



Weed brush Park Ranger 2<u>150</u>

# Introduction

#### Dear Customer

#### Congratulations with your new Egholm product

The Park Ranger 2150 is a Danish designed and manufactured product, which offers a very flexible way of maintaining outdoor areas.

#### Optimal use of your Park Ranger 2150 Weed brush

To ensure optimal performance of your Park Ranger 2150 Weed brush, 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 Weed brush 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 Weed brush 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 machine's specifications and equipment at any time without notice. Egholm accepts no liability for errors or omissions in the operator's manual.

#### Contact us

Do not hesitate to contact Egholm if you should have any questions regarding your new Egholm product.

Best Regards Egholm A/S · Transportvej 27 · DK-7620 Lemvig T. +45 97 81 12 05 · F. +45 97 81 12 10 E-mail: info@egholm.dk · www.egholm.eu



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#### 1. General information

The Weed brush has been specially developed for the Egholm utility machine

The Weed brush is used to remove weeds from kerbs, pavements and roads.

The Weed brush features a sturdy, front-mounted steel brush that is hydraulically adjustable in two directions.

The Weed brush can be fitted together with the hopper from the Suction Sweeper Unit in order to collect weeds and seeds loosened by the brush.

The Weed brush can be assembled and disassembled without using tools.

#### Useful tips

Always start your weed control in early spring. A perfect result requires repeated efforts throughout the summer.

Grass tufts by the edges of paths and pavements are easiest to remove when they are moist. Here, too, you should start weed removal before the grass starts to grow.

Large, heavy or damp grass tufts can be difficult for the machine to collect. Therefore, for a perfect result, leave them to dry for a couple of days before using the Suction Sweeper Unit to remove them.

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#### 1.1 Safety

#### Mounting

Make sure that the attachment has been fitted correctly and that the locking handle can be moved to locked position. (Picture 1)



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

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



#### N.B!

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



#### Avoid crushing fingers

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



#### Avoid roll-overs

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



# Reduction of noise and energy consumption

We recommend that you avoid driving with a higher engine speed than necessary to reduce noise and energy consumption.



Locked position





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

#### **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:	Weed brush
Туре:	UB1

 $\cdot$  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:

Date:

Signature:

Lemvig

Rainer Flanz, R&D Manager

#### 1.3 Technical data

Dimensions	Attached	Storage dimensions
Length (L) - Incl.hopper	3.300 mm	1.450 mm
Width (W)	1.230 mm	900 mm
Height without cab (H) - incl. hopper	1.850 mm	630 mm
Height with cab (H)	1.935 mm	

#### **Technical data**

Туре UB1
Ground clearance under brush
Ground clearance under vacuum nozzle
Brush diameter
Weed brush weight
Revolutions

#### N.B!

3

Specifications may be changed without prior notice.



Side view



Front view



Typeplate

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#### 2.1 Assembly

#### Delivery

The Weed brush is delivered on a pallet wrapped in plastic. (Picture 1)

1. Unpack the Weed brush and lift it off the pallet. (lifting point is the pipe below the top hydraulic cylinder). (Picture 2)



Weed brush delivered on a pallet wrapped in plastic.



Lifting point

#### 2.1 Assembly/Disassembly

#### Assembly

1. The locking handle on the A-frame of the basic unit must be in the open position. (Picture 1)

2. Drive the machine right up to the A-frame of the Weed brush so that the A-frames fit into each other. NB! We recommend raising the basic unit A-frame slightly to prevent damage to the paintwork on the Weed brush when the two A-frames make contact.

3. Use lever A to lift the A-frame until the brushes are raised clear of the ground. (Picture 3)

4. Use the locking handle on the A-frame to lock the Weed brush in position. (Picture 2)

5. Fit the two medium-sized hydraulic hoses to the B-connectors. (Picture 3)

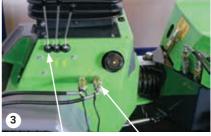
6. Use the rubber ring to attach the hydraulic hoses under the running board to ensure that they run correctly across the screen. (Picture 4)



Locking handle on the A-frame - open



Locking handle - locked



Lever A B-connector



The hoses are fastened with a rubber strap

#### 2.1 Assembly, continued

7. Run the two small hydraulic hoses between the D2 and D3 connectors and attach them to the hopper. The hopper must must be connected to the Basic machine C connectors. (Pictures 1+2+3)

8. Fit the large male connector to D1. (Picture 1)

9. Connect the hydraulic hoses from the hopper to D2, D3 and above the male connector on D1.(Picture 4)

#### Note1

#### **Connector tank**

Without three-way valve (old version) If the hopper is not fitted with a three-way valve the small hoses must be mounted directly on the Basic machine C connectors.

#### Note 2

If the Weed brush is used without the hopper, then mount the small hoses directly on the Basic machine C connectors.



Leading the hydraulic D1 connector hoses between the connectors



Mount the small hoses from the Weed brush on the hopper connectors



Attaching the hydraulic hoses from the hopper to C connector



Mount hydraulic hoses to D connectors

#### 2.1 Assembly, continued

10. Connect the suction hose.

Mount the rubber ring from the Weed brush on the suction hose. (Picture 1) Mount the suction hose to the suction mouth with the rubber lock handle. (Picture 2) Fix the rubber ring to the Weed brush bracket. (Picture 3) Fix the suction hose to the cabin. (Picture 4) (Without cabin: fix to the hose holder behind the seat)

#### Assembling the hopper

See Section 2.1 of the operator's manual for the Suction Sweeper Unit.

#### Disassembly

1. Position the Weed brush so that it is level with the ground.

2 Tip the Weed brush forwards in the direction of travel.

3. Stop the machine. (See the operator's manual for the basic unit, section 2.2)

4. Release the pressure from the hydraulic hoses. Then simply reverse the procedure for assembling the unit.



Rubber ring mounted on suction hose



Rubber lock handle



Rubber ring mounted on Weed brush bracket



Hose fixed to cabin with rubber mount

#### 2.2 Start-up

1. Start the machine. (See the operator's manual for the basic unit, section 2.2)

2. Turn the throttle until it is at least half open. (Picture 1)

3. Slowly move lever D up to position 1. The Weed brush will begin to rotate and the suction will start.(Picture 2)

4. Now fully engage the throttle (full power).

5. Start to drive forwards.



#### NB

If the machine stands still while the Weed brush is operating, a ring may be worn into the road surface. Therefore, the Egholm Park Ranger should always be in motion before the Weed Brush is lowered!!

6. Use lever A to lower the brush. (Picture 3)



#### Warning!

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



#### N.B!

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



Throttle



Lever D



Lever A



The machine must be in motion while the brush is rotating.

#### 2.3 Emptying the hopper

#### With three-way valve

If the hopper is fitted with a three-way valve, use lever C to empty the the hopper. (Picture 2)



#### NB!

It is not possible to empty the hopper if the Weed brush is started.

#### Without three-way valve (old version)

If the hopper is not fitted with a three-way valve, disconnect the Weed brush hydraulic hoses from C1 and C2 and connect the hopper hoses to C1 and C2 before emptying the the hopper. (Picture 1)

Reconnect the hydraulic hoses in the reverse order after emptying the hopper.



#### N.B!

There is a risk of crushing fingers when emptying the hopper.

#### 2.4 Adjustment

#### Removing weeds from the side of the road

When removing weeds from the side of the road, we recommend that you tilt the Weed brush to the right towards the edge of the road. To do this: - Move lever C up to position 1. (Picture 2)



#### NB

it is not possible to tilt the brush before the Weed brush is started. If the brush is stopped the hopper will start to tip.

#### To tilt the Weed brush to the left

- Move lever C down to position 2. (Picture 2)

#### To tilt the Weed brush forwards

This will result in pressure being applied to the front part of the brush:

- Move lever B down into position 2. (Picture 2)

#### To tilt the Weed brush backwards

- Move lever B up to position 1. (Picture 2)



C connector



Lever A - B - C



#### 2.4 Adjustment - continued

#### Adjusting the wearing rail

The centre brush ensures that the weeds are collected in the hopper.

The wearing rail holds the centre brush and must always be in contact with the ground to ensure that the centre brush functions optimally. (Picture 1)

If the wearing rail is correctly adjusted, it will follow the terrain.

#### Correct setting of the wearing rail

The wearing rail is correctly adjusted if there are 2-3 mm of space between the metal and the A-frame. (Picture 2)

If the gap is too large, the rail cannot be lifted clear of the ground. The wearing rail is therefore correctly adjusted when it is clear of the ground in "lifted" position.

#### Adjusting the wearing rail

1. Lower the wearing rail.

2. Remove the forked bolt. (Picture 3)

3. Turn the fork end in towards the wearing rail. (Picture 3)

The shorter the threaded section, the more the wearing rail will be raised.



Wearing rail

Centre brush



2-3 mm gap between the metal and the A-frame



The forked bolt

The fork end

# Service and maintenance

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# Service and maintenance

#### 3.1 Cleaning

Clean the Weed brush with clean water.



When cleaning, check to see whether any string, etc.has become wrapped around the centre brush. If so, remove it from the centre brush to allow the centre brush to rotate freely.

#### 3.2 Maintenance

#### Replacing the wearing rail

The wearing rail must not be worn down further than to the casing. New wearing rails may only be fitted by authorised Egholm distributors.

#### Replacing the steel brush

1. Stop the machine. Turn off main switch.

2. Loosen the nuts inside the steel brush. (Picture 2)

3. Remove the steel brush.

4. Fit the new brush.

You can order new steel brushes from an authorised Egholm distributor.

#### Replacing the centre brush

1. Stop the machine.

2. Loosen the bolt that holds the centre brush in place.(Picture 3)

3. Loosen the nuts that hold the oil motor in place.(Picture 4)

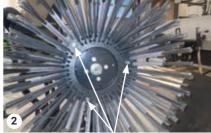
- 4. Remove the oil motor.
- 5. Remove the centre brush.

To fit the new centre brush, reverse the procedure. You can order new centre brushes from an authorised Egholm distributor.



Centre brush

Casing



Nuts holding the steel brush in place



Loosen the bolt holding the centre brush in place



Loosen the nuts holding the oil motor in place, 2 pcs

# Service and maintenance

#### 3.3 Troubleshooting

#### If weeds remain lying on the ground

For the machine to collect weeds in the hopper, the centre brush must touch the ground. To adjust the position of the centre brush, change the setting of the wearing rail. (See Section 2.4)

#### If branches or twigs block the suction mouth

1. Stop the machine. (See Section 2.2 of the operator's manual for the basic unit)

2. Disconnect the suction hose from the suction mouth. (Picture 2)

- 3. Remove branches and twigs manually.
- 4. Reconnect the suction hose.

#### If the suction hose is blocked

In extreme conditions, sand deposits can gradually block the suction hose. To deal with this situation:

1. Stop the machine. (See Section 2.2 of the operator's manual for the basic unit)

2. Disconnect the suction hose. (Picture 2)

3. Shake the hose to remove the unwanted material.

4. Reconnect the suction hose.

NB!



#### When collecting heavy material

Iff you are using the machine to collect heavy material such as sand, make sure to empty the hopper from becoming unstable on account of excess weight.



Wearing rail

Centre brush



Disconnect the suction hose

# Conditions

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# Conditions

#### 4.1 Warranty

The warranty period for the materials and manufacture of the Weed brush 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 at no 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 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.

# Conditions

#### 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 satisfied use of your machine.

Best Regards Egholm A/S

#### 4.3 Disposal

Many years from now, when your Weed brush has reached the end of its working life, it should be disposed of in a responsible manner that conforms with relevant disposal regulations.

1. Waste hydraulic oil must be disposed of at an approved waste disposal facility or site.

2. Remove all plastic and rubber parts and dispose of.

3. After the parts mentioned have been removed, the machine is ready to be handed over to one of your local approved scrap merchants.

# **Wearing parts**

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## Wearing parts

#### 5.1 Wearing parts - Park Ranger 2150 Weed brush



E01103210 Hard brush



E01103060 Soft Weed brush



E01103020 Centre brush



E09701110 Rail



E02709010 Rubber ring



# Honest Work

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