

# OPERATOR'S MANUAL

## SUCTION SWEEPER City Ranger 2200



**Nilfisk  
Egholm**  
Rangers at heart

## Dear Customer

### **Congratulations with your Nilfisk-Egholm product.**

The City Ranger 2200 is a Danish designed and manufactured product, which offers a very flexible way of maintaining outdoor areas.

### **Optimal use of your Nilfisk-Egholm Suction Sweeper:**

To ensure optimal performance of your Nilfisk-Egholm 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 Nilfisk-Egholm policy to make continuous improvements, we reserve the right to alter the specifications and equipment at any time without notice. Nilfisk-Egholm A/S accepts no liability for errors or omissions in the operator's manual.

### **Contact us:**

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

Best regards

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The 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 Nilfisk-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 two different sweeping solutions.

a) Sweeper section with two brushes. Can be upgraded to solution b) at an authorized Nilfisk-Egholm dealer.

b) Sweeper section with two brushes, with an optional third and/or fourth side-brush/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!

### Optional brush-speed regulator

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

# 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)

### 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.



### 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.

### 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)



## 1.2 EC Declaration of Conformity

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

hereby declares that

Machine: **Suction Sweeper**  
Type: **FST2200 = Tank**  
**2FS2200 = Two-brush solution**  
**2FS2200 = Four-brush solution**  
**FSS2200 = Side-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 Machinery Directive 2000/14/EU

### **and in accordance with**

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

Place: **Lemvig**  
Date: \_\_\_\_\_  
Signature:   
**Knud Olsen, Senioringeniør**

# General information

## 1.3 Technical data

### Dimensions:

Suction Sweeper with

two brushes:	Assembled	Storage dimension
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 (B3)	2,100 mm	

Side-brush height (H): 350 mm

### Technical data:

Sound power level, re Directive 2000/14/EU	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 (Dependant on type of surface and surface conditions)	5,000–8,000 m <sup>2</sup> /t
Water capacity	One water-sprayer approx. 2½ hours Three water-sprayers approx. 1½ hours
Hydraulic oil	Texaco Rando HDZ 46 or equivalent

PM10 certified

### Attention:

Specifications may change without notice.

## 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

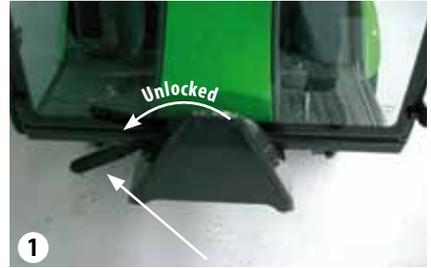
## 2.2 Assembly / Disassembly

### 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

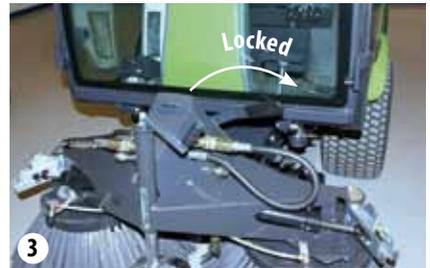
Follow the fitting procedure in reverse order.



Locking handle



Tilt the attachment into the machine



Locking

## 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)

(Continues on page 10)



Detach the hydraulic hose



Side-brush



Front-brush fixture



Snap on the side-brush

# Operator's Manual

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.



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



Hydraulic hoses + water hoses on the side-brush are fitted

## 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

# Operator's Manual

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.



The locking handle is pulled out



The locking handle is turned



### 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.

## 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 water-sprayers have enough water for approx. 1 ¾ hours of use. Four water-sprayers have enough water for 1 ¼ hours of use. If only the water-sprayer in the hopper is used, then it will have enough water for four hours of use.



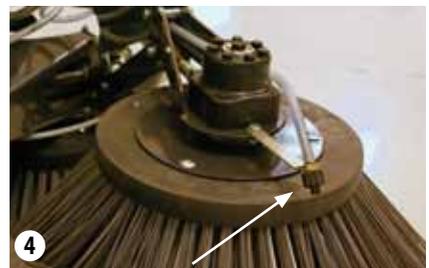
1 Topping-up the water



2 Tank gauge



3 Water-sprayer in the hopper



4 Water-sprayer – front brush

## 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

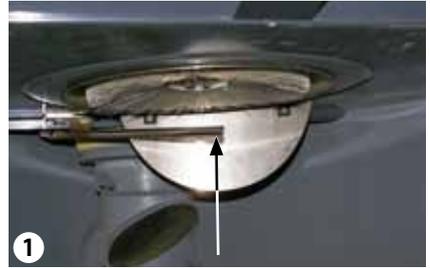
Correctly adjusted brushes last longer. Make sure the brushes do not press too hard against the surface being cleaned.  
(See Section 2.8)

### 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.

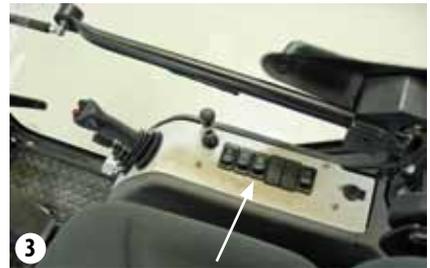
A low-level switch has been fitted which automatically stops the water pump if the water tank is empty.



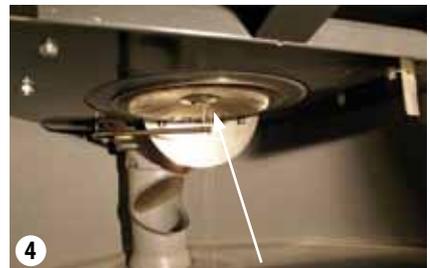
Checking the rotary filter and turbine



Ignition key – position 1



PTO (rear)



Water-sprayer in the hopper

## 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.

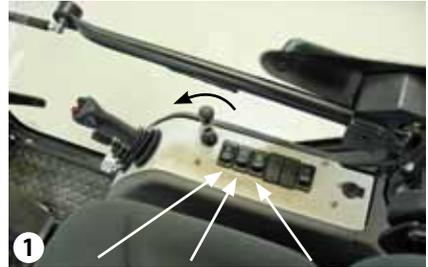
How to use the transport lock: Move the handle to the uppermost position. Lift the A-frame by moving the joystick up. As the A-frame lifts, the transport lock is automatically activated. (Picture 2)

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)

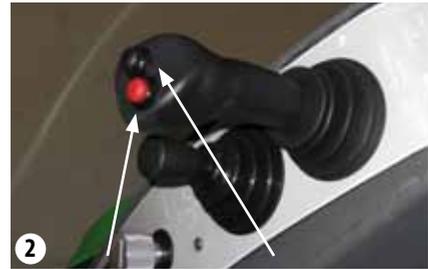


## 2.4 Suction Sweeper start-up

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 on. (Picture 1)
3. Switch ON the front PTO (brushes rotate). (Picture 1)
4. Move throttle to full. (Picture 1)
5. Lower the front brushes by moving the joystick down. (Picture 2)
6. 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 2200 machine.
7. If the two front water-sprayers are to be used, then switch them on using the "Water front brushes" switch. (Picture 1)



PTO front Water front brushes PTO rear



Weight distribution Engaging the left side-brush

## 2.5 Using side-brushes (optional equipment)

The joystick controls the side-brushes' 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.

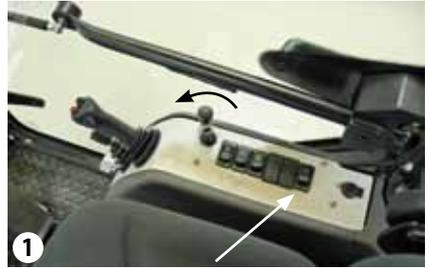
### Using left side-brush

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.

## 2.6 Using external vacuum hose

### Ready for use

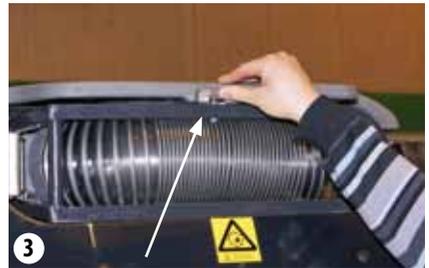
1. Engage the handbrake.
2. Switch the rear hydraulics ON while holding the manual start button down. (Picture 1)
3. Push the throttle to maximum.
4. Turn the change-over handle so the arrow points down. (Picture 2)
5. Lift the locking clip and pull the vacuum hose out. (Picture 3)
6. Pull out the vacuum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



Manual start button



Change-over handle



Locking clip is released by lifting



Handle – vacuum nozzle

## 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

## 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.



Drain plug

## 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. Adjusting the vacuum nozzle

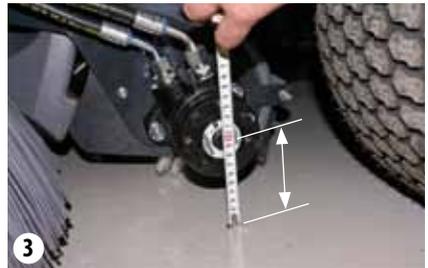
Adjust the distance between the surface and vacuum nozzle using the height-adjustment fixture. (Picture 2) With the nose wheel screwed all the way down, the distance between the hydraulic motor and the ground is 95 mm. (Picture 3) This adjustment also affects the coupling between the front brushes and the machine. Check that the vacuum hose is tightly connected to the vacuum nozzle.



Height-adjustment fixture

### 3. Adjusting the angle of the external side-brush

1. Loosen the counter nut. (Picture 4)
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.



Ground clearance



Counter nut – parallel rod

# 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)



"Clean the snap couplings with a cloth"

### 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. Remove the rotary filter and rotary filter grill (Pictures 2 and 3) and clean with water (max. temp 50°C).

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

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

4. 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 Nilfisk-Egholm distributor.

#### Replacing the turbine

The turbine should be replaced at an authorised Nilfisk-Egholm distributor.



Rotary filter



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.

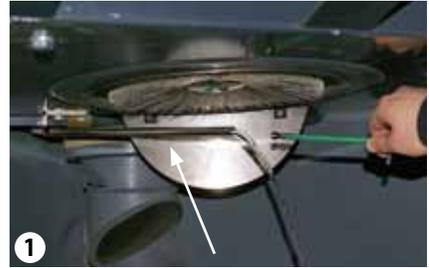
### Replacing the brush cylinder

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 brush cylinder bolt and pull the brush off. (Picture 4)
4. Fit the cylinder brush and vacuum nozzle in reverse order and tighten the bolt.

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.



Spray pipe



Vacuum nozzle Bolt



The vacuum nozzle pulls up



Cylinder brush

# Service and maintenance

## 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 Nilfisk-Egholm distributor.

The brush cylinder 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 Nilfisk-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

### **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 Nilfisk-Egholm distributor.

# Service and maintenance

## 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:

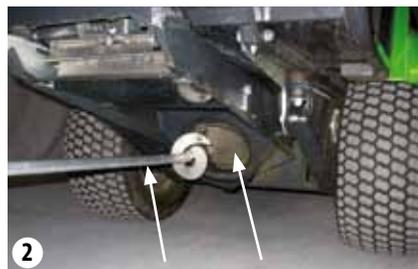
1. The hopper is fully-tipped.
2. The machine is off and the handbrake is engaged.
3. The hopper's own weight will hold it in position. (Picture 3)

## Attention!

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



1  
Cleaning tool



2  
Cleaning tool Vacuum hose



3  
Hopper fully-tipped

## 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 Nilfisk-Egholm distributor.

# ***Service and maintenance***

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**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.

**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.

## 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, Nilfisk-Egholm 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 scope of the warranty

1. The Nilfisk-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, Nilfisk-Egholm reserves the right to reject any claim made within the warranty period.
7. Nilfisk-Egholm 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.

### 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-Nilfisk-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 Nilfisk-Egholm A/S 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.

If there are questions that the distributor cannot answer, please do not hesitate to contact Nilfisk-Egholm A/S directly. Also feel free to contact us with suggestions or requests for special attachments and/or features for the machine.

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

Best regards

Nilfisk-Egholm A/S · Transportvej 27 · DK-7620 Lemvig

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## 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.

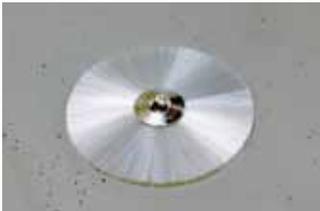
## 5.1 Spare parts – City Ranger 2200 Suction Sweeper



09922730 Rotary fan grill



09720480 Centre brush



09709600 Rotary filter



09722010 Flap for vacuum head 2200



41201780 Spray holder tank



01100330 Support wheel



04703090 Vacuum hose 150 mm



01402100 Side-brush water sprayer



01103000 Side-brush



01103200 Side-brush, poly/steel



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