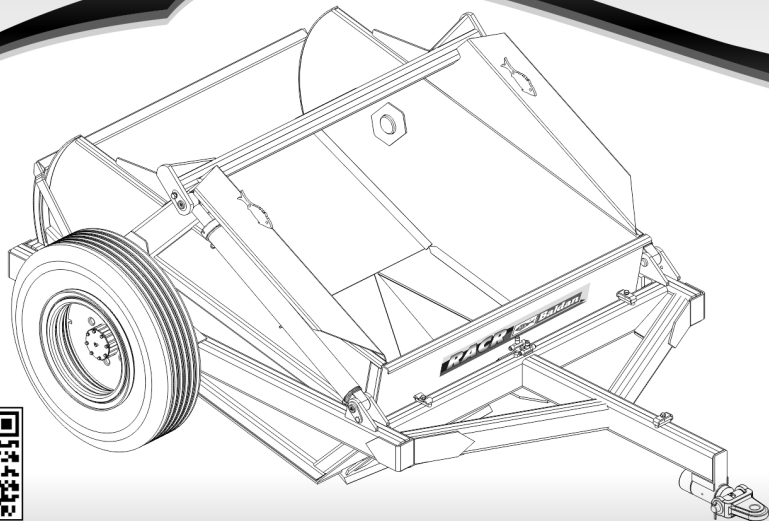


# **RACR/RACRT**

**Remote Control Agricultural  
Scraper Unit**



[www.baldan.com.br](http://www.baldan.com.br)

**Instruction Manual**

## INTRODUCTION

Thank you for your preference and congratulations on the excellent choice you have just made, because you have purchased a product manufactured with the BALDAN IMPLEMENTOS AGRICOLAS S/A technology.

This manual will guide you in the necessary procedures from the time of purchase to the operating utilization, safety and maintenance procedures.

BALDAN guarantees the delivery of this implement to the dealer, complete and in perfect conditions.

The dealer is responsible for the safekeeping and conservation during the period it remains in its power, and also for mounting, retightening, lubrication and general revision.

During technical delivery, the dealer should instruct the customer regarding maintenance, safety, its obligations in future technical support, the strict observation of the warranty term and reading of the instruction manual. Any request for technical support in warranty must be made to the dealer from whom it was purchased.

We repeat the need to carefully read the certificate of warranty and the observation of all the items of this manual, as this will increase the life of your equipment.



**THIS WARNING SYMBOL INDICATES IMPORTANT SAFETY WARNINGS IN THIS MANUAL. EVERY TIME YOU SEE THIS SYMBOL IN THIS MANUAL, CAREFULLY READ THE MESSAGE THAT FOLLOWS AND PAY ATTENTION TO THE POSSIBILITY OF PERSONAL ACCIDENTS.**

# ***Instruction Manual***



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## 01 – SAFETY STANDARDS



THIS SYMBOL INDICATES IMPORTANT SAFETY WARNING. EVERY TIME YOU SEE IT IN THIS MANUAL, CAREFULLY READ THE MESSAGE THAT FOLLOWS AND PAY ATTENTION TO THE POSSIBILITY OF PERSONAL ACCIDENTS.



### WARNING

- Carefully read the instructions manual to know the recommended safety practices.



### WARNING

- Only start operating the tractor when properly accommodated and with the sit belt locked.



### WARNING

- Do not transport persons on the tractor or equipment.





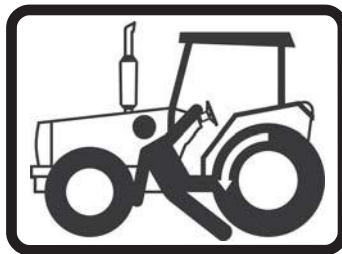
## WARNING

- There are risks of severe injuries due to falling when working on sloped lands.
- Do not use excess speed.



## WARNING

- Before executing any maintenance on your equipment, check if it is at a standstill.
- Avoid being hit.










**ALCOHOLIC DRINKS OR OTHER DRUGS CAN CAUSE LOSS OF REFLEXES AND ALTER THE PHYSICAL CONDITIONS OF THE OPERATOR. THEREFORE, NEVER OPERATE THIS EQUIPMENT WHEN UNDER THE INFLUENCE OF THESE SUBSTANCES.**










**WARNING:**



Incorrect handling of this equipment may result in serious or even fatal accidents. Before placing the equipment into operation, carefully read the manual's instructions. Ensure that the person responsible for the operation has been instructed on the correct, safe use of the implement, having read and understood this machine's instruction manual.

- 1 -  When operating with the equipment, prevent people from staying too close to or over the implement.
- 2 -  Use gloves during the mounting or dismounting in the disc sections.
- 3 -  Relieve the pressure of the circuit when switching the hydraulic hoses on or off.
- 4 -  Periodically check the state of conservation of the hoses. Immediately replace it in the case of leaks because the oil operates at high pressure and can cause serious injuries.
- 5 -  Do not use very loose clothing as it can get caught on the equipment.
- 6 -  When activating the tractor engine, be properly seated on the operator seat and have complete knowledge of the correct and safe handling of the tractor as well as the equipment. Always keep the gear stick in the neutral position, switch off the power take-off control gearing and place the hydraulic controls in the neutral position.
- 7 -  Do not start the tractor engine in a closed setting without suitable ventilation because the exhaust gases are dangerous to health.



- 8 -  When maneuvering the tractor to the coupler of the equipment, make sure there is enough space and no one too close to it, always maneuver in reduced speed and be prepared to brake in an emergency.
- 9 -  Do not make adjustments with the equipment in operation.
- 10 -  When working on sloped lands, proceed carefully, always maintaining the necessary stability. In the case of misbalance, reduce the speed, turn the wheels of the tractor towards the slope side of the land and never raise the equipment.
- 11 -  Always drive the tractor at speeds compatible with safety especially in works on uneven lands or slopes; always keep the tractor coupled.
- 12 -  When driving the tractors on streets, keep the brake pedals interconnected.
- 13 -  Do not work with the tractor if the front is light. Add weights to the front or front wheels in case it may be raised.
- 14 -  When leaving the tractor, put the brake handle in the neutral position and use the parking brake. Do not leave the equipment coupled to the tractor with the hydraulic system in the raised position.
- 15 -  Alcoholic drinks or some drugs may cause loss of reflexes and change the physical conditions of the operator. Therefore, never operate this equipment when under the influence of these substances.
- 16 -  Read or explain all the procedure above to the user that cannot read.

# REMOTE CONTROL AGRICULTURAL SCRAPERS WITH SIDE WHEELS - RACR

## 02-COMPONENTS

- 1 - Frame
- 2 - Hydraulic Box
- 4 - Complete Wheel
- 5 - Wheel hub
- 6 - Oil Distributor
- 7 - Hoses
- 8 - Coupling Shackle

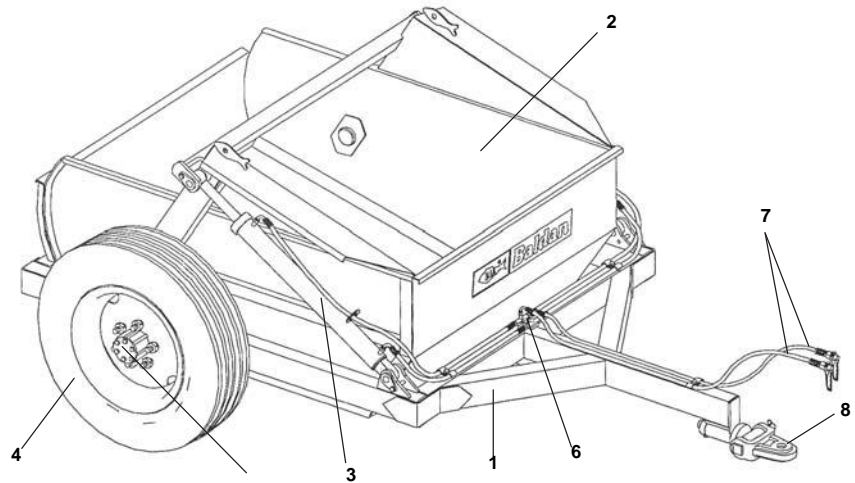


FIGURE 1



# REMOTE CONTROL AGRICULTURAL SCRAPERS WITH REAR WHEELS - RACRT

## 02 - COMPONENTS

- 1 - Frame
- 2 - Box
- 3 - Hydraulic Piston
- 4 - Complete Wheel
- 5 - Wheel Hub
- 6 - Articulation Hub
- 7 - Oil Distributor
- 8 - Hoses
- 9 - Coupling Bar
- 10 - Mudguards (Optional)

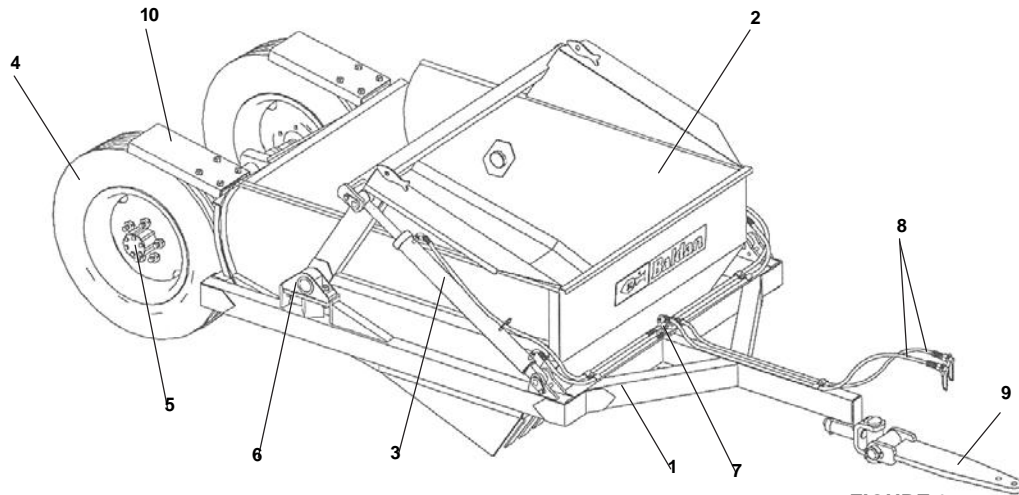


FIGURE 2

### 03 – TECHNICAL SPECIFICATIONS

| <i>Model</i>        | <i>Capacity</i>     |                   | <i>Working Depth (mm)</i> | <i>Cut Width (mm)</i> | <i>Approximate Weight (kg)</i> | <i>Approximate Tractor Power (Hp)</i> |
|---------------------|---------------------|-------------------|---------------------------|-----------------------|--------------------------------|---------------------------------------|
|                     | <i>Shallow (m³)</i> | <i>Crown (m³)</i> |                           |                       |                                |                                       |
| <i>RACR 1700</i>    | <i>1.70</i>         | <i>1.95</i>       | <i>100</i>                | <i>950</i>            | <i>1200</i>                    | <i>70 - 85</i>                        |
| <i>RACR-D 3400</i>  | <i>3.40</i>         | <i>3.90</i>       | <i>100</i>                | <i>950</i>            | <i>2400</i>                    | <i>70 - 85</i>                        |
| <i>RACR 3100</i>    | <i>3.10</i>         | <i>3.70</i>       | <i>150</i>                | <i>950</i>            | <i>1550</i>                    | <i>90 - 112</i>                       |
| <i>RACR-D 6200</i>  | <i>6.20</i>         | <i>7.40</i>       | <i>150</i>                | <i>950</i>            | <i>3100</i>                    | <i>90 - 112</i>                       |
| <i>RACRT 3100</i>   | <i>3.10</i>         | <i>3.70</i>       | <i>150</i>                | <i>1630</i>           | <i>1760</i>                    | <i>110 - 140</i>                      |
| <i>RACRT-D 6200</i> | <i>6.20</i>         | <i>7.407</i>      | <i>150</i>                | <i>1630</i>           | <i>3520</i>                    | <i>110 - 140</i>                      |

**TABLE 01**

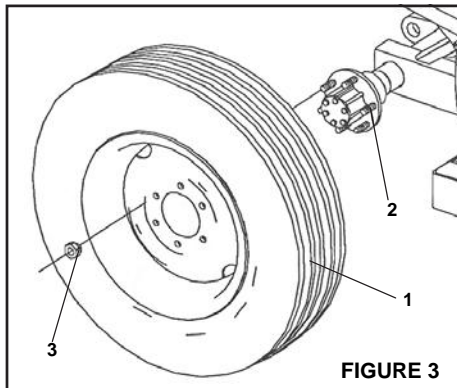
Baldan reserves the right to change the technical features of this product without prior warning.  
The technical specifications are approximate and informed in the normal working conditions.

## 04 – MOUNTING

### MOUNTING OF WHEELS (FIGURE 3)

1 – The scraper leaves the factory semi-mounted, only remaining to mount the wheels.

2 – Mount the wheels (1), in the hub (2), securing them with the nuts (3).

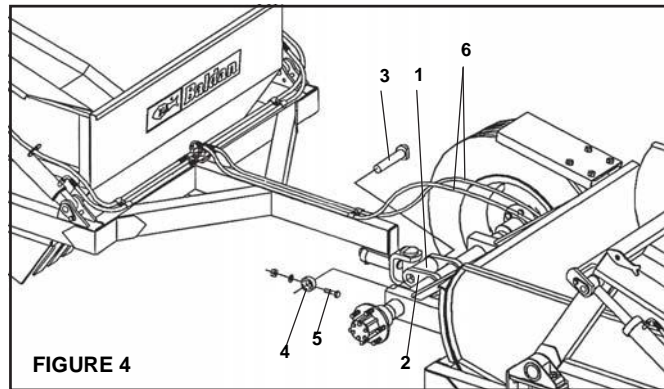


## 05 – COUPLING OF THE SCRAPER

### COUPLING OF DUAL SCRAPER (FIGURE 4)

1 – Couple the coupler (1) to the rear extension (2) of the front scraper, securing with the pin (3), bushing (4) and bolt (5).

2 – Connect the hydraulic hoses (6) to the rear quick coupling system of the scraper.



## COUPLING OF SCRAPER (RACR) TO TRACTOR (FIGURE 5)

3 – Before coupling the scraper (RACR) to the tractor, check if it is prepared for operation as follows:

- Check if it is equipped with the set of front counterweights;
- Place weights on the wheels, as specified in the tractor's manual;

4 – To couple the scraper to the tractor drawbar, first couple the hoses (1) to the quick coupling system of the tractor.

5 – Before switching the hydraulic hoses on or off, stop the engine and relieve the pressure of the circuit, completely activating the control lever. Make sure no one is close to the area of equipment movement when releasing the pressure of the system.

6 – After coupling the hoses, operate the tractor gradually activating the pistons to raise the frame to the exact height of the drawbar of the tractor. Couple the shackle (2) to the drawbar of the tractor using the pin (3).

7 - After coupling the scraper, look for a safe place of easy access and always use reduced gear with low speed.

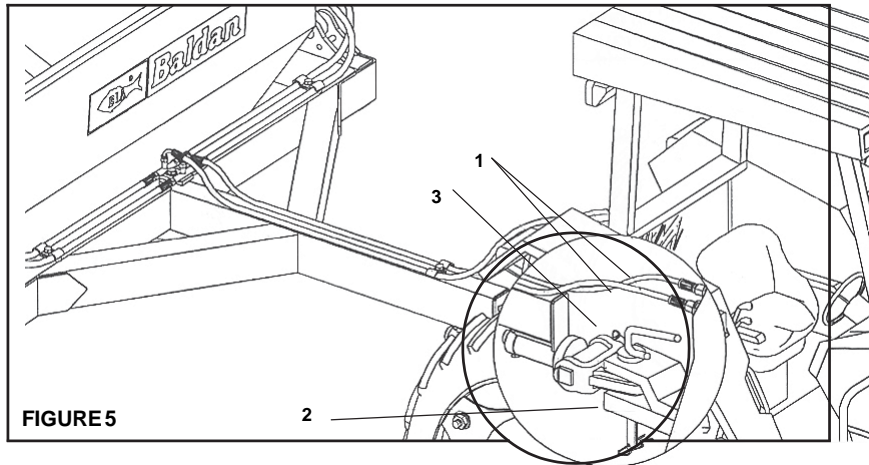


FIGURE 5

## COUPLING OF SCRAPER (RACRT) TO TRACTOR (FIGURE 6)

8 – before coupling the scraper (RACRT) to the tractor, remove the drawbar from it.

9 – Insert the coupling bar (1) in the place where the original coupling bar of the tractor was removed. Then couple the hoses (2) to the quick coupling system of the tractor.

10 – Before switching the hydraulic hoses on or off, stop the engine and relieve the pressure of the circuit, completely activating the control lever. Make sure no one is close to the area of equipment movement when releasing the pressure of the system.

11 – After coupling the hoses, operate the tractor gradually activating the pistons to raise the frame to the exact height of the drawbar. Couple the bushing of the shackle (3) to the drawbar through the pin (4), locking with the bushing and bolt.

12 - After coupling the scraper, look for a safe place of easy access and always use reduced gear with low speed.

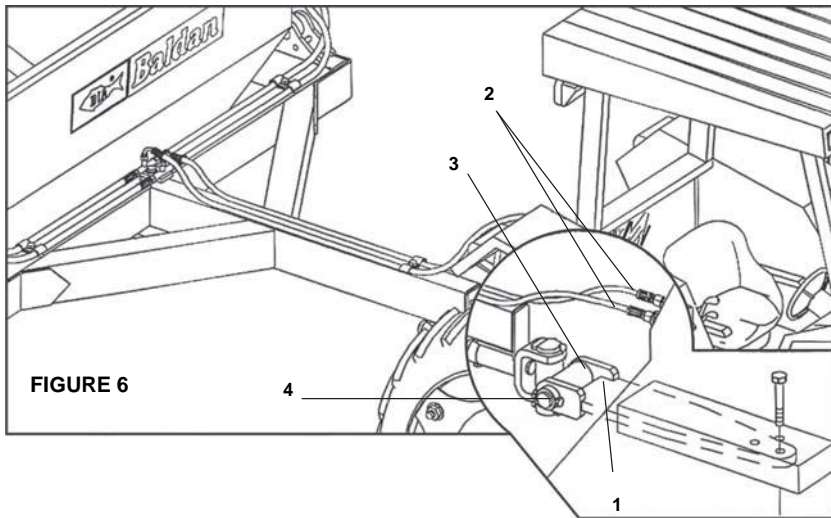


FIGURE 6

## 06 – ADJUSTMENTS AND OPERATIONS

### LOADING (FIGURE 7)

- 1 – The loading of the scraper is performed by activating the hydraulic system, which presses the blade to the ground and makes the material to be loaded to enter the box.
- 2 – When operating with the dual scraper, first load the front box then the rear box.



#### NOTE

During the loading operation, always keep the engine running and in gear compatible with the indications in the tractor's manual.

### TRANSPORT

- 3 – The transport speed should be compatible with the working conditions.
- 4 – When transporting the loaded scraper, avoid changing gears during climbs to prevent impacts at the ends of the tractor shaft. Put the gear necessary for climbing the slope before making the climb.

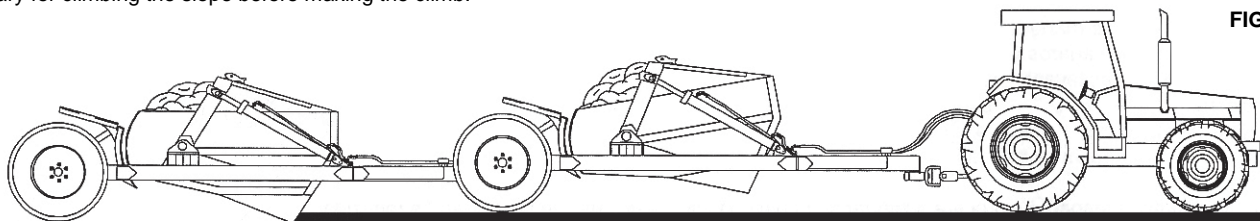


FIGURE 7



## UNLOADING (FIGURE 8)

- 5 – The scraper is unloaded through the back of the box, tipping it through the hydraulic piston to an angle of  $90^{\circ}$ .
- 6 – Unload the scraper at a gear compatible with the conditions of the land.
- 7 – After the unloading operation, return the box to its transport position.
- 8 – When unloading in very steep lands, avoid completely tipping the box.
- 9 – When unloading at curves, reduce the speed.

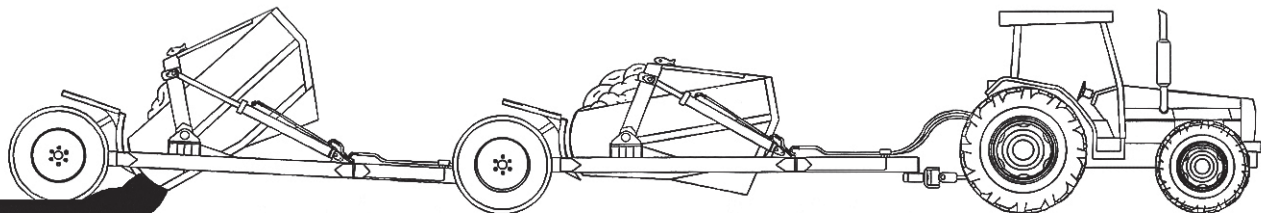


FIGURE 8

## 07 - MAINTENANCE

### LUBRICATION

- 1 - Lubrication is indispensable for a good performance and higher durability of the moving parts of the scraper, which helps save maintenance costs.
- 2 - Before executing the operation, carefully lubricate all greasers, always observing the lubrication intervals in the pages below.
- 3 - Check the quality of the lubricant in relation to its efficiency and purity, avoiding the use of products contaminated with water, soil and other agents.

TABLE OF GREASES AND EQUIVALENTS (TABLE 2)

| MANUFACTURER | TYPE OF GREASE RECOMMENDED                                  |
|--------------|---|
| PETROBRÁS    | LUBRAX GMA 2  |
| ATLANTIC     | LITHOLINE MP 2  |
| IPIRANGA     | SUPER GRAXA IPIRANGA<br>IPIRANGA SUPER GRAXA 2<br>IPIFLEX 2 |
| CASTROL      | LM 2  |
| MOBIL        | MOBILGREASE MP 77   |
| TEXACO       | MARFAK 2<br>AGROTEX 2                                       |

|         |   |
|---------|---|
| SHELL   | RETINAX A<br>ALVANIA EP 2               |
| ESSO    | MULTIPURPOSE GREASE H<br>LITHOLINE MP 2 |
| BARDAHL | MAXLUB APG 2 EP                         |



### IMPORTANT

*In the case of other lubricants and/or brands of equivalent greases that are not on this table, consult the technical manual of the lubricant manufacturer.*

TABLE 2

## LUBRICATION POINTS

4 – Lubricate every 10 hours of work.

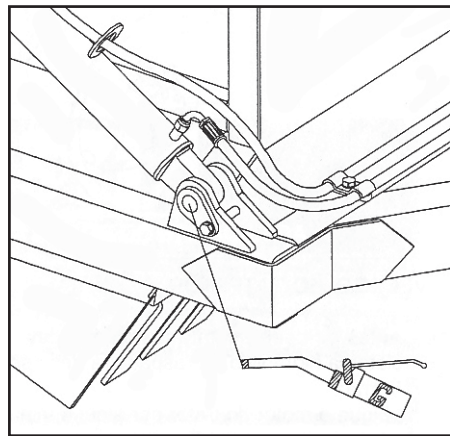
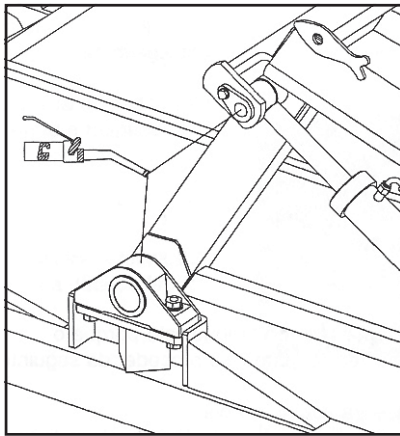
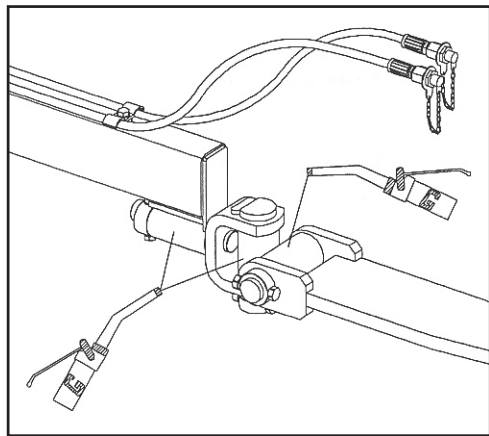
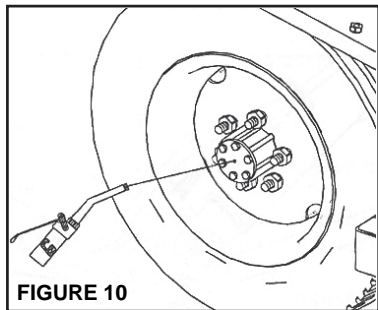


FIGURE 9

5 – Lubricate every 60 hours of work.



### TRACTOR OIL LEVEL

6 – Before operating the scraper, replace the oil in the tank because the hydraulic system of the scraper should be supplied, and in order to do so proceed as follows:

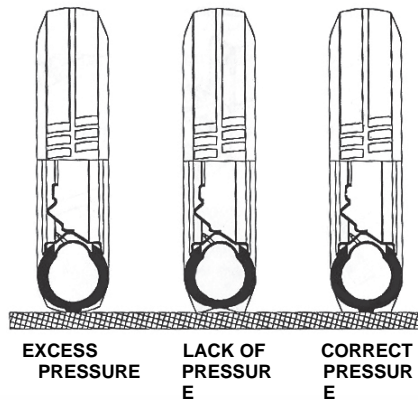
- Switch the engine of the tractor on for a few minutes to heat up the oil.

- Pull the lever in both directions several times for the oil to supply the entire circuit.
- Only use oil recommended by the manufacturer of the tractor.

### TIRE PRESSURE (FIGURE 11)

7 – The tires must always be calibrated correctly, avoiding premature wear due to excess or lack of pressure.

8 – Calibration of tires 9.00 x 20 should be 50 lb/inch<sup>2</sup> for each one.



**FIGURE 11**

## 08 - PRECAUTIONS

- 1 – Check the conditions of all the pins and bolts before using the scraper.
- 2 – Retighten the bolts and nuts after 8 hours of work.
- 3 – The displacement speed must be carefully controlled according to the conditions of the land.
- 4 – Only local conditions can determine the best way of operating the scrapers.
- 5 – Use the suitable methods and tools to mount or dismount any part of the scraper.
- 6 – Always check if the parts do not present wears. If replacement is required, **always demand for original Baldan parts.**

## GENERAL CLEANING

- Due to the corrosive action of the fertilizers, it is recommended to perform a general cleaning of the scraper before storing it, in order to conserve and increase the useful life of your equipment. For such, proceed as follows:
  - 1 – Use the suitable methods and tools to mount or dismount any part of the scraper.
  - 2 – First perform a general cleaning, removing all residues of the product inside and outside the scraper. Then wash it completely.
  - 3 – After, check if the paint is not worn, otherwise apply a general coat on all the worn parts.
  - 4 – Completely lubricate the scraper and check all the moving parts for wear or looseness and perform the necessary adjustments or replacement of the parts, leaving the equipment ready for the next operation.
  - 5 – After all the maintenance services, keep your scraper in a duly supported, safe and suitable place.



### WARNING

***- Do not use chemical detergents to wash the scraper because they can damage the painting.***



## 09 - IDENTIFICATION

1 - To consult the parts catalog or request for technical service from Baldan, always indicate the model (1), serial number (2) and date of manufacture (3) informed on the identification label (4) of the scraper.

2 - ALWAYS DEMAND FOR ORIGINAL BALDAN PARTS.



**BIA Baldan**  
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CNPJ: 52.311.347/0009-06 | INSCR. EST.: 441.016.953.110

|             |      |
|-------------|------|
| Modelo      |      |
| Nº de Série | Data |

1 points to the label header area.  
2 points to the 'Nº de Série' field.  
3 points to the 'Data' field.

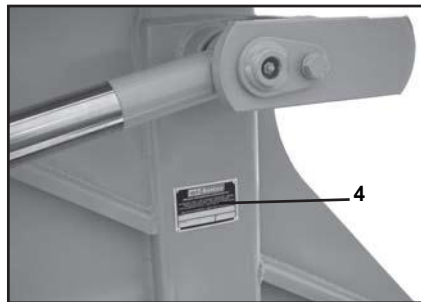


FIGURE 12



### Marketing

Edition of Catalogs  
and Manuals

Code: 6055010223-7

Revision: 02

CPT: RACRT098115



### WARNING

*The drawings contained in this instruction manual are merely illustrative.*



### CONTACT

*In the case of doubts consult the After Sales.*

Telephone: 0800-152577

E-mail: posvenda@baldan.com.br



## PRODUCT IDENTIFICATION

Identify the data below in order to always have the correct information on the life of your scraper.

Owner: \_\_\_\_\_

Dealer: \_\_\_\_\_

Farm: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_

Warranty Certificate \_\_\_\_\_

Model: \_\_\_\_\_

Serial No.: \_\_\_\_\_

Date of Purchase: \_\_\_\_/\_\_\_\_/\_\_\_\_

Invoice No.: \_\_\_\_\_



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**Baldan**



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