User Manual and Parts Book

Core collector 1200

Serial number:



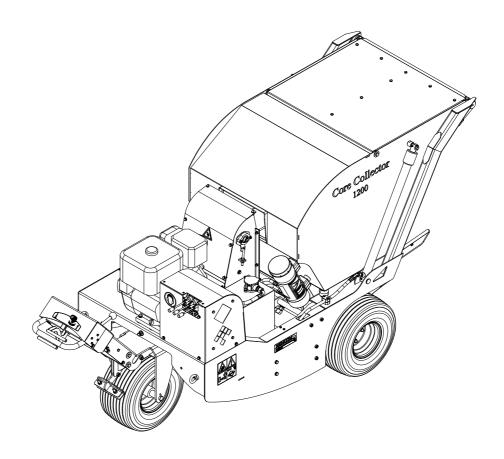
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Translation of the original User Manual



ATTENTION:

IT IS OF THE UTMOST IMPORTANCE TO READ THIS USER MANUAL CAREFULLY PRIOR TO USING THE CORE COLLECTORIN ORDER TO USE THE MACHINE SAFELY AND TO OBTAIN THE BEST RESULTS.

1701 English 943.120.000

FOREWORD

Congratulation on your Core Collector purchase! For safe and long-lasting operation of the Core Collector, 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 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 \triangle is an indication of a safety instruction. A \bigcirc 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

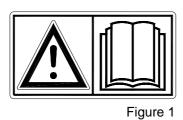
WITH DELIVERY THIS CORE COLLECTOR IS GUARANTEED AGAINST MATERIAL DEFECTS. THIS WARRANTY IS VALID FOR A PERIOD OF 12 MONTHS FROM THE PURCHASE DATE. CORE COLLECTOR WARRANTIES ARE SUBJECT TO THE 'GENERAL CONDITIONS FOR SUPPLY OF PLANT AND MACHINERY FOR EXPORT, NUMBER 188' THAT ARE PUBLISHED UNDER THE AUSPICES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



The Core Collector 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 *before* you start using the Core Collector.

If the machine is not used as described in this

manual, this can result in injuries and/or damage to the Core Collector.

 The user must be an expert in using the machine and the machine/combination should be professionally adjusted for processing 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 Core Collector. Remove loose obstacles and avoid irregularities.

2. The Core Collector 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!**

- 3. All persons assigned to operate, maintain and repair the Core Collector by the owner must read and completely understand the operation manual and in particular the chapter of **Safety Instructions**.
- 4. The user is **obliged to check** the Core Collector for **visible damage and defects** before using the Core Collector.

Modifications to the Core Collector (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 Core Collector (except those approved by the manufacturer).

If <u>modifications</u> to the Core Collector have been made, then the current CE marking is cancelled. The person that has made these modifications has to apply for a new <u>CE marking himself</u>.

Check the Core Collector for loose bolts, nuts and components *before* every operation.

Check the hydraulic pipelines regularly and replace these when the hydraulic pipelines are damaged or appear old. The pipelines that are replaced should comply with the technical requirements of the manufacturer.

The hydraulic installation should <u>always</u> be made pressure-free *before* working on this installation.

NEVER use the Core Collector in the absence of safety stickers.

<u>NEVER</u> crawl under the Core Collector! <u>NEVER</u> check the machine while the Core Collector's engine is running.

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

<u>Always switch off the motor and take the key out of the ignition</u> in carrying out maintenance, adjustments and repairs (Figure 2).



Figure 2

Use only original Core Collector 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 Core Collector.

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 Core Collector in the dark, in heavy rain/storm or on slopes with an angle larger than 20 degrees.

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

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 both sides (Figure 5) of the Core Collector and to the protective cover.

These safety stickers must always be clearly visible and legible and must be replaced if they have become damaged.



Figure 3



Figure 4



Figure 5



Figure 6

During operation, <u>NO persons are allowed within the danger zone</u> of the Core Collector, because there is danger of physical injuries caused by flying particles or substances (Figure 3).

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

Use certified ear protection when using the machine (Figure 5)!

BE CAREFUL not to get any parts of your body jammed (Figure 6)!

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.

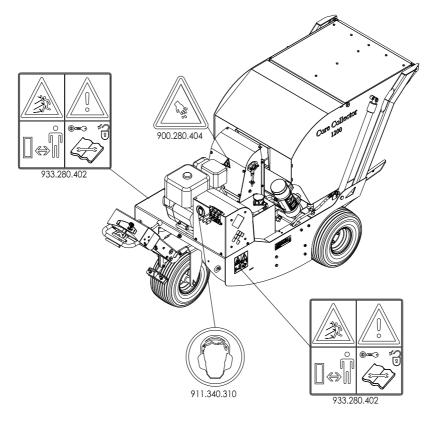


Figure 7

7. Location of the safety stickers (Figure 7).



EU DECLARATION

We,

Redexim BV Utrechtseweg 127 3702 AC Zeist, Holland

declare entirely under our own responsibility that the product

CORE COLLECTOR WITH A MACHINE NUMBER AS INDICATED ON THE MACHINE AND INDICATED IN THIS MANUAL

to which this declaration refers, complies with stipulation of the 2006/42/EC machine directive and is in conformity with the following standards: NEN-EN-ISO 12100 : 2010 NEN-EN-ISO 13857 : 2008

Zeist, 24-06-2015

A.C. Bos Manager Operations & Logistics Redexim Holland

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1.0 TECHNICAL DATA

Model	Core Collector 1200	
Speed	Up to 5 km/h (3.1 mph) Hydraulic transmission that can be adjusted continuously and variably	
Working width	1,200 mm (47.2")	
Weight	573 kg (1263 lbs)	
Maximum capacity (Theoretical at maximum speed of 5 km/h [3.1 mph])	6000 m ² /h (64583 ft ² /h)	
Capacity of the receptacle	0.3 m ³ (10.6 ft ³)	
Unloading height of the receptacle	1,250 mm (49.2")	
Dimensions (L x W x H)	2,878 mm x 1,200 mm x 1,367 mm 113.3" x 47.2" x 53.8"	
Tyre pressure	1.5 – 2 bar. (21.8 – 29 psi)	
Engine	Briggs & Stratton B&S 13HP	
Fuel	Petrol	
Content of the fuel tank	7 litres (1.85 gallon)	
Engine oil	See the manual of the motor	
Hydraulic oil	Tellus 46	
Content of the hydraulic oil tank	25 litres (6.6 gallon)	
Noise emissions * (A-weighted measurement in accordance ISO 4781 and EN 13684: 2004 + A3: 2010)	A-weighted emission sound pressure level L_{pAd} measured in working position re. 20 μ Pa: 91 dB Uncertaincy K_{pA} : 2 dB A-weighted sound power level measured in working position L_{WAd} re. 1pW: 99 dB Uncertaincy $K_{WA:}$ 2 dB	
Emission of hand-arm vibration * (Measurement according to EN 12069 and EN 13684: 2004 + A3: 2010)	Hand-arm-Vibration <i>a</i> _{hv} : 1.4 m/s ² Uncertaincy K: 0.2 m/s ²	

^{*}Remark: emission values for both sound and vibrations are determined under reference conditions as described in EN 13684. In practice the emission (or better: the partial exposure) maybe different due to specific conditions and circumstances. Emission data are primarily intended for comparison between different machines and may be used as an indication for partial exposure, but with limited validity.

2.0 GENERAL DESCRIPTION

The Core Collector is a machine/vehicle for collecting and removing cores of soil from lawns.

3.0 FIRST INSTALLATION – TAKING THE MACHINE OFF THE PALLET

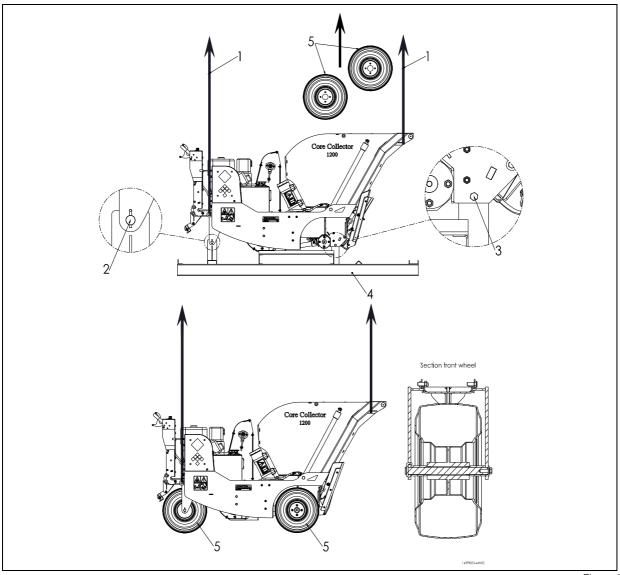


Figure 8

The machine is placed horizontally on the pallet. To remove the pallet and to place the machine horizontally on the ground, you take the following steps (see Figure 8 & 9):

NEVER crawl under the machine!

- 1. Remove the wheels (5) of the machine from the receptacle.
- 2. Check the tyre pressure of the wheels and if necessary, adjust it (1.5-2 bar/21.8-29 psi).
- 3. Attach a cable (1) to the lifting eyes 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 weight details.)

- 4. Lift the machine slightly off the ground and remove the transport frame (4) by removing the bolts and nuts (3) at both sides of the machine and by removing the wheel axle (2) at the front side.
- 5. Pull the transport frame (4) from under the machine.
- 6. Mount the wheels (5).
- 7. Lower the machine controlled and calmly until it stands completely on the ground.

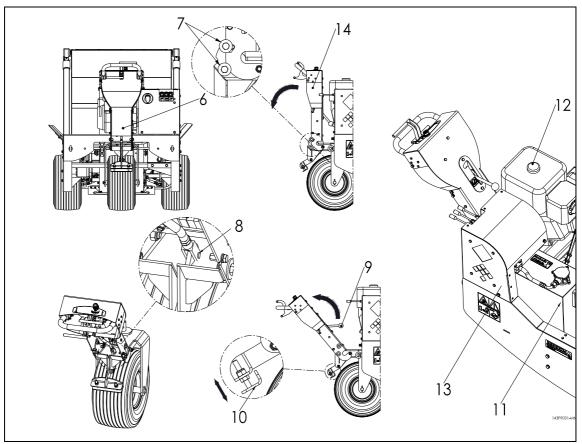


Figure 9

- 8. Remove the protective cover (6) by loosening the bolts at the sides a few turns.
- 9. Loosen the bolts and nuts (7) at both sides and rotate the steering pole (14) in the required position.
- 10. Tighten the bolts and nuts (7).
- 11. Attach the brake rod (8) to the lever of the brake.
- 12. Activate the parking brake by turning the brake handle (9) upwards.
- 13. Check the proper functioning of the parking brake.
- If this is not the case, the brake plate (10) should be adjusted until the brake functions properly.
- 14. Return the protective cover (6) to its place and tighten it.
- 15. Check the level of the engine oil. If needed, top it up. (See the manual of the engine.)
- 16. Check the level of the hydraulic oil (11); it should be about halfway the gauge glass. If needed, top it up.

The filling opening is located under the protective cover (13), which should be removed before filling.

17. Fill the fuel tank (12) with petrol.

4.0 OPERATING THE CORE COLLECTOR

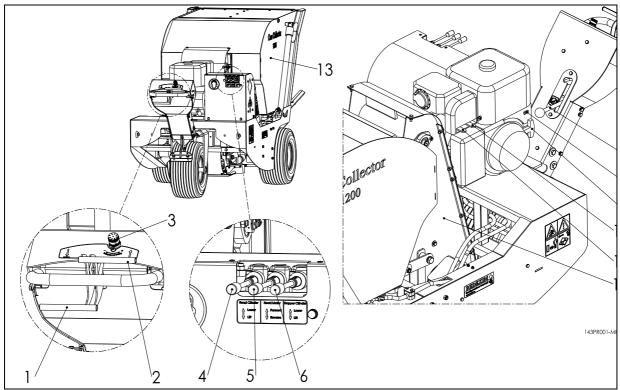


Figure 10

The following explains the position and function of the operating handles of the Core Collector (see Figure 10).

1. Handle for driving reverse (1)

Push the handle (1) upwards to move the machine backwards / towards you.

Always operate the movement quietly and gradually up to the maximum deflection.

2. Handle for driving forwards (2)

Push the handle (2) downwards to move the machine forwards / away from you.

Always operate the movement quietly and gradually up to the maximum deflection.

3. Adjustment knob of the driving speed (3)

The driving speed of the Core Collector is set continuously variable using the adjustment knob (3) of the driving speed. Clockwise is faster. Counter-clockwise is slower.

4. <u>Handle (4) for lifting and lowering the Core Collector head (12) & windrow plates</u>

Push the handle (4) upwards to lower the Core Collector head & windrow plates. Leave the handle (4) in this position in order to have the head follow the terrain. Push the handle (4) downwards to lift the head & windrow plates.

5. Handle (5) for activating the conveyor belt in the Core Collector head (12)

Push the handle (5) upwards to rotate the conveyor belt in the operating direction. Push the handle (5) downwards to rotate the conveyor belt in the opposite direction e.g., in case of a blockage.

6. Handle (6) for lifting and lowering the receptacle (13)

Push the handle (6) upwards to lower the receptacle.

Push the handle (6) downwards to lift the receptacle for emptying it.

7. Parking brake (7)

The parking brake (7) is solely intended for blocking the machine. If the Core Collector is not used, the parking brake must always be activated (away from the engine block).

8. Ignition (8) of the engine

The purpose of the ignition (8) is to start and stop the engine. The precise operation is described in the manual of the engine.

9. Start cord (9) of the engine

The purpose of the start cord (9) is to start the engine. The precise operation is described in the manual of the engine.

10. Accelerator handle (10) of the engine

The accelerator handle (10) controls the engine power. The engine power should be maximum during processing!

11. Choke handle (11) of the engine

The purpose of the choke handle (11) is to assist in starting the engine. The precise operation is described in the manual of the engine.

5.0 ADJUSTING THE WINDROW PLATES

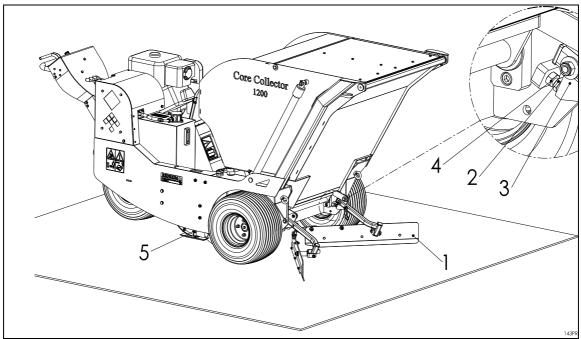


Figure 11

The correct adjustment of the windrow plates is vital for the machine. A correct adjustment prevents damage to the subsoil and a proper collection of the soil cores. The procedure is as follows (see Figure 11):

- 1. Drive to a flat subsoil and lower the core head (5) and windrow plates (1) until they stand on the ground (see Chapter 4.0 for operating the Core Collector).
- 2. Turn off the engine and activate the parking brake. Make sure that the machine cannot move on its own accord (see Chapter 4.0 for operating the Core Collector).
- 3. Loosen the lock nut (4).
- 4. Turn the bolt (2) inwards and outwards and make sure that there are a few millimetres of play between the bolt and the stop point (3). Tighten the lock nut (4). Repeat Items 1-5 for the other windrow plate.



In case of a poor subsoil or if the windrow plates 'eat' into the subsoil, it ca help to reduce the play.

6.0 TRANSPORTING THE CORE COLLECTOR

It is prohibited to drive the Core Collector on public roads. Therefore, the Core Collector must always be transported to the processing site after which it can be used.



Use the four lifting eyes (1) to secure the Core Collector during transport (see Figure 12).

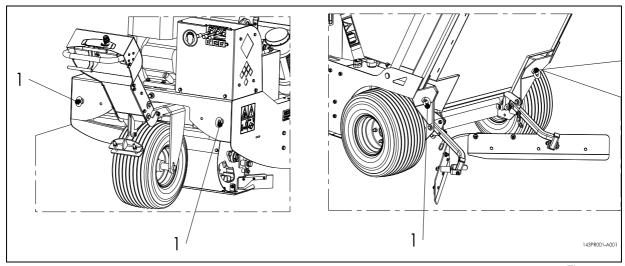


Figure 12



It is NOT allowed to tow the Core Collector to prevent damaging it.

7.0 THE WORKING SPEED

The Core Collector has a driving speed that can be adjusted continuously variable. The maximum speed is limited to 5 km/h (3.1mph).

The working speed depends on the condition of the material that should be collected and should be adjusted on site to these conditions.

8.0 USING THE CORE COLLECTOR

Before using the Core Collector in a location, you should check the following items:

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

9.0 START/STOP PROCEDURE

The start procedure is VERY important. If this procedure is not executed as described below, serious damage to the machine / subsoil could be the result (See Figure 13).

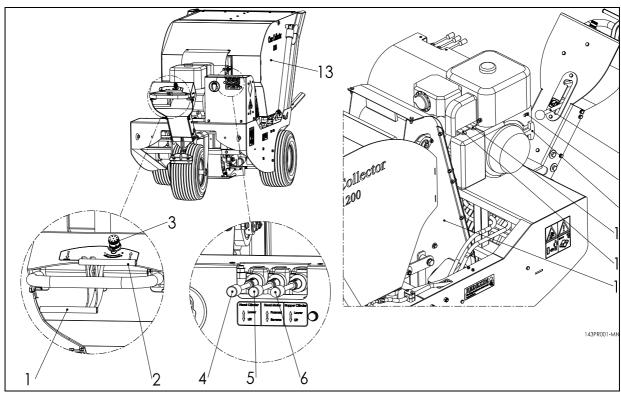


Figure 13

The start procedure is as follows:

- First check the soil cores that should be collected. If they are still damp, postpone the processing until they are dried up. A better and cleaner result can be achieved if the soil cores are dry.
- 2. Check the Core Collector for 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 Core Collector!

- 3. Check whether the handles 1, 2, 4, 5 and 6 are in the neutral position.
- Start the engine and increase the rotational speed to the maximum.
- 5. If the Core Collector head stands on the ground, lift it by pushing the handle (4)
- 6. Drive to the location where processing should occur and lower the head and windrow plates by pushing the handle (4) upwards.
- 7. Set the required driving speed by operating the adjustment knob of the driving speed (3).
 - (A)

The working speed can also be adjusted continuously variable during the run.

- 8. Activate the conveyor belt by pushing the handle (5) upwards.
- 9. Push the driving handle (2) gradually downwards and drive the Core Collector to the soil
- 10. At the end of the run, lift the head by pushing the handle (4) downwards.
- 11. Position the Core Collector for the next run and repeat the procedure from Item 5.

Stopping occurs as follows:

- 1. Lift the head (12) and windrow plates by pushing the handle (4) downwards
- 2. Stop the conveyor belt by pushing the handle (5) downwards into its centre position.
- 3. If no further processing is needed, stop the vehicle and use the parking brake (7) to block the Core Collector.
 - Make sure that the towing vehicle is blocked well and cannot move on its own accord!
- 4. Reduce the rotational speed by operating the accelerator handle (10).
- 5. Turn the engine off by switching the ignition (8) off.

9.1 EMPTYING THE RECEPTACLE

The procedure for emptying the receptacle (13) is as follows (see Figure 13):

- 1. Drive to a stable and flat location where the collected material can be emptied.
- Make sure that the Core Collector stands stable and flat in order to prevent any dangerous situations.
- 2. Lift the receptacle (13) by pushing the handle (6) downwards.
- 3. When the receptacle (13) is empty, push the handle (6) upwards to lower the receptacle.
 - Wait until the receptacle is completely lowered and then start driving in order to prevent any dangerous situations.
 - Attention: risk of jamming! Pay attention to your limbs: they can get jammed.

10.0 LUBRICATION POINT / OIL FILLING POINT

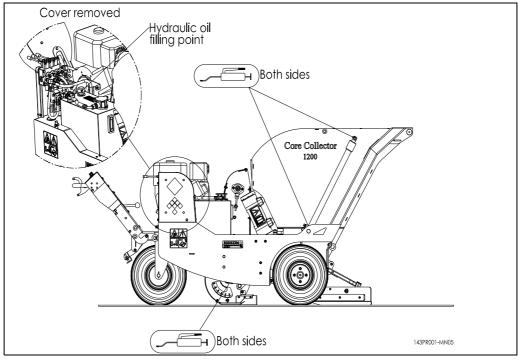


Figure 14



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Use EP2 lubrication grease. Bearings without grease nipples are maintenance-free and do not need to be lubricated.

10.1 TENSIONING THE CONVEYOR BELT

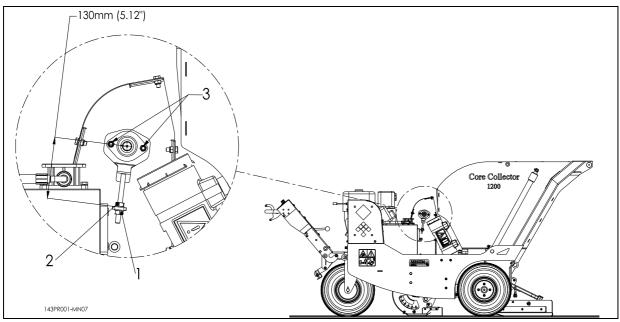


Figure 15

In case of mounting a new conveyor belt or retensioning an existing one, the conveyor belt should be adjusted.

The procedure is as follows (see Figure 15):

- 1. Loosen the lock nut (1) a few turns.
- 2. Loosen the nuts (3) a single turn.
- 3. Repeat Items 1 and 2 at the other side of the head.
- 4. If the belt is tensionless, the distance to the centre is approx. 130 mm (5.12").
- 5. Tension the belt 3 mm (0.12") by turning the nuts (2) at both sides of the head.
- 6. Tighten the nuts (1) and (3) at both sides of the head.
- 7. Start the Core Collector and let the conveyor belt run for approx. 30 minutes until it runs aligned.



1. The conveyor belt may not rub against the sides of the head. If the conveyor belt rubs against a side of the head, turn the side upwards to align the belt.

⚠ Excessive tension can shorten the life span of the conveyor belt.

11.0 TROUBLE SHOOTING (PROBLEM ANALYSIS)

Problem	Possible cause	Solution
Engine does not start/run.	No petrolNo ignition	 Check the petrol level. Use the choke. Check the petrol cock. Check the fuel filter. Check the switches. Check the wiring. Check the ignition.
Hydraulic faults	LeaksNo oil pressure	Check the parts and repair the leaks. Pump is damaged. Overpressure-relief valve is not adjusted correctly. No pump drive. Engine does not run. Check whether all hydraulic components are connected correctly.
No material is collected.	 Core collector head is not properly on the subsoil. Conveyor belt slips. Conveyor belt is blocked. Conveyor belt is worn out. Hydraulic problem 	 Check whether the head is blocked and remedy this. Check the hydraulic system. Tension the conveyor belt. Check the conveyor belt and remedy the blockage. Replace the conveyor belt. See hydraulic faults.
A lot of material remains on the ground.	 Windrow plates are not properly on the subsoil. Conveyor belt is worn out. 	 Check whether the windrow plates are adjusted properly (see Chapter 5.0). Replace the conveyor belt.
Wheels are slipping.	No grip Tyre pressure is too high.	 Surface is too wet. Wait for better conditions. Lower the tyre pressure to get more grip.
Receptacle is not lifted.	Too much material in the receptacle.Hydraulic problem	 Manually remove material until the receptacle can be lifted. See hydraulic faults.
Machine steers heavily.	Tyre pressure is too low.Bearing bushes of the steering pole are worn.	 Increase the tyre pressure. Replace the bearing bushes of the steering pole.
Squeaking noises during the machine's operation	Bearings need greasing or are worn out.	Grease the bearings with EP2 grease or replace them.

12.0 MAINTENANCE

Time schedule	Check/Grease point	Method
Before <u>every</u> use	 Check for loose bolts/nuts. Check oil level in the engine and hydraulic system. Check for hydraulic leaks. Presence and readability of the safety stickers (Figure 7) 	 Tighten loose bolts/nuts with the correct tightening moment. If necessary, top up. Remedy the leakage. Replace these if not present or damaged.
After the <u>first</u> 50 working hours(new or repaired).	 Grease the bearings. Check for loose bolts/nuts. Check the tension of the conveyor belt. Replace filters (fuel & hydraulic filter) 	 Use EP2 grease Tighten loose bolts/nuts with the correct tightening moment. If necessary, adjust the tension of the conveyor belt. Use original filters (see the Parts Manual).
After <u>every</u> 100 working hours or annually	 Grease the bearings. Check for loose bolts/nuts. Check the tyre pressure. Check the tension of the conveyor belt. Check the wear & tear of the sleeve bearings in all points of rotation. 	 Use EP2 grease Tighten loose bolts/nuts with the correct tightening moment. Make sure that the tyre pressure is 1.5 - 2 bar (21.8 - 29 psi) Adjust the tension of the conveyor belt. If necessary, replace these.
After <u>every</u> 500 working hours or annually	 Replace the hydraulic filter. Replace the hydraulic oil. 	 Use original filters. Drain off the old oil in compliance with regulations.



It is important to clean the Core Collector regularly, in particular the conveyor belt. If a high-pressure sprayer is used, avoid then the bearings and hydraulic components.

See the manual of the engine for maintaining the Briggs & Stratton engine. This manual is included in the delivery of the Core Collector.

See the Parts Manual for part numbers and schematic drawings.