

## **ASDA MULTI**

Subsoiler Plow with Automatic Disarm and Reset



## Presentation

e appreciate the preference and would like to congratulate you for the excellent choice you just made, since you have acquired a product manufactured with BALDAN



### IMPLEMENTOS AGRÍCOLAS S/A technology.

This manual will guide you through the procedures required since its acquisition until operational procedures of usage, safety and maintenance.

**BALDAN** assures that it has delivered this implement for resale in full and in perfect conditions.

Resale was responsible for the custody and maintenance during the period in its possession, and also for the assembly, retightening, lubrication and overhaul.

During the technical delivery, dealer should guide the user regarding maintenance, safety, their obligations in eventual technical assistance, strict compliance with the warranty term and reading the instructions manual.

Any technical assistance request while in warranty should be made to the dealer from whom you have purchased it.

We reiterate the need for a careful read of the warranty certificate and compliance of all items from this manual, because by doing so you will increase the life of your device.



## **ASDA MULTI**

Subsoiler Plow with Automatic Disarm and Reset

BALDAN IMPLEMENTOS AGRÍCOLAS S/A. CNPJ: 52.311.347/0009-06 State Registration: 441.016.953.110



Scan the QR Code on your machine's identification plate and access this Instruction Manual online.







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#### ■ Baldan 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 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** dealer 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 in experience.

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 previously products manufactured.



#### General Information

To the owner

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

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

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

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



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

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

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

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



#### Safety rules

To the operator



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

#### **ATTENTION**



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

#### **ATTENTION**



Do not carry people on or inside the tractor or on the equipment.

#### ATTENTION



Do not work with the tractor if its front is not sufficiently weighted for the rear equipment.

Where it tends to lift.

add weights or ballast to the machine's front or front wheels.

## **ATTENTION**



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

### ATTENTION



There is a risk of serious injury due to tipping when working on sloping terrains.

Do not use excessive speed.

## **ATTENTION**



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

## **ATTENTION**



When checking hoses for leaks, use a piece of cardboard or wood, never

use your hands. Avoid incision of fluid in the skin.



#### Safety rules



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

#### **ATTENTION**



Do not make adjustments while the ASDA MULTI is running.

When doing any work on the ASDA

MUTI, first turn off the tractor. Use appropriate tools.



#### ATTENTION



Always keep access and work places clean, such as from oil or grease, as they may cause accidents.

#### **ATTENTION**



When transporting the ASDA MULTI, do not exceed a speed of 25 km/h or 15 MPH. avoiding the risk of damage and accidents.



#### ATTENTION





When working with the ASDA MULTI. do not exceed 7 km/h or 4 MPH, avoiding the risk of damage and accidents.



#### ∕!\ ATTENTION



Remove the ignition key before performing any maintenance on the ASDA MULTI. Protect yourself from possible injury or death caused by an unexpected departure from the ASDA MULTI.

If the ASDA MULTI is not properly engaged, do not start the tractor.



#### **!\ 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.



#### Normas de segurança

## **ATTENTION**

ALCOHOLIC BEVERAGES OR SOME MEDICATIONS MAY CAUSE LOSS OF REFLEXES AND CHANGE THE OPERATOR'S PHYSICAL CONDITION. THEREFORE, NEVER OPERATE THIS EQUIPMENT UNDER THE USE OF THESE SUBSTANCES.

## **ATTENTION**



Keep the articulation area free while the ASDA MULTI is in operation. In sharp turns, keep the

tractor wheels from touching the header.

### **ATTENTION**



Avoid heating parts near fluid lines. Heating

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

### **ATTENTION**



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

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

### **ATTENTION**



Before starting work or transporting the ASDA MULTI, check for people or obstructions near it.

### **ATTENTION**



Do not apply chemical fertilizers in excess. In addition to economic waste, it can also interfere with the soil environment, cau-

sing serious risks of contamination of water, animals and vegetables.

#### PRESERVE THE ENVIRONMENT!

### **ATTENTION**



Improper waste disposal affects the environment and ecology as it will pollute rivers, canals, or

the soil.

Find out how to properly recycle or dispose of waste.

#### PRESERVE THE ENVIRONMENT!



#### Safety rules

PPE Equipment

DO NOT WORK WITH THE ASDA MULTI WITHOUT WEARING PPE (SAFETY EQUIPMENT). IGNORING THIS WARNING MAY CAUSE HEALTH DAMAGES, SERIOUS ACCIDENT, OR DEATH.

When performing certain procedures with the ASDA MULTI, place the following PPE (Safety Equipment) below:





## IMPORTANT

The safety practice must be carried out at all stages of working with the ASDA MULTI, thus avoiding accidents such as impact of objects, falling, noise, cuts and ergonomics, that is, the person responsible for operating the ASDA MULTI is subject to internal damage and external to your body.

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











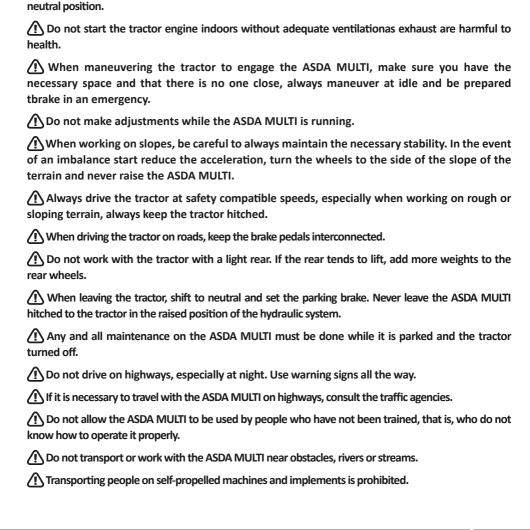






!\ When servicing the machine, wear PPE.

#### Warnings



(!\) When operating with ASDA MULTI, do not allow people to remain too close or on top of it.

(!) When starting the tractor engine, be properly seated in the operator's seat and aware of complete knowledge of correct and saf handling of both thr tractor and the ASDA MULTI. Always put the shift lever in the neutral position, disconnect the control gear from de PTO and put the hidraulic controls in the

!\ Do not wear loose clothes, as they may get caught in the ASDA MULTI.



#### Advertências

Transporting people on self-propelled machines and implements is prohibited.

• Changes to the original characteristics of the ASDA MULTI are not allowed, as they may alter safety, operation, and affect service life.

Read all safety information in this manual and in the ASDA MULTI carefully.

Always check that the ASDA MULTI is in perfect condition. In the event of any irregularity that may interfere with the operation of the ASDA MULTI, arrange for proper maintenance before any work or transport.

Maintenance and especially inspection in risk areas of the ASDA MULTI, must be carried out only by a trained or qualified worker, observing all safety guidelines. Before starting maintenance, disconnect all drive systems from the ASDA MULTI.

Periodically check all components of the ASDA MULTI before using it.

According to the equipment used and the working conditions in the country or in areas of maintenance, precautions are necessary. Baldan cannot directly control precautions, so it is the responsibility of the owner to put safety procedures into practice while working with ASDA MULTI.

(1) Check the minimum tractor power recommended for each ASDA MULTI model. Only usetrator tractors with power and ballast compatible with the load and terrain topography.

• When transporting the ASDA MULTI, travel at terrain-compatible speeds and never exceed 25 km/h, as this reduces maintenance and therefore extends the life of the ASDA MULTI.

Alcoholic beverages or some medications may cause loss of reflexes and change the operator's physical condition. Therefore, never operate the ASDA MULTI while using these substances.

Read or explain all procedures in this manual to a user who cannot read.

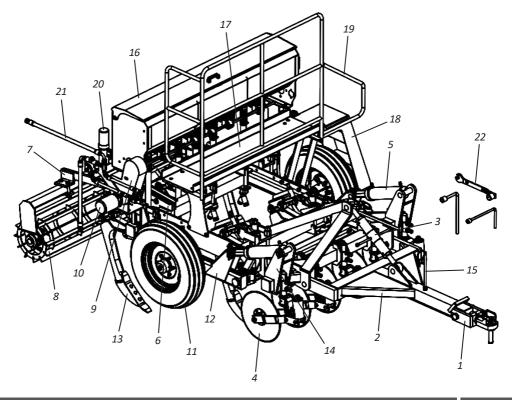


#### Components

#### • ASDA MULTI - Subsoiler Plow with Automatic Disarm and Reset

- 1. Hitch shackle
- 2. Hitch header
- 3. Header regulator
- 4. Cutting disc
- 5. Hydraulic cylinder
- 6. Cutting roller fixing bracket
- 7. Cutting roller oscillation bar
- 8. Cutting roller
- 9. Tank protection cover
- 10. Hydraulic motor
- **11.** Tires

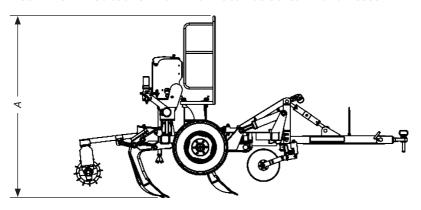
- 12. Tire articulation bracket
- **13.** Rod
- **14.** Frame
- 15. Hose support
- **16.** Tank
- 17. Platform
- 18. Ladder
- 19. Platform handrail
- 20. Manual container
- 21. Hydraulic hoses
- 22. Wrenches

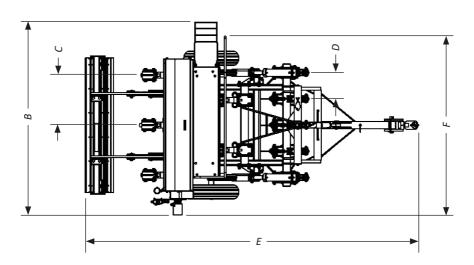




### Dimensions

• ASDA MULTI - Subsoiler Plow with Automatic Disarm and Reset





Model	No. of	Measurements						
Model	Rods	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	
ASDA MULTI	5	2560	2730	750	375	4695	2533	
	7	2560	3462	750	375	4695	3265	
	9	2560	4196	750	375	4695	3999	



#### Specifications

#### • ASDA MULTI - Subsoiler Plow with Automatic Disarm and Reset

Model	No. of Rods	No. of Discs	Disc Diameter (mm)	Seed Capacity (L)	Working Width (mm)	Approximate Weight (Kg)	Tractor Power (HP)	
4604	5	5	18"	365	1875	1944	120	
ASDA MULTI	7	7	18"	365	2625	2542	140	
	9	9	18"	470	3375	3005	180	

Working depth (mm)	450
Spacing between rods (mm)	375

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 products manufactured.

Technical specifications are estimates and reported under normal working conditions

#### **INTENDED USE OF THE ASDA MULTI**

- -The **ASDA MULTI** was specially built for two purposes: Breaking the compacted layers of the soil, increasing the infiltration capacity of the soil, facilitating the growth of the roots and considerably decreasing the risk of injuries and also making it possible in a single operation to distribute fertilizer and grazing seeds in general.
- -The **ASDA MULTI** must be driven and operated only by a properly instructed operator.

#### PROHIBITED USE THE OF ASDA MULTI

- -To avoid damage, serious accident or death, **DO NOT** transport people over any part of the **ASDA MULTI**.
- -It is **NOT** permitted to use the **ASDA MULTI** to couple, tow or push other attachments or accessories.
- -The **ASDA MULTI** must **NOT** be used by an inexperienced operator who does not know all the driving, command, and operation techniques.



#### Assembly

The **ASDA MULTI** leaves the factory disassembled. To assemble it, follow the instructions below:

The assembly of the **ASDA MULTI** must be carried out by the reseller, by people who are trained and qualified for this work.

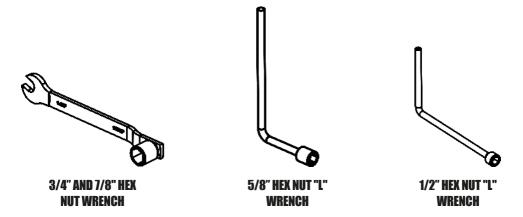
⚠ Before you begin assembling the **ASDA MULTI**, look for an ideal place, where it facilitates the assembly of the same.

① Do not wear loose clothing, as they may get caught in the ASDA MULTI.

Use PPE (Safety Equipment).

#### Wrench set

When assembling, disassembling, or servicing the **ASDA MULTI**, use the wrench set that come with the terracing plough. The Wrench Set consists of:





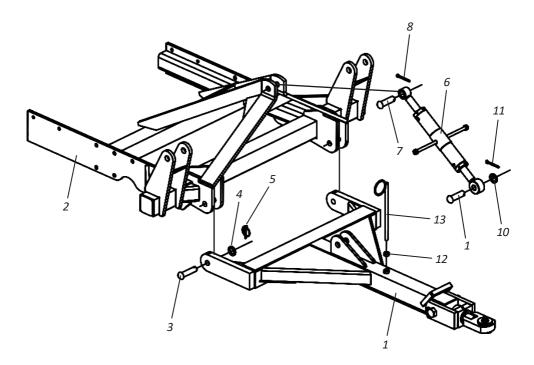
If a wrench is lost or broken, immediately acquire another one. Always use original Baldan wrenches.



• Mounting the coupling head

To assemble the coupling header, proceed as follows:

- **01** Attach the coupling header (1) to the upright (2) fixing with the pins (3), flat washers(4) and lock with the ring (5).
- **02** Then, insert the regulator (6) in the amount (2) fixing with the pin (7) and lock with the ring (8).
- **03** Then, insert the regulator (6) in the header (1) fixing with the pin (9), flat washer(10) and cotter pin (11).
- 04 Then, secure the lock nut (12) and the hose support (13).



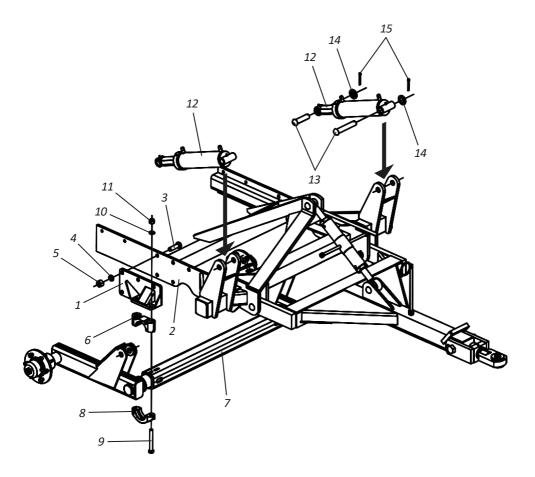


### Assembly

• Mounting the wheel shaft

To assemble the wheel shaft, proceed as follows:

- **01** Attach the bracket (1) to the support (2) through the bolts (3), lock washers (4) and nuts (5).
- **02** Then, attach the upper bearing (6) to the support (1) the wheel axle (7) the lower bearing (8) fixing through the screws (9), lock washers (10) and nuts (11).
- **03** Then, attach the hydraulic cylinders (12) to the upright (2) fixing through the pins (13), flat washers (14) and cotter pins (15).

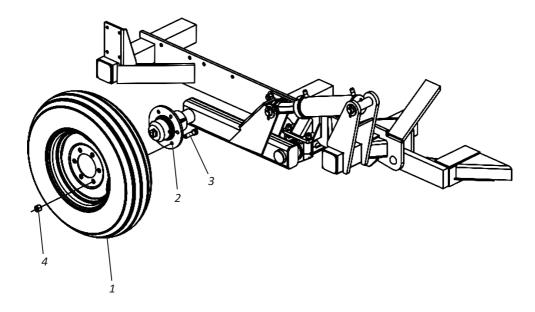




Mounting the tires

To mount the tire (1), proceed as follows:

01 - Couple the tire (1) on the hub (2) by fixing it using the screws (3) and nuts (4).





ATTENTION Check the proper tire calibration on page 54.



**NOTE** Repeat the procedure above to assemble the other tire.

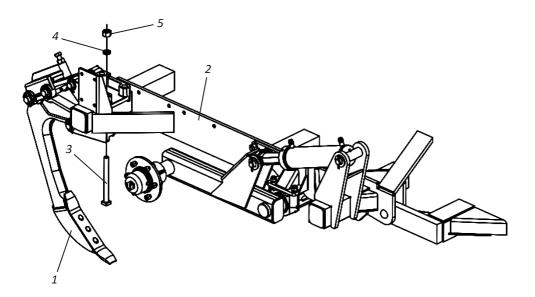


#### Assembly

• Mounting the rods

To mount the rods, proceed as follows:

01 - Couple the rod (1) on the pillar (2) through the screws (3), lock washers (4) and nuts (5).





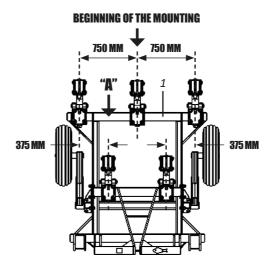
ATTENTION Check the following pages for the correct rod mounting for each ASDA MULTI model.



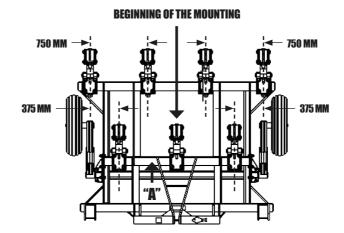
**NOTE** Repeat the above procedure for the assembly of the other rods



• Mounting the rods - ASDA MULTI 5 Rods



• Mounting the rods - ASDA MULTI 7 Rods





**O** NOTE

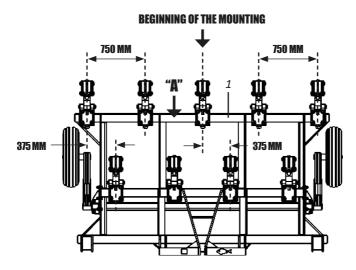
The number of assembled rods is odd, so start assembling them by the center bar "A" of the frame (1) going to the others.

The front section of the ASDA MULTI must contain fewer rods than the rear section.



#### Assembly

• Mounting the rods - ASDA MULTI 9 Rods





The number of assembled rods is odd, so start assembling them by the center bar "A" of the frame (1) going to the others.



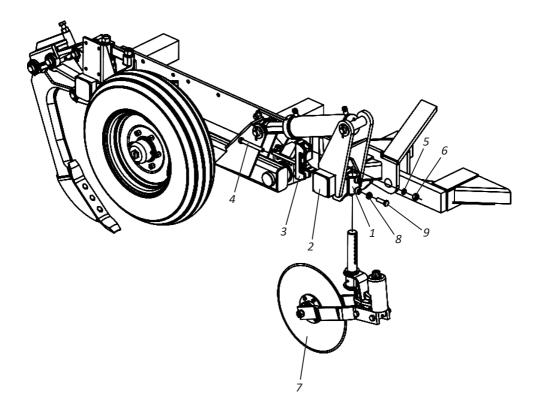
The front section of the ASDA MULTI must contain fewer rods than the rear section.



• Mounting the cutting discs

To mount the cutting dics, proceed as follows:

- 01 Secure the disc holder (1) to the upright (2) using the clamp (3), screws (4), lock washers (5) and nuts (6).
- **02** Then, attach the cutting disc (7) to the disc holder (1), fixing it using the nuts (8) and screws (9).

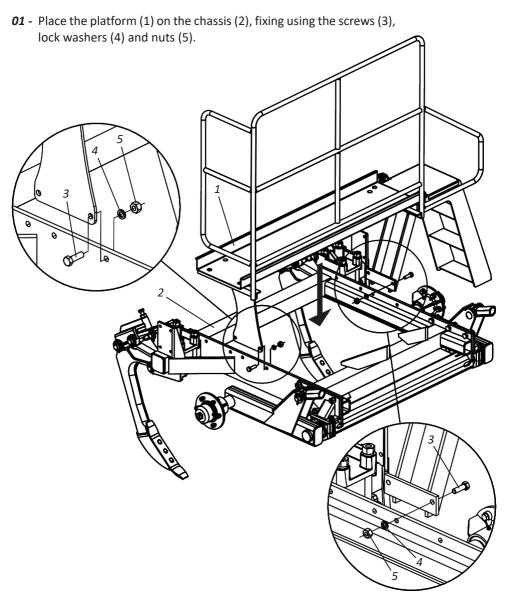




### Assembly

Mounting the platform

To mount the platform, proceed as follows:

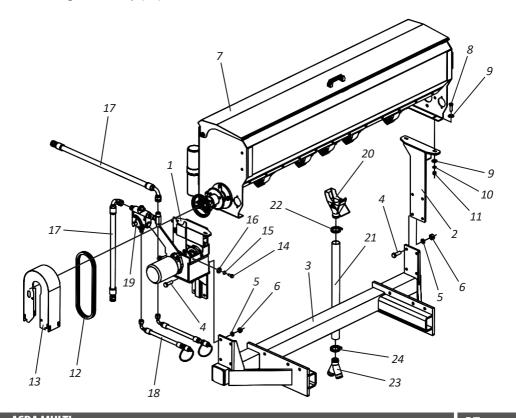




• Mounting the tank - Seed System

To mount the seed tank, proceed as follows:

- **01** Attach the brackets (1 and 2) to the upright (3), using the screws (4), lock washers (5) and nuts (6).
- **02** Then, place the tank (7) on the brackets (1 and 2), fixing it through the screws (8), flat washers (9), lock washers (10) and nuts (11).
- 03 Then, place the chain (12) on the gears in the bracket (1) and in the tank (7).
- **04** Then, put the protective cover (13), fixing it on the support (1) through the screws (14), flat washers (15) and pressure washers (16).
- 05 Then connect the hydraulic hoses (17 and 18) to the flow control valve (19).
- **06** Finish by coupling the cup (20) to the tank (7), attach the hose (21) to the cup (20) fixing through the clamp (22) and attach the "Y" spout (23) to the hose (21) fixing through the clamp (24).



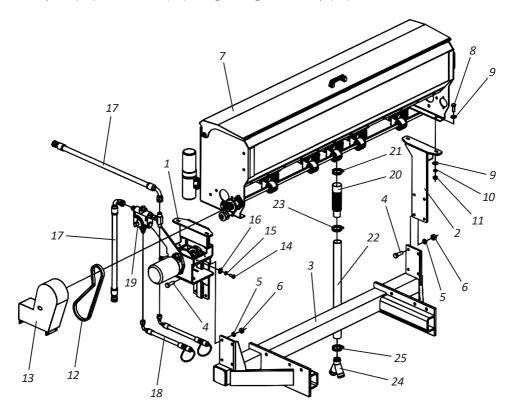


#### Assembly

• Mounting the tank - Fertilization System (Optional)

To mount the tank with fertilizer system (optional), proceed as follows:

- **01** Attach the brackets (1 and 2) to the upright (3), using the screws (4), lock washers(5) and nuts (6).
- **02** Then, place the tank (7) on the brackets (1 and 2), fixing it through the screws (8), flat washers (9), lock washers (10) and nuts (11).
- 03 Then, place the chain (12) on the gears in the bracket (1) and in the tank (7).
- **04** Then, put the protective cover (13), fixing it on the support (1) through the screws(14), flat washers (15) and pressure washers (16).
- 05 Then connect the hydraulic hoses (17 and 18) to the flow control valve (19).
- **06** Finish by coupling the hose (20) to the tank (7) fixing through the clamp (21), attachthe hose (22) to the hose (20) fixing through the clamp (23) and attach the "Y" spout (24) to the hose (22) fixing through the clamp (25).

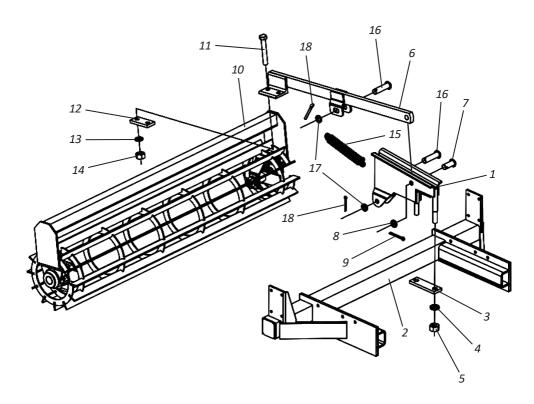




• Mounting the cutting roller

To mount the cutting roller, proceed as follows:

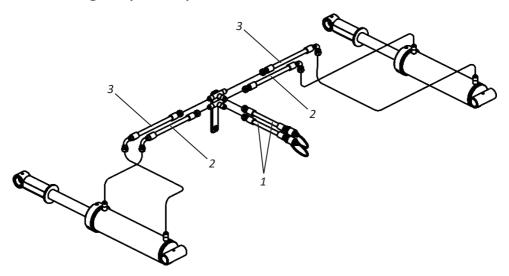
- **01** Place the support (1) on the chassis (2) fixing through the plate (3), lock washers (4) and nuts (5).
- **02** Then, insert the swing bar (6) between the support (1) and lock with the pin (7), flatwasher (8) and cotter pin (9).
- **03** Then, fix the cutting roller (10) on the swing bar (6) using the screws (11), plate (12),lock washers (13) and nuts (14).
- **04** Finally, place the spring (15) between the swing bar (6) and the support (1) fixing through the pins (16), flat washers (17) and cotter pins (18).





#### Assembly

· Mounting the hydraulic system



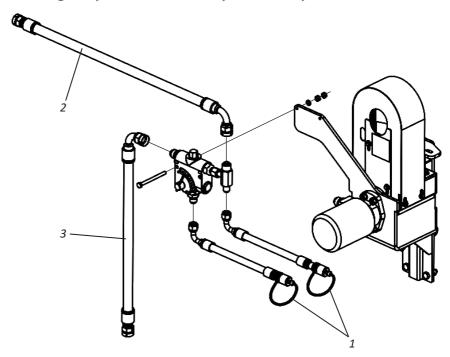
ITEM	PRODUCT DESCRIPTION	TODOS	ASDA MULTI 5 RODS	ASDA MULTI 7 RODS	ASDA MULTI 9 RODS
_1	3/8" x 3500 mm Hydraulic Hose with 1TRG and 1TRF with quick coupling	2			
2	3/8" x 1150 mm Hydraulic Hose with 1TCG and 1TRG (SAE 100 R2 AT - P.T. 4800 PSI)		2		
2	3/8" x 1300 mm Hydraulic Hose with 1TCG and 1TRG (SAE 100 R2 AT - P.T. 4800 PSI)			2	
2	3/8" x 1600 mm Hydraulic Hose with 1TCG and 1TRG (SAE 100 R2 AT - P.T. 4800 PSI)				2
3	3/8" x 1150 mm Hydraulic Hose with 1TCG and 1TRG (SAE 100 R2 AT - P.T. 4800 PSI)		2		
3	3/8" x 1550 mm Hydraulic Hose with 1TCG and 1TRG (SAE 100 R2 AT - P.T. 4800 PSI)			2	
3	3/8" x 2000 mm Hydraulic Hose with 1TCG and 1TRG (SAE 100 R2 AT - P.T. 4800 PSI)				2



When you finish assembling the hydraulic system, make a general overhaul on the ASDA MULTI, checking that there are no objects (nuts, screws or others) inside the tank. Retighten all screws and nuts, check all pins, cotter pins, and locks, review all hoses.



• Mounting the hydraulic transmission system - Seed System



ITEM	PRODUCT DESCRIPTION	ASDA MULTI 5 / 7 / 9 RODS
1	1/2" x 5000 mm High Pressure Hydraulic Hose with 1TCG and 1TRF (SAE 100 R2 AT - P.T. 4000 PSI)	2
2	3/4" x 800 mm High Pressure Hydraulic Hose with 1TCG and 1TRG (SAE 100 R2 AT - P.T. 3100 PSI)	1
3	3/4" x 600 mm High Pressure Hydraulic Hose with 1TCG and 1TRG (SAE 100 R2 AT - P.T. 3100 PSI)	1

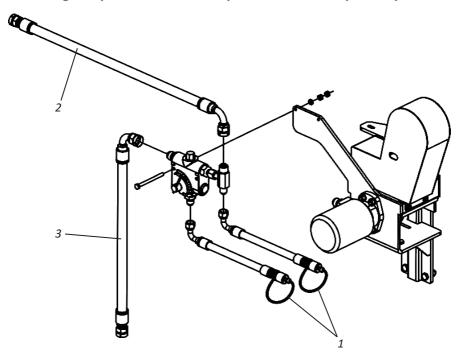


When you finish assembling the hydraulic system, make a general overhaul on the ASDA MULTI, checking that there are no objects (nuts, screws or others) inside the tank. Retighten all screws and nuts, check all pins, cotter pins, and locks, review all hoses.



#### Assembly

• Mounting the hydraulic transmission system - Fertilization System (Optional)



ITEM	PRODUCT DESCRIPTION	ASDA MULTI 5 / 7 / 9 RODS
1	1/2" x 5000 mm High Pressure Hydraulic Hose with 1TCG and 1TRF (SAE 100 R2 AT - P.T. 4000 PSI)	2
2	3/4" x 800 mm High Pressure Hydraulic Hose with 1TCG and 1TRG (SAE 100 R2 AT - P.T. 3100 PSI)	1
3	3/4" x 600 mm High Pressure Hydraulic Hose with 1TCG and 1TRG (SAE 100 R2 AT - P.T. 3100 PSI)	1



When you finish assembling the hydraulic system, make a general overhaul on the ASDA MULTI, checking that there are no objects (nuts, screws or others) inside the tank. Retighten all screws and nuts, check all pins, cotter pins, and locks, review all hoses.



#### Hitch

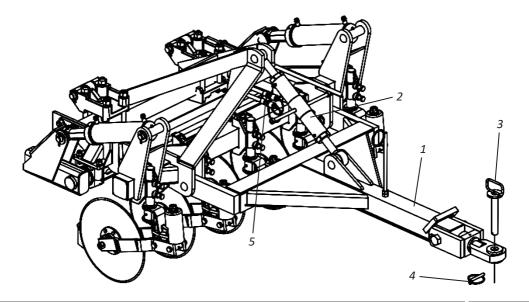
#### Subsoiler hitch

Before attaching the ASDA MULTI to the tractor drawbar, follow the instructions below:

- Before hitching the **ASDA MULTI**, look for a safe and easily accessible place.
- Always use low idle with low acceleration.
- Before turning the hydraulic hoses on or off, stop the engine and relieve circuit pressure by fully activating the control levers.
- Make sure that when relieving the pressure from the system, no one is injured when the equipment is moved.

After following the instructions above, proceed as follows:

- 01 Level the coupling header (1) of the ASDA MULTI in relation to the tractor couplingthrough the regulator (2). Then, slowly approach the tractor to the ASDA MULTI inreverse, paying attention to the application of the brakes.
- **02** Proceed to hook the **ASDA MULTI** to the tractor by fixing it through the hitch pin (3)and lock with a ring (4).
- 03 Finally, attach the hoses (5) to the tractor's quick coupling.



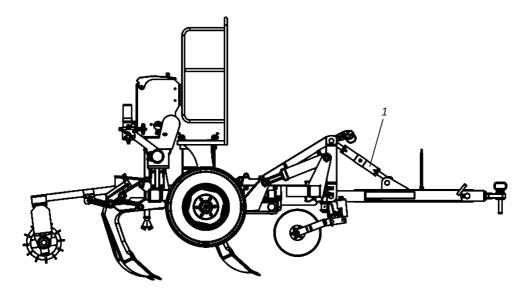


#### Adjustment

Subsoiler leveling

To level the ASDA MULTI, proceed as follows:

- 01 The tractor must be in a flat location.
- 02 Then level the ASDA MULTI using the regulator (1).





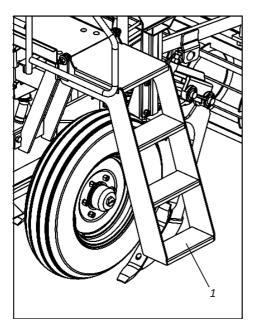
The stems should be parallel to the ground, that is, they should all touch the ground at the same time.



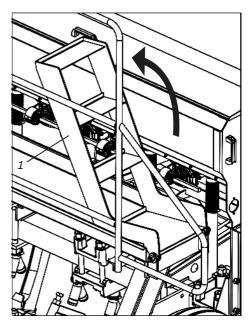
#### Ladder

#### Use of the ladder

The articulated ladder (1) should only be used when filling or servicing the **ASDA MULTI** tank. Before using the articulated ladder (1), make sure that the subsoiler is parked and the tractor is switched off.



OPEN POSITION: FOR MAINTENANCE OR SUPPLY OF THE DEPOSIT.



CLOSED POSITION: FOR WORK OR TRANSPORT.

## **ATTENTION**

Do not stand on the ladder when the subsoiler is working or being transported.

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

Do not carry people on the platform, ladder or any other part of the subsoiler. Ignoring these warnings could result in serious accidents or even death.



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

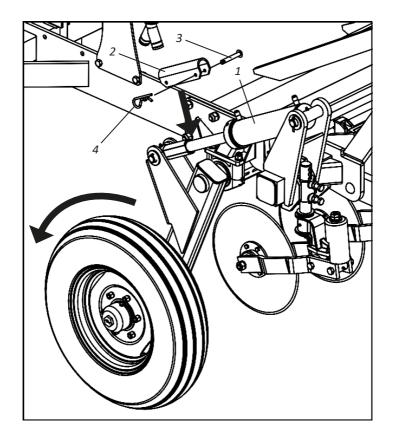


#### Adjustments

Adjusting for transport

Before transporting the ASDA MULTI, proceed as follows:

- **01** Activate the full stroke of the hydraulic cylinders (1) by opening them.
- 02 Then place the latches (2) and fix the pins (3) and latches (4).





Do not transport the ASDA MULTI without first placing the locks (2) on the hydraulic cylinders (1). Ignoring this warning may damage the subsoiler.



At the end of the transport of the ASDA MULTI, remove the locks (2) from the hydraulic cylinders (1), releasing the locks (4) and the pins (3).

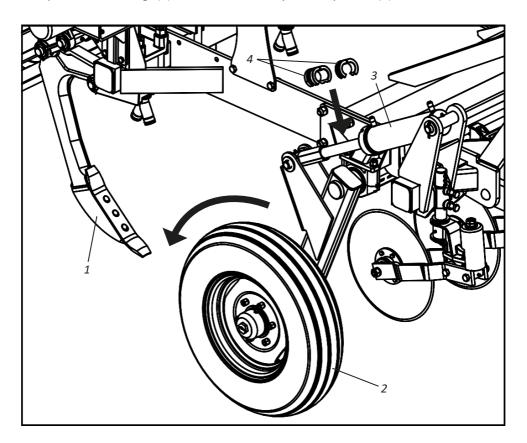


### Adjustments

### Adjusting the rod depth

The working depth of the rods is limited by the wheels that are driven by the hydraulic cylinders. To limit the working depth of the rods, proceed as follows:

- 01 First, determine the working depth of the rods (1).
- **02** Then, lift the wheels (2) through the hydraulic cylinders (3) to the specified extent, place the limit rings (4) on the rods of the hydraulic cylinders (3).





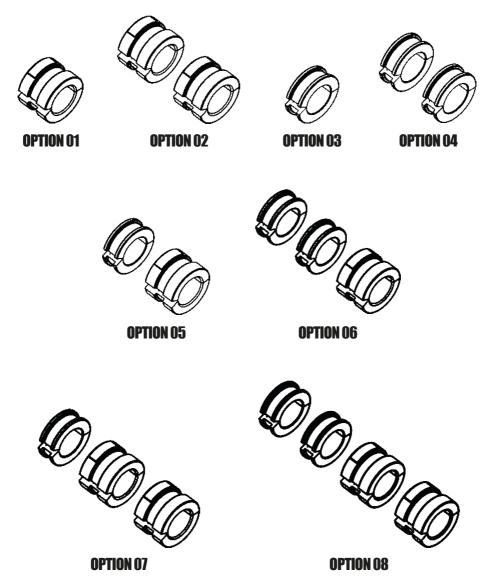
After adjustment, the depth will be constant, because the limiting rings (4) are limiting the travel of the hydraulic cylinder (3), preventing the wheels from oscillating, always maintaining the same depth.



## Adjustments

### • Limiting ring combinations

The limiting rings that come with **ASDA MULTI**, have different sizes, which combined as below, offer various depth adjustments.

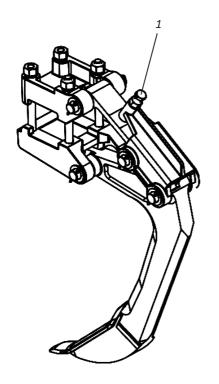


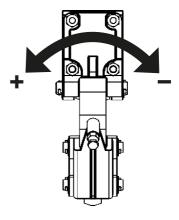


## Adjustments

### Adjusting the load for automatic rod tripping

The automatic disarming of the rods (1), leaves the factory with the pre-load regulation determined. To decrease or increase the load, proceed as follows:





Turn the screw (2) 90° (1/4 turn) to the right (clockwise).

It will decrease 5 kg in the load of the trip.

Turn the screw (2) 90° (1/4 turn) to the left (counterclockwise).

It will increase 5 kg in the load of the trip.



**ATTENTION** Increase the load only if the rod is disarming at all times. Decrease the load only if the rod is not disarmed when encountering obstacles.

Always adjust the load by 1/4 turn, that is, every 5 kg until you reach the ideal or correct work setting.

These adjustments must be made in the field before starting work, observing the type of soil to be worked to obtain a better performance of ASDA MULTI.

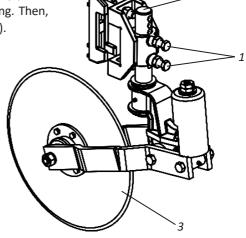


## Adjustments

· Adjusting the cutting disc depth

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

01 - Loosen the screws and counter nuts (1) and move the shaft (2) to the desired setting. Then, retighten the screws and against nuts (1).



## **ATTENTION**

The depth and pressure adjustment of the cutting disc (3) must be done in the field before starting the work, observing the type of soil to be worked, to obtain a better performance of the ASDA MULTI.

Adjusting the cutting disc pressure

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

# Turn the nut (1) to the right (clockwise).

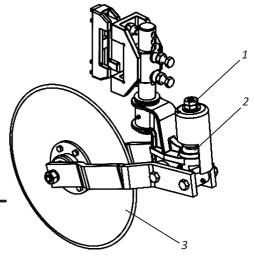
For greater pressure on the spring (2).

Turn the nut (1) to the left (counterclockwise).

For less pressure on the spring (2).



When adjusting the pressure of the cutting disc (3), take care not to cancel the articulation action.

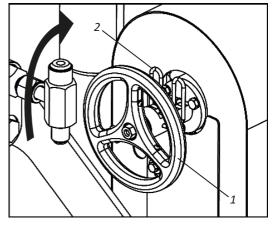




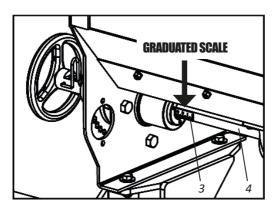
• Regulation of seed distribution - Part I

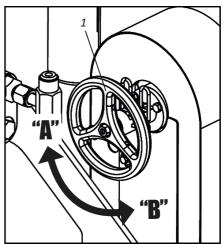
To adjust the seed distribution, proceed as follows:

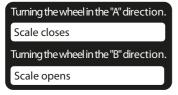
**01** - Unlock the wheel (1) through the lock (2).



**02** - Then, turn the wheel (1) in the "A" or "B" direction, adjusting the seed distribution through the graduated ladder (3) fixed on the shaft (4) according to your need or working condition.







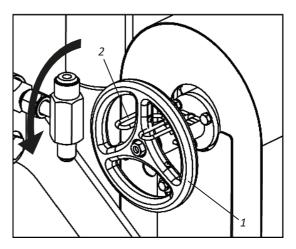


DO NOT work with an unlocked wheel (1). Ignoring this warning may cause variation in seed distribution.



## Seed distribution system

- Regulation of seed distribution Part II
- **03** When finished, lock the wheel (1) again through the lock (2).



# IMPORTANT

Before starting sowing, check that the distribution is in accordance with what is desired. This verification is necessary, as there may be variations in distribution according to the types of seed varieties. We recommend doing the practical check before starting planting.

NOTE

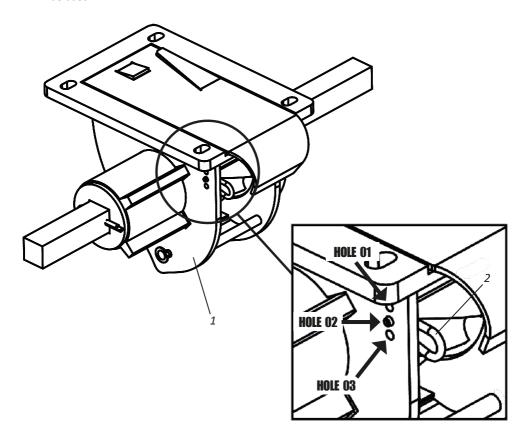
The regulation of seed distribution is related to the opening of the rotor and regulation of the valve. Before starting work, check the system by turning the wheel (1) so that the shaft (4) moves from position 0 (zero) to position 1 (one) and measure whether the rotor has also opened 1 cm.



Adjusting the seed distribution box

So that there is no seed break or irregular sowing occurs, adjust the seed distribution box (1), for this, proceed as follows:

01 - Release the pin (2) and adjust it in holes 1, 2 or 3 according to the size of each type of seed to be used.





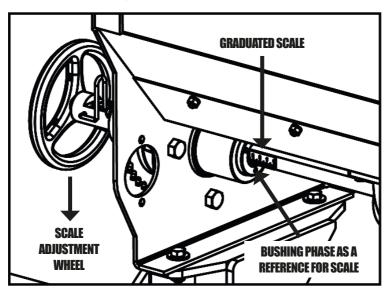
**ATTENTION** Before starting planting, always check the setting of the seed distribution box (1).



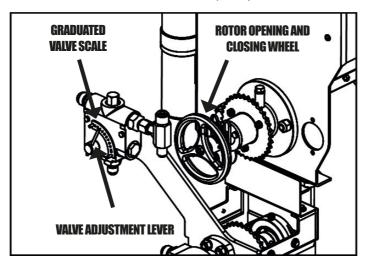
**NOTE** Do not press the seed as it may break. The seed must fall freely.



Adjusting the seed with hydraulic motor



**Rotor opening positions:** The rotor opens every 1 mm according to the graduated scale fixed on the axis indicated by the arrow. Use the face of the bushing with reference for orientation of the scale. At mark 0, the rotor is completely closed.



DETAILS OF THE LEVER AND VALVE REGULATION SCALE.



- Practical calculation for seed distribution
- **01** Determine the spacing between stems and the amount of seed to be distributed per bushel (Aa) or hectare (Ha).
- 02 Example: ASDA MULTI with a spacing of 375 mm, to play 5 kg of Colonion per Ha, use the formula below:

Formula Data: E = Spacing between rods (mm).

Q = Amount of seed to be distributed (kg).

A = Area to be planted (m²).
D = 50 meters distance (test).
X = Seed grams to 50 meters.

Fórmula:  $X = \underbrace{E \times Q \times D}_{A}$ 

**Resolve:**  $X = \frac{375 \times 5 \times 50}{10.000}$ 

 $X = 0.18 \times 50 = 9.3$ 

X = 9,3 grams to 50 meters per rod



The valve has high sensitivity in the flow regulation, therefore, in the example above, to distribute Guinea Grass the seed distribution table on the following page does not indicate 9.3 grams, however observing the Guinea Grass line, it is noted that this value of 9.3 grams is between 14 and 15 mm from the graduated scale of the axis. For these cases, it is advisable to keep the valve lever in position 2 and slowly turn the wheel so that the graduated scale is located in the median position between 14 and 15 mm, that is, approximately 14.5 mm. Then, perform the test collection in the 50 m to confirm that the 9.3 grams calculated in the formula above fell.



# Seed distribution system

#### Seed distribution tables

	APPROXIMATE AMOUNT OF GRAMS PER ROD IN 50 METERS (SPEED 6 km/h)										
	Crop Types	Combination	Scale in 1 mm	Scale in 2 mm	Scale in 3 mm	Scale in 4 mm	Scale in 5 mm	Scale in 6 mm	Scale in 7 mm	Scale in 8 mm	Scale in 9 mm
	Guinea Grass	Valv. Position 2	0,58	1,16	1,74	2,31	2,89	3,89	4,38	4,95	5,71
sses	Common Brachiara	Valv. Posi- tion 2	2,90	5,78	8,68	11,57	14,47	19,45	21,88	24,75	28,73
Grasses	Brachiara Brizantha	Valv. Posi- tion 2	1,74	3,47	5,21	6,94	8,68	11,67	13,13	14,85	17,12
	Millet	Valv. Position 2	4,64	9,25	13,89	18,51	23,15	31,12	35,01	39,60	45,65
	Perennial Soy	Valv. Position 2	1,43	2,85	4,29	5,71	7,14	9,60	10,80	12,22	14,08
es	Alfafa	Valv. Position 2	1,64	3,26	4,90	6,52	8,16	10,97	12,34	13,96	16,09
Legumes	Itch	Valv. Position 2	1,84	3,67	5,51	7,34	9,18	12,34	13,89	15,71	18,11
	Desmodium	Valv. Position 2	1,55	3,10	4,65	6,20	7,75	10,42	11,73	13,26	15,29
	Clover	Valv. Position 2	1,47	2,94	4,41	5,87	7,34	9,87	11,11	12,57	14,49

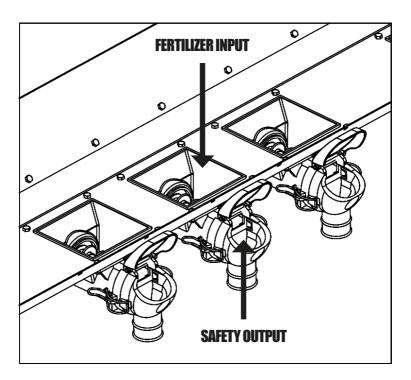
	APPROXIMATE AMOUNT OF GRAMS PER ROD IN 50 METERS (SPEED 6 km/h)										
	Crop Types	Combinações	Scale in 10 mm	Scale in 11 mm	Scale in 12 mm	Scale in 13 mm	Scale in 14 mm	Scale in 15 mm	Scale in 16 mm	Scale in 17 mm	Scale in 18 mm
	Guinea Grass	Valv. Position 2	6,48	7,13	7,77	8,42	9,1	9,72	10,36	11,01	11,66
ses	Common Brachiara	Valv. Position 2	32,38	35,62	38,86	42,10	45,33	48,57	51,81	55,05	58,29
Grasses	Brachiara Brizantha	Valv. Position 2	19,43	21,37	23,32	25,26	27,20	29,15	31,09	33,03	34,97
	Millet	Valv. Position 2	51,81	56,99	62,17	67,36	72,54	77,72	82,90	88,08	93,26
	Perennial Soy	Valv. Position 2	15,98	17,58	19,18	20,78	22,38	23,97	25,57	27,17	28,77
es	Alfafa	Valv. Position 2	18,27	20,09	21,92	23,75	25,57	27,40	29,23	31,05	32,88
egumes	ltch	Valv. Position 2	20,55	22,61	24,66	26,72	28,77	30,83	32,88	34,94	36,99
Le	Desmodium	Valv. Position 2	17,35	19,09	20,82	22,56	24,29	26,03	27,77	29,50	31,24
	Clover	Valv. Position 2	16,44	18,08	19,73	21,37	23,02	24,66	26,31	27,95	29,59



## Fertilizer dispensing system

• Fertilizer conductor - Fertisystem System

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 doser, proceed to clean the doser until the end of the hose near the rod, as the system can clog by roots, pieces of plastic and other objects.







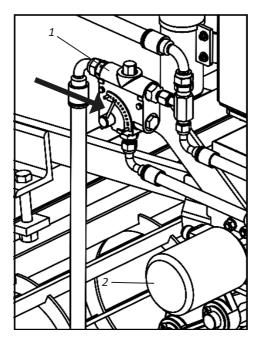
Check dispensers and hoses daily and clean their outlets. When the fertilizer has impurities or is damp, clean it more often.



## Fertilizer dispensing system

• Adjusting the fertilizer with hydraulic motor

The adjustment of the fertilizer must be done through the flow control valve (1), with the tractor stopped, but at the same working speed. Collect the fertilizer during the timed time to cover 50 or 100 meters and calculate according to the example on the following page.



# **O** IMPORTANT

You must wait a few seconds before starting to collect fertilizer so that it completely involves the shaft.

Before starting the test, heat the tractor oil to normal working temperature.



The variation in the amount of fertilizer is obtained by opening or closing the flow control valve (1).

By opening the flow control valve (1), the hydraulic motor (2) rotates faster, increasing the amount of fertilizer.



## Fertilizer dispensing system

- Practical calculation for fertilizer dispensing
- **01** Determine the spacing between stems and the amount of fertilizer to be distributed per bushel (Aa) or hectare (Ha).
- **02 Example:** ASDA MULTI with a spacing of 375 mm, to distribute 550 kg of Fertilizer per Ha, use the formula below:

Formula Data: E = Spacing between rods (mm).

Q = Amount of seed to be distributed (kg).

A = Area to be planted (m²).
D = 50 meters distance (test).
X = Seed grams to 50 meters.

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

**Resolve:**  $X = \frac{375 \times 550 \times 50}{10.000}$ 

 $X = 20,62 \times 50 = 1031$ 

X = 1031 grams to 50 meters per rod



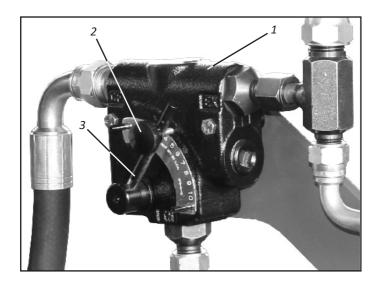
The valve has high sensitivity in the flow regulation, so, in the example above, to distribute 550 kg of fertilizer per Ha the result of the calculation is 1031 grams. However, the fertilizer distribution table on the following page does not indicate 1031 grams, however, it is noted that this value of 1031 grams is between the position of valve 4 and 4.5. For these cases, it is advisable to move the valve lever slowly in the median position between 4 and 4.5. After that, do the test collection in the 50 m to confirm that the 1031 grams calculated in the formula above fell.



## Fertilizer dispensing system

• Fertilizer distribution table

APPROXIMATE AMOUNT OF GRAMS PER ROD IN 50 METERS (SPEED 6 km/h)							
	Combination	Approximate Quantity					
	Valve Position 2	136					
H	Valve Position 2,5	248					
FERTILIZER	Valve Position 3	450					
FER	Valve Position 3,5	655					
	Valve Position 4	1004					
	Valve Position 4,5	1375					
	Valve Position 5	1615					





To adjust the valve (1), release the handle (2), adjust the lever (3) to the desired position and tighten the handle (2) to lock it.



### ■ Sistema de distribuição de adubo

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

For greater precision in the distribution of fertilizer and seed, test the quantity to be distributed at the planting site, since for each land there is a condition.

- 01 Always check and maintain the tire calibration of the ASDA MULTI.
- **02** Mark the test distance in the table, we opted for 50 linear meters.
- 03 Fill the ASDA MULTI tank at least halfway. Walk an average of 10 meters outside the test area for the seeds to fill the feeders.
- **04** Seal the outlets of the seed spouts. Always move the tractor in the demarcated area at the same speed you will be planting (7 km/h).
- 05 After going through the marked space, remove the seal from the seed spouts and collect them for counting. If necessary to increase or decrease the amount of seed to be distributed, check the table.



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

ASDA MULTI 5<sup>-</sup>



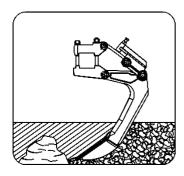
### Operations

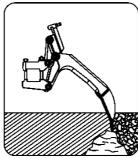
- General recommendations
- **01** Adjust the tractor according to the contents of the instruction manual, always using the front and rear weights to stabilize the equipment.
- 02 Always do the coupling to the tractor at slow speed and with great care.
- 03 When using ASDA MULTI it is important to check the coupling and cross leveling system to make sure that the rods and discs will have the same depth of penetration into the ground.
- 04 After coupling and leveling, the next adjustments will be made directly in the work field, analyzing the terrain in its texture, humidity and the types of operations to be done with ASDA MULTI.
- **05** On the tractor, choose a gear that allows you to maintain a certain reserve of power, ensuring against unforeseen efforts.
- 06 Respect the working and transport speeds specified on page 10. We do not recommend exceeding speeds to maintain service efficiency and avoid possible damage to the ASDA MULTI.
- **07** Do not disconnect any hose without first relieving circuit pressure. To do this, operate the control levers a few times with the engine off.
- 08 After the first day of work with the ASDA MULTI, retighten all screws and nuts, check the condition of the pins and locks. Then, perform a general tightening of all bolts and nuts every 10 hours of work.
- **09** Adjust the tractor according to the contents of the instruction manual, always using the front and rear weights to stabilize the subsoiler.
- **10** When performing any maintenance on the **ASDA MULTI**, you must lower it to the ground and turn off the engine.
- **11** The **ASDA MULTI** has several settings, however, only local conditions can determine the best setting.

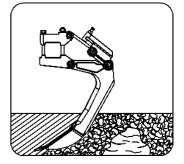


### Operations

- Rod operations
- 01 Subsoiling should be done on relatively dry ground to break the compacted soil layer.
- **02** This layer is located just below the surface layer of the soil, that is, approximately 10 to 15 cm in depth, and this layer varies from 5 to 15 cm in thickness.
- **03** Check the depth of the compacted soil layer through a penetrometer or trench and adjust the working depth of the rods.
- **04** The rods are equipped with an exclusive automatic disarming and resetting system that, when encountering obstacles, disarms, returning to the normal working position simply by lifting the subsoiler and reversing (page 39).
- **05** When operating with the subsoiler, choose a gear that allows the tractor to maintain a certain power reserve, guaranteeing itself against unforeseen efforts.
- **06** When performing maneuvers, activate the hydraulic cylinder by fully lifting the subsoiler to avoid great effort in it and overloading mainly the traction components.
- **07-** In terrains that are difficult to penetrate, ie compact, the cutting depth of the shanks may be minimal, making the operation unsatisfactory. In these cases we recommend the application of other more suitable Baldan products.
- 08 The working speed varies according to the terrain conditions.







If in doubt, never operate or handle the ASDA MULTI, consult the After Sales. Telephone: 0800-152577 / E-mail: posvenda@baldan.com.br



#### Maintenance

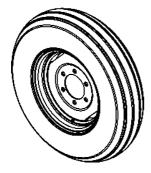
The **ASDA MULTI** was developed to provide you with maximum performance under terrain conditions. Experience has shown that the periodic maintenance of certain parts of the subsoiler is the best way to help you avoid problems, so we suggest their verification.



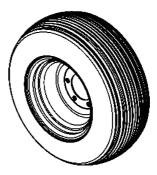
Constantly check nuts and screws, and retighten them if necessary. General retightening of equipment should be done every 10 working hours.

#### Tire pressure

Tires should always be properly calibrated to prevent premature wear due to over or under pressure.



TIRES 750 X 16 10 CANVAS - USE 60 LBS/POL<sup>2</sup> Standard: ASDA Multi 5 / 7 / 9 Rods



TIRES 11 X 15 10 CANVAS - USE 44 LBS/POL<sup>2</sup>
OPTIONAL: ASDA MULTI 5 /7 / 9 RODS

# **ATTENTION**

Never weld wheels assembled with tires, heat can cause an increase in air pressure and cause the tires to explode.

When filling the tires, position yourself next to the tires, never in front of them.

To inflate the tires, always use a containment device (inflation cage). Assemble the tires with suitable equipment. The service should be performed only by persons qualified for the job.



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



Tractor tire pressure should be as recommended by the manufacturer.



#### Lubrication

Lubrication is essential for good performance and a longer service life of the **ASDA MULTI**, contributing to maintenance cost savings.

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

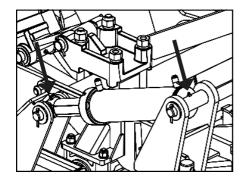
Manufacturer	Recommended grease types
Petrobrás	Lubrax GMA-2
Atlantic	Litholine MP 2
Ipiranga	Ipiflex 2
Castrol	LM 2
Mobil	Grease MP
Texaco	Marfak 2
Shell	Alvania EP 2
Esso	Multi H
Bardahl	Maxlub APG-2EP
Valvoline	Palladium MP-2
	Tutela Jota MP 2 EP
Petronas	Tutela Alfa 2K
	Tutela KP 2K

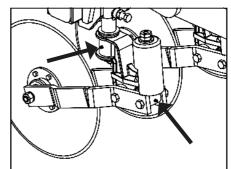


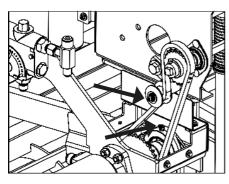
For manufacturers and or equivalent brands not listed in the table, see the manufacturer's technical manual.

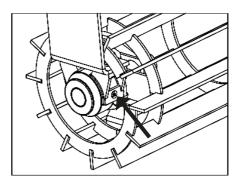


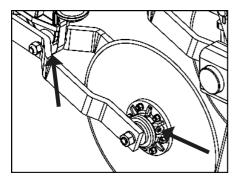
• Lubricate every 10 hours of work

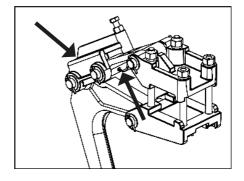










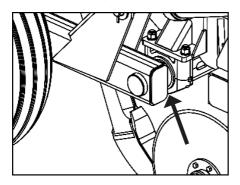




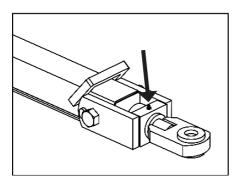
When lubricating the ASDA MULTI, do not exceed the amount of new grease. Insert a sufficient amount.

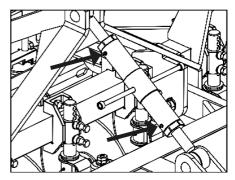


• Lubricate every 24 hours of work

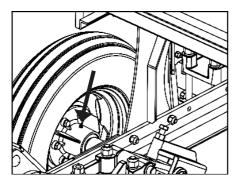


• Lubricate every 30 hours of work





• Lubricate every 60 hours of work





When lubricating the ASDA MULTI, do not exceed the amount of new grease. Insert a sufficient amount.

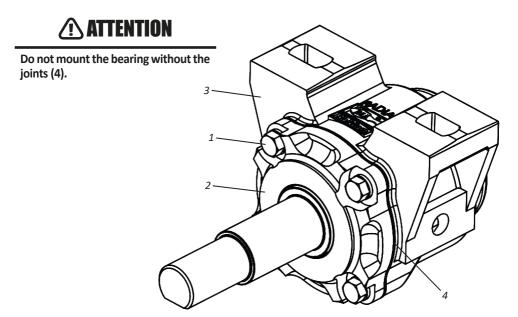


#### Maintenance

#### Adjusting the bearings

When the bearings have gaps, proceed as follows to adjust them:

- 01 Loosen the screws (1) and remove the cover (2) from the bearing (3).
- **02** Then, remove one or two gaskets (4) from the bearing cover (3). Replace the bearing cover (3) and retighten it.
- **03** If the gap persists, you can face the bearing cover (3) to increase the adjustment, then mount it on the bearing with as many joints as necessary.
- 04 The bearing must rotate freely, that is, without looseness.



### Bearing oil

In the first days of work with the **ASDA MULTI**, check the oil level of the bearings daily, then proceed to check every 120 hours of work.

Oil change should be done every 1200 working hours. Use transmission oil 90 API GL4, MIL-L-2105: SAEJ306, May/81; SAE 80W, 90 and 140.



The ideal oil level is when it reaches the plug hole. To check the bearing oil level, look for a flat place.



### • Operational Maintenance

PROBLEMS	PROBABLE CAUSES	SOLUTIONS		
The subsoiler is not	The working position is outside the horizontal line.	Adjust the horizontality by adjusting the 3rd point regulator.		
penetrating the soil (partially or totally).	Worn nozzles: 1 Tip or 2 Tips.	1 Tip: Reverse the position. 2 Tips: Replace.		
	Tractor with poor hydraulic system.	Repair the system or move the subsoiler to another tractor.		
	Oil level too low.	Complete the oil level.		
	Inverted hoses.	Check the hoses and assemble them correctly.		
The subsoiler does not move in any direction or moves	Defective hydraulic cylinders.	Replace repairs or replace cylinders.		
with difficulty.	Insufficient hydraulic control pressure.	Adjust the control via the relief valve using a pressure gauge.		
	Pressure of plugs uneven.	Adjust or change if necessary.		
	Hydraulic driver clogged or bent.	Unclog or change the tubing.		
	Damaged repairs.	Replace repairs.		
The subsoiler moves without activating the	Hydraulic cylinders with damaged repairs.	Identify which cylinder and replace the repairs.		
command.	Insufficient tightening.	Retighten carefully.		
	Lack of sealing material on the thread.	Use thread sealant and retighten carefully.		
	Carrying out curves or ends with a very short radius with the subsoiler glued to the ground.	When performing these maneuvers, remove the rods from the ground using the remote control.		
Chassis with cracks or	Automatic assembly does not disarm.	Apply correct adjustment to the screw according to page 39.		
warping.	Improper screw adjustment.	Apply correct adjustment to the screw according to page 39.		
	Screws with lower quality than required.	Replace with original Baldan parts.		



## Maintenance

### • Operational Maintenance

PROBLEMS	PROBABLE CAUSES	SOLUTIONS	
Automatic assembly does not disarm.	Improper screw adjustment.	Apply correct adjustment to the screw according to page 39.	
	Areas with high incidence of obstacles such as: stones, stumps, roots, etc.	Reduce speed and/or avoid these areas.	
Automatic assembly	Soil with high compaction index.	Reduce speed.	
with frequent disarm.	Tractor power and working speed higher than recommended.	Work within the power and speed limits recommended by the manufacturer.	
	Improper screw adjustment.	Apply correct adjustment to the screw according to page 39.	
	Oil with impurities.	Replace oil, repairs and filter element.	
Leak in hydraulic cylinders.	Working pressure higher than recommended.	Adjust the control via the relief valve using a pressure gauge.	
	Damaged repairs.	Replace repairs.	
	Damaged rod.	Replace rod.	
Leak in hydraulic hoses.	Thread sealing material is missing.	Use thread sealant and retighten carefully.	
	Insufficient tightening.	Retighten carefully.	
Quick couplings do not adapt.  Couplings of different types.		Exchange them for males and females of the same type.	



### • Fertisystem Accesories

The Fertisystem dispenser is fitted with a "cross-lid" level regulator and endless spring (step  $\bf 1$ "). The Fertisystem dispenser is supplied with accessories: maintenance tube and fixing tube to assist in maintenance.









MAINTENANCE TURE

FIXING TUBE

"CROSS-LID" LEVEL REGULATOR

ENDLESS SPRING (STEP 1")

### Endless spring

In the ASDA MULTI the Fertisystem dispenser leaves the factory fitted with the 1'' (1) endless spring.



### • "Cross-Lid" level regulator

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





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

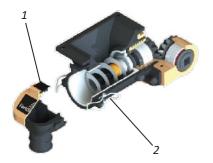


#### Maintenance

• Maintenance or replacement of the Fertisystem dosing spring

After planting, do not leave fertilizer in the tank. To perform maintenance or exchange of the endless spring or to perform cleaning or any repair on the inside of the Fertisystem dispenser, proceed as follows:

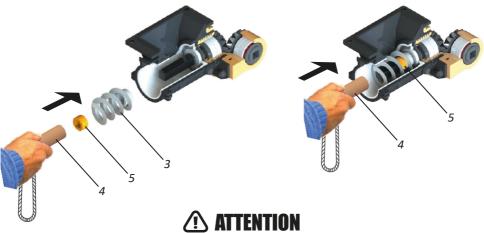
O1 - Disengage the nozzle (1) through the stainless steel lock (2).



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



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



Keep the worm spring in place with the locking ring. This procedure will prevent damage to the transverse cover when the doser is not used with the fertilizer or when transporting the subsoiler. In case of wear or lack of tightening "pressure" of the lock ring (5), replace it.



• Fertisystem doser maintenance tube

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



**01** - Disengage the nozzle (1) through the stainless steel lock (2).  $\ensuremath{2}$ 



02 - Then, introduce the maintenance tube (3) in rotating movements to move the fertilizer to the bottom of the feeder. Then perform the necessary maintenance.



**O** NOTE

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

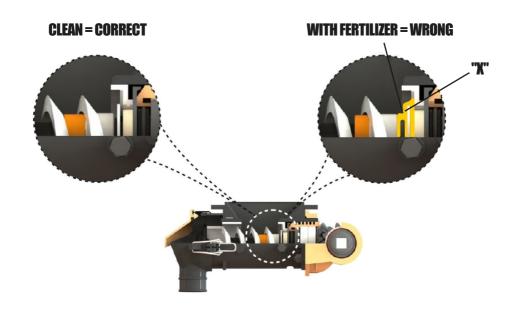


#### Maintenance

#### Cleaning the Fertisystem doser

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

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



# **ATTENTION**

Make sure that there is no fertilizer in the "X" area between the washers and the sealing felt. In case of extreme need to use the fertilizer out of specification and/or with excess moisture, perform daily cleaning of the endless springs and other components.

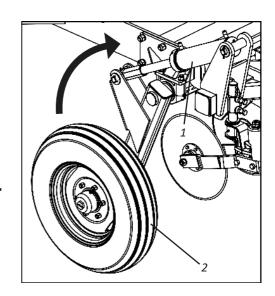
Do not carry out maintenance or cleaning in the bearing area, in the endless springs and in the gears while the subsoiler is in motion.



### Changing tires

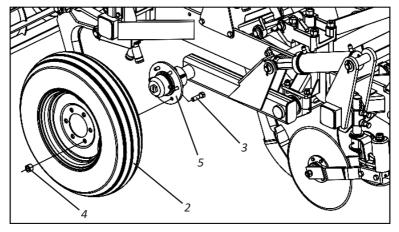
If necessary, change or repair the tires for this, proceed as follows:

- 01 Fully collect the hydraulic cylinders (1) by suspending the tires (2) from the ground.
- 02 Then, loosen the screws (3) and nuts (4) and remove the tires (2) from the hubs (5).
- 03 Then, change or repair the tires (2) and reassemble them.



# **ATTENTION**

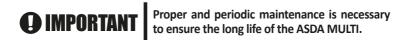
Before changing or repairing the tires, make sure that the ASDA MULTI is fully supported on the ground. Failure to do so can cause damage, serious accidents or even death.





#### Maintenance

- Care
- **01** Before each work, check the condition of all hoses, pins, screws, bearings, discs, bearings and sections. When necessary, retighten, or replace them.
- **02** Movement speed must be carefully controlled according to the terrain conditions.
- **03** The **ASDA MULTI** is used in several applications, requiring knowledge and attention during its handling.
- 04 Only local conditions can determine the best way to operate the ASDA MULTI.
- 05 When assembling or disassembling any part of the ASDA MULTI, use appropriate methods and tools.
- 06 Observe the lubrication intervals carefully at the different points of the ASDA MULTI. Observe the lubrication intervals.
- **07** Always check the parts for wear. If replacement is required, always require original Baldan parts.
- 08 Keep the tires of the ASDA MULTI always inflated.
- 09 Keep the ASDA MULTI discs sharp at all times.



- General cleaning Part I
- 01 When storing the ASDA MULTI, make a general cleaning and wash it thoroughly only with water. Check that the paint has not worn out, if this has happened, apply a general coat, apply protective oil and lubricate the ASDA MULTI completely. Do not use burnt oil or other abrasive.
- **02** Fully lubricate the **ASDA MULTI**. Check all the moving parts of the **ASDA MULTI**, if they show wear or looseness, make the necessary adjustment or replacement of the parts, leaving the scarifier ready for the next job.
- **03** After all maintenance care, store the subsoiler in a covered and dry place, properly supported.

Avoid: - The discs from directly contacting the ground.

- Springs compression.
- That hydraulic hoses are properly capped.



- General cleaning Part II
- 04 When connecting or disconnecting hydraulic hoses, do not let the ends touch the ground. Before connecting the hydraulic hoses, clean the connections with a clean cloth without loose threads. Do not use tow!
- 05 Replace all damaged or missing stickers, especially warnings. Make everyone aware of their importance and the dangers of accidents when instructions are not followed.
- 06 After all maintenance care, store your ASDA MULTI on a flat surface, covered and dry, away from animals and children.
- 07 We recommend washing the ASDA MULTI only with water at the beginning of the work.



**ATTENTION** Do not use chemicals or abrasives to wash the ASDA MULTI, as this may damage the paint and its stickers.

#### Subsoiler conservation - Part I

To extend the life and appearance of the ASDA MULTI for longer, follow the instructions below:

- 01 Wash and clean all the ASDA MULTI components during and at the end of the work season.
- 02 Use neutral products to clean the ASDA MULTI, following the safety and handling guidelines provided by the manufacturer.
- 03 Always perform maintenance at the times indicated in this manual.

#### Subsoiler conservation - Part II

The practices and care below if adopted by the owner or operator make a difference for the conservation of the ASDA MULTI.

- 01 Caution when performing high pressure washing; do not direct the water jet directly at the connectors and electrical components. Isolate all electrical components;
- 02 Use only water and MILD detergent (7 pH);
- 03 Apply the product, following the manufacturer's instructions, on the wet surface and in the correct sequence, respecting the application and washing time;
- 04 Stains and dirt not removed with the products should be removed with a sponge.
- **05** Rinse the machine with clean water to remove all chemical residues.



### Maintenance

- Subsoiler conservation Part II
- 06 Do not use: Detergents with basic active ingredient (pH greater than 7), can damage/ stain the subsoiler painting.
  - Detergents with acid active principle (pH less than 7) act as a paint remover/zinc plating (the protection of parts against oxidation).



- 07 Let the machine dry in the shade so that water does not accumulate in its components. Drying too fast can stain your paint.
- 08 After drying, lubricate all grease fittings according to the operator's manual recommendations.
- 09 Spray the entire machine, especially galvanized parts, with protective oil, following the manufacturer's application guidelines. The guard also prevents dirt from sticking to the machine, facilitating subsequent washes.
- 10 Observe the cure (absorption) time and application intervals as recommended by the manufacturer.



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



We recommend the following protective oils: - Baldan: Agro protective 200 or 300 - ITWChemical: Zoxol DW - 4000 Series

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



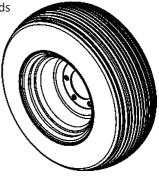
## Optional

Optional accessories

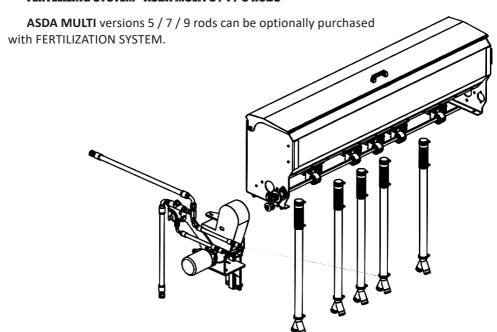
The **ASDA MULTI** has options that can be purchased according to the needs of the work.

#### TIRES - ASDA MULTI 5 / 7 / 9 RODS

For work on clay soils, ASDA MULTI versions 5/7/9 rods can be purchased optionally with  $11 \times 15 \times 10$  tarpaulin tires.



#### FERTELIZING SYSTEM - ASDA MULTI 5 / 7 / 9 RODS





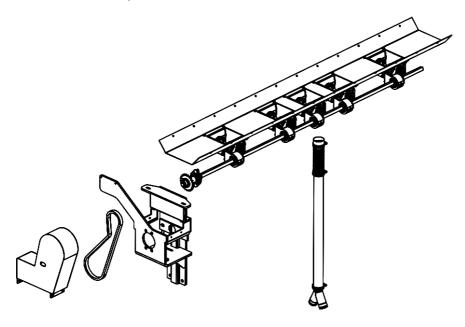
## Optional

Optional accessories

The **ASDA MULTI** has options that can be purchased according to the needs of the work.

#### CONVERSION SYSTEM - ASDA MULTI 5 / 7 / 9 RODS

**ASDA MULTI** versions 5/7/9 rods can be purchased optionally with a SEED to FERTILIZER conversion system.





### Identification

#### Nameplate

To consult the parts catalog or request technical assistance from Baldan, always indicate the model (01), serial number (02) and date of manufacture (03), which can be found on the nameplate of your **ASDA MULTI**.



# **ATTENTION**

The drawings contained in this Instruction Manual are for illustrative purposes only.

In order to provide a better view and detailed instructions, some drawings in this manual have removed the safety devices (covers, guards, etc.). Never operate the ASDA MULTI without these devices.



If in doubt, never operate or handle your equipment without consulting Post Sales.

Telefone: 0800-152577

e-mail: posvenda@baldan.com.br

## **PUBLICATIONS**

Code: 60550106348 | CPT: ASDAMULTI06420A





## Identification

• Product identification

Correctly identify the information below to always have information on the life of your equipment.

Owner:
Resale:
Farm:
City:
State:
Warranty Cert. No.:
Implement:
Serial No.:
Date of purchase:
Invoice:





Notes	



**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 a review of the replaced items by Baldan Technical Assistance, and if it is concluded that it is not covered by the warranty, then the reseller's will be responsible for replacement costs; as well as material expenses, travel including accommodation and meals, accessories, used lubricant and other expenses arising from the call for Technical Assistance, and Baldan is authorized to bill on behalf of the resale. 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 previously products 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 the use and maintenance care.

I confirm that I have been informed of the current warranty terms and instructed on the proper use and maintenance of the implement.

Implement:	_ Serial No.:	
Date:	_Invoice No.: _	
Resale:		
Phone:	_ Zip Code:	
City:		State:
Owner:		
Phone:		
Address:	_ Number:	
City:		State:
E-mail:		
Date of sale:		
Resale Signature/Stamp		

1ª1st copy - Owner:



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Implement:	Serial No.:
Date:	Invoice No.:
Resale:	
Phone:	Zip Code:
City:	State:
Owner:	
Phone:	
Address:	Number:
City:	State:
E-mail:	
Date of sale:	
Resale Signature/Stamp	



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I confirm that I have been informed of the current warranty terms and instructed on the proper use and maintenance of the implement.

Implement:	Serial No.:
Date:	Invoice No.:
Resale:	
Phone:	Zip Code:
City:	State:
Owner:	
Phone:	
Address:	Number:
City:	State:
E-mail:	
Date of sale:	
Resale Signature/Stamp	

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

1.74.05.0059-5

AC MATÃO ECT/DR/SP

# **RESPONSE CARD**

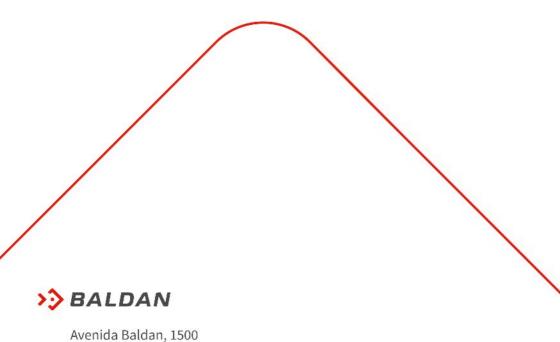
**NO STAMPING IS REQUIRED** 

#### THE STAMP WILL BE PAID BY:



#### **BALDAN IMPLEMENTOS AGRÍCOLAS S/A.**

Av. Baldan, 1500 | Nova Matão | CEP: 15993-900 | Matão-SP. | Brasil Tel: (16) 3221-6500 | Fax: (16) 3382-6500 | www.baldan.com.br | email: sac@baldan.com.br | Export: Tel: +55 (16) 3221-6500 | Fax: +55 (16) 3382-4212 | 3382-2480 | email: export@baldan.com.br



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