

**JOKER SPORTFIELD HARROW**

**INSTRUCTIONS FOR USE**



3	CONTACTS, INTRODUCTION
4	WARRANTY CONDITIONS
4	CE DECLARATION OF CONFORMITY
5	SAFETY INSTRUCTIONS
7	1   TECHNICAL DATA
9	2   DEPALLETIZING
9	3   TRANSPORT OF THE JOKER
10	4   LIST OF GENERAL PARTS
12	5   USE OF THE JOKER - PRELIMINARY CHECKS
13	6   TRACTOR ATTACHMENT
14	7   JOKER SETTING
15	8   DISENGAGING THE JOKER
16	9   PROBLEM ANALYSIS / CENTER PLATE
17	10   MAINTENANCE
18	11   TEETH REPLACEMENT
19	12   HARROW KIT
20	13   BRUSH KIT
21	14   MECHANICAL WEED CONTROL KIT
22	15   EDGE KIT
23	16   SEEDER KIT
26	17   ROLLER KIT
28	18   FRONT WHEEL KIT
29	19   DRAWBARS
30	20   STORAGE RACK
31	21   FRONT KIT

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**PREAMBLE**

Thank you for your confidence in the Joker. 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 Joker is not a stand-alone machine. It is the user's responsibility to select a compatible tractor and to ensure that the tractor/Joker 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: June 3, 2025

# WARRANTY PROVISIONS

## 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.

# 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 :

**JOKER**

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

RES Strasbourg TI B 844 788 786

n° TVA : FR 34 844 788 786

\*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.

# **SAFETY INSTRUCTIONS**

**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 soil to be treated.

The manufacturer accepts no liability for improper use or resulting damage; the user assumes full responsibility for the associated risks.

Before starting up the Joker, it is essential to inspect the work area, remove any obstacles and avoid excessive irregularities in the ground.

The operator is responsible for checking the general condition of the Joker and identifying any visible damage or defects.

## **2. Compliance with operating instructions**

All persons involved in the operation, maintenance or repair of the Joker must have read and understood the entire operating manual, and in particular this section "**Safety instructions**".

## **3. Machine modification**

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

## **4. Maintenance**

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

The Joker is designed according to the latest technological advances and guarantees safe use. 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 Joker must always be used with a suitable tractor, in accordance with the manufacturer's technical specifications.

 **Never reach under the Joker to replace the teeth.** If necessary, dismantle the platform and tilt it to one side.

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

To ensure the safety of the equipment and the user, only original Joker parts may be used for maintenance and repair.

## **5. Transport**

In addition to the instructions specified in this manual, general safety and working rules must be scrupulously observed.

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

 **Transporting people is strictly forbidden.**

The Joker must not be used in conditions of poor visibility, in rain, stormy or inclement weather, or on slopes greater than 30°.

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# **SAFETY INSTRUCTIONS**

## **6. Operating the machine**

Before commissioning, all Joker users must be fully conversant with all functions and controls.

The Joker 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 Joker is fitted with safety stickers with self-explanatory meanings. These must remain perfectly legible at all times, and must be replaced if damaged (see page 11 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 shoes that comply with EN ISO 20345
- Wear fitted pants and avoid loose clothing.
- Tie back long hair to prevent it from getting caught.

**1. TECHNICAL DATA**

Machine type	JOKER 2100 D5	JOKER 1800 D5	JOKER 1500 D5	JOKER 1200 D5	JOKER 1000 D5
Working width effective	2,10 m	1,80 m	1,50 m	1,20 m	1,00 m
Height	0,84 m	0,84 m	0,84 m	0,84 m	0,84 m
Length	1,34 m	1,34 m	1,34 m	1,34 m	1,34 m
Ø Hitch pin arm lifting	Cat 1 (22 mm)	Cat 1 (22 mm)	Cat 1 (22 mm)	Cat 1 (22 mm)	Cat 1 (22 mm)
Ø 3-point hitch	Cat 1 (19 mm)	Cat 1 (19 mm)	Cat 1 (19 mm)	Cat 1 (19 mm)	Cat 1 (19 mm)
Maximum driving speed	12 km/h	12 km/h	12 km/h	12 km/h	12 km/h
Weight	135 kg	120 kg	98 kg	78 kg	63 kg
Minimum power requirement	30 hp	30 hp	20 HP	15 hp	15 hp
Distance between tines	4,6 mm	4,6 mm	4,6 mm	4,6 mm	4,6 mm
Number of tines on the main plate	221	189	157	125	103
Number of tines on comb kit	37	31	27	23	19
Number of blades on the weed control kit	13	11	9	7	6

# 1. TECHNICAL DATA

The table below will help you find specific information about your model, in particular the exact number of tines on your Joker.

		<b>Number of teeth</b> Number of tines Anzahl der Zinken	<b>Spacing of tines</b> Spacing of tines Abstand zwischen zwei Zinken (△ mm)	<b>Weight</b> Weight Gewicht	<b>Minimum power requirement (HP)</b> Minimum power requirement (HP) Erforderliche Mindestleistung (PS)
D5	<b>JOKER 1000 D5</b>	103	4,6 mm	63 kg	15 HP
	<b>JOKER 1200 D5</b>	125	4,6 mm	78 kg	15 HP
	<b>JOKER 1500 D5</b>	157	4,6 mm	98 kg	20 hp / HP / PS
	<b>JOKER 1800 D5</b>	189	4,6 mm	120 kg	30 hp
	<b>JOKER 2100 D5</b>	221	4,6 mm	135 kg	30 hp
	<b>JOKER 3600 D5</b>	363	4,6 mm	347 kg	40 hp
	<b>JOKER 4600 D5</b>	469	4,6 mm	410 kg	50 hp
D6	<b>JOKER 1000 D6</b>	89	5 mm	104 kg	20 hp / HP / PS
	<b>JOKER 1200 D6</b>	107	5 mm	112 kg	25 hp
	<b>JOKER 1500 D6</b>	133	5 mm	120 kg	25 hp
	<b>JOKER 1800 D6</b>	161	5 mm	130 kg	30 hp
	<b>JOKER 2100 D6</b>	188	5 mm	150 kg	35 hp
	<b>JOKER 3600 D6</b>	313	5 mm	380 kg	50 hp
	<b>JOKER 4600 D6</b>	401	5 mm	450 kg	80 hp
D7	<b>JOKER 1000 D7</b>	76	5,5 mm	107 kg	20 hp / HP / PS
	<b>JOKER 1200 D7</b>	94	5,5 mm	118 kg	25 hp
	<b>JOKER 1500 D7</b>	117	5,5 mm	125 kg	30 hp
	<b>JOKER 1800 D7</b>	141	5,5 mm	135 kg	35 hp
	<b>JOKER 2100 D7</b>	166	5,5 mm	155 kg	40 hp



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## **2. DEPALLETIZING**

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. If the Joker was ordered with kits, remove them with the help of **two operators**.
5. **Unscrew** the elements holding the machine to the pallet.
6. **Attach** the machine to the towing vehicle.
7. **Raise** machine and **remove** pallet.

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## **3. TRANSPORTING THE JOKER**

### **User's responsibility**

The user is entirely responsible for transporting the Joker coupled to the tractor, especially on public roads. It is the user's responsibility to :

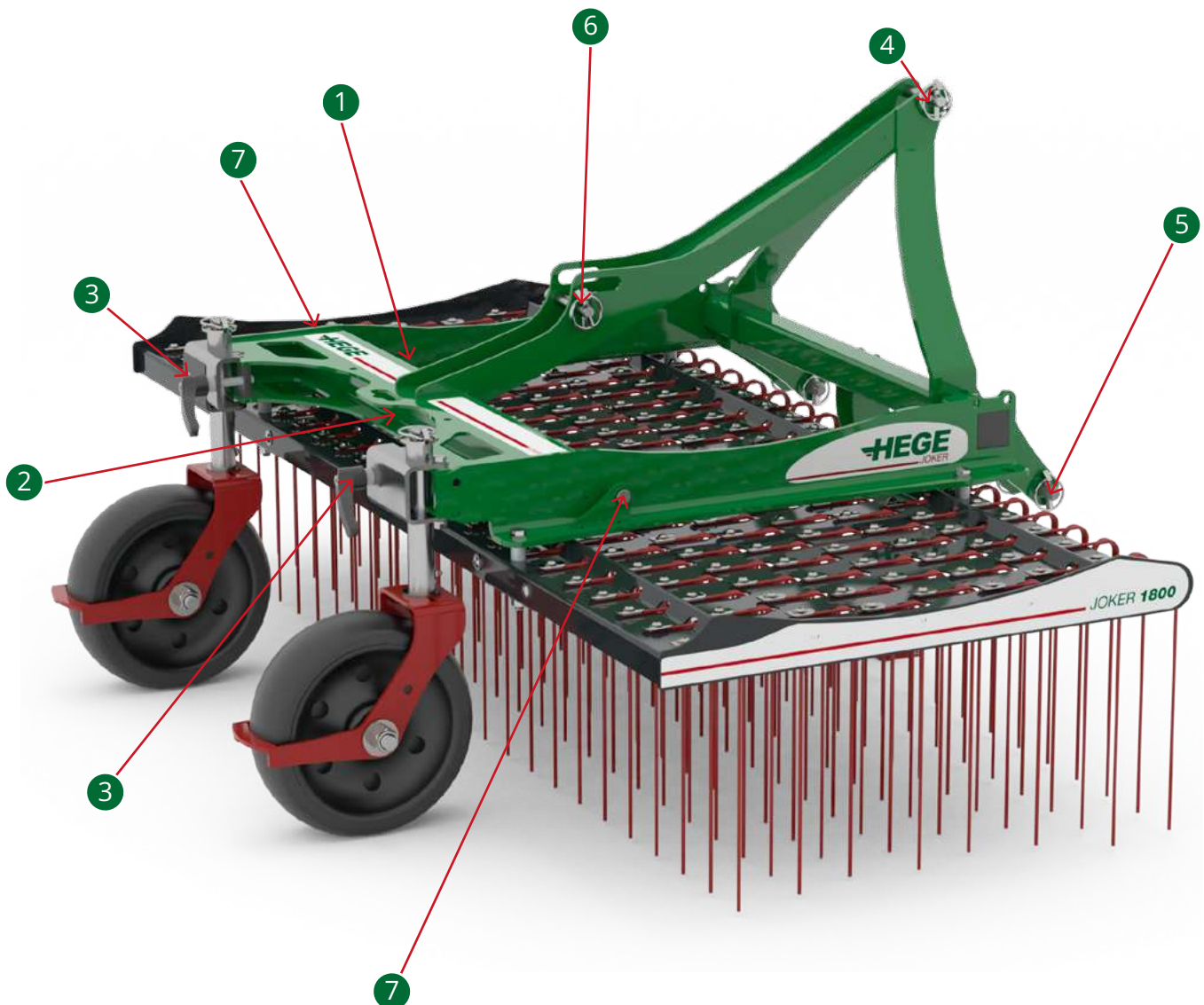
- Comply with current national legislation concerning the transport of agricultural or maintenance equipment hitched to a vehicle.
- Check the requirements for signage, lighting and authorized widths in your country.

### **Permissible speed**

- **In green areas**, 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. LIST OF GENERAL PARTS




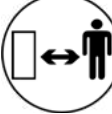
- 1 Safety stickers
- 2 Serial number
- 3 Working depth adjustment handles
- 4 3-point hitch pin
- 5 Lift arm pin
- 6 3-point attachment for adjusting the working depth of the rear kit
- 7 Rear kit hitch pins



## 4. GENERAL PARTS LIST

### 1 Safety decals :



Pictogram	Illustration	Meaning
Pictogram 1 General safety		The Joker is designed for safe operation, provided that the safety instructions described in this manual are strictly observed.
Pictogram 2 Reading the manual		Before using the Joker, it is imperative that you read and understand the operator's 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 operating the Joker, 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. USE OF THE JOKER**

### **PRE-USE CHECKS**

**Before starting to work with the Joker 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. Terrain inclination**

Identify any slopes.

*The maximum admissible slope for Joker operation is 30°.*

#### **3. 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.*

#### **4. Number of passes over 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.

#### **5. Handling in the field**

*Avoid sharp turns.*

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

#### **6. Aggressiveness setting**

*Setting the tines too aggressively can cause irreversible damage to the machine.*

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

## 6. ATTACHMENT TO TRACTOR

### 1. Pre-hitching checks

Before attaching the Joker to the tractor, the following checks must be carried out:

- Ensure that the machine has no 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 properly tightened and secured.
- Check that all safety stickers are present and in good condition. They must be legible and in good condition.

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

The Joker is designed to be hitched to the tractor via the lift arms and the 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 to the Joker'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. Stabilizer adjustment


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

#### d. Connecting the 3-point hitch

Connect the tractor's 3-point hitch to the Joker's fixed 3-point hitch pin.

#### e. 3-point adjustment

Adjust the length of the 3-point hitch so that the Joker platform is horizontal

 Make sure that all safety pins are in place and locked.

#### f. Commissioning

Start the tractor and lift the Joker off the ground.



- 1 Lift arm
- 2 Stabilizer
- 3 3-point hitch

## 7. JOKER ADJUSTMENT

### Adjustment steps :

#### 1. Initial positioning

Install the Joker on a flat surface corresponding to the work area.

#### 2. Positioning the gauge wheels

Slowly move forward with the tractor so that the gauge wheels are correctly positioned.

#### 3. Adjusting the platform

##### 3.1 Leveling the platform

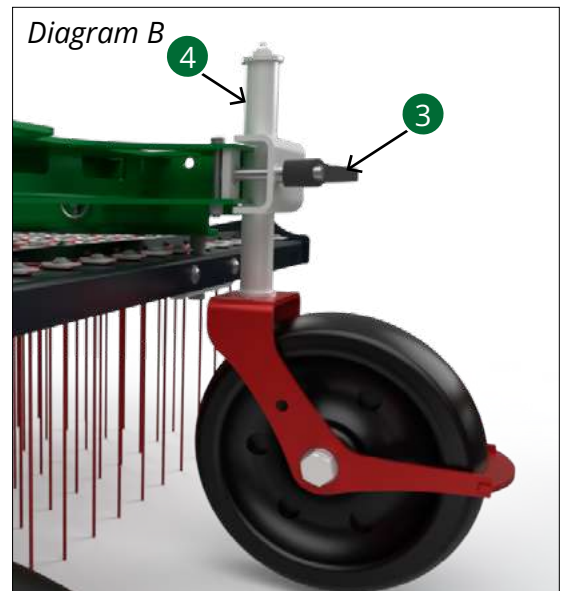
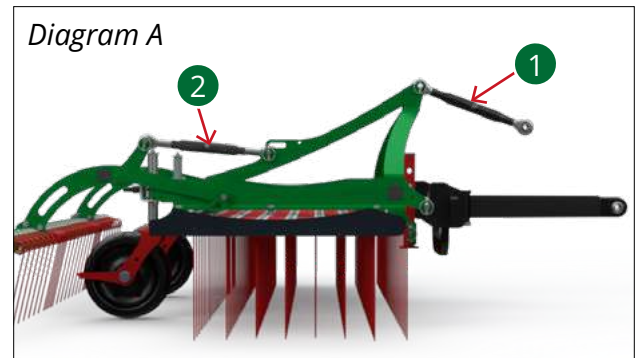
Adjust the height of the 3-point hitch **1** until the deck is perfectly horizontal, using the spirit level.

##### 3.2 Adjusting the aggressiveness of the rear tines of the platform

- Assess the desired aggressiveness.
- Raise the machine.
- Loosen the handle that secures the flange **3**.
- Adjust the graduated tube using the graduated scale as a guide **4**.
- Tighten the handle.
- Place the machine back on the ground (lowering the lift arms).
- Move forward a few meters to allow the wheels and deck to settle into position.

#### 7. Adjusting the rear kit

Once the platform is correctly adjusted, the working height of the rear kit can be adjusted using the 3-point hitch **2**.



## 8. JOKER DISENGAGEMENT

The Joker 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

### CENTRAL PLATFORM

Problem	Possible cause	Solution
<b>Tines not working efficiently enough</b>	Platform not horizontal	<ul style="list-style-type: none"> <li>Adjust the length of the 3-point hitch.</li> <li><b>Front gauge wheel option:</b> adjust the height of the gauge wheels so that the deck is perfectly horizontal.</li> </ul>
	Working depth incorrectly set	Adjust the height of the gauge wheels to obtain more aggressive tines on the platter.
	Unsuitable tooth diameter	D5 decks (teeth Ø 5 mm) can be replaced with decks equipped with teeth Ø 6 or 7 mm.
<b>Too much material coming out of the teeth</b>	Machine set too aggressively	Reduce aggressiveness by raising the tine plate slightly.
<b>Poor finishing quality</b>	Soil too wet	Wait for more favorable weather conditions
<b>Tines break or detach from platter</b>	Machine set too aggressively	<ul style="list-style-type: none"> <li>Reduce aggressiveness by raising the platter slightly</li> <li>Replace broken teeth, see page 18</li> </ul>
	Incorrect tine diameter	D5 decks (teeth Ø 5 mm) can be replaced with decks equipped with teeth Ø 6 or 7 mm.



# 10. MAINTENANCE

Control points	Action
Check bolts/nuts for loose fit	Tighten bolts/nuts to appropriate torque: - Tooth attachment, M8 screws: torque 23 Nm - Wheel attachment, M10 screw: torque 47 Nm - Fixing the chainring to the frame, M12 screw: 70 Nm
Presence and legibility of stickers	Replace if missing/damaged
Check presence of locking pins safety	Replace missing pins



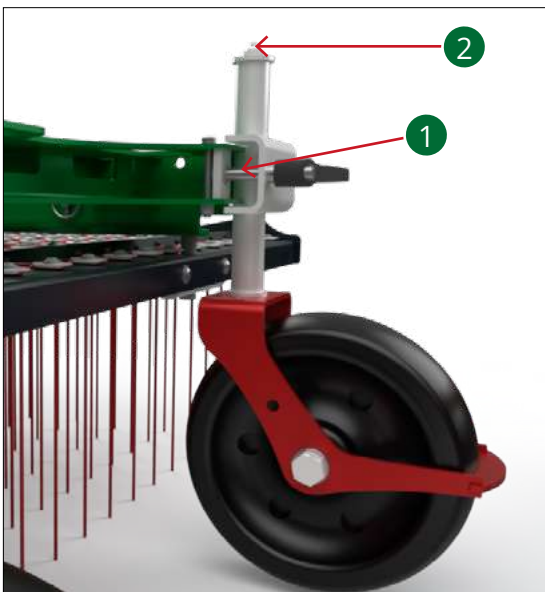
The wheels require no maintenance.

## Once a year :

- Apply a penetrating oil to the gauge wheel adjustment handles ①.
- Grease the wheel pivots ②.

## If necessary:

- Replace any missing teeth.
- If a significant number of teeth come loose, this may indicate that the machine is set too aggressively.



# 11. REPLACING TEETH

On the Joker, the teeth are attached to the chainring using nuts, screws and washers. Depending on operating conditions, the teeth may wear or break. If necessary, please contact us to obtain the appropriate replacement parts (teeth and hardware).

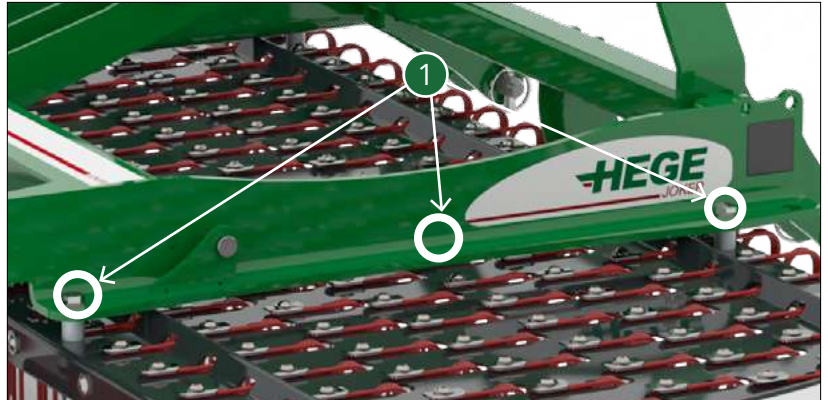
## Replacement procedure :

1. When the machine is attached to the tractor: remove the **4 or 6 screws** connecting the plate to the frame **1**.

2. Raise the machine and move it slightly forward to **release the platform**.

3. Position the **plate vertically** and secure it in a stable position.

4. Remove the string and safety snap hooks from the row of tines concerned.



5. Dismantle the teeth using a screwdriver, taking care to use the **appropriate tools** (6 mm Allen wrench + 10 mm socket wrench).

**Note:** Base nuts must not be unscrewed, as this may damage the surface. The screw must be unscrewed from the top.

6. To ensure safety and reliability, each new tooth must be fitted with a new nut, screw and flange supplied by us.

### Tightening torques to be respected :

- Tooth mounting - M8 screws : **23 Nm**
- Wheel mounting - M10 screws : **47 Nm**
- Fixing the chainring to the frame - M12 screw : **81 Nm**

7. Replace strings and karabiners.

## 12. HARROW KIT

### 1. Function

In wet conditions, when treating earthworm castings, the wheel scrapers can form clumps of earth. The teeth of the harrow kit disperse these clumps, leaving a clean and even surface.

### 2. Attaching the harrow kit to the Joker

The kit is attached using the two Ø16mm rear kit mounting pins **1**.

### 3. Adjustments

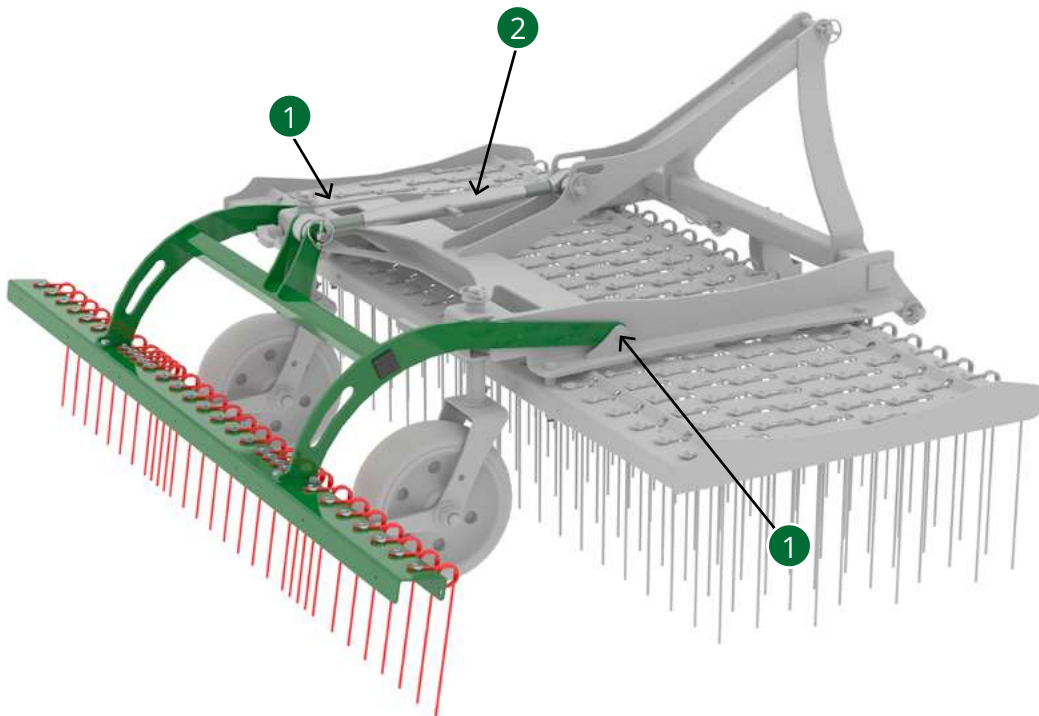
The 3-point hitch allows you to adjust the aggressiveness of the tines **2** :

- By lengthening the 3-point hitch, the tines move closer to the ground.
- Shortening it moves the tines further away from the ground.

### 4. Maintenance

The harrow kit is equipped with shorter tines than those on the plate (L=25cm). To replace the tines and corresponding hardware, please contact us to obtain compatible parts.

Number of teeth depending on your harrow kit model: see page 7.



## 13. BRUSH KIT

### 1. Function

The brush kit is used to level surfaces.

### 2. Attaching the brush kit to the Joker

The kit is attached using the two Ø 16 mm coupling pins on the rear kit **1**.

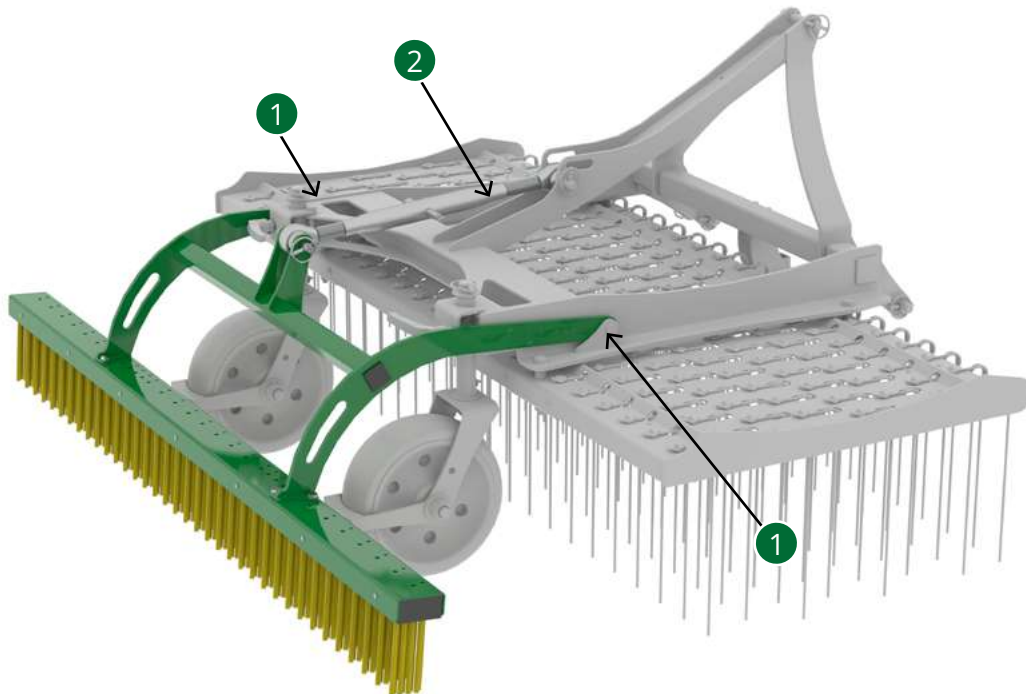
### 3. Setting

The 3-point hitch allows you to adjust the height of the brush **2**:

- By extending the 3-point hitch, the brush moves closer to the ground.
- Shortening it moves the brush away from the ground.

### 4. Maintenance

Caution: it is essential to store the brush on the trolley or machine and avoid leaving it resting on the nylon fibers, as this may cause them to become deformed.



# 14. MECHANICAL WEED CONTROL KIT

## 1. Function

The mechanical weed control kit allows for the environmentally friendly maintenance of mineral surfaces without the use of pesticides.

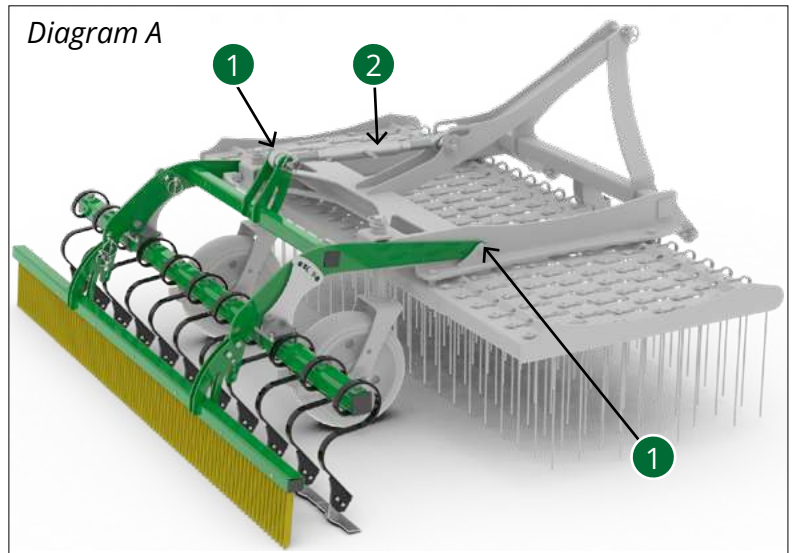
## 2. Attaching the mechanical weed control kit to the Joker

The kit is attached using the two Ø 16 mm coupling pins on the rear kit **1**.

## 3. Setting

The 3-point attachment allows you to adjust the working depth of the blades **2** :

- By extending the 3-point hitch, the blades sink into the ground.
- Shortening it raises the blades away from the ground.



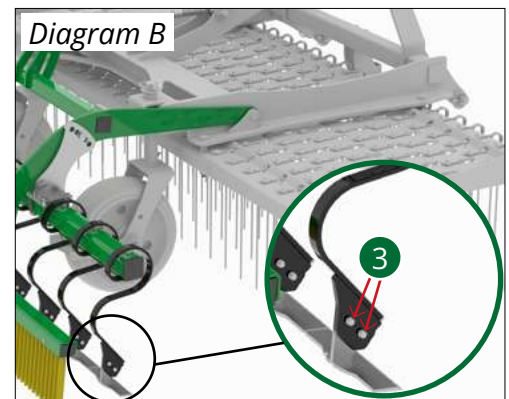
## 4. Maintenance

To change the blades, loosen the two M8 screws that secure the blade to the coulter **3**.

To replace the blades and corresponding hardware, please contact us to obtain compatible parts.

## 5. Working method

In order to limit the growth of unwanted plants, the aim is to maintain a clean, level, and compact surface.



### a. Preliminary leveling of the surface:

Weeding is best done after using the Joker + brush kit.

### b. First pass with the mechanical weed control kit:

- Set the working depth of the plate between 2 and 5 mm: the tines will then skim the ground, pulling up young shoots while maintaining the level of the surface.
- Position the blades so that they are almost parallel to the ground, carefully adjusting the working depth using the 3-point hitch: this should not exceed -1 cm, **so as not to recreate a seedbed.**
- The rear brush completes the operation by leveling the surface and separating the organic residues from the mineral substrate.

### c. Second pass without the mechanical weed control kit:

Once the scalping operation has been completed, it may be useful to run the Joker again without the mechanical weed control kit, having adjusted the tine height to +5 mm. This pass will shake out any unwanted material and separate the plant matter from the mineral.

**Recommended frequency:** minimum **4 times a year**, ideally during periods of vegetative rest (cool temperatures or periods of high heat).

A good knowledge of the plant species present will help you choose the most favorable periods and thus optimize the frequency of treatments.

**15. EDGE KIT****1. Function**

The edge kit is used in addition to the weed control kit. It is designed to protect the edges and the outer blade.

**2. Attaching the edge kit to the weed control kit**

There are right **1** and left **2** versions of the edge kit.

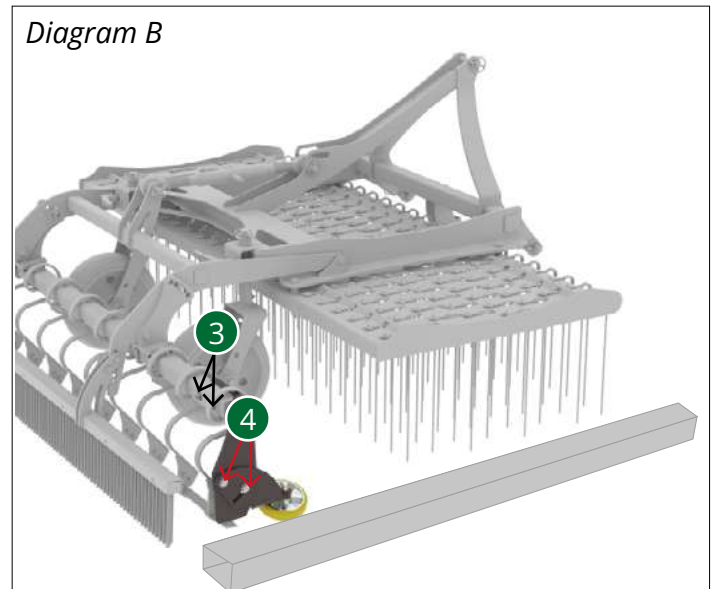
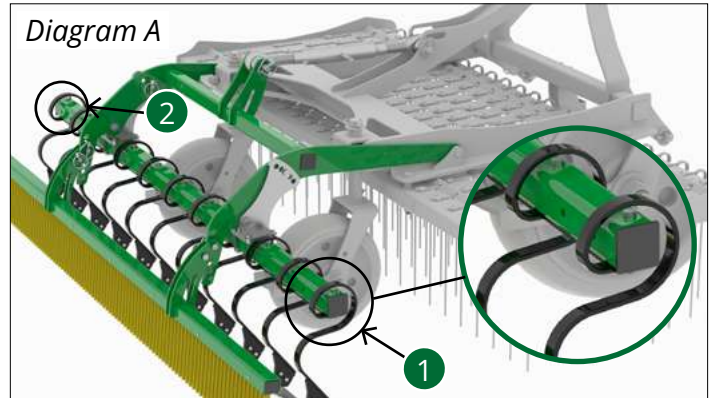
The edge kit is mounted with two M10 screws **3** to the square tube of the weed control kit

**3. Setting**

Adjust the height of the gauge wheel so that it presses directly against the edging. Adjustment is made using the 2 M10 screws **4**.

**4. Maintenance**

After each use, it is recommended to clean the border kit thoroughly, paying particular attention to the wheel to ensure optimal operation and prolong its service life.





## INSTRUCTIONS **JOKER**

# 16. SEEDER KIT

### 1. Function

The seeder kit is used for reseeding or grassing areas.

### 2. Installing the seed kit on the Joker

#### 1. ⚠️ **Electrical connection**

The tractor must be equipped with a **12 V, 3-pin** socket (diagram A) protected by a **30 A** fuse (minimum cross-section 6 mm<sup>2</sup>).

The necessary **wiring harness** is supplied with the machine.

The **pneumatic seeder** works thanks to a **blower ①** driven by a **12 V electric motor**.

#### 2. Seed distribution

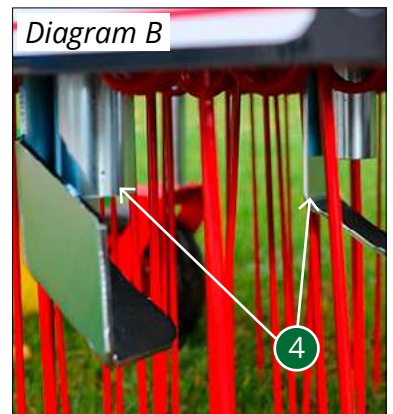
**Mechanical seed distribution** is provided by a grooved cylinder.

This cylinder is driven by a **self-regulating electric motor ②**.

For sowing Ray-grass and Fescue grass, we recommend using the red 8-blade coulter, which is fitted as standard on the machine.

#### 3. Seed transport

The **air flow generated by the blower** transports the seeds through **flexible plastic tubes ③** to the **seed diffusers ④**.



## INSTRUCTIONS **JOKER**

# 16. SEEDER KIT

When purchasing the **seed drill kit**, a **fixing clamp** is included **1** is supplied to enable installation of the cab-mounted **control box**. This box, included in the kit, is equipped with **three control elements**, as detailed below:

### **Blower start switch** **2**

- Switches on the blower (to blow the seed into the pipes).
- This switch must remain activated continuously throughout the seeding phase.

### **Seed distribution switch with indicator light** **3**

- Activates the seed distribution motor which blows seed into the pipes.
- A green light indicates that seed distribution is in progress.

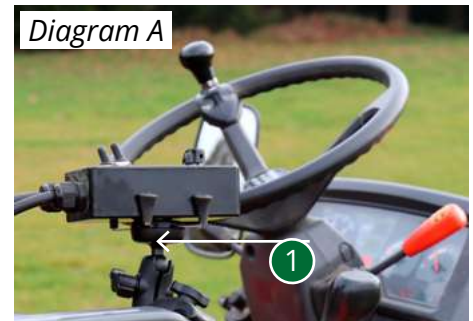
### **Rotary flow adjustment switch** **4**

- A knob graduated from 1 to 28 enables precise adjustment of seed flow.
- The setting must be adapted to several factors:
  - the type of seed used,
  - the tractor's forward speed,
  - and specific working conditions.

As every situation is different, it's essential to adjust the settings accordingly.

You will find our adjustment recommendations on the following page.

For more information, please refer to the Delimbe seeder kit user manual available on our website in the Customer Area (<https://hege-applications.com/login/>).





**Hege Applications** recommends the following settings for optimum use of the seeder.

**Characteristics of equipment tested:**

- **Seeder capacity** : 120 liters
- **Motor** : standard wiring, red wire, maximum speed: **40 rpm at 12 V, 70 W**
- **Seed tested: Mixture of 3 varieties of Ray-grass**

**Important :**

The values given below are for guidance only, as actual output may vary according to fluctuations in the tractor's 12 V voltage.

**Remark:**

The **number of outlets** (nozzles) has no influence **on flow rate**.

Only the **number of turns of the spline** determines the quantity of seed distributed.

	Tractor forward speed (km/h)	Quantity seed (g/m <sup>2</sup> )	Setting potentiometer	Rotation speed of the spline (rpm)	Autonomy (m <sup>2</sup> )
<b>JOKER 2100</b> <b>D5, D6, D7</b>	5	15	17	27	3 000
		10	12	17,8	4 500
	8	13,8	25	40	3 345
		10	18	28,6	4 620
<b>JOKER 1800</b> <b>D5, D6, D7</b>	5	15	14,5	23	3 075
		10	11	15,7	4 620
	8	15	23	36,7	3 000
		10	15,5	24,8	4 620
<b>JOKER 1500</b> <b>D5, D6, D7</b>	5	15	12	17	3 000
		10	9,5	13	4 500
	8	15	19	30,3	3 000
		10	13,5	21	4 500
<b>JOKER 1200</b> <b>D5, D6, D7</b>	5	15	11	15,7	3 000
		10	7,5	10,6	4 500
	8	15	15,5	24,7	3 000
		10	11,5	16,7	4 500
<b>JOKER 1000</b> <b>D5, D6, D7</b>	5	15	9,5	13	3 000
		10	6	8,8	4 500
	8	15	13,5	21	3 000
		10	10	13,6	4 500

**17. ROLLER KIT****1. Function**

The roller kit allows you to restore flatness or level surfaces after turfing.

**2. Attaching the roller kit to the Joker**

a. Remove the plastic packaging and cut the straps.

b. Insert the "handling tools" assemblies **1** in their respective locations: it is essential to follow the assembly direction with the 3-point attachment facing forward.

c. Screw the 2 arms **2** to their respective supports; the "Brush Adjustment" sticker should be facing outwards. Tighten the two sets of three M12 screws with a wrench to a nominal torque of 70 Nm.

d. Once the roller is on the ground, extend the length of the 3-point **1** of the handling equipment so that the arms pivot upwards.

e. Remove the gauge wheels from your Joker by loosening the levers; remove the two Ø22 pins from the lower front points of the Joker chassis.

f. Extend the 3-point hitch **1** to raise the arms; this action lifts the roller off the ground, freeing it for easy movement. Then position the roller kit on the Joker by passing the 2 arms of the roller over the chassis: extend the two 3-point links to raise the arms high enough to allow them to pass over the chassis, up to the front; then shorten the two 3-point links to lower the arms to the lower points (Ø22 pin) of the chassis.

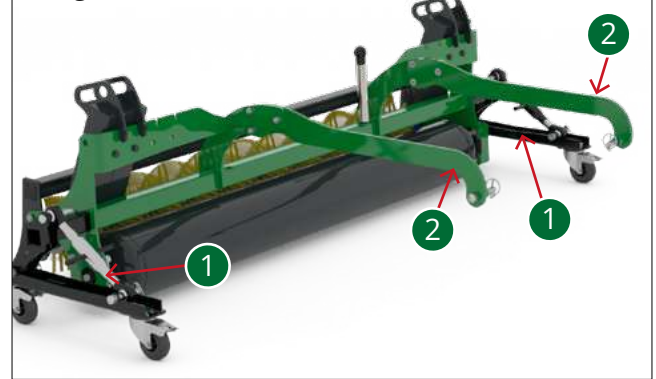
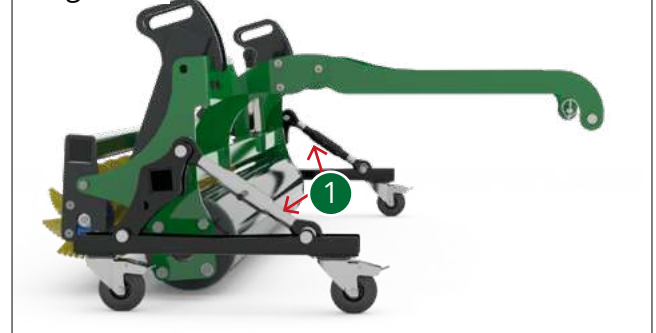
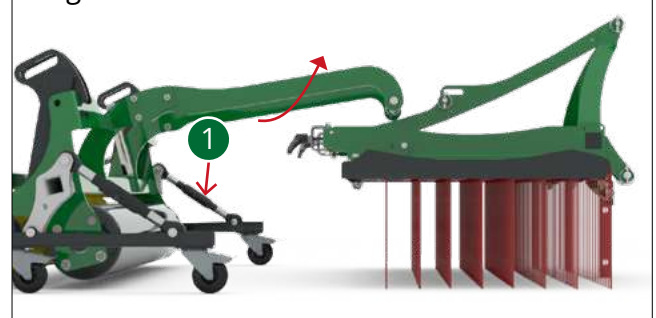
g. Hook the lower points with the two long axles provided. Place the bushing next to the pin.

h. Install the galvanized graduated tubes in place of the gauge wheels: these will allow you to adjust the Joker's horizontal position.

i. Hook the tractor to the lift and raise the machine to allow the roller installation tools (2 half-frames with wheels) to be removed.

**3. Setting**

a. Adjust the brush pressure to the minimum using the tensioner (nut + lock nut). In standard use, the brush

*Diagram A**Diagram B**Diagram C**Diagram D*

**17. ROLLER KIT**

should lightly touch the surface of the roller without applying significant pressure. If necessary, the brush can be completely disengaged when not required for operation.

**b. Weight table**

Recommended configuration at 150 kg/m for most applications.

Roller information: Diameter 220 mm, with counterweight 17.5 kg per piece.

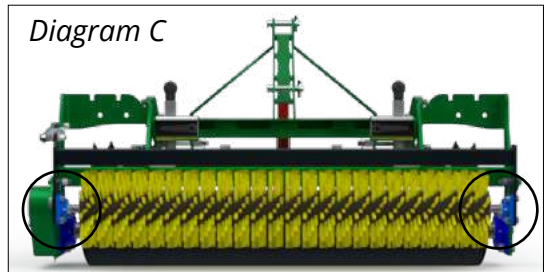
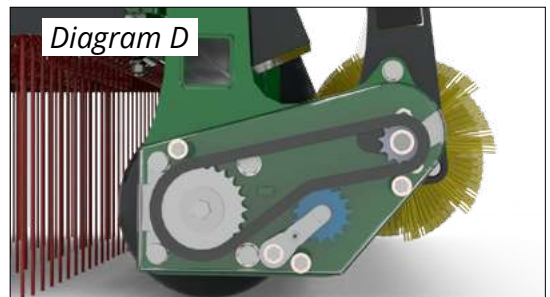
*Diagram A**Diagram B*

MODEL	UNLADEN WEIGHT		OPTIONAL EXTRA NET WEIGHT		TOTAL NET
	net (kg)	net per meter (kg/m)	No. of weights	kg/ml	Kg
<b>JOKER 1200 D5</b>	140	117	2	146	175
			4	175	210
<b>JOKER 1500 D5</b>	165	110	2	133	200
			4	157	235
			6	180	270
<b>JOKER 1800 D5</b>	190	106	2	125	225
			4	144	260
			8	183	330
<b>JOKER 2100 D5</b>	205	98	4	131	275
			6	148	310
			8	164	345
			10	181	380

**4. Maintenance**

**a. Lubrication of rotating parts** (diagram C) : the 4 bearings must be lubricated regularly, depending on how often the roller is used. **It is recommended to apply a dose of grease with a pump every 3 to 4 uses, and at least once a year.**

**b. Chain guard(s)** (diagram D) : the chain guards, which are not waterproof, must be opened once a year to check the condition of the chain and sprockets (lubrication, tension).

*Diagram C**Diagram D*

# 18. FRONT WHEEL KIT

## 1. Function

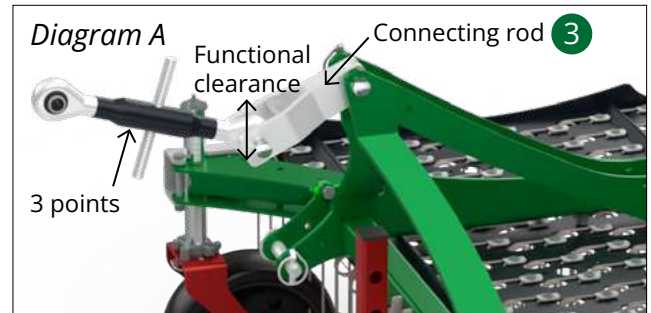
The front wheel kit allows the Joker to follow the ground contours perfectly on hilly surfaces.

## 2. Positioning

- Bolt the 2 arms **1** to the frame.
- Attach the 2 gauge wheels to these arms **2**.
- Install the connecting rod **3** and the 3-point hitch.

## 3. Setting

Adjust the length of the 3-point hitch so that there is a "break" between the 3-point hitch and the connecting rod. See diagram A.

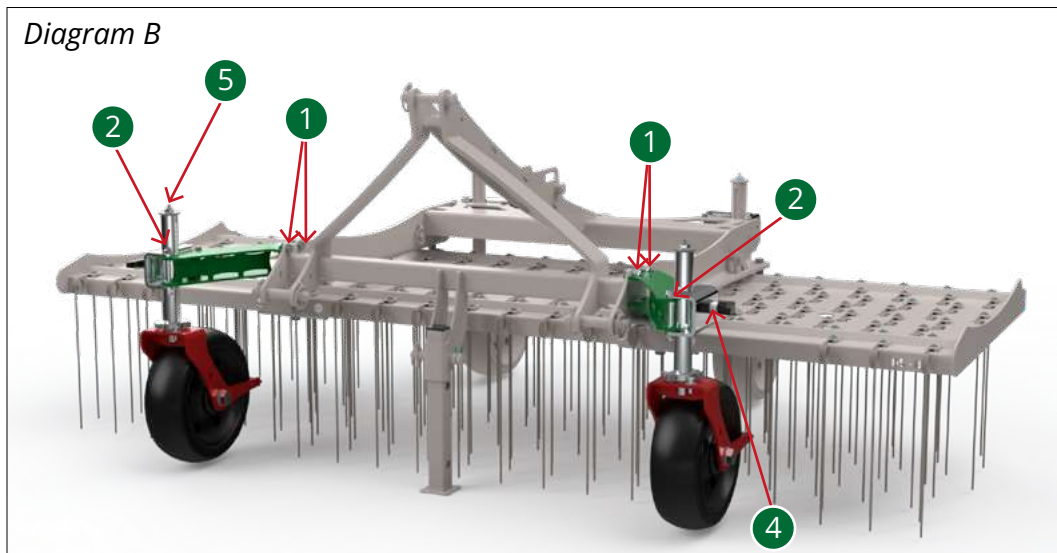


## 4. Maintenance

Wheels are maintenance-free.

### Once a year:

- Apply a penetrating oil to the gauge wheel adjustment handles **4**.
- Grease the wheel pivots **5**.



# 19. DRAWBARS

## 1. Function

The drawbar is used to attach the machine to vehicles **not equipped with lift arms**.

To adjust the working aggressiveness, the drawbar can be equipped with:

- a mechanical **3-point** hitch **1** or
- a **hydraulic 3-point** hitch (single-acting cylinder **2**).

There are also 2 types of hitch head: the Ø 50 mm ball attachment **4** and a ring attachment **5**.

## 2. Connecting the drawbar to the Joker

Hook the drawbar onto the two lift arms. Use the 2 spacers **6** to lock the drawbar. Hook up the hydraulic or mechanical 3-point hitch.

⚠ **A wheel lock bar is provided **7****. Make sure it is correctly installed before use to secure the two rear wheels.

**Additional information for the hydraulic 3-point hitch, single-acting cylinder (diagram B):**

⚠ The vehicle must be equipped with a single-acting control with a 1/2" female hydraulic coupling with check valve. Once the hydraulic cylinder is attached to the Joker, connect the hydraulic hose to the tractor.

## 3. Setting

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

Diagram A

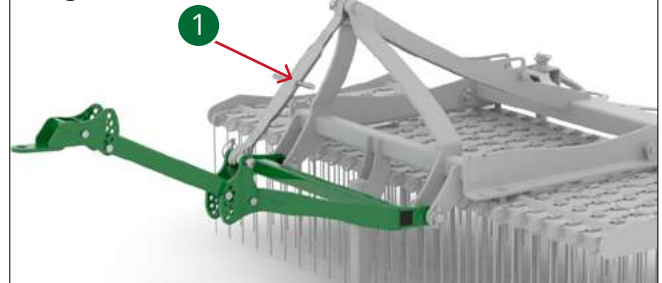


Diagram B

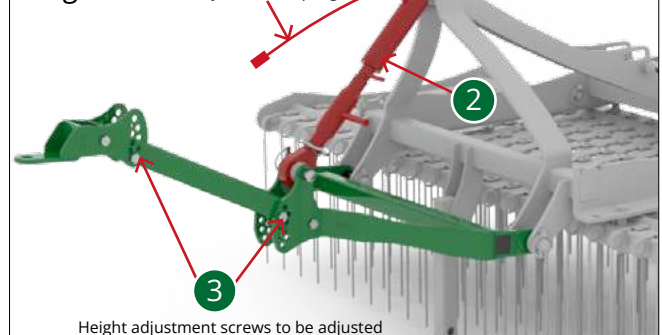


Diagram C

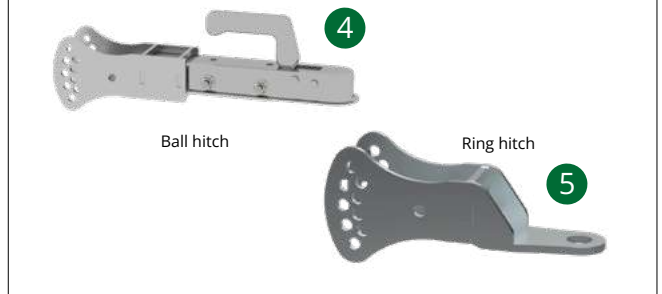


Diagram D

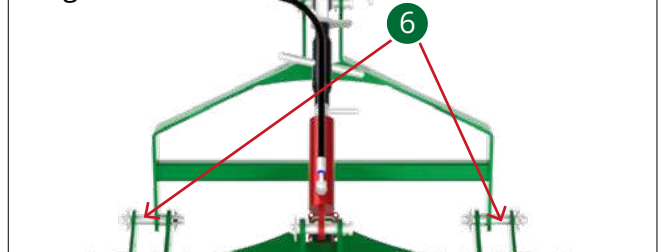


Diagram E



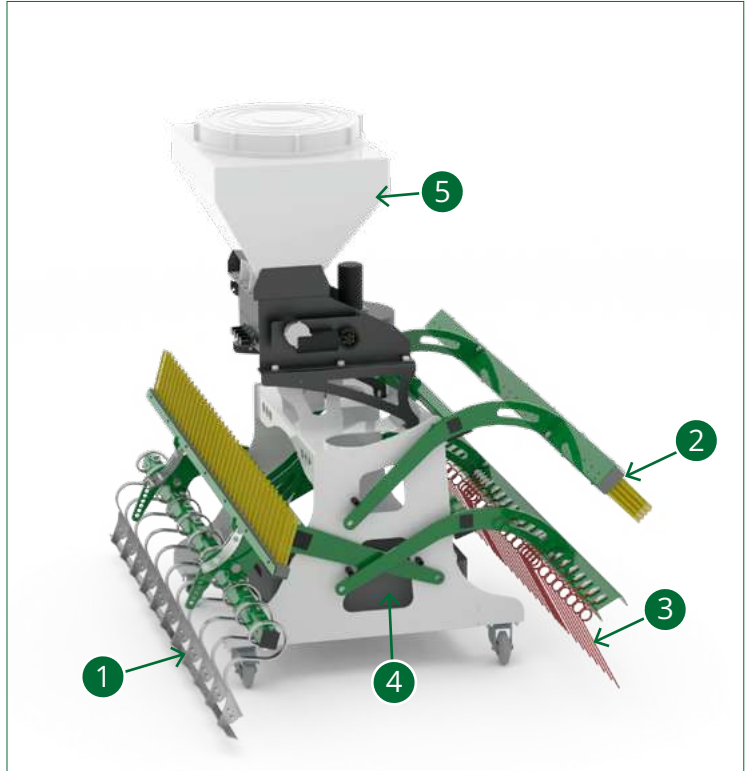


## 20. STORAGE RACK

The storage bracket allows you to store all the kits as shown opposite.

This holder is designed to store the following kits:

- ① Mechanical weed control kit
- ② Brush kit
- ③ Harrow kit
- ④ Edge kit
- ⑤ Seeder kit



### 1. Function

The front kit allows the Joker to be attached to the front of the tractor.

Examples: to break up earthworm casts before the tractor wheels pass over them or to lift grass blades before mowing.

### 2. Attaching the front kit to the Joker

1. Remove the gauge wheels.

2. Unscrew the 4 bolts ① to detach the frame from the platform, then turn the platform over.

⚠ Do not lose the spacers: one short (approx. 20 mm) between the frame and the platform and a long one under the platform (approx. 40 mm).

3. Attach the part ② to the Joker frame: Ø19 axle ③ and lifting arm axles Ø22 ④.

4. Attach the part ⑤ to the Joker frame using the Ø16 axles ⑥ and adding a M12x35 (or 40) CHC screw and a nut on each of the 2 arms ⑦. (Depending on your Joker model, the appropriate hole will already be there. If not, counter-drill a Ø13 hole using the template provided).  
Tightening torque: for an M12 screw, class 8.8, nominal torque of 70 Nm.

5. Move the gauge wheel clamps and reposition them on the chassis extension ⑧; do not tighten the screw, simply adjust the lock nut to allow the bracket to rotate easily.  
Add the gauge wheels and close the clamps with the indexable levers.

6. Attach the tractor's lift triangle to the triangular part of the frame.

Don't forget to lock this assembly using the washer and screw (supplied with the tractor triangle).

⚠ Remember to raise the Joker's stand.

### 3. Setting

The working height is adjusted by adjusting the height of the Joker's gauge wheels and adjusting the length of the tractor's front triangle 3-point hitch.

