

Table of Contents

1. Introduction	H1
2. Warranty and liability	H2
2.1 Warranty	H2
2.2 Liability	H2
3. Safety and the environment	H3
3.1 General safety	H3
3.2 Environment.....	H3
3.3 Warning labels and pictograms.....	H4
4. Checks before and during use	H5
4.1 Checks needed before use	H5
4.2 Shortening the PTO shaft	H5
4.3 Connecting the SAMON Potato Windrower	H6
4.4 Inspections after +/- 5 meters.....	H6
4.5 Inspections after +/- 5 ha	H6
4.6 Setting harvest knives	H6
4.7 Setting the shakers.....	H7
4.8 Setting disks and diabolo rollers	H7
5. Maintenance	H8
5.1 Lubrication schedule	H9
5.2 Gear drive maintenance.....	H9
5.2.1 Topping up the gear drive oil	H9
5.2.2 Changing gear drive oil.....	H9
6. Transport and storage	H10
6.1 Transport by transport vehicles	H10
6.2 Transport by tractor	H10
6.3 Storage	H10
7. Ordering parts	H11
8. Troubleshooting	H12

1. Inleiding.

This edition of the manual is intended for buyers of a SAMON Potato windrower. It contains information for the use and maintenance of this machine.

When this guide was compiled the utmost care was taken to ensure that the illustrations and technical data are correct and current for this manual.

Ellens Landbouwtechniek BV recommends users to carefully read this manual, instructions, directions and comments before using the machine.

References to the left or right side of the machine are determined based on the driving direction of the machine.

Ellens Landbouwtechniek BV reserves the right to change the content of this manual without notice.

This machine was designed in accordance with the provisions of the machinery directive 89/392/EEC + amendments.

2. Warranty and liability.

2.1 Warranty.

SAMON agricultural machinery comes with a warranty period of 1 season.

SAMON Potato windrower are designed and intended for harvesting potatoes.*

If the SAMON Potato windrower is used in a manner other than intended such will be considered to be improper use.

* For harvesting any other type crops, always first check with your Samon dealer.

This warranty is provided on construction defects in the machine encountered during normal use.

Parts that are subject to wear are not covered by this warranty, these are:

- Sprockets, chains, guide wheels,
- Sieve belts,
- Harvest knives
- Bearings,
- Coulter disks,
- Other parts subject to wear.

The Warranty on hydraulic components, PRO shafts and gear drives is given only on construction defects of the components, which result in failure, in the opinion of the producer.

This warranty lapses in the following instances:

- Constructive adjustments and changes to the machine without permission from Ellens Agricultural Engineering BV.
- Installation and use of components on or to the SAMON potato windrower that has an adverse impact on the solidity of the construction.
- Failure of components due to maintenance intervals not being observed.
- Changes to or non-adherence to adjustments and settings prescribed, which could result in damage.

Our dealers and manufacturing service points are all available to provide information and guidance.

2.2 Liability.

Ellens agricultural engineering BV is not liable for damage to Samon agricultural machinery; tractors; machines of third parties; injuries to humans, animals and products as a result of:

- improper use.
- not following instructions and instructions described in the manual.



NOTE!!!

The SAMON Potato windrower must be operated, maintained and repaired by persons who are familiar with the machine and its safety procedures.

3. Safety and the environment.

3.1 General safety.



NOTE!!!

Make sure that all persons that work with the SAMON Potato windrower and/or that perform maintenance on it read this manual carefully and take the required precautions for their own safety and others in the area while operating the SAMON Potato windrower.

Always keep the following points in mind when working with or on the SAMON Potato windrower.

- The SAMON Potato windrower must only be operated, maintained and repaired by persons who are familiar with the machine and who are familiar with the safety procedures.
- When performing inspections and maintenance on the SAMON Potato windrower always switch the tractor engine off and remove the key from the ignition.
- The SAMON Potato windrower is equipped with rotating sieve belts that can entrap body parts. Never come close to a SAMON Potato windrower while in operation.
- Always wait until the sieve belts have come to a complete halt before approaching the machine.
- Keep in mind that the sieve belts will keep turning for a while after the SAMON Potato windrower has been switched off.
- When an object is hit, switch off the SAMON Potato windrower and check for damage before switching back on again.
- The SAMON Potato windrower contains a number of parts that are fitted locking pins and safety belts and/or chains. These must always be connected.
- Damaged and broken safety devices and locking agents must be replaced immediately.
- Protective covers, sleeves and rubber flaps must always be undamaged. Always replace when dented or cracked.
- Always use original SAMON parts as they are specifically designed for the Samon Potato windrower.

3.2 Environment.

For ecological reasons cleaning and maintenance to the SAMON Potato windrower must take place on a hard, liquid-proof floor.



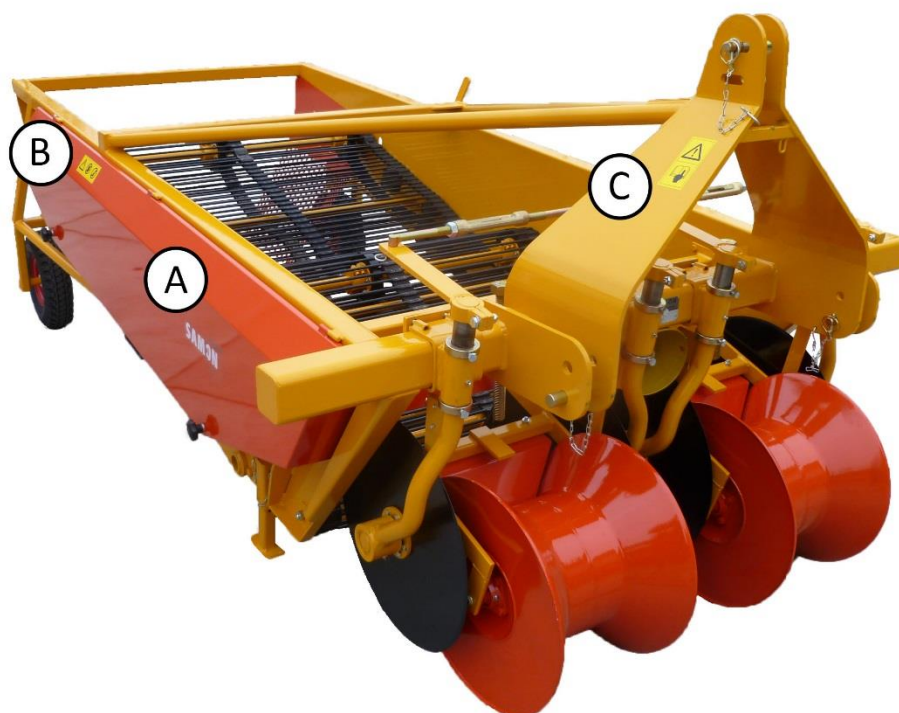
NOTE!!!

Dispose of used lubricants in an environmentally friendly manner. We recommend delivering old oil in a closed tank at a recycling centre or a collection point. Never dispose of old oil in a ditch, drain or sewer or on the soil.

3.3 Warning labels and pictograms.

Each SAMON Potato windrower is fitted with the following stickers and warning pictograms:

	Description:	Measurements.: (w x h) (cm)	Order no.
A:	"Samon" sticker	24.8 x 7.8	TL6304
B:	"Be careful with your hand/foot" sticker	19.3 x 6.4	TL6309
C:	"Check the manual" sticker	13.3 x 6.4	TL6310



Potato windrower sticers.

If any of these stickers should be missing or illegible you can order a replacement at your SAMON dealer.

4. Inspect before and during use.



WARNING!!!

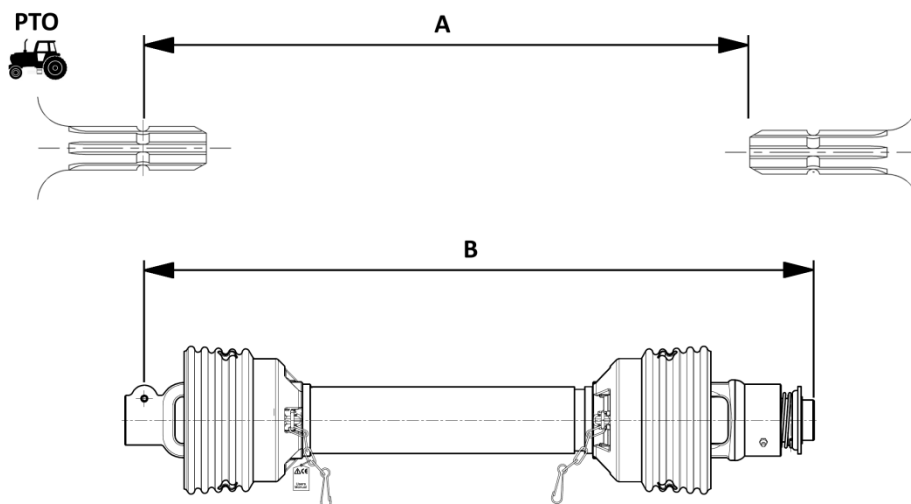
When performing maintenance on the SAMON Potato windrower always switch the tractor engine off and remove the key from the ignition.

4.1 Checks to be performed before use.

- Check the gear drive for leaks.
- Check the tire pressure. (4.5 Bar)
- Check the length of the PTO shaft (see 4.2)
- Check the protective cover of the PTO shaft for cracks.
- Check that the safety chains of the PTO shaft are mounted.
- Check if the locking clips and safety cords are in place.
- Check the drive chain for cracks and tears.
- Check the tension of the drive chain and do so regularly while in use.
- Check the harvest knives for damage and wear.
- Check the sieve belt and drive wheels for damage and wear.

4.2 Shortening the PTO shaft.

If it should appear during inspection that the PTO shaft is too long, it can be shortened as follows:



- Connect the machine to the tractor
- Position the PTO shafts together as short as possible.
- Measure distance "A" of the PTO shafts.
- Measure distance "B" of the PTO shafts.
(See the illustration for the measuring points)
- Subtract length "A" from length "B"
- Shorten the PTO shaft with the result (see example)

Calculation example:

A=400 mm
B=450 mm

$B(450) - A(400) = 50 \text{ mm} + 10 \text{ mm}$
Trimming length = 60 mm

4.3 Connecting the SAMON Potato windrower Lifter.

- Connect the machine to the tractor
- Attach the mechanical pins and confirm with the locking clips.
- Check that the top rod is free.
- Mount the PTO shaft (540 PTO).
- Put the safety chains of the protective cover of the PTO.
- Make sure both supporting legs are retracted secured with the locking pins (green arrow 4.6)

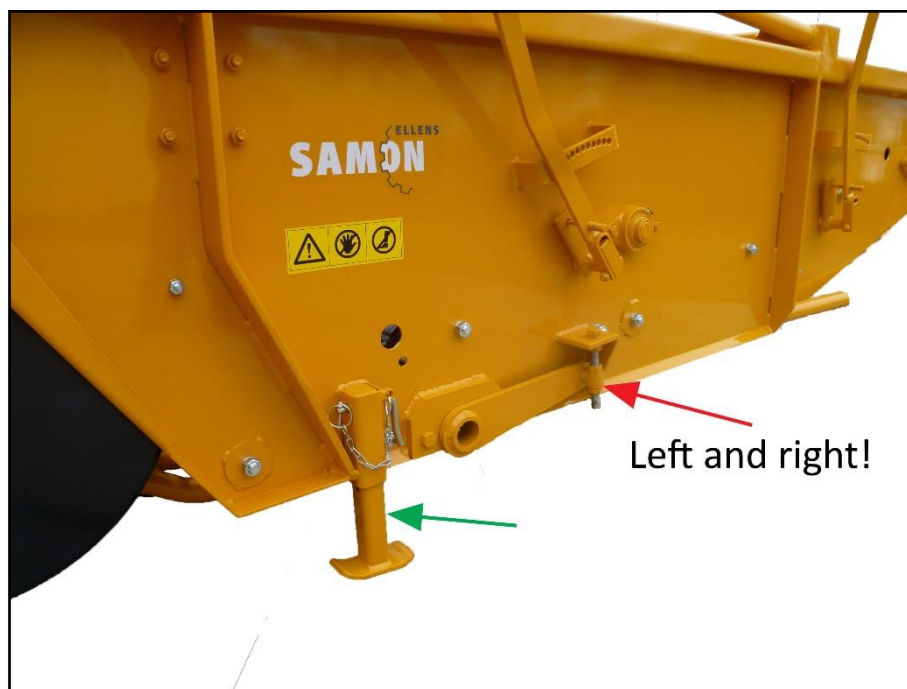
4.4 Inspection after \pm 5 metres.

- Check if the potatoes are damaged.
- Check if the collecting trays are adjusted correctly.
- Check the angle of the harvest knives (4.6).
- Check the disc setting (4.8).
- Check that the top rod is free.

4.5 Inspection and maintenance after \pm 5 ha.

- Inspect the sieve belt for cracks and tears.
- Check the tension of the drive chains and adjust if necessary.

4.6 Setting harvest knives.



The angle of the harvest knives is adjustable with the bolt pointed with the red arrow. We recommend to place the harvest knife parallel to the first sieve belt.



NOTE!

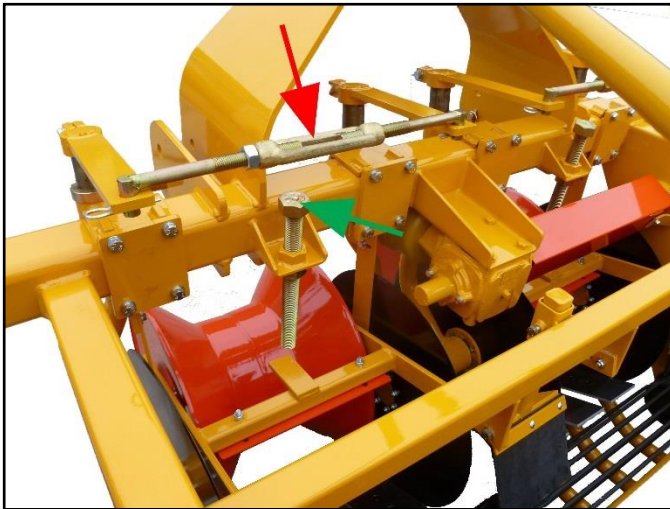
Make sure that that you equally adjust the angle of the harvest knives on the left and the right side of the machine.

4.7 Adjust the shakers.

The shakers can be adjusted on the sieve belt by turning the handles on the side of the SAMON Potato windrower. Turn the handle to the left to increase the intensity of shaking.

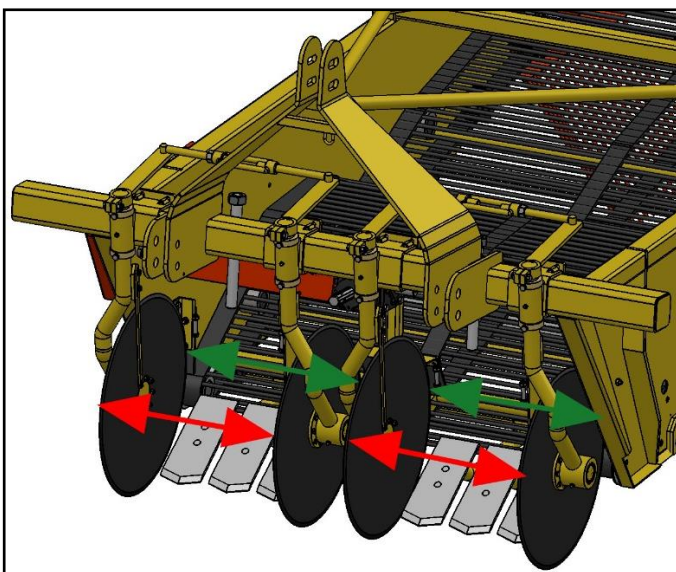


4.8 Setting disks and diablo rollers.



Red Arrow: Setting disks

Green arrow: Setting maximum height diablo rollers.



Check if the spacing between the disks in the back (green arrow) is bigger than in the front (red arrow). The difference should be 2 to 3 cm.

5. Maintenance.



WARNING!!!

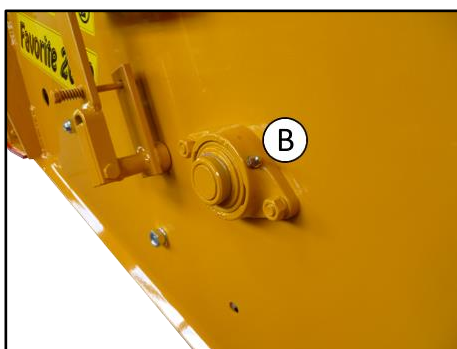
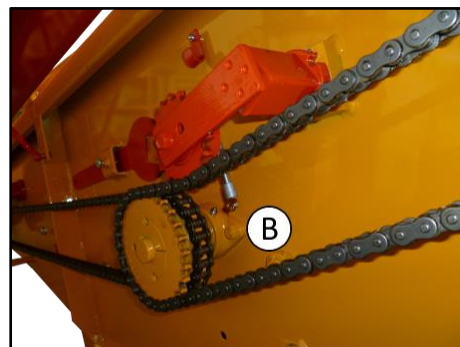
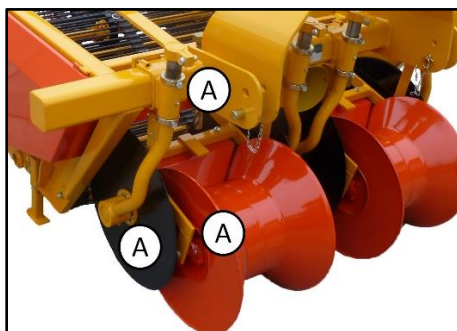
When performing maintenance on the SAMON Potato windrower always switch the tractor engine off and remove the key from the ignition.

5.1 Lubrication schedule.

Lubricate periodically to ensure that the SAMON Potato windrower works optimally.

Schedule for lubricating the Samon Potato windrower.

Lubricating point:	Interval:	Item:
A	8 hours	Disks, diablo rollers.
B	8 hours	Bearings, coulter disks, chains chain tensioner, wheels, pressure rollers.
C	50 hours	PTO shaft.



5.2 Gear drive maintenance.

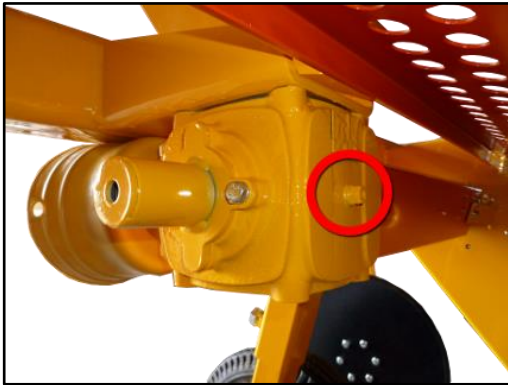
The gear drive is filled in the factory with gearbox oil (SAE 90).

NOTE!!!

The gearbox oil must be replaced every 2 years.

5.4.1 Topping up the gear drive oil.

- Make sure the SAMON Potato windrower Lifter is standing on a flat, level surface.
- Remove the PTO shaft.
- Remove the plug at the rear of the gear drive.
- Fill the gear drive with oil (SAE 90) until oil starts coming from the plug.
- Put the plug back in place.
- Mount the PTO shaft



5.4.2 Replacing the gear drive oil.

- Remove the PTO shaft.
- Remove the drive shaft.
- Remove the gear drive from the frame.
- Remove the plug at the rear of the gear drive.
- Drain the gear drive and collect the oil in a container - make sure to dispose of it in ecologically responsible manner.
- Put the gear drive back in the frame.
- Fill the gear drive with oil (SAE 90) until oil starts coming from the plug.
- Mount the plug.
- Mount the drive shaft.
- Mount the PTO shaft

6. Transport and storage.

6.1 Transport by transport vehicles

- Make sure the machine rests on its supporting legs (green arrow 4.6)
- When transporting the machine, make sure that it is firmly secured with rope or tensioning belts.
- Block the wheels and pressure rollers with wheel blocks.

6.2 Transport by tractor.

- Take local traffic rules into account when taking your SAMON Potato windrower onto a public road with a tractor.
- Before lifting the SAMON Potato windrower with a lifting device, make sure that it is switched off and that the sieve belts are not running.
- When driving, keep in mind that the SAMON Potato windrower has a tail swing.
- Also keep in mind that the sight of the driver is limited when the SAMON Potato windrower is connected to a tractor.

6.3 Storage.

- Clean the machine properly.



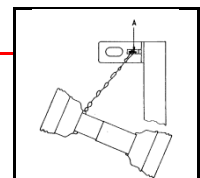
NOTE!!!

When using a high pressure cleaner, do not spray directly on/in the bearings or any electronics.

- Check the tire pressure and inspect for damage. (4.5 Bar)
- Check the drive chains.
- Check the harvest shaft and other parts subject to wear and replace in time.
- Check all bearings and replace when clearance is excessive.
- Inspect the sieve belt for damage and cracks.
- Inspect the intake roller for damage and cracks.
- Check the pressure roller for cracks and tears.
- Lubricate the machine as a whole (see Lubrication for more details).
- Check the oil level in de gear drive and top up if necessary.
- Check the cross connections and the turning parts of the PTO shaft for wear.
- Lubricate the cross connections and the turning parts of the PTO shaft.
- Check the protective cover of the PTO shaft for cracks.
- Check the safety chains of the PTO shaft.

NOTE!!!

When the machine is not in use (also for shorter periods of time) and the PTO shaft is left in the machine, attach the safety chain to the eye on the machine reserved for that purpose to prevent damage to the protective cover and the cross connection.

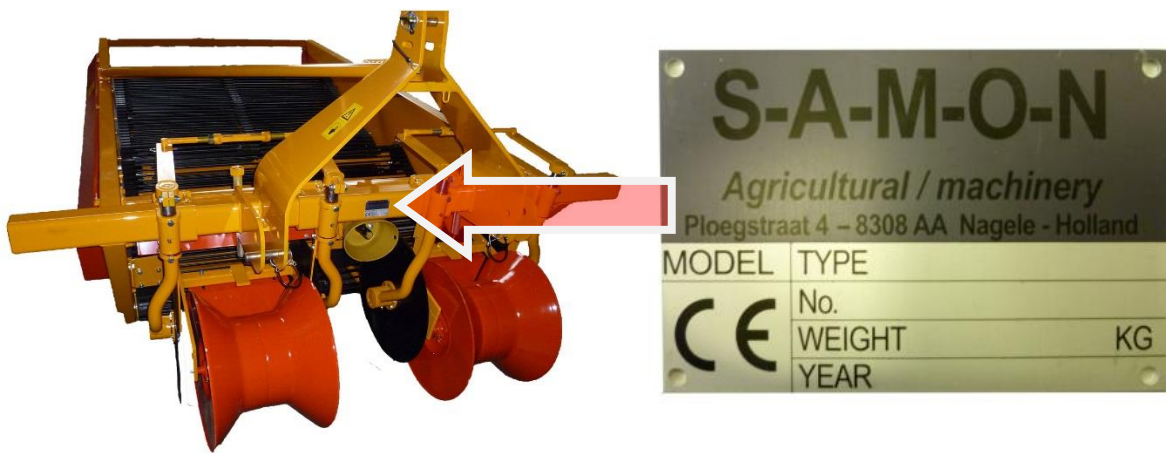


- Inspect the safety cords and locking clips for damage and cracks.
- Store the machine dry.

7. Ordering parts.

Follow the instructions below for ordering parts to ensure quick and correct delivery.

1. Only order parts from official SAMON dealers.
2. Include the type, model and serial number of your machine as stated on the type shield. The type shield is located on the frame of the PTO shaft.
3. Measure the width of the SAMON Potato windrower as many parts are dependent on the width of the sieve belt.
4. Always state the part number and the description thereof in full.



8. Troubleshooting.

General troubleshooting.

Defect:	Cause:	Solution:
The windrower does not want to go into the ground	Harvest knives are worn.	Replace the harvest knives.
	The top rod is too long.	Adjust the top rod.
	The maximum depth of the diabolo rollers is too low.	Adjust the maximum depth of the diabolo rollers (4.8).