



Presentation

e n to

e thank you for preference and congratulate you on the the excellent choice you have just made, as you have purchased a product made with **BALDAN IMPLEMENTOS AGRÍCOLAS S/A** technology.

This manual will guide you through the procedures necessary; from purchase to operating, safety and maintenance procedures.



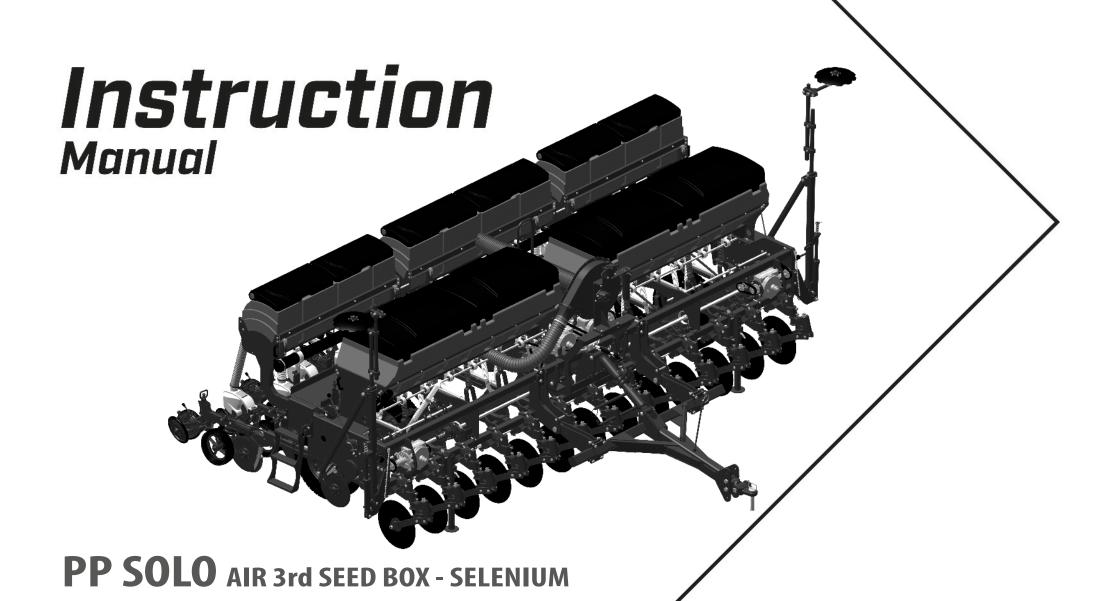


The retailer was responsible for the custody and conservation during the period in its possession, as well as for the assembly, retightening, lubrication, and overhaul.

At the technical delivery, the retailer should advise the user customer about maintenance, safety, their obligations in any technical assistance, the strict observance of the warranty term and the reading of the instruction manual.

Any warranty service claim should be made to the retailer where the implement was purchased.

We reiterate the need for careful reading of the warranty certificate and compliance with all items in this manual, as doing so will increase the life of your implement.



 ${\tt BALDAN\,IMPLEMENTOS\,AGR\'{I}COLAS\,S/A.}$

Precision Row Crop Planter

CNPJ: 52.311.347/0009-06 Insc. Est.: 441.016.953.110



Scan the QR Code on the identification plate of your device and access this Instruction Manual online.





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Seed dispensing system

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Baldan Warranty

BALDAN IMPLEMENTOS AGRÍCOLAS S/A ensures the dealer normal performance of the implement for a period of six (6) months as of the delivery date on the retail invoice to the first final consumer.

During this period, **BALDAN** undertakes to repair defects in material and/or of manufacture of its liability, including labor, freight and other expenses of the dealer's liability.

In the warranty period, request and replacement of eventual defective parts shall be made to the dealer of the area, who will submit the faulty piece to **BALDAN** analysis.

When this procedure is not possible and the resolving capacity of the dealer is exhausted, the dealer will request the support of **BALDAN** Technical Assistance through a specific form distributed to dealers.

After analyzing the replaced items by **BALDAN** Technical Assistance, and concluding that it is not a warranty, then the dealer will be responsible for the costs related to the replacement; as well as material expenses, travel including accommodation and meals, accessories, lubricant used and other expenses arising from the call out to Technical Assistance, and **BALDAN** company is authorized to carry the respective invoice in the name of the resale.

Any repairment carried in the product within the dealer warranty deadline will only be authorized by **BALDAN** upon previous budget presentation describing parts and workforce to be executed.

The product is excluded from this term if it is repaired or modified by representatives not belonging to the **BALDAN** dealer network, as well as the application of non-genuine parts or components to the user's product.

This warranty is void where it is found that the defect or damage is caused by improper use of the product, failure to follow instructions or inexperience of the operator.

It is agreed that this warranty does not cover tires, polyethylene tanks, cardan, hydraulic components, etc., which are equipment guaranteed by their manufacturers.

Manufacturing and/or material defects, object of this warranty term, will not constitute, under any circumstances, grounds for termination of a purchase agreement, or for indemnification of any nature.

BALDAN reserves the right to change and/or perfect the technical characteristics of its products, without previous notice, and without obligation to proceed in the same way with the products previously manufactured.



General Information

To the owner

BALDAN IMPLEMENTOS AGRÍCOLAS S/A is not responsible for any damaged caused by accident due to usage, transportation, or in the improper or incorrect transportation of its implement, whether by negligence and/or inexperience of any person.

Only people with complete knowledge of the tractor and the implement should carry their transportation and operation.

BALDAN is not responsible for any damaged caused in unpredictable or unrelated situations to the normal use of the implement.

The incorrect handling of this equipment may result in severe or fatal accidents. Before running the equipment, carefully read the instructions contained in this manual. Make sure that the person responsible for the operation is instructed as the correct and safe handling. Also make sure that the operator has read and understood the instructions manual of the product.



NR-31 - SAFETY AND HEALTH AT WORK IN AGRICULTURE, LIVESTOCK FARMING, FORESTRY, FOREST EXPLORATION AND AQUACULTURE.

This Regulatory Standard has the purpose of establishing precepts to be observed in the organization and work environment, compatible to the planning and development of agriculture, livestock, forestry, forest exploitation and aquaculture with safety and health and work environment.

MR. OWNER OR OPERATOR OF THE EQUIPMENT. Read and carefully comply with provisions of NR-31.

For more information, refer to the site and read NR-31 in full. http://portal.mte.gov.br/legislacao/normas-regulamentadoras-1.htm



Safety rules

To the operator



THIS SYMBOL INDICATES IMPORTANTE SAFETY WARNING. IN THIS MANUAL, WHENEVER YOU FIND IT, READ THE FOLLOWING MESSAGE CAREFULLY AND PAY ATTENTION TO THE POSSIBILITY OF PERSONAL ACCIDENTS.

ATTENTION



Carefully read the instructions manual tolearn about the recommended safety practices.

1 ATTENTION



Only start to operate the tractor when you are properly seated and with the seat belt locked.

1 ATTENTION



Do not perform adjustments while the seeder in operation. When performing any service on the seeder,

switch off the tractor first. Use appropriate tools.

ATTENTION



When transportation the seeder, do not exceed 10Km/h or 6 MPH, avoinding risks of injury and accident.

ATTENTION



Do not transport people on the tractor or over the equipment.

ATTENTION



There are risks of severe injuries due to tipping when working in sloped terrains. Do not over speed.

ATTENTION



When checking hoses for leaks, use a piece of cardboard or wood, never use your hands. Avoid incision of fluid in the skin.

ATTENTION



When working with the seeder, do not exceed of 5 to 6 Km/h or 3 to 4 MPH, avoiding risks of injury and accidents.

ATTENTION



Do not work with the tractor if the front has insufficient ballast to the rear equipment. Should there be a trend to lift, add

weights or ballasts to the front or the front wheels.

ATTENTION



Before performing any maintenance in your equipment, make sure it is properly stopped. Avoid being run over.

ATTENTION



Always maintain places of access and work free of residues such as oil or grease to prevent accidents.

ATTENTION



Before working on or transporting the seeder, check for people or obstructions near the machine.





Safety rules



FOLLOW ALL RECOMMENDATIONS, WARNINGS AND SAFE PRACTICES RECOMMENDED IN THIS MANUAL, UNDERSTAND THE IMPORTANCE OF YOUR SAFETY. ACCIDENTS MAY LEAD TO DISABILITY OR INCLUDING DEATH. REMEMBER, ACCIDENTS CAN BE AVOIDED!

ATTENTION



Avoid heating parts near fluid lines.

Heating can lead to material

brittleness, rupture, and leakage of pressurized fluid, which can cause burns and injuries.

ATTENTION



Keep the articulation area free while the seeder is in operation. In sharp turns, keep the tractor wheels from touching the header.

ATTENTION



Improper waste disposal affects the environment and ecology as it will pollute rivers, canals, or the soil. Find out how to properly recycle

or dispose of waste.

PROTECT THE ENVIRONMENT!

1 ATTENTION



Avoid accidents caused by the intermittent action of line markers.

When activating the seeder,

check if there are people under line markers on in their action area.

• Attention



Be careful when handling the sowing support foot, as there is a risk of accidents.

ATTENTION



Always stay away from the active elements of the seeder (discs) they are sharp and cause accidents.

When servicing discs, wear safety gloves in your hands.

ATTENTION



Pressurized hydraulic oil under may cause serious injury if leaks occur. Periodically check the condition of the hoses. If there is evidence of leaks, replace them immediately. Before connecting or disconnecting hydraulic hoses, relieve system pressure by activating the control with thetractor off.

ATTENTION



Do not operate theseeder if the transmission guards are not properly attached. Only remove protections to proceed with gear replacement, put them back immediately.

Do not make adjustments with the seeder in motion.

ATTENTION



Never weld the wheel with a mounted tire, as heat can increase air pressure and cause the tire toexplode.

When inflating a tire, position yourself next to the tire, never in front of it. When inflating thetire, always use a containment device (inflation cage).



Safety rules



FOLLOW ALL RECOMMENDATIONS, WARNINGS AND SAFE PRACTICES RECOMMENDED IN THIS MANUAL, UNDERSTAND THE IMPORTANCE OF YOUR SAFETY. ACCIDENTS MAY LEAD TO DISABILITY OR INCLUDING DEATH. REMENBER, ACCIDENTS CAN BE AVOIDED!

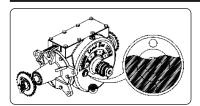
ATTENTION



Remove the ignition key before carrying out maintenance on the seeder. Protect yourself from injuries or death caused by an unforeseen start of the seeder.

If the seeder is not properly hitched, do not start the tractor.

ATTENTION



Check the oil level daily.

Change the Speed Box oil after the first 30 hours of work, then every 1500 hours, always using ISO VG 150 mineral oil at 40°C (amount of oil used 1.8 liters). Use only the original fuse from the factory, as only this one has a controlled hardness.

ATTENTION



The turbine may expel residues of toxic products used in seed treatment.

- Do not expose yourself to the air leaving the turbine when it is operating. Carefully read the label of the product used to treat seeds.

- While handling, applying and planting, use Personal Protection Equipment (PPE).
- Wash your hands throughtly after handling products.
- Treated seeds should not be exposed to people unrelated to the service, domestic animals, birds, nor allowed contat with human or animal consumption products.
- In case of intoxication due to inhalation or aspiration, keep the victim in a place with fresh air and seek a doctor immediately, taking with you the chemical product label or packaging.



POISONING SYMPTOMS: Weakness, headache, chest pressure, blurred vision, non-reactive pupils, excess of salivation, perspiration, nausea, vomiting and abdominal cramps.





Safety rules

PPE Equipment



DO NOT WORK WITH THE SEEDER WITHOUT FIRST WEARING PPES (SAFETY EQUIPMENT). IGNORING THIS WARNING MAY CAUSE DAMAGES TO HEALTH, SEVERE ACCIDENTS OR DEATH.

When performing certain procedures with the seeder, wear the following Safety Equipament (PPE):





O IMPORTANT

The safety practice must be performed in all stages of working with the seeder, thus avoiding accidents such as impact of objects, fall, noise, cuts and ergonomics, ie the person responsible for operating the seeder is subject to internal and external damage to your body.















NOTE All PPEs (Safety Equipment) must have an authenticity certificate.

1 If there is a need to travel with the seeder on highways, consult traffic agencies.

① Do not transport or work with the seeder close to obstacles, rivers or streams.

1 Do not allow the seeder to be used by people who have not been trained, that is, who do not know how to operate it properly.



Warnings

| ① When operating the seeder, do not allow people to remain too close or on top of it. |
|---|
| ⚠ When servicing the machine, wear PPE. |
| ① Do not wear loose clothing, as they may become entangled in the seeder. |
| Mhen starting the tractor engine, be properly seated in the operator's seat and aware of the full knowledge of the correct and safe handling of both the tractor and the seeder. Always put the shift lever in the neutral position, disconnect the control gear from the PTO and put the hydraulic controls in the neutral position. |
| ① Do not start the tractor engine indoors without adequate ventilation as exhaust fumes are harmful to health. |
| Mhen maneuvering the tractor to engage the seeder, make sure you have the necessary space and that there is no one very close, always do the maneuvers at idle and be prepared to brak in an emergency. |
| ① Do not make adjustments with the seeder in operation. |
| Mhen working on slopes, be careful to always maintain the necessary stability. In the event of imbalance, reduce acceleration, turn the wheels to the side of the slope and never raise th seeder. |
| Always drive the tractor at safety compatible speeds, especially when working on rough or sloping terrain, always keep the tractor hitched. |
| ⚠ When driving the tractor on roads, keep the brake pedals interconnected. |
| ① Do not work with the tractor with a light rear. If the rear tends to lift, add more weights to the rear wheels. |
| ⚠ When leaving the tractor, shift to neutral and set the parking brake. |
| Any and all maintenance on the seeder must be done with the seed stopped and the tractor turned off. |
| All refueling or inspection must be done with the seeder stopped and the tractor turned off, using the means of safe access. |
| ① Do not drive on highways, especially at night. Use warning signs all the way. |



Warnings

- Transporting people on self-propelled machines and implements is prohibited.
- Changes to the original characteristics of the seeder are not authorized, as they may alter safety, operation, and affect the useful life.
- Read carefully all the safety information in this manual and on the seeder.
- Only operate the seeder if all guards are installed and correctly.
- ? Do not under any circumstances remove the sowing protection components.
- Always check that the seeder is in perfect condition. In the event of any irregularity that may interfere with the seeder's operation, provide proper maintenance before any work or transport.
- Maintenance and especially inspection in risk areas of the seeder, must be carried out only by a trained or qualified worker, observing all safety guidelines. Before starting maintenance, disconnect all drive systems from the seeder.
- Periodically check all components of the seeder before using it.
- According to the equipment used and the working conditions in the country or in areas of maintenance, precautions are necessary. Baldan has no direct control over precautions, so it is the responsibility of the owner to put the safety procedures into practice while working with the seeder.
- ① Check the minimum tractor power recommended for each seeder model. Only use tractors with power and ballast compatible with the load and terrain topography.
- ① During the transport of the seeder, travel at speeds compatible with the terrain and never exceeding 10 km/h, this reduces maintenance and consequently increases the life of the seeder.
- Alcoholic beverages or some medications may cause loss of reflexes and change the operator's physical condition. Therefore, never operate this seeder under the use of these substances.
- !\ Read or explain all procedures in this manual to a user who cannot read.

If in doubt, contact After Sales.

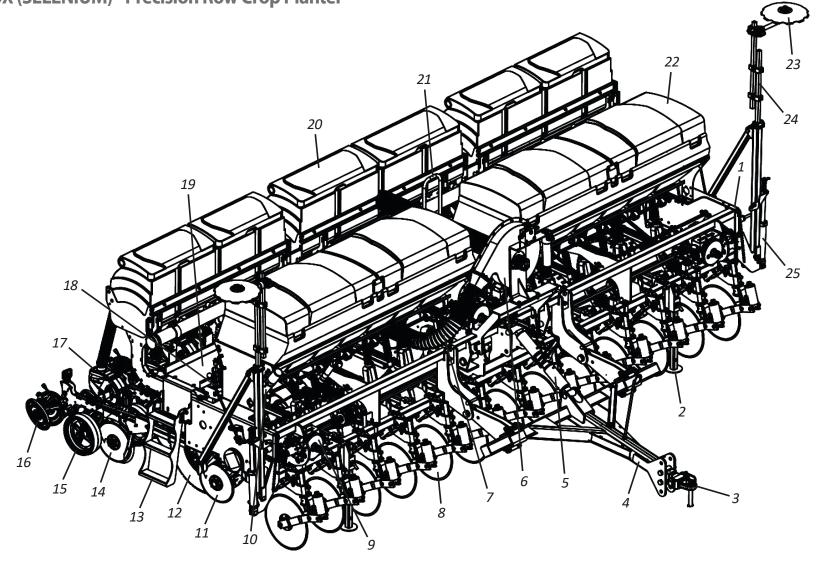
Telephone: 0800-152577 / E-mail: posvenda@baldan.com.br



Components

• PPSOLO AIR 3rd SEED BOX (SELENIUM) - Precision Row Crop Planter

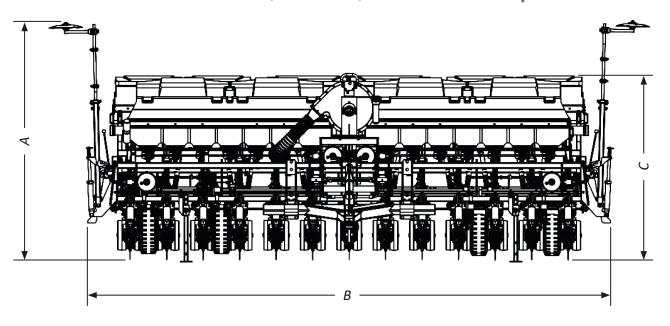
- 1. Chassi
- 2. Support
- 3. Shackle
- 4. Hitch header
- 5. 3rd point regulator
- 6. Turbine
- 7. Air conducting hose
- 8. Cutting disc
- 9. Speed Box
- 10. Manual container
- 11. Double fertilizer disc
- **12.** Tires
- 13. Ladder
- 14. Double seed disc
- 15. Depth limiting wheel
- 16. "V" wheel
- 17. Batcher Selenium
- 18. Closing lever
- 19. Plataform
- 20. Seed deposit
- 21. Plataform handrail
- 22. Fertilizer deposit
- 23. Marker disc
- 24. Line marker
- 25. Marker cylinder



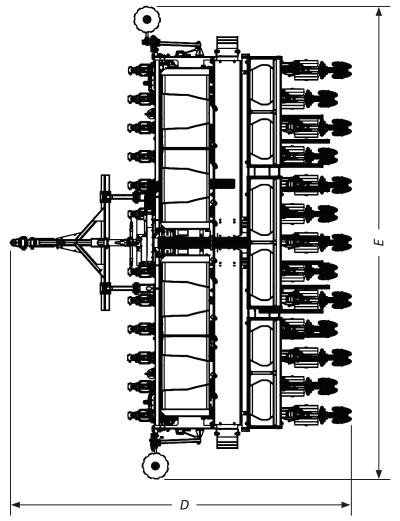


Dimensions

• PPSOLO AIR 3rd SEED BOX (SELENIUM) - Precision Row Crop Planter



| Modelo | Nr Lines | Measure A (mm) | | | Measure D (mm) | Measure E (mm) |
|-------------|-------------|----------------|------|------|-------------------|-------------------|
| PPSOLO 4000 | 8 | 2260 | 4285 | 2170 | 5103 | 5125 |
| PPSOLO 4500 | 10 | 2260 | 4965 | 2170 | 5103 | 5810 |
| PPSOLO 5000 | 12 | 2460 | 5945 | 2170 | 5197 | 6780 |
| PPSOLO 5500 | 13 | 2460 | 6445 | 2170 | 5197 | 7280 |
| PPSOLO 6500 | 15 | 3380 | 7100 | 2170 | 5284 | 8096 |
| PPSOLO 7500 | 17 | 3380 | 8000 | 2170 | 5284 | 8979 |





Specifications

PPSOLO AIR 3rd SEED BOX (SELENIUM) - Precision Row Crop Planter

| Modelo | No. of Lines | Useful Width | Width | Total Width (mm) | Fertilizer Deposit Capacity (L) | | 3rd Seed Deposit | Spacing between lines | Working width | No. Wheels | Estimate Weight | Approximate Power |
|-------------|-----------------|-----------------|-------|------------------------|------------------------------------|----------|---------------------|-----------------------|---------------|---------------|--------------------|----------------------|
| | | (mm) | | | Polyethylene | Metallic | · | (mm) | (mm) | | (Kg) | (Hp) |
| PPSOLO 4000 | 8 | 3150 | 3600 | 4300* | 1240 | 1400 | 810 | 415 | 0 - 120 | 2 | 4131 | 90 - 100** |
| PPSOLO 4500 | 10 | 4050 | 4500 | 5000* | 1500 | 1750 | 972 | 415 | 0 - 120 | 4 | 5080 | 100 - 110** |
| PPSOLO 5000 | 12 | 4950 | 5400 | 6000* | 1860 | 2100 | 1140 | 415 | 0 - 120 | 4 | 5820 | 120 - 150** |
| PPSOLO 5500 | 13 | 5400 | 5850 | 6500* | 1860 | 2100 | 1296 | 415 | 0 - 120 | 4 | 6170 | 130 - 160** |
| PPSOLO 6500 | 15 | 6300 | 6715 | 7300* | 2250 | 2600 | 1458 | 415 | 0 - 120 | 6 | 8200 | 160 - 190** |
| PPSOLO 7500 | 17 | 7200 | 7615 | 8200* | 2610 | 3000 | 1620 | 415 | 0 - 120 | 6 | 8480 | 170 - 200 ** |

Baldan reserves the right to change and or improve the technical characteristics of its products without prior notice and without obligation to do so with previously manufactured products. Technical specifications are estimates and reported under normal working conditions.

INTENDED USE OF PPSOLO AIR 3RD SEED BOX - SELENIUM

PPSOLO AIR 3rd SEED BOX - SELENIUM was developed to sow summer crops with precision.

PPSOLO AIR 3rd SEED BOX - SELENIUM must be conducted and operated only by a properly instructed operator.

UNPERMITTED USE OF PPSOLO AIR 3RD SEED BOX - SELENIUM

To avoid damage, serious accident or death, DO NOT transport people on any part of **PPSOLO AIR 3rd SEED BOX - SELENIUM.**

It is NOT permitted to use **PPSOLO AIR 3rd SEED BOX - SELENIUM** to attach, tow or push other implements or accessories.

PPSOLO AIR 3rd SEED BOX - SELENIUM must NOT be used by an inexperienced operator who does not know all the driving, command and operation techniques.

^(*) The dimensions of the total width (mm) include the seeder with line marker. The seeder without a line marker must be reduced by 200 mm in dimensions.

^(**) Approximate power (hp) depends on normal planting situations and may vary according to the type of soil, topography, etc.



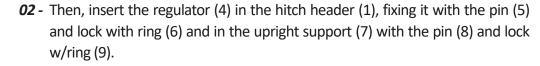
Assembly

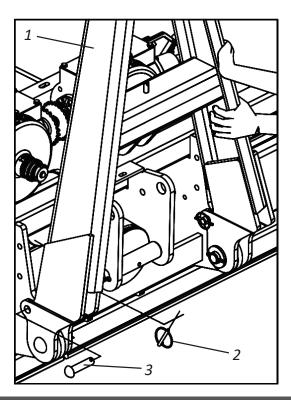
PPSOLO AIR 3rd SEED BOX - SELENIUM leaves the factory semi-assembled, lacking the assembly of some components that must be assembled according to the following instructions.

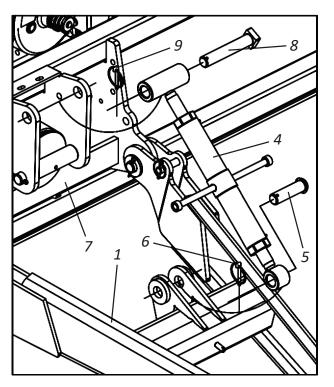
Assembly of the coupling header (Models 4000/4500)

To assemble the coupling header (1) on the **PPSOLO AIR 3rd SEED BOX - SELENIUM**, proceed as follows:

01 - Place the hitch header (1) in the working position, removing the lock with ring (2) and the pin (3) that were placed to transport the seeder.







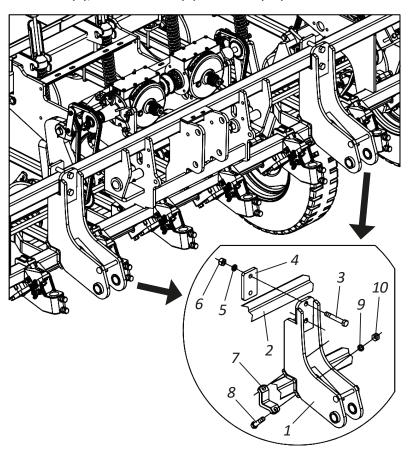


Assembly

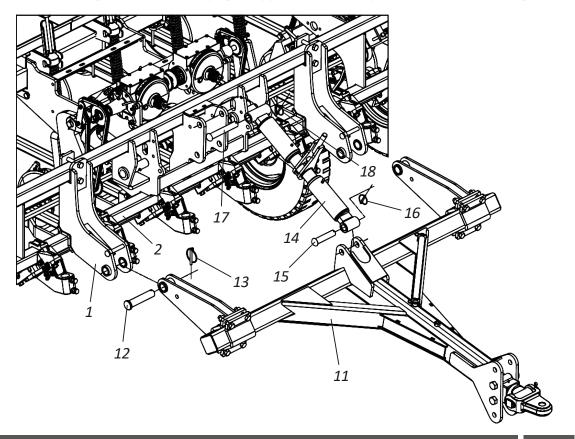
Assembly of the coupling header (Models 5000/5500)

To assemble the coupling header (1) on the **PPSOLO AIR 3rd SEED BOX - SELENIUM**, proceed as follows:

01 - Attach the supports (1) to the upright (2), fixing through screws (3), plate (4), lock washers (5), nuts (6) and clamp (7), screws (8), lock washers (9) and nuts (10).



- **02** Then, insert the hitch header (11) into the brackets (1), fixing it through the pins (12) and lock with the ring (13).
- 03 Finish by introducing the regulator (14) in the hitch header (11), fixing it with the pin (15) and lock with ring (16) and on the upright support (2) with the pin (17) and lock with ring (18).



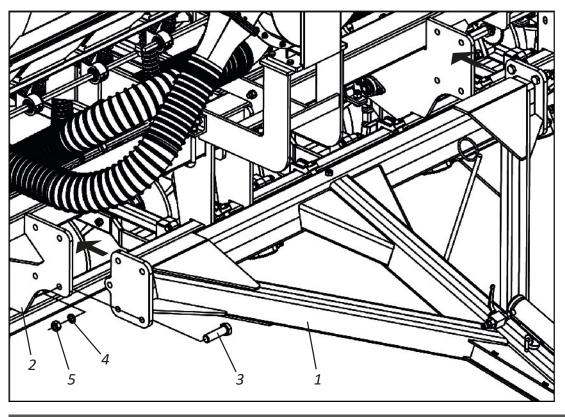


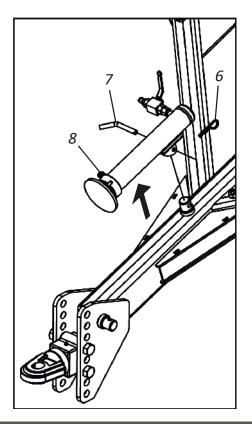
Assembly

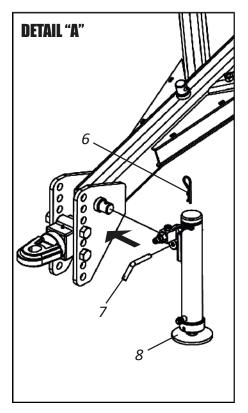
Assembly of the coupling header (Models 6500/7500)

To assemble the coupling header (1) on the PPSOLO AIR 3rd SEED BOX - SELENIUM, proceed as follows:

- 01 Attach the coupling header (1) to the chassis (2), fixing through the screws (3), pressure washers (4) and nuts (5).
- 02 Then, release the lock (6) and the pin (7) and remove the hydraulic jack (8) and secure it in the support position, as shown in detail "A" and lock again with the pin (7) and lock (6).







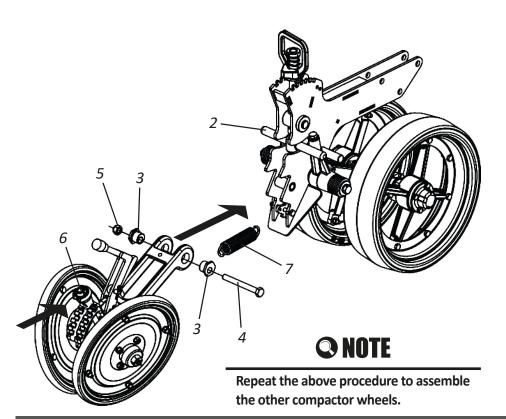


Assembly

Assembly of the compactor wheels

To mount the "V" wheel support (1), proceed as follows:

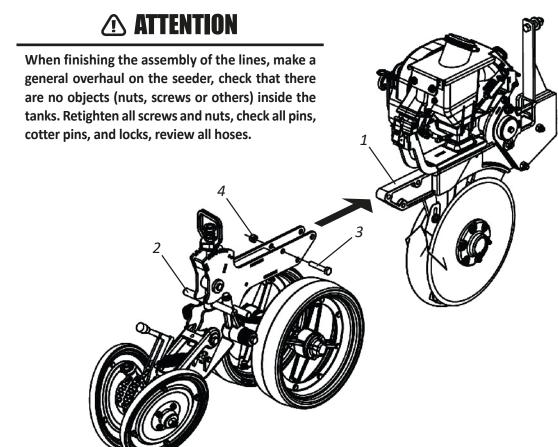
- **01** Couple the "V" wheel support (1) to the depth wheel cart (2), placing the bushings (3), fixing them through the screw (4) and nut (5).
- **02** Then, put the lever (6) fully forward and engage the spring (7) in the support (2).



Assembly of the lines

To assemble the line (1), proceed as follows:

01 - Attach the trolley (2) to the line (1), fixing it using the screws (3) and nuts (4).



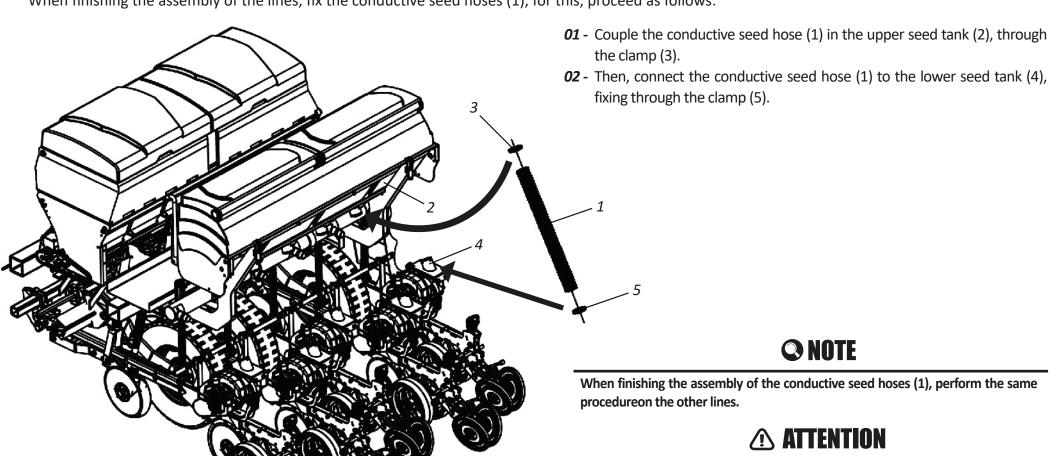
When finishing the assembly of the conductive seed hoses (1), make a general overhaul on the seeder, check that there are no objects (nuts, screws or others) inside the tanks. Retighten all bolts and nuts, check all pins, cotter pins and locks, check all hoses.



Assembly

Assembly the conductive seed hoses

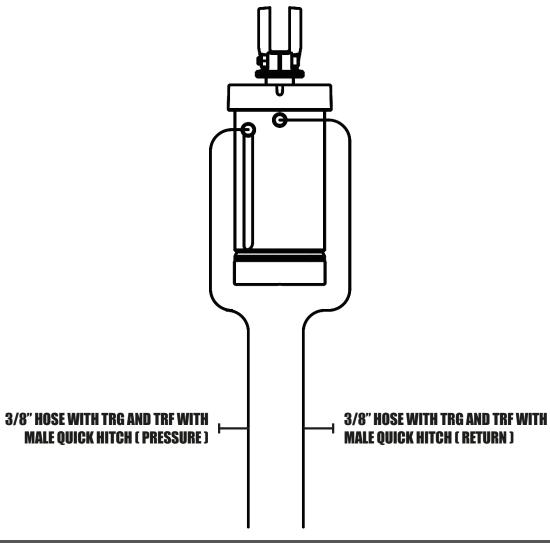
When finishing the assembly of the lines, fix the conductive seed hoses (1), for this, proceed as follows:





Assembly

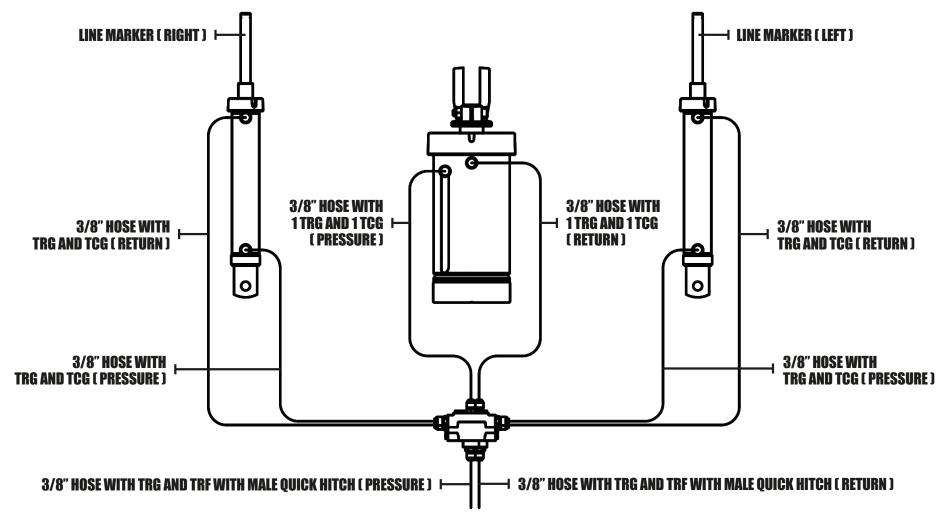
• Assembly of the hydraulic system without line marker (Models 4000/4500)





Assembly

Assembly of the hydraulic system with line marker (Models 4000/4500)

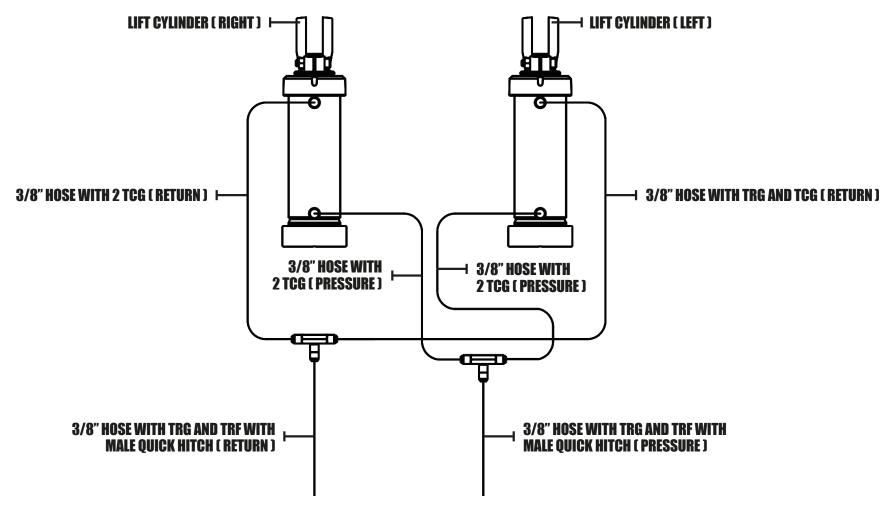


OBS: THE EXPRESSIONS "RIGHT" AND "LEFT" ARE NAMED LOOKING BEHIND THE SEEDER.



Assembly

• ssembly of the hydraulic system with line marker (Models 5000/5500)

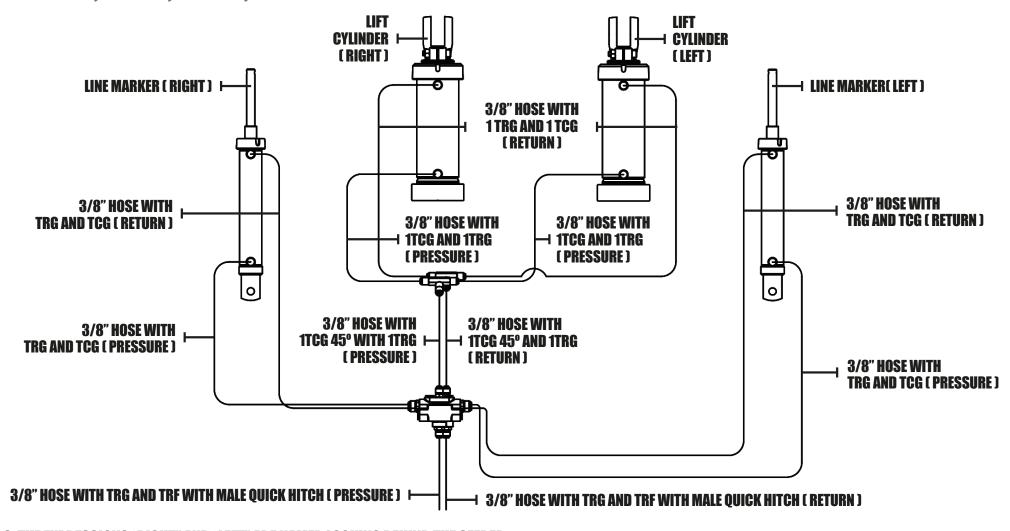


OBS: THE EXPRESSIONS "RIGHT" AND "LEFT" ARE NAMED LOOKING BEHIND THE SEEDER.



Assembly

Assembly of the hydraulic system with line marker (Models 5000/5500)

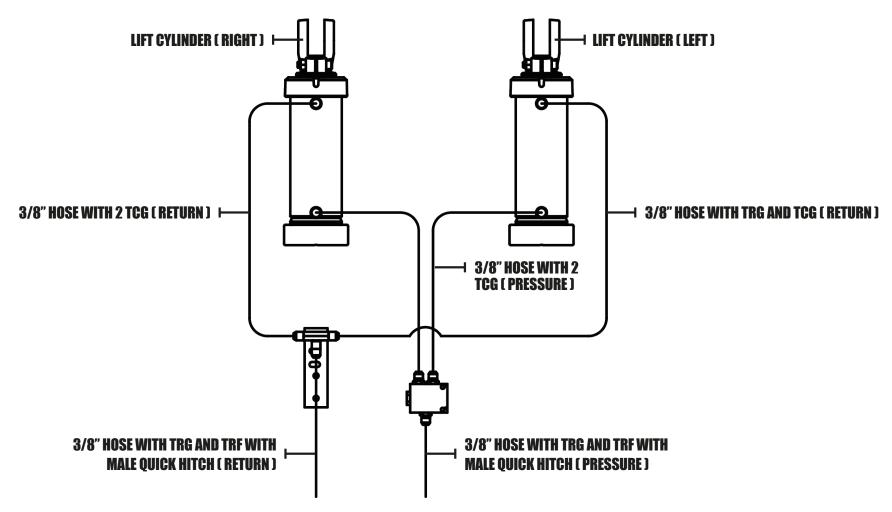


OBS: THE EXPRESSIONS "RIGHT" AND "LEFT" ARE NAMED LOOKING BEHIND THE SEEDER.



Assembly

Assembly of the hydraulic system without line marker (Models 6500/7500)

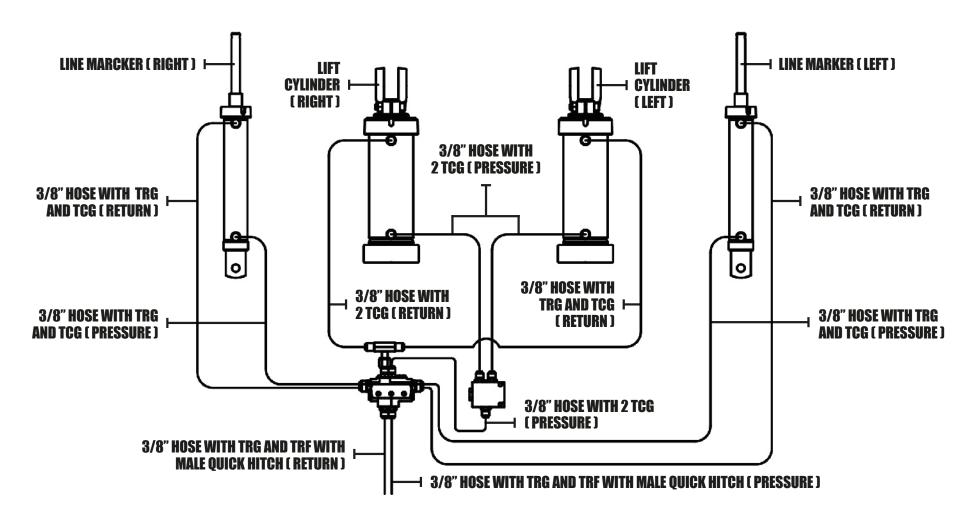


OBS: THE EXPRESSIONS "RIGHT" AND "LEFT" ARE NAMED LOOKING BEHIND THE SEEDER.



Assembly

Assembly of the hydraulic system with line marker (Models 6500/7500)



OBS: THE EXPRESSIONS "RIGHT" AND "LEFT" ARE NAMED LOOKING BEHIND THE SEEDER.



Assemby

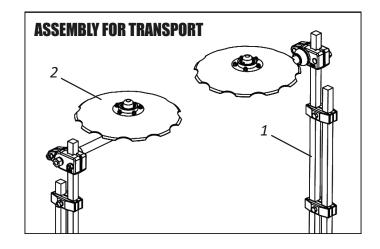
Assembly of the line marker cutting disc

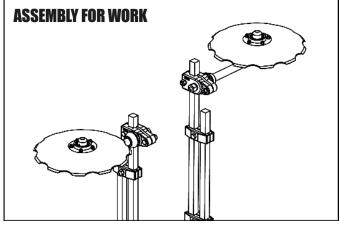
The seeders leave the factory with the line markers (1) fitted. The disks (2) are mounted inversely to their respective markers to avoid the risk of accidents in the

transport of the seeder.

Before starting to work with the seeder, change the discs (2) in the row markers (1), to do this, proceed as follows:

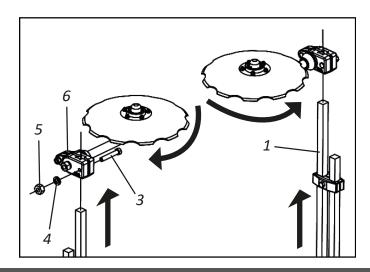
- **01** Loosen the screws (3), lock washers (4) and nuts (5).
- **02** Then, remove the disc supports (6), turn them 180° and mount them again on the line markers (1) fixing through the screws (3), pressure washers (4) and nuts (5).

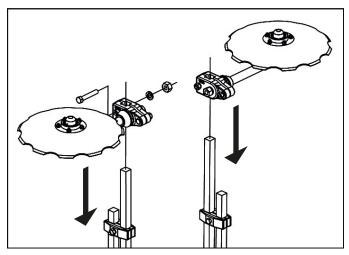






PPSOLO AIR 3rd SEED BOX - SELENIUM discs are sharp and can cause accidents. When reversing the position of the line marker discs, use PPE equipment (Safety Equipment) mainly gloves on your hands.





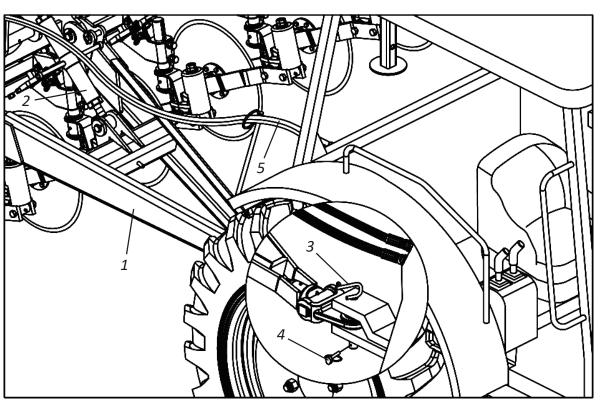


Hitch

Tractor hitch (Models 4000/4500)

Before attaching the **PPSOLO AIR 3rd SEED BOX - SELENIUM** to the tractor, check that the tractor is equipped with a set of weights or ballast on the front or on the front wheels to avoid lifting the tractor. The rear wheels will give the tractor greater stability and traction on the ground.

To connect the **PPSOLO AIR 3rd SEED BOX - SELENIUM**, proceed as follows:



- 01 Level the coupling header (1) of the seeder in relation to the tractor coupling through the adjustments (2) of the coupling jumel. Then, slowly approach the tractor to the tractor in reverse, paying attention to the application of the brakes.
- **02** Proceed the coupling of the seeder to the tractor, fixing it through the coupling pin (3) and lock (4).
- 03 Finalize, coupling the hoses (5) to the tractor's quick coupling.

ONOTE

When engaging the seeder, look for a safe and easily accessible place, always use reduced gear with low acceleration.

ATTENTION

Before connecting or disconnecting the hydraulic hoses, turn off the engine and relieve pressure from the hydraulic system by fully operating the control levers. When relieving system pressure, make sure that no one is close to the equipment's movement area.

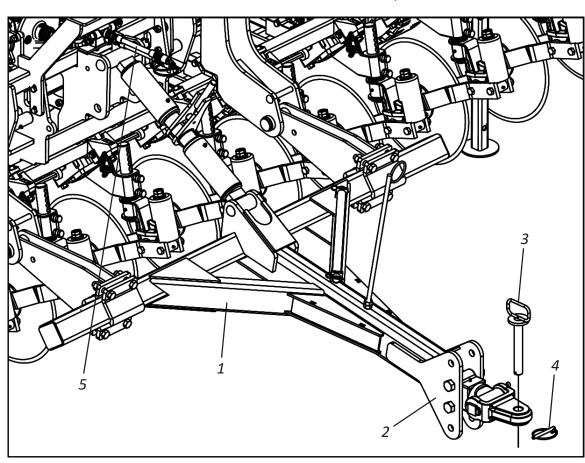


Hitch

Tractor hitch (Models 5000/5500)

Before attaching the **PPSOLO AIR 3rd SEED BOX - SELENIUM** to the tractor, check that the tractor is equipped with a set of weights or ballast on the front or on the front wheels to avoid lifting the tractor. The rear wheels will give the tractor greater stability and traction on the ground.

To connect the **PPSOLO AIR 3rd SEED BOX - SELENIUM**, proceed as follows:



- 01 Level the coupling header (1) of the seeder in relation to the tractor coupling through the adjustments (2) of the coupling jumel. Then, slowly approach the tractor to the tractor in reverse, paying attention to the application of the brakes.
- **02** Proceed the coupling of the seeder to the tractor, fixing it through the coupling pin (3) and lock (4).
- 03 Finalize, coupling the hoses (5) to the tractor's quick coupling.

ATTENTION

Before connecting or disconnecting the hydraulic hoses, turn off the engine and relieve pressure from the hydraulic system by fully operating the control levers. When relieving system pressure, make sure that no one is close to the equipment's movement area.

ONOTE

When engaging the seeder, look for a safe and easily accessible place, always use reduced gear with low acceleration.

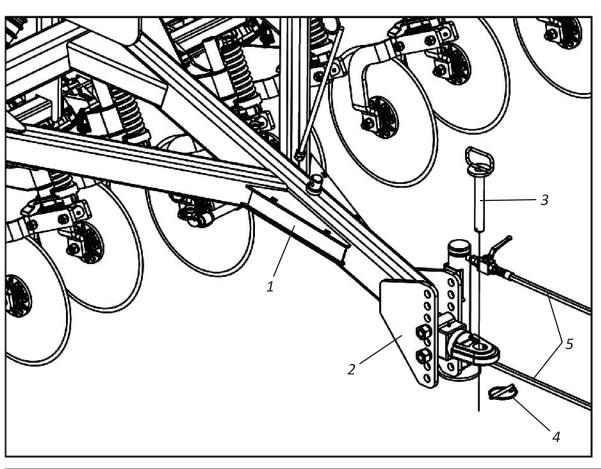


Hitch

Tractor hitch (Models 6500/7500)

Before attaching the **PPSOLO AIR 3rd SEED BOX - SELENIUM** to the tractor, check that the tractor is equipped with a set of weights or ballast on the front or on the front wheels to avoid lifting the tractor. The rear wheels will give the tractor greater stability and traction on the ground.

To connect the **PPSOLO AIR 3rd SEED BOX - SELENIUM**, proceed as follows:



- 01 Level the coupling header (1) of the seeder in relation to the tractor coupling through the adjustments (2) of the coupling jumel. Then, slowly approach the tractor to the tractor in reverse, paying attention to the application of the brakes.
- **02** Proceed the coupling of the seeder to the tractor, fixing it through the coupling pin (3) and lock (4).
- 03 Finalize, coupling the hoses (5) to the tractor's quick coupling.

ATTENTION

Before connecting or disconnecting the hydraulic hoses, turn off the engine and relieve pressure from the hydraulic system by fully operating the control levers. When relieving system pressure, make sure that no one is close to the equipment's movement area.

O NOTE

When engaging the seeder, look for a safe and easily accessible place, always use reduced gear with low acceleration.

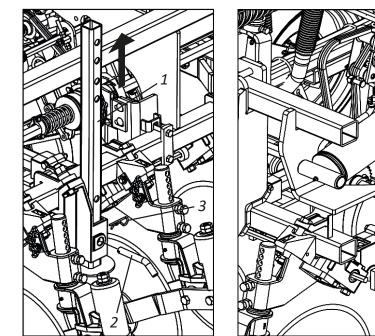


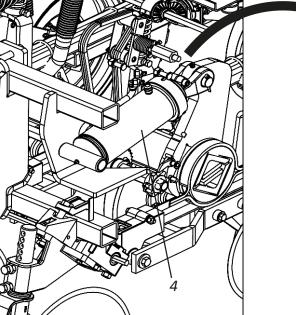
Transportation

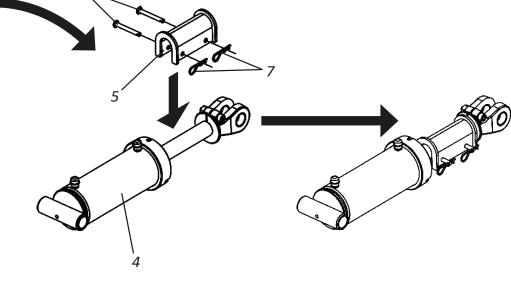
Preparing for transport

Before transporting the seeder, proceed as follows:

01 - Collect the support bracket (1) and secure with the pin (2) and lock (3).







02 - Then, raise the lines by fully activating the stroke of the hydraulic cylinder (4), place the lock (5) on the rod of the same locking with the pin (6) and lock (7).



Do not transport the seeder without first checking all the procedures mentioned. Do not transport the seeder with the ladderopen, follow the guidelineson page 38.

• IMPORTANT

Do not transport the loaded seeder as it may damage the equipment. We recommend that you supply it only at the workplace. If the seeder is going to remain in the field for any reason, we recommend covering it with waterproof tarpaulin to avoid moisture.

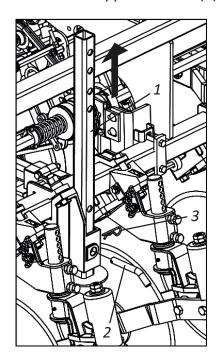


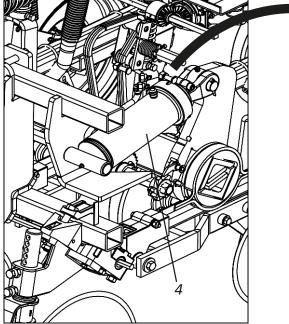
Work

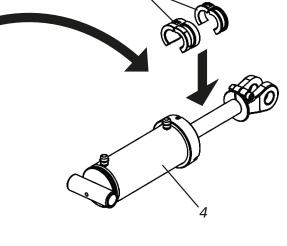
Preparing for work - Part I

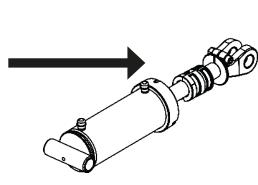
Before working with the seeder, proceed as follows:

01 - Collect the support bracket (1) and secure with the pin (2) and lock (3).









ATTENTION

Do not work with the seeder without first checking all the procedures mentioned. Do not work the seeder with the ladderopen, follow the guidelineson page 38.

02 - Then, raise the lines by fully activating the stroke of the hydraulic cylinder (4) and place the limiting rings (5) on the rod of the same.



Always place the same number of limit rings (5) on all hydraulic cylinders (4) for lifting the wheels.

O IMPORTANT

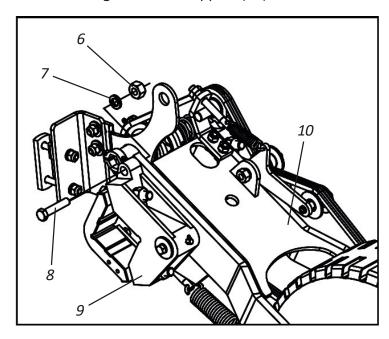
After attaching the limiting rings (5), the seeder will always operate at the same depth in both hard and loose terrain, because the limiting rings (5) are limiting the course of the hydraulic cylinders (4), that is, preventing the oscillation of the wheels. We recommend that you supply it only at the workplace. If the seeder is going to remain in the field for any reason, we recommend covering it with waterproof tarpaulin to avoid moisture.

>>> BALDAN

Work

Preparing for work - Part II

03 - Finish by loosening the nut (6), pressure washer (7) and remove the screw (8) from the clamp (9) by loosening the wheel support (10).

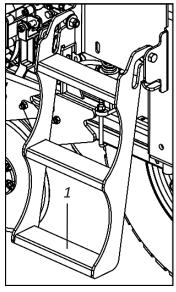


ATTENTION

Do not work with the seeder without first removing the screw (8), lock washer (7) and nut (6) from the clamp (9) of the wheel support (10). Ignoring this warning will cause failures in planting the seeder.

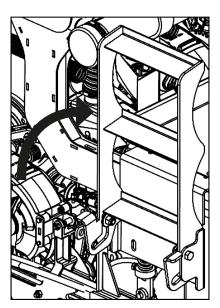
Use of the ladder

The articulated ladder (1) should only be used when filling or maintaining the **PPSOLO AIR 3rd SEED BOX - SELENIUM**. Before using the articulated ladder (1), make sure that the seeder is stopped and the tractor is switched off.



OPEN POSITION:
FOR MAINTENANCE
OR SUPPLY OF THE
DEPOSIT

CLOSED POSITION: FOR WORK OR TRANSPORT



ATTENTION

Do not remain on the ladder when the seeder is working or being transported.

Do not work or transport the seeder with the ladder open.

Do not transport people on the platform, ladder or any other part of the seeder. Ignoring thesewarnings could result in seriousaccidents or evendeath.

O IMPORTANT

The articulated ladder (1) should only be used when filling or maintaining tanks. The articulated ladder (1) complies with NBR standards.



Spacing

Line spacing

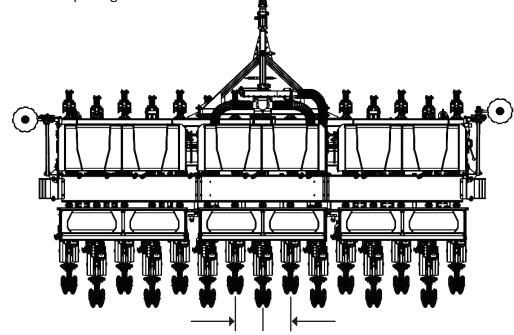
The **PPSOLO AIR 3rd SEED BOX - SELENIUM**, seeders are provided with spacing according to the number of lines requested, and new spacing can be made according to the type of culture desired.

Number of even lines

Mark the center of the **PPSOLO AIR 3rd SEED BOX - SELENIUM** and divide 1/2 (half) spacing to the left and 1/2 (half) to the right, fixing the first two lines at these points. Then, starting from these, make the assembly of the other lines with the desired spacing.

Number of odd lines

Attach a line in the center of the **PPSOLO AIR 3rd SEED BOX - SELENIUM** chassis and starting from this, assemble the others with lines with the desired spacing.



ON THE FOLLOWING PAGE, CHECK THE POSSIBLE SPACES, OBSERVING THE ABOVE ASSEMBLY INSTRUCTIONS TO ASSEMBLE THE QUANTITY OF UNIQUE OR UNIQUE LINES.



Spacing

• Spacing tables in milimeters

| Model | Lines | Spacing |
|-------|-------|------------------|
| | 4 | 800 / 900 / 1000 |
| 4 | 5 | 700 / 800 |
| Ō | 6 | 500 / 550 |
| 0 | 7 | 500 / 550 |
| 0 | 8 | 415* / 450 |
| | 9 | 415* |

| Model | Lines | Spacing |
|------------|-------|-------------------|
| | 5 | 900 / 1000 |
| 4 | 6 | 550 / 800 |
| 4 5 | 7 | 600 / 650 |
| 0 | 8 | 500 / 550 |
| 0 | 9 | 415* / 450 / 500 |
| | 10 | 415* / 430* / 450 |

| Model | Lines | Spacing |
|-------|-------|------------------------|
| | 6 | 800* / 850 / 900 / 950 |
| | 7 | 700 / 750 / 800 |
| 5 | 8 | 550** |
| Ŏ | 9 | 500 / 550 / 600 |
| 0 | 10 | 415* / 450 / 550** |
| 0 | 11 | 415* / 450 / 500 |
| | 12 | 415* / 430* / 450* |
| | 13 | 400* |

| Model | Lines | Spacing | | | | |
|--------|-------|-------------------|--|--|--|--|
| | 7 | 800* / 850 / 900 | | | | |
| 5 | 9 | 600 / 650 | | | | |
| 5 5 | 10 | 500 / 550 | | | | |
| 0 | 11 | 500 / 550 | | | | |
| 0 | 12 | 415* / 500 | | | | |
| | 13 | 415* / 430* / 450 | | | | |

| Model | Lines | Spacing | | | |
|-------------|-------|-------------------|--|--|--|
| | 8 | 800 / 900 | | | |
| | 9 | 790 | | | |
| 6 5 0 | 10 | 600* | | | |
| 2 | 11 | 600 | | | |
| ŏ | 12 | 500* / 550 | | | |
| U | 14 | 485 | | | |
| | 15 | 415* / 430* / 450 | | | |

| Model | Lines | Spacing | | | | | |
|-------|-------|-------------------|--|--|--|--|--|
| | 9 | 800 / 850 / 900 | | | | | |
| | 10 | 750* / 800 | | | | | |
| 7 | 11 | 600* / 650 / 700 | | | | | |
| 5 | 12 | 600* / 650 | | | | | |
| 0 | 13 | 600 | | | | | |
| 0 | 14 | 500 / 550 | | | | | |
| | 15 | 500* | | | | | |
| | 17 | 415* / 435* / 450 | | | | | |

- (*) SPACING MARKED WITH AN ASTERISK MIGHT HAVE AN ALTERATION UP TO 25MM AT ANY ROW.
- (**) SPACING MARKED WITH AN ASTERISK MIGHT HAVE AN ALTERATION UP TO 30MM AT ANY ROW.



Adjustments

Line markers adjustment

The regulating of the line markers is important to obtain evenly spaced planting, making so that the edge line of the seeder is at the same spacing as the last planted line, facilitating future operations. To adjust the line markers, proceed as follows:

01 - First of all, you must know the line spacing, the number of lines to be used in the operation and the tractor's front gauge. Use the formula below, followed by an example.

EXAMPLE: For a planting with 15 rows in the seeder, spacing of 0.45 mts and the front gauge of the tractor with 1.43 mts, determine:

Formula:
$$D = Ex(N+1)-B$$

$$2 E = Line spacing (mts)$$
Resolve: $X = 0.45 \times 16 - 1.43$

$$2 N = Number of seeder rows$$

$$B = Front gauge of tractor$$

$$D = Marker distance$$

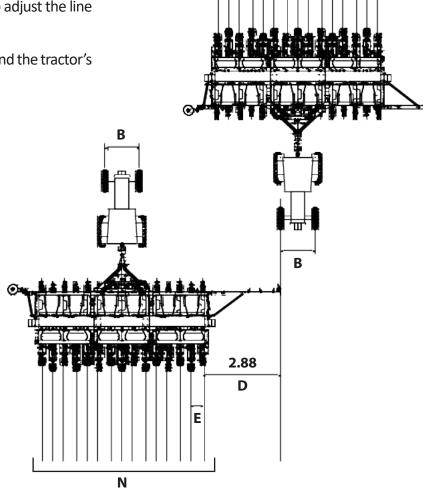
02 - Set the 2.88 m line marker disc to the center of the first planting line.

D = 2.88 meter

03 - Line markers are alternating, one lowers after the other, so if during planting before the end of the line there is the need to stop work, engage the piston so that the sower goes up and down twice to continue working with the marker on the right side.



Avoid accidents caused by the intermittent action of line markers. When activating the seeder, check that there are no people under the line markers or in their area of action.



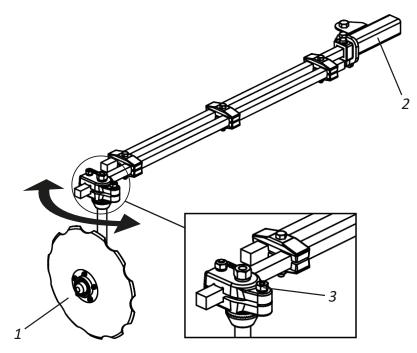


Adjustments

Adjustment of line marker discs

The discs 1 of the line markers 2 have angular adjustment to facilitate the demarcation work on the ground To adjust the disks 1 of the line markers 2 proceed as follows:

- 01 Loosen the nut (3), turn the disc (1) to the desired position.
- 02 Then, retighten the nut (3) fixing the disc (1) in the desired position.



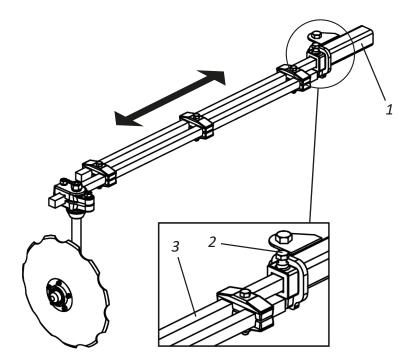


Before making any adjustments to the row marker, make sure it is on the ground, the seeder is stopped and the tractor is off.

Adjusting the line marker bar

The line markers 1 have distance regulation to be adjusted according to the number of lines, spacing and gauge of the tractor To adjust the distance of the line markers 1 proceed as follows:

- 01 Loosen the screw (2), move the bar (3) in the desired position.
- **02** Then, retighten the screw (2) fixing the bar (3) in the desired position.





To find out the distance to be adjusted in the line marker, do the calculation according to the instructions on the previous page.

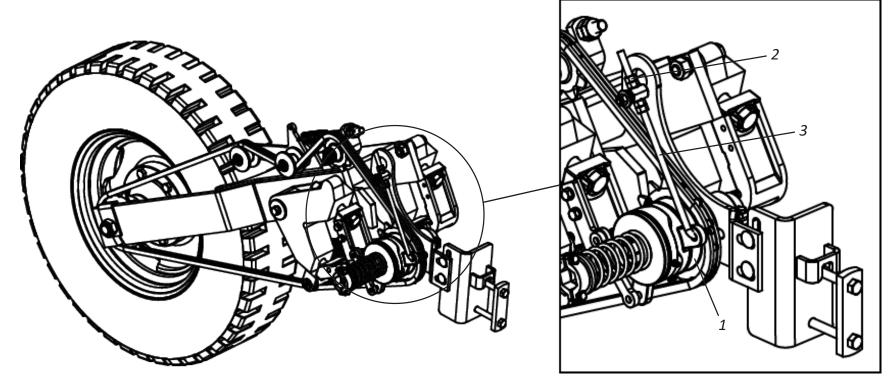


Adjustments

Ratchet adjustment

When placing the shims on the hydraulic cylinder to limit the depth of the discs according to the instructions on page 37, then adjust the ratchet (1) according to the need for work, thus ensuring the activation of the transmission system. To adjust the ratchet (1), proceed as follows:

- 01 Loosen the nuts and counter nuts (2), adjust the rod (3) for the correct activation of the system ratchet disarm (1).
- *02* Then, retighten the nuts and against nuts (2).





Failure to observe this regulation may cause the ratchet to disarm.

• IMPORTANT

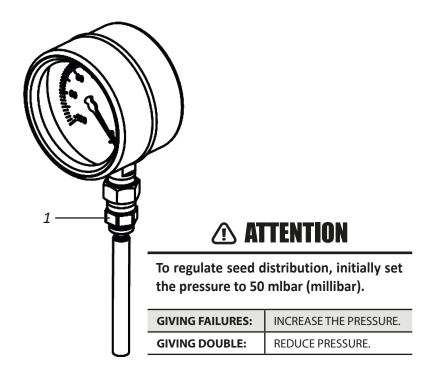
When adjusting the ratchet, repeat this procedure on all ratchets on the seeder.



Adjustments

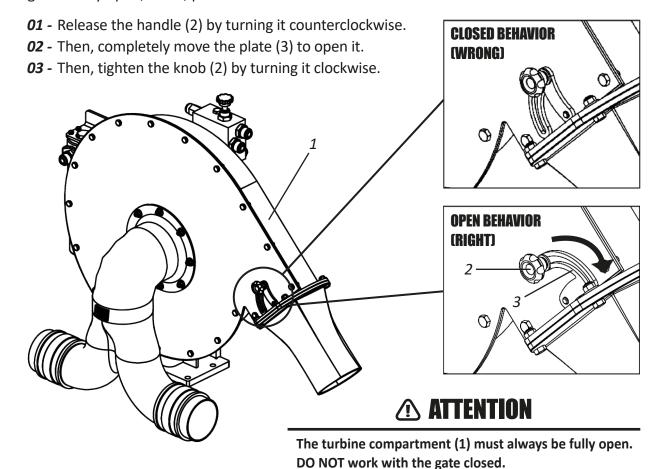
Vacuum Meter

A **PPSOLO AIR 3rd SEED BOX - SELENIUM** has a vacuum gauge (1), used to measure the vacuum level in the lines. To check the generated vacuum level, proceed as instructed on page 73.



Turbine

The turbine (1) must generate a negative pressure (vacuum) determined, depending on the specific weight of the seed that will be used. Before starting work, make sure that the gate is fully open, if not, proceed as follows:



O IMPORTANT

The vacuum is indicated in mbar (millibar) by the vacuum gauge (1).

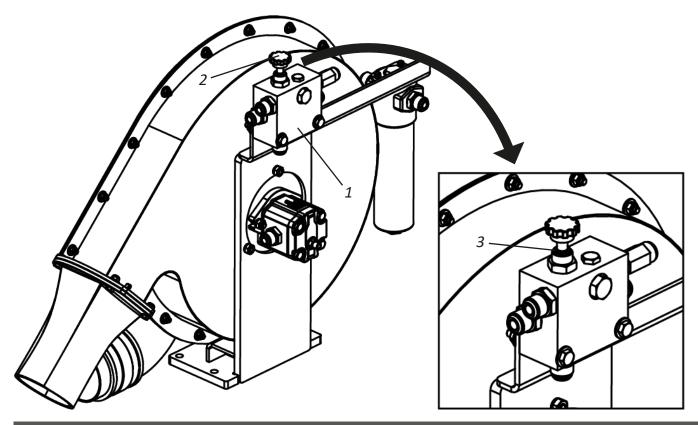


Adjustments

Regulation of the continuous flow system

PPSOLO AIR 3rd SEED BOX - SELENIUM has a continuous flow system. In this system, when checking the seed drop from the disc when maneuvering the seeder, gradually open the flow regulating valve (1), for this, proceed as follows:

- 01 Turn the handle (2) of the flow regulating valve (1) counterclockwise, until you see that the fact no longer occurs.
- 02 At the end of the adjustment, lock the flow regulating valve (1) through the counter nut (3) contained in the handle (2), turning it clockwise with an appropriate tool so that eventually the system does not suffer from adjustment.



ATTENTION

Before starting work, check the flow regulation according to the type of seed used, through the flow valve (1).



Seed dispensing system

SELENIUM Batcher

PPSOLO AIR 3rd SEED BOX - SELENIUM leaves the factory with the **SELENIUM** seed meter.



TECHNICAL SPECIFICATIONS

Pneumatic Batcher.

No need for adjustments and regulations.

It has a display to monitor the operation in real time.

Dimensions: 414 mm (H) x 206 mm (W) x 373 mm (L).

Weight: 3 Kg.

Vacuum nozzle diameter: 36.5 mm.

Seed nozzle diameter: 74 mm (gravity) or 32 mm (positive pressure).

Available crops



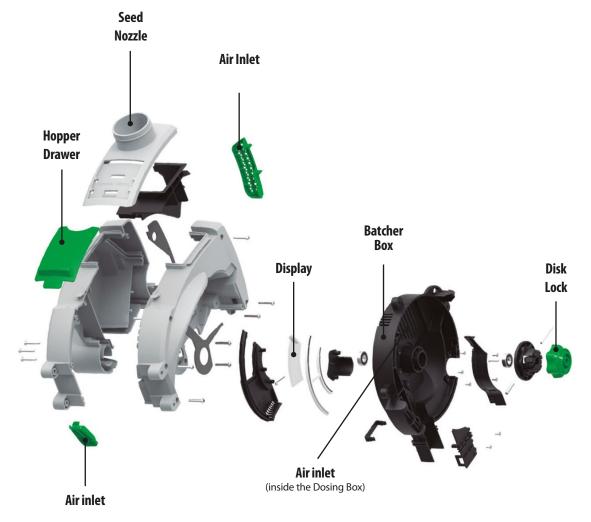


Seed dispensing system

• SELENIUM batcher components









Seed dispensing system

Crop choice

The **SELENIUM** batcher has **three distinct sets of discs** with their respective organizer and rosette; **for corn, flow soybean** and **soybean** plantations.

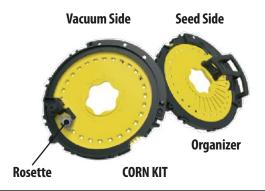
O NOTE

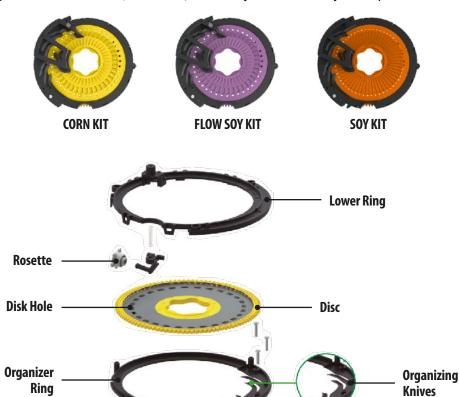
The disc set has no adjustment and also must not be disassembled.

Choose the specific set for the desired crop according to the **disc colors.** The table below relates the color of the disc with the planting crop.

| CROPS | CODES | NUMBER OF HOLES | HOLE DIAMETER |
|-----------|--------|-----------------|---------------|
| CORN | YELLOW | 28 | 4.5 mm |
| SOJA FLOW | LILAC | 40 | 4.0 mm |
| SOYBEAN | ORANGE | 55 | 4.0 mm |

 $Description\ of\ the\ 3\ (three)\ kits\ (consisting\ of\ disc,\ organizer\ and\ rosette)\ and\ respective\ crops.$





Bottom Organizer

Singulator

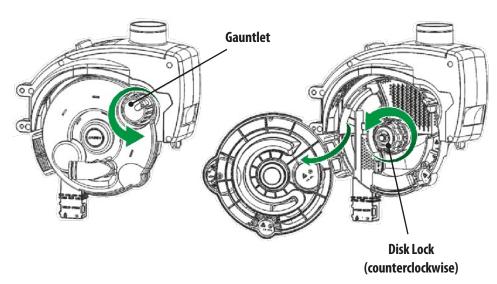


Seed dispensing system

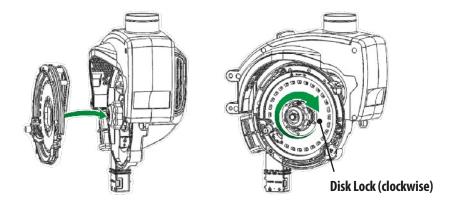
Disk choice

For mounting the selected disc set on the batcher, it is not necessary to remove the **Dispenser from the Hopper**.

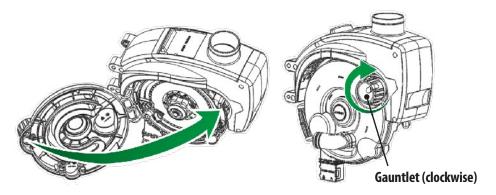
- 01 Open the batcher cover by turning the Handle counterclockwise.
- 02 -Turn the disc lock counterclockwise until the end of its course.



03 - Assemble the disc set with the Singulator (Organizers) facing inside the batcher. After positioning the assembly, turn the disc lock clockwise to lock the assembly.



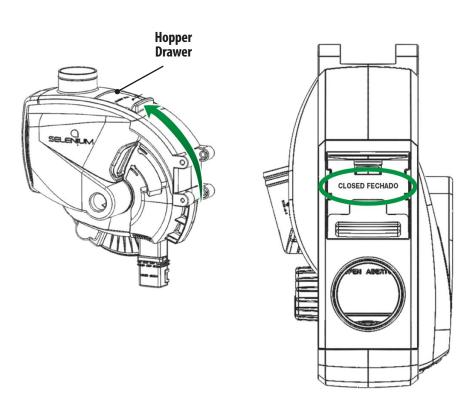
04 - Close the lid pressing it against the batcher box until the **handle** locks. Make sure the cover latch has closed properly.



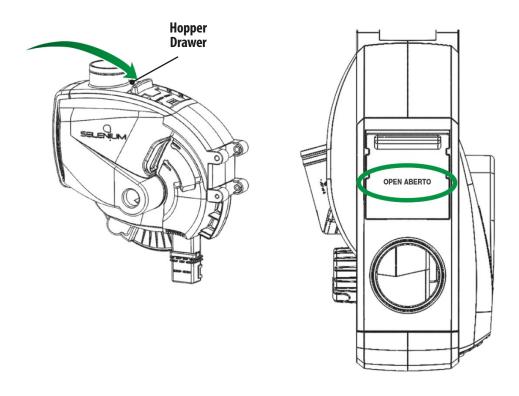


Seed dispensing system

- Crop change with the seed-filled SELENIUM batcher
- 01 Push the Hopper drawer, in the direction indicated in the image below, until the end of the course. In this position, the Hopper will be closed, displaying the indication "CLOSED".



- 02 Repeat the operations of the "Disk Set" topic of this manual.
- 03 Reopen the Hopper Drawer, in the direction indicated below, until the end of the course. In this position, the Hopper will be open, displaying the indication "OPEN".





Seed dispensing system

Display

The **SELENIUM** batcher has a display that offers the possibility to follow the result of the organization of the seeds inside the batcher. To open the display, just slide it as shown in the image on the side.



After checking the singularity, keep the display closed.



Seed dispensing system

Troubleshooting (SELENIUM Doser) - Part I

1-EXCESS OF FAILURES

FAILURES are characterized by the lack of seeds in the holes of the discs (they are verified by the display). Its incidence can be reduced with the following actions:

- a) Check that the choice of disc set has been made correctly (page 48) in this manual.
- **b)** Check that there are no fragments lodged in the disc holes.
- c) Check that the seeds are correctly graphited. The use of powdered and dry graphite, applied to the seeds and mixed evenly, is essential to make the seeds easy to move inside the batcher. In this way, the seeds are more easily captured by the hole in the disc.
- d) Make sure the vacuum pressure is set correctly. If the failures (lack of seeds) persist, try to increase the working pressure until the failures are reduced as much as possible. Then check that there are no doubles.
 - e) Check the seal, make sure it is in good condition.

2 - EXCESS OF DOUBLES

The **DOUBLE** ones are characterized by the presence of two or more seeds in the holes of the discs (they are verified by the display). Its incidence can be reduced with the following actions:

- a) Check that the choice of disc set has been made correctly (page 48).
- b) Check the organizing knives, make sure they aren't frayed from overuse.
- c) The seeds must be correctly graphited. The use of powdered and dry graphite applied to the seeds and, mixed uniformly, is essential to make the seeds easy to move inside the batcher. In this way, they will be separated from each other more easily by the organizer.
- d) Make sure the vacuum pressure is set correctly. If the doubles persist, reduce the working pressure until the doubles are reduced as much as possible. Then check if there are no errors.



Seed dispensing system

Troubleshooting (SELENIUM Doser) - Part II

3 - SPACING FAILURE

If the **spacing between seeds in the soil** is impaired, we recommend the following actions:

- a) Check the metering seed outlet and the seed conductor. Debris lodged in its walls can deflect the course of the seeds.
- **b)** Check the traction system. Make sure the system is in good condition and well lubricated.
- c) Try turning the batcher manually. Look for any unusual signs or sounds as you rotate. If it is turning hard, remove the disc, organizer and rosette assembly looking for any debris that is making the assembly difficult to turn.
- d) Look for marks or evidence of where the seed is making contact with the seed conductor. Make sure the Selenium is positioned so that the seed lands in the middle of the seed conductor.
 - e) Check that the batcher air inlets are clear (see pages 46 and 47) to allow free air flow into the batcher.
- f) Check that the seeds are correctly graphited. The use of powdered and dry graphite, applied to the seeds and mixed evenly, is essential to make the seeds easy to move inside the batcher. Thus, they will detach from the disc at the correct time. In case of wet weather, increase the dosage of graphite in the seeds.
 - g) Decrease the speed to verify if the problem is being caused by the excessive vibration of the planting line.
 - h) If you have a seed sensor on the conductor, check if the installation is correct. The sensor must not extend beyond the inner wall of the conductor.

4 - INCORRECT POPULATION

If the seed population in the soil is not in accordance with the desired one, the following actions can be taken:

- a) If the batcher is driven by a hydraulic motor or electric motor, check that the number of holes on the disc is correctly configured on the terminal that controls the motors. Also check that the population indicated on the display is correct.
- **b)** If the batcher is mechanically driven by the drive wheel of the planter, check in the dosage table if the correct gears are being used in the gear box (which moves the seed batchers).

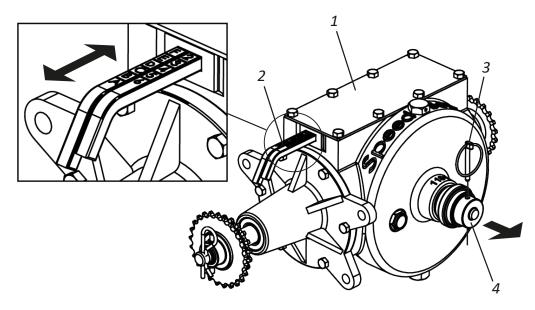


Seed dispesing system

Speed Box

PPSOLO AIR 3° DEPÓSITO - SELENIUM is equipped with the Speed Box system (1), which activates the dispensing system with simple adjustments, guaranteeing the exchange of fast rotations. To adjust the seeds, proceed as follows:

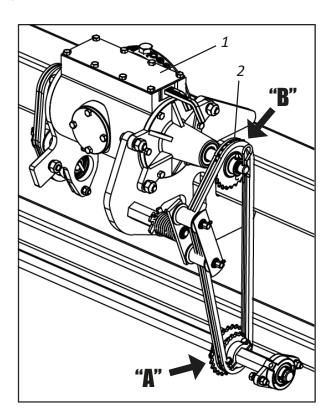
01 - Select the desired quantity in the tables and check the corresponding combination on the levers (2). EXAMPLE: Position F2 in the table, indicates that the lever with letters must be in the "F" position and the lever with numbers must be in the "2" position.



02 - To move the levers, remove the lock (3), pull the handle (4), then adjust the levers according to the example above. When combining is complete, return the handle (4) and replace the lock (3).

Regulation for seed dispensing

Seed adjustment is done through the Speed Box (1). To obtain more adjustments, reverse the current in the "A" and moved "B" drive gears. After changing the gears, check the chain tension (2).





When checking the chain tension (2) if more pressure is needed on the tensioner, proceed according to the instructions on page 82.





| | | SEED Dispensing T | able by linear met | er - PPSOLO AIR 3rd | I SEED BOX - SELEN | IUM | | |
|-----------------------|-----|-------------------|--------------------|---------------------|--------------------|----------|------|------|
| Ratchet l | 20 | | Speed Box | inlet gear | | 25 | | |
| Constitution | | | Nu | mber of holes in th | e Seed Dispenser [|)isc | | • |
| Speed Box Combination | 20 | 28 | 40 | 48 | 64 | 75 | 84 | |
| F - 1 | 1,6 | 2,2 | 3,1 | 3,8 | 4,3 | 5,0 | 5,9 | 6,6 |
| F - 2 | 1,8 | 2,5 | 3,5 | 4,2 | 4,9 | 5,7 | 6,6 | 7,4 |
| E - 1 | 2,0 | 2,8 | 3,9 | 4,7 | 5,4 | 6,3 | 7,4 | 8,3 |
| F-3 | 2,0 | 2,8 | 4,0 | 4,8 | 5,6 | 6,5 | 7,6 | 8,5 |
| E - 2 | 2,2 | 3,1 | 4,4 | 5,3 | 6,1 | 7,1 | 8,3 | 9,3 |
| D - 1 | 2,4 | 3,3 | 4,7 | 5,7 | 6,5 | 7,5 | 8,8 | 9,9 |
| F - 4 | 2,4 | 3,3 | 4,7 | 5,7 | 6,5 | 7,5 | 8,8 | 9,9 |
| E-3 | 2,5 | 3,5 | 5,1 | 6,1 | 6,9 | 8,1 | 9,5 | 10,6 |
| D - 2 | 2,7 | 3,7 | 5,3 | 6,4 | 7,3 | 8,5 | 9,9 | 11,1 |
| C - 1 | 2,8 | 3,9 | 5,5 | 6,6 | 7,6 | 8,8 | 10,3 | 11,6 |
| F - 5 | 2,8 | 4,0 | 5,7 | 6,8 | 7,8 | 9,1 | 10,6 | 11,9 |
| E - 4 | 2,9 | 4,1 | 5,9 | 7,1 | 8,1 | 9,4 | 11,0 | 12,4 |
| D-3 | 3,0 | 4,2 | 6,1 | 7,3 | 8,3 | 9,7 11,4 | | 12,7 |
| C - 2 | 3,1 | 4,3 | 6,2 | 7,4 | 8,5 | 9,9 | 11,6 | 13,0 |
| B - 1 | 3,1 | 4,4 | 6,3 | 7,5 | 8,6 | 10,1 | 11,8 | 13,2 |
| A - 1 | 3,5 | 5,0 | 7,1 | 8,5 | 9,7 | 11,3 | 13,3 | 14,9 |
| A - 2 | 4,0 | 5,6 | 8,0 | 9,5 | 10,9 | 12,7 | 14,9 | 16,7 |
| B - 3 | 4,0 | 5,7 | 8,1 | 9,7 | 11,1 | 12,9 | 15,2 | 17,0 |
| C - 4 | 4,1 | 5,8 | 8,3 | 9,9 | 11,3 | 13,2 | 15,5 | 17,3 |
| D - 5 | 4,2 | 5,9 | 8,5 | 10,2 | 11,7 | 13,6 | 15,9 | 17,8 |
| E-6 | 4,4 | 6,2 | 8,8 | 10,6 | 12,2 | 14,1 | 16,6 | 18,6 |
| A - 3 | 4,5 | 6,4 | 9,1 | 10,9 | 12,5 | 14,5 | 17,0 | 19,1 |
| B - 4 | 4,7 | 6,6 | 9,4 | 11,3 | 13,0 | 15,1 | 17,7 | 19,8 |
| C - 5 | 5,0 | 6,9 | 9,9 | 11,9 | 13,6 | 15,8 | 18,6 | 20,8 |
| D-6 | 5,3 | 7,4 | 10,6 | 12,7 | 14,6 | 17,0 | 19,9 | 22,3 |
| A - 4 | 5,3 | 7,4 | 10,6 | 12,7 | 14,6 | 17,0 | 19,9 | 22,3 |
| B - 5 | 5,7 | 7,9 | 11,3 | 13,6 | 15,6 | 18,1 | 21,2 | 23,8 |
| C-6 | 6,2 | 8,7 | 12,4 | 14,9 | 17,0 | 19,8 | 23,2 | 26,0 |
| A - 5 | 6,4 | 8,9 | 12,7 | 15,3 | 17,5 | 20,4 | 23,9 | 26,7 |
| B - 6 | 7,1 | 9,9 | 14,1 | 17,0 | 19,4 | 22,6 | 26,5 | 29,7 |
| A - 6 | 8,0 | 11,1 | 15,9 | 19,1 | 21,9 | 25,5 | 29,8 | 33,4 |



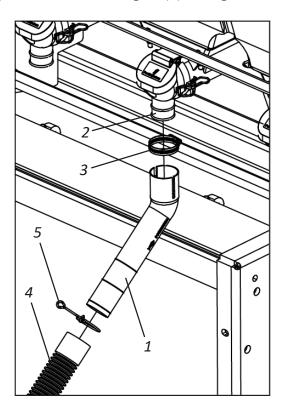
| | | SEED Dispensing 1 | able by linear met | er - PPSOLO AIR 3rd | SEED BOX - SELEN | IUM | | | | | | | |
|-----------------------|----------------|-------------------|--|---------------------|------------------|--------------|------|------|--|--|--|--|--|
| Ratchet I | nex shaft gear | | 25 | | Speed Box | c inlet gear | | 20 | | | | | |
| 6 ID 6 II 4 | | , | Number of holes in the Seed Dispenser Disc | | | | | | | | | | |
| Speed Box Combination | 20 | 28 | 40 | 48 | 55 | 64 | 75 | 84 | | | | | |
| F - 1 | 2,5 | 3,4 | 4,9 | 5,9 | 6,8 | 7,9 | 9,2 | 10,3 | | | | | |
| F - 2 | 2,8 | 3,9 | 5,5 | 6,6 | 7,6 | 8,8 | 10,4 | 11,6 | | | | | |
| E - 1 | 3,1 | 4,3 | 6,1 | 7,4 | 8,4 | 9,8 | 11,5 | 12,9 | | | | | |
| F - 3 | 3,2 | 4,4 | 6,3 | 7,6 | 8,7 | 10,1 | 11,8 | 13,3 | | | | | |
| E - 2 | 3,5 | 4,8 | 6,9 | 8,3 | 9,5 | 11,0 | 12,9 | 14,5 | | | | | |
| D - 1 | 3,7 | 5,2 | 7,4 | 8,8 | 10,1 | 11,8 | 13,8 | 15,5 | | | | | |
| F - 4 | 3,7 | 5,2 | 7,4 | 8,8 | 10,1 | 11,8 | 13,8 | 15,5 | | | | | |
| E - 3 | 3,9 | 5,5 | 7,9 | 9,5 | 10,9 | 12,6 | 14,8 | 16,6 | | | | | |
| D - 2 | 4,1 | 5,8 | 8,3 | 9,9 | 11,4 | 13,3 | 15,5 | 17,4 | | | | | |
| C - 1 | 4,3 | 6,0 | 8,6 | 10,3 | 11,8 | 13,8 | 16,1 | 18,0 | | | | | |
| F - 5 | 4,4 | 6,2 | 8,8 | 10,6 | 12,2 | 14,1 | 16,6 | 18,6 | | | | | |
| E - 4 | 4,6 | 6,4 | 9,2 | 11,0 | 12,7 | 14,7 | 17,3 | 19,3 | | | | | |
| D - 3 | 4,7 | 6,6 | 9,5 | 11,4 | 13,0 | 15,2 | 17,8 | 19,9 | | | | | |
| C - 2 | 4,8 | 6,8 | 9,7 | 11,6 | 13,3 | 15,5 | 18,1 | 20,3 | | | | | |
| B - 1 | 4,9 | 6,9 | 9,8 | 11,8 | 13,5 | 15,7 | 18,4 | 20,6 | | | | | |
| A - 1 | 5,5 | 7,7 | 11,0 | 13,3 | 15,2 | 17,7 | 20,7 | 23,2 | | | | | |
| A - 2 | 6,2 | 8,7 | 12,4 | 14,9 | 17,1 | 19,9 | 23,3 | 26,1 | | | | | |
| B - 3 | 6,3 | 8,8 | 12,6 | 15,2 | 17,4 | 20,2 | 23,7 | 26,5 | | | | | |
| C - 4 | 6,4 | 9,0 | 12,9 | 15,5 | 17,7 | 20,6 | 24,2 | 27,1 | | | | | |
| D - 5 | 6,6 | 9,3 | 13,3 | 15,9 | 18,2 | 21,2 | 24,9 | 27,8 | | | | | |
| E - 6 | 6,9 | 9,7 | 13,8 | 16,6 | 19,0 | 22,1 | 25,9 | 29,0 | | | | | |
| A - 3 | 7,1 | 9,9 | 14,2 | 17,0 | 19,5 | 22,7 | 26,6 | 29,8 | | | | | |
| B - 4 | 7,4 | 10,3 | 14,7 | 17,7 | 20,3 | 23,6 | 27,6 | 30,9 | | | | | |
| C - 5 | 7,7 | 10,8 | 15,5 | 18,6 | 21,3 | 24,8 | 29,0 | 32,5 | | | | | |
| D-6 | 8,3 | 11,6 | 16,6 | 19,9 | 22,8 | 26,5 | 31,1 | 34,8 | | | | | |
| A - 4 | 8,3 | 11,6 | 16,6 | 19,9 | 22,8 | 26,5 | 31,1 | 34,8 | | | | | |
| B - 5 | 8,8 | 12,4 | 17,7 | 21,2 | 24,3 | 28,3 | 33,1 | 37,1 | | | | | |
| C-6 | 9,7 | 13,5 | 19,3 | 23,2 | 26,6 | 30,9 | 36,3 | 40,6 | | | | | |
| A - 5 | 9,9 | 13,9 | 19,9 | 23,9 | 27,3 | 31,8 | 37,3 | 41,8 | | | | | |
| B - 6 | 11,0 | 15,5 | 22,1 | 26,5 | 30,4 | 35,4 | 41,4 | 46,4 | | | | | |
| A - 6 | 12,4 | 17,4 | 24,9 | 29,8 | 34,2 | 39,8 | 46,6 | 52,2 | | | | | |



Fertilizer dispensing system

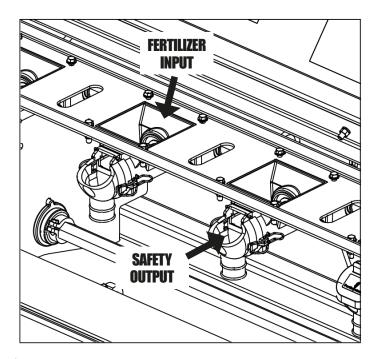
Fertisystem fertilizer conductor

To carry the fertilizer from the dispenser to the ground, fit the spouts in degree (1) to the fertisystem conductor outlets (2) through the clips (3). Then place the hoses (4) on the nozzles in degree (1) through the lock spring (5).



The Fertisystem system has safety outputs that guarantee the proper functioning of the system without damaging it. In case of clogging of the hose and the batcher, clean the batcher until the end of the hose near the furrower rod

or double disc, as the system may become clogged by roots, pieces of plastic and other objects.





ATTENTION

Check dispensers and hoses daily and clean their outlets. When the fertilizer has impurities or is damp, clean it more often.

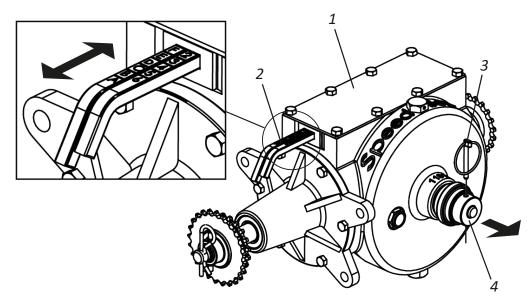


Fertilizer dispensing system

Speed Box

The **PPSOLO AIR 3rd SEED BOX - VSET** is equipped with the Speed Box system (1), which activates the dispensing system with simple adjustments, guaranteeing the exchange of fast rotations. To adjust the fertilizer, proceed as follows:

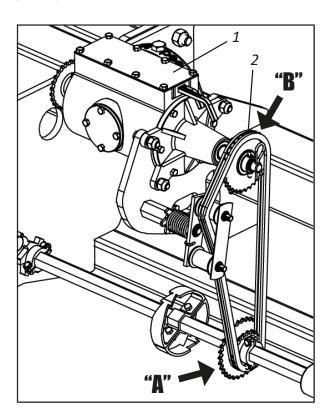
01 - Select the desired quantity in the tables and check the corresponding combination on the levers (2). EXEMPLE: Position F2 nin the table, indicates that the lever with letters must be in the "F" position and the lever with numbers must be in the "2" position.



02 - To move, the levers, remove the lock (3), pull the handle (4), then adjust the levers according to the example above. When combining is complete, return the handle (4) and replace the lock (3).

Regulation for fertilizer dispensing

The fertilizer adjustment is done through the Speed Box (1). To obtain more adjustments, reverse the current in the "A" and moved "B" drive gears. After changing the gears, check the chain tension (2).





When checking the chain tension (2) if more pressure is needed on the tensioner, proceed according to the instructions on page 82.



| | FERTILIZER Dispensing Table by linear meter - PPSOLO AIR 3rd SEED BOX - SELENIUM | | | | | | | | | | | | | | |
|-----------------------|--|-----|-----|-----|-----|-----|-----|-------------------------|-----|-----|-----|-----|-----|-----|------|
| | Ratchet hex shaft gear | | | | | | | 20 Speed Box Inlet Gear | | | | | | | |
| Speed Box Combination | Grams 50 m | 415 | 430 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 |
| F - 1 | 313 | 151 | 146 | 139 | 125 | 114 | 104 | 96 | 89 | 83 | 78 | 74 | 70 | 66 | 63 |
| F-2 | 352 | 170 | 164 | 157 | 141 | 128 | 117 | 108 | 101 | 94 | 88 | 83 | 78 | 74 | 70 |
| E - 1 | 391 | 189 | 182 | 174 | 157 | 142 | 130 | 120 | 112 | 104 | 98 | 92 | 87 | 82 | 78 |
| F-3 | 402 | 194 | 187 | 179 | 161 | 146 | 134 | 124 | 115 | 107 | 101 | 95 | 89 | 85 | 80 |
| E - 2 | 440 | 212 | 205 | 196 | 176 | 160 | 147 | 135 | 126 | 117 | 110 | 104 | 98 | 93 | 88 |
| D-1 | 470 | 226 | 218 | 209 | 188 | 171 | 157 | 144 | 134 | 125 | 117 | 110 | 104 | 99 | 94 |
| F - 4 | 470 | 226 | 218 | 209 | 188 | 171 | 157 | 144 | 134 | 125 | 117 | 110 | 104 | 99 | 94 |
| E-3 | 503 | 242 | 234 | 224 | 201 | 183 | 168 | 155 | 144 | 134 | 126 | 118 | 112 | 106 | 101 |
| D-2 | 528 | 255 | 246 | 235 | 211 | 192 | 176 | 163 | 151 | 141 | 132 | 124 | 117 | 111 | 106 |
| C - 1 | 548 | 264 | 255 | 243 | 219 | 199 | 183 | 169 | 157 | 146 | 137 | 129 | 122 | 115 | 110 |
| F - 5 | 563 | 272 | 262 | 250 | 225 | 205 | 188 | 173 | 161 | 150 | 141 | 133 | 125 | 119 | 113 |
| E - 4 | 587 | 283 | 273 | 261 | 235 | 213 | 196 | 181 | 168 | 157 | 147 | 138 | 130 | 124 | 117 |
| D-3 | 604 | 291 | 281 | 268 | 241 | 220 | 201 | 186 | 172 | 161 | 151 | 142 | 134 | 127 | 121 |
| C - 2 | 616 | 297 | 287 | 274 | 247 | 224 | 205 | 190 | 176 | 164 | 154 | 145 | 137 | 130 | 123 |
| B - 1 | 626 | 302 | 291 | 278 | 250 | 228 | 209 | 193 | 179 | 167 | 157 | 147 | 139 | 132 | 125 |
| A - 1 | 704 | 339 | 328 | 313 | 282 | 256 | 235 | 217 | 201 | 188 | 176 | 166 | 157 | 148 | 141 |
| A - 2 | 792 | 382 | 369 | 352 | 317 | 288 | 264 | 244 | 226 | 211 | 198 | 186 | 176 | 167 | 158 |
| B - 3 | 805 | 388 | 374 | 358 | 322 | 293 | 268 | 248 | 230 | 215 | 201 | 189 | 179 | 169 | 161 |
| C - 4 | 822 | 396 | 382 | 365 | 329 | 299 | 274 | 253 | 235 | 219 | 205 | 193 | 183 | 173 | 164 |
| D - 5 | 845 | 407 | 393 | 376 | 338 | 307 | 282 | 260 | 241 | 225 | 211 | 199 | 188 | 178 | 169 |
| E - 6 | 880 | 424 | 409 | 391 | 352 | 320 | 293 | 271 | 252 | 235 | 220 | 207 | 196 | 185 | 176 |
| A - 3 | 906 | 436 | 421 | 402 | 362 | 329 | 302 | 279 | 259 | 241 | 226 | 213 | 201 | 191 | 181 |
| B - 4 | 939 | 453 | 437 | 417 | 376 | 341 | 313 | 289 | 268 | 250 | 235 | 221 | 209 | 198 | 188 |
| C - 5 | 986 | 475 | 459 | 438 | 394 | 359 | 329 | 303 | 282 | 263 | 247 | 232 | 219 | 208 | 197 |
| D-6 | 1056 | 509 | 491 | 470 | 423 | 384 | 352 | 325 | 302 | 282 | 264 | 249 | 235 | 222 | 211 |
| A - 4 | 1056 | 509 | 491 | 470 | 423 | 384 | 352 | 325 | 302 | 282 | 264 | 249 | 235 | 222 | 211 |
| B - 5 | 1127 | 543 | 524 | 501 | 451 | 410 | 376 | 347 | 322 | 301 | 282 | 265 | 250 | 237 | 225 |
| C-6 | 1233 | 594 | 573 | 548 | 493 | 448 | 411 | 379 | 352 | 329 | 308 | 290 | 274 | 259 | 247 |
| A - 5 | 1268 | 611 | 590 | 563 | 507 | 461 | 423 | 390 | 362 | 338 | 317 | 298 | 282 | 267 | 254 |
| B - 6 | 1409 | 679 | 655 | 626 | 563 | 512 | 470 | 433 | 402 | 376 | 352 | 331 | 313 | 297 | 282 |
| A - 6 | 1585 | 764 | 737 | 704 | 634 | 576 | 528 | 488 | 453 | 423 | 396 | 373 | 352 | 334 | 317 |



| | FERTILIZER Dispensing Table by linear meter - PPSOLO AIR 3rd SEED BOX - SELENIUM | | | | | | | | | | | | | | |
|-----------------------|--|------|------|------|------|------|------|-------------------------|------|------|-----|-----|-----|-----|------|
| | Ratchet hex shaft gear | | | | | | | 31 Speed Box Inlet Gear | | | | | | | |
| Speed Box Combination | Grams 50 m | 415 | 430 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 |
| F - 1 | 752 | 362 | 350 | 334 | 301 | 273 | 251 | 231 | 215 | 201 | 188 | 177 | 167 | 158 | 150 |
| F - 2 | 846 | 408 | 394 | 376 | 338 | 308 | 282 | 260 | 242 | 226 | 212 | 199 | 188 | 178 | 169 |
| E - 1 | 940 | 453 | 437 | 418 | 376 | 342 | 313 | 289 | 269 | 251 | 235 | 221 | 209 | 198 | 188 |
| F-3 | 967 | 466 | 450 | 430 | 387 | 352 | 322 | 298 | 276 | 258 | 242 | 228 | 215 | 204 | 193 |
| E - 2 | 1058 | 510 | 492 | 470 | 423 | 385 | 353 | 325 | 302 | 282 | 264 | 249 | 235 | 223 | 212 |
| D-1 | 1128 | 544 | 525 | 501 | 451 | 410 | 376 | 347 | 322 | 301 | 282 | 265 | 251 | 237 | 226 |
| F - 4 | 1128 | 544 | 525 | 501 | 451 | 410 | 376 | 347 | 322 | 301 | 282 | 265 | 251 | 237 | 226 |
| E-3 | 1209 | 582 | 562 | 537 | 483 | 440 | 403 | 372 | 345 | 322 | 302 | 284 | 269 | 254 | 242 |
| D - 2 | 1269 | 612 | 590 | 564 | 508 | 461 | 423 | 390 | 363 | 338 | 317 | 299 | 282 | 267 | 254 |
| C - 1 | 1316 | 634 | 612 | 585 | 526 | 479 | 439 | 405 | 376 | 351 | 329 | 310 | 292 | 277 | 263 |
| F - 5 | 1354 | 652 | 630 | 602 | 541 | 492 | 451 | 417 | 387 | 361 | 338 | 319 | 301 | 285 | 271 |
| E - 4 | 1410 | 680 | 656 | 627 | 564 | 513 | 470 | 434 | 403 | 376 | 353 | 332 | 313 | 297 | 282 |
| D-3 | 1450 | 699 | 675 | 645 | 580 | 527 | 483 | 446 | 414 | 387 | 363 | 341 | 322 | 305 | 290 |
| C-2 | 1481 | 714 | 689 | 658 | 592 | 538 | 494 | 456 | 423 | 395 | 370 | 348 | 329 | 312 | 296 |
| B - 1 | 1504 | 725 | 700 | 668 | 602 | 547 | 501 | 463 | 430 | 401 | 376 | 354 | 334 | 317 | 301 |
| A - 1 | 1692 | 815 | 787 | 752 | 677 | 615 | 564 | 521 | 483 | 451 | 423 | 398 | 376 | 356 | 338 |
| A - 2 | 1904 | 917 | 885 | 846 | 761 | 692 | 635 | 586 | 544 | 508 | 476 | 448 | 423 | 401 | 381 |
| B - 3 | 1934 | 932 | 899 | 859 | 774 | 703 | 645 | 595 | 553 | 516 | 483 | 455 | 430 | 407 | 387 |
| C - 4 | 1974 | 951 | 918 | 877 | 790 | 718 | 658 | 607 | 564 | 526 | 494 | 465 | 439 | 416 | 395 |
| D-5 | 2031 | 979 | 944 | 902 | 812 | 738 | 677 | 625 | 580 | 541 | 508 | 478 | 451 | 427 | 406 |
| E-6 | 2115 | 1019 | 984 | 940 | 846 | 769 | 705 | 651 | 604 | 564 | 529 | 498 | 470 | 445 | 423 |
| A - 3 | 2176 | 1048 | 1012 | 967 | 870 | 791 | 725 | 669 | 622 | 580 | 544 | 512 | 483 | 458 | 435 |
| B - 4 | 2256 | 1087 | 1049 | 1003 | 902 | 820 | 752 | 694 | 645 | 602 | 564 | 531 | 501 | 475 | 451 |
| C - 5 | 2369 | 1142 | 1102 | 1053 | 948 | 861 | 790 | 729 | 677 | 632 | 592 | 557 | 526 | 499 | 474 |
| D-6 | 2538 | 1223 | 1181 | 1128 | 1015 | 923 | 846 | 781 | 725 | 677 | 635 | 597 | 564 | 534 | 508 |
| A - 4 | 2538 | 1223 | 1181 | 1128 | 1015 | 923 | 846 | 781 | 725 | 677 | 635 | 597 | 564 | 534 | 508 |
| B - 5 | 2707 | 1305 | 1259 | 1203 | 1083 | 985 | 902 | 833 | 774 | 722 | 677 | 637 | 602 | 570 | 541 |
| C-6 | 2961 | 1427 | 1377 | 1316 | 1184 | 1077 | 987 | 911 | 846 | 790 | 740 | 697 | 658 | 623 | 592 |
| A - 5 | 3046 | 1468 | 1417 | 1354 | 1218 | 1108 | 1015 | 937 | 870 | 812 | 761 | 717 | 677 | 641 | 609 |
| B - 6 | 3384 | 1631 | 1574 | 1504 | 1354 | 1231 | 1128 | 1041 | 967 | 902 | 846 | 796 | 752 | 712 | 677 |
| A - 6 | 3807 | 1835 | 1771 | 1692 | 1523 | 1384 | 1269 | 1171 | 1088 | 1015 | 952 | 896 | 846 | 802 | 761 |



Calculation

Practical calculation for fertilizer dispensing

01 - Determine the spacing between lines and the amount of fertilizer to be distributed per bushel (Aa) or hectare (Ha).

02 - Example: Seeder with a spacing of 450 mm, to distribute 500 kg of fertilizer per Ha, use the formula below:

Formula: $X = \underbrace{E \times Q}_{\Delta} \times D$

WHERE:

E = Spacing bertween lines (mm)

Q = Amount of fertilizer to be distributed (kg)

A =Area to be fertilized (m^2)

D = 50 meters distance (test)

X = Fertilizer grams to 50 meters

Resolve: $X = 450 \times 500 \times 50$ 10.000

 $X = 22.50 \times 50 = 1125$

X = 1125 grams to 50 meters per line

• Practical test to measure the amount of fertilizer and seed dispensing

- 01 For greater precision in the dispensing of fertilizer or seed, make the test of the amount to be distributed at the place of planting, because there is a condition for each terrain.
- 02 Mark the test distance in the table, we opted for 50 linear meters.
- 03 Fill the tanks of the seeder at least halfway. Run an average of 10 meters outside the test area so that the fertilizer and seeds fill the batchers.
- 04 Seal the exit from the seed nozzles and place collection receptacles on the manure exits. Move the tractor in the demarcated area, always at the same speed you will plant, from 5 to 6 km/h.
- **05** After going through the demarcated space, remove the seed nozzle seal and collect them for counting and also collect the fertilizer for weighing the amount collected. If necessary, increase or decrease the amount of seed and fertilizer to be distributed, check the table.



We suggest that a practical test be carried out on the dispensing of the fertilizer and seed, over 50 m, to later compare the results of the fertilizer and the seed.



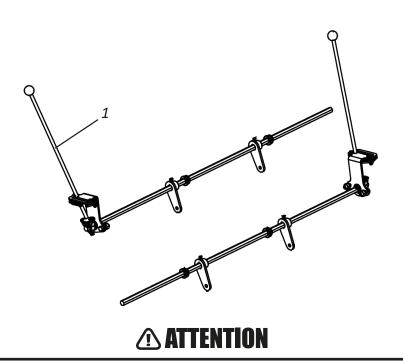
Trimming system

The mechanical or hydraulic trimming systems allow planting with only one side of the seeder, that is, half the lines.

Mechanical trimming system

To activate the mechanical trimming system, proceed as follows:

- 01 Choose the side of the seeder to be trimmed.
- **02** Then, with the tractor and the seeder stopped, manually activate the lever (1) for the chosen side.

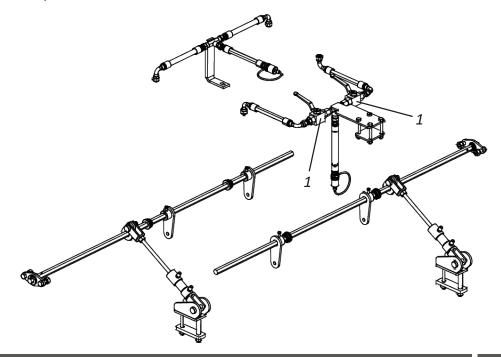


Do not operate the trimming system with the tractor and the seeder in motion. Ignoring this warning could result in serious accidents or death.

Hydraulic trimming system (Optional)

The hydraulic trimming system allows the tractor operator, through a simple operation, to activate it without the need to leave the tractor. This activation is done through the tractor's remote control lever. To start the hydraulic system, proceed as follows:

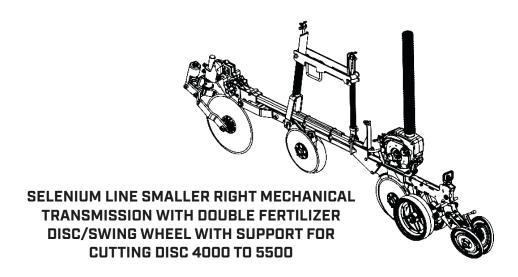
- 01 Choose the side of the seeder to be trimmed.
- 02 Then, close the valve (1) referring to the opposite side of the chosen one.
- 03 Then, activate the remote control lever of the tractor.

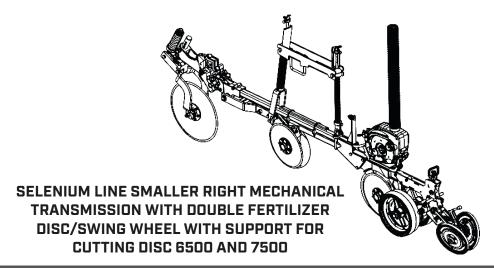


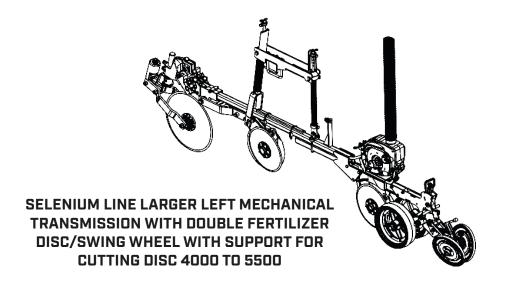


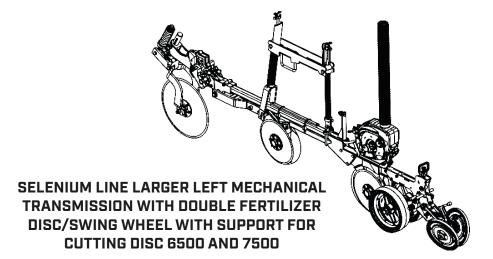
Planting lines

Planting line models









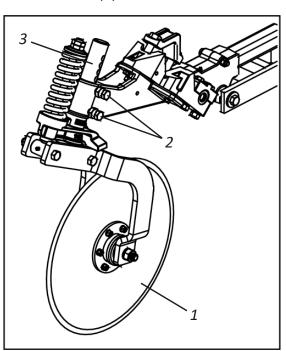


Adjusting the lines

Adjusting the cutting disc depth

To adjust the depth of the cutting disc (1), proceed as follows:

- 01 Loosen the screws (2) and move the shaft (3) to the desired adjustment.
- 02 Then, retighten the screws (2).



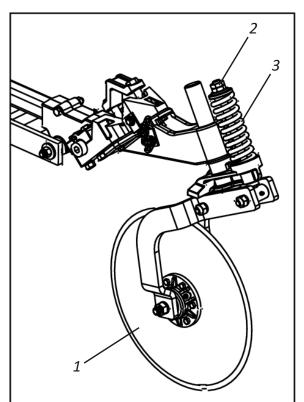
ATTENTION

When adjusting the pressure of the cutting disc, take care not to cancel the articulating action of the cutting disc.

Adjusting the cutting disc pressure

To adjust the pressure of the cutting disc (1), proceed as follows:

- 01 Turn the nut (2) clockwise to increase pressure on the spring (3).
- 02 Turn the nut (2) counterclockwise to decrease pressure on the spring (3).



PRESSURE REGULATION

(+) INGREASED SPRING PRESSURE:

INCREASED PRESSURE OF CUTTING DISC IN THE SOIL.

(-) DECREASED SPRING PRESSURE:

DECREASED PRESSURE OF CUTTING DISC IN THE SOIL.

O IMPORTANT

The depth and pressure adjustments of the cutting disc must be made in the field before starting work, observing the type of soil to be worked, to obtain a better performance of the seeder.



Adjusting the lines

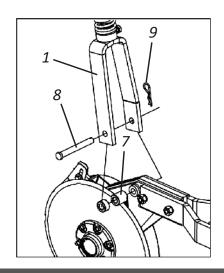
Adjusting the ridge opening and fertilizer position in the soil

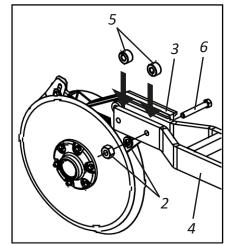
The opening of the ridge in the soil for the fertilizer to be deposited is done by double discs or ridgers in the following systems:

- SIDE FERTILIZATION AND BELOW THE SEED.
- FERTILIZATION IN THE SAME LINE AND BELOW THE SEED.

To adjust the distance between the fertilizer line and the seed line, proceed as follows:

01 - Remove the spring rod (1), loosen the nuts and washers (2), remove the housing (3) that is between the fork plates (4), pass it to one side of the fork, place the bushings (5) between the fork plates and secure with screws (6), washers, and nuts (2). Then, replace the spring rod (1), placing the bushings (7) on the same side as the housing was moved, securing with the pin (8) and the lock (9).

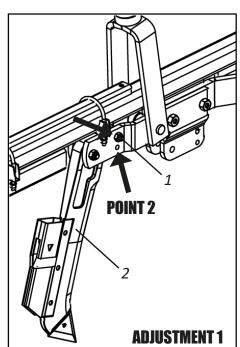




Ridger attack angle adjustment

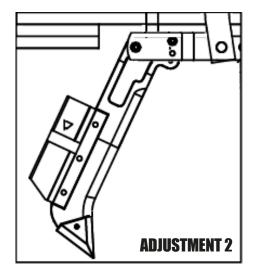
To adjust the angle of attack of the ridger, proceed as follows:

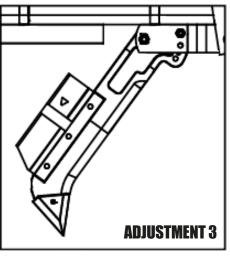
01 - Remove the screw (1), articulate the ridger (2) in the ideal setting and replace the screw (1).



O IMPORTANT

When the adjustment is finished, repeat the procedure on all lines, avoiding variation between them.





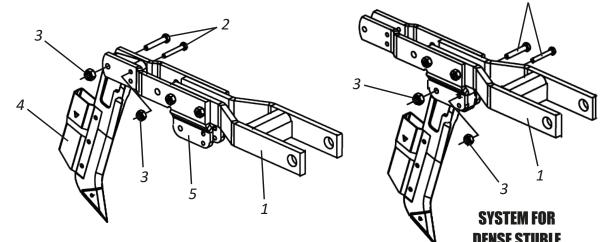


Adjusting the lines

Adjusting the smaller ridger for greater or lesser mismatch (Optional)

The planting lines of **PPSOLO AIR 3rd SEED BOX - SELENIUM**, may be purchased with a smaller ridge (1). This ridger is used in cases where the stubble is dense, increasing the mismatch of ridgers, providing greater flow. To adjust the ridger with adjustable deflector (1), proceed as follows:

- 01 Loosen the screws (2) and nuts (3).
- 02 Then remove the ridger (4) and place it on the front of the support (5).
- 03 Then, secure it again with the screws (2) and nuts (3).



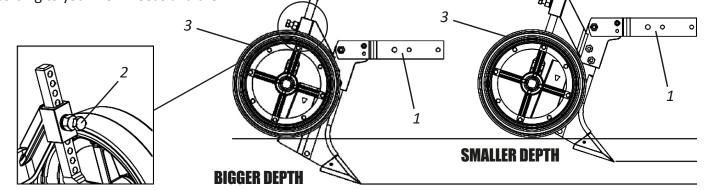
Adjusting the ridger with depth wheel (Optional)

The planting lines of the **PPSOLO AIR 3rd SEED BOX - SELENIUM**, can be purchased with a ridger with a depth wheel (1). The depth wheel of this ridger is used to control depth uniformity of the deposit in the soil. To adjust the plow with depth wheel (1), proceed as follows:

01 - Loosen the screw (2), adjust the depth wheel (3) according to your work needs and then tighten the screw (2) again, locking it.

• IMPORTANT

When finishing the adjustment, repeat the procedure on all lines, avoiding variation between them.



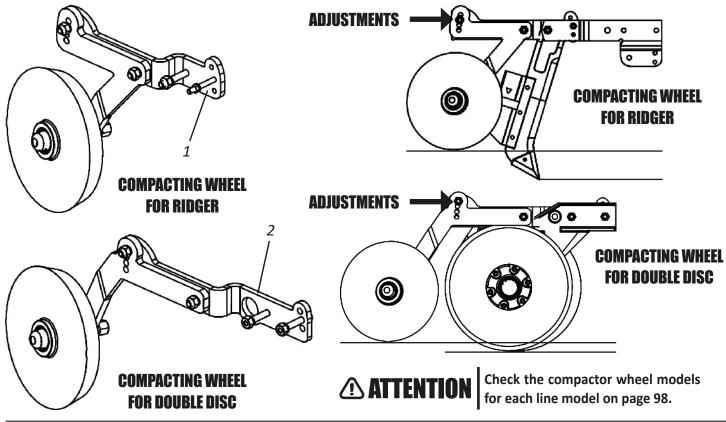


Adjusting the lines

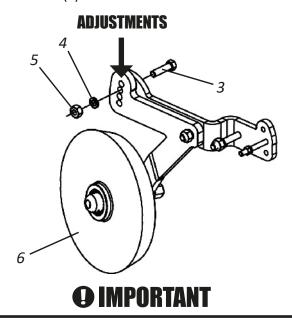
Adjustment of compacting wheels for ridger or double disc (Optional)

The planting lines of the **PPSOLO AIR 3rd SEED BOX - SELENIUM**, seeder can be purchased with a "ridge covering" compactor wheel for ridger (1) or for double disc (2). The ridger or double disc compacting wheels are used to cover the ridge, where a better uniformity is obtained in the seed deposit and the depth of the fertilizer deposit in the soil. To adjust the "ridge cover" compactor wheel for ridger or double disc, proceed as follows:

- 01 Loosen the screw (3), pressure washer (4) and nut (5).
- 02 Then, articulate the "ridge cover" compactor wheel (6) in the ideal setting according to your work needs.



03 - Then, fix the "ridge cover" compactor wheel (6) again with the screw (3), pressure washer (4) and nut (5).



When finishing the adjustment, repeat the procedure on all lines, avoiding variation between them.

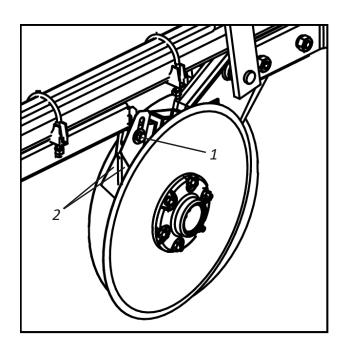


Adjusting the lines

Double disc cleaners adjustment

The double disc features flexible, adjustable wipers to remove dirt adhering to the discs. To adjust the wipers, proceed as follows:

01 - Loosen the screw (1), adjust the cleaners (2) in the ideal position and retighten the screw.



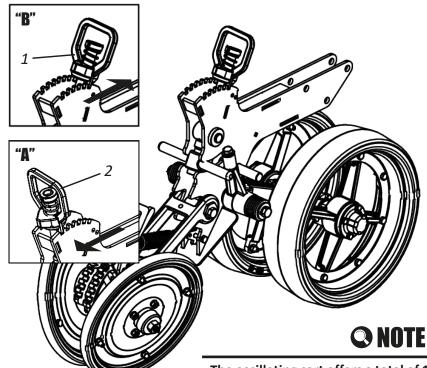
O IMPORTANT

When finishing the adjustment, repeat the procedure on all lines, avoiding variation between them.

Adjusting the oscillating depth wheel

The limiting wheels with oscillating depth, have a single support point that allows their oscillation, if an obstacle or irregularities appears in the ground in their path they will rise to overcome it, immediately returning to the initial position without lifting the double disc from its position. The seed depth is set individually by the depth limiting wheels. For this adjustment, proceed as follows:

01 - Pull the handle (1) up, move the regulator (2) to the desired point, adjusting the depth wheel (3), then lower the handle (1) locking the regulator (2).



The oscillating cart offers a total of 11 adjustment points, 6 in the "A" direction and 5 in the "B" direction interspersed.



Adjusting the lines

Adjusting the "V" compactor wheel - Part I

The "V" compacting wheels (1) are used to close the ridge laterally, causing the soil to be immediately placed over the seed, avoiding excess compaction and removing air pockets, facilitating germination and plant development. To adjust the greater or lesser angle of closing of the "V" compacting wheels (1), pull the handle (2) upwards, move the regulator (3) to the desired point, then lower the handle (2) locking the regulator (3). The "V" compacting wheels have 5 adjustment points.

| HIGHER PRESSURE: | SHIFT THE HANDLE (2) BACK, GIVING MORE PRESSURE TO THE WHEEL (1). |
|------------------|---|
| LOWER PRESSURE: | SHIFT THE HANDLE (2) FOWARD, GIVING LESS PRESSURE TO THE WHEEL (1). |

LOWER

PRESSURE

The "V" compactor wheel (1) can also be adjusted to its pressure using the lever (4), as shown in the figure below.

HIGHER PRESSURE:

SHIFT THE LEVER (4) BACK, GIVING MORE PRESSURE TO THE WHEEL (1).

LOWER PRESSURE:

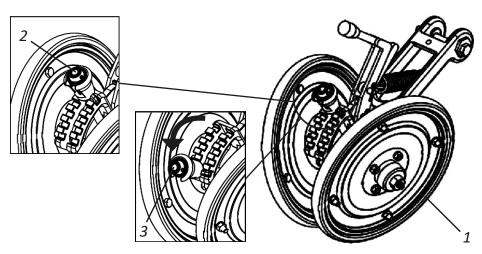
TIGHTEN THE LEVER (5) SHIFTH THE LEVER (4) FORWARD, GIVING LESS PRESSURE ON THE WHEEL (1).

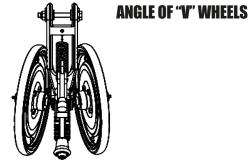




/ ATTENTION

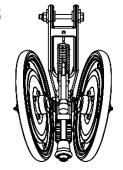
Make the same adjustment for all "V" compacting wheels and consider the type of soil, seed and planting depth, so as not to affect the free emergence of the plants.





FULLY CLOSED ANGLE POSITION

LESS EARTH ON THE SEED.



OPEN ANGLE POSITION

MORE EARTH ON THE SEED.

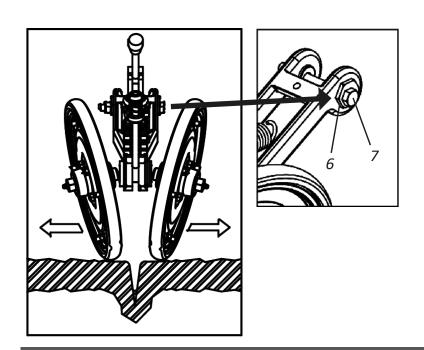


Adjusting the lines

Adjusting the "V" compactor wheel - Part II

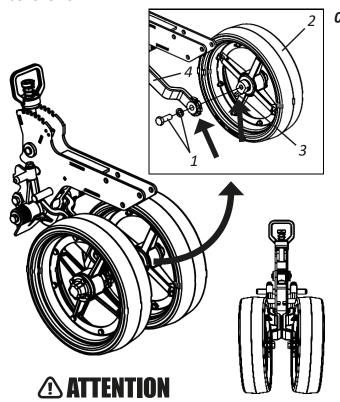
For horizontal displacement of the wheels, they were developed with eccentric bushings (5). For this adjustment, proceed as follows:

01 - Loosen the screws (7), rotate the said bushings (6), with a spanner to actuate the wheels and align them with the ridge, placing more or less soil on the side of the seed.



Adjusting the oscillating depth wheel angle

The angle of the depth limiting wheels (1) has the purpose of pressing the ridge causing the soil to be immediately replaced on the seed, avoiding excessive compaction, facilitating the germination and development of the plant. To obtain the adjustments on the wheels, proceed as follows:



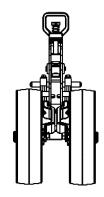
Do the same procedure for the other wheel support (4) and for all wheels with oscillating depth.

FULLY CLOSED ANGLE POSITION

LESS EARTH ON THE SEED.

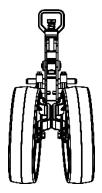
01 - Loosen the screws and washers (1), remove the wheel (2), adjust the wheel adjustment point (3) on the wheel support shaft adjustment (4), then secure the wheel (2) again with the washers and screws (1).

WHEEL ANCLE



PARALLEL POSITION

FOR DEPTH CONTROL ONLY.



OPEN ANGLE POSITION

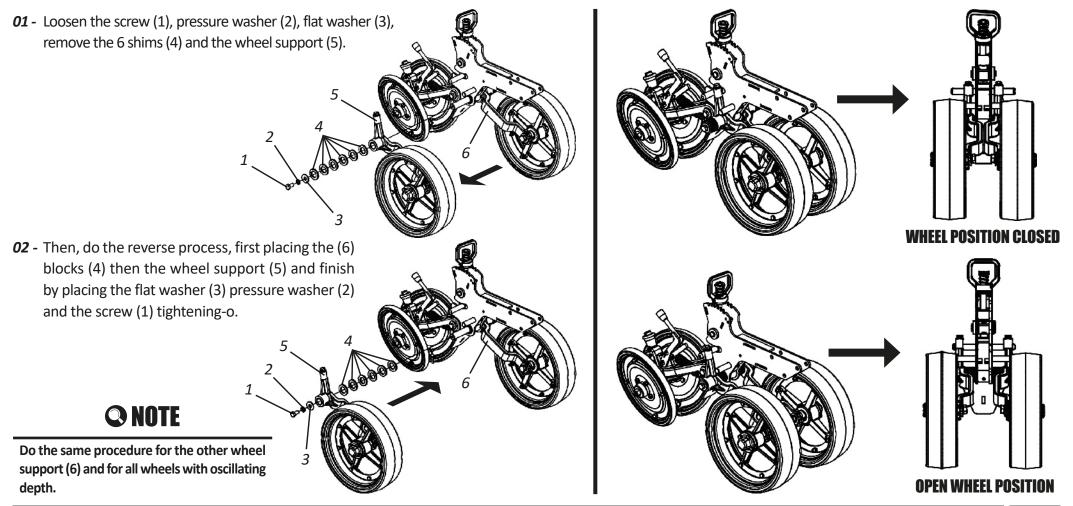
MORE EARTH ON THE SEED.



Adjusting the lines

Opening adjustment of the oscillating depth wheel

The oscillating depth wheels have an opening and closing system to better adapt to terrains with dense stubble or with higher and lower humidity. The oscillating depth wheels leave the factory in the closed position. To open the wheels with oscillating depth, proceed as follows:





Adjusting the lines

Adjustment of fertilizer depth and pressure in the seed lines

The depth adjustment of the fertilizer is done through the pressure of the springs exerted on the planting lines This adjustment is made through the bushings To adjust the pressure on the springs, proceed as follows:

TO INCREASE DEPTH:

01 - Loosen the screw (1) and place the bushing (2) upwards.

TO DECREASE DEPTH:

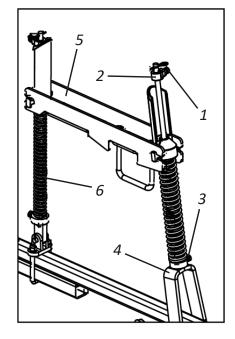
01 - Loosen the screw (1) and place the bushing (2) downwards.

TO INCREASE PRESSURE:

01 - Loosen the screw (3) and place the bushing (4) upwards.

ATTENTION

Always leave a space between the bushing (2) and the rod support (5) for the line to oscillate.



O IMPORTANT

To adjust the pressure in the seed lines, do the same procedure above but now on the rod (6).

O NOTE

When finishing the adjustment, repeat this procedure on all lines, avoiding the variation between them.

Oscillating cart with protection ring (Optional)

The planting lines of the **PPSOLO AIR 3rd SEED BOX - SELENIUM**, seeder can be purchased with an oscillating trolley with a protective ring (1) The oscillating cart with protection ring was developed for situations of direct planting in which the corn cane was harvested in high cut, preventing it from entering the wheel rims during planting, locking it.

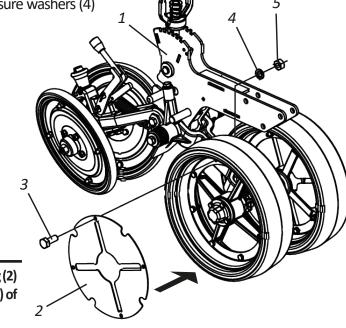
If you have purchased the **PPSOLO AIR 3rd SEED BOX - SELENIUM**, seeder with the oscillating carts without a protection ring, you can purchase the protection ring (2) to secure it on the wheels To install the protection ring (2) proceed as follows:

01 - Loosen the screws (3) lock washers (4) and nuts (5).

02 - Then put the protection cover (2) fixing it through the screws (3), pressure washers (4) and nuts (5).



If you only buy the protection ring (2) secure it on all the oscillating carts (1) of the seeder.





Adjusting the lines

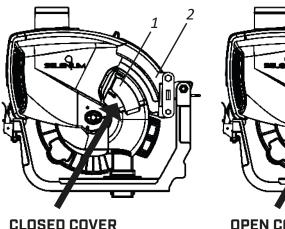
Vacuum pressure in the dosers

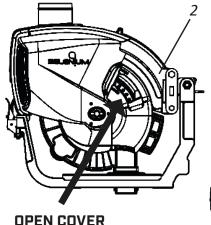
O IMPORTANT

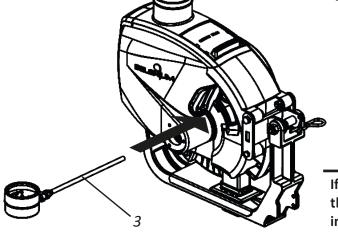
To check the vacuum pressure in the SELENIUM feeders, first put the seeder in working condition, that is, the SELENIUM feeders must be loaded with seeds; then start the turbine, move the seeder until all the holes in the seed discs are filled. Then do the procedure below.

To check the vacuum pressure in the SELENIUM feeders, proceed as follows:

- 01 Start the turbine at the working speed.
- 02 Then open the cover (1) of the SELENIUM dispenser (2).
- **03** Then, take the vacuum gauge (3), attach the end of your hose to one of the holes on the SELENIUM doser disk (2) and check the vacuum pressure, which must be the same as that of work, with minimal variation possible.
- **04** After checking the vacuum pressure, detach the vacuum gauge hose (3) from the disk and close the cover (1) of the SELENIUM dispenser (2).







ATTENTION

If you need to adjust the vacuum pressure, adjust the opening or closing of the turbine gate as instructed on page 44.

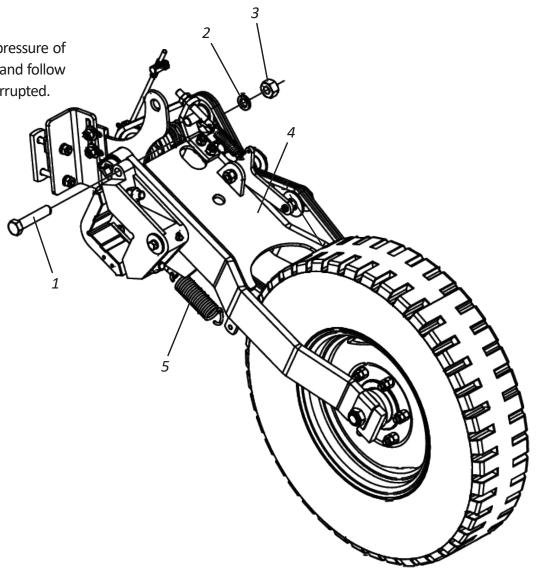


Operations

Wheels mounting and articulating system

The mounting and articulating system of the tires makes them free from the pressure of the springs of the pantographic system on the soil, thus allowing them to oscillate and follow the irregularities of the ground, making the dispensing of fertilizer and seed not interrupted.

- **01** For conventional planting, lock the wheels with the screw (1), washer pressure (2) and nut (3).
- **02** For direct planting, the wheels operate free and if necessary, insert 3/4" of water in the tires.
- **03** The wheels (4) are equipped with traction springs (5), for greater grip to the ground. Do not operate the seeder without it.





Operations

Recomendations for operation

Preparing the **PPSOLO AIR 3rd SEED BOX - SELENIUM** and the tractor will allow you to save time and obtain better results in field work. The following suggestions may be helpful to you.

- 01 After the first day of work with PPSOLO AIR 3rd SEED BOX SELENIUM, retighten all screws and nuts. Check the condition of the pins and locks.
- 02 Do not maneuver or reverse with the lines lowered to the ground.
- 03 Observe lubrication intervals.
- 04 When filling the tanks make sure that there are no objects inside them, such as nuts, bolts, etc. Always use seeds free of impurities.
- 05 Always observe the functioning of seed dispensing mechanisms and also the regulations established at the beginning of planting.
- 06 Keep the PPSOLO AIR 3rd SEED BOX SELENIUM always level, the tractor drawbar must remain secured and the working speed must remain constant.
- 07 Always check seed depth and press wheel pressure.
- 08 Note the position of the fertilizer in relation to the seed in the soil.
- 09 Do not make sharp turns with PPSOLO AIR 3rd SEED BOX SELENIUM during work, especially in no till. The components of the lines may be damaged.
- 10 Do not partially activate the hydraulic cylinders. The drive for both raising and lowering the PPSOLO AIR 3rd SEED BOX SELENIUM must always be complete.
- 11 Do not disconnect any hose without first relieving circuit pressure. To do this, operate the control levers a few times with the engine off.
- 12 After coupling and leveling, the next adjustments will be made directly in the field of work, analyzing the terrain in its texture, humidity and the types of operations to be done with PPSOLO AIR 3rd SEED BOX SELENIUM.
- 13 Respect the working and transport speeds specified on page 12. We do not recommend exceeding speeds to maintain service effic ien cy and avoid possible damage to PPSOLO AIR 3rd SEED BOX SELENIUM.
- 14 When carrying out any checks or maintenance on the PPSOLO AIR 3rd SEED BOX SELENIUM, you must lower it to the ground and turn off the tractor engine.
- 15 PPSOLO AIR 3rd SEED BOX SELENIUM has several adjustments but only local conditions can determine the best adjustment.
- 16 The indications on the right and left side are made by observing the PPSOLO AIR 3rd SEED BOX SELENIUM from behind.
- 17 Only fill the PPSOLO AIR 3rd SEED BOX SELENIUM at the workplace.
- 18 Do not transport or work with excess load on the PPSOLO AIR 3rd SEED BOX SELENIUM.
- 19 PPSOLO AIR 3rd SEED BOX SELENIUM operates with greater efficiency in the range of 5 to 6 km/h.

In case of doubt, never operate or handle the PPSOLO AIR 3rd SEED BOX - SELENIUM, consulte o Pós Venda.

Telephone: 0800-152577 / E-mail: posvenda@baldan.com.br



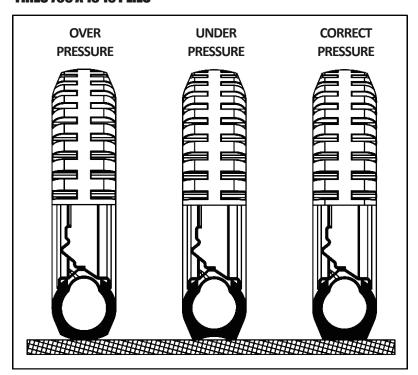
Maintenance

PPSOLO AIR 3rd SEED BOX - SELENIUM was developed to provide you with the maximum performance under terrain conditions. Experience has shown that periodic maintenance of certain parts of **PPSOLO AIR 3rd SEED BOX - SELENIUM** is the best way to help you to avoid problems, so we suggest checking.

Tire pressure

The tires must always be correctly calibrated, avoiding premature wear due to excess or lack of pressure and ensuring precisi on in dispensing.

TIRES 700 X 16 10 PLIES



ATTENTION

Never weld wire assembled with a tire, the heat can cause an increase in air pressure and cause the tire to explode.

When inflating a tire, position yourself next to the tire, never in front of it.

When inflating the tire, always use a containment device (inflation cage).

Assemble the tires with suitable equipment. The service should be performed only by persons qualified for the job.

• IMPORTANT

O NOTE

When calibrating the tires, do not exceed the recommended calibration.

Tractor tire pressure should be as recommended by the manufacturer.

USE: 70 LBS/POL²



Lubrification

Lubrication is indispensable for good performance and greater durability of the **PPSOLO AIR 3rd SEED BOX - SELENIUM**, moving parts, contributing to savings in maintenance costs.

Before starting the operation, carefully lubricate all grease fittings, always observing the greasing intervals on the following page Make sure of the quality of the lubricant, its efficiency and purity, avoiding the use of products contaminated by water, soil and other agents.

Grease table and equivalents

| Manufacturer | Recommended grease types | |
|--------------|--------------------------|--|
| Petrobrás | Lubrax GMA-2 | |
| Atlantic | Litholine MP 2 | |
| Ipiranga | Ipiflex 2 | |
| Castrol | LM 2 | |
| Mobil | Grease MP | |
| Texaco | Marfak 2 | |
| Shell | Alvania EP 2 | |
| Esso | Multi H | |
| Bardahl | Maxlub APG-2EP | |
| Valvoline | Palladium MP-2 | |
| Petronas | Tutela Jota MP 2 EP | |
| | Tutela Alfa 2K | |
| | Tutela KP 2K | |

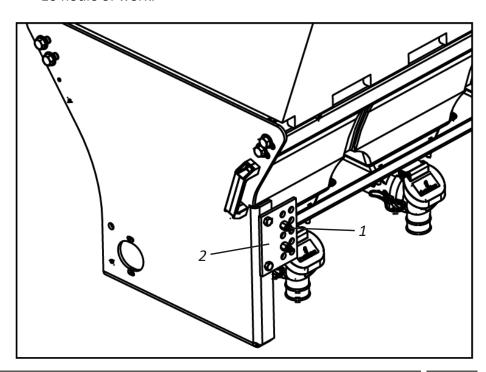
ATTENTION

For manufacturers and or equivalent brands not listed in the table, see the manufacturer's technical manual.

Centralized lubrification system

PPSOLO AIR 3rd SEED BOX - SELENIUM has a centralized lubrication system that makes maintenance quicker and easier, allowing to lubricate all the lateral and central points of the machine without removing the protections. To lubricate, proceed as follows:

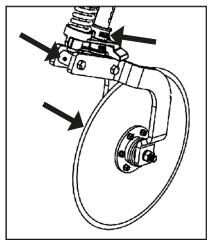
- **01** Before starting lubrication, clean all grease fittings (1) with a lint free cloth and replace damaged ones.
- **02** Lubricate all grease fittings (1) of the centralized system (2) every 10 hours of work.

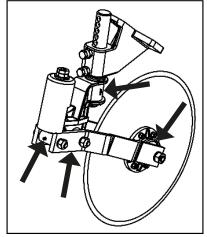


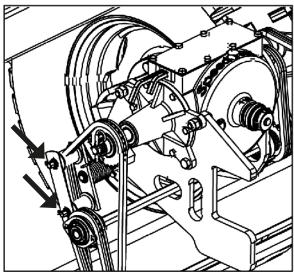
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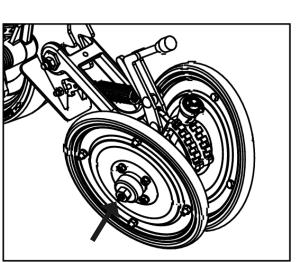
Maintenance

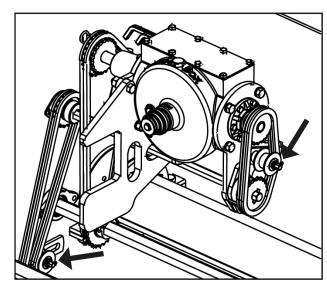
• Lubrification every 10 working hours - Part I

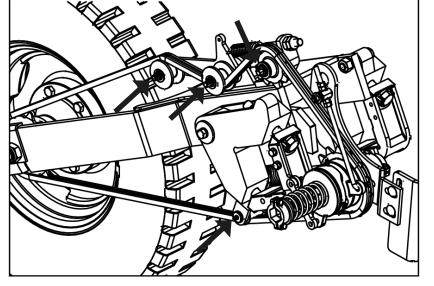










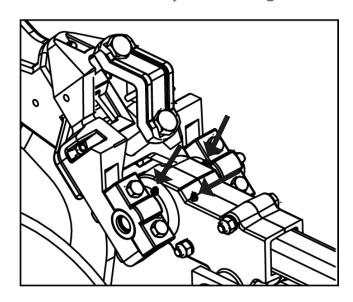


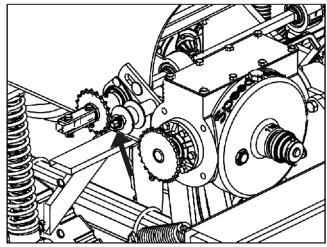
ATTENTION

When lubrificating PPSOLO AIR 3rd SEED BOX - SELENIUM, do not exceed the amount of new grease. Insert a sufficient amount.



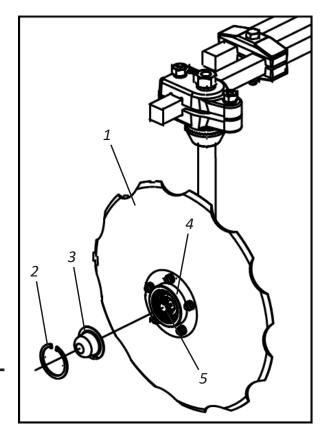
Lubrification every 10 working hours - Part II





To lubricate the hub of the line markers (1), proceed as follows:

- 01 Remove the retaining ring (2) and the hub cap (3) from the hub (4).
- 02 Then, check the bearings if there is any gap, adjust them through the castle nut (5).
- 03 Insert new grease into the hubcap (3), replace it in the hub (4) fixing it through the retaining ring (2).



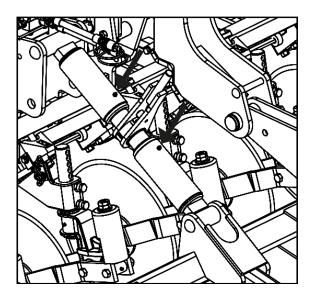
ATTENTION

When lubrificating PPSOLO AIR 3rd SEED BOX - SELENIUM, do not exceed the amount of new grease. Insert a sufficient amount.



Maintenance

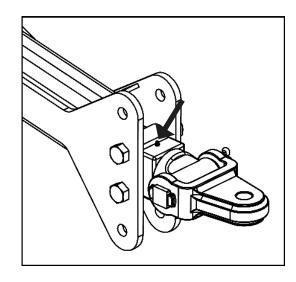
• Lubrification every 10 working hours - Part III

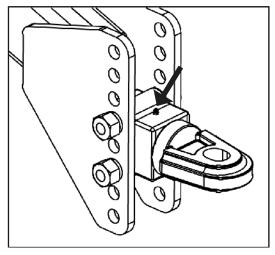


ATTENTION

When lubrificating PPSOLO AIR 3rd SEED BOX - SELENIUM, do not exceed the amount of new grease. Insert a sufficient amount.

• Lubrification every 30 working hours

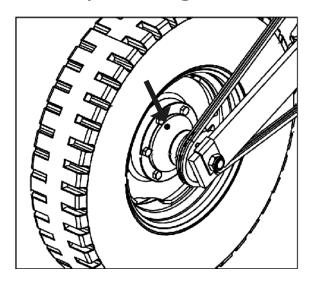


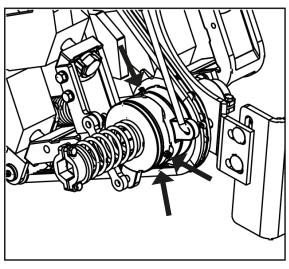






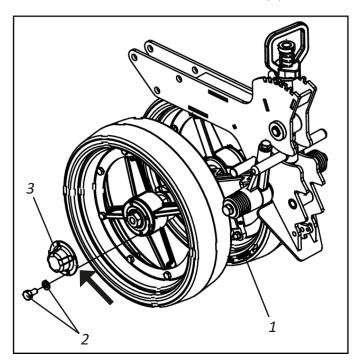
Lubrification every 60 working hours





• Lubrification every 200 working hours

To lubricate the compacting wheels (1) loosen the screws and washers (2) remove the cap (3) and add new grease Replace the hub (3) on the compactor wheels (1) and secure it with the screws and washers (2).





When lubricating the PPSOLO AIR 3rd SEED BOX - SELENIUM, do not exceed the amount of new grease. Insert a sufficient amount.



Before opening the hub (8), clean its external surfaces.

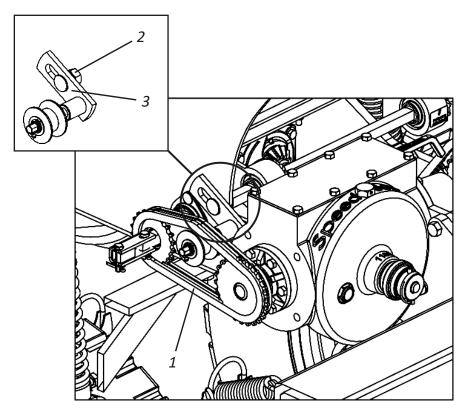


Maintenance

Chain tension

To tension the chain (1), proceed as follows:

- 01 Loosen the nut (2), slide the tensioner (3) adjusting the chain tension (1).
- 02 Then, retighten the nut (2).

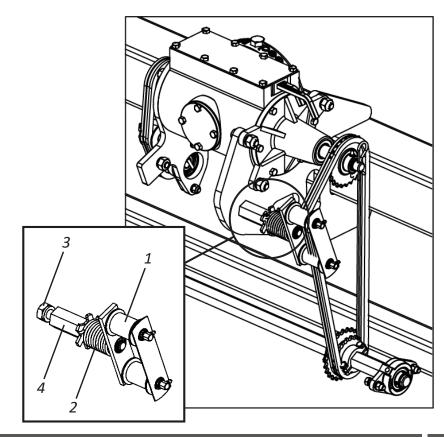




Check chain tension daily, normal clearance should be $+-1\,\mathrm{cm}$ in the center of the chains.

Oscillating stretcher

The tensioner (1) is equipped with a torsion spring (2) for greater flexibility If more pressure is needed on the tensioner, loosen its inner nut (3) turn the shaft (4) passing the spring coupling (2) to the other tooth of the shaft socket and retighten the inner nut (3) again.



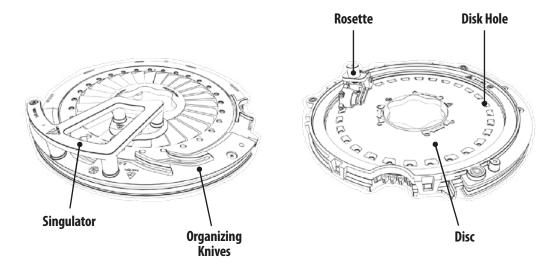


Preventive maintenance on the SELENIUM batcher before planting - Part I

Perform preventive maintenance on the **SELENIUM** batcher before planting as instructed below:

1-DISK, ORGANIZER AND ROSETTE SET

01 - Check the disc, organizer and rosette set. Replace the assembly when there is excessive wear on any of the following parts:



2-SEAL

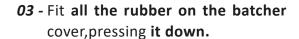
Check for excessive wear, cracks or holes in the vacuum seal. If you have any of the items mentioned, replace the seal.

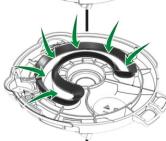
STEP BY STEP TO REPLACE THE SEAL

01 - Remove the sealing rubber from the batcher cover, pulling it upwards.



02 - Firstly, assemble the ends of the new seal on the metering cover.







Maintenance

• Preventive maintenance on the SELENIUM batcher before planting - Part II

3 - GRAPHITE POWDER IN THE BATCHER

Make sure the batcher is well lubricated with powdered graphite before each planting, if not, apply powdered graphite to the batcher before filling it with seed.

4 - GRAPHITE ON DISC

Check if the graphite on the back of the disc (rosette side) is worn and, if so, apply **J.Assy Graphite Lubricant Spray** to the entire surface of the disc.



IMPORTANT:

To maintain the life of the seal, always keep the back side of the disc well graphited.

STEP BY STEP FOR APPLYING GRAPHITE ON DISC

Position the disc assembly horizontally, then apply J.Assy Graphite Lubricant Spray all over the disc. Wait for it to dry (disassembly of the disc array is not required). See next.

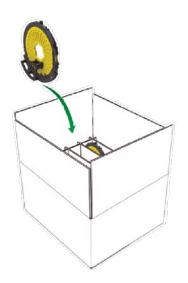


5-STORAGE

When not in use, store the disc set in its original box for your protection.

6 - CLEANING

In case of accumulation of residues and dust in the batcher, clean it to ensure the correct functioning of the product.







• Operational maintenance - Part I

| PROBLEMS | PROBLABLE CAUSES | SOLUTIONS |
|---|---|---|
| During planting, fertilizer begins to leak from the safety outlets. | Clogged hoses or pieces of plastic in the fertilizer conducing spirals. | Unclog the hose or remove the upper channel that gives access to the spiral, rotate the shaft in the opposite direction until the foreign body that is stuck loosens. |
| Fertilizer hub shaft does not rotate. | Spiral blocked by wet fertilizer or excess fertilizer in the closed line. | Unclog the spirals, check if you have a loose gutter and the fertilizer may be entering by their sides. |
| A planting line is less deep than the other. | Different pressure settings on the depth limiting wheels or in the springs of the line. | Set all wheels to equal depth and regulate the pressure of the line springs. |
| The ridge is too open during planting. | Sticky soil that sticks to the discs or excessive speed of work. | Decreases work speed. |
| Strange noise when operating or walking with the loaded sower. | Loose wheels or wheel hub. | Re-tighten the wheel nuts. Adjust the wheel hub bearings. |
| The sower leaves the planting line, sometimes to one side, sometimes to the other, sideways. | Tractor drawbar loose. | Use the pin that comes with the sower. Secure the tractor drawbar in the center hole. |
| It is not covering the ridge. | Poorly adjusted covering wheels or damp grounds. | Adjust the covering wheel by moving it sideways in relation to the ridge. |
| The hydraulic cylinders stop operating, lifting the sower and then doesn't lower or vice versa. | Different quick coupler, sphere male type and female needle type or vice versa. | Proceed by changing the quick coupler, placing two of the same type. |
| Broken seeds. | High planting speed. | Decrease work speed. |
| | Inadequate disc thickness. | Use suitable disc (hole thickness and diameter). |
| | Poorly placed disc. The seed sieve is not suitable for the disc used. | Insert the disc properly (note the sentence: THIS SIDE DOWN) . |
| | Using moist seeds. | Use dry seeds. |



• Maintenance

• Operational maintenance - Part II

| PROBLEMS | PROBABLE CAUSES | SOLUTIONS |
|--------------------------------------|---|---|
| Damaged tires. | Work area with stones, stumps or crop remains with stems that cause tire cutting. | Eliminate the elements that cause damage to the tires before period of use of PPSOLO AIR 3rd SEED BOX - SELENIUM . |
| | Tires are not inflated, causing deformations. | Maintain proper tire pressure. |
| Strange noise on wheels. | Loose wheels or wheel set. | Retighten the wheel nuts and adjust the bearing wheel hub. |
| | Bearings breakage. | Identify the occurrence and replace the damaged parts. |
| Quick coupling does not fit. | Couplings of different types. | Exchange them for males and females of the same type. |
| Seeds "double" spaced in dispensing. | Feeder transmission current is skipping the gear teeth. | Adjust chain tension according to the instructions on page 82. |
| Leak in hydraulic hoses. | Thread sealing material is missing. | Use thread sealant and retighten carefully. |
| | Insufficient tightening. | Retighten carefully. |
| | Damaged repairs. | Replace terminals. |
| Leak in quick couplers. | Insufficient tightening. | Retighten carefully without excess. |
| | Damaged repairs. | Replace repairs. |
| Quick couplings do not couple. | Couplings of different brands. | Use couplings of the same brand. |
| | Mixture of needle couplings with ball couplings. | Always use couplings of the same type. |
| | System pressure. | Relieve pressure to couple. |





Fertisystem batcher accessories

The Fertisystem feeder is assembled with a level regulator "cross cover" and a worm spring (step 2").





ENDLESS SPRING (STEP 2")

The Fertisystem feeder includes the following accessories: maintenance tube, fixing tube e blocking tube.



TUBE



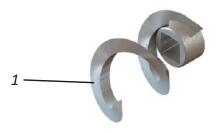


FIXING TUBE

BLOCKING TUBE

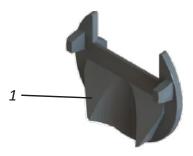
Endless spring

At **PPSOLO AIR 3rd SEED BOX - SELENIUM** the Fertisystem batcher leaves the factory assembled with the endless spring 2" (1).



Level Regulator "Cross Cover"

The Fertisystem dispenser leaves the factory fitted with the "Cross-Lid" level regulator (1). The uniformity and precision in the distribution is due to the level regulator "Cross-Lid" (1), which has the function of canceling the pulsating effect of the endless spring cycle and also controlling the dosage.





Never operate without the "Cross-Lid" level regulator (1). Check that it is well positioned in the nozzle.



Maintenance

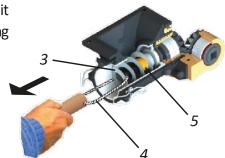
Maintenance or replacement of the Fertisystem dosing spring

After planting, do not leave fertilizer in the tank. To maintain or replace the worm-spring or to clean or repair the internal part of the Fertisystem batcher, proceed as follows:

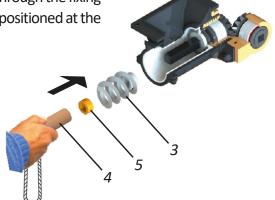
01 - Disengage the nozzle (1) through the stainless steel lock (2).

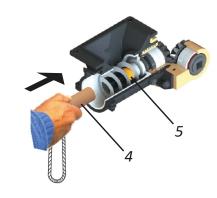


02 - Then, remove the endless spring (3), pulling it through the cord of the fixing tube (4), also removing the locking ring (5).



03 - After cleaning, replace the endless spring (3), together with the locking ring (5), through the fixing tube (4), making sure that the endless spring (3) and the locking ring (5) are well positioned at the base of the shaft (6).





⚠ ATTENTION

Keep the worm spring in place with the locking ring. This procedure will avoid damaging the cross cover when not using the seeder with the fertilizer or when transporting the seeder. In case of wear or lack of tightening "pressure" of the lock ring (5), replace it.

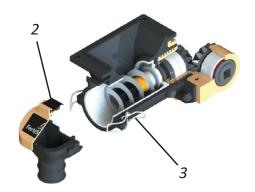


• Fertisystem batcher maintenance tube

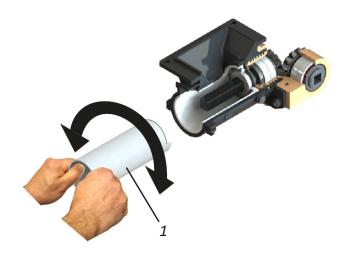
To maintain or change the endless springs in the Fertisystem feeder without the need to remove the fertilizer from the tank, use the maintenance tube (1), to do this, proceed as follows:



01 - Disengage the nozzle (2) through the stainless steel lock (3).



02 - Then, introduce the maintenance tube (1) in rotating movements, promoting the displacement of the fertilizer to the bottom of the batcher. Then perform the necessary maintenance.



♥ NOTE

The maintenance tube (1) has an end cut angle to facilitate this operation.



Maintenance

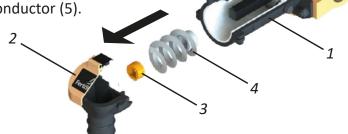
• Fertisystem Batcher Blocker Tube

PPSOLO AIR 3rd SEED BOX - SELENIUM comes with a blocking tube (1) so that when you need to isolate some planting Rows, fertilizer distribution does not occur.

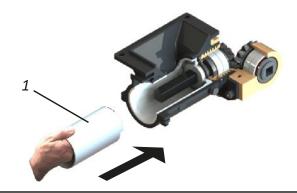
planting Rows, fertilizer distribution does

In order to place the blocking tube (1) into the Fertisystem doser, proceed as follows:

01 - Remove the nozzle (2), the lock ring (3) and the worm spring (4) of the fertisystem conductor (5).



02 - Then insert the locking tube (1).



03 - Then, replace the nozzle (2).



• Springs and caps (optional) - Fertisystem batcher

PPSOLO AIR 3rd SEED BOX - SELENIUM leaves the factory with a 2" pitch worm spring and transversal cover (standard), but optionally the seeder can be supplied with a 1" pitch worm spring and a high-flow cover.



ENDLESS SPRING (STEP 1")



ONOTE

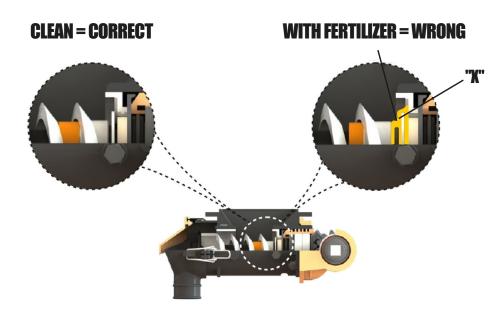
Always fill the fertilizer tank at the work location. Avoid any kind of impurity in the fertilizer tank. Carry out a measurement of dosage daily.



Cleaning the Fertisystem doser

We consider it mandatory to clean parts and components of the Fertisystem dispenser that maintain direct and indirect contact with fertilizers, since they are highly corrosive and abrasive, and can promote oxidation and destructible chemical reactions, through the effects of acidity, salinization and others, chemical fertilizers.

After planting is complete, disconnect the nozzle (1), the endless springs (2) and wash the sets thoroughly, keeping them free of fertilizers until new use, making the assemblies correctly.





Make sure that there is no fertilizer in the "X" area between the washers and the sealing felt.

In case of extreme need to use the fertilizer out of specification and/or with excess moisture, perform daily cleaning of the endless springs and other components. Do not carry out maintenance or cleaning in the bearing area, in the endless springs and in the gears while the subsoiler is in motion.

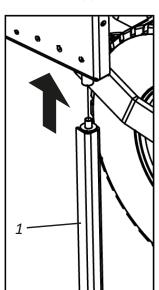


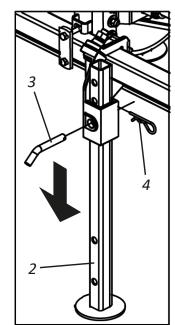
Maintenance

Changing tires

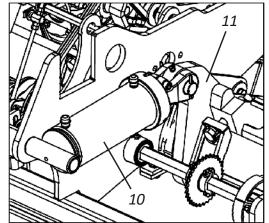
If necessary, change or repair the tires for this, proceed as follows:

01 - First, support the PPSOLO AIR 3rd SEED BOX - SELENIUM on its rear through the support bracket (1) so that it is stabilized.





02 - Then, lower the support brackets (2) on the front of the seeder and fix them with the pin (3) and lock (4).
03 - Then, lock the clamp (5) in the wheel support (6) through the screws (7), pressure washer (8) and nut (9).
04 - Then, fully retract the hydraulic cylinder (10) from the central axle (11) to suspend the tire (12) from the ground.
05 - Finally, remove the chain (13), loosen the nuts (14) and the locks (15) to remove the tire (12).

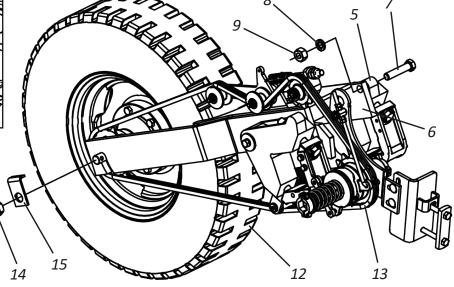




At the end of changing the tire, remove the screw (6) lock washer (7) and nut (8) unlocking the clamp (4) of the wheel support (5). Do not work with the seeder without first removing them Ignoring this warning will cause planting failures.



Before changing or repairing the tire, make sure that the PPSOLO AIR 3rd SEED BOX - SELENIUM is properly supported Failure to do so can cause damage, serious accidents or even death.





Care

- 01 Before each work, check the condition of all hoses, pins, screws, bearings, discs, and sections. When necessary, retighten or replace them.
- 02 The speed of movement must be carefully controlled according to the terrain conditions.
- 03 PPSOLO AIR 3rd SEED BOX SELENIUM is used in many applications, requiring knowledge and attention during its handling.
- 04 Only local conditions will be able to determine the best way of operating the PPSOLO AIR 3rd SEED BOX SELENIUM.
- 05 When assembling or disassembling any part of PPSOLO AIR 3rd SEED BOX SELENIUM, use suitable methods and tools
- 06 Pay close attention to the lubrication intervals at the different lubrication points of the PPSOLO AIR 3° DEPÓSITO SELENIUM. Observe the lubrication intervals.
- 07 Always check the parts for wear. If replacement is required, always require original Baldan parts.
- 08 Keep the PPSOLO AIR 3rd SEED BOX SELENIUM tires calibrated at all times
- 09 Keep the PPSOLO AIR PPSOLO AIR 3rd SEED BOX SELENIUM discs sharp at all times.



Adequate and periodic maintenance is necessary to guarantee the long life of PPSOLO AIR 3rd SEED BOX - SELENIUM.

Care during planting

- 01 The fertilizer has great moisture absorption power and this speeds up the oxidation process so, avoid spillage and accumulation of fertilizer during the filling of PPSOLO AIR 3rd SEED BOX SELENIUM.
- 02 Use a blower, compressed air or broom to remove excess fertilizers from the seeder at the end of the day.
- 03 To avoid fertilizer effects, protect PPSOLO AIR 3rd SEED BOX SELENIUM by keeping it in the shed or covering it with canvas (in the best possible way) during rain and/or night periods, to protect it from moisture.



Maintenance

- General cleaning
- 01 When storing PPSOLO AIR 3rd SEED BOX SELENIUM, make a general cleaning and wash it completely with water only. Check that the paint has not worn out, if this has happened, apply a general coat, apply protective oil and lubricate the PPSOLO AIR 3rd SEED BOX SELENIUM completely. Do not use burnt oil or other abrasive. At the end of planting, proceed as follows:
 - Remove the transmission chains and keep them bathed in oil until the next planting.
 - Remove the hoses by immediately washing them with mild soap and water. Do not use other chemicals.
 - Remove the regulator and articulate the header upwards, locking it.
- 02 Fully lubricate the PPSOLO AIR 3rd SEED BOX SELENIUM. Check all moving parts of PPSOLO AIR 3rd SEED BOX SELENIUM, if they show wear or looseness, make the necessary adjustment or replacement of the parts, leaving the seeder ready for the next job.
- 03 After all maintenance work, store the sower in a covered, dry place, properly supported.
 - Avoid: The discs from directly contacting the ground.
 - That the hydraulic hoses are properly plugged.
- **04** When connecting or disconnecting hydraulic hoses, do not let the ends touch the ground. Before connecting the hydraulic hoses, clean the connections with a clean cloth without loose threads. **Do not use low!**
- **05** Replace all damaged or missing stickers, especially warnings. Make everyone aware of their importance and the dangers of acc ide nts when instructions are not followed.
- 06 After all the maintenance care, store your PPSOLO AIR 3rd SEED BOX SELENIUM on a flat surface, covered and dry place, away from animals and children.
- 07 Make sure that the deposits are properly covered.
- 08 We recommend washing the PPSOLO AIR 3rd SEED BOX SELENIUM only with water at the beginning of the work



Do not use chemicals or abrasives to wash the PPSOLO AIR 3rd SEED BOX - SELENIUM, as this may damage its paint and stickers.



Seeder conservation - Part I

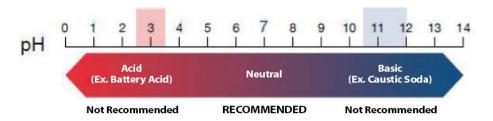
To prolong the life and appearance of the **PPSOLO AIR 3rd SEED BOX - SELENIUM** for longer, follow the instructions below:

- 01 Fertilizers and their additives are highly corrosive and their formulation is increasingly aggressive to the seeder components.
- 02 Wash and clean all seeder components during and at the end of the work season.
- 03 Use neutral products to clean the seeder, following the safety and handling guidelines provided by the manufacturer.
- 04 Always carry out maintenance during the periods indicated this manual.

Seeder conservation - Part II

The practices and care below if adopted by the owner or operator make a difference to the conservation of the **PPSOLO AIR 3rd SEED BOX - SELENIUM.**

- 01 Be careful when performing high-pressure washing; do not direct the water jet directly into the connectors and electrical components. Isolate all electrical components;
- 02 Use only NEUTRAL detergent and water (pH equal to 7);
- 03 Apply the product, following the manufaturer's instructions strictly, on the wet surface and in the correct sequence, respecting the time of application and washing;
- 04 Stains and dirt not remove with the products should be removed with the aid of a spong.
- 05 Rinse the machine with clean water to remove any chemical residues.
- 06 Do not use: Detergents with a basic active ingredient (pH greater than 7), can attack/stain the paint on the seeder.
 - Detergents with acid active ingredient (pH less than a 7), act as stripper/remover of zinc coating (the protection of parts against oxidation).



07 - Let the machine dry in the shade so that water does not accumulate in its components. Drying too fast can stain your paint.



Maintenance

- Seeder conservation Part III
- **08** After drying, lubricate all chains and greases according to the recommendations in the operator's manual.
- 09 Spray all the machine, especially the zinc parts, with protective oil, following the manufacturer's application guidelines. The protective also prevents dirt from adhering to the machine, facilitating subsequent wasthings.
- 10 Observe curing (absorption) time and application intervals as recommended by the manufacturer.

ATTENTION

Do not use any other type of oil to protect the harrow (used hydraulic oil, "burnt" oil, diesel oil castor oil, kerosene, etc.).

O IMPORTANT

We recommend the following protective oils:

- Bardahl: Agro protective 200 or 300
- ITWChemical: Zoxol DW Series 4000



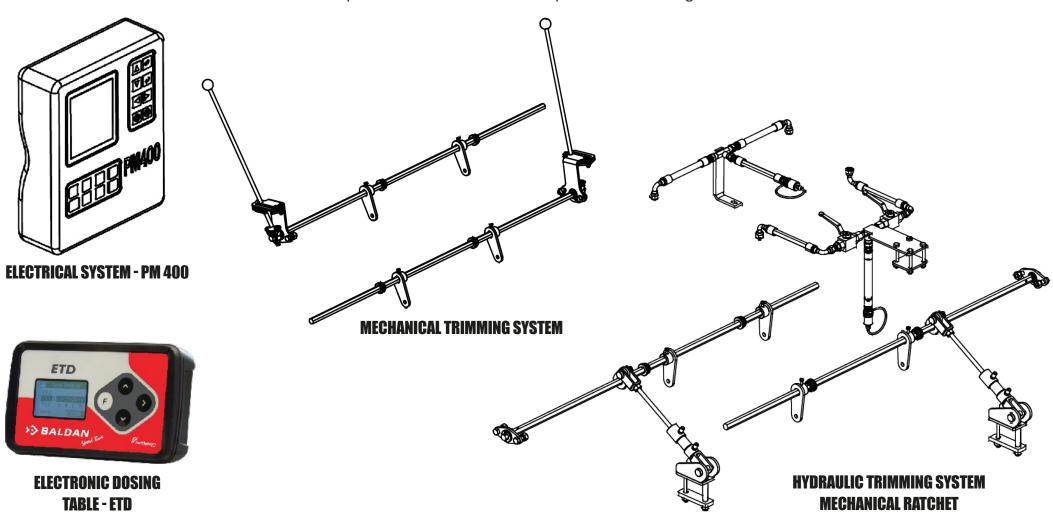
Ignoring the above conservation measures may result in the loss of warranty for painted or galvanized components that may be oxidized (rust).



Optional

• Optional accessories - Part I

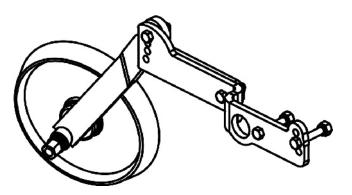
The **PPSOLO AIR 3rd SEED BOX - SELENIUM** has optional accessories that can be purchased according to the need for work.



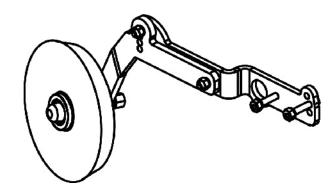
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Optional

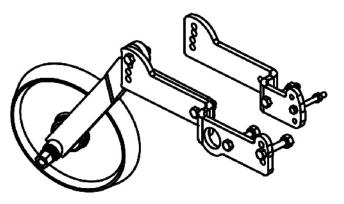
• Optional accessories - Part II



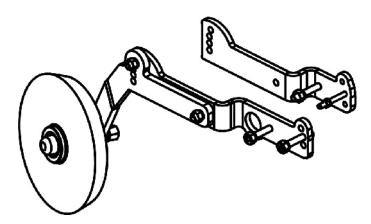
LEFT COMPACTING WHEEL CPL FOR DOUBLE DISC



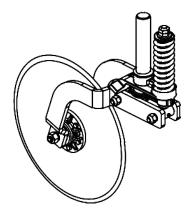
RIGHT COMPACTING WHEEL CPL FOR DOUBLE DISC



LEFT COMPACTING WHEEL CPL FOR DOUBLE DISC AND RIDGER



RIGHT COMPACTING WHEEL CPL FOR DOUBLE DISC AND RIDGER

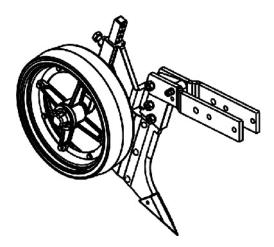


CUTTING DISC CART (SMOOTH FLAT DISC 20" X 5 MM)

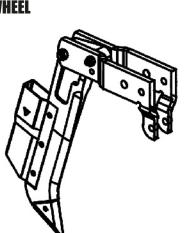


Optional

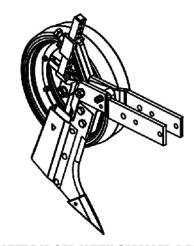
• Optional accessories - Part III



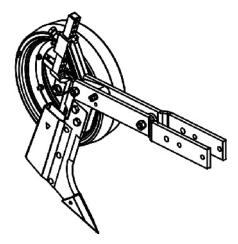
RIGHT RIDGER WITH SMALLER BAR WITH DEPTH WHEEL



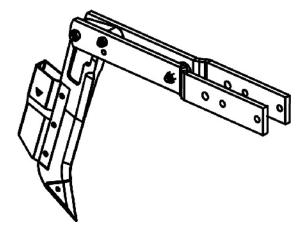
SMALLER ROD RIDGER (THIN)



LEFT RIDGER WITH SMALLER BAR WITH DEPTH WHEEL



LEFT RIDGER WITH BIGGER BAR WITH DEPTH WHEEL



BIGGER ROD RIDGER (THIN)

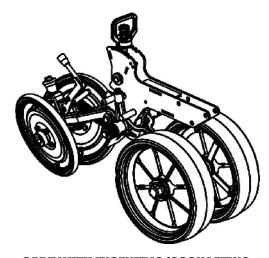
>>> BALDAN

Optional

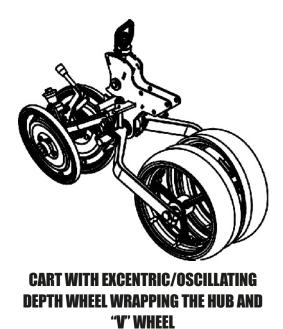
• Optional accessories - Part IV



CART WITH EXCENTRIC/OSCILLATING
DEPTH WHEEL AND "V" WHEEL WITHOUT
PROTECTION RING



CART WITH EXCENTRIC/OSCILLATING DEPTH WHEEL AND "V" WHEEL WITH PROTECTION RING





>>> BALDAN

■ Manual PM 400 - Optional

• PM 400



Monitor overview



FRONT VIEW OF MONITOR



Manual PM 400 - Optional

Navigation keys - Part I



ON / OFF

Press to activate the monitor. When turned on, the monitor carries out internal tests, lights up the display, sounds an alarm and determines which sensors are connected to the system.

Pressing the key for one second, when the display is on, the system will be turned off regardless of what is shown on the display.



ALARM CANCELLATION

When pressing the key during normal operation, the monitor recognizes the alarm conditions that are being shown on the display.

When pressing the key during the alarm event, the audible warning will be canceled but the visual information will continue to be displayed.



ENTER

By pressing you will move from the main operation screen to the main menu or the selected screen. Once the item is selected, when the key mode will be modified to change the data.



pressed, the navigation

 \bigcirc

NOTE: After having changing the data, the ESC key will accept the change.



Manual PM 400 - Optional

Navigation keys - Part II



ESC (EXIT)

for two seconds on the OPERATION SCREEN, the accumulated area located at the top of the screen will be reset. The key to return to OPERATION mode





NOTE: After having made the data change, the ESC key will accept the change.





UP ARROW AND DOWN ARROW

On the OPERATION SCREEN the arrow keys are used to manually select the parameters that are being displayed at the top of the display.



NOTE: These keys will be inactive if all configured parameters are being displayed.

When in a settings screen, ARROWS are used to navigate between options or to change a digit/option.



On the OPERATION SCREEN the arrow keys are used to manually select the lines that are being displayed at the bottom of the display.



NOTE: These keys will be inactive if all configured parameters are being displayed.

When in a settings screen, ARROWS are used to navigate between options.



■ Manual PM 400 - Optional

• Settings keys - Part I



SETTING THE PLANTER

This key is used to set:

- Number of lines;
- Line spacing;
- Planter width (optional)
- Line status (seed, fertilizer, blocked or disabled).

See "Planter Configuration" for more information.



SETTING THE TRAVEL SPEED

This key is used to:

- Perform the travel speed calibration;
- Enter the manual travel speed data (used if there is no speed sensor available);
- Configure the speed limit alarm.

See more information in "Setting the Travel Speed".



Manual PM 400 - Optional

Settings keys - Part II



LIMIT CONFIGURATION

This key is used to set:

- Maximum / Minimum Population Variation Limits (optional).
- Estimated target population (optional).
- Population adjustment factor, for sensors that comprise less than 100% of the total seeds (optional).
- Response rate, to increase or decrease the response rate (optional).

See more information in "Limits Configuration".



DISPLAY AND SERVICE CONFIGURATION

This key is used to:

- Access security functions, line indicators, services and sub-menus;
- Selection of Metric / English units;
- Intensity of the display illumination;
- Alarm volume;
- Font and Icon Size;
- Sound Intensity.

See more information in "Setting the Travel Speed".



Manual PM 400 - Optional

Settings keys - Part III



OPERATION

This key is used for the user to return to the OPERATION SCREEN. See "Operation" for more information.



ACCESSORIES SETTINGS

This key is used to configure the selection of Fan (RPM), Shaft (RPM) or Flow (Grains per minute). See "Setting the Accessories" for more information.



SEED COUNT MODE

This key takes the user to the SEED COUNTING screen.

This mode allows the user to test the planter before operating in the field and shows the seed count for each row in use. See more information in "Seed Counting Mode".



AREA, SPEED, AND DISTANCE MODE

This key takes the user to the SPEED, AREA and DISTANCE screen.

This mode allows the user to use the monitor for operations without planting. This mode is also used to start, to clear the three independent area markers (planting area 1, planting area 2 and total area) and distance (linear meter).

See "Speed Area Mode" for more information.

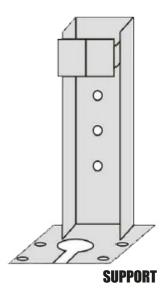


Manual PM 400 - Optional

Installation and configuration - Part I

Before shipping, the monitor is tested and inspected to ensure that the unit is operating in full condition and meets all measurement specifications. After unpacking the product, inspect for damage that may have occurred during transportation. Save all packing materials until all inspection has been done. If any damage is found, immediately file a claim with the carrier. Also notify your sales representative.

Install the mounting bracket in the chosen location using suitable tools. Then Install the bracket on the console by sliding it into the slots until the lock fits.





NOTE: The console must not obstruct or interfere with the operation of the tractor.

When mounting on a vertical surface, a strap can be used to retain cables at the bottom of the bracket.



To prevent damage, make sure that the console is properly seated in the bracket.



Manual PM 400 - Optional

Installation and Configuration - Part II

The planting monitor has two inputs for connecting the planter's electrical harnesses. Input **(A)** monitors from the 1st to the 24th sensor. Input **(B)** monitors from 25th to 36th sensor.

ATTENTION

The planter configuration and the travel setting the speed are essential for the planting monitor to function.

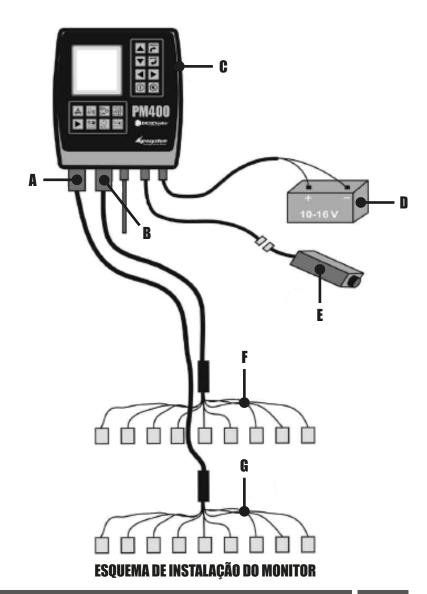
To perform these settings, see "Setting the Planter" and "Setting the Travel Speed".

If you have an 11-line planter and a monitor with two electrical harnesses with 12 sensors each: The electrical harness for the seed line sensors must be connected to connection (A) and the electrical harness for the fertilizer sensors to connection (B).

But if you have an 11-row planter and a monitor with an electrical harness with 24 sensors: You connect the harness to connection (A), sensors 1 to 12 in the seed lines and sensors 13 to 24 in the fertilizer batchers.



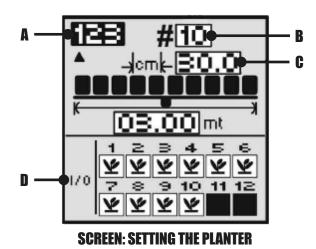
NOTE: You can monitor up to 36 seed lines, using two harnesses or up to 18 seed lines and 18 fertilizer lines.





• Setting the planter - Part I

To select the "Planter Configuration" screen, press , and remember that the monitor stores up to 03 different planter configurations.



01 - In field A press , select a planter configuration number using confirm by pressing again;

02 - In field B use to select the number of lines and press

to change the number of lines;



NOTE: Inform only the number of SEED lines to be monitored.

03 - Use to select digits and increase or decrease value

04 - Press to accept the new number;

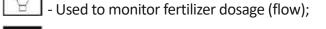
05 - In field C, line spacing, proceed to field B.

06 - In field **D**, use to select the line to be monitored,





 $oxedsymbol{oxed}$ - Used when the sensor is installed on the line, but it is turned off;



- Used when the line is removed.

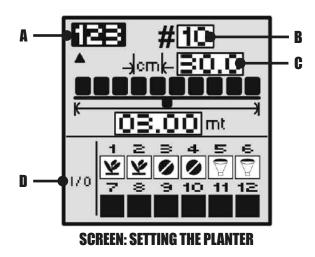
PPSOLO AIR 3rd SEED BOX - SELENIUM

109



Manual PM 400 - Optional

Setting the planter - Part II



At the end of the configuration, press or to the OPERATION SCREEN.

Setting the travel speed - Part I

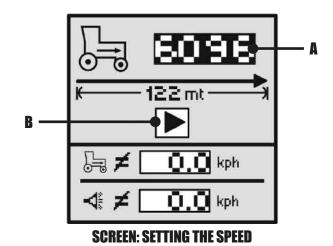
To select the Travel SETTING THE SPEED screen, press



To perform a new setting:

The tractor must be in motion before calibration STARTS.

01 - Select (B) and press , to start the calibration of 122 meters.





NOTE: After calibration has started, the button will switch to





Setting the Travel Speed - Part II





03 - The new calibration factor will be displayed in the window. Press



accept this value or to reject the value.

At the end of the configuration press to the PROTECTION SCREEN.



To enter a travel speed constant manually:

to highlight the displacement speed constant value (A).

- to modify the constant.
- to select the digits, increasing or decreasing the **03** - Press values.
- to accept the new number.

When the new values have been entered, press return to the OPERATION SCREEN.





NOTE: It is important to set the travel speed in the planting area.



Any value other than zero will activate the travel speed. Adjust the speed manually to zero in order to disable.



To check if the calibration number obtained is correct, go to the speed/ area/distance screen and check the speed indicated on the tractor indicator.

We recommend averaging the values of the 3 calibration constants.



NOTE: Calibration on a smooth soil is different from calibrating a soil with stubble.

Whenever you are planting in soil other than the one performed the calibration, perform the calibration process again.

If your planter is not equipped with a travel speed sensor, the operator can enter a value for planting with simulated speed by manually changing the value of the speed field (C).

In the limit field (D), the operator can enter the limit value for excess travel speed.



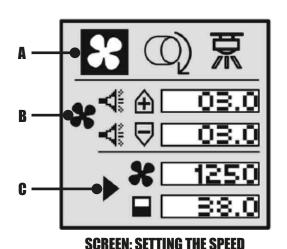
Manual PM 400 - Optional

Setting the Accessories - Part I

To add an auxiliary sensor with its performance characteristics (calibration values, limits, etc.) for monitoring, it must be activated through the calibration constant. If minimum and maximum alarms are desired, limits can be added to the calibrated sensors. The fan, shaft or flow sensor can be monitored with high or low alarm values or no value.

Shaft and Fan

01 - Select the accessory **(A)**, go to the START button **(B)** and press . After calibration has started, the button will switch to STOP **(B)** and the factor will start to accumulate.



- **02** During the rotation count, turn the shaft or fan on the number total rotations.
- 03 Stop the calibration by pressing . The factor will stop accumulating.
- **04** Using , select the number of turns box (under the cali-

bration number) and change the number of turns turned with



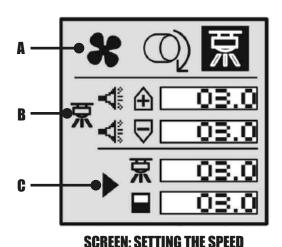
When the new values have been entered, press or (operation) to return to the OPERATION SCREEN.

■ Manual PM 400 - Optional

- Setting the Accessories Part II
- Flow

It is worth remembering that an adequate method is needed to determine the volume of material (scale, graduated glass or a collecting shell) to calibrate the monitor.

01 - Select the accessory **(A)**, go to the START button **(B)** and press . After calibration has started, the button will switch to STOP **(B)** and the factor will start to accumulate.



- **02** Once the desired quantity is dispensed, stop dispensing. The factor will stop accumulating.
- 03 Measure the amount of material that was distributed.

04 - Using , select the tank volume box (below the calibration

number) and change the distributed volume with



05 - Configure the maximum/minimum limits (B).

When the new values have been entered, press return to the OPERATION SCREEN.



J (operation) to

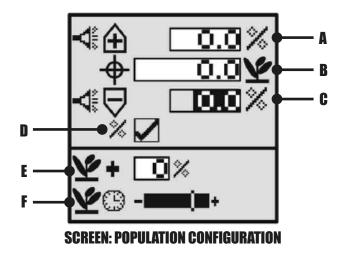


Manual PM 400 - Optional

Setting the seed population

Press to access the SETTING THE SEED POPULATION screen. This screen allows the user to define different population characteristics.

01 - Define the desired target population of seeds (B).





NOTE: If no population value is selected, the monitor will use the population average as the calculation basis for alarm and line indicators.

02 - Define the values for the maximum **(A)** and minimum **(C)** limits that be accepted as a percentage or basic values;



NOTE: If you use basic values, it is important to note that the comma indicates thousands.

03 - Define, if necessary, the adjustment factor (E) for more or less population;



NOTE: The population adjustment factor is available to provide the result and show the population as close to the real. This is useful when the sensors do not detect double, triple, etc.

04 - In field **(F)**, slide to the right to obtain a high population response rate and to the left for a low population response rate.

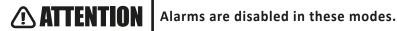


NOTE: This feature is used to ensure uniformity in the display of the seed population for planters with few rows versus planters with many rows.



Setting auxiliary Modes

The lift switch can be used to more accurately monitor the area accumulator. It automatically disables the counter while the planter is not planting, thus avoiding accumulating the non-planted area.



Speed, Area and Distance

In this mode, the travel speed, the area and the distance covered are displayed. The mode includes start/stop/restart for monitoring.

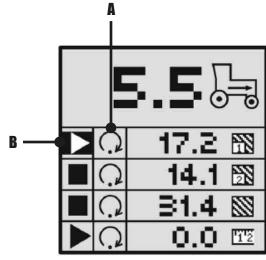
To enter this mode press the key



01 - Select button

02 - Start the count by pressing . After counting has started, the button

 $oxedsymbol{oxed}$ (STOP) and the factor will start to accumulate;



SCREEN: SPEED. AREA AND DISTANCE

03 - Press (the count will pause).

04 - Press again. The factor accumulate again.

To reset the counter:

to select the (RESET) button



Manual PM 400 - Optional

Seed Count

The seed counting mode can be used to determine the performance of the rows when operating the planter in stationary mode.

To enter this mode press the key 1,2,3...



01 - Select button (B):

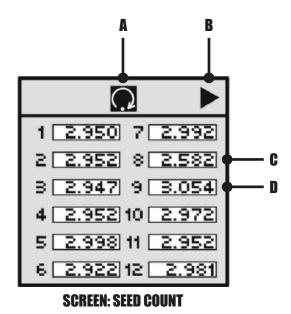
02 - Start the count by pressing . After counting has started, the button

will switch to (STOP) and the factor will start to accumulate;

03 - Press (the count will pause).

04 - Press again. The factor accumulate again.

In the example opposite, line 8 **(C)** is marking less seeds than desired, while in line 9 **(D)** it is marking more seeds.



To reset the counter:

There are two ways to reset the counter.

01 - Press to select the (RESET) button and press and press

02 - Press to exit seed counting mode and press 1,2,3...



Setting the Display - Top Half of the Operation Screen

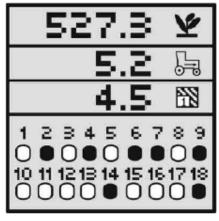
Through the user interface settings it is possible to select the functions that can be displayed on the screen. If more functions are selected than the screen availability, then the

keys are used to scroll between the functions, and it is possible to view up to 25 functions. See the example. If 8 functions are selected:

- Average Plant Population.
- Travel Speed.
- Planting Area 1.
- Total Area.
- Fan RPM.
- Maximum/Average/Minimum Population.
- Spacing between seeds.
- Checking Seed Variation by Distance.

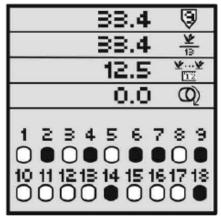
37.3 25 33.5 % 1 2 3 4 5 6 7 8 9 0 0 0 0 0 0 0 0 10 11 12 13 14 15 16 17 18 0 0 0 0 0 0 0 If the screen is set to display 3 functions, the operation screen will display functions 1, 2 and 3.

When is pressed, the screen will show functions 2, 3 and 4.



SCREEN: TOP DISPLAY

The next touch on the screen will show functions 3, 4 and 5. Returning to item 1 when the screen is showing functions 7, 8 and 1.



SCREEN: TOP DISPLAY

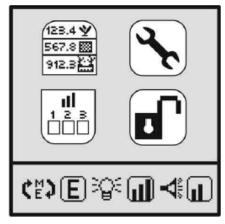
SCREEN: TOP DISPLAY



Manual PM 400 - Optional

Number of Functions to Display

01 - Press to enter the display settings screen;

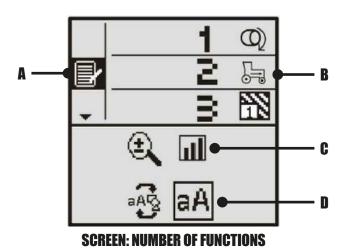


SCREEN: TOP DISPLAY SETTING

02 - Press 567.8 to enter the settings screen;

03 - Select the functions to display option (A) and press





04 - Use the arrows to choose the functions **(B)** that will be visible on the operation screen;

05 - Select the option of the number of functions to display (C);

06 - Press ;

07- Use to change the number of functions to display on the screen.

08 - Select the graphic/text mode (D);

09 - Press ,;

10 - Use to change mode.

When the new values have been entered, press return to the OPERATION SCREEN.



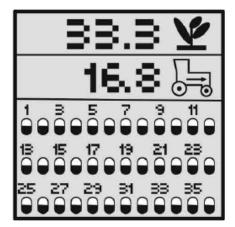
or

(operation) to



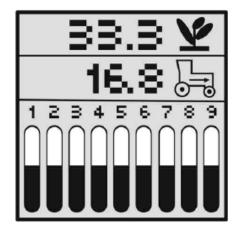
Setting the Display - Lower Half of the Operation Screen

The number of connected lines shown in the lower half of the screen is defined by the user, thus varying the size of the numbers.



SCREEN: GRAPHIC WITH 36 LINES

The monitor will automatically count through the lines at 3-second intervals when the line is connected.



The operator can use usar to manually select which line to monitor. Automatic counting will restart in 10 seconds after manual selection.



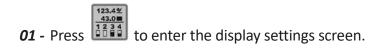
SCREEN: GRAPHIC WITH 18 LINES

SCREEN: GRAPHIC WITH 09 LINES



Manual PM 400 - Optional

Indicator type to display

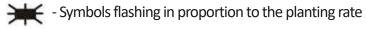


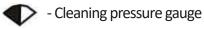
02 - Select to enter the settings screen and choose the option to display the indicator;





- Symbols





05 - Select the option of the number of indicators to display (A) on the operation screen;



to change the number of indicators to display (A) on the operation screen.

When the new values have been entered, press or



(operation) to return to the OPERATION SCREEN.



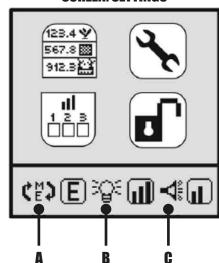
• Setting the Measurement System, Display, Lighting and Alarm Volume

Press to configure the measurement system, display illumination and alarm volume.



NOTE: At the bottom of the screen are icons for settings.

SCREEN: SETTINGS



01 - Press to configure the measurement system, the display lighting the volume of the alarms.

02 - Switch between METRIC and ENGLISH as desired;

- **03** Press to accept the new configuration;
- 04 Select the display lighting icon (B) using and pressione
- **05** Use to select the lighting level of the display. There are 03 lighting levels that can be chosen.
- **06** Press to accept the new configuration;
- 07 Select the alarm volume icon (c) usando and press ;
- **08** Use to select the alarm volume level. There are 03 volume levels that can be chosen;
- **09** Press to accept the new configuration.

When the new values have been entered, press return to the OPERATION SCREEN.





l (operation) to



Manual PM 400 - Optional

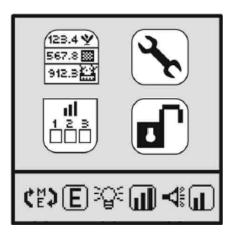
Setting the Security Password - Part I

The monitor's security system allows a security password to be entered, protecting the system from access by unauthorized persons to change settings data.

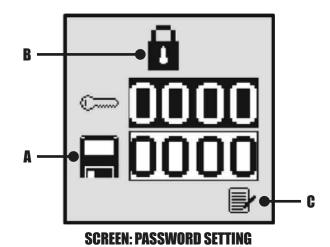


NOTE: A screen list allows the operator to lock screens individually to ensure they are not modified.

Press Press to enter the display settings screen and choose



SCREEN: DISPLAY CONFIGURATION



02 - Press to enter the password;

03 - Modify the digits with and press to accept the new password;

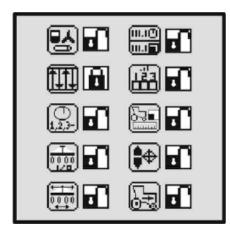
04 - To lock the screens individually, select the icon **(B)** and press to enter the list of screens;

01 - Select the disk icon (A) using





Setting the Security Password - Part II



SCREEN: PASSWORDS BY FUNCTION

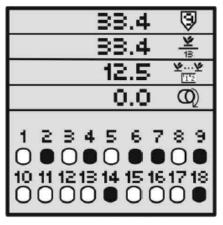
05 - Using , lock or unlock the desired screens, closing or opening the lock icon next to each screen;

06 - Press to return to the password screen;

07 - Select the lock (c) and press to switch from unlocked to locked. The selected screens will be locked and you will need to enter the password to make the changes.

General Information on Function Monitoring - Part I

The operator can choose 2, 3 or 4 functions for simultaneous monitoring and can select several others to be viewed.



SCREEN: DISPLAY

The monitor's operation screen provides monitoring functions.

No matter where the user has navigated in the settings screens, security or

auxiliary modes, pressing the key repeatedly the system will return to the operation screen. The operation screen is divided into two halves, upper and lower.

The upper half provides the user-definable output parameters (population, area, speed, etc.) while the lower half is dedicated to line information.



Manual PM 400 - Optional

General Information on Function Monitoring - Part II



NOTE: For more information and how to configure the operation screen, see "Settings on the Operation Screen".



AVERAGE PLANT POPULATION

The function shows the average plants per row in seeds per hectare or seeds per acre that are set for population. The population response rate and population adjustment can be modified on the target settings screen.



NOTE: This function can be identified with a symbol or text, depending on the text/graphic setting.



MAXIMUM/AVERAGE/MINIMUM POPULATION

The function alternates the display in minimum, average and maximum population every 2 seconds, indicating the corresponding line.

When maximum or minimum populations are being shown, the corresponding symbol is shown with the line number.



LINE POPULATION CHECK

The function shows the population of each row of the planter. The monitor switches between the active lines every 2 seconds. After the last line is displayed, the monitor returns to the first active line and starts another verification sequence.



SPACE BETWEEN SEEDS

The function shows variation in seed spacing.

This function can be identified with a symbol or text, depending on the text/graphic setting.



MAXIMUM/AVERAGE/MINIMUM SPACING

The function switches the display in minimum, medium and maximum spacing every 2 seconds.

When maximum or minimum spacing is being shown, the corresponding symbol is shown with the line number.



• General Information on Function Monitoring - Part III



CHECKING SPACE BETWEEN SEEDS

The function shows the spacing between the seeds of each row. The monitor switches between the active lines every 2 seconds. After the last line is displayed, the monitor returns to the first active line and starts another verification sequence.



SFFD VARIATION BY DISTANCE

The function shows the variation of the seed population of each row of the planter in spacing of seeds by distance according to the configuration. This function can be identified with a symbol or text, depending on the text/graphic setting.



MAXIMUM/AVERAGE/MINIMUM SEED VARIATION BY DISTANCE

The function switches the display in minimum, average and maximum variation every 2 seconds.

When maximum or minimum variations are being shown, the corresponding symbol is shown with the line number.



CHECKING SEED VARIATION BY DISTANCE

The function shows the variation between the seeds of each row. The monitor switches between the active lines every 2 seconds. After the last line is displayed, the monitor returns to the first active line and starts another verification sequence.



PLANTING AREA 1

The function shows the planting area in hectares or acres, depending on the selected unit.

This function will identify a planting area chosen for marking, where it can be reset or stored.

It can be identified with a symbol or text, depending on the text/graphic setting.



Manual PM 400 - Optional

General Information on Function Monitoring - Part IV



PLANTING AREA 2

The function shows the planting area in hectares or acres, depending on the selected unit.

This function will identify another planting area chosen for marking, as the operator will be able to choose any area, regardless of Planting Area 1, and may also zero or store that area.

It can be identified with a symbol or text, depending on the text/graphic setting.



TOTAL PLANTING AREA

The function shows the total planting area in hectares or acres, depending on the selected unit.

The Total Area can also be reset to zero, and can start marking again.

This function can be identified with a symbol or text, depending on the text/graphic setting.



NOTE: The Total Planting Area is stored in the Tools option in the "Display

and Service Settings" menu





DISPLACEMENT SPEED

The function shows the displacement speed of the planter in Miles per hour (mph) or Kilometers per hour (Km/h), depending on the selected unit.

This function can be identified with a symbol or text, depending on the text/graphic setting.



AREA PER HOUR

The function shows the area rate per hour in hectares per hour (Ha/h) or acres per hour (AC/h), depending on the selected unit.

This function can be identified with a symbol or text, depending on the text/graphic setting.



FAN RPM

The function shows the fan speed in revolutions per minute (rpm).

This function can be identified with a symbol or text, depending on the text/graphic setting.



General Information on Function Monitoring - Part V



SHAFT RPM

The function shows the rotation of the shaft in revolutions per minute (rpm). This function can be identified with a symbol or text, depending on the text/graphic setting.



FLOV

The function shows the material flow rate in gallons per acre (g/ac) or liters per hectare (I/ha).

This function can be identified with a symbol or text, depending on the text/graphic setting.

Alarms

Two audible alarm beeps are emitted during navigation or data entry indicating some illegal operation or wrong keystroke.

The warning screen for illegal operation appears on the display, informing the operator of the type of problem.

Every audible alarm is accompanied by a visual alarm, which informs the type of problem that is occurring

Whenever an audible warning or a warning screen appears on the display, it indicates that a problem is occurring. Correct the problem before continuing planting.

ATTENTION

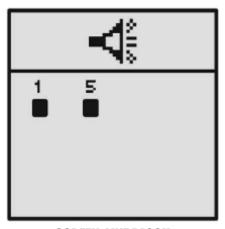
The key



can be used to cancel this alarm, but not to solve the problem.

- Alarm Types Part I
- Line Block

When the fertilizer line becomes clogged or the seed falls is blocked, two alarm beeps are emitted and the warning screen shows the lines that are in trouble.



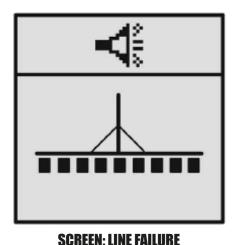
SCREEN: LINE BLOCK



Manual PM 400 - Optional

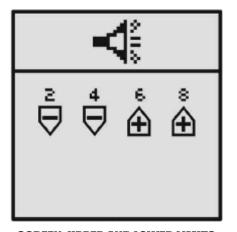
- Alarm Types Part II
- Failure on All Lines

Eight audible alarm beeps are heard and the failure warning screen on all lines will be displayed, which may indicate the planter's lift.



High/Low Population Limits Exceeded

The alarm sounds a whistle-like sound and the limit exceeded warning screen is displayed.



SCREEN: UPPER AND LOWER LIMITS

The symbols shown on the screen alert you if the limit has been exceeded for



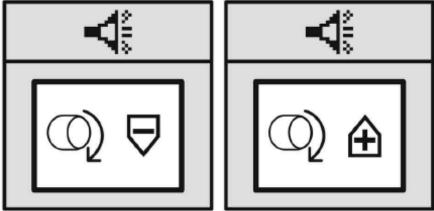
(more) or for (less) and the numbers indicate which seed lines have exceeded the limits.



- Alarm Types Part III
- Accessory High/Low Exceeded (Optional)

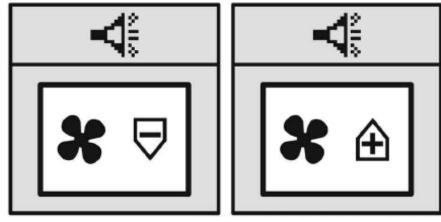
The alarm sounds constantly until the symptom is resolved and the limit exceeded warning screen is displayed:

• Warning display of fan speed limit exceeded;



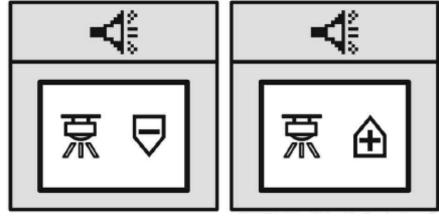
SCREEN: FAN ROTATION LIMIT

Warning display of shaft rotation limit exceeded;



SCREEN: SHAFT ROTATION LIMIT

Pressure limit warning display exceeded;



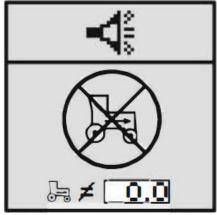
SCREEN: PRESSURE LIMIT

>> BALDAN

Manual PM 400 - Optional

- Alarm Types Part IV
- Lack of Travel Speed

When planting without marking the machine's travel is detected, the alarm sounds until the problem is solved. The travel speed warning screen will be displayed.



SCREEN: LACK OF SPEED

Self-test Failure

When it is detected that the battery voltage is insufficient or exceeds the maximum voltage limit, the self-test alarm sounds. The self-test failure warning screen will be displayed.



SCREEN: SELF-TEST FAILURE

Maximum Travel Speed Exceeded (Optional)

When detected, the audible alarm sounds until the travel speed is adjusted within the configured range. The Maximum Speed Exceeded warning screen will be displayed.



SCREEN: SPEED FAILURE



Troubleshooting - Part I

ERROR: THE MONITOR DOES NOT TURN ON.

PROBABLE CAUSE: Monitor fuse blown.

CORRECTIVE ACTION: Inspect the fuse (located near the battery). If necessary, replace with a fuse of a maximum of 7.5 A. If the fuse blows again, inspect all harnesses for dents or breaks that could cause a short circuit with the grounding.

PROBABLE CAUSE: Bad battery connection.

CORRECTIVE ACTION: Make sure that the connections are clean and tightened correctly. Inspect the harnesses for damage.

PROBABLE CAUSE: Low battery voltage.

CORRECTIVE ACTION: The monitor voltage must be at least 10V. If it is lower, recharge or replace the battery.

ERROR: LINE FAILURE OR HIGH/LOW ALARM IN LINE PLANTING PROPERLY.

PROBABLE CAUSE: Seed sensor covered with dirt.

CORRECTIVE ACTION: Clean the sensor using the brush that came with the equipment.

PROBABLE CAUSE: Defect in the sensor or harness.

CORRECTIVE ACTION: Turn on the sensor and see the troubleshooting LED. If the sensor does not have an LED, replace the harness connection with a nearby sensor to determine if the sensor is damaged.

PROBABLE CAUSE: Defective monitor. **CORRECTIVE ACTION:** Contact Agrosytem.



Manual PM 400 - Optional

• Troubleshooting - Part II

ERROR: TANK ALARM DOES NOT SOUND WHEN EMPTY.

PROBABLE CAUSE: Tank sensor covered with dirt.

CORRECTIVE ACTION: Clean the sensor using the brush that came with the equipment.

PROBABLE CAUSE: Short-circuit sensor or harness failure.

CORRECTIVE ACTION: Change the harness connection with another sensor to determine if the problem is with the sensor or the harness.

PROBABLE CAUSE: Defective monitor. **CORRECTIVE ACTION:** Contact Agrosytem.

ERROR: TANK ALARM SOUNDS WHEN FULL.

PROBABLE CAUSE: Broken sensor or harness failure.

CORRECTIVE ACTION: Monitor detected a different number of sensors than the I/O line configuration. Make sure that all lines are being detected d uring

the self test. Replace defective sensors.

PROBABLE CAUSE: Defective monitor. **CORRECTIVE ACTION:** Contact Agrosytem.



Troubleshooting - Part III

ERROR: SYSTEM VOLTAGE ALARM.

PROBABLE CAUSE: Low battery voltage.

CORRECTIVE ACTION: The monitor voltage must be at least 10V. If it is lower, recharge or replace the battery.

PROBABLE CAUSE: Battery faulty contact.

CORRECTIVE ACTION: Check that the connections are clean and tight.

PROBABLE CAUSE: Damaged harness.

CORRECTIVE ACTION: Inspect all harnesses for damage or breakage that can cause a short circuit.

ERROE: AUXILIARY MODE ALARM SOUND WHEN THE SHAFT, FAN, OR FLOW ARE IN PROGRESS.

PROBABLE CAUSE: Sensor failure.

CORRECTIVE ACTION: Shaft, fan, or flow sensor not operating. Replace the defective sensor.

PROBABLE CAUSE: Wrong calibration number.

CORRECTIVE ACTION: Incorrect calibration sensor number. Check the calibration number on the accessories setup screen.

PROBABLE CAUSE: Incorrect sensor limits.

CORRECTIVE ACTION: Sensor limits are incorrect. Check the limits on the setting the accessories screen.

PROBABLE CAUSE: Defective monitor. **CORRECTIVE ACTION:** Contact Agrosytem.



Manual PM 400 - Optional

Troubleshooting - Part IV

ERROR: TRAVEL SPEED ALARM SOUND WITH THE MACHINE IN MOTION.

PROBABLE CAUSE: Travel speed sensor failure.

CORRECTIVE ACTION: Travel speed sensor is not detected. Replace the defective sensor.

ERROR: MONITOR FAILURE.

PROBABLE CAUSE: Defective monitor.

CORRECTIVE ACTION: Contact Agrosytem.

ERROR: ALARME DE VELOCIDADE MÁXIMA EXCEDIDA SOANDO.

PROBABLE CAUSE: Maximum travel speed alarm set to slow.

CORRECTIVE ACTION: Set the travel speed limit to faster or zero to disable.

PROBABLE CAUSE: Incorrect speed constant.

CORRECTIVE ACTION: Speed sensor has not been calibrated, RADAR sensor angle has been changed, or an incorrect constant has been entered. Use SPEED - AREA - DISTANCE mode to determine if the speed is correct. If it is incorrect, re-calibrate the speed constant.

ERROR: SELF-TEST ALARM.

PROBABLE CAUSE: Defective monitor.

CORRECTIVE ACTION: Contact Agrosytem.



Manual ETD (Electronic Dosing Table) - Optional

Presentation



The **ETD** is an electronic device that can be connected to planters, seeders, and fertilizers to assist the operator in configuring the best gear ratio so that the correct dosage of seeds and fertilizers occurs, according to the needs of each area/plot, based on the adjustments previously done in the field and calibrations before planting. It allows to perform other additional functions such as the registration of planted hectares, hours actually worked and planting speeds above specified, and this important information is recorded and shown on the **ETD** electronic device display.



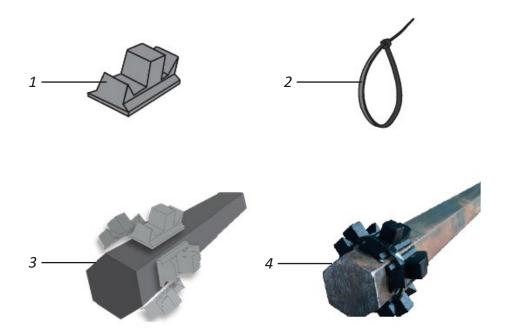
To use the ETD (Electronic Dosing Table), refer to the instruction manual on the following pages.



• Manual ETD (Electronic Dosing Table) - Optional

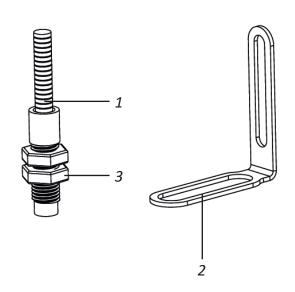
Assembling the magnets on the main shaft

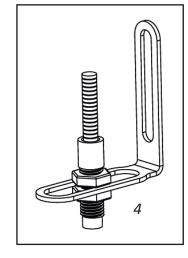
The magnets (1) must be installed on the planter's primary shaft, after the shutdown ratchet, as this way, hours and hectares of when the machine is in transport will not be counted. A magnet must be installed on each face of the shaft (3), securing them with two nylon clamps (4) so that whoever is properly fixed and positioned (4).



Assembling the speed sensor

Mount the sensor (1) on the support (2) fixing by the nuts (3) according to the image (4).



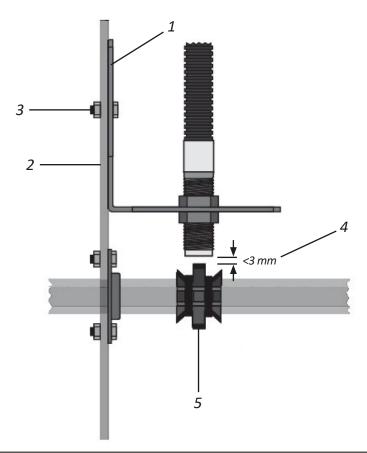




• Manual ETD (Electronic Dosing Table) - Optional

Speed sensor installation

Attach the sensor support (1) to the machine chassis (2) using the M8x30 screw (3) making sure that the distance between the sensor and the magnets is less than 3 mm (4). It is extremely important to align the speed sensor and the magnets on the primary shaft (5).



Identification



- A Display
- **B** Function key
- C Decrease item
- **D** Login
- E Increase item

The ETD has four keys

Function F key

The Function F key is used to change between the four main functions of the ETD, which are:

F1: Seed Rate

F2: Fertilizer Rate

F3: Hobbs Meter

F4: Hectometer

Within the menus, the Function F key assumes the "back" function, which facilitates navigation.

Teclas

The keys ▼ and ▲ are used to increase the numeric items of the interface. The icon with arrows above and below the interface indicates the item to be controlled by the keys.

Keys



The key is used as a "enter" function. This key allows you to enter the options that are shown in the lower right corner of the interface.



• Manual ETD (Electronic Dosing Table) - Optional

Settings menu

The settings menu (1) can be accessed through the Function F key, when pressed for more than 2 seconds.

The settings menu has 7 items. The keys between menu items.



(2) are used to navigate



The Select key (3) is used to select the highlighted item. Just click on the "F" key (4) to exit the settings menu



To select the start of the calibration click 'Yes' \triangleright (1).

Sensor calibration



When starting the sensor calibration (2), the machine must be moved for exactly 100 meters (3) and stopped.

The number of pulses (4) counted by the sensor is shown on the screen. To complete the calibration, the operator must press the (5) "Ready" key.

The calibration of the sensor is important for the ETD to determine the number of hectares worked, the machine's working speed and also the distance covered in the fertilizer calibration.

If, during displacement, the number of pulses corresponding to the end of the 100m is not displayed, the displacement of the sensor or magnets may have occurred, making it impossible to read the pulses during the displacement. In this case, it is necessary to carry out the adjustment of these components according to the assembly diagram, item 4 "INSTALLING THE SPEED SENSOR", previous page.

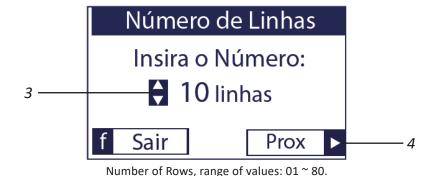


Manual ETD (Electronic Dosing Table) - Optional

Machine



In the machine configuration (1), click 'Select' \triangleright (2) to enter the number of Rows using the buttons $\stackrel{\triangle}{\bullet}$ (3).



After selecting the number of Rows contained in the machine, press the 'Next' key \blacktriangleright (4) to select the Row spacing using the buttons \spadesuit (5).

Sensor calibration



When clicking on "Save" (6), the system saves the settings and displays the following message.

Linhas Salvas! 10:45cm

This information is very important for the presentation of the worked hectares and also for the calibration of fertilizer rates.

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Manual ETD (Electronic Dosing Table) - Optional

- Seed rate Part I
- 1) Select Seed Rate and click Select.



2) Then select CD Gears and click Select.



3) Then keep the list below.



4) Click Fn to save.



5) Then select CD Gears and click Select.



6) Then select Seed Rate and click Select.





Manual ETD (Electronic Dosing Table) - Optional

- Seed rate Part II
- 7) Then select Change Disk and click Select.



8) Then, insert the number of holes in the disc according to the crop to be worked.



9) Then click save.



10) Next, select Register Table and click Select.



11) IMPORTANT: Look in the Seed physical table on the disk you will be working on and choose the average value. **Example:** B1.



12) Then type B1 and click Next.





• Manual ETD (Electronic Dosing Table) - Optional

- Seed rate Part III
- 13) Then keep the CxD Ratio and click next.



14) Then keep the amount of holes placed previously and click next.



15) **NOTE:** Note that the seed rate value 4.9 corresponds to relation B1 in the SPEED BOX table; if it is different, redo the previous steps.



16) Then, if the value is correct, click on save.

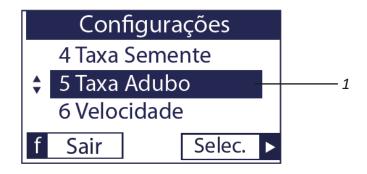


Then select Fn (exit) and go to the FERTILIZER settings as instructed on the following pages.



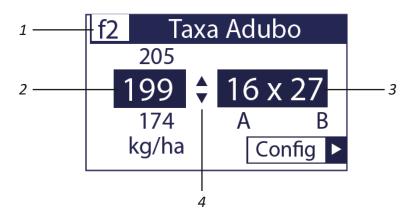
Manual ETD (Electronic Dosing Table) - Optional

Fertilizer rate

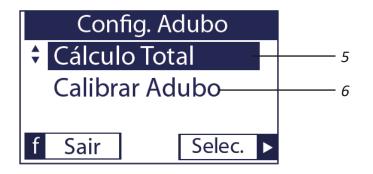


The F2 (1) screen indicates the fertilizer rate (2) in kg per hectare obtained with a specific gear ratio. Fertilizer rates are calculated according to the fertilizer calibration, the gear configuration (3) and the spacing between Rows. The \bigvee and \triangle keys (4) allow the user to navigate between the rate options in Kg/ha.

Fertilizer Rate: ETD



The fertilizer rate menu has two items: Total Calculation (5) and Calibrate Fertilizer (6).



Total calculation

In total calculation (5), the user can calculate the amount of total fertilizer in tons (8) required for planting a given area, in hectares. The last fertilizer rate selected on the function screen F2 (9), selected using the key $\stackrel{\blacktriangle}{=}$ (10) is used as a reference for the calculation.





Manual ETD (Electronic Dosing Table) - Optional

Calibrate fertilizer - Part I

The fertilizer calibration (11) has 3 steps. First, you must inform the gear ratio (12) used on the machine at the time of calibration. **EXAMPLE:** In the SPEED BOX, configure the option Mot **6** and Mov **F**, then inform the same configuration in the ETD; then walk 50 m collecting at least 3 fertilizer outlets, make the average and enter the value in the electronic table).



On the next screen, the operator must walk with the machine collecting the fertilizer over a distance greater than 50 meters (1). It is important that the sensor is already calibrated so that the distance covered is measured correctly. The distance traveled is displayed instantly (2).



After covering the required distance, click on Ready (3).

NOTE: The minimum distance to be covered is 50 meters, if this distance is insufficient, the screen for entering the weight of the collection will not be enabled and the following warning will be displayed:

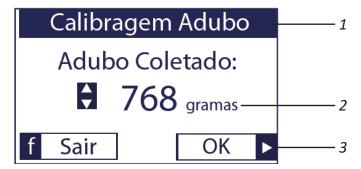
ERRO: Num. de Pulsos Insuficientes



Manual ETD (Electronic Dosing Table) - Optional

Calibrate fertilizer - Part II

On the next screen (1), the total weight of the collected fertilizer (2) in a row or the average of the collection, always in grams, is reported.

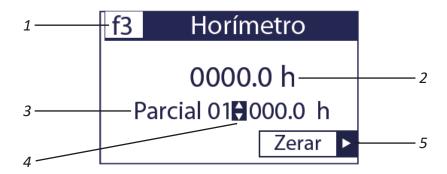


Fertilizer collected, value range: 10 ~ 9000 Grams.

Click on 'OK' (3) the 'calibration completed' message is displayed.



• F3 Hobbs Meter



The F3 screen (1) indicates the total number of hours (2) of work with the ETD in three partials (3), which can be related to the keys $\stackrel{\blacktriangle}{=}$ (4)

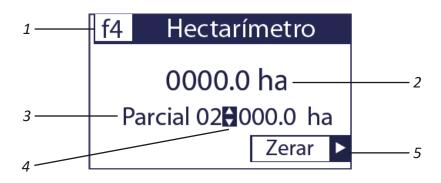
To reset a certain partial, the Reset key (5) must be held down for more than 2 seconds.

The hours counted refer only to the time that the machine was in effective work, that is, with the ratchet turned on. Thus, hours of handling the ETD or traveling with the machine in the transport position will not be counted.



• Manual ETD (Electronic Dosing Table) - Optional

F4 Hectometer



Screen F4 (1) indicates the total number of hectares worked (2) with the ETD, also in 3 partial ones (3), which can be selected using the keys $\stackrel{\blacktriangle}{=}$ (4).

Settings menu - Part I

The settings menu (1) can be accessed through the Function F key, when pressed for more than 2 seconds.

The settings menu has 7 items. The keys (2) are used to navigate between menu items.



The Select key \blacktriangleright (3) is used to select the highlighted item. Just click on the "F" key (4) to exit the settings menu.



• Manual ETD (Electronic Dosing Table) - Optional

• Settings menu - Part II



To select the start of the calibration click 'Yes' (1).

Sensor calibration



When starting the sensor calibration (2), the machine must be moved for exactly 100 meters (3) and stopped.

The number of pulses (4) counted by the sensor is shown on the screen. To complete the calibration, the operator must press the (5) "Ready" key .

The calibration of the sensor is important for the ETD to determine the number of hectares worked, the machine's working speed and also the distance covered in the fertilizer calibration.

If, during displacement, the number of pulses corresponding to the end of the 100m is not displayed, the displacement of the sensor or magnets may have occurred, making it impossible to read the pulses during the displacement. In this case, it is necessary to carry out the adjustment of these components according to the assembly diagram, item 4 "INSTALLING THE SPEED SENSOR", page 137.

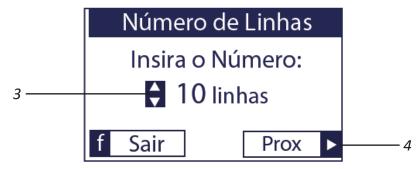


Manual ETD (Electronic Dosing Table) - Optional

Machine



In the machine configuration (1), click 'Select \triangleright (2) to enter the number of Rows using the buttons $\stackrel{\blacktriangle}{=}$ (3).



Number of Rows, range of values: 01 ~ 80.

After selecting the number of Rows contained in the machine, press the 'Next' key ► (4) to select the Row spacing using the buttons (5).



Spacing, range of values: 01 ~ 99 cm.

When clicking on "Save" ▶ (6), the system saves the settings and displays the following message.

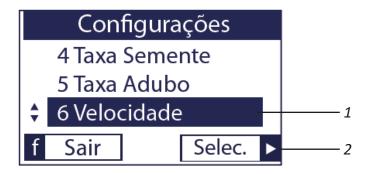


This information is very important for presenting the hectares worked and also for calibrating fertilizer rates.



Manual ETD (Electronic Dosing Table) - Optional

• Time above maximum speed



By clicking on 'Select.' (2) in the 'Speed' setting (1) it will be shown for how many hours (4) the machine has been working above the limit speed (3).





Identification

Identification plate

To see the parts catalog or to request technical assistance from Baldan, always inform model (01), serial number (02) and date of manufacture (03), which is on your **PPSOLO AIR 3rd SEED BOX - SELENIUM** nameplate.



ATTENTION

The drawings in this Instruction Manual are merely illustrative.

CONTACT

In case of doubts, never operate or handle your equipment without referring to Post-Sales.

Telephone: 0800-152577

e-mail: posvenda@baldan.com.br

Product Identification

Please make the correct identification of the data below, to always have information about the service life of your equipment.

| Owner: |
|------------------------------|
| Dealer: |
| Property: |
| City: |
| State: |
| Certificate of Warranty no.: |
| Implement: |
| Serial No: |
| Purchase Date: |
| Invoice: |



Code: 60550109118 | CPT: PPSAIR15218



| Notes: | | | |
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Certificate of Warranty

BALDAN IMPLEMENTOS AGRÍCOLAS S/A ensures the dealer normal performance of the implement for a period of six (6) months as of the delivery date on the retail invoice to the first final consumer. During this period, **BALDAN** undertakes to repair defects in material and/or of manufacture of its liability, including labor, freight and other expenses of the dealer's liability.

In the warranty period, request and replacement of eventual defective parts shall be made to the dealer of the area, who will submit the faulty piece for **BALDAN** analysis.

When this procedure is not possible and the resolving capacity of the dealer is exhausted, the dealer will request the support of **BALDAN Technical Assistance** through a specific form distributed to dealers. After analyzing the replaced items by Baldan Technical Assistance, and concluding that it is not a warranty, then the dealer will be responsible for the costs related to the replacement; as well as material expenses, travel including accommodation and meals, accessories, lubricant used and other expenses arising from the call out to Technical Assistance, and Baldan company is authorized to carry the respective invoice in the name of the resale. Any repair carried in the product within the dealer warranty deadline will only be authorized by **BALDAN** upon previous budget presentation describing parts and work to be performed.

The product is excluded from this term if it is repaired or modified by representatives not belonging to the **BALDAN** dealer network, as well as the application of non-genuine parts or components to the user's product. This warranty is void where it is found that the defect or damage is caused by improper use of the product, failure to follow instructions or inexperience of the operator.

It is agreed that this warranty does not cover tires, polyethylene tanks, cardan, hydraulic components, etc., which are equipment guaranteed by their manufacturers. Manufacturing and/or material defects, object of this warranty term, will not constitute, under any circumstances, grounds for termination of a purchase agreement, or for indemnification of any nature.

BALDAN reserves the right to change and/or perfect the technical characteristics of its products, without previous notice, and without obligation to proceed in the same way with the products previously manufactured.

Inspection and Delivery Certificate

SERVICE BEFORE DELIVERY: This implement was carefully prepared by the sale organization, with all its parts inspected according to the manufacturing prescriptions.

DELIVERY SERVICE: The user was informed about the current warranty terms and instructed on the usage maintenance precautions.

I confirm that the user has been informed about the current warranty terms and instructed on the usage maintenance precautions.

| Implement: | Serial Number: | | |
|------------------|----------------|--|--|
| Date: | _ Tax Number: | | |
| Dealer: | | | |
| Telephone: | CEP: | | |
| City: | State: | | |
| Owner: | | | |
| Telephone: | | | |
| | Number: | | |
| City: | State: | | |
| E-mail: | | | |
| | | | |
| | | | |
| 1st copy - Owner | | | |



Inspection and Delivery Certificate

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I confirm that the user has been informed about the current warranty terms and instructed on the usage maintenance precautions.

| Implement: | Serial Number: | | |
|--------------------------|----------------|--|--|
| Date: | _ Tax Number: | | |
| Dealer: | | | |
| Telephone: | CEP: | | |
| City: | State: | | |
| Owner: | | | |
| Telephone: | | | |
| Address: | Number: | | |
| City: | State: | | |
| E-mail: | | | |
| Sale date: | | | |
| Signature / Dealer Stamp | | | |
| 2nd copy - Dealer | | | |

Inspection and Delivery Certificate

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I confirm that the user has been informed about the current warranty terms and instructed on the usage maintenance precautions.

| Implement: | Serial Number: |
|--------------------------|----------------|
| Date: | Tax Number: |
| Dealer: | |
| | CEP: |
| City: | State: |
| Owner: | |
| | |
| | Number: |
| City: | State: |
| E-mail: | |
| Sale date: | |
| Signature / Dealer Stamp | |

3rd copy - Manufacturer (Please send completed within 15 days).

9-6900'90'7\l

AC MATÃO ECT/DR/SP

CARTĂO-RESPOSTA

NÃO É NECESSÁRIO SELAR

O SELO SERÁ PAGO POR:



BALDAN IMPLEMENTOS AGRÍCOLAS S/A.

Av. Baldan, 1500 | Nova Matão | CEP: 15993-900 | Matão-SP | Brasil Fone: (0**16) 3221-6500 | Fax: (0**16) 3382-6500 Home Page: www.baldan.com.br | e-mail: sac®baldan.com.br

Exportação: Fone: 55 16 3321-6500 | Fax: 55 16 3382-4212 | 3382-2480

e-mail: export@baldan.com.br

>> BALDAN

Avenida Baldan, 1500 Nova Matão 15.993-900 Matão/SP - Brasil sac@baldan.com.br export@baldan.com.br

+55 16 3221 6500 baldan.com.br