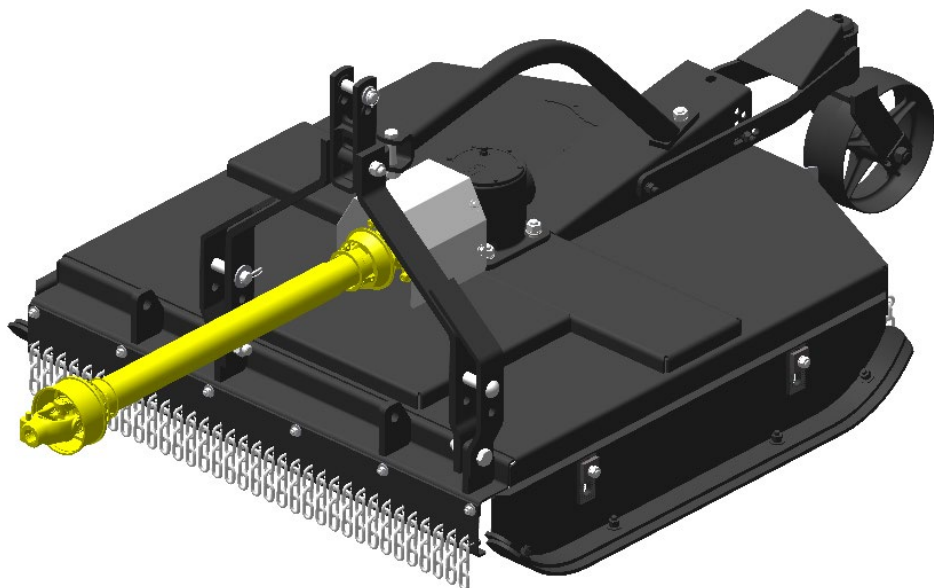


Instruction Manual



RD / RDU 1300/1500/1700

Central and Lateral Mounted Rotary Cutter

 **BALDAN**

■ Presentation

We appreciate your preference and congratulate you for the Excellent choice you have just made, as you have purchased a product manufactured with **BALDAN**



IMPLEMENTOS AGRÍCOLAS S/A.

This manual will guide you through the procedures that are necessary since its acquisition until the operating procedures of use, safety and maintenance.

BALDAN guarantees that it delivered this implement to the reseller complete and in perfect condition.

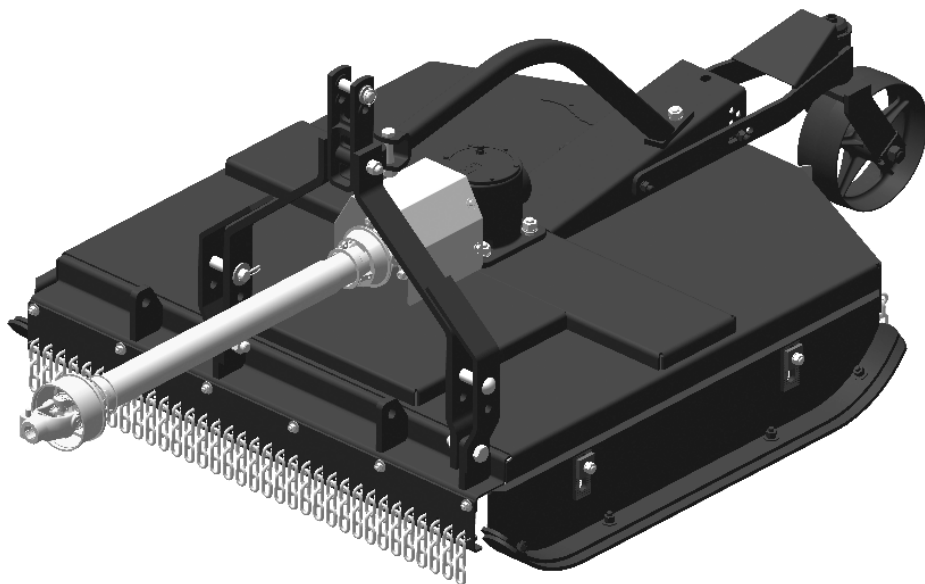
The resale is accountable for the custody and maintenance during the period it was in its power, and also for assembly, retightening, lubrication and overhaul.

In technical delivery, the dealer should guide the user customer regarding maintenance, security, their obligation to possible technical assistance, the strict observance of the warranty and reading the instructions manual.

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

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

Instruction Manual



RD / RDU 1300/1500/1700

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

 **BALDAN**

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▪ **Baldan Warranty**

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

During this period, **BALDAN** undertakes to remedy defects in materials and/or workmanship of its responsibility, being labor, freight and other expenses the dealer's responsibilities.

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

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

After analyzing the replaced items by **BALDAN's** Technical Assistance, and concluding that it is not a warranty, then the costs related to the replacement will be the responsibility of the dealer;

as well as expenses for material, travel including accommodation and meals, accessories, used lubricant and other expenses arising from the call for Technical Assistance, and the company **BALDAN** is authorized to make the respective billing on behalf of the reseller.

Any repair made to the product that is within the warranty period by the dealer, will only be authorized by **BALDAN** upon prior presentation of a quote describing parts and labor to be performed.

This term excludes the product that undergoes repairs or modifications by officials who do not belong to the **BALDAN** dealer network, as well as the application of non-genuine parts or components to the user's product.

This guarantee will become null when it is determined that the defect or damage is resulting from improper product use, failure to follow instructions or the inexperience of the operator.

It is agreed that this warranty does not cover tires, deposits of polyethylene, cardans, 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, reason for purchase and sale contract termination, or compensation of any nature.

Baldan reserves the right to change and/or improve the technical characteristics of its products, without prior notice, and without obligation to do so with previously manufactured products.

▪ General Information

• To owner

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

Only people who have full knowledge of the tractor and the implement must make the transport and the operation thereof

BALDAN is not responsible for any damage caused in unpredictable situations or others to implement's normal use.

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

ATTENTION

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

This Regulatory Standard is to establish the principles to be observed in the organization and in the workplace, consistent with planning and development of agricultural, livestock, forestry, logging and aquaculture activities with safety and health, environment of Work.

MR. OWNER OR EQUIPMENT OPERATOR.

Read and follow carefully the provisions of NR-31.

More information, visit the website and read in full the NR-31.
<http://portal.mte.gov.br/legislacao/normas-regulamentadoras-1.htm>

▪ Safety Standards

- To operator



THIS SYMBOL INDICATES AN IMPORTANT SAFETY WARNING. IN THIS MANUAL, WHENEVER YOU FIND IT, CAREFULLY READ THE FOLLOWING MESSAGE AND BE AWARE OF THE POSSIBILITY OF PERSONAL INJURY.



ATTENTION



Read the instruction manual carefully for recommended safety practices.



ATTENTION



Only start operating the tractor when you are properly accommodated and with the seat belt fastened.



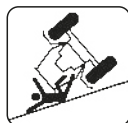
ATTENTION



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



ATTENTION



There is a risk of serious injury from tipping over when working on slopes. Do not use excessive speed.



ATTENTION



Do not work with the tractor if the front is without enough ballast for the rear equipment. If there is a tendency to lift, add weights or weights to the front or front wheels.



ATTENTION



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

▪ Safety Standards

ATTENTION

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

ATTENTION



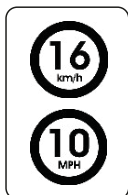
Before starting work on or transporting the RD/RDU, check it for people or obstructions.

ATTENTION



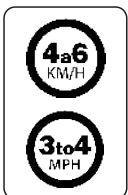
Always keep the access and work places clean of residues such as oil or grease, as they can cause accidents.

ATTENTION



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

ATTENTION



When working with the RD/RDU, do not exceed a speed of 4 to 6 Km/h or 3 to 4 MPH, avoiding the risk of damage and accidents.

ATTENTION



Do not make adjustments with the RD/RDU in operation. When doing any work on the RD/RDU, turn off the tractor first. Use proper tools.

ATTENTION

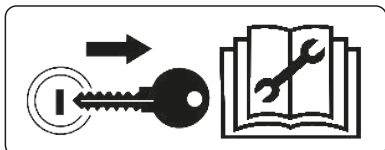


Improperly disposing of waste affects the environment and ecology, as it will be polluting rivers, canals

or the soil.

Find out about the correct way to recycle or dispose of waste.

PROTECT THE ENVIRONMENT!

▪ Safety Standards**! ATTENTION**

Remove the ignition key before performing any maintenance on the RD/RDU.

- Protect yourself from possible injury or death caused by an unforeseen departure of the RD/RDU.
- If the RD/RDU is not properly engaged, do not start the tractor.

! ATTENTION

There are risks of injury or death to the mower operator and bystanders during operations for the following reasons:

- Body contact with rotating knives.
- Wrapping the body in transmission shafts and rotary shafts.

! ATTENTION

To prevent serious injury or death, when the cutter is in operation and the knives are rotating, proceed as follows:

- Stop and turn off the equipment if people are less than 50 meters away.



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



- Never allow people on or under the cutter, especially children.

! ATTENTION

The cutters can drop fragments or throw objects at high speeds which can cause serious injury or death to those nearby.

▪ Safety Standards

• PPE Equipment

! ATTENTION | DO NOT WORK WITH THE RD/RDU WITHOUT PUTTING THE PPE (SAFETY EQUIPMENT) ON BEFORE. IGNORING THIS WARNING COULD CAUSE HEALTH DAMAGE, SERIOUS INJURY OR DEATH.

When performing certain procedures with the **RD/RDU**, put the following PPE (Safety Equipment) below:



! IMPORTANT

The safety practice must be carried out at all stages of work with the RD/RDU, thus avoiding accidents such as impact from objects, falls, noise, cuts and ergonomics; that is, the person responsible for operating the RD/RDU is subject to internal and external damage to his or her body.

🔍 OBSERVATION | All PPE (Security Equipment) must have a certificate of authenticity.



▪ Warnings

-  When operating with the RD/RDU, do not allow people to stand too close or on top of it.
-  When carrying out any maintenance service, use the PPE equipment.
-  Do not make adjustments with the RD/RDU in operation.
-  Do not travel on highways, especially at night. Use warning signs throughout the route.
-  If there is a need to travel with the RD/RDU on the highways, consult the transit agencies beforehand.
-  Do not wear clothes that are too loose, as they may become entangled in the RD/RDU.
-  When starting the tractor engine, be properly seated in the operator's seat and aware of complete knowledge of the correct and safe handling of both the tractor and the RD/RDU. Always place the gearshift lever in the neutral position, disconnect the control gear from the power take-off and place the hydraulic controls in the neutral position.
-  Do not start the tractor engine indoors, without adequate ventilation, as the exhaust gases are harmful to health.
-  When maneuvering the tractor to RD/RDU hitch, make sure you have the necessary space and that no one is too close, always maneuver at idle speed and be prepared to brake in an emergency.
-  When working on sloping terrain, proceed with care always trying to maintain the necessary stability. In case of an imbalance beginning, reduce the acceleration, turn the wheels to the side of the terrain slope and never raise the RD/RDU.
-  Always drive the tractor at speeds compatible with safety, especially when working on rough terrain or on slopes, keep the tractor in gear at all times.
-  When driving the tractor on roads, keep the brake pedals interlocked and use safety signs.
-  Do not allow the RD/RDU to be used by people who have not been trained, that is, who do not know how to operate it correctly.
-  Do not transport or work with the RD/RDU near obstacles, rivers or streams.
-  Only operate the RD/RDU if all protections are installed and correctly.
-  Do not, under any circumstances, remove the protective components of the RD/RDU.
-  Do not operate the tractor with a light front. If the front tends to lift, add more weight to the front or front wheels.
-  When leaving the tractor, place the gearshift lever in neutral position and apply the parking brake. Never leave the RD/RDU hitched to the tractor in the raised position of the hydraulic system.
-  The transport of people on self-propelled machines and implements is prohibited.
-  Alterations to the original RD/RDU characteristics are not authorized as they may alter safety, function and affect service life.

▪ Warnings

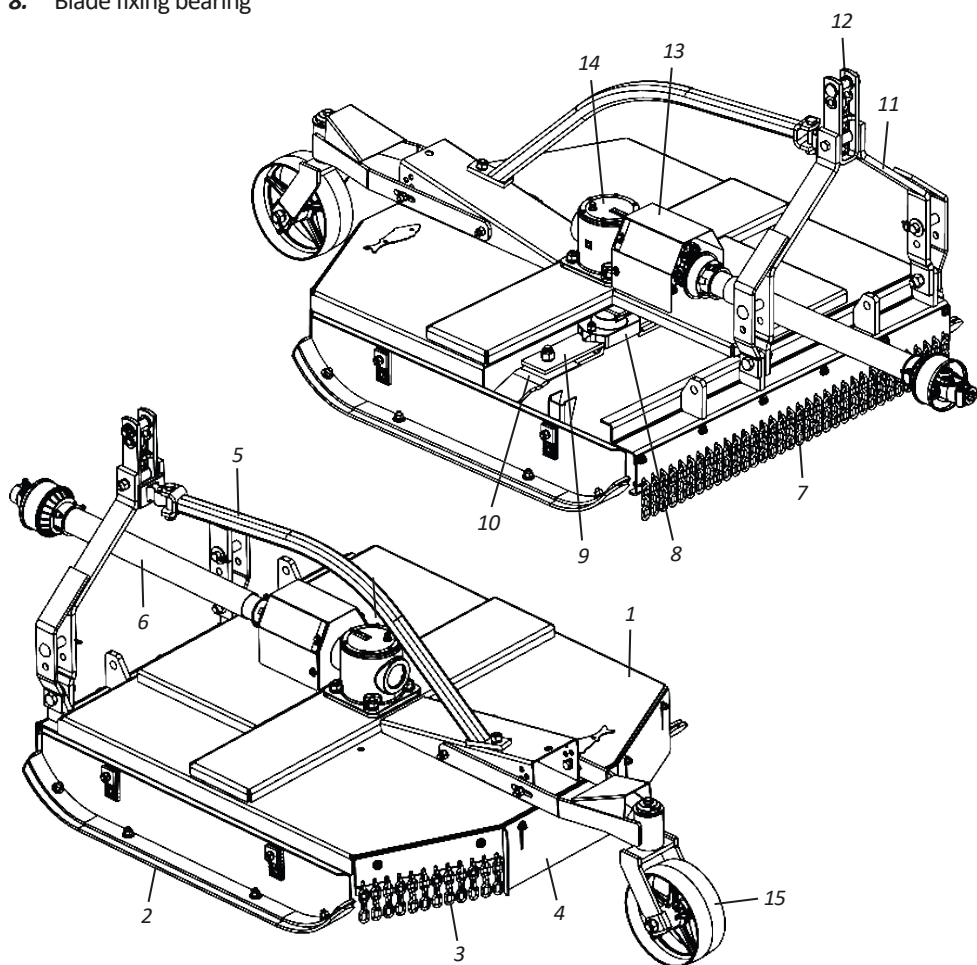
-  Carefully read all safety information contained in this manual and on the RD/RDU.
-  All inspections must be done with the RD/RDU stopped and turned off, using secure means of access.
-  Access, maintenance and especially inspection in risk areas of the RD/RDU must only be done by a trained or qualified worker, observing all safety guidelines.
-  Periodically check all components of the RD/RDU before using it.
-  Depending on the equipment used and the working conditions in the field or in maintenance areas, precautions are necessary. Baldan has no direct control over precautions, therefore it is the owner's responsibility to put in place safety procedures while working with the RD/RDU.
-  Any and all maintenance on the RD/RDU must be done with the same shutdown and with the tractor turned off.
-  Operate the RD/RDU from the driver's seat only. Do not release controls until movements are complete.
-  Do not leave the seat before locking the controls to prevent any movement.
-  Regularly check for the presence of safety pins and screws. Do not substitute with other objects such as nails, wires, etc.
-  The maintenance of the RD/RDU must only be done by specialized people. Before starting maintenance, disconnect all drive systems from the RD/RDU.
-  The warranty is immediately void when the RD/RDU assembly, adjustment, operation and maintenance instructions are not observed.
-  Unqualified persons and children are prohibited from operating the RD/RDU.
-  Alcoholic beverages or some medications can cause loss of reflexes and alter the operator's physical condition. Therefore, never operate this RD/RDU under the use of these substances.
-  Read or explain all the procedures in this manual to the user who cannot read.

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

▪ Components

• RD - Central and Lateral Mounted Rotary Cutter

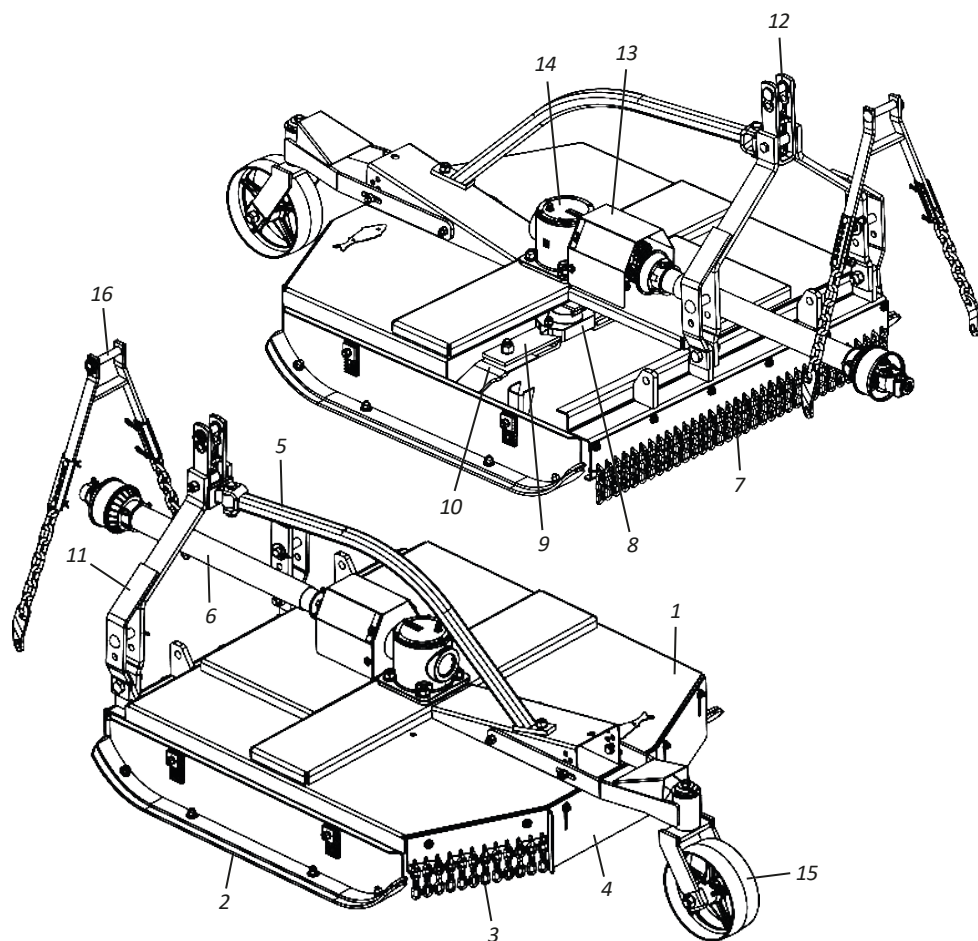
- | | |
|----------------------------|------------------------|
| 1. Blade protection box | 9. Blade holder bar |
| 2. Cutting regulation shoe | 10. Blades |
| 3. Rear guard with chains | 11. Coupling head |
| 4. Rear guard | 12. Hook Shackle |
| 5. Head bracing | 13. Protection plate |
| 6. Cardan | 14. Multiplier gearbox |
| 7. Full stand with chains | 15. Depth wheel |
| 8. Blade fixing bearing | |



■ Components

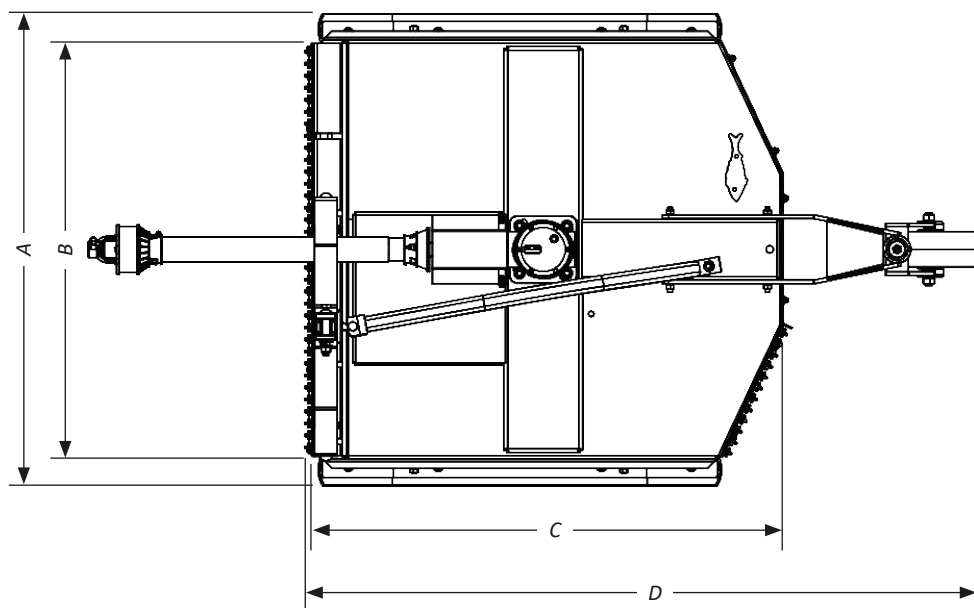
• RDU - Urban Central and Lateral Mounted Rotary Cutter

- | | |
|----------------------------|------------------------------|
| 1. Blade protection box | 9. Blade holder bar |
| 2. Cutting regulation shoe | 10. Blades |
| 3. Rear guard with chains | 11. Coupling head |
| 4. Rear guard | 12. Hook Shackle |
| 5. Head bracing | 13. Protection plate |
| 6. Cardan | 14. Multiplier gearbox |
| 7. Full stand with chains | 15. Depth wheel |
| 8. Blade fixing bearing | 16. Height-limiting coupling |

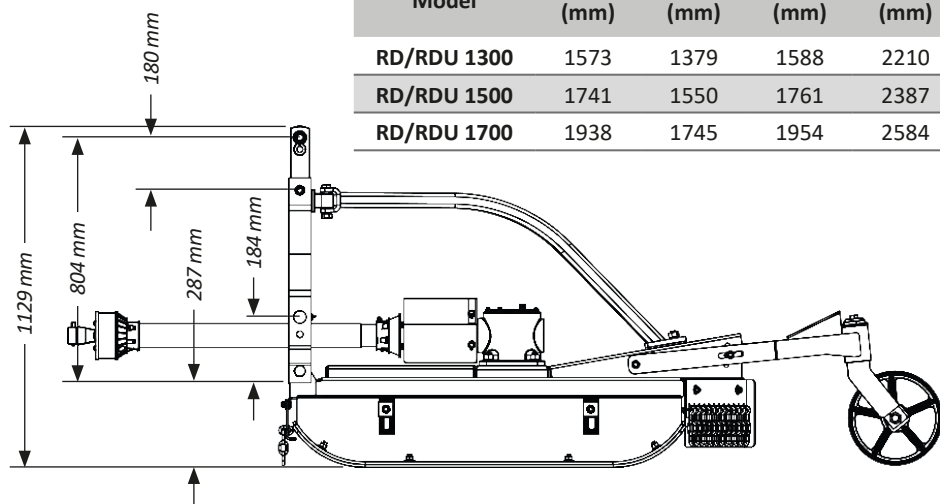


▪ Dimensions

• RD/RDU



Model	A (mm)	B (mm)	C (mm)	D (mm)
RD/RDU 1300	1573	1379	1588	2210
RD/RDU 1500	1741	1550	1761	2387
RD/RDU 1700	1938	1745	1954	2584



▪ Specifications

• RD/RDU - Central and Lateral Mounted Rotary Cutter/Urban

Model	Nr of Blades	Cutting Width (mm)	Cutting Height (mm)	Length of Cardan (mm)	RPM at PTO	RPM of Blades	Approx. Weight (Kg)	Tractor Power (HP)
RD/RDU 1300	2	1300	50-200	750	540	1038	400	61
RD/RDU 1500	2	1500	50-200	750	540	1038	440	73
RD/RDU 1700	2	1700	50-200	850	540	1038	480	73

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

INTENDED USE OF RD/RDU

- The **RD/RDU** was developed for the most diverse types of mowing in the most varied types of vegetation.
- The **RD/RDU** must be driven and activated only by a duly instructed operator.

NOT ALLOWED USE OF RD/RDU

- To avoid damage, serious accident or death, DO NOT carry people on any part of the **RD/RDU**.
- It is NOT allowed to use the **RD/RDU** to attach, tow or push other implements or accessories.
- The **RD/RDU** must NOT be used by an inexperienced operator who does not know all the techniques of driving, command and operation.

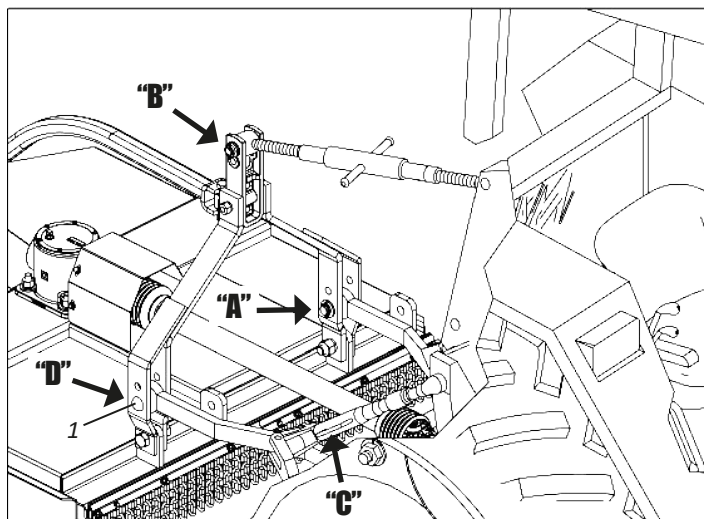
▪ Coupler

Before coupling the **RD**, check if the tractor is equipped with a set of weights or ballasts in front or on the front wheels so as not to lift the tractor. The rear wheels will give the tractor greater stability and ground traction.

• Tractor Coupling - RD

To couple the **RD**, proceed as follows:

- 01** - Slowly approach the tractor to **RD** in reverse gear, paying attention to the application of the brakes.
- 02** - Then, use the hydraulic position control lever when approaching the **RD**, leaving the lower left arm at the level of the cutter hitch.
- 03** - Couple the lower left arm of the tractor through the hitch pin (1) on the “**A**” support of the **RD**.
- 04** - Couple the 3rd point of the tractor to the “**B**” support of the **RD**.
- 05** - Then, with the help of the regulating lever “**C**”, hitch the lower right arm of the tractor on the support “**D**” of the **RD**.



ATTENTION

When lifting the tractor hydraulic, check the hydraulic height limit so that the cardan does not touch the upper part of the knife protection box. Hydraulic lift varies depending on the tractor model.



NOTE

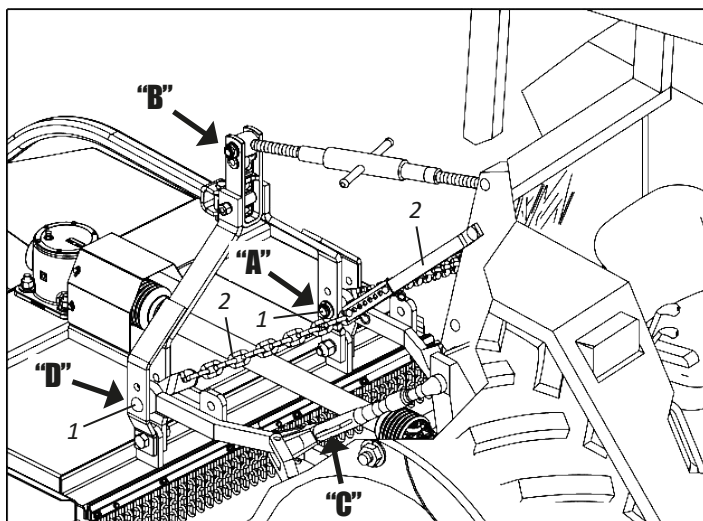
When engaging the **RD**, find a safe and easily accessible place, always use a low gear with low acceleration.

Before coupling the **RDU**, check if the tractor is equipped with a set of weights or ballasts in front or on the front wheels so as not to lift the tractor. The rear wheels will give the tractor greater stability and ground traction.

• Tractor Coupling - RDU

To couple the **RDU**, proceed as follows:

- 01** - Slowly approach the tractor to the **RDU** in reverse gear, paying attention to the application of the brakes.
- 02** - Then use the linkage position control handle as you approach the **RDU**, leaving the lower left arm level with the cutter hitch.
- 03** - Couple the lower left arm of the tractor together with the limiting hitch plate (2) securing with the hitch pin (1) on the "A" bracket of the **RDU**.
- 04** - Engage the 3rd point of the tractor in the "B" bracket of the **RDU**.
- 05** - Then, with the aid of the regulating lever "C", hitch the lower right arm of the tractor together with the limiting hitch plate (2), securing with the hitch pin (1) on the support "D" of the **RDU**.



ATTENTION

When lifting the tractor hydraulic, check the hydraulic height limit so that the cardan does not touch the upper part of the knife protection box. Hydraulic lift varies depending on the tractor model.

NOTE

When engaging the RDU, find a safe and easily accessible place, always use a low gear with low acceleration.

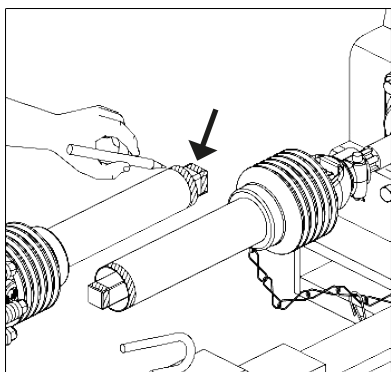
Before coupling the cardan, check its length in relation to the tractor model that will pull the cutter.

• Adjusting the length of the cardan - Part I

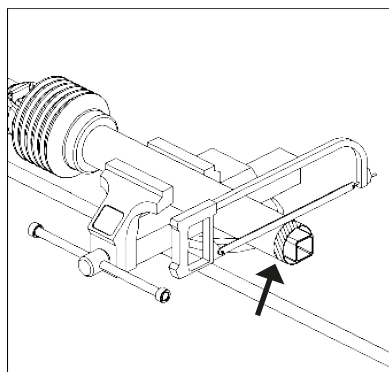
! IMPORTANT

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

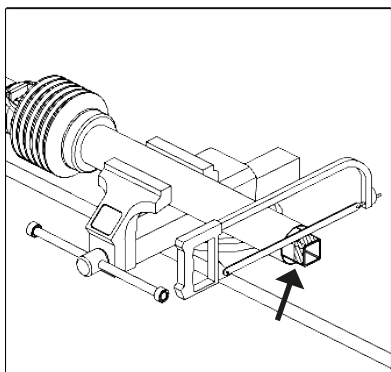
To cut the cardan, proceed as follows:



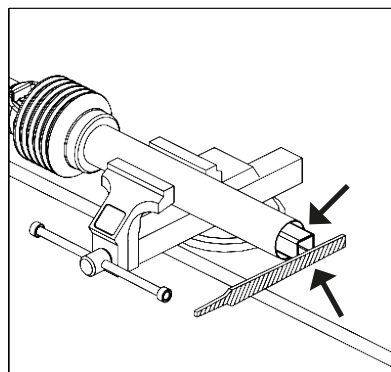
Hold the cardan shaft halves close together in the working position and mark the part to be cut.



Decrease the internal and external protective tubes of the cardan proportionally.

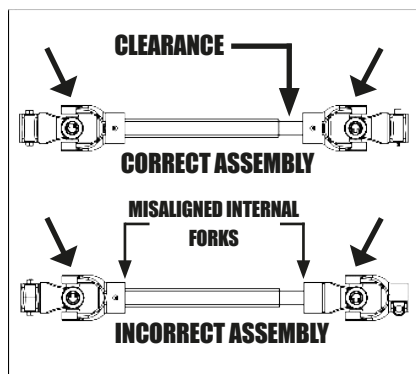


Cut the inner bars of the gimbal to the same length as the protective tubes.

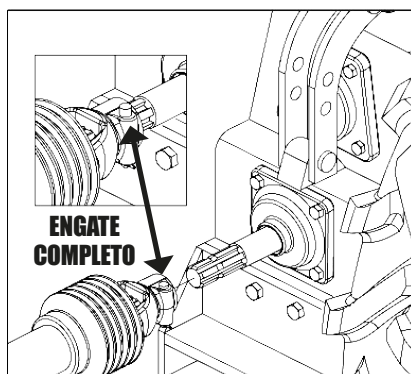


Remove all burrs and edges. Clean and grease the gimbal slide bars.

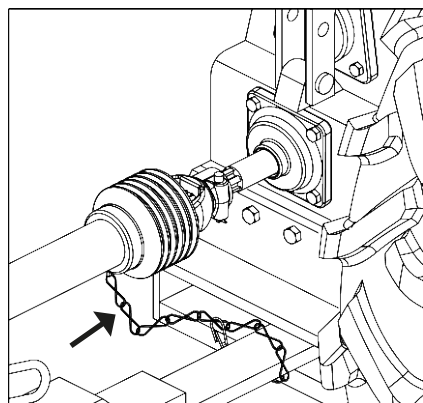
• Adjusting the length of the cardan - Part II



When mounting, note that the internal and external terminals are always in the same plane, aligned. Also check the clearance in the telescopic shaft, which should be 5 to 7 cm.



Couple the flange on the tractor TDP shaft noting that the hitch will only be completed when the lock (1) pops out.



Do not engage the extended cardan chains. Keep the installation slack and consider angular movements.

! IMPORTANT

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

NOTE

Check page 29 for the gimbal articulation angle and other recommendations for its use.

! ATTENTION

The wrong mounting of the cardan causes excessive vibration, harmful to the transmission.
When coupling the cardan to the TDP, the tractor must have the engine off and the parking brake applied.

▪ Adjustments

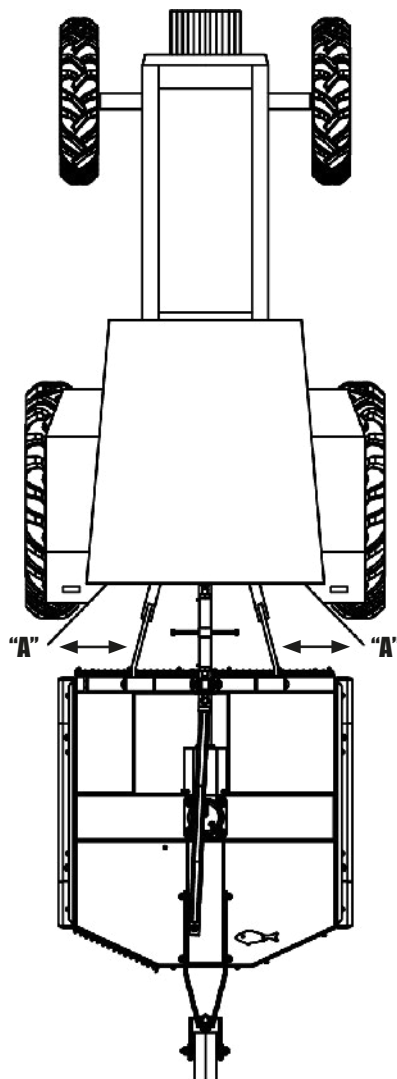
• Centralization

To center the **RD/RDU** in relation to the longitudinal axis of the tractor, proceed as follows:

01 - Align the top hitch on the **RD/RDU** with the 3rd point on the tractor.

02 - Then fully lift the **RD/RDU**.

03 - Then, check if the distances "**A**" of the lower links of the hydraulic are equal in relation to the tractor tires. The lower arms must be level with each other.



ATTENTION

Never adjust the tractor linkage lower arms with the RD/RDU lowered.

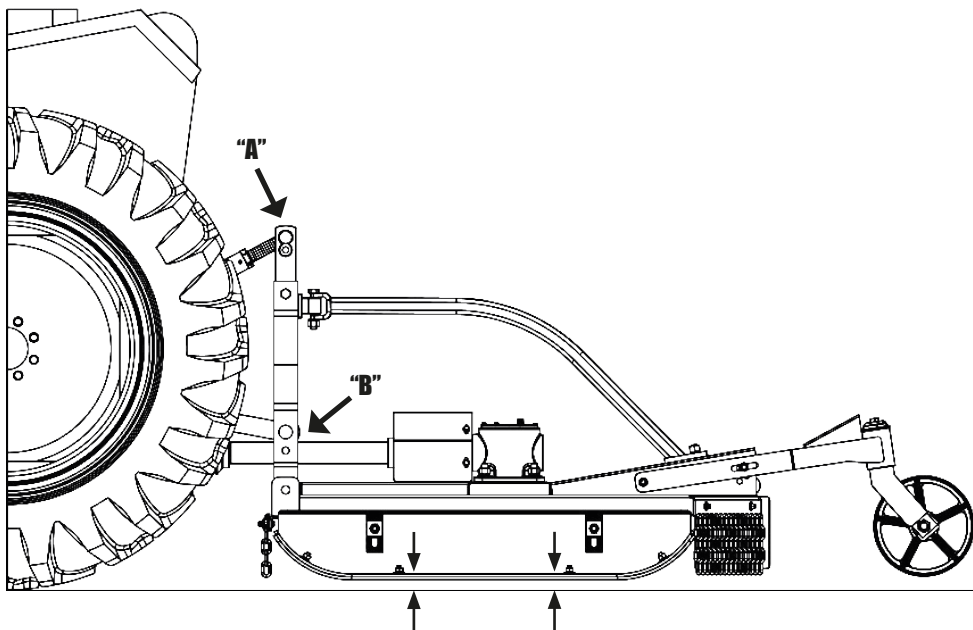
▪ Adjustments

• Levelling

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

01 - First, the tractor must be on a level place.

02 - Then, through the upper arm "**A**" and lower right arm "**B**", which have adjustments, level the **RD/RDU**.



ATTENTION

Check the gap of the cardan which must be from 5 to 7cm. If there is no gap, adjust the cardan length as instructed on pages 21 and 22.

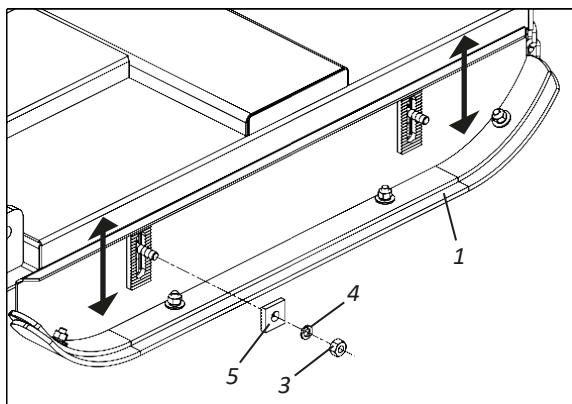
▪ Adjustments

• Regulagem de altura de corte

The cutting height of the **RD/RDU** is regulated through the side shoes (1) and the rear wheel (2). To adjust the cutting height, proceed as follows:

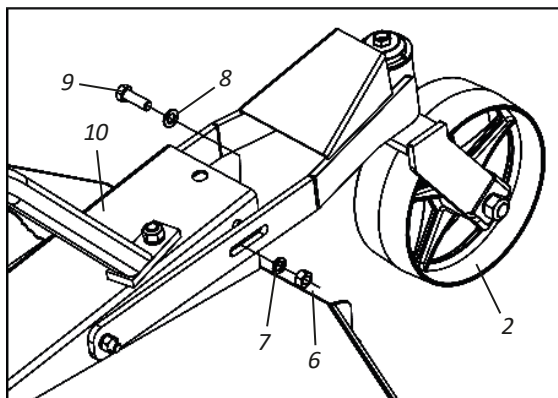
SIDE SHOES

- 01** - Loosen nuts (3), lock washers (4) and splined plates (5).
- 02** - Then adjust the side shoes (1) to the desired height.
- 03** - Then retighten the splined plates (5) through the spring washers (4) and nuts (3).



REAR WHEEL

- 04** - After adjusting the side shoes (1), loosen the nuts (6), pressure washers (7), flat washers (8) and remove the screws (9).
- 05** - Then, adjust the rear wheel (2) positioning it at the desired height through the support hole (10).
- 06** - Finish by replacing screws (9), flat washers (8), spring washers (7) and nuts (6) and retightening them.



ATTENTION

We recommend that the cutting height is at least 50 mm above the ground.

▪ Adjustments

• Work position

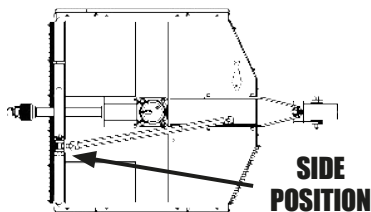
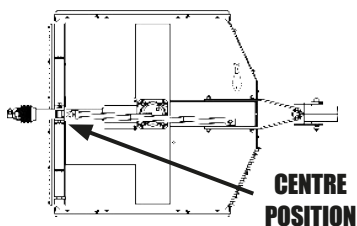
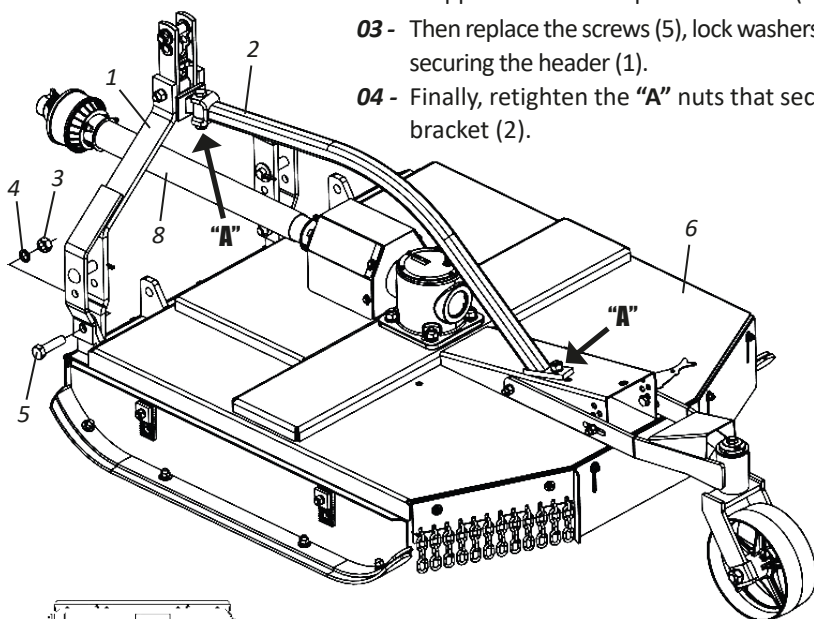
The **RD/RDU** can work in a central and lateral position in relation to the tractor. To change the position of the header (1), proceed as follows:

01 - Loosen the “**A**” nuts that fix the header support (2), it is not necessary to remove them.

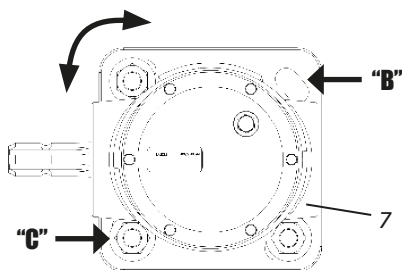
02 - Then, remove the nuts (3), spring washers (4), screws (5) and move the header (1) to the other support of the knife protection box (6).

03 - Then replace the screws (5), lock washers (4) and nuts (3) securing the header (1).

04 - Finally, retighten the “**A**” nuts that secure the header bracket (2).



The gearbox (7) has oblong holes “**B**”. When positioning the header support (2) in the lateral position, if necessary, loosen the screws “**C**” and turn the gearbox (7) to better position the cardan (8).



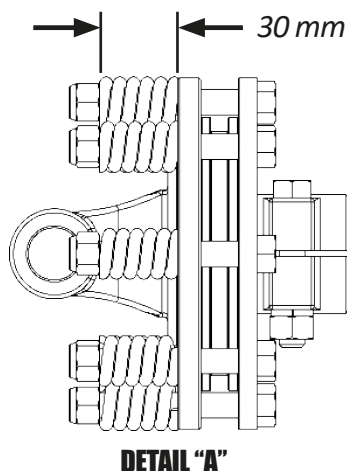
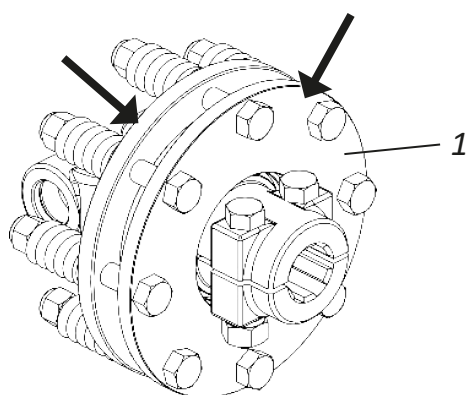
▪ Adjustments

• Friction plate - Part I

Friction is factory-set, eliminating any adjustment to start using the **RD/RDU**. When encountering overloads, the friction comes into operation, and the work must be stopped immediately by raising the **RD/RDU**.

- The occurrence of more frequent activations of friction, after some time of use and without operating with overloads, indicates the need to adjust it due to the wear that occurred in the discs (1).

- It is important to keep the adjustment of 30 mm on the springs as shown in **detail "A"**, to compensate for the wear of the discs (1) and to maintain the good functioning of the friction.



- When the mechanic (or trained person in charge) performs the adjustment of the clutch in the field, he must be careful not to tighten the springs excessively, as what is known as a **LOCKED CLUTCH** will occur, this occurrence interrupts the function of the clutch, providing a risk of rupture in pinions, crowns, axles, crossheads and even in the tractor TDP.

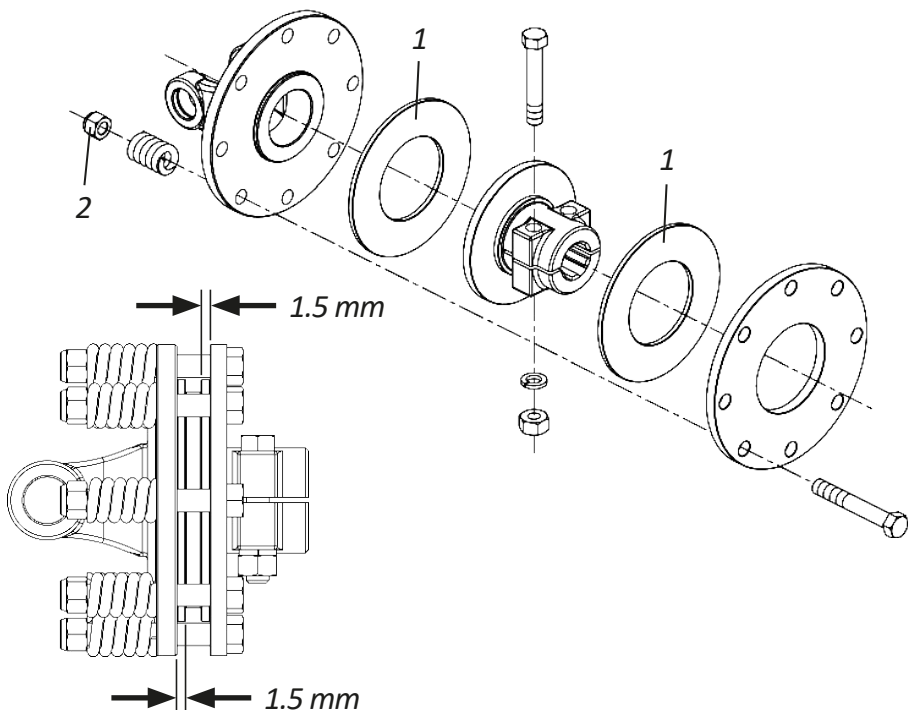
- How to adjust at the work site.

- 01** - Make a visual assessment of clutch components (discs, springs, etc.).
- 02** - Then tighten the springs evenly, one by one, approximately 1/3 of a turn.
- 03** - Repeat this procedure every time the clutch starts firing continuously.

▪ Adjustments

• Friction plate - Part II

- Taking a base spring height to keep the clutch factory-adjusted may not be the best way to carry out the assessment, as the sets have particular variables that can distort the results.



ATTENTION

If the RD/RDU has been idle for some time in an uncovered place, the clutch must be disassembled and cleaned before returning to work. In direct contact with the other components of the clutch the friction discs can lock and not work. Check the post storage instructions on page 41.

IMPORTANT

Discs (1) must be replaced as soon as they reach a thickness of 1.5mm or before they show major damage. To do this, loosen the nuts (2) and remove the friction.

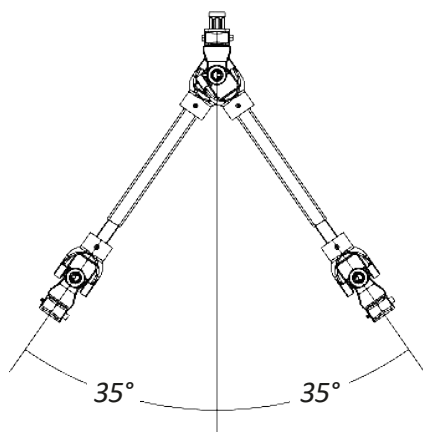
NOTA

When encountering a large volume of vegetation or if the cutting resistance is excessive, try to cut a narrower band or reduce the operating speed.

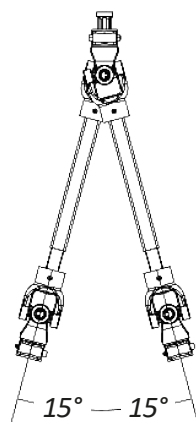
■ Operations

• Recommendations for the cardan

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



SHORT TIME PERIOD



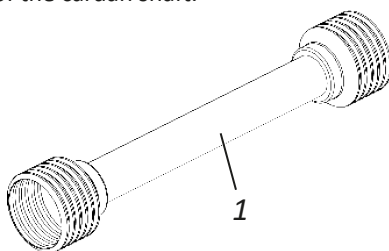
IN CONTINUOUS WORK



ATTENTION

Never activate the TDP when the joint is at an angle greater than 15°. In maneuvers with the TDP turned off, never exceed the 35° articulation angle, this can occur on transport routes or maneuvers in sheds with the cardan coupled.

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



IMPORTANT

Do not work with the RD/RDU if the cardan is not protected (1). Ignoring this warning can cause cardan damage or serious accidents.

▪ Operations

• Recommendations for operation

- 01** - Before starting work, make a complete review of the **RD/RDU**. Complete the multiplier oil level and retighten the nuts and bolts. Also check the interlocking of the pins and cotter pins.
- 02** - The working speed is **540 rpm on the TDP**. Check the corresponding engine speed in the tractor manual. This engine speed varies from tractor to tractor.
- 03** - For best performance, we recommend a **minimum cutting height 50 mm** above the ground.
- 04** - To ensure a good working result, the site to be cut must be free of stones and stumps.
- 05** - First, put the knives into operation and then start cutting the vegetation.
- 06** - Do not turn on the TDP with the knives locked in a mound of earth, sticks or stumps, objects can be thrown and cause serious injuries.
- 07** - During work, keep the engine speed constant, avoiding the variation in the average speed of the tractor, so that there is no inefficiency or failure in cutting vegetation.
- 08** - To couple or uncouple the cardan, the TDP must be turned off.
- 09** - During work, do not vary the speed of the tractor, this leads to inefficient cutting "faults". Maintain medium speed and maintain it throughout your work. The recommended average working speed is **4 to 6 km/h**.
- 10** - In excessively wavy soils, the cutting height adjustment must prevent the knives from touching the ground excessively.
- 11** - The tractor's lower link stabilizers must be adjusted with the **RD/RDU** fully raised.
- 12** - In dense vegetation, we recommend using a reduced gear, keeping the **TDP rotation at a constant 540 rpm**.
- 13** - When encountering overloads, the friction starts operating, and the work must be stopped immediately and the **RD/RDU** lifted.
- 14** - It is important to maintain the **30mm adjustment on the springs** to compensate for the adjustment of the discs and maintain good friction operation.
- 15** - When transporting or carrying out checks/maintenance, keep the power take-off off.
- 16** - Stop and turn off the equipment if people are less than **50 meters** away.

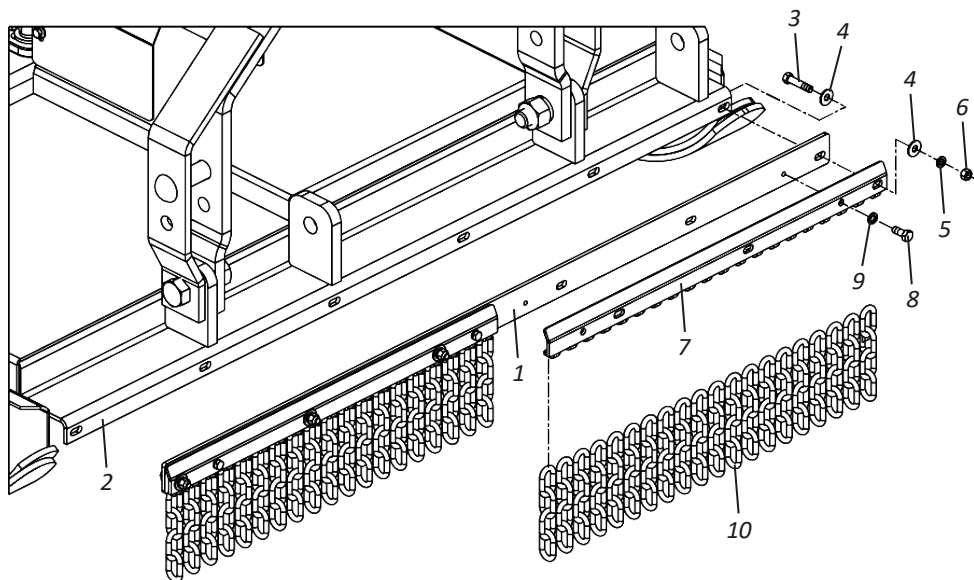
In case of doubt, never operate or handle the RD/RDU, consult After Sales.
Telephone: 0800-152577 / E-mail: posvenda@baldan.com.br

▪ Maintenance

• Front protection

The **RD/RDU** have front protection. Periodically check its conservation status, if necessary, replace it, proceed as follows:

- 01** - Release the support with chains (1) from the knife protection box (2) through the screws (3), flat washers (4), spring washers (5) and nuts (6).
- 02** - Then, loosen the chain fixing plate (7) through the screws (8) and spring washers (9).
- 03** - Then replace the chains (10) that are damaged.
- 04** - Finish by re-assembling the support w/ chains (1) in the knife protection box (2).



ATTENTION

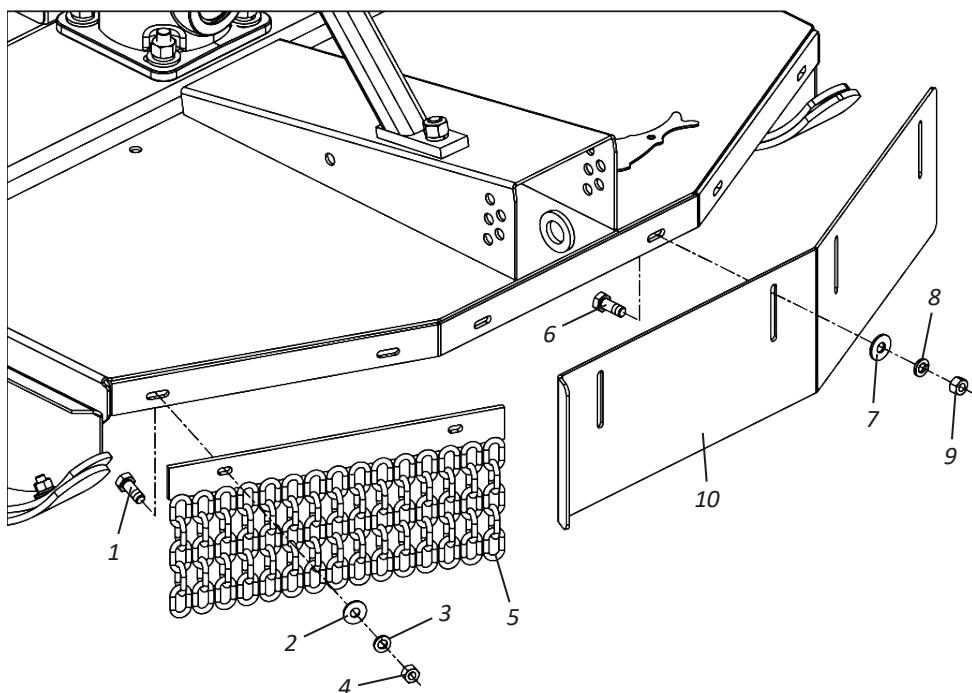
Do not operate the RD/RDU without the front guards. Ignoring this warning could result in serious injury or death.

▪ Maintenance

• Rear protection

The **RD/RDU** have rear protections that can be composed of chains and plate or totally of chains (**optional**). Periodically check their conservation status, if necessary, replace them, proceed as follows:

- 01** - Loosen the screws (1), flat washers (2), spring washers (3), nuts (4) and replace the rear protector with chains (5).
- 02** - Then fix the rear protector with chains (5) using screws (1), flat washers (2), spring washers (3) and nuts (4).
- 03** - Then, loosen the screws (6), flat washers (7), spring washers (8), nuts (9) and replace the plate (10).
- 04** - Finish fixing the plate (10) using screws (6), flat washers (7), spring washers (8) and nuts (9).



ATTENTION

Do not operate the RD/RDU without the rear protections. Ignoring this warning can result in serious accidents.

▪ Maintenance

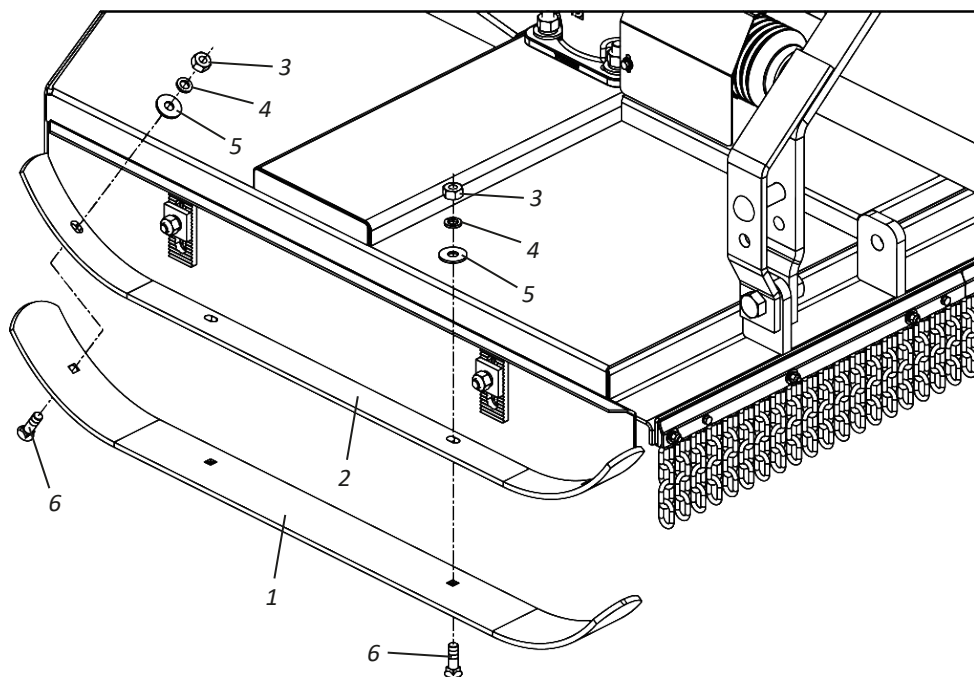
• Changing the side shoes guide plates

Check periodically for wear on the guide plates (1) of the side shoes (2) of the **RD/RDU**, replace if they wear and tear. To replace the guide plates (1), proceed as follows:

01 - Loosen the nuts (3), lock washers (4), plain washers (5) and screws (6).

02 - Then replace the guide plates (1).

03 - Then tighten with screws (6), plain washers (5), lock washers (4) and nuts (3).



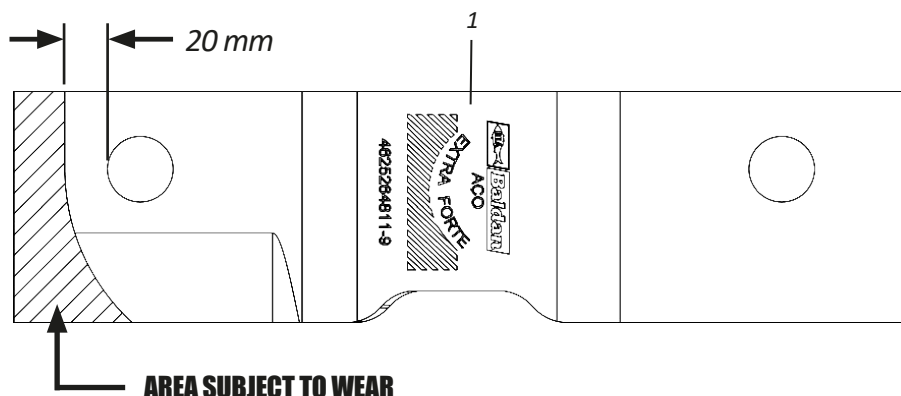
ATTENTION

If there is wear on the bolts, washers and nuts, replace them. Ignoring this warning can result in serious accidents.

▪ Maintenance

• Wear of blades

RD/RDU knives are reversible. Before starting the work, make a complete overhaul of the cutter, especially on the knives, so that wear does not affect the hole, which should have a 20mm wall. If wear affects the hole or the wall becomes too thin, we recommend changing the knife immediately as it will not have the necessary safety, allowing for the risk of accidents.



ATTENTION

Keep away from the rotating elements, especially the knives, until their movement is stopped.
When breaking the knives, arrange for the exchange immediately. Ignoring these warnings could result in serious injury or death.

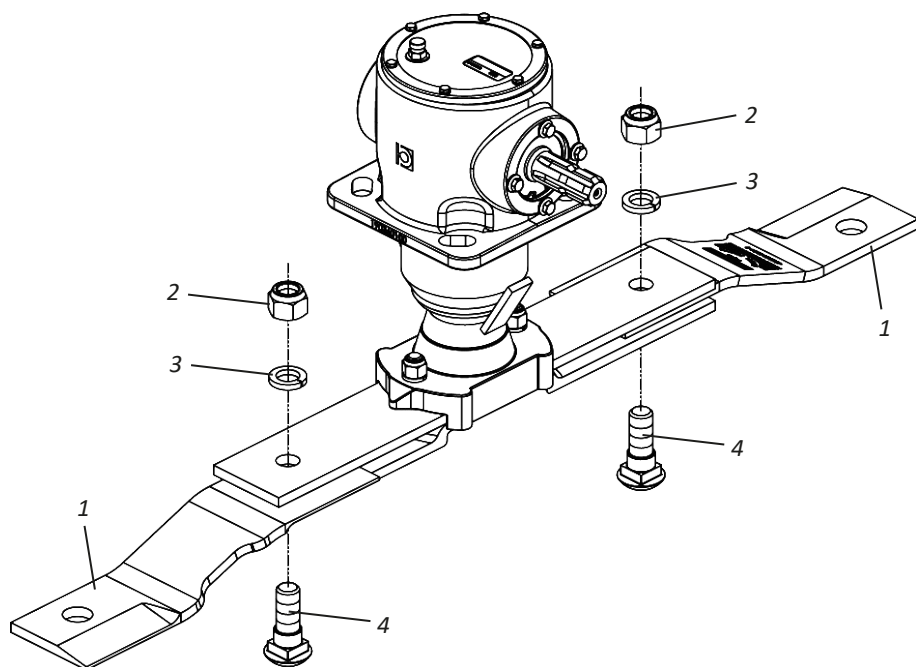
IMPORTANT

Always keep knives sharp to increase yield and require less tractor effort.
In case of loss or breakage of any of the rotating elements, especially the knives, they must be replaced immediately to avoid vibrations and consequently damage to the mower and work failures.

▪ Maintenance

• Replacement of blades - Part II

Before each use of the **RD/RDU**, inspect the knives (1) making sure they are in good condition and properly installed. Replace the knives (1) if they are broken, bent, excessively worn or have suffered any type of damage. Also, replace the knives (1) when you notice imperfections in the cut. To replace the knives (1), proceed as follows:



⚠ ATTENTION

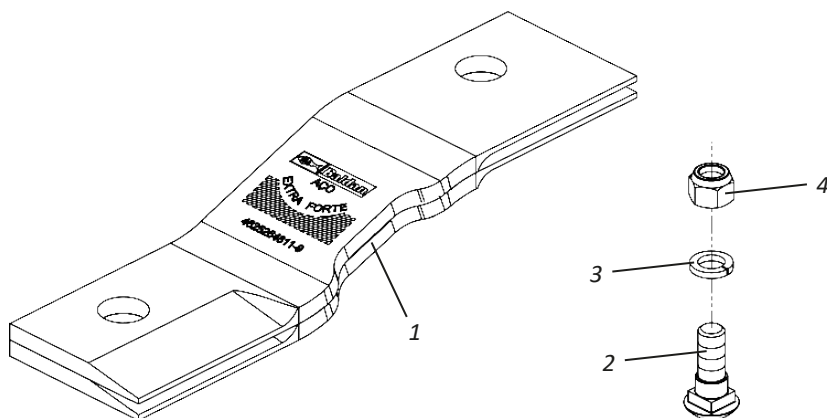
When changing blades, always change the pair of them, avoiding damage to the RD/RDU because of the imbalance. Always use original Baldan blades.

❗ IMPORTANT

Periodically check the condition and tightness of the screws and bolts for fixing the knives. Ignoring this warning could cause serious injury or death.

■ Maintenance

• Replacement of blades - Part II



NOTE When replacing the blades (1), also replace the screws (2), pressure washers (3) and nuts (4).

ATTENTION When replacing the blades (1), note that they are supplied in pairs, which must be kept until they are mounted to the RD/RDU hub. Unbalanced knives can cause excessive vibration and damage the bearings, retainers and the gearbox. The weight variation between these blades (1) is within the tolerance limit.

▪ Maintenance

The **RD/RDU** has been developed to provide you with maximum performance over terrain conditions. Experience has shown that periodic maintenance of certain parts of the **RD/RDU** is the best way to help you avoid problems, so we suggest their verification.



ATTENTION

Constantly check the nuts and bolts, retighten if necessary. General maintenance of the equipment must be carried out every 8 working hours.

• Lubrication

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

Before starting the operation, carefully lubricate all grease fittings, always observing the greasing intervals on the following page. Make sure about the lubricant quality, regarding its efficiency and purity, avoid using products contaminated by water, earth and other agents.

• Grease and equivalents table

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
Petronas	Tutela Jota MP 2 EP
	Tutela Alfa 2K
	Tutela KP 2K

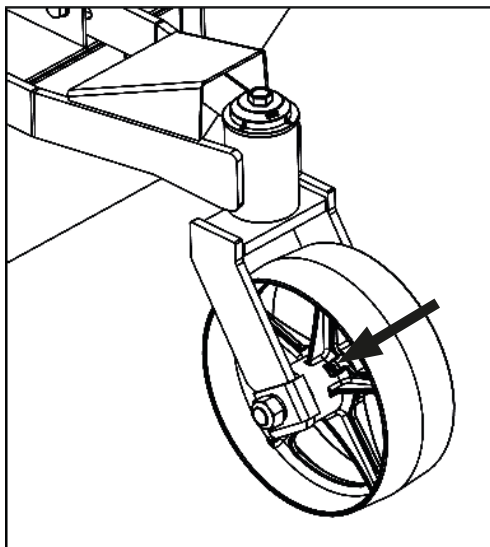


ATTENTION

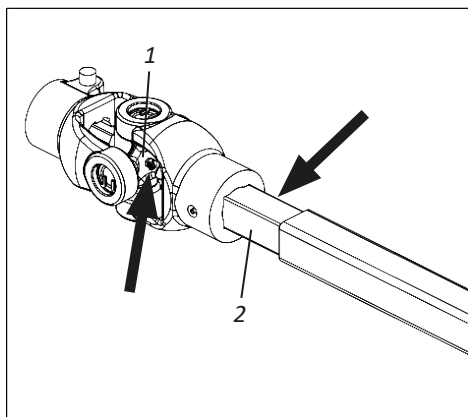
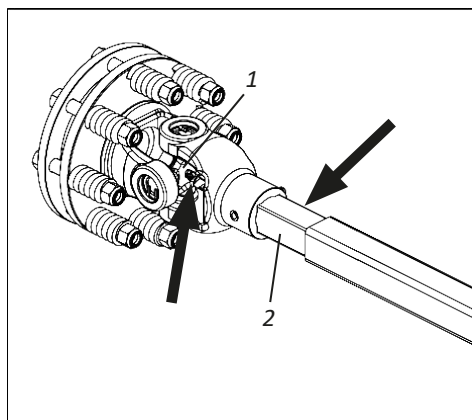
If there are manufacturers and/or equivalent brands that are not listed in the table, consult the manufacturer's technical manual.

▪ Maintenance

- Lubricate every 8 hours of work



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



ATTENTION

When lubricating the RD/RDU, do not exceed the amount of new grease. Fill-in a sufficient quantity.

▪ Maintenance

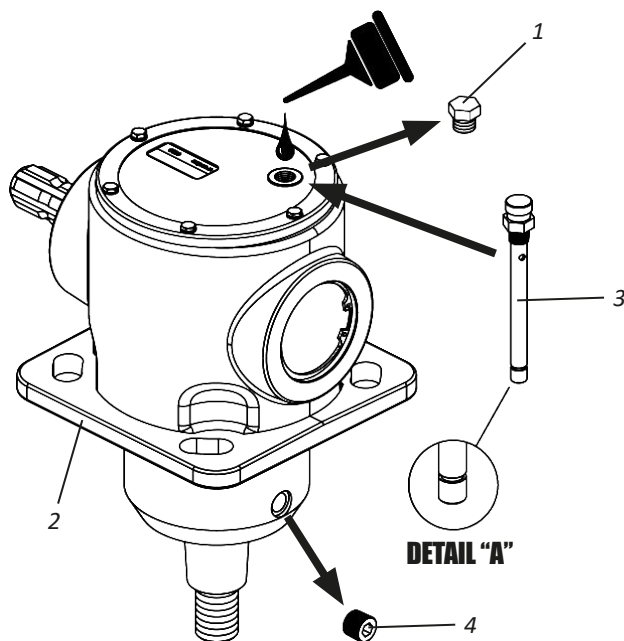
• Oil change - Gearbox (BPN)

On the **RP/RPU** equipped with a gearbox (BPN), before putting the cutter into operation, remove the plug (1) from the gearbox (2) and replace the breather with dipstick (3). Periodically check the level of the gearbox (2) to do this, proceed as follows:

01 - Place the **RD/RDU** in a flat location.

02 - The place the vent with dipstick (3) into the hole without threading it.

03 - Then remove the breather with dipstick (3) and check the level marker as shown in **detail "A"**, if there is a complete need 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).



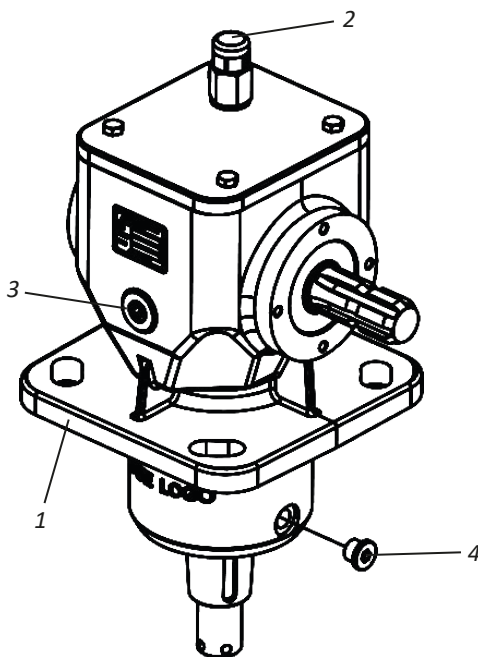
OBSERVATION

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

▪ Maintenance

• Oil change - Gearbox (Comer)

On the **RD/RDU** equipped with a gearbox (Comer) it does not come with a plug, as the gearbox (1) is already fitted with a breather (2). Periodically check the oil level in the gearbox (1) using the level indicator screw (3) and refill as necessary.



! ATTENTION | Replace the oil every 600 hours of work using 1.40 liters. Only use the specified oil: SAE 80W-90.

! IMPORTANT | To drain all the gearbox oil (1), remove the drain plug (4).

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

▪ Maintenance

• Storage

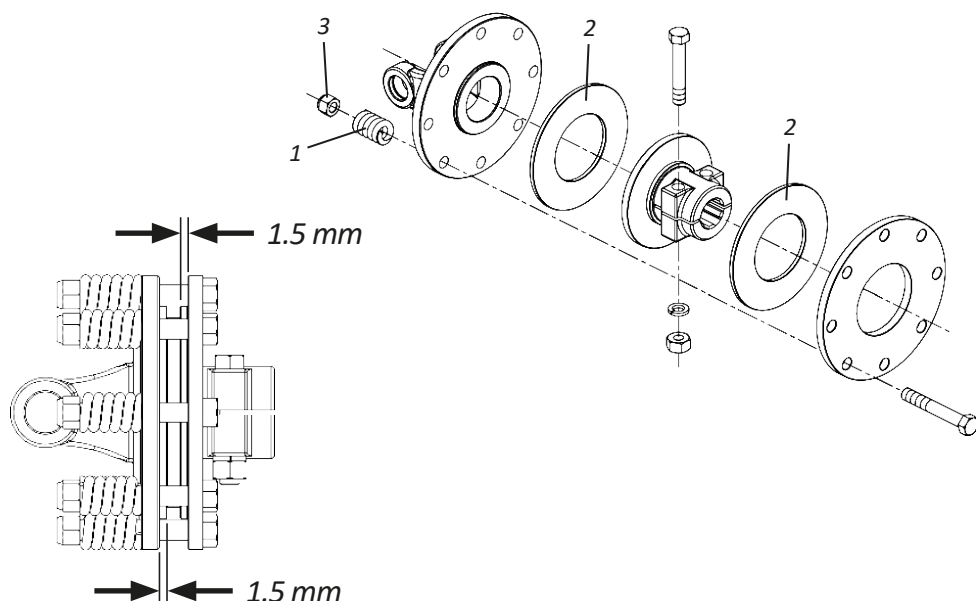
Before storing the **RD/RDU**, remove the cardan and friction plate and store them in a covered, dry place.

Check all transmission components, if necessary, replace any worn or damaged parts.
Always demand original Baldan parts.

• Post storage

Before returning to with the **RD/RDU**, lubricate all components and check the oil level.
With the friction plate, perform the following procedures.

- 01** - Before disassembling the friction plate, note the average length of the springs (1).
- 02** - Then, remove the friction plate and note the average length of the springs (1).
- 03** - Then, with the friction plate removed, the discs (2) must rotate freely on the metal parts.
- 04** - The discs (2) that have a thickness less than **1.5 mm** need to be replaced.
- 05** - The reassemble the friction plate.
- 06** - The springs (1) should be adjusted to have the same length as before disassembly.
- 07** - If, after preventive maintenance, the friction plate is activated continuously in normal working conditions, tighten the nuts (3) proportionally until this is no longer the case.



■ Maintenance

• Operational Maintenance

PROBLEMS	PROBABLE CAUSES	SOLUTIONS
It does not cut.	Blades worn or broken.	Replace the blades (pairs only) as instructed on pages 35 and 36.
	TDP rotation is incorrect.	The correct rotation is 540 RPM.
	Overspeed.	Reduce the speed.
	Blades do not spin when the TDP is running.	Check the drive shaft connection.
	The gearbox is not working properly.	Repair the gearbox.
	Direction of rotation of the blades.	Check the correct cutting side of the blades and the direction of rotation of the gearbox.
Irregular cut.	Blades worn or working properly.	Replace the blades (pairs only) as instructed on pages 35 and 36.
	Overspeed.	Reduce the speed.
	Excessive cutting height.	Lower the cutting height.
	Vegetation of great density and of excessive height.	Use reduced speed.
	Levelling of the rotary cutter is not correct.	Correctly adjust the levelling of the rotary cutter as instructed on page 24.
Slipping of the clutch with excessive friction.	Friction plate out of adjustment.	Adjust the friction plate.
	Friction plate discs worn.	Replace when the minimum thickness of 1.5 mm is reached, as instructed on page 28.
	Adjusting the friction plate springs.	Maintain a 30 mm adjustment on the friction plate springs as instructed on page 27.
Vibration.	Broken blades.	Replace the blades (pairs only) as instructed on pages 35 and 36.
	Incorrect cardan length.	Check the length of the cardan.
	Cardan shaft crosshead assembly.	Check the correct mounting of the cardan brackets.

▪ **Maintenance**

• **Operational Maintenance**

PROBLEMS	PROBABLE CAUSES	SOLUTIONS
Noisy rotary cutter.	Loose components.	Check all the screws and tighten.
	Low oil level in the gearbox.	Check the oil level, as instructed on pages 39 and 40.
Wear on the tip and blades too quick.	Blades touching the ground.	Adjust and operate at a height that will eliminate contact with the ground.
	The brushcutter is not operating at the correct TDP speed.	Maintain the correct TDP speed.

▪ Maintenance

• Cares

- 01** - Before each job, check the condition of all pins, bolts, gearbox, and blades. When necessary, retighten or replace
- 02** - Every 8 hours of work, retighten the nuts and bolts.
- 03** - The speed of movement must be carefully controlled according to the terrain conditions.
- 04** - The **RD/RDU** are used in several applications, requiring knowledge and attention during its handling.
- 05** - Only local conditions can determine the best working form of the **RD/RDU**.
- 06** - When mounting or removing any part of the **RD/RDU**, use appropriate methods and tools.
- 07** - Carefully observe the lubrication intervals at the various lubrication points of the **RD/RDU**.
- 08** - Always check the parts for wear, especially the blades. If there is a need for replacement, **always request original Baldan parts**.



Proper and periodic maintenance is necessary to ensure the long life of the RD/RDU.

▪ **Maintenance**

• **General cleaning**

- 01** - When storing the **RD/RDU**, carry out general cleaning and wash it thoroughly with water only. Make sure the paint is not worn, if this happened, paint a full coat, use protective oil and fully lubricate the **RD/RDU**.
- 02** - Fully lubricate the brushcutter. Check all moving parts of the **RD/RDU**, if they present wear or loosening, make the necessary adjustment or replacement of the parts, leaving the brushcutter ready for the next job.
- 03** - In the period you do not use the **RD/RDU**, wipe the residues that remain on it after its use with grass, dirt, residues, etc.
- 04** - Spray the **RD/RDU** with preservative oil, never use burned oil.
- 05** - Replace all the stickers, especially warning ones that are damaged or missing. Make everyone aware of their importance and the dangers of accidents when instructions are not followed.
- 06** - Clean the cardan weekly or earlier if necessary.
- 07** - Remove the protective caps, separate “male” and “female”, wash and remove crusts, dry and lubricate the sliding parts with grease and reassemble.
- 08** - After all maintenance care, store your **RD/RDU** on a flat surface, which is in a sheltered and dry place away from animals and children.
- 09** - We recommend washing the **RD/RDU** with water only at the start of work.



ATTENTION

Do not use chemicals to wash the RD/RDU, this way damage the paint on it.

• **Rotary cutter conservation - Part I**

To extend the service life and appearance of **RD/RDU**, follow the instructions below:

- 01** - Wash and clean all **RD/RDU** components during and at the end of the work season.
- 02** - Use neutral products to clean the **RD/RDU**, following the safety and handling guidelines provided by the manufacturer.
- 03** - Always carry out maintenance during the periods indicated in this manual.

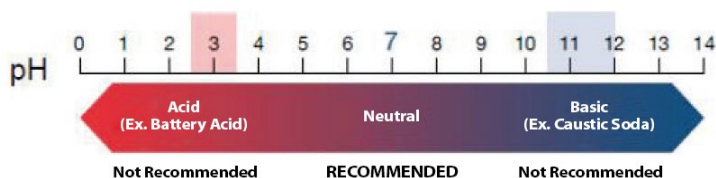
• **Rotary cutter conservation - Part II**

The practices and precautions below, if adopted by the owner or operator, make a difference to the conservation of the **RD/RDU**.

- 01** - Be careful when performing high-pressure washing:

■ Maintenance

- 01** - Use only NEUTRAL detergent and water (pH equal to 7);
- 02** - Apply the product, following the manufacturer's instructions strictly, on the wet surface and in correct sequence, respecting the time of application and washing.
- 03** - Stains and dirt not removed with the products should be removed with the aid of a sponge.
- 04** - Rinse the machine with clean water to remove any chemical residues.
- 05** - Do not use:
 - Detergents with a basic active principle (pH greater than 7) can attack/stain the grid paint.
 - Detergents with acidic active principle (pH less than 7), act as a stripper/zinc remover (protection of parts against oxidation).



- 06** - Let the machine dry in the shade, so that water does not accumulate in its components. Drying too quickly can cause stains on your paint.
- 07** - After drying, lubricate all chains and grease fittings according to the recommendations in the operator's manual.
- 08** - Spray the entire machine, especially the zinc-coated parts, with protective oil, following the manufacturer's application guidelines. The protector also prevents the adherence of dirt in the machine, facilitating subsequent washing.
- 09** - Observe the curing time (absorption) and application intervals as recommended by the manufacturer.

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

❗ IMPORTANT We recommend the following protective oils:

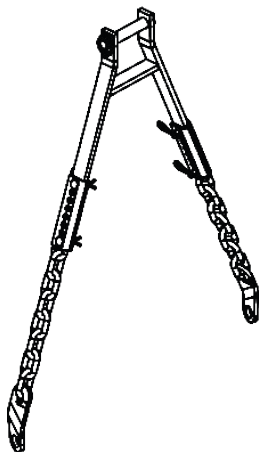
- Bardahl: Protective Agro 200 or 300
- ITWChemical: Zoxol DW - Series 4000

🔍 OBSERVATION Ignoring the conservation measures mentioned above may result in the loss of the warranty for painted or zinc-coated components that present possible oxidation (rust).

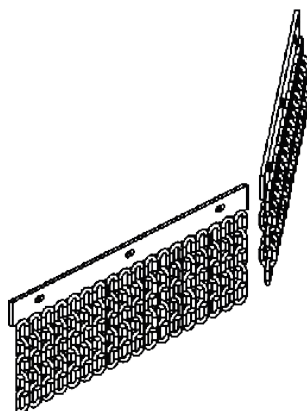
▪ Optional

• Optional Accessories

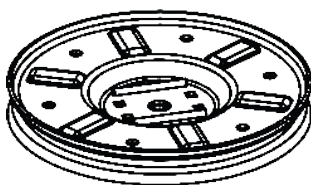
The rotary cutter **RD/RDU** has options that can be purchased according to the work need.



**HEIGHT LIMITER
(MODEL RD)**



**REAR GUARDS WITH CHAINS
(MODEL RD/RDU)**



**ROTATING TRAY
(MODEL RD/RDU)**

■ Identification

• Identification plate

To see the parts catalog or to request technical assistance from Baldan, always inform model (1), serial number (2) and date of manufacture (3), which is on your **RD/RDU** nameplate.

 BALDAN BALDAN IMPLEMENTOS AGRÍCOLAS S/A. AV. BALDAN, 1500 NOVA MATÃO CEP 15.993-900 MATÃO-SP BRASIL FONE: (16) 3221-6500 CNPJ: 52.311.347/0009-06 CREA/SP 0170977		
01 → Modelo / Model		→ 03 Data / Date
02 → N° de Série / Serial Number		Tipo / Type
Capacidade / Load Capacity		Peso / Weight



ATTENTION

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



CONTACT

In case of doubt, never operate or handle your equipment without consulting the After Sales.
 Telephone: 0800-152577
 e-mail: posvenda@baldan.com.br



PUBLICATIONS

Code: 60550201561 | CPT: RDU17021A



▪ Identification

• Product Identification

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

Owner: _____

Resale: _____

Farm: _____

City: _____

State: _____

Certificate No. of warranty: _____

Implement: _____

Serial No.: _____

Purchase date: _____

Invoice: _____

■ Notes

[illegible]

■ Notes

This image shows a single page of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page, leaving small margins at the top and bottom. There are no vertical margin lines, and the page is completely blank except for the lines themselves.

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

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

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

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

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

▪ Inspection and Delivery Certificate

SERVICE BEFORE DELIVERY: This implement was carefully prepared by the sales organization, inspected in all its parts according to the manufacturer's prescriptions.

DELIVERY SERVICE: The user has been informed of the current warranty terms and instructed on the use and maintenance precautions.

I confirm that I was informed about the terms of existing warranty and instructed on the use and proper maintenance of the implement.

Implement: _____ Serial number: _____

Date: _____ Invoice no.: _____

Resale: _____

Phone: _____ CEP: _____

City: _____ State: _____

Owner: _____

Phone: _____

Address: _____ Number: _____

City: _____ State: _____

E-mail: _____

Date of Sale: _____

Signature / Stamp of Resale _____

1st counterpart - Owner

▪ Inspection and Delivery Certificate

SERVICE BEFORE DELIVERY: This implement was carefully prepared by the sales organization, inspected in all its parts according to the manufacturer's prescriptions.

DELIVERY SERVICE: The user has been informed of the current warranty terms and instructed on the use and maintenance precautions.

I confirm that I was informed about the terms of existing warranty and instructed on the use and proper maintenance of the implement.

Implement: _____ Serial number: _____

Date: _____ Invoice no.: _____

Resale: _____

Phone: _____ CEP: _____

City: _____ State: _____

Owner: _____

Phone: _____

Address: _____ Number: _____

City: _____ State: _____

E-mail: _____

Date of Sale: _____

Signature / Stamp of Resale _____

2nd counterpart - Dealer

▪ Inspection and Delivery Certificate

SERVICE BEFORE DELIVERY: This implement was carefully prepared by the sales organization, inspected in all its parts according to the manufacturer's prescriptions.

DELIVERY SERVICE: The user has been informed of the current warranty terms and instructed on the use and maintenance precautions.

I confirm that I was informed about the terms of existing warranty and instructed on the use and proper maintenance of the implement.

Implement: _____ Serial number: _____

Date: _____ Invoice no.: _____

Resale: _____

Phone: _____ CEP: _____

City: _____ State: _____

Owner: _____

Phone: _____

Address: _____ Number: _____

City: _____ State: _____

E-mail: _____

Date of Sale: _____

Signature / Stamp of Resale _____

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

1.74.05.0059-5

AC MATÃO
ECT/DR/SP

RESPONSE CARD

NOT REQUIRED SEAL

SEAL WILL BE PAID BY:



BALDAN IMPLEMENTOS AGRÍCOLAS S/A.

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

Phone: (16) 3221-6500 | Fax: (16) 3382-6500

www.baldan.com.br | email: sac@baldan.com.br

Export: Phone: +55 (16) 3221-6500 | Fax: +55 (16) 3382-4212 | 3382-2480

email: export@baldan.com.br



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