

V-BRUSH

INSTRUCTIONS FOR USE



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PREAMBLE

Thank you for your confidence in the V-Brush. In order to ensure safe use and optimize its service life, we recommend that you read these operating instructions carefully. A thorough knowledge of this document is essential for safe operation.

The V-Brush is not a stand-alone machine. It is the user's responsibility to select a compatible tractor and to ensure that the tractor/V-Brush combination complies with safety requirements, particularly with regard to noise level, operating instructions and risk assessment.

The following pages set out general safety instructions, which all users must be familiar with and observe.

We guarantee that the information and technical specifications contained in this document are up-to-date and conform to the latest version available. However, design specifications are subject to change without notice.

This document is the original version.

Date of last update: May 19, 2025

INSTRUCTIONS FOR USE **V-BRUHS**
WARRANTY CONDITIONS

1. Warranty

The product is covered by a **five-year** warranty from date of receipt, provided it is used and maintained in accordance with the manufacturer's technical documentation. Wear parts are not covered by this warranty.

2. Conditions

To invoke the warranty, the customer must provide the machine's serial number and year of manufacture. This information can be found on the manufacturer's nameplate.

EC DECLARATION OF CONFORMITY

EC DECLARATION OF CONFORMITY

We, **Hege Applications**, manufacturer, domiciled at 118 Schafbusch - 67160 STEINSELTZ, declare under our sole responsibility that the product :

V-BRUSH

to which this declaration refers, conforms to the essential health and safety requirements of the Machinery Directive **2006/42/EC** .

The customer hereby declares that he has read the information contained in the manufacturer's user manual, a copy of which has been supplied to him* and of which he is fully aware.

Signed in **Steinseltz** **march 14th, 2025**

Samuel Escach
President

HEGE APPLICATIONS
118 Schafbusch
67160 STEINSELTZ
SASU au capital de 10.000 euros
RCS Strasbourg TI B 844 788 786
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*in the form of a QR code downloadable from the start-up sheet included in the package, and whose presence has been notified on the packaging.

**IMPORTANT: The machine has not been designed for outdoor storage.
It must be protected from the elements.**

1. General

When using the machine, the operator must have the necessary skills, and ensure that the equipment is optimally adjusted to the surfaces to be treated.

Operations must be carried out in compliance with the synthetic carpet manufacturer's specifications.

The manufacturer declines all responsibility for inappropriate use or resulting damage; the user assumes full responsibility for associated risks.

Before starting up the V-Brush, it is essential to inspect the work area and remove any obstacles.

The operator must check the general condition of the V-Brush and identify any visible damage or defects.

2. Compliance with operating instructions

All persons involved in the operation and maintenance of the V-Brush must have read and understood the entire operating manual, and in particular this section on **"Safety instructions"**.

3. Machine modification

For safety reasons, any modification or addition not approved by the manufacturer is strictly forbidden. Any alteration to the V-Brush will result in the loss of the CE mark, and responsibility for obtaining a new mark will rest with the person who made the alteration.

4. Maintenance

Before each use of the V-Brush, it is imperative to check the condition of bolts, nuts, spare parts and safety pins.

The V-Brush is designed according to the latest technological advances and guarantees safe operation. However, its use, maintenance or repair by unqualified persons may entail risks of injury, both to the user and to third parties. It is essential to prevent such situations.

The V-Brush must always be used with a suitable tractor, in accordance with the manufacturer's technical specifications.

 **Never reach under the V-Brush to carry out maintenance operations.**

During maintenance or repair operations, the machine must be stabilized to avoid any risk of falling or slipping.

To ensure the safety of the machine and the user, only original V-Brush parts may be used for maintenance and repair operations.

5. Transport

In addition to the instructions specified in this manual, general safety and working rules must be scru-

pulously observed.

When using on public roads, compliance with the **Highway Code** is mandatory.

 **Transporting people is strictly forbidden.**

6. Operating the machine

All V-Brush users must be fully conversant with the machine's functions and controls before starting up.

The V-Brush must not be used in conditions of poor visibility, rain, storm or inclement weather, or on slopes exceeding 30°.

The V-Brush must be coupled in accordance with the towing vehicle manufacturer's instructions, to prevent any risk of injury.

Before starting work, the operator must ensure optimum visibility, both near and far.

The V-Brush is equipped with safety decals whose meaning is self-explanatory. These must remain perfectly legible at all times, and must be replaced if damaged (see page 10 for detailed meaning).

Before use, be sure to check the lifting capacity of the towing vehicle to avoid any risk of accident.

Wear appropriate clothing:

- Wear safety **wear safety shoes complying with EN ISO 20345**
- Wear **tight-fitting pants** and avoid loose-fitting clothing.
- Tie back **long hair** to prevent snagging.

1. TECHNICAL DATA

Machine type	V-BRUSH 2000
Working width	2,00 m
Height	0,70 m
Length	1,09
Ø Linkage pin Lifting arm	Cat 1 (22 mm)
Ø 3-point hitch	Cat 1 (19 mm)
Machine weight	75 kg
Minimum power requirement	20 HP


Palletizing configuration may vary according to order (kits, accessories, etc.).


Please follow the steps below to unpack and install the machine correctly:

1. **Read** the sticker on the film.
2. **Remove** the protective film.
3. **Cut** the straps.
4. **Attach** machine to towing vehicle.
5. **Raise** machine and **remove** pallet.

3. TRANSPORTING THE V-BRUSH

1. Storing and transporting the V-Brush on a cart

 **Important:** The V-Brush must be stored vertically on the cart support to avoid deformation of the nylon fibers.

 It is essential to move the cart and the V-Brush on perfectly level and stabilized ground. Due to the height of the center of gravity, any imbalance caused by a sloping or uneven surface may result in the machine tipping over, with a high risk of material damage or personal injury.

See page 16 for safe installation of the brush on the cart.

When the V-Brush is on the cart, make sure that the cart is secured to prevent it from tipping over, especially if it is left on the edge of the ground.

2. Transporting the V-Brush attached to the tractor

The user is entirely responsible for transporting the V-Brush coupled to the tractor, particularly when travelling on public roads. It is the user's responsibility to :

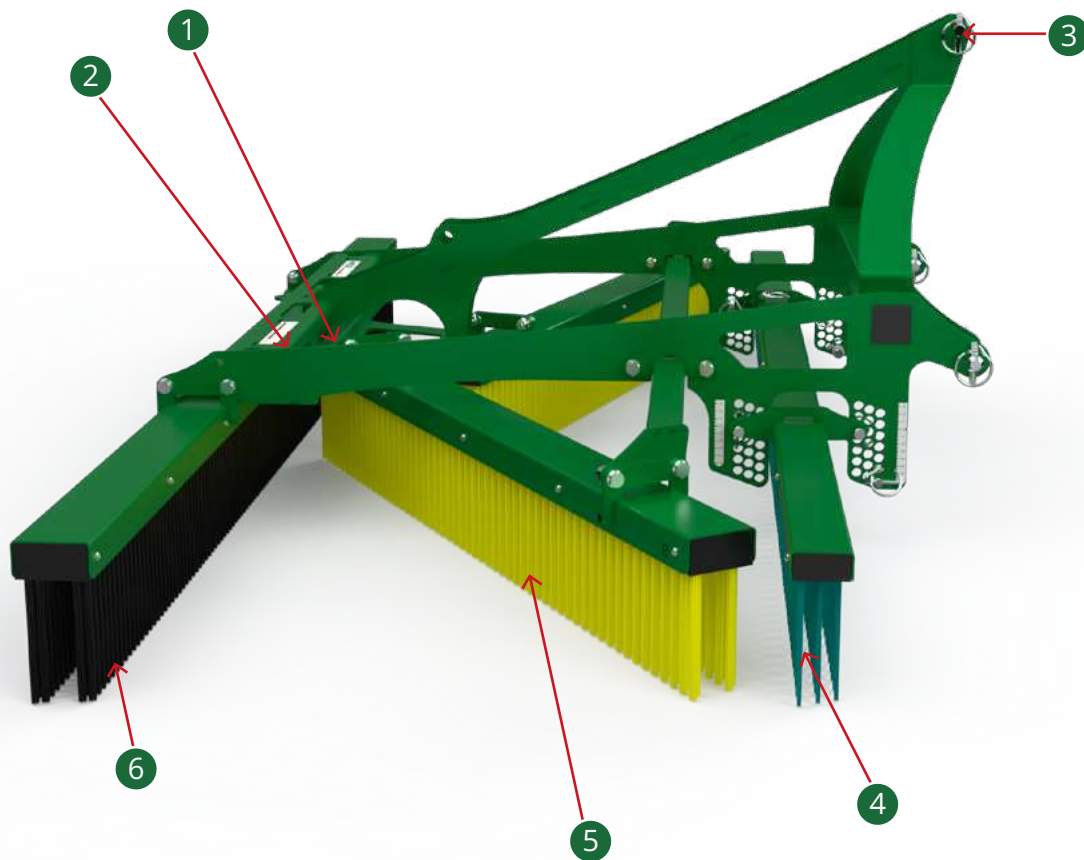
- Comply with current national legislation concerning the transport of agricultural or maintenance equipment hitched to a vehicle.
- Check the requirements for signage, lighting and authorized widths in your country.

Permissible speed

- **On synthetic surfaces**, when the machine is coupled and in operation, the maximum speed allowed is **12 km/h**, due to the weight of the machine.
- Exceeding this speed may :
 - Pose a risk to the driver or bystanders.
 - Cause serious damage to the machine.

4. GENERAL PARTS LIST




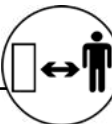
- ① Safety stickers (see details on next page)
- ② Serial number
- ③ 3-point hitch pin
- ④ Decompacting brush
- ⑤ V" brush
- ⑥ Finishing brush



4. GENERAL PARTS LIST

1 Safety decals :



Pictogram	Illustration	Meaning
Pictogram 1 General safety		The V-Brush is designed for safe use, provided that the safety instructions described in this manual are strictly observed.
Pictogram 2 Reading the manual		Before using the V-Brush, it is essential to read and understand the manual. Failure to follow the instructions may result in personal injury and/or damage to the machine.
Pictogram 3 Safety during maintenance		When carrying out maintenance, installation or repair work, always switch off the tractor engine and remove the ignition key. Any technical intervention must be carried out by qualified and authorized personnel only.
Pictogram 4 Danger zone		When the V-Brush is in operation, no-one should be in the danger zone, as there is a risk of injury from flying material. It is imperative to maintain a minimum safety distance of 4 meters.

Important note:

All safety decals must remain permanently visible on the machine and be understood by users.

5. PRELIMINARY CHECKS BEFORE USING THE MACHINE IN THE FIELD

Before starting to work with the V-Brush on a given surface, the operator must make sure of the following points:

1. No obstacles on the ground

Check that the ground is clear of any objects that could interfere with driving (eg. (e.g. balls, branches, animals, etc.).

If such objects are present, the machine must not be used.

2. Safety requirements

Check that there is no risk of slipping or falling (eg. unstable, damp or frozen ground).

If in doubt about safety, postpone work to a more favourable time.

3. Number of passes over the surface

It is possible to make several successive passes over the same area to improve work efficiency:

- following the same direction,
- or cross-passing to achieve the desired result.

4. Handling in the field

Avoid sharp turns.

Prefer straight trajectories to preserve the integrity of the soil and the machine.



5. Aggressiveness setting

Setting the front brush too aggressively can cause irreversible damage to the carpet.

Carefully adjust the working parameters to suit the type of soil and the desired results.

6. TRACTOR ATTACHMENT

1. Pre-hitching checks

Before attaching the V-Brush to the tractor, the following checks must be carried out:

- Check the machine for any damage that could compromise safety. If there are any defects, carry out the necessary repairs before using the machine.
- Check that all nuts, bolts and safety pins are correctly tightened and secured.
- Check that all safety decals are present and in good condition. They must be legible and in good condition.

2. Hitching method (to be adapted to tractor model)

The V-Brush is designed to be attached to the tractor via the lift arms and 3-point system. The standard procedure is as follows:

a. Tractor positioning

Back the tractor slowly and carefully until the attachment arms are aligned with the machine's lifting pins.

Make sure the tractor is safely immobilized before coupling.

b. Securing the linkage arms

Lock the tractor's lifting arms onto the V-Brush's lifting pins.

- In most cases, the tractor has a category 1 linkage (lower pin Ø22 mm; upper pin Ø19 mm)
- In the case of a category 2 linkage: it is essential to install the appropriate adapter sleeves (lower pin Ø28 mm; upper pin Ø25 mm).

c. Lifting arm stabilization

Adjust the linkage stabilizer to ensure the machine's lateral stability.

d. 3-point linkage

Connect the V-Brush to the tractor using a standard 3-point linkage.

7. V-BRUSH ADJUSTMENT

Adjustment steps :

1. 3-point length adjustment

The length of the 3-points must be adjusted according to the desired result ①.

First, set the machine horizontally by adjusting the length of the 3-point.

To increase the pressure of the finishing brush on the aggregate, the 3-point bar can be lengthened slightly, to facilitate the descent of the aggregate into the carpet.

2. Decompaction brush height adjustment

Depending on the type of filling, the level of moisture and the degree of compaction of the aggregate, you can adjust the intensity of the work performed by changing the height setting ②.



8. UNCOUPLING

The V-Brush can be uncoupled from the tractor as follows:

1. Choice of location

Move the machine to a flat, stable and safe **stable and secure storage area**.

Make sure the tractor is stationary.

2. Placing the machine on the ground

Carefully lower the machine until it rests completely on the ground.

3. Release 3-point linkage

Release the tension on the 3-points.

4. Uncoupling the linkage arms

Depending on the type of tractor linkage :

- Remove the safety pins, then the hitch pins.
- Unlock and lower both linkage arms.

5. Removing the 3-point pin

- Remove safety pin.
- Remove the 3-point link pin.

Check that the Joker rests stably, without risk of slipping or sliding.

6. Move away from tractor

Restart the tractor and **move slowly forward** to disengage from the machine.

9. PROBLEM ANALYSIS

Problem	Possible cause	Solution
Too much material coming out of the fiber	Feed speed too high	Reduce forward speed
	Decompaction brush set too low	Reassemble the loosening brush
Brush does not decompact aggregate	Decompaction brush incorrectly adjusted	Lower the decompaction brush with the axes (4 axes)

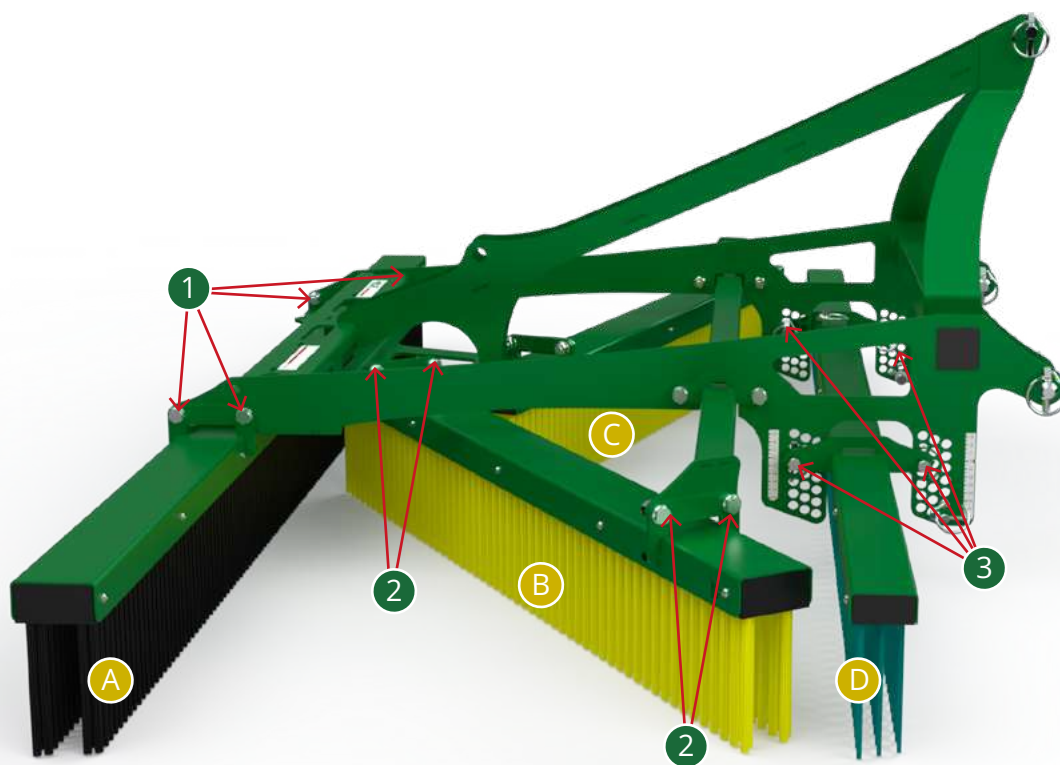
10. MAINTENANCE

We recommend turning the brushes once a year to maintain their efficiency.

For the brush **A** unscrew the 4 bolts **1** and turn the brush over.

For the brushes **B**, **C** unscrew the 4 bolts **2** and turn the brush over.

For the brush **D** remove the 4 axles **3** and turn the brush over.



11. OPTION: CART

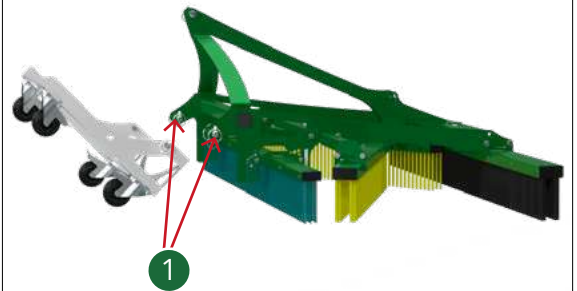
1. Function

The cart enables the V-Brush to be stored vertically, to avoid any deformation of the fibers during storage. It also optimizes space by limiting floor space requirements, while facilitating transport of the V-Brush.

2. Positioning

a. When the V-Brush is on the floor, bring the cart up to the V-Brush. Remove the 2 D22 pins from the lifting arms **1**.

Diagram A



b. Replace pins D22 **2** then fit the other 2 pins D16 **3**.
Engage the brake on the 2 wheels close to the ground to block their rotation **4**.

Straighten the brush, using the 2 notches above the black brush **5**.

⚠️ Adopt a safe posture: keep your back straight and bend your knees to avoid any risk of injury.

Diagram B



c. Release the wheel brakes to move the V-Brush.

⚠️ It is essential to move the cart and the V-Brush on perfectly level and stabilized ground.

Due to the height of the center of gravity, any imbalance caused by a sloping or uneven surface may result in the machine tipping over, with a high risk of material damage or personal injury.

When storing, be sure to put the brakes back on to secure the position.

Diagram C



12. OPTION: COMB KIT

1. Function

The comb kit provides enhanced aggregate de-compaction, thanks to a more aggressive action on the surface. It must only be used with the express authorization of the synthetic carpet manufacturer.

2. Installing the comb kit

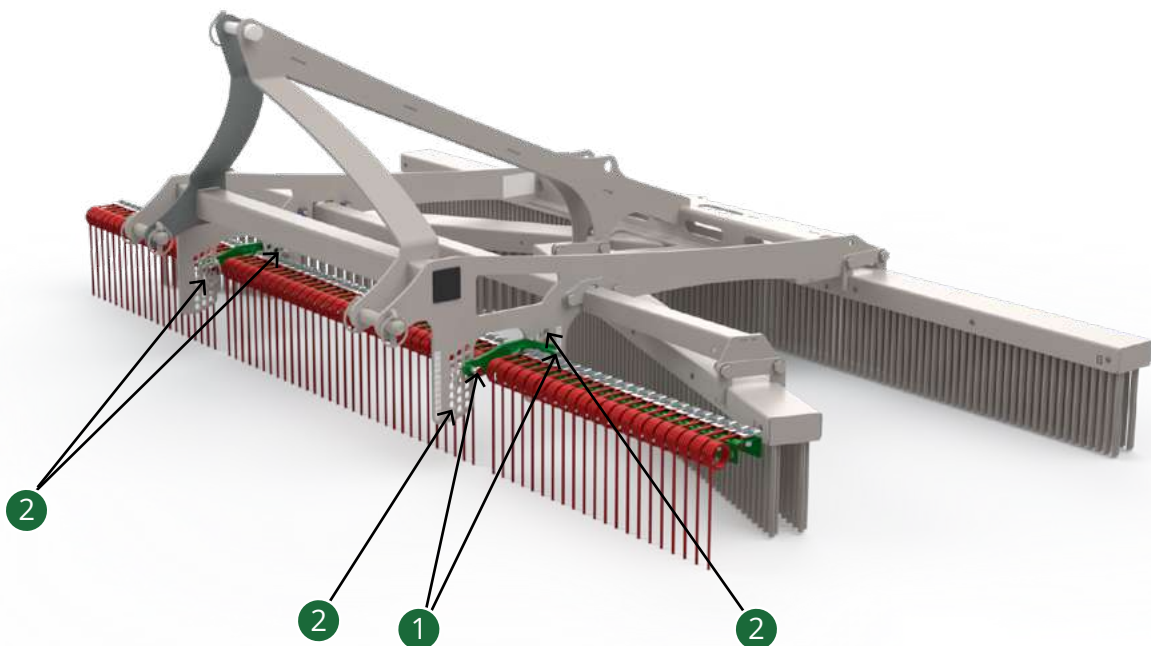
The comb kit is installed in place of the blue decompaction brush.

3. Setting

The comb kit is adjusted by setting the height of the tines in relation to the ground, according to the desired level of aggressiveness. This is done using the 4 axes ① and 4 adjusting slides ②.

4. Maintenance

To replace teeth and related hardware, please contact us for compatible parts.



13. OPTION: DRAWBAR

1. Function

The drawbar allows the machine to be hitched to vehicles not equipped with lifting arms.

There are 2 types of drawbar head (see diagram A):

- attachment for Ø 50 mm ball
- ring hitch.

2. Attaching the drawbar to the V-Brush

Hook the drawbar onto the 2 hitch pins **1**.

Use the 2 spacers **1** to secure the drawbar laterally.

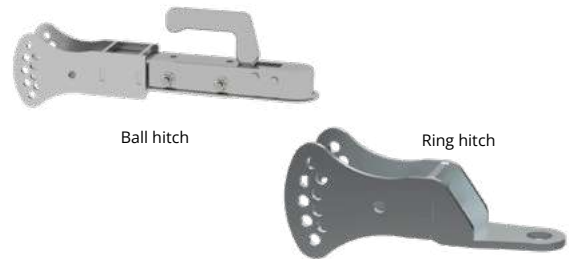
Attach the mechanical 3-point **2** to the V-Brush.

3. Setting

Depending on the vehicle, adjust the height of the hitch using the adjusting screws **3**.

The mechanical 3-point **2** will allow you to adjust the ground pressure.

Diagram A



Ball hitch

Ring hitch

Diagram B

