

OPERATOR'S MANUAL

Snow sweeper



Introduction

Dear Customer

Thank you for buying an Egholm product

The Egholm 2100 is a Danish designed and manufactured product which offers a very flexible way of maintaining outdoor areas.

Get the optimal use of your Egholm Snow sweeper:

To ensure the optimal performance of your Egholm Snow sweeper, 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 Snow sweeper is equipped with various devices to ensure optimal operational safety both for the user and the surroundings. We therefore ask you to pay particular attention to Section 1.1 Safety. The machine must only be serviced by professionals.

The Snow sweeper is intended for professional use only. On delivery, the user will receive thorough instructions in the use of the machine and will thus 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 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

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1. General information

With the Snow sweeper fitted to the front, and the Salt and sand spreader behind, the Egholm 2100 clears snow and leaves a non-slip path behind it in one workflow.

The Snow sweeper clears snow up to 15 cm deep and follows the terrain perfectly over inclines and other obstacles.

With the hydraulic steering the Snow sweeper is set to the wind direction and the adjustable sweeping direction makes it possible to clear snow even from places where the machine is unable to turn.

Useful tips

Tip the Snow sweeper up on the A-frame when you do not intend to use it for a long period to save wear on the brushes.

Wipe the snap couplings before fitting, as this protects the hydraulic system.

Daily cleaning and maintenance will extend the lifetime of both the machine and the tool.

1. General information

1.1 Safety



Make sure no one is standing close to the machine while it is in use.
Make sure that no one is near the machine while it is in use as there is a danger of crushing.

N.B!



As it is articulated, the rear end of the machine swings out when turning. Make sure that no one is standing near the machine while it is in use. (Picture 1)



When lever B on the right-hand side of the machine is operated, the Snow sweeper moves from side to side. Make sure that no one is standing near the machine while it is in use. (Picture 2)



Avoid crushing fingers

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



Avoid roll-overs:

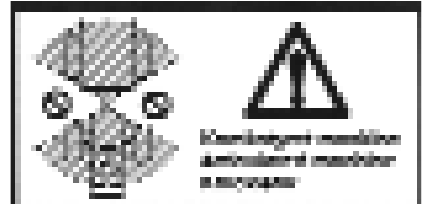
Do not drive the machine in a place where it can slide, tip or roll. Do not drive on slopes with an incline of more than 10°. (Picture 3)



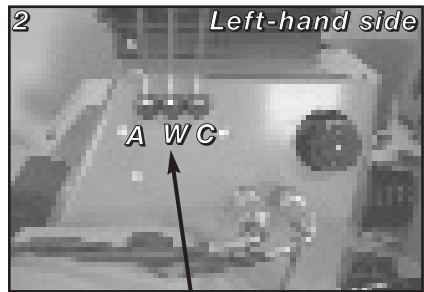
Reduction of noise and energy consumption:

It is recommended not to drive with a higher engine speed than necessary, to reduce the noise and the energy consumption.

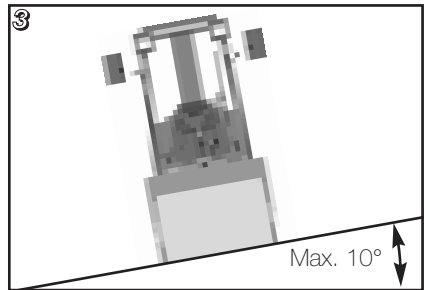
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Prevent people from standing in the working area.



Lever B



Do not drive on slopes with an incline of more than 10°

1. General information

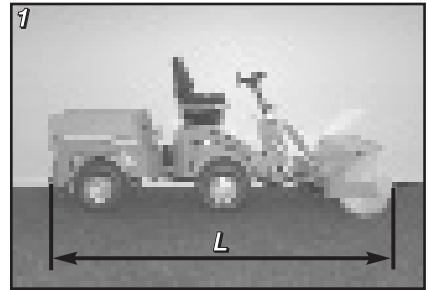
1.3 Technical data

Dimensions:

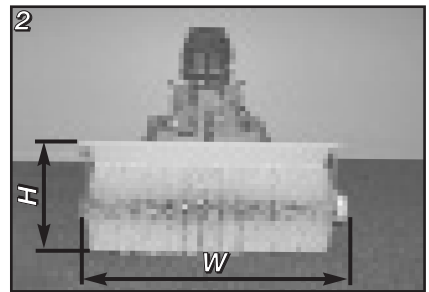
	Assembled:	Storage dimensions:
Length (L):	2,915 mm	750 mm
Width (wide model) (B):	1,370 mm	1,370 mm
Width (narrow model) (B):	1,220 mm	1,220 mm
Height without cab (H):	600 mm	600 mm
Height with cab	1,935 mm	

Technical data:	Narrow model:	Wide model:
Type description:	SK105	SK120
Clearing width:	1,050 mm	1,200 mm
Ground clearance below brush:	420 mm	420 mm
Brush diameter:	450 mm	450 mm
Weight on Snow sweeper:	90 kg	95 kg
Number of brush rings:	29	33
Number of adjusting rings:	27	32

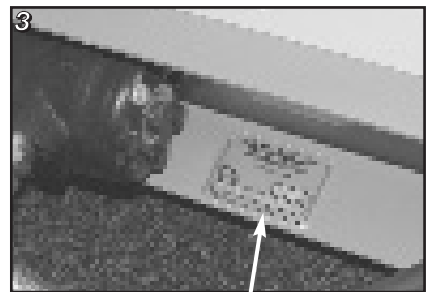
Sweeping capacity: approx. 10-12,000 m²/hour



Side view



Front view



Location of model plate

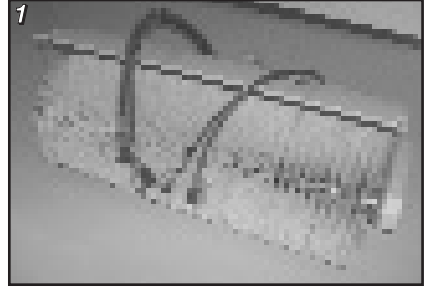
N.B!

Specifications may be changed without prior notice.

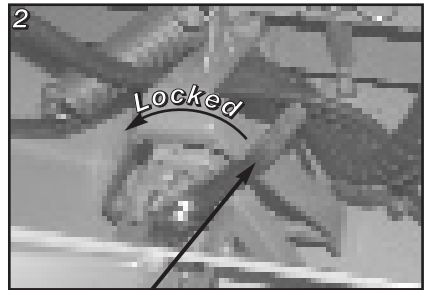
2. Operator's manual

2.1 Assembly / Disassembly

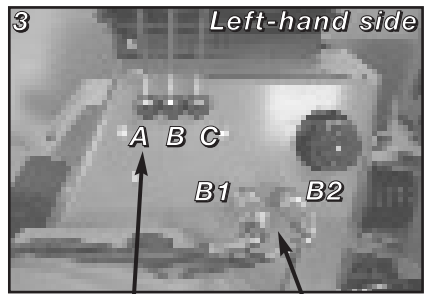
1. It is recommended that the hydraulic hoses should be run over the guard of the Snow sweeper to keep them clear and free from dirt when the Snow sweeper is fitted. (Picture 1)
2. The locking handle on the A-frame of the basic machine must be in the open position. (Picture 2)
3. Drive the basic machine right up to the A-frame of the Snow sweeper, so the A-frames fit into each other.
4. Raise the A-frame with lever A on the left-hand side of the basic machine until the Snow sweeper is freely suspended above the ground. (Picture 3)
5. Lock the Snow sweeper in place with the locking handle on the A-frame. (Picture 2)
6. Raise the Snow sweeper completely up with lever A on the left-hand side of the basic machine. (Picture 3)
7. Stop the machine. (See the operator's manual for the basic machine, section 2.2)
8. Hook the large spring on the Snow sweeper into the socket on the instrument panel. (Picture 4)
9. Fit the hydraulic hoses which swing the Snow sweeper on the B-connector on the left-hand side of the machine. (Picture 3)



Hydraulic hoses

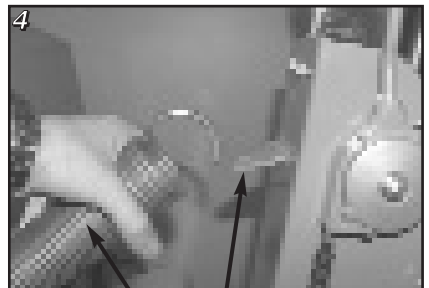


Locking handle on the A-frame - open



Lever A

B-connector



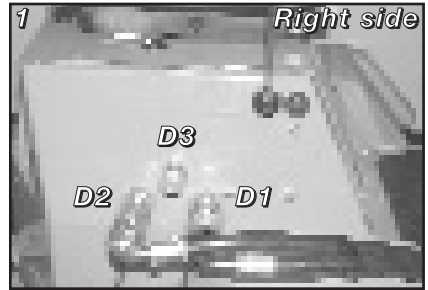
Hook the spring into the socket on the console

2. Operator's manual

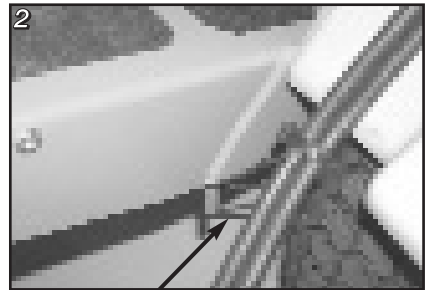
10. Fit the hydraulic hoses which rotate the brush on the D-connectors on the right-hand side of the machine. (Picture 1)
11. Attach the hydraulic hoses with the rubber strap under the running board to ensure it runs correctly over the screen. (Picture 2)
12. Pull the split-pin out of the support strut, lift the strut and put the split-pin in again. (Picture 3)

Disassembly:

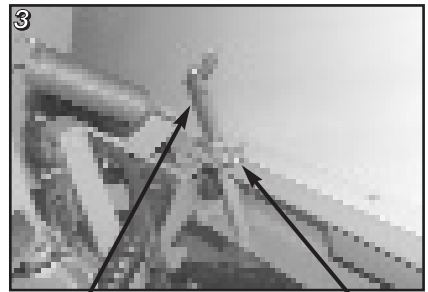
Follow the procedure for fitting in reverse order. Put the protective caps on the snap couplings to protect them from dirt.



D-connectors



The hoses are fastened with a rubber strap



Support strut in uppermost position — split-pin

2.2 Important before start-up

During transport — lock the Snow sweeper in the raised position with the transport lock. (Picture 4)

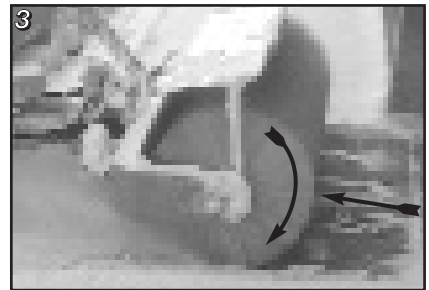
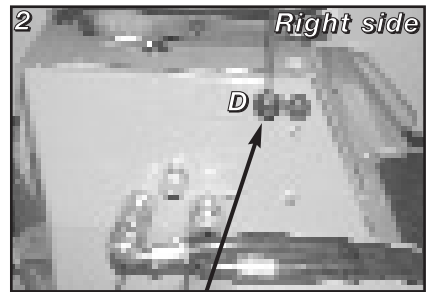
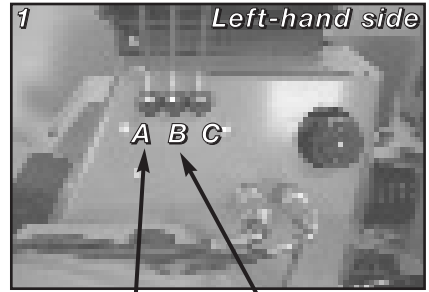


Transport lock

2. Operator's manual

2.3 Start-up

1. Start the machine. (See the operator's manual for the basic machine, section 2.2)
2. Lower the Snow sweeper by pushing lever A on the left-hand side of the machine down to position 2. (Picture 1)
3. By holding the lever down for about 2 seconds the snow sweeper will be in a float position, which allows it to follow ground contours.
4. Start the brush by pushing lever D on the right-hand side of the machine up to position 1. (Picture 2)
The direction of the brush can be turned so that it is possible to clear snow in places where the machine cannot turn. Do this by pushing lever D down to position 2 (Picture 3)
5. Turn the Snow sweeper with lever B on the left-hand side of the basic machine until the brush turns as you want it to. (Picture 1)



Warning!

Make sure no one is standing close to the machine while it is in use.



When lever B on the right-hand side of the machine is operated, the Snow sweeper moves from side to side. Make sure that no one is standing near the machine while it is in use.



N.B!

When turning, the rear of the machine swings out, so there is a risk of crushing or collision.



It is recommended *not* to drive with a higher engine speed than necessary, to reduce the noise and the energy consumption.

3. Service and maintenance

3.1 Cleaning

Daily cleaning and maintenance will extend the lifetime of both the machine and the attachment.

Clean the Snow sweeper with water when it is no longer required for use.

3.2 Maintenance

Lubricating the bearings:

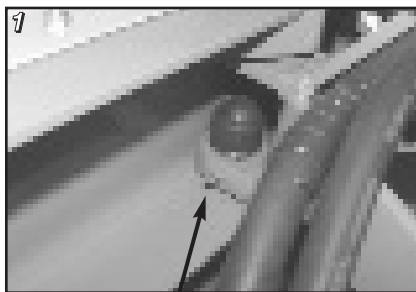
The bearings for the brush axle and the bearing for the swivel on the Snow sweeper must be lubricated regularly with a good quality lubricant.

1. Stop the machine.
2. Clean the lubricating nipples and lubricate the bearings until the grease starts to come out of the bearing. (Pictures 1 & 2)

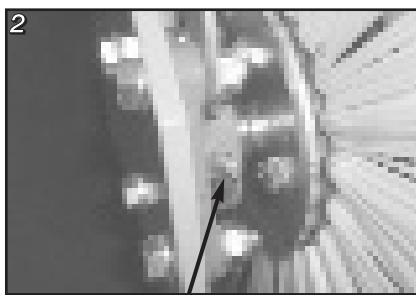
Checking, adjusting and lubricating the chain:

1. Stop the machine.
2. Detach the hydraulic hoses.
3. Take off the guard which protects the chain on the left-hand side of the Snow sweeper. (Picture 3)
4. Check the chain and cog for wear, replace them if necessary.
5. Tighten the chain until it has a play of 4-5 mm when you pull it with one finger, (it must not touch the nylon block). (Picture 4)
Tighten the chain by loosening the bolts that hold the brush-axle bearing. Tighten the chain and then tighten the bearing again.

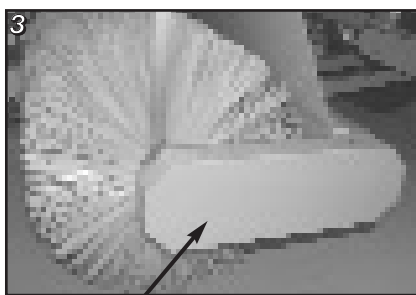
6. Lubricate the chain with a good quality lubricant.



Location of lubrication nipple on the swivel



Location of lubrication nipple on the brush axle



Guard on left-hand side



Adjust the chain - play 4 - 5 mm

3. Service and maintenance

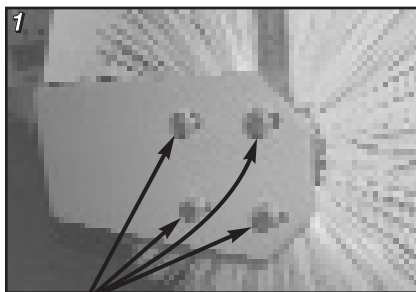
7. Replace the guard on the right-hand side of the Snow sweeper.
8. Reattach the hydraulic hoses.

New cogs and chains can be ordered from an authorised Egholm distributor.

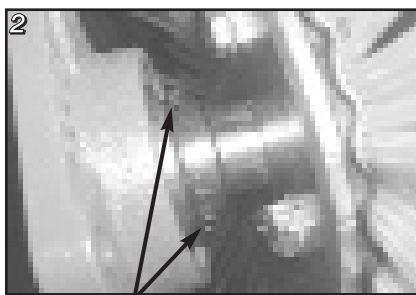
Replacing the brush rings:

1. Tip the Snow sweeper with lever A on the left-hand side of the machine, lock it in the raised position with the transport lock.
2. Stop the machine.
3. Detach the hydraulic hoses.
4. Take apart the nuts and bolts that hold the bearing on the right-hand side of the Snow sweeper. Now the brush axle is loose at one end. (Picture 1)
5. Remove the bearing by loosening the two Allen bolts that fix it to the axle, pull the bearing off the axle. (Picture 2)
6. Remove the flange that holds the brush rings by unscrewing the three bolts that hold the flange.
7. Take all the brush rings and adjusting rings off the brush axle.
8. Put on the new brush rings, alternate a brush ring with an adjuster ring. Finish with a brush ring.
9. Replace the flange.
10. Put the bearing on the axle.
11. Tighten the bearing against the edge of the brush frame. Remember to tighten the brace for the guard to the bearing.
12. Tighten the Allen bolts in the bearing on to the axle again.

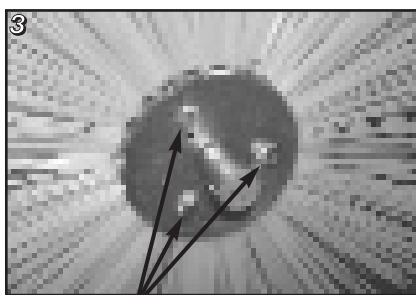
New brush rings can be ordered from an authorised Egholm distributor.



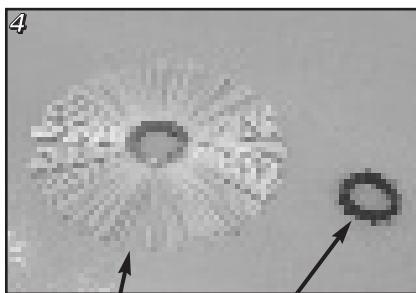
Bolts and nuts that hold the bearing.



Loosen the Allen bolts in the bearing



The bolts that hold the flange



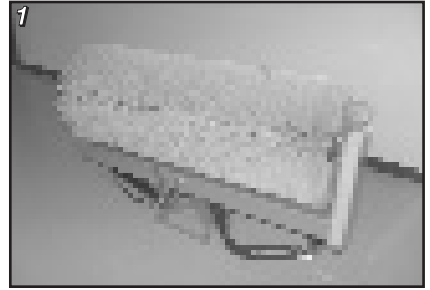
Brush ring and adjusting ring

3. Service and maintenance

Storage outside the season:

When the Snow sweeper is to be stored outside the season, it is recommended to remove any loose paint and to repaint any damaged areas.

Tip the Snow sweeper up on the A-frame when you do not intend to use it for a long period to save wear on the brushes. (Picture 1)



Avoid wear on the brushes.

4. Conditions

4.1 Warranty

The warranty period for the materials and manufacture of the Snow sweeper 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 Snow sweeper 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.

Notes

