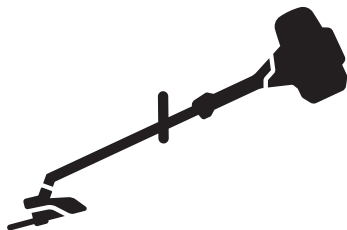




Husqvarna®



RA850

EAC

EN	Operator's manual	2-13
BG	Ръководство за експлоатация	14-26
CS	Návod k použití	27-39
DA	Brugsanvisning	40-51
DE	Bedienungsanweisung	52-64
EL	Οδηγίες χρήσης	65-77
ES	Manual de usuario	78-90
ET	Kasutusjuhend	91-102
FI	Käyttöohje	103-114
FR	Manuel d'utilisation	115-127
HU	Használati utasítás	128-140
IT	Manuale dell'operatore	141-153
LT	Operatoriaus vadovas	154-165
LV	Lietošanas pamācība	166-178
NL	Gebruiksaanwijzing	179-191
NO	Bruksanvisning	192-203
PL	Instrukcja obsługi	204-216
PT	Manual do utilizador	217-229
RO	Instrucţiuni de utilizare	230-242
RU	Руководство по эксплуатации	243-255
SK	Návod na obsluhu	256-267
SL	Navodila za uporabo	268-279
SV	Bruksanvisning	280-291
TR	Kullanım kılavuzu	292-303

Contents

Introduction.....	2	Maintenance.....	9
Safety.....	4	Transportation, storage and disposal.....	12
Operation.....	7	Technical data.....	12
Assembly.....	8	EC Declaration of Conformity.....	13

Introduction

Intended use



WARNING: The cutting attachment must only be used together with compatible products. Refer to the operator's manual of the product.

The cutting attachment is used to cut grass and twigs.

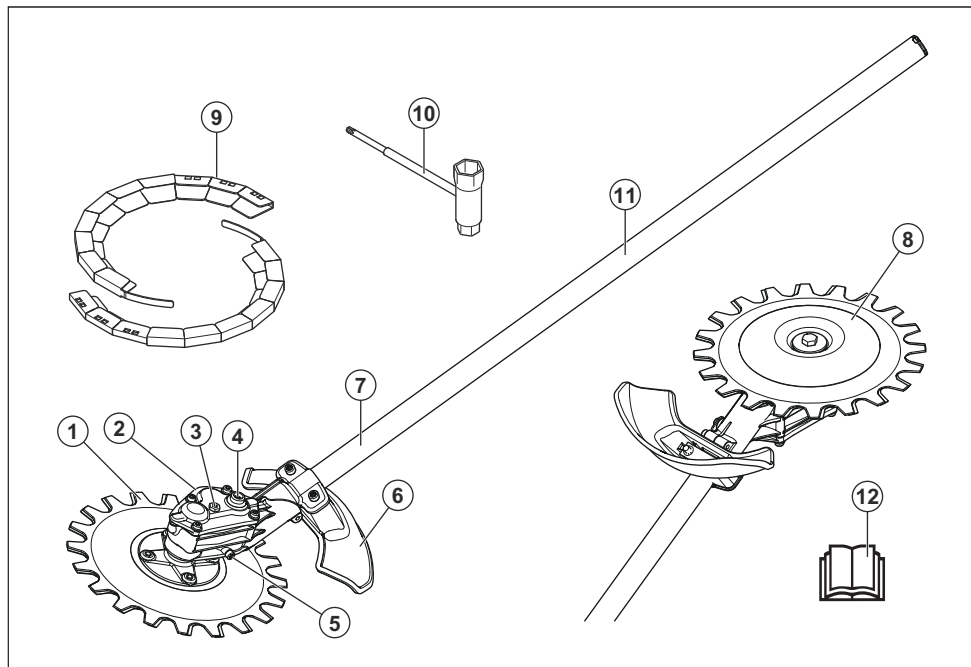
Note: National regulations can set limit to the operation of the product.

Product description

We have a policy of continuous product development and therefore reserve the right to modify the design and appearance of the products without prior notice.

Note: This manual cover both gasoline operated and battery operated power units.

Cutting attachment overview



1. Blade
2. Gear housing
3. Top grease plug

4. Socket to move the blades manually
5. Bottom grease plug
6. Cutting attachment guard

7. Shaft
8. Support cup
9. Transport guard
10. Combination wrench
11. Information and warning decal
12. Operator's manual

Symbols on the attachment and on the power unit



Careless or incorrect use of this attachment can result in serious or fatal injury to the operator or others.



Read the operator's manual carefully and make sure you understand the instructions before you use the attachment.



Use a protective helmet in locations where objects can fall on you. Use approved hearing protection. Use approved eye protection.



Always wear approved protective gloves.



Wear sturdy, non-slip boots.



Maximum cuts per minute.



The arrows show the limits for the position of the handle.



The product can cause objects to eject, which can cause injury.



Keep a minimum of 15 m / 50 ft distance to persons and animals during operation of the product.



The operator must ensure that no people or animals come closer than 15 metres. When several operators are working at the same site a safety distance of at least 15 metres must be in effect. The attachment can forcibly throw objects that can bounce back. This can result in serious eye injuries if the recommended safety equipment is not used.



Noise emission to the environment according to the European Community's Directive. The attachment's emission is specified in the *Technical data on page 12* chapter and on the label.



This attachment is in accordance with applicable EC directives.

The product agrees with the applicable EAC directives.



The product agrees with the applicable Ukraine directives



The product agrees with the applicable Australia and New Zealand electromagnetic compatibility directives.

yyyywwxxxx

The serial label shows serial number. **yyyy** is the production year and **ww** is the production week.

Note: Other symbols/decals on the attachment refer to special certification requirements for certain markets.

EU V



WARNING: Tampering with the engine voids the EU type-approval of this product.

IMPORTANT SAFETY INSTRUCTIONS

Safety definitions

Warnings, cautions and notes are used to point out specially important parts of the operator's manual.



WARNING: Used if there is a risk of injury or death for the operator or bystanders if the instructions in the manual are not obeyed.



CAUTION: Used if there is a risk of damage to the product and/or the attachment, other materials or the adjacent area if the instructions in the manual are not obeyed.

Note: Used to give more information that is necessary in a given situation.

Read all instructions



WARNING: When using electric gardening appliances, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury, including the following:

General safety instructions



WARNING: Read the safety instructions that follow before you use the attachment.

- Please read the operator's manual carefully and make sure you understand the instructions before using the attachment.
- These instructions supplement the instructions that were included with the product. For other procedures, please refer to the operating instructions for the product.
- Under no circumstances may the design of the attachment be modified without the permission of the manufacturer. Do not use an attachment that appears to have been modified by others and always use original accessories. Non-authorized modifications and/or accessories can result in serious personal injury or the death of the operator or others.
- Overexposure to vibration can lead to circulatory damage or nerve damage in people who have

impaired circulation. Contact your doctor if you experience symptoms of overexposure to vibration. Such symptoms include numbness, loss of feeling, tingling, pricking, pain, loss of strength, changes in skin color or condition. These symptoms normally appear in the fingers, hands or wrists. These symptoms may be increased in cold temperatures.

Safety instructions for operation

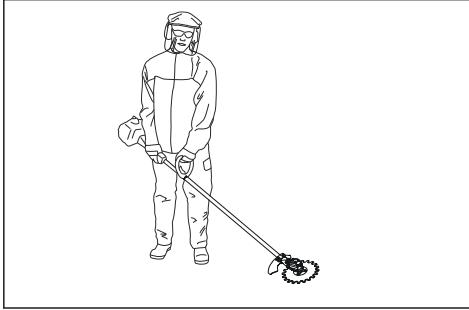


WARNING: Read the warning instructions that follow before you use the product.

- Only use the product for operations that are given in this manual. Refer to *Intended use on page 2*.
- Do not use the product if you are not sure about if you can operate it.
- Do not operate this product when you are tired, ill, or if you use alcohol, drugs or medicine. This can decrease your vision, your judgment or your coordination.
- Do not use the product if you cannot get aid if an accident occurs.
- Do not use the product if there are signs of damage.
- Make sure that the cutting attachment always stops when the engine/motor is at idle speed.
- Make sure that no one comes nearer than 15 m / 50 ft when you cut. Make sure that only approved persons are in the work area.
- Do not let children use or come near the product.
- Keep the work area clean and bright. Do not use the product in bad weather, for example in fog, heavy rain, strong winds, intense cold, risk of lightning.
- If something gets caught in the blades during operation, stop the engine/motor and wait until the blades do not move. Remove the spark plug cap from the spark plug/remove the battery. Put the combination wrench in the gear housing socket to move the blades, refer to *To sharpen the blades on page 10*.
- If the blades are damaged during operation, the top blade and lower blade can get caught in each other. Do not touch the blades, they can move suddenly and cause injury.
- Make sure that you are in a safe and stable position during operation.
- The product can cause objects to eject at high speed. Make sure that all persons in the work area use approved personal protective equipment. Remove loose objects from the work area.
- Monitor the work area when you wear hearing protection. Always remove your hearing protection when the engine/motor stops.
- If the product has unusual vibration, stop the engine/motor. If you have a gasoline operated product,

remove the spark plug cap from the spark plug. If you have a battery operated product, remove the battery. Check immediately for the cause. Vibration is usually a warning of damage.

- Do not go away from the product when the engine/motor is on.
- Hold the product with 2 hands. Hold the product on the right of your body. Operate the product with the cutting attachment below your waist.



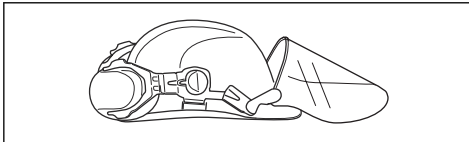
- The cutting attachment must cut away from the operator. To cut in the direction the operator can cause serious injury.
- Make sure your hands and feet do not come near the blades when the engine/motor is on.

Personal protective equipment



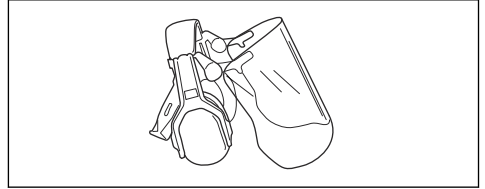
WARNING: Read the warning instructions that follow before you use the product.

- Always use approved personal protective equipment when you use the product. Personal protective equipment cannot fully prevent injury but it decreases the degree of injury if an accident does occur. Let your dealer help you select the right equipment.
- Use a protective helmet where there is a risk of falling objects.

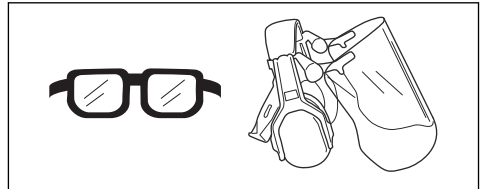


- Long term exposure to noise can result in damaged hearing. In general, battery powered products are relatively quiet but damage can result from a combination of noise level and long usage. Husqvarna recommends that operators use hearing protectors when using products for a longer coherent time of a day. Continual and regular users should have their hearing checked regularly. Note that

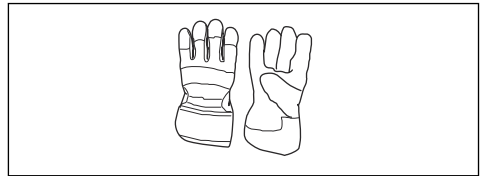
hearing protectors limit the ability to hear sounds and warning signals.



- Use approved eye protection. If you use a visor, you must also use approved protective goggles. Approved protective goggles must agree with the ANSI Z87.1 standard in the USA or EN 166 in EU countries.



- Use gloves when it is necessary, for example, when you examine or clean the product.

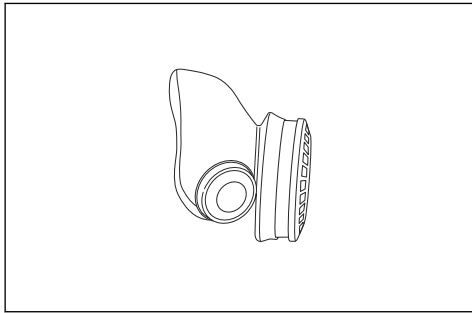


- Use protective boots, or shoes, with non-slip soles.



- Use clothing made of a strong fabric. Always use heavy, long pants and long sleeves. Do not use loose clothing that can catch on twigs and branches. Do not wear jewelry, short pants, open shoes or go with bare feet. Put your hair up safely above your shoulders.

- Use breathing protection when there is a risk of dust.



- Keep first aid equipment close at hand.



Safety devices on the attachment



WARNING: Read the warning instructions that follow before you use the attachment.

This section contains the attachment's safety features, its purpose and how checks and maintenance should be carried out to ensure that it operates correctly. See instructions under the heading *Cutting attachment overview on page 2* to find where these parts are located on your attachment.

The life span of the attachment can be reduced and the risk of accidents can increase if attachment maintenance is not carried out correctly and if service and/or repairs are not carried out professionally. If you need further information please contact your nearest servicing dealer.



WARNING: Never use an attachment with defective safety components. The attachment's safety equipment must be inspected and maintained as described in this section. If your attachment fails any of these checks, contact your service agent to get it repaired.



WARNING: All servicing and repair work on the product requires special training. This is especially true of the product's safety equipment. If your product fails any of the checks described below you must contact your service agent. When you buy any of our products we guarantee the availability of professional repairs and service. If the retailer who sells your product is not a

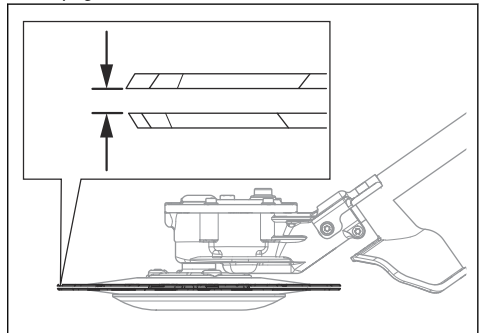
servicing dealer, ask him for the address of your nearest service agent.

To do a check of the cutting attachment and the cutting attachment guard

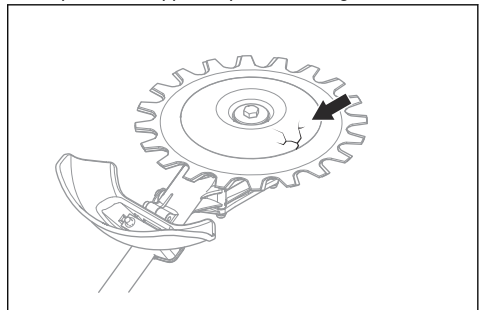


WARNING: Do not use a cutting attachment without an approved cutting attachment guard. If an incorrect or defective cutting attachment guard is installed, it can cause injury.

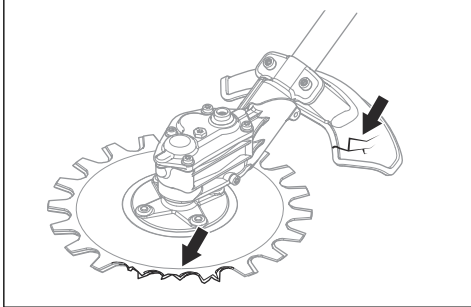
1. Stop the engine and make sure that the cutting attachment stops.
2. If you have a gasoline operated product, remove the spark plug cap from the spark plug. If you have a battery operated product, remove the battery from the product.
3. Put on protective gloves.
4. Make sure that the blades are not damaged. Replace the blades if they are damaged. Refer to *To replace the blades on page 10*.
5. Examine the blades. Make sure that there is no clearance between the blades. If there is a clearance between the blades, the blades must be adjusted. Refer to *To adjust the clearance between the blades on page 11*.



6. Make sure that the support cup is not damaged. Replace the support cup if it is damaged.



7. Make sure that the screws on the cutting attachment are tightened.
8. Make sure that the blades and the cutting attachment guard is not damaged. Replace damaged parts.



Safety instructions for maintenance

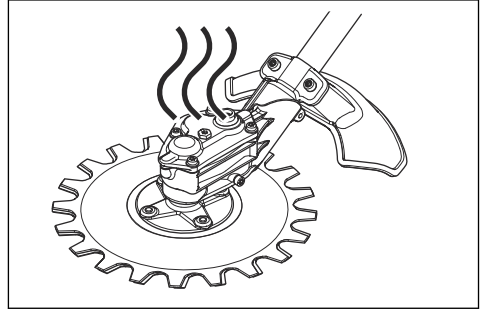


WARNING: The cutting attachment can continue to rotate after the throttle/power trigger has been released. If you have a gasoline operated product, remove the spark plug cap from the spark plug. If you have a battery operated product, remove the battery from the product. Make sure that the

cutting attachment has stopped fully before you do maintenance.



WARNING: The gear housing gets hot during operation of the product. Hot surfaces can burn you, do not touch the gear housing.



- Always wear heavy-duty gloves when you repair the cutting attachment. The cutting equipment is very sharp and can easily cause cuts.
- Use only original spare parts for repairs.

SAVE THESE INSTRUCTIONS

Operation

The working technique



WARNING: Branches or grass can get caught between the cutting attachment guard and the cutting attachment. Always stop the engine/motor before you clean the cutting attachment.

- Use full throttle/speed when you cut and decrease to idle speed after each cut.

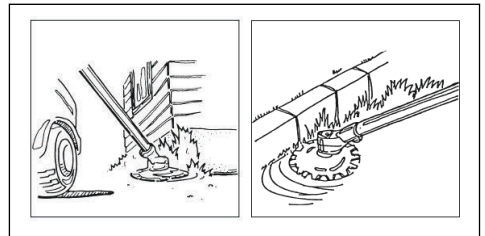


CAUTION: Engine/motor damage can occur if the engine runs for too long at full throttle without load.

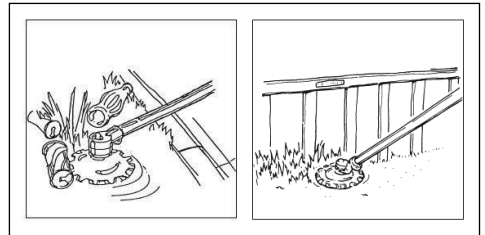
Recommended use for the cutting attachment

The cutting attachment blades moves with a small angle and can cut in all directions. Move the cutting attachment along the ground at a height where the support cup touches the ground. Use the cutting attachment to cut:

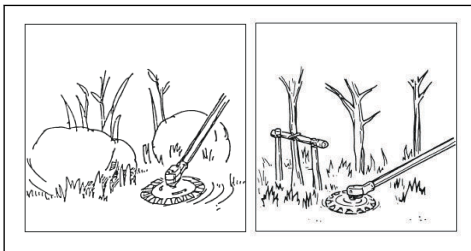
- Park areas and road edges.



- Road side and near fences.



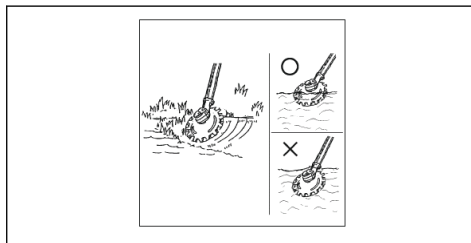
- Around stones and trees.



- Near water.



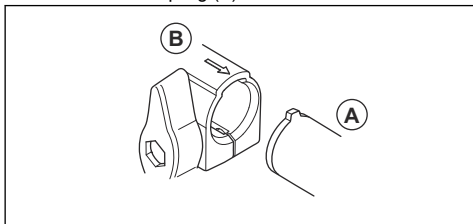
CAUTION: Do not put the gear housing in water.



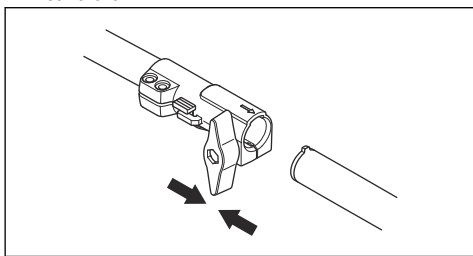
Assembly

To assemble the two-piece shaft

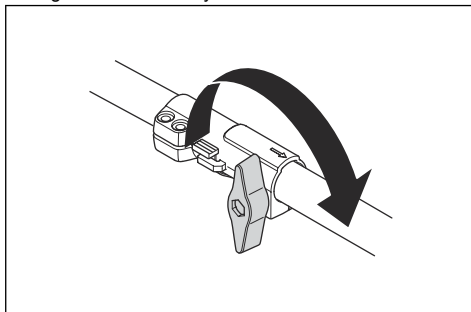
1. Turn the knob to loosen the coupling.
2. Align the tab of the cutting attachment (A) with the arrow of the coupling (B).



3. Carefully push the shaft into the coupling until you hear a click.

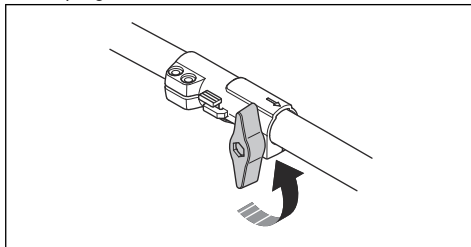


4. Tighten the knob fully.



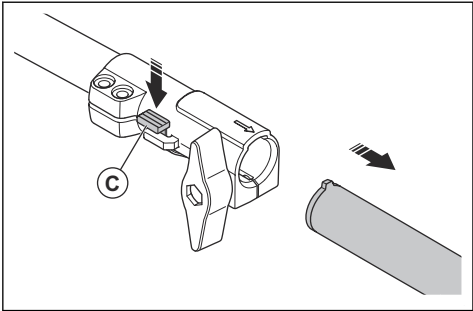
To disassemble the two-piece shaft

1. Turn the knob 3 turns or more to loosen the coupling.



2. Push and hold the button (C).
3. Hold tight in the end of the shaft that the engine is attached to.

4. Pull the attachment straight out of the coupling.



Maintenance

Introduction

Below you will find some general maintenance instructions. If you need further information please contact your service workshop.

Note: The operator must only do the maintenance and service on the cutting attachment that is given in this operator's manual. Other maintenance and service must be done by an approved service workshop.

Maintenance schedule

Below is a list of the maintenance steps that must be done on the cutting attachment.

Maintenance	Daily	Weekly	Monthly
Clean the external parts of the product.	X		
Make sure that the blades are not damaged. Replace the blades if they are damaged.	X		
Make sure that the cutting attachment guard is not damaged. Replace the cutting attachment guard if it is damaged.	X		
Make sure that the support cup is not damaged. Replace the support cup if it is damaged.	X		
Make sure that the screws and nuts are tight.	X		
Fill the gear housing with grease, approximately each 100 work hours.		X	

To clean and lubricate the blades

- Clean the blades from unwanted materials before and after you use the product.
- Lubricate the blades before long periods of storage.

Note: Speak to your servicing dealer for more information about recommended cleaning agents and lubricants.

cause damage to the seals and cause leakage.

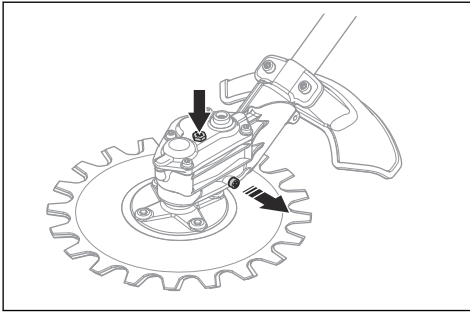
- Remove the grease plugs.

To lubricate the gear housing



CAUTION: Do not fill the gear housing fully. If the gear housing is full, the grease can

2. Add grease to the top hole.



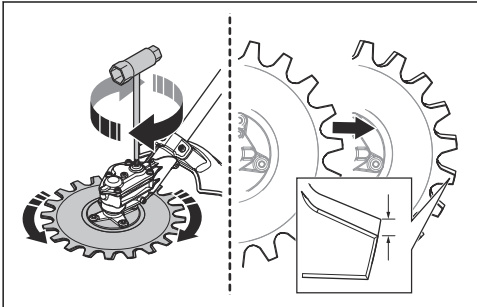
3. Install the grease plugs.

To sharpen the blades

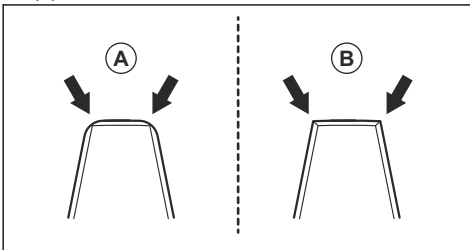


WARNING: Use protective gloves when you hold the blades.

1. Put the combination wrench in the socket on the gear housing.
2. Turn the combination wrench until there is a 3 mm/ 0.12 in. difference between the top blade and the lower blade.

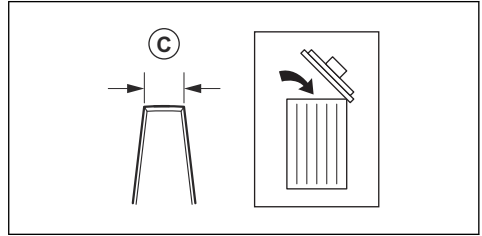


3. Sharpen the edges (B) that you can access with a grinder. Make sure not to make the edges rounded (A).



4. Turn the combination wrench in the opposite direction to get access to the opposite edges.
5. Sharpen the edges that you can access with a grinder.

6. Replace the blades when the width of the tooth is less than 8 mm/0.32 in. (C).



To replace the blades



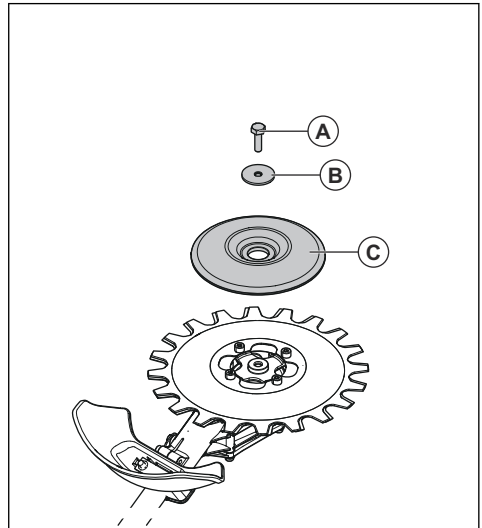
WARNING: Use protective gloves when you hold the blades.



WARNING: To prevent unbalance and vibrations in the product, clean the cutting attachment when you replace the blades.

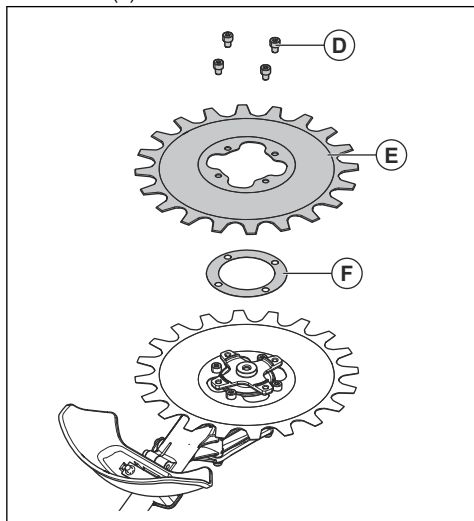
Note: The blades are interchangeable.

1. Remove the center screw (A), the washer (B) and the support cup (C).

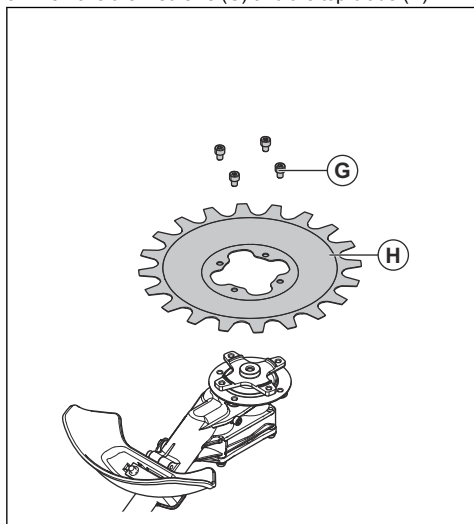


Note: The center screw has a left hand thread

2. Remove the 4 screws (D), the lower blade (E) and the shim (F).



3. Remove the 4 screws (G) and the top blade (H).



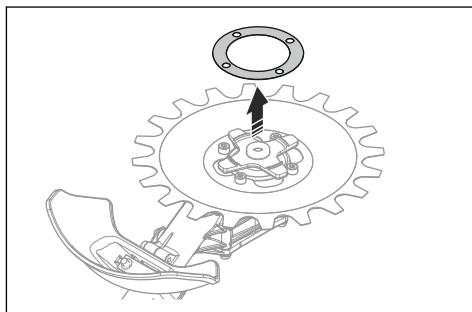
4. Install the blades in opposite sequence. Tighten the screws equally when you install the blades.

To adjust the clearance between the blades



WARNING: Use protective gloves when you hold the blades.

1. Remove the lower blade, refer to *To replace the blades on page 10*.
2. Remove the shim.



Note: Save the shim until it is time to replace the blades.

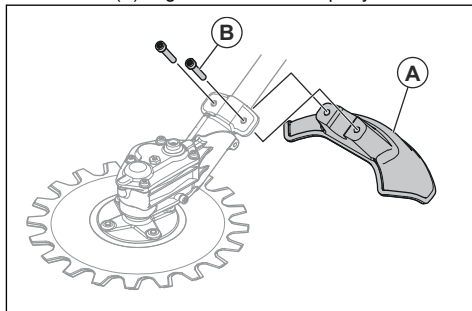
3. Install the lower blade. Tighten the screws equally when you install the blades.

To replace the cutting attachment guard



WARNING: Use protective gloves when you hold the blades

- Remove the 2 screws (B) and the cutting attachment guard (A).
- Install the new cutting attachment guard (A) with the 2 screws (B). Tighten the screws equally.



Transportation, storage and disposal

Transport and storage

- Make sure that the transport guard is attached correctly to the cutting attachment when the product is not in use, is transported or is in storage.
- Keep the cutting attachment in a locked area to prevent access for children or persons that are not approved.
- Attach the cutting attachment safely during transportation to prevent damage and accidents.
- Make sure that the cutting attachment is clean and that a complete service is done before long time storage.

Technical data

Technical data

RA850	
Weight	
Weight, kg	2.5
Noise emissions¹	
Sound power level, measured dB (A)	102
Sound power level, guaranteed L_{WA} , dB (A)	105
Noise levels²	
Equivalent sound pressure level at the operator's ear, measured according to EN ISO 11806-1 and EN ISO 22868, dB(A)	
Equipped with approved accessory (original)	90
Vibration levels³	
Equivalent vibration levels ($a_{hv,eq}$) at handles, measured according to EN ISO 11806-1 and ISO 22867, m/s^2	
Equipped with approved accessory (original), left/right	3.9/4.8
Blades	
Diameter, mm	230
Blade speed, cuts/min	4600

¹ Noise emissions in the environment measured as sound power (L_{WA}) in conformity with EC directive 2000/14/EC. Reported sound power level for the machine has been measured with the original cutting attachment that gives the highest level. The difference between guaranteed and measured sound power is that the guaranteed sound power also includes dispersion in the measurement result and the variations between different machines of the same model according to Directive 2000/14/EC.

² Reported data for equivalent sound pressure level for the machine has a typical statistical dispersion (standard deviation) of 1 dB(A).

³ Reported data for equivalent vibration level has a typical statistical dispersion (standard deviation) of 1 m/s^2 .

EC Declaration of Conformity

EC Declaration of Conformity

Husqvarna AB, SE-561 82 Huskvarna, Sweden, tel: +46-36-146500, declares that the reciprocator attachment **Husqvarna RA850** with serial numbers dating from 2019 onwards (the year is clearly stated on the rating plate, followed by the serial number), comply with the requirements of the COUNCIL'S DIRECTIVE:

- of May 17, 2006 "relating to machinery" **2006/42/EC**.
- of June 8, 2011 "on the restriction of the use of certain hazardous substances in electrical and electronic equipment" **2011/65/EU**.
- of May 8, 2000 "relating to the noise emissions in the environment" **2000/14/EC**. Conformity assessment according to Annex V. For information relating to noise emissions, refer to the Technical data chapter.

The following standards have been applied:

EN ISO 11806-1:2011, EN 50581:2012

RISE SMP Svensk Maskinprovning AB, Box 7035, SE-750 07 Uppsala, Sweden has carried out voluntary type approval for Husqvarna AB. The certificates have the numbers: **SEC/19/2528**

Huskvarna, 2019-03-11



Per Gustafsson, Development Manager (Authorized representative for Husqvarna AB and responsible for technical documentation)