User manual





Translation of the original user manual



2336 English 947.120.214 EN



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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:

<u>SPEED-CLEAN WITH MACHINE NUMBER AS INDICATED ON THE MACHINE AND IN THIS MANUAL,</u>

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

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:

SPEED-CLEAN 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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FOREWORD

Congratulations on your Speed-Clean purchase. For safe and long-lasting operation of this Speed-Clean it is necessary to read and understand this user's manual. Without full knowledge of the contents it is impossible to work with this machine safely.

The following page deals with the general safety instructions first. Every user must know these and use them. After this a registration card is entered that needs to be returned in order to be able to deal with later claims.

In this users' manual many instructions are given, which are numbered in order. You should act according to this order. If a \triangle is used, this points to safety instructions. If a is used, this 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 PROVISIONS

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

REGISTRATION CARD

For your own information, complete the table below:

Serial number machine	
Dealer name	
Purchase date	
Remarks	

! SAFETY INSTRUCTIONS !



Fig. 1

Speed-Clean has been designed to be used safely. This can only be done if the safety instructions described in this manual are followed fully.

Read and understand (Fig. 1) the manual before you start using the Speed-Clean.

If the machine is not used as described in the manual there is the risk of injury and/or damage to the Speed-Clean.

(1) When using the machine the operator must be competent and must have competently adjusted the machine to the surface to be treated.

With incompetent usage and damage resulting from it the manufacturer will not accept any responsibility; all risks associated with this are the sole responsibility of the user.

Incompetent usage also includes not following the manufacturer's directions for use, maintenance or repairs.

Before using the Speed-Clean, first inspect the area to be treated. Remove loose obstacles and avoid irregularities.

(2) The Speed-Clean has been manufactured according to the latest technical insights and is safe for use.

Should the machine be used, maintained or repaired by inexpert persons, then there is a risk of injury to both the user and third parties. **This must be avoided!**

(3) All persons that have been designated by the owner to operate, maintain or repair the Speed-Clean, must have read and fully understood the user's manual and especially the chapter **Safety instructions**.

The operator is responsible for the safe usage of the **Speed-Clean**.

(4) The operator is <u>required</u> to <u>check for visible damage and defects</u> before he/she starts using the Speed-Clean. Alterations to the Speed-Clean (including its operation) that influence the safety negatively must be remedied immediately.

Making alterations or additions to the Speed-Clean (excluding those approved by the manufacturer) are not permitted, in principle, for safety reasons.

If <u>modifications</u> to the Speed-Clean have been made, then the current CE mark is cancelled and whoever made these modifications must apply for a new <u>CE mark</u> himself.

Check the Speed-Clean for loose bolts/ nuts/ parts every time before using it.

If present, check the hydraulic hoses regularly and replace them if they are damaged or show signs of ageing. The replacement hoses should comply with the technical demands of the manufacturer.

If present, before work is done to it, the pressure should <u>always</u> be taken off the hydraulic installation.

In the absence of protective covers and safety stickers the Speed-Clean must **NEVER** be used.

NEVER crawl under the Speed-Clean.

Turn the Speed-Clean over if necessary.

When performing maintenance, adjustments or repairs it is necessary to block the Speed-Clean from sagging/moving/sliding away.

When performing maintenance, adjustments or repairs <u>always turn off the tractor's</u> <u>engine and remove the tractor's key from the ignition.</u> (Fig.2)



Fig. 2

For maintenance and repairs only use original Speed-Clean parts for safety of machine and operator.

Repairs of the Speed-Clean may only be performed by authorised technical personnel.

Keep an account of repairs.

(5) Besides the instructions in this user's manual, the generally safety and instructions should be followed.

When using the public highway the applicable traffic regulations also apply.

Transporting people is not permitted!

Do not use the Speed-Clean in the darkness, during heavy rainfall/ storms or on slopes with an angle over 20 degrees.

(6) Before commencing the work, all persons who will operate the Speed-Clean must be familiar with all its functions and operational elements.

On the sides of the Speed-Clean safety stickers (Fig. 5) are applied with an identical meaning. These safety stickers must be properly visible and legible at all times, and be replaced when damaged.

During operation <u>NO persons without the proper personal protective equipment</u> <u>are permitted in the danger area</u> of the Speed-Clean, because there is danger of physical injury there from spurting materials (Fig. 3).





Fig. 4

Bystanders without personal protective equipment must keep a minimum distance of four metres (4 metres)! (Fig. 4)

Wear functional clothes. Wear heavy shoes with steel toecaps, long trousers, long hair done up and no loose-fitting clothes.

Use the proper personal protective equipment according to the applicable safety instructions.

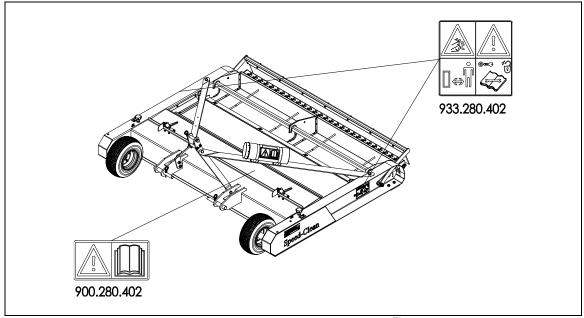


Fig. 5

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

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1.0 TECHNICAL DATA

Model	Speed-Clean 1000	Speed-Clean 1700
Working width	970mm (65.7")	1670mm (65.7")
Working depth (With brush not worn out)	0mm -10mm (0"-0.4")	0mm -10mm (0"-0.4")
Driving speed	Max. 12km/h (7.4mph) Depending on ground conditions.	Max. 12km/h (7.4mph) depending on the conditions of the surface.
Weight	165 Kg (365 lbs)	220 kg (485 lbs)
3-points connection	Cat. 1 small	Cat. 1
Minimal lift capacity at the lift eyes	200 Kg (440 lbs)	250 Kg (550 lbs)
Contents receiving bin	25ltr. (1525 cu. inch.)	2x 20ltr. (2x1220 cu. inch.)
Maximum capacity (Theoretical with speed; 10 Km/h (6.2mph))	9700 m ² /h (104410 ft ² /h)	16700 m ² /h (179750 ft ² /h)
Drainage vibrating sieve (Standard delivered)	5mm x 5mm (0,2 " x 0,2")	5mm x 5mm (0.2 " x 0.2")
Shipping dimensions	LxBxH	LxWxH
	1720 x 1200 x 728 mm 67,7" x 47.2" x 68"	1720 x 1900 x 728 mm 67,7" x 74.8" x 68"
Standard parts	- Removable dirt receiving bin Ground-hugging dragging brush Easily changeable sieve Manual cylinder with manual and tool set Rake section	
Options	- Sieve elements with various drainage dimensions.	

2.0 GENERAL DESCRIPTION

The Speed-Clean is a surface cleaning machine for cleaning artificial turf.

3.0 FIRST INSTALLATION

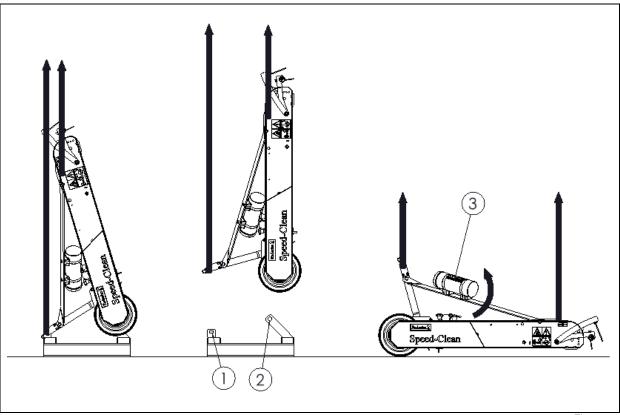


Fig. 6

The machine is delivered on a pallet in transport position. To take the machine off the pallet and place it horizontally, act as follows: (Fig. 6).

⚠ !! NEVER CRAWL UNDER THE MACHINE !!

- 1. Attach a cable to the lifting points on both sides of the machine, and to the top of the 3-point hitch on the front.
- 2. Lift the machine about 50 mm (2") off the ground.
- 3. Remove the pallet by removing the bottom 3-point pins (1) and (2).
- 4. Pull the pallet from under the machine.
- 5. Slowly rotate the machine horizontally.
- 6. Lower the machine in a controlled and slow fashion until it is fully on the ground.
- 7. If still necessary mount the toolbox (3) at the top of the 3 point strip.

 $ilde{\mathbb{A}}$ Make sure the cable/crane/lift has the capacity to lift at least 500 kg (1000 lbs).

4.0 COUPLING / DISCONNECTING

Check procedure before starting the coupling of the Speed-Clean.

- Check the Speed-Clean for visually observable damage and repair this if a safe operation of the machine can no longer be guaranteed.
- Check whether all nuts and bolts are tightened.
- Check whether all protective covers and safety stickers are attached to the machine and are not damaged.

Without them the machine must **NEVER** be used.

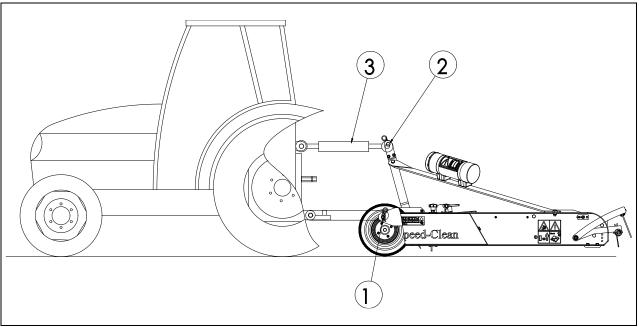


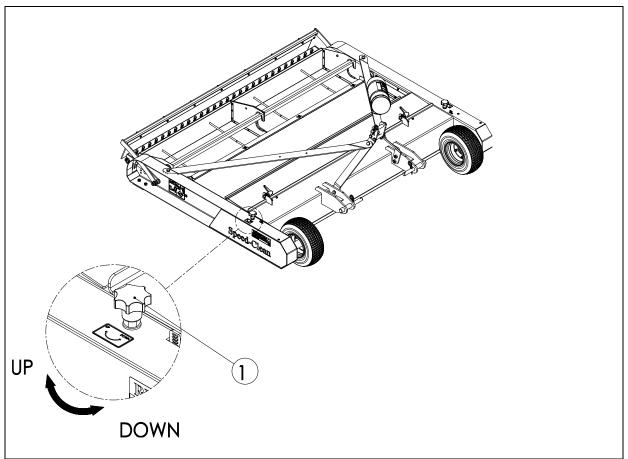
Fig. 7

The Speed-Clean can be coupled to the tractor by means of the 3-point linkage.

The method is as follows: (Fig. 7)

- 1. Remove the 3-point pins (1) and (2).
- 2. Reverse the tractor carefully, so the lower connecting arms can be coupled to the frame.
 - \triangle !! Make sure the tractor is blocked properly and cannot move of its own accord !! \triangle !! Turn off the tractor before dismounting !!
- 3. Connect the lower connecting arms with the 3-point pins connecting plate pins (1) and secure these with the retaining pins supplied.
- 4. Set the tractor's stabiliser to 100 mm sideways stroke.
- 5. Install the top link (3) on your tractor and unscrew this until it is at the same height as the upper 3-point top connection of the Speed-Clean.
- 6. Connect the top link (3) with pin (2) on the frame; secure pin (2) with the retaining pin.
- 7. Screw in the top link (3) so that it is charged. Make sure the machine is parallel with the ground.
 - $ilde{ ext{ } ext{$
- 8. Start the tractor and lift the Speed-Clean from the surface.

Disconnecting takes place in reverse order.



Fia. 8

5.0 WORKING DEPTH ADJUSTMENT OF BRUSH

The working depth of the brush can be adjusted through changing the wheels at the front of the machine.

The procedure is as follows: (see fig.8)

riangle !! Make sure the Speed-Clean is blocked properly and cannot move on its own !! riangle!! Turn off the tractor before dismounting !!

- 1. Turn Knob (1) clockwise to raise the brush
- 2. Turn Knob (1) counter clockwise to lower the brush
- 3. Follow point 1 or 2 for the other side of the machine so that the machine is adjusted parallel.

NEVER set the machine in such a way that damage can occur to the surface to be worked.



First statically check the working depth of the surface to be worked before using the machine!



Experience has shown that the best machine setting for top-layer cleaning is when the hairs of the brush do not touch the fibres of the grass.

5.1 ADJUSTABEL RAKE / REAR BRUSH

The machine is equipped with an adjustable rake section and a loose rear brush. (Fig 9)

- The rake can be set to different depths or in the transport position. Remove pin (3) and set the rake to the desired depth. Put pin (3) into the desired hole.

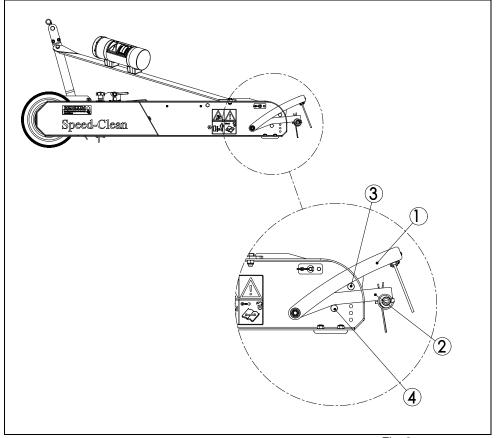


Fig. 9

- For using the rear brush, remove pin (3). The brush will now be forced on the ground by his own weight and will an even image on the ground.

6.0 TRANSPORT OF THE SPEED-CLEAN

The user is responsible for the transportation of the Speed-Clean behind the tractor on public highways. Check the national law regarding regulations.

Levied concerning open fields, the machine, can up to with a speed of 20 km hours 12.4 Over open fields, with the machine lifted, the speed must not exceed a maximum of 20 km/hour (12.4 mph), higher speed can be dangerous for the driver bystanders and can even damage the machine.

 $ilde{\mathbb{M}}$ Make sure that the upper forestay is connected and under tension in the transport position! See fig. 7

If not, then serious damaged can be done to the machine.

1 If the machine is lifted off the ground, at least 20% of the tractor's weight must be supported by the front axle.

7.0 THE DRIVING SPEED

The driving speed of the Speed-Clean is 12 km/h (7.4mph), but in practice the maximum speed must be read from the surface to be worked and the desired cleaning.

8.0 THE USE OF THE SPEED-CLEAN

Before the Speed-Clean can be used at a location the following must be checked:

- 1. Are there any loose objects present on the field? First remove these.
- 2. Are there any slopes? The maximum slope on which work can take place with this machine is 20 degrees. Always work from the top downwards.
- 3. Is there a danger of flying objects such as for example balls, which distract the attention of the driver? If so then the Speed-Clean can NOT be used.
- 4. Is there a risk on sinking or slipping away? If so, postpone the working until the circumstances have improved.
- 5. When the ground is wet, postpone the activities until the circumstances have improved.
- 6. A field can be worked multiple times in the same or in different directions to obtain a better cleaning.
- 7. Do not make tight turns, preferably drive straight; the surface can be damaged.

START/STOP PROCEDURE 9.0

The start procedure is **VERY** important. If this procedure is not conducted as described below, then serious damage can be done to the surface to be treated/the machine.

The start procedure is as follows:

1. Check the Speed-Clean thoroughly for loose parts and check whether all parts are functioning properly.

⚠ !! If loose parts have been found or if parts do not work properly, then the problems need to be solved first before using the Speed-Clean!!

- 2. Drive to the location where the treatment needs to take place.
- 3. Place the machine on surface to be treated and adjust the working depths of the machine statically as described in chapter 5.0

4. Start up the tractor and increase the speed until the correct speed has been reached.



!! Preferably drive in straight lines in connection with possible damage which could otherwise occur to the surface!!

Stopping is as follows:

- 1. Reduce the driving speed and lift the machine from the surface.
- 2. Drive to the next spot and start the working as discussed above.

10.0 EMPTYING OF THE DIRT RECEIVING BIN

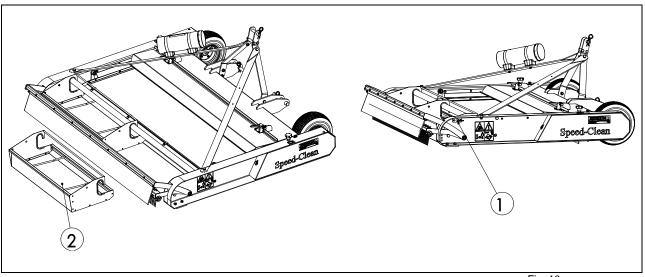


Fig. 10

When the dirt receiving bin is full this must be emptied. This is done according to the following procedure (See Fig. 10):

1. Drive the Speed-Clean to the dumping site for collected waste.

1. Make sure the Speed-Clean is blocked properly and cannot move on its own accord !!

 \triangle !! Switch off the tractor before continuing !!

- 2. Open the rotating lock (1)
- 3. Remove the dirt receiving bin (2) and empty this.
- 4. Place the dirt receiving bin (2) back in the machine.
- 5. Close the rotating lock (1).



Remove the waste according to the applicable conditions of the local legislation.

11.0 PROBLEM ANALYSIS

Problem	Possible Cause	Solution
Overspill material to be cleaned is caught in the dirt	- Working depth is adjusted too deep.	- Adjust the machine les deep.
receiving bin.	- Vibration sieve is blocked.	- Open the vibration sieve.
	 Work environment is too wet. 	Wait till the work environment has dried up.
	- Vibration sieve too fine.	Use a sieve with a larger mesh.
Too little cleaning	 Working depth is adjusted too shallow. 	- Adjust the machine deeper.
	- Sieve has too large a mesh	- Replace the sieve by one with a smaller mesh.
	- Brush is worn out.	- Replace the Brush
Drive wheel skids.	- Too little pressure on the drive wheel.	- Release air pressure from the tire.
	- Bearings are stuck.	 Loosen the bearings or replace these.
	- Too wet surface.	Postpone the working till the surface is dry
	- Brush set to deep	- Raise the brush
Sieve does not move / return	 Vibrating screen is not placed well in the machine. 	- Position sieve correct into the machine.
	- Drive chain broken	- Repair or replace.
Untidy look of the field after working.	- Brush set to deep	- Raise the brush
Cracking sounds when the machine is operational.	- Bearings are worn out.	- Replace the bearings.
Machine takes too many bites in the field	- Brush set to deep	- Raise the brush

12.0 MAINTENANCE

Time-line	Check point /Lubrication point	Method
Before <u>every</u> use.	 Check for loose bolts / nuts. Presence and Legibility of safety stickers. (Fig. 5) 	Tighten the loose bolts/nuts with the right torque.Replace these if not present/damaged.
After <u>first</u> 20 working hours (new or repaired).	- Check the roller bearings and the drive line.	- If necessary replace these components.
	- Check for loose bolts / nuts.	- Tighten the loose bolts/nuts with the right torque
After <u>every</u> 100 working hours or annually.	 Check the roller bearings and the drive line. 	If necessary replace worn out components.
	- Check for loose bolts / nuts.	- Tighten the loose bolts/nuts with the right torque
	- Check the tension of the chain in the drive line.	- Adjust the tension of the chain. Or if necessary replace the chain.
	- Check the wear and tear of the brush.	- If necessary replace the brush.
	- Lubrication of the drive chain.	- Use a universal chain lubrication
	- Grease bearings	- Use EP2 grease (Fig 13)

12.1 ADJUSTABLE GUARD PLATE ADJUSTMENT

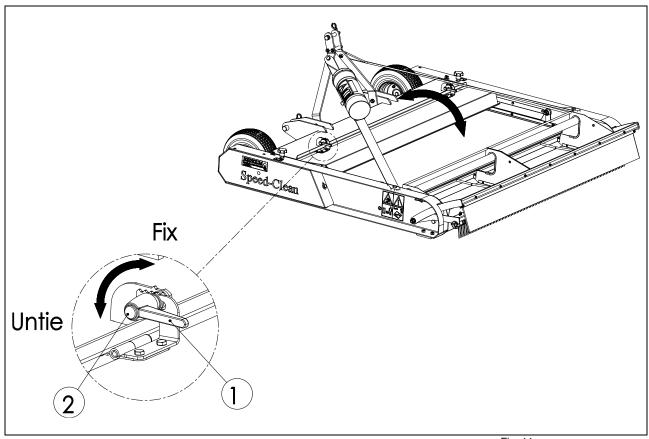


Fig. 11

The machine is equipped with an adjustable guard plate. The plate is mounted above the brush. This can adjust the material flow of the brush. The adjusting the guard plate goes as follows (see fig. 11):

1! Make sure the tractor is secured in place and cannot start moving!

1! Switch the tractor off prior to getting off!!

- 1. Push button (2) and turn simultaneously lever (1) counter clockwise to loosen the cover.
- 2. Do this for both sides.
- 3. Adjust the cover to the desired position. Do this for both sides so that the guard plate is set level.
- 4. Push button (2) and turn simultaneously handle (1) clockwise to fasten the cover.

12.2 CHANGING OF THE VIBRATION SIEVE

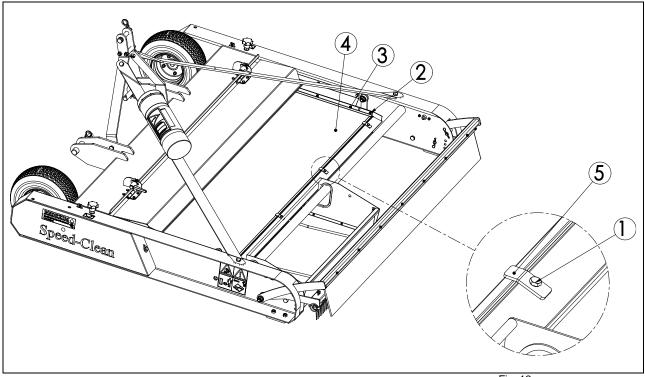


Fig. 12

For operation with different materials there are sieves available with different meshes which can be exchanged in the Speed-Clean.

Changing the vibration sieve is done as follows (See Fig. 11):

riangle!! Make sure the Speed-Clean is blocked properly and cannot move on its own !!

- 1. Take the vibration sieve/dirt receiving bin from the machine as described in chapter 10.0
- 2. Unscrew bolts (1) one turn.
- 3. Rotate lock plate (5) so that the sieve is free.
- 4. Unscrew bolts (2) one turn.
- 5. Move plates (3) upwards.
- 6. Remove the sieve (4) from the machine and place a new one.
- 7. Lower plates (3) and make sure the sieve is locked.
- 8. Tighten bolts (2).
- 9. Rotate lock plate (5) so that the sieve is locked.
- 10. Tighten bolts (1).
- 11. Place the vibration sieve/dirt receiving bin back in the machine as described in chapter 10.0.

12.3 GREASE POINTS

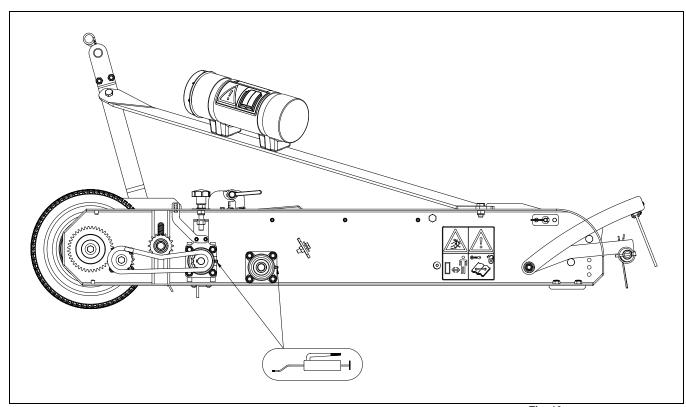


Fig. 13

Grease points left & right.

13.0 OPTION: MAGNETIC BROOM

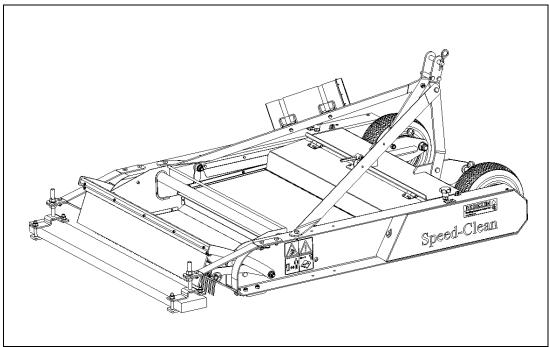


Fig.14

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:

247.100.002 Speed-Clean 1000 247.167.010 Speed-Clean 1700

See the parts manual for mounting this option on the Speed-Clean.