DELIMBE

Abbaye de Bonport – 27340 PONT DE L'ARCHE

✆ **02.35.23.27.62** – Fax 02.35.23.27.78

contact@delimbe.com

MICROGRANULATOR
SMALL SEED DISPENSER
ELECTRIC PNEUMATIC SEED DRILL
DOUBLE TANK DELIMBE T18

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 300 liters polyethylene.
Dimensions of the distributor:

- **300 liters:** 680 mm wide, 900mm high, 1880mm deep, weight 120 kgs.

Number of pipe outlets: 1 to 12 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 T18 MICROGRANULATOR SEED DRILL double tank distributor is designed to be placed in the center 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 T18 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 T18 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 T18 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 microgranules or seeds are ventilated by a high-speed turbine disc which is driven by a hydraulic motor.
To avoid jamming the seed drill, hydraulic ventilation must be triggered first and must be left running for the duration of the job.
There are 4 types of control boxes:

- A standard control box with adjustment scale in the cabin from 0 to 30, not DPA.
- A DPA box with a sensor installed at the end of the roll or on the back of a disk.
- A DPA ISO box with tractor information on the 7-pin socket.
- A DPA box with magnetic GPS antenna to attach to the roof of the tractor.

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 DPA sensor box, the device stops automatically as soon as you raise the cultivator because there is no more movement in front of the sensor. The sensor must be mounted with a stud on a wheel on the back of a roller end disc or on any rotating parts. The stud should pass 5 mm in front of the sensor.

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 T18 double tank and are provided for this purpose and 3 are available as an option, the white (very small flow), the green (small flow), the yellow (medium flow), the red (large flow). The green 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.

TANK EMPTYING: Relax the springs. Remove the black cabochons that secure the black and yellow flag bearing. Pull the flag and everything comes out, landing and groove. You can then empty the tank and clean the inside of the seeder with a brush.

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.

To do a calibration: Disassemble the hose holder with all the pipes by unscrewing the 4 butterfly screws. Remove the hose holder and put the funnel in place to collect the seed for one minute.

SETTING:

Since the T18 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 T18 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.

T18 equipped with SMALL SEED DRILL – green rotor:
Example 1: For microgranule seeding density 0.95, small green groove setting 1st speed. For a 6 row seeder, with seeding elements spaced at 80cm, working width 4.80m with a seeding speed of 4 km/h. 4.80m x 4km/h = 1.92ha/hour. Desired dose per hectare: 10kg. Seeded area: 1.92ha x 10kg/ha = 19.2 kg/hour. **Take the table, setting 19.2 kg = number 11.**

Example 2: For microgranule seeding density 0.95, small green groove setting 1st speed. For an 8-row seeder, with seeding units spaced at 80cm, working width 6.40m with a seeding speed of 5 km/h: 6.40m x 5km/h = 3.20ha/hour. Desired dose per hectare: 9kg. Seeded area: 3.20ha x 9kg/ha = 28.8 kg/hour. **Take the table, setting 28.8 kg = number 13.**

Example 3: For microgranule seeding density 0.95, small green groove setting 1st speed. For an 8-row sunflower seeder with seeding elements spaced at 45cm, working width 3.60m with a seeding speed of 5 km/h. 3.60m x 5km/h = 1.80ha/hour. Desired dose per hectare: 9kg. Seeded area: 1.80ha x 9kg/ha = 16.2 kg/hour. **Take the table, setting 16.2 kg = number 10.**

Example 4: for seeding small seeds density 0.65, setting small yellow groove 1st speed. For a mustard seeding on a 5-meter-wide cultivator, at a speed of 7 km/h for a 10 kg/hectare seeding. 5meters wide x 7 km/hour = 3.5 ha/hour. Desired dose per hectare: 10kg. Seeded area: 3.5ha x 10kg = 35kg/hour.
Take the 35kg/hour adjustment board, n°16 on the adjustment knob.

Example 5: for seeding small seeds density 0.65, setting small green rotor. For a mustard seeding on a 6-meter-wide cultivator, at a speed of 8 km/h for a 12 kg/hectare seeding. 6meters wide x 8 km/hour = 4.8 ha/hour. Desired dose per hectare: 12kg. Seeded area: 4.80ha x 12kg = 57.6kg/hour.

Take the adjustment table at 57.6kg/hour, n°22 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 T18 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

White rotor– very small flow

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

DELIMBE T18 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

Green rotor – small flow

	MOTOR 40/60 RUN/MIN	MOTOR 15/30 RUN/MIN
N°4	5.31 Kg/h	1.99 Kg/h
N°5	7.44 Kg/h	2.79 Kg/h
N°6	8.50 Kg/h	3.19 Kg/h
N°7	9.72 Kg/h	3.64 Kg/h
N°8	11.96 Kg/h	4.49 Kg/h
N°9	14.27 Kg/h	5.35 Kg/h
N°10	17.43 Kg/h	6.54 Kg/h
N°11	20.40 Kg/h	7.65 Kg/h
N°12	23.99 Kg/h	8.99 Kg/h
N°13	29.44 Kg/h	11.04 Kg/h
N°14	32.87 Kg/h	12.33 Kg/h
N°15	37.79 Kg/h	14.17 Kg/h
N°16	39.85 Kg/h	14.94 Kg/h
N°17	43.93 Kg/h	16.47 Kg/h
N°18	47.73 Kg/h	17.90 Kg/h
N°19	50.44 Kg/h	18.91 Kg/h
N°20	52.02 Kg/h	19.50 Kg/h
N°21	53.13 Kg/h	19.92 Kg/h
N°22	53.97 Kg/h	20.24 Kg/h
N°23	54.55 Kg/h	20.46 Kg/h
N°24	56.45 Kg/h	21.17 Kg/h
N°25	57.56 Kg/h	21.58 Kg/h
N°26	59.22 Kg/h	22.21 Kg/h
N°27	60.32 Kg/h	22.62 Kg/h
N°28	63.76 Kg/h	23.91 Kg/h
N°29	64.20 Kg/h	24.07 Kg/h
N°30	65.86 Kg/h	24.70 Kg/h

Yellow rotor – medium flow

	MOTOR 40/60 RUN/MIN	MOTOR 15/30 RUN/MIN
N°4	8.10 Kg/h	3.04 Kg/h
N°5	8.95 Kg/h	3.36 Kg/h
N°6	9.52 Kg/h	3.57 Kg/h
N°7	11.84 Kg/h	4.44 Kg/h
N°8	14.21 Kg/h	5.33 Kg/h
N°9	17.49 Kg/h	6.56 Kg/h
N°10	20.10 Kg/h	7.54 Kg/h
N°11	24.20 Kg/h	9.08 Kg/h
N°12	29.10 Kg/h	10.91 Kg/h
N°13	35.80 Kg/h	13.43 Kg/h
N°14	42.00 Kg/h	15.75 Kg/h
N°15	49.20 Kg/h	18.45 Kg/h
N°16	57.10 Kg/h	21.41 Kg/h
N°17	65.00 Kg/h	24.38 Kg/h
N°18	73.50 Kg/h	27.56 Kg/h
N°19	80.20 Kg/h	30.07 Kg/h
N°20	88.70 Kg/h	33.26 Kg/h
N°21	98.10 Kg/h	36.79 Kg/h
N°22	109.00 Kg/h	40.88 Kg/h
N°23	119.80 Kg/h	44.92 Kg/h
N°24	129.00 Kg/h	48.37 Kg/h
N°25	140.20 Kg/h	52.58 Kg/h
N°26	151.00 Kg/h	56.62 Kg/h
N°27	162.50 Kg/h	60.93 Kg/h
N°28	177.40 Kg/h	66.53 Kg/h
N°29	182.60 Kg/h	68.48 Kg/h
N°30	192.80 Kg/h	72.30 Kg/h

DELIMBE T18 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

Big rotor – large flow (RYE GRASS)

	MOTOR 40/60 RUN/MIN	MOTOR 15/30 RUN/MIN
N°4	15.50 Kg/h	5.81 Kg/h
N°5	19.92 Kg/h	7.47 Kg/h
N°6	24.35 Kg/h	9.13 Kg/h
N°7	28.77 Kg/h	10.78 Kg/h
N°8	33.21 Kg/h	12.45 Kg/h
N°9	37.63 Kg/h	14.11 Kg/h
N°10	42.06 Kg/h	15.77 Kg/h
N°11	46.49 Kg/h	17.43 Kg/h
N°12	50.92 Kg/h	19.09 Kg/h
N°13	54.79 Kg/h	20.55 Kg/h
N°14	58.66 Kg/h	21.99 Kg/h
N°15	62.53 Kg/h	23.44 Kg/h
N°16	66.41 Kg/h	24.90 Kg/h
N°17	70.28 Kg/h	26.35 Kg/h
N°18	74.16 Kg/h	27.81 Kg/h
N°19	77.48 Kg/h	29.05 Kg/h
N°20	80.80 Kg/h	30.30 Kg/h
N°21	84.12 Kg/h	31.55 Kg/h
N°22	87.44 Kg/h	32.79 Kg/h
N°23	90.76 Kg/h	34.03 Kg/h
N°24	94.08 Kg/h	35.28 Kg/h
N°25	97.40 Kg/h	36.52 Kg/h
N°26	100.72 Kg/h	37.77 Kg/h
N°27	104.04 Kg/h	39.15 Kg/h
N°28	107.36 Kg/h	40.26 Kg/h
N°29	110.68 Kg/h	41.50 Kg/h
N°30	114.00 Kg/h	42.75 Kg/h

Big rotor – large flow (CEREALES)

	MOTOR 40/60 RUN/MIN	MOTOR 15/30 RUN/MIN
N°4	26.56 Kg/h	9.96 Kg/h
N°5	30.99 Kg/h	11.62 Kg/h
N°6	38.74 Kg/h	14.53 Kg/h
N°7	43.16 Kg/h	16.19 Kg/h
N°8	48.70 Kg/h	18.26 Kg/h
N°9	58.66 Kg/h	21.99 Kg/h
N°10	69.73 Kg/h	26.15 Kg/h
N°11	79.69 Kg/h	29.88 Kg/h
N°12	90.76 Kg/h	34.04 Kg/h
N°13	101.83 Kg/h	38.19 Kg/h
N°14	112.90 Kg/h	42.34 Kg/h
N°15	123.97 Kg/h	46.49 Kg/h
N°16	133.93 Kg/h	50.22 Kg/h
N°17	145.00 Kg/h	54.38 Kg/h
N°18	156.07 Kg/h	58.53 Kg/h
N°19	166.00 Kg/h	62.25 Kg/h
N°20	174.88 Kg/h	65.58 Kg/h
N°21	184.85 Kg/h	69.32 Kg/h
N°22	193.70 Kg/h	72.64 Kg/h
N°23	199.24 Kg/h	74.72 Kg/h
N°24	212.52 Kg/h	79.70 Kg/h
N°25	221.37 Kg/h	83.01 Kg/h
N°26	230.23 Kg/h	86.34 Kg/h
N°27	236.87 Kg/h	88.83 Kg/h
N°28	237.98 Kg/h	89.24 Kg/h
N°29	251.26 Kg/h	94.22 Kg/h
N°30	257.90 Kg/h	96.71 Kg/h

DELIMBE T18 DOUBLE TANK -Adjustment Table

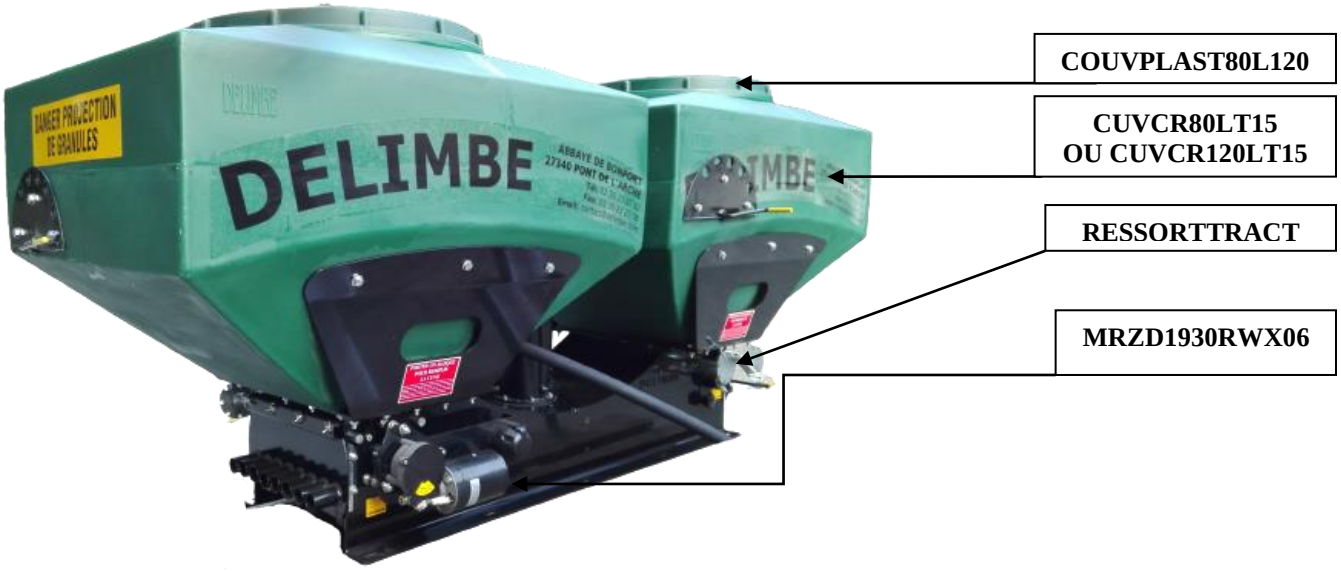
DEBIT CALCULATION: the adjustment table is given in flow/hour: selected working width x working tool speed x desired dose/hectare.

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

Black rotor - very large flow (CEREALES)

	MOTOR 40/60 RUN/MIN	MOTOR 15/30 RUN/MIN
N°4	33.90 kg/h	12.71 kg/h
N°5	39.56 kg/h	14.84 kg/h
N°6	49.45 kg/h	18.54 kg/h
N°7	55.09 kg/h	20.66 kg/h
N°8	62.17 kg/h	23.31 kg/h
N°9	74.88 kg/h	28.08 kg/h
N°10	89.02 kg/h	33.38 kg/h
N°11	100.73 kg/h	37.77 kg/h
N°12	115.86 kg/h	43.44 kg/h
N°13	130.00 kg/h	48.75 kg/h
N°14	144.13 kg/h	54.04 kg/h
N°15	158.26 kg/h	59.35 kg/h
N°16	172.23 kg/h	64.59 kg/h
N°17	186.46 kg/h	69.92 kg/h
N°18	201.51 kg/h	75.57 kg/h
N°19	214.33 kg/h	80.37 kg/h
N°20	225.80 kg/h	84.67 kg/h
N°21	238.67 kg/h	89.50 kg/h
N°22	250.10 kg/h	93.79 kg/h
N°23	25.725 kg/h	96.47 kg/h
N°24	274.39 kg/h	102.89 kg/h
N°25	285.82 kg/h	107.18 kg/h
N°26	297.26 kg/h	111.47 kg/h
N°27	307.27 kg/h	115.22 kg/h
N°28	318.75 kg/h	119.53 kg/h
N°29	324.42 kg/h	121.66 kg/h
N°30	333.00 kg/h	124.875 kg/h

SCHEMA – PHOTO DELIMBE T18 DOUBLE TANK



REFERENCE	NAME
COUVPLAST80L120	CAP
CUVCR80/120LT15T11	TANK
MRZD1930RWX06	ELECTRIC DISTRIBUTION MOTOR
BOITIERCDET18D	CONTROL BOX T18 DOUBLE TANK
DPACAPTEUR	DPA PER SENSOR
DPAISO	DPA ISO PLUG 7 PLOTS
DPAANTGPS	DPA WITH GPS ANTENNA AND LIMIT SWITCH
RESSORTTRACT	TRACTOR SPRING
SUPPTUYT18(1S)	HOSE HOLDER (specify the number of outlets desired at the end of the reference)

NB: Light daily lubrication is recommended to ensure proper maintenance of the T18 seed drill.*

REPLACEMENT OF DISTRIBUTION ROTOR OFF DELIMBE T18

Correct positioning of distribution rotor, bibs and spring.

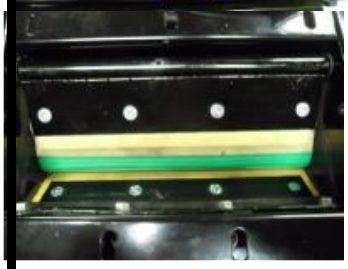
1. Release the spring : Original position bottom spring: 6H00
   Original position top spring: 12H00

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