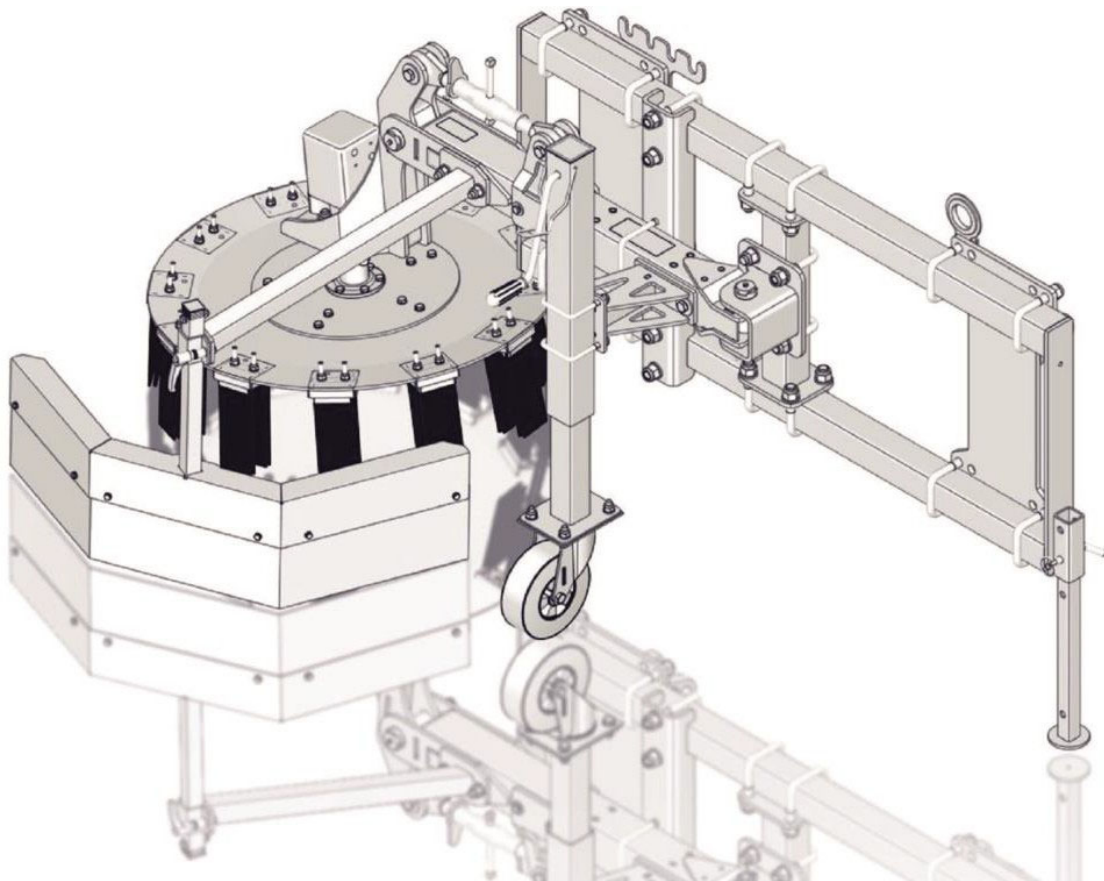




The original operating instructions

Weedbrush UB Easy



Order number: B00083 From machine no.: 59113 Rev.: 00

Date: 2018-06-25



Manufactures by
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Information about the operating instructions

This manual enables the safe and efficient handling of the machine. The instructions are part of the machine and must be kept accessible to the personnel in the immediate vicinity of the machine at all times.



The personnel must read and understand this manual carefully before starting any work. The basic prerequisite for safe working is compliance with all specified safety instructions and instructions in this manual.

Risk of accident and property damage if used improperly!

As self-propelled implements and attachments can cause serious accidents or hazards if used improperly, a briefing of competent and authorized persons is mandatory when commissioning the Kersten implement for the first time. The best way to familiarize yourself with its basic functions and its handling is to choose a free and level terrain for your first trip.

- For further information and difficulties of any kind please contact the dealer, importer or directly to the manufacturer
- Pass on all safety instructions to other users!

In addition, the local health and safety regulations and general safety regulations apply to the area of application of the machine.

Co-Applicable Documents

In addition to these instructions, the following documents and the safety instructions listed there are to be observed:

- Operating instructions of the component parts
- Operating instructions of the carrier vehicle

Customer service of the manufacturer

For technical information please contact the customer service of the machine manufacturer:

Manufacturer address	Kersten Arealmaschinen GmbH Empeler Straße 95 46459 Rees Deutschland
Service phone	+ 49 2851 9234-10
Fax	+ 49 2851 9234-44
E-Mail	Info@kersten-maschinen.de
Internet	http://www.kersten-maschinen.de



For inquiries please have the following information ready:

- Machine / device type
- Order number of the machine
- In case of problems: exact description or exact error messages

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1 Foreword

Dear Customer,

Thank you for choosing a quality product from Kersten.

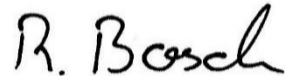
This product has been manufactured according to the most up-to-date production methods and extensive quality assurance measures, because only when you are satisfied with your device, our goal is reached.

Before using this machine or implement for the first time, please read this manual thoroughly and thoroughly.

If you do not understand any of the information contained in this safety data sheet or the product-specific installation or operating instructions, please contact your sales representative or the machine manufacturer directly.

Keep this manual handy. If necessary, you can read important information and instructions.

Have fun with your Kersten - device wishes youDipl.- Ing. (FH) Robert Bosch



Managing Director

1.1 Overview

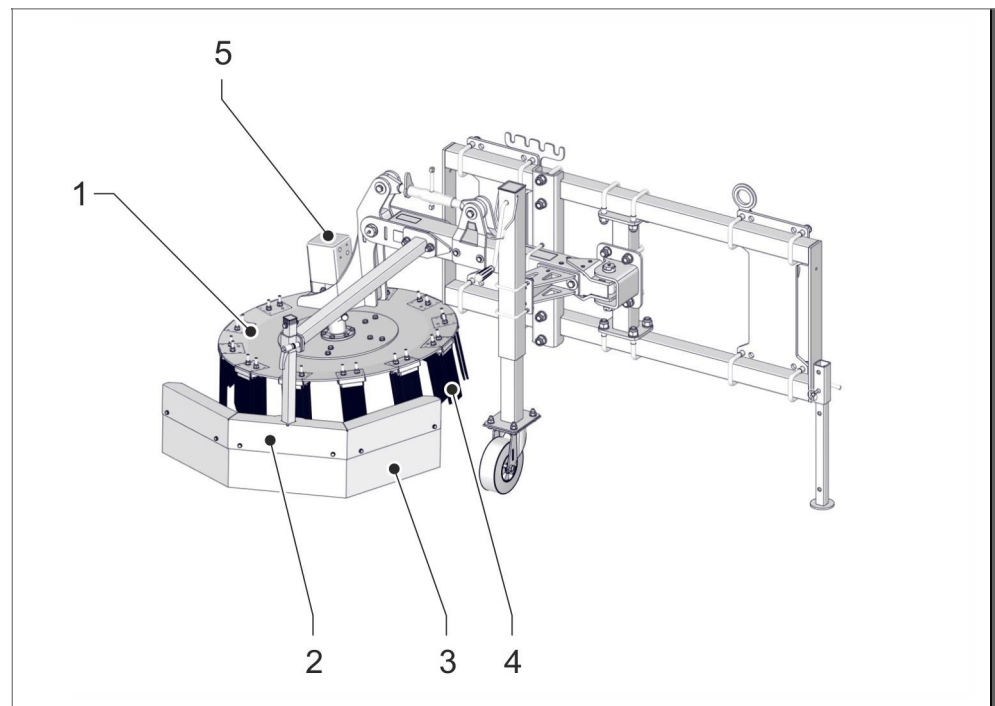


Abb. 1: Overview

- 1 Brush plate
- 2 Splash guard frame with signal band
- 3 Rubber splash flap
- 4 Cuffs
- 5 Hydraulic motor

The weed brush consists of a steel construction with a hydraulic motor (5) on which a brush plate (1) is mounted. The brush plate (1) can be equipped with a tufting (4) or with wire rope pigtails. By the rotation of the brush plate (1) and the propulsion of the carrier vehicle, the weeds are removed from the joints and collected by an attached splash guard frame with signal band (2) and rubber squirt lugs (3).

2 Safety

2.1 Symbols in this manual

Safety instructions

The following occupational safety symbols stand for all safety instructions that indicate a danger to the life and limb of persons and are marked by a pictogram, a signal word and a signal color.

The documentation explains the hazardous situations at the relevant locations.

Follow these instructions!

Observe the locally valid safety and accident prevention regulations!

DANGE

Type and source of danger

This symbol warns of an imminent danger to the life and health of persons. Failure to comply with these instructions will result in serious health effects, including life-threatening injuries and extensive damage to property.

- Action that must be avoided so that the danger does not occur

WARNING



Type and source of danger

This symbol warns of an imminent danger to the life and health of persons, as well as environmental and material damage.

Failure to comply with these instructions can result in serious health effects, even life-threatening injuries or extensive environmental and material damage.

- Action that must be avoided so that the danger does not occur

ATTENTION



Type and source of danger

This symbol warns of an imminent danger to the health of persons as well as environmental and material damage.

Failure to comply with these instructions may result in moderate or slight health effects or even injury or result in extensive environmental and material damage.

- Action that must be avoided so that the danger does not occur

NOTE



Type and source of machine or plant damage

This symbol warns of a dangerous situation and serves to identify a note on handling the machine or system.

- Failure to comply with extensive property damage. Action that must be avoided in order to prevent machine or equipment damage

Tips and recommendations



This symbol highlights useful tips and recommendations, as well as information for efficient and trouble-free operation.

Further markings

To highlight instructions, results, listings, references, and other elements, this guide uses the following labels:

Identification	Explanation
1., 2., 3. ...	Step-by-step instructions
→	Results of action steps
•	Listings without a specified order
[Taster]	Operating elements (eg buttons, switches), display elements (eg signal lights)
"Display"	Screen elements (eg buttons, assignment of function keys)

2.2 Pictograms

Follow instructions



Do not use the marked machine until the instructions have been read.

Wear protective clothing



This label indicates that protective clothing must be worn in the area concerned.

Protective clothing is tight-fitting workwear with low tear resistance, tight sleeves and no protruding parts.

Wear safety shoes



This sign indicates safety shoes must be worn in the area concerned.

Safety shoes protect the feet from bruising, falling parts and slipping on slippery surfaces.

Wearing safety gloves



This label indicates that protective gloves must be worn in the area concerned.

Protective gloves are used to protect hands from friction, abrasions, punctures, cuts or deeper injuries, as well as from contact with hot surfaces.

Wear safety glasses



This label indicates that protective goggles must be worn in the area in question.

The safety glasses are used to protect the eyes from flying parts and liquid splashes..

Operating instructions and safety instructions



Before commissioning read and observe the operating instructions and safety instructions.



Never open or remove protective devices while the engine is running.



Follow the instructions in the technical manual. Smudge!



Touch machine parts only when they have come to a complete stop.



Danger from passing parts while the engine is running.
Keep safety distance!

2.3 Intended use

WARNING



Danger of injury / risk of environmental damage due to improper use of the machine!

Incorrect use of the machine can result in injury, as well as the risk of damage to the environment and property (on the machine or system)!

- The machine must only be used for the usual or common use in plant care for weed removal on flat surfaces.
- The weed brush is designed to be used with a front lift carrier machine.
- Any further use is considered improper use. The manufacturer is not liable for damage resulting from this, the risk being solely borne by the operator.
- Proper use includes compliance with the operating, maintenance and service conditions prescribed by the manufacturer.
- The attachment may only be used, maintained and repaired by persons who are familiar with it and have been informed of the dangers.
- The relevant accident prevention regulations as well as the other generally recognized safety and occupational health rules must be observed.
- Unauthorized modifications to the machine lead to the exclusion of liability of the manufacturer for the resulting damage.

2.4 Work and danger areas

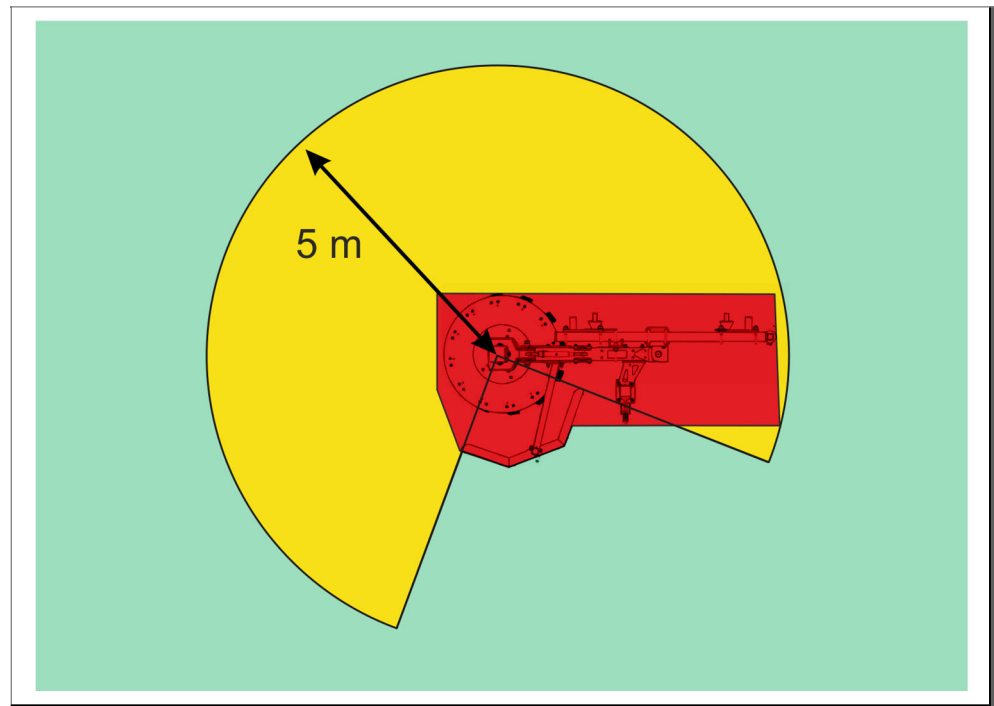


Fig. 2: Work area, safety area and danger area.

- RED → danger area
- YELLOW → safety area (radius of 5 meters around the brush plate)
- GREEN → Workspace

WARNING



Danger of injury / risk of environmental damage from working / staying in the danger area!

Working / stopping in the danger zone poses a risk of injury, as well as the risk of damage to the environment and property (on the machine or system)!

- The user is responsible towards third parties in the danger and safety area of the machine!
- Staying in the danger and safety area of the machine is prohibited! Refer all persons from the danger and security area. The security area has a radius of 5 m around the brush plate.
- When approaching people to the danger and safety area, the machine must be switched off.
- The operator must make sure that there are no persons or property in the ejection area (safety area).
- Check both the danger area and the safety area before switching on the implement and starting it up. Especially on children and animals is important. Make sure you have enough sight!

- Park the implement in hard-to-see areas and make sure that no one is in the area of danger and safety.
- Before starting work, remove foreign objects from the surface to be worked. Pay attention to other foreign objects during work and eliminate them in good time.
- When working in enclosed areas, the safety distance to the border must be maintained so as not to damage the machine or brushes.
- When working in the immediate vicinity of public roads and paths, they should not be approached longitudinally, but preferably as far as possible, thus minimizing the risk of injury to third parties due to flying objects.
- When working on public roads and squares or in the immediate vicinity, warning and danger signs should be set up to alert third parties.

2.5 Safety during the work process

Before starting work

WARNING



Risk of injury / risk of environmental damage due to non-compliance with the safety measures!

Non-compliance with the safety measures can result in injury, as well as the risk of damage to the environment and property (on the machine or the carrier vehicle)!

- Before starting work, you must familiarize yourself with all the equipment and actuators and their function; it must be ensured that all safety equipment is properly installed and in the protective position. It's too late during the work assignment!
- Check the machine for operational safety before each use!
- The hydraulic connections and hoses must be checked for leaks and replaced if necessary.
- Never operate the machine with defective or missing protective devices.

During operation

WARNING



Risk of injury / risk of environmental damage due to non-compliance with the safety measures!

Non-compliance with the safety measures can result in injury, as well as the risk of damage to the environment and property (on the machine or the carrier vehicle)!

- If persons or vehicles approach the danger or safety area (radius 5 m), stop the implement immediately.
- Never leave the control room while driving!

- The operating station should not be left until the brushes of the attachment have come to a standstill!
- Do not make adjustments to the attachment during operation - risk of accident!
- The transport of persons and objects is prohibited!
- If, for example, the attachment has caught a foreign object and blocked it, stop the engine and clean the attachment with a suitable tool! Always switch off the engine and disconnect the spark plug connector when intervening or cleaning the attachment! The safety instructions of the self-propelled implement must be observed.
- If the self-propelled implement or attachment is damaged, stop the engine immediately and have the damage repaired.

Leaving the machine

WARNING



Risk of injury / risk of environmental damage due to non-compliance with the safety measures!

Non-compliance with the safety measures can result in injury, as well as the risk of damage to the environment and property (on the machine or the carrier vehicle)!

- Secure the carrier vehicle against rolling away by using wheel chocks or, if necessary, by applying the parking brake.
- Secure the device against unauthorized use!
- Never leave the appliance unattended while it is still in operation!

and uncoupling attachments

WARNING



Risk of injury / risk of environmental damage due to non-compliance with the safety measures!

Non-compliance with the safety measures can result in injury, as well as the risk of damage to the environment and property (on the machine or system)!

- The corresponding instructions and safety regulations of the carrier vehicle must be observed.
- Use suitable tools and gloves when changing attachments and their parts.
- When mounting and dismounting, bring the required support equipment into the respective position and ensure sufficient stability.
- Secure the self-propelled working machine and the attachment against rolling away (parking brake, wheel chocks).
- When attaching attachments, there is a risk of injury (crushing). Special care is necessary.
- Attach implements according to regulations and fix in the prescribed places.

2.6 Safety devices

⚠ DANGER



Failure to operate or disable the safety equipment can result in serious injury or even death.

Failure to operate or disable the safety equipment can result in serious injury or even death.

- Before beginning work, check that all safety devices are installed properly and correctly.
- Never override or bypass safety devices.
- Make sure that all safety devices are always accessible.

Splash guard frame with signal band and rubber mud flaps

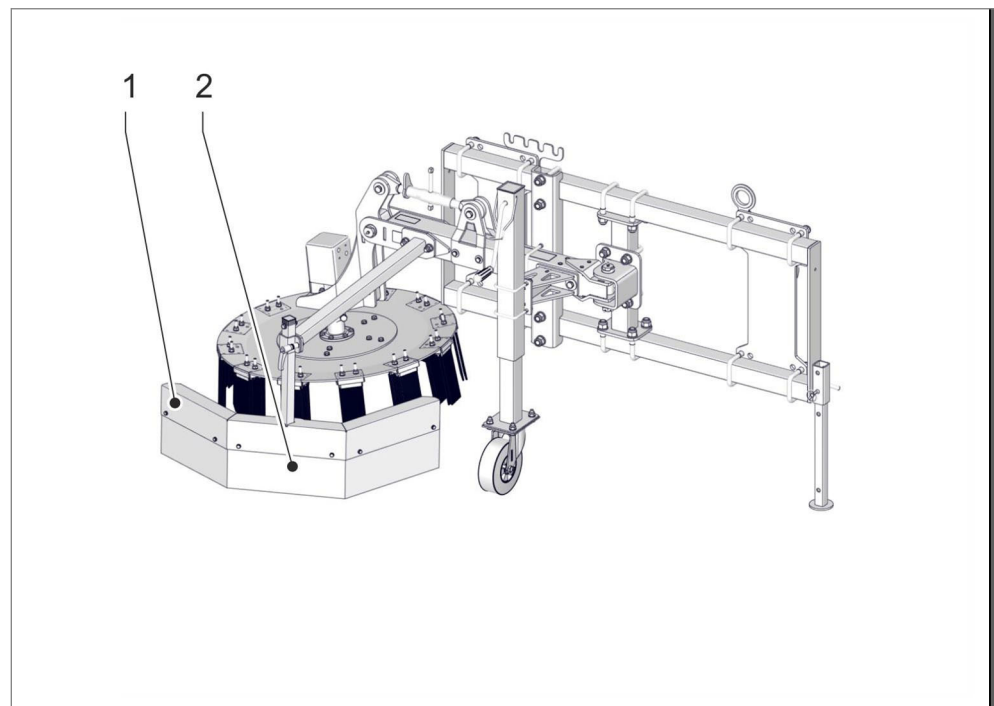


Fig. 3: Splash guard with signal band

- 1 Splash guard frame with signal band
- 2 Rubber mud flaps

The splash guard frame with signal band (1) and rubber lobes (2) separates the danger area of the machine and protects persons from foreign objects, dirt and liquids.

2.7 Safety labeling

The following symbols and signs are in the workspace. They refer to the immediate environment in which they are installed.

WARNING



Danger of injury due to illegible or missing signs!

Missing and illegible labels and signs can cause serious health effects or life-threatening injuries.

- Keep all safety, warning and operating instructions in an always legible state.
- Replace damaged signs or labels immediately.

2.8 Residual dangers

The machine is designed according to the state of the art and according to current safety requirements. Nevertheless, residual risks remain, which require prudent action. The following lists the residual risks and the resulting behavior and measures.

Improper transport

NOTE



Property damage due to improper transport

If transported improperly, transport items may fall or fall over. This can result in material damage to a considerable amount.

- Take care when unloading the transport pieces on delivery as well as during in-house transport and observe the symbols and notes on the packaging.
- Use only the intended attachment points.
- Remove packaging only shortly before installation.

Dirt and surrounding objects

ATTENTION



Danger of injury by falling over dirt and objects lying around!

Danger of injury by falling over dirt and objects lying around!

- Always keep the work area clean.
- Remove objects that are no longer needed from the work area and especially from the ground.
- Mark unavoidable stumbling points with yellow-black marking tape.
- Remove tools or components from the work area and store in a suitable location outside the machine.

Cleaning supplies

WARNING



Risk of injury due to improper handling of cleaning agents or materials

Improper handling of cleaning agents or materials can result in serious health effects or life-threatening injuries.

- Read the material safety data sheets and manufacturer's instructions applicable to the cleaning agents or materials
- Wear appropriate protective equipment (eg gloves, safety shoes, protective suit, respirator, goggles, etc.)
- Ensure adequate ventilation of the environment
- Be careful when handling hot cleaning agents or substances. Touching it can cause burns and scalds
- If necessary, clean parts, assemblies or components of adhering oils, greases and other contaminants
- Avoid skin contact with cleaning agents or substances
- Do not inhale vapors from cleaning agents or substances
- Do not handle close to open fire and do not smoke

Noise level

Valid noise protection regulations as well as the warnings of the complete documentation must be observed. The local noise level depends on the local ambient noise. The noise level must be checked at regular intervals by the operator.

WARNING



Risk of injury due to noise!

The noise level occurring in the work area can cause severe hearing damage.

- Covers, insulating materials and other insulating equipment must not be removed and must be replaced if damaged.
- If the daily noise exposure level exceeds 85 dB (A), wear the ear protection in this case from the operator side.
- Only stay in the danger area as far as necessary.

Moving components

DANGER



Danger of life or injury due to moving components!

Improper handling of moving components can cause death or injury as well as material damage to the machine or system

- Do not interfere with moving components or handle moving components during operation.
- Never open covers during operation.
- Note the after-run time: Make sure that no components are moving before opening the covers.
- Wear tight-fitting work clothing with low tear resistance in the danger area.

Sharp edges and sharp corners

ATTENTION



Risk of injury due to sharp edges and sharp corners!

Sharp edges and sharp corners can lead to skin abrasions and cuts.

- Use caution when working near sharp edges and sharp corners.
- If in doubt wear protective gloves.

Hydraulic

DANGER



Danger of life or injury due to hydraulic energy!

By hydraulically driven moving components there is a risk of life or injury.

- Work on the hydraulic system should only be carried out by qualified hydraulics.
- Do not interfere with moving components or handle moving components during operation.
- Do not open covers during operation.
- Wear tight-fitting work clothing with low tear resistance in the danger area.

Operating resources / Lubricants / Oils

WARNING



Danger of injury due to improper handling of equipment or substances who!

Improper handling of equipment or materials can result in serious health effects or life-threatening injuries.

- Read the material safety data sheets and manufacturer's instructions applicable to the equipment and / or materials
- Wear appropriate protective equipment (eg gloves, safety shoes, protective suit, respirator, goggles, etc.)
- After accidental eye contact, rinse eyes thoroughly with plenty of water and seek medical attention.
- After skin contact rinse thoroughly with plenty of water.
- Ensure adequate ventilation of the environment
- Be careful when handling hot equipment or materials. Touching it can cause burns and scalds
- If necessary, clean parts, assemblies or components of adhering oils, greases and other contaminants
- Avoid skin contact with equipment or materials
- Do not inhale vapors from equipment or materials
- Do not handle close to open fire and do not smoke

2.9 Environmental Protection

WARNING



Danger of environmental damage due to improper handling of operating materials or operating materials as well as cleaning agents or cleaning agents!

Improper handling of operating materials or materials as well as cleaning agents or materials can result in extensive environmental and material damage.

- Read the material safety data sheets and manufacturer's instructions applicable to the operating materials, cleaning agents and cleaning agents
- Store materials and operating fluids that are hazardous to water and soil, such as oil-contaminated parts, assemblies or components in secured areas or drip pans
- Bind worn equipment or operating materials as well as cleaning agents or cleaning agents with a binder and dispose of according to local regulations
- If necessary, clean parts, assemblies or components of adhering oils, greases and other contaminants
- Do not allow leaked equipment or operating materials as well as detergents or cleaning agents to seep into the ground or into drains

The following environmentally hazardous substances are used: lubricants

Lubricants such as fats and oils contain toxic substances. They must not get into the environment. Disposal must be carried out by a disposal specialist.

Oils

Oils (such as lubricating, hydraulic or cleaning oils) must not be released into the environment. Oils cause long-term harmful effects in waters. Disposal must be carried out by a disposal specialist.

Observe the safety data sheets of the manufacturer.

Electronic components

Electronic components may contain toxic substances. They must not get into the environment. Disposal must be carried out by a disposal specialist.

Batteries

Batteries contain toxic heavy metals. They are subject to special waste treatment and must be delivered to municipal collection points or disposed of by a specialist company.

2.10 Safety instructions for maintenance / troubleshooting

Behavior in case of dangerous malfunctions

Basically:

1. Immediately initiate emergency stop in the case of faults that pose an immediate danger to persons or property.
2. Determine the cause of the fault.
3. If troubleshooting requires work in the hazardous area, switch off the machine and secure it against being switched on again.
4. Have them repaired or repaired by authorized service personnel, depending on the type of fault.

⚠ DANGER



Danger of life or injury due to improperly performed maintenance work / work for fault elimination!

Due to improper maintenance / work for fault elimination there is a risk of death or injury as well as a risk of property damage to the machine or system!

- Observe all safety information in this chapter, as well as the relevant local safety and accident prevention regulations
- Only repair faults that require intervention and maintenance and cleaning work if it is ensured that the machine is stationary and secured against being switched on again.



- Release blocks only when it has been ensured that no dangerous movement of machine parts occurs due to loosening.
- Ensure adequate assembly freedom before starting work.
- Pay attention to order and cleanliness at the installation site! Loose components lying on or around each other and tools are accident sources.
- If components have been removed, make sure they are correctly installed, reinstall all fasteners.
- Observe the following before restarting:
- Ensure that all work has been carried out and completed in accordance with the instructions given in this manual.
- Make sure that there are no persons in the danger zone.
- Make sure all covers and safety devices are installed and working properly.
- Wait until the oil has cooled to below 50 ° C before starting work
- Before starting work, have a temperature-resistant receptacle of the required capacity ready.

WARNING

Risk of injury / risk of environmental damage due to lack of / faulty maintenance!

There is a risk of injury due to a lack of maintenance, as well as a risk of damage to the environment and property (on the machine or system)!

- Maintenance and cleaning work should only be carried out with the drive stationary.
- Simple cleaning and adjustment work may be carried out by operating personnel. Maintenance and repair work may only be carried out by trained specialist personnel.
- Instructions and instructions from the original operating instructions of the installed components must be observed.
- If guards and working tools are subject to wear, these must be checked regularly and replaced if necessary.
- When replacing cutting tools, use appropriate tools and protective equipment.
- After maintenance and cleaning work, be sure to refit the guards and put them in the protective position!
- Only use original spare parts from the manufacturer, as these correspond to the technical requirements and thus the risk of accidents is minimized!
- Cleaning with the high-pressure cleaner should be carried out so that the water jet is not held directly in bearings, turned parts, grease nipples, shaft seals, wheel hubs, etc. After each cleaning with the high-pressure cleaner, the lubrication points must be re-greased. In case of infringement, the right to guarantee expires!
- For the first time after 5 operating hours and as a result, regularly check that the nuts and bolts are tight and retighten if necessary

Safety

- Install protective devices after maintenance and bring them into the protective position.
- When carrying out maintenance, cleaning and repair work on the lifted unit, always secure it with suitable support elements.
- Repairs such as welding, drilling, grinding etc. must not be carried out on supporting safety-related parts.
- Before carrying out any repairs, make sure that the hydraulic system is depressurized, because fluids under pressure can penetrate the skin and cause serious injuries! Therefore, seek medical attention immediately - risk of infection!
- Check hydraulic connections for the first time after 5 operating hours, tighten if necessary!

Only tightening has no success!



First loosen a leaking hydraulic screw connection, then move hose or screw connection. Subsequently, the screw can be tightened again.

- Inspect hydraulic hoses at regular intervals for damage and aging and replace if necessary.
 - Hydraulic hose lines must be completely replaced every 6 years at the latest. The date of manufacture is stamped on the hose line.
 - Recycle used oils and greases.
 - Immediately remove excess oil with oil binder.
 - Remove excess fat.
-

NOTE



Incorrect quantities of oil or grease, as well as impurities, can cause damage to gears and components!

Damage to components can shorten the life of components.

- The quantity of oil as well as the position of the closing elements of gears depends on their design and installation position
 - After removing the oil level screw, the oil level must not exceed 3 to 5 mm below the prescribed filling level
 - Close the gearbox again immediately after the oil level check or the oil change
 - Do not rinse components (gears, bearings, etc.) using cleaning agents until after consulting the manufacturer.
 - When regreasing lubrication points via grease nipples, the lubricant must not be pressed in with high pressure or hard lubrication surges. The maximum permissible lubrication pressure is 15 bar.
-

2.11 Safety instructions for disassembly and disposal

⚠ WARNING



Risk of injury due to improper disassembly!

Stored residual energy, angular components, points and corners on or in the machine or on the required tools can cause injuries.

- Make sure there is enough space before starting work.
 - Be careful with open sharp-edged components.
 - Pay attention to order and cleanliness in the workplace! Loose components lying on or around each other and tools are accident sources.
 - Disassemble components professionally. Note partially high dead weight of the components. If necessary, use lifting gear.
 - Secure components so they do not fall or fall over.
-

3 Function Description

3.1 Overview

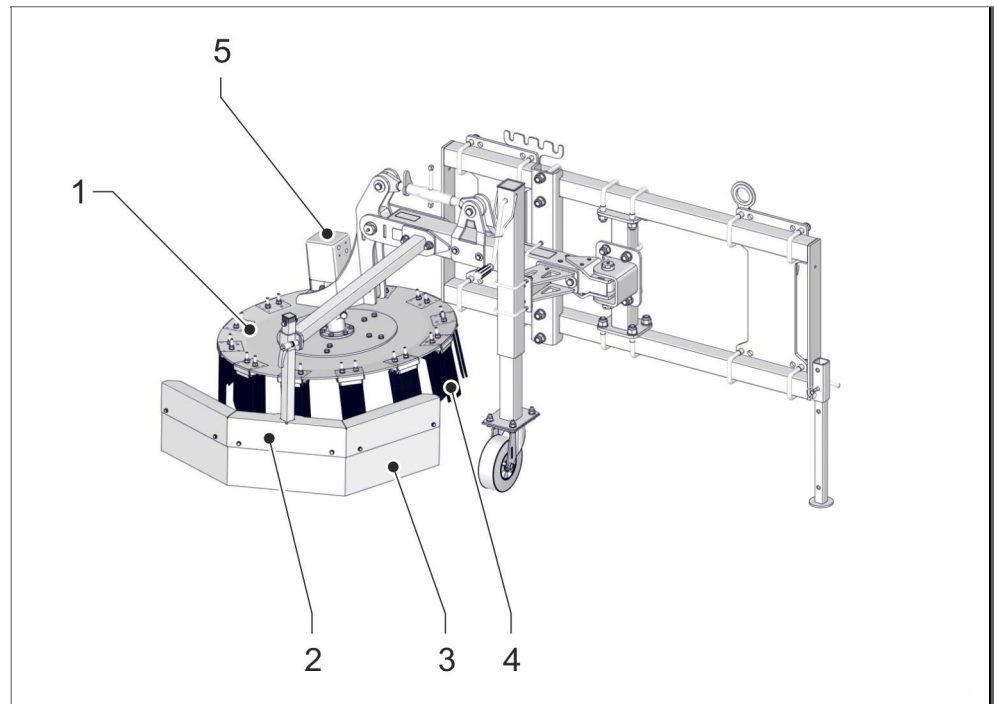


Fig. 4: Overview

- 1 Brush plate
- 2 Splash guard frame with signal band
- 3 Rubber splash flap
- 4 Bushing set
- 5 Hydraulic motor

The weed brush consists of a steel construction with a hydraulic motor (5) on which a brush plate (1) is mounted. The brush plate (1) can be equipped with a tufting (4) or with wire rope pigtails. By the rotation of the brush plate (1) and the propulsion of the carrier vehicle, the weeds are removed from the joints and collected by an attached splash guard frame with signal band (2) and rubber squirt lugs (3).

4 Transport, packaging and storage



Assembly, installation and commissioning are carried out exclusively by employees of the dealer or by persons authorized by him.

Nevertheless, it may happen that operators or maintenance personnel of the operator are entrusted with the handling of packages during the installation and further use. The following notes be sure to pay attention.

4.1 Safety



It is essential to observe all the safety instructions listed in the chapter Safety!

(See chapter 2 Safety on page 8)

4.2 Transport Inspection

Upon receipt, check the delivery immediately for completeness and shipping damage.

For externally visible transport damage, proceed as follows:

- Do not accept delivery or only with reservations.
- Note the extent of damage on the transport documents or on the delivery note of the transporter.
- Initiate a complaint.



Claim any shortcoming as soon as it is recognized. Claims for damages can only be asserted within the applicable complaint period.

4.3 Packing

Handling of packaging materials

The packaging material must be disposed of in accordance with the applicable legal regulations and local regulations.

NOTE



Danger to the environment through incorrect disposal!

Packaging materials are valuable raw materials and in many cases can continue to be used or reasonably treated and reused. Incorrect disposal of packaging materials can be hazardous to the environment.

- Dispose of packaging materials in an environmentally friendly manner.
- Observe the locally applicable disposal regulations. If necessary, commission a specialist company with disposal.

4.4 Transport of the machine

The machine is usually transported together with the required carrier vehicle.

NOTE



Property damage due to improper handling!

Improper handling of the machine can lead to damage.

- Do not tip the machine or turn the horizontal axis.
- Vehicles, aids and lifting gear must be suitable for the weight of the transport units.
- The driver must be authorized to drive the vehicle.

Protective equipment

- Protective clothing
- Protective gloves
- Safety shoes

The following points must be observed when transporting the machine / carrier vehicle:

- Charging, unloading and transport are carried out using suitable public transport vehicles and trailers.
- The transport vehicles must be suitable for the transport weight and the dimensions of the machine / carrier vehicle combination to be transported.
- The machine and carrier vehicle must be attached to the marked attachment points.
- Sufficiently dimensioned lifting gear / lashing must be used.
- The slings / lashings must not be damaged.
- For transport, only functionally correct, safety-relevant and load-compliant vehicles and aids or lifting tackle / lashing must be used.
- Do not stack the individual transport units!

5 Assembly / installation, installation, commissioning

5.1 Safety



It is essential to observe all the safety instructions listed in the chapter Safety!

(See chapter 2 Safety on page 8)

5.2 Mechanical coupling / uncoupling

ATTENTION



Risk of injury / risk of environmental damage during coupling and uncoupling!

By coupling and uncoupling, there is a risk of injury from crushing, as well as the risk of environmental and material damage (on the machine or system)!

- Observe the information from the operating instructions of the carrier vehicle!
- Special care is required!

Coupling

The following points should be observed when coupling the attachment:

1. Hook the attachment frame of the weed broom into the tractor front linkage and lock it.

Uncouple

Uncoupling is done in the reverse order

5.3 Connecting / disconnecting hydraulic hoses

When connecting or disconnecting hydraulic hoses, the following points should be noted.

- Stop the engine of the carrier machine!
- Move hydraulic controls back and forth to relieve any overpressure.
- Before connecting or disconnecting hydraulic hoses, make sure that the hydraulic system of the carrier vehicle is not under pressure. The entire machine must not be under pressure
- Make sure all connections are clean before connecting. Impurities in the hydraulic oil cause severe damage to the hydraulic system
- When connecting hydraulic hoses, remove the protective covers from the couplings and make the hydraulic connection.
- When disconnecting hydraulic hoses, clean and clean joints before fitting the protective covers. Always protect free junctions with protective covers.

In the case of weeds, insert the hydraulic plug-in couplings in the carrier vehicle or separate them from the carrier vehicle.

6 Operation

6.1 Adjusting the brush plate

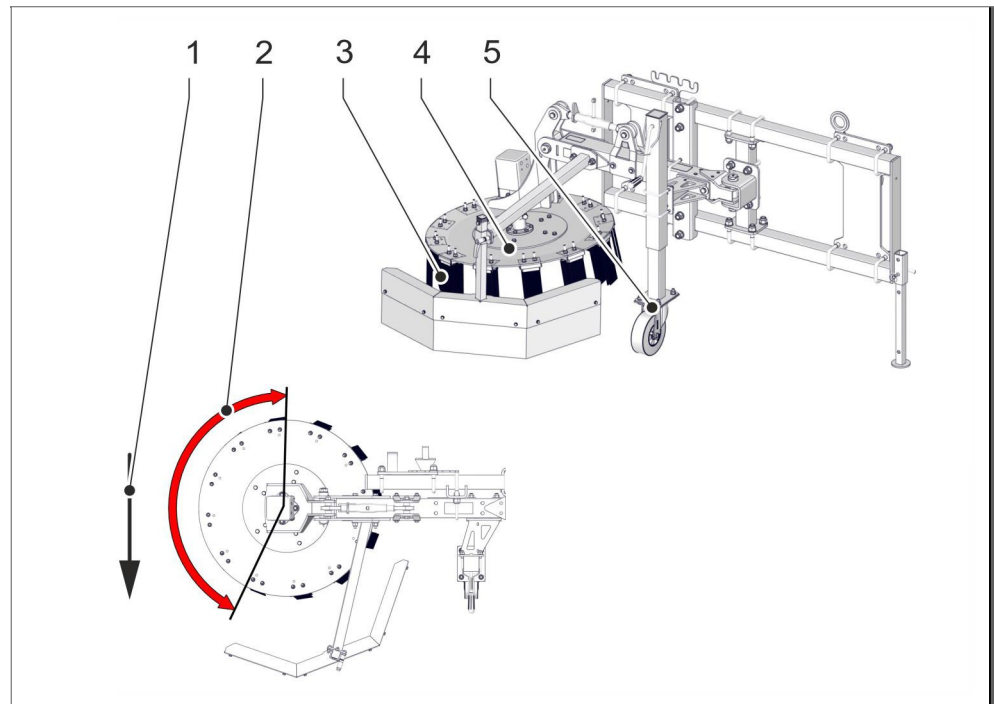


Fig. 5: Adjustment of the brush plate

- 1 One direction
- 2 Working area of the brush plate
- 3 Busses
- 4 Brush plate
- 5 Wheel

The working height of the brush plate (4) is adjusted via the support wheel (5). The working height is dependent on the position of the brush plate (4) and the degree of wear of the tufts (3).

After rainfall and wet weather particularly good work results are achieved. The driving speed depends on the strength of the weed growth.

The position of the brush plate (4) depends i.a. according to the strength of the weed growth. The working area of the brush plate (2) is indicated by the red arrow. A good work performance is achieved when viewed in the direction of travel (1), the brush plate (4) is inclined to the right and slightly to the rear.

6.2 Adjustment of the brush plate

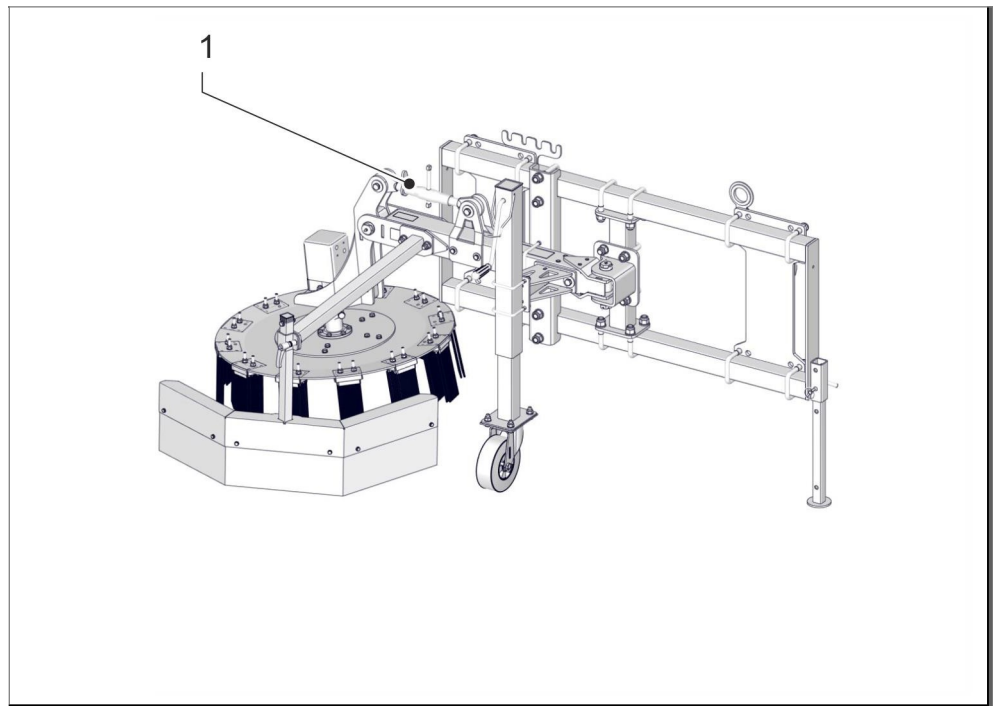


Fig. 6: Adjustment of the brush plate

1 top link

The tilt angle adjustment of the brush plate via the top link (1). The top link (1) tends the brush plate laterally to the direction of travel.

6.3 Setting the splash guard

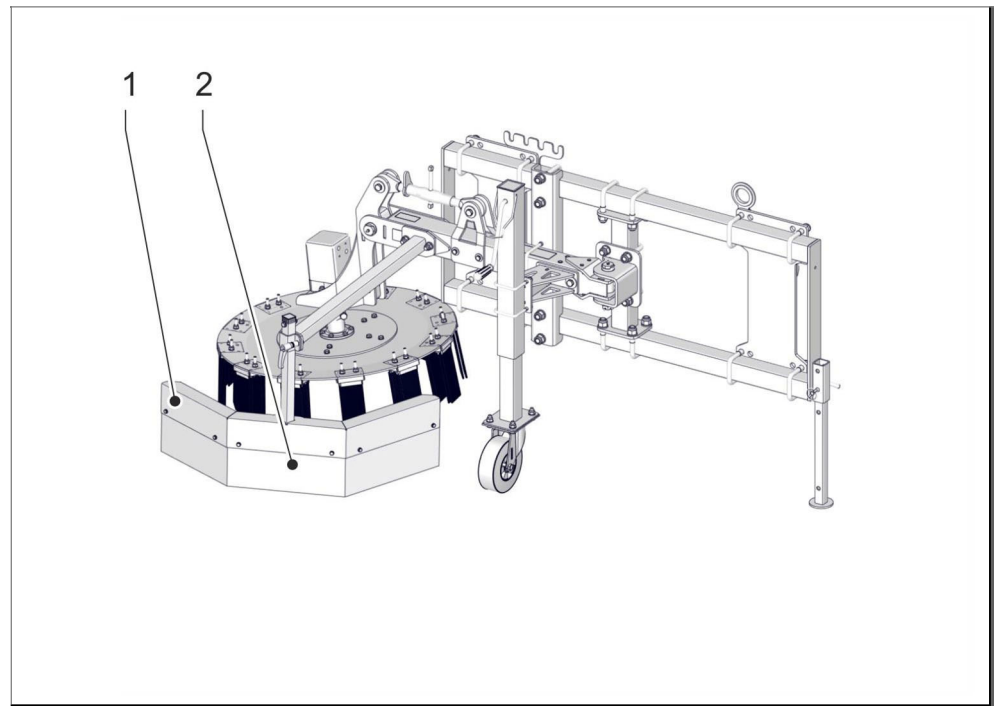


Fig. 7: Splash guard with signal band

- 1 Splash guard frame with signal band
- 2 Rubber splash flap

Due to the rotation of the brush plate, materials such as weeds, stones and other objects are thrown away. To prevent this material from leaving the work area, a side splash guard (1 and 2) is attached to the machine.

⚠ WARNING



Danger of injury / risk of environmental damage due to improperly set splash guard!

Incorrectly adjusted splash guard may result in injury, risk of damage to the environment and property (on the machine or system)!

- The splash guard must always be set up correctly

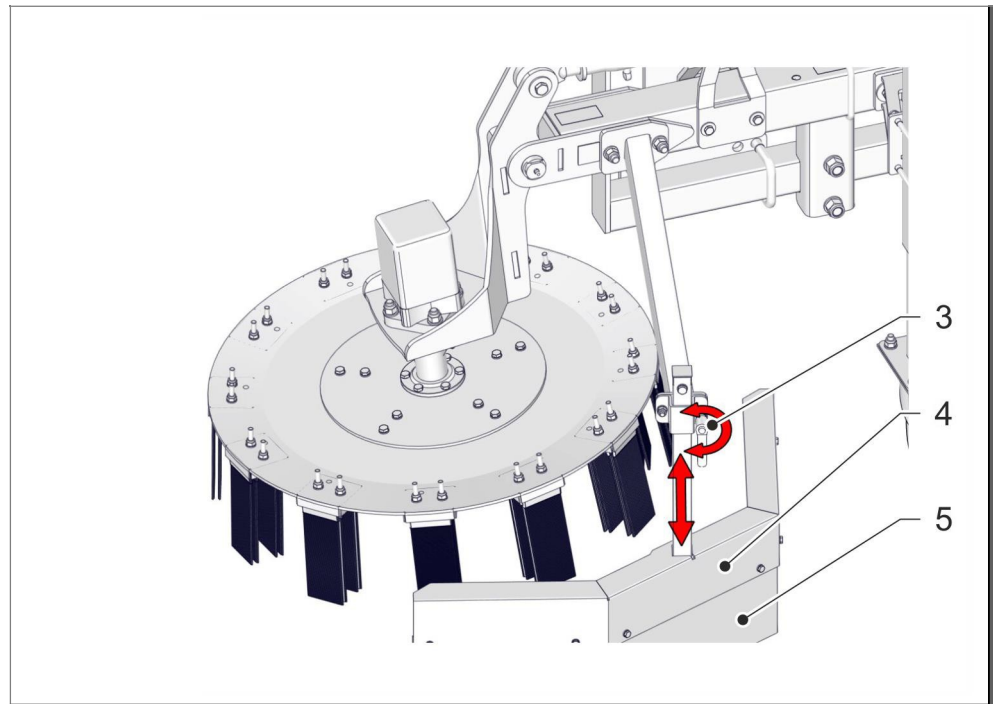


Fig. 8: Setting splash guard

- 3 Clamping lever
- 4 Splash guard frame with signal band
- 5 Rubber splash flap

The setting of the splash guard (4) depends on the inclination of the brush plate and the local conditions.

The rubber flap (5) from the splash guard must be lightly resting on the ground in working position. When setting the height of the splash guard, proceed as follows during setting:

1. Loosen the clamping lever (3) to the left
2. Adjust splash guard (4)
3. Tighten the clamping lever (3) to the right

7 Maintenance

7.1 Safety



It is essential to observe all the safety instructions listed in the chapter Safety!

(See chapter 2 Safety on page 8)

7.2 Parts

Wrong spare parts

DANGER



Danger of life or injury due to the use of incorrect spare parts!

This symbol warns of an imminent danger to the life and health of persons.

The use of incorrect or faulty spare parts can cause death or injury as well as the risk of property damage to the machine or system!

- Use only original spare parts from the manufacturer or replacement parts approved by the manufacturer.
- If in doubt, contact our customer service / customer service (see manufacturer's service on page 3).

Procurement of spare parts

Replacement and wear parts must be ordered through Customer Service (see Customer Service on page 3).

7.3 Maintenance

7.3.1 Daily check

Staff:

- Private and commercial operators

Protective gear:

- Protective clothing
- Protective gloves
- Safety goggles

The planning, execution and documentation of tests must be carried out in consideration of the valid regulations and laws by the operator.

To ensure safe operation of the machine, the safety devices must be checked:

The following things should be checked daily on the machine:

- Check protective devices for wear and replace if necessary.
- Check brush elements for wear and replace if necessary.
- Check brush elements for tightness.
- Have damaged brush elements replaced by trained specialist personnel.
- Remove wraps of the brush plate (such as wire).
- Check the smooth running of the moving parts.
- Check the hydraulic connections for leaks before each use.
- Lubricate the grease nipple before use
- Carry out a test run before each use.

7.3.2 Maintenance after 50 hours of operation / prolonged downtime

DANGER



Danger of life or injury due to a machine in operation!

An operating machine poses a risk of life or injury, as well as the risk of property damage to the machine or system!

- Before carrying out any maintenance work, disconnect the machine from the power supply and secure it against being switched on again.

The planning, execution and documentation of tests must be carried out taking into account the applicable regulations and laws.

To ensure safe operation of the machine, the safety devices must be checked:

At intervals of a maximum of 50 operating hours, as well as at the beginning and end of the season, all moving parts of the unit must be greased or oiled.

Smudges

Staff:

- Private and commercial operators

Protective gear:

- Protective clothing
- Protective gloves
- Safety goggles

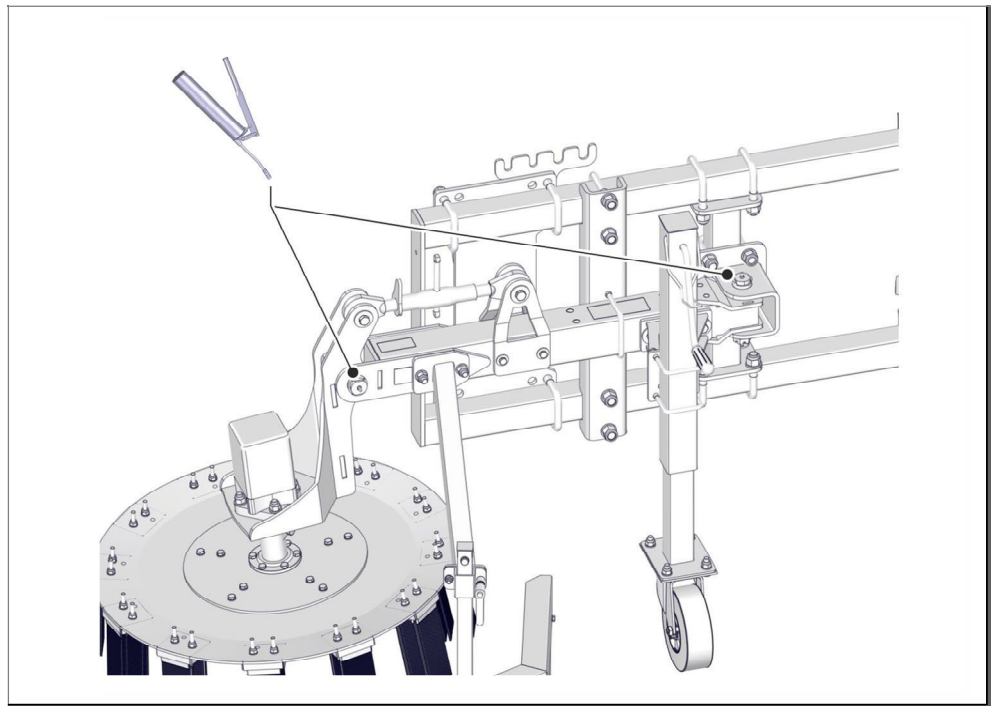


Fig. 9: Lubrication points

The machine must be oiled at intervals of 50 operating hours at the points shown.

7.3.3 Changing brush elements

⚠ DANGER



Danger of life or injury due to a machine in operation!

An operating machine poses a risk of life or injury, as well as the risk of property damage to the machine or system!

- Before changing the brush elements, disconnect the machine from the power supply and secure it against being switched on again.

Staff:

- trained specialist personnel

Protective gear:

- Protective clothing
- Protective gloves
- Safety goggles

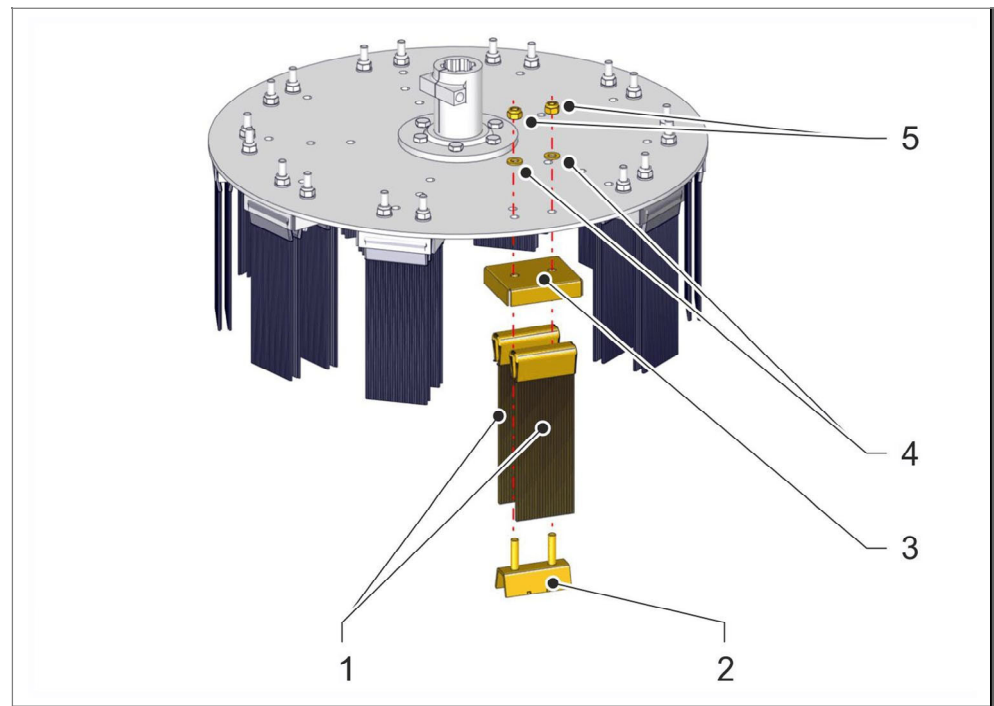


Fig. 10: Brush elements

- 1 Weed tufts
- 2 Brush holder inner part
- 3 Brush holder outer part
- 4 Washers
- 5 Locking nuts

Before changing the individual brush elements, the weed tufts must (1) with brush holder inside and outside part (2 and 3) to be loosened. To do this, remove the stop nuts (5) and the washers (4). Then the weed tufts (1) can be removed and replaced.

7.3.4 Changing the brush plate

DANGER



Danger of life or injury due to a machine in operation!

An operating machine poses a risk of life or injury, as well as the risk of property damage to the machine or system!

- Before replacing the brush plate, disconnect the machine from the power supply and secure it against being switched on again.

Staff:

- Trained specialist personnel

Protective gear:

- Protective clothing
- Protective gloves
- Safety goggles

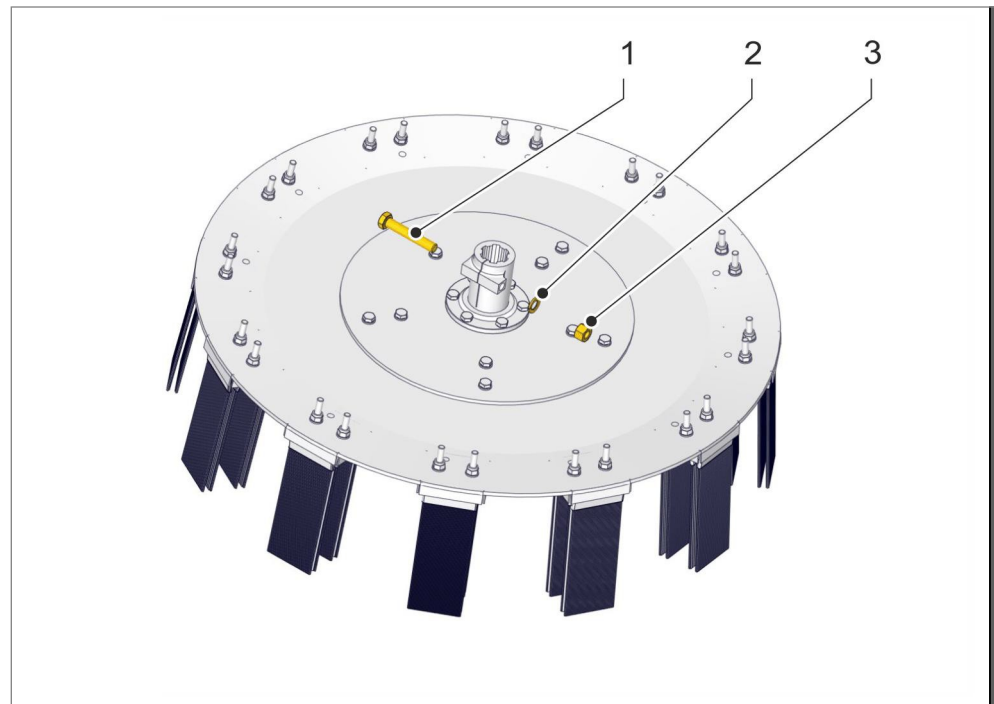


Fig. 11: Changing the brush plate

- 1 SKT-screw
- 2 spring ring
- 3 SKT-mother

In addition to individual weed tufts, the entire brush plate can be changed. For this purpose, first the SKT screw (1) and spring ring (1) and SKT nut (3) solved. Subsequently, the brush plate is removed and changed.

7.3.5 Check safety features

Staff:

- Operators

Protective gear:

- Protective clothing
- Protective gloves

The planning, execution and documentation of tests must be carried out in consideration of the valid regulations and laws by the operator. To ensure safe operation of the machine, the safety devices must be checked:

Separating guards (covers)	
interval	During commissioning, when switching on the machine
scope	Visual inspection for integrity
tester	operator
Measures for errors	<ul style="list-style-type: none"> • Lock the danger area • Repair

7.4 Measures after maintenance

Staff:

- Private and commercial operators

After completing the maintenance and before turning on the machine, perform the following steps:

1. Check all previously loosened screw connections for tightness.
2. Verify that all previously removed guards and covers are properly reinstalled.
3. Make sure all tools, materials and other equipment used have been removed from the work area.
4. Clean work area and any leaked substances such. As liquids, processing material or the like remove.
5. Make sure that all safety devices of the machine are working properly.

8 Disassembly, disposal

8.1 Safety



It is essential to observe all the safety instructions listed in the chapter Safety!

(See chapter 2 Safety on page 8)

8.2 Disassembly

Before the dismantling begins:

- Switch off the machine and secure it against being switched on again.
- Physically disconnect all power from the machine, discharge stored residual energy.
- Remove operating and auxiliary materials as well as the remaining processing materials and dispose of them in an environmentally sound manner.

Then clean the assemblies and components professionally and disassemble them in compliance with the applicable local health and safety and environmental protection regulations.

8.3 Disposal

Unless a return or disposal agreement has been made, disassembled components should be recycled:

- Scrap metals.
- Give plastic elements for recycling.
- Dispose of other components sorted by material condition.

ATTENTION

Danger to the environment through incorrect disposal!

Incorrect disposal can be hazardous to the environment.

- Have electronic waste, electronic components, lubricants and other additives disposed of by authorized specialist companies.
- In case of doubt, obtain information on environmentally sound disposal from the local municipal authority or specialist waste disposal companies.

Batteries and rechargeable batteries

ATTENTION



Danger to the environment through batteries and rechargeable batteries!

Components of batteries and rechargeable batteries are poisonous and pose a danger to the environment.

- Never dispose of batteries and rechargeable batteries as household waste and have them disposed of according to the local regulations.



Components of the machine marked with the adjacent symbol must never be disposed of with household waste. Disposal of these components may only be carried out by specialist companies authorized on site.

Lubricants

ATTENTION



Danger to the environment through lubricants

Lubricants such as fats and oils contain toxic substances. They must not get into the environment.

- Disposal must be carried out by a disposal specialist.

9 Technical specifications

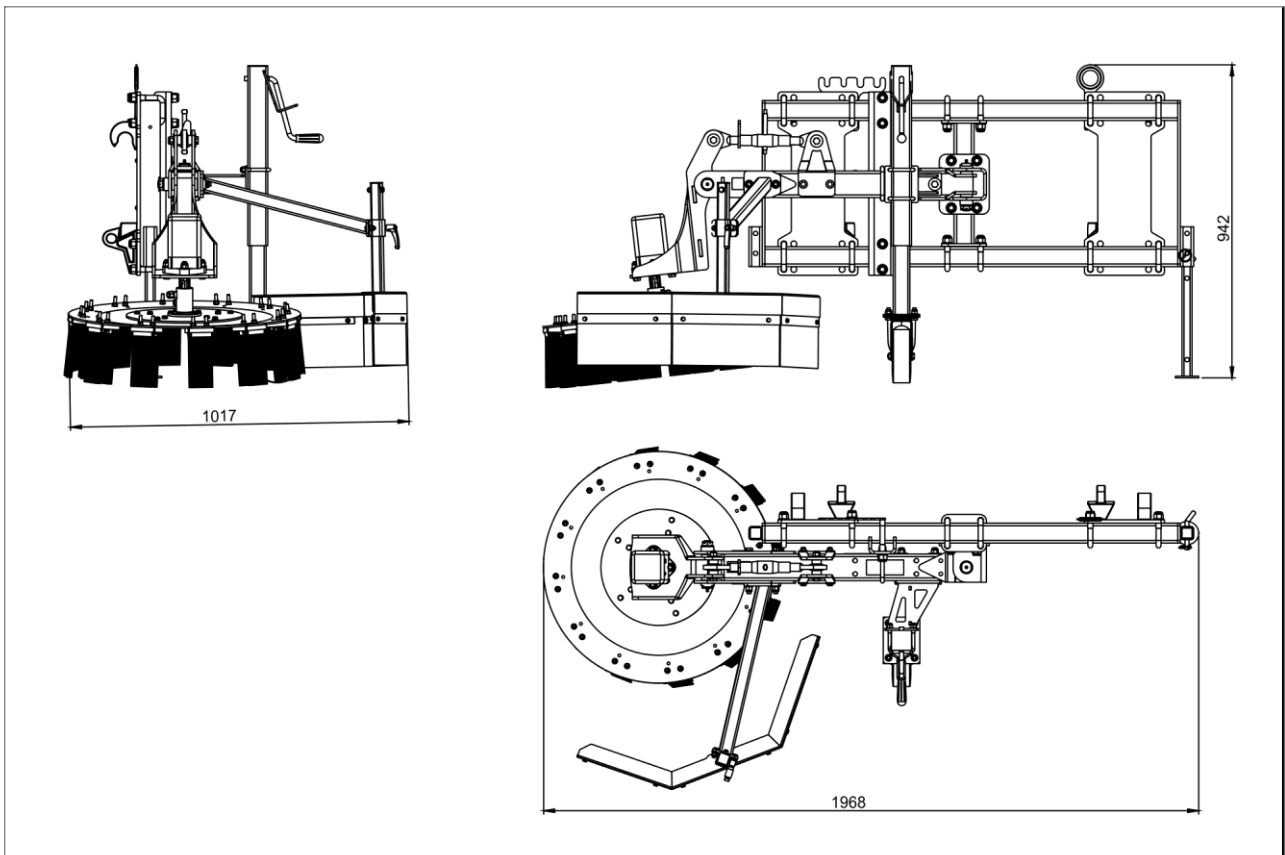


Fig. 12: Layout

	UB Easy
Working width	Ø 80 cm
Number of tools	24 tufts / 12 wire rope heads
Mold	Tufts or wire ropes
Power unit	Hydraulic, min. 25 l / min
Cultivation recording	Three-point / front loader / special shots
Max. Brush plate speed	360 rpm
Sound pressure level LpA, eq	dB(A) on the ear of the operator Measurement based on DIN EN 12733: 2009
Weight attachment	about 160 kg
Maximum oil pressure	175 bar

9.1 Declaration of Conformity

Wir, die
Kersten Arealmaschinen GmbH
Empeler Straße 95
D- 46459 Rees

explain that the product

Brushing wild herb

UB Easy

with all relevant provisions of the EC Machinery Directive 2006/42 / EC.

The machine is also in compliance with all relevant provisions of the following EC directives:

Low Voltage Directive	2014/35/EU
Pressure Equipment Directive	2014/68/EU

Furthermore, the following standards were applied: EN ISO 12100: 2010

Dipl. Ing. (FH) Robert Bosch, Empeler Strasse 95, D-46459 Rees is authorized to compile the technical documentation.

Rees, 03.05.2018



Dipl. Ing. (FH) Robert Bosch
Managing Director

Kersten

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