

Instruction Manual



SAB MP

Mounted Forrower and Fertilizer

 **BALDAN**

PRESENTATION

We appreciate your purchase and congratulate you for the excellent choice you just made because you have purchased a product manufactured with technology from **BALDAN IMPLEMENTOS AGRÍCOLAS S/A.**

This instruction manual will guide you through the procedures that are necessary since its acquisition up to the operating procedures of use, security and maintenance.

BALDAN ensures that has delivered this farming implement to the dealer in perfect conditions.

The dealer is responsible for the custody and maintenance of this farming implement and also for the assemblage, retightening, lubrication and overhaul.

In the technical delivery, the dealer must advise the user on its maintenance, security, its obligations under any technical assistance, the strict observance of the guarantee and reading of the instruction manual.

Any request for technical assistance under warranty should be made to the dealer where it was purchased.

We reiterate the need for careful reading of the **Warranty Certificate** and observance of all items in this instruction manual, as doing so, the useful life of your farming implement will increase.



Instruction Manual



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BALDAN IMPLEMENTOS AGRÍCOLAS S/A.
CNPJ: 52.311.347/0009-06
Insc. Est.: 441.016.953.110



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Instruction Manual online.

 **BALDAN**

INDEX

WARRANTY	6
<i>Product Warranty</i>	<i>6</i>
GENERAL INFORMATION	7
<i>Owner</i>	<i>7</i>
SAFETY STANDARDS	8 - 10
WARNINGS	11
COMPONENTS	12
TECHNICAL SPECIFICATIONS	13
COUPLING	14
<i>Tractor Coupling (Figures 02)</i>	<i>14</i>
<i>Plow Centering (Figures 03)</i>	<i>15</i>
<i>Plow Leveling (Figures 04)</i>	<i>15</i>
ADJUSTMENTS	16
<i>Adjusting the Spacing Between Rods (Figure 05)</i>	<i>16</i>
<i>Adjusting the Cutting Disc Depth (Figure 06)</i>	<i>16</i>
<i>Adjusting the Rod Opening (Figure 07)</i>	<i>17</i>
<i>Adjusting the Rod Auto Disarm Load (Figures 08)</i>	<i>17</i>
<i>Adjusting the Furrow Markers and Stool (Figure 09)</i>	<i>18</i>
FERTILIZER DISTRIBUTION SYSTEM	19
<i>Fertilizer Conductor - Independent System (Figures 10/11/12)</i>	<i>19</i>
<i>Fertilizer Adjustment with Hydraulic Motor (Figures 13)</i>	<i>20</i>
CALCULATION	21
<i>Practical Calculation for Fertilizer Distribution</i>	<i>21</i>
<i>Practice Test to Assess the Amount of Fertilizer Distribution</i>	<i>21</i>
<i>Operations</i>	<i>22</i>
ADJUSTMENTS AND OPERATIONS	22
MAINTENANCE	23
<i>Lubrification</i>	<i>23</i>
<i>Table of Grease and Equivalents</i>	<i>23</i>
<i>Lubricate Every 10 hours of Work (Figures 14)</i>	<i>23</i>
<i>Lubricate Every 10 Hours of Work - Continued (Figures 14)</i>	<i>24</i>
<i>Tension of Chains (Figure 15)</i>	<i>25</i>
<i>Operational Maintenance</i>	<i>25</i>
<i>Care</i>	<i>26</i>
<i>General Cleaning</i>	<i>26</i>
IDENTIFICATION	27
<i>Product Identification (Figures 16)</i>	<i>27</i>
NOTES	28

PRODUCT WARRANTY

The **BALDAN IMPLEMENTOS AGRÍCOLAS S/A** ensures the normal operation of the implement to the dealer for a period of six (6) months from the date of delivery in the invoice to the first retail consumer.

During this period, **BALDAN** undertakes to repair material or manufacturing defects of its responsibility, but labor, freight and other expenses are responsibilities of the dealer.

In the warranty period, the order and replacement any defective parts must be made to the dealer, which will send the defective part for analysis in **BALDAN**.

When such a procedure is not possible and the dealer no longer can solve the problem, it will request support from the **BALDAN** Technical Assistance through specific form distributed to dealers.

After analysis of items replaced by **BALDAN** Technical Assistance the concluded that it is not guaranteed, then it will be responsibility of the dealer the costs related to replacement and material, including travel time and meals, accessories, lubricants used and other expenses from the service call, and **BALDAN** will be authorized to make the billing to the resale.

Any repair done on the product that is within the warranty period by the dealer, will only be authorized by **BALDAN** by prior budget presentation describing parts to be replaced and labor to be performed.

Productus repaired or modified by services that do not belong to **BALDAN** dealer network are excluded from this term, as well as the application of non-genuine parts or components.

This warranty becomes null will when it is determined that the defect or damage is the result of misuse of the product, failure to follow instructions or operator's inexperience.

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

Manufacturing or material defects, object of this warranty term, shall not be under any circumstances, reason for termination of contract purchase and sale, or compensation of any nature.

The **BALDAN** reserves the right to change and/or improve the technical characteristics of its products without notice and without obligation to do so with products previously manufactured.

WARRANTY

GENERAL INFORMATION

OWNER

The **BALDAN IMPLEMENTOS AGRÍCOLAS S/A**, is not responsible for any damage caused by accident from use, transport or improper or incorrect storage of your implement, whether by negligence and / or inexperience of any person.

Only people who have the full knowledge of both tractor and implement must make their transportation and operation.

The **BALDAN** is not responsible for any damage caused by unpredictable situations or unrelated to the normal use of the implement.

The mismanagement of this equipment can result in serious or fatal accidents. Before placing the equipment in operation, carefully read the instructions in this handbook. Make sure that the person responsible for the operation is instructed on the proper and safe handling, if he has read and understood the handbook of this product.



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

This Norm aims to establish the principles to be observed in the organization and the work environment compatible with the planning and development of activities in agriculture, livestock, forestry, and aquaculture with safety and health at the working environment.

OWNER:

Read and follow carefully the provisions of NR-31.

To learn more, visit the website and read the full NR-31.

<http://portal.mte.gov.br/legislacao/normas-regulamentadoras-1.htm>



THIS ALERT SYMBOL INDICATES IMPORTANT SAFETY NOTES. WHENEVER YOU FIND IT IN THIS MANUAL, READ THE MESSAGE WITH ATTENTION TO AVOID ANY ACCIDENT.

**ATTENTION**

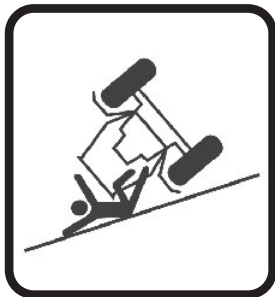
- Read the instruction handbook carefully to learn about safety practices.

**ATTENTION**

- Only start operating the tractor, when properly accommodated and with the seat belt fastened.

**ATTENTION**

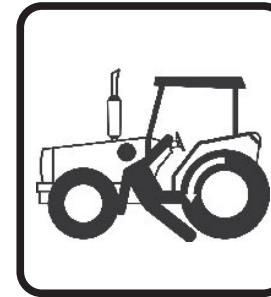
- Do not operate the tractor if the front is light. Having a tendency to lift, add weights on the front or front wheels.

**ATTENTION**

- There are risks of serious injury by tipping when working on slopes.
- Do not use excessive speed.

**ATTENTION**

- Do not transport people on the tractor or equipment.

**ATTENTION**

- Before doing any maintenance on your equipment, make sure it is properly stopped. Avoid getting hit.

SAFETY RULES

SAFETY RULES

! ATTENTION



- Do not operate the seeder if the transmissions protections are not properly fixed.
- Only remove the protections to switch gear, then replace them immediately.
- When doing any service on the seeder transmission, disable the ratchets.
- Do not make adjustments with the seeder in movement.

! ATTENTION



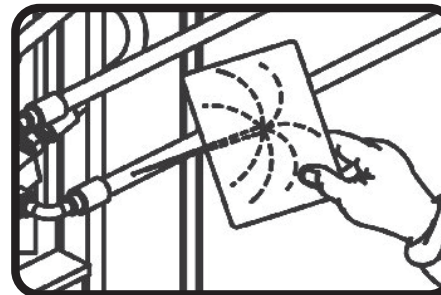
- The hydraulic oil works under pressure and can cause serious injury in case of leaks. Periodically check the condition of hoses. If there is evidence of leakage, replace them immediately.
- Before connecting or disconnecting the hydraulic hoses, relieve the system pressure, triggering the command with the tractor off.

! ATTENTION



- Keep yourself away from active elements of the seeder (discs), as they are sharp and can cause accidents.
- When carrying any service in discs, use safety gloves on hands.

! ATTENTION



- When searching for a possible leak in hoses, use a piece of cardboard or wood, never use your hands.
- Avoid fluid incision through the skin.



THIS ALERT SYMBOL INDICATES IMPORTANT SAFETY NOTES. WHENEVER YOU FIND IT IN THIS MANUAL, READ THE MESSAGE WITH ATTENTION TO AVOID ANY ACCIDENT.

**ATTENTION**

- Avoid accidents caused by intermittent action of line markers.
- When operating the seeder, check for the presence of persons under the line markers or near their action.

**ATTENTION**















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



THIS ALERT SYMBOL INDICATES IMPORTANT SAFETY NOTES. WHENEVER YOU FIND IT IN THIS MANUAL, READ THE MESSAGE WITH ATTENTION TO AVOID ANY ACCIDENT.

SAFETY RULES

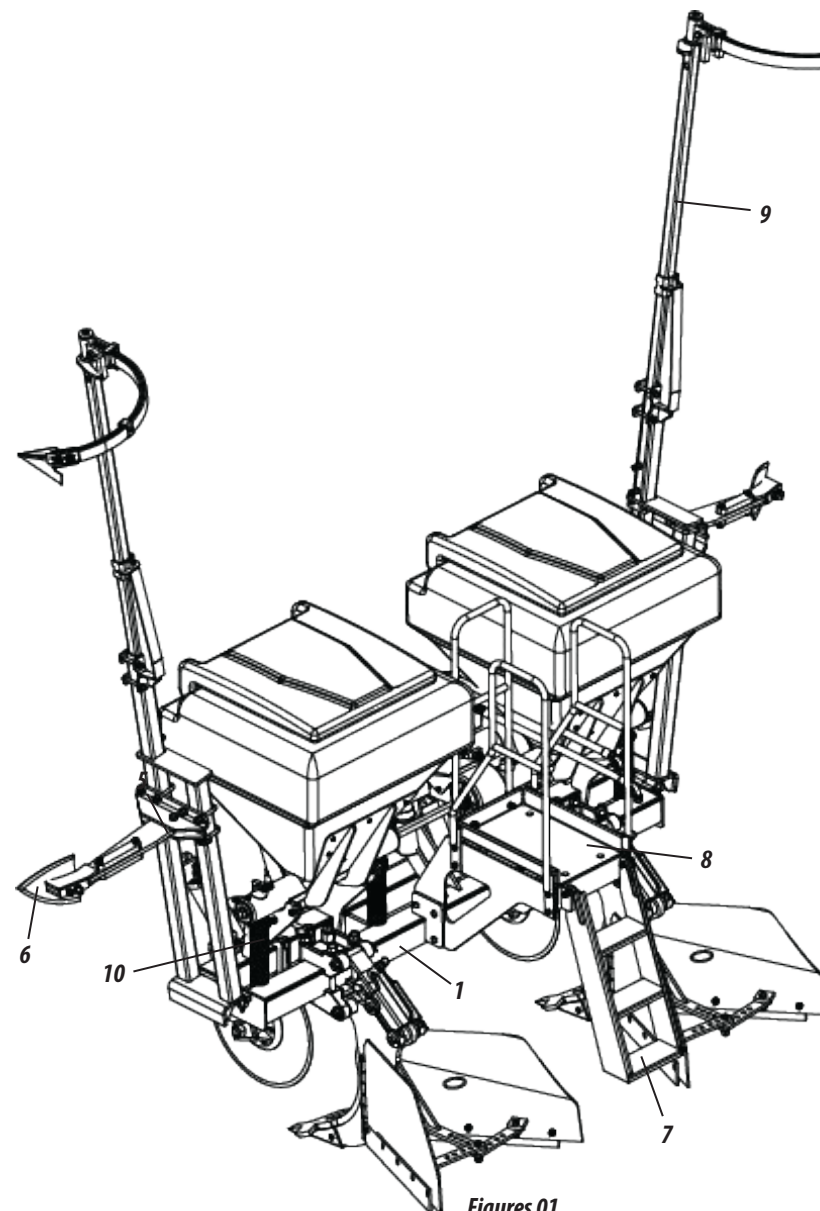
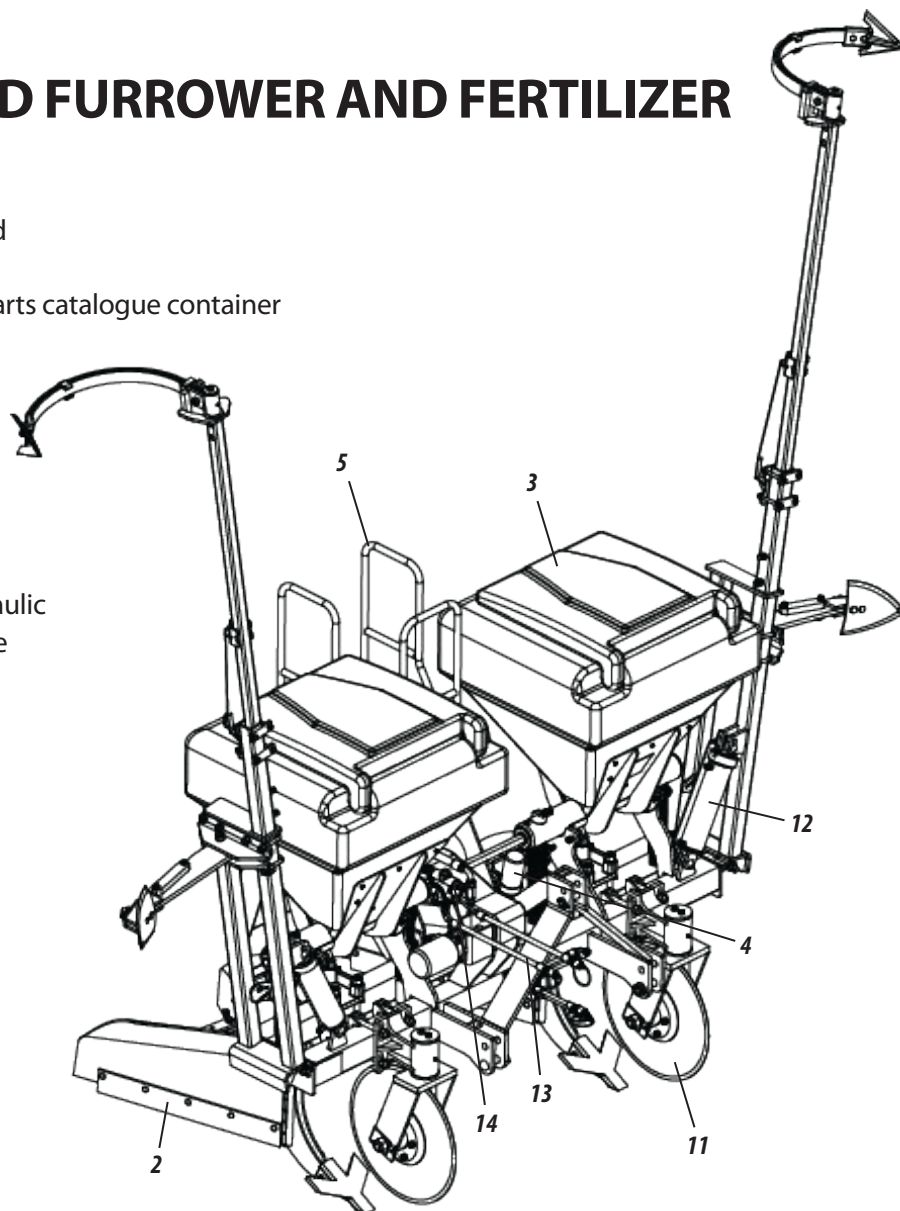
WARNINGS

- 01 -  When operating the equipment, do not allow people to stay very close to it.
- 02 -  In making any assembly and disassembly service in the discs, use safety gloves.
- 03 -  Do not wear loose clothing as they can curl up on the equipment.
- 04 -  When turning the tractor engine on, by properly seated in the operator's seat and aware of the correct and safe management both of tractor and implement. Always put the shifter in neutral, turn off the engine and put the hydraulic command in the neutral position
- 05 -  Do not turn on the engine indoors or without adequate ventilation, because the exhaust fumes are harmful.
- 06 -  When maneuvering the tractor to the implement hitch, make sure to have the necessary room and that there is nobody very close. Make maneuvering in low gear and be prepared to brake in an emergency.
- 07 -  Do not make adjustments with the implement in operation.
- 08 -  When working on slopes, proceed with caution when trying to maintain the necessary stability. In case of unbalance, reduce the throttle and turn the wheels of the tractor to the side of the slope.
- 09 -  Always drive the tractor at speeds compatible with safety, especially when working on uneven ground or slopes. Keep the tractor always engaged.
- 10 -  When driving on roads, keep the tractor brake pedals interconnected and use safety signs.
- 11 -  Do not operate the tractor if the front is light. If there is a tendency to rise, add weights on the front or front wheels.
- 12 -  Leaving the tractor, put the shifter in neutral and apply the parking brake.
- 13 -  Alcoholic beverages and some medications can cause loss of reflexes and change the physical conditions of the operator. Therefore, never operate this equipment, under the influence of these substances.
- 14 -  Read or explain all the procedures above to the user that cannot read.

If in doubt, refer to after-sales
Phone: +55 0800-152577 / E-mail: posvenda@baldan.com.br

SAB MP MOUNTED FURROWER AND FERTILIZER

- 1- Chassi
- 2- Subsolling Rod
- 3- Fertilizer Tank
- 4- Manual and parts catalogue container
- 5- Handrall
- 6- Rod
- 7- Ladder
- 8- Platform
- 9- Beacon
- 10- Hose
- 11- Cutting Disc
- 12- Cylinder Hydraulic
- 13- Hydraulic Hose
- 14- Valve



Figures 01

COMPONENTS

TECHNICAL SPECIFICATIONS

Table 01

Model	Nr of Rows	Row Spacing (mm)	Total Width (mm)	Total Height (mm)	Comprimento Total (mm)	Fertilizer Hopper (L)	Fertilizer Rate (kg/Ha)	Approx. Weight (kg)	Required Tractor Power (hp)
						Polietileno			
SAB MP	02	1300 / 1400 / 1500	3100	2300	2750	800	250 - 1200	1450	100 - 140

*The Baldan reserves the right to change specifications of this product without notice.
The technical specifications are approximate and reported in normal working conditions.*

TRACTOR COUPLING (FIGURE 02)

Before connecting the planter to the tractor, check if the tractor is equipped with the set of weights on the front or front wheels to keep it down. The rear wheels will give the tractor higher stability and traction to the ground:

To couple the plow, proceed as follows:

- 1- Bring the tractor slowly close to the plow in reverse, being aware for the application of the brakes.
- 2- Then, use the lever of the hydraulic position control when approaching the plow, leaving the left lower arm on the same level as the plow coupling.
- 3- Couple the lower left arm of the tractor through the hitch pin (1) on support the "A" of the plow.
- 4- Couple the 3rd point of the tractor to support "B" of the plow.
- 5- Then, with the aid of lever "C", couple the right lower arm of the tractor to support "D" of the plow.
- 6- Finally, attach the hydraulic hoses (2 and 3) on the tractor.

ATTENTION

Before connecting or disconnecting the hydraulic hoses, turn off the engine and relieve the pressure of the hydraulic system by moving command levers completely. Make sure that, by relieving the pressure of the system, no one is near the area.

IMPORTANT

Do not transport the plow if it is loaded, since it may damage the equipment. Supplying it only in at the workplace is recommend. If the planter is to remain on the field for any reason, we recommend covering it with impermeable canvas tarpaulin to prevent moisture.

COUPLING

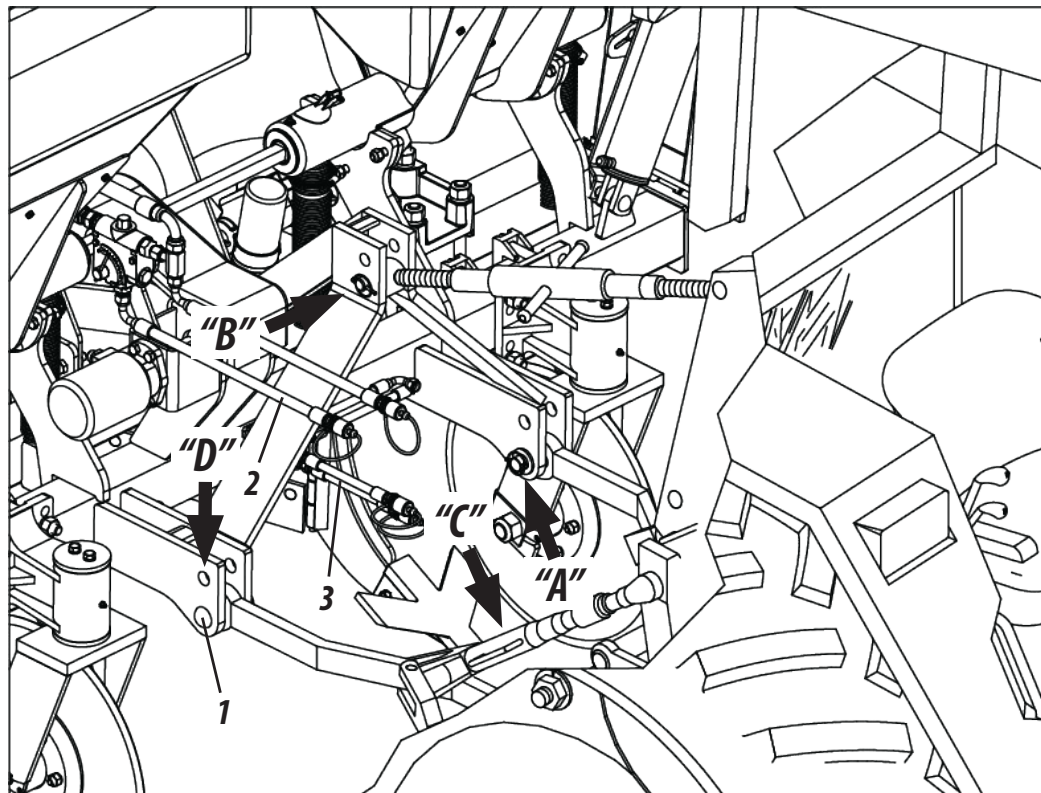


Figure 02

NOTE

By coupling the plow, find a safe and accessible place, and always use reduced gear with low acceleration.

COUPLING

PLOW CENTERING (FIGURE 03)

To centralize **SAB MP** plow in relation to the longitudinal axis of the tractor, proceed as follows :

- 1- Align the top couple of the plow with 3rd point of the tractor, checking if the distances "**A**" of the lower hydraulic arms are equal in relation to tractor tires. The lower arms should be leveled with each other.

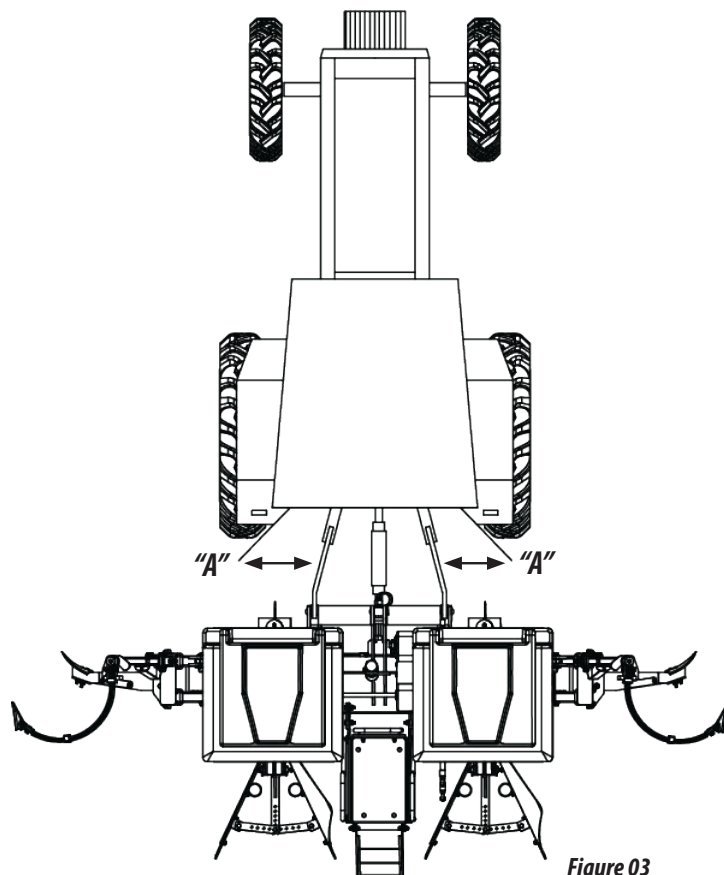


Figure 03

PLOW LEVELING (FIGURE 04)

To level the SAB MP plow, proceed as follows:

- 1- The tractor must be in flat place; then level the plow in transverse direction (width) through the lower right arm crank of the hydraulic couple. Observe that the "**A**" measures must be equal.
- 2- The longitudinal leveling (length) is done through the arm of the 3rd point . Note that the rods must be parallel to the ground.

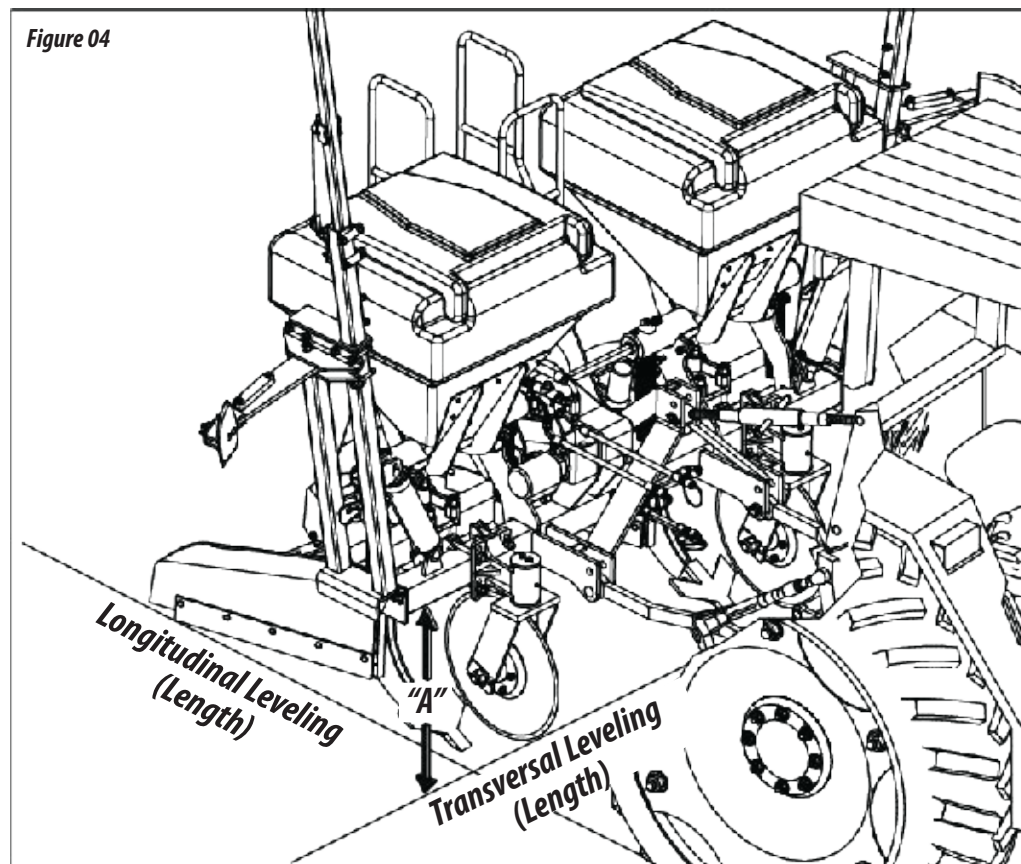


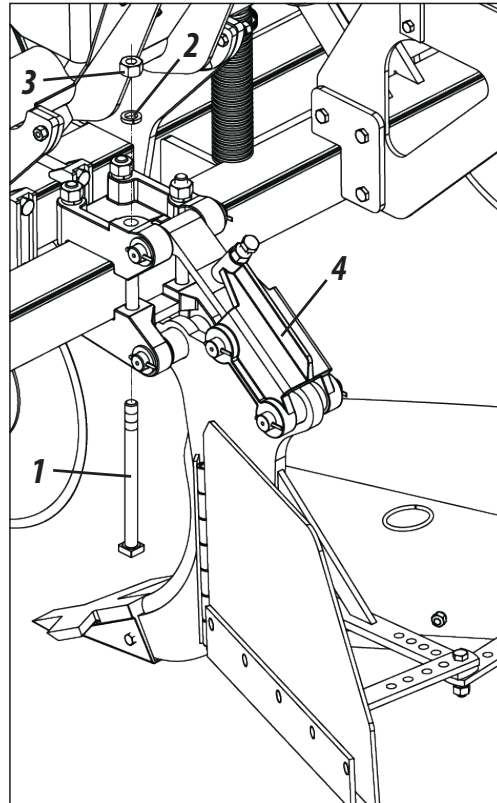
Figure 04

ADJUSTING THE SPACING BETWEEN RODS (FIGURE 05)

The **SAB MP** plow has cutting discs (1) to work in areas of reduced tillage or residues of annual crops used in crop rotation in the recovery areas, facilitating the cutting operation. To adjust the depth of the cutting discs (1), proceed as follows:

- 1- Loosen the screws (1) through the pressure washers (2) and nuts (3) .
- 2- Then adjust the rod (4) at the desired spacing.
- 3- Then, fasten the screws (1) again and washers (2) and nuts (3).

Figure 05



ATTENTION

When you finish the setting, repeat procedure for the other rod (1).

ADJUSTING THE CUTTING DISC DEPTH (FIGURE 06)

The **SAB MP** plow is provided with a spacing that can be changed according to the type of culture, to do this, proceed as follows:

- 1- First, loosen the nuts (2) , washers (3) and remove the screws (4).
- 2- Then, slide the cutting disc (1) to the desired setting.
- 3- Then, replace the screws (4) fixing it though the pressure washers (3) and nuts (2).

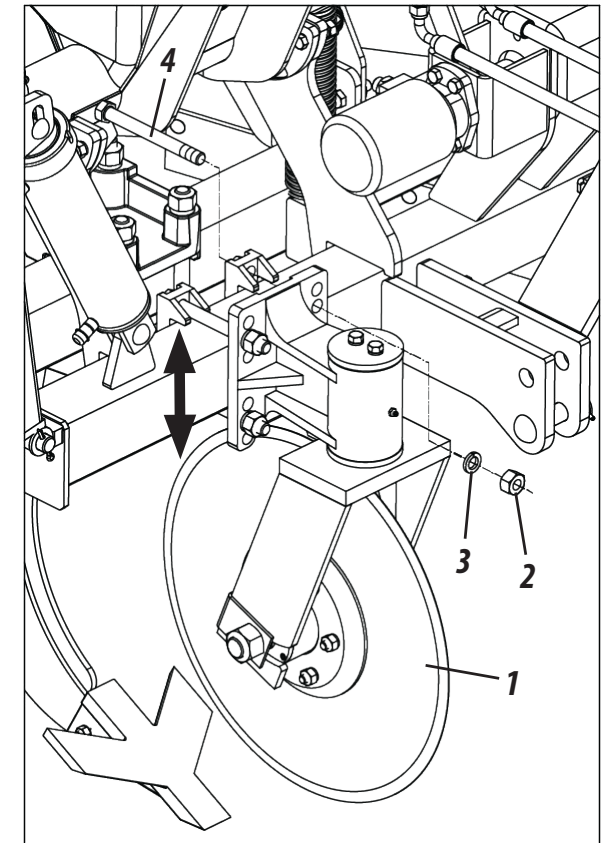


Figure 06

ATTENTION

When finished, do the same adjustment on the other cutting disc (1), because both must have the same setting.

ADJUSTMENTS

ADJUSTMENTS

ADJUSTING THE ROD OPENING (FIGURE 07)

The **SAB MP** plow has rods (1) whose openings can be adjusted according to need of work. To adjust the rod opening (1), proceed as follows :

- 1- Remove the screw (2), releasing the pressure washer (3) and nut (4).
- 2- Then, move the moldboard (5 and 6) according to the need of work.
- 3- Then, replace the screw (2), fixing it through the spring washer (3) and nut (4).

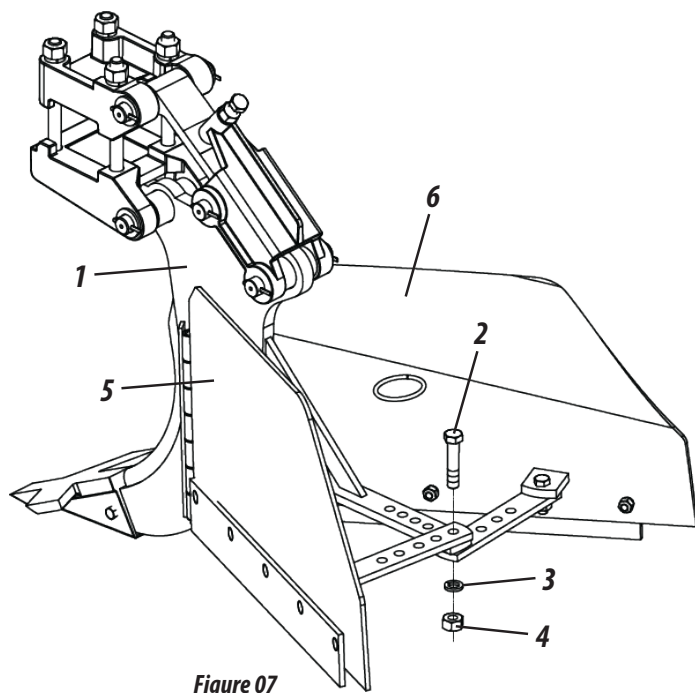


Figure 07



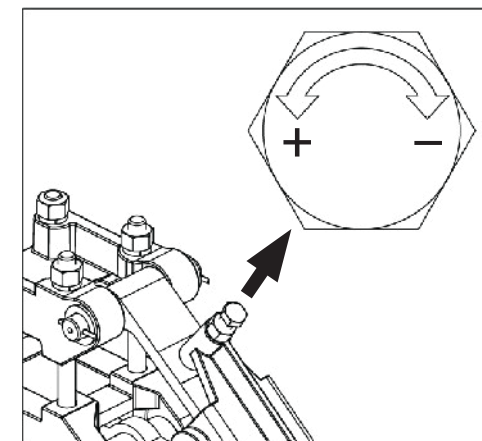
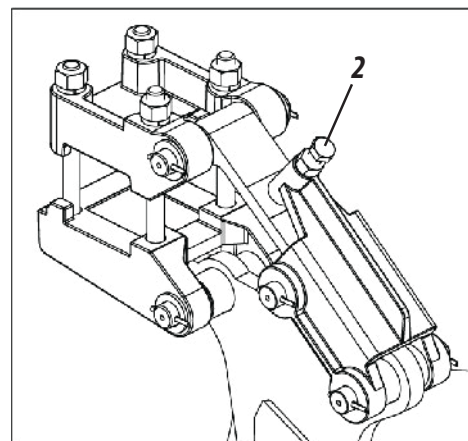
ATTENTION

When finishing the adjustment, repeat procedure for the other rod (1).

ADJUSTING THE ROD AUTO DISARM LOAD (FIGURES 08)

The automatic rod disarm system (1) leaves the factory with predetermined load adjustment. To decrease or increase the load, proceed as follows:

- 1- Turning the screw (2) 90° (1/4 turn) to the right (clockwise) will decrease 5 kg in the disarm load.
- 2- Turning the screw (2) 90° (1/4 turn) to the left (counter-clockwise) will increase 5 kg in the disarm load.



Figures 08



ATTENTION

Adjust the rod disarm load (1) only if it is disarming all the time. Make the adjustment always 1/4 by 1/4 turn, this is 5kg by 5 kg until disarm stops. These adjustments should be made in the field before starting work observing the type of soil to be worked for better performance of the plow.

ADJUSTING THE FURROW MARKERS AND STOOL (FIGURE 09)

The adjustment of furrow markers or stool is important to obtain furrowing and fertilizer distribution evenly spaced, making the line at the end of the plow has the same spacing as the last furrowed and fertilized line, facilitating future operations. To adjust furrow markers or stool, proceed as follows:

- 1- Firstly, you must know the spacing between rods, the number of rods to be used in the operation and the tractor's front gauge. Note: In the case of stool markers, the front gauge of the transshipment is considered.

Use the following formula, followed by an example.

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

$$\text{Solve: } X = \frac{1,50 \times 3 - 1,43}{2}$$

$$D = 1,53 \text{ meters}$$

WHERE:

E = Spacing Between Rods (m)
N = Number of rods of the plow
B = Tractor's front gauge
D = Marker Distance



ATTENTION



Avoid accidents caused by the intermittent action of line markers. When operating the plow, make sure that there are no people on the line markers or near their action.

- 2- Adjust the furrow marker with 0.785 m from the furrowing rod shown in **Figure 09** by the letter **A**.
- 3- To adjust the stool marker, it is necessary to know the transshipment's gauge.

EXAMPLE: Assuming transshipment with 2.40 meters of gauge, the stool marker will be positioned at 2.40 meters from the furrowing rod shown in Figure 09 by the letter B.

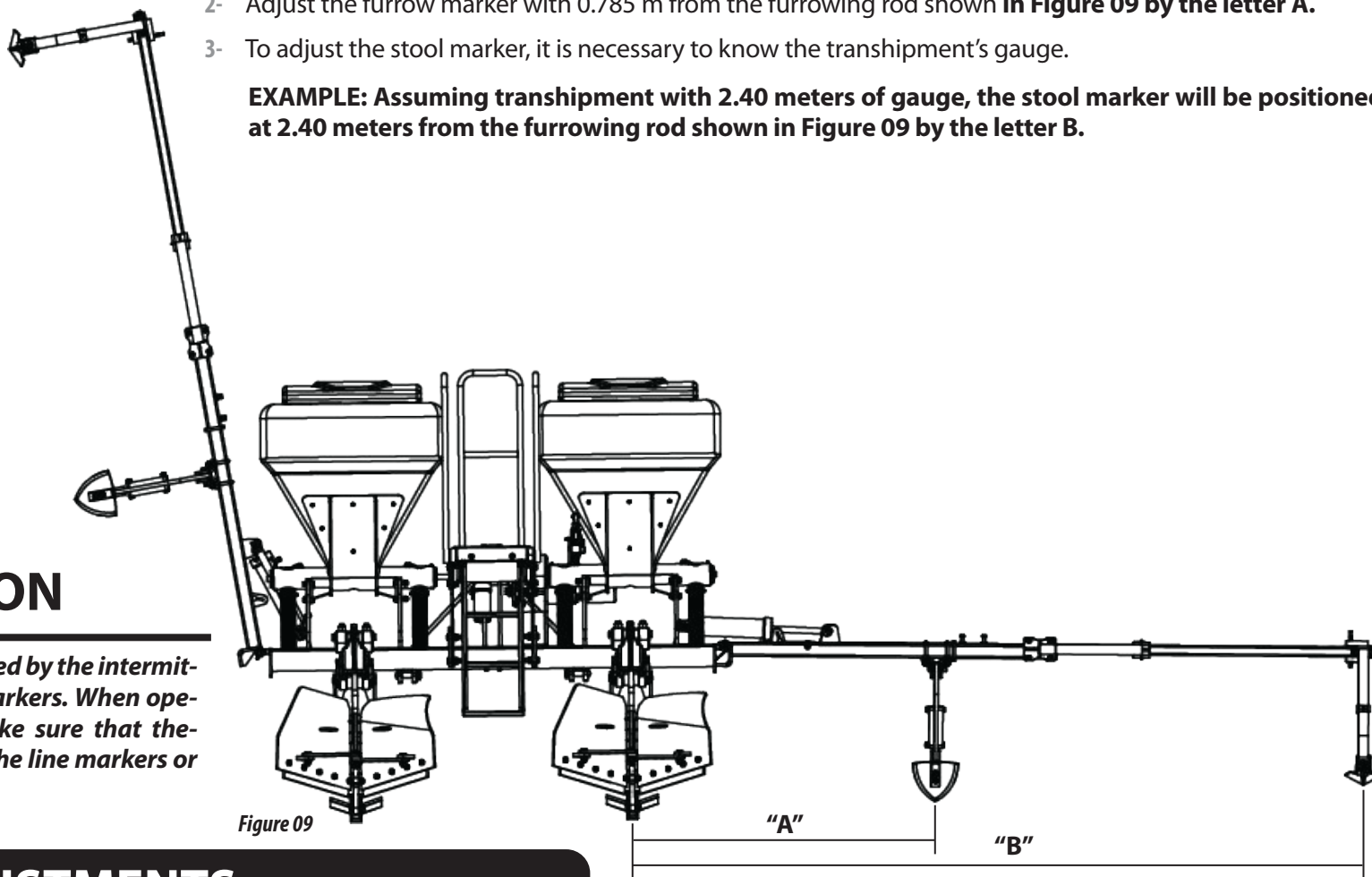


Figure 09

ADJUSTMENTS

FERTILIZER DISTRIBUTION SYSTEM

FERTILIZER CONDUCTOR - INDEPENDENT SYSTEM (FIGURES 10/11/12)

To conduct the fertilizer from the distributor to the soil, proceed as follows:

- 1- Connect the hoses (1) to the high flow distributor outputs (2), fixing them through the clamps (3), **as shown in Figure 10.**

Figure 11

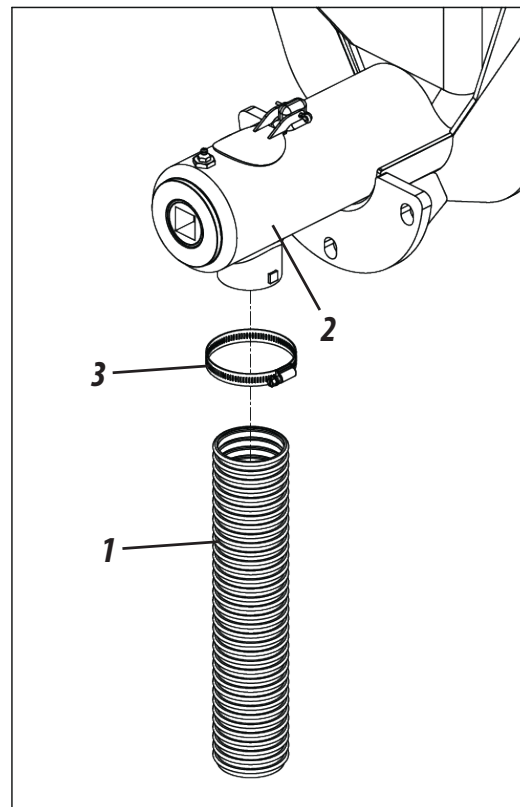
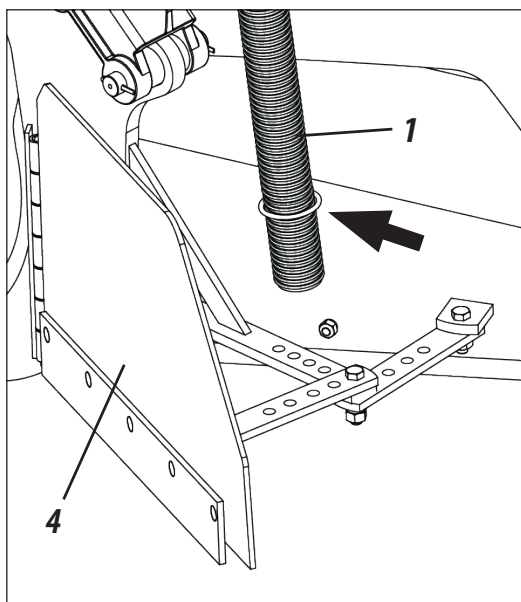
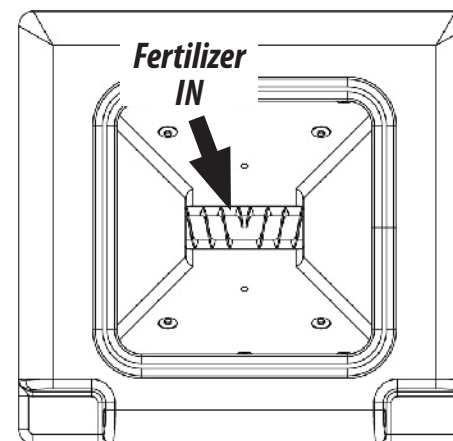


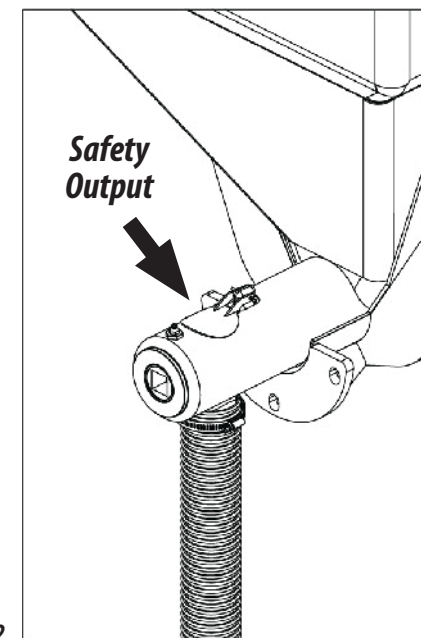
Figure 10

- 2- Then, pass the hoses (1) , inside the rings of rods (4) , preventing them from getting bent or folded , **as shown in Figure 11.**

The independent distribution system has safety outputs that, ensuring the system operation without damaging it. In case of clogging proceed the cleaning of the feeder up to the end of the hose near the furrow rod or double disc, because clogging can occur due to roots, pieces of plastic and other objects, **as shown in figures 12.**



Figures 12



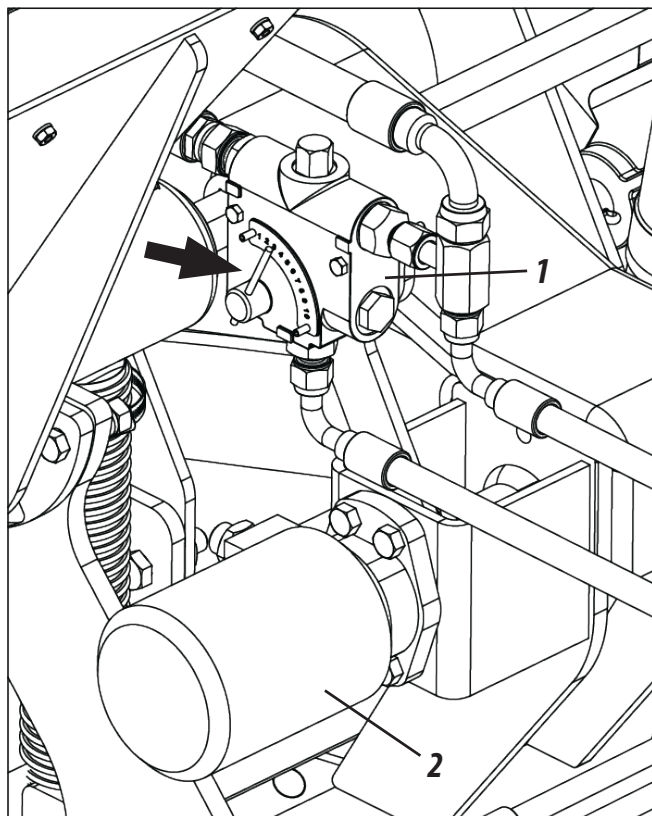
Figures 12

⚠ ATTENTION

Check distributors and hoses daily, and clean their outputs. When the fertilizer is wet or has impurities, proceed to clean more often.

FERTILIZER ADJUSTMENT WITH HYDRAULIC MOTOR (FIGURES 13)

- 1- Fertilizer adjustment must be made through the oil flow adjustment valve (1) with tractor stopped, but in the same work rotation. Collect fertilizer during time to go through 50 or 100 meters and calculate according to the example on the next page.



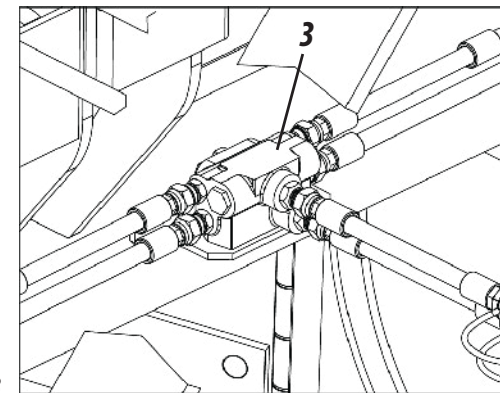
NOTE: You must wait a few seconds before starting to collect the fertilizer, so that it involves the shaft completely. Before starting the test, heat the tractor oil for normal working temperature.

- 2- The variation in the amount of fertilizer is obtained by opening or closing the oil flow adjustment valve (1).
- 3- Opening oil flow adjustment valve, the hydraulic motor (2) spins faster increasing the amount of fertilizer.

Table 02

Fertilizer Distribution Table (KG/Ha) - SAB MP Hydraulic Motor				
Gears				
Hexagon Shaft Motor		38		
Moved Fertilizer Box		20		
		Spacing (mm)		
		Kg / Ha		
Adjustment	g / 50 m	1300	1400	1500
2,0	2,800	431	400	373
2,1	4,000	615	571	533
2,5	4,800	738	686	640
3,0	7,200	1108	1029	960

- 4- Furrow and stool markers are alternative, lower one, then another, this happens through the oil flow divider valve of (3), which leaves the factory pre-set.



Figures 13



The oil flow adjustment valve (1), has a pre-set pressure relief system (safety system), which aims to stop the rotation of the hydraulic motor in case of a possible crash in the individual system of fertilizer distribution (spouts). It is recommended to operate with adjustment in position 2 or 3, as shown in Table 02, depending on the desired fertilizer distribution. Never change the valve adjustment (1).

FERTILIZER DISTRIBUTION SYSTEM

CALCULATION

PRACTICAL CALCULATION FOR FERTILIZER DISTRIBUTION

- To distribute other amounts of fertilizer in different spacing and areas as those shown in distribution tables, use the formula below and 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:** Plow with spacing of 1.50 m to distribute 400 kilograms of fertilizer per hectare, use the formula below:

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

Formula Data:

E = Spacing between lines (m)
Q = Amount of fertilizer to be distributed [kg]
A = Area to be fertilized [m²]
D = Distance of 50 meters (test)
X = Grams of fertilizer in 50 meters

Solve:
$$X = \frac{1500 \times 400}{10.000} \times 50$$

$$X = 60,00 \times 50 = 3000$$

$$X = 3000 \text{ grams in 50 meters per haste.}$$

NOTE

When obtaining the result, adjust the plow to distribute the amount found or the closest to the space predetermined in the test.

PRACTICAL TEST FOR MEASURING THE AMOUNT OF SFERTILIZER AND FERTILIZER TO BE DISTRIBUTED

- 1- For greater accuracy in fertilizer distribution, do the test to assess the amount of fertilizer distribution in the workplace because there are different conditions for different soil conditions. Proceed as follows:
- 2- As far as possible, always use the same tractor and operator.
- 3- Check the distance to the test in the table, we chose 50 linear meters.
- 4- Fill the plow tanks at least halfway. Run on average 10 meters outside the testing area so that the fertilizer fills the feeders.
- 5- Place containers to collect at the fertilizer outputs. Move the tractor in the testing area, always at the same speed that will be used in planting, from 5 to 7 km/h.
- 6- After running the delimited space, remove the sealing of the seed spout and collect them for counting and weighing of the fertilizer collected. If it is necessary to increase or decrease the amount of fertilizer and seed, refer to the table.
- 7- Once you reach the desired amount, still in the area, move the tractor at the same speed, however, leaving the fertilizer to reach the soil to check the distribution uniformity.

IMPORTANT

We suggest carrying a practical test for fertilizer distribution over 50m, to later compare the fertilizer and seed results.

ATTENTION

Variations in working speed affect the uniform fertilizer distribution. When changing the fertilizer manufacturer, it is necessary to recalibrate. After the first day of work, recheck all settings.

OPERATIONS

- 01 - After the first day of work with the planter, tighten all screws and nuts. Check the conditions of pins and locks.
- 02 - Do not make maneuvers or go in reverse with lines lowered into the ground.
- 03 - Observe lubrication intervals.
- 04 - When filling the seed and fertilizer tanks, check if there are no objects within them, such as nuts, bolts, etc.. Always use seed and fertilizer free of impurities.
- 05 - Always observe the functioning of mechanisms that distribute seeds and fertilizer and also the settings established at the beginning of furrowing and fertilization.
- 06 - Keep the plow always leveled, the tractor drawbar must remain stable and working speed should remain constant.
- 07 - Check the position of the fertilizer in relation to seed in the soil.
- 08 - When doing any checking or maintenance on the plow, you should lower it to the ground and turn off the tractor engine.
- 09 - Do not make closed curves with the plow during work.
- 10 - The plow has several settings but only the local conditions will determine the best adjustment.
- 11 - Fill the plow only in the workplace.
- 12 - Do not transport or work overloaded on the plow.
- 13 - Indications of right and left side are made by observing the plow from behind.
- 14 - The **SAB MP** plow operates with greater efficiency in the range from 5 to 7 km/h.
- 15 - If in doubt, do not operate or handle the plow, refer to the after-sales.

Phone: 0800-152577 or e-mail: posvenda@baldan.com.br

ADJUSTMENTS AND OPERATIONS

MAINTENANCE

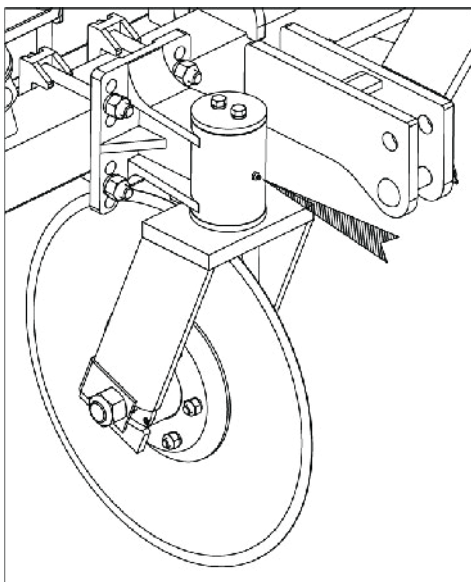
LUBRIFICATION

- 1- Lubrication is essential for good performance and durability of the seeder moving parts, helping to reduce maintenance costs.
- 2- Before starting operation, lubricate all grease fittings carefully always observing lubrication intervals in the following pages. Make sure the lubricant is of good quality; avoid using products contaminated by water, dirt and other agents.

IMPORTANT

if there are other equivalent lubricants and / or greases listed in this table, refer to the lubricant manufacturer technical handbook.

LUBRICATE EVERY 10 HOURS OF WORK (FIGURES 14)



Figures 14

TABLE OF GREASE AND

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

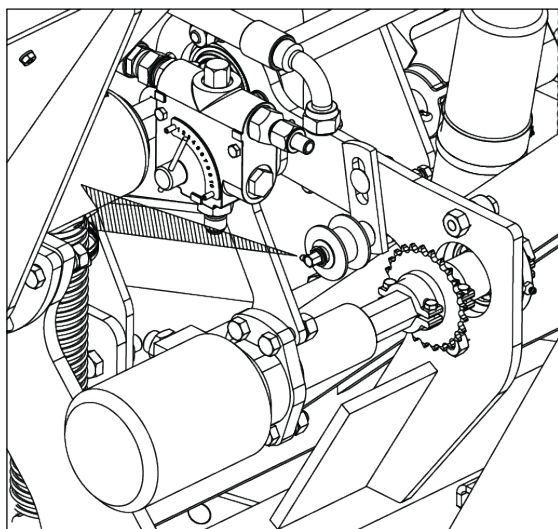
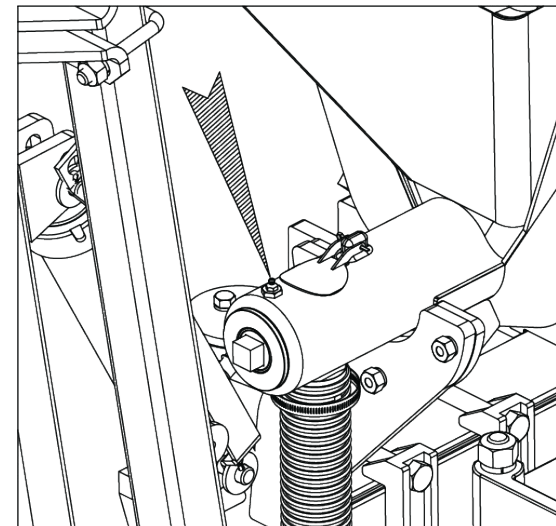
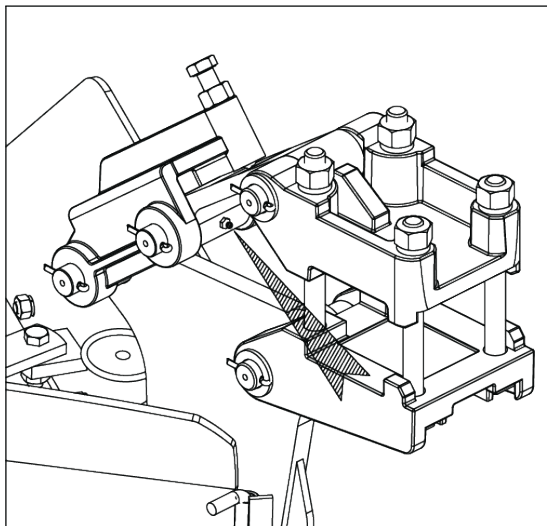
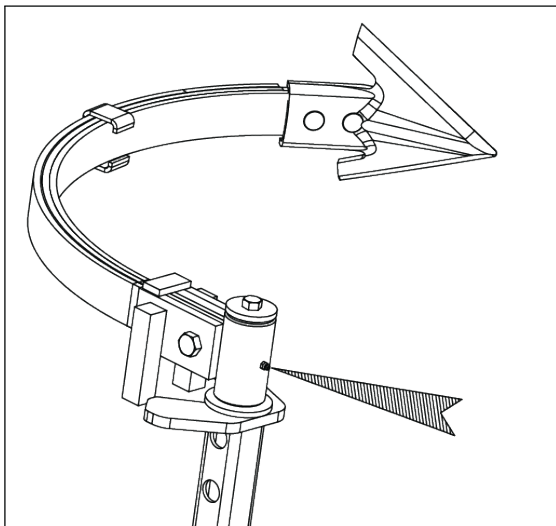
Table 03



ATTENTION

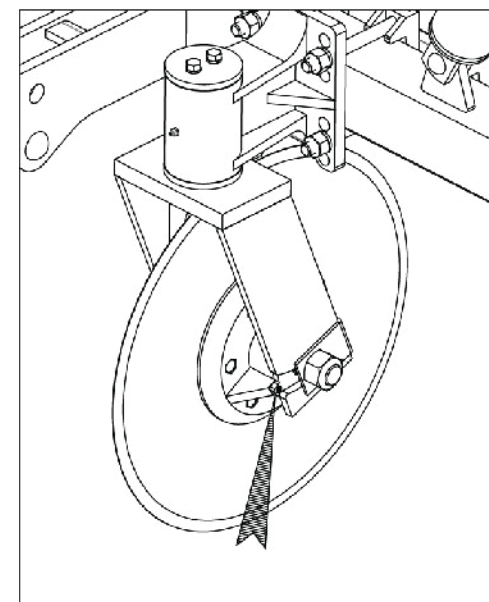
Do not over-grease, respect the interval to lubricate again.

LUBRIFICATE EVERY 10 HOURS OF WORK - CONTINUED (FIGURES 14)



ATTENTION

Do not over-grease, respect the interval to lubricate again.



Figures 14

MAINTENANCE

MAINTENANCE

CHAIN TENSION (FIGURE 15)

- To strengthen the chain, proceed as follows:

- 1- Loosen the screw (1), slide the tensioner up to the desired position. Then, retighten the nut , **as in figure 15.**



ATTENTION

Check the chain tension every day, the normal clearance must be ± 1 cm in its center.

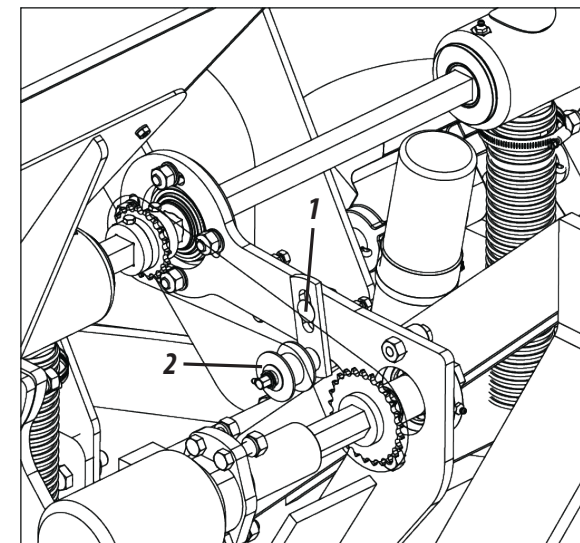


Figure 15

OPERATIONAL MAINTENANCE

PROBLEMS	PROBABLE CAUSES	SOLUTIONS
During furrowing, fertilizer leaks through the safety outputs.	Hoses are clogged or there are pieces of plastic in the spiral hoses that conduct the fertilizer.	Unclog the hoses or remove the upper gutter that gives access to coil, rotate the shaft to the opposite side until the foreign body is removed.
Hub shaft of the fertilizer tank does not turn.	Spiral blocked with wet fertilizer or excess fertilizer in closed line.	Unclog the coils, check if there is loose gutter and if the fertilizer is coming in through their sides.
Tractor lifts when the plow lifts.	Lack of ballast in the front of the tractor.	Ballast the front of the tractor.
Plow loses path during furrowing in fertilization on soil with steep slopes.	Lower arms of the tractor hook up are loose with lateral displacement.	Fasten the lower arms of the tractor hook up as to eliminate the side displacement.
Rods often disarm.	Improper adjustment on springs.	Apply the correct adjustment on springs.
	Area with obstacles (wood, stones). Soil too compressed.	Reduce work speed or avoid them.

CARE

- 1- Check the conditions of all nuts and screws before starting the use of the plow.
- 2- The speed must be carefully controlled according to the terrain conditions.
- 3- The Baldan plows are used in various applications, requiring knowledge and attention during handling.
- 4- Only local conditions will determine the best mode of operation of the plow.
- 5- When assembling or disassembling any part of the plow, use adequate methods and tools.
- 6- Observed lubrication intervals in the several points of the plow.
- 7- Always check the parts that wear. If you need parts, **always require Baldan original parts.**

GENERAL CLEANING

- 1- When storing the plow, make a general clean and wash it. Make sure the paint did not wear off, if so, give an overall coat, pass protective oil and completely lubricate the plow. Do not use burnt oil.
- 2- At the end of work, proceed as follows:
 - Remove the transmission chains, and keep them immersed in oil until the next use.
 - Remove all the vacuum hoses and wash them immediately with only mild soap and water. Do not use other chemicals.
- 3- Lubricate the machine completely. Check all moving parts, if they show signs of wear and clearances, make the necessary adjustment or replacement of parts, leaving the machine ready for the next use.
- 4- After all the maintenance procedures, store the plow in a covered and dry place, properly supported. Avoid the discs to be in direct contact with the ground.
- 5- When connecting or disconnecting the hydraulic hoses, do not let the ends touch the ground. Before connecting the hydraulic hoses, clean the connections with clean, lint-free cloth (**do not use burlap**).
- 6- Replace all damaged or missing warning stickers, especially warning ones. Tell everyone about their importance and the dangers of accidents when instructions are not followed.
- 7- We recommend washing the plow with water only at the beginning of a new work.

**ATTENTION**

Do not use chemicals to wash the plow, as this could damage the paint and stickers on it.

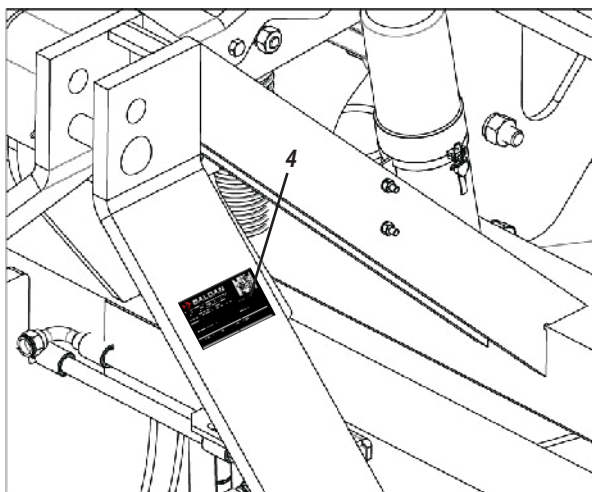
MAINTENANCE

IDENTIFICATION

PRODUCT IDENTIFICATION (FIGURES 16)

- 1- To view the parts catalog or request technical assistance from BALDAN, always indicate the model (1), serial number (2) and date of manufacture (3), which are on the identification label (4) of the plow.
- 2- **ALWAYS ORIGINAL PARTS REQUIRED BALDAN.**

Figures 16



Make the identification of the data below to always have correct information about the life of your plow.

Owner's name: _____

Dealer: _____

Farm: _____

City: _____ State: _____

Warranty Certificate Nr.: _____

Model: _____

Serial number: _____

Date of Purchase: _____ Invoice Nr: _____



ATTENTION

The drawings contained in this manual are for illustrative purposes only. To enable a better overview and detailed instruction, some safety devices have been removed from this handbook (covers, shields, etc.). Never operate the plow without these devices.



PUBLICATIONS

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CONTACT

In case of doubt do not operate the equipment, please contact after-sales service.
Phone: 0800-152577
E-mail: posvenda@baldan.com.br

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There is a vertical margin line on the left side, creating a narrow left margin. The top right corner of the paper is rounded. The paper appears to be from a notebook or a set of legal pads.

NOTES

NOTES

BALDAN IMPLEMENTOS AGRÍCOLAS S/A.

WARRANTY CERTIFICATE

BALDAN IMPLEMENTOS AGRÍCOLAS S/A, ensures normal operation of the implement to the dealer for a period of six (6) months from the delivery date on the resale invoice to the first end consumer.

During this period undertakes **BALDAN** to remedy defects in materials and/or workmanship of their responsibility, and the labour, freight and other expenses are of the responsibility of the dealer.

During the warranty period, the order and replacement of any defective parts must be made to the dealer in the region, who will send the defective part for analysis at **BALDAN**. When such a procedure is not possible and exhausted the resolution capacity of the dealer, the dealer will request support from the Technical Assistance of **BALDAN**, through the specific form distributed to resellers.

After analysing the items replaced by the Technical Assistance of Baldan, and concluded that it is not a warranty issue, so it will be of responsibility of the reseller any costs related to replacement; as well as the cost of materials, travel including accommodation and meals, accessories, lubricant and other expenses resulting from the call to the service, with the Baldan company authorised to make its billing on behalf of the reseller.

Any repairs made to the product that is within the warranty period of the dealer will only be authorized by **BALDAN** with prior presentation of the budget describing the work of parts and labor to be performed.

It is excluded from this term the product that is repaired or modified in shops that do not belong to the dealer network of **BALDAN**, as well as the use of non-genuine parts or components in the product of the customer.

This guarantee will be void when it is determined that the defect or damage is the result of improper product use, failure to follow instructions or the inexperience of the operator.

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

Manufacturing and or material defects, object of this warranty term, will not constitute, under any circumstances, a reason for termination of the purchase and sale contract or compensation of any nature.

BALDAN reserves the right to modify and or improve the technical characteristics of its products without notice and without obligation so to proceed with the products previously manufactured.

INSPECTION AND DELIVERY CERTIFICATE

- **SERVICE BEFORE DELIVERY:** This implement was carefully prepared by the sales organisation, checked in all its parts according to the manufacturer's instructions.
- **DELIVERY SERVICE:** The user is informed about the terms of existing warranty and instructed on the use and maintenance care.
- I confirm that I was informed about the current guarantee terms and instructed about the use and proper maintenance of the implement.

Tool: _____

Serial Number: _____

Date: _____ Invoice No: _____

Reseller: _____ City: _____

State: _____ Zip Code: _____

Owner: _____ Phone: _____

Address: _____ Number: _____

City: _____ State: _____

E-mail: _____

Sale Date: _____

Signature / Reseller Stamp _____

1st - Owner

CERTIFICATE

CERTIFICATE

INSPECTION AND DELIVERY CERTIFICATE

- **SERVICE BEFORE DELIVERY:** This implement was carefully prepared by the sales organisation, checked in all its parts according to the manufacturer's instructions.
- **DELIVERY SERVICE:** The user is informed about the terms of existing warranty and instructed on the use and maintenance care.
- I confirm that I was informed about the current guarantee terms and instructed about the use and proper maintenance of the implement.

Tool: _____

Serial Number: _____

Date: _____ Invoice No: _____

Reseller: _____ City: _____

State: _____ Zip Code: _____

Owner: _____ Phone: _____

Address: _____ Number: _____

City: _____ State: _____

E-mail: _____

Sale Date: _____

Signature / Reseller Stamp _____

2nd - Reseller

INSPECTION AND DELIVERY CERTIFICATE

- **SERVICE BEFORE DELIVERY:** This implement was carefully prepared by the sales organisation, checked in all its parts according to the manufacturer's instructions.
- **DELIVERY SERVICE:** The user is informed about the terms of existing warranty and instructed on the use and maintenance care.
- I confirm that I was informed about the current guarantee terms and instructed about the use and proper maintenance of the implement.

Tool: _____

Serial Number: _____

Date: _____ Invoice No: _____

Reseller: _____ City: _____

State: _____ Zip Code: _____

Owner: _____ Phone: _____

Address: _____ Number: _____

City: _____ State: _____

E-mail: _____

Sale Date: _____

Signature / Reseller Stamp _____

3rd - Reseller

Please send this copy filled within 15 days to **BALDAN**.



BALDAN IMPLEMENTOS AGRÍCOLAS S/A.

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Home Page: www.baldan.com.br | e-mail: sac@baldan.com.br
Export: Phone: 55 16 3321-6500 | Fax: 55 16 3382-4212 | 3382-2480
e-mail: export@baldan.com.br

THE STAMP WILL BE PAID BY:

RESPONSE CARD
NO STAMPING IS REQUIRED

1.74.05.0059-5
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ECT/DR/SP



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