

Instruction Manual



PP SOLO 3rd SEED BOX

Row Crop Planter

 **BALDAN**

INTRODUCTION

We thank you for your preference and congratulate you on 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.

BALDAN warrants that it has delivered this implement to the retailer in a complete and perfect condition.

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



Instruction Manual



PP SOLO 3rd SEED BOX

Row Crop Planter

BALDAN IMPLEMENTOS AGRÍCOLAS S/A.
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.

 **BALDAN**

INDEX

BALDAN WARRANTY	9
Product Warranty.....	9
GENERAL INFORMATION	10
To the owner.....	10
SAFETY RULES.....	11-13
WARNINGS.....	14
COMPONENTS	15
TECHNICAL SPECIFICATIONS	16
Coupling Head Assembly - 4000 / 4500 (Figures 02)	17
Coupling Head Assembly - 5000 / 5500 (Figures 03/04)	18
Coupling Head Assembly - 6500 / 7500 (Figures 05/06)	19
Assembly of the Compactor Wheels (Figure 07)	20
Assembly of the lines (Figure 08)	20
Assembly the Conductive Seed Hoses (Figure 09)	21
Assembly of PP Solo 3rd Seed Box 4000 and 4500 Hydraulic System without Line Marker (Figure 10)	22
Assembly of PP Solo 3rd Seed Box 4000 and 4500 Hydraulic System with Line Marker (Figure 11)	23
Assembly of PP Solo 3rd Seed Box 5000 and 5500 Hydraulic System without Line Marker (Figure 12)	24
Assembly of PP Solo 3rd Seed Box 5000 and 5500 Hydraulic System with Line Marker (Figure 13)	25
Assembly of PP Solo 3rd Seed Box 6500 and 7500 Hydraulic System without Line Marker (Figure 14)	26
Assembly of PP Solo 3rd Seed Box 6500 and 7500 Hydraulic System with Line Marker (Figure 15)	27
Assembly of the Liner Marker Cutting (Figures 16/17).....	28
COUPLING	29
Tractor Coupling - 4000 / 4500 (Figure 18)	29
Tractor Coupling - 5000 / 5500 (Figure 19)	30
Tractor Coupling - 6500 / 7500 (Figure 20)	31
Levelling (Figure 21).....	32
TRANSPORT	33
Transport procedure (Figures 22)	33
WORK	34
Work Procedure (Figures 23).....	34-35
Use of the Ladder (Figures 24)	35
SPACING	36
Line Spacing	36
Number of Even Lines (Figure 25)	36
Number of Odd Lines (Figure 26)	36
Spacing Tables in Millimeters (Tables 02).....	37
PREPARING FOR WORK	38
Slip Index (Figures 27)	38
ADJUSTMENTS	39
Line Markers Adjustment (Figure 28)	39

Adjustment of Line Marker Discs (Figure 29)	40
Adjustment the Line Marker Bar (Figure 30)	40
Ratchet Adjustment (Figure 31)	41
SEED DISPENSING SYSTEM.....	42
Choosing the Suitable Disc (Figure 32)	42
Changing the Seed Discs (Figures 33)	42-44
Seed Batcher Rosette (Figures 34)	44
Changing the Double Rosette for Simple (Figure 35)	44
Seed Distributor Discs and Rings (Tables 03/04/05)	45
Use of Graphite powder or industrial talc (Table 06)	46
Speed Box (Figure 36)	46
Regulation for Seed Distribution (Figure 37)	47
Seed Distribution Table by Linear Meter 20-25 (Table 07)	48
Seed Distribution Table by Linear Meter 25-20 (Table 08)	49
FERTILIZER DISPENSING SYSTEM	50
Fertilizer Conductor - Fertisystem System (Figures 38/39)	50
Speed Box (Figure 40)	51
Regulation for Seed Distribution (Figure 41)	51
Fertilizer Distribution Table 20-31 (Table 09)	52
Fertilizer Distribution Table 31-20 (Table 10)	53
CALCULATION	54
Practical Calculation for Fertilizer Dispensing	54
Practical Test to Measure the Amount of Distribution of Fertilizer and Seeds	54
Mechanical Locking System 4000 to 7500 (Figure 42 / Table 11)	55
Hydraulic Trimming System - Optional 4000 to 7500 Mechanical Ratchet (Figure 43 / Table 12)	55
PLANTING LINES	56
Optional Line Models (Figures 44)	56
LINE ADJUSTMENTS	57
Adjusting the Cutting Disk Depth (Figure 45)	57
Adjusting the Cutting Disk Pressure (Figure 46)	57
Ridge Opening and Fertilizer Position in the Soil (Figures 47)	58
Furrower Attack Angle Adjustment (Figures 48)	58
Adjusting the Smaller Furrower for Greater or Lesser Mismatch - Optional (Figures 49)	59
Adjusting the Furrower with Depth Wheel - Optional (Figures 50)	59
Adjustment of the Optional Automatic Disarming Furrower (Figure 51)	60
Adjustment of Optional Furrower Reset Load (Figure 52)	60
Adjustment of Companioning Wheels for Furrower or Double Disc - Optional (Figures 53)	61
Double Disc Cleaners Adjustments (Figure 54)	62
Adjusting the Oscillating Depth Wheel (Figure 55)	62
Depth Limiting Wheel (Figures 46/57/58)	63-64

INDEX

Adjusting the Oscillating Depth Wheel (Figures 59)	64
Opening Adjustments of the Oscillating Depth Wheel (Figures 60).....	65
Adjustment of Fertilizer Depth and Pressure in the Seed Lines (Figure 61)	66
Oscillating Cart with Optional Protection Ring (Figure 62)	66
OPERATION.....	67
Fixation and Wheel Articulation System (Figure 63).....	67
Operating Recommendations	67-68
MAINTENANCE.....	69
Tire Pressure (Figure 64)	69
Lubrication	69
Grease Table end Equivalents (Table 13)	69
Lubricate every 10 hours of work (Figures 65).....	70-71
Lubricate every 30 hours of work (Figures 66).....	72
Lubricate every 60 hours of work (Figure 67)	72
Lubricate every 200 hours of work (Figure 68)	73
Chain Tension (Figure 69)	73
Oscillating Stretcher (Figure 70).....	73
Operational Maintenance	74
Cations	75
General Cleaning	75
Titanium Batcher - Optional (Figure 71)	76
Changing the Titanium Batcher Poliflows - Optional (Figures 72).....	76
Changing Escovaflex of the Titanium Batcher - Optional (Figures 73)	77
Changing the Titanium Doser Anti Skip - Optional (Figures 74)	77
Changing Discs and Rings on the Titanium Batcher - Optional (Figures 75)	78
Titanium Batcher Closing Precautions - Optional.....	78
Ring Change with Each New Planting Titanium Batcher - Optional (Figures 76).....	79
Cleaning the Titanium Batcher - Optional (Figures 77).....	79
Fertisystem Conductor Cleaning (Figures 78)	80
Fertisystem Conductor Maintenance Tube (Figures 79).....	81
Fertisystem Conductor Blocking Tube (Figures 80).....	82
Springs and Caps (Optional) Fertisystem Conductor (Figures 81).....	82
Tire Pressure (Figures 82)	83
Hydraulic Trimming System - Optional 4000 to 7500 Mechanical Ratchet (Figure 83 / Table 14)	84
OPTIONAL	85
Compactor Wheels - Opcional (Figures 84).....	85
Cutting Disc - Optional (Figures 85)	85
Furrowers - Optional (Figures 86)	86
Cpl Compating Wheel Carts - Optional (Figures 87).....	87
Cpl Compating Wheel Carts - Optional (Figures 88).....	87

IDENTIFICATION.....	88
<i>Product Identification (Figures 89).....</i>	<i>88</i>
NOTES.....	89
CERTIFICATE	90
<i>Inspection and Delivery Certificate.....</i>	<i>90-92</i>

WARRANT

PRODUCT WARRANTY

BALDAN IMPLEMENTOS AGRÍCOLAS S/A, guarantees the normal operation of the implement to the retailer for a period of six 6 months as of the date of delivery in the resale invoice to the first end consumer

During this period **BALDAN** undertakes to repair defects in material and or manufacture of its own, with labor, freight and other expenses being responsibility of the retailer

Within the warranty period, the request and replacement of any defective parts must be made to the regional retailer, who will send the defective part for analysis to **BALDAN**.

When such a procedure is not possible and the retailer's resolution capacity is exhausted, it will request support from **BALDAN**, Technical Assistance, through a specific form distributed to the retailers.

After the review of the replaced items by **BALDAN's** Technical Assistance, if it is concluded that such item is not covered by the warranty, then the retailer will be responsible for replacement costs as well as material, travel including accommodation and meals, accessories, used lubricant and other expenses arising from the call for Technical Assistance, and **BALDAN** is authorized to bill such expenses on behalf of the retailer.

Any repairs made to the product within the warranty period by the retailer will only be authorized by **BALDAN** upon prior quotation describing parts to be used and labor to be performed.

This term excludes products that undergo repairs or modifications at workshops not belonging to the **BALDAN**, retailer network, as well as the application of non genuine parts or components to the user's product.

This warranty is rendered void when it is found that the defect or damage is the result of improper use of the product, failure to follow instructions or operator inexperience.

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

Manufacture and or material defects, subject matter of this warranty term, shall not, under any circumstances, be a cause for termination of sales contract, or for indemnity of any kind

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 products previously manufactured.

OWNER

BALDAN IMPLEMENTOS AGRÍCOLAS S/A, is not liable for any damage caused by accident arising from the use, transportation, or improper or incorrect storage of its implement, either by negligence and/or inexperience of any person.

Only persons with full knowledge of the tractor and the implement should transport and operate them.

BALDAN is not responsible for any damage caused in unpredictable situations or beyond the normal use of the implement.

Improper handling of this equipment may result in serious or fatal accidents Before operating the equipment, carefully read the instructions in this manual. Make sure that the person responsible for the operation is instructed in the correct and safe handling. Also make sure that the operator has read and understood the product's instruction manual.



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

This Regulatory Standard aims to establish the precepts to be observed in the organization and in the work environment, in a manner compatible with the planning and development of agriculture, livestock, forestry, logging, and aquaculture activities with work safety, health and environment.

MR. EQUIPMENT OWNER OR OPERATOR.

Carefully read and comply with the contents of NR-31.

*For more information, see the website and read the full NR-31.
<http://portal.mte.gov.br/legislacao/normas-regulamentadoras-1.htm>*

GENERAL INFORMATION

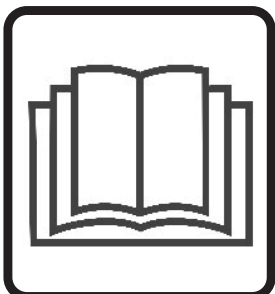
SAFETY RULES



THIS SYMBOL INDICATES AN IMPORTANT SAFETY WARNING. IN THIS MANUAL, WHENEVER YOU FIND IT, PLEASE READ THE FOLLOWING MESSAGE CAREFULLY AND WATCH OUT FOR POTENTIAL PERSONAL ACCIDENTS.



ATTENTION



- Read the instruction manual carefully in order to get to know the recommended safety practices.



ATTENTION



- Only start operating the tractor when properly seated and with a fastened seat belt.



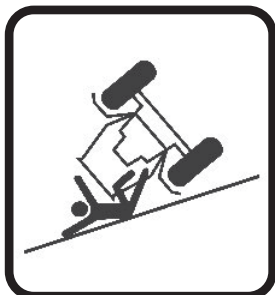
ATTENTION



- Do not work with the tractor if the front is light. If there is a tendency to lift, add weights or ballast to the front or front wheels.



ATTENTION



- There is a risk of serious injury due to tipping when working on sloping terrains.
- Do not use excessive speed.



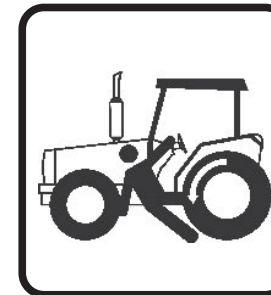
ATTENTION



- Do not transport people on the tractor or equipment.



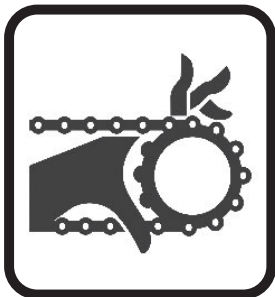
ATTENTION



- Before performing any maintenance on your equipment, make sure that it is properly stopped. Avoid getting run over.



ATTENTION



- When doing any service in the transmission of the seeder, disable the ratchets.
- Do not make adjustments with the seeder in motion.



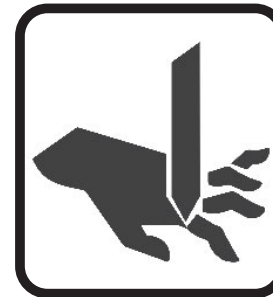
ATTENTION



- When operating the seeder, do not allow people to stand on the machine.
- Do not stay on the platforms with the seeder in operation.



ATTENTION



- Always stay away from the active elements of the seeder (discs), they are sharp and may cause accidents.
- When servicing discs, wear safety gloves.



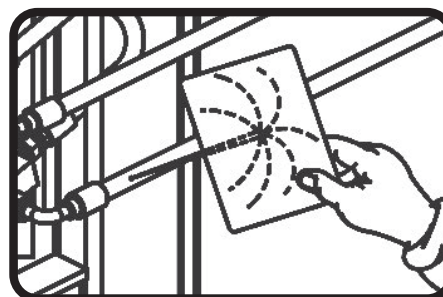
ATTENTION



- 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 the tractor off.



ATTENTION



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



THIS SYMBOL INDICATES AN IMPORTANT SAFETY WARNING. IN THIS MANUAL, WHENEVER YOU FIND IT, PLEASE READ THE FOLLOWING MESSAGE CAREFULLY AND WATCH OUT FOR POTENTIAL PERSONAL ACCIDENTS.

SAFETY RULES

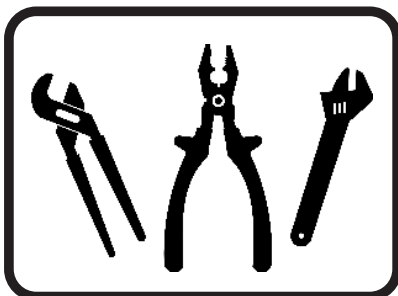
SAFETY RULES

! ATTENTION

- When transporting the seeder, do not exceed a speed of 16km/h or 10 MPH, avoiding the risk of damage and accidents.

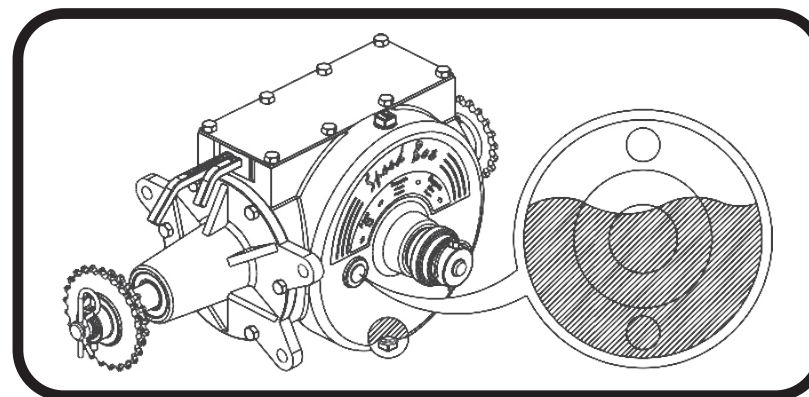


! ATTENTION



- Do not make adjustments with the seeder in motion.
- When doing any service on the seeder, turn off 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.



THIS SYMBOL INDICATES AN IMPORTANT SAFETY WARNING. IN THIS MANUAL, WHENEVER YOU FIND IT, PLEASE READ THE FOLLOWING MESSAGE CAREFULLY AND WATCH OUT FOR POTENTIAL PERSONAL ACCIDENTS.

- 01 -  When operating the equipment, do not allow people to stand too close to or on it.
- 02 -  When carrying out any assembly and disassembly service on the disks, use gloves on your hands.
- 03 -  Do not wear loose clothing, as they may become entangled in the seeder.
- 04 -  When 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.
- 05 -  Do not start the tractor engine indoors without adequate ventilation as exhaust fumes are harmful to health.
- 06 -  When 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 brake in an emergency.
- 07 -  Do not make adjustments with the seeder in operation.
- 08 -  When 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 the seeder.
- 09 -  Always drive the tractor at safety compatible speeds, especially when working on rough or sloping terrain, always keep the tractor hitched.
- 10 -  When driving the tractor on roads, keep the brake pedals interconnected.
- 11 -  Do not work with the tractor with a light rear. If the rear tends to lift, add more weights to the rear wheels.
- 12 -  When leaving the tractor, shift to neutral and set the parking brake.
- 13 -  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.
- 14 -  Read or explain all procedures in this manual to a user who cannot read.

WARNINGS

*If in doubt, contact After Sales.
Telephone: 0800-152577 / E-mail: posvenda@baldan.com.br*

COMPONENTS

PP SOLO 3RD SEED BOX ROW CROP PLANTER

- 1- Chassi
- 2- Support
- 3- Hydraulic Hoses
- 4- Shackle
- 5- Coupling head
- 6- Regulator
- 7- Central Valve
- 8- Ratchet
- 9- Cutting Disc
- 10- Speed Box
- 11- Double Fertilizer Disc
- 12- Ladder
- 13- Double Seed Disc
- 14- Depth Limiting Wheel
- 15- "V"Wheel
- 16- Closing Lever
- 17- Plataform
- 18- Manual Container
- 19- Seed Deposit
- 20- Plataform Handrail
- 21- Fertilizer Deposit
- 22- Marker
- 23- Marker Disc
- 24- Marker Cylinder

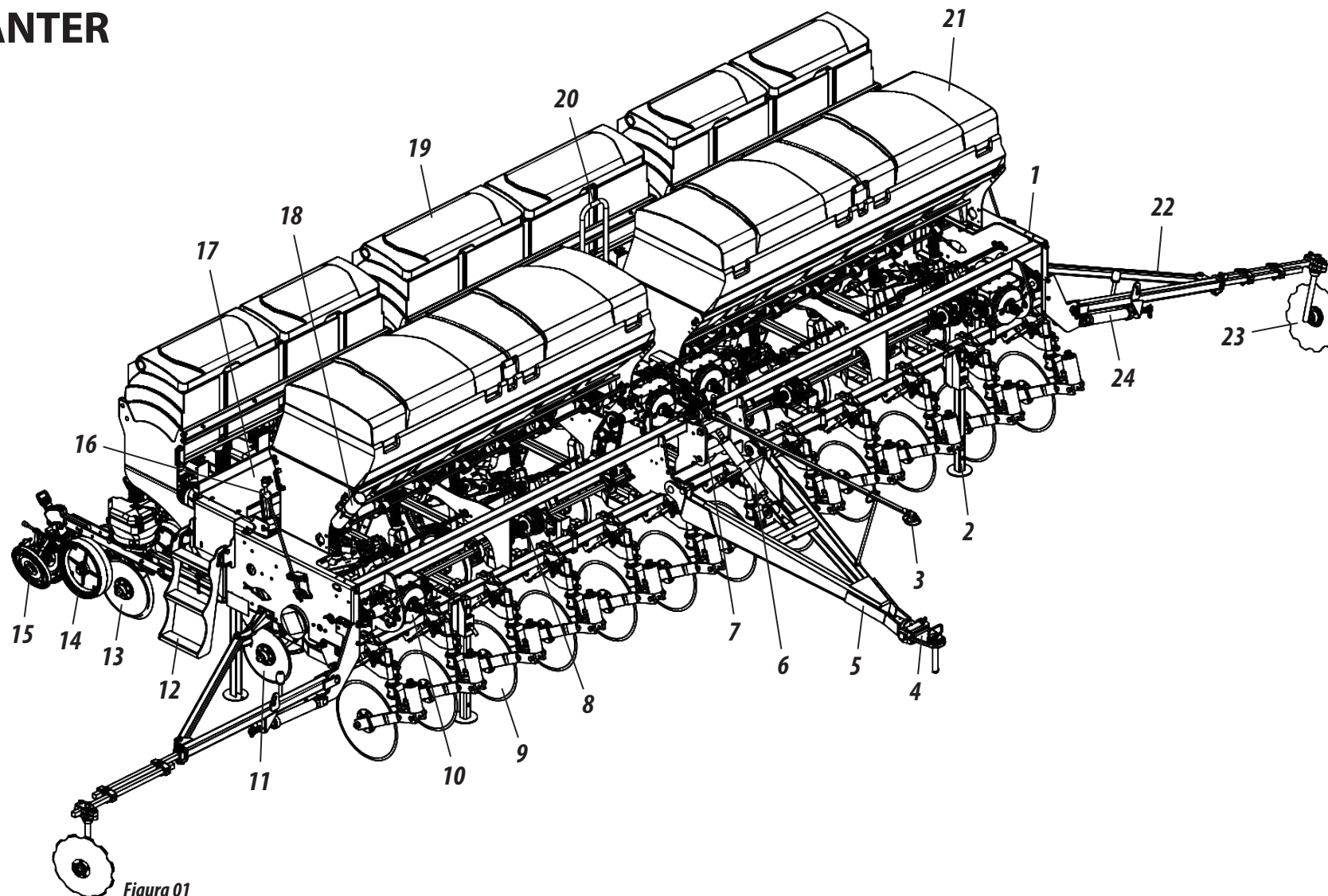


Figura 01

Table 01

Model	No. of Lines	Total Width (mm)	Working Width (mm)	Capac. Metallic Fertilizer Deposit (L)	Capac. Plastic Fertilizer Deposit (L)	Capac. 3rd Seed Deposit (L)	Number of Wheels (unit)	Estimate Weight (kg)	Approximate Power (Hp)
PP Solo 3rd Seed Box 4000	08	4300*	3800	1400	1240	810	2	3450	90 - 100**
PP Solo 3rd Seed Box 4500	10	5000*	4480	1750	1500	972	4	4365	100 - 110**
PP Solo 3rd Seed Box 5000	12	6000*	5350	2100	1860	1140	4	5300	120 - 150**
PP Solo 3rd Seed Box 5500	13	6500*	6300	2100	1860	1296	4	5820	130 - 160**
PP Solo 3rd Seed Box 6500	15	7300*	6715	2600	2250	1458	6	8200	160 - 190**
PP Solo 3rd Seed Box 7500	17	8200*	7615	3000	2610	1620	6	8480	170 - 200**

Wheelset (mm) 700x16

Spacing between lines (mm) 415

Total Height (mm) 2000

Working Depth (mm) 0 - 120

(*) 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.

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.

TECHNICAL SPECIFICATIONS

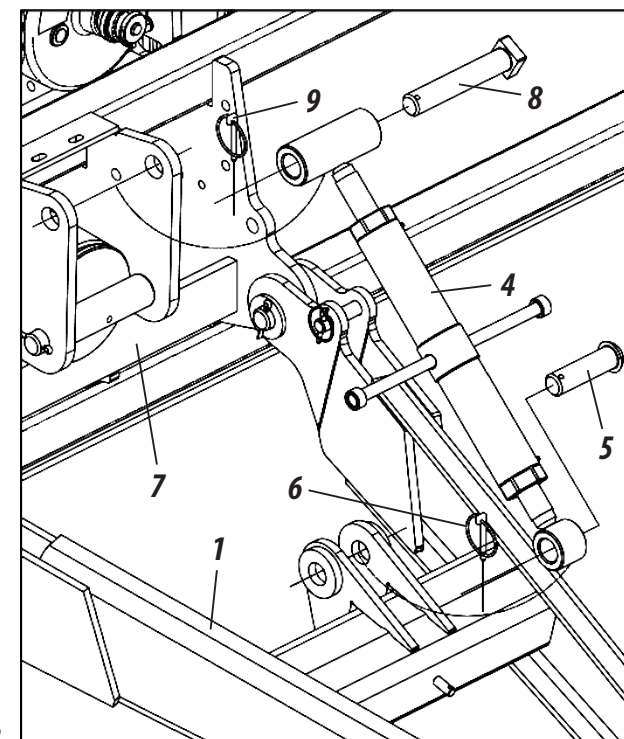
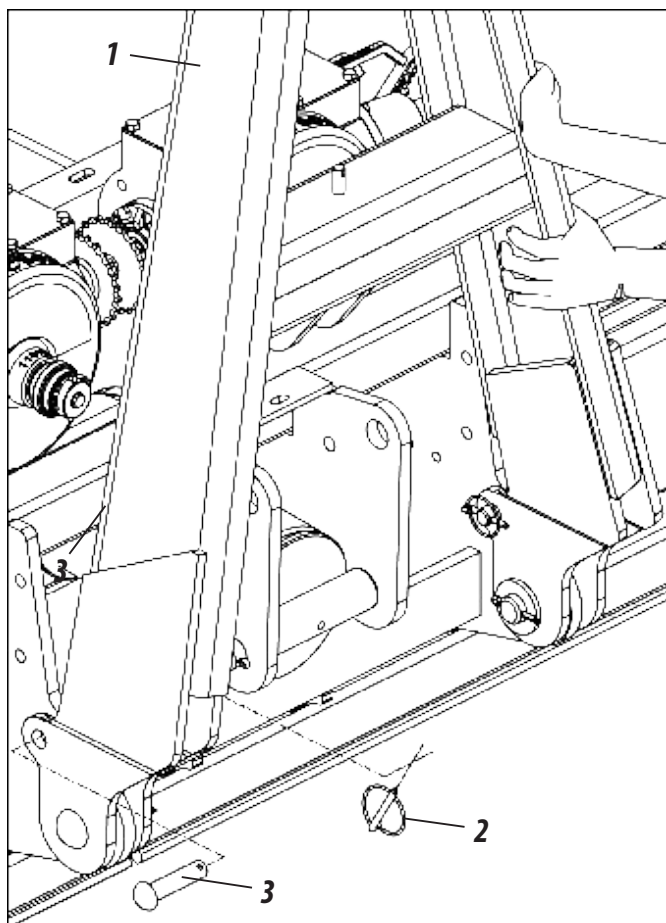
ASSEMBLY

PP Solo 3rd Seed Box leaves the factory semi assembled, lacking the assembly of some components that must be assembled according to the following instructions:

COUPLING HEAD ASSEMBLY - 4000 / 4500 (FIGURES 02)

To assemble the coupling head (1) on the models 4000 / 4500 **PP Solo 3º Depósito** modelos 4000 / 4500, proceed as follows:

- 1- Place the coupling head (1) in the working position, removing the lock with ring (2) and the pin (3) that were placed for transporting the seeder.
- 2- Then, insert the regulator (4) in the coupling head (1), fixing it with the pin (5) and lock with the ring (6) and in the upright support (7) with the pin (8) and lock with ring (9).



Figures 02



ATTENTION

Before starting to assemble the header (1), find an ideal location where it is easy to identify the components and assemble the header.

PP Solo 3rd Seed Box leaves the factory semi assembled, lacking only the assembly of some components that must be assembled according to the following instructions:

COUPLING HEAD ASSEMBLY - 5000 / 5500 (FIGURES 03 / 04)

To assemble the coupling head (1) on the models 5000 / 5500 **PP Solo 3rd Seed Box**, proceed as follows:

- 1- Couple the brackets (1) in the upright (2), fixing through the screws (3), plate (4), lock washers (5), nuts (6) and clamp (7), screws (8), lock washers (9) and nuts (10).
- 2- Then, insert the coupling head (11) into the brackets (1), fixing it through the pins (12) and lock with a ring (13).
- 3- Finish by inserting the regulator (14) in the coupling head (11), fixing it with the pin (15) and locking with the ring (16) and in the upright support (2) with the pin (17) and locking with ring (18).

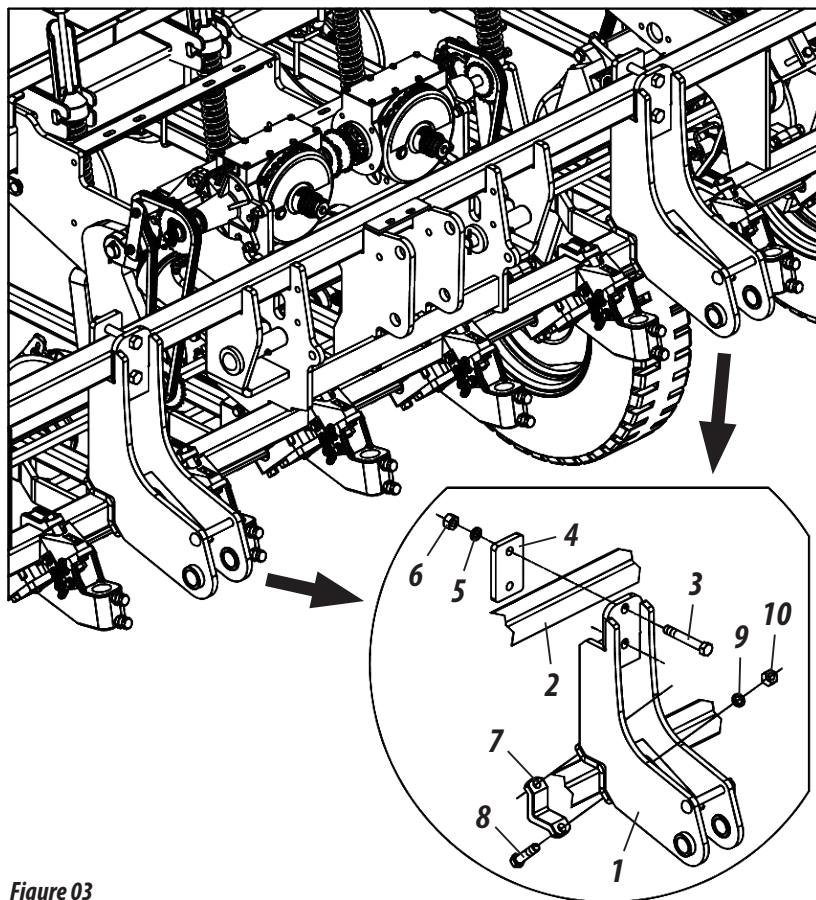


Figure 03

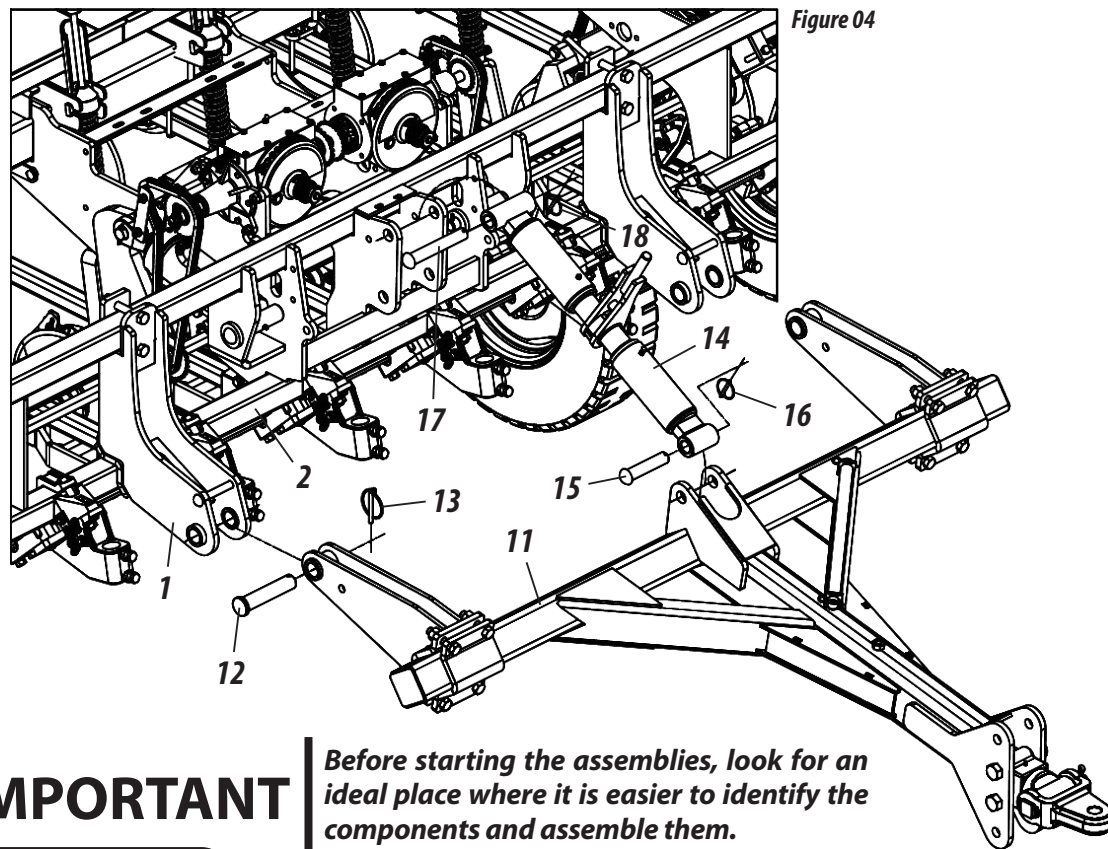


Figure 04

IMPORTANT

Before starting the assemblies, look for an ideal place where it is easier to identify the components and assemble them.

ASSEMBLY

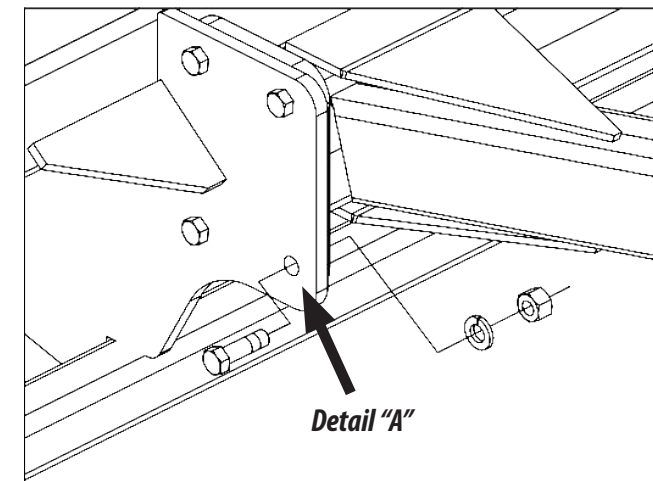
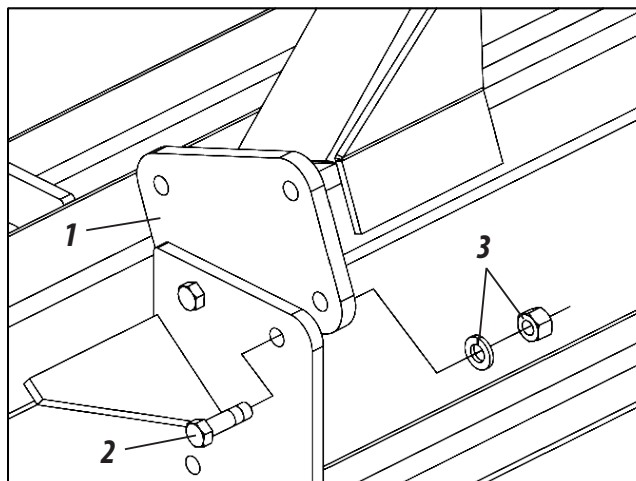
ASSEMBLY

COUPLING HEAD ASSEMBLY - 6500 / 7500 (FIGURES 05 / 06)

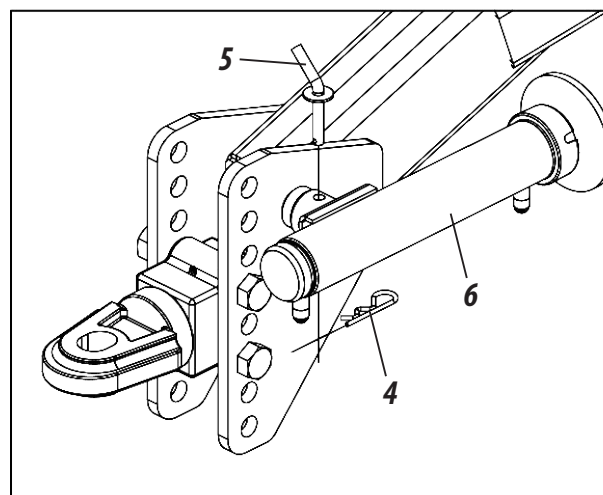
To assemble the coupling head (1) on the models 6500 / 7500 **PP Solo 3rd Seed Box**, proceed as follows:

- 1- Place the coupling head 1 in the working position, removing the screw 2 washer and nut 3 that were placed for transporting the seeder. Then, replace them in the holes that match the work position, as shown in **detail "A"**.

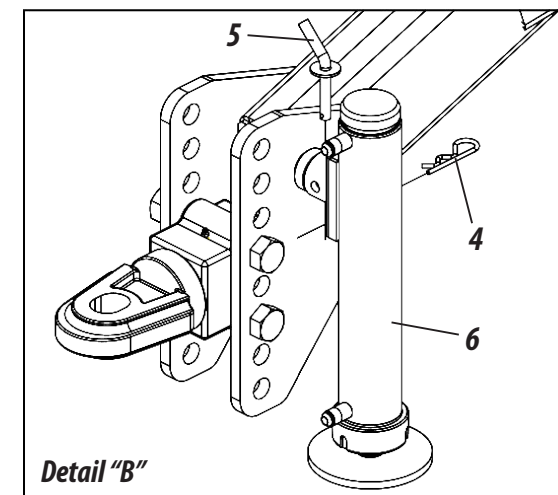
Figures 05



- 2- Then, remove the lock (4) and the pin (5) and turn the hydraulic jack (6) and fix it in the support position, as shown in **detail "B"** and lock again with the pin (5) and lock (6).



Figures 06



ⓘ IMPORTANT

Before starting to assemble the head 1 find an ideal location where it is easy to identify the components and assemble the head.

ASSEMBLY OF THE COMPACTOR WHEELS (FIGURE 07)

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

- 1- Couple the "V" wheel support (1) to the depth wheel cart (2) placing the bushings (3) fixing them through the screw (4) lock washer (5) and nut (6).
- 2- Then put the lever 7 fully forward and engage the spring (8) in the support (2).

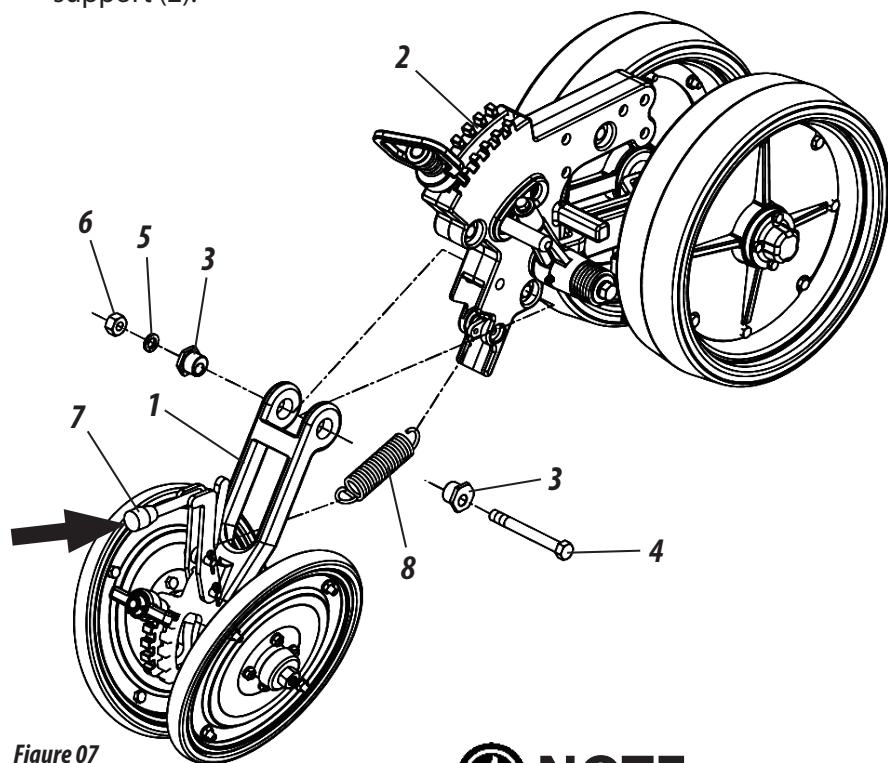


Figure 07



NOTE

Perform the same assembly procedure on the other carts.

ASSEMBLY

ASSEMBLY OF THE LINES (FIGURE 08)

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

- 1- Insert the cart (2) between the thread plates (1), fixing it with the screws (3), lock washers (4) and nuts (5).

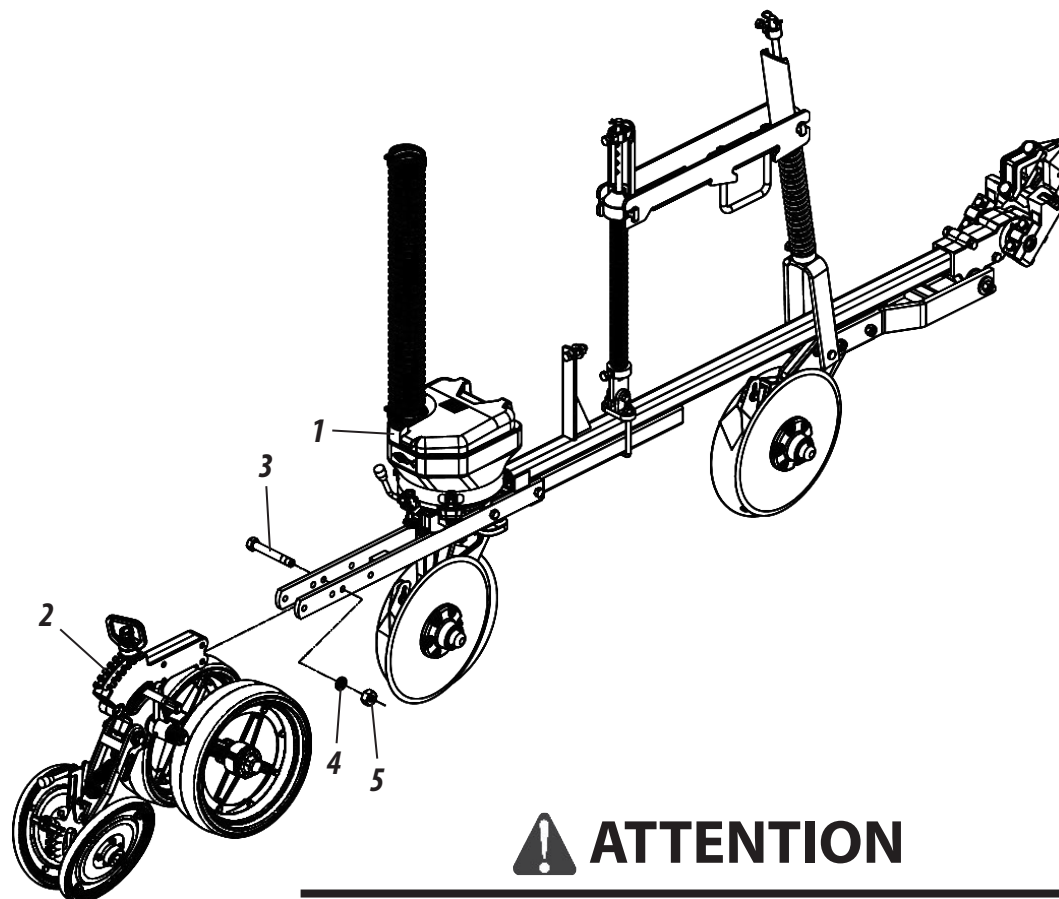


Figure 08



ATTENTION

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

ASSEMBLY

MOUNTING THE CONDUCTIVE SEED HOSES (FIGURE 09)

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

- 1- Couple the conductive seed hose (1) in the upper seed deposit (2), through the clamp (3).
- 2- Then , connect the conductive seed hose (1) to the lower seed deposit (4), fixing through the clamp (5).

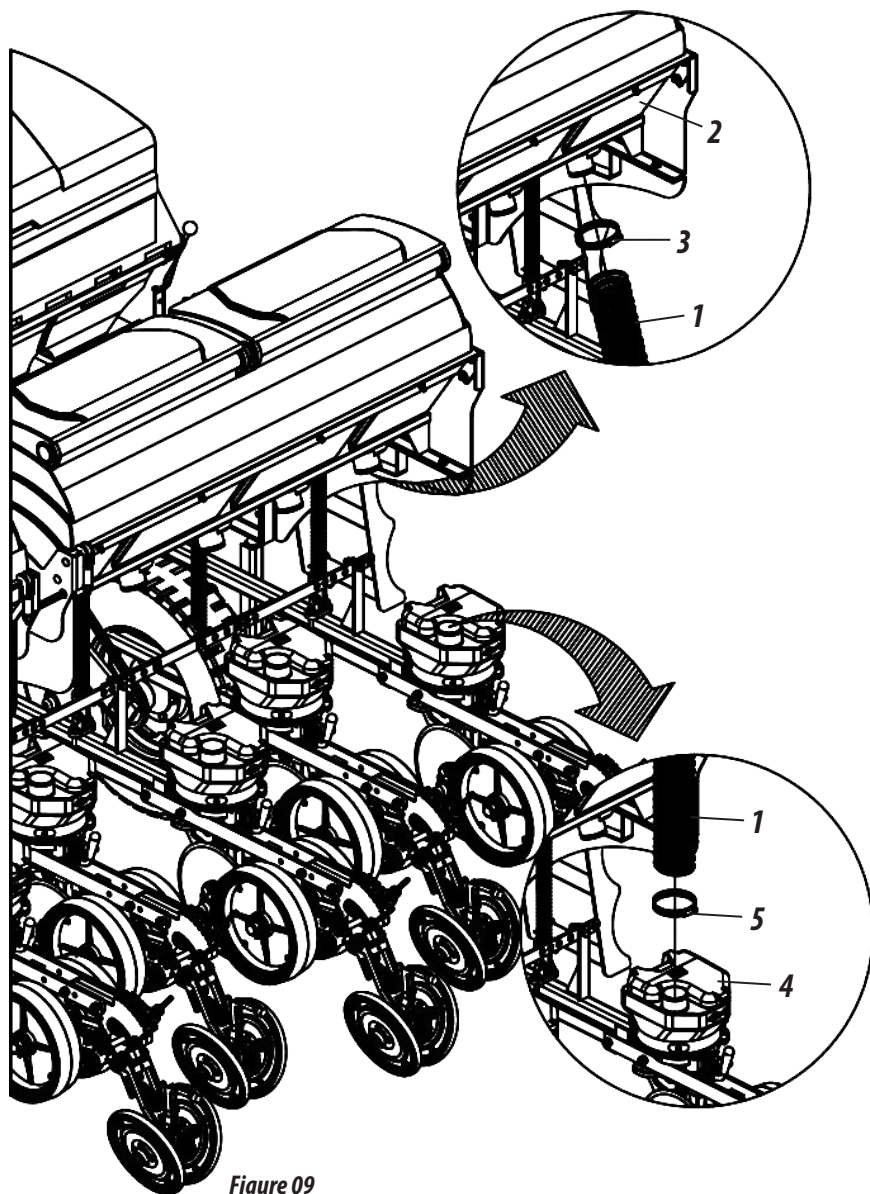


Figure 09

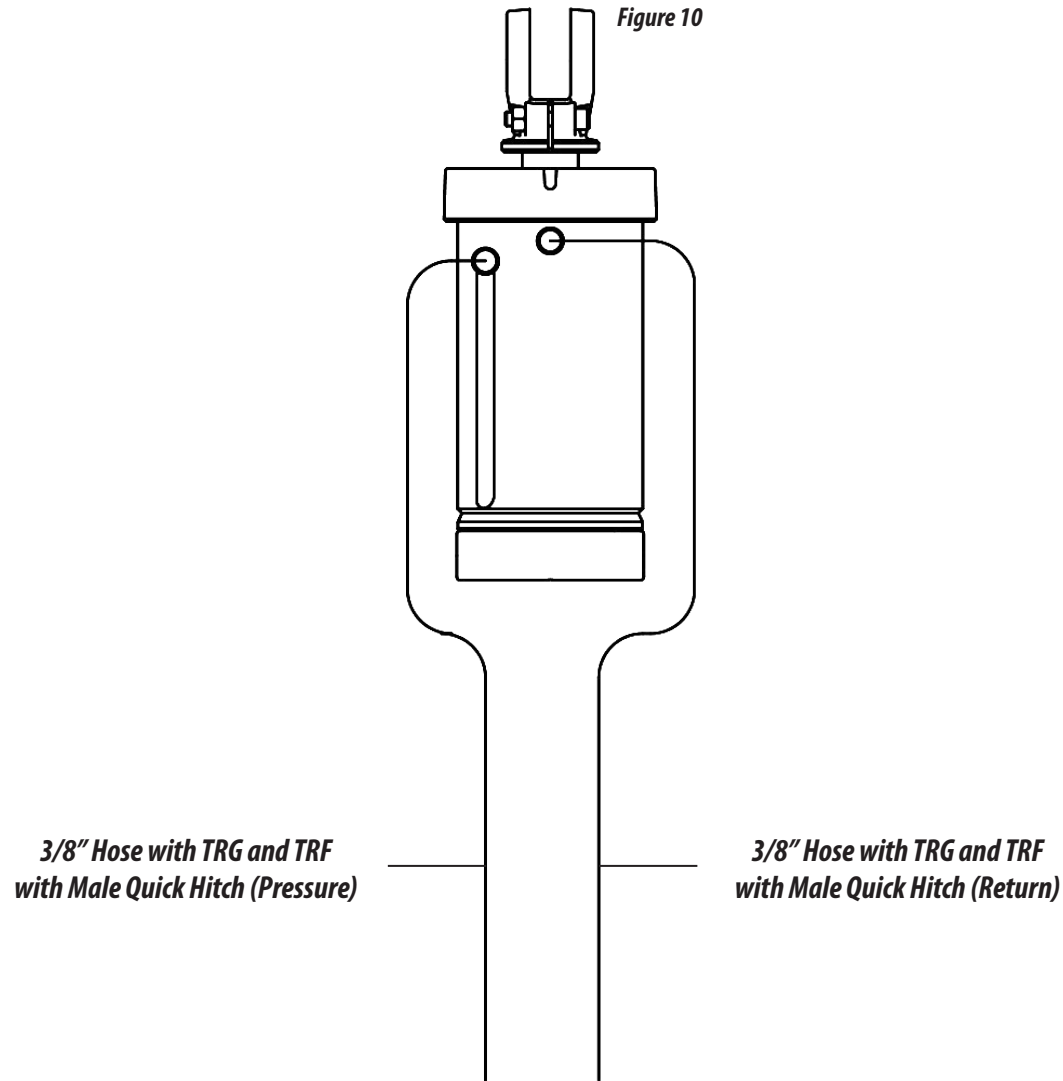
NOTE

When finishing the assembly of the conductive seed hoses (1), perform the same procedure on the other lines.

ATTENTION

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 deposits. Retighten all screws and nuts, check all pins, cotter pins, and locks, review all hoses.

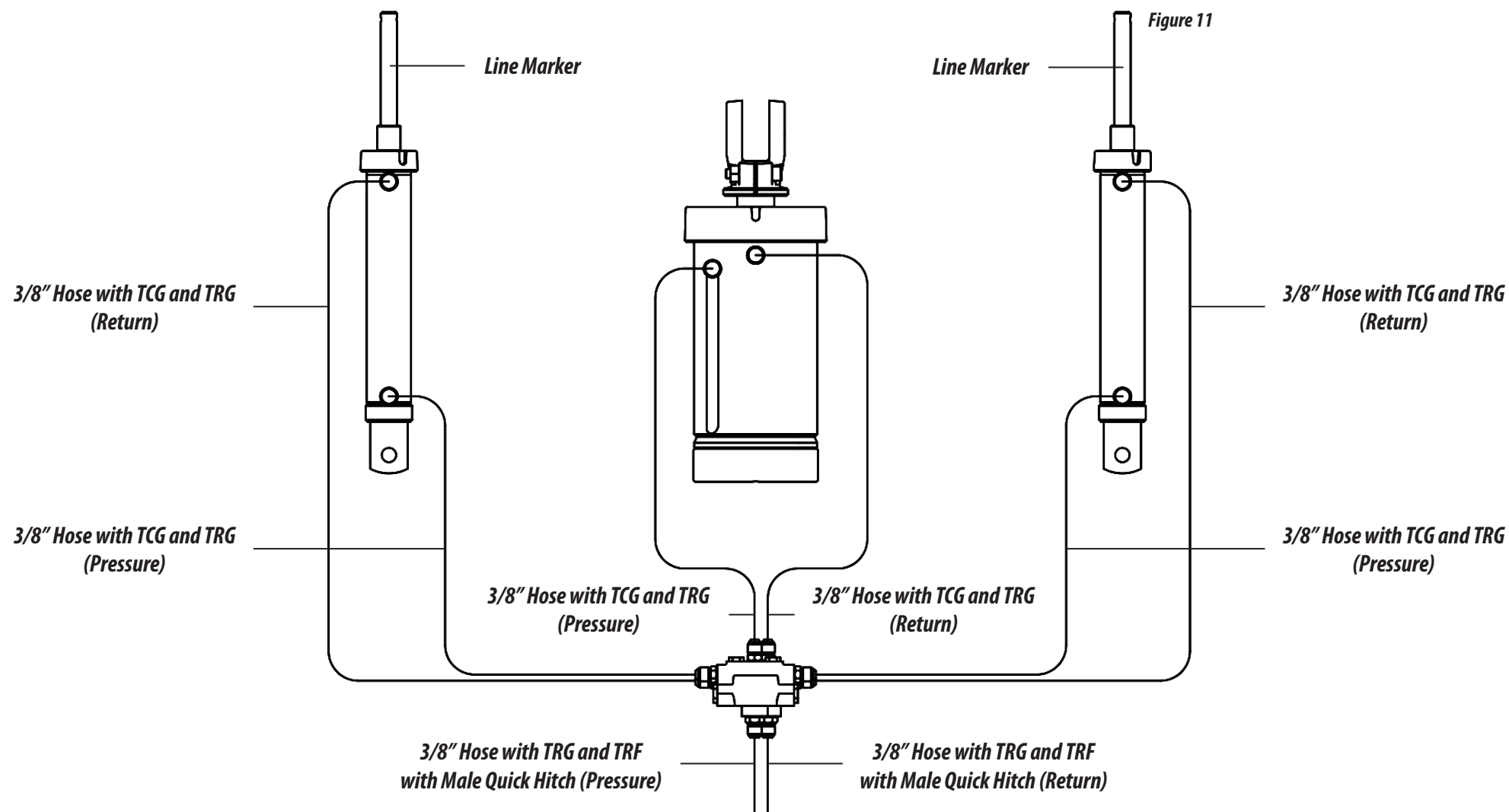
ASSEMBLY OF PPSOLO 3RD SEED BOX 4000 AND 4500 HYDRAULIC SYSTEM WITHOUT LINE MARKER (FIGURE 10)



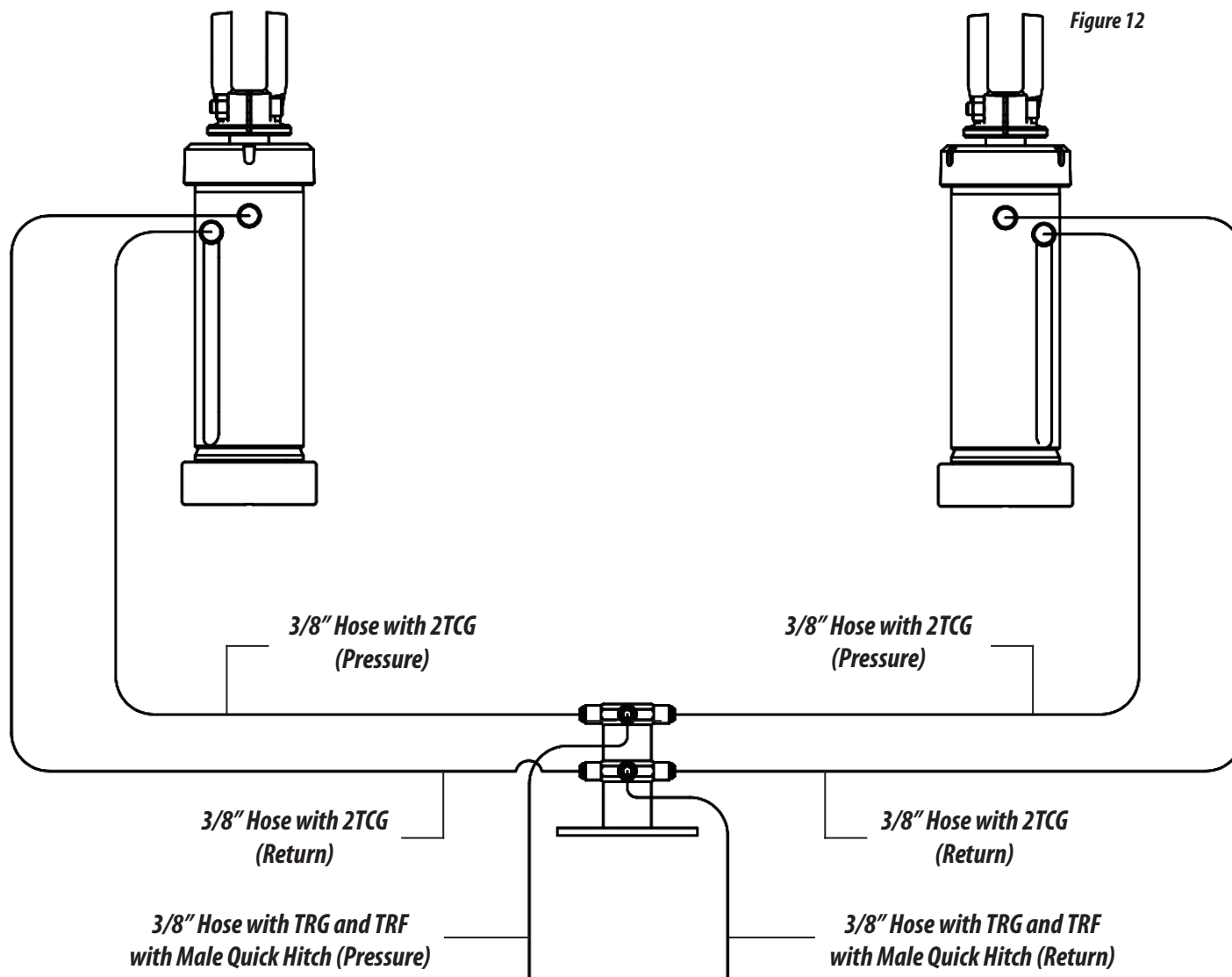
ASSEMBLY

ASSEMBLY

ASSEMBLY OF PPSOLO 3RD SEED BOX 4000 AND 4500 HYDRAULIC SYSTEM WITH LINE MARKER (FIGURE 11)



ASSEMBLY OF PPSOLO 3RD SEED BOX 5000 AND 5500 HYDRAULIC SYSTEM WITHOUT LINE MARKER (FIGURE 12)



ASSEMBLY

ASSEMBLY

ASSEMBLY OF 3RD PPSOLO SEED BOX 5000 AND 5500 HYDRAULIC SYSTEM WITH LINE MARKER (FIGURE 13)

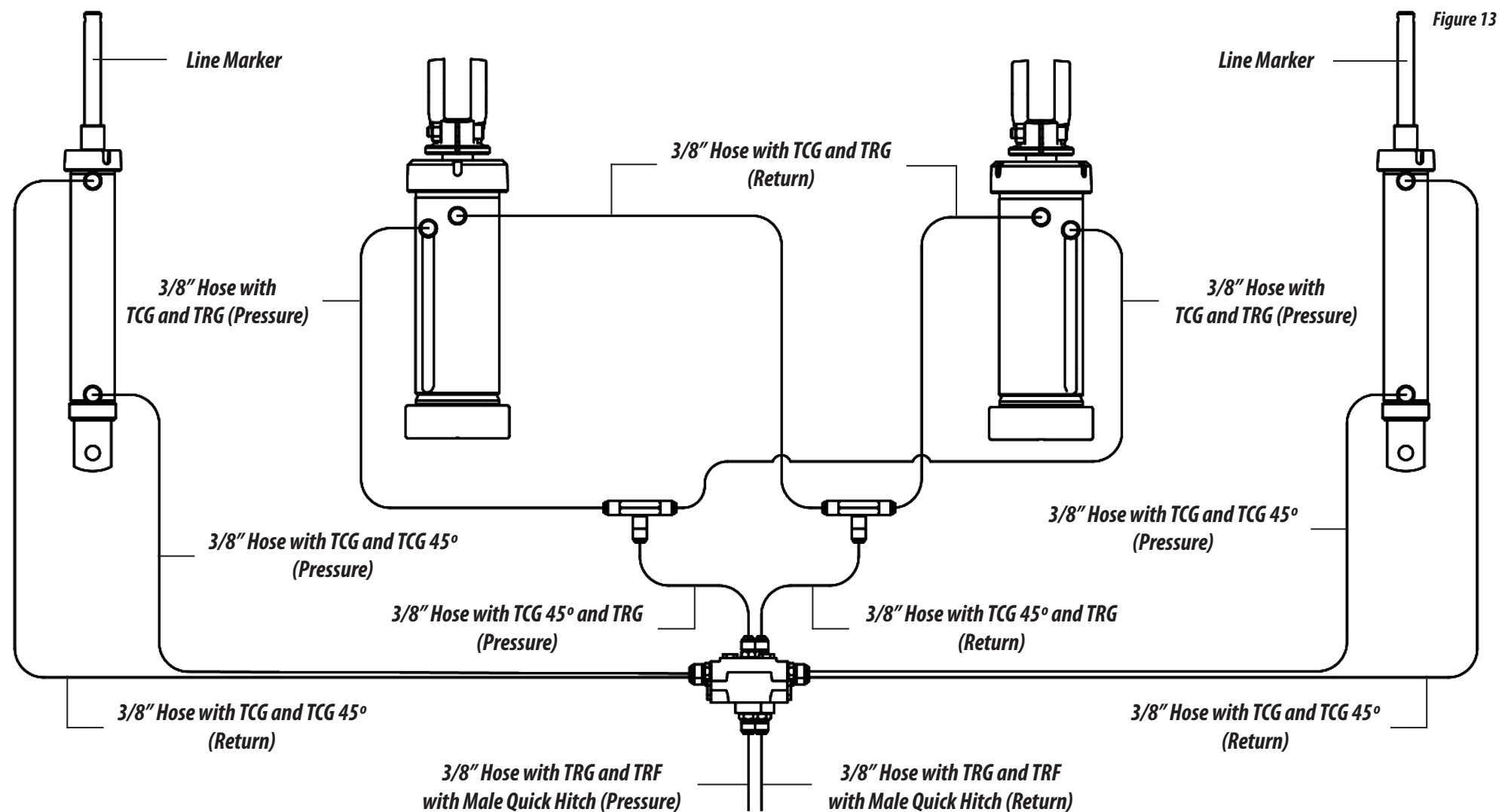
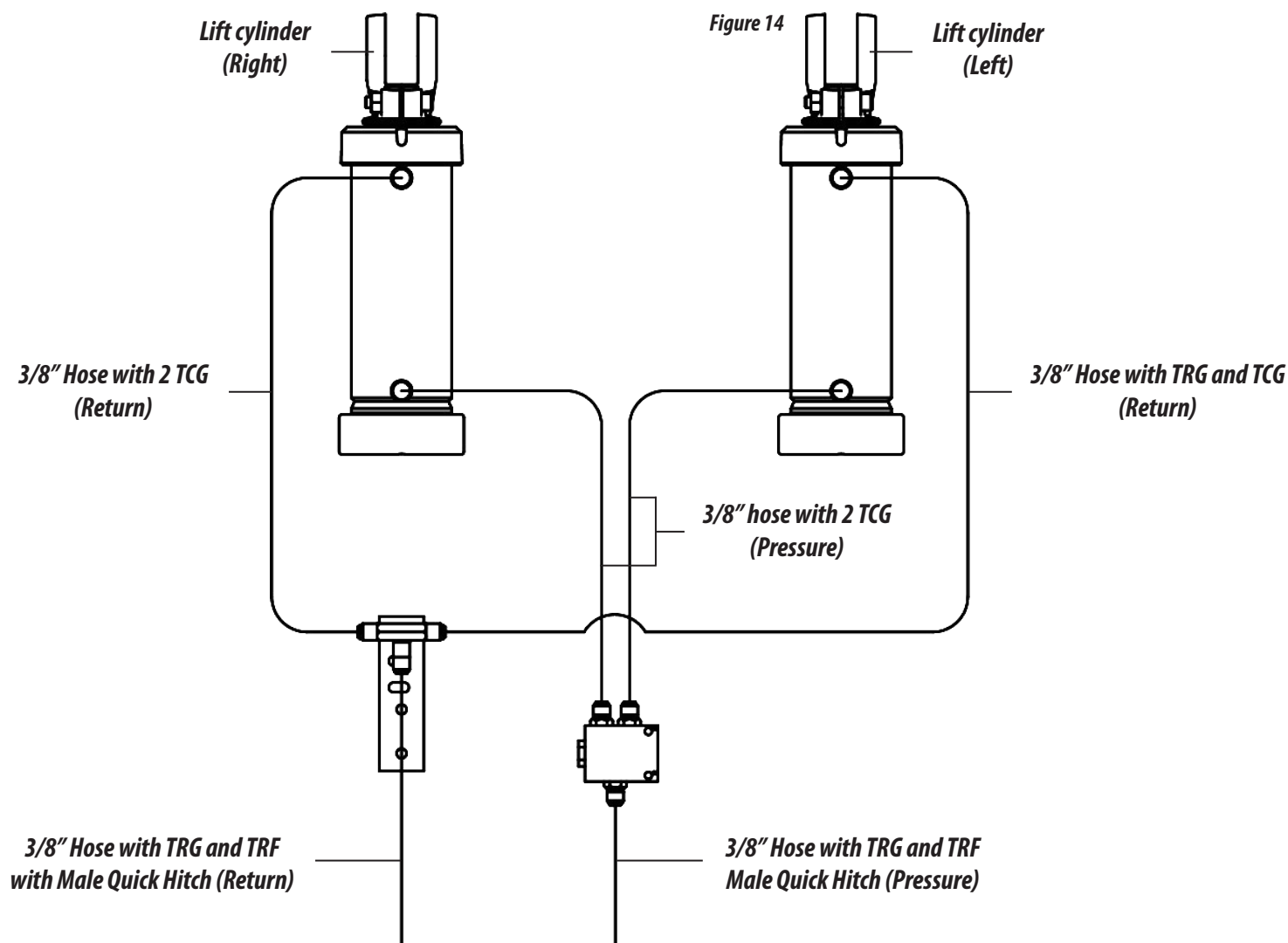


Figure 13

ASSEMBLY OF PPSOLO 3RD SEED BOX 6500 AND 7500 HYDRAULIC SYSTEM WITHOUT LINE MARKER (FIGURE 14)

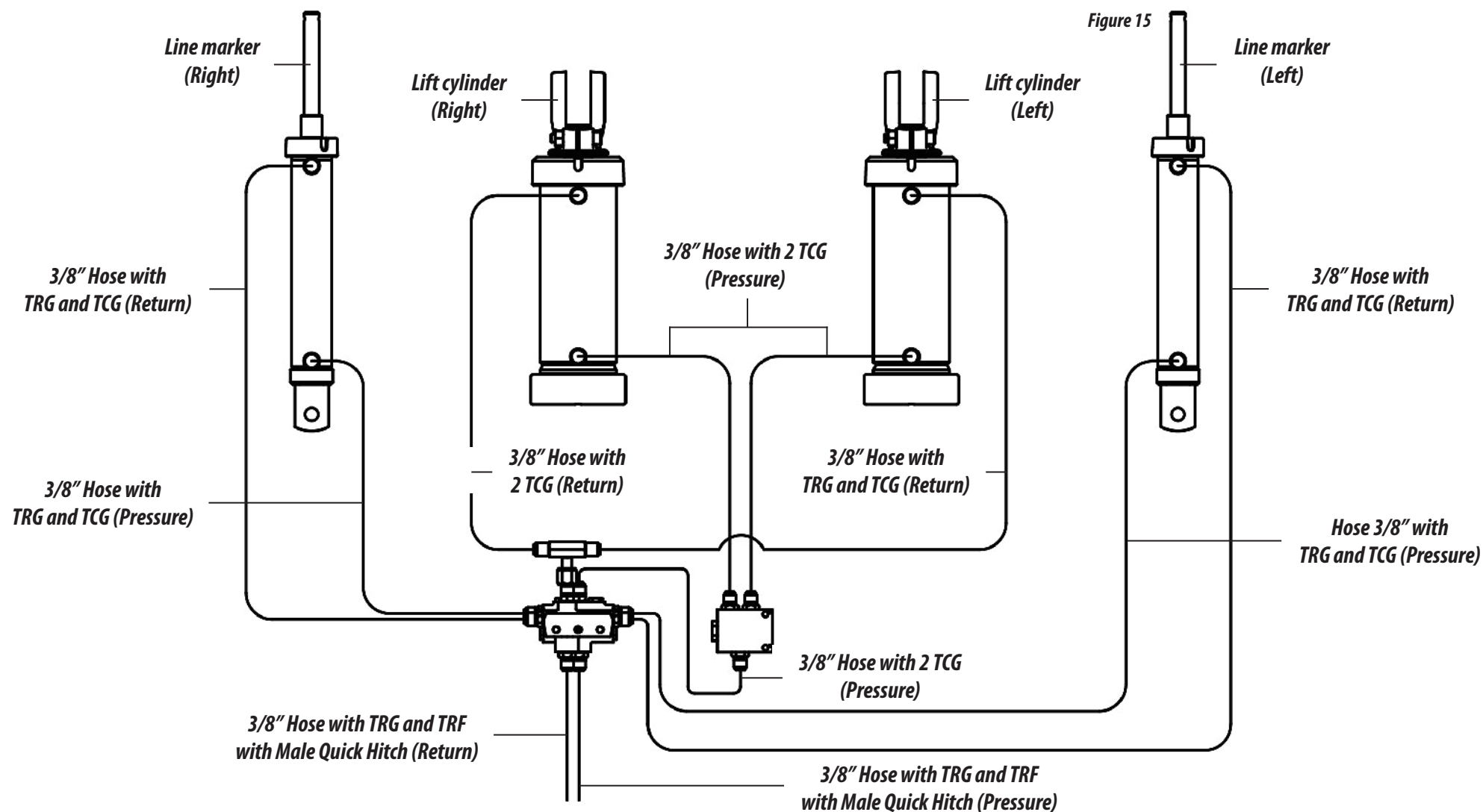


NOTE: The expressions "Right / Left Cylinder" are called looking behind the Seeder.

ASSEMBLY

ASSEMBLY

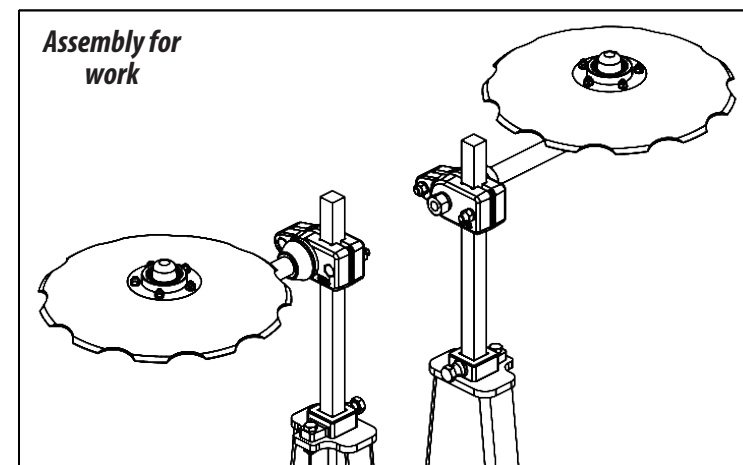
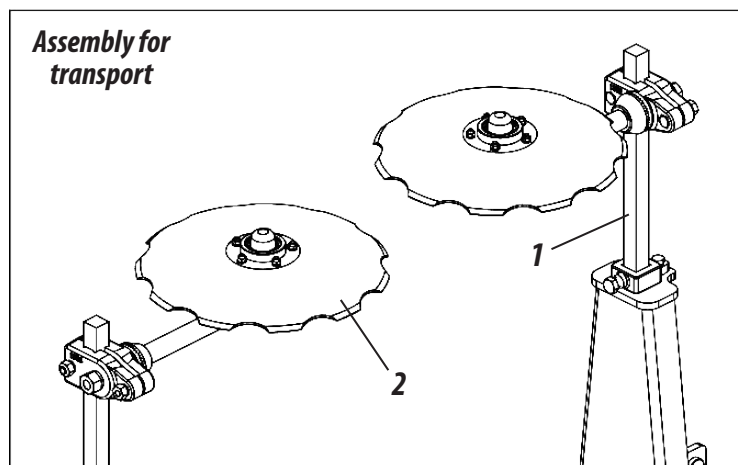
ASSEMBLY OF 3RD PPSOLO SEED BOX 6500 AND 7500 HYDRAULIC SYSTEM WITH LINE MARKER (FIGURE 15)



NOTE: The expressions "Right / Left Cylinder" are called looking behind the Seeder.

ASSEMBLY OF THE LINE MARKER CUTTING DISC (FIGURES 16/17)

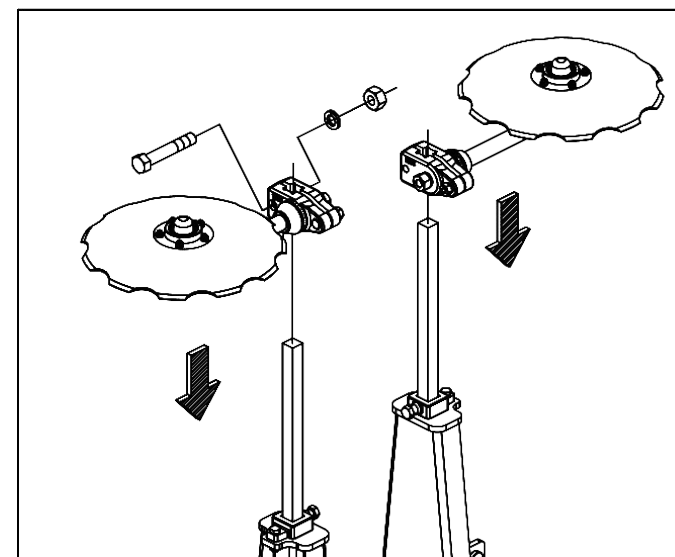
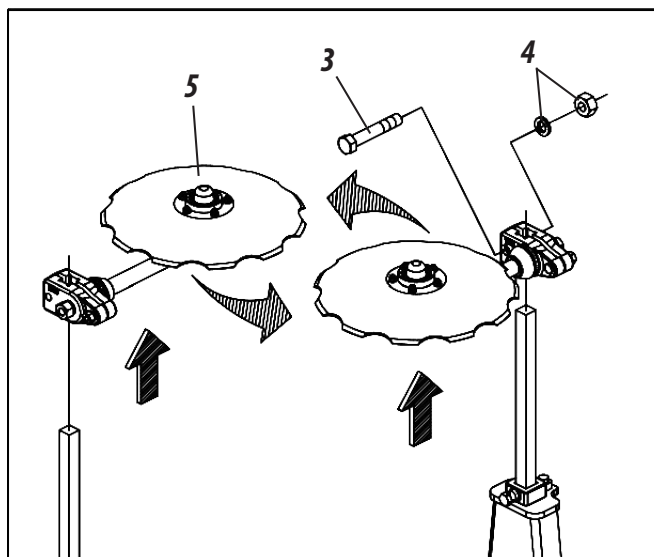
The seeders leave the factory with the line markers 1 fitted. The discs 2 are mounted inversely to their respective markers to avoid the risk of accidents in the transport of the seeder, **as shown in figures 16.**



Figures 16

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

- 1- Loosen the screws 3 washers and nuts 4 remove the disc supports 5 and mount them on the markers opposite to the ones originally installed, **as shown in figures 17**



Figures 17

ⓘ IMPORTANT

Before starting to assemble the line marker, look for a safe and easily accessible place where it can be easily assembled.

ASSEMBLY

COUPLING

TRACTOR HITCH 4000 / 4500 (FIGURE 18)

To attach the **PP Solo 3rd Seed Box** seeder 4000 / 4500 models, proceed as follows:

- 1- Slowly approach the seeder to the tractor in reverse, paying attention to the application of the brakes.
- 2- Level the coupling header (1) of the seeder in relation to the tractor coupling through the adjustments (2).
- 3- Then , slowly approach the seeder to the tractor in reverse, paying attention to the application of the brakes.
- 4- Then , hitch the coupling header (1) to the tractor, fixing it through the coupling pin (3) and lock (4).
- 5- 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.

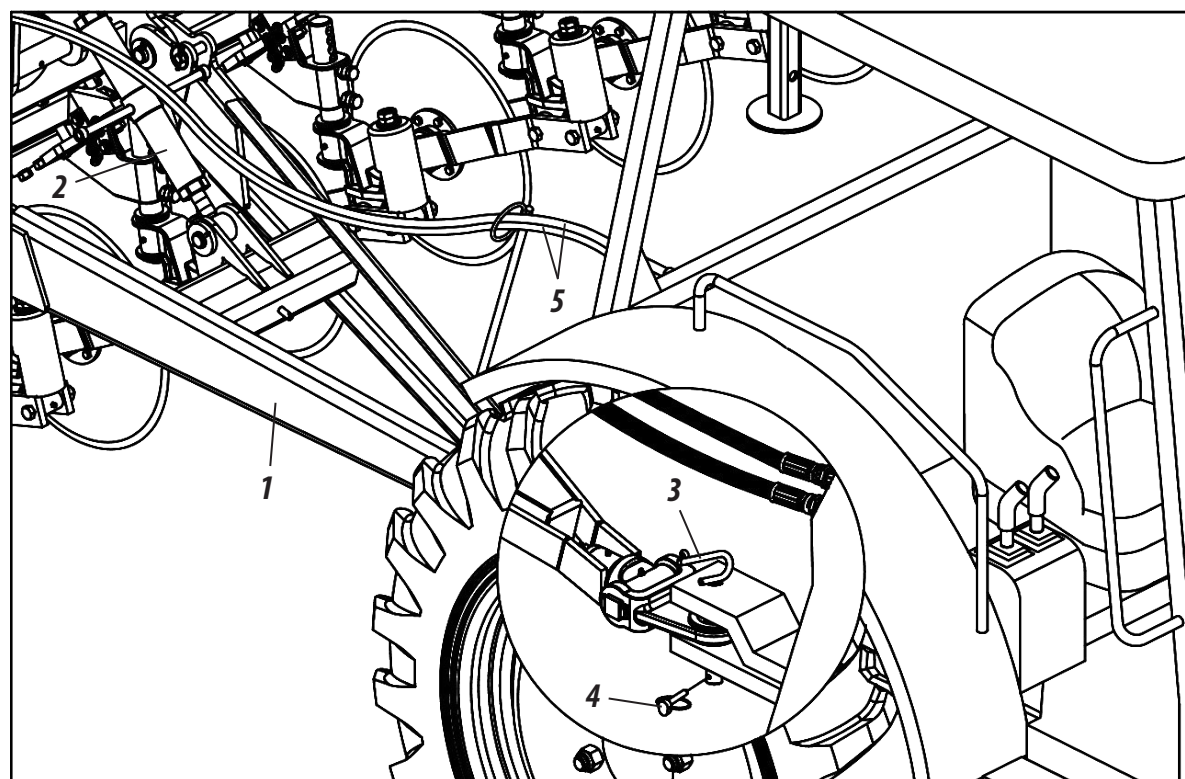
🔍 IMPORTANT

Before attaching the seeder 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.

📌 NOTE

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

Figure 18



TRACTOR HITCH - 5000 / 5500 (FIGURE 19)

To attach the **PP Solo 3rd Seed Box** seeder 5000 / 5500 models, proceed as follows:

- 1- Slowly approach the seeder to the tractor in reverse, paying attention to the application of the brakes.
- 2- Level the coupling header (1) of the seeder in relation to the tractor coupling through the adjustments (2) of the coupling shackle.
- 3- Then, slowly approach the seeder to the tractor in reverse, paying attention to the application of the brakes.
- 4- Then, hitch the coupling header (1) to the tractor, fixing it through the coupling pin (3) and lock (4).
- 5- 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.

**IMPORTANT**

Before attaching the seeder 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.

**NOTE**

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

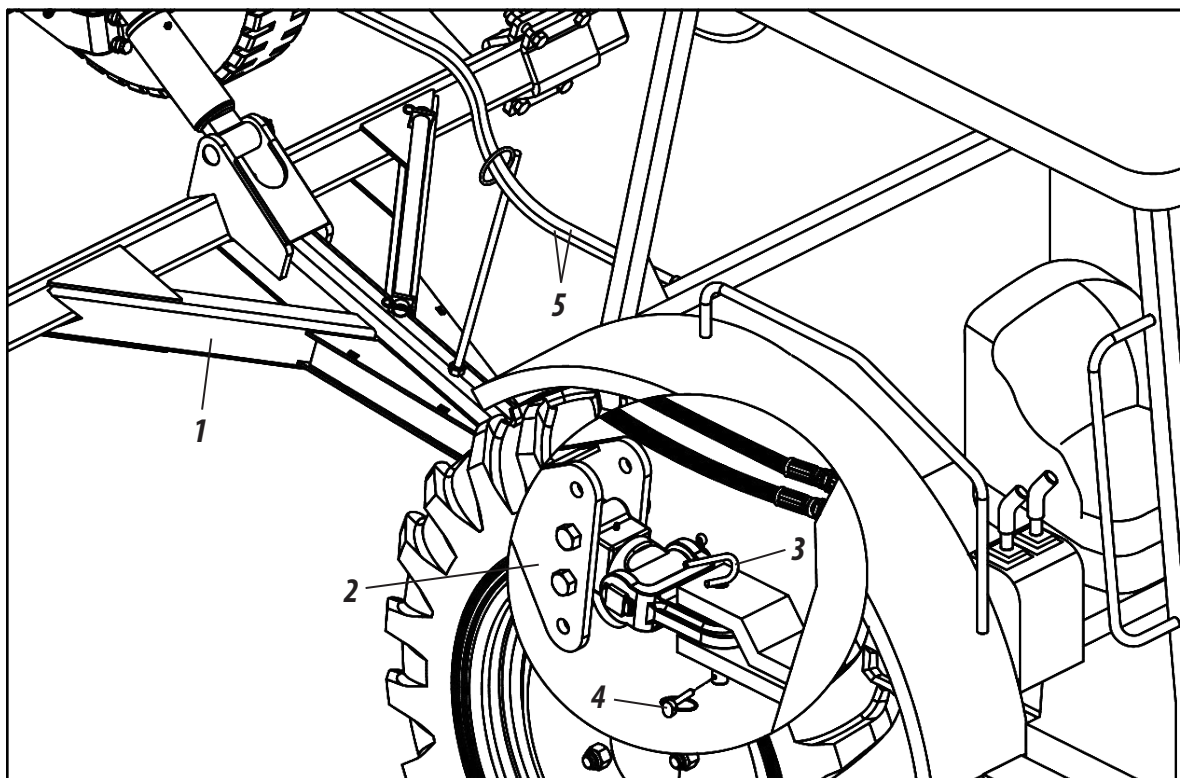


Figure 19

COUPLING

COUPLING

TRACTOR HITCH - 6500 / 7500 (FIGURE 20)

To attach the **PP Solo 3rd Seed Box** seeder 6500 / 7500 models, proceed as follows:

- 1- Level the coupling header (1) of the seeder in relation to the tractor coupling through the adjustments (2) of the coupling s hac kle.
- 2- Then, slowly approach the seeder to the tractor in reverse, paying attention to the application of the brakes.
- 3- Then, hitch the coupling header (1) to the tractor, fixing it through the coupling pin (3) and lock (4).
- 4- 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.



IMPORTANT

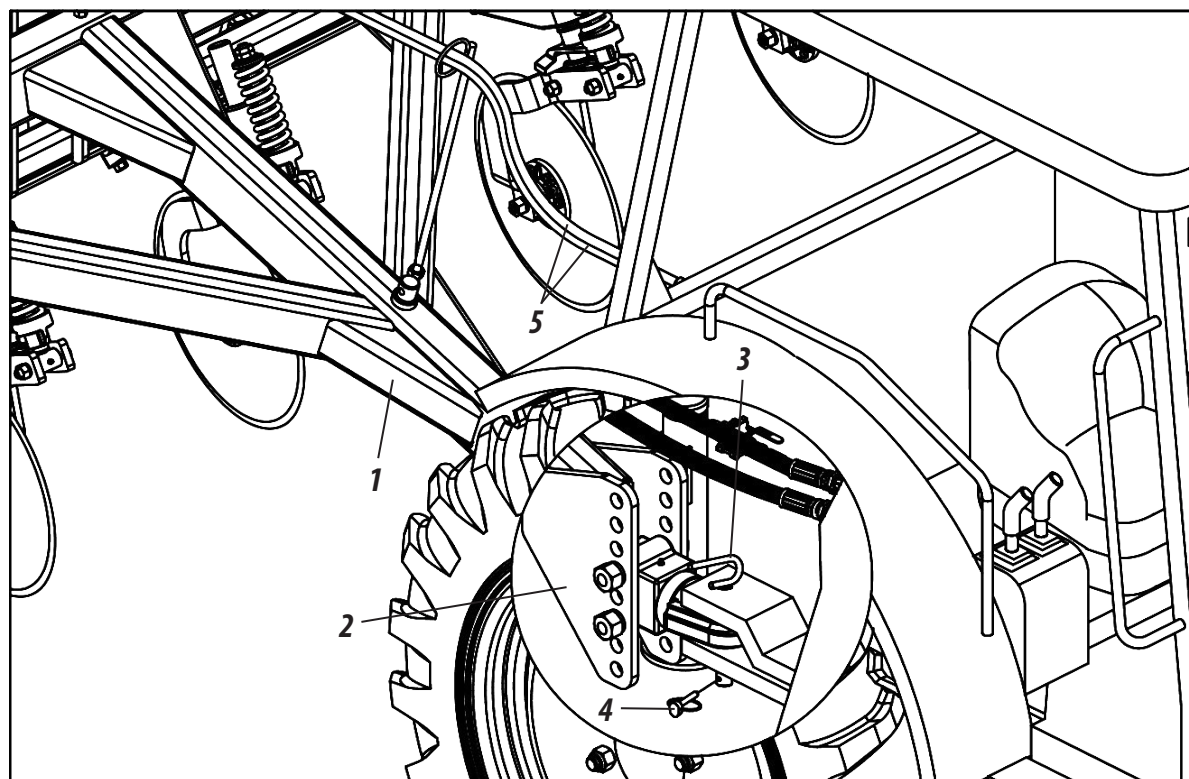
Before attaching the seeder to the tractor, check that the tractor is equipped with a set of weights or ballast on the front or on the front wheels to avoid lifting the tractor. The rear wheels will give the tractor greater stability and traction on the ground.



NOTE

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

Figure 20



LEVELLING (FIGURE 21)

At the end of the **PP Solo 3rd Seed Box** coupling, level it out, to do this, proceed as follows:

- 1- Place the tractor and seeder in a flat location.
- 2- Then, level the seeder using the regulator (1).

**ATTENTION**

The leveling regulation varies according to the tractor model.

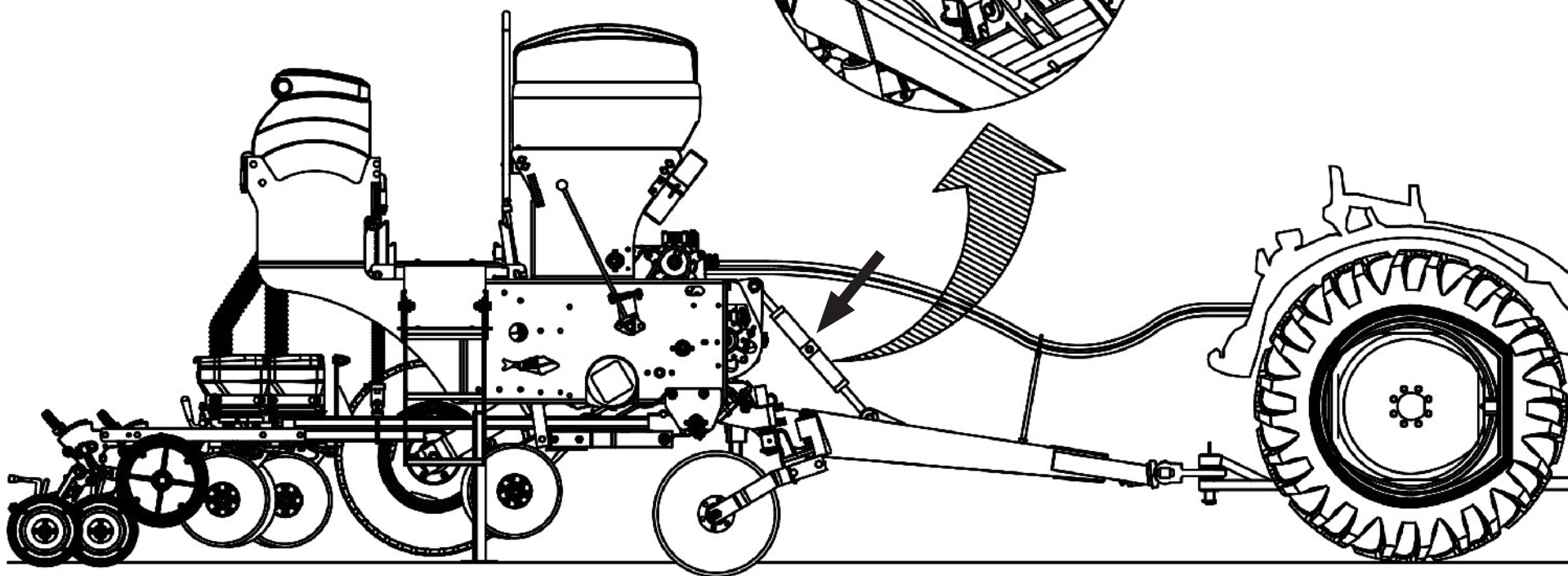
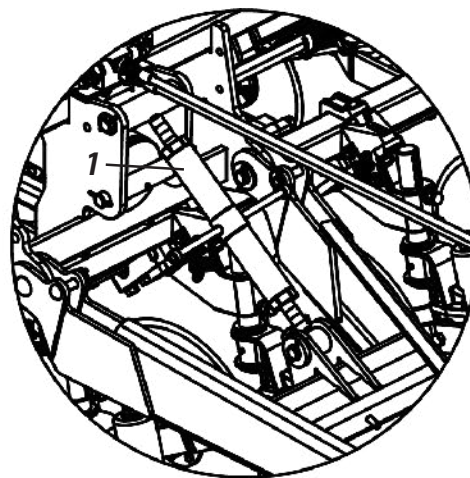


Figure 21

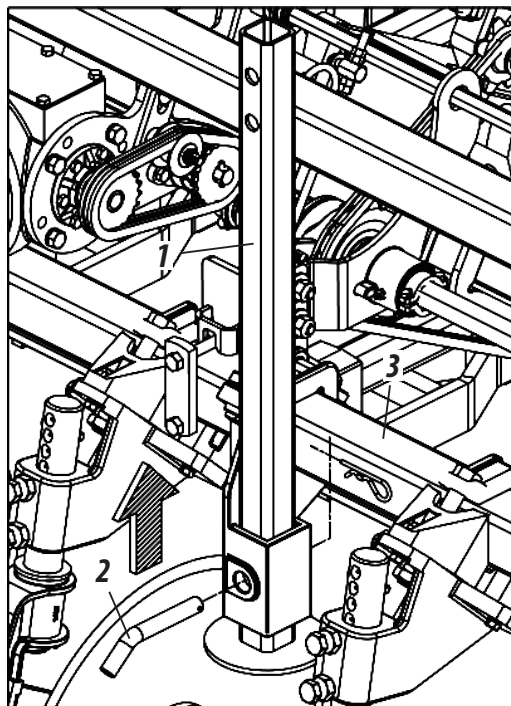
COUPLING

TRANSPORT

TRANSPORT PROCEDURE (FIGURES 22)

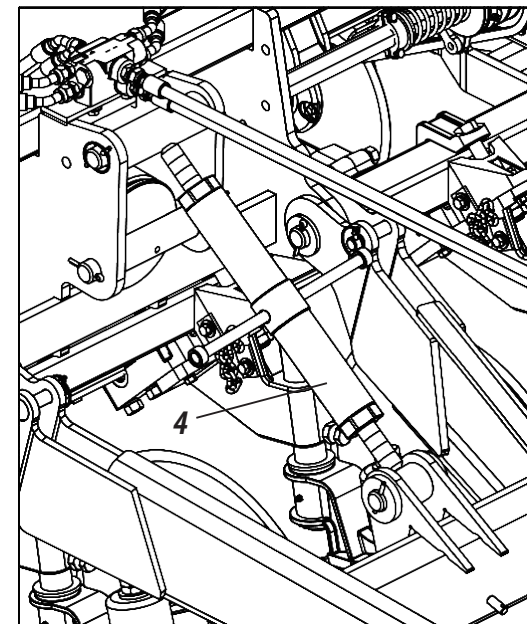
Before transporting the seeder, proceed as follows:

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

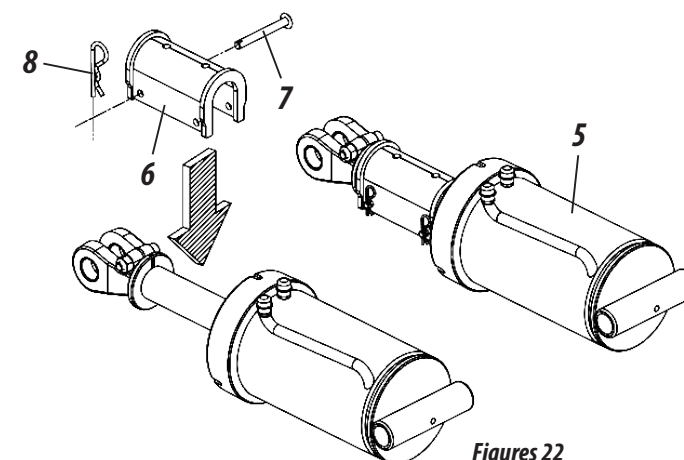


Figures 22

- 2- With the seeder lowered, check if it is leveled in relation to the ground, otherwise, level it using the header regulator (4).



- 3- Then lift the lines by fully activating the stroke of the hydraulic cylinder (5) and put the yellow color lock (6) on the stem of the same locking with the pin (7) and lock (8).



Figures 22



ATTENTION

Do not transport the seeder without first checking all the procedures mentioned.



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.*

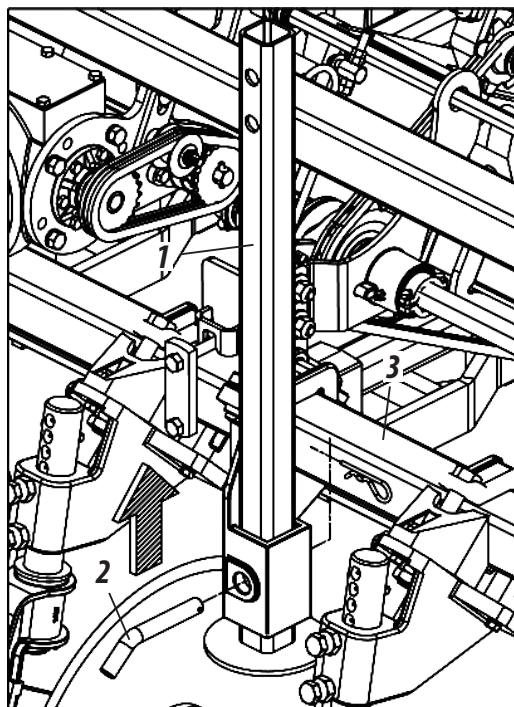
WORK PROCEDURE (FIGURES 23)

Before working with the seeder, proceed as follows:

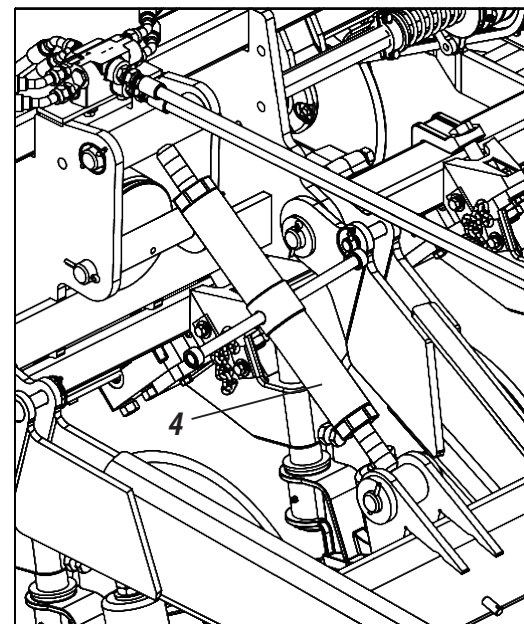
- 1- Collect the support bracket (1) and secure with the pin (2) and lock (3).

NOTE

Always place the same number of limit rings (6) on all hydraulic cylinders (5) for lifting the wheels.



- 2- With the seeder lowered, check if it is leveled in relation to the ground, otherwise, level it using the header regulator (4).



- 3- Then lift the lines by fully activating the stroke of the hydraulic cylinders (5) and place the limit rings (6) on their rods (7).

Figures 23

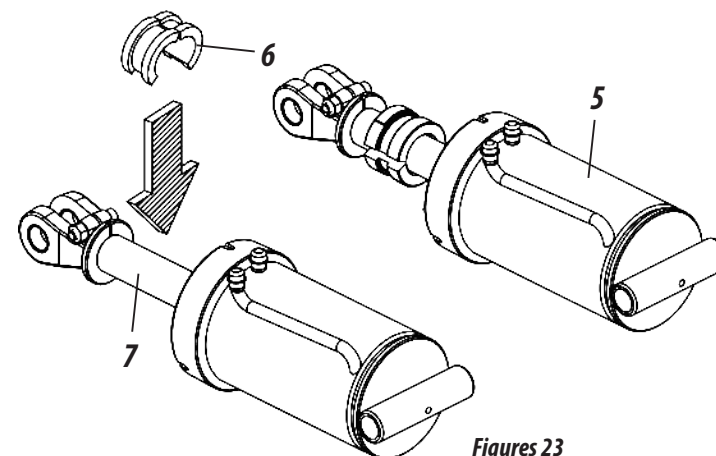
ATTENTION

Do not work with the seeder without first checking all the procedures mentioned.

IMPORTANT

After attaching the limiting rings (6), the seeder will always operate at the same depth in both hard and loose terrain, because the limiting rings (6) are limiting the course of the hydraulic cylinders (5) that is, preventing the oscillation of the wheels.

If the seeder is going to remain in the field for any reason, we recommend covering it with waterproof tarpaulin to avoid moisture.



Figures 23

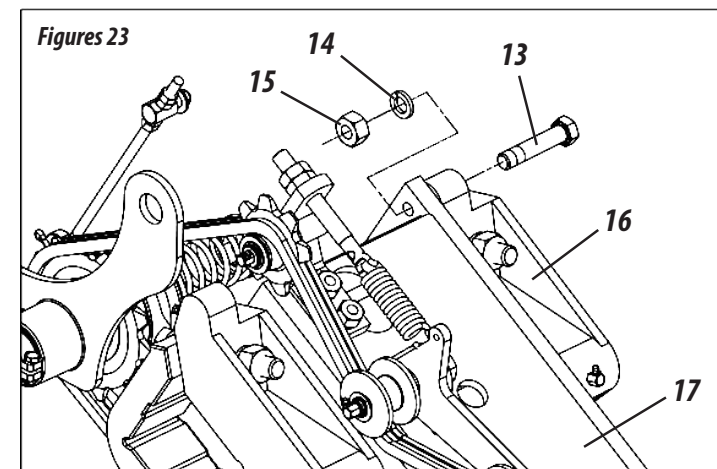
WORK

WORK

WORK PROCEDURE - CONTINUED (FIGURES 23)

⚠ ATTENTION

Do not work with the seeder without first removing the screw (13), lock washer (14) and nut (15) from the clamp (16) of the wheel support (17). Ignoring this warning will cause failures in planting the seeder.



USE OF THE LADDER (FIGURES 24)

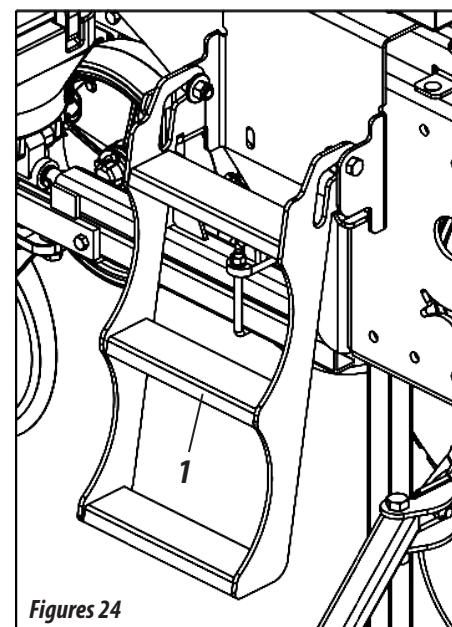
The articulated ladder (1) should only be used when filling or maintaining deposits of **PP Solo 3rd Seed Box**. Before using the articulated ladder (1) make sure that the seeder is stopped and the tractor is switched off.

⚠ 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 these warnings could result in serious accidents or even death.*

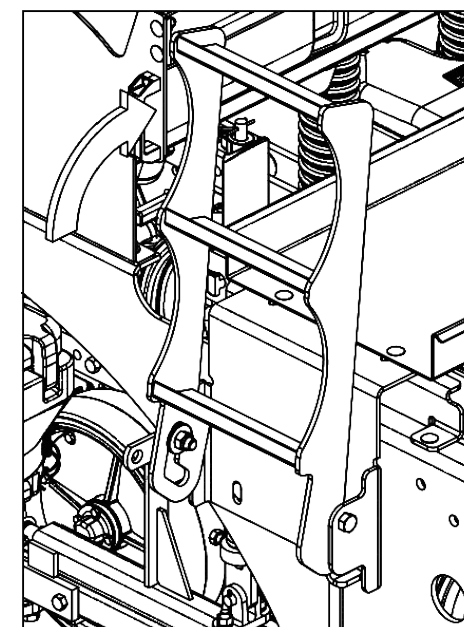
Ⓢ IMPORTANT

*Always use the articulated ladder (1) to access or fill the deposit.
The articulated ladder (1) complies with NBR standards.*



Figures 24

*Supply position or
deposit maintenance*



*Position for work
or transportation*

LINE SPACING

The **PP Solo 3rd Seed Box**, seeders are provided with spacing according to the number of lines requested, and new spacing can be carried out according to the type of crop desired.

NUMBER OF EVEN LINES (FIGURE 25)

Mark the center of the chassis of the **PP Solo 3rd Seed Box** and divide 1/2 (middle) space to the left and 1/2 (middle) 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.

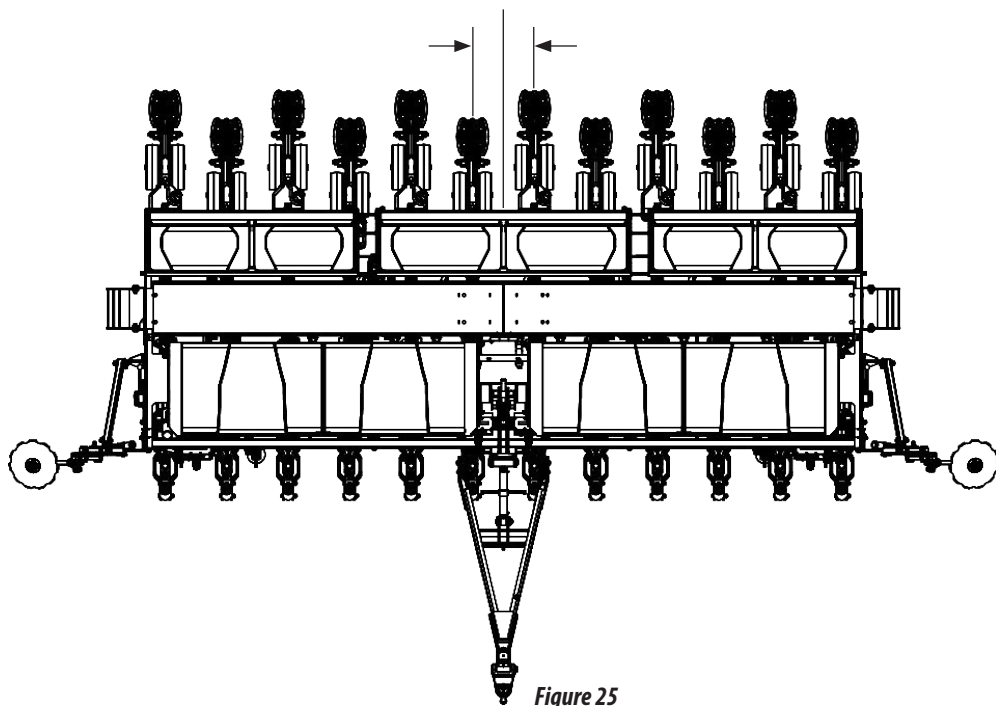


Figure 25

NUMBER OF ODD LINES (FIGURE 26)

Attach a line in the center of the **PP Solo 3rd Seed Box** chassis and starting from this, assemble the others with lines with the desired spacing.

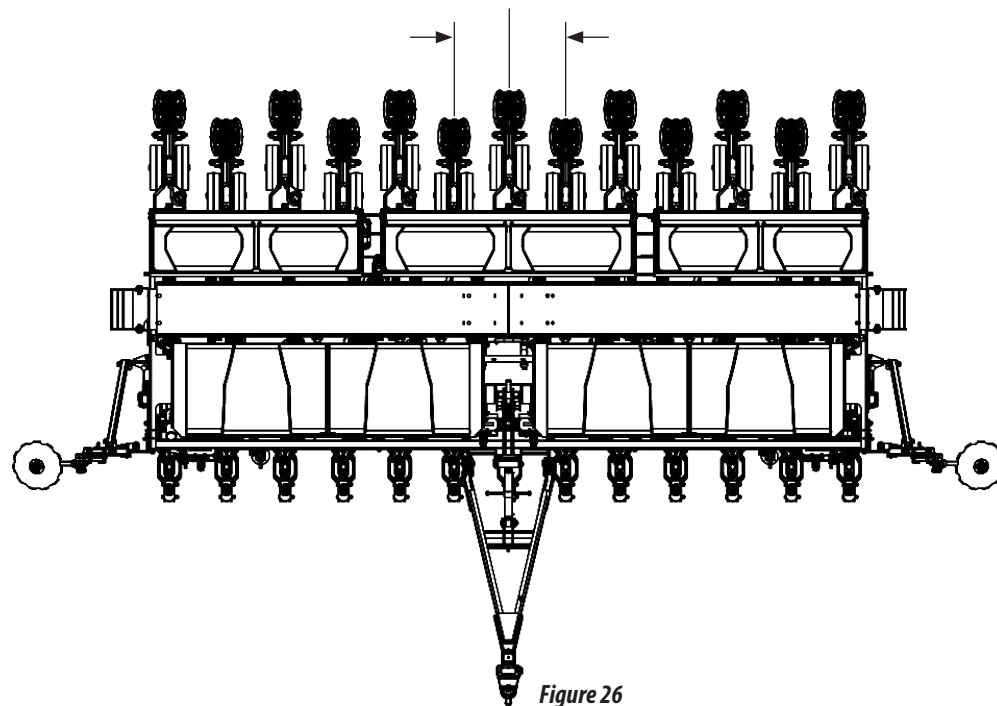


Figure 26



NOTE

On the following page, check the possible spaces, observing the above assembly instructions to assemble the quantity of unique or unique lines.

SPACING

SPACING

SPACING TABLES IN MILLIMETERS (TABLES 2)

The **PP Solo 3rd Seed Box** seeders are provided with spacing according to the number of lines requested, and new spacing can be carried out according to the type of crop desired.

Model	Lines	Spacing	Line tolerance (mm)
4000	4	800 / 900 / 1000	± 5
	5	700 / 800	± 5
	6	500 / 550	± 5
	7	500 / 550	± 5
	8	415 / 450	± 10
	9	415	± 10

Tables 02

Model	Lines	Spacing	Line tolerance (mm)
4500	5	900 / 1000	± 5
	6	550 / 800	± 5
	7	600 / 650	± 5
	8	500 / 550	± 5
	9	415	± 10
	9	450 / 500	± 5
	10	415 / 430	± 10
	10	450	± 5

Model	Lines	Spacing	Line tolerance (mm)
5000	6	850 / 900 / 950	± 5
	6	800	± 10
	7	700 / 750 / 800	± 5
	8	550	± 5
	9	500 / 550 / 600	± 5
	10	550	± 10
	10	415 / 450	± 5
	11	415 / 450 / 500	± 10
	12	415 / 430 / 450	± 10
	13	400	± 10

Model	Lines	Spacing	Tolerância entre linhas (mm)
5050	7	800	± 5
	7	850 / 900	± 5
	9	600 / 650	± 5
	10	500 / 550	± 5
	11	500 / 550	± 5
	12	415	± 10
	12	500	± 5
	13	415 / 430	± 10
	13	450	± 5

Model	Lines	Spacing	Line tolerance (mm)
6050	8	800 / 900	± 5
	11	550 / 600	± 5
	12	500	± 5
	13	500	± 10
	14	485	± 5
	15	415 / 430	± 10
	15	450	± 5

Model	Lines	Spacing	Line tolerance (mm)
7500	9	800 / 850 / 900	± 5
	10	750 / 800	± 5
	11	600	± 5
	12	650	± 5
	13	600	± 5
	14	500 / 550	± 5
	15	500	± 10
	16	450	± 5
	17	415 / 435	± 10
	17	450	± 5

NOTE: Any spacing other than that presented above, the engineering should be consulted.

SLIP INDEX (FIGURES 27)

Due to factors such as germination index, physical purity, vigor (provided in the seed packaging), in addition to pests and diseases that can occur during the crop cycle, the number of plants in the harvest is less than the number of seeds effectively distributed in the crop planting.

In addition, local working conditions should also be considered, since the seeder tires may slip during planting. See how to calculate the seeder slip index.

- 1- Place the seeder on a non deformable floor such as asphalt, concrete or solid ground; mark a point on the sowing tire with chalk;
- 2- Then, put the seeder in slow motion and mark the space traveled for the tire to rotate ten complete turns (**this is the theoretical distance**).
- 3- Then, place the seeder in the conditions and place of work (seeding area) and chalk out a point on the seeder tire.
- 4- Finally, set the seeder in motion at working speed and mark the space traveled for the tire to rotate ten full turns (**this is the actual distance**).
- 5- With the data in hand, use the equation below to calculate the slip index.

EXAMPLE: The seeder on concrete or solid ground, a distance of 21.25 m was obtained for the tire to rotate ten turns; In the field it was obtained a distance of 27.95 m for the tire to turn ten laps, determine:

$$\text{Slip} = 1 - \left(\frac{\text{Theoretical distance}}{\text{actual distance}} \right)$$

$$\text{Slip} = 1 - \left(\frac{21,25}{27,95} \right) = 0,76$$

$$\text{Slip} = 1 - 0,76 = 0,24$$

CONCLUSION:

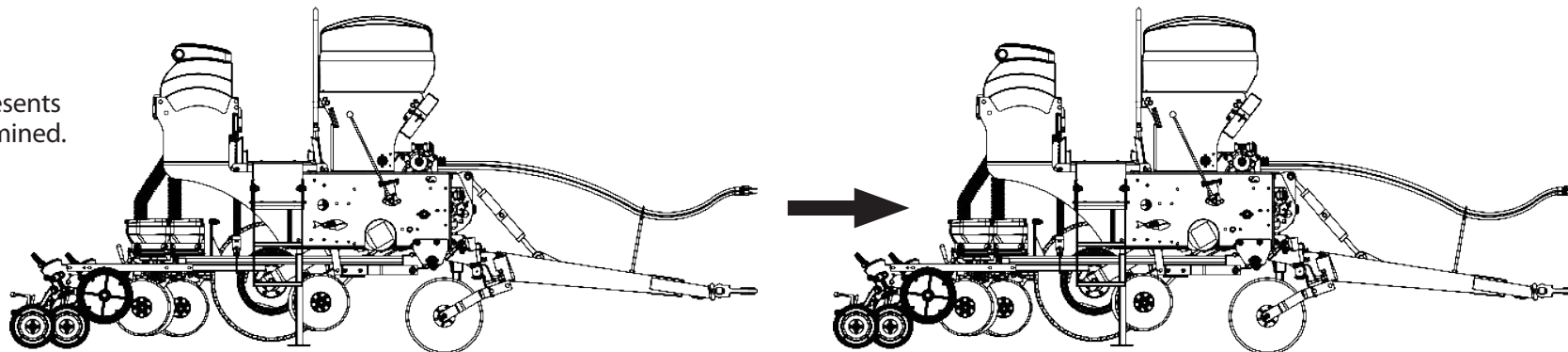
The 0.24 index, which represents 24% of slipping, was determined.



ATTENTION

*The seeder tires must have the same design and the same pressure calibration.
The wheels must have the same pressure regulation on the springs.*

Figures 27



PREPARING FOR WORK

ADJUSTMENTS

LINE MARKERS ADJUSTMENT (FIGURE 28)

The adjustment of the line markers is important to obtain a planting with uniform spacing, making the line at the end of the seeder stay in the same spacing as the last planted line, facilitating future operations. To adjust the line markers, proceed as follows:

- 1- 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 13 rows in the seeder, spacing of 0.45 mts and the front gauge of the tractor with 1.43 mts, determine:

$$\text{Formula: } D = \frac{E \times (N+1) - B}{2}$$

$$\text{Resolve: } X = \frac{0.45 \times 14 - 1.43}{2}$$

$$D = 2.43 \text{ meter}$$

WHERE:

E = Line spacing (m)
N = Number of seeder lines
B = Front gauge of the tractor
D = Marker distance

- 2- Set the 2.43 m line marker disc to the center of the first planting line.
- 3- The line markers are sequential, lower one after the other, so if during the planting before finishing the line there is a need to interrupt the work, activate the valve of the line markers to continue working with the marker on the right side.



NOTE For the line marker to lower the same side again, it is necessary to operate the valve twice.



ATTENTION

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.

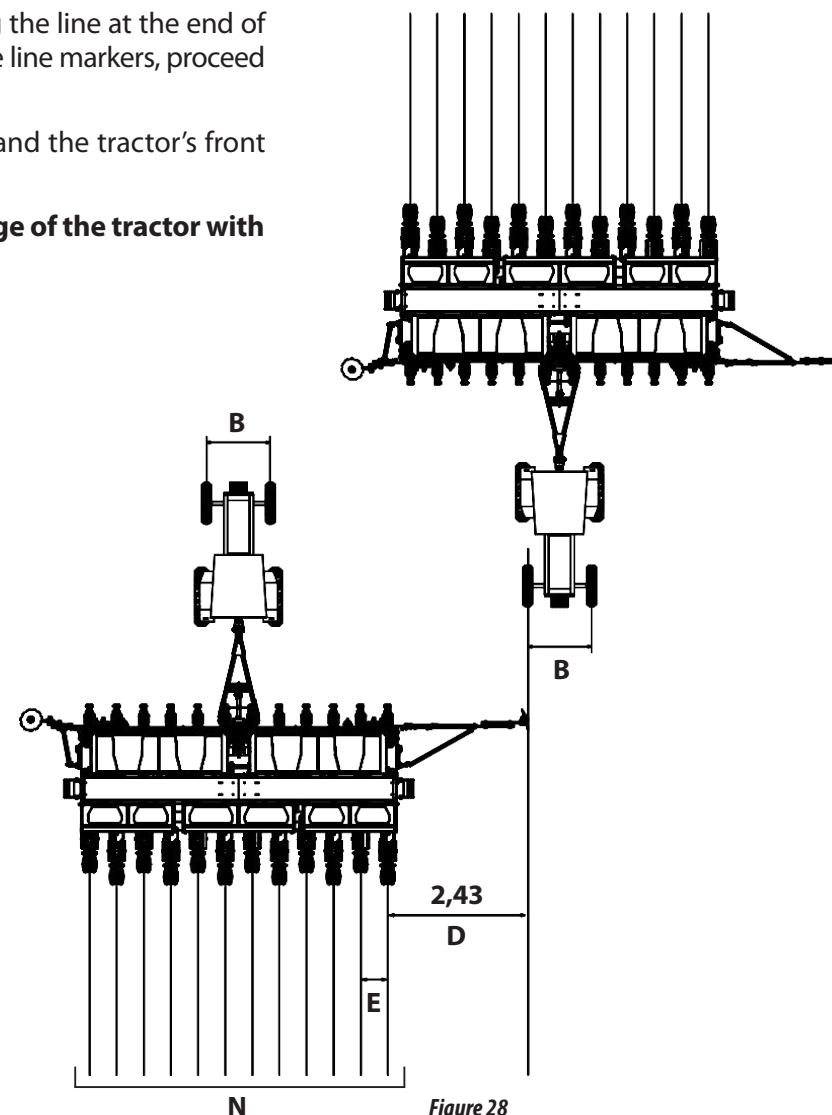


Figure 28

ADJUSTMENT OF LINE MARKER DISCS (FIGURE 29)

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:

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

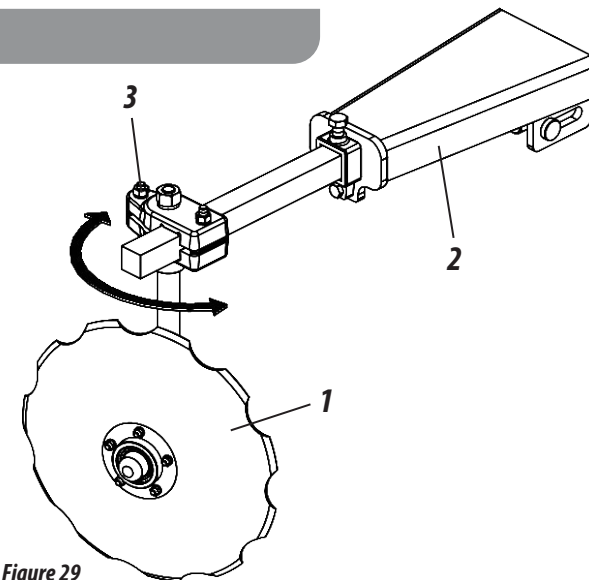


Figure 29

**ATTENTION**

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 (FIGURE 30)

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 marker (1), proceed as follows:

- 1- Loosen the screw (2), move the bar (3) to the desired position.
- 2- Then , retighten the screw (2) fixing the bar (3) in the desired

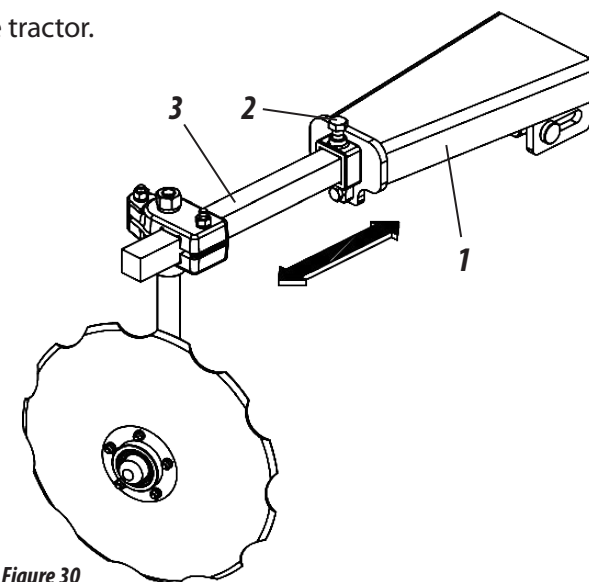


Figure 30

**IMPORTANT**

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

ADJUSTMENTS

ADJUSTMENTS

RATCHET ADJUSTMENT (FIGURE 31)

When placing the shims on the hydraulic cylinder to limit the depth of the discs **according to the instructions on page 26**, 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:

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

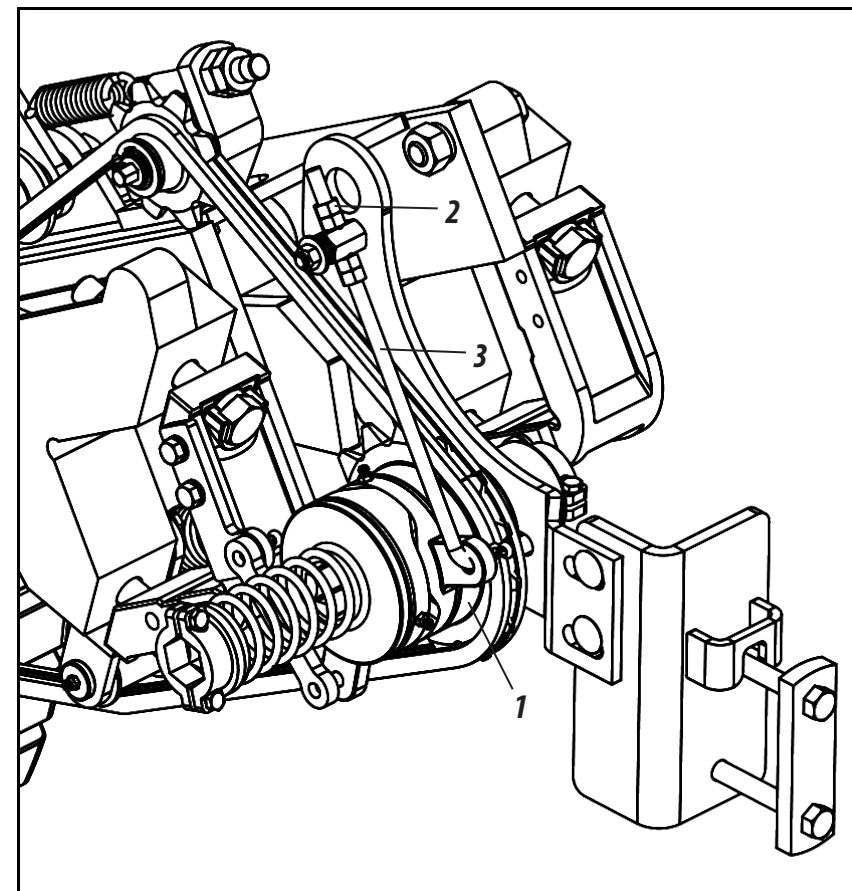


Figure 31

ATTENTION

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.

CHOOSING THE SUITABLE DISC (FIGURE 32)

As a parameter for selecting the appropriate disc, always use the largest seeds.

The grains must not get stuck in the holes. To make sure of this, place the disc on a flat place and insert a seed in each hole. Then, lift the disc, all seeds should be on the table.

To avoid damage to the seed, the thickness of the distributor discs (1) must be equal to or slightly greater than the seed.

Always use the spacer ring (2) next to the distributor discs (1). The sum of the set, seed disk and ring must always be equal to 8.5 mm in thickness for the perfect adjustment of the system.

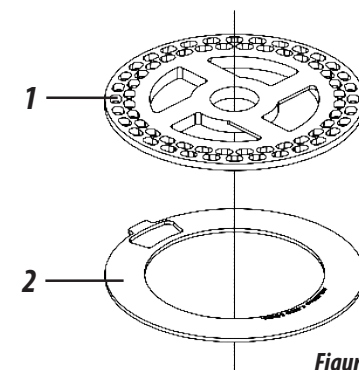


Figure 32

NOTE | *PP Solo 3rd Seed Box seeders come assembled with recessed rings for taller seeds.*

IMPORTANT | *Always use the spacer ring (2) next to the distributor discs (1). The sum of the set, seed disk and ring must always be equal to 8.5 mm in thickness for the perfect adjustment of the system.*

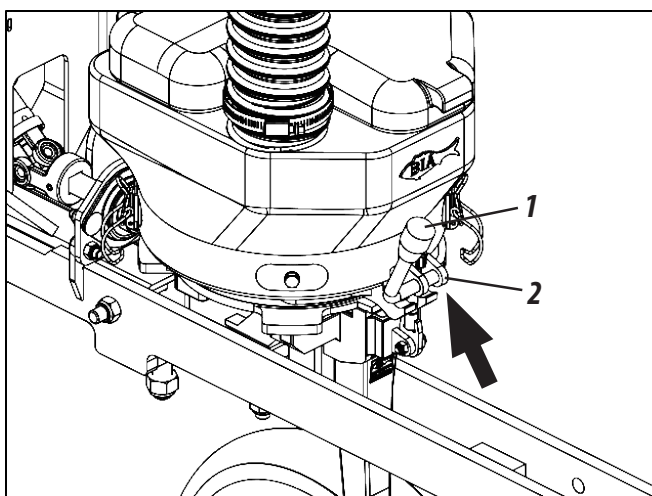
CHANGING THE SEED DISCS (FIGURES 33)

To change or replace the seed distributor discs, proceed as follows:

1rd Step: Lower the lever (1) to disengage the latch (2) from the seed tank, as shown in details "A" and "B".

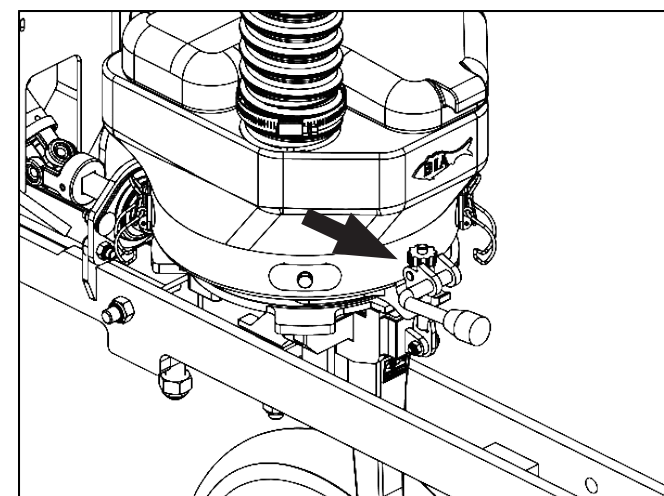
NOTE

If there are seeds in the deposit, remove them before changing the disc and ring, preventing them from spreading on the floor or locking the system.



Figures 33

Detail "A"

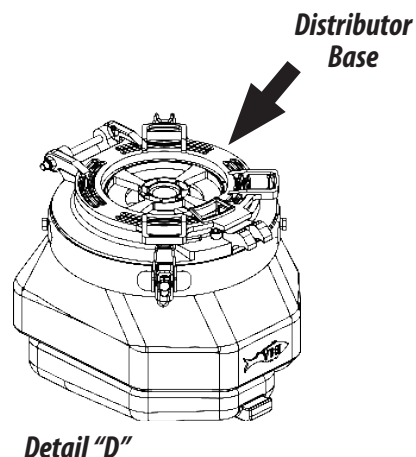
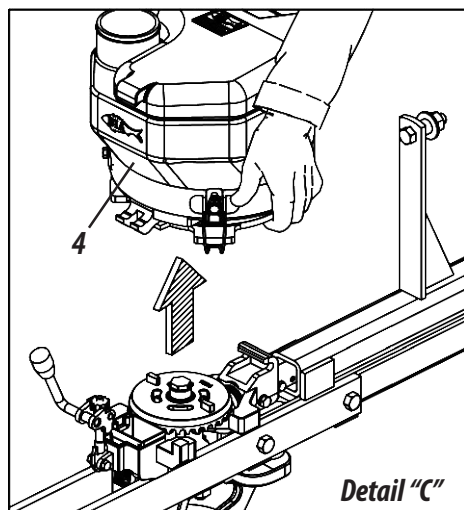


Detail "B"

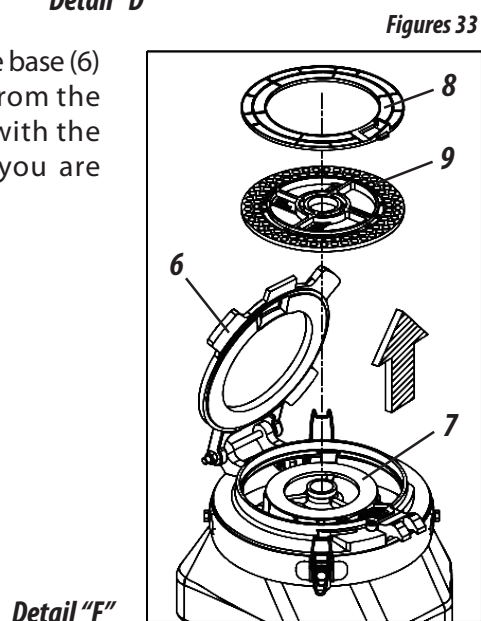
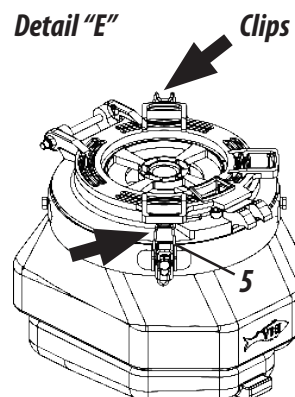
SEED DISTRIBUTION SYSTEM

SEED DISTRIBUTION SYSTEM

2nd Step: Then, remove the seed box (4) from the line and rotate, leaving the base of the distributor upwards, as shown in details "C" and "D".

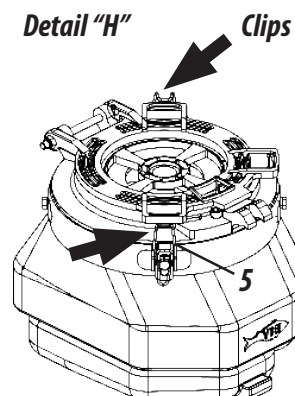


3rd Step: Then, loosen the clips (5), tilt the base (6) and remove the ring (8) and disc (9) from the distributor base (7), replacing them with the ring and disc suitable for the crop you are going to work with,

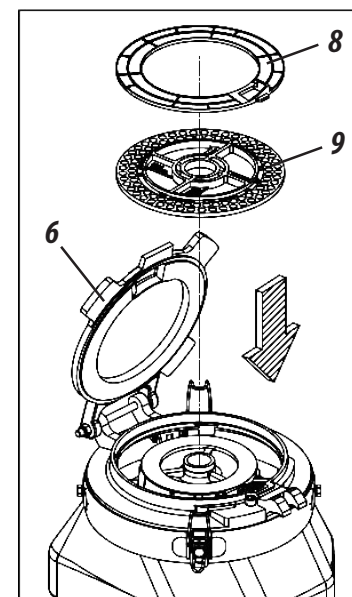


Figures 33

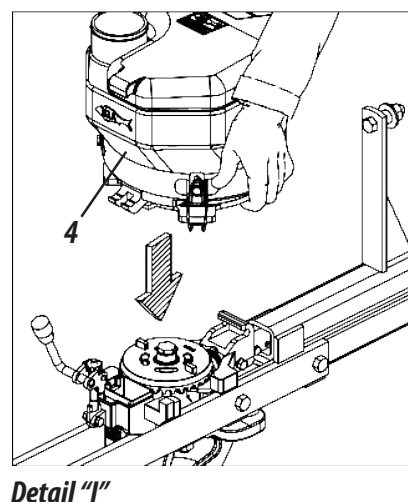
4th Step: When changing the ring (8) and the disc (9) tilt the base (6) by closing it. Then lock the clips (5) again, as shown in details "G" and "H".



Detail "G"

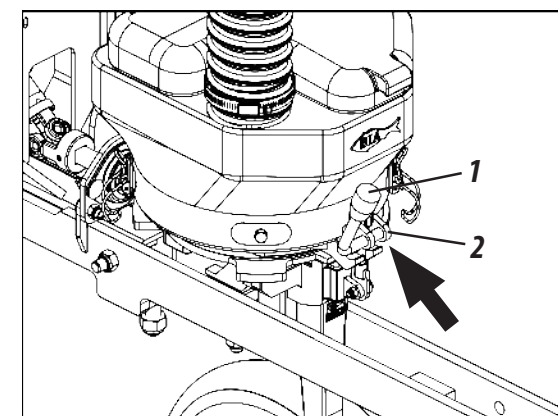


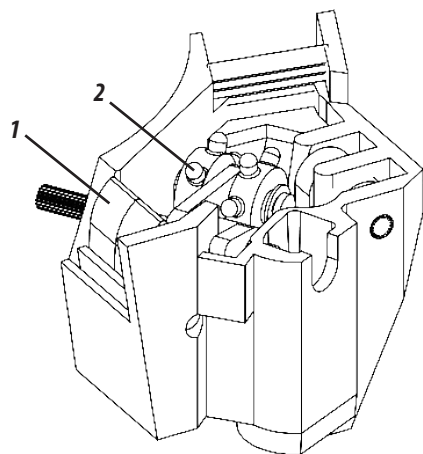
5th Step: Finish by replacing the seed box (4) in the line and reset the lock (3), fixing the lever (1) through the pin (2), as shown in details "I" and "J".



Figures 33

Detail "J"

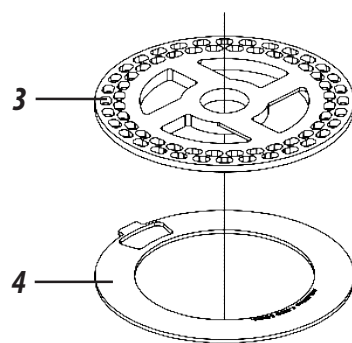




Seed Batcher Box

IMPORTANT

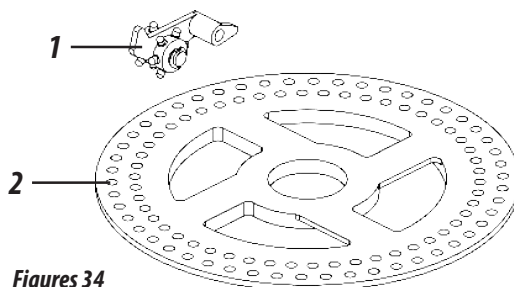
Change the distributor discs (3) and the spacer rings (4) when they show excessive wear.



Figures 33

SEED BATCHER ROSETTE (FIGURES 34)

The seed distribution box leaves the factory with the trigger mounted with double rosettes (1) for double row discs (2).



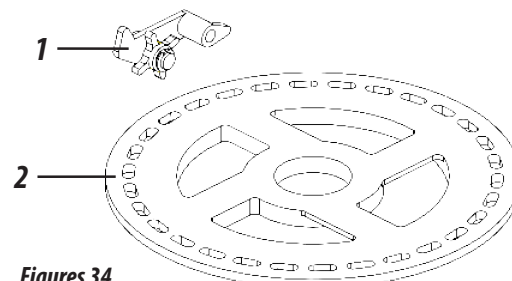
Figures 34

For single row discs (1), change the trigger with double rosettes to the single

! ATTENTION

Before changing the disc and ring to work with the new seed, check the conditions of the trigger (1) and the rosette (2) as the wear of these items, compromise the dosage. If necessary, replace them.

rosette trigger (2), as shown in figure below.



Figures 34

IMPORTANT

The seed distribution box has triggers and rosettes that must be cleaned internally at least once a day, for untreated seeds and twice a day for planting with treated seeds.

CHANGING THE DOUBLE ROSETTE FOR SIMPLE (FIGURE 35)

To change the trigger with double rosettes, for the trigger with single rosette, proceed as follows:

- 1- Remove the pin (1) the trigger with double rosettes (2) place the spring (3) in the socket and insert the trigger with single rosette (4) in the distribution box (5) and lock with the pin (1).

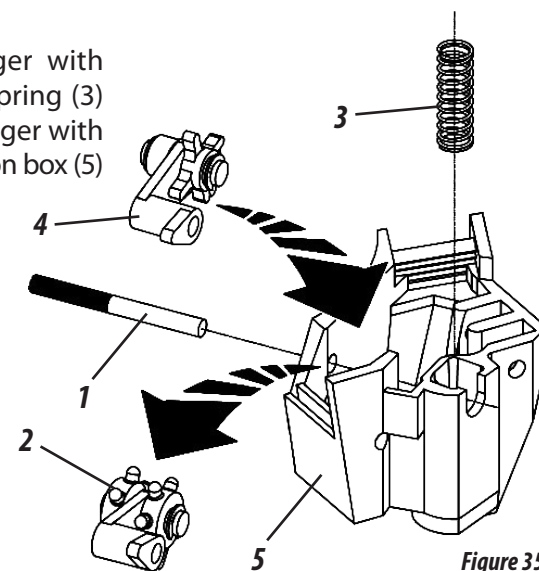


Figure 35

SEED DISTRIBUTION SYSTEM

SEED DISTRIBUTION SYSTEM

BALDAN IMPLEMENTOS AGRÍCOLAS S/A.

SEED DISTRIBUTOR DISCS AND RINGS (TABLES 03/04/05)

The **PP Solo 3rd Seed Box** seeder leaves the factory with some standard discs and rings, and other loose models can be purchased optionally.

Crop	Code	Discs Standards
Corn	60200717980	Disc with 28 holes ø 11.5mm (ø189 x 4.00mm) Rampflow
	60200717999	Disc with 28 holes ø 12.5mm (ø189 x 4.00mm) Rampflow
	60200718006	Disc with 28 holes ø 13.5mm (ø189 x 4.00mm) Rampflow
Sorghum	52200101049	Disc with 100 holes ø 5mm (ø35.5 x 189 x 3.00mm) with ring
Soybean	60200718014	Disc with 90 holes ø 8mm (ø35.1 x 189 x 4.50mm) Rampflow
	60200718022	Disc with 90 holes ø 9mm (ø35.1 x 189 x 5.50mm) Rampflow
Disc	52200101316	Blind Disc (ø35.5 x 189 x 5.50mm) with ring

Tables 03

Crop	Code	Discs Standards
Corn	60200158094	Mod. Corn Ring U 4mm with 1mm recess Rampflow
	60200158140	Mod. Corn Ring U 4mm with 2mm recess Rampflow
	60200158159	Mod. Corn Ring U 4mm Flat Rampflow
Soybean	60200158108	Mod. Soybean Ring U 4mm Flat Rampflow
	60200158116	Mod. Soybean Ring U 3mm Flat Rampflow
	60200158124	Mod. Soybean Ring U 3mm with 0.8mm recess Rampflow
	60200158132	Mod. Soybean Ring U 4mm with 1mm recess Rampflow

Tables 04

Crop	Code	Discs Standards
Corn	60200718162	Disc with 28 holes ø 10.5mm (ø189 x 4.00mm) Rampflow
	60200718170	Disc with 28 holes ø 11mm (ø189 x 4.00mm) Rampflow
	60200718189	Disc with 28 holes ø 12mm (ø189 x 4.00mm) Rampflow
	60200718197	Disc with 28 holes ø 13mm (ø189 x 4.00mm) Rampflow
Sorghum	52200101200	Disc with 50 holes ø 5mm (ø35.5 x 189 x 3.00mm) with ring
Bean	60200700905	Disc with 34 holes ø 10.5 x 20mm (ø35.5 x 189 x 8.50mm) with ring
	52200101219	Disc with 64 holes ø 8 x 12.5mm (ø35.5 x 189 x 5.50mm) with ring
Sunflowers	52200101235	Disc with 30 holes ø 5,5 x 13.4mm (ø35.5 x 189 x 4.50mm) with ring
Soybean	60200718200	Disc with 90 holes ø 7.3mm (ø35.1 x 189 x 4.50mm) Rampflow
	60200758167	Model Soybean Ring U 4mm Flat Rampflow
Canola / Sorghum	52200101278	Disc with 76 holes ø 5mm (ø35.5 x 186 x 3.00mm) with ring
Cotton	52200101286	Disc with 64 holes ø 7 x 12mm (ø35.5 x 189 x 5.50mm) with ring
Rice	52200101294	Disc with 40 holes ø 6.5 x 19.5mm (ø35,5 x 189 x 5.50mm) with ring
Blind	52200101324	Blind Disc (ø35.5 x 189 x 4.00mm) with ring
	60200700891	Blind Disc (ø35.5 x 189 x 8.00mm) with ring

Tables 05

USE OF GRAPHITE POWDER OR INDUSTRIAL TALC (TABLE 06)

To facilitate distribution and increase the service life of the dispensing mechanism, powdered graphite or industrial talc should be mixed with the seeds.

Seeders with distribution system type:	Amount of graphite per kg of seed		
	Seeds previously treated with insecticide		
	Small and Round	Big and Round	Flat
Horizontal Discs	04 grams	02 grams	04 grams

Table 06

⚠ IMPORTANT

Graphite should not be mixed before seed treatment.
Graphite should not be mixed with the insecticide for application.
For untreated seeds, use only half of the graphite mentioned in the table on the side.

SPEED BOX (FIGURE 36)

The seeders are equipped with the *Speed Box* (1), which activates the distribution system with simple adjustments, guaranteeing the exchange of fast rotations. To adjust the seeds, proceed as follows:

- 1- 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, as shown in figure 36.**
- 2- 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).

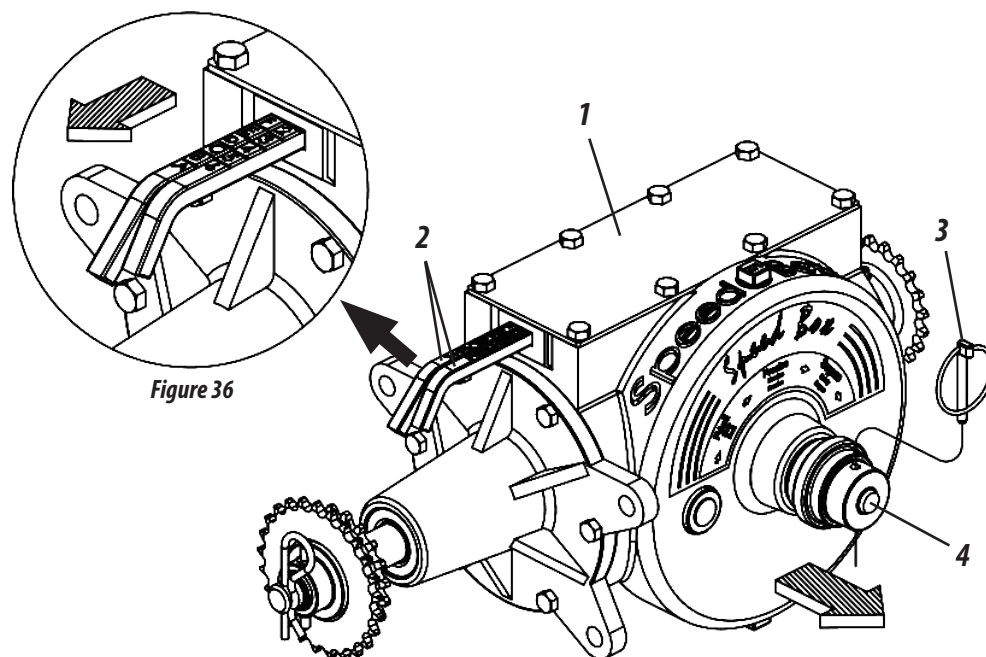


Figure 36

SEED DISTRIBUTION SYSTEM

SEED DISTRIBUTION SYSTEM

BALDAN IMPLEMENTOS AGRÍCOLAS S/A.

REGULATION FOR SEED DISTRIBUTION (FIGURE 37)

Seed adjustment is done through the *Speed Box* (1). To obtain more adjustments, reverse the current in the "A" and moved "B" drive. To reverse the current in the gears, proceed as follows:

- 1- First, turn the tensioner (2), removing the chain tension (3).
- 2- Then invert the current (3) according to the need for work.
- 3- Then, release the tensioner (2) releasing it, returning the tension in the chain (3).

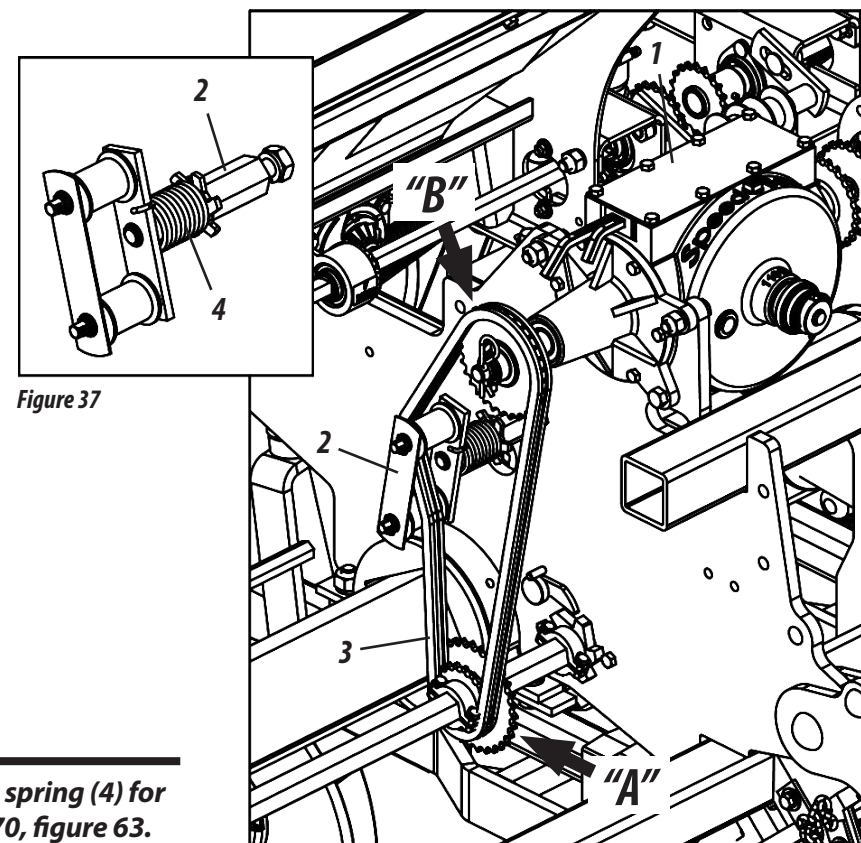


Figure 37

ⓘ IMPORTANT

After changing the gears, check the chain tension. The tensioner (2) is equipped with a torsion spring (4) for greater flexibility. If more pressure is needed on the stretcher, proceed as instructed on page 70, figure 63.

SEED DISTRIBUTION TABLE (TABLES 07/08)

The seed distribution table is made according to the number of holes in the distributor disc, gear changes and number of seeds to be distributed.



ATTENTION

If there is a need to check the seeds distributed on the ground, open the ridge and count the first seed found 5 linear meters. Then, take the result and divide by 5 linear meters and you will have the result of distribution of seeds per linear meter.

Seed Distribution Table by linear meter- PP Solo 3rd Seed Box

Ratchet Axis Output Gear (Z3)								20	Speed Box inlet gear (Z4)								25
Combination	Number of Holes in the Seed Dispenser Disc																
	17	18	19	20	24	26	28	30	38	40	48	50	62	64	72	90	100
F - 1	1,3	1,4	1,5	1,5	1,9	2,0	2,2	2,3	2,9	3,1	3,7	3,9	4,8	4,9	5,6	7,0	7,7
F - 2	1,5	1,6	1,7	1,7	2,1	2,3	2,4	2,6	3,3	3,5	4,2	4,3	5,4	5,6	6,3	7,8	8,7
E - 1	1,6	1,7	1,8	1,9	2,3	2,5	2,7	2,9	3,7	3,9	4,6	4,8	6,0	6,2	7,0	8,7	9,7
F - 3	1,7	1,8	1,9	2,0	2,4	2,6	2,8	3,0	3,8	4,0	4,8	5,0	6,2	6,4	7,2	8,9	9,9
E - 2	1,8	2,0	2,1	2,2	2,6	2,8	3,0	3,3	4,1	4,3	5,2	5,4	6,7	7,0	7,8	9,8	10,9
D - 1	2,0	2,1	2,2	2,3	2,8	3,0	3,2	3,5	4,4	4,6	5,6	5,8	7,2	7,4	8,3	10,4	11,6
F - 4	2,0	2,1	2,2	2,3	2,8	3,0	3,2	3,5	4,4	4,6	5,6	5,8	7,2	7,4	8,3	10,4	11,6
E - 3	2,1	2,2	2,4	2,5	3,0	3,2	3,5	3,7	4,7	5,0	6,0	6,2	7,7	7,9	8,9	11,2	12,4
D - 2	2,2	2,3	2,5	2,6	3,1	3,4	3,7	3,9	5,0	5,2	6,3	6,5	8,1	8,3	9,4	11,7	13,0
C - 1	2,3	2,4	2,6	2,7	3,2	3,5	3,8	4,1	5,1	5,4	6,5	6,8	8,4	8,7	9,7	12,2	13,5
F - 5	2,4	2,5	2,6	2,8	3,3	3,6	3,9	4,2	5,3	5,6	6,7	7,0	8,6	8,9	10,0	12,5	13,9
E - 4	2,5	2,6	2,8	2,9	3,5	3,8	4,1	4,3	5,5	5,8	7,0	7,2	9,0	9,3	10,4	13,0	14,5
D - 3	2,5	2,7	2,8	3,0	3,6	3,9	4,2	4,5	5,7	6,0	7,2	7,5	9,2	9,5	10,7	13,4	14,9
C - 2	2,6	2,7	2,9	3,0	3,7	4,0	4,3	4,6	5,8	6,1	7,3	7,6	9,4	9,7	11,0	13,7	15,2
B - 1	2,6	2,8	2,9	3,1	3,7	4,0	4,3	4,6	5,9	6,2	7,4	7,7	9,6	9,9	11,1	13,9	15,5
A - 1	3,0	3,1	3,3	3,5	4,2	4,5	4,9	5,2	6,6	7,0	8,3	8,7	10,8	11,1	12,5	15,6	17,4
A - 2	3,3	3,5	3,7	3,9	4,7	5,1	5,5	5,9	7,4	7,8	9,4	9,8	12,1	12,5	14,1	17,6	19,6
B - 3	3,4	3,6	3,8	4,0	4,8	5,2	5,6	6,0	7,6	7,9	9,5	9,9	12,3	12,7	14,3	17,9	19,9
C - 4	3,4	3,7	3,9	4,1	4,9	5,3	5,7	6,1	7,7	8,1	9,7	10,1	12,6	13,0	14,6	18,3	20,3
D - 5	3,5	3,8	4,0	4,2	5,0	5,4	5,8	6,3	7,9	8,3	10,0	10,4	12,9	13,4	15,0	18,8	20,9
E - 6	3,7	3,9	4,1	4,3	5,2	5,7	6,1	6,5	8,3	8,7	10,4	10,9	13,5	13,9	15,6	19,6	21,7
A - 3	3,8	4,0	4,2	4,5	5,4	5,8	6,3	6,7	8,5	8,9	10,7	11,2	13,9	14,3	16,1	20,1	22,4
B - 4	3,9	4,2	4,4	4,6	5,6	6,0	6,5	7,0	8,8	9,3	11,1	11,6	14,4	14,8	16,7	20,9	23,2
C - 5	4,1	4,4	4,6	4,9	5,8	6,3	6,8	7,3	9,2	9,7	11,7	12,2	15,1	15,6	17,5	21,9	24,3
D - 6	4,4	4,7	5,0	5,2	6,3	6,8	7,3	7,8	9,9	10,4	12,5	13,0	16,2	16,7	18,8	23,5	26,1
A - 4	4,4	4,7	5,0	5,2	6,3	6,8	7,3	7,8	9,9	10,4	12,5	13,0	16,2	16,7	18,8	23,5	26,1
B - 5	4,7	5,0	5,3	5,6	6,7	7,2	7,8	8,3	10,6	11,1	13,4	13,9	17,2	17,8	20,0	25,0	27,8
C - 6	5,2	5,5	5,8	6,1	7,3	7,9	8,5	9,1	11,6	12,2	14,6	15,2	18,9	19,5	21,9	27,4	30,4
A - 5	5,3	5,6	5,9	6,3	7,5	8,1	8,8	9,4	11,9	12,5	15,0	15,6	19,4	20,0	22,5	28,2	31,3
B - 6	5,9	6,3	6,6	7,0	8,3	9,0	9,7	10,4	13,2	13,9	16,7	17,4	21,6	22,3	25,0	31,3	34,8
A - 6	6,6	7,0	7,4	7,8	9,4	10,2	11,0	11,7	14,9	15,6	18,8	19,6	24,3	25,0	28,2	35,2	39,1

Table 07

SEED DISTRIBUTION SYSTEM

SEED DISTRIBUTION SYSTEM

BALDAN IMPLEMENTOS AGRÍCOLAS S/A.

Table 08

Seed Distribution Table by linear meter - PP Solo 3rd Seed Box

Seed Distribution Table by linear meter - PP Solo 3rd Seed Box																	
Ratchet Axis Output Gear (Z3)								25	Speed Box inlet gear (Z4)								20
Combination	Number of Holes in the Seed Dispenser Disc																
	17	18	19	20	24	26	28	30	38	40	48	50	62	64	72	90	100
F - 1	2,1	2,2	2,3	2,4	2,9	3,1	3,4	3,6	4,6	4,8	5,8	6,0	7,5	7,7	8,7	10,9	12,1
F - 2	2,3	2,4	2,6	2,7	3,3	3,5	3,8	4,1	5,2	5,4	6,5	6,8	8,4	8,7	9,8	12,2	13,6
E - 1	2,6	2,7	2,9	3,0	3,6	3,9	4,2	4,5	5,7	6,0	7,2	7,5	9,4	9,7	10,9	13,6	15,1
F - 3	2,6	2,8	2,9	3,1	3,7	4,0	4,3	4,7	5,9	6,2	7,5	7,8	9,6	9,9	11,2	14,0	15,5
E - 2	2,9	3,1	3,2	3,4	4,1	4,4	4,8	5,1	6,5	6,8	8,1	8,5	10,5	10,9	12,2	15,3	17,0
D - 1	3,1	3,3	3,4	3,6	4,3	4,7	5,1	5,4	6,9	7,2	8,7	9,1	11,2	11,6	13,0	16,3	18,1
F - 4	3,1	3,3	3,4	3,6	4,3	4,7	5,1	5,4	6,9	7,2	8,7	9,1	11,2	11,6	13,0	16,3	18,1
E - 3	3,3	3,5	3,7	3,9	4,7	5,0	5,4	5,8	7,4	7,8	9,3	9,7	12,0	12,4	14,0	17,5	19,4
D - 2	3,5	3,7	3,9	4,1	4,9	5,3	5,7	6,1	7,7	8,1	9,8	10,2	12,6	13,0	14,7	18,3	20,4
C - 1	3,6	3,8	4,0	4,2	5,1	5,5	5,9	6,3	8,0	8,5	10,1	10,6	13,1	13,5	15,2	19,0	21,1
F - 5	3,7	3,9	4,1	4,3	5,2	5,7	6,1	6,5	8,3	8,7	10,4	10,9	13,5	13,9	15,6	19,6	21,7
E - 4	3,8	4,1	4,3	4,5	5,4	5,9	6,3	6,8	8,6	9,1	10,9	11,3	14,0	14,5	16,3	20,4	22,6
D - 3	4,0	4,2	4,4	4,7	5,6	6,1	6,5	7,0	8,8	9,3	11,2	11,6	14,4	14,9	16,8	21,0	23,3
C - 2	4,0	4,3	4,5	4,8	5,7	6,2	6,7	7,1	9,0	9,5	11,4	11,9	14,7	15,2	17,1	21,4	23,8
B - 1	4,1	4,3	4,6	4,8	5,8	6,3	6,8	7,2	9,2	9,7	11,6	12,1	15,0	15,5	17,4	21,7	24,1
A - 1	4,6	4,9	5,2	5,4	6,5	7,1	7,6	8,1	10,3	10,9	13,0	13,6	16,8	17,4	19,6	24,4	27,2
A - 2	5,2	5,5	5,8	6,1	7,3	7,9	8,6	9,2	11,6	12,2	14,7	15,3	18,9	19,6	22,0	27,5	30,6
B - 3	5,3	5,6	5,9	6,2	7,5	8,1	8,7	9,3	11,8	12,4	14,9	15,5	19,2	19,9	22,4	27,9	31,0
C - 4	5,4	5,7	6,0	6,3	7,6	8,2	8,9	9,5	12,0	12,7	15,2	15,8	19,6	20,3	22,8	28,5	31,7
D - 5	5,5	5,9	6,2	6,5	7,8	8,5	9,1	9,8	12,4	13,0	15,6	16,3	20,2	20,9	23,5	29,3	32,6
E - 6	5,8	6,1	6,5	6,8	8,1	8,8	9,5	10,2	12,9	13,6	16,3	17,0	21,1	21,7	24,4	30,6	34,0
A - 3	5,9	6,3	6,6	7,0	8,4	9,1	9,8	10,5	13,3	14,0	16,8	17,5	21,7	22,4	25,1	31,4	34,9
B - 4	6,2	6,5	6,9	7,2	8,7	9,4	10,1	10,9	13,8	14,5	17,4	18,1	22,5	23,2	26,1	32,6	36,2
C - 5	6,5	6,8	7,2	7,6	9,1	9,9	10,6	11,4	14,5	15,2	18,3	19,0	23,6	24,3	27,4	34,2	38,0
D - 6	6,9	7,3	7,7	8,1	9,8	10,6	11,4	12,2	15,5	16,3	19,6	20,4	25,3	26,1	29,3	36,7	40,7
A - 4	6,9	7,3	7,7	8,1	9,8	10,6	11,4	12,2	15,5	16,3	19,6	20,4	25,3	26,1	29,3	36,7	40,7
B - 5	7,4	7,8	8,3	8,7	10,4	11,3	12,2	13,0	16,5	17,4	20,9	21,7	26,9	27,8	31,3	39,1	43,5
C - 6	8,1	8,6	9,0	9,5	11,4	12,4	13,3	14,3	18,1	19,0	22,8	23,8	29,5	30,4	34,2	42,8	47,5
A - 5	8,3	8,8	9,3	9,8	11,7	12,7	13,7	14,7	18,6	19,6	23,5	24,4	30,3	31,3	35,2	44,0	48,9
B - 6	9,2	9,8	10,3	10,9	13,0	14,1	15,2	16,3	20,6	21,7	26,1	27,2	33,7	34,8	39,1	48,9	54,3
A - 6	10,4	11,0	11,6	12,2	14,7	15,9	17,1	18,3	23,2	24,4	29,3	30,6	37,9	39,1	44,0	55,0	61,1

FERTILIZER CONDUCTOR FERTISYTEM SYSTEM (FIGURES 38/39)

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 spouts in degree (1) through the clips (5), as shown in figure 38.

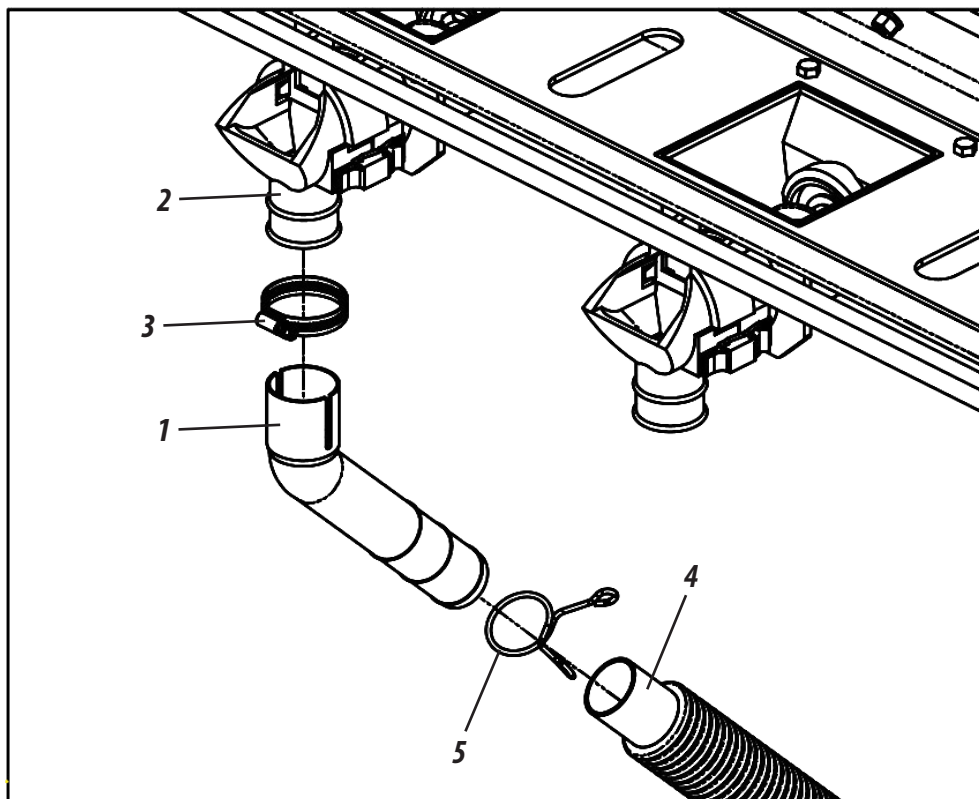


Figure 38

The fertisystem distribution system has safety outputs that guarantee the smooth functioning of the system without damaging it. In case of clogging of the hose and the dosing pump, clean the dosing pump until the end of the

hose close to the furrower rod or double disc, as the system can be blocked by roots, pieces of plastic and other objects, as shown in figure 39.

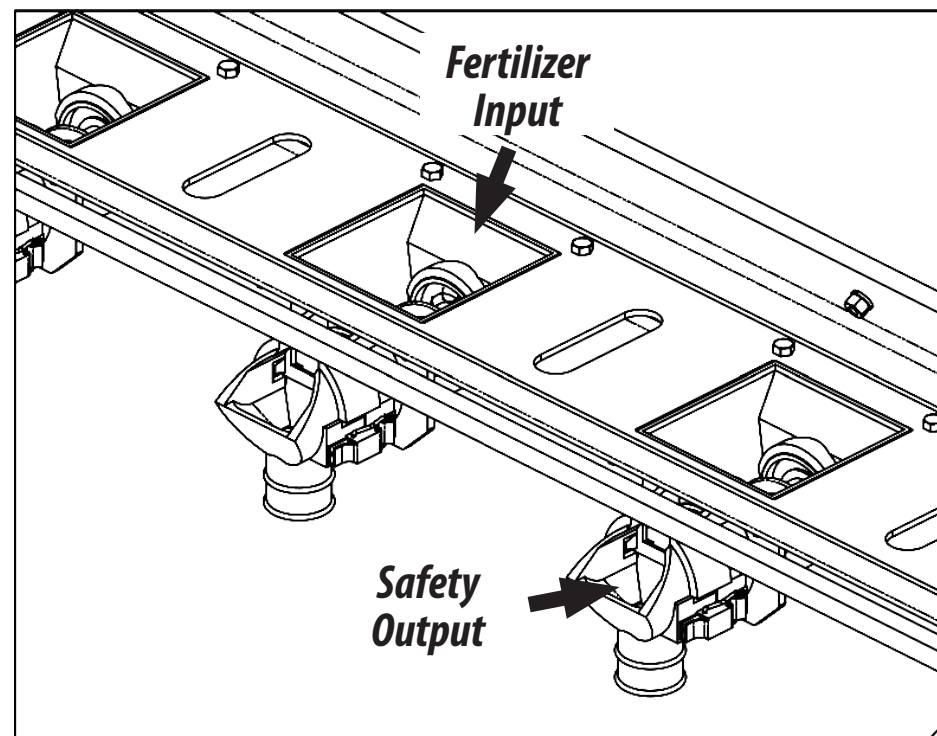
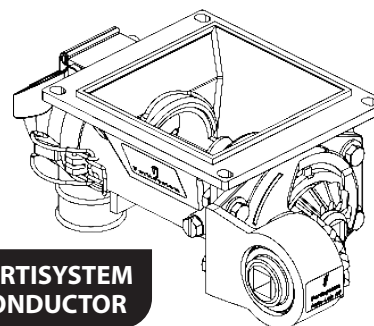


Figure 39



FERTISYSTEM
CONDUCTOR

⚠ ATTENTION

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

FERTILIZER DISTRIBUTION SYSTEM

FERTILIZER DISTRIBUTION SYSTEM

SPEED BOX (FIGURE 40)

The seeders are equipped with the *Speed Box* system (1), which activates the distribution system with simple adjustments, guaranteeing the exchange of fast rotations. To adjust the seeds, proceed as follows:

- 1- 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.

- 2- 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).

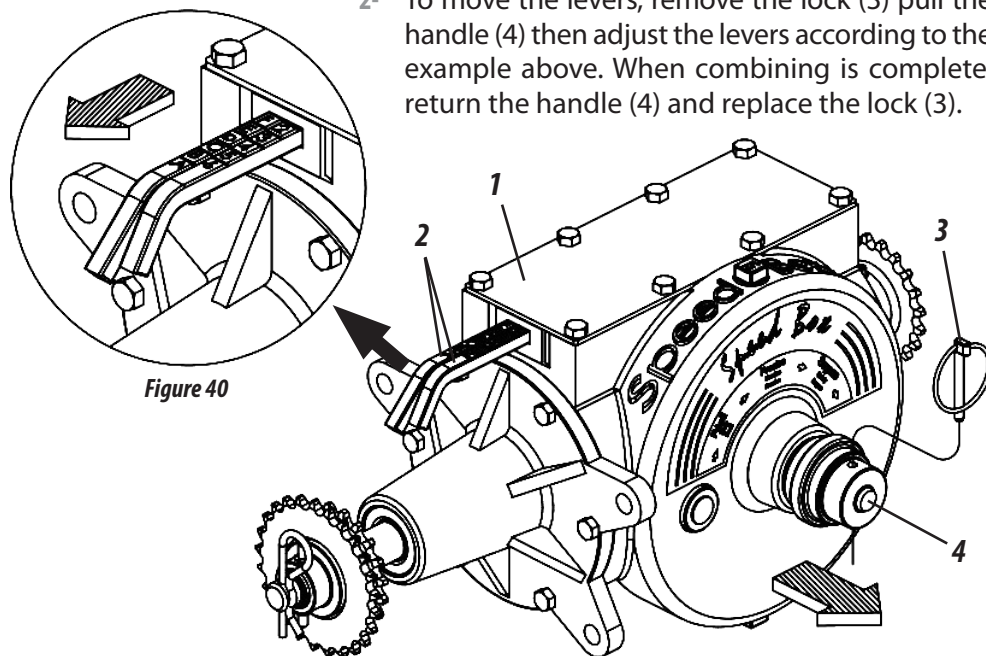


Figure 40

IMPORTANT

After changing the gears, check the chain tension. The tensioner (2) is equipped with a torsion spring (4) for greater flexibility. If more pressure is needed on the stretcher, proceed as instructed on page 70, figure 63.

REGULATION FOR FERTILIZER DISPENSING (FIGURE 41)

Seed adjustment is done through the *Speed Box* (1). To obtain more adjustments, invert the current in the motor gears "**A**" and moved "**B**", as shown in figures 41. To reverse the current in the gears, proceed as follows:

- 1- First, turn the tensioner (2), removing the chain tension (3).
- 2- Then invert the current (3) according to the need for work.
- 3- Then, release the tensioner (2) releasing it, returning the tension in the chain (3).

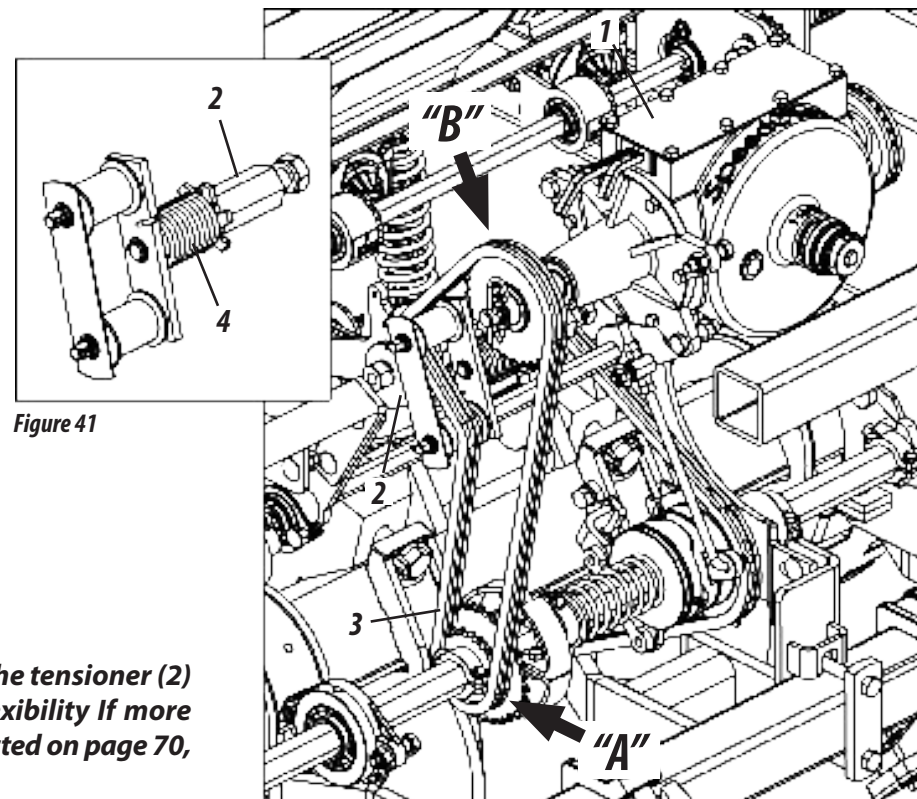


Figure 41

Fertilizer Distribution Table - PP Solo 3rd Seed Box

Ratchet hex shaft gear			20		Speed Box inlet gear									31	
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

Note: Spring with 2" pitch

Table 09

FERTILIZER DISTRIBUTION SYSTEM

FERTILIZER DISTRIBUTION SYSTEM

BALDAN IMPLEMENTOS AGRÍCOLAS S/A.

Note: Spring with 2" pitch

Table 10

Fertilizer Distribution Table - PP Solo 3rd Seed Box

Ratchet hex shaft gear			31			Speed Box inlet gear								20	
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

PRACTICAL CALCULATION FOR FERTILIZER DISPENSING

To distribute other quantities of fertilizer in spacing and areas other than those shown in the distribution tables, use the formula below, to do this, proceed as follows:

- 1- Determine the spacing between lines and the amount of fertilizer to be distributed per bushel (Aa) or hectare (Ha).
- 2- **Example:** Seeder with a spacing of 0.45 m, to distribute 500 kg of fertilizer per Ha, use the formula below:

$$\text{Formula: } X = \frac{E \times Q \times D}{A}$$

Formula Date:

E = Spacing between lines (m)

Q = Amount of fertilizer to be distributed [kg]

A = Area to be fertilized [m²]

D = 50 meters distance (test)

X = Fertilizer grams to 50 meters

$$\text{Resolve: } X = \frac{0,45 \times 500 \times 50}{10.000}$$

$$X = 22.50 \times 50 = 1.125$$

X = 1.125 grams to 50 meters per line.

NOTE

When obtaining the result, adjust the seeder to distribute the quantity found, or the one closest to the predetermined space for the test.

ATTENTION

Variation in working speed affects the uniform distribution of seeds.

When changing the seed lot or the fertilizer manufacturer, it is necessary to check again.

After the first day of planting, check all adjustments again.

CALCULATION

PRACTICAL TEST TO ASSESS THE QUANTITY OF FERTILISER AND SEED DISTRIBUTION.

- 1- 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. Proceed as follows:
- 2- As far as possible, always use the same tractor and operator who will carry out the planting.
- 3- Always check and maintain the correct calibration in the seeder tires **(70 lb/in² for each tire)**.
- 4- Mark the test distance in the table, we opted for 50 linear meters.
- 5- 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.
- 6- 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 7 km/h.
- 7- 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.
- 8- When reaching the desired amount, still in the area, move the tractor at the same speed, however, letting the fertilizer and seed reach the soil to check for uniformity in distribution later.

IMPORTANT

We suggest that a practical test be carried out on the distribution of fertilizer and seed, over 50 meters, to subsequently compare the results of the fertilizer and the seed.

TRIMMING SYSTEM

The mechanical (1) and hydraulic (2) finishing systems allow planting with only one side of the seeder, that is, half the rows.

MECHANICAL LOCKING SYSTEM 4000 TO 7500 (FIGURE 42/TABLE 11)

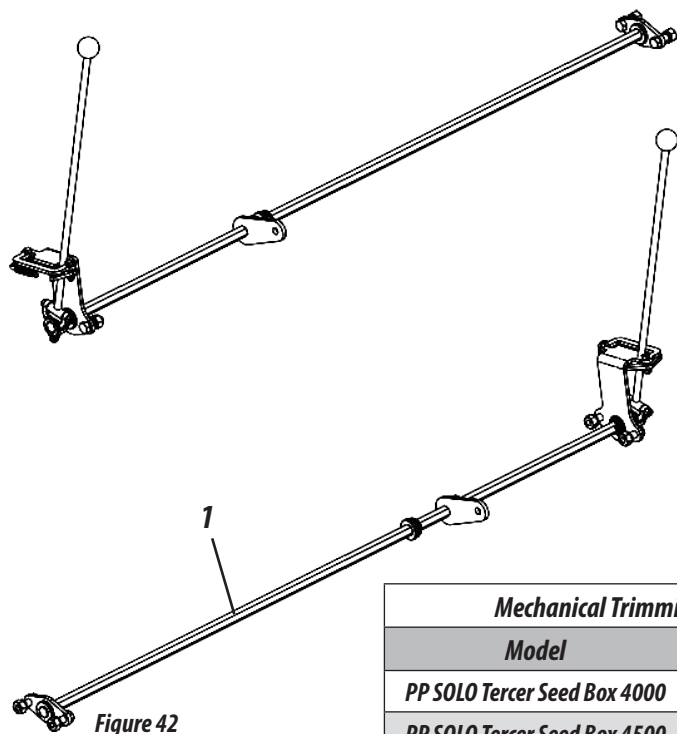


Table 11

Mechanical Trimming System	
Model	Code:
PP SOLO Tercer Seed Box 4000	55280107343
PP SOLO Tercer Seed Box 4500	55280107238
PP SOLO Tercer Seed Box 5000	55280107351
PP SOLO Tercer Seed Box 5500	55280107360
PP SOLO Tercer Seed Box 6500	55280107378
PP SOLO Tercer Seed Box 7500	55280107386

HYDRAULIC TRIMMING SYSTEM - OPTIONAL 4000 TO 7500 MECHANICAL RATCHET (FIGURE 43/TABLE 12)

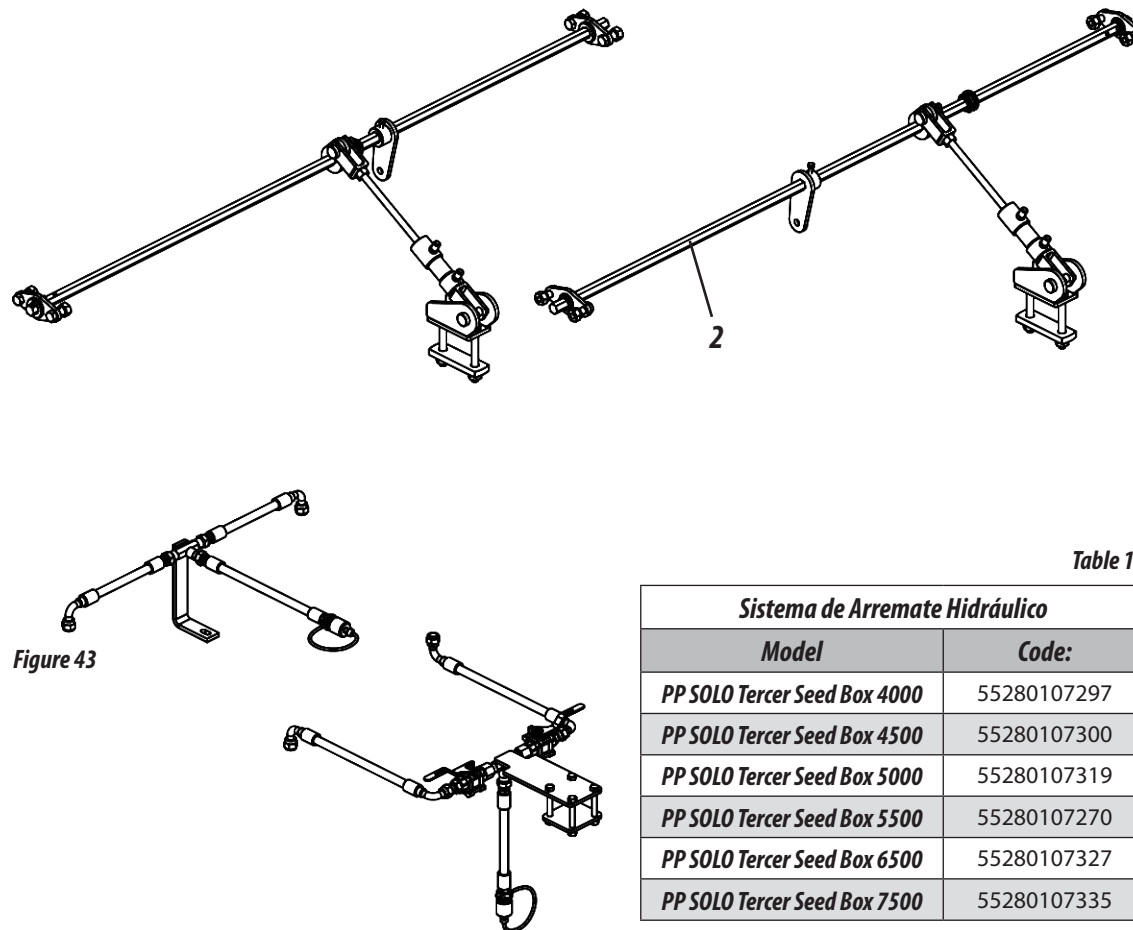


Table 12

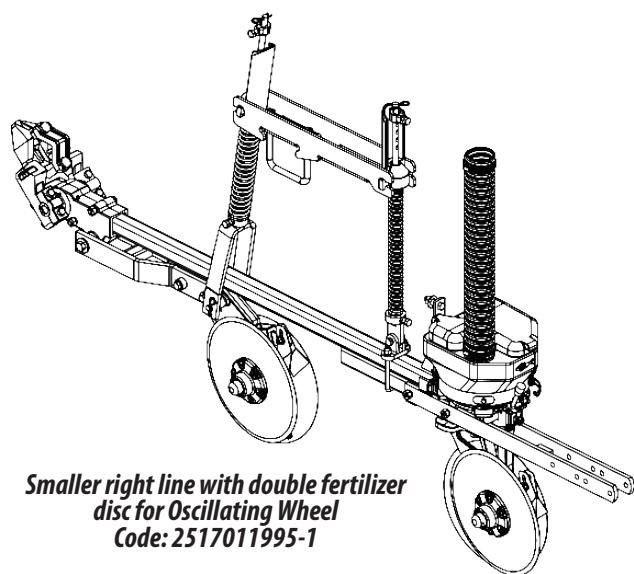
Sistema de Arremate Hidráulico	
Model	Code:
PP SOLO Tercer Seed Box 4000	55280107297
PP SOLO Tercer Seed Box 4500	55280107300
PP SOLO Tercer Seed Box 5000	55280107319
PP SOLO Tercer Seed Box 5500	55280107270
PP SOLO Tercer Seed Box 6500	55280107327
PP SOLO Tercer Seed Box 7500	55280107335



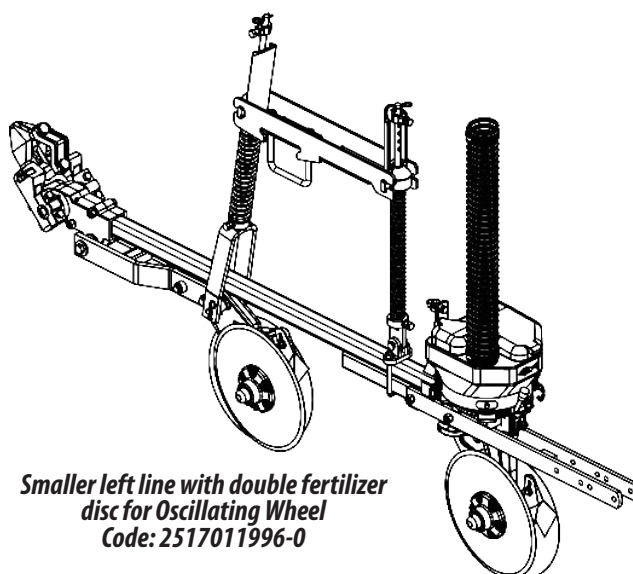
ATTENTION

Before activating the finishing system, get off the tractor and make sure that the seeder is stationary. Do not operate the trimming system with the tractor and the seeder in motion. Ignoring this warning could result in serious accidents.

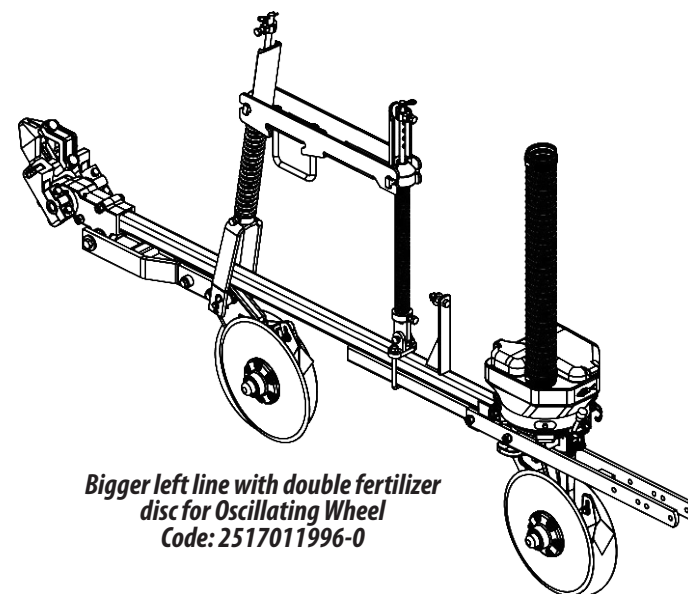
OPTIONAL LINE MODELS (FIGURES 44)



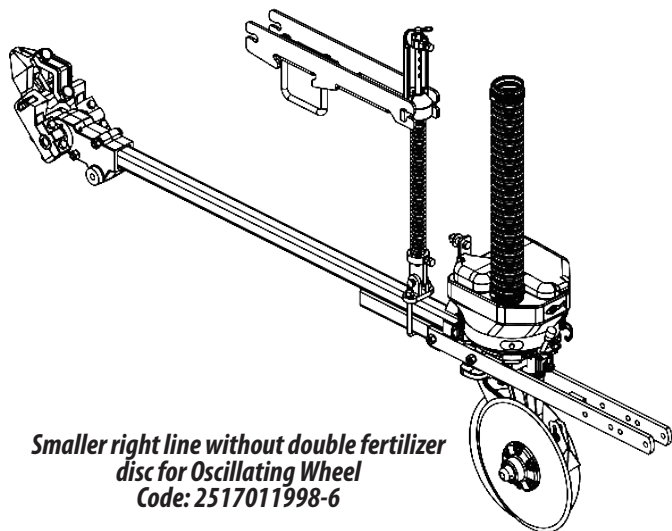
*Smaller right line with double fertilizer
disc for Oscillating Wheel
Code: 2517011995-1*



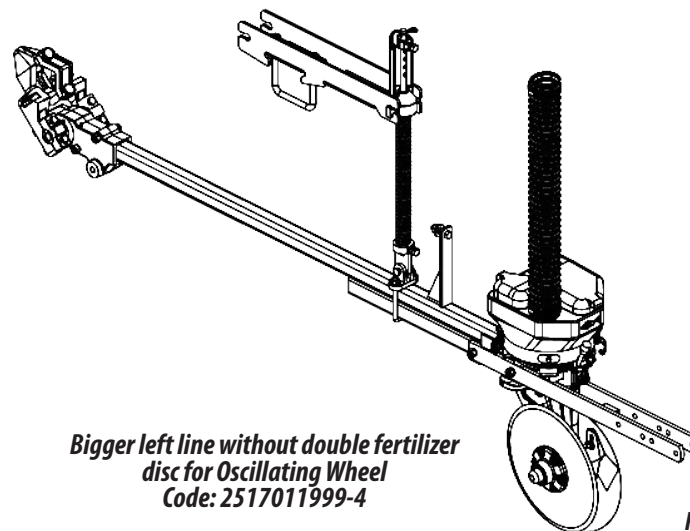
*Smaller left line with double fertilizer
disc for Oscillating Wheel
Code: 2517011996-0*



*Bigger left line with double fertilizer
disc for Oscillating Wheel
Code: 2517011996-0*



*Smaller right line without double fertilizer
disc for Oscillating Wheel
Code: 2517011998-6*



*Bigger left line without double fertilizer
disc for Oscillating Wheel
Code: 2517011999-4*

Figures 44

PLANTING LINES

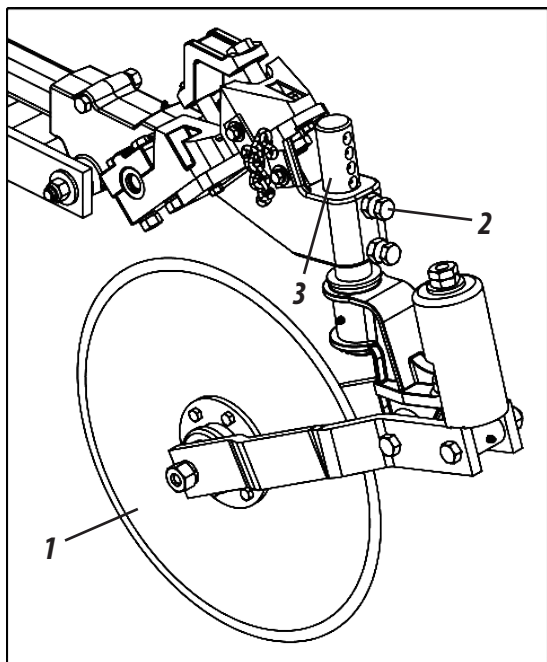
LINE ADJUSTMENTS

ADJUSTING THE CUTTING DISC DEPTH (FIGURE 45)

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

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

Figure 45

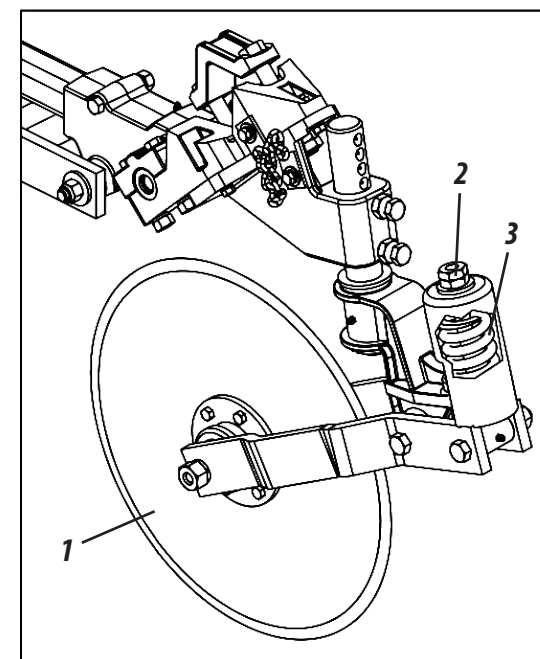


ADJUSTING THE CUTTING DISK PRESSURE (FIGURE 46)

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

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

Figure 46



! ATTENTION | When finished adjusting the depth and pressure of the cutting disc, repeat this procedure on all lines.

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

📌 NOTE | These depth and pressure adjustments of the cutting disc should be made in the field before starting work, observing the type of soil to be worked, to obtain a better performance of the seeder.

PRESSURE REGULATION

(+) INCREASED SPRING PRESSURE:

Increased pressure of cutting disc in the soil.

(-) DECREASED SPRING PRESSURE:

Decreased pressure of cutting disc in the soil.

RIDGE OPENING AND FERTILIZER POSITION IN THE SOIL (FIGURES 47)

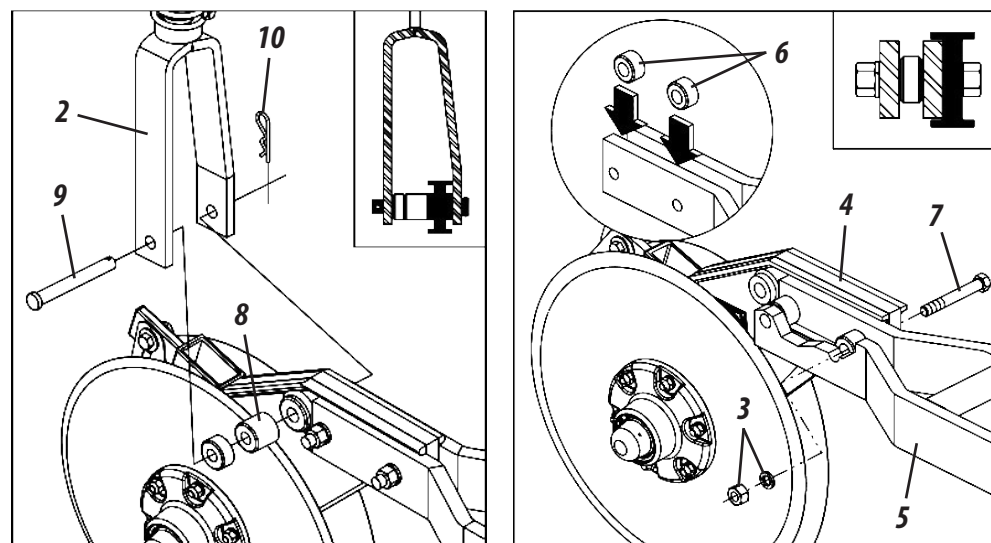
The opening of the ridge in the soil for the fertilizer to be deposited is done by double discs or furrowers in the following systems:

- **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:

- 1- Remove the spring rod (2), loosen the nuts and washers (3), remove the housing (4) that is between the fork plates (5), pass it to one side of the fork, place the bushings (6) between the fork plates and secure with screws (7), washers, and nuts (3). Then, replace the spring rod (2), placing the bushings (8) on the same side as the housing was moved, securing with the pin (9) and the lock (10).

Figures 47

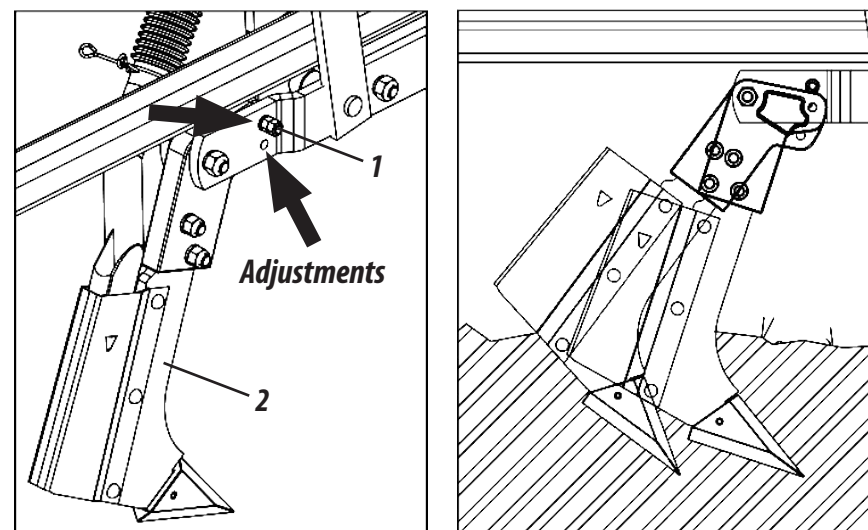


FURROWER ATTACK ANGLE ADJUSTMENT (FIGURES 48)

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

- 1- Remove the screw (1), articulate the furrow (2) in the ideal setting and replace the screw (1), according to the drawings on the side.

Figures 48



ATTENTION

When making any adjustments contained on this page, repeat the procedure on all lines, avoiding variation between the lines.

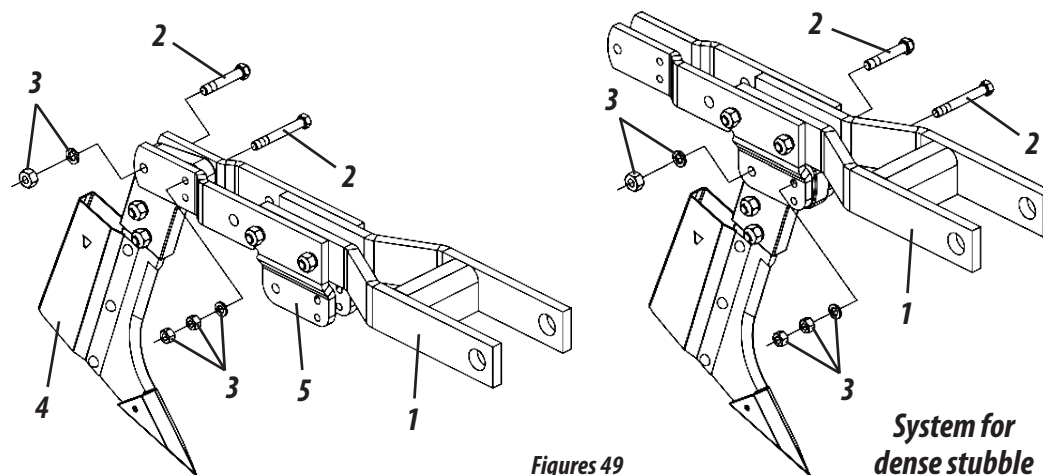
LINE ADJUSTMENTS

LINE ADJUSTMENTS

ADJUSTING THE SMALLER FURROWER FOR GREATER OR LESSER MISMATCH - OPTIONAL (FIGURES 49)

The planting lines of the **PP Solo 3rd Seed Box** seeder can be purchased with a smaller furrower (1). This furrower is used in cases where the stubble is dense, increasing the mismatch of furrowers, providing greater flow. To adjust the furrower with adjustable deflector (1), proceed as follows:

- 1- Loosen the screws (2), lock washers and nuts (3).
- 2- Then remove the furrower (4) and place it on the front of the support (5).
- 3- Then, fix it again with the screws (2), lock washers and nuts (3).

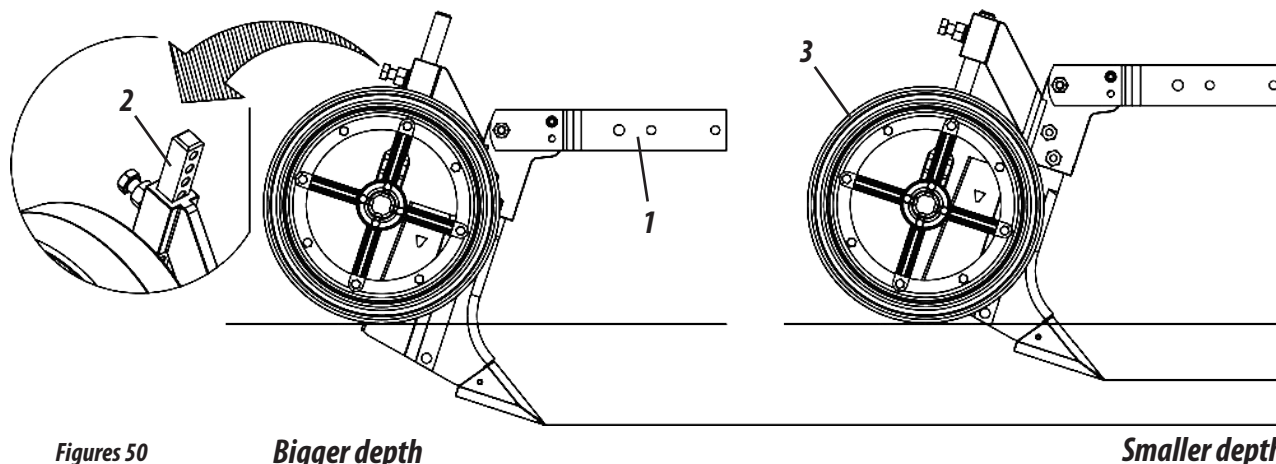


Figures 49

ADJUSTING THE FURROWER WITH DEPTH WHEEL - OPTIONAL (FIGURES 50)

The planting lines of the **PP Solo 3rd Seed Box** can be purchased with a furrower with a depth wheel (1). The depth wheel of this furrower is used to control depth uniformity of the deposit in the soil. To adjust the plow with depth wheel (1), proceed as follows:

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



Figures 50

ATTENTION

When making any adjustments contained on this page, repeat the procedure on all lines, avoiding variation between the lines.

ADJUSTMENT OF THE OPTIONAL AUTOMATIC DISARMING FURROWER (FIGURE 51)

The furrower with automatic disarm has several working settings, to better adjust to the type of soil to be worked To adjust the sensitivity of the furrower wear, proceed as follows:

FOR GREATER DISCUSSION FROM THE SULCATOR

Tighten the screw (1) by turning clockwise.

FOR SMALLER RIDGER DISARMING

Loosen the screw (1) by turning it counterclockwise.

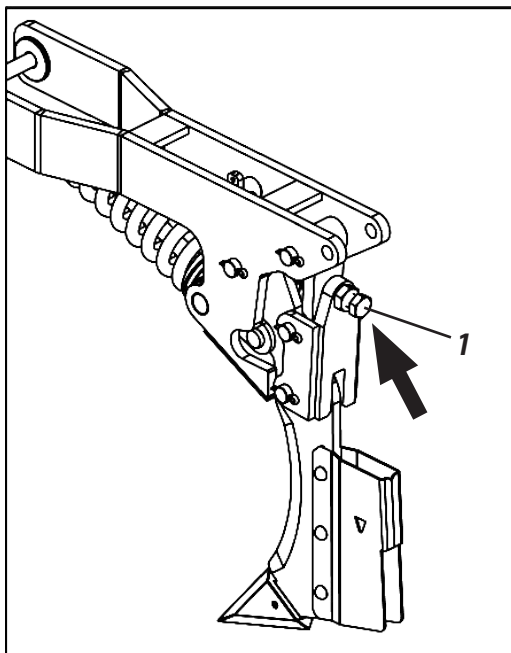


Figure 51



ATTENTION

This adjustment is minimal, thus having the ideal adjustment with the screw or less.

ADJUSTMENT OF OPTIONAL FURROWER RESET LOAD (FIGURE 52)

The furrower automatic reset system leaves the factory with the pre load regulation in the determined spring that can vary between 170 to 180 mm in its length.

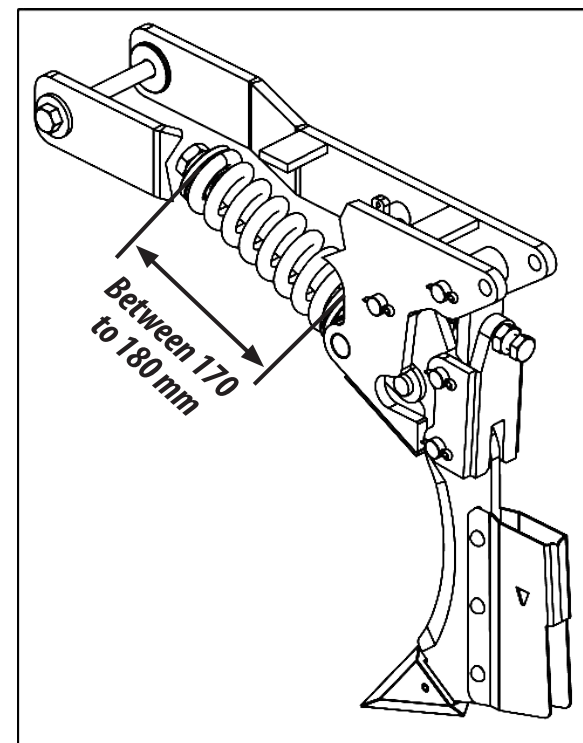


Figure 52



ATTENTION

Do not make any other adjustments to the furrower spring If you are constantly disarming, check the soil conditions, which can be very hard or have a high compaction rate.

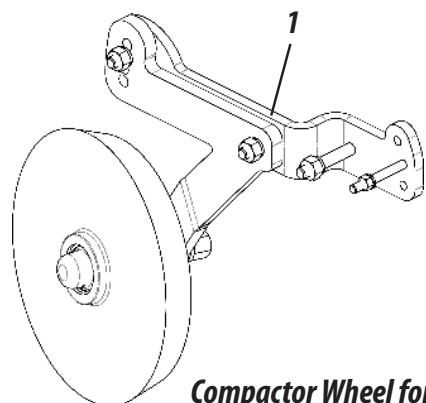
LINE ADJUSTMENTS

LINE ADJUSTMENTS

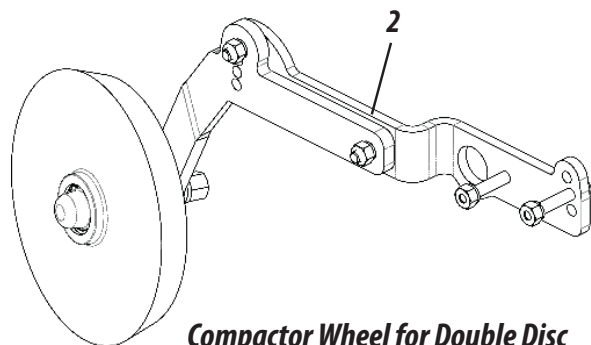
ADJUSTMENT OF COMPACTING WHEELS FOR FURROWER OR DOUBLE DISC - OPTIONAL (FIGURES 53)

The planting lines of the **PP Solo 3rd Seed Box** seeder can be purchased with a "furrow cover" compactor wheel for furrower (1) or for double disc (2). The furrower 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 furrower or double disc, proceed as follows

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

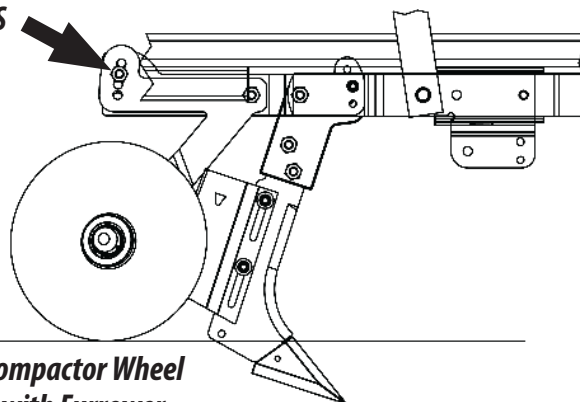


Compactor Wheel for Furrower



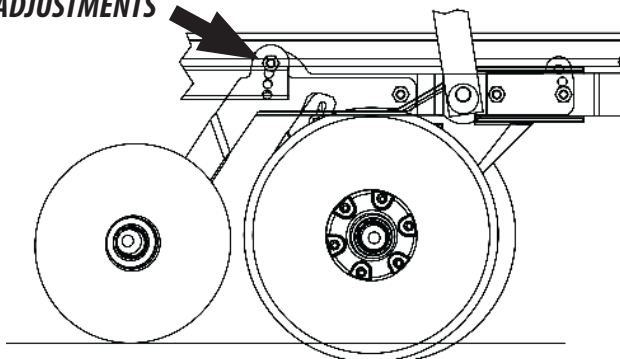
Compactor Wheel for Double Disc

ADJUSTMENTS



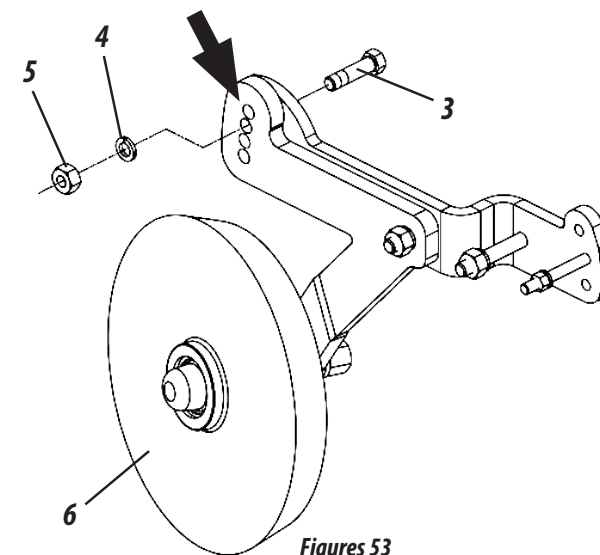
Compactor Wheel with Furrower

ADJUSTMENTS



Compactor Wheel for Double Disc

ADJUSTMENTS



Figures 53

! ATTENTION

Check the compactor wheel models for each line model on page 49.

! ATTENTION

When finishing the adjustments contained on this page, repeat this procedure on all lines, avoiding variation between the lines.

DOUBLE DISC CLEANERS ADJUSTMENT (FIGURE 54)

The double disc has cleaners that are flexible and adjustable to remove the dirt that sticks to the discs. To adjust the wipers, proceed as follows:

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



ATTENTION

At the end of the adjustment of the wipers (1), repeat the procedure on all lines.

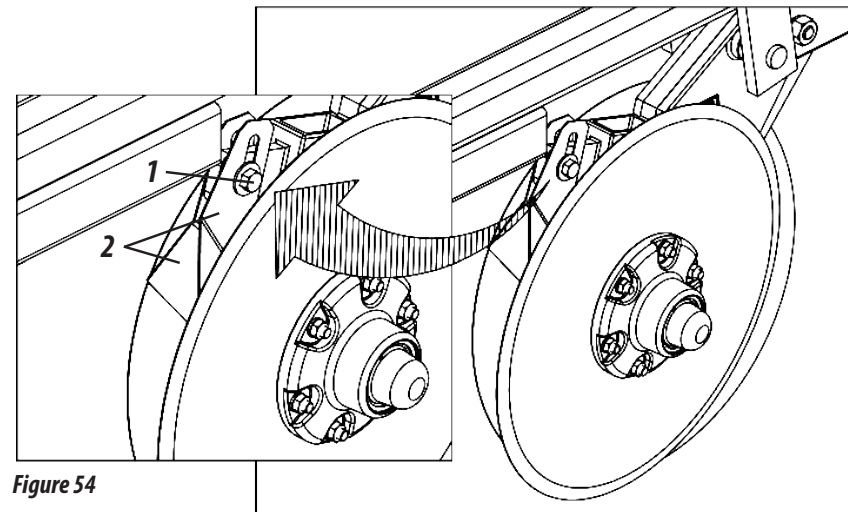


Figure 54

ADJUSTING THE OSCILLATING DEPTH WHEEL (FIGURE 55)

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 made individually by depth limiting wheels. For this adjustment, proceed as follows:

- 1- 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).

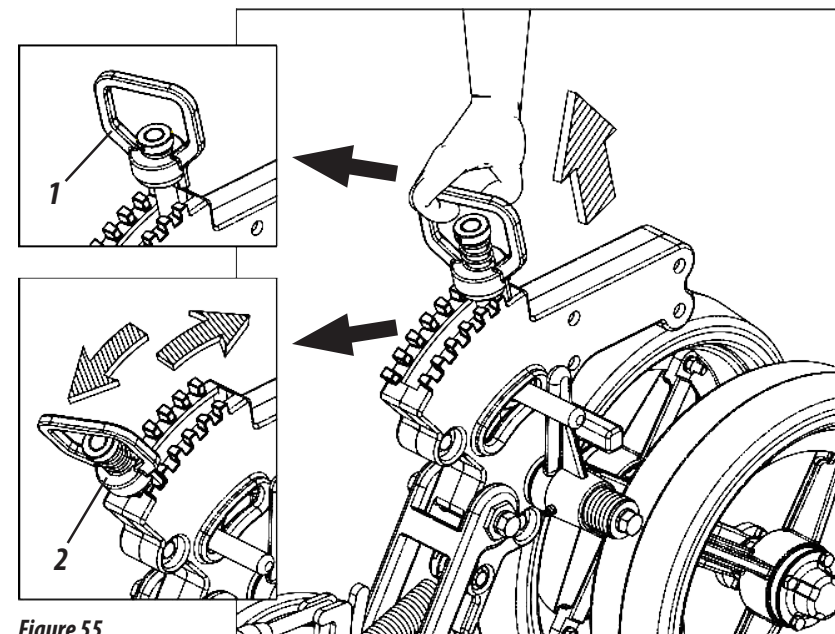


Figure 55



NOTE

The oscillating cart offers 18 adjustment points.

LINE ADJUSTMENTS

LINE ADJUSTMENTS

DEPTH LIMITING WHEEL (FIGURES 56/57/58)

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 lever 2 upwards, move the regulator (3) to the desired point, then lower the lever (2) locking the regulator (3) as shown in figures 56. The "V" compacting wheels have (5) adjustment points.

Higher Pressure: Shift the lever (2) back, giving more pressure to the wheel (1).

Lower Pressure: Move the lever (2) forward, giving less pressure to the wheel (1).

- The "V" compactor wheel (1) can also be adjusted to its pressure using the lever (4). For this adjustment, **proceed as shown in figure 57.**

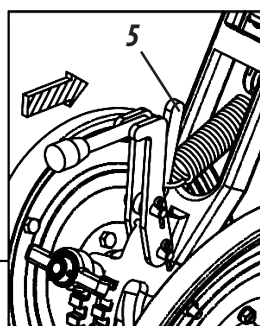
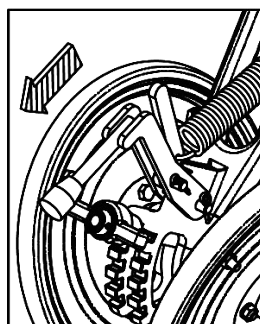
Higher Pressure:

Shift the lever (4) back, giving more pressure to the wheel (1).

Lower Pressure:

Press the lever (5) and move the lever (4) giving less pressure to the wheel (1).

Higher Pressure



Lower Pressure

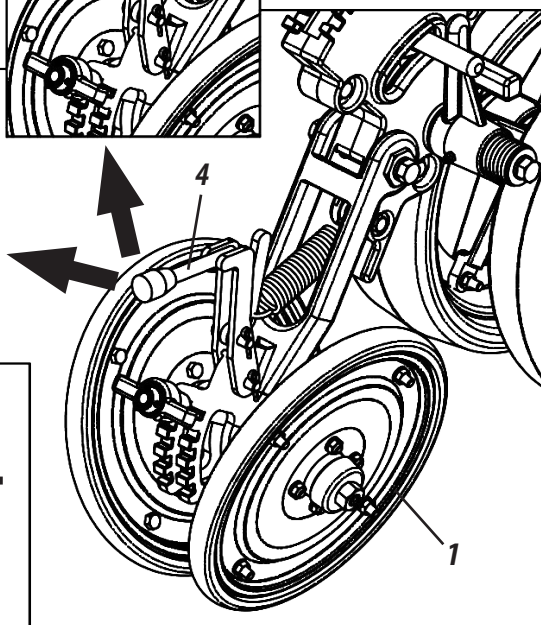
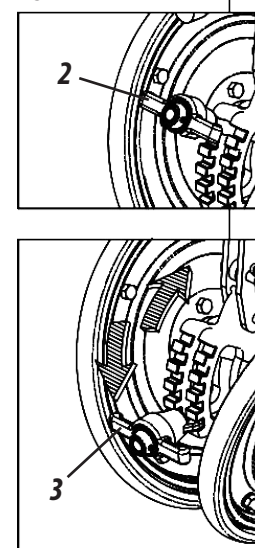
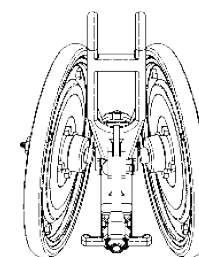


Figure 57

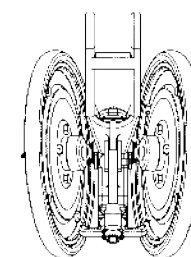
Figures 56



Angles of "V" Wheels



Fully closed angle position
(Less earth on the seed).



Figures 56

Open angle position
(More earth on the seed).

! 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.

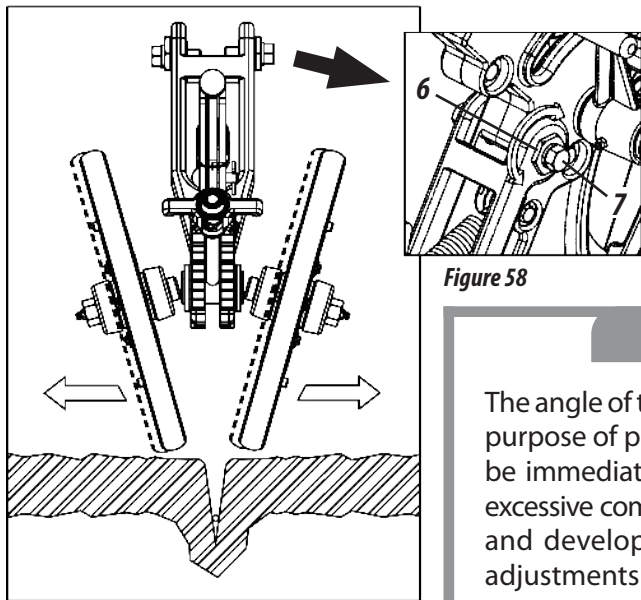


Figure 58

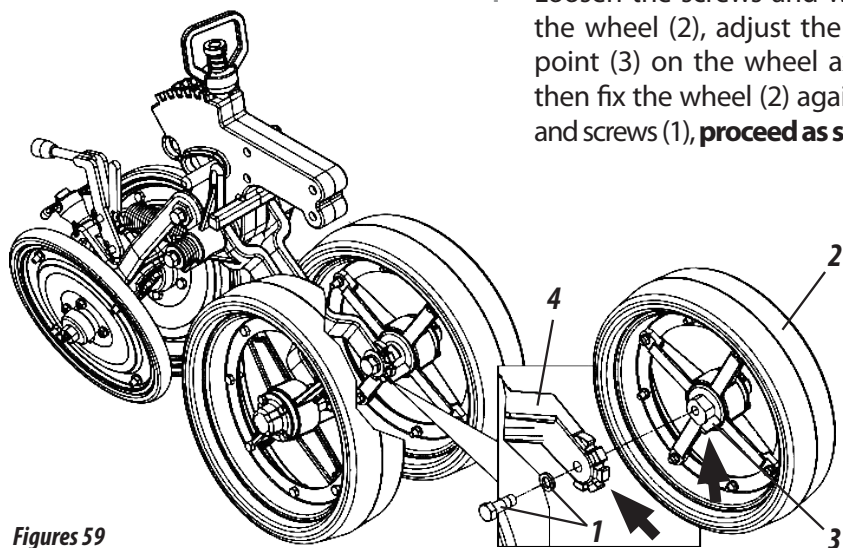
For horizontal displacement of the wheels, they were developed with eccentric bushings (5). For this adjustment, proceed as follows:

- 1- Loosen the screws (7), rotate the said bushings (6), with a wrench to actuate the wheels and align them with the furrow, placing more or less soil on the side of the seed, **as shown in figure 58.**

ADJUSTING THE OSCILLATING DEPTH WHEEL (FIGURE 59)

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:

- 1- Loosen the screws and washers (1), remove the wheel (2), adjust the wheel adjustment point (3) on the wheel axle adjustment (4), then fix the wheel (2) again with the washers and screws (1), **proceed as shown in figures 59.**



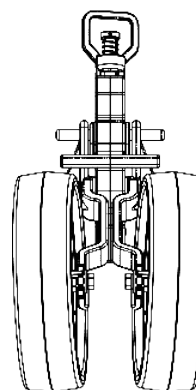
Figures 59

! ATTENTION

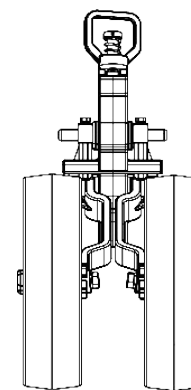
Make the same adjustment for all "V" compacting wheels and consider the type of soil, seed and planting depth, so as not to affect the free emergence of the plants.

Angle of Wheels

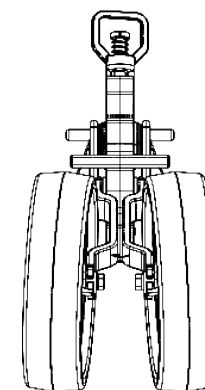
Figures 59



Fully closed angle position
(Less earth on the seed).



Parallel position
(Only for depth control).



Open angle position
(More earth on seed).

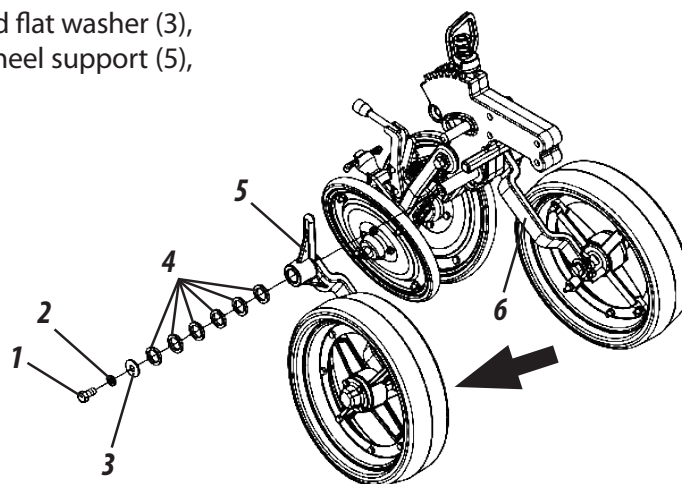
LINE ADJUSTMENTS

LINE ADJUSTMENTS

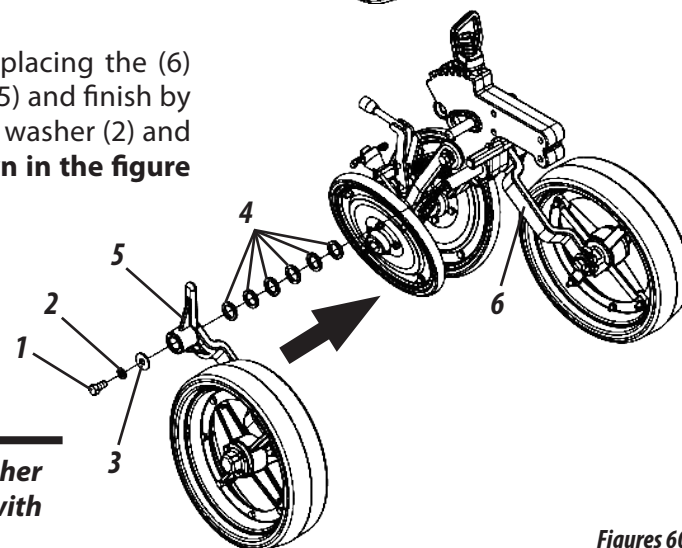
OPENING ADJUSTMENT OF THE OSCILLATING DEPTH WHEEL (FIGURES 60)

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:

- 1- Loosen the screw (1), pressure (2) and flat washer (3), remove the (6) chocks (4) and the wheel support (5), **as shown in the figure at the side.**



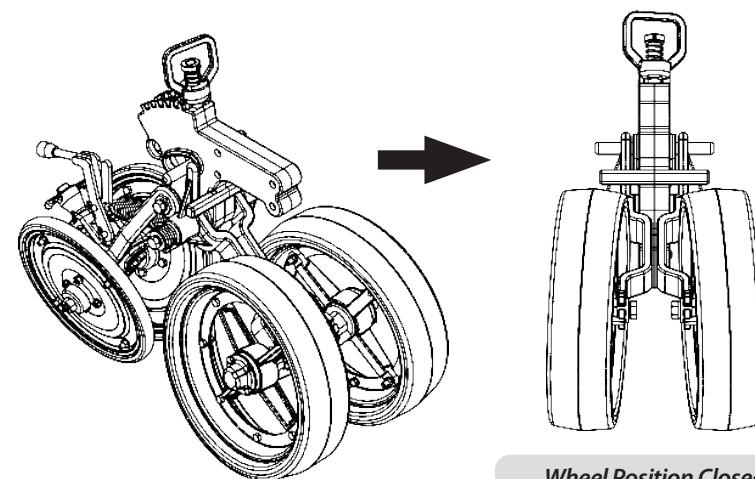
- 2- Then do the reverse process, first placing the (6) shims (4), then the wheel support (5) and finish by placing the flat washer (3) pressure washer (2) and the screw (1) tightening it, **as shown in the figure on the side.**



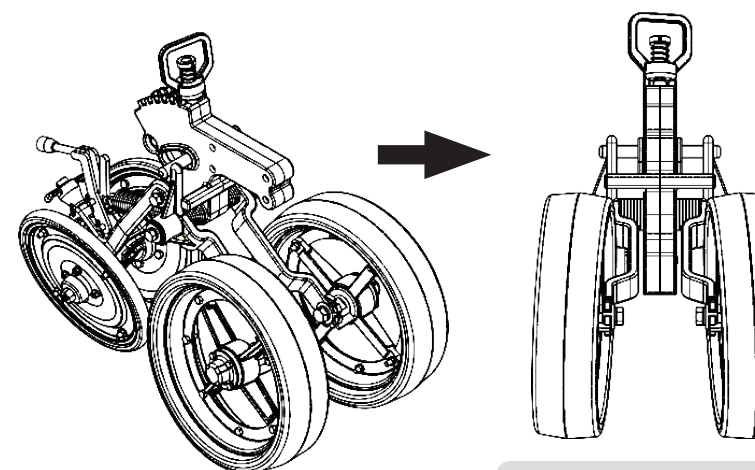
ATTENTION

Do the same procedure for the other wheel support (6) and for all wheels with oscillating depth.

Figures 60



Wheel Position Closed



Open Wheel Position

ADJUSTMENT OF FERTILIZER DEPTH AND PRESSURE IN THE SEED LINES (FIGURE 61)

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.

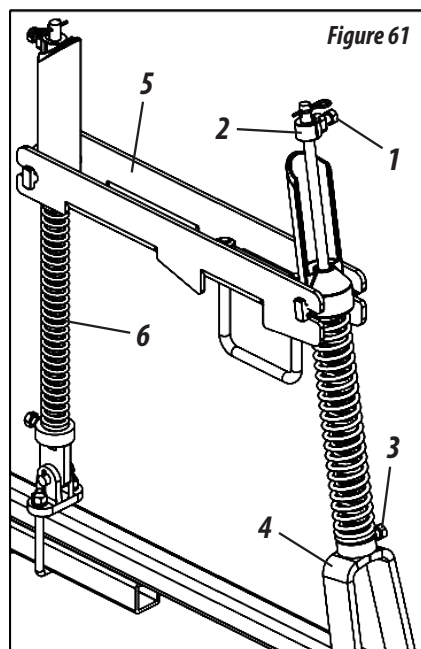
- 1- Loosen the screw (1) and place the bushing (2) upwards.

TO DECREASE DEPTH.

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

TO INCREASE PRESSURE:

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



IMPORTANT

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

NOTE

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

ATTENTION

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

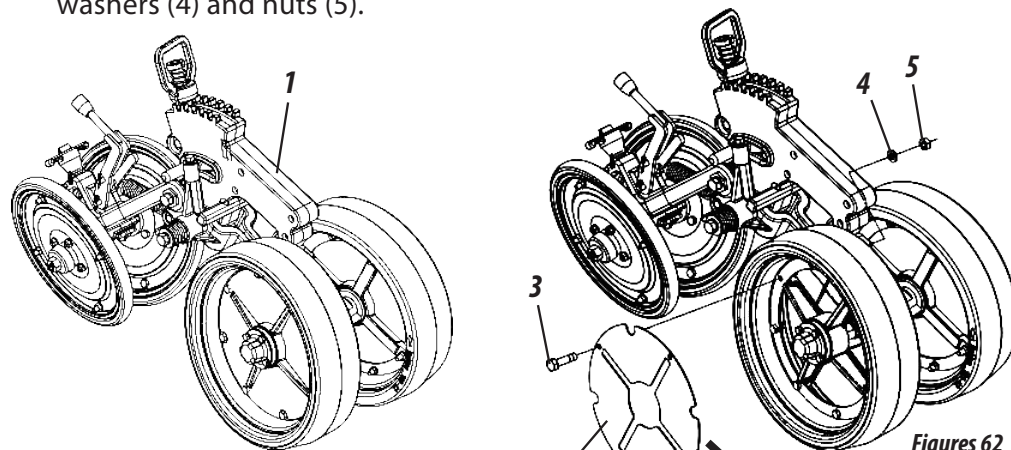
LINE ADJUSTMENTS

OSCILLATING CART WITH OPTIONAL PROTECTION RING (FIGURE 62)

The planting lines of the **PP Solo 3rd Seed Box** 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 **PP Solo 3rd Seed Box** 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:

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



*Cart with Eccentric/Oscillating Depth Wheel
and "V" Wheel (Manual Adjustment)
with Protection Rim - Code: 51240106497*

*Protection Ring for Oscillating Wheel
Code: 50180100609*

ATTENTION

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

OPERATION

FIXATION AND WHEEL ARTICULATION SYSTEM (FIGURE 63)

The fixing and articulation system of the tires make them free 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 distribution of fertilizer and seed not interrupted.

- 1- For conventional planting, lock the wheels with the screw (1).
- 2- For direct planting, the wheels operate free and if necessary, add 3/4" of water to the tires.
- 3- The wheels (2) are equipped with traction springs (3), for greater adherence to the ground. Do not operate the seeder without it.

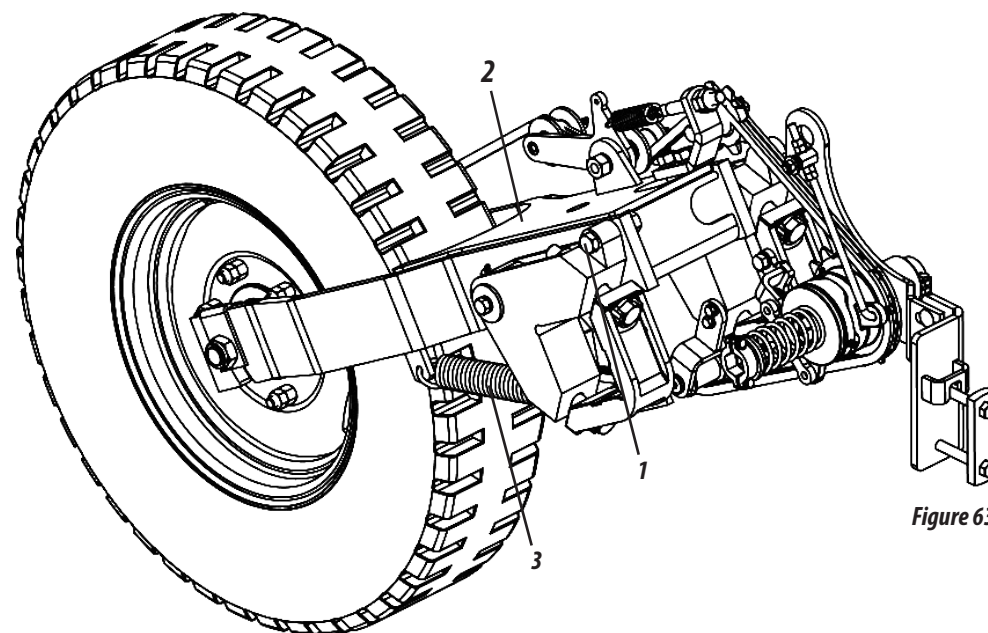


Figure 63

RECOMMENDATIONS FOR OPERATION

- 01 - After the first day of work with the seeder, 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.

OPERATING RECOMMENDATIONS - CONTINUED

- 06 - Always keep the seeder levelled, the tractor drawbar must remain fixed and the working speed should remain constant.
- 07 - Always check the seed depth and the pressure of the compacting wheels.
- 08 - Note the position of the fertilizer in relation to the seed in the soil.
- 09 - Performing any check or maintenance on the seeder, lower it to the ground and switch off the tractor engine.
- 10 - Do not make sharp turns with the seed drill while working, especially in no till farming . The components of the lines may be damaged.
- 11 - Do not partially activate the hydraulic cylinders. The drive for both raising and lowering the seed drill must always be complete.
- 12 - The seeder has several adjustments but only local conditions can determine the best fit.
- 13 - Fill the seeder only at the job site.
- 14 - Do not transport or work with an overloaded seeder.
- 15 - Right and left side indications are made by observing the seeder from behind.
- 16 - **PP Solo 3rd Seed Box** operates with greater efficiency in the range of 5 to 7 km/h.
- 17 - If in doubt, never operate or handle the seeder, consult After Sales.
- 18 - Telephone: 0800 152577 or email: posvenda@baldan.com.br

MAINTENANCE

TIRE PRESSURE (FIGURE 64)

- 1- The tires must always be correctly calibrated, avoiding premature wear due to excess or lack of pressure and ensuring precision in dispensing.
- 2- The tire calibration of the **PP Solo 3rd Seed Box** must be **70 lb /in²** for each one.

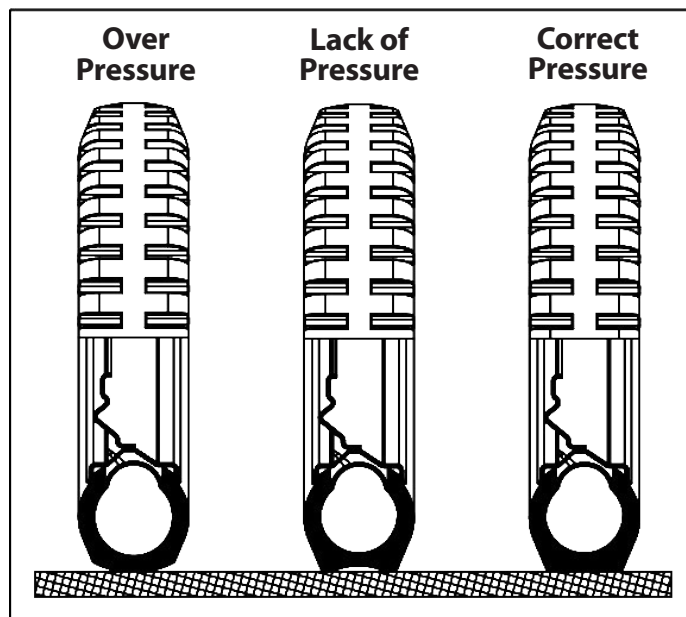


Figure 64

⚠ ATTENTION

When calibrating the seeder tires, do not exceed the recommended calibration. Always keep all tires of the same type with the same calibration to avoid wear and maintain uniformity of planting.

LUBRICATION

- 3- Lubrication is indispensable for good performance and longer durability of the moving parts of **PP Solo 3rd Seed Box** contributing to savings in maintenance costs.
- 4- Before starting the operation, carefully lubricate all grease fittings, always observing the lubrication intervals on the following pages. 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 (TABLE 13)

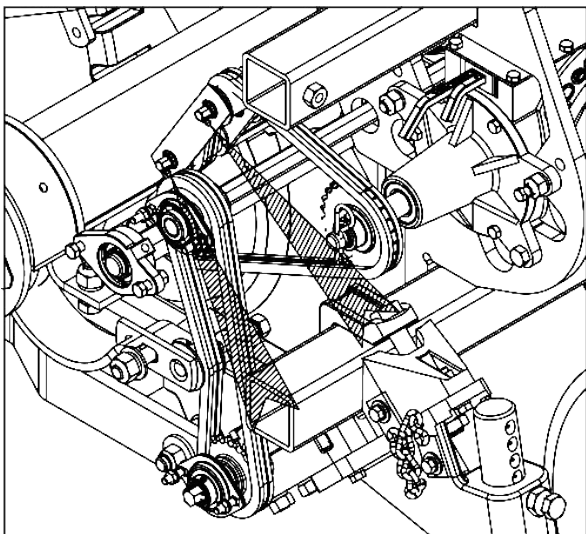
MANUFACTURER	TYPE OF GREASE RECOMMENDED
Petrobrás	Lubrax GMA 2
Atlantic	Litholine MP 2
Ipiranga	Super Graxa Ipiranga Ipíanga Super Graxa 2 Ipiflex 2
Castrol	LM 2
Mobil	Mobilgrease MP 77
Texaco	Marfak 2 Agrotex 2
Shell	Retinax A Alvania EP 2
Esso	Multipurpose grease H
Bardahl	Maxlub APG 2 EP

Table 13

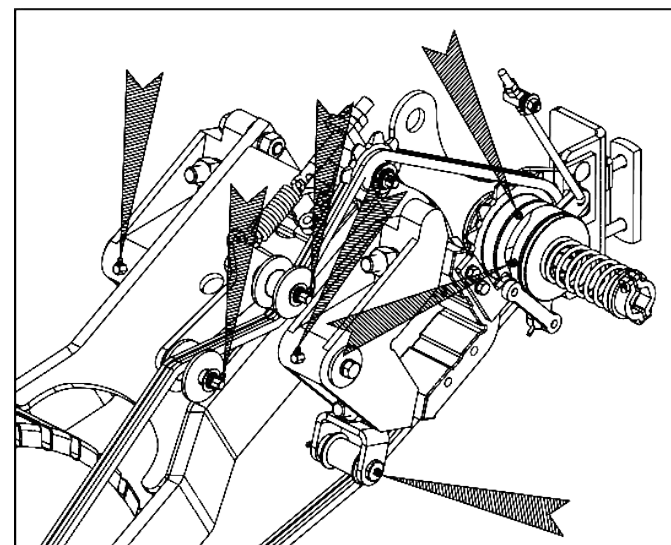
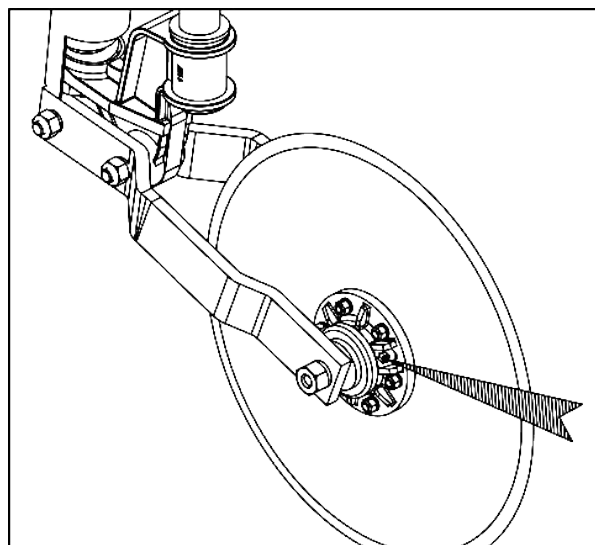
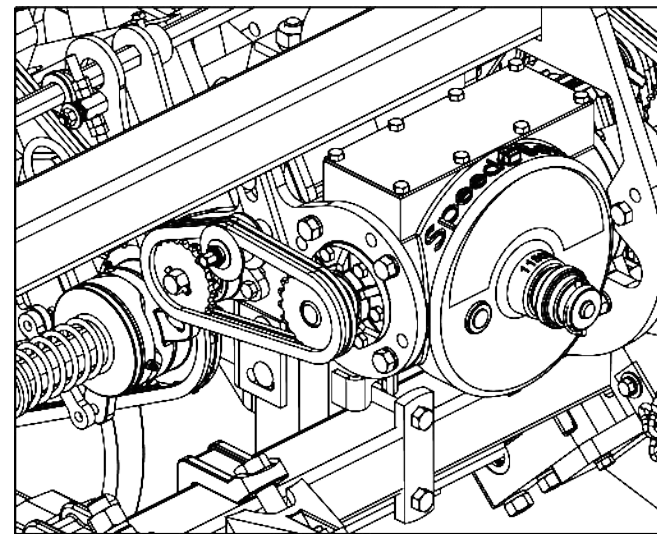
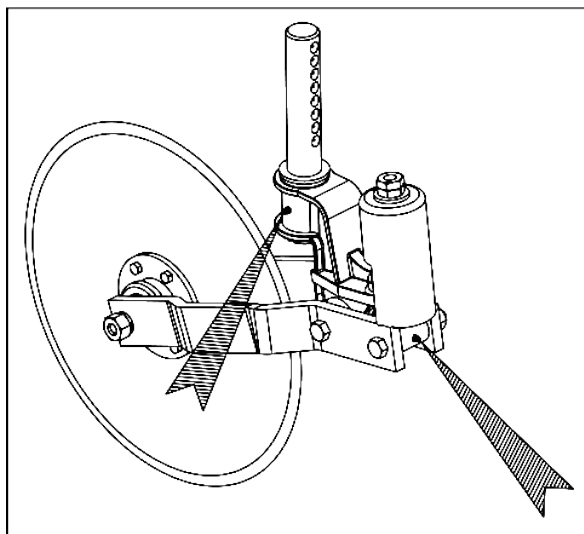
Ⓢ IMPORTANT

If there are other lubricants and/or brands of equivalent greases listed in this table, consult the technical manual of the lubricant manufacturer.

LUBRICATE EVERY 10 HOURS OF WORK (FIGURES 65)



Figures 65



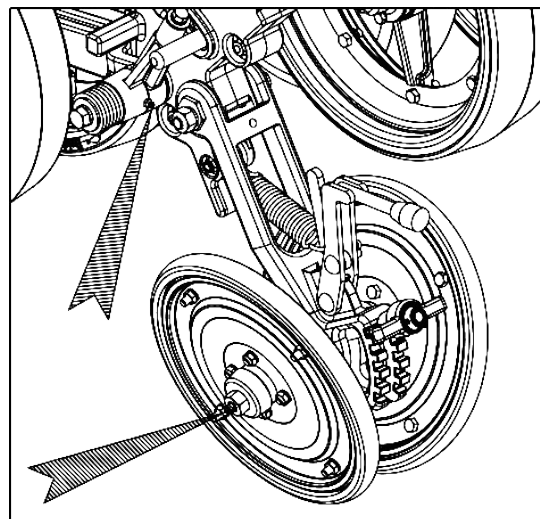
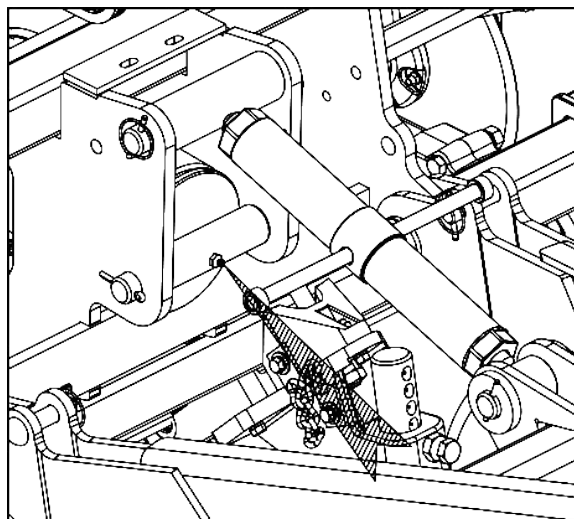
ATTENTION

Do not put excess grease, observe the lubrication intervals.

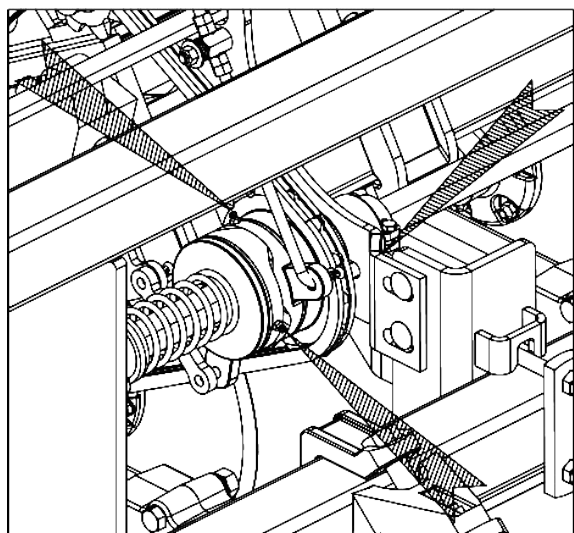
MAINTENANCE

MAINTENANCE

LUBRICATE EVERY 10 HOURS OF WORK - CONTINUED (FIGURES 65)

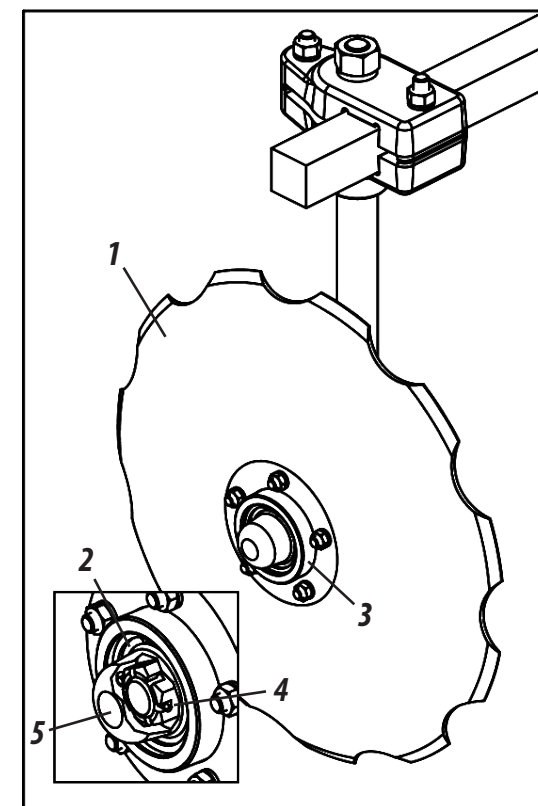


Figures 65



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

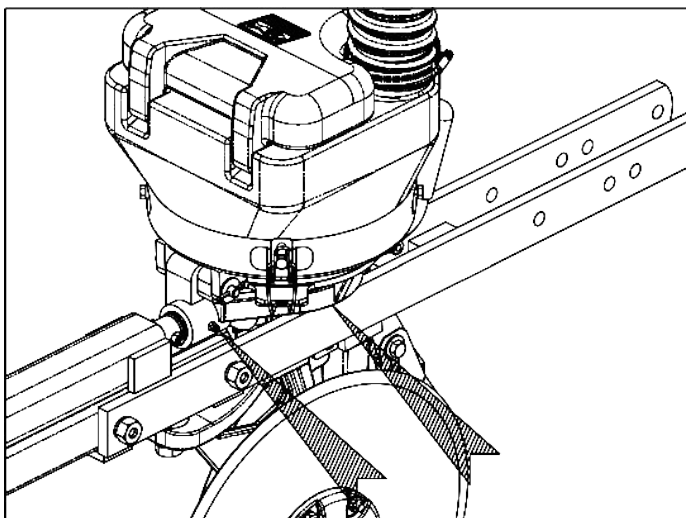
- 1- Remove the retaining ring (2) from the hub (3). Examine the bearings and if there are gaps, adjust using the castle nut (4). Place new grease on the cap (5) Put the hub cap (5) back on the hub and secure it with the retaining ring (2).



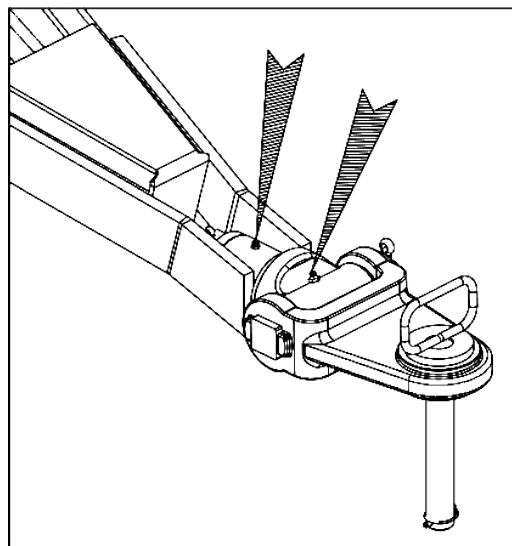
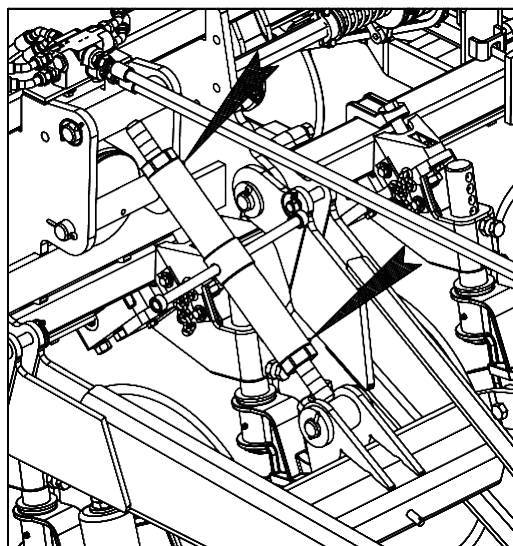
ATTENTION

Do not put excess grease, observe the lubrication intervals.

LUBRICATE EVERY 30 HOURS OF WORK (FIGURE 66)



Figures 66



LUBRICATE EVERY 60 HOURS OF WORK (FIGURE 67)

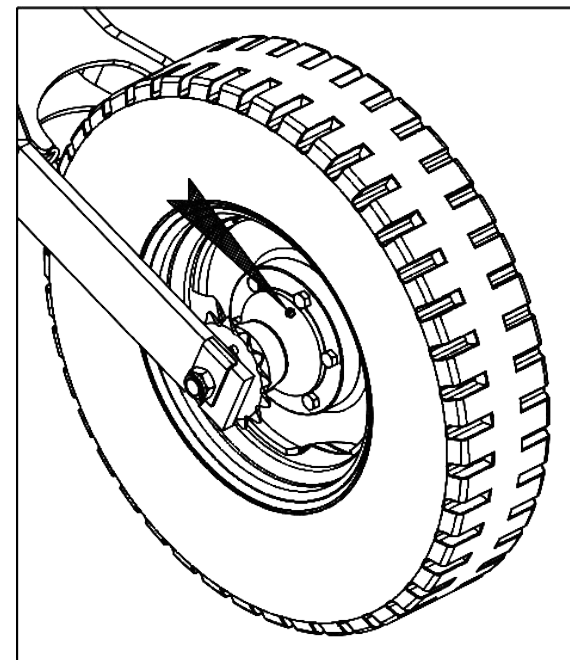


Figure 67

MAINTENANCE



ATTENTION

Do not put excess grease, observe the lubrication intervals.

MAINTENANCE

LUBRICATE EVERY 200 HOURS OF WORK (FIGURE 68)

Periodically lubricate the compactor wheels (1) approximately every 200 hours and at the end of the harvest, proceed as follows:

- 1- On the compacting wheels (1) loosen the screws and washers (2) remove the hubcap (3) and insert new grease. Replace the cap (3) on the compactor wheels (1) and secure it with the screws and washers (2).

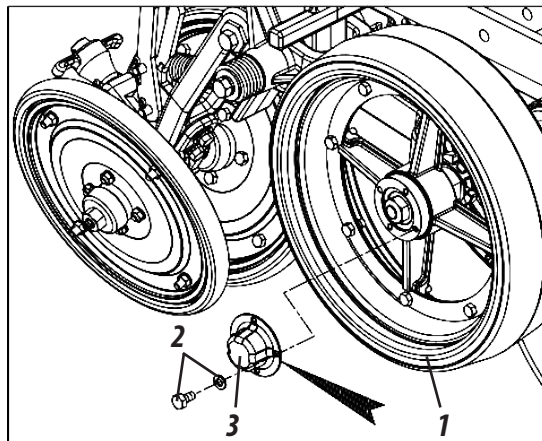


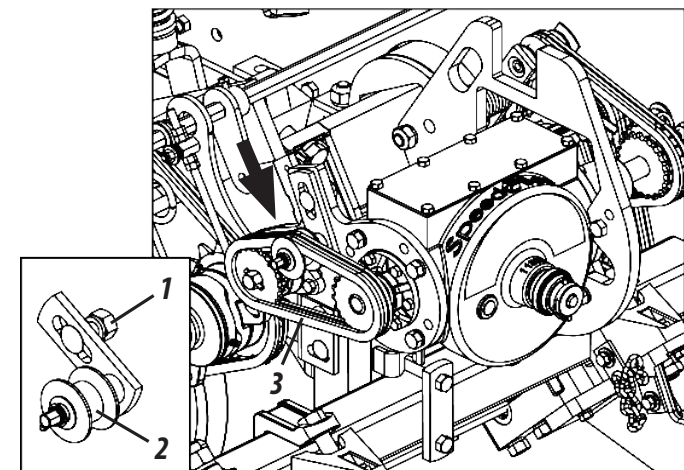
Figure 68

CHAIN TENSION (FIGURE 69)

To tension the chain, proceed as follows:

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

Figure 69



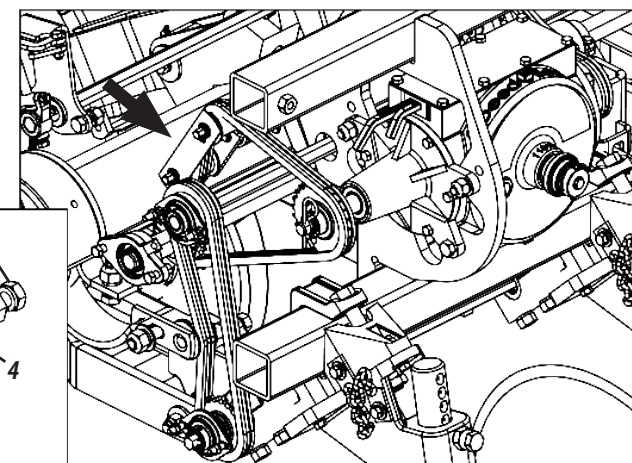
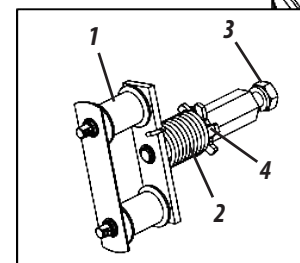
⚠ ATTENTION

Check chain tension daily, normal clearance should be ± 1 cm in the center of the chains.

OSCILLATING STRETCHER (FIGURE 70)

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.

Figure 70



OPERATIONAL MAINTENANCE

PROBLEMS	PROBABLE CAUSES	SOLUTIONS
One planting line is less shallow than the other.	Different pressure settings on the depth limiting wheels or line springs.	Set all depth wheels equally and the pressure of the line springs.
The ridge is too open during planting.	Sticky soil that sticks to the discs or excessive work speed.	Decrease work speed.
Strange noise when operating or moving with a loaded seeder.	Loose wheels or wheel set.	Re-tighten the wheel nuts. Adjust the wheel hub bearings.
The seeder leaves the planting line, sometimes to one side, sometimes to the other in width.	Tractor drawbar loose.	Use the pin that comes with the seeder. 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, raise the seeder and then do not 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

MAINTENANCE

CAUTIONS

- 1- Check the condition of all pins and screws before starting to use the seeder.
- 2- Travel speed must be carefully controlled according to terrain conditions.
- 3- Baldan seeders are used in several applications, requiring knowledge and attention during its handling.
- 4- Only local conditions can determine the best way of operating the seeder.
- 5- When assembling or disassembling any part of the seeder, use suitable methods and tools.
- 6- Observe the lubrication intervals carefully at the different points of the seeder.
- 7- Always check if the parts are worn. If replacement is required, **always require original Baldan parts.**

GENERAL CLEANING

- 1- When storing the seeder, do a general cleaning and wash it only with water. Make sure the paint is not worn, if that has happened, give it a full coating of paint, use protective oil and fully lubricate the seeder. Do not use burnt oil and/or diesel oil.
- 2- At the end of planting, proceed as follows:
 - Remove the transmission chains and keep them bathed in oil until the next planting.
 - Remove all seed hoses immediately by washing them with water and neutral soap. Do not use other chemicals.
- 3- Fully lubricate the seeder. Check all moving parts of the same, if they show wear or looseness, make the necessary adjustment or replacement of the parts, leaving the seeder ready for the next planting.
- 4- After all maintenance work, store the seeder in a covered, dry place, properly supported. Prevent the discs from being directly in contact with the ground.
- 5- When connecting or disconnecting the hydraulic hoses of the seeder, do not let the ends touch the ground. Before connecting the hydraulic hoses, clean the connections with a clean, lint free cloth **(do not use tow)**.
- 6- Replace all stickers that are damaged or missing, especially warnings. Make everyone aware of their importance and the dangers of accidents when instructions are not followed.
- 7- We recommend washing the seeder only with water at the beginning of work.

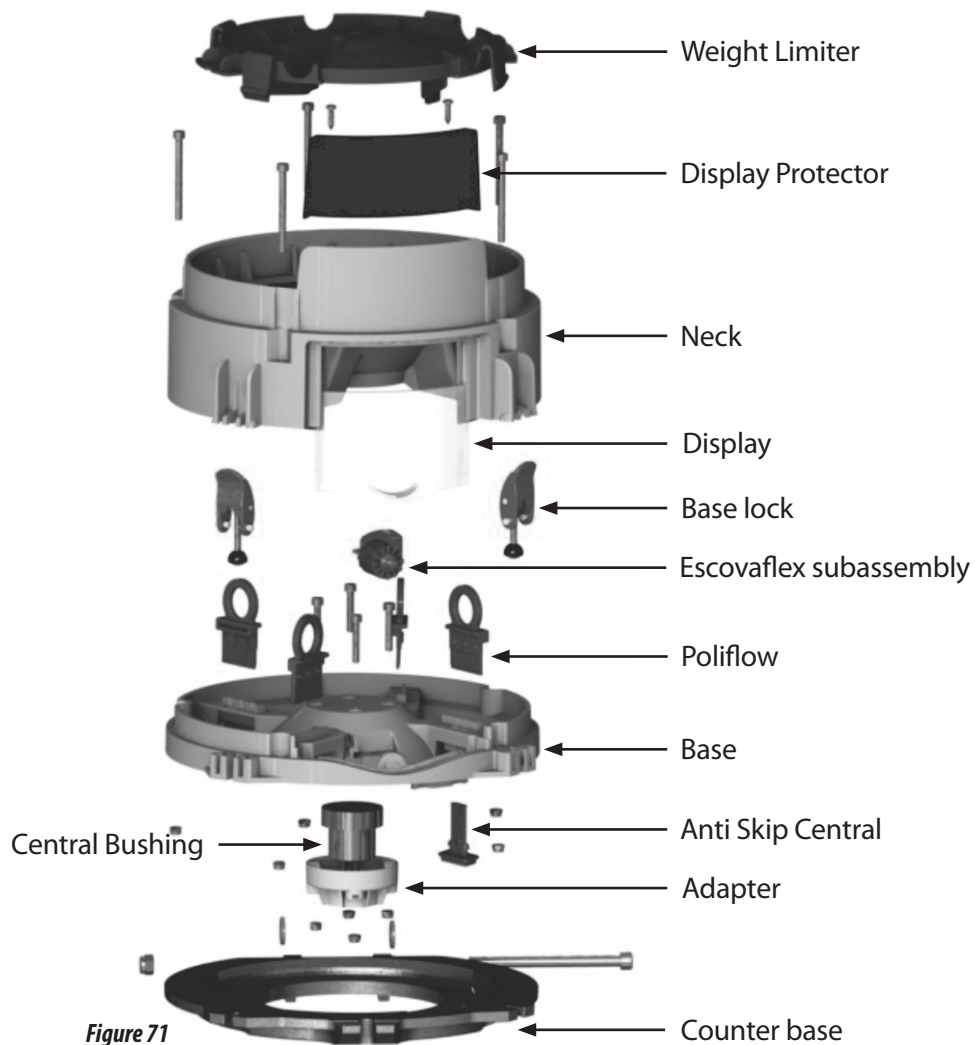


ATTENTION

Do not use chemical products to wash the seeder, as this may damage the painting and adhesives.

TITANIUM BATCHER - OPTIONAL (FIGURE 71)

PP Solo 3rd Seed Box can be purchased optionally with the **TITANIUM** seed dispenser. See below, the components that make up **TITANIUM**.



CHANGING THE TITANIUM BATCHER POLIFLOWS - OPTIONAL (FIGURES 72)

The change can be done manually or with universal pliers.

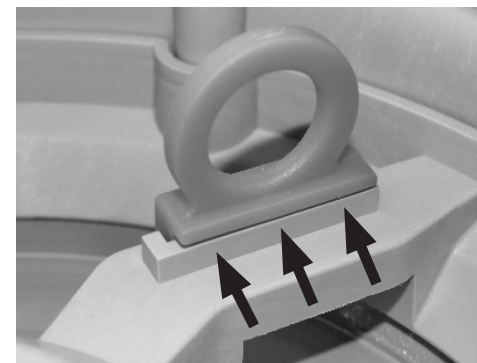
2nd Step: When fitting the **POLIFLOW**, make sure it is in the correct position.



1st Step: Remove the weight limiter. Pull the **POLIFLOW** with your finger or pliers.



3rd Step: Insert it until the faces come together.



Figures 72

MAINTENANCE

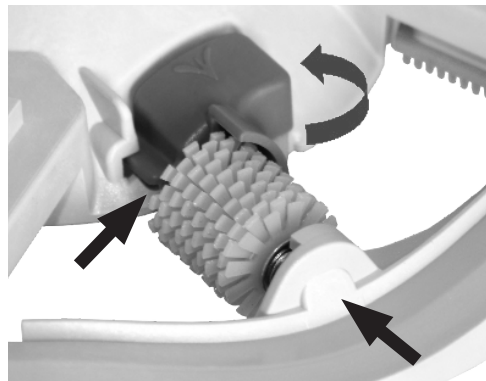
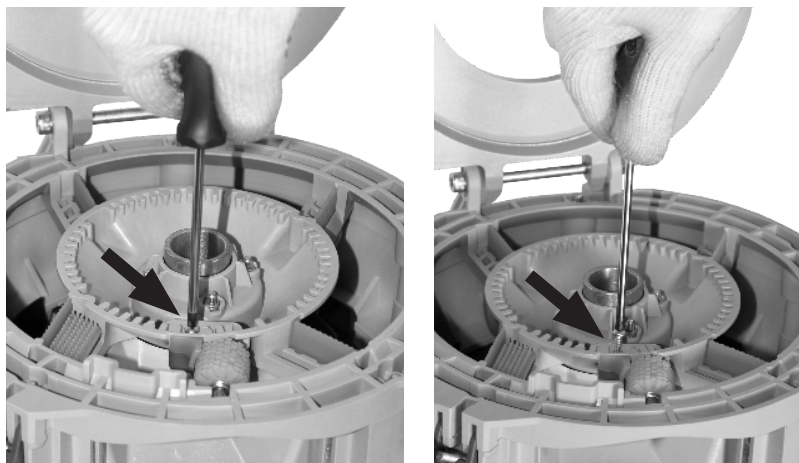
MAINTENANCE

CHANGING ESCOVAFLEX OF THE TITANIUM BATCHER - OPTIONAL (FIGURES 73)

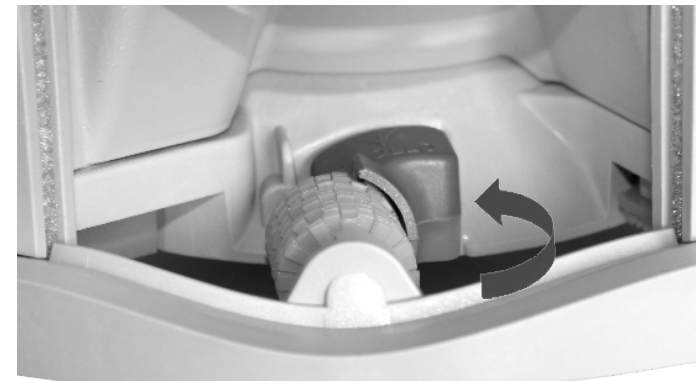
The change must be done with a **Philips screwdriver no. 2**.
Unlock and open the counter base. Then, loosen the screw.

Rotate the **ESCOVAFLEX** counterclockwise and raise the rear diagonally.

Figures 73



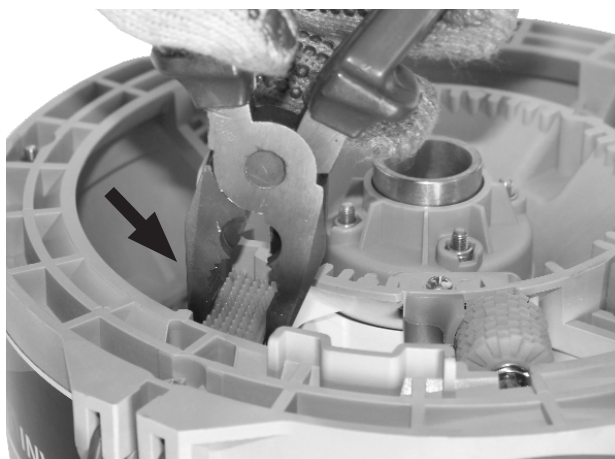
Note: The side of the support must fit into the base.



ESCOVAFLEX also fits the base, so when replacing the used one with a new one, confirm that it is properly fitted.

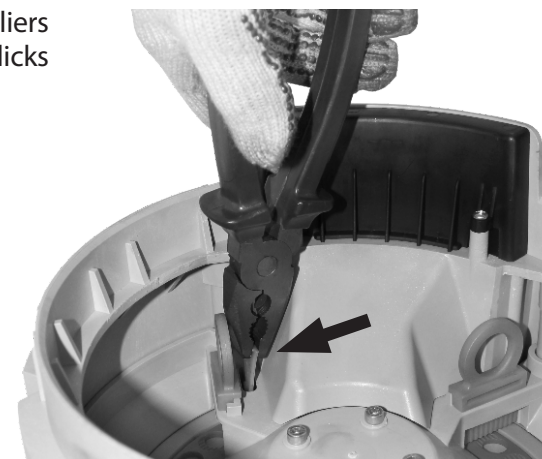
CHANGING THE TITANIUM DOSER ANTI SKIP - OPTIONAL (FIGURES 74)

Use universal pliers.
With pliers, remove the **ANTI SKIP**.



Figures 74

Fit the **ANTI SKIP** and with pliers inside the box, pull until it clicks into the base.



CHANGING DISCS AND RINGS ON THE TITANIUM BATCHER - OPTIONAL (FIGURES 75)

To change or replace the discs and rings on the Titanium seed feeder (optional), proceed as follows:

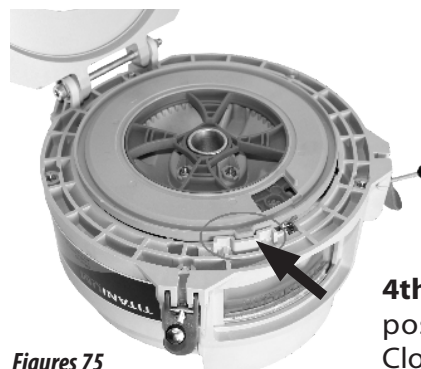
1st Step: Open the locks (1).



3rd Step: When placing the new disc, make sure it is in the correct position. Fit the central hole of the disc in the centering sleeve.



2nd Step: Tilt the counter base (2) and remove the ring (3) and disc (4).



Figures 75

4th Step: Fit the adapter ring to the disc, obeying the positioning. Close the counter base, lock the system.



NOTE

If there are seeds in the deposit, remove them before changing the disc and ring, preventing them from spreading on the floor or locking the system.

TITANIUM BATCHER CLOSING PRECAUTIONS - OPTIONAL

When you notice difficulties when closing the **TITANIUM** batcher, follow these steps:

- 1° Check that the disc and ring have been correctly installed in the housing.
- 2° Check if there is dirt in the counter base of the **TITANIUM** dispenser, if necessary, clean it according to the instructions on the next page and in the manufacturer's manual.
- 3° Adjust the latches, providing ease when opening the **TITANIUM** dispenser and also providing a light grip when closing.



ATTENTION

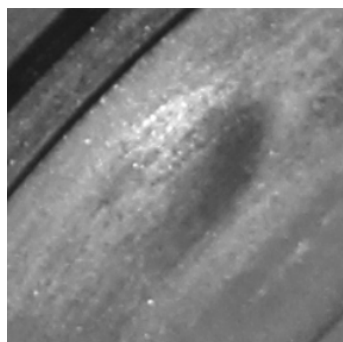
Never leave the latches loose, they directly influence plantability in cases of disc and ring looseness.

MAINTENANCE

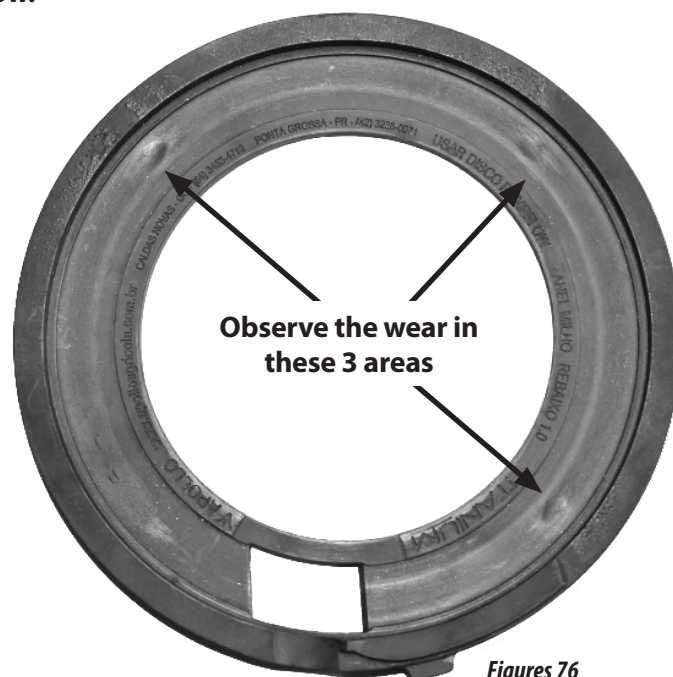
MAINTENANCE

RING CHANGE WITH EACH NEW PLANTING TITANIUM BATCHER - OPTIONAL (FIGURES 76)

To maintain the excellence and efficiency of the **TITANIUM** dispenser, it is necessary to change the rings with each new planting, factors such as the use of graphite and the number of hours worked directly influence this wear. In tests carried out it is concluded that a worn ring can increase the number of double seeds in the same hole of the disc. **See example of the ring below.**



Wear very evident in this area that can cause double (two seeds in the same hole of the disc).



Figures 76



NOTE

*At the end of planting, it is recommended to dismantle the **TITANIUM** batcher disc and ring.*

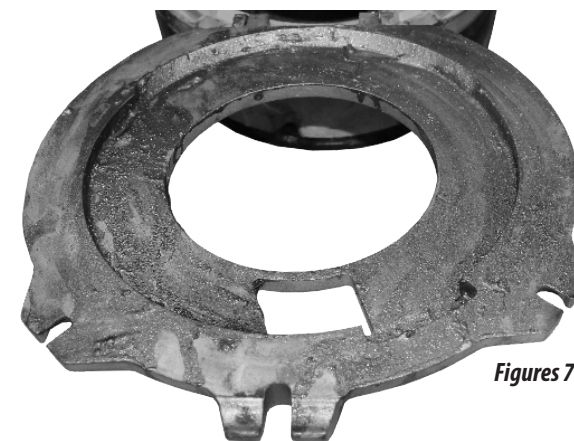


ATTENTION

*For more information on the **TITANIUM** seed dispenser, consult the manufacturer's instruction manual on the website: www.assy.com.br*

CLEANING THE TITANIUM BATCHER - OPTIONAL (FIGURES 77)

After planting is complete, clean the **TITANIUM** batcher disc and ring housing. It should be washed with a brush and neutral detergent, **do not use corrosive products such as automotive shampoo, among others.**



Figures 77

Counter base of the **TITANIUM** dosing pump dirty and crusted.

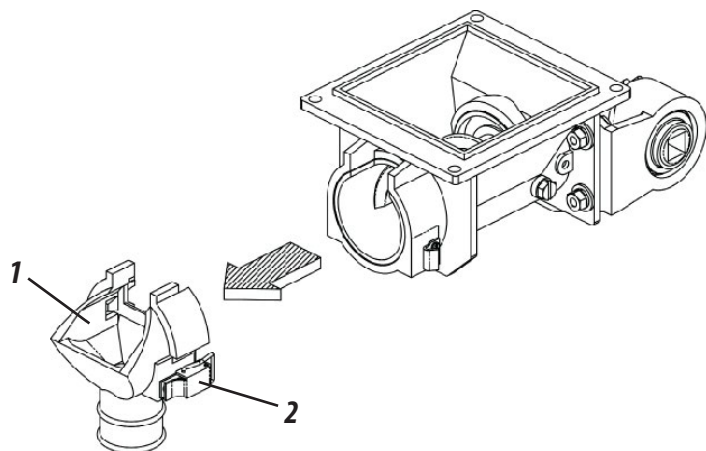


Wash with a brush and neutral detergent, rubbing well to remove all dirt.

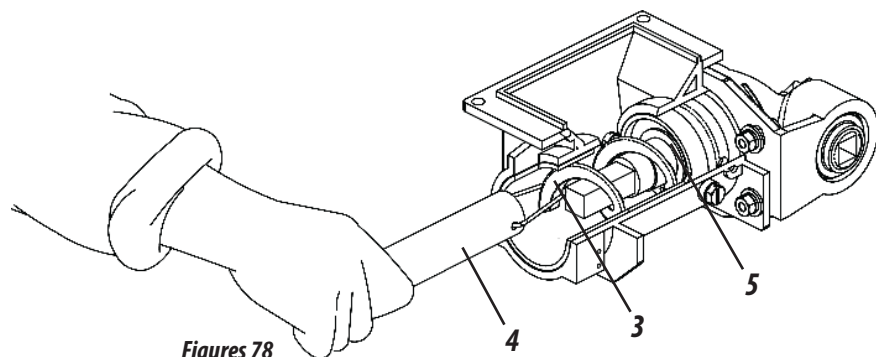
FERTISYSTEM CONDUCTOR CLEANING (FIGURES 78)

After planting, do not leave fertilizer in the tank. To clean, proceed as follows:

1- Remove the nozzle (1) through the quick coupler (2).

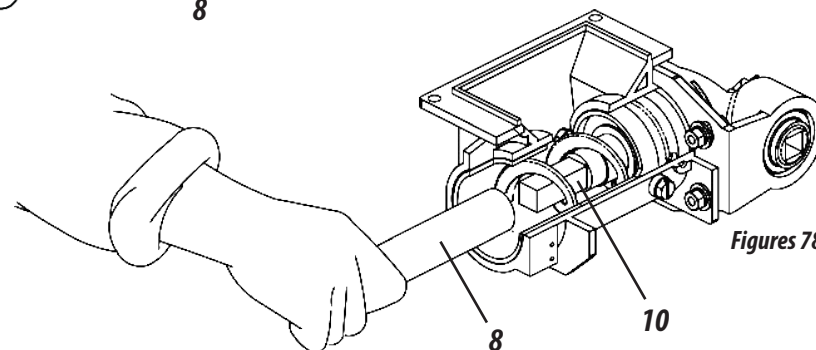
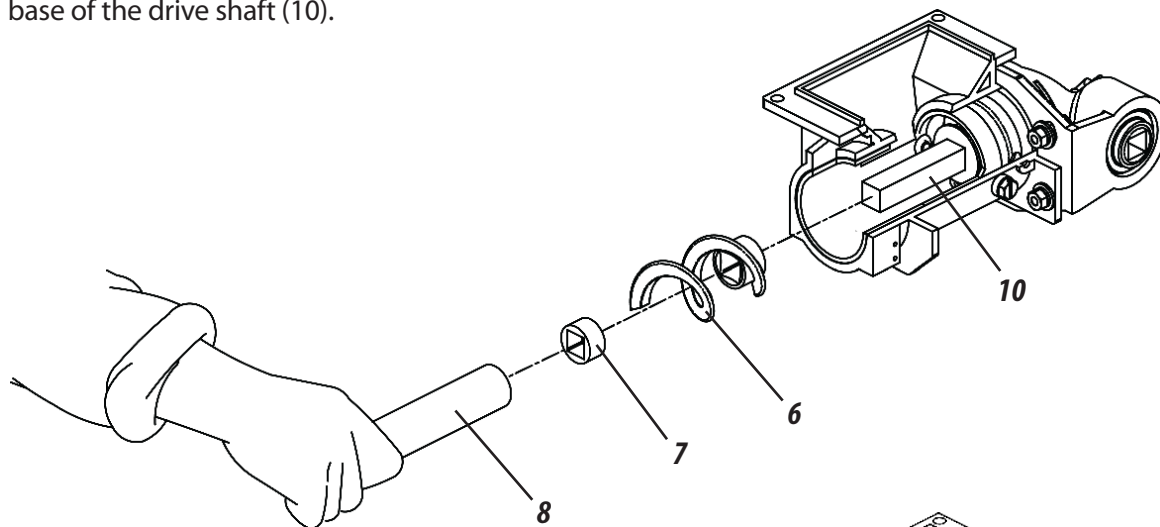


2- Remove the worm spring (3) by pulling it through the retaining tube ring (4) and removing the locking ring (5).



Figures 78

3- After cleaning, replace the worm spring (6), together with the locking ring (7), through the fixing tube (8), making sure that the worm spring (6) and the locking ring (7) are well positioned at the base of the drive shaft (10).



Figures 78



ATTENTION

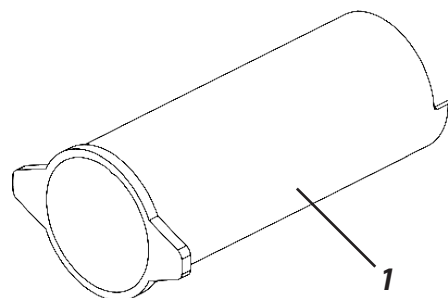
Keep the worm spring in place with the locking ring. This procedure will prevent damage to the transverse lid when not using the batcher with fertilizer or when transporting the seeder. Failure of the locking ring can lead to damage of the fertilizer dispensing and/or transmission of the seeder.

MAINTENANCE

MAINTENANCE

FERTISYSTEM CONDUCTOR MAINTENANCE TUBE (FIGURES 79)

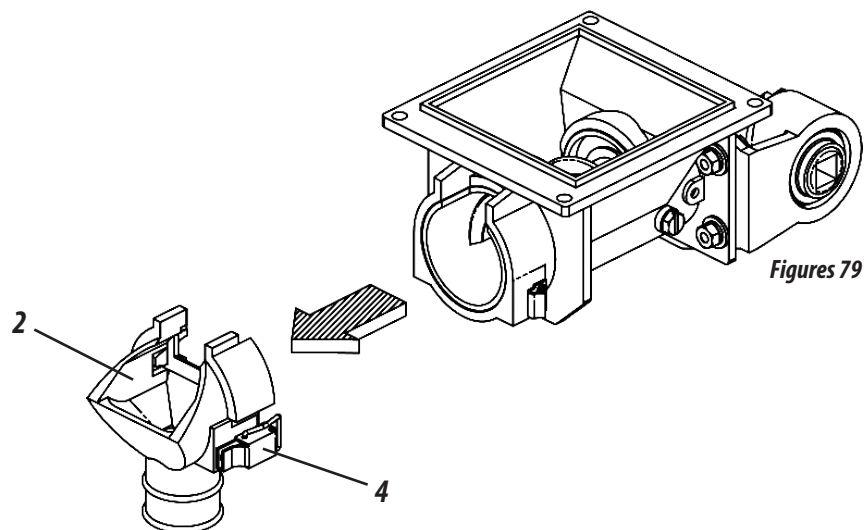
The **PPSolo 3rd Seed Box** seeder when sold with the Fertisystem driver comes with a maintenance tube (1) to carry out maintenance or changes to the endless spring, without the need to remove the fertilizer from the box.



Tube Maintenance
Code: 60203900930

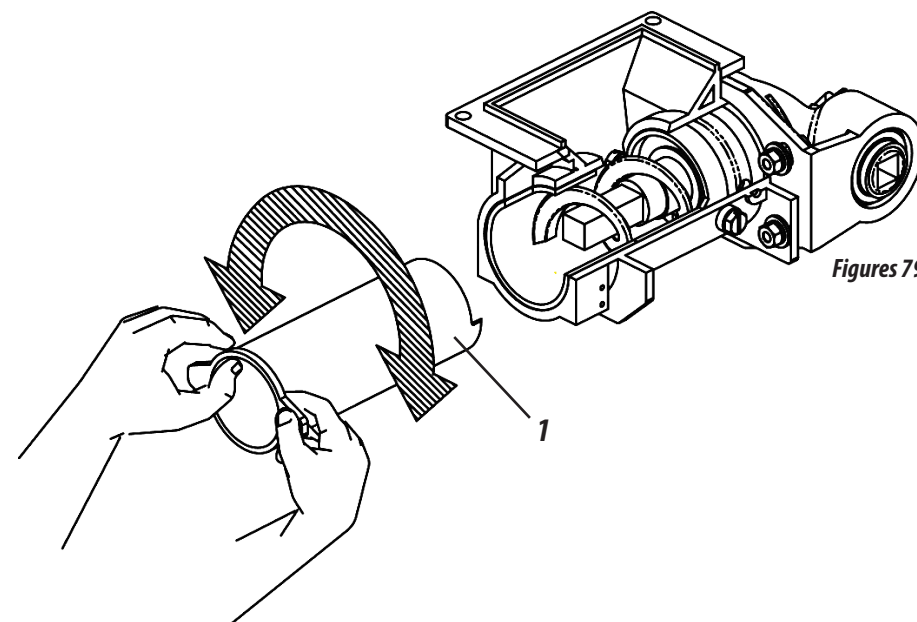
To service the Fertisystem conductor, proceed as follows:

- 1- Remove the discharge nozzle (2) from the Fertisystem conductor (3) by releasing the quick latches (4).



Figures 79

- 2- Then introduce the maintenance tube 1 in rotating movements, removing the displacement of the fertilizer to the bottom of the batcher. Then perform the necessary maintenance.



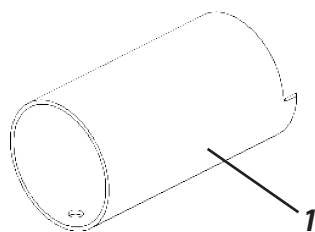
Figures 79

NOTE

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

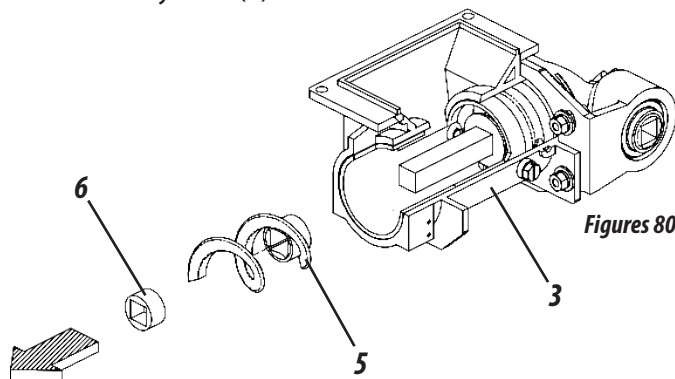
FERTISYSTEM CONDUCTOR BLOCKING TUBE (FIGURES 80)

The **PP Solo 3rd Seed Box** seeder, when sold with the Fertisystem driver, comes with a blocking tube so that when you need to isolate some plantation lines, fertilizer is not distributed.

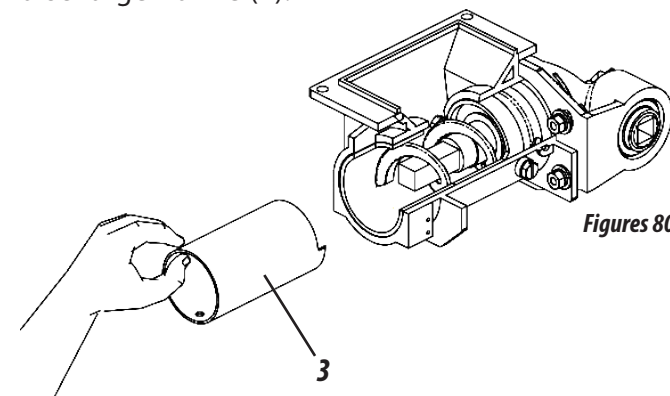


Tube Blocker
Code: 60203900913

Then, remove the worm spring (5) and the locking ring (6) from the Fertisystem (3).



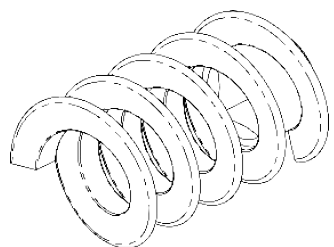
Then insert the release tube (1) and replace the discharge nozzle (2).



SPRINGS AND CAPS (OPTIONAL) FERTISYSTEM CONDUCTOR (FIGURES 81)

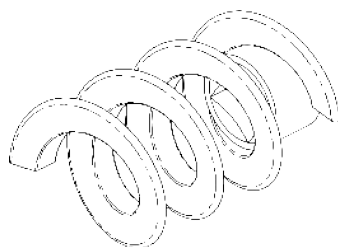
The **PP Solo 3rd Seed Box** seeder leaves the factory assembled with a 2" endless spring, however the seeder comes with a 1" endless spring package in its packaging. The seeder can also be supplied with 3/4" pitch endless spring (**optional**).

The **PP Solo 3rd Seed Box** seeder leaves the factory with the transverse flow cap (**standard**) but the seeder can be supplied with two other flow cap models (**optional**).

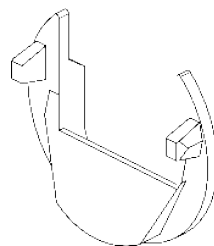


Worm Spring (Step 3/4")
Code: 60203700418

Figures 81

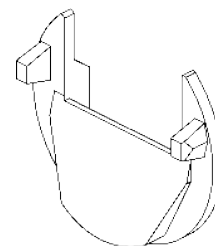


Worm Spring (Step 1")
Code: 60203700426



Fertipó Cap
Code: 60203900530

Figures 81



High Flow Cap
Code: 60203900522

NOTE

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

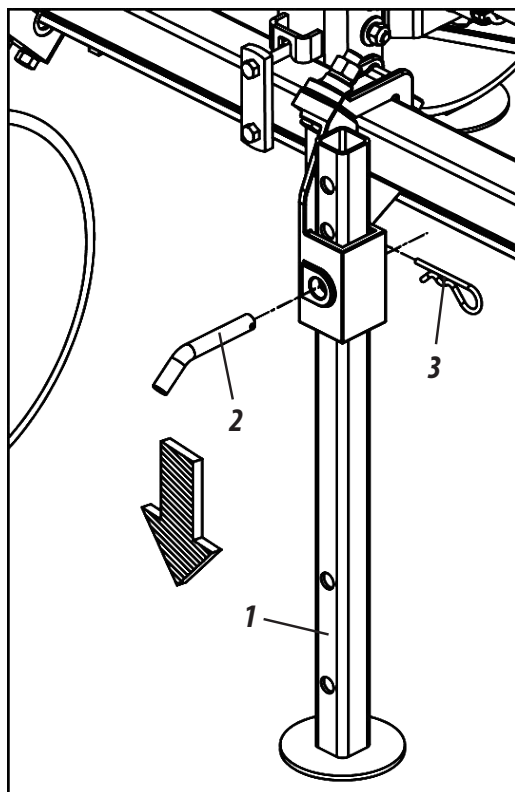
MAINTENANCE

MAINTENANCE

TIRE PRESSURE (FIGURE 82)

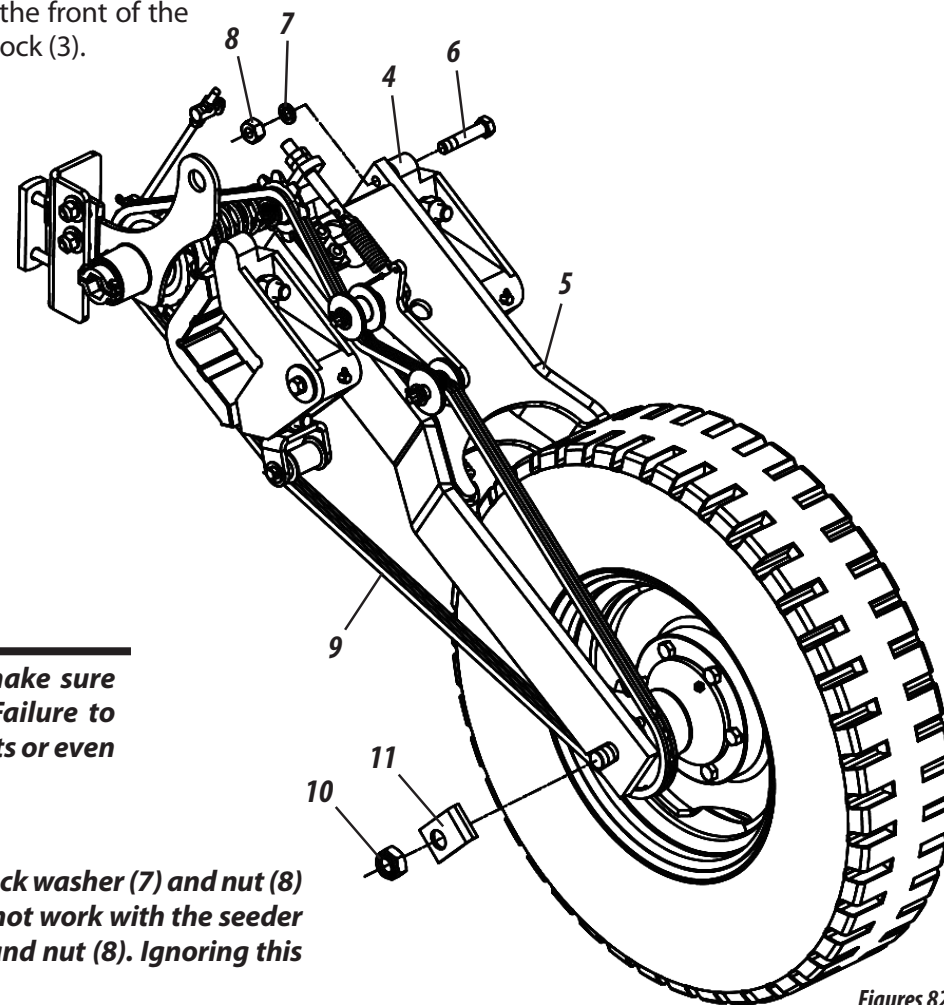
If necessary, change or repair the tire for this, proceed as follows:

1- First, support the **PP Solo 3rd Seed Box** on the rear so that it is stabilized.



Figures 82

- 2- Then, lower the support brackets (1) on the front of the seeder and fix them with the pin (2) and lock (3).
- 3- Then, lock the clamp (4) in the wheel support (5) through the screws 6 pressure washer (7) and nut (8).
- 4- Then, fully collect the hydraulic cylinder by suspending the tire from the ground.
- 5- Finally, remove the chain (9) loosen the nuts (10) and the lock (11) to remove the tire.



Figures 82

IMPORTANT

Before changing or repairing the tire, make sure that the seeder is properly supported. Failure to do so can cause damage, serious accidents or even death.

ATTENTION

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 the screw (6) lock washer (7) and nut (8). Ignoring this warning will cause failures in planting the seeder.

The **PP Solo 3rd Seed Box** seeder has options that can be purchased according to the need for work. Among the options available are:

HYDRAULIC TRIMMING SYSTEM - OPTIONAL 4000 TO 7500 MECHANICAL RATCHET (FIGURE 83 / TABLE 14)

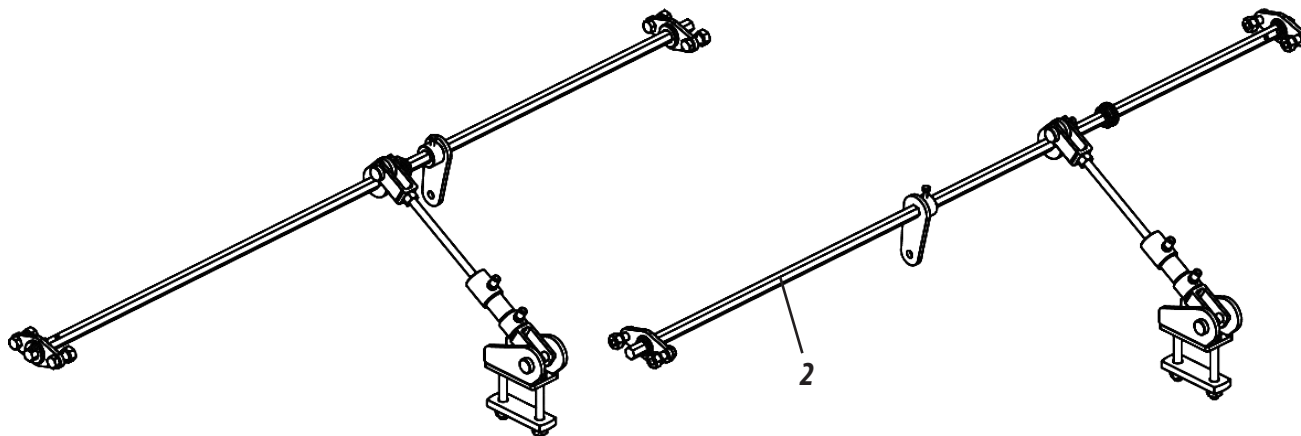
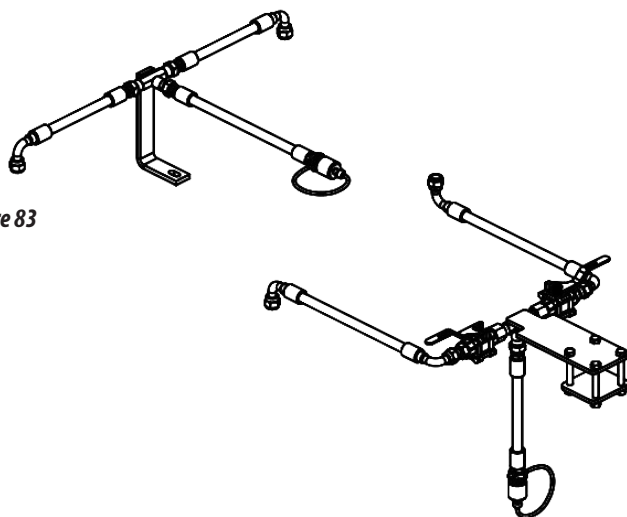


Figure 83



Hydraulic Trimming System	
Model	Code:
PP SOLO 3rd Seed Box 4000	55280107297
PP SOLO 3rd Seed Box 4500	55280107300
PP SOLO 3rd Seed Box 5000	55280107319
PP SOLO 3rd Seed Box 5500	55280107270
PP SOLO 3rd Seed Box 6500	55280107327
PP SOLO 3rd Seed Box 7500	55280107335

Table 14

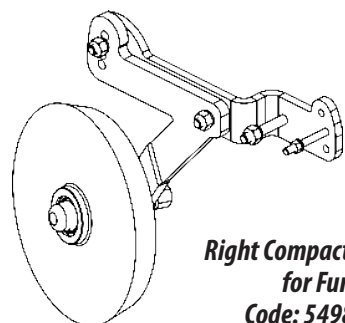
OPTIONAL

OPTIONAL

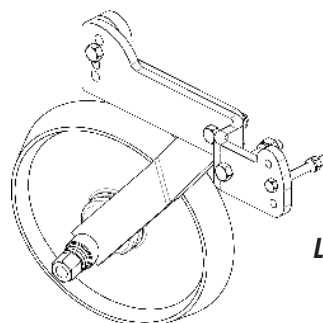
The **PP Solo 3rd Seed Box** seeder has options that can be purchased according to the need for work. Among the options available are:

COMPACTOR WHEELS - OPTIONAL (FIGURES 84

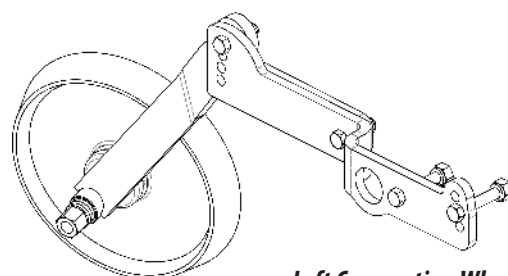
Figures 84



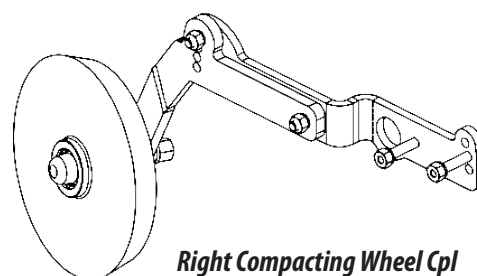
**Right Compacting Wheel Cpl
for Furrower**
Code: 54980100882



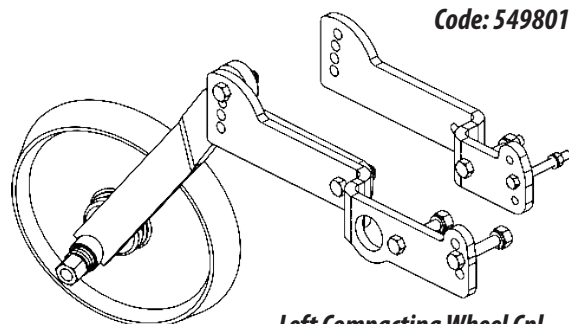
**Left Compactor Wheel Cpl
for Furrower**
Code: 54980100890



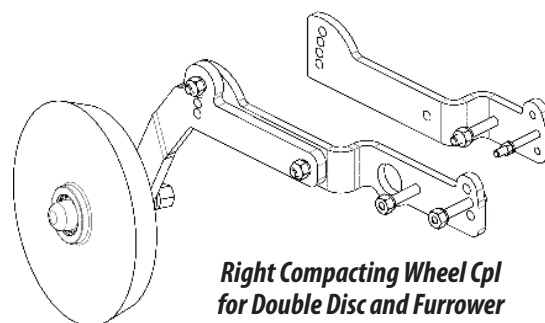
**Left Compacting Wheel Cpl
for Double Disc**
Code: 54980100904



**Right Compacting Wheel Cpl
for Double Disc**
Code: 54980100912



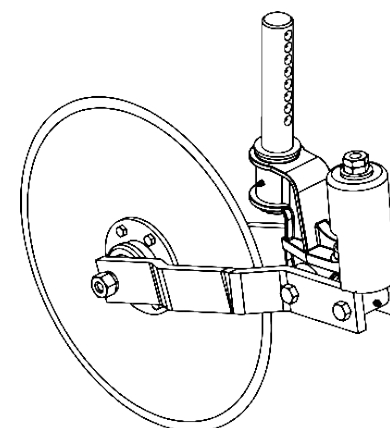
**Left Compacting Wheel Cpl
for Double Disc and Furrower**
Code: 54980101196



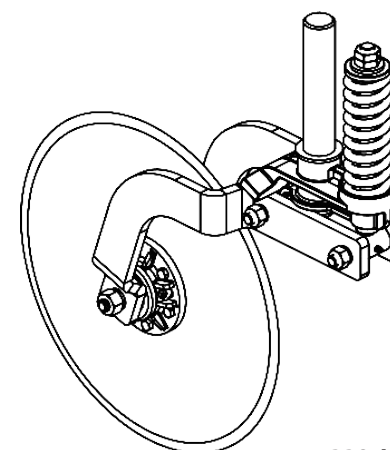
**Right Compacting Wheel Cpl
for Double Disc and Furrower**
Code: 54980101188

CUTTING DISC - OPTIONAL (FIGURES 85)

Figures 85



**Cutting Disc Cart
(Flat Disc 20" x 5mm)**
PPSolo 3rd Seed Box 4000 to 5500
Code: 51240101975

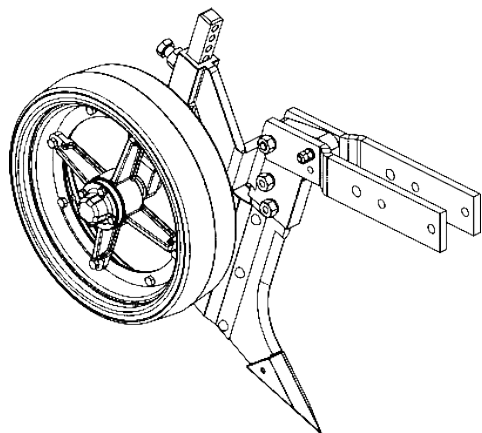


**Cutting Disc Cart
(Flat Disc 20" x 5mm)**
PPSolo 3rd Seed Box 6500 to 7500
Code: 51240101061

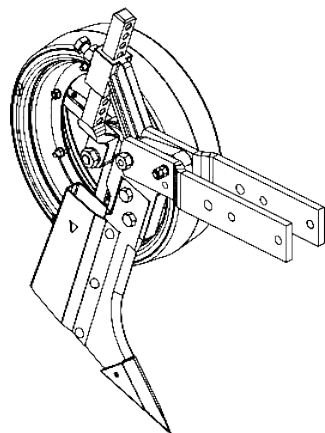
The **PP Solo 3rd Seed Box** seeder has options that can be purchased according to the need for work. Among the options available are:

FURROWERS - OPTIONAL (FIGURES 86)

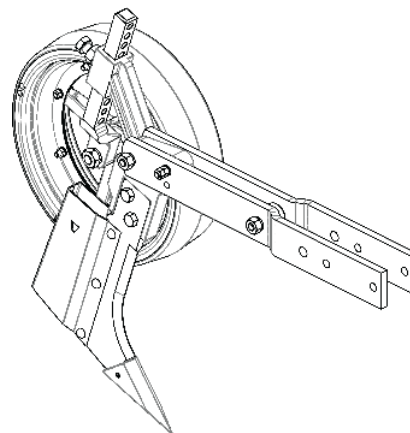
Figures 86



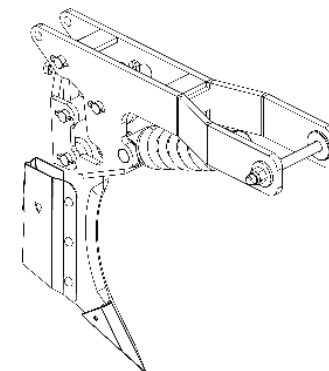
**Right furrower With Smaller Bar with
Depth Wheel**
Code: 55320101378



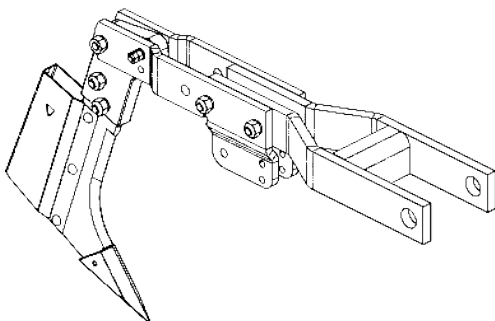
**Left Furrower with Smaller Bar with
Depth Wheel**
Code: 55320101386



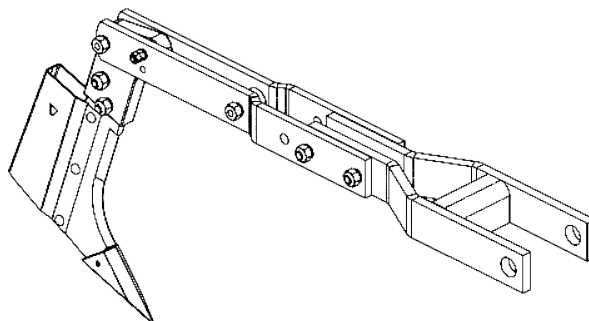
**Left Furrower with Bigger Bar
with Depth Wheel**
Code: 55320101394



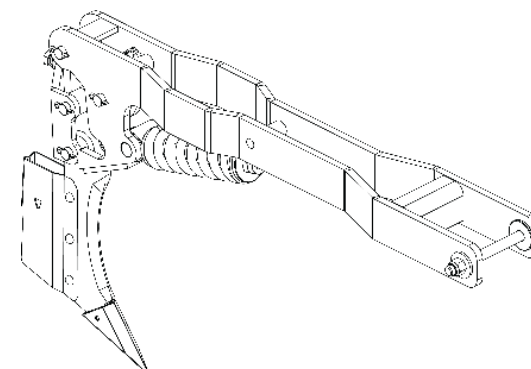
**Smaller Cpl Automatic
Disarm and Reset Plow**
Code: 55320101998



Smaller Fertilizer Furrower Cpl Code:
Code: 55320102021



Bigger Fertilizer Furrower Cpl
Code: 55320102030



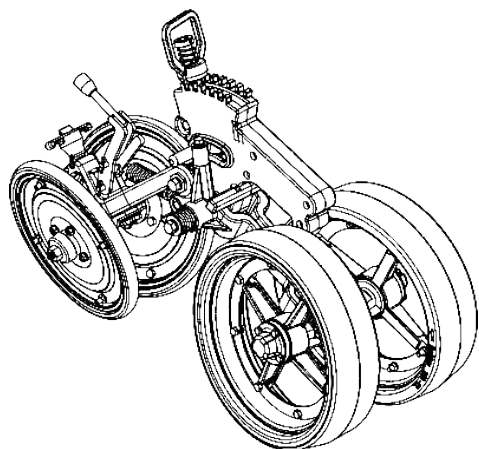
Bigger Cpl Automatic Disarm and Reset Furrower
Code: 55320101980

OPTIONAL

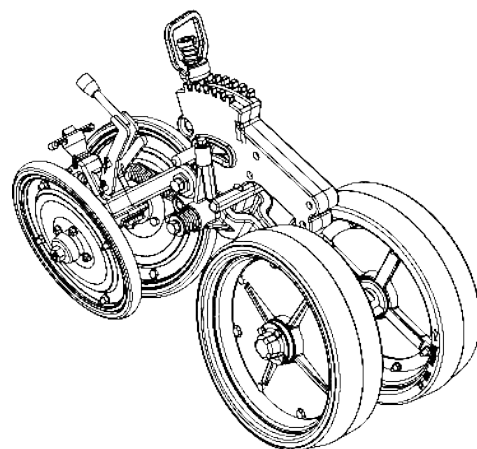
OPTIONAL

The **PP Solo 3rd Seed Box** seeder has options that can be purchased according to the need for work. Among the options available are:

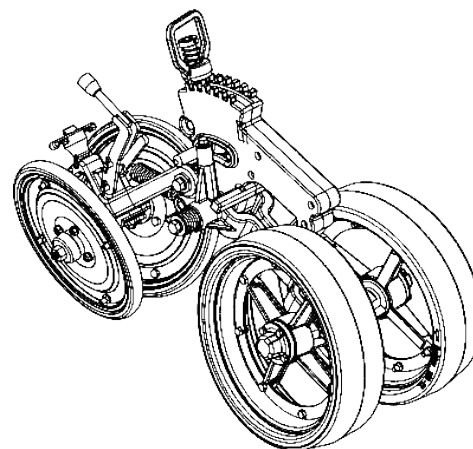
CPL COMPACTING WHEEL CARTS - OPTIONAL (FIGURES 87)



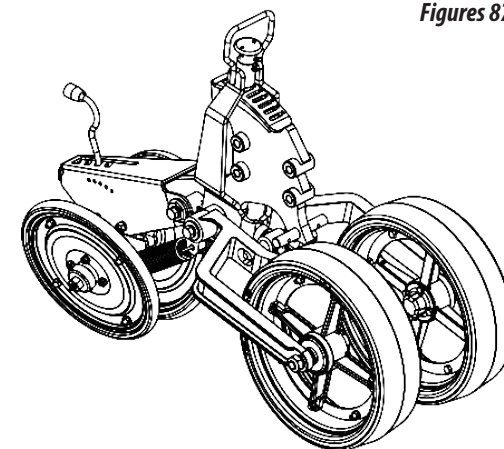
Cart with Eccentric Depth Wheel/ Oscillating and "V" Wheel (Manual Adjustment) without Protection Ring - Code: 51240105466



Cart with Eccentric/Oscillating Depth Wheel and "V" Wheel (Manual Adjustment) with Protection Rim - Code: 51240106497



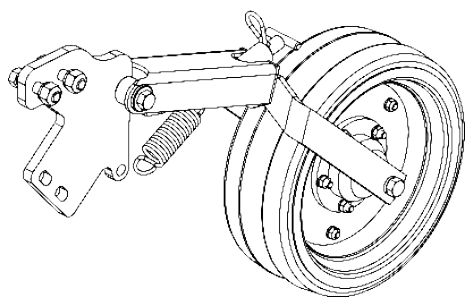
Cart with Depth Wheel for Wheel Wrapping Disc and Wheel in "V" Cpl without Beater - Code: 51240103625



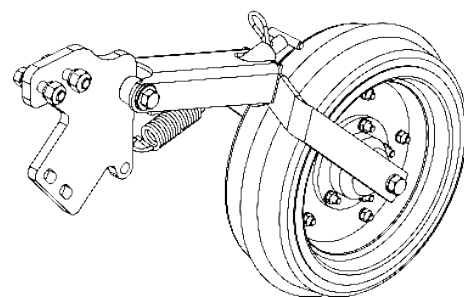
Cart with Depth Wheel for Wheel Wrapping Disc and Wheel in "V" Cpl with Beater - Code: 51240103609

Figures 87

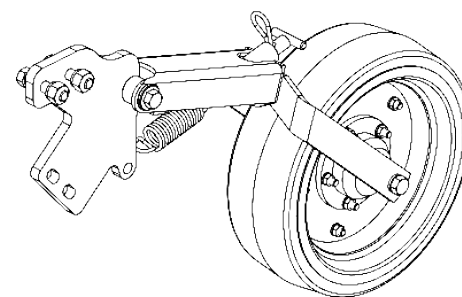
CPL COMPACTING WHEEL CARTS - OPTIONAL (FIGURES 88)



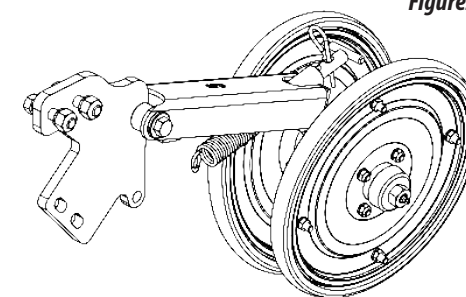
*Cpl Concave Compactor Wheel Cart
Code: 51240103781*



*Cpl Convex Compactor Wheel Cart
Code: 51240103790*



*Cpl Flat Compactor Wheel Cart
Code: 51240103803*



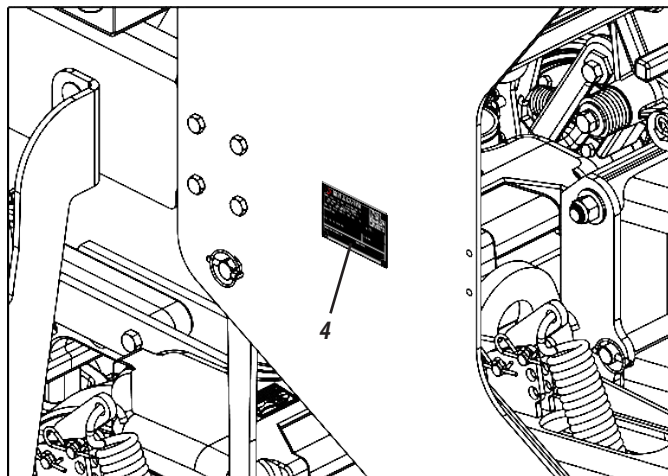
*Cpl "V" Compactor Wheel Cart
Code: 51240103811*

Figures 88

PRODUCT IDENTIFICATION (FIGURES 89)

- 1- To consult the parts catalog or request technical assistance at Baldan always identify the model (1) serial number (2) and manufacturing date (3) which is found on the seeder's identification tag (4).
- 2- **ALWAYS DEMAND BALDAN ORIGINAL PARTS.**

Figures 89



Identify the data below to always have correct information about the life of your seeder.

Owner: _____

Resale: _____

Farm: _____

City: _____ State: _____

Warranty Certificate No: _____

Model: _____

Serial No: _____

Date of Purchase: _____ NF. No: _____

! ATTENTION

The drawings in this manual are merely illustrative. To provide a better view and detailed instruction, some drawings in this manual have been removed from safety devices (covers, guards, etc.). Never operate the seeder without these devices



PUBLICATIONS

Code: 60550106097
CPT: PPS07619A



CONTACT

If in doubt, contact After Sales.
Telephone: 0800-152577
E-mail: posvenda@baldan.com.br

IDENTIFICATION

NOTES

BALDAN IMPLEMENTOS AGRÍCOLAS S/A.

WARRANTY CERTIFICATE

BALDAN IMPLEMENTOS AGRÍCOLAS S/A guarantees the normal operation of the implement to the retailer for a period of six 6 months as of the date of delivery in the resale invoice to the first end consumer.

During this period **BALDAN** undertakes to repair material and/or manufacturing defects of its responsibility, with labor, freight and other expenses being the responsibility of the reseller.

Within the warranty period, the request and replacement of any defective parts must be made to the regional retailer, who will send the defective part for analysis to **BALDAN**.

When such a procedure is not possible and the retailer's resolution capacity is exhausted, it will request support from **BALDAN** Technical Assistance through a specific form distributed to the retailers.

After the review of the replaced items by Baldan's Technical Assistance, if it is concluded that such item is not covered by the warranty, then the retailer will be responsible for replacement costs as well as material, travel including accommodation and meals, accessories, used lubricant and other expenses arising from the call for Technical Assistance, and **BALDAN** is authorized to bill such expenses on behalf of the retailer.

Any repairs made to the product within the warranty period by the retailer will only be authorized by **BALDAN** upon prior quotation describing parts to be used and labor to be performed.

This term excludes products that undergo repairs or modifications to workshops not belonging to the **BALDAN** retailer network, as well as the application of non genuine parts or components to the user's product.

This warranty shall be rendered void when it is found that the defect or damage is the result of improper use of the product, failure to follow instructions or operator inexperience

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

Manufacture and or material defects, subject matter of this warranty term, shall not, under any circumstances, be a cause for termination of sales contract, or for indemnity of any kind.

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 products previously manufactured.

INSPECTION AND DELIVERY CERTIFICATE

- **SERVICE BEFORE DELIVERY:** This implement has been carefully prepared by the sales organization and inspected in its entirety in accordance with the manufacturer's requirements.
- **DELIVERY SERVICE:** The user has been informed of the current warranty terms and instructed on use and maintenance care.
- I confirm that I have been informed of the current warranty terms and instructed on the correct use and maintenance of the implement.

Implement: _____

Serial No: _____

Date: _____ Invoice No: _____

Resale: _____ City: _____

State: _____ CEP: _____

Owner: _____ Phone: _____

Address: _____ Number: _____

City: _____ State: _____

E-mail: _____

Date of sale: _____

Resale Signature / Stamp _____

1st - Owner

CERTIFICATE

CERTIFICATE

INSPECTION AND DELIVERY CERTIFICATE

- **SERVICE BEFORE DELIVERY:** This implement has been carefully prepared by the sales organization and inspected in its entirety in accordance with the manufacturer's requirements.
- **DELIVERY SERVICE:** The user has been informed of the current warranty terms and instructed on use and maintenance care.
- I confirm that I have been informed of the current warranty terms and instructed on the correct use and maintenance of the implement.

Implement: _____

Serial No: _____

Date: _____ Invoice No: _____

Resale: _____ City: _____

State: _____ CEP: _____

Owner: _____ Phone: _____

Address: _____ Number: _____

City: _____ State: _____

E-mail: _____

Date of sale: _____

Resale Signature / Stamp _____

2nd - Resale

INSPECTION AND DELIVERY CERTIFICATE

- **SERVICE BEFORE DELIVERY:** This implement has been carefully prepared by the sales organization and inspected in its entirety in accordance with the manufacturer's requirements.
- **DELIVERY SERVICE:** The user has been informed of the current warranty terms and instructed on use and maintenance care.
- I confirm that I have been informed of the current warranty terms and instructed on the correct use and maintenance of the implement.

Implement: _____

Serial No: _____

Date: _____ Invoice No: _____

Resale: _____ City: _____

State: _____ CEP: _____

Owner: _____ Phone: _____

Address: _____ Number: _____

City: _____ State: _____

E-mail: _____

Date of sale: _____

Resale Signature / Stamp _____

3rd - Manufacturer

Manufacturer please send this completed form within 15 days to BALDAN.

1.74.05.0059-5
AC MATÃO
ECT/DR/SP

RESPONSE CARD

NO SEALING REQUIRED

POSTAGE WILL BE PAID BY:



BALDAN IMPLEMENTOS AGRÍCOLAS S/A.

Av. Baldan, 1500 | Nova Matão | CEP: 15993-900 | Matão-SP | Brasil
Phone: (0**16) 3221-6500 | Fax: (0**16) 3382-6500
Home Page: www.baldan.com.br | e-mail: sac@baldan.com.br
Exportation: Fone: 55 16 3321-6500 | Fax: 55 16 3382-4212 | 3382-2480
e-mail: export@baldan.com.br



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