

Operator's manual



**Grass Collector
City Ranger 2200**

Introduction

Dear Customer

Congratulations with your new 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 City Ranger 2200 Grass Collector

To ensure the optimal performance of your City Ranger 2200 Grass Collector, 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 Grass Collector 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 Grass Collector is designed for use by professionals only. On delivery, the user will receive thorough training to become a competent operator. Do not lend the machine to anyone who has not been thoroughly trained and 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 the machine if it 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 Egholm's policy to make continuous improvements, we reserve the right to alter the specifications and equipment at any time without notice. Egholm A/S accepts no liability for errors or omissions in the operator's manual.

Contact us

If you have questions that the distributor cannot answer, please do not hesitate to contact Egholm A/S directly.

Best regards

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

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The Egholm Grass Collector quickly and efficiently collects grass clippings directly from the Rotary Mower.

A turbine transports grass clippings from the mower at the front to the hopper at the back.

The turbine finely separates grass, twigs and leaves, ready for composting.

The turbine airstream exits the tank via a grid at the top of the hopper.

Emptying the hopper is easy – done from the cab seat. The hopper has a high-level tipping function so that it can be emptied directly into a container.

The hopper can be attached or detached quickly and easily, using the specially designed moveable frame.

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)

NB!

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 to avoid crushing.

Tyre pressure

Check tyre pressure before attaching the hopper. Adjust to 1.5 bar (22 psi). Low tyre pressure increases the risk of roll-over accidents.

Emptying the hopper

Before emptying the hopper, make sure that:

- the machine is firmly parked in level space on a stable surface and that the machine is not "angled".
- there is sufficient space to open the rear cover.



Tipping the hopper

The hopper must neither be tipped nor raised when the turbine is running.



Make sure that the hopper is secured

Check that the hopper is securely locked onto the machine. (Picture 2)



Do not get too close to the hopper

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



①

Max. 10°

Never drive on slopes with an incline of more than 10°



②

Locking handle

General information

1.1 Safety - continued

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 secure grip on the lever until the hopper rests on the machine. (Picture 1)

Risk of crushing

Make sure no one gets their fingers trapped when the hopper is lowered after tipping. (Picture 2)



Attaching the hopper on the machine



Lowering the hopper

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: **Grass Collector**
Type: **22GOT**

has been manufactured in conformity with the provisions of the Machinery Directive, Directive 2006/42/EC

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.

Person authorized to compile the technical documentation:

Mr. Rainer Flanz
Egholm A/S
Transportvej 27 · DK-7620 Lemvig

Place: Lemvig
Date: _____
Signature: 

Rainer Flanz, R&D Manager

General information

1.3 Technical data

Dimensions	Attached	Storage dimensions
Length (L).....	1,500 mm	1,700 mm
Width (W).....	940 mm	940 mm
Height with cab (H).....	1,880 mm	1,950 mm
Height with Leaf vacuum hose.....	2,150 mm	550 mm

Technical data

Type description:	22GOT
Sound power level, re	
Directive 2000/14/EF:	105 Lwa
Hopper own weight:	202 kg
Hopper volume:	750 litres
Max. weight in hopper:	500 kg
Hopper frame weight:	31 kg
Weight of Leaf vacuum hose.....	20 kg
Range with Leaf vacuum hose.....	6 m
Tipping level from ground, without high tipping:	575 mm
Tipping level from ground, with high tipping.....	Variably-adjustable from 575 to 1,860 mm
Hydraulic oil.....	Texaco Rando HDZ 46 or equivalent

NB:

Egholm reserves the right to alter the specifications and equipment at any time without notice.

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2.1 Assembling the hopper frame

On delivery, the frame must be assembled. Assemble with the 2 bolts (supplied) and the frame is ready for use. (Picture 1)



2 bolts on frame

2.2 Attaching the hopper

1. Reverse the machine up to the hopper on the frame.
2. Stop the machine.
3. Check that the locking handle is in the unlocked position. The hooks should be in the same position as illustrated. (Picture 1)
4. Check that the hydraulic couplings are clean. If necessary, clean the couplings with a dry cloth. (Picture 2)
5. Lift the hopper over the loading deck until you feel resistance. The hopper must be centred over the machine.
6. Push lever down. Note: there are two levels. Push the locking pin free from the barb and lower the hopper to level 1. (Picture 3)

Push the lever to level 2, push down, then push the locking pin away from the barb (Picture 4) and lower the hopper slowly down over the machine.



Locking lever – unlocked



Cleaning couplings



Attaching the hopper



Locking pin Lever

Operator's manual

2.2 Attaching the hopper - continued

7. Check that the hopper is correctly attached to the machine.
8. Free the hopper frame from the Grass Collector.
9. Press the grip on the locking handle in and turn it anticlockwise. 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.



Warning!

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

Removing the hopper

Follow the procedure for attaching in reverse order.



The locking handle is pulled out



The locking handle is turned

2.3 Checks before start-up

1. Position of changeover valve

Arrow pointing upwards. (Picture 1)

2. Grass filter

Check that the grass filter is clean so that expelled air can escape. (Picture 2)

3. The rear cover must be closed

The rear cover is hinged at the top. A locking pin at the bottom keeps the rear cover closed. To close the rear cover: Push gently at the bottom. (Picture 3)

Avoid roll-overs:

Check tyre pressure.

Check and adjust tyre pressure to 1.5 bar (22 psi)
Do not drive the machine where it can slide, tip or roll.
Do not drive on slopes with an incline of more than 10°. (Picture 4)



Handle on changeover valve



Grass filter



Closing rear cover



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

Operator's manual

2.4 Grass Collector start-up

The hopper is designed for use with the Rotary Mower for collecting grass clippings.

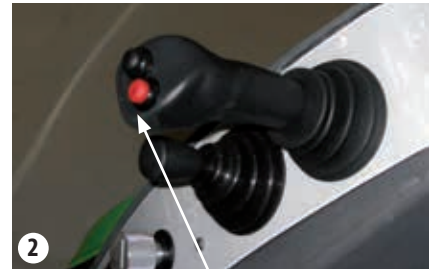
1. Start the machine.
2. Lower the Rotary Mower by moving the joystick down (Picture 1)
3. Activate the weight distribution using the red button on the joystick (Picture 2)
The mower will now follow the terrain.
4. Push the throttle forward until it is at least half open (Picture 3)
5. Activate PTO front (Mower starts) and PTO rear (turbine starts). (Picture 4)
6. Move throttle to full.

NB!

Please refer to Rotary Mower safety instructions in the Operator's Manual for the Mulch Mower and Rotary Mower.



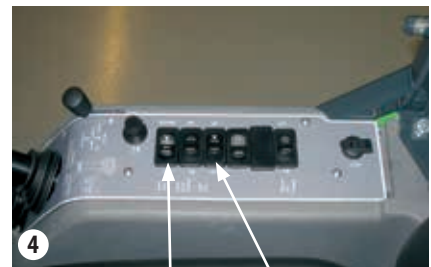
Joystick



Weight distribution



Throttle



PTO front PTO rear

2.5 Emptying the hopper

When the hopper is full, suction stops.

Grass clippings can either be emptied onto the ground or into a container.

Tipping height is variably adjustable from 575–1,860 mm.

NB!

Before emptying the hopper, make sure that:

- The machine is on a level surface and that it is not "angled".
- there is sufficient space to open the rear cover.

1. Stop PTO front and rear. (Picture 1)

2. Drive to disposal area.

3. To empty without high tipping:

The "Water Front" contact must be switched ON. (Picture 2)

Start emptying by raising the lower joystick. The hopper begins to tip.

Note that the rear cover opens automatically when the hopper is tipped at an angle of about 30°. (Picture 3)

4. To empty with high tipping:

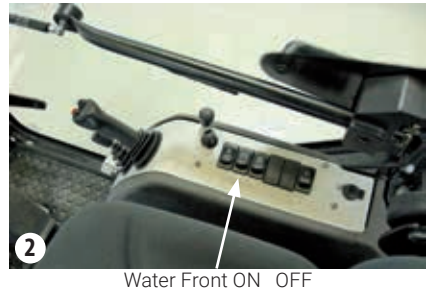
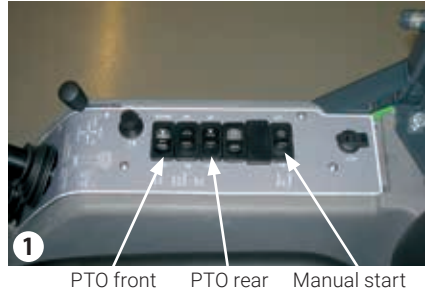
The "Water Front" contact must be switched OFF. (Picture 2)

Start raising the hopper by raising the lower joystick. When the hopper has reached the correct height, start to empty it.

The "Water Front" contact must now be switched ON. (Picture 2)

Start emptying by raising the lower joystick, the hopper begins to tip.

Note that the rear cover opens automatically when the hopper is tipped at an angle of about 30°. (Picture 4)



Operator's manual

2.5 Emptying the hopper - continued

5. When the hopper is empty, push the lower joystick down (the hopper tips back in place). Do not release the joystick handle until the hopper is completely back in place.

If you used the high tipping function, switch the "Water Front" switch to OFF. Push the lower joystick down (hopper moves down). Do not release the joystick handle until the hopper is completely back in place.

The hopper is fitted with a hose-break valve which may lock if you lower the hopper too fast. If the hose-break valve activates, raise the hopper again and then lower it more slowly.

Important!

To avoid accidents and injuries: Do not tip or raise the hopper unless the turbine has been shut off! When power to the turbine has been switched off, the deck will continue to work for approximately 15 secs.

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

Make sure the hopper is completely lowered after emptying!

Always check that the rear cover is closed after emptying!

2.6. Adjustment

1. Adjusting exhaust air direction

The exhaust air can be adjusted either to blow upwards or downwards.

To adjust the air direction: turn the vent in the exhaust-air grate. Loosen the bolts at both sides, turn the vent as required and retighten the bolts. (Picture 1)



Adjustable vent at the top of the container

2.7 Leaf vacuum hose for hopper (optional equipment)

A Leaf vacuum hose can be purchased and fitted on top of the hopper as an optional equipment.

The hose can be used to collect leaves, hedge cuttings and pine needles, for example.

It can swivel through 360° above the machine (if a roll bar is fitted, it can swivel around up to the roll bar). (Picture 1)

The Leaf vacuum hose is fitted with an extension arm that can be extended as required to allow the vacuum hose to reach over hedges, etc. (Picture 2)

We recommend using the Leaf vacuum hose alongside or in front of the machine.

2.8 Before fitting the Leaf vacuum hose

When the Leaf vacuum hose is ordered at the same time as the hopper, the hopper is prepared for connection of the hose.

If the Leaf vacuum hose is ordered subsequently, the following must be fitted to the hopper before use:

Fitting sealing ring to the changeover valve housing. (Picture 3)

1. Position the sealing ring on top of the collar of the change-over valve housing.
2. Place the strip supplied around the sealing ring and tighten. Cut off the loose end.



1 Can swivel above the cab



2 Extension arm Hook for handle



3 Sealing ring fitted with strip

Operator's manual

2.8 Before fitting the Leaf vacuum hose - continued

Fitting the transport lock to the air exhaust duct on top of the hopper (Picture 1)

1. Push the M8 x 16 Allen key bolt through a washer, the left-hand hole in the exhaust air duct and another washer. Screw on the nut to finish.
2. Place the transport lock on top of the bolt head so that the handle is to the right. (Picture 1)
3. Push the M8 x 16 Allen key bolt through the hole in the transport lock, a washer, the right-hand hole in the exhaust air duct and another washer. Screw on the nut to finish.
4. Tighten the nuts and bolts.



Transport lock, turns around bolt heads

Fitting the plastic ring on top of the hopper (Picture 2)

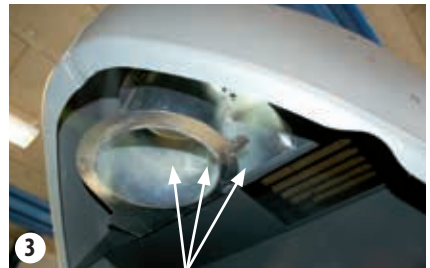
1. Place the plastic ring on top of the front end of the hopper.
2. Push the two M6 x 50 bolts through a washer, the plastic ring, the top of the hopper and another washer. Then screw on an M6 locknut.
3. Tighten the nuts and bolts.



Plastic ring on top of hopper

Fitting the bracket with the plastic ring (Picture 3)

1. Push the three M8 x 16 bolts through the three square holes in the front panel (from the interior side of the hopper).
2. Place the bracket with the plastic ring over the bolts.
3. Put on washers and locknuts.
4. Tighten the nuts.

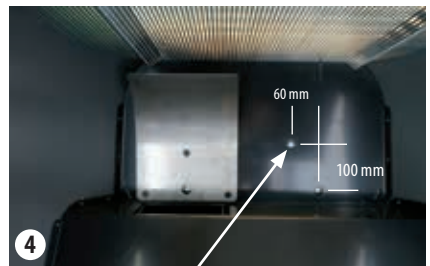


Bracket, fitted with three bolts

If you have an early model of the hopper, there is no top hole for fitting the bracket.

Drill a 13 mm hole from the interior side of the hopper. Position in relation to the right-hand square hole:

- 60 mm to the left of the centre of the hole.
- 100 mm above the centre of the hole. (Picture 4)



Hole may be missing

2.9 Fitting the Leaf vacuum hose

1. Remove the vacuum nozzle from the holder to make it easier to fit the Leaf vacuum hose.
2. Lift the Leaf vacuum hose up and lower it into the hole in the plastic ring (in the top of the front end of the hopper). (Picture 1)
3. Start the machine.
4. Engage the handbrake.
5. Switch on the rear PTO while pressing in the manual start switch. (See picture 1, page 13)
6. Push the throttle to MAX.
7. Turn the switch on the hopper so the arrow points down. (Picture 2)
8. Place the vacuum nozzle in the holder. The hose is sucked in. (Picture 3)
9. Fold the handle in.
10. Attach the rubber strap to the handle. (Picture 4)

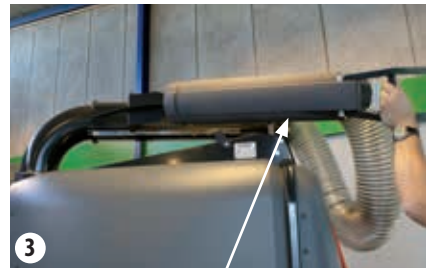
To remove the Leaf vacuum hose, reverse the procedure.



Lower into plastic ring



Turn the switch



Place the vacuum nozzle in the holder



Attach rubber strap to the handle

Operator's manual

2.10 Using the Leaf vacuum hose

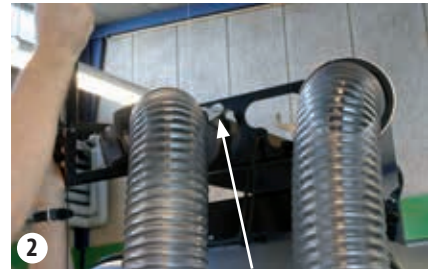
Ready for use

1. Engage the handbrake.
2. Switch on the rear PTO while pressing in the start switch. (See picture 1, page 13)
3. Push the throttle to MAX.
4. Turn the switch on the hopper so the arrow points down. (Picture 1)
5. Remove the rubber strap from the handle.
6. Pull out the vacuum nozzle.
7. Turn the handle upwards and pull out the Leaf vacuum hose. (Picture 2)
8. Pull out the extension arm (if this is necessary). Loosen the screw, pull out the extension arm and tighten the screw again. (Picture 3)

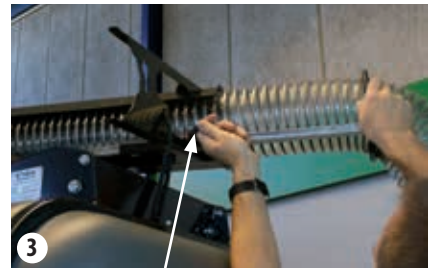
There is a hook on the extension arm on which the handle can be placed when the Leaf vacuum hose is not in use. (Picture 4)



Turn the switch



Turn the handle upwards, pull out



Loosen the screw, pull out, tighten the screw



Extension arm

Hook for handle

2.10 Using the Leaf vacuum hose - continued

Storing the Leaf vacuum hose

1. Place the vacuum nozzle in the holder. The hose is sucked in.
2. Fold the handle in.
3. Attach the rubber strap to the handle.
4. Turn the switch on the hopper so the arrow points up.

Leaf vacuum hose transport lock

As the Leaf vacuum hose may easily swivel while the machine is in motion, the transport lock must always be applied during transport.

1. Turn the Leaf vacuum hose towards the back of the machine.
2. Lock it with the transport lock, by flipping the transport lock up under the Leaf vacuum hose.
(Picture 1)



Flip the transport lock up

Service and maintenance

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Service and maintenance

3.1 Cleaning

Important

The machine must be stopped immediately if there is imbalance in the filter or turbine to prevent vibration damage in the turbine.

Grass filter

A blocked grass filter can weaken the hopper's suction.

Cleaning the grass filter

1. Tip the hopper right back so that the rear cover opens.
2. Hold the rear cover open with the bar. (Picture 1)
3. Release the grass filter by turning the locking pin. (Picture 2)
4. Lower the grass filter and pull it. (Picture 3)
5. Brush the grass filter clean. If required, use a high-pressure cleaner.

Hopper

Over time, grass, leaves and soil will adhere to the hopper.

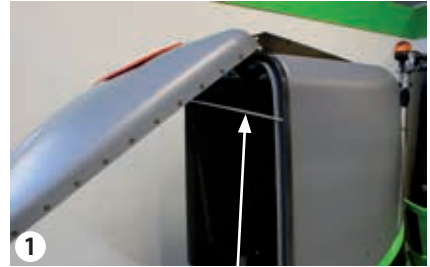
Cleaning the hopper

1. Tip the hopper right back so that the rear cover opens.
2. Hold the rear cover open with the bar. (Picture 1)
3. Brush the inside of the hopper (alternatively use a high-pressure cleaner).

NB

The rear cover can be opened without tipping the hopper.

1. Pull back the pin under the hopper.
2. The rear cover can now be opened from the bottom. (Picture 4)



Rear cover bar



Release top grate at the back



Pull top grate out



Opening the rear cover

Service and maintenance

3.2 Maintenance

Incomplete seal on turbine

The seal will become uneven or damaged over time and must be changed. (Picture 1)

Imbalance/vibration in the hopper

Under certain circumstances, imbalance/vibration can occur in the hopper. This may be caused by dried-on dirt in the turbine.

Standing under the hopper when it is raised.

If you need to stand under a raised hopper during cleaning or maintenance, follow the procedure below:

1. Lift the hopper to its highest position and then tip it.
2. Stop the machine and engage the handbrake.
3. The hopper's own weight will hold it in position. (Picture 2)

NB

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



Replace the seal on the turbine



Hopper is tipped as far as it can

3.3 Troubleshooting

The hopper suction does not work. Possible causes:

1. The hopper is full.
2. The grass filter is blocked and must be cleaned. (See section 3.1 Cleaning)

Service and maintenance

3.3 Troubleshooting - continued

3. Suction connection on the Rotary Mower is blocked.
Solution below:

- a) Release connection to the Rotary Mower.
- b) Reverse the machine away from the Rotary Mower.
- c) Remove blockage in the suction opening. (Picture 1)

4. Machine overheats.

Mowing grass is often dusty work and the cooling grate on the machine can become blocked. A blocked cooling grate can cause the machine to overheat.

Check the cooling grate regularly and clean when necessary. (Picture 2)

5. The hopper cannot be lifted from the machine after uncoupling.

On uncoupling, a hook under the hopper locks onto the lifting frame.

If this hook does not engage, the hopper cannot be lifted from the machine

Solution below:

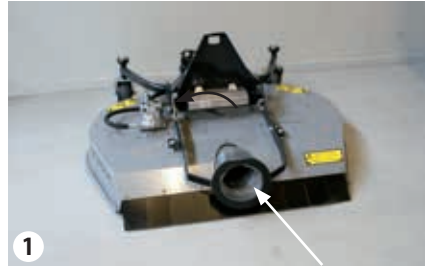
- a) Remove plastic stopper in the inspection hole. (Picture 3)
- b) Check that the hook is engaged correctly. If not, push the hook forwards.
- c) The hopper can now be lifted from the machine.

6. Mowing grass too fast can result in blockages.
Mow grass more slowly.

7. Grass can amass on the rear cover and can mean that the rear cover will not close.

Clean dried-on grass off the rear cover.

8. Certain types of grass and leaves tend to cause frequent blockages.



1 Clearing a blockage on the Rotary Mower



2 Cleaning the machine's cooling grate



3 Plastic stopper on the inspection hole

Service and maintenance

3.3 Troubleshooting - continued

Troubleshooting the Leaf vacuum hose

Failure of the Leaf vacuum hose to provide suction may be due to the following:

The change-over valve between suction with Cutter/ Leaf vacuum hose is in the wrong position. See Section 2.10, using the Leaf vacuum hose

There is a blockage somewhere in the hose. Try the following:

1. Stretch the Leaf vacuum hose out completely and shake it.
2. Look into the end of the nozzle to see if you can spot the blockage. If you can, remove it.
3. Turn off the rear PTO and lift the hopper up to check whether there is anything blocking the change-over valve. If there is, remove it.

If there is still no suction, remove the Leaf vacuum hose and check whether anything is blocking the hose.

Conditions

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Conditions

4.1 Warranty

The warranty period for the materials and manufacture of the Grass Collector is 12 months from the date of purchase.

In case of errors or defects on the machine within the warranty period, 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 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 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. 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 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-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 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.

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

Best regards
Egholm A/S

4.3 Disposal

When many years from now your Grass Collector 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 appropriately.
3. After the parts mentioned have been removed, the machine is ready to be handed over to an approved scrap merchants.

Spare parts

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5.1 Spare parts - City Ranger 2200 Hopper for grass collecting



09723970 Seal



61202220 Top grate - ø5



41108390 Shield



61202539 Top grate - ø10



09724320 Tank holder



41202350 Turbine



61201975 Cover

Spare parts

5.2 Spare parts - City Ranger 2200 Leaf vacuum hose



70501131 Vacuum hose, 6 m



70501151 Kit – Pipe bend



09724090 Nozzle



70501221 Kit - Sealing ring



70501161 Kit – Pipe



70501171 Kit – Top support



70501181 Kit – Bottom support

Notes

Honest Work.

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