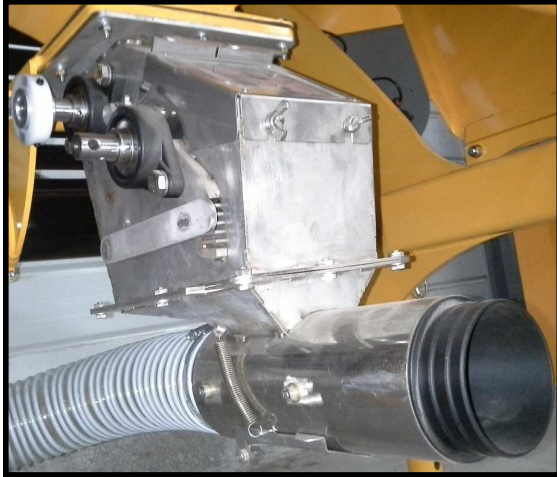


Distribution system

Either with outlet
1 X Ø90



Or with outlet
2 X Ø70



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1- Distribution system: Maximum seeding rate

Each distribution system has a maximum possible seeding rate

- Distribution 1 x Ø90 → 500 kg/hour
- Distribution 2 x Ø70 → 600 kg/hour

To find out the maximum speed possible without clogging up the distribution system, the following formula is used:

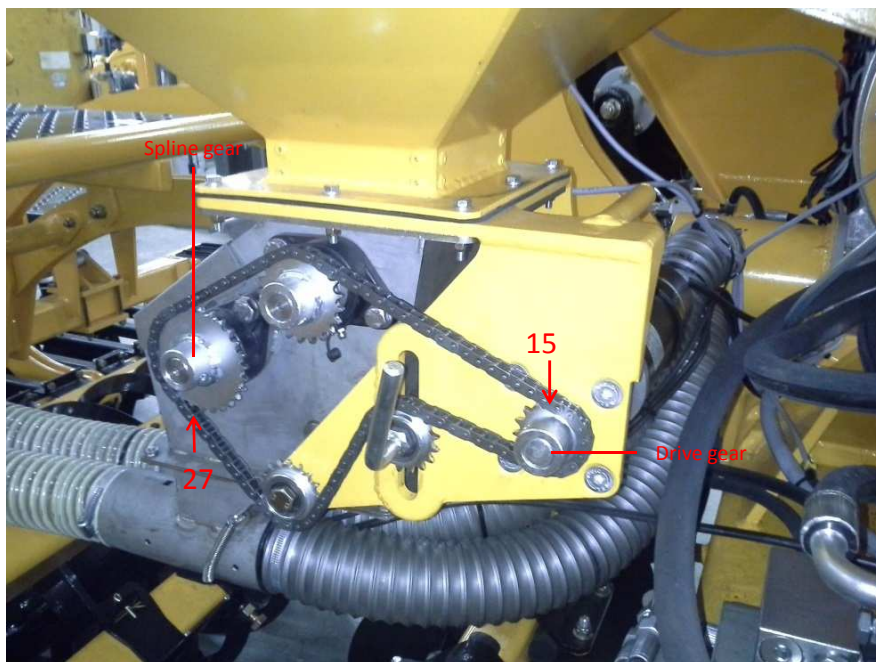
- For distribution 1 x Ø90:
 $(500 / \text{width of seed drill} / \text{quantity per ha}) \times 10 = \text{max. speed}$
- For distribution 2 x Ø70:
 $(600 / \text{width of seed drill} / \text{quantity per ha}) \times 10 = \text{max. speed}$

En / April 15



2- Distribution system: Gear ratio

The ratio between the drive gear and the spline gear is **1,8**.



Originally, these are gears with 15 for the motor and 27 for the metering unit

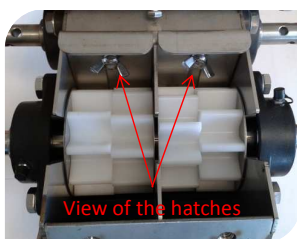
En / April 15



3- Distribution system: Opening hatch



Hatches closed



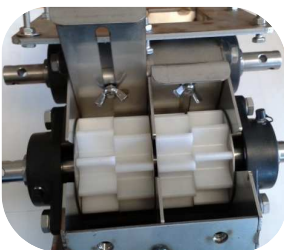
View of the hatches

The hatches are used to close the distribution system opening—as when a spline is replaced.

The hatches lock using the wing screw.



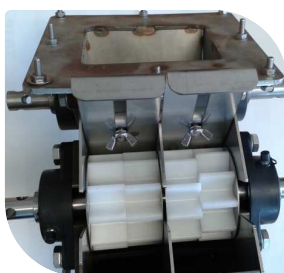
1 of the 2 hatches open



In sowing mode, the hatches must be open.



Hatches open

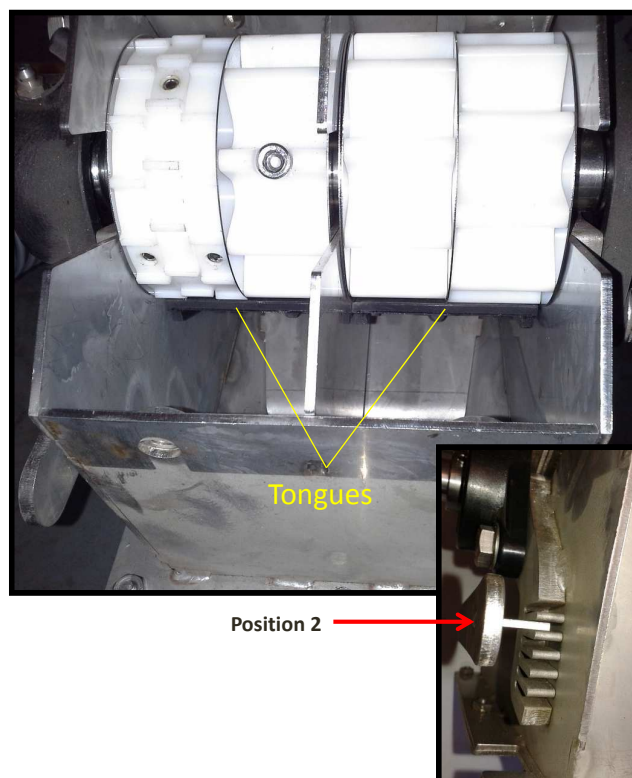
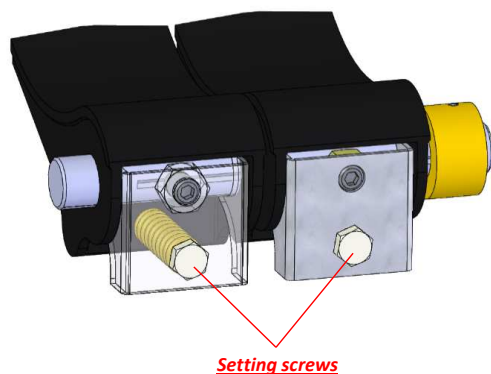


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4- Distribution system: Tongues

The tongues are arranged on the same shaft and are controlled by the same lever. However, each of them can be individually adjusted to achieve optimum accuracy.

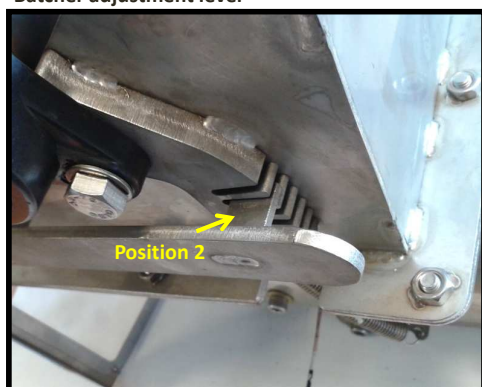


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5- Distribution system: Tongue positioning

Batcher adjustment lever

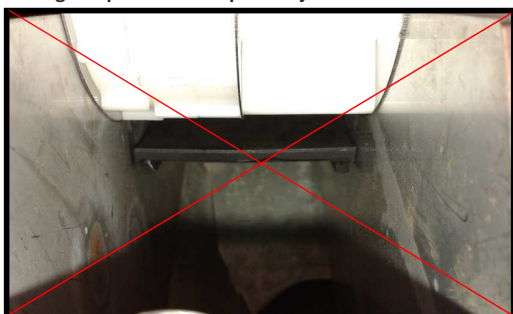


To check that the tongues are positioned correctly, just move the batcher adjustment lever to position 2.

The tongues must rest lightly on the splines as shown in the photo below.

If they do not, adjust the pressure of each tongue (see next page for adjustment).

Tongue open too far = poor adjustment



Tongue resting lightly = correct adjustment



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6- Distribution system: Tongue adjustment



To modify the positioning of the tongues, start by removing the grille protecting the tongue setting screws at the back of the distribution system.

Tools: size 8 wrench to remove the 4 bolts.

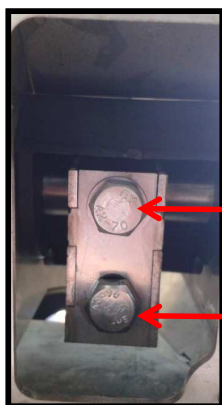
Tip: Keep one bolt in place to hold the grille.



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6- Distribution system: Tongue adjustment



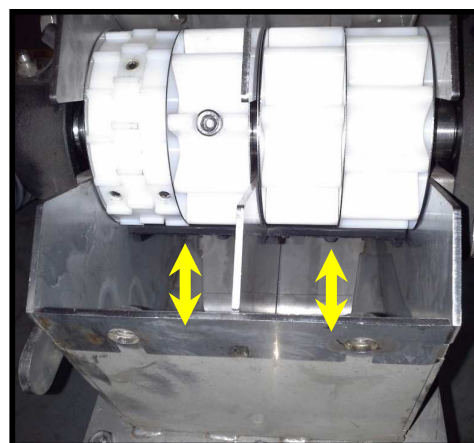
Tongue retaining bolt

Tongue setting screw

- The top bolt holds the tongue on its axle. The bolt must be tightened to its maximum. Check that it is properly tightened once a year.
- The bottom bolt is used to adjust the positioning of the tongue.

The tongues must rest lightly on the splines when the batcher adjustment lever is in position 2. The tongues must be at the same level.

Tools: size 13 wrench to loosen/tighten the setting screw



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6- Distribution system: Tongue adjustment



- When the setting screw is tightened, the tongue opens.



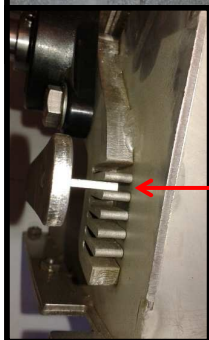
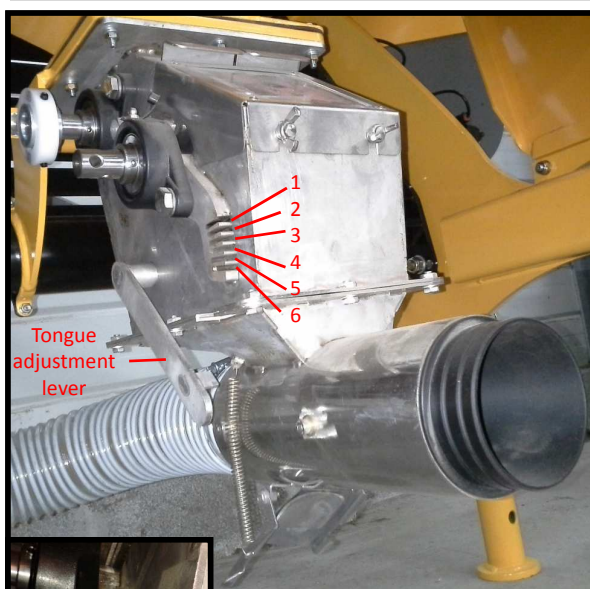
- When the setting screw is loosened, the tongue closes.

- Once the tongues have been adjusted, replace the protective grille.

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6- Distribution system: Tongue adjustment

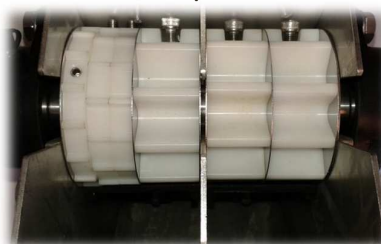
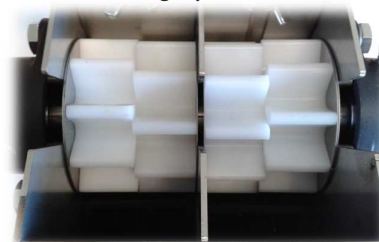


Tongue position

- Depending on the type of seeds, adjust the tongue by default:
 - Position 1: Rape, small seeds
 - Position 2: Wheat - Barley
 - Position 3/4: Oats
 - Position 5/6: Peas - Horse bean
- In the attached photo, the distribution system is in hopper discharge position.
- Position 2 is the standard factory configuration for all of our distribution systems.

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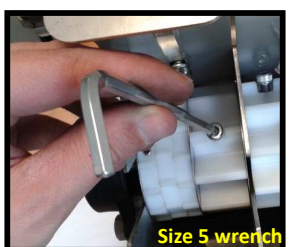


7- Distribution Ø90**Outlet 1 X Ø90****Small spline kit****Standard assembly****Large spline kit**

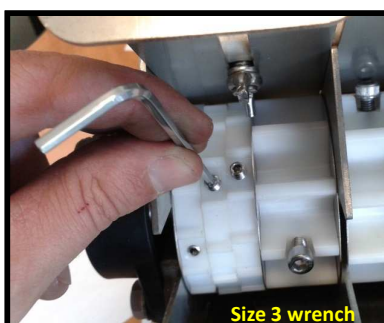
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**8- Distribution Ø90: Adjustment of small splines**

To use the small splines only, close the RH hatch of the distribution system. This prevents the 2 large splines disconnecting.

**Size 5 wrench**

Use a size 5 Allen key to disconnect the large spline on the LH side of the distribution system. Do not unscrew it completely. The bolt head must rest against the hatch to lock the spline in place.

**Size 3 wrench**

Use a size 3 Allen key to disconnect the small splines according to the required quantity. Do not unscrew them completely. The bolt head must rest against the hatch to lock the spline in place.

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8- Distribution Ø90: Adjustment of small splines

Depending on the hectare quantity required, 1, 2 or 3 small splines will be engaged when sowing small seeds such as rape.



3 small splines engaged



2 small splines engaged



1 small spline engaged



Splines locked

Depending on the results of the seeding rate test and the seed drill's minimum and maximum speeds indicated during the seeding rate test, 1, 2 or 3 small splines need to be engaged.

N.B.: The average range of the motor must always be targeted.

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8- Distribution Ø90 : Réglage des petites cannelures

Selon la quantité Hectare souhaitée ; 1, 2 ou les 3 petites cannelures seront engagées lors du semis de petites graines tel que le Colza.



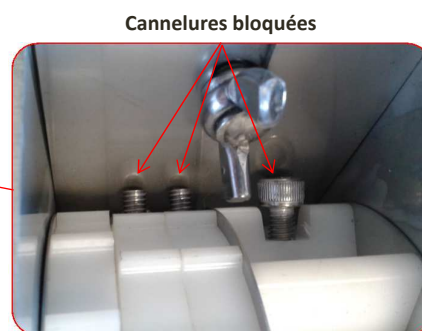
3 petites cannelures engagées



2 petites cannelures engagées



1 petite cannelure engagée



Cannelures bloquées

Voici la limite en Kg pour un ratio de pignon de 1 (21-21 dents) en fonction du nombre de petites cannelures engagées.

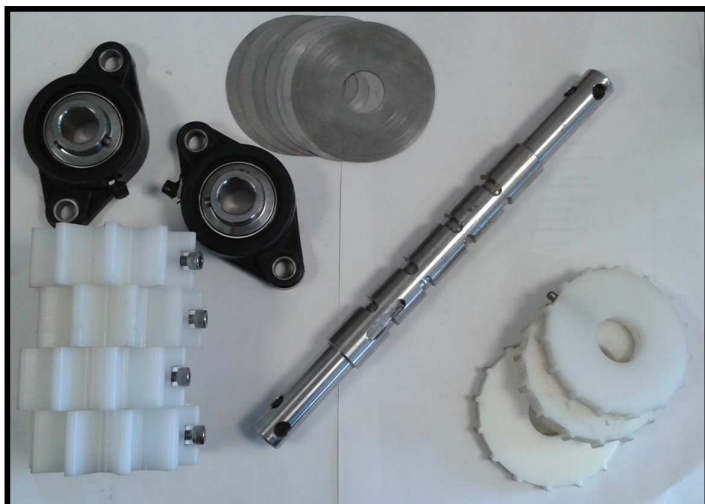
	Colza 3,00 m			Colza 3,50 m			Colza 4 m			Colza 4,50 m			Colza 5,00 m			Colza 6,00 m		
kg	1,91	3,82	5,73	1,64	3,28	4,91	1,43	2,87	4,30	1,27	2,55	3,82	1,15	2,29	3,44	0,96	1,91	2,87

Eléments de référence:

Poids Spécifique du colza : 77

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9- Distribution Ø90: spline kit

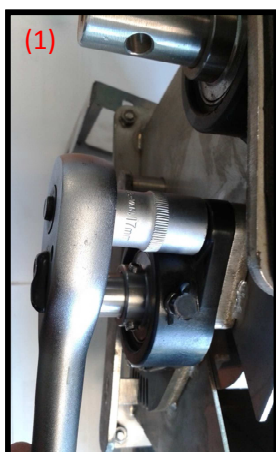
The spline kit for each distribution system includes:

- 1 shaft
- 2 bearings
- 8 adjustment washers
- 3 small splines
- 4 large splines



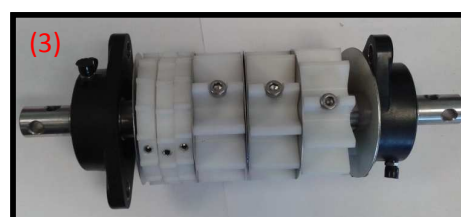
View of the distribution shaft

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**10- Distribution Ø90: Spline replacement**

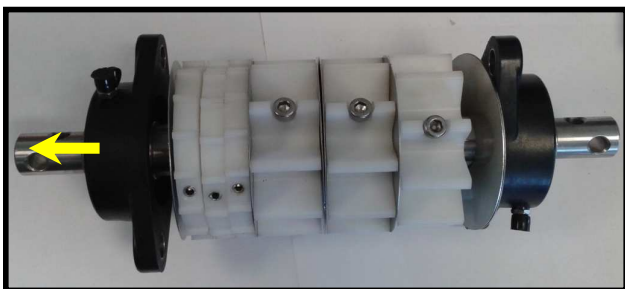
To change the splines, start by undoing the bearing bolts (1), then remove the distribution system's spline system (2). Place the spline system (3) on a flat surface to make spline replacement easier.

Tools: size 17 wrench to undo the 2 bolts on each bearing.



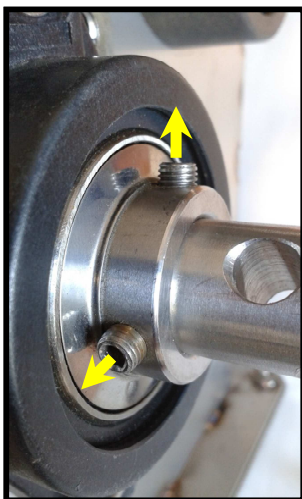
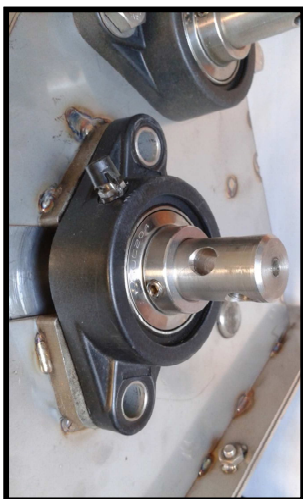
En / April 15



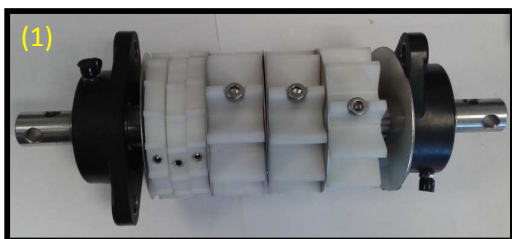
10- Distribution Ø90: Spline replacement

- Undo the 2 bolts on the bearing (on the left of the spline system) using a size 3 Allen key, then remove the bearing from the shaft.

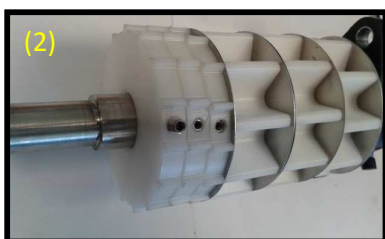
Tools: size 3 Allen key



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**10- Distribution Ø90: Spline replacement**

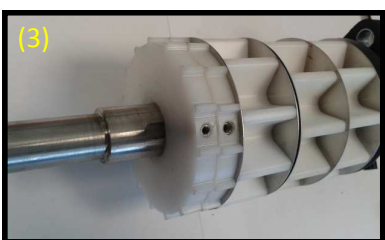
- Remove the LH adjustment washer(s) **(1)**.



- Disconnect the first small spline **(2)** from the distribution shaft. Do not unscrew it completely.



Tools: size 3 Allen key



- Remove the first small spline **(3)**.

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10- Distribution Ø90: Spline replacement

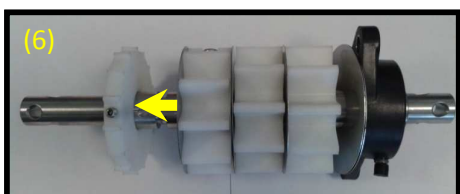
- Disconnect and remove the second small spline **(4)**. Do not unscrew it completely.

Tools: size 3 Allen key



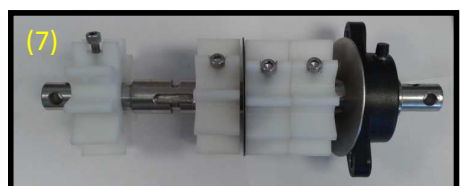
- Disconnect and remove the third small spline **(5)**. Do not unscrew it completely.

Tools: size 3 Allen key



- Remove the adjustment washer(s).

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**10- Distribution Ø90: Spline replacement**

- Insert the fourth large spline **(7)**.

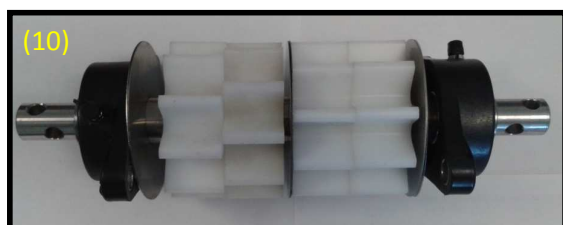


- Tighten the bolt for the fourth large spline **(8)** in the groove on the distribution shaft.

Tools: size 5 Allen key



- Insert the adjustment washer(s) **(9)** depending on the play in the distribution system.

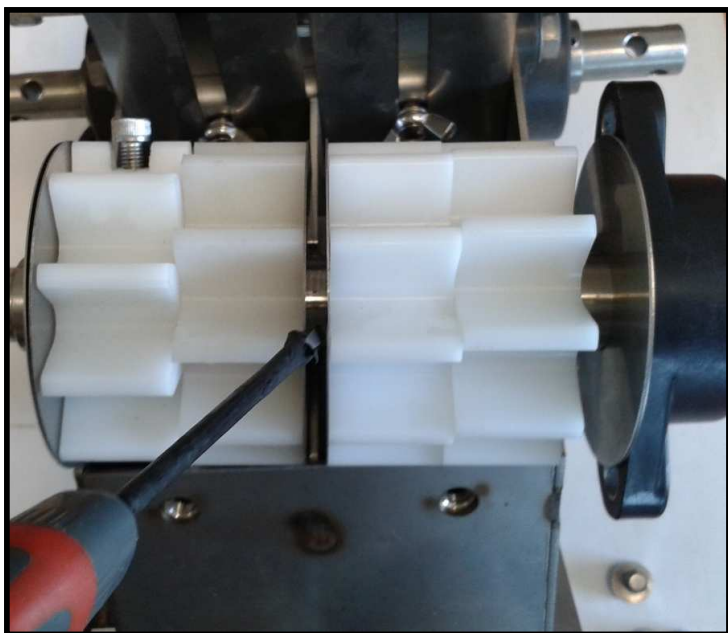


- Replace the bearing and tighten the 2 bearing bolts on the shaft **(10)**.

Tools: size 2.5 Allen key

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10- Distribution Ø90: Spline replacement

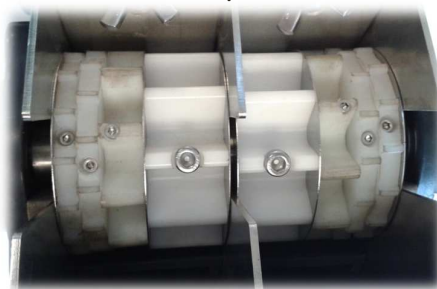
When the spline system is inserted into the distribution system, make sure that the adjustment washers are fitted on either side of the distribution system partition. The most practical way to do this is to use a screwdriver as shown in the attached photo.

The number of washers depends on the play between the splines and the distribution system body.



Check if the spline system rotates correctly without sticking. To do this, turn the shaft by hand. You must be able to turn it.
If not, check the cleanliness of the distribution system and/or remove adjustment washers.

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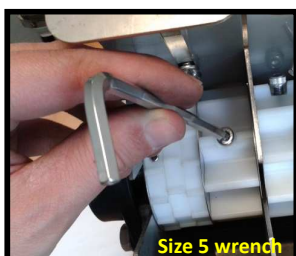
**11- Distribution Ø70****Outlet 2 X Ø70****Small spline kit****Standard assembly****Large spline kit**

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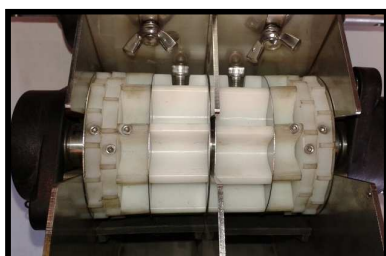


12- Distribution Ø70: Adjustment of small splines

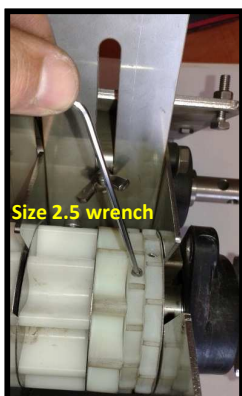
To use the small splines only, the 2 hatches must be open.



Size 5 wrench



Use a size 5 Allen key to disconnect the 2 large splines of the distribution system. Do not unscrew them completely. The bolt head must rest against the hatch to lock the spline in place.



Size 2.5 wrench

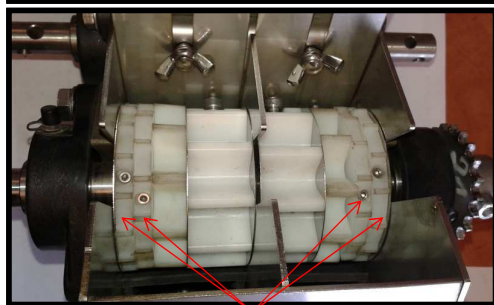


Use a size 2.5 Allen key to disconnect the 2 medium-sized splines. Do not unscrew them completely. The bolt head must rest against the hatch to lock the spline in place.

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**12- Distribution Ø70: Adjustment of small splines**

Depending on the hectare quantity required, 2 or 4 small splines will be engaged when sowing small seeds such as rape.

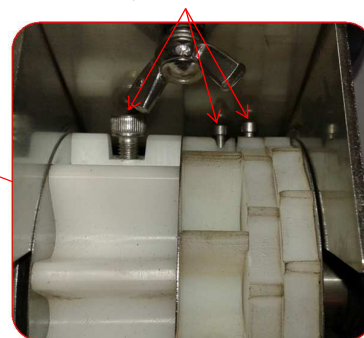


4 small splines engaged



2 small splines engaged

Splines locked



Depending on the results of the seeding rate test and the seed drill's minimum and maximum speeds indicated during the seeding rate test, 2 or 4 small splines need to be engaged.

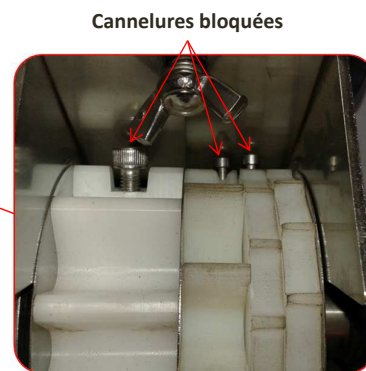
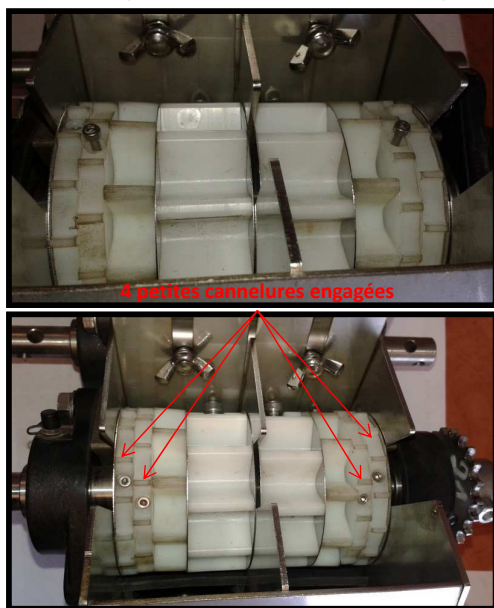
N.B.: The average range of the motor must always be targeted.

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12- Distribution Ø70 : Réglage des petites cannelures

Selon la quantité Hectare souhaitée ; 2 ou 4 petites cannelures seront engagées lors du semis de petites graines tel que le Colza.



Voici la limite en Kg pour un ratio de pignon de 1 (21-21 dents) en fonction du nombre de petites cannelures engagées.

	Colza 3,00m		Colza 3,50m		Colza 4m		Colza 4,50m		Colza 5,00m		Colza 6,00m	
	x2	x2	x2	x2	x2	x2	x2	x2	x2	x2	x2	x2
Kg	2,86	5,72	2,45	4,91	2,14	4,29	1,90	3,82	1,72	3,43	1,43	2,86

Eléments de référence:

Poids Spécifique du colza : 77

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13- Distribution Ø70: spline kit



The spline kit for each distribution system includes:

- the shaft
- 2 bearings
- 8 adjustment washers
- 4 small splines
- 2 medium-sized splines
- 2 large splines



View of the distribution shaft

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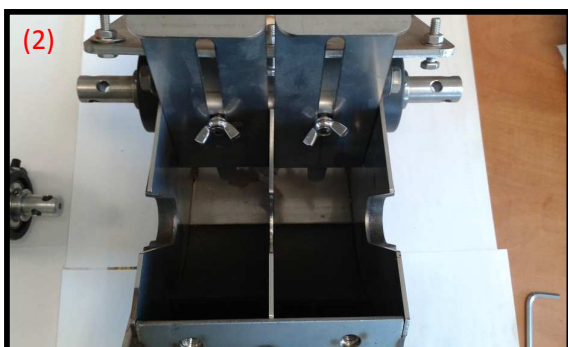


14- Distribution Ø70: Spline replacement



To change the splines, start by undoing the bearing bolts (1), then remove the distribution system's spline system (2). Place the spline system (3) on a flat surface to make spline replacement easier.

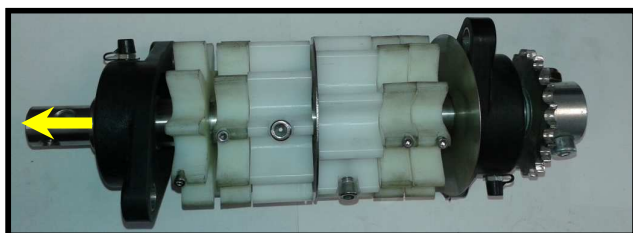
Tools: size 17 wrench to undo the 2 bolts on each bearing.



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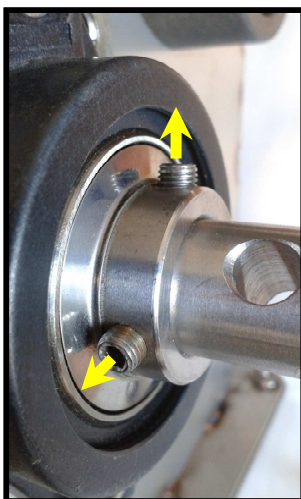
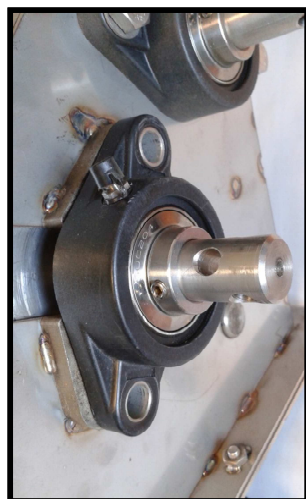


14- Distribution Ø70: Spline replacement



- Undo the 2 bolts on the bearing (on the left of the spline system) using a size 3 Allen key, then remove the bearing from the shaft.

Tools: size 3 Allen key



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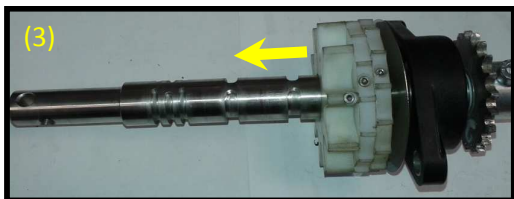
14- Distribution Ø70: Spline replacement

- Remove the LH adjustment washer(s) **(1)**.



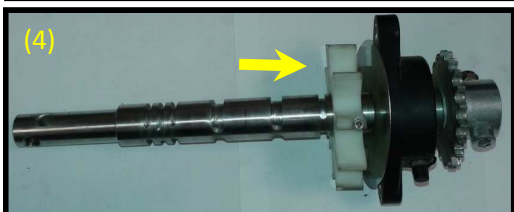
- Disconnect and remove the first small spline **(2)** from the distribution shaft. Do not unscrew it completely.

Tools: size 2.5 Allen key



- Repeat the operation for all the other splines and washers. Only one washer must be left. Remove all of the splines from the distribution shaft.

Tools: size 2.5 and size 5 Allen keys



- Insert the first medium-sized spline **(4)**. Be careful with the direction, the clamping screw must be on the bearing side.

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**14- Distribution Ø70: Spline replacement**

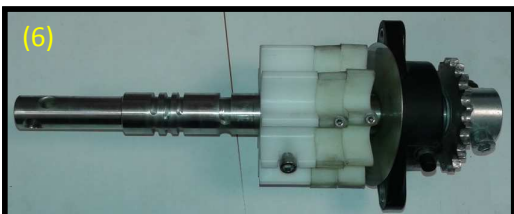
- Tighten the bolt for the first medium-sized spline **(4)** in the first groove on the distribution shaft.

Tools: size 2.5 Allen key



- Insert the second medium-sized spline **(5)**. Be careful with the direction, the clamping screw must be the same way round as the first.
- Tighten the bolt for the second medium-sized spline in the corresponding groove on the distribution shaft.

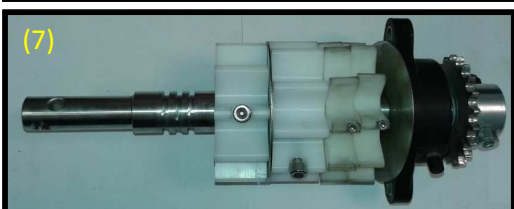
Tools: size 2.5 Allen key



- Insert the first large spline **(6)**.

- Tighten the bolt for the first large spline in the corresponding groove on the distribution shaft.

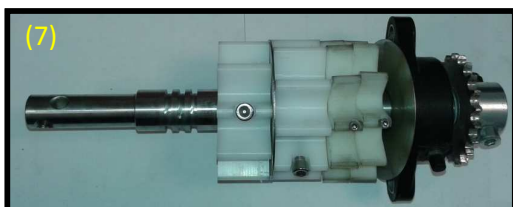
Tools: size 5 Allen key



- Insert the adjustment washers after the first large spline.

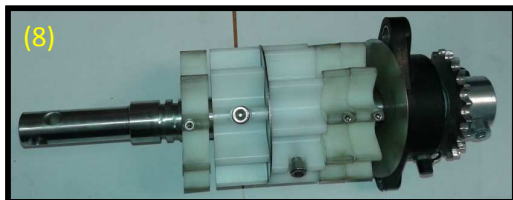
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14- Distribution Ø70: Spline replacement

- Insert the second large spline **(7)**.
- Tighten the bolt for the second large spline in the corresponding groove on the distribution shaft.

Tools: size 5 Allen key



- Insert the third medium-sized spline **(8)**. Be careful with the direction, the spline must be the same way round as the first two.
- Tighten the bolt for the third medium-sized spline in the corresponding groove on the distribution shaft.

Tools: size 2.5 Allen key



- Insert the fourth medium-sized spline **(9)**. Be careful with the direction, the spline must be the same way round as the third.
- Tighten the bolt for the fourth medium-sized spline in the corresponding groove on the distribution shaft.

Tools: size 2.5 Allen key



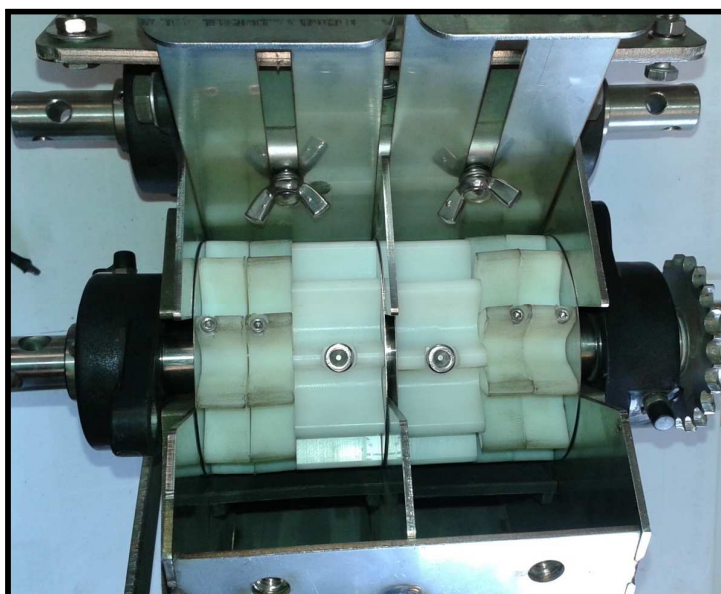
- Insert the adjustment washer(s) **(10)** depending on the play in the distribution system.

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**14- Distribution Ø70: Spline replacement**

- Replace the bearing and tighten the 2 bearing bolts on the shaft **(10)**.

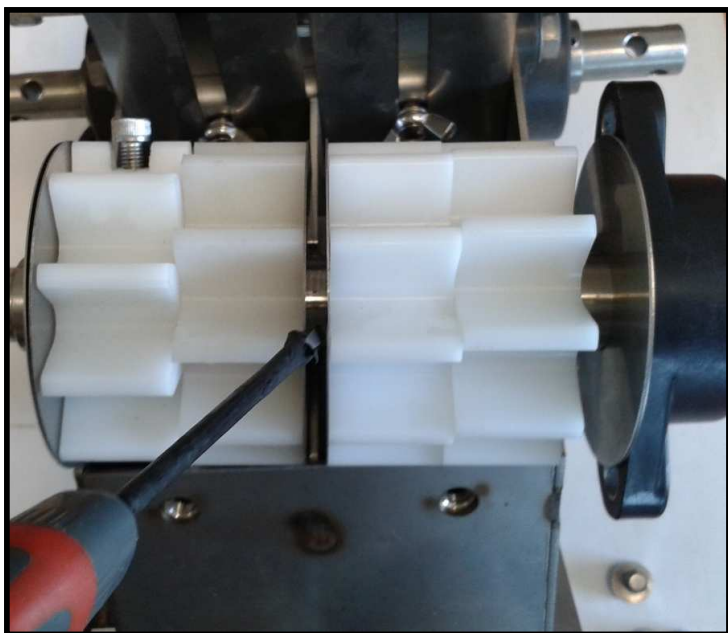
Tools: size 2.5 Allen key



This assembly, with all of the splines engaged, will be used for high seeding rates.

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14- Distribution Ø70: Spline replacement

When the spline system is inserted into the distribution system, make sure that the adjustment washers are fitted on either side of the distribution system partition. The most practical way to do this is to use a screwdriver as shown in the attached photo.

The number of washers depends on the play between the splines and the distribution system body.



Check if the spline system rotates correctly without sticking. To do this, turn the shaft by hand. You must be able to turn it.

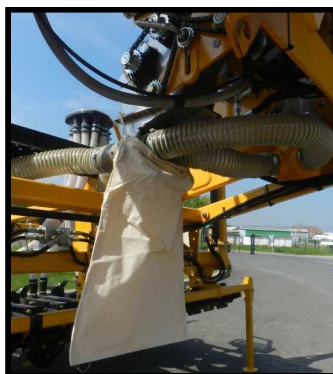
If not, check the cleanliness of the distribution system and/or remove adjustment washers.

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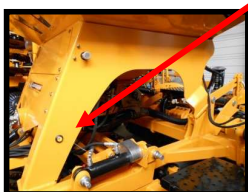
**15- Distribution system: Seeding rate test**

1- Open the discharge hatch

2- Place the bag under the distribution system as shown in the photos opposite.

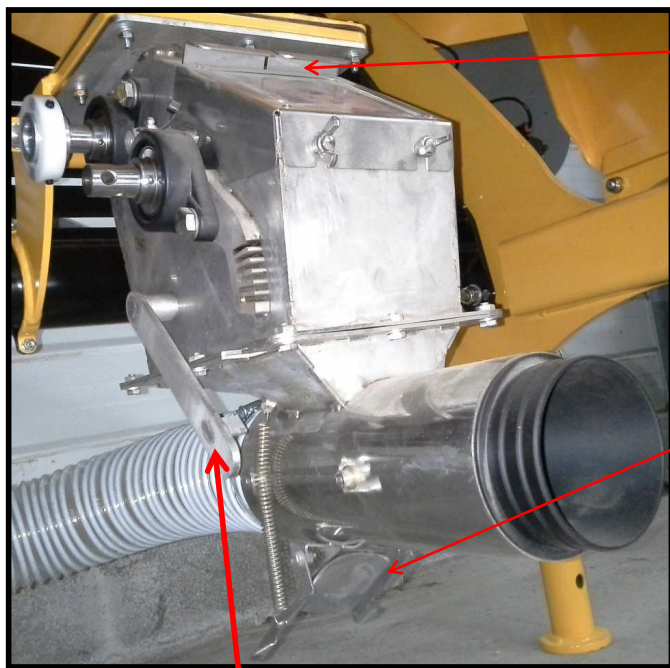


3- Press and hold the test button to run the distribution motor. Release the button when the bag is full.



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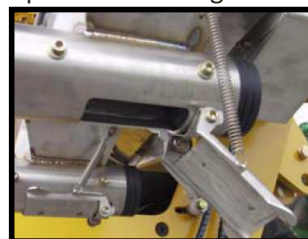


16- Distribution system: Hopper discharge

1- Open the 2 hatches on top



2- Open the discharge hatch



3- Put the tongues into hopper discharge position / Operate the motor by simulating the speed

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