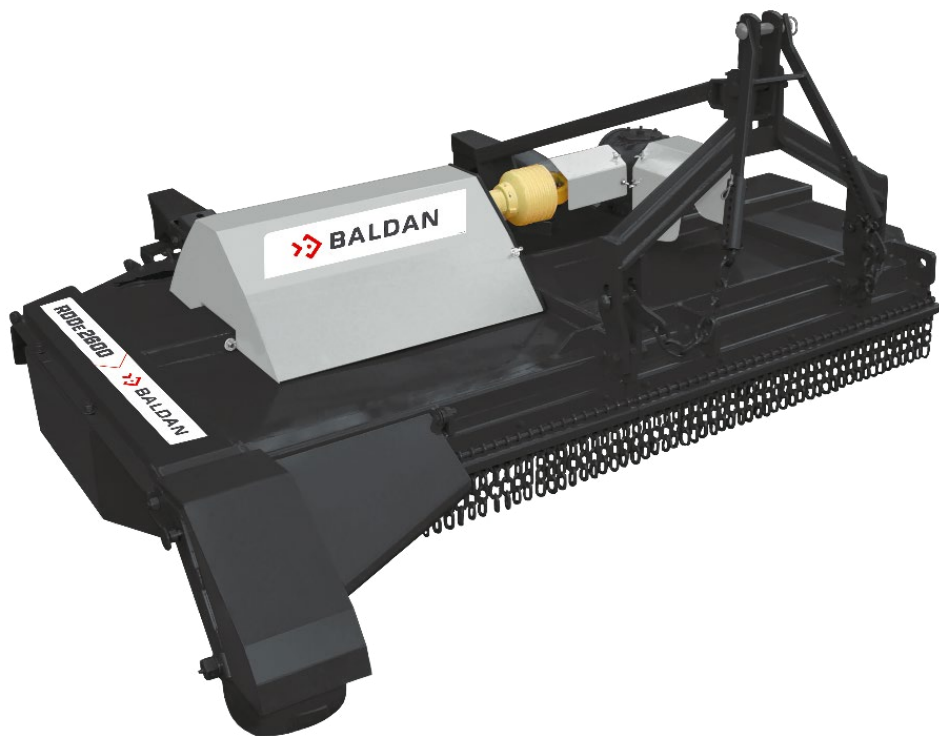


Instruction Manual



RDD-E 2600

Rotary Cutter Double Direct Special

 **BALDAN**

■ Presentation

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



IMPLEMENTOS AGRÍCOLAS S/A technology.

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

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

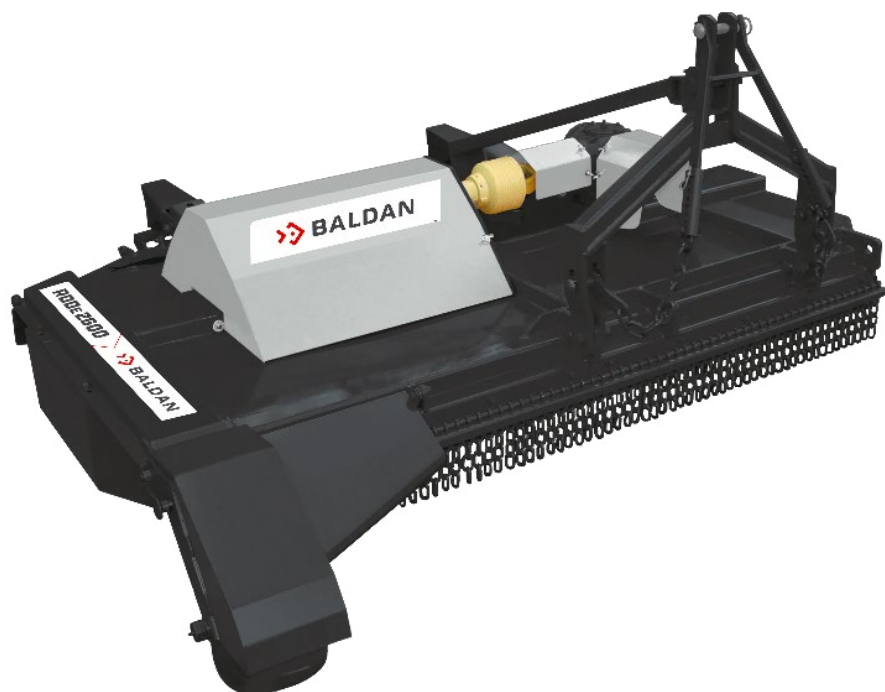
Resale was responsible for the custody and maintenance during the period in its possession, and also for the assembly, retightening, lubrication and overhaul.

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 Manual



RDD-E 2600

Rotary Cutter Double Direct Special

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



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

 **BALDAN**

▪ Index

BALDAN WARRANTY	07
GENERAL INFORMATION	08
<i>To the owner</i>	08
SAFETY RULES	9
<i>To the operator</i>	9-12
WARNINGS	13-14
COMPONENTS	15
<i>RDD-E - Rotary Cutter Double Direct Special</i>	15
DIMENSIONS	16
<i>RDD-E 2600</i>	16
SPECIFICATIONS	17
<i>RDD-E - Rotary Cutter Double Direct Special</i>	17
HITCH	18
<i>Tractor Coupling</i>	18
<i>Cardan length adjustment - Part I</i>	19
<i>Cardan length adjustment - Part II</i>	20
REGULATION	21
<i>Centralization</i>	21
<i>Leveling</i>	22
<i>Adjusting cutting height - Part I</i>	23
<i>Adjustment of cutting height - Part II</i>	24
<i>Working position - Part I</i>	24
<i>Working position - Part II</i>	24
<i>Working position - Part III</i>	24
<i>Friction - Part I</i>	27
<i>Friction - Part II</i>	28
OPERATIONS	29
<i>Cardan recommendations</i>	29
<i>Position of blades and direction of rotation</i>	30
<i>Recommendations for operation</i>	31
MAINTENANCE	32
<i>Front, rear and side guards</i>	32
<i>Blade exchange – Gearbox</i>	33
<i>Blade exchange – Transmission</i>	34
<i>Lubrication</i>	35
<i>Lubrication every 8 hours of work</i>	36
<i>Oil change</i>	37
<i>Storage</i>	38
<i>Post-storage</i>	38

Operational maintenance 39-40

Care 41

General cleaning 42

Retaining the Trimmer 42-43

OPTIONAL 44

Optional accessories 44

IDENTIFICATION 45

Name plate 45

Product identification 46

NOTES 47

CERTIFICATE 48

Guarantee certificate 48-54

▪ 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 out in the product within the dealer warranty deadline will only be authorized by **BALDAN** upon previous budget presentation describing parts and workforce to be executed.

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 shafts, 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.



ATTENTION

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>

▪ Safety Rules

• 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 booklet 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.



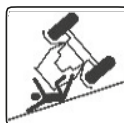
ATTENTION



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

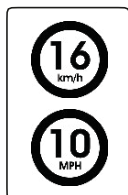


Before performing any maintenance in your equipment, make sure it is properly stopped. Avoid being run over.

▪ Safety Rules

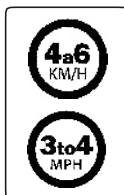
! ATTENTION FOLLOW ALL RECOMMENDATIONS, WARNINGS AND SAFE PRACTICES RECOMMENDED IN THIS MANUAL, UNDERSTAND THE IMPORTANCE OF YOUR SAFETY. ACCIDENTS MAY LEAD TO DISABILITY OR INCLUDING DEATH. REMEMBER, ACCIDENTS CAN BE AVOIDED!

! ATTENTION



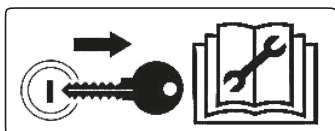
When transporting the RDD-E, do not exceed 16Km/h or 10 MPH, to avoid risks of damage and accidents.

! ATTENTION



When working with the RDD-E, do not exceed speeds of 4 to 6 km/h or 3 to 4 MPH, to avoid risks of damage or accidents.

! ATTENTION



Remove the ignition key before performing any maintenance on the RDD-E. Protect yourself from possible injury or death caused by an unforeseen event in the RDD-E. If the RDD-E is not properly coupled, do not start the tractor.

! ATTENTION



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

! ATTENTION



Before work with or transporting the RDD-E, check for nearby people or obstructions.

! ATTENTION



Do not make adjustments with the RDD-E in operation. When servicing the RDD-E, first switch off the tractor. Use proper tools.

▪ Safety Rules**! 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

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

RDD-E can release fragments or throw objects at high speeds that can cause serious injury or death to expectators.

▪ Safety Rules

• PPE Equipment

! ATTENTION | DO NOT WORK WITH THE RDD-E WITHOUT WEARING PPE (SAFETY EQUIPMENT). IGNORING THIS WARNING COULD CAUSE DAMAGE TO HEALTH, SERIOUS ACCIDENTS OR DEATH.

When performing certain procedures with the **RDD-E**, wear the following Safety Equipment (PPE):



! IMPORTANT

Safety practice must be performed in all stages of working with RDD-E, thus avoiding accidents such as impact of objects, falls, noise, cuts and ergonomics, i.e. the person responsible for operating RDD-E is subject to internal and external damage to your body.

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



▪ **Warnings**

-  When operating RDD-E, do not allow people to be near or on top of it.
-  When performing any maintenance service, wear PPE.
-  Do not wear loose clothing, as they may get caught in the RDD-E.
-  When operating the tractor engine, be properly seated in the operator's seat and fully aware of the correct and safe handling of both the tractor and the RDD-E. Always set the gear shift lever to the neutral position, turn off the power take-off gear and place the hydraulic controls in the neutral position.
-  Do not start the motor in a closed environment or with no proper ventilation since the exhaust gases are harmful to health.
-  When maneuvering the tractor to engage the RDD-E, make sure you have the necessary space and that there are no people near, always maneuver it at idle and be prepared to brake in an emergency.
-  Do not make adjustments with the RDD-E in operation.
-  When working in sloped terrains, proceed with precautions, always trying to maintain the required stability. In the event of an imbalance decrease acceleration, turn the wheels to the slope side of the terrain and never lift the RDD-E.
-  Always drive the tractor in speeds compatible to the safety, especially during works in bumpy lands or slopes, keep the tractor always engaged.
-  When driving the tractor in highways, keep the brake pedals interconnected.
-  Do not work with a tractor with a light rear. If its front tends to raise, add weights or ballasts to the front of the tractor or to its front wheels.
-  When leaving the tractor, put the gear lever in neutral position and apply the parking brake. Never leave the RDD-E coupled to the tractor with the hydraulic system in the raised position.
-  Any maintenance on the RDD-E must be done in a single stop and with the tractor switched off.
-  Only operate the RDD-E from the driver's seat. Do not release controls until the movements are complete.
-  Do not leave the seat before locking the controls to avoid any movement.
-  Regularly check the presence of safety pins and screws. Do not replace with other objects, such as nails, wires, etc.
-  The warranty is void immediately when the installation, adjustment, operation, and maintenance instructions for the RDD-E are not observed.

▪ Warnings

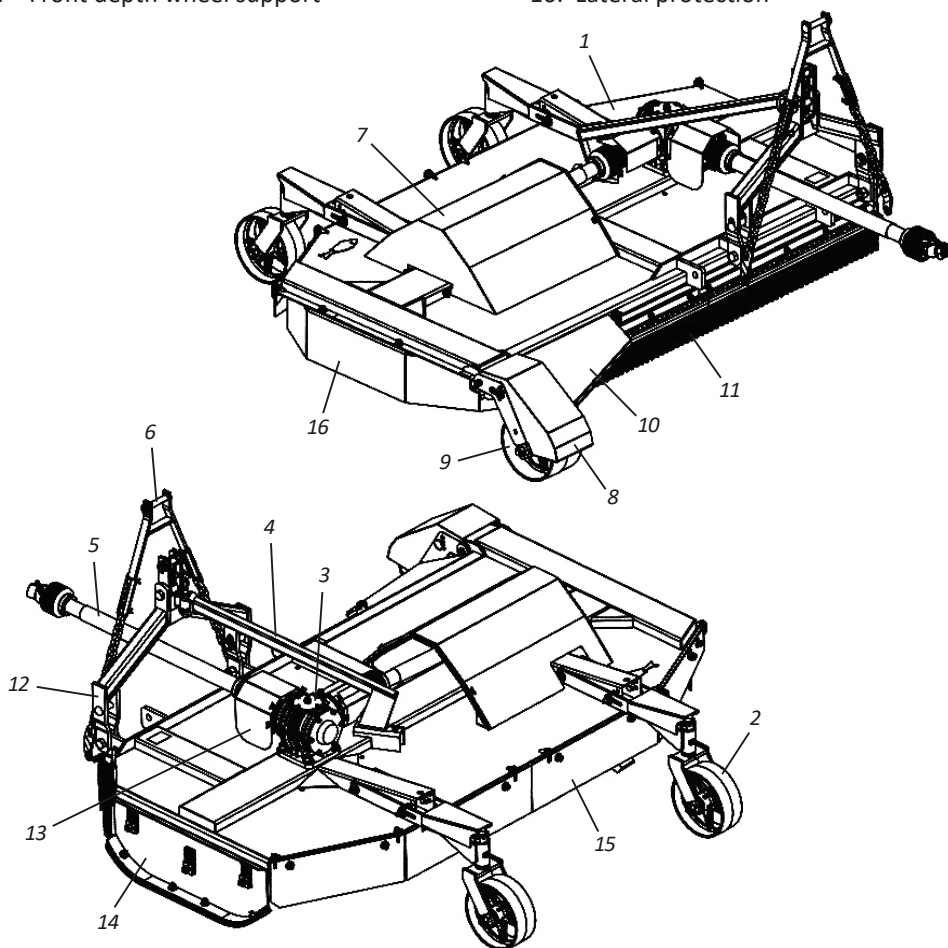
-  Do not travel on highways especially at night. Use warning signs throughout the course
-  If you need to travel with the RDD-E on highways, see the transit agencies.
-  Do not allow untrained people to use the RDD-E, that is, people that do not know how to operate it correctly.
-  Read all safety information contained in this manual and RDD-E carefully.
-  Do not transport or work with RDD-E near obstacles, rivers or streams.
-  The transportation of people on self-propelled machines and implements is forbidden.
-  Changes in the original characteristics of the RDD-E are not allowed, as they may alter the safety, the operation and affect the service life.
-  Unqualified persons and children are prohibited from operating RDD-E.
-  Always check that the RDD-E is in perfect conditions of use. In case of any irregularity that may interfere with the operation of the RDD-E, ensure proper maintenance before any work or transportation.
-  The maintenance, especially the inspection in risk zones of the RDD-E, must be done only by qualified or qualified worker, observing all the safety guidelines. Before starting maintenance, disconnect all drive systems from the RDD-E.
-  Periodically check all components of the RDD-E before using it.
-  Due to the equipment used and work conditions on field or in maintenance areas, precautions are required. Baldan has no direct control over precautions, so it is the owner's responsibility to implement safety procedures while working with RDD-E.
-  During transport of the RDD-E, walk at speeds compatible with the terrain and never exceed 16 km/h, this reduces maintenance and consequently increases the life of the RDD-E.
-  Do 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

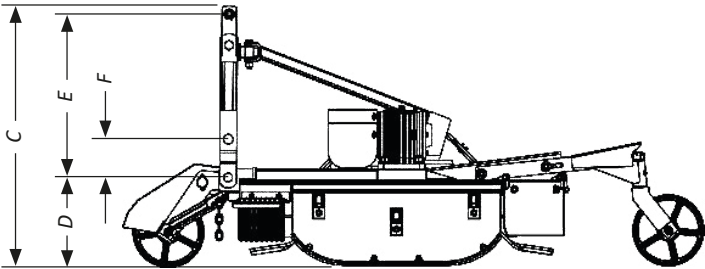
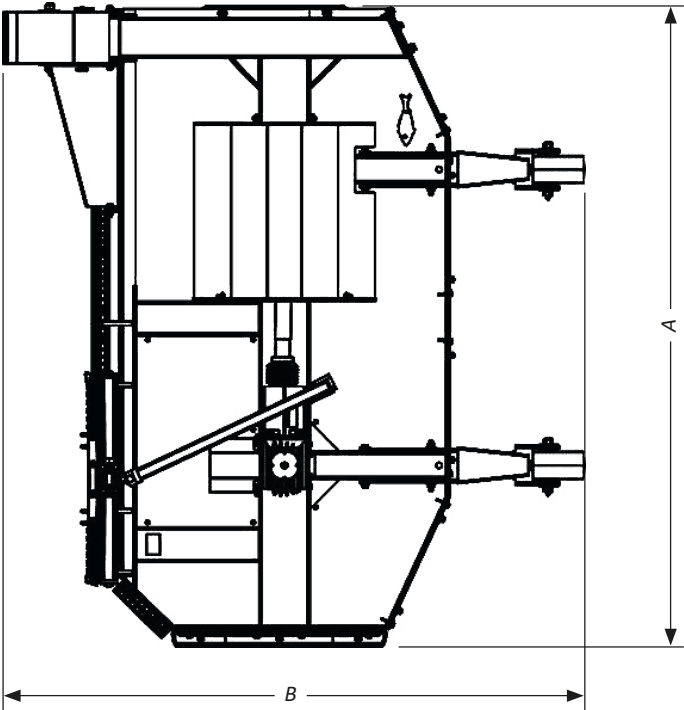
• RDD-E - Rotary Cutter Double Direct Special

- | | |
|------------------------------|-----------------------------|
| 1. Blade protection box | 9. Front depth wheel |
| 2. Back depth wheel | 10. Front protection plate |
| 3. Multiplier box. | 11. Protective chains |
| 4. Stabilizer support | 12. Coupling head |
| 5. Cardan | 13. Drive shaft protection |
| 6. Height-limiting coupling | 14. Cutting regulation shoe |
| 7. Gearbox protection | 15. Rear guard |
| 8. Front depth wheel support | 16. Lateral protection |



▪ Dimensions

• RDD-E 2600



Model	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
RDD-E 2600	2843	2580	1168	395	735	172

▪ **Specifications**

• **RDD-E - Rotary Cutter Double Direct Special**

Model	No. of Blades	Cutting Width (mm)	Total Width (mm)	App. Weight (Kg)	Tractor Power (HP)
RDD-E 2600	4	2600	2900	800	65

Cutting height.....50 - 200 mm
PTO RPM 540
Blades RPM..... 1038

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.

INTENDED USE OF THE RDD-E

- The **RDD-E** was developed to leave scattered or directed material close to the flowering of plants.
- The **RDD-E** must be driven and operated only by a properly instructed operator.

NON-ALLOWED USE OF RDD-E

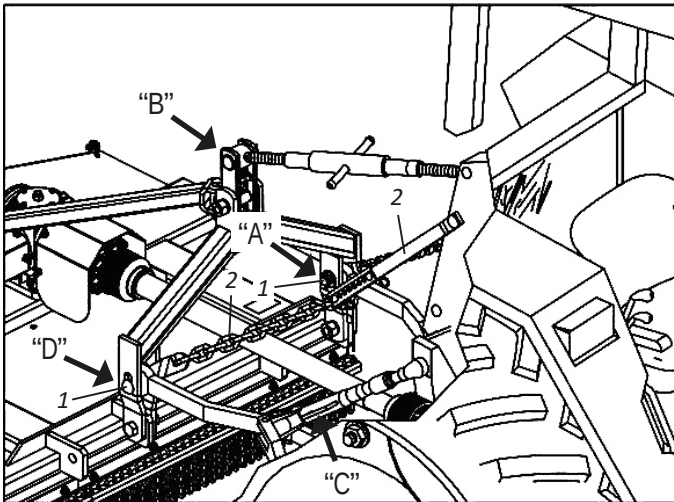
- To avoid damages, severe accidents or death, do NOT transport people on other part of **RDD-E**.
- It is NOT permitted to use the **RDD-E** to attach, towing or to push other implements or accessories.
- RDD-E** was developed for agricultural use, NOT to be used in urban areas.
- RDD-E** must NOT be used by an inexperienced operator who is not familiar with all driving, operating and command techniques.

▪ Hitch

Before engaging the **RDD-E**, make sure the tractor is equipped with a set of weights or weights on the front or front wheels to avoid lifting the tractor. Rear wheels will give greater stability and soil traction to the tractor.

• Tractor Hitch

1. Slowly approach the **RDD-E** tractor in reverse gear, paying attention to the application of the brakes.
2. Then use the hydraulic position control lever as you approach the **RDD-E**, leaving the lower left arm at the level of the mower hook.
3. Engage the lower left arm of the tractor together with the limiter clutch plate (2) securing with the pin (1) on the "A" bracket of the **RDD-E**.
4. Engage the 3rd point of the tractor on the bracket "B" of the **RDD-E**.
5. Then, using the adjusting lever "C", engage the lower right arm of the tractor together with the limiting coupling plate (2) by attaching the coupling pin (1) to the "D" holder of the **RDD-E**.



ATTENTION

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



NOTE

When engaging the **RDD-E**, look for a safe and easily accessible place, always use low gear with low acceleration.

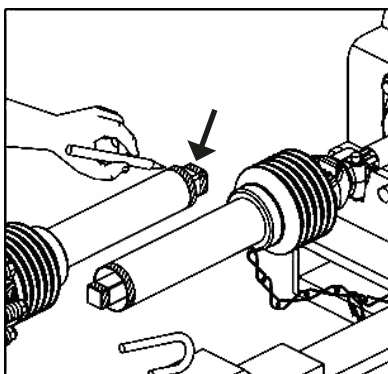
▪ Hitch

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

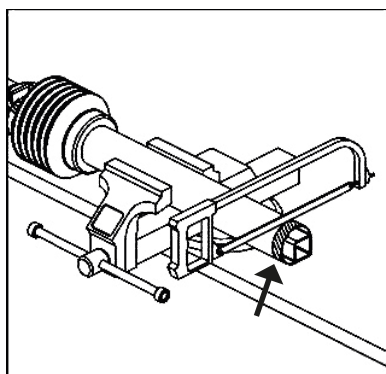
• Cardan length adjustment - Part I

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

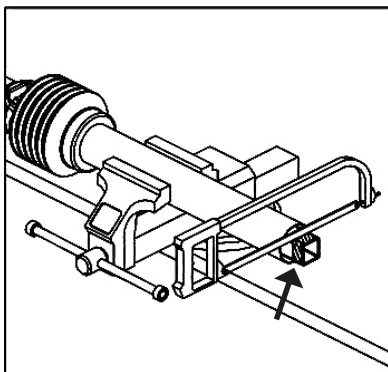
To perform the cardan cut, proceed as follows:



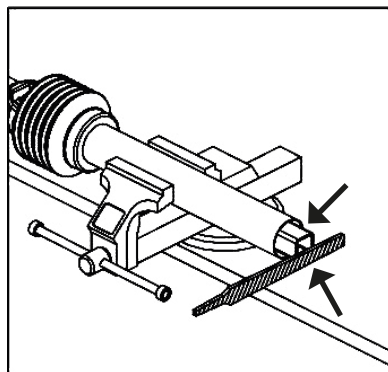
Secure the shaft halves from the shaft close to each other in the working position and mark the part to be cut.



Shorten the inner and outer guards of the cardan proportionally.



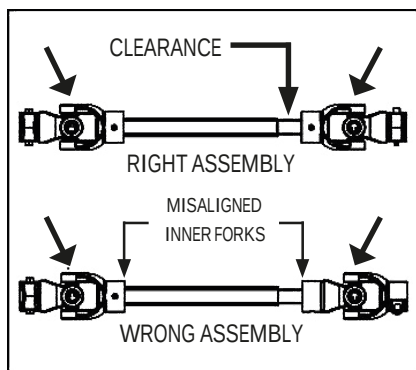
Cut the inner bars of the cardan in the same length as the protective tubes.



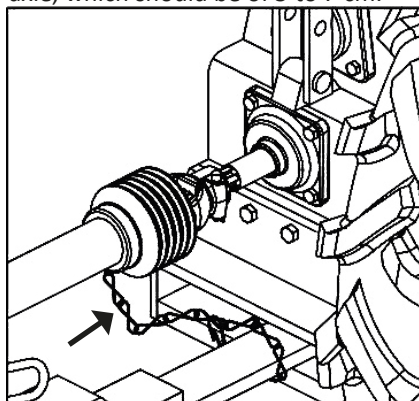
Remove all burrs and edges. Clean and grease the cardan bars.

▪ Hitch

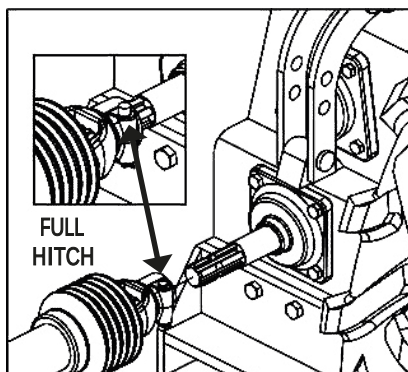
• Cardan length adjustment - Part II



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.

! IMPORTANT

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

NOTE

Check the drive shaft angle on page 28 and other recommendations for using it.

! ATTENTION

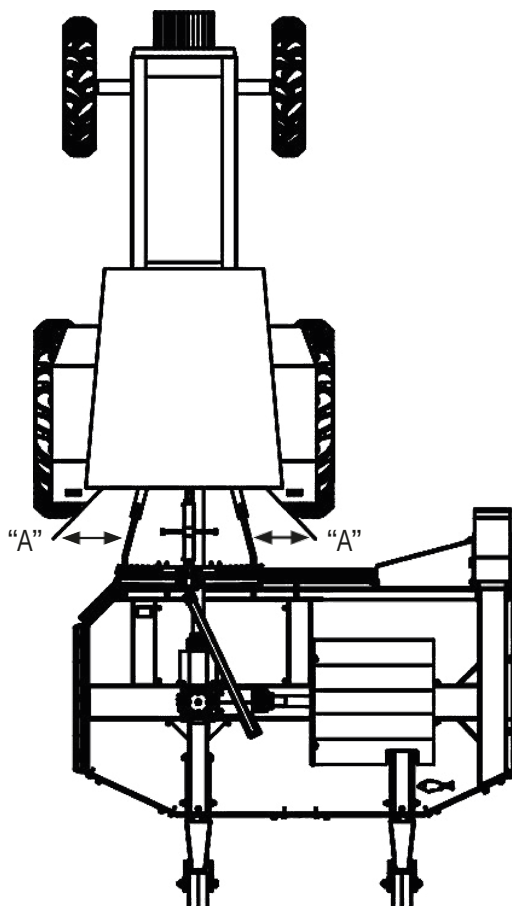
Incorrect mounting of the cardan causes excessive vibration, which is harmful to the transmission.
When engaging the cardan in the TDP, the tractor must be switched off with the parking brake applied.

▪ Adjustment

• Centralization

To center the **RDD-E** in relation to the longitudinal axis of the tractor, proceed as follows:

1. - Align top **RDD-E** coupling with 3rd tractor point.
2. - Then fully raise the **RDD-E**.
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.

**ATTENTION**

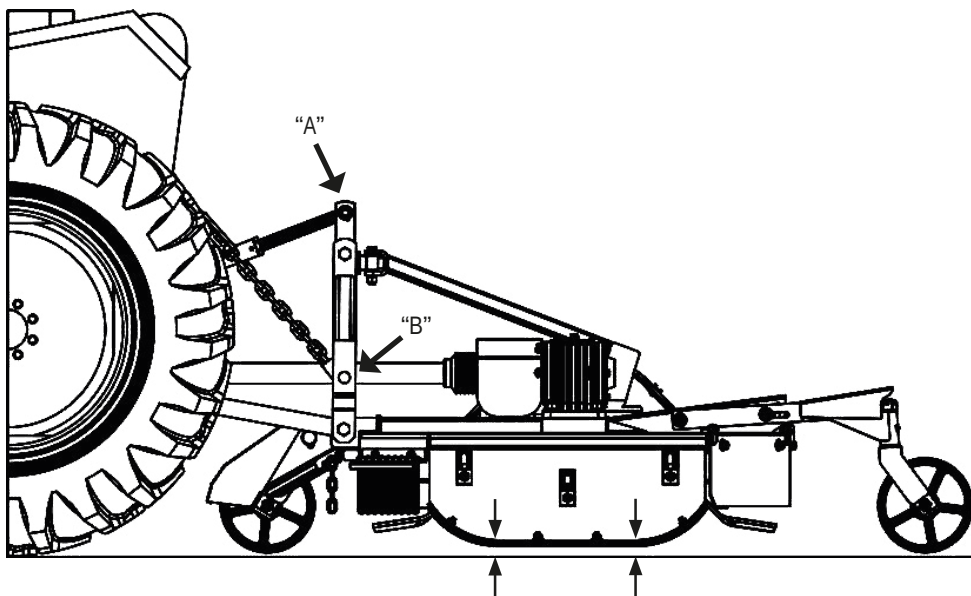
Never adjust the tractor's lower hydraulic arms with the RDD-E lowered.

▪ Adjustment

• Leveling

To level the **RDD-E** 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, using the upper arm "A" and lower right "B", which have adjustments, level the **RDD-E**.



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.

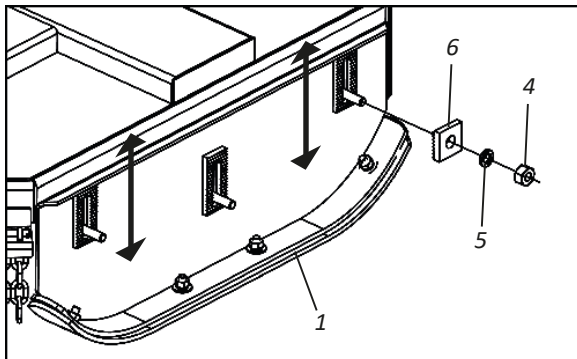
▪ Adjustment

• Adjustment of cutting height - Part I

The cutting height of the **RDD-E** is adjusted by the side shoes (1), rear wheels (2) and front wheel (3). To adjust the cutting height, proceed as follows:

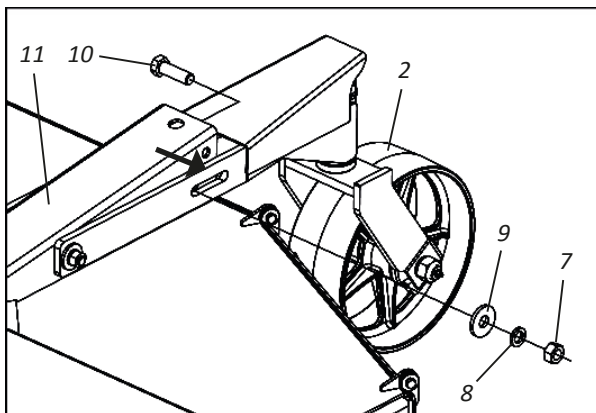
SIDE SHOES

1. - Loosen the nuts (4), lock washers (5), and grooved plates (5).
2. - Then adjust the side shoes (1) by positioning them at the desired height.
3. - Then, retighten the grooved plates (6) through lock washers (5), and nuts (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.



ATTENTION

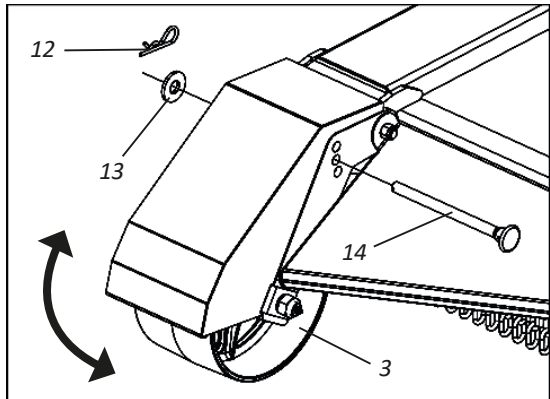
We recommend a cutting height of at least 50 mm above the ground.

▪ Adjustment

• Adjustment of cutting height - Part II

FRONT WHEEL

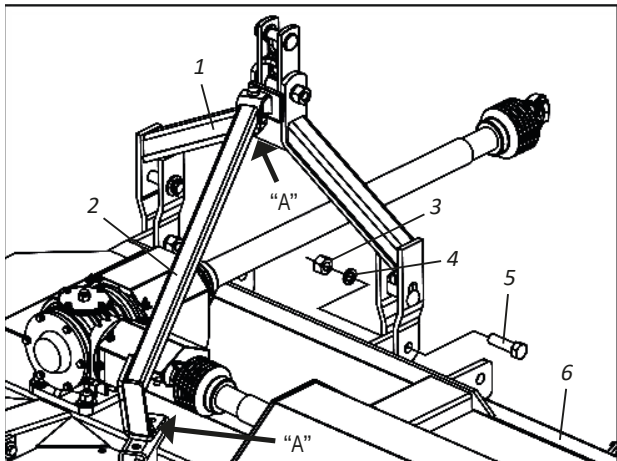
7. - Then, loosen lock (12), flat washer (13) and remove the pin (14) from the front wheel (3), position it at the same desired height through holes "A" in the bracket.
8. - Finish by replacing the pin (14), flat washer (13), and lock (12).



• Working Position - Part I

The **RDD-E** can work in the side or super side position in relation to the tractor. To adjust head position (1), proceed as follows:

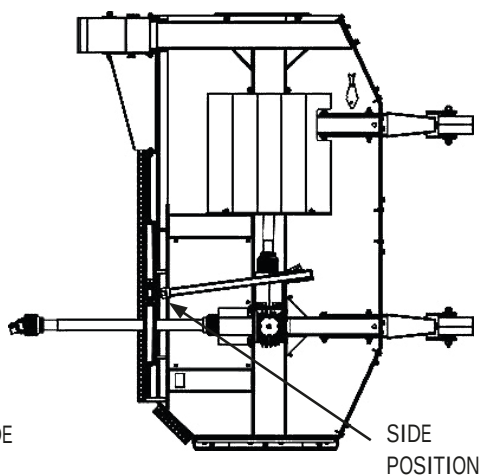
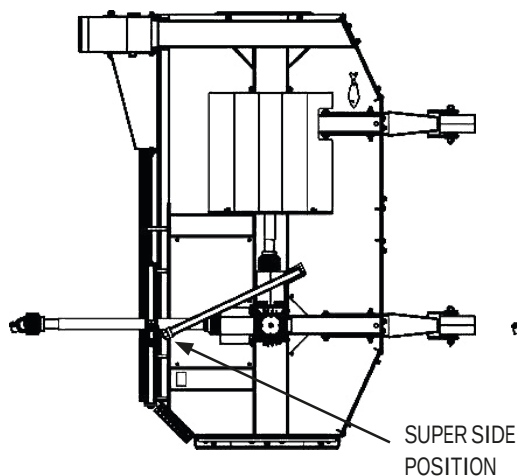
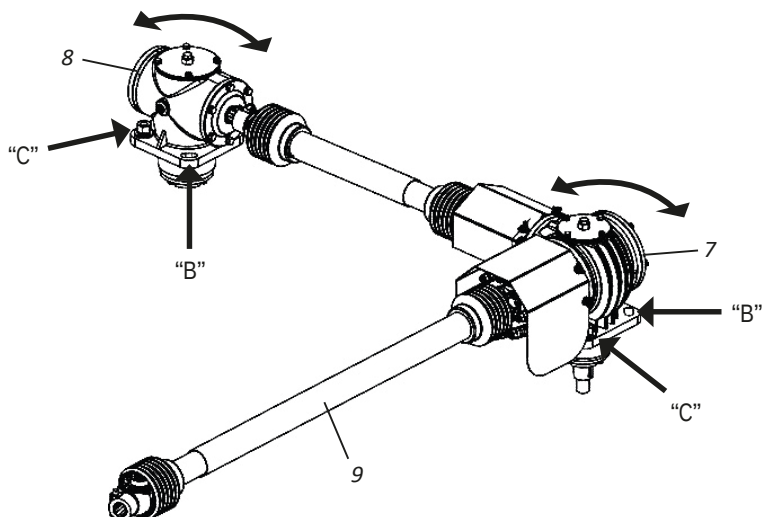
1. - Loosen the "A" nuts securing the head holder (2) and removing them is no necessary.
2. - Then remove nuts (3), locking washers (4), screws (5) and move head (1) to the other holder of the blade box (6).
3. Then replace bolts (5), locking washers (4) and nuts (3) by reattaching the head (1).
4. Finally tighten the "A" nuts securing the head bracket (2).



▪ Adjustment

• Working position - Part II

The gear box (7) and transmission (8) have oblong holes "B". When positioning the head holder (2) in the super side position, if necessary, loosen the screws "C" and turn the gearbox (7) and transmission box (8) to better position the drive shaft (9).



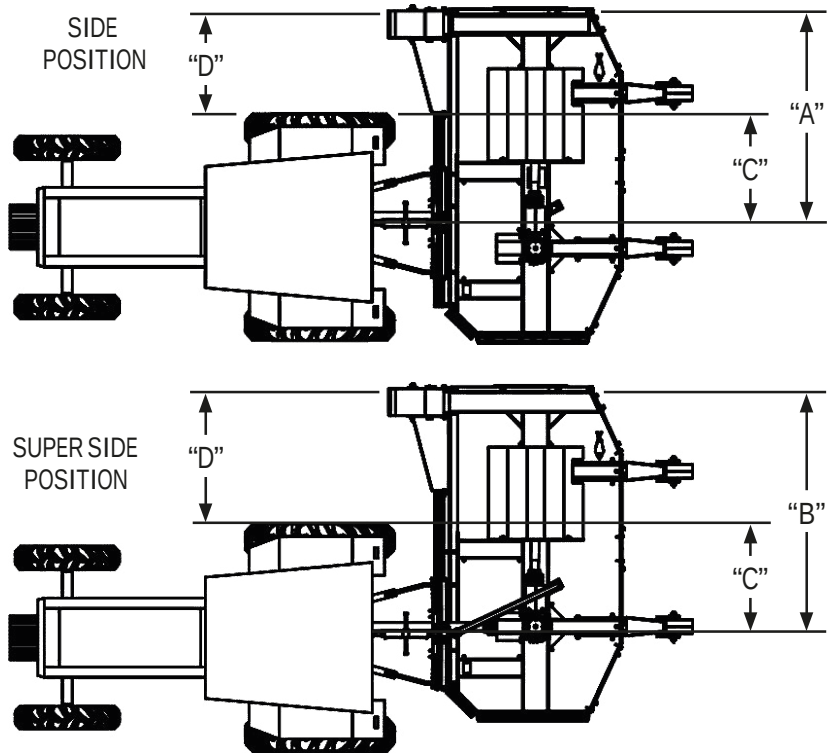
▪ **Adjustment**

• **Working position - Part III**

For measurements exceeding the right side of the tractor using the **RDD-E** in the side or super side positions, use the formula below.

Formula: $A = C + X$
 $B = C + X$

Data: **A** = Dimension of the **RDD-E** head center in the lateral position until the end of the cut.
B = Dimension of the **RDD-E** head center in the super 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.



 ATTENTION

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

Model	Side Position "A"	Position Super Lateral "B"	Displacement between "A" and "B"
RDD-E 2600	2100	2370	270

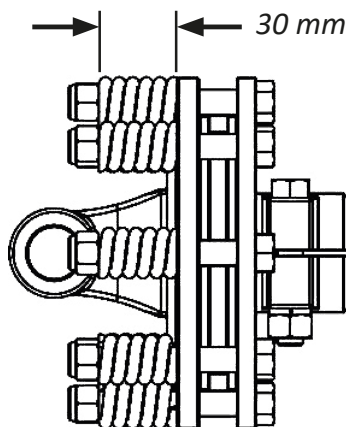
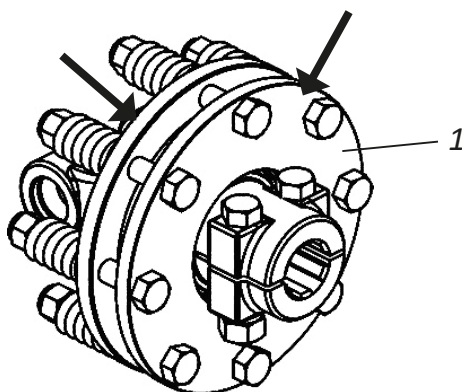
▪ Adjustment

• Friction - Part I

The friction is set at the factory, without any adjustment before starting the **RDD-E**. Upon encountering overloads, friction starts and the work should be stopped immediately by lifting the **RDD-E**.

- The recurrence of friction, after some time of use and without overloading, indicates the need to adjust friction due to wear on the discs (1).

- It is important to maintain a 30 mm adjustment in the springs as shown in **detail "A"** to compensate for wear on the discs (1) and to maintain proper friction operation.



DETAIL "A"

- When the mechanic (or trained person) performs the clutch adjustment in the field, it must be careful not to tighten the springs excessively, because **BLOCKED CLUTCH** will occur, which interrupts clutch function, providing risk of cracks in pinions, crowns, shafts, crosses and even in the TDP of the tractor.

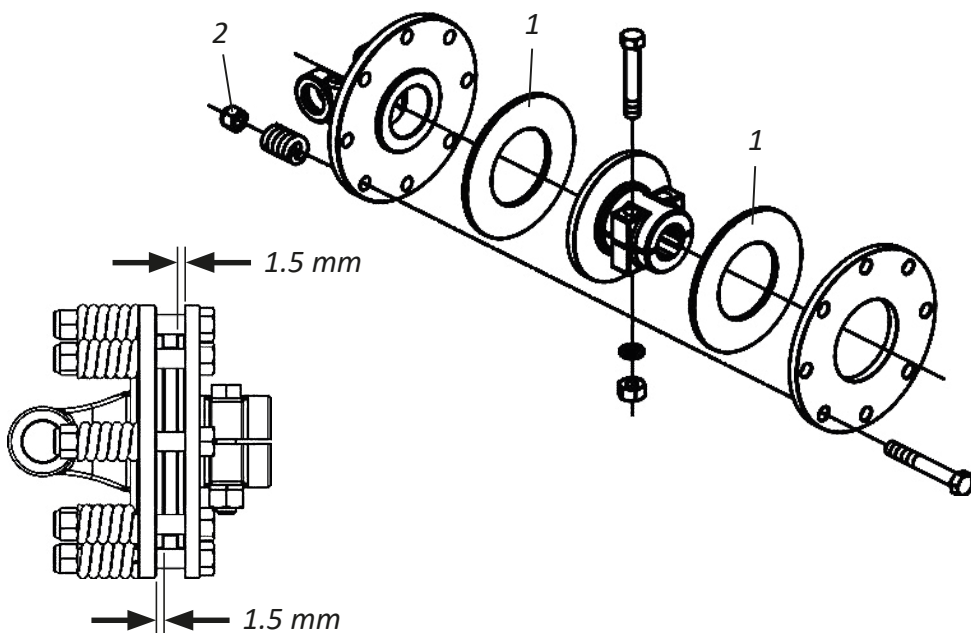
- How to adjust in the field.

1. - Make a visual evaluation of the components of the clutch (discs, springs, etc.).
2. - Then tighten the springs equally, one by one, approximately 1/3 of a turn.
3. - Repeat this procedure every time the clutch starts activating continuously.

▪ Adjustment

• Friction - Part II

- Setting the spring height to keep the factory-set clutch may not be the best way to do the evaluation, since the sets have particular variables that can distort results.



ATTENTION

If the RDD-E goes idle in an uncovered place, you must unscrew the clutch and clean it before returning to work. Friction discs may lock and not work when in direct contact with the other components of the clutch. Check the post-storage instructions on p.37.

IMPORTANT

Discs (1) must be replaced as soon as they become 1.5mm thick or before larger damage. To do so, loose the nuts (2) and disassemble the friction.

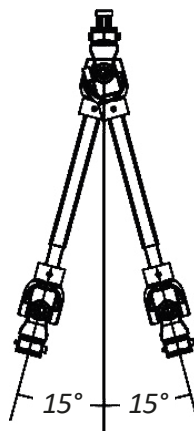
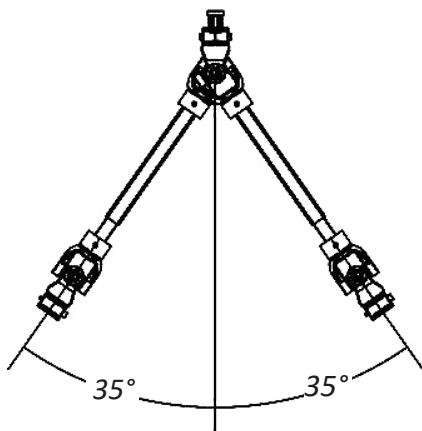
NOTE

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.

■ 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°.



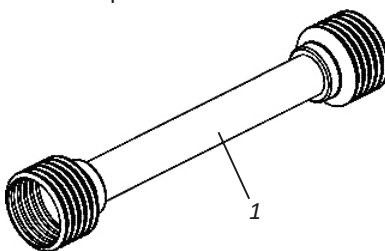
IN A SHORT PERIOD OF TIME



ATTENTION

Never engage to TDP when the joint is at an angle greater than 15°. When maneuvering with TDP off, never exceed 35° of pivot angle, this can occur in 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 cardan shaft's lifespan.



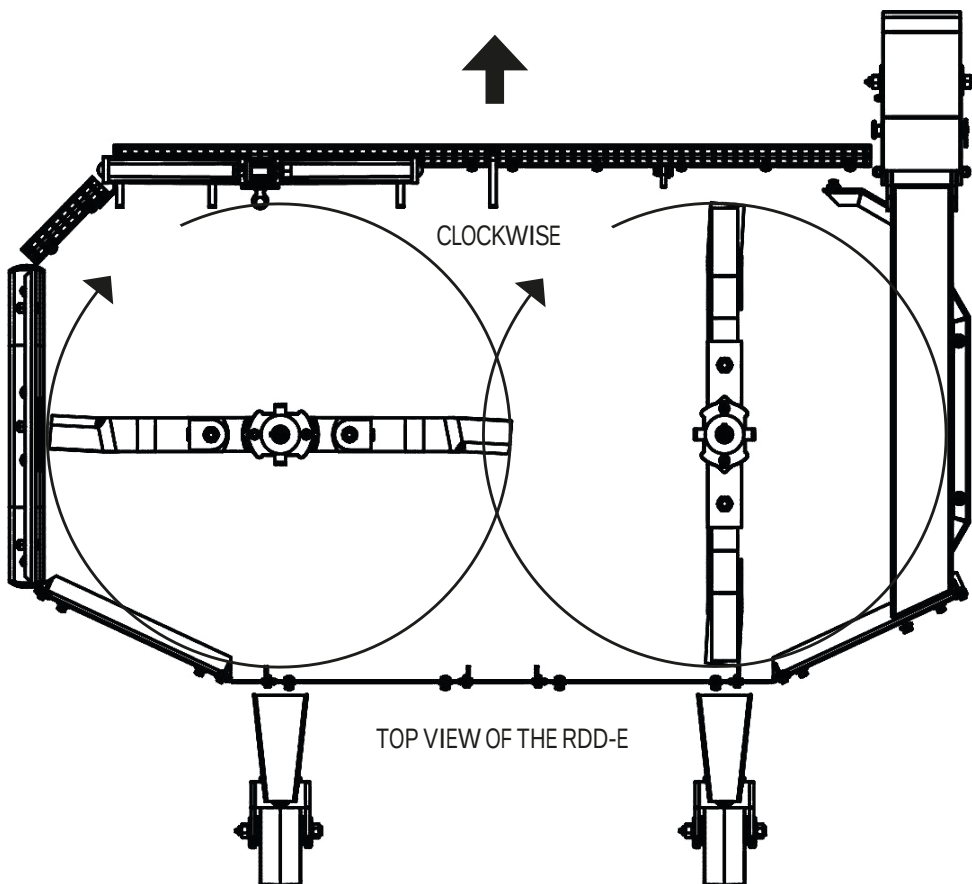
IMPORTANT

Do not work with the RDD-E if the drive shaft is not protected (1). Ignoring this warning may cause severe accidents or cardan damages.

■ Operations

• Blade position and rotation direction

The **RDD-E** blades rotate in the clockwise position and to avoid shocks between them, before assembling the intermediate cardan, observe the position of the blade supports, which should be positioned perpendicular to each other, **as shown in the figure below**.



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

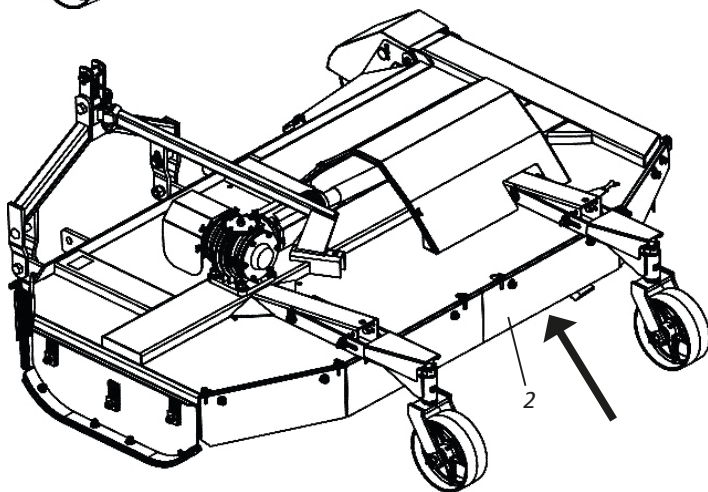
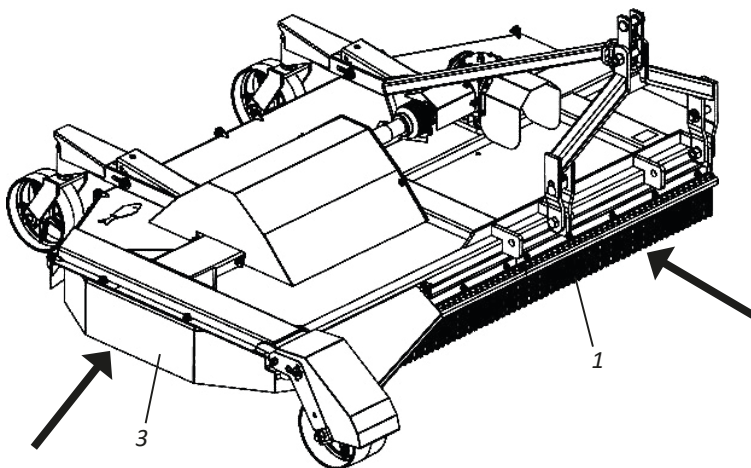
1. Before starting the work, do a thorough review of the **RDD-E**. It is necessary to fill the oil level of the gearbox and tighten nuts and bolts. Also check the locking of pins and coters.
2. The ideal work rotation is **540 rpm for TDP**. Check the corresponding rotation on the motor, in the tractor manual. This rotation on the traction motor changes from tractor to tractor.
3. 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. Start the blades first 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.
7. 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.
9. Do not vary the speed of the tractor during work, as this will cause an inefficient and uneven cut. Keep an average speed throughout 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 **RDD-E** fully raised.
12. In high density vegetation, we recommend the use of reduced gear, keeping the **TDP rotation at a constant 540 rpm**.
13. When friction is encountered, start the work immediately and lift the **RDD-E**.
14. It is important to maintain a **30 mm** adjustment in the **springs** to compensate for the adjustment of the discs and to maintain a smooth operation of the friction.
15. When transporting or performing maintenance/inspection, keep the power outlet off.
16. Switch the equipment off and on if people are less than **50 meters** away.

If in doubt, never operate or handle the RDD-E, see Post-Sale.
Telephone: 0800-152577 / E-mail: posvenda@baldan.com.br

Maintenance

• Front, rear and side shields

Always before using the **RDD-E**, check the conditions of the front (1), rear (2) and side (3). If the front (1), rear (2) and side (3) guards are broken or lost, they must be replaced or replaced immediately to avoid serious accidents or death during work.



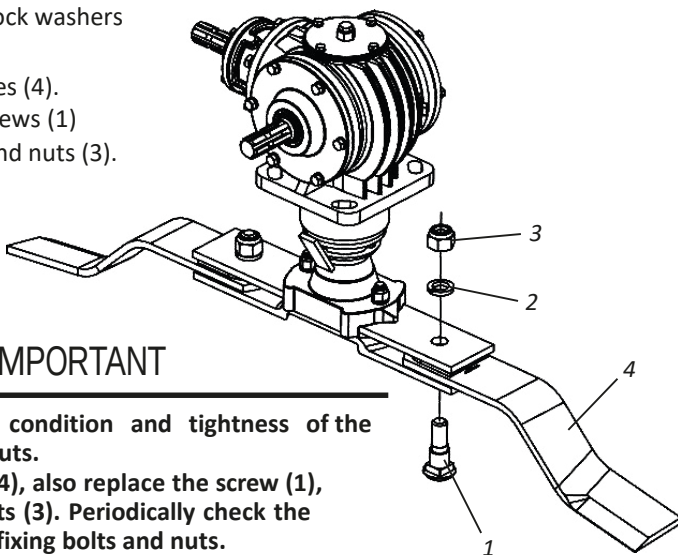
Do not work with the RDD-E without the front (1), rear (2) and side (3) guards. Ignoring these warnings may cause severe accidents or death.

▪ **Maintenance**

• **Blade exchange - Speed multiplier**

The **RDD-E** blades are not reversible. Before using the **RDD-E**, always make a thorough inspection on the blade, especially if the blades are in good condition and are properly installed. Replace the blades immediately if they are broken, bent, over-worn or damaged in any way. In addition, replace the blades when you notice imperfections in the cut. To change the blades, proceed as follows:

1. - Loosen the bolts (1), lock washers (2) and nuts (3).
2. - Then replace the blades (4).
3. - Then retighten the screws (1) pressure washers (2), and nuts (3).



! IMPORTANT

Periodically check the condition and tightness of the blades' set screws and nuts.

When changing blades (4), also replace the screw (1), lock washers (2) and nuts (3). Periodically check the tightness of the blades' fixing bolts and nuts.

When changing blades, always change the pair avoiding damage to RDD-E because of an imbalance. Always use original Baldan blades.



ATTENTION

When replacing the blades (4), note that they are supplied in pairs, which must be maintained until the RDD-E bearing is installed. Unbalanced blades can cause excessive vibration and damage bearings, retainers and the transmission case. The weight variation between these blades (4) is within the tolerance limit.



NOTE

Always keep blades (4) sharpened to increase yield and require less tractor effort.

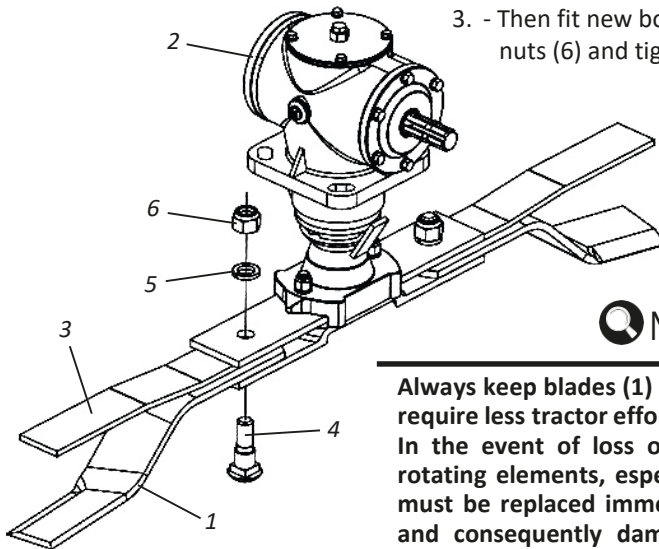
In the event of loss or breakage of any of the rotating elements, especially blades (4), the blades must be replaced immediately to avoid vibrations and consequently damage to RDD-E, failure to work, severe accident or death.

▪ Maintenance

• Blade exchange - Transmission

The **RDD-E** blades are not reversible. When replacing the blades (1) in the transmission box (2), also replace blunt blades (3), bolts (4), lock washers (5) and nuts (6). To change them, proceed as follows:

1. - Loosen screws (4), pressure washers (5), and nuts (6).
2. - Then replace blades (1) and blunt blades (3).



3. - Then fit new bolts (4) lock washers (5) and nuts (6) and tighten them.

NOTE

Always keep blades (1) sharp to increase yield and require less tractor effort.

In the event of loss or breakage of any of the rotating elements, especially the blades (4), they must be replaced immediately to avoid vibration and consequently damage to RDD-E, failure to work, serious injury or death.

IMPORTANT

When changing blades, always change in pairs to avoid damage to RDD-E because of the imbalance. Always use original Baldan blades. When changing blades (4), also replace the screw (1), lock washers (2) and nuts (3). Periodically check the condition and tightness of the blades' set screws and nuts.

ATTENTION

When replacing blades (1) and non-cutting blades (3), note that they are supplied in pairs, which must be maintained until the RDD-E bearing is installed. Unbalanced blades can cause excessive vibration and damage bearings, retainers, and the transmission. The weight variation between these blades (1) is within the tolerance limit.

▪ Maintenance

The **RDD-E** is designed to provide you with maximum performance over terrain conditions. Experience has shown that periodic maintenance of certain parts of the **RDD-E** is the best way to help you to have no problems, so we suggest verification.



ATTENTION

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 essential for good performance and longer service life of the **RDD-E's** moving parts, helping to save on maintenance costs.

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

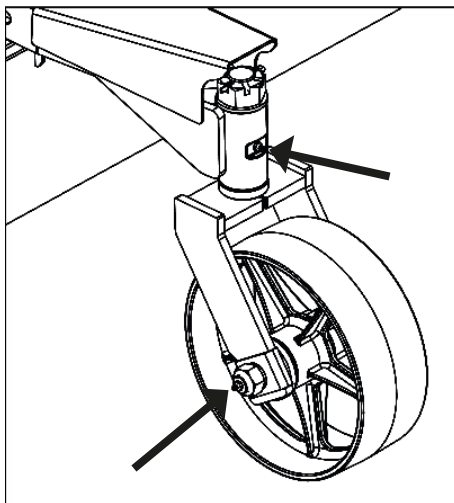
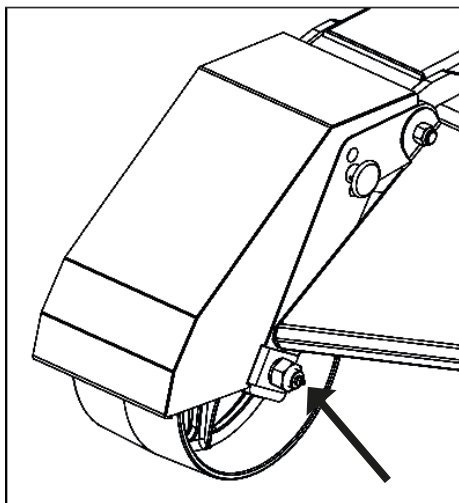


ATTENTION

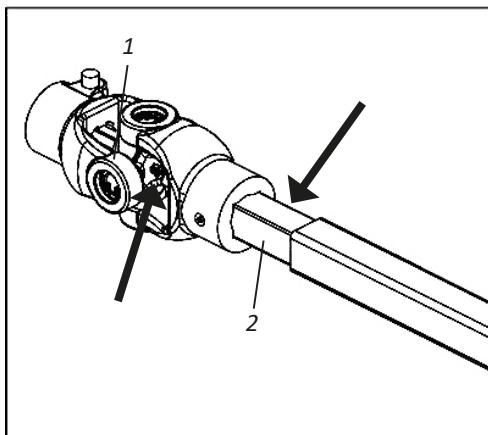
If there are equivalent manufacturers and/or brands that are not listed in the table, consult the manufacturer's technical manual.

▪ Maintenance

- Lubrication every 8 hours of work



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



ATTENTION

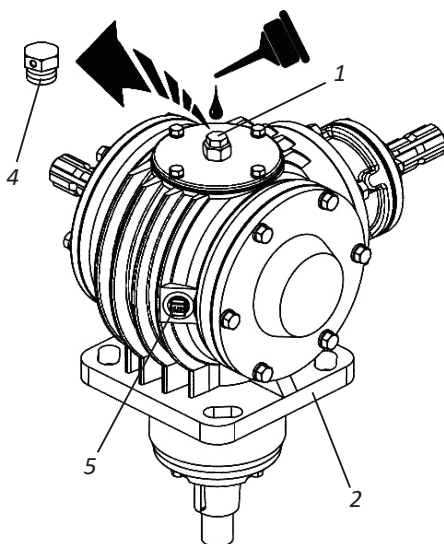
When lubricating the RDD-E, do not exceed the amount of new grease. Introduce an adequate amount.

▪ Maintenance

• Oil change

Before putting the **RDD-E** into operation, remove the plugs (1) from the gearbox (2) and transmission box (3) and replace it with the vents (4).

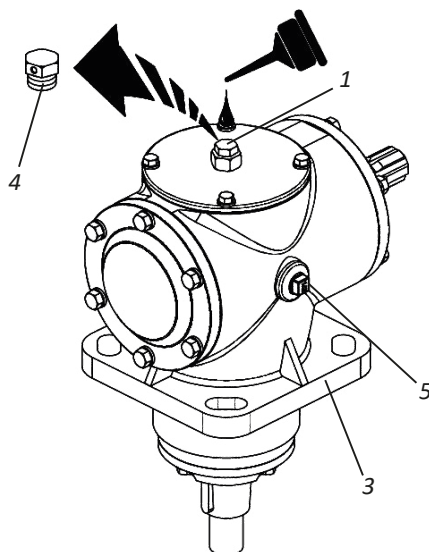
Periodically check the oil level of the speed multiplier gearbox (2) and the transmission gearbox (3) through the level plugs (5) and refuel as necessary.



ATTENTION

Change the oil of the speed multiplier gearbox (2) every 600 hours of work using 2.5 liters.

Only use the specified oil: 85W140
API GL-5 MIL-L-2105D;SAEJ306;Maio/81.



ATTENTION

Change the oil the transmission gearbox (3) every 600 hours of work using 1.75 liters.

Only use the specified oil: 85W140
API GL-5 MIL-L-2105D;SAEJ306;Maio/81.

 **IMPORTANT** | To exhaust all the oil from the gearbox (2), remove the drain (4).

 **NOTE** | When using a specific oil brand, avoid filling the oil level with different brand and specification.

▪ Maintenance

• Storage

Before storing the **RDD-E**, remove the drive shaft and friction and store them in a covered, dry place.

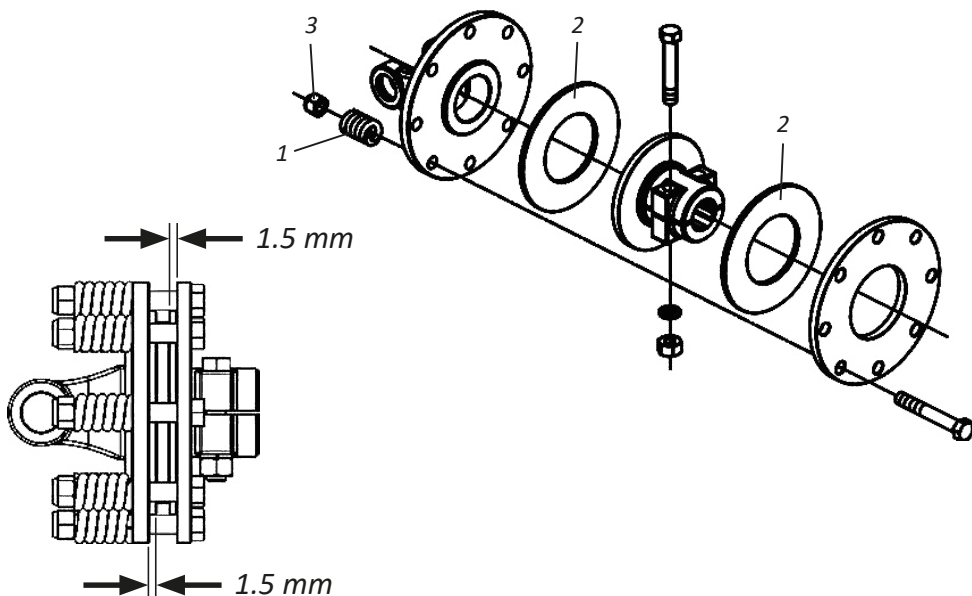
Check all transmission components, if necessary, replace any worn or damaged parts.

Always demand Baldan original parts.

• Post storage

Before returning to work with the **RDD-E**, lubricate all components and check the oil level. With friction, perform the following procedures.

1. Before disassembling friction, note the average length of the springs (1).
2. Then, remove friction, note the average length of the springs (1).
3. Then, with friction removed, discs (2) must rotate freely on the metal parts.
4. Discs (2) that are less than **1.5 mm** thick must be replaced.
5. Then reassemble friction.
6. Springs (1) should be adjusted so they have the same length as before disassembly.
7. If, after preventive maintenance, friction is constantly activated in normal working conditions, tighten nuts (3) proportionally until this is no longer the case.



▪ Maintenance

• Operational Maintenance

PROBLEMS	PROBABLE CAUSES	SOLUTIONS
No cutting.	Blades worn or broken.	Replace blades (only in pairs only) as instructed on pages 32 and 33.
	TDP rotation is incorrect.	Correct rotation 540 Rpm.
	Excessive speed.	Reduce work speed.
	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
Irregular cut.	Blades worn or broken.	Replace blades (only in pairs only) as instructed on pages 32 and 33.
	Excessive speed.	Reduce work speed.
	Excessive cutting height	Lower cutting height.
	Vegetation of great density and of excessive height.	Use reduced speed.
Noisy Rotary Cutter	Loose components.	Check all the screws and tighten.
	Low oil of the multiplier box.	Check oil level as instructed on page 36.
Vibration.	Broken blades.	Replace blades (only in pairs only) as instructed on pages 32 and 33.
	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
Tip and blades wear too fast.	Blades are touching the ground.	Adjust and operate it at a height that will eliminate contact with the ground.
	The cutter is not operating at the correct TDP speed.	Keep the correct TDP speed.

▪ Maintenance

• Cares

1. Before each work, check the condition of all pins, screws, gear box, and blades. Where necessary, retighten or replace them.
2. After 8 hours of work, retighten screws and nuts.
3. The displacement speed should be carefully controlled according to the land's conditions.
4. **RDD-E** are used in many applications, requiring knowledge and attention during its handling.
5. Only local conditions can determine the best method of operation of RPD. **RDD-E**.
6. When mounting or removing any part of the **RDD-E**, use suitable methods and tools.
7. Carefully observe the lubrication intervals at the various lubrication points of the **RDD-E**.
8. Always check if the parts presents wear and tear, specially the blades. If there is a need for replacement, **always ask for original Baldan parts**.

**IMPORTANT**

Proper and periodic maintenance is necessary to ensure a long service life for the RDD-E.

▪ Maintenance

• General Cleaning

1. When storing the **RDD-E**, clean and wash it thoroughly with water only. Make sure the paint has not worn out, if this has happened, give it a general coat, apply protective oil and fully lubricate the **RDD-E**.
2. Completely lubricate the rotary cutter. Check all moving parts of the **RDD-E**, if any wear or gaps occur, make the necessary adjustment or replacement of the parts, leaving the rotary cutter ready for the next job.
3. When the **RDD-E** is not in use, clean residues as grass, dirt, crop residues, etc.
4. Spray the entire **RDD-E** with preservative oil, never use burned oil.
5. Replace all stickers, especially those 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 protective caps, separate "tongue" and "groove", wash and remove crusts, dry and lubricate the sliding parts with grease and reassemble.
8. After all maintenance, store your **RDD-E** on a flat surface, in a covered and dry place, away from animals and children.
9. We recommend washing the **RDD-E** with water only at the start of work.



ATTENTION

Do not use chemicals to wash the RDD-E, as this may damage its painting.

• Rotary cutter conservation - Part I

To maintain the life and appearance of the **RDD-E** for longer, follow the instructions below:

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

• Rotary cutter conservation - Part II

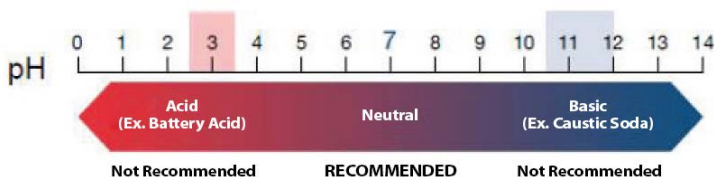
The practices and care below if adopted by the owner or operator make a difference for the conservation of **RDD-E**.

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

■ Maintenance

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 base active ingredient (pH greater than 7) can damage the painting of the rotary cutter.

- 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.



ATTENTION

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



IMPORTANT

We recommend the following protective oils:

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



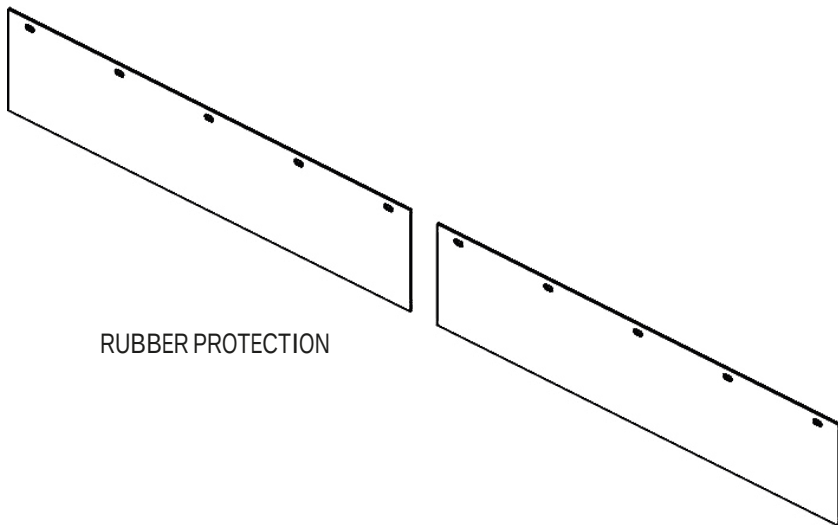
NOTE

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

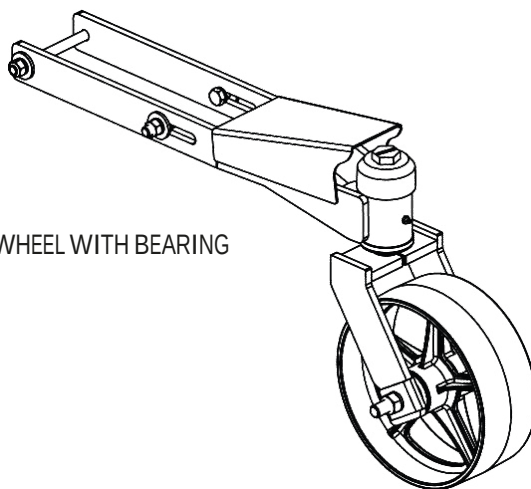
▪ Optional

- Optional accessories

The **RDD-E** has optional **accessories** that can be acquired according to the need of work.



RUBBER PROTECTION



DEPTH WHEEL WITH BEARING

▪ Identification

• Identification plate

To consult the parts catalogue or request Baldan's technical assistance, always identify the model (1), serial number (2) and manufacture date (3), which can be found on the **RDD-E** identification plate.



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

02 → N° de Série / Serial Number

03 → Data / Date

Capacidade / Load Capacity

Peso / Weight



ATTENTION

The drawings in this Instruction Manual are merely illustrative.



CONTACT

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: 60550105813 | CPT: RDDE03417



▪ 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 _____

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

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 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 usage maintenance precautions.

I confirm that the 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 _____

1st copy - Owner

▪ 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 _____

2nd copy - Dealer

▪ 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 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 _____

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

1.74.05.0059-5

AC MATÃO
ECT/DR/SP

RESPONSE CARD

NO STAMPING IS REQUIRED

THE STAMP WILL BE PAID BY:



BALDAN IMPLEMENTOS AGRÍCOLAS S/A.

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

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

email: export@baldan.com.br



Avenida Baldan, 1500
Nova Matão
15.993-900
Matão/SP - Brasil
sac@baldan.com.br
export@baldan.com.br

+55 16 3221 6500
baldan.com.br