# **DELIMBE**

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# MICROGRANULATOR SEED DISPENSER PNEUMATIC ELECTRIC SEED DRILL DELIMBE T18



We thank you for choosing this air seeder to which we have given the constant concern of quality to offer you a product of the highest order. In order to make the most of your DELIMBE T18 seed drill we invite you to read carefully all the indications mentioned in this leaflet.

# **TECHNICAL NOTICE**

### **TECHNICAL FEATURES:**

Steel frame painted in epoxy oven-baked paint.

Capacity of the plastic tank: 300 liters.

**Distributor dimensions**: 670 mm wide, 900 mm high, 1200 mm deep, 60 kgs.

Number of pipe outlets: from 1 to 12 outlets.

Flow rate adjustable by speed of electrically controlled splines.

Power supply voltage: 12volts.

Ventilation engine power: 140 Watts.

Ventilation turbine powered by an electric motor.

Distribution engine power: 70 Watts.

### **INSTALLATION-MOUNTING:**

The DELIMBE T18 MICROGRANULATOR SEED DRILL 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 during filling. When mounting the device on the carrier tool, provide protection (safety guard). A platform must be installed with a handrail railing and access stairs to allow safe tank filling.

Provide openwork and non-slip metal.

When the T18 dispenser is used as a microgranulator (green or stainless steel spline) on a seed drill, place the downpipes on the seed drill base, solder a 30mm diameter tube on each base. When the T18 microgranulator is used as a small seed drill, place the splitters in such a way that the seed falls behind the bases of the cultivator and before the roll.

The small seeds will be covered by the projections of the roll. The spark gaps can be placed between 30 and 70 cm apart and at 30-40cm height of ground.

If it is not possible to attach the spark gaps to the roller frame, make a bracket. Hoses should be mounted as short as possible. Secure hoses in such a way as to avoid counter slopes and elbows.

### **SAFETY RULES:**

After securing the DELIMBE T18, check the stiffness of the assembly and use all the mounting points on the DELIMBE chassis.

When mounting, the installer must ensure that a means of access to the hopper is provided. This may be a bridge attached to the rack. It must be accessible by a staircase whose non-slip steps will have a depth of between 28 and 35 cm.

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

To prevent possible accidents, wear respiratory protection when filling the hopper and using the device, as well as chemical-appropriate clothing.

Before any intervention unplug the device: unplug the electrical and hydraulic connections.

Keep anyone at a distance (at least 10m) during work. Although protected, do not approach the rotating disc.

The DELIMBE SMALL SEED PLANTER T18 has been designed to be used on the back of a tractor. For installation cases deviating from the intended conditions, consult the manufacturer. It can also be used on any planter, seeder or cultivator, it is important to keep a slope of descent in the pipes, avoid the slopes...

### **CONNECTION:**

Electrical connection conditions with the standard control box:

- The switch (INTER2B on the drawing) is used to start the distribution.
- The 2nd switch (INTER2B on the drawing) is used to start the ventilation
- The 0 to 30 graduated knob (BOUTPOT) is used for flow adjustment.
- At the end of the field, manually stop the distribution with the cabin switch (allow ventilation to rotate).
- 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. PAY ATTENTION IN CASE OF POLARITY INVERSION YOU MAY BLOW THE FLOW CONTROL POTENTIOMETER WHICH WOULD BE DEFINITIVELY OUT OF SERVICE.
- Check that the ventilation is rotating in the correct direction (arrow direction).

### **USE:**

The microgranules or seeds are ventilated by a high-speed turbine disc.

- The device is switched on and off with the switch and indicator light.
- Flow adjustment is done by turning the knob on the cabin control box.
- Ventilation is done with the switch.
- At the end of the field, manually stop the distribution with the cabin switch but allow the ventilation to rotate.

### **DEBIT REGULATION:**

- The flow adjustment is done with a separate groove for each downpipe, driven by an electric motor connected to an electronic enclosure in the cabin allowing also an adjustment of 3 to 278kg/hour (for a higher flow consult us).
- The rotor is electronically regulated by a cabin enclosure. A scale of 0 to 30 allows the adjustment of the device's flow rate. A light indicates the on and off flow.
- There are 4 types of control boxes:
  - A standard control box with adjustment scale in the cabin from 0 to 30, not DPA
  - o A DPA box with a sensor installed at the end of the roll or on the back of a disk
  - o A DPA ISO box with tractor information on the 7-pin socket.
  - o A DPA box with magnetic GPS antenna to attach to the roof of the tractor
- The device is new, before filling the hopper, check that the engine is running in the correct direction (arrow direction). A visual reference is installed at the end of the rotor shaft.
- The vessel is pressurized, so use the closed capping device.

EMPTYING OF THE TANK: A rotor end hatch is provided for emptying. To drain the tank, unscrew the two black cabochons on each side of the rotating butterfly to visualize

the operation of the device. Now that you have removed the 2 black cabochons pull the butterfly and the groove bearing assembly will come out, you can drain your device.

STORAGE: protected from the whole machine and its control box.

AFTER EACH USE: completely clean your water/blower machine, pay attention to the different electrical and electronic parts, check that no seed (especially for corrosive seeds) remains in your machine: tank and distribution system, The same goes for your pipes and spark gaps.

### **DEBIT CALCULATION:**

The adjustment table is given as a guide in flow rate/hour:

### WORKING WIDTH X SPEED OF THE TILLAGE TOOL X DOSE/HECTARE

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

### **ADJUSTING:**

Since the T18 DELIMBE is an electrical device, the flow rate must be calculated per hour. Working width multiplied by speed of advance equal area sown in one hour. Take the seeded area in one hour and multiply by the dose/hectare. Then take the adjustment table.

The DELIMBE T18 can be equipped, either as a small seed planter yellow flute, or as a Microgranulator green flute or for the Ray-grass red flute, the color of the flute is visible at the end of the rotor or by the hopper.

### T18 equipped with MICROGRANULATOR – green flute:

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.  $4.80m \times 4km/h = 1.92ha/hour$ . Desired dose per hectare: 10kg. Seeded area:  $1.92ha \times 10kg/ha = 19.2 kg/hour$ . 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:  $6.40m \times 5$ km/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.  $3.60m \times 5 \text{km/h} = 1.80 \text{ha/hour}$ . Desired dose per hectare: 9kg. Seeded area:  $1.80 \text{ha} \times 9 \text{kg/ha} = 16.2 \text{kg/hour}$ . Take the table, setting 16.2 kg = number 10.

### T18 SEEDER SMALL SEED – green rotor:

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: 10 kg. Seeded area:  $3.5 \text{ha} \times 10 \text{kg} = 35 \text{kg/hour}$ .

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.

## THE DIFFERENT KIND OF ROTORS

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 -Adjustments tables**

**CALCULATION OF FLOW:** the adjustment table is given in rate/hour: working width chosen x speed of the work tool x dose/hectare desired.

### <u>Green rotor – small flow</u>

### $\underline{Yellow\ rotor-medium\ flow}$

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

	MOTOR	MOTOR
	40/60 RUN/MIN	15/30 RUN/MIN
N°4	7.90 Kg/h	2.95 Kg/h
N°5	8.52 Kg/h	3.20 Kg/h
N°6	9.50 Kg/h	3.56 Kg/h
N°7	11.70 Kg/h	4.38 Kg/h
N°8	13.70 Kg/h	5.14 Kg/h
N°9	15.80 Kg/h	5.93 Kg/h
N°10	18.10 Kg/h	6.79 Kg/h
N°11	22.20 Kg/h	8.33 Kg/h
N°12	26.40 Kg/h	9.90 Kg/h
N°13	31.70 Kg/h	11.89 Kg/h
N°14	36.10 Kg/h	13.54 Kg/h
N°15	41.00 Kg/h	15.38 Kg/h
N°16	45.20 Kg/h	16.95 Kg/h
N°17	50.80 Kg/h	19.05 Kg/h
N°18	55.10 Kg/h	20.66 Kg/h
N°19	58.20 Kg/h	21.83 Kg/h
N°20	63.24 Kg/h	23.72 Kg/h
N°21	67.50 Kg/h	25.31 Kg/h
N°22	72.80 Kg/h	27.30 Kg/h
N°23	77.20 Kg/h	28.95 Kg/h
N°24	82.10 Kg/h	30.79 Kg/h
N°25	87.20 Kg/h	32.70 Kg/h
N°26	92.50 Kg/h	34.69 Kg/h
N°27	97.80 Kg/h	36.68 Kg/h
N°28	102.20 Kg/h	38.33 Kg/h
N°29	107.80 Kg/h	40.43 Kg/h
N°30	117.00 Kg/h	43.88 Kg/h

# **DELIMBE T18 -Adjustments tables**

**CALCULATION OF FLOW:** the adjustment table is given in rate/hour: working width chosen x speed of the work tool x dose/hectare desired.

<u>Red rotor – big flow (RAY GRASS)</u>

**Red rotor - big flow** (CEREALES)

	MOTOR 40/60 RUN/MIN	MOTOR 15/30 RUN/MIN		MOTOR 40/60 RUN/MIN	MOTOR 15/30 RUN/MIN
N°4	15.50 Kg/h	5.81 Kg/h	N°4	26.56 Kg/h	9.96 Kg/h
N°5	19.92 Kg/h	7.47 Kg/h	N°5	30.99 Kg/h	11.62 Kg/h
N°6	24.35 Kg/h	9.13 Kg/h	N°6	38.74 Kg/h	14.53 Kg/h
N°7	28.77 Kg/h	10.78 Kg/h	N°7	43.16 Kg/h	16.19 Kg/h
N°8	33.21 Kg/h	12.45 Kg/h	N°8	48.70 Kg/h	18.26 Kg/h
N°9	37.63 Kg/h	14.11 Kg/h	N°9	58.66 Kg/h	21.99 Kg/h
N°10	42.06 Kg/h	15.77 Kg/h	N°10	69.73 Kg/h	26.15 Kg/h
N°11	46.49 Kg/h	17.43 Kg/h	N°11	79.69 Kg/h	29.88 Kg/h
N°12	50.92 Kg/h	19.09 Kg/h	N°12	90.76 Kg/h	34.04 Kg/h
N°13	54.79 Kg/h	20.55 Kg/h	N°13	101.83 Kg/h	38.19 Kg/h
N°14	58.66 Kg/h	21.99 Kg/h	N°14	112.90 Kg/h	42.34 Kg/h
N°15	62.53 Kg/h	23.44 Kg/h	N°15	123.97 Kg/h	46.49 Kg/h
N°16	66.41 Kg/h	24.90 Kg/h	N°16	133.93 Kg/h	50.22 Kg/h
N°17	70.28 Kg/h	26.35 Kg/h	N°17	145.00 Kg/h	54.38 Kg/h
N°18	74.16 Kg/h	27.81 Kg/h	N°18	156.07 Kg/h	58.53 Kg/h
N°19	77.48 Kg/h	29.05 Kg/h	N°19	166.00 Kg/h	62.25 Kg/h
N°20	80.80 Kg/h	30.30 Kg/h	N°20	174.88 Kg/h	65.58 Kg/h
N°21	84.12 Kg/h	31.55 Kg/h	N°21	184.85 Kg/h	69.32 Kg/h
N°22	87.44 Kg/h	32.79 Kg/h	N°22	193.70 Kg/h	72.64 Kg/h
N°23	90.76 Kg/h	34.03 Kg/h	N°23	199.24 Kg/h	74.72 Kg/h
N°24	94.08 Kg/h	35.28 Kg/h	N°24	212.52 Kg/h	79.70 Kg/h
N°25	97.40 Kg/h	36.52 Kg/h	N°25	221.37 Kg/h	83.01 Kg/h
N°26	100.72 Kg/h	37.77 Kg/h	N°26	230.23 Kg/h	86.34 Kg/h
N°27	104.04 Kg/h	39.15 Kg/h	N°27	236.87 Kg/h	88.83 Kg/h
N°28	107.36 Kg/h	40.26 Kg/h	N°28	237.98 Kg/h	89.24 Kg/h
N°29	110.68 Kg/h	41.50 Kg/h	N°29	251.26 Kg/h	94.22 Kg/h
N°30	114.00 Kg/h	42.75 Kg/h	N°30	257.90 Kg/h	96.71 Kg/h

# **DELIMBE T18 -Adjustments tables**

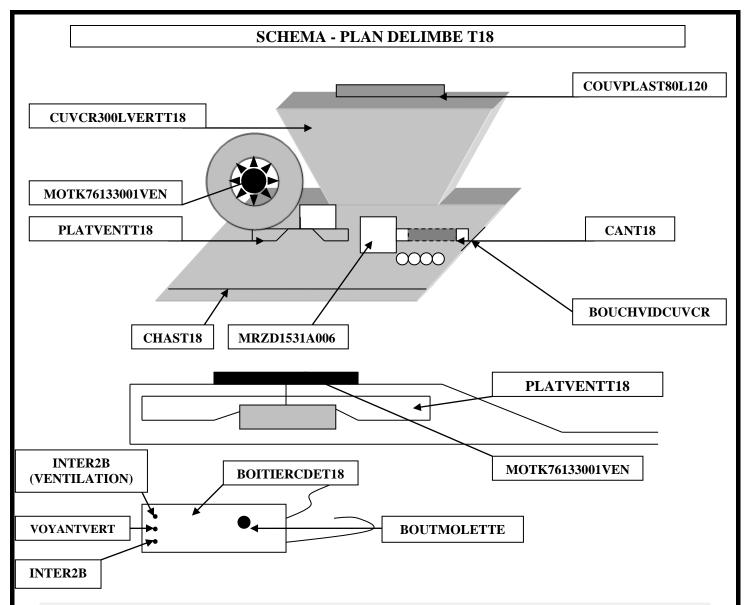
**CALCULATION OF FLOW:** the adjustment table is given in rate/hour: working width chosen x speed of the work tool x dose/hectare desired.

White rotor – very small flow

**Black rotor – very large flow (CEREALES)** 

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

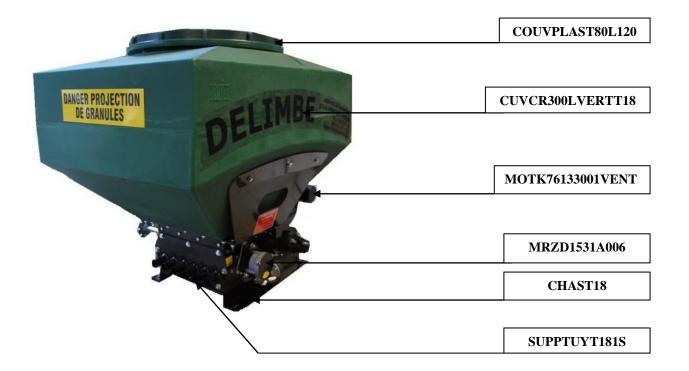
	MOTOR	MOTOR
	40/60 RUN/MIN	15/30 RUN/MIN
N°4	33.90 kg/h	12.71 kg/h
N°5	39.56 kg/h	14.84 kg/h
N°6	49.45 kg/h	18.54 kg/h
N°7	55.09 kg/h	20.66 kg/h
N°8	62.17 kg/h	23.31 kg/h
N°9	74.88 kg/h	28.08 kg/h
N°10	89.02 kg/h	33.38 kg/h
N°11	100.73 kg/h	37.77 kg/h
N°12	115.86 kg/h	43.44 kg/h
N°13	130.00 kg/h	48.75 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

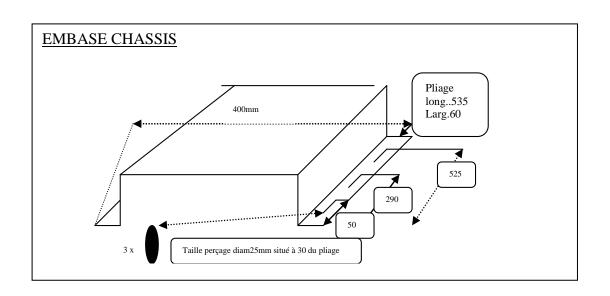


REFERENCE	NAME
CHAST18	CHASSIS
COUVPLAST80L120	CAP
CANT18	ROTOR
CUVCR300LVERTT18	TANK
MRZD1531A006	DISTRIBUTION ELECTRIC MOTOR
MOTK76133001VENT	VENTILATION ELECTRIC MOTOR
BOUCHVIDCUVCR	SCREW-ON DRAIN CAP
PLATVENTT18	VENTILATION BEARING
BOITIERCDET18	CONTROL BOX
BOUTMOLETTE	DEBIT ADJUSTMENT KNOB
INTER2B	VENTILATION ON/OFF SWITCH
INTER2B	DISTRIBUTION ON/OFF SWITCH
VOYANTVERT	GREEN LIGHT DISPLAY
RESSORTTRACT	TRACTOR BIB
SUPPTUYT18(1S)	HOSE HOLDER (specify the desired output number at the end of the reference)
DRAPEAU	BUTTERFLY FLAG

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

### **SCHEMA – PHOTO DELIMBE T18**





# 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 ( E 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