## DELIMBE

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# MICROGRANULATOR SMALL SEED DISPENSER ELECTRIC PNEUMATIC SEED DRILL DOUBLE TANK DELIMBE T15



Thank you for choosing this air seeder, which we have always striven for quality to offer you a first-class product. In order to make the most of your DELIMBE T15 seeder, we invite you to carefully read all the information mentioned in this manual.

## **TECHNICAL NOTICE**

#### **TECHNICAL CHARACTERISTICS:**

Painted steel frame in epoxy oven-baked paint.

Capacity: 2 tanks of 80 liters or 120 liters polyethylene.

#### Dimensions of the distributor:

- **80 liters:** 620 mm wide, 750mm high, 1240mm deep, weight 75kgs.
- 120 liters: 620mm wide, 850mm high, 1240mm deep, weight 80kgs.

Number of pipe outlets: 1 to 10 outlets per hopper.

Adjustable flow rate by electrically controlled spline speed.

Supply voltage: 12volts.

Hydraulic ventilation turbine: oil flow between 20 and 40 liters maximum, manometer on 40 bar maximum.

Power of distribution motors: 2 x 100 Watts.

#### **INSTALLATION-MOUNTING:**

The DELIMBE T15 MICROGRANULATOR SEED DRILL double tank distributor is designed to be placed in the centre of the cultivator. Position the device so that there is no risk of injury to the user when filling. When mounting the device on the carrier tool, provide protection (safety railing). A platform must be installed with a handrail and an access staircase to allow safe filling of the tank. Provide an openwork and non-slip metal.

When the T15 double tank is used in small and large seed drills, one tank must be equipped with green fluting for small seeds and the other tank with red fluting for large type seeds; weight, fababella, oats, cereals. The tank containing the large seeds should be placed towards the front of the cultivator and the tank containing the small seeds towards the back of the cultivator. Large seeds are sown in front of the tillage tool to deeply bury the seed. The seeding of small seeds is done behind the tillage tool (cultivator) and before the roll and it is the earth projection of the roll that covers the seed.

The splitters can be placed between 30 and 70 cm apart and at 30-40cm soil height. If it is not possible to attach the sprinklers to the cultivator frame, make a support. Pipe assembly should be as short as possible. Secure pipes to avoid backslopes and elbows.

#### **SAFETY RULES:**

After fixing the DELIMBE T15 double tank, check the rigidity of the assembly and use all the fixing points on the DELIMBE chassis.

During installation, the installer must ensure that a means of access to the hopper is provided. This may be a gateway fixed to the rack. It must be accessible by a staircase with non-slip steps between 28 and 35 cm deep.

The maximum height of the first step shall be between 50 and 55 cm from the ground (EN253 reference).

The upper horizontal platform shall be provided with a guardrail around the perimeter with a 1,000 mm rail and a 500 mm sub-rail.

To prevent possible accidents, wear respiratory protection when filling the hopper and when using the device, as well as clothing adapted to the chemicals.

Before any intervention disconnect the appliance: disconnect the electrical connections and the hydraulic connections.

Keep everyone away (at least 10m) during work. While protected, do not approach the rotating disc.

The DELIMBE SMALL SEED DRILL T15 double tank is designed for use on the rear of a tractor. For installation cases deviating from the requirements, consult the manufacturer. It can also be used on any planter, seeder or cultivator, it is important to keep a descent slope in the pipes, avoid backslopes...

#### USE:

The microgranulates or seeds are ventilated by a turbine disc that rotates at high speed.

- Starting and stopping the device is done with the switch and the indicator light.

- Flow adjustment is done by turning the knob on the cab control box.

- At the end of the field, manually stop the distribution with the cabin switch but allow the ventilation to rotate.

#### **CONNECTION:**

> Electrical connection conditions with the standard control box:

- The first switch (ref. INTER2B on the diagram) is used to start the distribution.

- The 2nd switch (ref. INTER2B on the diagram) is used to start the ventilation

- The dial graduated from 0 to 30 (ref. BOUTPOT) is used for flow adjustment.

- At the end of the field, manually stop the distribution with the cabin switch (let the ventilation turn).

- Provide power to a protected outlet with a 30 Amp fuse.

- Connect the red lug wire to the positive terminal (brown wire) and the blue wire to the negative terminal. CAUTION IN CASE OF POLARITY INVERSION YOU RISK TO GRILL THE DEBIT ADJUSTMENT POTENTIOMETER WHICH WOULD THEN BE DEFINITIVELY OUT OF SERVICE.

Check that the ventilation turns in the correct direction (arrow direction).

Electrical connection conditions if you are equipped with a sensor DPA box, iso (7 studs) or GPS antenna: To activate the device you must:

1. Adjust your device using the adjustment table

2. Start sowing by pressing the seeding button and take the seeding cruising speed 3. Press the memorized speed button (one pulse) and the device becomes DPA. You can reduce the speed or increase the speed up to 50% the device adapts. At the end of the job the setting remains memorized. For a new set-up, press again on stored speed (one pulse is enough)

If you are equipped with a DPA ISO tractor information box, the unit stops automatically with the lift-up cut-off (information provided by the tractor).

If you are equipped with a sensor DPA box, the device stops automatically as soon as you raise the cultivator.

If you are equipped with a DPA with GPS antenna, it is provided a limit switch to put on a lifting arm to automatically stop the distribution of the seed drill. This device must be connected to the 3-pin socket next to the distribution motor.

#### **ADJUSTMENT OF THE DEBIT:**

- The adjustment of the flow is done with a separate groove rotor for each descent hose, driven by an electric motor connected to an electronic box in the cabin allowing also an adjustment from 3 to 278kg/hour per tank (for a higher flow consult us).

- The spline rotor is electronically controlled by a cab. Per tank, a scale from 0 to 30 allows the flow of the device to be adjusted. An indicator light indicates the on and off flow rate.

- 4 fluting rotors exist for the T15 double tank and are provided for this purpose and 3 are available as an option, the white (very small flow), the yellow (medium flow), the red (large flow) and the green that is included in the original on one tank and red on the other tank.

- Since the device is new, before filling the hoppers, check that the motors is running in the correct direction (arrow direction). A visual marker (black and yellow butterfly) is installed at the end of the rotors shaft.

- Since the vessel is under pressure, use the closed cover device.

#### **DRAINING THE TANKS:** A door at the end of the rotor is provided to drain per tank.

#### STORAGE: take cover.

#### **DEBIT CALCULATION:**

#### The setting table is given in flow/hour: WORKING WIDTH X TILLAGE TOOL SPEED X DOSE/HECTARE

Before planting, due to the variety of product sizes, perform a per-minute calibration. After calculating the flow/hour, divide it by 60 minutes and check the flow/minute before departure. After spreading a distance of a few tens of meters, check that the spreading is correct in width and density of seedlings.

#### **SETTING:**

Since the T15 DELIMBE double tank is an electrical distribution unit, the flow rate must be calculated per hour. Working width multiplied by speed of advance equal area sown in one hour. Take the area sown in one hour and multiply by the dose/hectare. Then take the adjustment table (one for each tank).

The DELIMBE T15 double tank unit can be equipped, either in small green, yellow or red spline seed drill, or in green spline or for red spline Ray-grass, the color of the spline is visible at the end of the rotor or through the hopper.

#### T15 equipped with SMALL SEED DRILL – green rotor:

Example 1: for a seedling of small seeds density 0.65, setting small green spline. For sowing mustard on a 5metre wide cultivator, at a speed of 7km/h for sowing at 10kg/hectare. 5meters wide x 7,000/hour = 35,000 square meters/hour. Desired dose per hectare: 10kg. Sown area: 3.5ha x 10kg = 35kg/hour. Take the adjustment table at 35kg/hour, or number 15 on the adjustment knob.

<u>Example 2</u>: for small seedlings density 0.65, setting yellow spline. For sowing mustard on a cultivator 6metres wide, at a speed of 8km/h for sowing at 12kg/hectare. 6meters wide x 8,000/hour = 48,000 square meters/hour. Desired dose per hectare: 12kg. Sown area: 4,80ha x 12kg = 57.6kg/hour. Take the adjustment table at 57.6kg/hour, or number 28 on the adjustment knob.

#### **DIFFERENT TYPES OF ROTOR**

-	Very small white rotor for very fine seeds (flow rate <3kg/ha)
	Small green rotor for mustard, alfalfa, clover, rapeseed, phacele, insecticides
	Medium yellow rotor for radish, buckwheat, turnip, incarnate, rye, cereals
	Large red rotor for rye grass, fecal, oats, wheat, vetch
	Very large black rotor for beans, wheat, peas This rotor is in 4-fin version, attention it allows a regular flow only at very high speed. It is therefore suitable for a specific use.

#### **DELIMBE T15 DOUBLE TANK -Adjustment Table**

**DEBIT CALCULATION:** the adjustment table is given in flow/hour: selected working width x working tool speed x desired dose/hectare.

Example: 4.80 meters wide x 4 km/hour = 1.92 ha/hour = 1.92 ha x 10 kg = 19.2 kg/hour N°11 on the flow-hour controller

Density 0.65	Small flow rotor GREEN	Density 0.65	<b>Medium flow rotor</b> YELLOW
N°4	4.80 Kg/h	N°4	15.00 Kg/h
N°5	6.72 Kg/h	N°5	16.00 Kg/h
N°6	7.68 Kg/h	N°6	19.20 Kg/h
N°7	8.78 Kg/h	N°7	22.00 Kg/h
N°8	10.81Kg/h	N°8	27.00 Kg/h
N°9	12.90 Kg/h	N°9	32.25 Kg/h
N°10	15.75 Kg/h	N°10	39.50 Kg/h
N°11	18.43 Kg/h	N°11	46.00 Kg/h
N°12	21.67 Kg/h	N°12	54.00 Kg/h
N°13	26.60 Kg/h	N°13	66.50 Kg/h
N°14	29.70 Kg/h	N°14	74.25 Kg/h
N°15	33.79 Kg/h	N°15	84.47 Kg/h
N°16	36.00 Kg/h	N°16	90.00 Kg/h
N°17	39.69 Kg/h	N°17	99.20 Kg/h
N°18	43.13 Kg/h	N°18	107.82 Kg/h
N°19	45.57 Kg/h	N°19	113.25 Kg/h
N°20	47.00 Kg/h	N°20	117.50 Kg/h
N°21	48.00 Kg/h	N°21	120.00 Kg/h
N°22	48.76 Kg/h	N°22	122.00 Kg/h
N°23	49.28 Kg/h	N°23	124.00 Kg/h
N°24	51.00 Kg/h	N°24	127.00 Kg/h
N°25	52.00 Kg/h	N°25	130.00 Kg/h
N°26	53.50 Kg/h	N°26	133.75 Kg/h
N°27	54.50 Kg/h	N°27	136.25 Kg/h
N°28	57.60 Kg/h	N°28	144.00 Kg/h
N°29	58.00 Kg/h	N°29	146.00 Kg/h
N°30	59.50 Kg/h	N°30	148.50 Kg/h

#### FLOW RATE PER TANK

#### **DELIMBE T15 DOUBLE TANK -Adjustment Table**

**DEBIT CALCULATION:** the adjustment table is given in flow/hour: selected working width x working tool speed x desired dose/hectare.

Example: 4.80 meters wide x 4 km/hour = 1.92 ha/hour = 1.92 ha x 10 kg = 19.2 kg/hour N°11 on the flow-hour controller

	Rye Grass Big flow rotor	Density 0.75	Cereal Big flow rotor		Very big flow rotor
	RED		RED		BLACK
N°4	14 Kg/h	N°4	24 Kg/h	N°4	30.96 Kg/h
N°5	18 Kg/h	N°5	28 Kg/h	N°5	36.12 Kg/h
N°6	22 Kg/h	N°6	35Kg/h	N°6	45.15 Kg/h
N°7	26 Kg/h	N°7	39 Kg/h	N°7	50.31 Kg/h
N°8	30 Kg/h	N°8	44 Kg/h	N°8	56.76 Kg/h
N°9	34 Kg/h	N°9	53 Kg/h	N°9	68.37 Kg/h
N°10	38 Kg/h	N°10	63 Kg/h	N°10	81.27 Kg/h
N°11	42 Kg/h	N°11	72 Kg/h	N°11	92.88 Kg/h
N°12	46 Kg/h	N°12	82 Kg/h	N°12	105.78 Kg/h
N°13	49.5 Kg/h	N°13	92 Kg/h	N°13	118.68 Kg/h
N°14	53. Kg/h	N°14	102 Kg/h	N°14	131.58 Kg/h
N°15	56.5 Kg/h	N°15	112 Kg/h	N°15	144.48 Kg/h
N°16	60. Kg/h	N°16	121 Kg/h	N°16	158.67 Kg/h
N°17	63.5 Kg/h	N°17	131 Kg/h	N°17	168.99 Kg/h
N°18	67 Kg/h	N°18	141 Kg/h	N°18	181.89 Kg/h
N°19	70 Kg/h	N°19	150 Kg/h	N°19	193.50 Kg/h
N°20	73 Kg/h	N°20	158 Kg/h	N°20	203.82 Kg/h
N°21	76 Kg/h	N°21	167 Kg/h	N°21	215.43 Kg/h
N°22	79 Kg/h	N°22	175 Kg/h	N°22	225.75 Kg/h
N°23	82 Kg/h	N°23	180 Kg/h	N°23	232.20 Kg/h
N°24	85 Kg/h	N°24	192 Kg/h	N°24	247.68 Kg/h
N°25	88 Kg/h	N°25	200 Kg/h	N°25	258.00 Kg/h
N°26	91 Kg/h	N°26	208 Kg/h	N°26	268.32 Kg/h
N°27	94 Kg/h	N°27	215 Kg/h	N°27	277.35 Kg/h
N°28	97 Kg/h	N°28	220 Kg/h	N°28	283.80 Kg/h
N°29	100 Kg/h	N°29	227 Kg/h	N°29	292.83 Kg/h
N°30	103 Kg/h	N°30	233 Kg/h	N°30	300.50 Kg/h

#### FLOW RATE PER TANK

### ANTI SLUGS density

**DEBIT CALCULATION:** the adjustment table is given in flow/hour: selected working width x working tool speed x desired dose/hectare.

Very small flow white rotor							
MOTO	R 15/30 RUN/MIN	MOTOR	40/60 RUN/MIN				
N°4	0.80Kg/h	N°4	2.13Kg/h				
N°5	0.99Kg/h	N°5	2.42Kg/h				
N°6	1.16Kg/h	N°6	2.71Kg/h				
N°7	1.34Kg/h	N°7	3.01Kg/h				
N°8	1.52Kg/h	N°8	3.31Kg/h				
N°9	1.70Kg/h	N°9	3.61Kg/h				
N°10	1.88Kg/h	N°10	3.91Kg/h				
N°11	2.06Kg/h	N°11	4.21Kg/h				
N°12	2.24Kg/h	N°12	4.51Kg/h				
N°13	2.42Kg/h	N°13	4.82Kg/h				
N°14	2.60Kg/h	N°14	5.13Kg/h				
N°15	2.78Kg/h	N°15	5.23Kg/h				
N°16	2.96Kg/h	N°16	5.54Kg/h				
N°17	3.14Kg/h	N°17	5.85Kg/h				
N°18	3.32Kg/h	N°18	6.16Kg/h				
N°19	3.50Kg/h	N°19	6.47Kg/h				
N°20	3.68Kg/h	N°20	6.78Kg/h				
N°21	3.86Kg/h	N°21	7.09Kg/h				
N°22	4.04Kg/h	N°22	7.40Kg/h				
N°23	4.22Kg/h	N°23	7.72Kg/h				
N°24	4.40Kg/h	N°24	8.05Kg/h				
N°25	4.58Kg/h	N°25	8.38Kg/h				
N°26	4.76Kg/h	N°26	8.72Kg/h				
N°27	4.94Kg/h	N°27	9.56Kg/h				
N°28	5.12Kg/h	N°28	9.90Kg/h				
N°29	5.30Kg/h	N°29	10.58Kg/h				
N°30	5.48Kg/h	N°30	11.07Kg/h				

#### FLOW RATE PER TANK



NB\*: Light daily lubrication is recommended to ensure proper maintenance of the T15 seed drill.



## REPLACEMENT OF DISTRIBUTION ROTOR OFF DELIMBE T15

Correct positioning of distribution rotor, bibs and spring.



- 1. Release the spring : Original position bottom spring: 6H00 Original position top spring: 12H00



- 2. The spring releases the pressure of the 2 rubber flaps on the rotor.
- 3. Unscrew the 2 knurled knobs holding the grease bearing

The two knurled buttons, the rotor grease bearing and its 2 washers



Pull the spline from the distribution compartment

The positioning of the bibs is essential for the proper distribution of the seeds.

Replace the rotor to match the adjustment boards, reposition the grease bearing and washers, knurled knobs and finally the spring.

# DECLARATION CE DE CONFORMITE

# Le Constructeur : DELIMBE - F-27340 PONT DE L'ARCHE Déclare que le matériel neuf : SEMOIR PNEUMATIQUE

*Est conforme aux exigences essentielles de sécurité mentionnées dans la Directive européenne 2006/42 CE par application des normes harmonisées* 

Fait à PONT DE L'ARCHE

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