

Operator's manual



**Rotary/mulch mower 1600
City Ranger 2200**

Introduction

Dear Customer

Congratulations with your 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 Mulch/Rotary Mower 1600

To ensure optimal performance from your City Ranger 2200 mulch mower/rotary mower 1600, 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 mulch mower/rotary mower is equipped with various devices to ensure optimal operational safety, both for the user and the surroundings. We therefore ask you to pay particular attention to Safety section 1.1. The machine must only be serviced by professionals.

The mulch mower/rotary mower is designed for use by professionals only. On delivery of the machine, the user will receive thorough training to become a competent operator. Do not lend the machine or tools to anyone who has not been thoroughly trained and who has not read this manual carefully.

The operator's manual should be considered a vital accessory to the machine and so must remain with it if the machine is sold.

Warnings

Some items in this operator's manual are marked with this warning symbol. The warning indicates areas where extra care has to be taken to avoid personal injury or damage to the machine and its accessories. The warning also explains how you should pay special attention to the aspect in question.



Reservations

As it is Egholm 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 shortcomings in the operator's manual.

Contact Egholm

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

Best regards
Egholm A/S · Transportvej 27 · DK-7620 Lemvig
T. +45 97 81 12 05
E-mail: info@egholm.dk · www.egholm.eu

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The City Ranger 2200 mulch mower/rotary mower 1600 operates quickly and effectively to meet your every cutting need – even on difficult lawns.

The mulch mower cuts and recuts the grass into tiny particles and blows them down into the lawn, which fertilises the soil naturally throughout the summer. The result is a green and well-trimmed lawn.

The rotary mower with rear discharge feature is especially well-suited to rough, tall and even damp grass, leaving it looking well groomed.

The Egholm mowers are equipped with piano wheels as standard, which make the mower follow the steering. This also avoids leaving tracks on the lawn.

The City Ranger 2200 mulch mower/rotary mower 1600 can maintain 8–15,000 m² per hour. It simply races around the lawn with a cutting width of 1,610 mm.

Useful tips

Never allow the radiator grille to become choked with grass. This reduces the cooling effect.

The mulch mower is designed to cut up to one third of the grass height. Adjust the mowing frequency hereafter.

Adjust the speed for the desired result – the best result is achieved when you avoid driving too fast.

Ensure the snap couplings are clean before locking, as this protects the hydraulic system.

General information

**Honest
Machines**

General information

1.1 Safety



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

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



NB

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



Avoid crushing fingers

Keep your hands and fingers away from areas where there is a danger of crushing. (Picture 2)



Avoid roll-overs

Do not drive the machine in places where there is a risk that it may slide, tip or roll. Do not drive on slopes with an incline of more than 10°. (Picture 3)



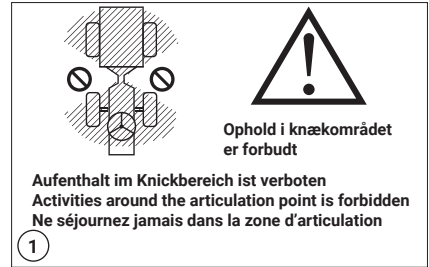
Warning! Rotating parts

To avoid personal injury, make sure no one puts their fingers or toes under the mower while it is in operation. (Picture 4)



Warning

Remove stones and branches from the lawn as they can be unintentionally thrown out and cause damage to people and property. Prevent people from standing in the working area.



Prevent people from standing in the working area.



Warning label



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



Warning label

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

The machine: **Mulch Mower/Rotary Mower 1600**
Type: **22LM16**
Serial No:
Year:

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

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

General information

1.3 Technical data

Dimensions:	Attached:	Storage dimensions:
Length (L)	3,050 mm	1,240 mm
Width (W)	1,670 mm	1,670 mm
Height with cab (H)	1,960 mm	570 mm

Technical data:

Type description	22LM16
Sound power level, re Directive 2000/14/EC	103 dB(A)
Own weight	170 kg
Cutting width	1,610 mm
Adjustable cutting height	30-90 mm
Performance/hour	approx. 8,000-15,000 m ² /h
Ground clearance below mower	90 mm
No. of mower blades	3 units

Attention:

Specifications may be changed without prior notice.

Optional equipment

70301081 Mulch-kit for rotary mower

Operator's manual

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2.1 Assembly / Disassembly

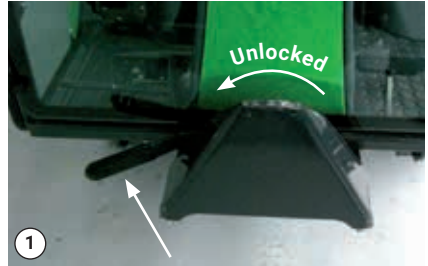
Check that the blades are sharp, intact and free from cracks before attaching the mower. This avoids unnecessary breakdown while mowing.

Assembly

1. The locking handle on the A-frame of the base machine must be in the unlocked position. (Picture 1)
2. Drive the base machine right up to the A-frame of the mower, so the A-frames fit into each other. (Picture 2)
N.B. It is recommended that the A-frame of the machine is not dropped completely down, as this may damage the mower paintwork when the A-frames are fitted together.
3. Raise the A-frame by pulling the joystick back until the support wheels hang free of the ground. (Picture 3)
4. Switch off the engine.
5. Use the locking handle on the A-frame to lock the mower in place. (Picture 4). The locking handle can only be engaged when the engine has been switched off.

Removal

Follow the procedure for fitting in reverse order.



Locking handle



Attaching



Lift



Locking

Operator's manual

2.2 Before start-up

During transport:

Lock the mower in the raised position using the transport lock. This 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 1)

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 2)



Warning!

Make sure to avoid driving over manhole covers or similar obstacles to avoid damaging the blades and guard.

2.3 Start-up

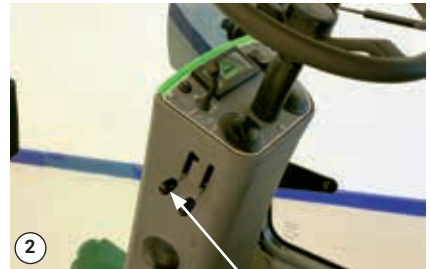
1. Start the machine.

2. Lower the rotary mower by moving the joystick down. (Picture 3)

3. Activate the weight distribution using the red button on the joystick. (Picture 4) The mower will now adjust to ground conditions.



Transport lock – locked



Transport lock – unlocked



Joystick



Weight distribution

2.3 Start-up - ontinued

4. Push the throttle forward until it is at least half open. (Picture 1)

5. Start the mower by activating PTO-front. (Picture 2)

6. Push the throttle all the way forward to achieve the correct cutter speed.

7. Adjust the driving speed to suit the conditions.

8. Make sure to keep the radiator, water cooler and radiator grilles free from grass. This ensures the correct cooling effect and protects the engine. (See Section 3.1 Cleaning)



Warning Rotating parts

To avoid personal injury, make sure no one puts their fingers or toes under the mower while it is in operation.



Warning

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



NB

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



Push the throttle forward until it is half open



PTO-front

Operator's manual

2.4 Adjustment

Adjusting the cutting height

Start with a high cutting height to avoid cutting the grass too short.

Use the joystick to adjust the cutting height

For a higher cutting height, move the joystick inwards. (Picture 1)

For a lower cutting height, move the joystick outwards. (Picture 2)

The cutting height in cm is approximately equivalent to the number on the height adjustment scale. (Picture 3)

Check the mower height and repeat the adjustment until the required cutting height is achieved.

Adjust the rear support wheel to suit the cutting height. The rear support wheel protects against uneven areas on the lawn and ensures an optimal mowing result. The height of the support wheel can be adjusted to accommodate grass heights of 2.5–6 cm. The height adjustment is carried out in intervals of 0.5 cm.

How to adjust the rear support wheel

1. Unscrew the winged nut. (Picture 4)
2. Turn the wheel to the hole that corresponds to the height required.
3. Retighten the winged nut.



1 Adjustment handle – Raising the cutting height



2 Adjustment handle – Lowering the cutting height



3 Height adjustment scale



4 Rear support wheel – Winged nut

2.5 Tilt the mower up during maintenance and service procedures

The mower is supplied with a support frame for use during service and maintenance of the mower.

The frame is attached to the mower guard on delivery. (Picture 1)

To tip the mower up, set the cutting height at 3–4 on the scale. (See Section 2.4)

Removing the frame

1. Pull the locking handle out and hold it in its "out" position. (Picture 2)
2. Pull out the frame.

Fitting the frame

1. Use the A-frame of the base machine to lift the mower.
2. Fit the frame to the mower guard, using the two attachment holes in the guard. (Picture 3)
3. Pull the locking handle out, and make sure that it locks in the hole.
4. Lower the mower again and drive the base machine away.

Tilt the mower up

1. Turn the lever so that the lock on the frame is lifted out. (Picture 4)
2. Lift the back edge of the mower and stand it up.

Make sure that the lock falls into place when the mower is laid down.

The frame can be carried on top of the mower, if it is placed upside down on the mower guard.



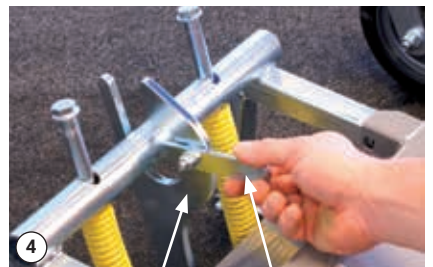
Frame on top of mower



Locking handle



Fit the frame



Lock Lever

Service and maintenance

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Service and Maintenance

3.1 Cleaning

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

It is important the couplings are intact before fitting the attachment.

Cleaning the mower

1. Switch off the machine.
2. Remove the mower. (See Section 2.1)
3. Tilt the mower forward. (See Section 2.5) and (Picture 1)
4. Clean the mower with water.
5. Open the flap over the snap couplings. Clean the area around the snap couplings with compressed air. Dry the snap couplings with a cloth. (Picture 2)
6. Avoid high pressure cleaning of the snap couplings. We recommend that you clean the mower immediately after operation to stop the grass sticking too firmly to the guard and blades.



Tip the mower forward.



Clean the snap couplings

Service and Maintenance

3.1 Cleaning - continued

Cleaning the water/oil cooler

1. Open the side guards. Detach the side guards if necessary. (Picture 1)
2. Blow the cover and radiator clean with compressed air.
3. The radiator can be washed with clean water. (Picture 2)
4. The radiator guards must be cleaned regularly if cutting very dry grass.



Warning

Do not use hard implements when rinsing the radiator, as this can damage the fins.



Warning

Blow the radiator clean with compressed air before washing the machine. Otherwise the dirt will not wash off.



Open the side guards



Wash the radiators with clean water

Service and Maintenance

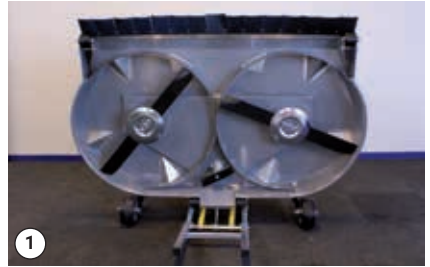
3.2 Maintenance

Replacing the blades

If the blades are damaged, the mower will begin to vibrate. These are replaced as follows:

1. Switch off the machine.
2. Remove the cutter. (See Section 2.1)
3. Tip the mower forward. (See Section 2.5) and (Picture 1)
4. Using a chisel or screwdriver, open the locking plate that locks the bolt heads. (Picture 2)
5. Unscrew the bolts and remove the locking plate.
6. Attach new blades with the sharp edge facing towards the direction of travel. (Picture 3)
It is recommended to replace the blades one at a time to ensure that they face the right way.
7. Refit the locking plate and bolts. The bolts should be tightened to a torque of 85 Nm.
8. Lock the bolts by bending the locking plate in towards a flat side of each bolt.
It is recommended to avoid using the locking plate more than twice, and to avoid bending it repeatedly. This prevents the blades from falling off during operation.

New blades and locking plates can be ordered from an authorised Egholm distributor.



Tip the mower forward



Bolts and locking plate



Direction of blade travel

Service and Maintenance

3.2 Maintenance - continued

Sharpening the blades

1. Switch off the machine.
2. Remove the cutter. (See Section 2.1)
3. Remove the blades. (See Page 14)
4. The blades should be sharpened equally on both sides to ensure they are correctly balanced.
5. Refit the blades. (See Page 14)

Replacing the fan belt

We recommend replacing the fan belt every year. This work must be carried out by an authorised Egholm distributor.

Winter storage

When it is time to store the mower for the winter, the following steps are recommended:

1. Remove any loose paint and repaint any damaged areas.
2. Spray the mower with protective oil.

Conditions

**Honest
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Conditions

4.1 Warranty

The warranty period for the materials and manufacture of this mulch mower/rotary mower is 12 months from the date of purchase.

In case of faults or defects in 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 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 therefore cover

- Wear and tear, accidents, damage to the equipment caused by operating errors, negligence, 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, incorrect or insufficient maintenance 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 to 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 mulch mower/rotary mower has reached the end of its working life, it should be disposed of in a responsible manner that conforms with 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 aforementioned parts have been removed, the machine is ready to be handed over to a local approved scrap merchants.

Spare parts

**Honest
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5.1 Spare parts - City Ranger 2200 Mulch Mower/Rotary Mower 1600



01604250 Fan belt



70301141 Blade set



01100300 Wheel



09724030 Rubber guard

Honest Work.

Egholm A/S
Transportvej 27
7620 Lemvig, Denmark
T.: +45 97 81 12 05
www.egholm.eu - info@egholm.dk