

# Operator's manual



**Suction sweeper  
City Ranger 2260/2250**

# Introduction

## Dear Customer

### **Congratulations with your Egholm product**

The City Ranger 2260/2250 is a Danish designed and manufactured product, which offers a very flexible way of maintaining outdoor areas.

### **Optimal use of your City Ranger 2260/2250 Suction sweeper**

To ensure optimal performance of your City Ranger 2260/2250 suction sweeper, please read this manual carefully before using the machine. Failure to do so can result in personal injury and damage to the machine.

### **Safety**

The suction sweeper 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 section 1.1 Safety. The machine must only be serviced by professionals.

The suction sweeper is designed only for use by professionals. On delivery, the user will receive thorough training to become a competent operator.

Do not lend to anyone who has not been thoroughly trained and who 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 accepts no liability for errors or omissions in the operator's manual.

### **Contact us**

Should you have questions of any kind regarding your Egholm product, do not hesitate to contact Egholm Division.

Best regards

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### **Egholm app - easy access to useful material**

Download our Egholm app, enter the serial number of your machine and possibly add attachments, and get access to videos, manuals, technical specifications and much more.

If you agree to receive notifications, you will be notified about product and service information, offers etc. The app is available for Apple and Android mobile phones.

General information .....	5
1.1 Safety .....	5
1.2 EC Declaration of Conformity .....	6
1.3 Technical data .....	7
Operator's manual .....	10
2.1 Assembling the hopper frame .....	10
2.2 Assembly / disassembly .....	11
2.3 Checks before start-up .....	16
2.4 Suction sweeper start-up .....	19
2.5 Using the side brush (optional equipment) .....	19
2.6 Using external vacuum hose .....	20
2.7 Emptying the hopper .....	22
2.8 Emptying the hopper for water .....	23
2.9 Protect the suction sweeper against ice during the winter .....	23
2.10 Adjustment .....	24
2.11 High-pressure cleaner (optional equipment) .....	29
Service and maintenance .....	32
3.1 Cleaning/replacing filter system and turbine .....	32
3.2 Maintenance .....	33
3.3 Troubleshooting .....	38
Conditions .....	42
4.1 Warranty .....	42
4.2 Complaints .....	43
4.3 Disposal .....	43

The Egholm suction sweeper is effective everywhere – on paths and pavements, verges, driveways, outdoor and indoor parking areas, etc. Two optional side brushes increase the suction sweeper's clearing width to 2,100 mm.

Dust is cleaned away in two stages using the suction sweeper. Two water-sprayers dampen dust before it is sucked up. The well-known Egholm rotary filter system binds even the finest of dust to the water inside the hopper. A robust and quiet unit, the suction sweeper is available with 2, 3 and 4 brushes.

Emptying the collection tank is easy and done from the comfort of the cab seat.

The suction sweeper can be attached or detached quickly and easily, using the specially designed moveable frame. The brushes and hopper can be attached to the frame. This handy design feature means they can be smartly stored away too!

### **Adjusting brush speeds**

Brush speed can be controlled in dry conditions, slowing the brushes to prevent dust spreading.

# General information

**Honest  
Machines**

# General information

## 1.1 Safety



### 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 1)



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

### Tyre pressure

The tyre pressure must be checked and adjusted to 1.5 bar (22 psi) when the suction sweeper is attached. Lower tyre pressure increases the risk of roll-overs.

### Emptying the hopper

Before emptying the hopper, make sure that:

- A) The machine is firmly placed on a level surface and is not "angled"
- B) That there is sufficient space for the open back cover.



Locking handle



### Make sure the hopper is secured

Check the hopper is firmly attached to the machine. (Picture 2)



### Prevent people from standing close to the suction sweeper

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



Hopper is placed on the machine

### Attention

As it is articulated, the rear end of the machine swings out when turning. Make sure that no one is near the machine while it is in use as there is a danger of crushing.

### Risk of impact when using the lever

Do not let go of the lever when the hopper tank is lowered as that is dangerous. Keep a good grip of the lever until the hopper is on the machine. (Picture 3)

### Risk of crushing

Make sure no one gets their fingers trapped when the hopper is lowered after tipping. (Picture 4)



Hopper is lowered

# General information

## 1.2 EC Declaration of Conformity

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

hereby declares that

Machine: **Suction sweeper**  
Type: **FST2260/2250 = Hopper**  
**4FS2260/2250 = Sweeper section (with Centre brush)**  
**FSS2260/2250 = Side brush**  
**22FBAA = sweeper section (without Centre brush)**

- has been manufactured in conformity with the provisions of the Machinery Directive, Directive 2006/42/EU
- has been manufactured in conformity with the provisions of Directive 2000/14/EU

and in accordance with

- DS/EN 13019 Machines for road surface cleaning – Safety requirements

Any alteration, rebuilding or addition of implements, accessories or other equipment not manufactured by Egholm automatically results in the cancellation of type approval, CE approval, any other approval, as well as any warranty on machine and attachments.

Unless otherwise agreed in writing between the operator, customer and Egholm, Egholm is the data originator (data originator) of all data generated by the machine and attachments during use.

Place: Lemvig  
Date: \_\_\_\_\_  
Signature:   
Rainer Flanz, R&D Manager

## 1.3 Technical data

### Dimensions

<b>Suction sweeper with two brushes</b>	<b>Assembled</b>	<b>Storage dimension</b>
Length (L1) .....	2,820 mm .....	1,500 mm
Width (W1) .....	1,200 mm .....	1,200 mm
Height with cab (H) .....	1,960 mm .....	2,070 mm

### Suction sweeper with three or four brushes

Length (L2) .....	3,400 mm .....	1,500 mm
Width (W2) .....	1,650 mm .....	1,200 mm
Width (W3) .....	2,100 mm	
Side-brush height (H): .....	350 mm	

### Technical data

Sound power level, re Directive 2000/14/EEC .....	106 LwA
Hopper volume .....	500 l
Max. weight in hopper .....	300 kg
Water tank volume .....	100 l
Clearing width .....	1,200 mm
Clearing width with one side brush .....	1,650 mm
Clearing width with two side brushes .....	2,100 mm
Tipping height .....	1,300 mm
Ground clearance under vacuum nozzle .....	55 mm
Ground clearance below brushes .....	140 mm
Clearing area at 5–8 km/h .....	5,000-8,000 m <sup>2</sup> /t
..... (Dependant on type of surface and surface conditions)	
Water capacity .....	1 nozzle 180 min.
.....	3 nozzles 140 min.
.....	5 nozzles 115 min.
Hydraulic oil .....	Texaco Rando HDZ 68 or equivalent
PM10 certified .....	.4 stars

### Attention

Specifications may change without notice.

# General information

## 1.3 Technical data - continued

### Technical data High-pressure cleaner (extra equipment)

Hose reach .....	6 m
Water pressure - adjustable up to .....	100 bar
Water capacity .....	6.5 l/min.

### Attention

Specifications may change without notice.

# Operator's manual

**Honest  
Machines**

# Operator's manual

## 2.1 Assembling the hopper frame

The hopper frame is folded up and hung on the hopper on delivery. Assembling the hopper frame:

1. Take the hopper frame down and unfold it. (Picture 1)
2. Put the frame together using the two bolts supplied. (Picture 2)

### Moving the hopper frame

The hopper frame can be transported on the suction sweeper. Fold it down in reverse order and hang it on the hopper.

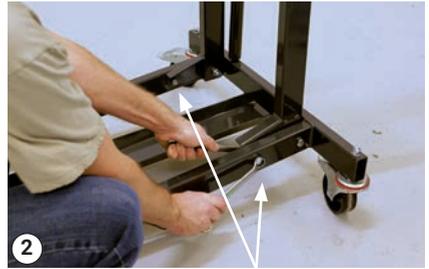


#### Attention

The hopper must never be emptied when the hopper frame is hanging on the suction sweeper.



Transporting the hopper frame on the hopper



Two bolts on the hopper frame

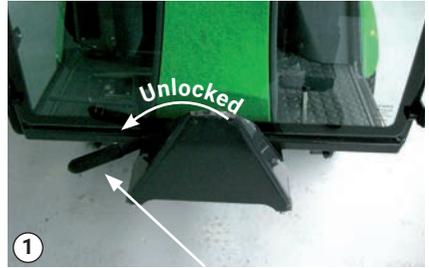
## 2.2 Assembly / disassembly

### Fitting the front brush

1. The locking handle on the A-frame of the basic machine must be in the unlocked position. (Picture 1)
2. Drive the base machine right up to the A-frame of the brushes, so the A-frames fit into each other.
3. Raise the A-frame by pulling the joystick back until the brushes are free of the ground.
4. Stop the machine
5. Tilt the attachment into the machine. (Picture 2)
6. Lock the attachment in place by turning the locking handle on the A-frame all the way to the right. (Picture 3)

### Removing the front brush

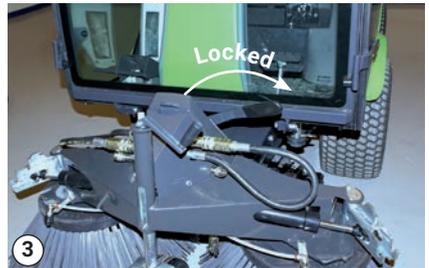
Follow the fitting procedure in reverse order



Locking handle



Tilt the attachment into the machine



Locking

# Operator's manual

## 2.2 Assembly / disassembly - continued

### Fitting side-brushes

One or two side brushes can be fitted onto the unit. The side brushes are identical, and can be fitted on either side of the unit, though the water-sprayers must be adjusted when a side brush is moved over to the opposite side of the unit.

1. Lower front brushes.
2. Stop the machine.
3. Detach the hydraulic hose. (Picture 1)
4. Lift the side brush under the panel for the hydraulic motor. (Picture 2)
5. Guide the side brush to the front-brush fixture. (Picture 3)
6. Snap on the side brush. (Picture 4)



Detach the hydraulic hose



Side-brush



Front-brush fixture



Snap on the side-brush

## 2.2 Assembly / disassembly - continued

7. Fit the hydraulic hoses and the water hoses.  
(Pictures 1 and 2)
8. Adjust the water-sprayers.
9. Tighten the bolts on the side brushes regularly.

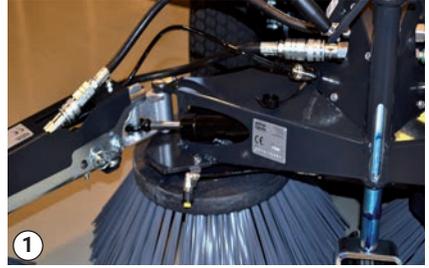
### Removing side-brushes

Follow the assembly procedure in reverse order.

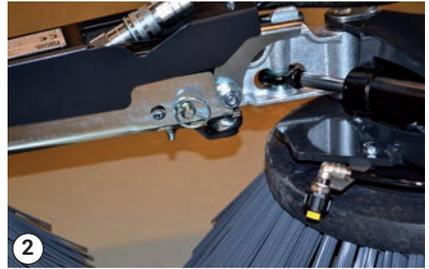


#### **Avoid burn injuries**

The hydraulic components get hot when operating with the suction sweeper unit. Do not touch the components before they are cooled or use gloves.



Hydraulic hoses + water hoses on the A-frame are fitted



Hydraulic hoses + water hoses on the side brush are fitted

# Operator's manual

## 2.2 Assembly / disassembly - continued

### Fitting the hopper

1. Reverse the machine up to the hopper, which is placed on the hopper frame.

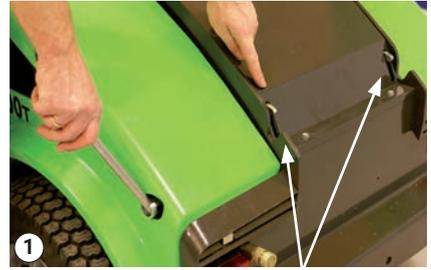
2. Stop the machine.

3. Check the locking handle is in the open position. The hooks must be in the position shown in the picture. (Picture 1)

4. Check that the hydraulic couplings are clean and not dirty. If necessary, wipe with a dry cloth. (Picture 2)

5. Push the hopper in over the loading panel until there is approx. a 5 cm gap between the hopper frame and the back bumper. (Picture 3)  
The hopper must be centrally placed over the machine.

6. Press the lever down, push the locking latch free from the barb and lower the hopper slowly over the machine. (Picture 4)



Locking lever – unlocked



Cleaning couplings



Fitting the hopper



Locking lever

## 2.2 Assembly / disassembly - continued

7. Check the hopper is correctly attached to the machine.
8. Free the hopper frame from the hopper.
9. Press the grip on the locking handle in and turn it anti-clockwise. Pull the lever out and move it up. (Picture 1)
10. Fix the hopper securely to the machine by turning the lever 1/3 clockwise. (Picture 2)
11. Push the lever in, opposite way to point 9.



### Attention

Keep fingers and hands away as there is a danger of crushing. Keep a good grip of the hopper frame lever when the hopper is lowered.

### Removing the hopper

Follow the fitting procedure in reverse order.



The locking handle is pulled out



The locking handle is turned

# Operator's manual

## 2.3 Checks before start-up

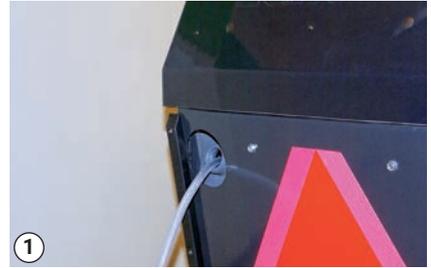
### 1. Topping-up the water

It is important the water tank is filled up before starting. (Picture 1)

The water level can be read on the right side of the hopper. (Picture 2)

A water-sprayer is positioned in the hopper (Picture 3) and a water-sprayer is positioned in front of each brush. (Picture 4)

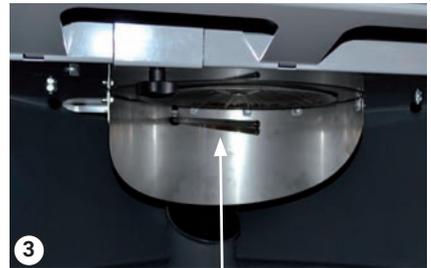
Two nozzles supply enough water for approx. 140 mins. of use. Four nozzles supply enough water for approx. 115 mins. of use. If you only use the nozzle in the hopper, it has enough water for approx. 180 mins. of use.



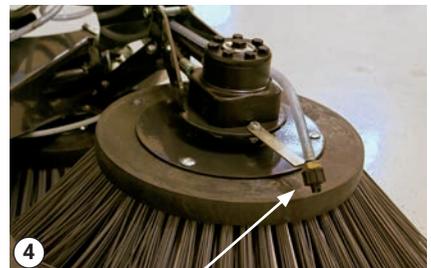
Topping-up the water



Tank gauge



Water-sprayer in the hopper



Water-sprayer – front brush

## 2.3 Checks before start-up - continued

### 2. Checking the rotary filter and turbine

Checking the rotary filter and turbine. (Picture 1)  
Remove any dirt before starting (See Section 3.1).

### 3. Checking the rotary filter water-sprayer

1. Engage the handbrake.

2. Turn the ignition key to position 1 WITHOUT starting the machine. (Picture 2)

3. Switch the rear PTO ON. (Picture 3)

4. Check water comes out of the water-sprayer below the filter in the hopper tank. (Picture 4)

### 4. Adjusting brushes

Correctly adjusted brushes last longer. Make sure the brushes do not press too hard against the surface being cleaned (See Section 2.8).

### Attention

The suction sweeper must not be used if the water-sprayer in the hopper is not working.

Stop the turbine immediately if there is imbalance/vibration in the filter or in the turbine.

A low-level switch has been fitted which automatically stops the water pump if the water tank is empty.

A lamp lights up when there is water in the tank. The lamp switches off when the suction sweeper unit needs refilling with water.



1

Checking the rotary filter and turbine



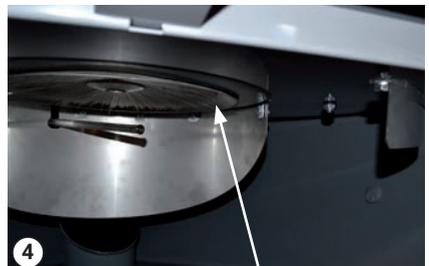
2

Ignition key – position 1



3

Lamp PTO (rear)



4

Water-sprayer in the hopper

# Operator's manual

## 2.3 Checks before start-up - continued

### Avoid roll-overs

#### Check tyre pressure

The tyre pressure must be checked and adjusted to 1.5 bar (22 psi) when the suction sweeper is attached.

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 1)

#### Transport lock

The transport lock prevents the attachment from lowering during transport.

How to use the transport lock: Move the handle to the uppermost position. Lift the A-frame by moving the joystick up. As the A-frame lifts, the transport lock is automatically activated. (Picture 2)

How to unlock the transport lock: Unhitch the handle and lift the A-frame to the uppermost position. The attachment can now be lowered again. (Picture 3)



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



Transport lock – locked



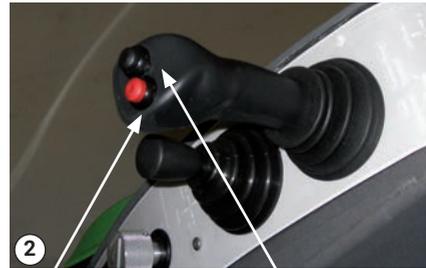
Transport lock – unlocked

## 2.4 Suction sweeper start-up

1. Start the machine
2. Switch ON the ("Rear PTO"), suction begins. Water for the rotary filter starts to flow when the rear PTO is switched in on position - Do not use S&G mode. (Picture 1)
3. Set the throttle to the eco-mode (2,350 rpm) when you sweep light litter or to max. for very dirty jobs. (Picture 1)
4. Start the front brushes by activating the ("Front PTO"). (Picture 1)
5. Adjust the speed of the front brushes to the desired speed with the ("Front RPM") button (variably adjustable reduction of rotation).
6. Lower the front brushes by moving the joystick down. (Picture 2)
7. Engage the weight distribution using the red button on the joystick. (Picture 2) The front brushes will now adjust to ground conditions. To adjust the weight distribution: Read the operator's manual for the basic City Ranger 2260/2250 machine.
8. To spray water using the nozzles on the front brushes, activate the ("F1") switch. (Picture 1)



Throttle PTO front F1(Water) PTO rear  
Front RPM (Speed regulation of the front brushes)



Weight distribution Engaging the left side brush

## 2.5 Using the side brush (optional equipment)

The joystick controls the side brush' movements.  
A side brush is automatically lowered as it moves out from the machine.

Using right side brush.

The side brush follows the joystick's sideways movement.  
Moving the joystick to the right moves the side brush out.  
Moving the joystick to the left moves the side brush back in.

Using left side brush.

To switch over to the left side brush, push the black button on the joystick (Picture 2) and move the joystick at the same time. The side brush follows the joystick's sideways movement. Moving the joystick to the left moves the side brush out. Moving the joystick to the right moves the side brush back in.

# Operator's manual

## 2.6 Using external vacuum hose

### Ready for use

1. Engage the handbrake.
2. Switch the rear hydraulics ON while holding the manual start button down. (Picture 1)
3. Push the throttle to maximum.
4. Turn the change-over handle so the arrow points down. (Picture 2)
5. Lift the locking clip and pull the vacuum hose out. (Picture 3)
6. Pull out the vacuum nozzle. (Picture 4)



Manual start button



Change-over handle



Locking clip is released by lifting



Handle – vacuum nozzle

## 2.6 Using external vacuum hose - continued

### Storing the external vacuum hose

1. Place the vacuum nozzle in the holder. The hose rolls up together. (Picture 1)
2. Fold the handle in.
3. Snap the handle into the lock.
4. Turn the change-over handle so the arrow points up. (Picture 2)



Locked Vacuum nozzle Handle



Change-over handle

# Operator's manual

## 2.7 Emptying the hopper

The hopper can empty directly onto the ground or tip into a container.  
Tipping height 130 cm.

### Attention

Before emptying the hopper, make sure that:

A) The machine is on a level surface, and that it is not "angled".

B) That there is sufficient space for the opened back cover.

1. STOP the front and rear PTO. (Picture 1)
2. Drive to the nearest disposal area.
3. Begin emptying by using the lower joystick to tip the hopper. (Picture 2)
4. Lower the joystick once the hopper is empty. (the hopper will move back to its normal position)  
Release the handle when the hopper is back in position. The hopper is fitted with a hose-break valve, which will close if the hopper lowers too quickly. If this happens, raise the hopper a little again and then lower it slowly. (Picture 3)

### Attention

The rear hatch must not be opened until suction has ceased. Otherwise there is a risk of personal injury. The suction continues to run for approx. 15 s after the turbine has been switched off (PTO rear).

There is a risk of crushing while the hopper is being emptied.

Make sure the hopper is completely lowered after emptying!



PTO front PTO rear



Bottom joystick



Hopper tips all the way back

## 2.8 Emptying the hopper for water

The water in the hopper can be emptied by unscrewing the drain plug. (Picture 1)

## 2.9 Protect the suction sweeper against ice during the winter

1. Pouring a solution of water and anti-freeze into the water tank – the same solution as if protecting a sprinkler system against ice.
2. Turning the turbine and water supply to the front brushes on, the liquid runs through the whole system and protects it against ice.
3. Alternative, completely empty the water in the tank and the rest of the system.



Drain plug

# Operator's manual

## 2.10 Adjustment

### 1. Adjusting brushes

Adjust the brushes using the nose wheel. Adjust the brushes so that they precisely brush the ground to give a maximum clearing width, with half of the brush bristles touching the ground at any given time. (Picture 1)



Nose wheel

## 2.10 Adjustment - continued

### 2. Adjusting the vacuum nozzle (front brush without Centre brush)

Adjust the flap to CR2250 or CR2260. If spring is in front position the flap is adjusted to CR2260 machine. In back position the flap is adjusted to CR2250. (Picture 1+2)

### Adjusting the rubber

The vacuum nozzle must be adjusted so the brushes do not touch the rubber (Picture 3)

Pull out the lock – then it's possible to move the vacuum nozzle to get the right distance between brush and rubber (approx. 10mm). (Picture 4)



Front brush 22FBAA – vacuum nozzle

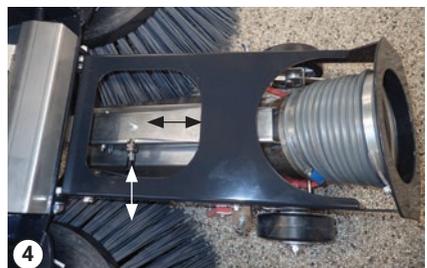


CR2260 position

CR2250 position



Brushes must not touch the rubber



Distance between brush and rubber approx.  
10mm

# Operator's manual

## 2.10 Adjustment - continued

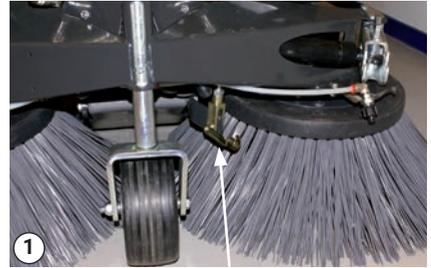
### 3. Adjusting the rubber to the ground

Loosen the nut holding the wheel – the height can then be adjusted by lifting the wheel bracket. The height from rubber to ground should be approx. 5-8mm. (Picture 3)

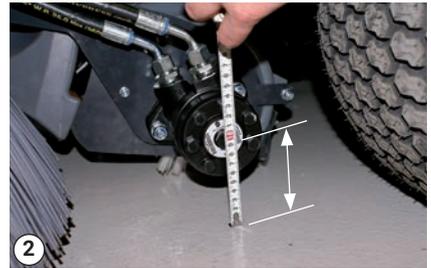
### 4. Adjusting the vacuum nozzle (front brush with Centre brush)

Adjust the distance between the surface and vacuum nozzle using the height-adjustment fixture. (Picture 1)

With the nose wheel screwed all the way down, the distance between the hydraulic motor and the ground is 95 mm. (Picture 2) This adjustment also affects the coupling between the front brushes and the machine. Check that the vacuum hose is tightly connected to the vacuum nozzle.



Height-adjustment fixture



Ground clearance



Adjusting the rubber to the ground

## 2.10 Adjustment - continued

### 5. Adjusting the angle of the external side brush

#### Vertical

1. Loosen the counter nut. (Picture 1)
2. Unscrew the parallel rod. The forward edge of the brush lowers.
3. Screw the parallel rod back. The forward edge of the brush lifts.
4. The optimal brushing position is with the forward 1/3 of the brushes in contact with the ground.

#### Horizontal

To adjust the side brush horizontally, loosen the 3 nuts on the side brush and turn the brush head manually. (Picture 2)

### 6. To adjust side brush lifting position

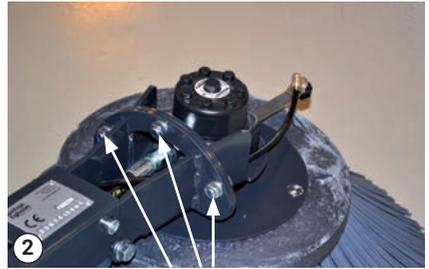
The side brushes can be adjusted so that they either remain brushing in the lowered position or raised when moved towards the middle.

#### How to adjust the side brush to enter raised position

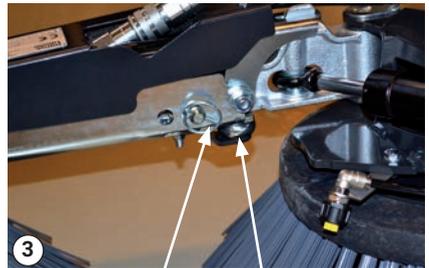
- A) Pull back the pin.
- B) Push the wheel back.
- C) Put the pin into the rear position. (Picture 3+4)



Counter nut – parallel rod



3 nuts



Pin

Wheel



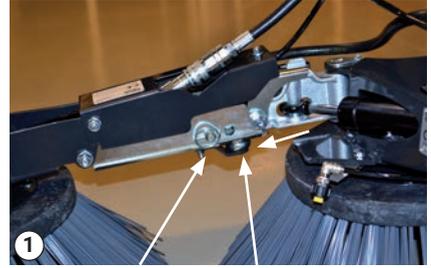
Side brush raised

# Operator's manual

## 2.10 Adjustment - continued

### How to adjust the side brush to remain lowered

- A) Pull back the pin.
- B) Push the wheel forward.
- C) Put the pin into the front position. (Picture 1+2)



Pin Wheel



Side brush lowered

## 2.11 High-pressure cleaner (optional equipment)

The high-pressure cleaner is stored in a hollow space behind the hopper. To gain access to the high-pressure cleaner, pump and filter, the hopper must be tipped as far back as possible. (Picture 1+2)

The spray lance, hose and switch valve are located on the back of the machine. (Picture 3)

The high-pressure cleaner runs on the same hydraulic connector as the suction tank turbine. To switch between turbine and high-pressure cleaner, activate the switch valve on the back of the hopper.



High-pressure cleaner



Filter Pumps



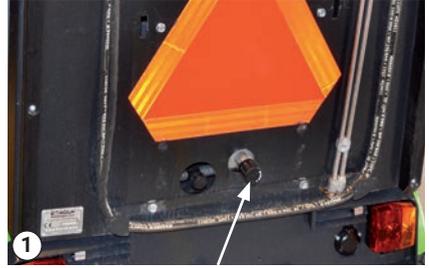
Switch valve Spray lance Hose

# Operator's manual

## 2.11 High-pressure cleaner (optional equipment) - continued

### To start the high-pressure cleaner

1. Turn the switch valve to the left (to run the high-pressure cleaner). (Picture 1)
2. Start the hydraulic system "manual operation" (see section 2.6).  
The machine should run at about 2,000 rpm.
3. Remove the spray lance and hoses from the hose rack. Clean as required.
4. To stop the high-pressure cleaner, turn the switch valve to the right. (Picture 1)
5. Release the pressure in the water hose by activating the spray lance.
6. Roll the hose tightly in a clockwise direction and return the spray lance to its holder. It is important that the hose is rolled tightly so that it fits snugly into the hose holder.



Switch valve



#### **NB**

Excessive rpm will not cause any noticeable increase in water pressure as the flow of oil to the high-pressure pump is regulated.

The water pump is fitted with a bypass function to ensure that the pump does not overheat in "neutral", when the high-pressure cleaner is not using water. We recommend that you do not run the high-pressure cleaner in "neutral" for more than 10 minutes at a time.



#### **Important**

The water pump must never run when the water tank is empty. If the water pump runs for more than 1 min. without water, the pump will be damaged and will fail relatively quickly.



#### **Warning**

When you turn the switch valve back to "run turbine", the suction system immediately restarts.

# Service and maintenance

**Honest  
Machines**

# Service and maintenance

## 3.1 Cleaning/replacing filter system and turbine

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

Clean the suction sweeper with water after use. Avoid high pressure cleaning of the snap couplings.

Clean the snap couplings with a cloth. (Picture 1)

### Cleaning/replacing filter system and turbine

#### Attention

In case of imbalance in the filter or turbine, the machine must be stopped immediately to prevent vibration damage.

#### Checking the filter and turbine daily

Dirt can cause imbalance in the rotary filter and turbine. It must be removed immediately! Give special attention to the filter and turbine while the machine is operating in difficult conditions.

#### Cleaning the rotary filter and turbine

1. To remove the turbine inspection hatch, loosen the lever on the hopper. Rinse the turbine clean with water, preferably using the high-pressure cleaner. (Picture 2)

2. If the turbine is very soiled, remove the rotary filter and rotary filter grill to give better access for cleaning the turbine. (Picture 3+4)

3. Check for dirt on the turbine and clean. (Picture 4)

4. Flush the turbine until it is clean. A high-pressure cleaner is recommended for this purpose.

5. Attach the rotary filter grill and rotary filter. Bolt should be tightened to 45 Nm of torque.

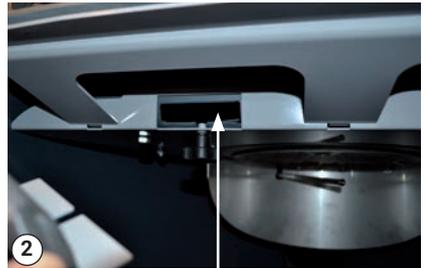
If the rotary filter cannot be cleaned or is worn, it should be replaced. New filters can be ordered from an authorised Egholm distributor.

#### Replacing the turbine

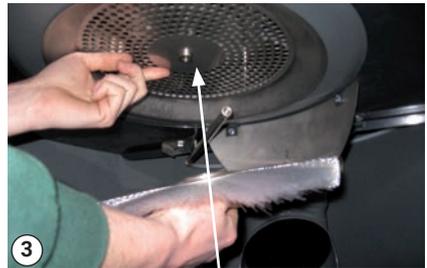
The turbine should be replaced at an authorised Egholm distributor.



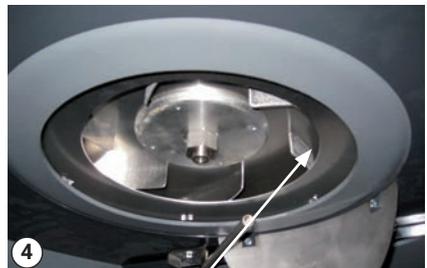
"Clean the snap couplings with a cloth"



Inspection hatch



Rotary filter grill



Turbine

## 3.2 Maintenance

### Cleaning the water-sprayer

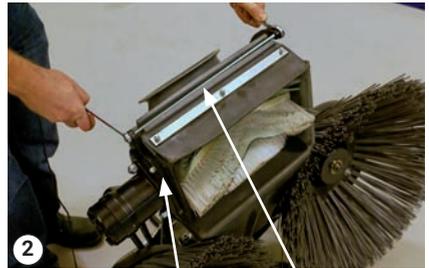
1. Use a 5 mm Allen key to remove the Allen screw in the end of the spray pipe. (Picture 1)
2. Clean the spray hole with a nozzle cleaner or similar.
3. Turn on the basic machine.
4. Use the rear PTO to turn on the water and flush the spray pipe clean (See Section 2.4).
5. Refasten the Allen screw and tighten it.



Spray pipe

### Replacing the Centre brush (front brush with Centre brush)

1. Remove the brush part from the A-frame on the basic machine.
2. Remove the bolt that holds the vacuum nozzle. Pull up the vacuum nozzle. (Pictures 2+3)
3. Remove the Centre brush bolt and pull the brush off. (Picture 4)
4. Loosen and remove screws and the fixing plate that hold the rubber seal in place. - Fit new rubber seal, and replace the fixing plate and screws.



Vacuum nozzle Bolt

You can order new Centre brushes and rubber seals from your authorised Egholm distributor.

### NB!

Egholm recommends that you replace the rubber seals and Centre brushes at the same time.

New cylinder brushes can be ordered from an authorised Egholm distributor.

### Attention

Give careful attention to string or any other similar material stuck to the cylinder brush. Such material must be removed.

To avoid excessive wear and tear, it is important that you readjust the front brush. See section 2.10.



The vacuum nozzle pulls up



Centre brush

# Service and maintenance

## 3.2 Maintenance - continued

### Replacing the two front brushes

1. Loosen the three bolts on each brush plate.  
(Picture 1)
2. Remove the old brush (The brush plate should not be removed from the hydraulic motor).
3. Fit new brushes. New brushes can be ordered from an authorised Egholm distributor.

The Centre brush in the vacuum nozzle should also be replaced when replacing the two front brushes. This ensures optimal cleaning and sweeping. The side brushes can be replaced independently, as required.

### Replacing the vacuum hose

The vacuum hose should be replaced at an authorised Egholm distributor.

### Ice protection

When the suction sweeper is stored away during the winter, or is in a very cold environment, it can be protected against ice by:

1. Emptying the water tank (See Section 2.8).
2. Pouring approx. 10 l of anti-freeze solution into the water tank.
3. Turning the water pump on (See Section 2.4).
4. When the solution begins to flow out of the front brushes and the turbine sprayer, this liquid can be bled from the tank and subsequently re-used.



Brush plate Bolts

## 3.2 Maintenance - continued

### **Imbalance/vibrations in the hopper**

In certain circumstances imbalance/vibrations can occur in the hopper. The reasons for this may be:

1. Dirt stuck in the rotary filter, rotary filter grill or turbine.
2. The filter or turbine is damaged. New filters, rotary filter grills and turbines can be ordered from an authorised Egholm distributor.

# Service and maintenance

## 3.2 Maintenance - continued

### Blocked vacuum nozzle

1. Stop the machine.
2. Remove the front brushes.
3. Reverse the machine away from the front brushes.
4. Start suction.
5. Take the cleaning tool that is fixed on the top of the hopper (under the external vacuum hose). (Picture 1)
6. Remove any material blocking the nozzle with the cleaning tool. (Picture 2)
7. Put the cleaning tool back.
8. Attach the front brushes.

Attention! Always clean the vacuum hose from below.

### Cleaning under the raised hopper

If the hopper is raised and you need to clean under it, the following should be observed:

1. The hopper is fully-tipped.
2. The machine is off and the handbrake is engaged.
3. The hopper's own weight will hold it in position. (Picture 3)

### Attention

The hopper has a break valve fitted to ensure the hopper continues to lift to its full height if a hydraulic hose breaks.



Cleaning tool



Cleaning tool Vacuum hose



Hopper fully-tipped

# Service and maintenance

## 3.2 Maintenance - continued

Daily maintenance of the high-pressure cleaner  
No special maintenance is required. However, the high-pressure cleaner suction filter must be cleaned once a day. If you are aware that the water used contains a lot of sand or iron, you may need to clean the water filter more often. Check the system for leaks. Check hoses and spray lance for damage. (Picture 1+2)



### Warning

Never use a damaged hose or lance.  
Replace immediately.

### Ice protection of the high-pressure cleaner

1. To drain the water tank and suction system, open the drain plug in the tank. (Picture 3)  
Check that the water filter is empty. See also Section 3.2. Ice protection.
2. Replace the drain plug and add liquid anti-freeze.
3. Start the high-pressure cleaner, activate the spray lance until antifreeze escapes from the nozzle.
4. The system is now protected.



### Important

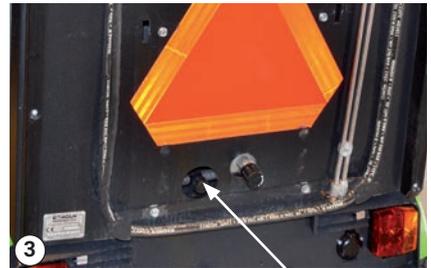
If the system has been exposed to light frost, start the pump and allow it to run in neutral (max. 1 min.) until the water in the pump has melted.



Suction filter



Spray lance      Hose



Drain plug

# Service and maintenance

## 3.3 Troubleshooting

### **Possible causes of lack of water pressure in the water-sprayers**

1. The water tank is empty.
2. The water-sprayers for the brushes are switched off.
3. The water-sprayers are blocked. To clean the water-sprayers:
  - Remove the sprayer holder hose connection (See Section 3.2).
  - Clean the sprayer with water or compressed air.
  - Refit the sprayer holder hose connection so that it is spread evenly across the machine.
4. Blocked sprayer in the hopper.  
Remove the Allen screw in the end of the spray pipe and clean the spray hole with a pipe cleaner. Turn the water on to flush the spray pipe.
5. No power to the pump.
6. Faulty sensor or relay.
7. Faulty pump.
8. Water hose is leaking or not fitted correctly.

New pumps can be ordered from an authorised Egholm.

## 3.3 Troubleshooting - continued

If the sweeping result is not optimal, it may be caused by the following reasons

### Generally

1. Too high operating speed.
2. The adjustment of the brush speed should be adjusted.
3. The distance between the front brushes and the ground should be adjusted (See paragraph 2.10, adjusting the brushes).
4. The rotational speed of the engine is too low.

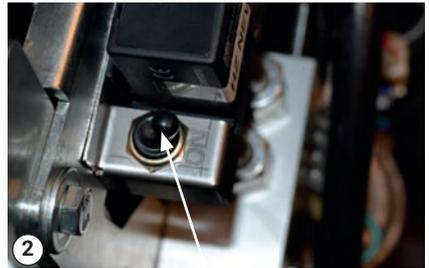
**The suction stops when the machine is stopped. Depending on tractor variant there are two possibilities for Stop and Go mode**

1. Check that the start/stop function for the salt and sand spreader (extra equipment), behind the left rear cover, is deactivated. (Picture 1+2)
2. PTO rear is started in S&G mode. make sure rear PTO is started in ON position. (Picture 3)

Check the "Stop and Go" function is NOT activated, but the PTO ON on the rear PTO is selected.



1 Start /stop function - behind the left rear cover



2 Start/stop ON



3 PTO ON

# Service and maintenance

## 3.3 Troubleshooting - continued

### **Air leaks**

1. The vacuum nozzle does not close tightly on the rubber sleeve of the vacuum hose (See paragraph 2.10, adjusting the vacuum nozzle).
2. The rubber gasket between the hopper and the water tank does not close tightly, is deformed and/or faulty. Adjust or replace the rubber gasket.
3. The rubber gasket on the rear end of the hopper does not close tightly. Adjust or replace the rubber gasket.
4. The hopper has not been lowered completely after emptying.
5. The change-over handle between suction at the front brushes / remote vacuum hose is placed in the wrong position (See paragraph 2.6, using remote vacuum hose).

### **Cleaning/maintenance**

1. Blocked or faulty vacuum hose / remote vacuum hose.
2. Blocked rotary filter / faulty rotary filter (See paragraph 3.1, cleaning / replacing the filter system).
3. Blocked change-over handle between suction at the front brushes / remote vacuum hose.
4. The hopper is full.

# Conditions

**Honest  
Machines**

# Conditions

## 4.1 Warranty

The warranty period for the materials and manufacture of this suction sweeper is 12 months from the date of purchase.

In case of errors or defects on the machine within the warranty period, Egholm will carry out the necessary repairs without charge for materials and working hours in accordance with the terms and conditions listed below.

### **The scope of the 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 warranty.
3. All inquiries concerning the warranty are to be addressed to the distributor from whom 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. This warranty is valid for persons who have legally acquired the machine within the warranty period.
6. In the event of failure to perform and substantiate service in accordance with the applicable instructions, Egholm reserves the right to reject any claim made within the warranty period.
7. Egholm reserves the right to make improvements and design-related alterations to the machine without being obliged to modify previously delivered models in relation hereto.

### **The warranty 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 attachments.
- 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 has no control.

## 4.2 Complaints

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 any complaints.

We wish you many years of safe and satisfactory use of your machine.

Best regards  
Egholm A/S

## 4.3 Disposal

When, many years from now, your suction sweeper has reached the end of its working life, it should be disposed of in a responsible manner that conforms to relevant disposal regulations.

1. Used hydraulic oil is to be disposed of at an approved waste disposal facility or site.
2. Remove the plastic and rubber parts and dispose of them in accordance with the applicable environmental legislation.
3. After the parts mentioned have been removed, the machine is ready to be handed over to one of your local approved scrap merchants.

# Honest Work.

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