

# SPREADER WITH VERTICAL BEATERS

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## Instruction manual Version 6.1



Read this manual carefully  
before operating the equipment



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Rue de la Tertrais, ZI La Hautière BP1, 35590 L'Hermitage - FRANCE  
Tel: 00 33 (0)2.99.64.04.04  
Fax: 00 33 (0)2.99.64.19.56  
E-mail: [jeantil@jeantil.com](mailto:jeantil@jeantil.com) – Web site: [www.jeantil.com](http://www.jeantil.com)

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# 1. Instruction manual aims

## a) General

- This manual concerns all users of the equipment and any person responsible for assembling, installing, operating, adjusting, servicing, repairing or transporting the equipment and its accessories.
- It contains practical instructions on the correct and safe operation of the machine, as well as adjustment and maintenance information.
- Please read carefully before using the equipment. Comply with the instructions and the safety-related advice.

## b) Warning symbols



This warning symbol identifies important safety advice. This symbol indicates serious safety hazards which can cause injuries. Read the advice carefully and inform other users.

## c) Keeping the manual

Always keep this manual within easy reach or at your place of work (or operating site). Pass it on to any other user, including if you lend or sell the machine.

## d) Contact details (customer service)

JEANTIL  
Rue de la Tertrais  
ZI de La Hautière  
35590 L'HERMITAGE – France  
Tel: 00 33 (0)2.99.64.04.04  
Fax: 00 33 (0)2.99.64.19.56  
Spare parts shop tel: 00 33 (0)2.99.64.04.02  
Spare parts shop fax: 00 33 (0)2.99.64.09.36

## e) Statement of compliance with the European "Equipment" directive

N°2006/42/EC

and with any relevant implementation regulations

The manufacturer: JEANTIL

Rue de la Tertrais  
ZI de La Hautière  
35590 L'HERMITAGE – France

HEREBY DECLARES THAT THE EQUIPMENT manufactured by JEANTIL as designated below:

EVR10-6    EVR 12-8    EVR 13-10    EVR 15-12    EVR 14-11    EVR 14-12  
EVR 16-12    EVR 16-12T    EVR 18-14    EVR 18-14T    EVR 21-15    EVR 23-16

SERIAL N°: .....

COMPLIES WITH:

1. French labour regulations
2. The revised European equipment directive N°2006/42/EC
3. The revised EMC directive (electromagnetic compatibility) N° 2004/108/EC
4. Specific safety standards: NF / En 690 (Spreaders)
5. General safety standards:    NF/EN/ISO 12100-1  
  NF/EN/ISO 12100-2  
  NF/EN/ISO 13857: 2008  
  NF/EN/349: 1993 + A.1:2008  
  NF/EN/ISO 4254-1: 2013  
  NF/EN/ISO 3600.
6. Highway Code

SIGNED AT L'HERMITAGE, (DATE)

NAME OF SIGNATORY: JEANTIL Philippe

SIGNATURES :





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### 3. Equipment identification

	
ZI de la Hautière 35590 L'Hermitage Tél : 02.99.64.04.04	
Marque : <i>Jeantil</i>	
Type / Variante / Version :	
<input type="text"/>	
N° de série	<input type="text"/>
Réceptionné le	<input type="text"/>
par la DREAL de BRETAGNE	
P.T.A.C.	<input type="text"/> kg
Masses maximales admissibles	1 <input type="text"/> kg
	2 <input type="text"/> kg
	3 <input type="text"/> kg
	4 <input type="text"/> kg
	Année de fabrication : <input type="text"/>

Ref : 892 038

Manufacturer's plate to EC standards.

Never remove the manufacturer's plate and the EC marking fixed to the equipment.

## **4. Standard operating conditions**

### **a) Applications of the equipment:**

1. This equipment is intended exclusively for general agricultural purposes i.e.: Transport and spreading of various materials, e.g. cattle, sheep and goat manure, poultry litter, sludge, thick slurry, lime, compost, droppings.
2. Any other use falls outside normal usage and is therefore forbidden.
3. For any other use, please contact the manufacturer.

### **b) Operator qualification:**

1. The machine must only be used, maintained and repaired by trained operators; see page 2 “Instruction manual aims”.
2. Before using your equipment, acquaint yourself with all controls and their correct operation.
3. Prior to using the spreader, all users must have carefully read this Manual, be familiar with its contents and have applied all the safety instructions. This cannot be done while operating the machine.

### **c) Defining the operating stations:**

1. The equipment must only be operated from the tractor cabin.
2. Never leave the tractor cabin when the tractor engine is running and the equipment in operation.

### **d) Environmental conditions:**

1. Never approach or remain in the areas that are dangerous when the equipment is in operation.
2. Adapt your speed and driving style to the lands, roads and tracks. Always operate with caution and care!
3. Do not operate vehicles on slopes (tilting backwards, forwards or on the side) when there is a risk of tipping or overturning.
4. Do not start or brake abruptly.
5. Operate your equipment with sufficient light to ensure safety; use appropriate artificial light if necessary (contact your dealer or mechanic).

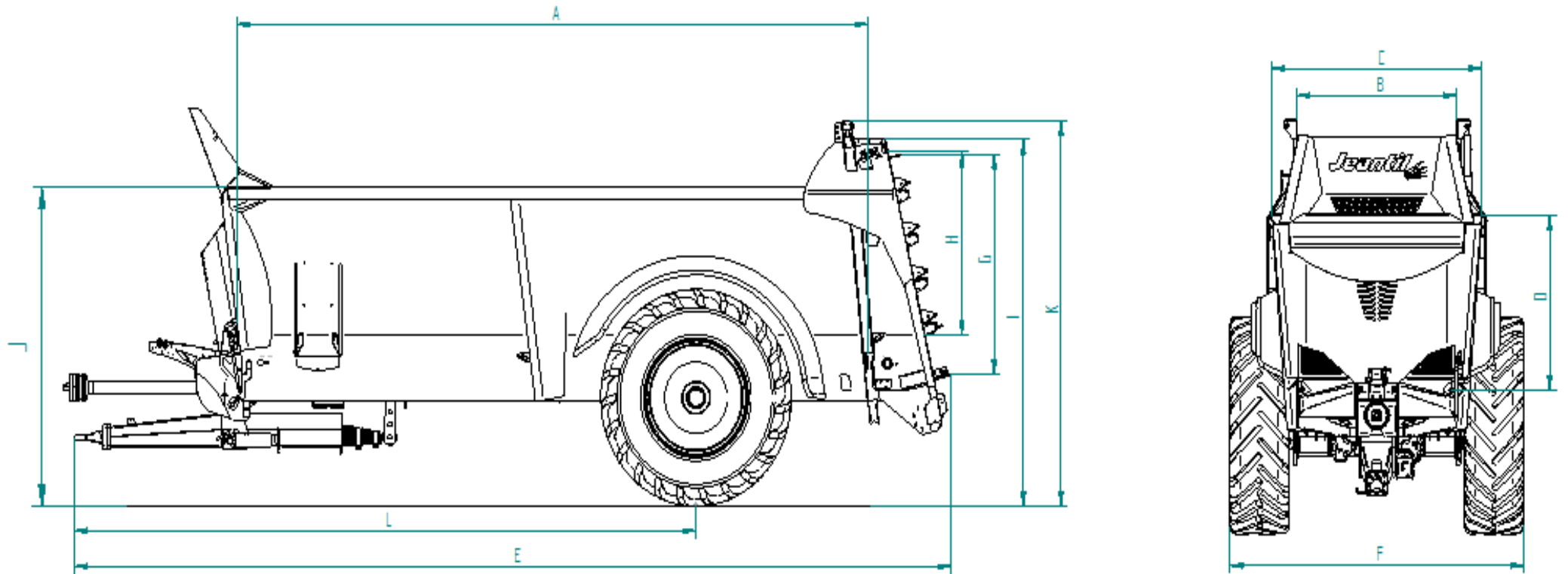
### **e) Manufacturer's and user's responsibilities:**

- 1.** Follow all advice contained in this manual regarding levels of knowledge, installation procedures, operation, adjustment, maintenance and repair.
- 2.** Only use spare parts and accessories that comply with the manufacturer's recommendations.
- 3.** Do not carry out any modifications yourself and do not allow others to modify your equipment and its accessories (mechanical, electrical, hydraulic or pneumatic characteristics) without requesting prior written approval from the manufacturer.
- 4.** Failure to comply with these requirements may make the machinery dangerous. The manufacturer disclaims any responsibility if damage or injury arises from such action.



## 5. Technical characteristics

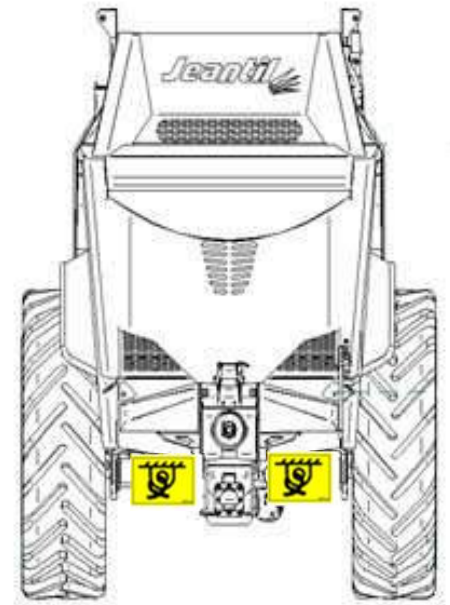
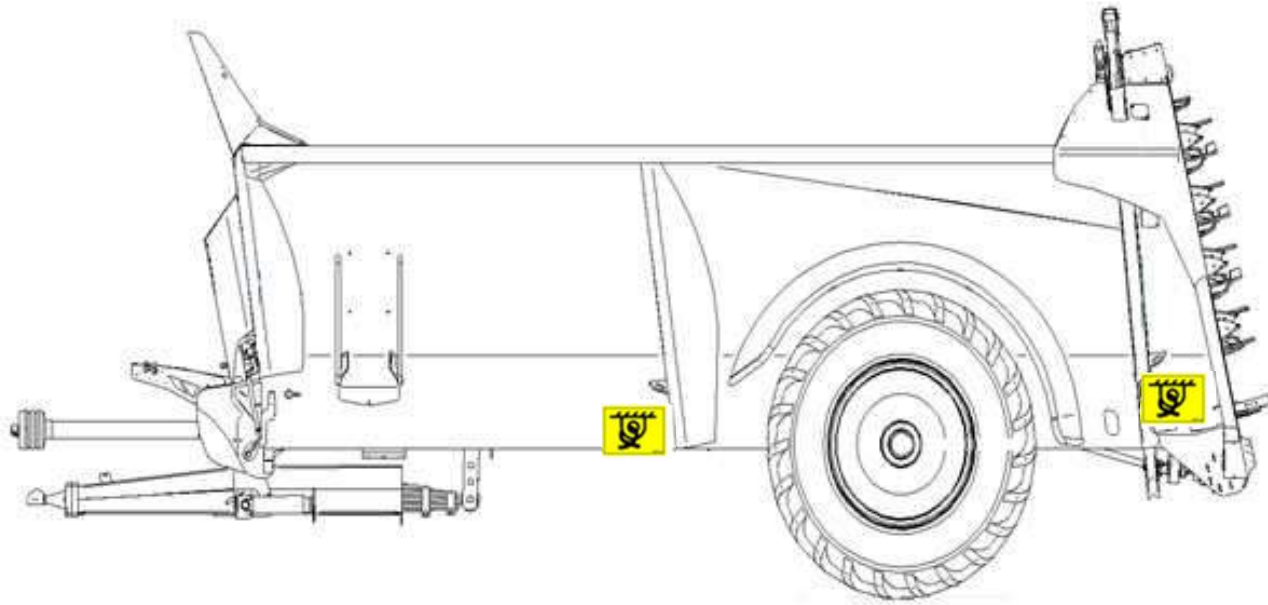
### a) Dimensions:



TYPES	EVR 10.6	EVR 12.8	EVR □13.10	EVR 15.12	EVR 14.11	EVR 14.12	EVR 16.12	EVR □16.12 T	EVR 18-14	EVR 18-14 T	EVR 21-15	EVR 23-16
Manure volume	10.5 m³	11.5 m³	12.8 m³	14.5 m³	14.5 m³	14.5 m³	16 m³	16 m³	17.6 m³	17.6 m³	20.6 m³	23 m³
Working load on site	6 t	8 t	10 t	12 t	11 t	12 t	12 t	12 t	14 t	14 t	15 t	16 t
Road working load □(standard equipment without options)	4.3 t	7.51 t	7.34 t	7.30 t	7.10 t	7.10 t	8.22 t	12 t	10.06 t	14 t	15 t	15 t
A: int. length. Body:	4.20 m	4.65 m	5.15 m	5.65 m	5.15 m	5.15 m	5.65 m	5.65 m	6.25 m	6.25 m	7.25 m	8.05 m
B: Int. width Body:	1.50 m	1.50 m	1.50 m	1.50 m	1.50 m	1.50 m	1.50 m	1.50 m	1.50 m	1.50 m	1.50 m	1.50 m
C: Int. upper body width	2.00 m	2.00 m	2.00 m	2.00 m	2.00 m	2.00 m	2.00 m	2.00 m	2.00 m	2.00 m	2.00 m	2.00 m
D: Int. body height	1.20 m	1.20 m	1.20 m	1.20 m	1.40 m	1.40 m	1.40 m	1.40 m	1.40 m	1.40 m	1.40 m	1.40 m
E: Overall length	6.40 m	6.85 m	7.35 m	7.85 m	7.35 m	7.35 m	7.85 m	7.85 m	8.45 m	8.45 m	9.45 m	10.25 m
F: Overall width	2.55 m	2.55 m	2.55 m	2.55 m	2.55 m	2.55 m	2.70 m	3.00 m	2.85 m	3.00 m	3.00 m	3.00 m
G: Beater length *optional	1.80 m *2.00 m	1.80 m *2.00 m	1.80 m *2.00 m	1.80 m *2.00 m	2.00 m *2.25 m	2.00 m *2.25 m	2.00 m *2.25 m	2.00 m *2.25 m	2.00 m *2.25 m	2.00 m *2.25 m	2.00 m *2.25 m	2.00 m *2.25 m
H: Height under frame *optional	1.50 m *1.70 m	1.50 m *1.70 m	1.50 m *1.70 m	1.50 m *1.70 m	1.70 m *1.95 m	1.70 m *1.95 m	1.70 m *1.95 m	1.70 m *1.95 m	1.70 m *1.95 m	1.70 m *1.95 m	1.70 m *1.95 m	1.70 m *1.95 m
I: Overall height (with standard wheels and equipment)	2.75 m	2.80 m	2.80 m	2.85 m	3.00 m	3.05 m	3.05 m	3.08 m	3.04 m	3.08 m	3.13 m	3.13 m
J: Loading height *with optional 300 mm extension **with optional 600 mm extension	2.35 m *2.65 m **2.95 m	2.40 m *2.70 m **3.00 m	2.40 m *2.70 m **3.00 m	2.45 m *2.75 m **3.05 m	2.62 m *2.92 m **3.22 m	2.67 m *2.97 m **3.27 m	2.67 m *2.97 m **3.27 m	2.70 m *3.00 m **3.30 m	2.66 m *2.96 m **3.26 m	2.70 m *3.00 m **3.30 m	2.75 m *3.05 m **3.35 m	2.75 m *3.05 m **3.35 m
K: Overall height □(with guillotine door closed) *with guillotine door open	2.90 m *4.70 m	2.95 m *4.75 m	2.95 m *4.75 m	3.00 m *4.80 m	3.15 m *5.29 m	3.20 m *5.34 m	3.20 m *5.34 m	3.23 m *5.37 m	3.19 m *5.33 m	3.23 m *5.37 m	3.28 m *5.42 m	3.28 m *5.42 m
L: Wheelbase	4.63 m	4.95 m	5.22 m	5.58 m	5.22 m	5.22 m	5.58 m	5.42 m	5.88 m	5.88 m	6.16 m	6.50 m

The equipment complies with safety standards. We reserve the right to modify our equipment and its specifications at any time.

**b) Stowing diagram**



## **6. General safety rules**




### **a) General**

- 1.** Never forget that knowledge, awareness and caution are the best way to ensure your safety.
- 2.** Regulations and rules relating to accident prevention, health and safety at work, and the operation of vehicles on the public highway must be observed at all times.
- 3.** Chapter 4 (Standard operating conditions) of this Instruction Manual contains the basic instructions to be followed for your safety.
- 4.** Only one person should operate the equipment. No one must be allowed to enter the equipment when the spreading mechanism and/or the moving floor are working.
- 5.** Make sure that no person, animal or obstruction is located near the equipment before start-up and operation or any other manoeuvre.
- 6.** Never allow children near the equipment.
- 7.** Never carry passengers or animals on the equipment.
- 8.** Do not step on the hoods or on any other parts of the equipment, except where provided for this purpose (ladder, platform, and means of access to the tractor cab).
- 9.** Before carrying out any work on the equipment, ensure that it cannot be started up accidentally.
- 10.** All controls (cords, cables, push-rods, hoses, etc.) must be positioned in the locations provided for them so that they cannot accidentally initiate an action likely to cause an accident or damage.
- 11.** Before use and after any adjustment or maintenance, ensure that all protective devices are in position and in good condition, and that their safety locks are engaged.
- 12.** Before use, check the tightness of all screws, nuts, connectors and wheels. Retighten if required.
- 13.** Do not wear loose clothing, long untidy hair and jewellery that might get caught in the moving parts of the equipment.
- 14.** Keep your hands, arms and feet well away from any moving parts, even those that are slow-moving. Keep well away from moving parts.
- 15.** If you detect any unusual noise or vibration, stop the equipment, and identify and eliminate the cause of the incident before resuming work. Contact your dealer if required.
- 16.** Beware of projections when the beaters are in operation.

## b) Warning / Pictograms

1. Warnings and pictograms placed on the equipment provide information about safety measures to be strictly observed to avoid accidents.
2. Make sure that these warnings and pictograms remain clean and legible. If they are damaged, ask for new stickers from the manufacturer (or agent).
3. If repairs are carried out, check that the replacement parts carry the same stickers as those that have been removed.

Ref: 892 640



### INSTRUCTIONS DE SÉCURITÉ ET D'UTILISATION

**1 - Lire la notice d'utilisation et vérifier les éléments de sécurité**

**2 - Atteler la machine au tracteur**

**3 - Branchement transmission primaire au tracteur :**

- Adapter longueur : **jamais en butée**
- Recouvrement mini : **250 mm**
- Verrouiller sur P.d.F. 1"3/8 (autocollant **540** ou **1000 tr/mn**)
- Vérifier tarage et fonctionnement du limiteur de couple

**4 - Branchement électrique au tracteur :**

- Signalisation : prise 7 broches
- Fonctions : **direct batterie** **12** volts  
Fils : **2,5 mm<sup>2</sup>** rouge = + bleu = -

**5 - Branchement hydraulique au tracteur :**

- Filtres ..... : **propres**
- Débit mini ..... : **30 l/mn**
- Débit maxi ..... : **45 l/mn** (au-dessus : réduire débit par diviseur)
- Pression maxi ..... : **180 bar**
- Alimentation ..... : (coupleur rouge), sur distributeur **simple effet**
- Retour ..... : (coupleur bleu), **libre**, MAXIMUM **5 bar**
- Circuit fermé ..... : retour au bol filtre tracteur  
remise au neutre après utilisation

**ORDRE A SUIVRE IMPERATIVEMENT**

- 1 - Accoupler dans l'ordre : **RETOUR** ensuite **ALIMENTATION**
- 2 - Distributeur tracteur :
  - a) en route, et AUSSITÔT utiliser Fonctions Hydrauliques Machine
  - b) au neutre aussitôt après utilisation Fonctions Hydrauliques Machine
- 3 - Désaccoupler dans l'ordre : **ALIMENTATION** ensuite **RETOUR**

**6 - Utilisation :**

- Respecter les consignes de sécurité et les instructions de la notice

### IMPORTANT

**Avant chaque utilisation, contrôler le bon état des :**

- Éléments de sécurité
- Organes mécaniques, hydrauliques, électriques
- Éléments de circulation (flèche, roues, essieux, freins, feux...)

892 640

SAFETY AND OPERATING LABEL CLEARLY mounted IN FULL VIEW at the front of any piece of equipment, near the components used to connect the equipment to the tractor.



**Ref: 892 651**  
Placed on the left of the drive shaft casing



**Ref : 892 759**  
Placed near the stowing points  
See diagram



**Ref: 892 453**  
Placed above right and left tail lights



**Ref : 892 299**  
Rear position Left  
Near rear door valve



**Ref: 892 227**  
Front position Right and Left of the body sides



**Ref: 892 229**



**Ref: 892 446**

Placed on the metal primary drive shaft casing



**Ref: 892 687**  
Placed on the rear right and left sides of the spreader



**Ref: 892 230**  
Placed at the front of the spreader near the moving floor tensioners.



**Ref: 892 652**  
Placed near the parts which need greasing  
See diagram



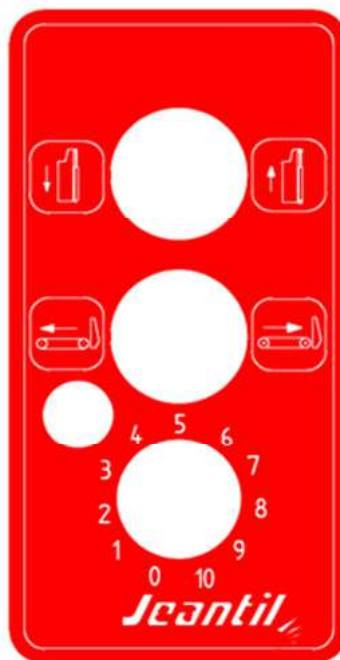
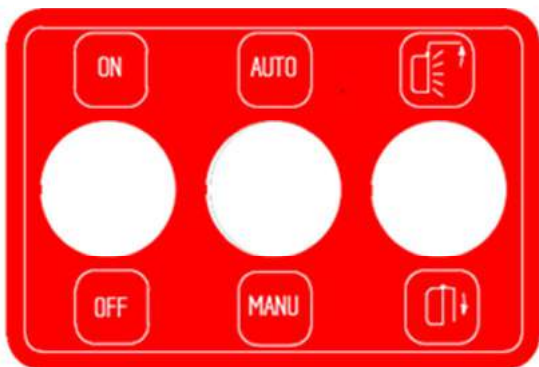
**Ref: 892 612**  
Placed at the rear of the spreader



**Stickers for use on the equipment:**

**Ref. 892867**

Placed on the 1- or 2-position electric control unit (Basic and Advanced)

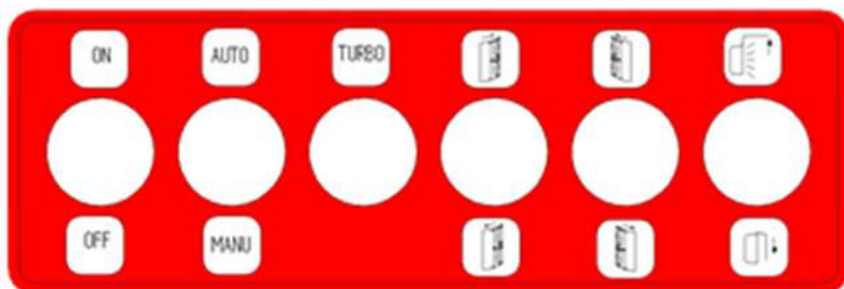


**Ref. 892861**

Placed on the 1- or 2-position electric control unit (Basic and Advanced)

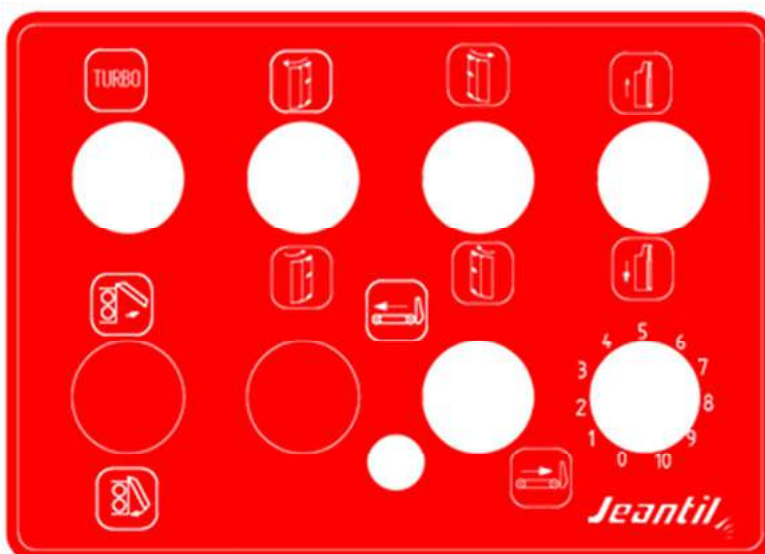
**Ref. 892860**

Placed on the Smart Control or Smart electric control unit



**Ref. 892859**

Placed on the 3- or 4-position electric control unit (Basic and Advanced)



## **c) Coupling**

1. See chapter 5, Technical characteristics, page 9.
2. The equipment must only be coupled to the tractor using the tractor's rear coupling points provided for this purpose.
3. Check compatibility of the equipment with the tractor (minimum engine power, type of coupling, tractor PTO characteristics, etc.). Keep clear of the area between the tractor and the equipment until you have stopped the tractor's engine and removed the starter key.
4. Keep clear of the area between the tractor and the equipment during any operation of the tractor linkage, whether this is being controlled from the cab or from outside the tractor.
5. When manoeuvring, select the lowest possible tractor gear ratio. When coupling, attach the equipment's electric control unit in the tractor cab, ensuring that it cannot move during operations.
6. Once the equipment has been coupled up, the hitch must be locked. Check the coupling is correctly locked and in good condition before any movement.
7. Check that the equipment coupling does not create either an overload or poor weight distribution on the tractor that might compromise stability:  
Do not exceed the maximum allowed load for the tractor and machine coupling points.
8. To drive on roads, comply with the coupling height specified in the instruction manual.

## **d) PTO (Power Take-Off) / Drive shaft**

1. Read the drive shaft manufacturer's instructions carefully.
2. Check that the PTO guards are in place and in a good condition. Replace them immediately if damaged.
3. Adjust the length between the tractor and the machine, retaining maximum engagement.
4. Before each operation, check that the drive shaft is in good condition and that it is fitted and locked correctly.
5. Only use the drive shaft provided with the equipment or recommended by the manufacturer.
6. Check before each use that the speed and direction of rotation of the tractor PTO are compatible with the planned use of the equipment.
7. The tractor engine must always be turned off before connecting the drive shaft to the PTO.



## **e) Equipment failure or jamming**

- 1. Carry out this operation from the tractor cab.**
- 2. Stop the equipment.**
- 3. With tractor hydraulic pump**
  1. When the cam safety goes off, disengage the tractor PTO and slow the tractor engine's speed right down.
  2. Reverse the moving floor direction at maximum speed, preferably for 10 seconds, to bring the heap of manure back towards the front.
  3. When the heap of manure is cleared from the spreading device, restart the tractor's PTO and gradually accelerate its speed.
- 4. With a hydraulic power unit (optional)**
  1. When the limiter disengages, keep the tractor's PTO on maximum revs (540 or 1,000revs/min), and do not reduce the revs, in spite of the constant noise produced by the two beating cams. The limiter can remain disengaged for some time without risk of damaging the cams or casing notches.
  2. Reverse the moving floor direction at maximum speed, preferably for 10 seconds, to bring the heap of manure back towards the front.
  3. Reduce the tractor's PTO revs to re-engage the limiter.
  4. Gradually increase the tractor's PTO revs.

## **f) Maintenance and repair**

### **f).1 General:**

1. Maintenance and repair operations must only be carried out by qualified technicians.
2. Always maintain the equipment and its accessories in perfect working order to ensure safe and efficient operation.
3. Check oil for cleanliness.
4. Comply with recommended maintenance frequency.

Before any servicing or repair:

5. Check equipment and component stability
6. Lower the equipment to the ground.
7. Fit any provided stability devices (stands, etc.).
8. Check that all moving parts are stopped.
9. Disengage the tractor PTO.
10. Disconnect the hydraulic power hoses between the tractor and the machine.
11. Stop the tractor engine, remove the starter key and disconnect the battery.
12. Engage the hand brake.
13. Allow any components likely to be at a high temperature to cool down.

### **f).2 Welding operations:**

1. When carrying out any welding operation on the equipment, disconnect the electrical supply and the tractor battery.
2. Disconnect and protect any hoses (particularly rubber) and any electric cables to ensure that they are not damaged by sparks or projections that could cause oil loss or a short circuit.
3. Disconnect the computer and any electronic components.

**f) 3. Servicing the tyres:**

1. Only carry out work on tyres if you have the specific tools and experience required.
2. Incorrect fitting could seriously compromise your safety.
3. If in doubt, call in a qualified technician.
4. Do not fit tyres of a different type from those recommended by the manufacturer.
5. Ensure that the tyres are inflated to the pressures recommended by the tyre manufacturer.

**f).4 Electrical maintenance operations:**

Before carrying out any work on the electrical system, disconnect the power supply.

**f).5 Hydraulic maintenance operations:**

1. Place all hydraulic distributors in neutral (rest).
2. Stop the tractor engine and remove the starter key.
3. Before working on the hydraulic system, check that the installation is not under pressure.
4. Discharge any pressure before disconnecting hydraulic lines.
5. Before restoring pressure in hydraulic lines, check that all connectors are fully tightened and that the hydraulic hoses are in good condition and correctly protected.

## **f).6 Repairs:**

1. Any failure that might compromise safety must be repaired.
2. Carry out immediate repairs on any leak or failure affecting the hydraulic or electrical systems. These must be done by qualified staff.
3. Do not use fingers to find a hydraulic oil leak (under pressure).
4. Damaged or defective protective devices or casings must be replaced immediately.
5. Protective devices fitted to the equipment must not be removed or modified.
6. Hydraulic hoses from another hydraulic system must not be re-used.
7. Replace any damaged rigid or flexible lines immediately.
8. Repairs affecting components under pressure or electrically powered require special tools and procedures. Repairs must only be carried out by qualified staff.

## **7. Environmental protection**

### Ground pollution:

1. Make sure that used lubricating oil or other substances such as hydraulic oil are not spilled or discarded in any drainage system
2. Collect used fluids in sealed, clean containers designed for that purpose. Avoid using containers used for food or drink bottles.
3. Used tyres. It is against the law to store tyres or dispose of them in the natural environment or burn them in the open air. Take them to a dealer or an approved collector.

# 8. Fitting and installation

## Hitching to the tractor

### a) Couplings

1. See page 9 technical characteristics and page 16 "Couplings".
2. Read sticker page 13 ref: 892 640.
3. Hitch the ring on the spreader drawbar onto the coupling pin or axle hook on the rear of the tractor.
4. Check the locking devices.

### b) Drive shaft:

#### Primary drive shaft located between the tractor and the spreader.

1. See page 16 PTO / Drive shaft.
2. Read sticker page 13 ref: 892 640.
3. Read the drive shaft manufacturer's instructions.
4. Check that the guard is safe. If it shows any sign of damage, replace the guard before operating the equipment.
5. Fit the spreader's primary drive shaft to the tractor's rear PTO outlet, with the tractor engine turned off, and adjust its length, retaining maximum engagement. Minimum engagement length is **250 mm**.
6. Ensure that **both** jaws have engaged correctly.
7. The primary drive shaft must be connected to the rear PTO.  
Do not exceed the following maximum revs:  
-tractor, **540revs/min**, for EVR 10-6 / 12-8 / 13-10 / 13-10\* / 15-12\*.  
-tractor, **1,000 revs/min**, for EVR 14-11 / 14-12 / 16-12 / 16-12T / 18-14 / 18-14T / 21-15 / 23-16.

\* **Note:** a **1,000 revs/min** PTO can be fitted as an option

#### Secondary drive shafts

1. The secondary drive shaft is located between the spreader's longitudinal main shaft and the vertical and horizontal beater drives. It is equipped with a declutchable cam limiter on the 10-6 to 23-16 spreaders or with a shear bolt on the 8-6 spreader with vertical beaters, and a freewheel at the front of the spreader.
2. Read the drive shaft manufacturer's instructions (supplied with the drive shaft)

## c) Hydraulics

1. See page 19, hydraulic servicing and repairs.
2. Read sticker page 13 ref: 892 640.
3. **Spreaders are designed to operate with a maximum oil flow rate of 100 l/min at a maximum pressure of 180 bars.**
4. All EVR spreaders are equipped either with a simple flow regulator for the moving floor speed (standard), or with a hydraulic distributor with an integrated flow regulator for the moving floor speed.
5. Regulators or distributors are equipped with a pressure limiting valve set at **180 bars**.
6. The distributor must be **linked directly** to the tractor's pump pressure via its **single-action distributor**, with the **return always routed directly and unrestrictedly to the tractor's oil tank**. Avoid connecting to a dual-acting tractor distributor (pressure loss).
7. The moving floor **flow** regulator should be connected to the tractor's DUAL-ACTING distributor. Make sure that there is no check valve on the end of one of the 2 hydraulic hoses.
8. The hydraulic pressure hose (with a **red** collar) is always located close to the pressure limiter on the spreader's distributor. The return hose has a blue collar.
9. The hydraulic brake hose, ending with a VF 86 socket, should always be connected to the tractor's brake pressure socket.
10. **Tractor with closed circuit hydraulics:** (Example: John DEERE)
  - a- To operate the equipment without damaging the tractor, activate the tractor distributor and immediately use the equipment's hydraulic actuators.
  - b- As soon as the equipment's hydraulic actuators are no longer in use, return the tractor's distributor to NEUTRAL.
  - c- With earlier John Deere tractor models (prior to the 6000 series), check for vibrations in the tractor's hydraulic system and that the equipment's return hose is connected to the tractor's filter bowl to avoid CAVITATION and pump unpriming (if you experience problems, contact your John Deere dealer).

## d) Electrical systems

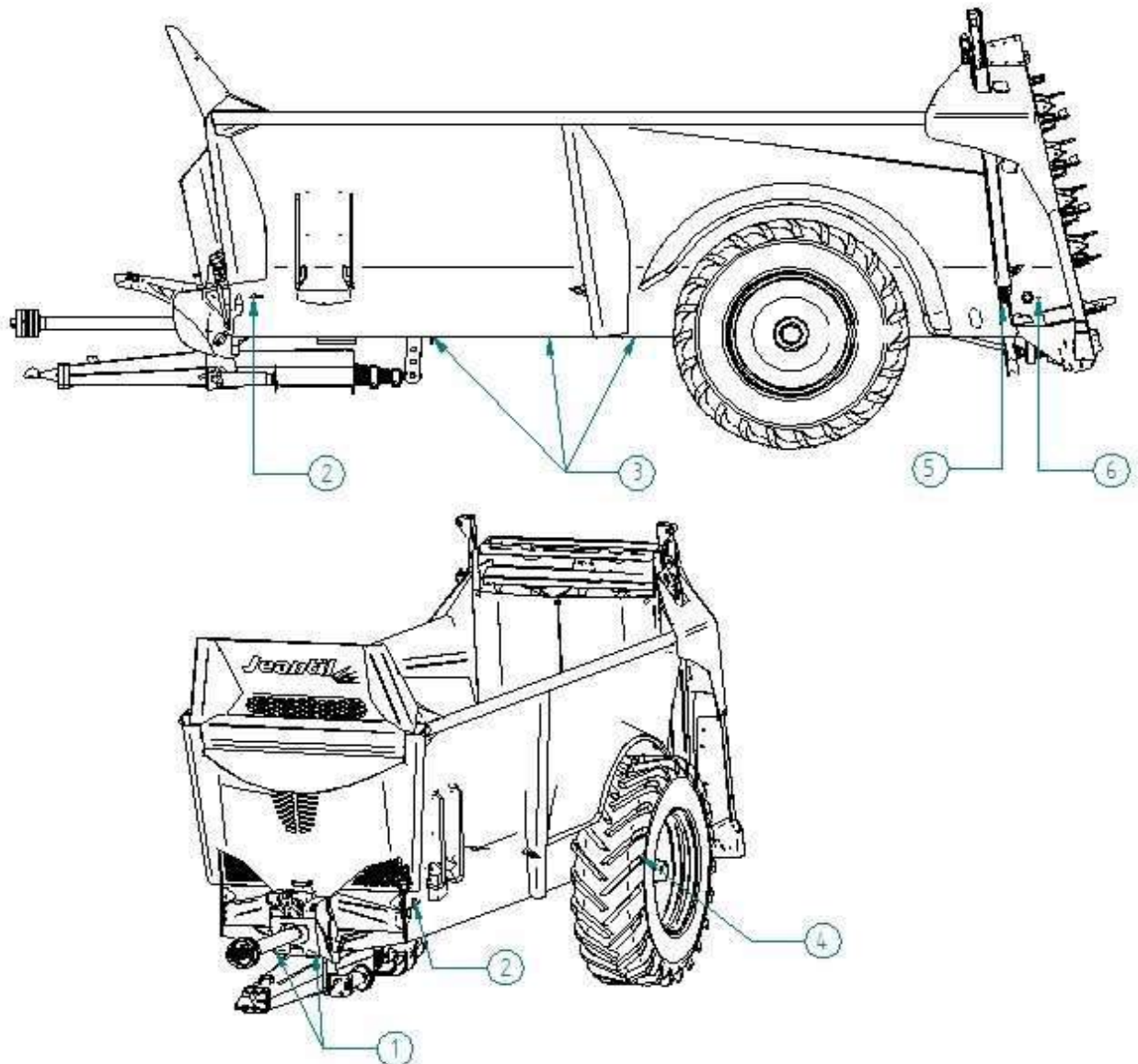
1. See pages 18 and 19 section f: Maintenance and repair.
2. **Read sticker page 13 ref: 892 640.**  
Any equipment (direct tractor control or distributor) requires a power: supply
  - Direct connection to the battery via an electric cable
  - Voltage: **12 volts DC**
  - Section for both conductor wires: **2.5 mm<sup>2</sup>**. The **brown** wire is to be connected to battery **+**, and the **blue** wire to battery **-**.
3. Signal lights:  
Spreaders are equipped with rear signal lights, compliant with the French Highway Code, with standard **7-contact connectors, type 12 N Normal, ISO standard 1724 N° NF 43.407**, which should be connected to the socket at the rear of the tractor.

## 9. Adjustments and maintenance

### a) Greasing

1. When the equipment is in use, **grease every day**.
2. The various greasing points are arranged as follows:
  - 1- drawbar pin (2)
  - 2- front moving floor shaft, left and right sides (1 Left + 1 Right)
  - 3- PTO drive shaft (4)
  - 4- Wheel hub (1 Left + 1 Right)
  - 5- upper spreader mechanism bearings. (1 Left + 1 Right)
  - 6- rear moving floor shaft, left and right side (1 Left + 1 Right)
3. Hinges and pins not fitted with greasers **must be oiled regularly**.

#### Greasing diagram



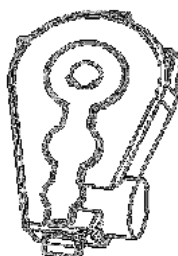


## b) Reduction gear

Oil changes on all gearboxes should be carried out at least **once a year**, depending on frequency of use of the equipment:



Type	Gear boxes		Makes	Oil	Quantity/Litres
	Reference	Mounted on			
EVR 10-6 to 15-12	814181	EPAN 5 540 r/min	G.B.	SAE 90	3 x 2 l.
			ROGELBERG		10 l.
			BERMA		11 l.
EVR 14-11 to 23-16	814182	EPAN 5 1,000revs/min	G.B.	SAE 90	3 x 2 l.
			ROGELBERG		10 l.
			BERMA		15,5 l.
EVR 14-11 to 23-16	814186	2 discs EPAN 6	BERMA	SAE 90	20 l.
	814231		G.B.		15,5 l.
			ROGELBERG		15L.
EVR 14-11 to 23-16	814190	EPAN 6 horizontal beaters	GB	SAE 90	2 x 2l.
	814233 and 814234		ROGELBERG		2 x 1l.



Type	Gear boxes		Makes	Oil	Quantity Litres
	Reference	Mounted on			
EVR 10-6	814 160	Moving floor.	2 l.	SAE 90	ROGELBERG
EVR 12-8 to 15-12	814 136	Moving floor.	2.4 l.	SAE 90	ROGELBERG
EVR 14-11 to 16-12	814 130	Moving floor.	2 l.	SAE 90	ROGELBERG
EVR 18-14 and 23-16	814 161	Moving floor.	3.5 l.	SAE 90	ROGELBERG

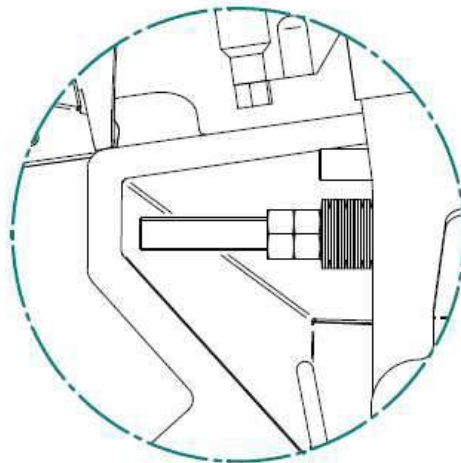


Type	Gear boxes		Makes	Oil	Quantity Litres
	N°	Mounted on			
EVR 10-6 to 23-16	814,177	pump	BIMA	SAE 90	2,22 l.

## c) Chains

Marine-type transmission chain (moving floor)









1. Follow instructions on the stickers placed at the front of the spreader for moving floor chains (see page 14).
2. Chains should be **moderately** tensioned at all times. ALWAYS CHECK chain alignment
3. During the running in period, the chains may stretch significantly: **tighten again if necessary.**
4. When the chain tensioners are at their maximum, **cut two links** and tighten again.
5. Check **attachment screw tightness** on the moving floor connector bars, especially during the first hours of operation.
6. Check the **state of the moving floor chain drive sprockets**. Change any worn chain sprockets to avoid chains coming off.
7. Check chain tension with optional belleville washers (belleville washers aligned with the mark positioned on the equipment - see diagram below).




## d) Wheels

1. Fixing: Check wheel tightness regularly and after **10 hours** of use.
2. Pressure: Check tyre pressure regularly.


### Alliance wheel

Reference	Profile	Dimensions	Diameter	Wheel perimeter	Load per wheel kg 25km/h max.	Inflation pressure in bars	Number of plys
842129		18.4/15x34 Alliance 324	1.61 m	4.91 m	4660	3.0	14
842138		18.4/15x30 Alliance 324	1.55 m	4.55 m	4530	3.2	14
842179		24.5x32 Alliance 347	1.81 m	5.28 m	5740	2	160 A8
842360		18.4R38 Alliance A356	1.75 m	5.22 m	6050	2.8	Radial
842367		620/75R26 Alliance A360	1.59 m	4.69 m	6050	3.2	Radial 167 A8
842640		650/75R32 Alliance A360	1.80 m	5.26 m	6990	3.2	Radial 172 A8
842359		600/55R26.5 Alliance A380	1.32 m	4.13 m	8860	4	Radial 165 E
842670		710/55R34 Alliance A388	1.66	4.91 m	9160	2.8	Radial 169 D





### Trelleborg wheel:

Reference	Profile	Dimensions	Diameter	Wheel perimeter	Load per wheel kg 25km/h max.	Inflation pressure in bars	Nb. of plys
842253		600/60x30.5 Trelleborg 421	1.50	4.45 m	7290	3.1	171 A8

### Cultor wheel:

Reference	Profile	Dimensions	Diameter	Wheel perimeter	Load per wheel kg 25km/h max.	Inflation pressure in bars	Nb. of plys
842661		23.1x26 Cultor As agricultural	1.61 m	4.66 m	5700	3	18

### Michelin wheel:

Reference	Profile	Dimensions	Diameter	Wheel perimeter	Load per wheel kg 25km/h max.	Inflation pressure in bars	Nb. of plys
842664		710/50R26.5 MichelinCargo	1.41 m	4.14 m	9480	4	Radial 170 D
842672		600/60R30.5 MichelinCargo	1.49 m	4.42 m	9160	4	Radial 169 D
842618		650/65R30.5 MichelinCargo	1.62 m	4.78	11220	4	Radial 176 D
842662		710/50R30.5 MichelinCargo	1.49 m	4.41 m	7220	2	Radial 170 D

Other wheels: check with the wheel manufacturer

### 3. Braking:

Regularly check:

Cable surface condition

Cable clamp tightness

Cable tension

Drum brake lining thickness

## e) Hydraulic hoses

1. See page 18 Section: Maintenance and repairs.
2. Check hydraulic hoses once a week, especially sections in contact with the equipment.
3. Check for hydraulic connector leaks once a week.
4. Tighten the hydraulic connectors if required after the first few hours of operation.

## f) Hydraulic safety valves

1. All distributors are equipped with a general hydraulic safety valve set at **180 bars**, located at the distributor unit pressure inlet. Only the proportional regulator is not fitted with a hydraulic safety valve.
2. To check valve calibration, connect a pressure gauge in parallel on the pressure line:
  - a) With hydraulic door:
    - activate the dual-acting cylinders to limit,
    - read the set pressure.
  - b) With moving floor hydraulic motor:
    - block the engine pressure hose with the tractor in forward gear.
    - activate the moving floor distributor component with the tractor in forward gear.
    - read the set pressure.
3. To calibrate or decalibrate, screw or unscrew the valve's adjusting screw, and control with pressure gauge.

## g) Hydraulic door safety valve

1. Valve N° **825 246** fitted on the lower port, piston side, of one of the hydraulic door cylinders.
2. Safety device for any interventions on or inside the spreader (see safety instructions).
3. Should be completely open when operating and completely closed for interventions on or inside the spreader (see sticker page 13).
4. At least once a year, check that the mechanical parts of the valve are working correctly, by operating the lever **2 to 3 times** without using the hydraulic distributor.

## **h) Road tail lights**

1. The lights are recessed for protection.
2. The rear light comply with current road safety regulations.

## **i) Moving floor hydraulic motor speed**

1. The first **dial** marked **0** to **10** located at the bottom of the electric control unit, is used to adjust moving floor speed depending on body load and material type: (for instance, compact manure, etc.).
2. Electric control unit with display screen. The speed of the moving floor is displayed in the DPA section of the screen.

## **j) Torque limiter with 2 adjustable declutchable cams (EPAN 5 secondary drive) Walterscheid**

1. This protects the spreading device against overload, foreign matter and excessive moving floor speed.
2. Located on the secondary drive shaft (**K64/22R**).
3. The jaw with freewheel is fitted on the main longitudinal shaft side, towards the front of the spreader.
4. The jaw with torque limiter is fitted on the vertical beater drive side.

5. The torque limiter calibrations are:

Drive shafts		Limiters			Equipment	Gear boxes
N°	Speed	Type	Calibration	Dimension A	EVR	
811103	540 r/min	2 x K 64/22R declutchable cams	200 MdaN		10-6 12-8 13-10 15-12	SRT 8
811,101	1,000revs/min		165 MdaN		14-11 14-12 16-12 16-12 T 18-14 18-14 T 21-15	SRT 12
814181	540 r/min		200 MdaN		10-6 12-8 13-10 15-12	GB 540
814182	1,000revs/min		165 MdaN		14-11 14-12 16-12 16-12 T 18-14 18-14 T 21-15	GB 1,000

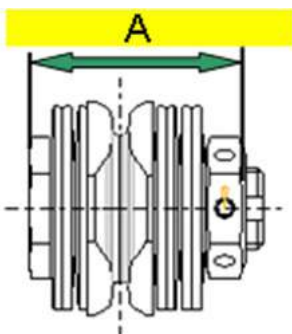
**ADJUSTMENT (recalibration)**

1. To be carried out once if the limiter disengages too often in normal operating conditions, i.e.: normal body load and average moving floor speed.

Disassemble the secondary half-drive on the limiter side.

2. Take the limiter apart with the following tools:
1. Flat screwdriver to remove the yellow plastic flange
  2. Internal circlip pliers (Ø 150 thickness 4 mm),
  3. Flat 32 mm spanner
  4. Pin punch Ø 4
  5. Caliper

3. Remove the spring pack with Belleville washers



The first step is to determine the length of the spring pack (dimension A), and, after removing the elastic pin, to adjust the limiter according to the table below:

Inform the manufacturer if the spring pack requires further tightening.

Limiters type	External diameter	Spring type	Number of springs	Adjustment value □ 1mm = 1 turn □ Corresponds to	Longest adjustment dimension □ max L. (mm)	Shortest adjustment dimension □ min L (mm)
K64/22	170 mm	60x20.5x2	6	about 35 daNM	53 mm	47.5 mm

 **Warning!**

When adjusting or readjusting the limiter, always make sure that the shortest adjustment setting is not lower than the minimum setting allowed, to avoid limiter blocking.

After adjustment, the elastic flange should be changed in the hex nut hole.

Use only special grease (Agraset 116 or 147).

**FOREIGN MATTER**

1. If the limiter does not engage again correctly, check that there is no foreign matter in front or inside the spreader beaters.
2. If there is foreign matter, remove it before starting the spreader again.
3. **Be extremely careful** (see safety section).

**k) EVR 10-6 EPAN 5 secondary shear bolt torque limiter**

WALTERSCHEID

*Calibration 160 daNM (screw M8 x 60, class 8.8)*

**l) EPAN 6 side cam-actuated torque limiter**

WALTERSCHEID

*K 64/22L*

**See pages 24-25-26**

**m) Assembling the vertical beater fingers and small volume kits / DLG**

See technical documents: 904 009-1-B (See fact sheet in appendix)



## **10. Start-up and operation**

1. Our spreaders will give reliable and satisfactory service if used within their normal limits.
2. Never exceed the maximum load indicated on the manufacturer's plate.
3. Before loading the spreader for the first time and after a period of inactivity, operate the moving floor through one full cycle.
4. In case of frost, check that the guillotine door is working (option).

# 11. Uses

## a) Spreading quantity per hectare

### I. Determine the weight to be loaded

1. **Manure density (D) =  $\frac{P1 [\text{weight of container full (kg)}] - P2 [\text{weight of container empty (kg)}]}{V1, \text{ volume of container (in litres)}}$**

Example: **P1=11 kg**    **P2=3kg**                      **V1=10 litres**

$$D = \frac{P1 - P2}{V1} = \frac{11 - 3}{10} = 0.8$$

2. **Calculate the weight P (in tonnes) to be loaded:**

$$P = V2 (\text{volume of spreader body in } M^3) \times D$$

Example: **V2 = 12M<sup>3</sup>**      **D=0.8**

$$P = 12 \times 0.8 = 9.6 \text{ tons}$$

### II. Determine the distance L (in metres), to travel to cover 1 hectare

1. **Know the spreader spreading width l (in metres), (example: l = 6 metres)**
2.  **$L = 1 \text{ hectare} = 10,000 \text{ m}^2 = \frac{10,000}{l} = 1,666 \text{ metres}$**

$$l(\text{in metres}) \quad 6$$

### III. Determine the distance d (in metres), that the tractor needs to cover, to empty a spreader loaded with the weight P in tonnes

1. Example:

**Q=35 tonnes/hectare (set)**

**P= 9.6 tonnes (calculated)**

**l = 6 metres (known = spreading device characteristic)**

**L= 1,666 metres (calculated)**

2. Calculation of **d** :  **$d = \frac{P \times L}{Q} = \frac{9.6 \times 1,666}{35} = 457 \text{ metres}$**

3. Spreading surface **S**:  **$S = d \times l = 457 \times 6 = 2,742 \text{ m}^2$**   
**= 0.274 hectare = 27.4 ares**

4. In order to obtain the quantity **Q** to spread per hectare, according to the distance **d** that the tractor should cover, adjust the moving floor's speed in **metres per minute** with the spreader's electrically controlled hydraulic flow regulator, and adjust the tractor's speed in **km/h**.

## 2<sup>nd</sup> method

Based on the quantity of manure Q1 (in tonnes) to be spread per hectare, at tractor speed V1 (in km/h), tractor speed V2 required to spread a new set quantity Q2 of manure, can be calculated as follows:

1.  $V2 = \frac{V1 \times Q1}{Q2}$

2. **Example:**      Q1 = 40 tonnes per hectare  
                          V1 = 6 km/h

To spread Q2 = 50 tonnes per hectare, the tractor will have to move at a speed V2:

$$V2 = \frac{V1 \times Q1}{Q2} = \frac{6 \times 40}{50} = 4.8 \text{ km/hour}$$

## **b) Loading**

Make sure that no one ever enters the potential danger areas around the spreader when in operation, whatever the circumstances.

1. Put the equipment **in position** next to the manure heap.
2. Before leaving the tractor, **engage** the handbrake, **stop** the engine and remove the starter key.
3. Get in the tractor equipped with the loader to **carry out the loading** operation. If this operation is carried out by another person, do not stand in the loading area.
4. Manure should be loaded regularly across the length and breadth of the spreader body and must not exceed the height of the rotors, to guarantee regular spreading and equipment stability.
5. When spreading heavy manure, equipment balance can be altered on sloping ground, if the load moves towards the back. Always take this into account, as vertical vibrations could unhitch the spreader drawbar ring. **REMEMBER TO CHECK THIS WHEN HITCHING**

## **c) Spreading**

1. **Activating the rotor**, GRADUALLY ENGAGE the PTO (**540 or 1,000revs/min** depending on spreader model)
2. **Opening the guillotine door** (if the spreader has one), the guillotine door is equipped with a hydraulic safety system, which stops the moving floor if the door is not open enough.
3. **Field edges**: slow down the PTO to avoid side projections. If equipped with an edge flap, use when spreading at field edges.

#### 4. Moving floor with hydraulic geared motor

**AIM:**

With a hydraulic control, the moving floor can have a regular or variable speed.

**OPERATION:**

**A- With hydraulic control linked to the tractor pump:** pressurise the power circuit (engaging the tractor distributor)

**B- With independent hydraulic control from the spreader's hydraulic power unit:**

1. Activate the moving floor, using the **spreader distributor at low speed**.
2. **Adjust** the moving floor speed, using the control dial (**0** to **10**) on the control unit
3. The distributor moves the moving floor **backwards** and **forwards**.
4. The **limiter may disengage** during the loading process: see engaging and disengaging operation.
5. When spreading is almost finished, increase the moving floor speed as the height of the material left may not be sufficient to reach the rotor.  
It is recommended to reduce the tractor's PTO speed and/or close the slurry door by 1/3 of its height to reduce projections towards the front of the spreader and the tractor cab.

#### **d) After spreading**

After you have finished spreading, remember to:

1. Stop the moving floor.
  - With hydraulic control from the tractor, cut spreader power by putting the tractor distributor into neutral.
  - With independent hydraulic control, put the spreader distributor in neutral, stop.
2. Stop the rotor by disengaging the PTO.
3. Close the guillotine door. The door should never remain open during transfer.
4. To cut the tractor's hydraulic circuit.

## 12. Additional equipment information

### a) Independent hydraulic pump

1- PUMP MODEL 540 revs/ min EVR 10-6 12-8 13-10\* 15-12\* N° 821019

2- PUMP MODEL 1,000 revs/min EVR 14-11 14-12 16-12 18-14 21-15 23-16 N° 821020

\* 1,000 revs/min pump model possible as an option

#### SAFETY

The pump is driven by the PTO when in action, so remember to put the hydraulic component control distributors (moving floor, heavy slurry door...etc.) in neutral.

#### AIM

Avoids using the tractor's hydraulic circuit.

#### OPERATION

1. Activate the tractor's PTO.
2. Check the oil tank indicator regularly to make sure the oil level is correct.
3. 30 litres of oil can be added to the tank for intensive spreading.
4. When you have finished spreading, stop the tractor's PTO to stop the hydraulic control unit.

#### MAINTENANCE

1. Empty the tank once a year:

2. Oil quality:  
Mineral oil

<b>HFO 32</b>	formerly HYDRO 32
<b>UNIL -</b>	
<b>OPAL</b>	

3. Oil quantity

<b>49 litres</b>	<b>Between the 2 indicators – level</b>
------------------	---

4. Change the pressure filter cartridge and return filter cartridge **once a year**.

Return filter	Ref. 823243
Pressure filter	Ref. 825262
Level indicator	Ref. 825443
Filler cap with strainer	Ref. 825245

Reverser gearbox N° 814177 R = 1/1.9	Oil SAE 90 <b>2.22 Litres</b>
--	----------------------------------

## b) Control unit display screen

### SAFETY

Check that the control unit is working properly (electric shock hazard).

### AIM

The control unit displays spreading operation information (spreading speed, moving floor speed and distance, dosing, etc.) It can also be used to make several adjustments (dosing, spreading width, etc.)

### OPERATION

Once the control unit is powered up, the screen displays the Jeantil home page.  
Press OK to confirm display start up.

## c) Rear door for thick slurry

### SAFETY

1. Carefully check that the door is not in contact with an electric wire (electric shock hazard).
2. The guillotine door is equipped with a hydraulic safety system, which stops the moving floor if the door is not open enough.

### AIM

Used to halt and control flow rate, when spreading liquid and viscous materials.

### OPERATION

1. The door can be adjusted vertically with a hydraulic distributor, according to the nature of the product and the quantity that needs spreading.
2. Do not use the door to regulate the unloading of materials such as straw-based manure, marl, limestone or other similar products.
3. Before activating the door, check that the maintenance safety valve n° **825 246** fitted on one of the door cylinders is **completely open**.
4. In case of frost, check the equipment before use.

## d) Hydraulic single-action stand N°822007

### SAFETY

Never put your foot under the stand.

### AIM

1. Replaces the angle transmission mechanical stand on high tonnage machines.
2. Equipment height can be adjusted more easily when hitching it to the tractor.

## ***OPERATION***

1. To pump oil into the stand-cylinder, operate the lever from top to bottom.
2. To lower, slowly open the pump valve.

## ***MAINTENANCE***

1. Change oil at least once a year.
2. Oil quality: Mineral oil **HFO 32 UNIL-OPAL**
3. Oil quantity: **4 litres**

Stand	N° 822007
Hand pump	N° 821001
Hose	N° 827076

### **e) Hydraulic dual-action stand N°891 008**

Equipped with a dual action pilot valve which enables it to be completely immobile when not actuated. It is connected to the equipment's distributor with 2 hoses.

### **f) EPAN 6 Spreading system**

#### ***DESCRIPTION***

The Epan 6 spreading device is fitted with two horizontal beaters, a rear cover and two lower discs with almost vertical axis.

The beaters shred the material, which is then channelled by the cover and falls on the discs. The discs rotate and eject the product.

Drive train: The lower gearbox is activated by the tractor's PTO. The latter drives the ejection plates and the horizontal beaters via a side transmission.

Adjusting the cover shutter

For low quantity spreading: low position

For high quantity spreading: high position

## SAFETY

1. *Before using the spreader the operator should make sure that no one is near dangerous areas such as: the lower drive shaft, the spreading device (horizontal beaters and plates), the side transmission etc. and that no one is inside the spreader.*
2. *Be extremely careful as the discs can project material containing stones or other foreign matter at a great distance.*
3. During maintenance, the cover must be locked open by closing a hydraulic valve. This valve is located on the left side of the equipment.
4. Depending on the models, some machines are equipped with automatic pilot valves which do not need to be operated by the user. (Valve on the cover cylinder).
5. Any intervention (maintenance, repair...) should be carried out with the tractor engine stopped, the spreading device at a complete halt, valves or safety check valves activated and the hydraulic motor stopped.
6. The mechanical safety of the spreading device is guaranteed by a cam limiter at the entry to the lower gearbox, which protects the entire device, and by the declutchable cam limiter on the side drive shaft which protects the horizontal beaters.

## **AIM**

This device enables very wide and accurate spreading with small volumes.

## **OPERATION**

Activating the tractor PTO drives the two discs and the two horizontal beaters via the single-block gearboxes and the drive shafts connecting the gearboxes.

The spreading width and thinness can be adjusted with the mobile shutter (deflector) on the cover, manually controlled by a crank.

**WARNING:** The device must only be adjusted with tractor engine stopped, and spreading device and hydraulic motor completely at a halt.

## **MAINTENANCE**

All gearbox oil should be changed at least once a year, depending on the frequency of use.



# 13. Cleaning

## Cleaning method

1. **Never clean equipment when in operation! Serious accident hazard! Equipment must be cleaned when idle and not hitched to the tractor, with PTO and hydraulic unit disconnected.**
2. **If you need to operate the moving floor while cleaning, to empty it, put the equipment in work mode and carry out the operation from the tractor cab after checking that no one is within range of beater projections, near the moving floor or inside the spreader.**
3. **Once this operation has been completed, return to cleaning safety conditions as above.**
4. Raise the front of the spreader as much as possible to facilitate run off.
5. Put the slurry door in raised position and lock it with the safety valve.
6. Use a mobile gantry to clean the inside of the body.
7. Cover all parts that need protection from water penetration or from cleaning products. Regularly hose down the equipment. When using a high pressure water hose, do not hold it too close to the spreader and avoid directing the hose at electronic components, the engine or electric connections, hydraulic lines and hoses, seals, filler plug, etc.
8. Never use detergents or acid.
9. Wear all the necessary protective clothing against projections and slipping, i.e. waterproofs, gloves, non-slip boots and goggles.
10. Soak any dry manure several times to facilitate removal and limit pressure to 120 bar while keeping the jet at a distance from the spreader body.
11. Prefer a higher flow rate to high pressure when cleaning.
12. Paintwork may be damaged if you do not comply with the cleaning recommendations.
13. Grease the equipment as soon as it is dry.

# 14. Dealer technical sheet list

## a) Supplier spare parts.

### **1. Hydraulic equipment:**

- 904 028-1-A: Filler cap
- 904 029-1-A: Return filter
- 904 032-1-A: EVR *pressure filter with hydraulic power unit*
- 904 037-1-A: Hydraulic cylinder, slurry door / side shutter / cover Epan 6
- 904 103-1-A: Hydraulic cylinder, brake system
- 904 207-1-A: Cover cylinder Safety hydraulic system
- 904 208-1-A: Hydraulic cylinder for trapdoor opening
- 904 023-1-A: Drawbar stand
- 904 066-1-A: Return pressure valve
- 904 007-1-A: Moving floor hydraulic motor
- 904 008-1-A: EVR pump 27 cm<sup>3</sup>/revs *with hydraulic power unit (540revs/min)*
- 904 041-1-A: EVR pump 51 cm<sup>3</sup>/revs *with hydraulic power unit (1,000revs/min)*
- 904 127-1-A: Dual pilot check valve
- 904 123-1-A: Single pilot check valve
- 904 025-1-A: Flow deviator
- 904 061-1-A: Single-acting manual pump
- 904 024-1-A: Dual-acting hydraulic stand
- 904 027-1-A: Level indicator
- 904 031-1-A: Two-way valve
- 904 036-1-A: Safety plug valve ALFAGOMMA
- 904 038-1-A: Check valve and coupler on return
- 904 065-1-A: Brake valve
- 904 265-1-A: Dealer spare parts

### **2. Hydraulic diagrams:**

- 904 235-1-A: Hydraulic diagram 1 electrical function
- 904 236-1-A: Hydraulic diagram 2 functions
- 904 237-1-A: Hydraulic diagram with 1 or 2 simultaneous side flaps
- 904 238-1-A: Hydraulic diagram with 2 independent side flaps
- 904 240-1-A: Hydraulic diagram: proportional flow rate regulator
- 904 264-1-A: On board hydraulic pump

### **3. Electric equipment and diagrams:**

- 904273-1-A: EVR electrical wiring diagram Smart/ 5 function Smart control
- 904,274-1-A: 3 function Basic electric wiring diagram
- 904,275-1-A: Basic/6 function Advanced electric wiring diagram

### **4. Drive shaft:**

- 904 033-1-A: Primary drive shaft WALTERSCHEID
- 904 034-1-A: Homokinetic primary drive shaft WALTERSCHEID
- 904 209-1-A: Secondary drive shaft WALTERSCHEID- *EVR EPAN 5- 540 revs/min*
- 904 004-1-A: Secondary drive shaft WALTERSCHEID- *EVR EPAN 5- 1,000 revs/min*

## **5. Gear boxes:**

- **904 016-1-A:** Reduction gearbox *EVR 8-6 / 10-6 5 (Rochling)*
- **904 017-1-A:** Reduction gearbox *EVR 12-8 / 13-10 / 15-12 (Rochling)*
- **904 015-1-A:** Reduction gearbox *EVR 14-11 / 14-12 / 16-12 (Rochling)*
- **904 006-1-A:** Reduction gearbox *EVR 18-14 / 21-15*
- **904 040-1-A:** Double side gearbox *EVR EPAN 6 / 14-11 / 14-12 / 16-12 / 18-14 / 21-15*
- **904 018-1-A:** Pump reversing gearbox
- **904 276-1-A:** Exploded view gearbox parts 814186 EPAN 6
- **904 277-1-A:** Exploded view gearbox parts 814182 EPAN 5 1,000 revs/min
- **904 278-1-A:** Exploded view gearbox parts 814181 EPAN 5 540 revs/min

## **6. Axles and drawbar spring:**

- **904 189-1-A:** Brake bearings A410 8-6 / 10-6 (Square 80)
- **904 191-1-A:** Brake bearings 408E 12-8 (Square 90)
- **904 192-1-A:** Brake bearings 408E 13-10 / 14-11 / 14-12 / 15-12 (Square 100)
- **904 193-1-A:** Brake bearings 412S 16-12 / 18-14 (Square 110)
- **904 194-1-A:** Brake bearings 412S 16-12 / 18-14 (Square 140)
- **904 067-1-A:** Brake A410.
- **904 068-1-A:** Brake 408E
- **904 005-1-A:** Brake 412S
- **904 092-1-A:** Drawbar spring 8-6 / 10-6 / 12-8 / 13-10
- **904 091-1-A:** Drawbar spring 14-11 / 14-12 / 15-12 / 16-12
- **904,090-1-A:** Drawbar spring 16-12 T / 18-14 / 18-14 T / 21-15

## **b) JEANTIL spare parts.**

- **904 205-1-A:** Edge flap
- **904 201-1-A:** Disc assembly EPAN 6
- **904 206-1-A:** Beater assembly EPAN 6
- **904 168-1-A:** Parking brake
- **904 199-1-A:** Protection cover
- **904 202-1-A:** Exploded view EPAN 6
- **904 160-1-A:** Spreading device EPAN 5 with slurry door
- **904 260-1-A:** Drawbar + Stands
- **904 262-1-A:** Exploded view beater drive
- **904 282-1-A:** Steel hood 1m20
- **904 283-1-A:** Exploded view casing EVR ND

## **c) Other.**

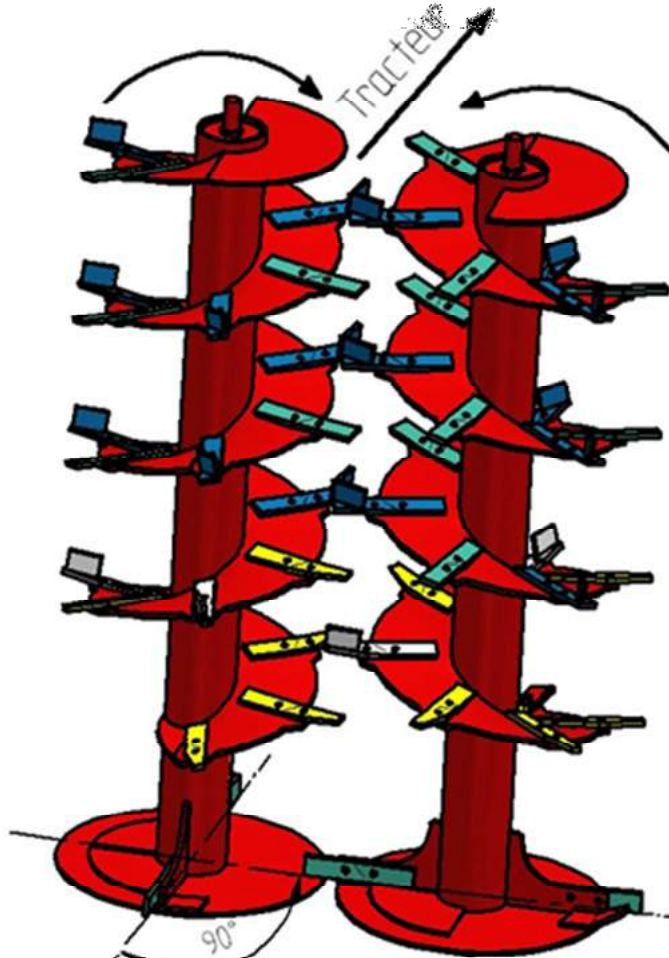
- **904 132-1-A:** Moving floor speed EVR 10-6
- **904 085-1-A:** Moving floor speed EVR 12-8
- **904 133-1-A:** Moving floor speed EVR 13-10
- **904 134-1-A:** Moving floor speed EVR 15-12
- **904 135-1-A:** Moving floor speed EVR 14-11 / 14-12
- **904 095-1-A:** Moving floor speed EVR 16-12
- **904 137-1-B:** Moving floor speed EVR 18-14
- **904 138-1-A:** Moving floor speed EVR 21-15
- **908 001-1-A:** Coupling questionnaire
- **900 006-1-A:** Vertical beater drive replacement
- **904 281-1-A:** Moving floor tensioner

## 14. Possible incidents and solutions

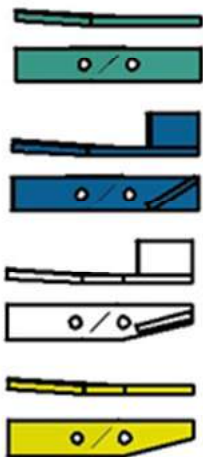
INCIDENTS	CAUSES and SOLUTIONS
1 – Total hydraulic sensor malfunction when starting equipment	1- Check tractor and spreader electric circuit 2- Check hydraulic connection of spreader and tractor single-acting distributor. 3- Excessive return pressure.
2 – Lack of hydraulic power	1- Too much pressure loss with dual-acting distributor. Connect to single-acting distributor and free return 2- Check spreader and tractor distributor unit calibration ( <b>180 bar</b> ) 3- Tractor hydraulic circuit pollution (see tractor filter) 4- Tractor pump failure (flow and pressure)
3 - Damaged hydraulic motor seal.	1- Back pressure on hydraulic return (see hydraulic connection) 2- Reduce flow to <b>45 l/min</b>
4 - Sudden vibrations and/or hydraulic circuit overheat	1- Flow too high; reduce flow to <b>45 l/min</b>
5 – Rear door stuck because of frost	1- In case of frost, check rear door operation before loading.
6- Declutchable cam limiter safety mechanism activates	1 - Conveyor moving too fast: reduce conveyor speed 2- Significant rotor blade wear. 3- Foreign matter in manure
7- Moving floor does not start	1- Excessive load: reduce load 2- Foreign matter; check and remove 3- Check electric circuit 4- Check tractor hydraulic pressures

Côté gauche  
Left hand side

Côté droit  
right hand side

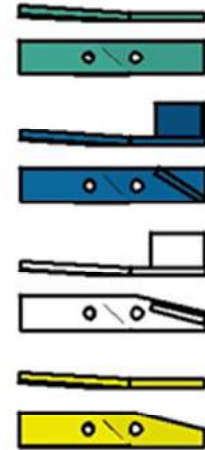


Vis Gauche  
Vertical beater

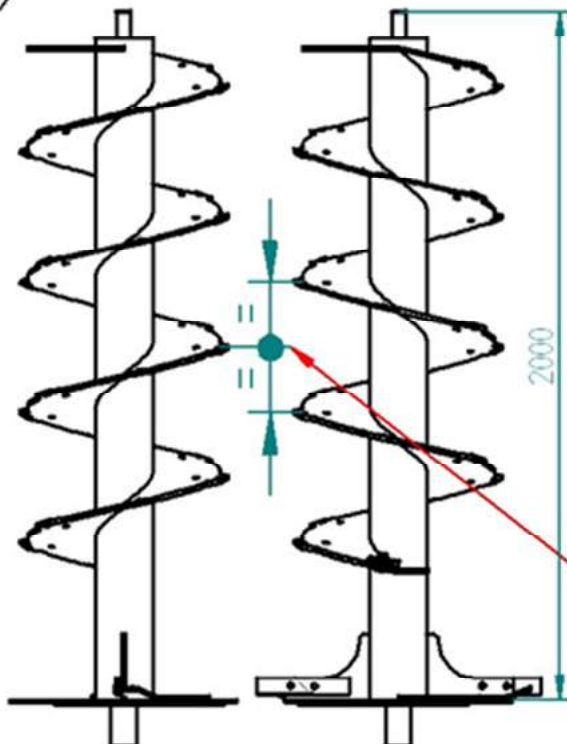


- 36570 = 8
- 86518 = 8
- 86520 = 2
- 36566 = 6

Vis droite  
Vertical beater



- 36562 = 8
- 86519 = 8
- 86521 = 2
- 36567 = 6



**IMPORTANT!**

Montage doigts de vis verticales  
 Assembling the vertical beater fingers

## EVR all models

Configuration Doigts N° Fingers N°	1 Compost sec Dry compost Trockener Kompost	2 Compost Compost Kompost	3 (Standard) fumier std Standard manure Standarddünger	4 fumier court Short manure Kürzdünger	5 fumier long, grossier Long manure Langdünger
28 *					
27 *					
26 *					
25 *					
24 *					
23 *					
22 *					
21 *					
20 *					
19 *					
18 *					
17 *					
16 *					
15 *					
14 *					
13 *					
12 *					
11 *					
10 *					
9 *					
8 *					
7 *					
6 *					
5 *					
4 *					
3 *					
2 *					
1					

\* Appareil de 2,25 m seulement

LA VIS ICI REPRÉSENTE ET LA VIS GAUCHE

\* Appareil de 2,00 m seulement

 PRODUIT SEC  
 DRY PRODUCT  
 TROCKENER PRODUKT

 PRODUIT LOURD  
 HEAVY PRODUCT  
 SCHWERES PRODUKT

\* Appareil de 1,80 m seulement

 NB: Numérotation des doigts: le doigt n°1 est le premier doigt situé sur la vis, en commençant par le bas de la vis.  
 NB: Classification of the fingers: the finger N°1 is the first finger located on the screw, while starting with the bottom of the screw.

 REMARQUE IMPORTANTE: Ce tableau ne peut servir de référence stricte, car on observe des disparités dans l'épandage suivant les densités des produits.  
 IMPORTANT REMARK: This table cannot be used as strict reference, because we can see some disparities.

 Cependant, il convient de noter:  
 However, you can note that:  
 Jedoch, kann man das feststellen:

		Remarque: les vis sont à sens inverse, à l'encre bleue on trouve le sens de la vis. Attention: les vis sont à sens inverse, à l'encre bleue on trouve le sens de la vis. Hinweis: Die Schrauben sind rechtsdrehend, in der blauen Tinte ist die Drehrichtung angegeben.
		Remarque: les vis sont à sens inverse, à l'encre bleue on trouve le sens de la vis. Attention: les vis sont à sens inverse, à l'encre bleue on trouve le sens de la vis. Hinweis: Die Schrauben sind rechtsdrehend, in der blauen Tinte ist die Drehrichtung angegeben.

 Vis gauche  
 Left hand side

 Vis droite  
 Right hand side


36570 (10 - 8 - 6 - 5) 36562 (10 - 8 - 6 - 5)

 Quantité pour Vis 2,25 m  
 Quantity for 2,25 m hand side


86518 (10 - 8 - 7 - 5) 86519 (10 - 8 - 7 - 5)

 Quantité pour vis 2,00 m  
 Quantity for 2,00 m hand side

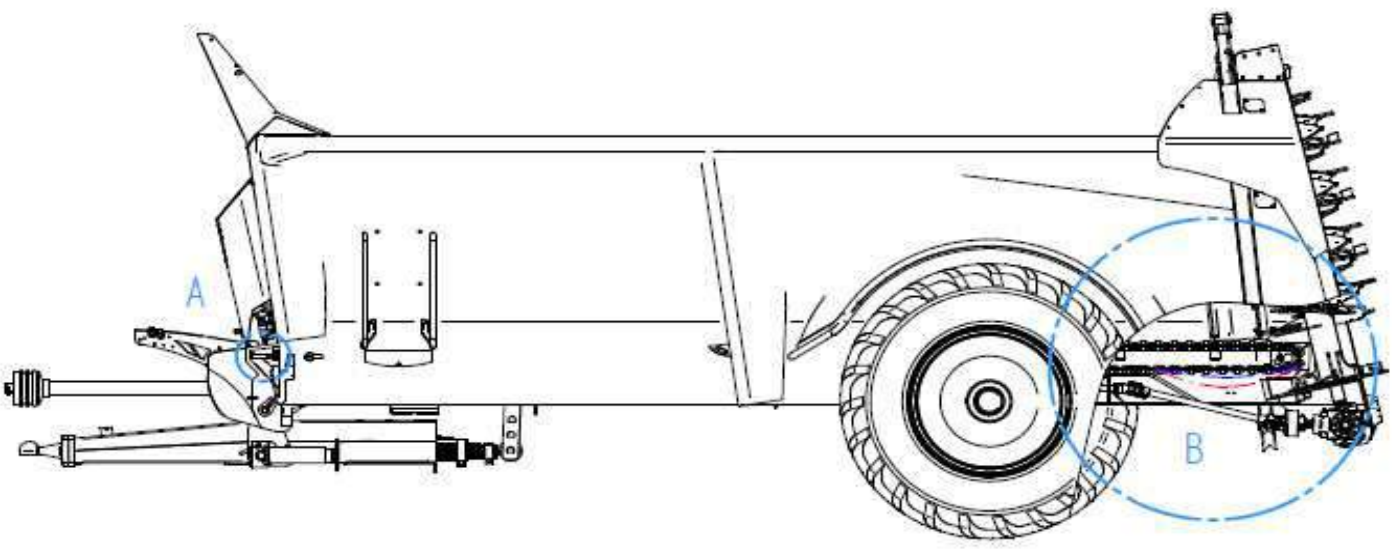

86520 (2 - 2 - 2 - 2) 86521 (2 - 2 - 2 - 2)

 Quantité pour vis 1,80 m  
 Quantity for 1,80 m hand side

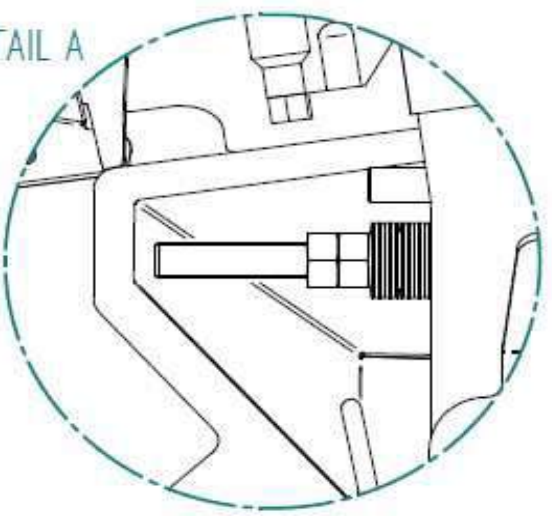
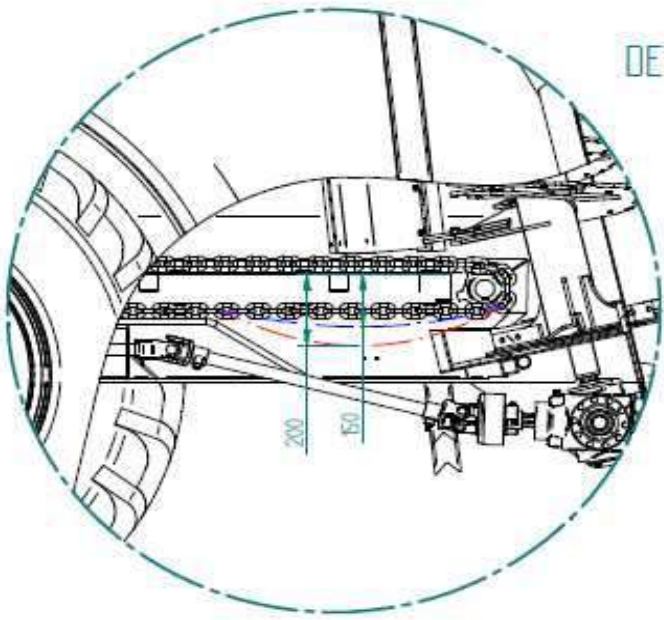

36566 (6 - 6 - 6 - 6) 36567 (6 - 6 - 6 - 6)

 Quantité pour vis 1,60 m  
 Quantity for 1,60 m hand side





DETAIL B

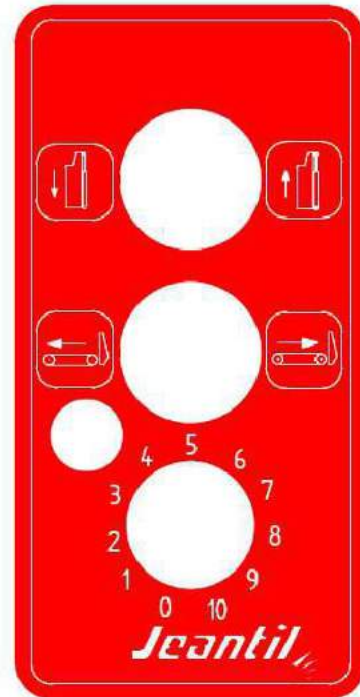
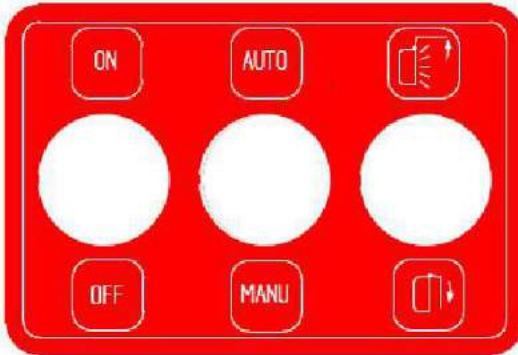


DETAIL A

*Use of the standard, Basic and Advanced control box*

**EVR with standard electric controls + 1 or 2 functions  
 Basic or Advanced**

**Main controls on the control box :**



- 1) Switch-on of the control box
- 2) Manual or automatic spreading mode (when the spreader is equipped with Advanced controls)
- 3) Light protection device
- 4) Opening and closing of the guillotine door
- 5) Forward and reverse gear of the moving floor (the green light stays lit in forwarding motion)
- 6) Adjustment of the moving floor speed

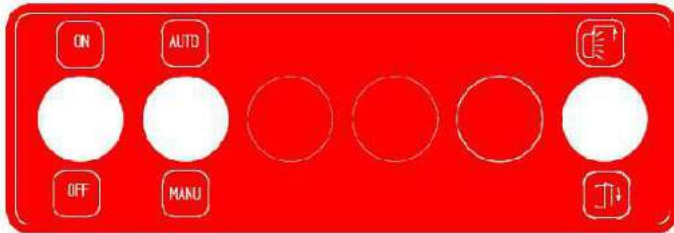


Use of control box  
 Basic + Advanced

**EVR with electric controls 3 and 4 functions  
 Basic or Advanced**

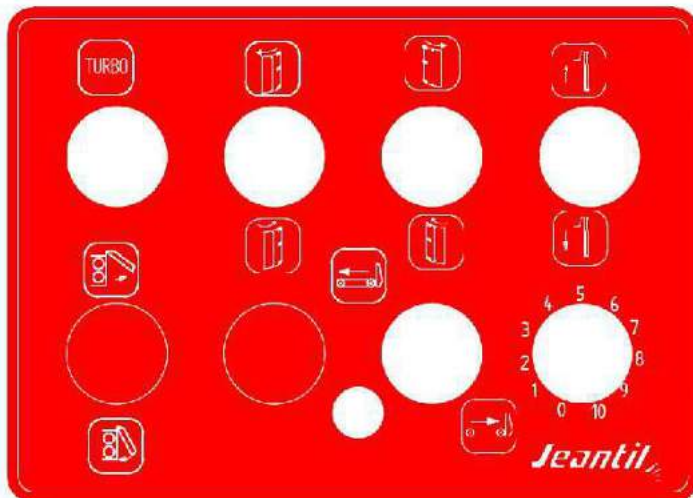
**Use of control box**

1      2      3      4      5      6



- 1) Switch-on of the control box
- 2) Automatic or manual mode (DPA)
- 3) Not used
- 4) Not used
- 5) Not used
- 6) Control of the light protection.

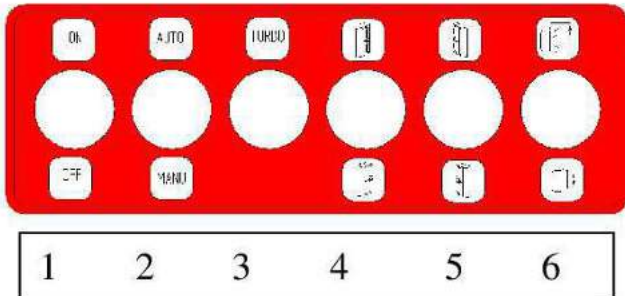
7      8      9      10



- 7) Not used (set on Turbo)
- 8) Control of the right edge flap
- 9) Control of the left edge flap
- 10) Control of the guillotine door
- 11) Control of the rear cap
- 12) Not used
- 13) Switch-on of the forward and reverse gear of the moving floor
- 12) Potentiometer to set the speed of the moving floor

11      12      13      14

1) Main controls of Smart control box

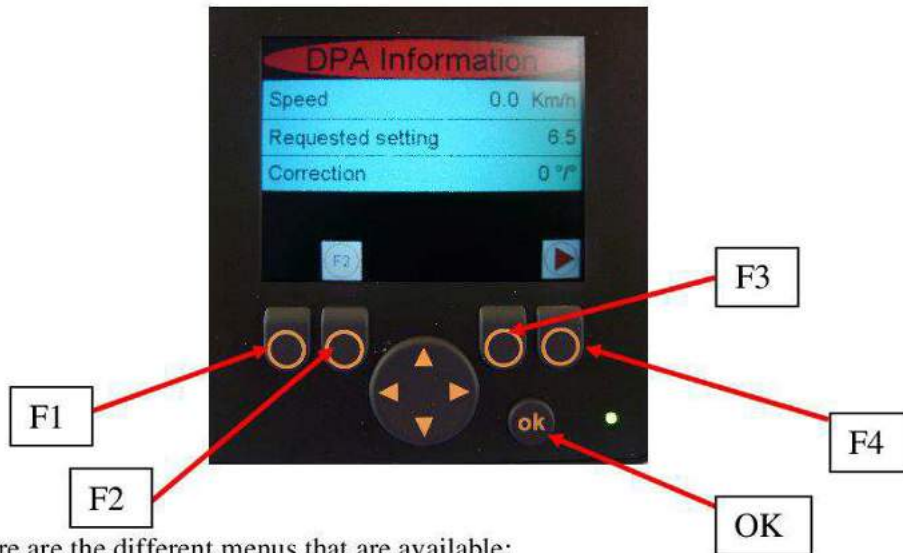


- 1) Control box power-on
- 2) Manual or automatic spreading mode (DPAE)
- 3) Auger security, turbo position: forced running moving floor, switch down: moving floor running with auger security.
- 4) Edge shutter (1 or 2 simultaneously) or rear hood on EPAN 6.
- 5) 2<sup>nd</sup> edge shutter
- 6) Lights protection
- 7) Unlocking and locking drop door
- 8) Forward and rear moving floor gear (the green diode always lights when forward gear is activated)
- 9) Setting the required hectare quantity

## 2) Use of control box display

Once control box has been powered-on, Jeantil home page displays.

To start up the display, click on OK to validate power-on. The following menu then displays:



Here are the different menus that are available:



### Menu 1: DPA data

- Speed (km/h)
- Instruction: expected flow rate (ton/hectare)
- Correction: effective spreading

F2 allows you to have access to the settings of the display

Press F4 to move to the second menu.



### Menu 2 : DPA data

- Distance covered: total distance covered by the spreader (m) when the moving floor is forwarding.
- Surface: total spread surface (m<sup>2</sup>). Calculating area according to spreading width (to be defined in the " settings » menu") and total distance
- Total floor distance: total distance covered by the moving floor
- Floor speed : spot speed (m/min) of the moving floor

To reset Distance covered and Surface data, press RAZ (F3)

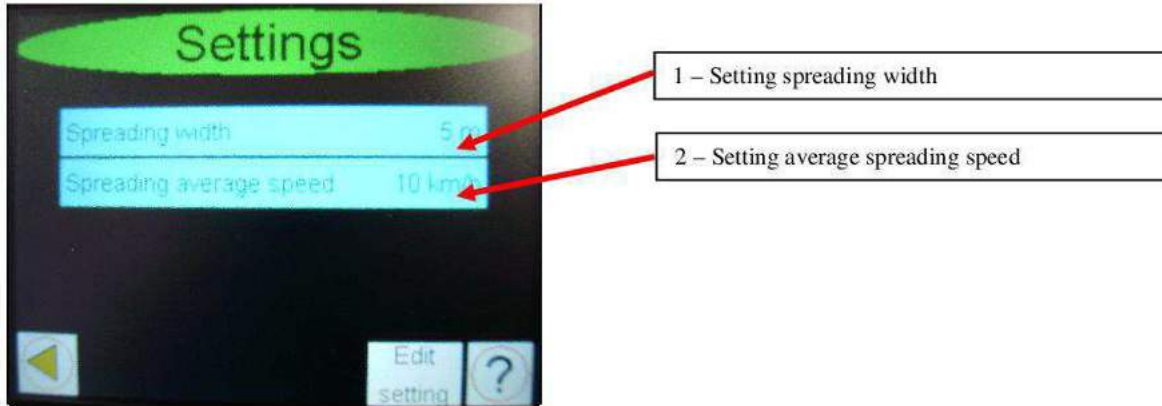
Press F1 to return to the first menu.



<b>Jeantil</b>	Technical data sheet 904 247-2-A	15/04/2011	Page 3/3	USER
<i>Use of Smart control box</i>		<b>EVR / EPR with Smart electric control</b>		

### 3) Configuring control box

To configure new settings or reset, press F2 in menu 1 to enter « settings » menu.



1) Setting spreading width: regulates spreading width depending on the product being used to have a coherent spread surface.

2) Setting average spreading speed: regulates average spreading speed to optimize DPA function.

To activate data capture, press « edit param » (F3).

To browse through settings, use left and right keys.

To change selected settings, use up (+) and down (-) arrow keys.

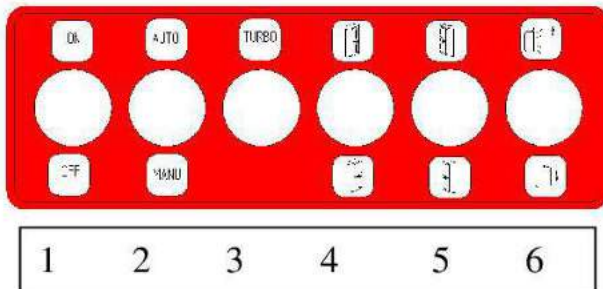
To validate data and go back to menu 1, press OK.

To have access to help section, press ? (F4). Press F1 to return to the previous menu.

*Use of Smart Control control box*

**EVR / EPR with Smart Control electric control**

**1) Main controls of Smart Control box**



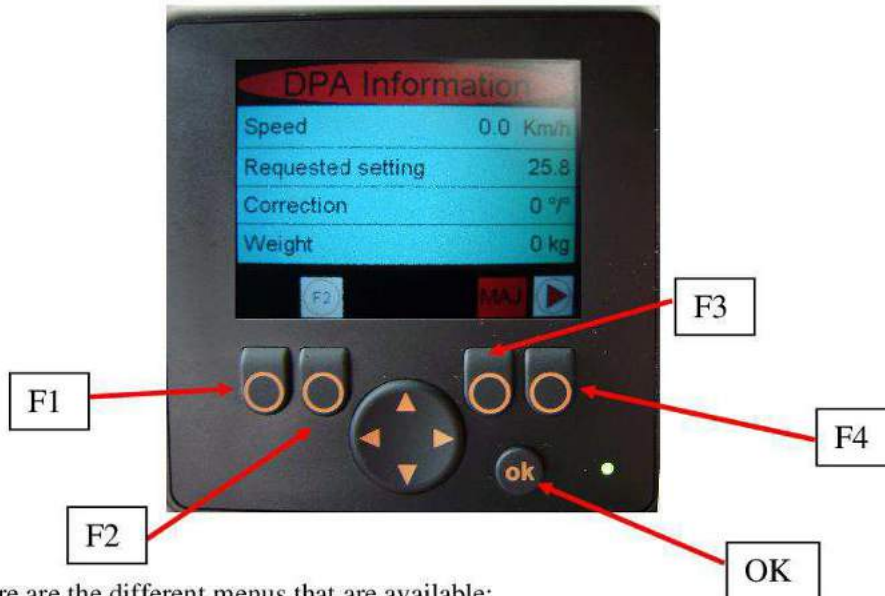
Press F1 to choose language.

- 1) Control box power-on
- 2) Manual or automatic spreading mode (DPAE)
- 3) Not used
- 4) Edge flap (1 or 2 simultaneously) or rear hood on EPAN 6
- 5) 2<sup>nd</sup> edge flap
- 6) Lights protection
- 7) Unlocking and locking slurry door
- 8) Forwarding and reversing moving floor (the green diode always lights in forwarding motion)
- 9) Setting the required hectare quantity

**2) Use of control box display**

Once the control box has been powered-on, Jeantil home page displays.

To start up the display, click on OK to validate power-on. The following menu then displays:



Here are the different menus that are available:



Menu 1 : DPA data

- Speed (km/h)
- Instruction: expected flow rate (ton/hectare)
- Correction: effective spreading
- Weigh: dynamic device loading

F2 allows you to have access to the settings of the display

Press F4 to move to the second menu.




Menu 2 : DPA data

- Distance totale: total distance covered by the spreader (m) when the moving floor is forwarding.
- Surface: total spread area (m²). Calculating area according to spreading width (to be defined in the « settings » menu) and total distance
- Dist totale FM: total distance covered by the moving floor
- Vitesse FM: spot speed (m/min) of the moving floor

To reset Distance Totale and Surface data, press RAZ (F3)

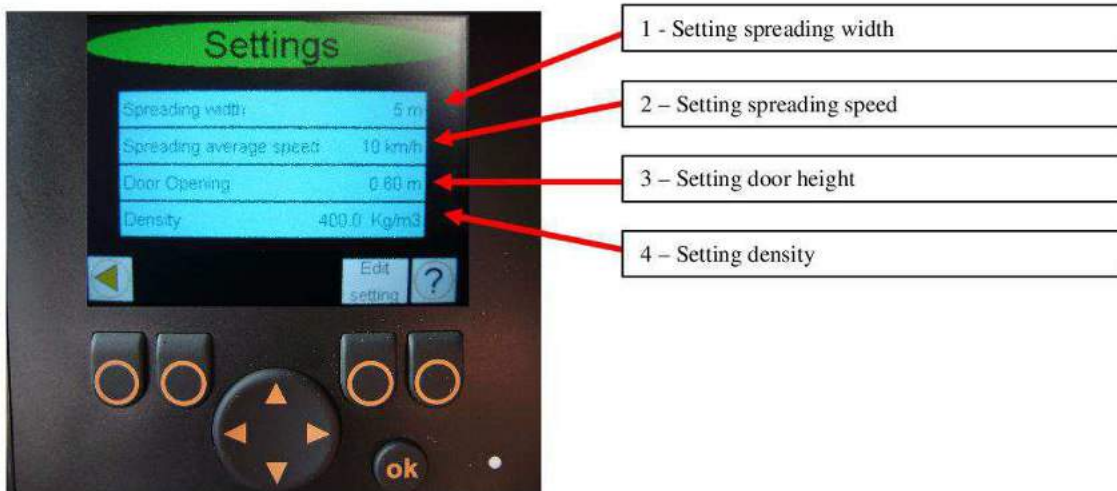
Press F1 to return to the first menu.



	FICHE TECHNIQUE 904 246-2-A <i>Technical data sheet 904 246-2-A</i>	02/08/2011	Page 3/4	USER
<i>Use of Smart Control control box</i>		<b>EVR / EPR with Smart Control electric control</b>		

### 3) Configuring control box

To configure new settings or reset, press F2 in menu 1 to enter « settings » menu.



1) Setting spreading width: regulates spreading width depending on the product being used to have a coherent spread area..

2) Setting average spreading speed: regulates spreading average speed to optimize DPA function.

3) Setting door height: this data is relevant for the calculation of flow rate – e.i compost = 0.60m, cowshed manure = 1.80m)

4) Setting density: weigh per cubic metre of products to be spread (with a 50kg/m3 accuracy)


To activate data capture, press « edit param » (F3)

To browse through settings, use left and right keys.

To change selected settings, use up (+) and down (-) arrow keys.

To validate data and go back to menu 1, press OK.

To have access to help topic, press ? (F4). Press F1 to return to the previous menu.

	FICHE TECHNIQUE 904 246-2-A <i>Technical data sheet 904 246-2-A</i>	02/08/2011	Page 4/4	USER
<i>Use of Smart Control control box</i>		<b>EVR / EPR with Smart Control electric control</b>		

#### 4) Using the device

Switching on the PTO

Door opening

Switching on the moving floor

Press the MAJ key on the display screen during 4-5 seconds while starting moving. Pressing this key allows to accelerate the moving floor to load the device when starting.

Then, during the unloading of the equipment, switch off the moving floor at the end of the fields thanks to the forward/rear switch by switching it on the neutral position.

Switch on the moving floor again by switching the moving floor button.

NB : You must press the MAJ key everytime you start spreading, as it allows you to accelerate the moving floor when starting moving and to reset the calculation values of the DPAAE system.