

OPERATOR'S MANUAL
Salt & Sand Spreader



INTRODUCTION

Dear Customer

Thank you for buying an Egholm product.

The Egholm 2001 is a Danish designed and manufactured product which offers a very flexible way of maintaining outdoor areas.

Optimal performance of your Egholm Salt and Sand Spreader:

To ensure the optimal performance of your Egholm Salt and Sand Spreader, please read this operator's manual carefully before starting to use the machine. Failure to do so can result in personal injury and damage to the machine.

Safety:

The Salt and Sand Spreader is equipped with various devices to ensure optimal operational safety both for the user and the surroundings. We ask you to pay particular attention to page 5. The machine must only be serviced by professionals.

The Salt and Sand Spreader is designed only for use by professionals. On delivery, the user will receive thorough training to become a competent operator. Do not lend the machine to anyone who has not been thoroughly trained and has not read this manual carefully.

The operator's manual should be considered as a permanent part of the machine and so must remain with it if the machine is sold.



Warnings:

Some items in this operator's manual are marked with this warning symbol.

The warning indicates areas where extra care has to be taken to avoid personal injury or damage to the machine and its accessories. The warning also shows what you should pay special attention to.

Reservations:

As it is the Egholm policy to make continuous improvements, we reserve the right to alter the specifications and equipment at any time without notice. Egholm Maskiner A/S accepts no liability for errors or shortcomings in the operator's manual.

Contact us:

Should you have questions of any kind regarding your new Egholm product, do not hesitate to contact Egholm Maskiner A/S.

Best regards

Egholm Maskiner A/S - Transportvej 27 - DK - 7620 Lemvig

Tel: (+45) 97 81 12 05 - Fax: (+45) 97 81 12 10

e-mail: egholm@egholm.dk - www.egholm.dk

CONTENTS

1. General information	Page:
1.1 Safety	5
1.2 Technical data	7
2. Instructions for use	
2.1 Assembly of the roller stand	8
2.2 Assembly/disassembly	8
2.3 Start-up	9
2.4 Adjustment	10
2.5 Assembly/disassembly of the stirrer system	11
2.6 Important!	12
2.7 Field of application	12
3. Service and maintenance	
3.1 Cleaning	13
4. Conditions	
4.1 Warranty	15
4.2 Conditions of complaint	16
4.3 Disposal	16
4.4 EC Declaration of Conformity for Machinery	17

1. GENERAL INFORMATION

1 General information

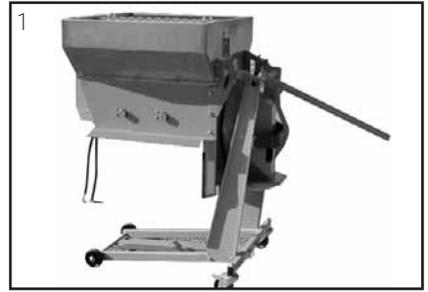
The Salt and Sand Spreader was designed especially for the Egholm 2100. It will ensure winter maintenance by use of salt, sand, gravel and grit.

The Salt and Sand Spreader can ideally be combined with the Dozer Blade, the Snow Blower and the Snow Sweeper. In that way the driver is enabled to remove snow and spread salt at one go and thereby provide a safe route for the motorists and pedestrians.

A special designed roller stand enables the one person to safely mount or dismount the spreader. (Picture 1)

The Salt and Sand Spreader features a stainless steel hopper and a built-in air scoop, supplying the cooler with fresh air and thereby also protecting the engine of the basic unit from the fine salt particles.

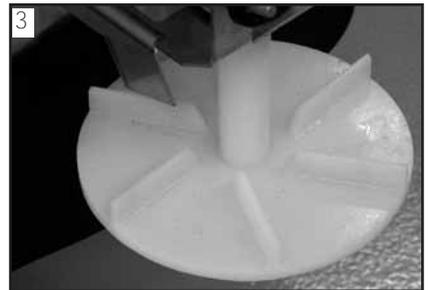
The construction features only robust components. The new deflector plate with high wear resistance handles salt, sand and gravel. (Pictures 2 and 3)



Roller stand



Deflector plate



1. GENERAL INFORMATION

1.1 Safety

Mounting:

Before mounting the Salt and Sand Spreader, check that the console cover is closed and locked. (Picture 1)

Make sure the Salt and Sand Spreader is mounted correctly and that the locking handle is left in locked position. (See section 2.2)



Prevent accidents behind the Salt and Sand Spreader:

Avoid fingers and toes near the rotating deflector plate. (Picture 2)



Keep a safe distance to the Salt and Sand Spreader

Make sure there is no one close to the machine when it is in use.



Avoid crushing fingers:

Keep your hands and fingers away from areas where there is a danger of crushing. (Picture 3)



Avoid roll-overs:

Do not drive the machine in a place where it can slide, tip or roll. Do not drive on slopes with an incline of more than 10°.



N.B.!

As it is articulated, the rear of the machine swings out when turning. Make sure no one is near the machine while it is in use.

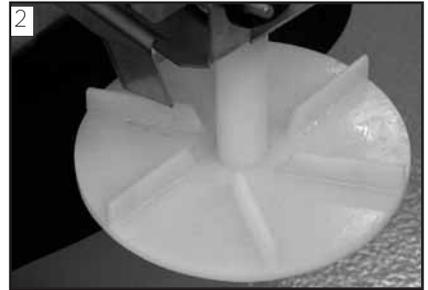


Avoid blows from the lever when mounting the spreader:

Avoid blows from the lever when lowering the spreader. Keep a firm grip on the lever until the spreader rests safely on the machine. (Picture 4)



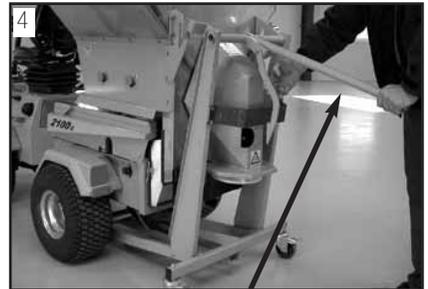
Bonnet lock



Deflector plate



Lowering the Salt and Sand Spreader



Lever

1. GENERAL INFORMATION

Safety grating:

Never use the Salt and Sand Spreader unless the container is covered by a meshed grid safety grating. (Picture 1)

Filling In salt and gravel:

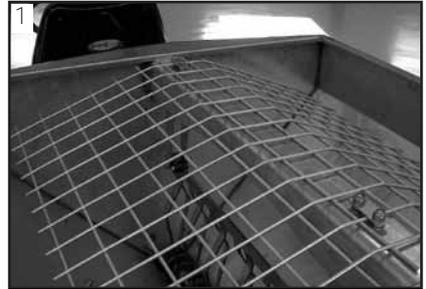
Never fill the container with material to a higher level than the container edges. The top point of the material must not be higher than the edges of the container.

Rear protective guard:

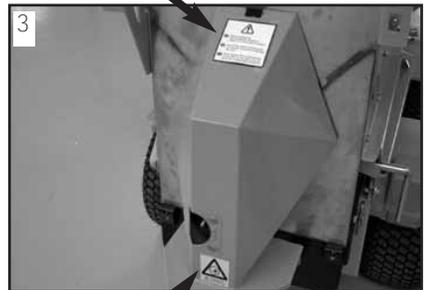
The rear protective guard must always remain in its holders except during cleaning (see section 3.1). Before removing the guard, always stop the machine and detach the hydraulic hoses to the Salt and Sand Spreader. Be very careful - there are hot hydraulic parts, a rotating feed screw as well as a rotating deflector plate behind the guard. Make sure you are fully familiar with the warning labels on the guard. (Pictures 2-4)

The deflector plate:

Keep away from the deflector plate when the machine is in use.



Safety grating



1. GENERAL INFORMATION

1.2 Technical data

Mounted:

Length: 2225 mm

Width: 1015 mm

Height: 1265 mm

Weight: 574 kg

Dismounted on roller stand:

Length: 1175 mm

Width: 800 mm

Height: 1350 mm

Weight

Roller Stand: 31 kg

Salt and Sand Spreader: 89 kg

Specifications

Volume: 210 Litres

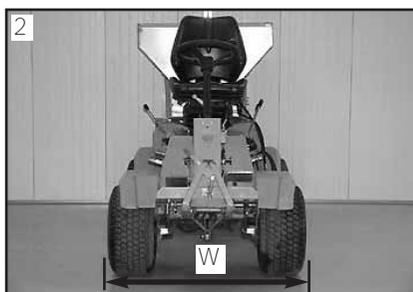
Spread width: 1-5 metres.

NB!

Specifications may be changed without prior notice.



Side view



Front view



Mounted on the roller stand

2. INSTRUCTIONS FOR USE

2.1 Assembly of the roller stand

On delivery, you will find the roller stand collapsed. Before use the roller stand is to be assembled as follows:

- A) Unpack and unfold the roller stand.
- B) Assemble the roller stand with the two bolts included and it is ready for use. (Picture 1)

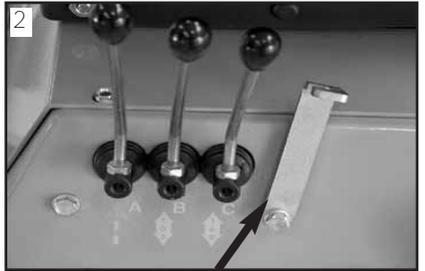


Two bolts on roller stand

2.2 Assembly/disassembly

Fitting the valve lever bracket:

Before starting use of the Salt and Sand Spreader, the bracket for the valve lever must be fitted in order for the valve lever to stay in activated position. Unscrew the bolt to the right of the valve block and fit the bracket in the shown position with the enclosed nut and bolt. (Picture 2)



Valve lever bracket

Mounting the Salt and Sand Spreader:

- A) Make sure that the console cover is closed before mounting the Salt and Sand Spreader. (See page 5, picture 1)
- B) Back up the basic unit to the Salt and Sand Spreader which is stored on the roller stand. When the console is placed directly beneath the Salt and Sand Spreader, stop the engine. (See operator's manual for the basic unit, section 2.2)
- C) Press down the lever, the beard releases the locking pawl and allows the Salt and Sand Spreader to be lowered onto the basic unit. (Picture 3)



Lower the Salt and Sand Spreader



Caution!

Avoid getting your fingers and feet caught when lowering the Salt and Sand Spreader.

- D) Release and pull away the roller stand.
- E) Push the Salt and Sand Spreader forward into place.
- F) The locking handle on the basic unit is activated and the Salt and Sand Spreader is now in position.



Locking handle

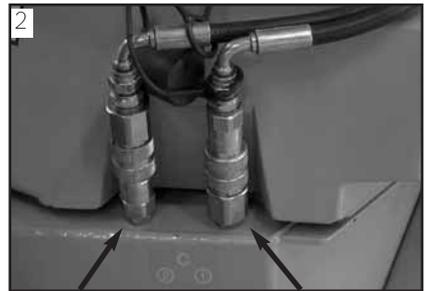
2. INSTRUCTIONS FOR USE

G) Make sure that the locking handle is left in locked position - the Salt and Sand Spreader is locked in place. (Picture 1). Pull the Salt and Sand Spreader to test a correct fit - it must not move.



The Salt and Sand Spreader is in place

H) Connect the hydraulic hoses:
If mounted, disconnect the snap couplings of the rear lifter.
Connect the snap couplings of the Salt and Sand Spreader to the connectors C1 and C2. (Picture 2)
For Salt and Sand Spreaders with a magnetic valve, connect the 12V plug to the output on the right side of the basic unit. (Picture 3)



C2

C1

Disassembly

Reverse the above procedure.



Caution!

Make sure that all hydraulic hoses (and the electrical plug) are disconnected and that they are not caught in something when driving away from the Salt and Sand Spreader.

2.3 Start-up

Start the basic unit. Then place lever C in the bracket. (Picture 4)

If the Salt and Sand Spreader is equipped with a magnetic valve (for switching the spreader on and off electrically), activate the switch for the power outlet. (Picture 5)

The Salt and Sand Spreader is now activated.



Power outlet



NB!

Before start-up, make sure the rear guard is positioned correctly.



Switch for power outlet



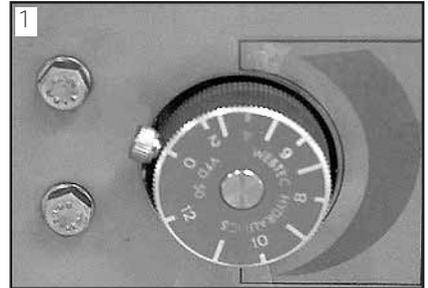
2. INSTRUCTIONS FOR USE

2.4 Adjustment

Amount spread:

To adjust the amount spread, turn the front knob on the left-hand side of the spreader. (Picture 1)
Turn the knob clockwise to reduce the amount spread per m².

Turn the knob counter-clockwise to increase the amount spread per m².
For additional details about spread settings, see the enclosed spreading chart.

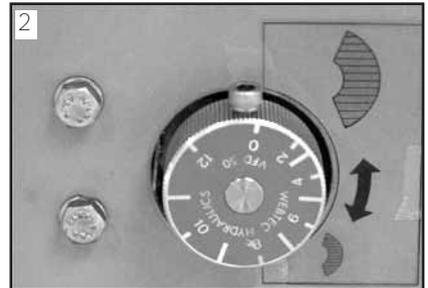


Amount spread

Spread width:

Spread width is the width of material spread by the spreader. The material will be spread in a semicircular pattern with equal amounts spread on either side of the basic unit.

To adjust the spread width, turn the rear knob. The spread width is adjustable from 1 to 5 m. (Picture 2)
Turn the knob clockwise to decrease and counter-clockwise to increase the spread width.

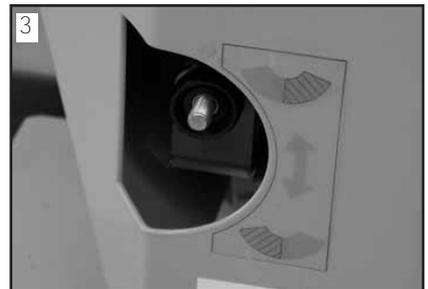


Spread width

Spread pattern:

The spread pattern refers to the way the material is spread on the ground, when the basic unit is not moving. Let the basic unit stand still for a few seconds and the spread pattern will be visible on the ground. To achieve an even spread pattern, turn the adjusting knob on the back of the Salt and Sand Spreader. (Picture 3) This will alter the spread pattern.

Turn the knob clockwise to increase the amount spread to the left.
Turn the knob counter-clockwise to increase the amount spread to the right.
For additional details about spread settings, see the enclosed spreading chart.



Spread pattern

2. INSTRUCTIONS FOR USE

2.5 Assembly/disassembly of the stirrer system

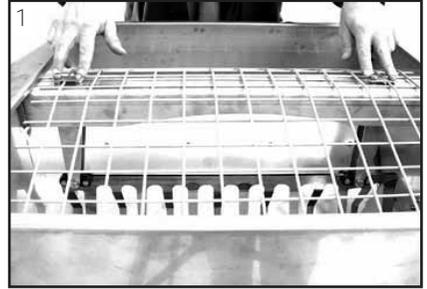
The stirrer system is necessary when spreading wet sand and is recommended for spreading sand and salt. We do not recommend the stirrer system when spreading grit or gravel as this material can be too heavy for the stirrer system.

Disassembling the stirrer system:

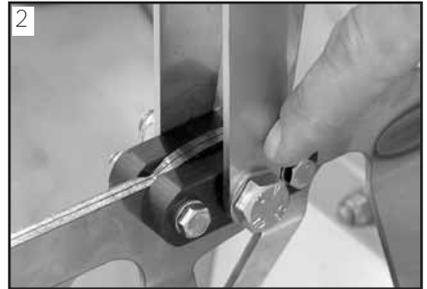
- A) Stop the engine and deactivate the valve lever for the Salt and Sand Spreader.
- B) Remove the safety grating by loosening the four nuts on top. (Picture 1)
- C) Remove the bracket holding the safety grating in place and the lift off the grid.
- D) Find and then the two 10 mm bolts which connect the stirrer system to the rest of the spreader. (Picture 2)
The stirrer system can now be removed. Be aware of the now unfastened sleeves!

Assembling the stirrer system:

Reverse above procedure.
Do not forget the two sleeves!



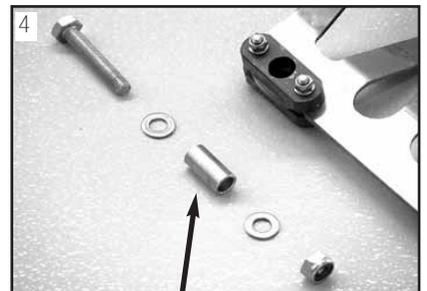
Four nuts hold the safety grating in place



Bolts for the stirrer system



Bolts, nuts, sleeves, etc.



Sleeves, etc.

2. INSTRUCTIONS FOR USE

2.6 Important!



Make sure never to put items larger than 1 cm³ in the Salt and Sand Spreader. These items can become wedged between the feed screw and the container and may even cause damage.



The Salt and Sand Spreader has been designed to stop before any components are damaged. Should the spreader stop, simply push the lever which activates the spreader briefly in the opposite direction. This will shortly reverse the direction of the feed screw and loosen any wedged objects. The manoeuvre may have to be repeated.

Roller stand

When dismantling the spreader and moving the spreader on the roller stand, always make sure the roller stand is on a level and firm surface.

2.7 Field of application

The Salt and Sand Spreader is only to be used with the Egholm Powerflex or the Egholm 2100.

Do not use the Salt and Sand spreader as a lime or fertilizer spreader.

Do not store corrosive materials in the Salt and Sand Spreader.

The maximum load on the Salt and Sand Spreader stored on the roller stand is 100 kg. For storage periods of less than a week, the maximum load is 300 kg.

3. SERVICE AND MAINTENANCE

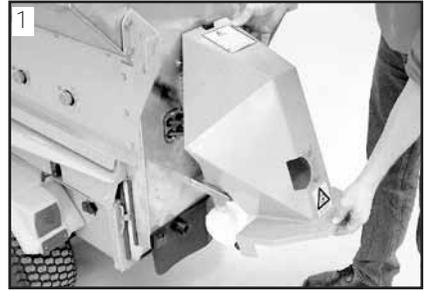
3.1 Cleaning

Daily cleaning will extend the life of the Salt and Sand Spreader significantly and ensure correctly functioning parts.

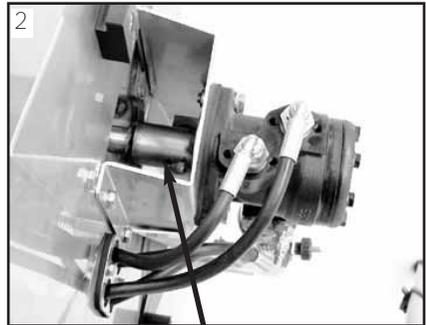
Daily cleaning:

- A) Remove and clean the snap couplings.
- B) Remove the rear guard to clean under it. (Picture 1)
- C) Dismount the Salt and Sand Spreader from the basic unit. See section 2.2.
- D) Clean the Salt and Sand Spreader thoroughly with water to ensure that all salt residue etc. has been removed from the container, chute, and deflector plate and from under the attachment. (Picture 2)

Remember to also clean the basic unit thoroughly.



Remove the rear guard



Clean

3. SERVICE AND MAINTENANCE

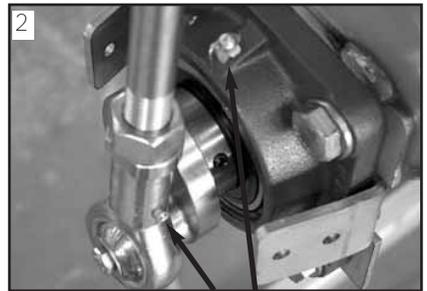
Periodic/In-depth cleaning:

At the end of the season or when storing the spreader for a longer period of time, corrosion prevention is essential.

- A) Complete all procedures listed under "Daily cleaning".
- B) Disassemble the front screen by removing the four bolts located at the bottom. Then simply pull off the screen. Clean the underlying parts thoroughly with water and dry them with a cloth. Finally, smear the parts with a rust-preventing fluid.
- C) Grease the bearings.
Only grease the large bearing if the stirrer system is not assembled. Also grease both of the joints if the stirrer system is assembled.
- D) Smear all parts of the spreader with rust-preventing fluid - in time, even stainless steel can corrode.
- E) Wearing parts such as the feed screw are not made of stainless steel. Therefore, please pay extra attention to them when cleaning and applying rust preventive.
- F) Make sure to remove all salt residue etc. from the roller stand.
- G) As part of this procedure, make sure to check all nuts and bolts and tighten them if required.



Bolts



Lubrication nipple

4. CONDITIONS

4.1 Warranty

The warranty period for the materials and manufacture of the Salt and Sand Spreader is 12 months from the date of purchase.

In case of errors or defects on the machine within the warranty period, Egholm Maskiner A/S will carry out the necessary repairs without charge for materials and working hours in accordance with the terms and conditions listed below. The customer is to cover the costs for transportation.

The scope of warranty:

- 1) The Egholm warranty is only valid on presentation of the original receipt supplied with model description, serial number and date of purchase.
- 2) Regular checks, adjustments, services and technical alterations are not covered by the guarantee.
- 3) All inquiries concerning the warranty are to be addressed to the place where the machine was purchased..
- 4) This warranty does not cover faults and defects which cannot be traced back to defects in material or production errors.
- 5) Egholm Maskiner A/S reserves the right to make improvements and design-related alterations to the machine without being obliged to modify previously delivered models in relation hereto.
- 6) This warranty is valid for persons who have legally acquired the machine within the warranty period.

The guarantee does not cover:

- * Wear and tear, accidents, damage to the equipment caused by operating errors, changes to the construction of the machine, or use of non-Egholm spare parts or implements.
- * Machines with illegible serial numbers.
- * Damage caused by force majeure such as lightning, flood, fire, war, civil disturbance etc. or other causes over which Egholm Maskiner A/S has no control.

4. CONDITIONS

4.2 Conditions of complaint

All inquiries regarding the machine should be made at the distributor from whom the machine was purchased. This applies to inquiries concerning normal use, service, maintenance and spare parts as well as to any complaints.

If there are questions that the distributor cannot answer, please do not hesitate to contact Egholm Maskiner A/S directly. Also feel free to contact us with suggestions or requests for special implements and/or features for the machine. We wish you many years of safe and satisfied use of your machine.

Best regards

Egholm Maskiner A/S - Transportvej 27 - DK -7620 Lemvig, telephone: +45 97 81 12 05, fax: 97811210

4.3 Disposal

When — many years from now — your Salt and Sand Spreader comes to the end of its working life, it should be disposed of in a responsible manner and conform with the relevant disposal regulations.

1. Used hydraulic oil is to be disposed of at an approved waste disposal facility or site.
2. Remove all plastic and rubber parts and discard in a dustbin.
3. After the parts mentioned have been removed, the machine is ready to be handed over to one of your local approved scrap merchants.

4. CONDITIONS

1.2 EC Declaration of Conformity for Machinery

Manufacturer: Egholm Maskiner A/S
Address: Transportvej 27, DK-7620 Lemvig
Telephone: (+45) 97 81 12 05

hereby declares that

- The machine: Salt and Sand Spreader Type: SG3 _____
Serial no.: _____ Year: _____
- has been manufactured in conformity with- the provisions of the Machinery Directive, Directive 98/37/EU

The Egholm 2100 fitted with the cab FH 2100 (ROPS approved)

- has been tested at the Danish Institute of Agricultural Sciences at Bygholm in conformity with directive 86/298/EEC concerning rear mounted, roll-over protection structures of narrow-track wheeled agricultural and forestry tractors.

Place: Lemvig

Date: _____

Signature: Kaj Egholm
Managing Director Kaj Egholm

4. NOTES

A large, faint, light-colored leaf graphic is positioned in the lower half of the page, serving as a background for the contact information.

Egholm Maskiner A/S . Transportvej 27 . DK - 7620 Lemvig
Tel.: (+45) 97 81 12 05 . Fax (+45) 97 81 12 10