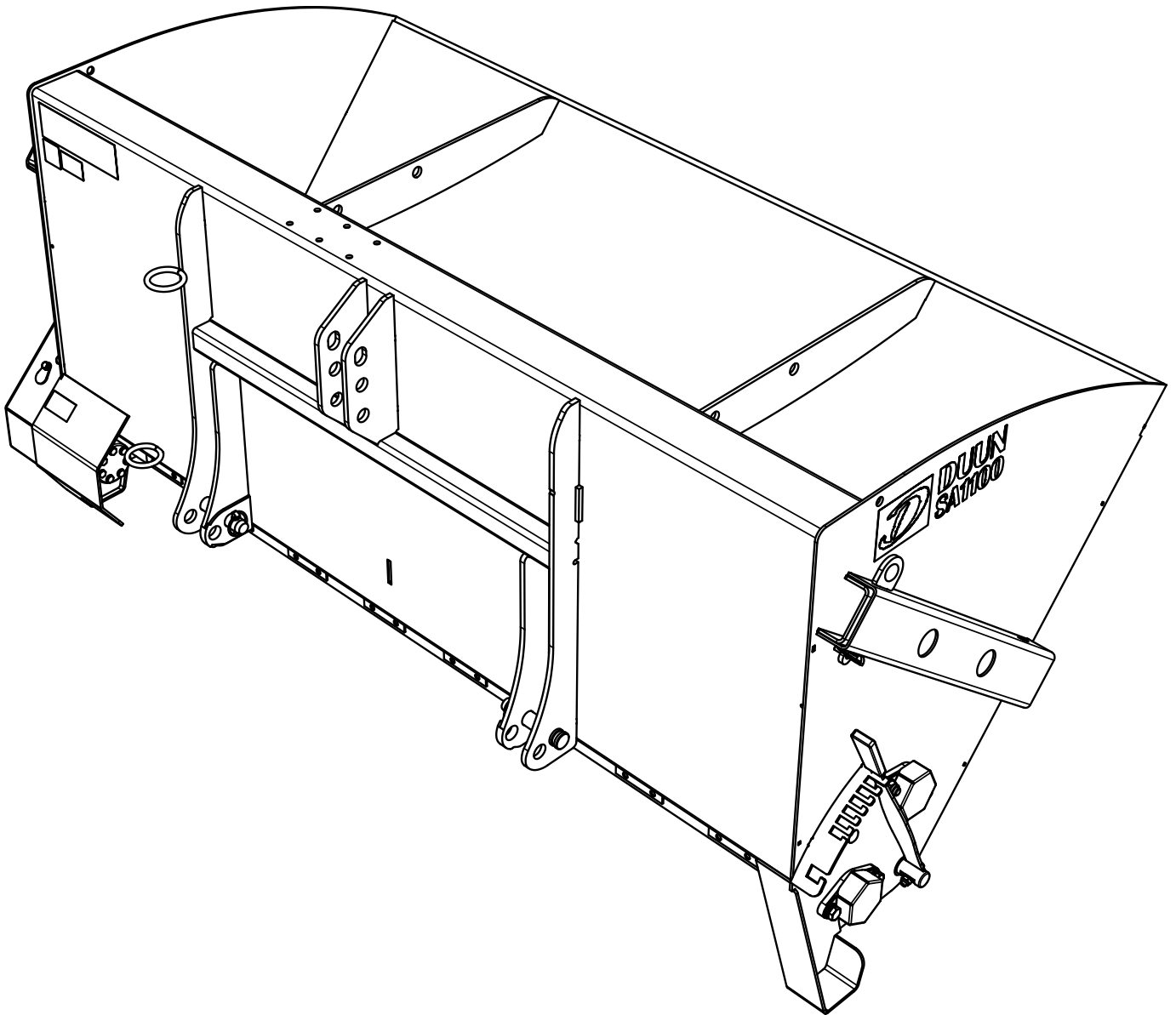


SA1100 Instruction manual

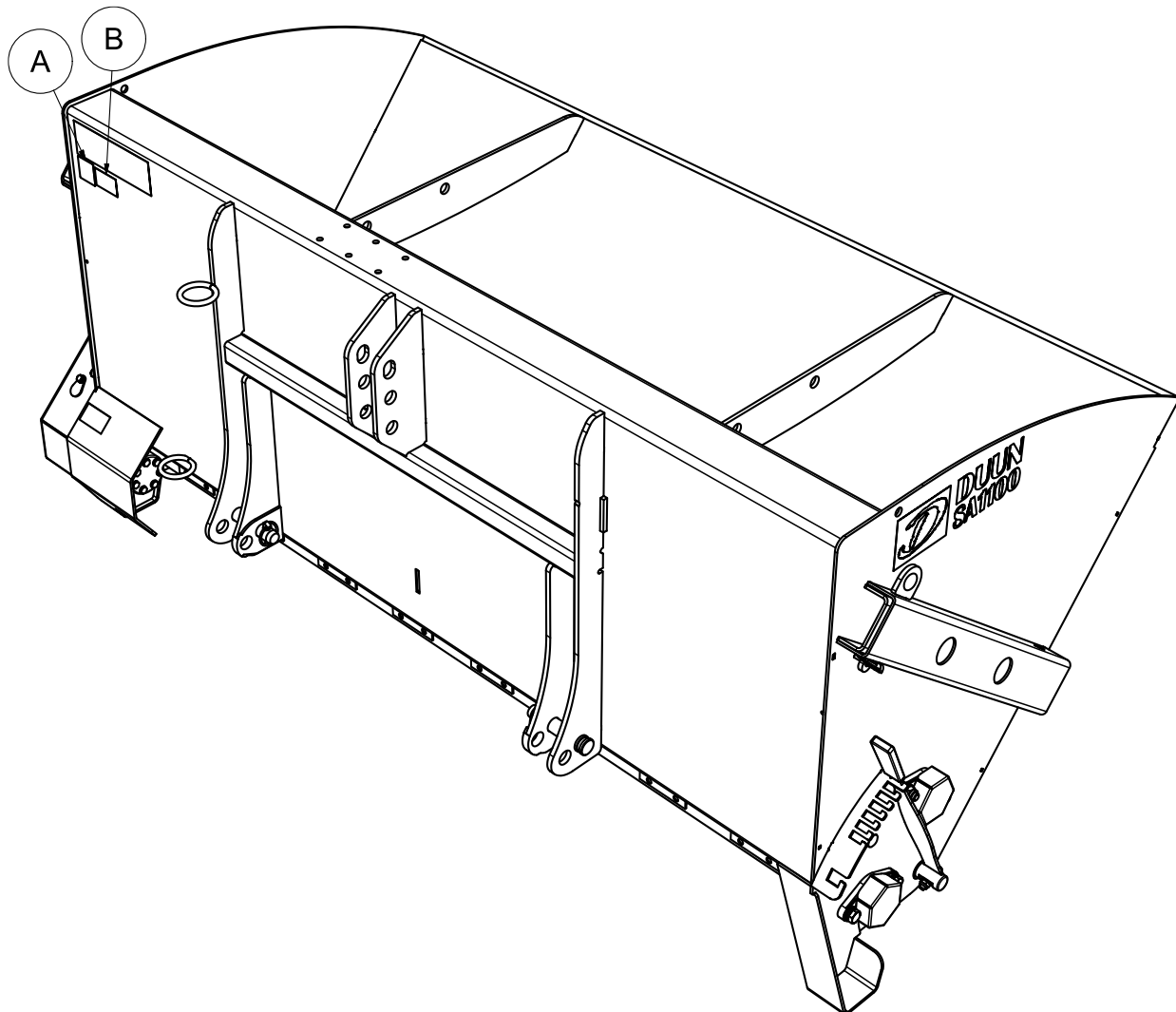


Congratulations on your Dunn SA1100 sand spreader.

All Duun tractor operated machines have been engineered and tested in close cooperation with representative users to produce functionally safe and user-friendly machines.

Please read this instruction manual before using the machine.

Good luck!



Machine identification

Serial number and manufacturer are indicated on badge (A)

Register serial number and delivery time as indicated.

Always specify serial number when requesting service for the machine.

Serial number

Time of delivery (month/year)

CONTENT

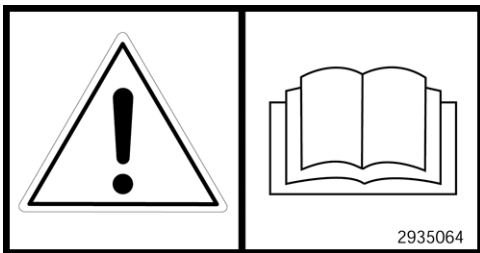
| | |
|----------------------------------|-----------|
| MACHINE INDETIFICATION | 2 |
| SAFETY | 4 |
| WARRANTY TERMS | 6 |
| TECHNICAL DATA | 7 |
| PREPARATION FOR USE | 8 |
| PRACTICAL USE | 9 |
| SERVICE AND MAINTENANCE | 10 |
| DECLARATION OF CONFORMITY | 11 |

Safety

All operators, mechanics and the owner must always work carefully with agricultural machinery. Read and observe safety instructions in this instruction manual.

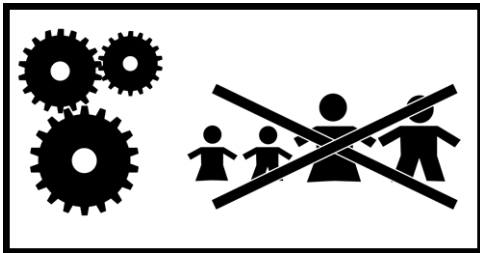


Be particularly aware of warning signs with this symbol, it marks measures that must be carried out in order to avoid accidents. The symbol appears in the instruction manual and on warning signs on the machine.



Instruction manual

All operators, mechanics and the owner must be well acquainted with the instruction in this instruction manual before the machine is taken into use.



Safety of the surroundings

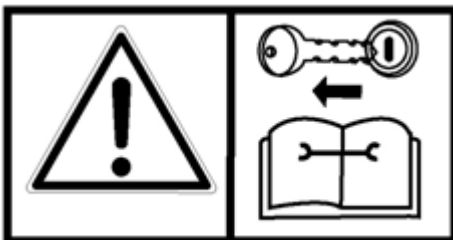
Be very careful when other people or animals are near the machine or tractor. Never start the machine when there are people or animals close to it, also never stand between the tractor wheels and the machine!

The rotating parts of the machines can cause serious damage to the body parts that come into contact with them.



Safe connection and use

Do not allow anyone to stay between the machine and the tractor when the machine is connected to the tractor. The same applies during the use of the machine. Make sure that the connection is carried out in a safe manner.



Safety in case of interruptions and maintenance

Remember always to stop the tractor's engine and remove the ignition key before you lubricate, adjust, clean, or carry out repairs. This is to secure that the tractor does not start before you have completed the operation.



Rotating parts – high risk of injury

Make sure that the feet are not under the support legs when adjusting and setting them down!



Sudden danger during maneuver

A fully loaded sand spreader forms a heavy weight arm at the back of the tractor. This means, during loading from the warehouse it can lift up the tractor in the front. The problem can be remedied with front weights or other load at the front of the tractor (loading device). Please pay special attention to this and also during transport.



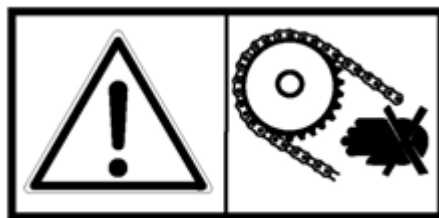
Hydraulic high fluid pressure

Be careful when you work with hydraulics. Wear eye protection and gloves. Hydraulic oil under high pressure may penetrate the skin and cause serious infections. See a doctor if you have sustained an injury. Make sure no one is close by when performing hydraulic functions.



Rotating parts output roller– high risk of legs injury

The rotating parts of the machine can cause severe damage to the body parts that come into contact with them. Avoid any contact with rotating parts and the immediate vicinity of these when the machine is in operation.



Yellow danger points - danger of pinching chains and chain wheel

Protective covers and moving parts are preferably marked in yellow.

Protective covers must always be fitted except for necessary maintenance and always with the engine stopped as mentioned under point **safe connection and use**. Pay special attention to the high risk of injury due to rotating chain wheel and chain.



Rotating parts output roller - high risk of hand injury

The rotating parts of the machine can cause severe damage to the body parts that come into contact with them. Avoid any contact with or near the rotating parts when machine is in operation.



Clothing and risk

Do not work in clothing that can be pulled into moving parts of the machine (for example scarves, and wide coats-sweaters). The rotating parts of the machine can easily catch such details and cause the major injuries.

Always lower the machine to safety rest at ground level when it needs to be parked. Never work under a lifted device unless it is mechanically secured against coming down. Before startup after servicing make sure all tools have been removed and brought into place. Before the machine is raised or lowered, make sure that no person is near or touching the machine.

If warning signs are removed during repairs or service, new signs should be installed immediately!

Warranty terms

Duun sand spreader have 12 months guarantee against defects in materials and workmanship.

Parts that are not originally manufactured by Duun Industrier as, for example, wheels, hydraulic parts, etc. are subject to these suppliers' guarantees and terms.

In cases where a repair is considered to be covered by the guarantee, the representative must inform the supplier's representatives that the repair is intended executed based on the guarantee.

In this context, the following information must be recorded:

- Product name
- The product's serial no. (see machine identification)
- Date of sale
- The product owner's address, telephone no.
- The seller with the address tel. no.

In case of such a repair, the supplier is presented with a claim within 3 weeks after the repair date.

Replaced parts are to be kept until a decision has been made with reference to the claim and the replaced parts are to be forwarded to Duun Industrier as for assessment if so required.

As the employment of the product is beyond our control, we may only guarantee the quality and do not accept liability for the product's general performance.

Duun Industrier as reserves the right to modify the design and specifications and/or make alterations and improvements without notification.

What is not included in the guarantee:

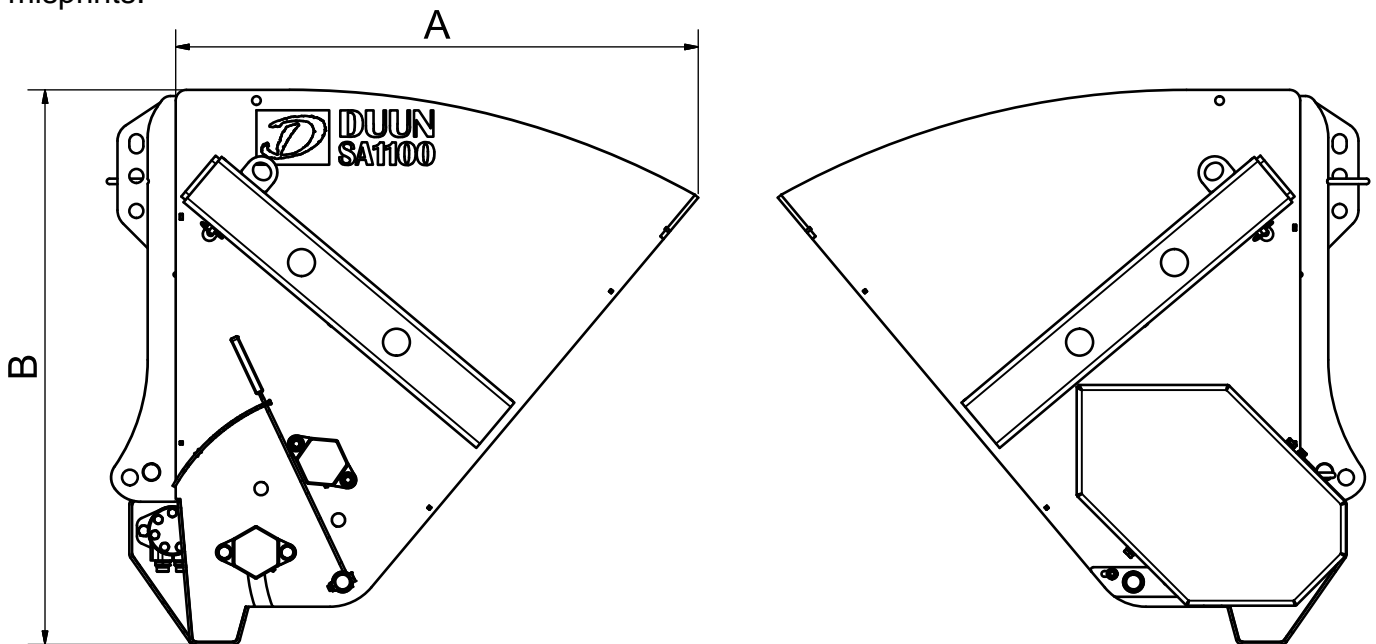
- The guarantee does not cover economic loss as a consequence of interruptions.
- The guarantee does not cover consequential loss due to defects.
- The guarantee does not cover damage to paintwork and rotating parts as a result of the spread of litter material with a high salt content.
- The guarantee does not cover defects or damage caused by misuse and uses that are not in accordance with the instruction manual's specifications and guidelines.

Technical data

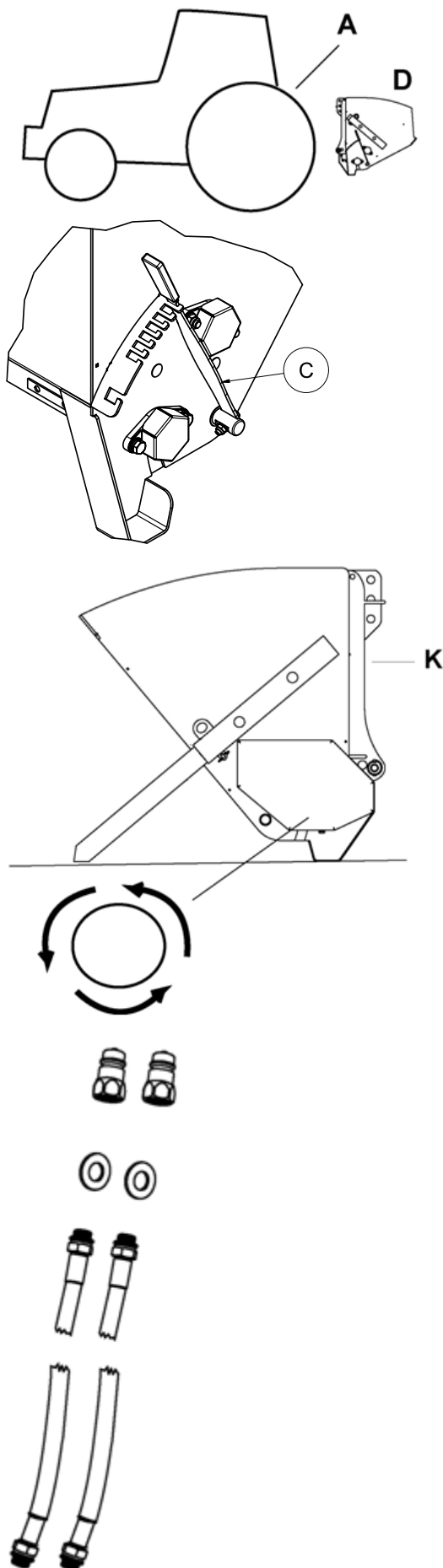
| Features | Sand spreader SA1100 |
|---|----------------------|
| Total filling volume in liters | 1100 liters |
| Weight | 450 kg |
| Total width of the container, direction of travel (spreading width) | 2000 mm |
| Total length of the container in the direction of travel (A) | 970 mm |
| Total height (B) | 1030 mm |
| Machine's total width direction of travel | 2180 mm |
| The total length of the machine in the direction of travel | 1090 mm |
| Oil engine capacity | 200cc |
| Diameter of output roller | 114mm |
| Dimension of chain feeder drive | 3/4" |

All measurements and weights are approximate values.

Duun Industrier is continuously working on product improvements. We therefore reserve the right to make changes to specifications without prior notice. We take reservations for any misprints.



Preparation for use



Quantity regulation

The sand spreader is delivered ready for use with a standard three-point linkage for connection to a tractor. The spread rate itself can be regulated in three ways or by combining these:

- The oil flow to the hydraulic motor is increased-reduced with the settings on the tractor for this (A).
- Regulate the oil flow to the hydraulic motor with a stepless control valve that is mounted between the hydraulic motor and the tractor's oil system.

(Accessories).

- The quantity can also be adjusted with the handle (C) by setting it in different positions during the use.

A

Parking - provided before joining

The support legs are placed in the farthest position so that the front wall of the sand spreader (K) is as vertical as possible before connection to the tractor.

The sand spreader can also be filled when it is in this position.

Make sure that the spreader stands firmly on a hard surface so that it cannot tip over and cause damage during storage.

Connection

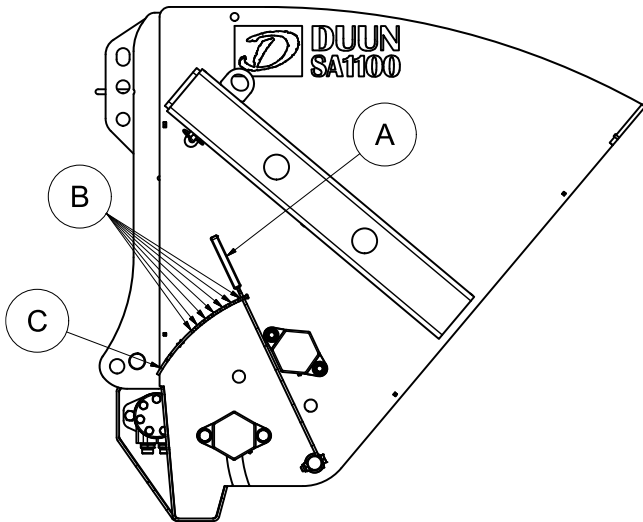
Check that no one is standing between the tractor and the machine during connection. Make sure that no pinching damage occurs during the connection.

Hydraulic hoses, safety

Check the hose connections if they are not stretched or cut during the use. Tighten loose hose connections and secure/fasten the advance of the fasteners.

Failure to secure hydraulic hoses can cause leaks and damage to the tractor and its components.

Practical use

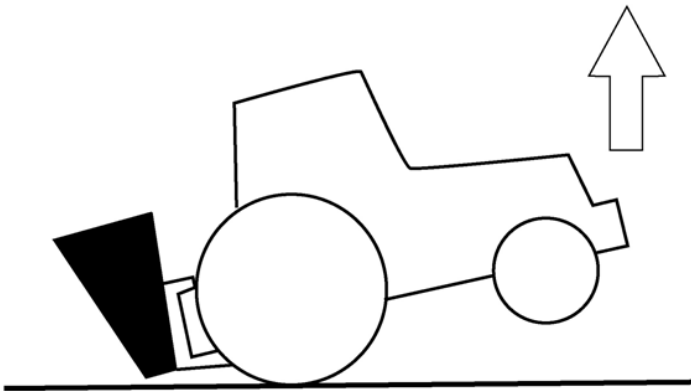


Regulation of spreading amount

The handle A can be placed in 7 different positions (B) to regulate the quantity.

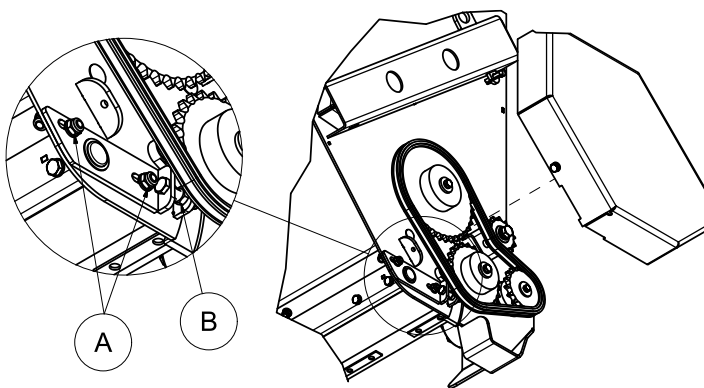
Emptying before storage

By moving the handle (A) to position (C), the spreader can be easily emptied by driving the roller at the same time.



Large total weight and dangerous moments!

Pay particular attention to the fact that a fully loaded sand spreader constitutes a significant total weight which can entail the risk of tilting and displacement of the tractor's center of gravity during transport with less control.



Adjustment of skewed distribution

If the spreader spreads more on one side, it is possible to regulate this on the hatch that presses against the spreading roller.

Loosen the screws marked A and adjust with screw B to get the spreader straight.

A

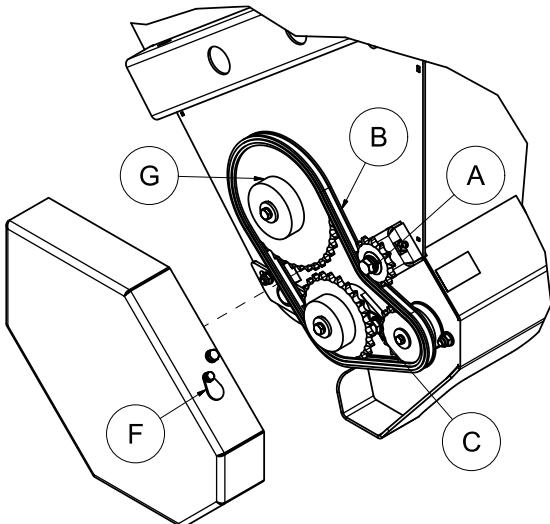
Service and maintenance

First of all

Before cleaning, lubricating, repairing or adjusting the machine, stop the engine and activate the handbrake and remove the ignition key during the work. Pay special attention to safety during maintenance work, park the machine in accordance with specified safety rules.

Screw connections checking

Screw connections that are under tension during the use must be tightened after two hours of operation.

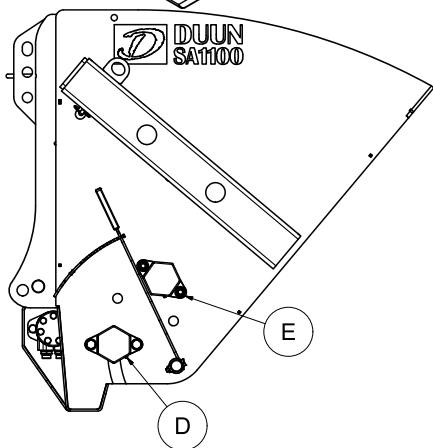


Chain tensioning

Check chain tension after two hours of operation on a new machine, and adjust if necessary. Access to the chain **B** is via the cover **F**. Tightening at the holding screw **A** for the chain tensioner. Suitable slack is approx. 1cm.

Cleaning after use

The sand spreader is cleaned after use, if high-pressure washers are used avoid spraying directly on bearing surfaces. Cleaning is particularly important to reduce corrosion damage if salty spreading material **A** has been used.



Lubrication of the bearings for the output roller

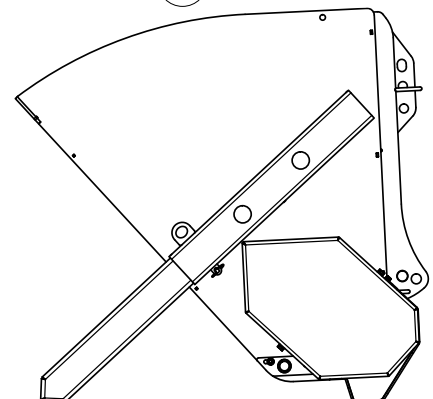
Interval: Once a month and by arrangement after the "season".

The lubrication point for this is the nipples **C, D, E and G**.

Lubrication points **C** and **G** are on the right-hand side and accessible after cover **F** is removed. Avoid pushing in too much grease as this can cause sealing rings to squeeze out + contribute to overheating of the entire bearing.

Recommended amount 3 grams per time. Recommended grease type is Lithium grease down NLG – grade 2 and viscosity ISO VG 220.

Consult the oil supplier if necessary. The grease nipples **D** and **E** are directly accessible as indicated.



It is not recommended to use sulphide grease for bearing lubrication.

Chains for output roller and agitator roller

Interval: Every 20 hours. The chain is lubricated with chain spray, or with grease.

Lubricate the chain immediately after the use, until it is warm, and the lubrication will absorb well into the chain.

The recommended type of grease is a sulphide grease with lubrication properties adapted to these conditions of use.

Declaration of conformity

Responsible person

Name: Karl Martin Eggen
Position: CEO
Company name: Duun Industrier as
Address: N-7630 Åsen
Norway
Telephone: +47 74 01 59 00

Person responsible for the technical documentation: Rolf Even Duun

Declares that the following machine: SA1100 Sand spreader
Manufacturer: Duun Industrier as
Type: Duun Sand spreader SA1100
is in accordance with:

Directive 2006/42/EC Machinery

Signed by:



Karl Martin Eggen

Åsen, 15.09.2020