

# RPDL 2250/2700/3000

Central and Lateral Mounted Rotary Cutter



# 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 tecnnology.

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

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

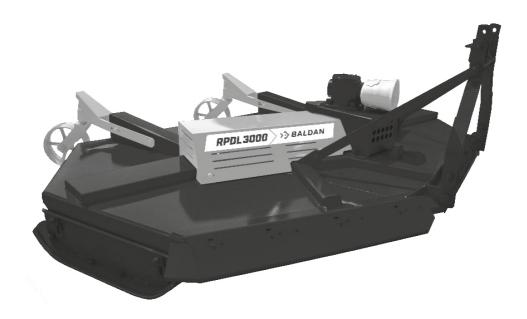
Resale was responsible for the custody and maintenance during the period in its possession, and also for the assembly, retightening, lubrication and overhaul.

During the technical delivery, dealer should guide the user client about maintenance, safety, his/her 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.

# Instruction



# RPDL 2250/2700/3000

Central and Lateral Mounted Rotary Cutter

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

Insc. Est.: 441.016.953.110



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







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### **■** Baldan Warranty

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

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

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

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

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

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

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

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

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

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

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



### 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 starting 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 FORESTRY, FOREST EXPLORATION, AND AQUACULTURE.

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

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

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

O8 RPDL



#### To the operator



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

### **!** ATTENTION



Carefully read the instructions manual to learn about the recommended safety practices.

### **ATTENTION**



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

### **ATTENTION**



Do not transport people or equipment on the tractor.

### **ATTENTION**



There are risks of severe injuries due to tipping when working in sloped terrains.

Do not over speed.

### **ATTENTION**



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

### ATTENTION



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



### **ATTENTION**

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

### **ATTENTION**



When transporting do not the RPDL. exceed the 16Km/h or 10 MPH speed. avoiding risk οf damages and accidents.

### **ATTENTION**



Remove the ignition key before performing type anv of maintenance in RPDL.

- Protect yourself against possible injuries or death caused by RPDL unexpected start-up.
- Do not start up the tractor if RPDL, is not properly coupled.

### **ATTENTION**



Before beginning the work or transportation of RPDL, check if there people are blockages close to it.

### **ATTENTION**





When working with RPDL. dο exceed the 4 km/h or 4 MPH speed. avoiding risk damages and accidents

### **ATTENTION**



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

### **ATTENTION**



perform Dο not adjustments when RPDL is in operation.

When performing any service on the RPDL, switch off the tractor first.

Use appropriate tools.



### **ATTENTION**



There are risks of injuries or death to the rotary cutter operator and surrounding people during operations for the following reasons:

- -Body contact with rotating blades.
- -Engagement of the body in the drive shaft and rotary shaft.

### **ATTENTION**



Dispose residues inappropriately affects the environment and the ecology since you will be polluting rivers, canals or the soil.

Inform yourself about the proper way of recycling or disposing residues.

#### PROTECT THE ENVIRONMENT!

### **ATTENTION**

To prevent intoxications, injuries or death when the rotary cutter is running and its blades are spinning, proceed in the following manner:

- Stop and turn the equipment off if there are people under 50 meters.



- Do not place hands or feet under the chassis. Contact with blades can cause serious injury or death.



 Never allow people to stand or get under the rotary cutter.

**ATTENTION** 

RPDL may release fragments or release objects at high speeds which can cause serious injury or death to nearby people.



PPE Equipment

### **ATTENTION**

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

When performing certain procedures with **RPDL**, put the following PPEs (Safety Equipment) on:





### **O** IMPORTANT

Safe practice should be performed in all work steps with RPDL, therefore avoiding accidents such as objects impact, fall, noises, cuts and ergonomics, that is, the person responsible for operating RPDL is subject to internal and external damages to their body.

# **OBSERVATION**

All PPEs (Safety Equipment) should have certificate of authenticity.









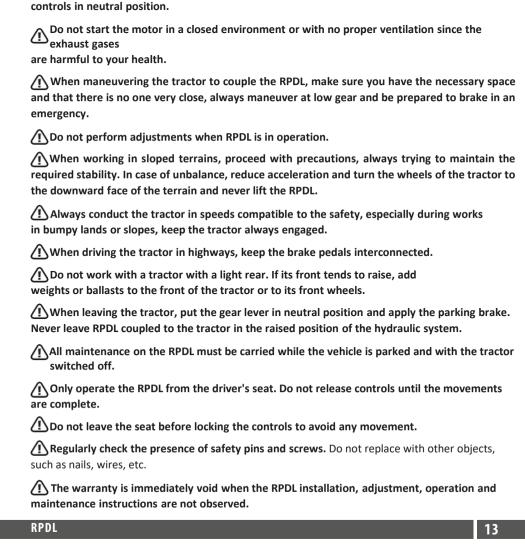








### Warnings



Mhen operating the RPDL, do not allow people to stay too close, inside it or on it.

When starting the tractor motor, be properly seated in the operator seat and aware of the complete knowledge of correct and safe handling of both the tractor and RPDL. Always put the gear shift in neutral position, unplug the power take-off gear switch and place the hydraulic



### Warnings

① Do not travel on highways especially at night. Use warning signs throughout the course

If traveling with the RPDL on highways is necessary, first consult with traffic agencies.

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

Carefully read all safety information in this manual and in the RPDL.

No not transport or work with RPDL around obstacles, rivers or streams.

The transportation of people on self-propelled machines and implements is forbidden.

Alterations of RPDL original characteristics are not authorized since they may change safety, operation and affect service life.

• Unqualified persons and children are prohibited from operating the RPDL.

Always check if RPDL is in perfect usage conditions. In case of any irregularity that may interfere in RPDL operation, arrange due maintenance before any work or transport.

Maintenance and especially inspection in RPDL risk zones should only be performed by trained and qualified worker, respecting all safety guidance. Before beginning maintenance, disconnect all RPDL drive systems.

Periodically check all RPDL components before using it.

① Due to the equipment used and work conditions on field or in maintenance areas, precautions are required. Baldan does not have direct control over precautions, therefore, it is the owner's responsibility to put into practice the safety procedures while working with RPDL.

① During RPDL transportation, drive in speeds compatible to the terrain and never exceeding 16Km/h, since it reduces maintenance and, therefore, increases RPDL service life.

①Do not approach the moving distributors discs.

Alcoholic beverage or some medications may cause loss of reflexes and change the operator's physical conditions. For this reason, never operate this equipment under the influence any of these substances.

Read or explain all the procedures of this manual to the operator who cannot read.

In case of doubts, refer to Post-Sales.
Telephone: 0800-152577 / E-mail: posvenda@baldan.com.br

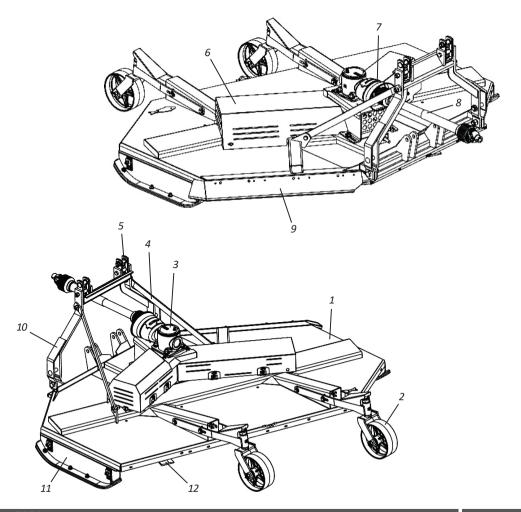


### Components

### • RPDL - Central and Lateral Mounted Rotary Cutter

- 1. Blade protection box
- 2. Back depth wheel
- 3. Multiplier box.
- 4. 3rd point holder
- 5. Hook Shackle
- 6. Belt protection

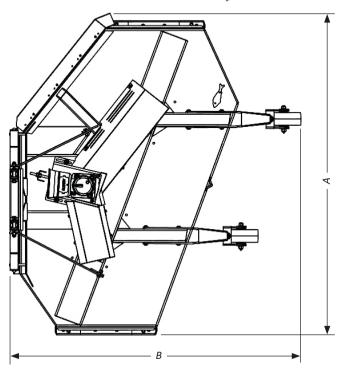
- 7. Guard assembly
- 8. Cardan
- 9. Front guard
- 10. Coupling head
- 11. Cutting regulation shoe
- 12. Blades

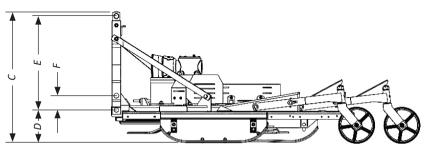




### Dimensions

• RPDL - Central and Lateral Mounted Rotary Cutter





Model	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
<b>RPDL 2250</b>	2598	2366	1149	285	825	126
RPDL 2700	2993	2732	1149	285	825	126
RPDL 3000	3230	2895	1149	285	825	126



### Specifications

#### • RPDL - Central and Lateral Mounted Rotary Cutter

Model	Nr of Blades (mm)	Cutting Width (mm)	Length of Cardan (mm)	Weight Approx (Kg)	Tractor Power (HP)
RPDL 2250	4	2250	600 - 800	700	65
RPDL 2700	4	2700	600 - 800	800	75
RPDL 3000	4	3000	600 - 800	870	85

Cutting height	50 - 200 mm
TDP RPM	540
Blade RPM	950

Baldan reserves the right to change and/or perfect the technical characteristics of its products, without previous notice, and without obligation to proceed in the same way with the products previously manufactured. Technical specifications are approximate and informed under normal work conditions.

#### RPDL INTENDED USE

- -The **RPDL** was developed for the most diverse scrubbing works in the most varied types of vegetation, usually used for cotton, maize and others.
- The **RPDL** should only be driven and started by a properly instructed operator.

#### NON-ALLOWED USE OF RPDL

- To avoid damages, severe accidents or death, do NOT transport people on other part of RPDL.
- -The **RPDL** may not be used to couple, tow or push other implements or accessories.
- -The **RPDL** should NOT be used by an inexperienced operator who does not knows all the driving, command and operation techniques.

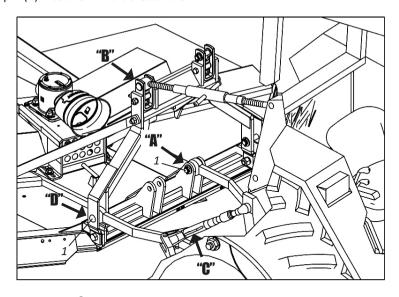


#### Hitch

Before coupling the **RPDL**, check if the tractor has front or rear weight or ballast sets in its wheels to avoid overturning. Rear wheels will give greater stability and soil traction to the tractor

#### Tractor Hitch

- Finally, slowly approach the tractor to the RPDL in reverse, being aware when to use the brakes.
- 2. Use the hydraulic position control lever as you approach the RPDL, leaving the left lower arm at the level of rotary cutter hitch.
- Engage the lower left arm of the tractor through the engaging pin (1) on the "A" bracket of the RPDL.
- 4. Engage the 3rd point of the tractor in the "B" support of the RPDL.
- 5. Then, using the adjusting lever "C", engage the lower right arm of the tractor in throuth the pin (1) into the "D" bracket of the RPDL.





When lifting the tractor hydraulics, check the hydraulic height limit so that the tractor does not touch the top of the blade box. Hydraulic lift varies according to the tractor model.

**OBSERVATION** 

When hitching the RPDL up, look for a safe and easily accessible place, always use low gear with low acceleration.



#### Hitch

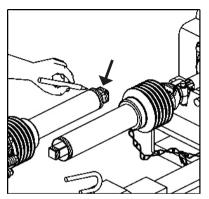
Before engaging the cardan, check the length of the tractor with respect to the tractor model that will pull the rotary cutter.

#### · Cardan length adjustment - Part I

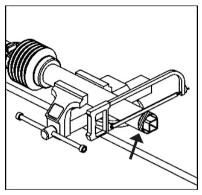
## **•** IMPORTANT

Before cutting the cardan, check the adjustment of the tractor's drawbar, which can increase or decrease its compliance, avoiding the cardan cut.

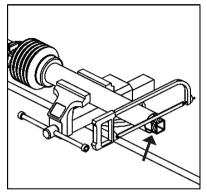
To perform the cardan cut, proceed as follows:



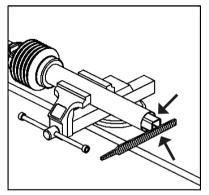
Secure the shaft halves from the shaft close to each other in the working position and mark the part to be cut.



Shorten the inner and outer guards of the cardan proportionally.



Cut the inner bars of the cardan in the same length as the protective tubes.

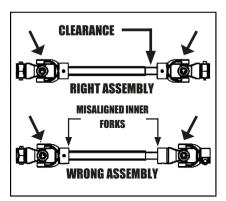


Remove all burrs and edges. Clean and grease the cardan bars.

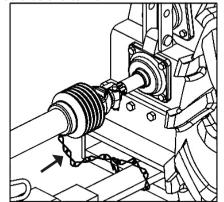


#### Hitch

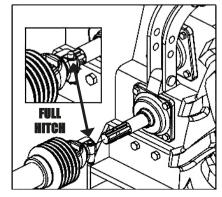
· Cardan length adjustment - Part II



When assembling, observe that the internal and external terminals are always in the same plane, aligned. Also check the clearance on the telescopic axle, which should be of 5 to 7 cm.



Do not connect the cardan chains while they are stretched. Keep a gap in the installation and consider angular movements.



Attach the flange to TDP shaft of the tractor observing that the engagement will only be completed when lock (1) springs out.

### **O** IMPORTANT

Every time you change the tractor, check the cardan shaft length again.

### **OBSERVATION**

Check the cardan joint angle on page 27 and other recommendations for using it.



Incorrect mounting of the cardan causes excessive vibration, which is harmful to the transmission.

When engaging the cardan in the TDP, the tractor must be switched off with the parking brake applied.

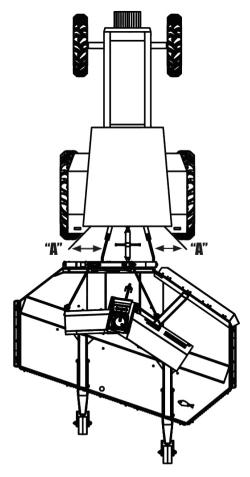


### Adjustment

#### Centralization

To center the **RPDL** relative to the longitudinal axis of the tractor, proceed as follows:

- 1. Align the top link of the **RPDL** with the 3rd point of the tractor.
- 2. Then lift the **RPDL** completely.
- 3. Next, check that the distances "A" of the lower hydraulic arms are equal to the tractor tires. The lower arms should be level with each other.





Never adjust the tractor's lower hydraulic arms with the RPDL down.  $\label{eq:constraint}$ 

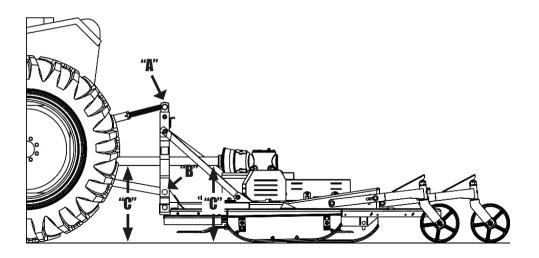


### Adjustment

### Leveling

To level **RPDL** in relation to the longitudinal axis of the tractor, proceed as follows:

- 1. First off, the tractor must be in a flat location.
- 2. Then, through the upper arm "A" and lower right "B", which have adjustments, level the RPDL as per letter "C".



### **ATTENTION**

Check the clearance on the cardan, which should be of 5 to 7 cm. If there is no gap, adjust the length of the gimbal as instructed on pages 19 and 20.



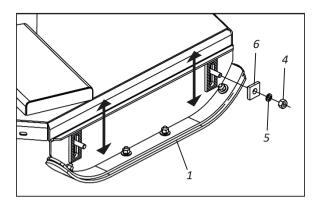
### Adjustment

Cutting height adjustment

The cutting height of the **RPDL** is regulated by the side shoes (1) and the rear wheel (3). To adjust the cutting height, proceed as follows:

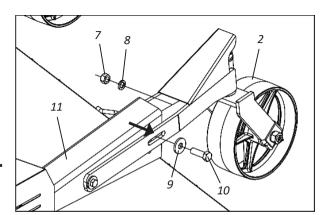
#### SIDE SHOES

- 1. Loosen the nuts (4), pressure washers (5), and grooved plates(5).
- Then adjust the side shoes
   by positioning them at the desired height.
- 3. Then, loosen the screws (6), pressure washers (5), and grooved plates (4).



#### **REAR WHEEL**

- 4. After regulating the side shoes (1), loosen the nuts (7), pressure washers (8), flat washer (9), and remove screws (10).
- 5. Then adjust the rear wheel (2) by positioning it at the desired height through the bracket bore hole (11).
- 6. Then replace the bolts (10), plain washers (9), locking washers (8) and nuts (7) by tightening them.





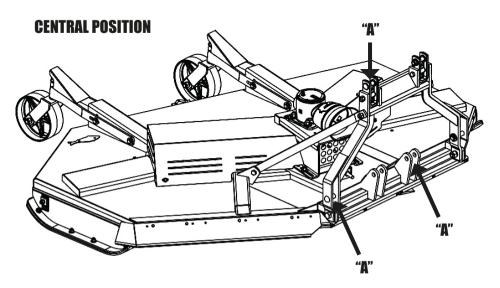
We recommend a cutting height of at least 50 mm above the ground.

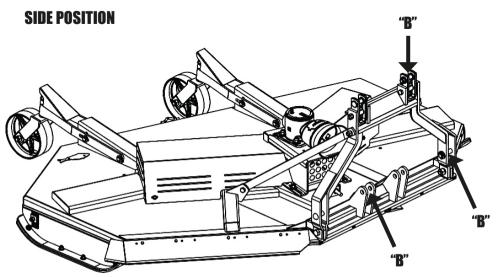


### Adjustment

### Working Position - Part I

**RPDL** can work in the center and lateral position relative to the tractor. To change the working position, disengage the tractor from points "A" and engage the points "B" or vice versa.



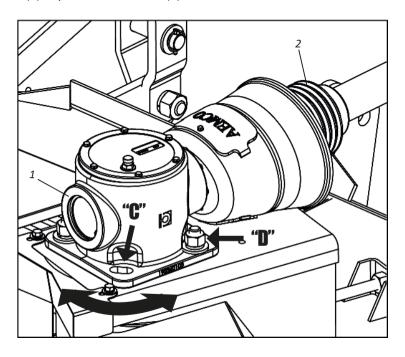




### Adjustment

### · Working position - Part II

The multiplier box (1) has oblong holes "C". When changing the working position of the RPDL (from center to side or vice versa) if necessary, loosen the screws "D" and turn the gearbox (1) to position the cardan (2).





Check the cardan joint angle on page 27 and other recommendations for using it.



### Adjustment

### · Working position - Part III

For measurements exceeding the right side of the tractor using the RPDL in the center or side positions, use the formula below.

Formula: A - C = X Da

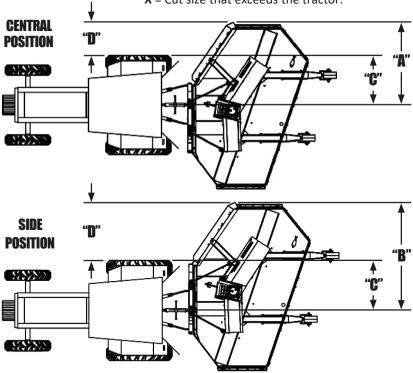
B - C = X

**Data:** A = Dimension of the center of the **RPDL** header in the center position until the end of the cut.

**B** = Dimension of the center of the **RPDL** header in lateral position until the end of the cut.

C = Dimension of the tractor 's rear wheel divided by 2.

**X** = Cut size that exceeds the tractor.



Model	Central Location	Side Position "B"	Displacement between "A" and "B"
RPDL 2250	1307	1782	475
RPDL 2700	1496	1971	475
RPDL 3000	1597	2072	475



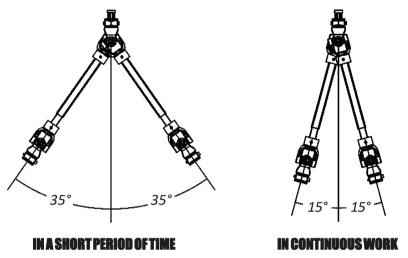
Measurements "C and D" vary from tractor to tractor due to different gauge sizes.



### Operations

#### Cardan recommendations

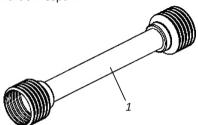
The cardan is limited in its maximum angle of articulation. This angle, with a running cardan, can reach a maximum of 35° for a short period of time. In continuous work, it should not exceed 15°.



# **ATTENTION**

Never engage to TDP when the joint is at an angle greater than 15°. When maneuvering with TDP off, never exceed the pivot angle of 35 degrees, this may occur in transportation routes or maneuvers in warehouses with the coupled cardan.

Safety protection (1) is a fundamentally important component for the user's personal safety and for the cardan shaft's lifespan.



**•** IMPORTANT

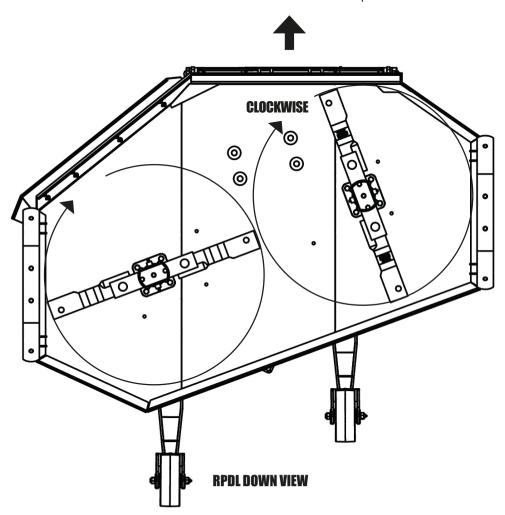
Do not work with the RPDL if the cardan is not guarded (1). Ignoring this warning may cause severe accidents or cardan damages.



### Operations

Direction of rotation of the blades.

The **RPDL** have 4 identical blades that rotate in the clockwise position.





Keep away from the rotating elements especially of the knives until the movement of the knives is interrupted. Ignoring this warning may cause severe accidents or death.



### Operations

#### Recommendations for the operation

- Before starting to work, thorough review the RPDL. The oil level of the multiplier must be filled, and nuts and screws must be retightened. Also check the locking of pins and cotters.
- 2. The ideal work rotation is **540 rpm for TDP**. Check the corresponding rotation on the motor, in the tractor manual. This rotation on the traction motor changes from tractor to tractor.
- For best performance, we recommend a cutting height of at least 50 mm above ground.
- 4. To ensure a good work result, the terrain to be cleared must be free of stones and stumps.
- 5. First, put the blades in operation and then start cutting the vegetation.
- 6. Do not connect to TDP with blades caught in dirt mounds, sticks, or stumps, as objects may be projected and cause serious injury.
- During work, maintain a constant motor rotation, avoiding the average speed variation of the tractors in order to prevent inefficiency or product distribution failures.
- 8. To engage or uncouple the cardan, the TDP must be switched off.
- During work do not vary the speed of the tractor, as this causes inefficient cutting.
   Keep the average speed and keep it in the middle of the work. Recommended average speed is 4 to 6 km/h.
- 10 In excessively corrugated soils, adjusting the cutting height should prevent the blades from excessively touching the ground.
- 11 The lower arms of the tractor must be adjusted with the RPDL fully erected.
- 12 In high density vegetation, we recommend the use of reduced gear, maintaining the rotation in the **TDP at constant 540 rpm**.
- 13 When transporting or performing maintenance/inspection, keep the power outlet off.
- 14 Stop and turn the equipment off if there are people under 50 meters.

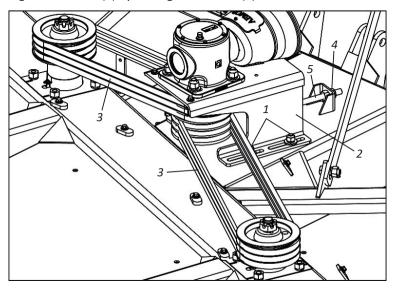


#### Maintenance

#### · Belt tension

The **RPDL** have belts that should be checked daily for their tension. To adjust belt tension, proceed as follows:

- 1. Loosen the nuts (1) by unlocking the bracket (2).
- 2. Then tighten the belt tension (3) tightening the nut (4) of the tensioner (5).
- 3. Then retighten the nuts (1) by locking the bracket (2).





Check the belt tension in the first hours of work, then perform a daily check.

If the belts wear out, replace them immediately. Do not operate the RPDL with loose belts.

The chain clearance should be of 1 cm in its center.

IMPORTANT

Before adjusting the tensioning of the belts, make sure that the tractor is switched off, if it is not, switch it off and remove the ignition key.

OBSERVATION |

Adjusting the tension of the belts must be done to avoid excessive slippage during work.

If a large volume of vegetation is encountered or if there is excessive cutting resistance, decrease the working speed or try to cut on a narrower range.

30

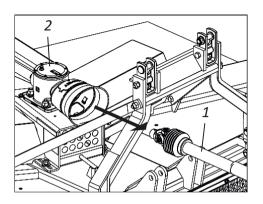


### Maintenance

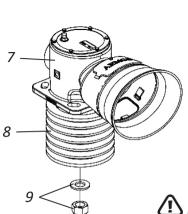
### · Pulley nut adjustment

After 50 to 70 hours of operation, check if the pulley nut of the **RPDL** is properly tightened, to do this, proceed as follows:

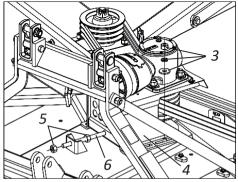
01 - Disengage the cardan (1) from the gearbox (2).



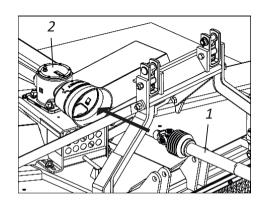
03 - Then, remove the gearbox (7) together with the pulley (8). Then, loosen the washer and nut (9), lock the pulley (8) and tighten the washer and nut (9) as necessary.



**02** - Then, loosen washers and nuts (3) from the support (4) and the nut and locknut (5) together with the tensioner (6).



04 - Then reassemble all the components and finish fitting the cardan (1) in the gearbox (2).



ATTENTION Check the pulley changing the belt

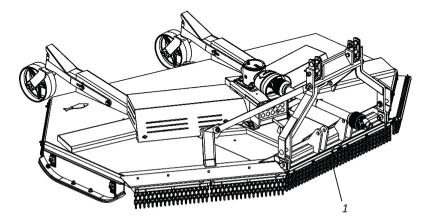
Check the pulley setting when changing the belt set.

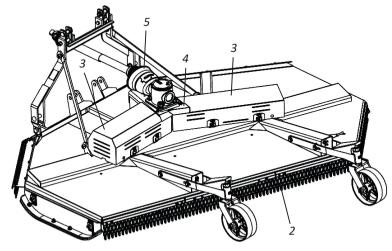


### Maintenance

### • Front, rear and side shields

Always check the conditions of the front (1), rear (2), belt guard (3), pulley guard (4) and gimbal guard (5) before using the RPDL. In the event of a break or loss of any of these protections, they must be replaced or replaced immediately to avoid serious accidents or death during work.







Do not work with the RPDL without the front (1), rear (2) and side (3) guards. Ignoring these warnings may cause severe accidents or death.

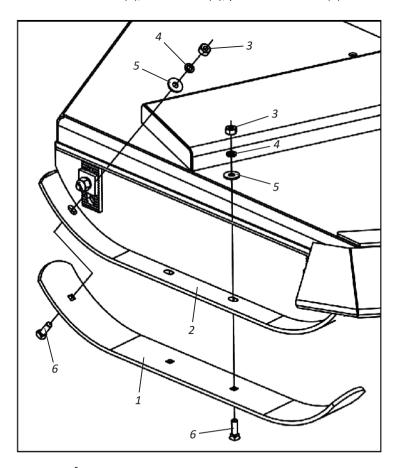


### Maintenance

### · Replacement of side shoe guide plates

Check periodically for wear on the guide plates (1) of the side shoes (2) of the RPDL, and replace them if necessary. To adjust the guide plates (1), proceed as follows:

- 1. Loosen the screws (3), pressure washers (4), flat washer (5) and screws (6).
- 2. Then replace the guide plates (1).
- 3. Then secure it with screws (6), flat washer (5), pressure washers (4) and screws (3).





If screws (6), plain washers (5), spring washers (4) and nuts (3) are worn, immediately replace them. Ignoring these warnings may cause severe accidents or death.

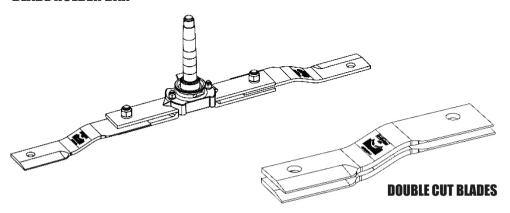


### Maintenance

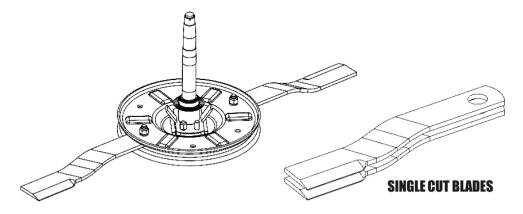
#### Blades

**RPDL** can be purchased with blade bar or rotating tray systems. Blades for each system are different as shwon below.

#### **BLADE HOLDER BAR**



#### **ROTATING TRAY**





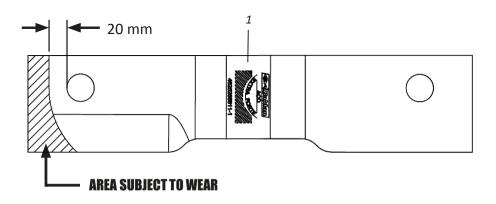
When replacing the blades (1), note that they are supplied in pairs, which must be retained until they are mounted to the RPDL tray. Unbalanced blades can cause excessive vibration and damage bearings, retainers and the transmission case. The weight variation between these blades (1) is within the tolerance limit.



### Maintenance

### · Blade wear - Blade bar system

The RPDL with bar blade system has reversible blades. Before starting the work, do a thorough review on the rotary cutter especially on the blades so that no wear will affect the hole, which should have a 20mm wall. If the wear affects the hole or the wall becomes too thin, we recommend the replacement of the blade immediately because it will not have the necessary safety, thus creating a risk of accidents.





In the event of loss or breakage of any of the rotating elements, especially the blades (1), they must be replaced immediately to avoid vibrations and consequently damage to RPDL, work failure, serious accident or death.



Always keep knives (1) sharpened to increase yield and require less tractor effort.

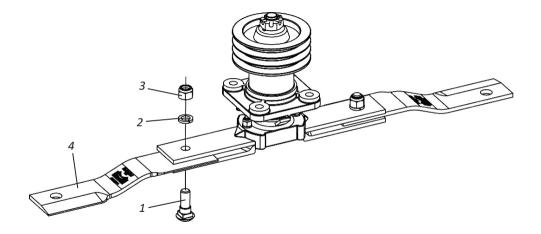


#### Maintenance

#### · Blade exchange - Blade bar system

Before each use of the **RPDL**, inspect the knives to verify that they are in good condition and properly installed. Have the blades replaced if they are broken, bent, overworn, or otherwise damaged. In addition, replace the blades when you notice imperfections in the cut. To replace tie blades, proceed as follows:

- 1. Loosen the screws (1), pressure washers (2), and nuts (3).
- 2. Then replace the blades (4).
- 3. Then, secure them again with screws (1), pressure washers (2), and nuts (3).



# **ATTENTION**

Periodically check the conditions and tightness of the bolts (1), locking washers (2) and nuts (3) for securing the knives (4). Ignoring this warning may cause severe accidents or death.

# **O** IMPORTANT

When changing blades (4), always change the pair avoiding damage to RPDL because of the imbalance. Always use original Baldan parts.

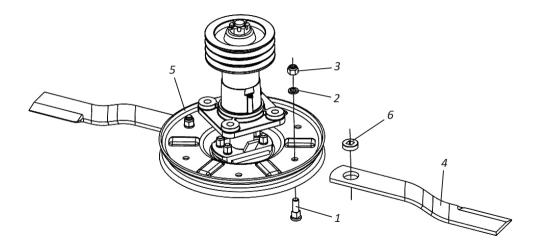
When changing knives (4), also replace the bolts (1), locking washers (2) and nuts (3). Periodically check the condition and tightness of the blades' set screws and nuts.



· Blade replacement - Rotating tray system (Optional)

Before each use of the **RPDL**, inspect the blades to verify that they are in good condition and properly installed. Have the blades replaced if they are broken, bent, overworn, or otherwise damaged. In addition, replace the blades when you notice imperfections in the cut. To replace tie blades, proceed as follows:

- 1. Loosen the screws (1), pressure washers (2), and nuts (3).
- 2. Next, take the blade (4) off the rotating tray (5).
- 3. Then, remove the bushing (6) from the knife (4) and place it on the new knife.
- 4. Loosen the screws (1), pressure washers (2), and nuts (3).



# **ATTENTION**

Periodically check the conditions and tightness of the bolts (1), pressure washers (2) and nuts (3) that secure the blades (4). Ignoring this warning may cause severe accidents or death.

# IMPORTANT

When changing blades, always change torque avoiding damage to the RPDL due to unbalance. Always demand Baldan original parts.

When changing knives (4), also replace the bolts (1), locking washers (2) and nuts (3). Periodically check the condition and tightness of the blades' set screws and nuts.



#### Maintenance

**RPDL** has been developed to provide you with the maximum yield on land conditions. Experience has shown that periodic maintenance of certain parts of **RPDL** is the best way to help you avoid problems, so we suggest verification.



Check nuts and bolts, retighten them if necessary. The maintenance of general re-installation of the equipment must be performed every 8 hours of work

#### Lubrication

Lubrication is indispensable for a good performance and greater durability of **RPDL** moving parts, contributing to savings in maintenance cost.

Before starting the operation, carefully lubricate all grease cups, always observing the lubrication intervals in the following pages. Make sure of the lubricant quality regarding its efficiency and purity, avoiding products contaminated by water, dust and other agents.

#### Table of greases and equivalents

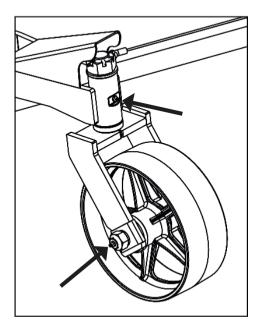
Manufacturer	Types of grease recommended
Petrobrás	Lubrax GMA-2
Atlantic	Litholine MP 2
Ipiranga	Ipiflex 2
Castrol	LM 2
Mobil	Grease MP
Texaco	Marfak 2
Shell	Alvania EP 2
Esso	Multi H
Bardahl	Maxlub APG-2EP
Valvoline	Palladium MP-2
	Tutela Jota MP 2 EP
Petronas	Tutela Alfa 2K
	Tutela KP 2K

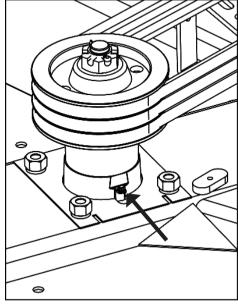


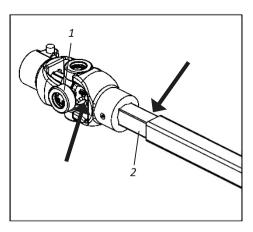
If there are equivalent manufacturers and/or brands that are not listed in the table, consult the manufacturer's technical manual.



· Lubrication every 8 hours of work







Lubricate the crossbars (1) with grease every 8 hours. The telescopic axle (2) must be lubricated weekly.



**ATTENTION** When lubricating the RPDL, do not exceed the amount of new grease. Introduce an adequate amount.

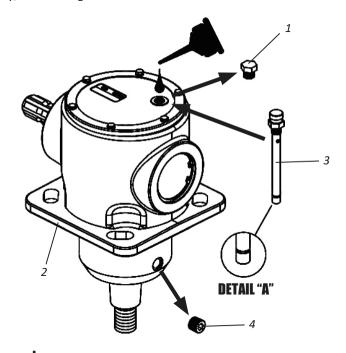


#### · Oil change

Before putting the RPDL into operation, remove the plug (1) from the gearbox (2) and put the breather with the dipstick (3) in its place.

Periodically check the level of the gearbox (2) for this, proceed as follows:

- 1. Place the RPDL in a flat location.
- 2. Then place the vent with dipstick (3) into the hole without threading it.
- 3. Then remove the vent with dipstick (3) and check the level marker as shown in detail "A", if necessary, fill or change the oil.



**ATTENTION** 

Replace the oil every 600 hours of work using 1.65 liters. Only use the specified oil: SAE 90EP.

**IMPORTANT** To drain all the gearbox oil (2), remove the drain plug (4).

When using a specific oil brand, avoid completing the oil level with different brand and specification.



#### Storage

Before storing the **RPDL**, remove the cardan and store it in a covered, dry place. Check all transmission components, if necessary, replace any worn or damaged parts. **Always demand Baldan original parts.** 

#### Post storage

Before returning work with the **RPDL**, lubricate all components and check the oil level.

#### · Operational Maintenance - Part I.

PROBLEMAS	CAUSES POSSIBLE	SOLUTIONS	
	Blades worn or broken.	Replace blades (pairs only) as instructed on pages 34 and 37.	
	TDP rotation is incorrect.	Correct rotation 540 Rpm.	
	Excessive speed.	Reduce work speed.	
No cutting.	Blades do not spin when TDP is running	Check the drive shaft connection.	
	Multiplier box is not working properly.	Repair the multiplier box.	
	Direction of rotation of the blades.	Make sure the correct side of the cut of the blades and the direction of rotation of the multiplier box	
	Blades worn or broken.	Replace blades (pairs only) as instructed on pages 34 to 37.	
Irregular cut.	Excessive speed.	Reduce work speed.	
	Excessive cutting height	Lower cutting height.	
	Vegetation of great density and of excessive height.	Use reduced speed.	



#### Maintenance

#### • Operational maintenance - Part II

PROBLEMAS	CAUSES POSSIBLE	SOLUTIONS	
Noisy	Loose components.	Check all the screws and tighten.	
Rotary	Low oil of the multiplier box.	Check oil level as instructed on page 40.	
	Broken blades.	Replace blades (pairs only) as instructed on pages 34 and 37.	
Vibration.	Incorrect cardan length	Check the length of the cardan.	
	Cardan shaft crosshead assembly.	Check the correct mounting of the cardan brackets.	
Tip and blades wear	Blades are touching the ground.	Adjust and operate it at a height that will eliminate contact with the ground.	
too fast.	The cutter is not operating at the correct TDP speed.	Keep the correct TDP speed.	



#### Cares

Before each work, check the condition of all pins, screws, gear box, and blades. Wherever necessary, retighten or replace them.

At every 8 hours of work, retighten screws and nuts.

The displacement speed should be carefully controlled according to the land's conditions.

**RPDL** are used in many applications, requiring knowledge and attention during its handling.

Only local conditions can determine the best method of operation of **RPDL**.

When assembling or disassembling any part of **RPDL** employ proper methods a

When assembling or disassembling any part of RPDL, employ proper methods and tools.

Observe the lubrication intervals carefully in the various lubrication points of **RPDL**. Always check if the parts presents wear and tear, specially the blades. If there is a need for replacement, **always demand Baldan original parts**.

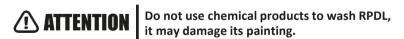
Proper and periodical maintenance are necessary to guarantee a long useful life of RPDL.



#### Maintenance

#### · General Cleaning

- 1. When storing RPDL, perform a general cleaning and thoroughly wash only with water. Make sure the paint has not worn out, if this has happened, give a general coat, apply the protective oil and fully lubricate the **RPDL**.
- 2. Completely lubricate the rotary cutter. Check all moving parts of the **RPDL**, if they present wears or gaps, perform the required adjustment or replace the parts, leaving the machine ready for the next work.
- 3. During the period you are not using the **RPDL**, clean any remaining residues after use such as grass, dirt, crop residues, etc.
- 4. Spray the entire **RPDL** with preservation oil, never use burned oil.
- Replace all adhesives, especially those about warnings, that are damaged or missing. Make everyone aware of the importance and risks of accidents when instructions are not followed.
- 6. Clean the cardan every 15 days or sooner if necessary.
- 7. Remove the protective caps, separate "male" from "female" threads, wash and remove crusts, dry and lubricate the sliding parts with grease and reassemble.
- 8. After all maintenance precautions, store your **RPDL** in a plain surface, covered and dried location, away from animals and children.
- 9. We recommend to wash the **RPDL** with water only on the beginning of works.



#### · Rotary cutter conservation - Part I

To further extend the service life and appearance of **RPDL**, follow the instructions below:

- 1. Wash and clean all **RPDL** components during and at the end of the work season.
- 2. Use neutral products to clean the **RPDL** following the safety and handling guidelines provided by the manufacturer.
- 3. Always carry out maintenance during the periods indicated in this manual.

#### Rotary cutter conservation - Part II

The practices and precautions below if adopted by the owner or operator make the difference for the conservation of **RPDL**.

1. Be careful when performing high-pressure washing; do not direct the water jet directly into the connectors and electrical components.



- 2. Use only NEUTRAL detergent and water (pH equal to 7):
- 3. Apply the product, following the manufacturer's instructions strictly, on the wet surface and in the correct sequence, respecting the time of application and washing;
- 4. Stains and dirt not removed with the products should be removed with the aid of a sponge.
- 5. Rinse the machine with clean water to remove any chemical residues.
- 6. Do not use: Detergents with a basic active ingredient (pH less than 7) can damage/stain the paint on the RPDL.
  - Detergents with acid active ingredient (pH less than 7), act as stripper/remover of zinc coating (the protection of parts against oxidation).



- 7. Allow the machine to dry in the shade so that it does not accumulate water in its components. Very fast drying can cause stains on your paint.
- 8. After drying, lubricate all chains and greases according to the recommendations in the operator's manual.
- 9 Spray all the machine, especially the zinc parts, with protective oil, following the manufacturer's application guidelines. The protective also prevents dirt from adhering to the machine, facilitating subsequent washings.
- 10. Observe curing (absorption) time and application intervals as recommended by the manufacturer.



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



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

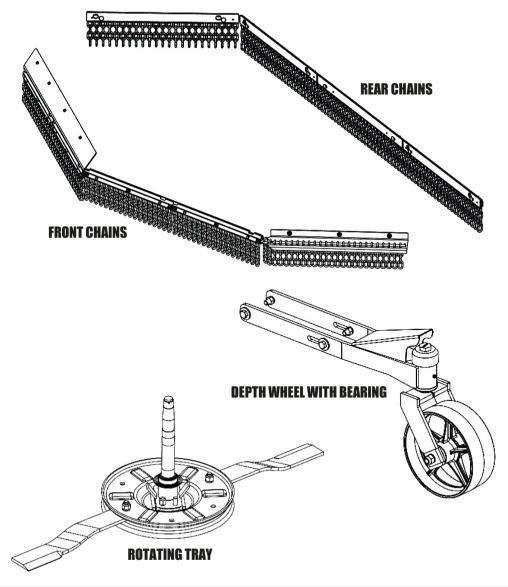
Ignoring the conservation measures mentioned above may result in the loss of warranty for painted or zinc-coated components which may show oxidation (rust).



### Optional

Optional accessories

**RPDL** rotary cutters has optional features which can be acquired according to the work requirement.





#### Identification

#### · Identification plate

To consult the parts catalogue or request Baldan technical assistance, always identify the model (1), serial number (2) and manufacture date (3), which can be found on the **RPDL** identification label (4).





The drawings in this Instruction Manual are merely illustrative.



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

Telephone: 0800-152577

e-mail: posvenda@baldan.com.br

### **PUBLICATIONS**

Code: 60550100595 | CPT: RPDL13516





### Identification

#### Product identification

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

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



• <u>Notes</u>	



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

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

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

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

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



#### Inspection and Delivery Certificate

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

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

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

Implement:	Serial Number:
Date:	Tax Number:
Dealer:	
Telephone:	CEP:
City:	State:
Owner:	
Telephone:	
Address:	Number:
City:	State:
Email:	
Sale date:	
Signature / Dealer Stamp	



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City:	State:	
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Implement:	Serial Number:		
Date:	Tax Number:		
Dealer:			
Telephone:	CEP:		
City:	State:		
Owner:			
Telephone:			
Address:	_Number:		
City:	State:		
Email:			
Signature / Dealer Stamp			

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

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AC MATÃO ECT/DR/SP

### **RESPONSE CARD**

**NO STAMPING IS REQUIRED** 

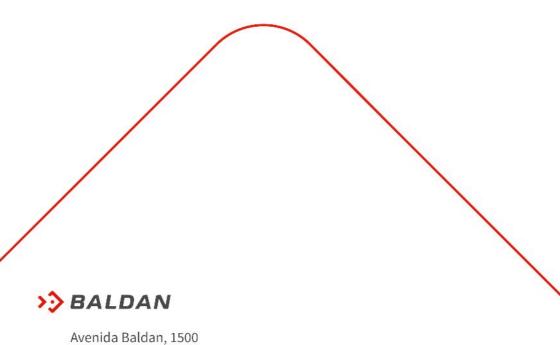
#### THE STAMP WILL BE PAID BY:



#### BALDAN IMPLEMENTOS AGRÍCOLAS S/A.

Av. Baldan, 1500 | Nova Matão | CEP: 15993-900 | Matão-SP. | Brazil 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

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