.
	General check	Attach the machine to the tractor and operate the machine for 5 minutes. Listen and observe any strange movements / sounds.

11.2. Cleaning

If a high-pressure cleaner is used to clean the machine, then observe the following rules:

- Do not use aggressive cleaning agents that can affect the machine.
- Maximum water pressure: 70 Bar (1015 PSI)
- Maximum water temperature: 50°C (122°F)
- Do not aim the jet of the high-pressure nozzle directly at the bearings, oil seals, lubrication points and stickers.
- Keep a minimum distance of 0.5 m (1.6 ft) between the head of the high-pressure cleaner and the surface you want to clean.



Grease the bearing points after cleaning the machine.

11.3. Lubrication points

To ensure proper operation of the machine, all lubrication points should be lubricated periodically (Fig. 12 and Fig. 13). Lubricate the points according to the maintenance schedule (11.1).



Fig. 12

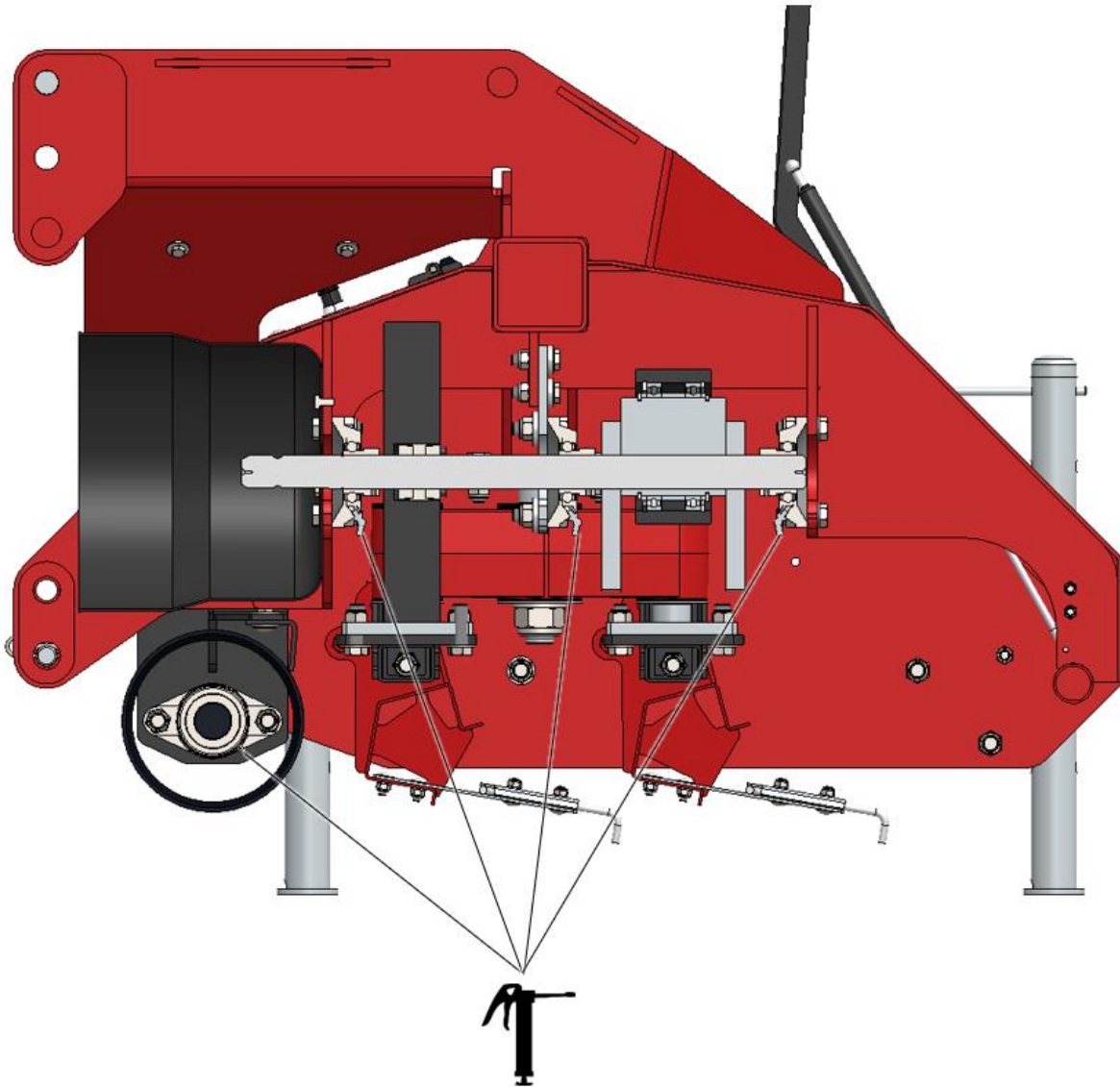


Fig. 13

12. TROUBLE SHOOTING (PROBLEM ANALYSIS)

Problem	Possible cause	Solution
Machine vibrates.	<ul style="list-style-type: none"> - Obstacle(s) between the knives. - Angles cross the PTO differently. - Worn or broken tines. - Wear & tear in the drive. 	<ul style="list-style-type: none"> - Remove the obstacle(s). - Turn the top rod to an acceptable angle. - Replace the worn or broken tines. - Check the drive.
Working depth is not achieved.	<ul style="list-style-type: none"> - Front roller is not adjusted correctly. - Rake beams adjusted uneven. 	<ul style="list-style-type: none"> - Adjust the front roller correctly. - Align the rake beams equally.
Too coarse treatment of the soil.	<ul style="list-style-type: none"> - Driving speed is too high. - Tines too deep. 	<ul style="list-style-type: none"> - Reduce the driving speed. - Set the tines less deep.
Rake beams blocked.	<ul style="list-style-type: none"> - Obstacle(s) between the tines. - Tines too deep. - Too much overgrowth. 	<ul style="list-style-type: none"> - Remove the obstacle(s). - Set the tines less deep. - Cut the overgrowth.