



# VENCE TUDO<sup>®</sup>

## OPERATION MANUAL



05/2021  
Review 00

**GRANOS AGRICULTURAL REEL  
26000 AND 33000**





# TECHNICAL DELIVERY CERTIFICATE # \_\_\_\_\_

Verify that the following information is being provided by your chosen dealer, and that the service has been duly carried out:

1. Instructions and use of equipment;
2. Maintenance, lubrication and safety use rules;
3. Adjustments and proper use of its options;
4. Check re tightening of necessary spots and gauge adjustments;
5. Presentation of operator's manual and parts catalog;
6. Delivery of additional parts carton, according to the operator's manual;
7. Verify correct completion of certificate.

DEALER: \_\_\_\_\_ PHONE: (     ) \_\_\_\_\_  
 CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_ - \_\_\_\_\_  
 INVOICE SALES TO CLIENT NUMBER: \_\_\_\_\_ DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_  
 TECHNICIAN OR MECHANIC RESPONSIBLE \_\_\_\_\_  
 EQUIPMENT: \_\_\_\_\_  
 MODEL: \_\_\_\_\_ SERIAL NUMBER: \_\_\_\_\_ MANUFACTURER: \_\_\_\_/\_\_\_\_/\_\_\_\_  
 OPTIONALS \_\_\_\_\_  
 CLIENT: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_ PHONE: (     ) \_\_\_\_\_  
 CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_ - \_\_\_\_\_

| DELIVERY ASSESSMENT AND TECHNICAL ASSISTANCE                                     | Great | Good | Regular |
|--|-------|------|---------|
| The equipment was delivered on time.   |       |      |         |
| The technical delivery was made in order to answer all your doubts.              |       |      |         |
| The demonstration of the equipment was performed satisfactorily.                 |       |      |         |
| The equipment was delivered in perfect condition and along with its accessories. |       |      |         |
| In case of parts request or technical assistance it was carried out.             |       |      |         |
| Reseller meets parts request or service.   |       |      |         |

|              |
|--------------|
| Suggestions: |
|              |
|              |
|              |
|              |
|              |
|              |

NOTE: After checking, running all seven (7) items above and filling out this form, sign and send it to Customer Service Wins It All within one year.

Failure to submit technical delivery certificate will prevent further warranty analyzes.

\_\_\_\_\_  
 Authorized Dealer's Signature

\_\_\_\_\_  
 Customer Signature







## PRESENTATION

**VENCE TUDO Agricultural Implement Manufacturing** was founded in 1964 in the city of Alfredo Brenner, located in the district of Ibirubá, in Rio Grande do Sul state, has been pursuing the mission established by its founder Nelson Lauxen, to relentlessly aim at developing qualified and resistant agricultural implements that are easy to handle while offering productivity gain.

**VENCE TUDO's** mission is to develop products based on user needs through partnerships with universities, research centers and their engineering staff, continuously improving their products within the most technologically advanced concepts.

Once developed, products are thoroughly tested by farmers in different regions, under different conditions, in order to assess strength and functionality. As soon as products have passed field tests, they will be scaled to be manufactured under modern quality concepts.

Customer satisfaction with **VENCE ALL** products is our primary concern.

This manual is intended to become familiar with your equipment's operation and minor precautions to be observed, ensuring its long life span. Just as important as learning how to take care of it and how to operate it correctly is to observe aspects that may compromise the warranty due to negligence, misuse, unauthorized adaptations performed by the owner or others. Therefore, we recommend that you read the Warranty Certificate carefully.

The parts catalog contains all the necessary information for spare parts. Correctly interpreting parts catalog will enable you to make the necessary replacements according to the described equipment model.

Should you have any questions regarding operation, please contact **VENCE TUDO LTDA** so that **TECHNICAL CONSUMER SERVICE** may solve any existing doubts, further improving our service, ensuring an excellent relationship between **VENCE TUDO** and the **FARMER**

We wish to congratulate you for choosing **VENCE TUDO** products. You may rest assured that it is in our deepest to have you satisfied at all times.

**VENCE TUDO**  
Manufacturing, Trade, Imports  
And Exports Ltd.



## TO VENCE TUDO's CUSTOMER

*Dear farmer, allow us to congratulate you for purchasing a **VENCE TUDO** product, which is mainly based on customer satisfaction. Your satisfaction in reaping profits obtained through our implements is ours as well. We firmly believe that looking after the farmers' needs with utmost seriousness and confidence we are building a mutually strong and profitable agriculture.*

*This product is developed under the most discerning concepts in agricultural technology destined to production. We employ the most modern equipment for industrial manufacturing, with fundamental interest in developing products that meet your needs, while ensuring long life span.*





**WARRANTY TERMS: NUMBER \_\_\_\_\_**

VENCE TUDO products are guaranteed for a period of one (01) year from the date of purchase, against defects in workmanship or material that cause the product to be compromised, except for components purchased from third parties, which are guaranteed by the manufacturer.

**TERMS:**

- 1-** Warranty covers any manufacturing defects found, provided that all parts and components have been supplied by VENCE TUDO Ltda. or by authorized companies and/or staff.
- 2-** The parts and / or components covered by the warranty will only be replaced or reimbursed if the defects have been confirmed by the Technical Assistance, or by a staff member duly authorized by VENCE TUDO Ltda. Parts that undergo wear and tear due to operating and soil conditions are not guaranteed. Proof of both technical delivery certificate duly filled out, and invoice are mandatory.
- 3-** VENCE TUDO Ltda guarantees the repair of defects or component replacement, free of charge, provided all Warranty Terms have been met. In the event of cancellation or warranty expiration, service and replacement spare parts will be charged at the day's listing costs.

**WARRANTY CANCELLATION**

The warranty is void if:

- 1-** Damage caused to equipment by misuse, abuse, neglect or lack of proper maintenance, in disagreement with manufacturer's instructions published in the corresponding operation manual;
- 2-** Damage caused by accidents or natural agents;
- 3-** Repair, modification, or tampering with parts and components by unauthorized persons;
- 4-** Amendments, erasures or deletions of data on the Technical Delivery certificate, Warranty Certificate, purchase invoice or nameplate.

**IMPORTANT**

If your product is defective during the warranty period, contact your dealer or manufacturer only. It should only be repaired or disassembled in the presence of personnel duly accredited by the manufacturer, as well as with the use of original spare parts, under penalty of loss of warranty.

**KEEP PURCHASE INVOICE SAFELY, IT IS PROOF OF THE WARRANTY TERM.**

CLIENT: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_ CITY: \_\_\_\_\_ STATE \_\_\_\_\_  
 MODEL: \_\_\_\_\_ SERIAL NUMBER \_\_\_\_\_ YEAR: \_\_\_\_\_  
 DELIVERY DATE \_\_\_\_/\_\_\_\_/\_\_\_\_  
 DEALER: \_\_\_\_\_ CITY: \_\_\_\_\_ STATE: \_\_\_\_\_

I faithfully and unquestionably declare that I received, on this date, the PRODUCT (Model): \_\_\_\_\_ according to the above specification in perfect condition and that I accept the warranty terms.

CLIENT: \_\_\_\_\_  
 DEALER: \_\_\_\_\_

**CERTIFICATE OF TECHNICAL DELIVERY # \_\_\_\_\_**

Destaque aqui 

CLIENT: \_\_\_\_\_ CITY: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_ STATE: \_\_\_\_\_  
 MODEL: \_\_\_\_\_ SERIAL NUMBER: \_\_\_\_\_  
 DEALER: \_\_\_\_\_ CITY: \_\_\_\_\_  
 Invoice number: \_\_\_\_\_ Date of sales: \_\_\_\_/\_\_\_\_/\_\_\_\_

**DEALER, PLEASE SEND THIS CERTIFICATE TO THE FACTORY SOON AFTER DELIVERY.**

Destaque aqui





I declare that on this date I have received the model described above, according to the above specifications, in perfect condition and that I accept warranty terms.

DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_

CLIENT: \_\_\_\_\_

DELIVERY DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_





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## 1. IDENTIFICATION

When contacting VENCE ALL Technical Service, please provide the following information: MODEL, YEAR, and manufacturing SERIAL NUMBER of your product. Above data can be found on the Product Nameplate affixed to the chassis, on the left side.

|   |   |
|---|---|
|  | INDÚSTRIA DE IMPLEMENTOS AGRÍCOLAS<br><b>VENCE TUDO</b> <sup>®</sup><br>IMPORTAÇÃO E EXPORTAÇÃO LTDA. |
| RODOVIA RS 223 - KM 53 - IBIRUBÁ - RS<br>BRASIL - CEP: 98200-000                  |   |
| FONE: +55 54 3324-8000 FAX: +55 54 3324-8030                                      |   |
| MOD.:   | <input type="text"/>  |
| ANO:  | <input type="text"/>  |
| SÉRIE:  | <input type="text"/>  |
| MADE IN BRAZIL  |   |

When replacing parts, always use original VENCE TUDO parts. Use PARTS CATALOG to easily identify each part.

All information contained in this Operation Manual is subject to change. Weights, dimensions and specifications are approximate. The illustrations do not necessarily reflect the equipment itself. Please consult your VENCE TUDO Distributor / Rep for exact information on any particular model.

VENCE TUDO Ltd, is permanently searching to improve, therefore, it reserves the right, at any time, to introduce changes to its products in order to best meet consumers needs and expectations, without incurring the obligation to equally introduce such changes to previously sold products.



## 2. CARE FOR THE ENVIRONMENT

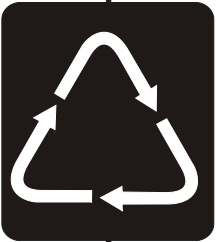
Dear User



We value nature.

Uncontrollable dumping of waste into soil and water harms the lives of all living things on the planet.

Always observe manufacturer's and responsible agronomist's recommended levels on the use of chemicals. Excess and misuse of chemicals can affect people, animals and the environment.



Dumping lubricants, combustible oils, plastic and agrochemicals packaging, etc., into soil and water, directly interfere with soil and water ecosystem's balance from the topsoil to the groundwater.

Properly handle such wastes, learning how to recycle or reuse them.

Doing so will contribute to the ecosystem's preservation and balance.

## 3. SAFETY RULES

### 3.1. Important instructions when receiving the equipment

- Inspect all equipment components for shipping damage.
- Damage resulting from shipping is not covered by warranty. In the event of damage caused by shipping, notify the Vence Tudo Shipping department immediately.

### 3.2. Identify the safety information



When observing this symbol on your equipment and in this manual, beware of possible injuries. It indicates a hazardous situation and represents safety alert (danger and caution).

Follow recommended safety operating procedures and precautions. Safety warnings such as DANGER, WARNING are located near specific hazards. The word CAUTION is meant to refer to safety messages in this manual.

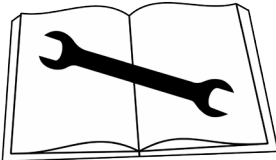


### 3.3. Follow safety instructions

The equipment complies with the design and construction of NR-12 MACHINERY AND EQUIPMENT WORK SAFETY standard.



## ATTENTION



Before starting operations, carefully read all safety messages in this operation manual and safety warnings on your equipment

- Keep safety stickers in good condition. If damaged or lost, they should be replaced.
- To replace stickers contact Parts Center department or authorized reseller.
- Learn how to operate your equipment correctly.
- Do not allow anyone to operate the equipment without having been trained.
- Keep your equipment in good working condition.
- Changes to the original equipment features are not permitted as they may alter operation, safety, and affect product life span.

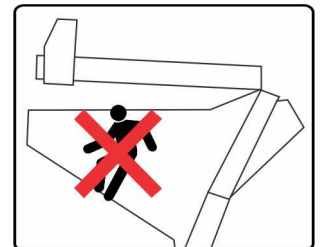
If you do not understand any part of this manual and need technical assistance, contact your service department or authorized reseller.

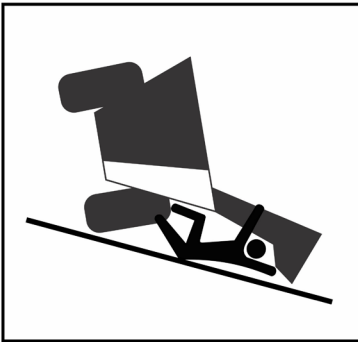
### 3.4. Expected use

- This equipment is indicated to accompany the harvesters in the work of collecting grain in bulk.
- Must be operated by a properly trained operator.

### 3.5. Not allowed

- Towing, attaching or pushing implements or attachments other than those designated for this purpose is not permitted.
- To avoid risk of serious injury or even death, do not carry people or objects on parts of the equipment.
- The equipment should only be operated by an experienced operator who is fully familiar with all the controls and driving techniques.
- It is not allowed to get on or off the operating equipment.



**! ATTENTION**

Improper use of the equipment, especially on uneven terrain, slopes or slopes, can cause it to tip over. Pay close attention in case of rain, snow, ice or any case of slippery terrain. If necessary, get off the machine and check the consistency of the soil. Never get off the machine in motion, even in the event of tipping over, to avoid being crushed.

### 3.6. Operate and transport equipment safely

- Operate the equipment only when all protection devices are in place.
- Keep clear when equipment is in operation.
- Stay away from moving mechanisms such as gears, chains, and cardans (Figures A e B).

- Do not operate the implement under the influence of alcohol, tranquilizers or stimulants.

- The equipment has special features such as side overhang, which does not allow traffic on public roads or highways.. If necessary, consult with the relevant authorities and proceed in accordance with the applicable traffic laws.

- Periodically review all safety components of the equipment before use.
- Make sure the equipment is in perfect condition. In the event of any irregularity that may interfere with the operation of the equipment, have it serviced prior to any operation or transport.

- Before operating it, check for people close by, or any other obstructing elements. (Figure C).
- Do not operate near obstacles, rivers or streams.
- Avoid potholes, ditches and obstacles that could cause equipment to roll over, especially on inclines.
- FAssess workplace prior to operating it. Check for obstacles near the equipment, such as trees, walls, and power lines that pose a risk of serious or fatal injury (Figure D and E).

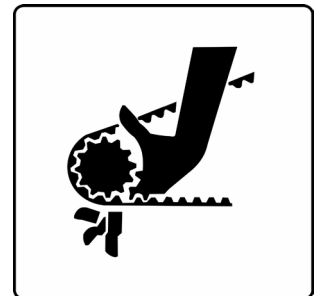
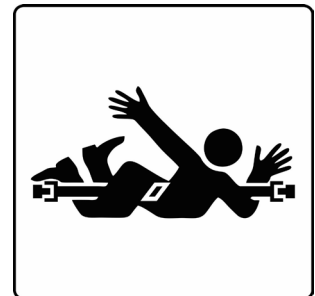
*Figura A**Figura B*





Figura C

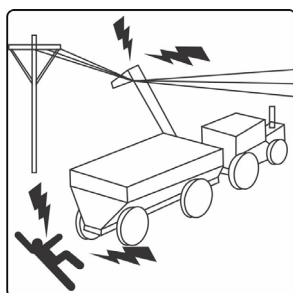


Figura D

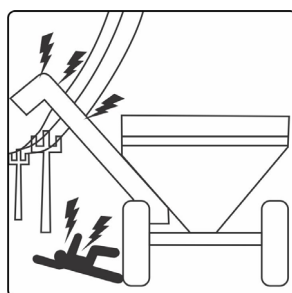


Figura E

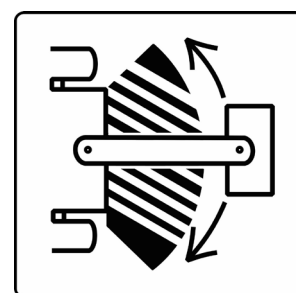


Figura F

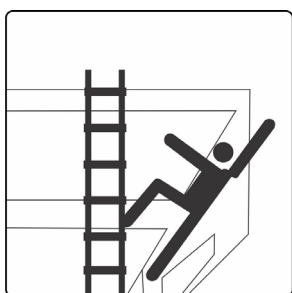


Figura G

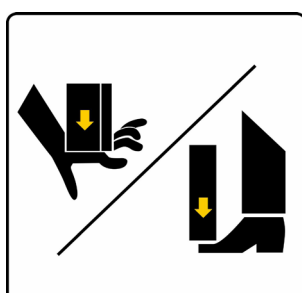


Figura H



Figura I

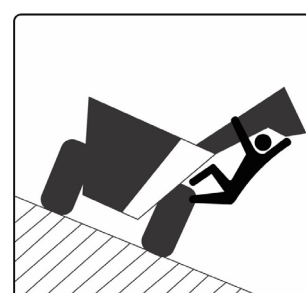


Figura J

- Do not drive on roads or paths at night.
- Drive carefully and slowly on rough terrain (Figure J).
- Reduce speed on wet, frozen or gravel surfaces.
- Slow down corners (Figure F).
- Nas manobras ou curvas fechadas, evite que as rodas do trator toquem no cabeçalho do equipamento (Figure F).
- Avoid making sharp turns on slopes or hills.
- Be careful when handling the jack or support foot and hydraulic cylinders, as there is a risk of injury (Figure H).
- Don't give a ride (Figure I).
- To climb on the implement, use only the non-slip steps of the ladder. Keep the steps, handrails and platform always clean of residues such as oil or grease, which can cause accidents (Figure G).
- When attaching the equipment to the tractor, remember to place the coupling lock pin.



### 3.7. Transportation of equipment on trucks

- The equipment should be partially disassembled.
- For safe transportation, straps should be used to secure the equipment to the truck body.

### 3.8. Avoid heating parts near fluid lines

- Heating of fluid lines can lead to material brittleness, disruption and leakage of pressurized fluid, causing burns or injuries. (Figure J).



Figura J

### 3.9. Avoid fluids under high pressure

- Do not handle pressurized fluid hoses. Leakage of these pressurized fluids can penetrate the skin, causing serious injury (Figure K).
- Avoid danger by lowering the pressure of hydraulic systems before disconnecting them. Tighten all connections before applying pressure.
- In case of accident, seek medical attention immediately. Any fluid that penetrates the skin should be surgically removed within a few hours so as not to cause gangrene.



Figura K

- Only qualified technicians and familiar with this type of system should perform any repairs. Contact Vence Tudo service department or an authorized reseller.

### 3.10. Emergency Procedures

- Be prepared in case of a fire.
- In the event of fire or any risk to the operator, the operator must leave the tractor cab as soon as possible and seek a safe place.
- Keep emergency, doctor, ambulance, hospital and fire numbers close to your phone.

### 3.11. Safe procedures for pumping air into tires

- Never inflate a tire that is completely flat. If the tire has completely lost pressure, contact a retreading specialist.
- Tire inflation should always be done with a containment device (filling cage) (Figure M).
- To inflate a tire, follow the instructions below:
  - Use a safety tube long enough, with a graduated scale dual valve pressure gauge.

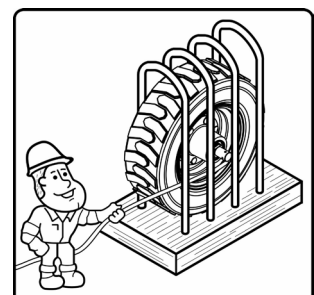


Figura L



- Stand at a safe distance from the tire tread and move everyone else away from the tire before inflating.

- Never over inflate the tire with more pressure than recommended.

### 3.12. Lights and safety devices

Operate safely when transporting the implement on public roads permitted by traffic laws. To do so, follow the recommendations:

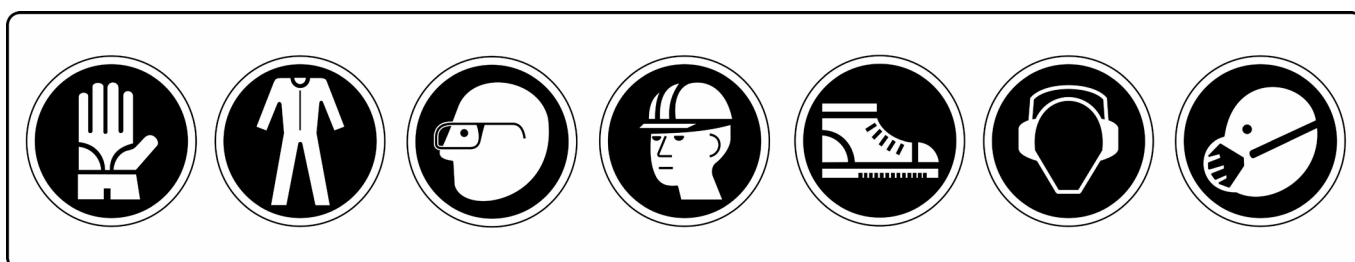
- Check rear view mirrors frequently.
- Always signal your directions.
- Emergency vehicle lights should be placed above the cabin and turned on.
- Use headlights, turn signal and emergency signals day and night.
- Respect traffic signs.
- Always keep headlights, and emergency lights clean so they can be seen. Before driving, check that your headlights, signals, flashes and alerts are working properly. If not, have a technician perform the repairs.
- Non-slip steps and handrails prevent slipping off the stairs.

In addition to the safety resources described here, the caution and concern of a qualified operator contributes to the safety of other people near the equipment.

### 3.13. Safety precautions for equipment maintenance

- In order to run the equipment, the operator must be properly trained, and have read all instructions contained in this manual.
- Always keep the equipment in good working condition by performing the recommended service regarding operation frequency of the products involved.
- Be attentive to any signs of wear, noise, and any parts that need lubrication. In the event of any component flaw or failure, contact an authorized dealer, or Vence Tudo Parts Center to replace it with an original part.
- It is recommended that maintenance services be always performed by trained and qualified professionals. All equipment mechanisms must be switched off.

When servicing under equipment, use shims to lock hydraulic cylinders (*Figure M*).



*Figure M*

- Check, and periodically replace tractor and hydraulic system filters and lubricants for maximum equipment performance, and to prevent damage to its operation. Use only filters and lubricants recommended by the tractor manufacturer.



**Do not disconnect hydraulic hoses while they are still pressurized! Always wear safety equipment such as gloves and goggles. Be very careful when servicing hydraulic systems. Fluid injuries should be immediately treated by a physician.**

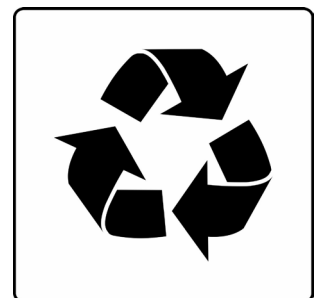
- Keep components such as hoses, fittings and clamps in perfect condition to prevent leakage.
- While servicing equipment, immediately wipe any oil leaks.
- Do not smoke or install any electrical appliance near flammable products, either by the equipment, or kept in storage.
  - Lack of adequate maintenance and operation by unprepared people can cause serious accidents, as well as damages to the equipment.
  - In case of doubts, request technical maintenance services.
  - In case of a flat tire, deflate it to remove the object that caused the puncture.

Tire assembly / disassembly should be done by a qualified professional.

- Any changes to the rim geometry may cause tire to burst. Therefore, disassemble the tire before making any repair to the rim.
  - After using the equipment wash it so as to increase its life span.
  - Design modifications or adaptations may affect its life span and void its warranty. Therefore, they should only be carried out with Vence Tudo's consent.
  - Keep working space clean and dry.
  - Before beginning maintenance and tuning procedures, lower the equipment to the ground, turn off all power sources (electrical, hydraulic), shut off the engine, and operate the controls to assess hydraulic system pressure.
  - Securely support any equipment elements that must be lifted before maintenance can be performed.

### 3.14. Proper disposal of waste

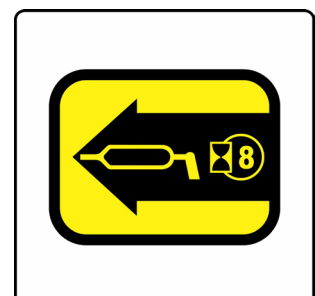
- Improper disposal of waste can threaten the environment and ecology.
  - Use leak proof container when draining fluids.
  - Do not pour waste from drainage system onto the soil or water-courses.
  - Ask local environment or recycling officials for the proper way to recycle or dispose of waste.



## 4. MAINTENANCE

In order to fully utilize the features of this machine with greater durability and accuracy, take some essential precautions such as:

- Lubricate grease fittings every 8 working hours (*Figure N*). Before lubricating clean them with a cloth. In case they are defective, they must be replaced.
- Paint all parts that are chipped or worn.



*Figura N*



| PERIODIC MAINTENANCE PROGRAM              |                         |                         |                             |  |
|---|-------------------------|-------------------------|-----------------------------|--|
| WHAT?                                     | EVERY 10 HOURS OR DAILY | EVERY 50 HOURS OR DAILY | EVERY 100 HOURS OR ANNUALLY | NOTE   |
| GEAR BOX OIL LEVEL                        | *                       | -                       | -                           | IF LEVEL IS LOW, FILL UP UNTIL THE LEVEL IS REACHED (1.5 L SAE 90) |
| CHAIN LUBRICATION                         | *                       | -                       | -                           | -  |
| CHECK FOR HYDRAULIC LEAKS                 | *                       | -                       | -                           | -  |
| LUBRICATION OF ROLLER BEARINGS            | -                       | *                       | -                           | -  |
| SHAFT JOINTS                              | -                       | *                       | -                           | -  |
| TIRE PRESSURE                             | -                       | *                       | -                           | FOLLOW THE RECOMMENDATIONS   |
| TIGHTENING WHEEL NUTS                     | -                       | *                       | -                           | FOLLOW THE RECOMMENDATIONS   |
| HITCH BALL JOINTS                         | -                       | *                       | -                           | -  |
| SUSPENSION JOINTS                         | -                       | *                       | -                           | -  |
| ASSESSMENT OF BEARINGS AND ROLLERS        | -                       | *                       | -                           | ROLLING MUST BE LIGHT AND QUIET                                    |
| PHYSICAL STATUS OF HELICOIDS              | -                       | *                       | -                           | -  |
| PHYSICAL EVALUATION OF TRANSMISSION GEARS | -                       | *                       | -                           | -  |
| PHYSICAL EVALUATION OF TRANSMISSION CHAIN | -                       | *                       | -                           | -  |
| GENERAL PHYSICAL STATUS                   | -                       | *                       | -                           | REMOVE DIRT AND PAINT CORRECTION IF NECESSARY                      |
| CHANGE GEAR BOX OIL                       | -                       | -                       | *                           | 1.5 LITER OF SAE 90 OIL  |
| CHANGE WHEEL CUBE GREASE                  | -                       | -                       | *                           | -  |

table 01

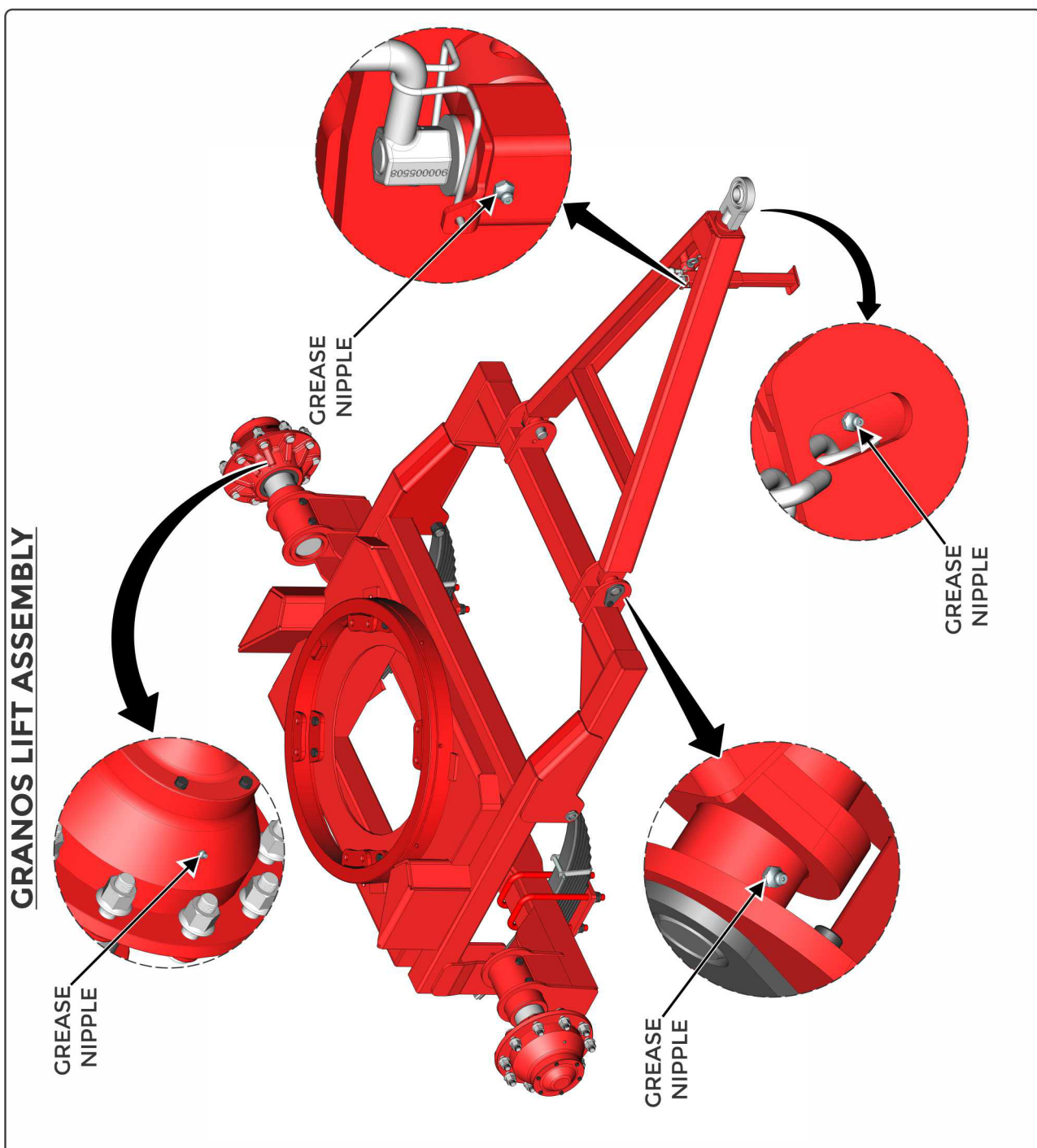


## 5. LUBRICATION

Lubrication must be properly performed, according to the instructions below to reduce the wear caused by friction between the moving parts of the equipment:

- Verify lubricant quality regarding its efficiency and purity, and avoid using products contaminated by water, dirt etc.
- Use medium-consistency grease.
- Remove excess grease around the joints.
- Clean grease nipples with a cloth before inserting lubricant and replace those with defects.
- Insert a sufficient quantity of new grease.

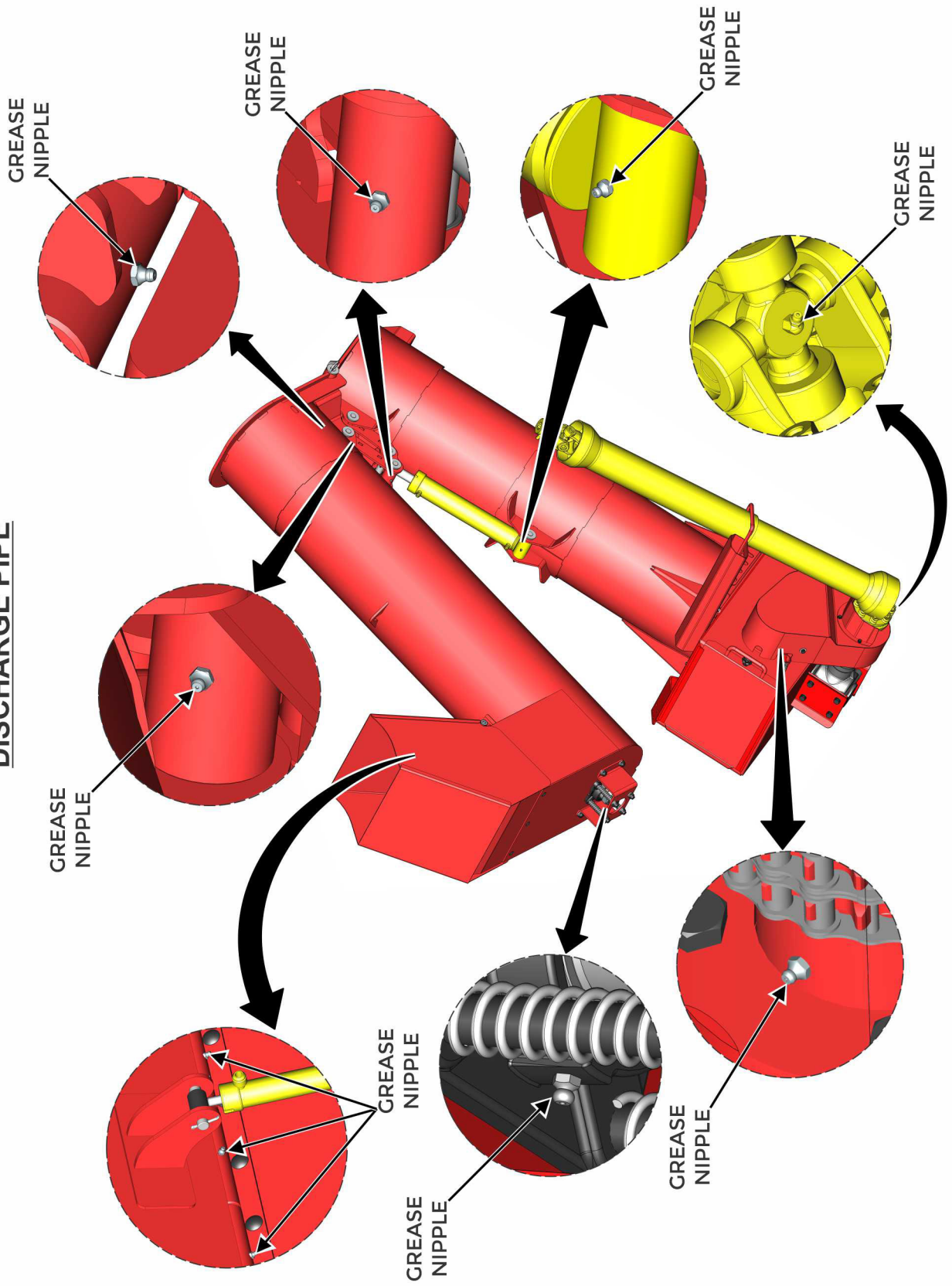
### 5.1. Lubrication points



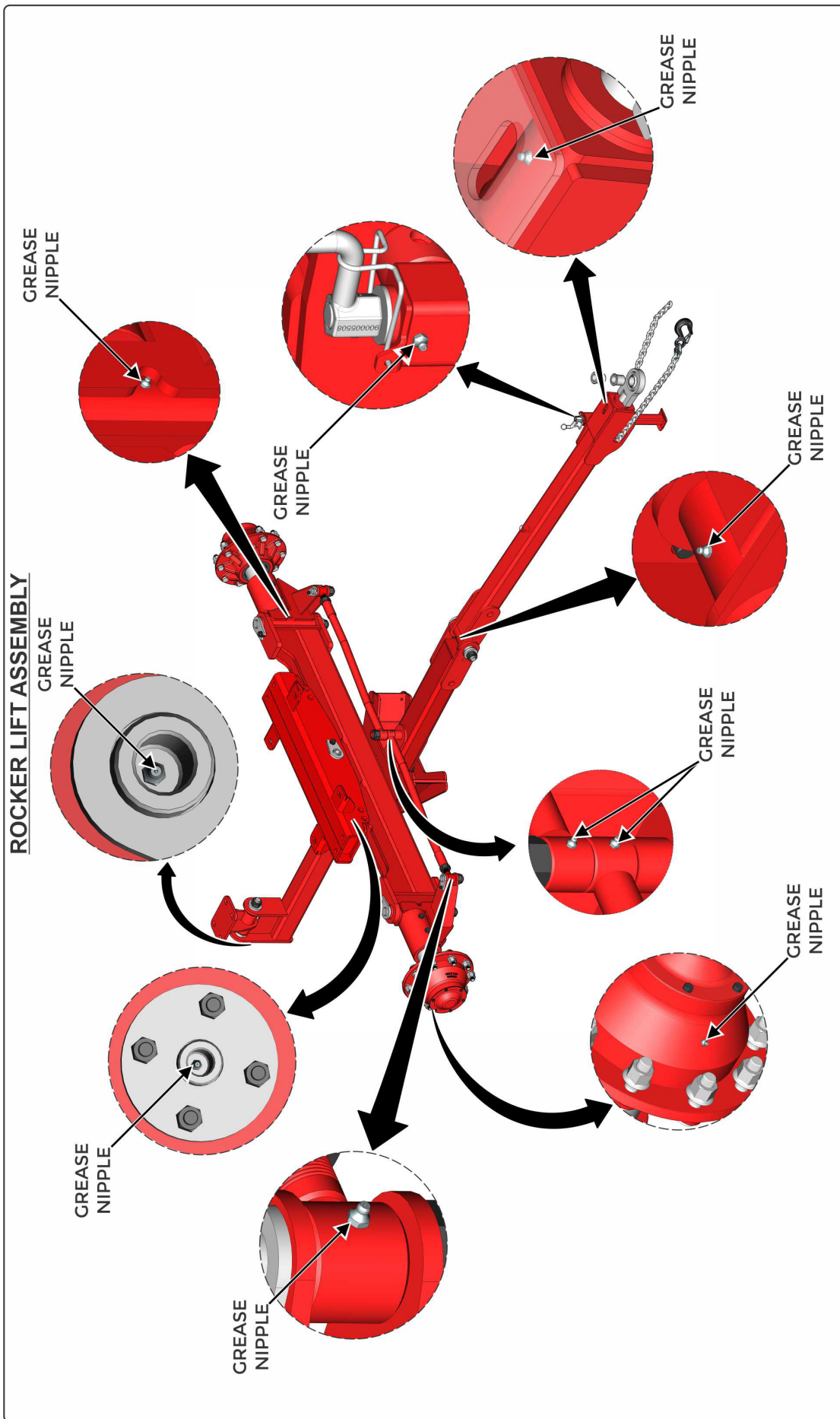




**DISCHARGE PIPE**









## 6. TECHNICAL SPECIFICATIONS

| <b>Technical Specifications - GRANOS 26000 AND 33000</b> |                       |                          |                       |                          |
|--|-----------------------|--------------------------|-----------------------|--------------------------|
|  | <b>26000 (ROCKER)</b> | <b>26000 (5TH WHEEL)</b> | <b>33000 (ROCKER)</b> | <b>33000 (5TH WHEEL)</b> |
| <b>Cubage</b>  | 26m <sup>3</sup>      | 26m <sup>3</sup>         | 31m <sup>3</sup>      | 31m <sup>3</sup>         |
| <b>Soybean capacity</b>                                  | 312 bags              | 312 bags                 | 372 bags              | 372 bags                 |
| <b>Corn capacity</b>                                     | 390 bags              | 390 bags                 | 465 bags              | 465 bags                 |
| <b>Required power (hp)</b>                               | 150cv                 | 150cv                    | 180cv                 | 180cv                    |
| <b>Weight with rims (without tires)</b>                  | 5423Kg                | 5708Kg                   | 6165Kg                | 6366Kg                   |
| <b>Discharge pipe diameter</b>                           | 500mm                 | 500mm                    | 500mm                 | 500mm                    |
| <b>Discharge flow (L/min) *</b>                          | 7875                  | 7875                     | 7875                  | 7875                     |
| <b>Discharge flow (Bags/min) *</b>                       | 118                   | 118                      | 118                   | 118                      |
| <b>Time of discharge (min.) *</b>                        | 3'30"                 | 3'30"                    | 4'                    | 4'                       |
| <b>Height of discharge **</b>                            | 4,1 à 4,6m            | 4,1 à 4,6m               | 4,1 à 4,6m            | 4,1 à 4,6m               |

table 02

### NOTES:

\* Varies according to product density and moisture. In this case, based on corn;

TDP= 540RPM

\*\*Varies according to the tire used and inclination of the discharge nozzle;

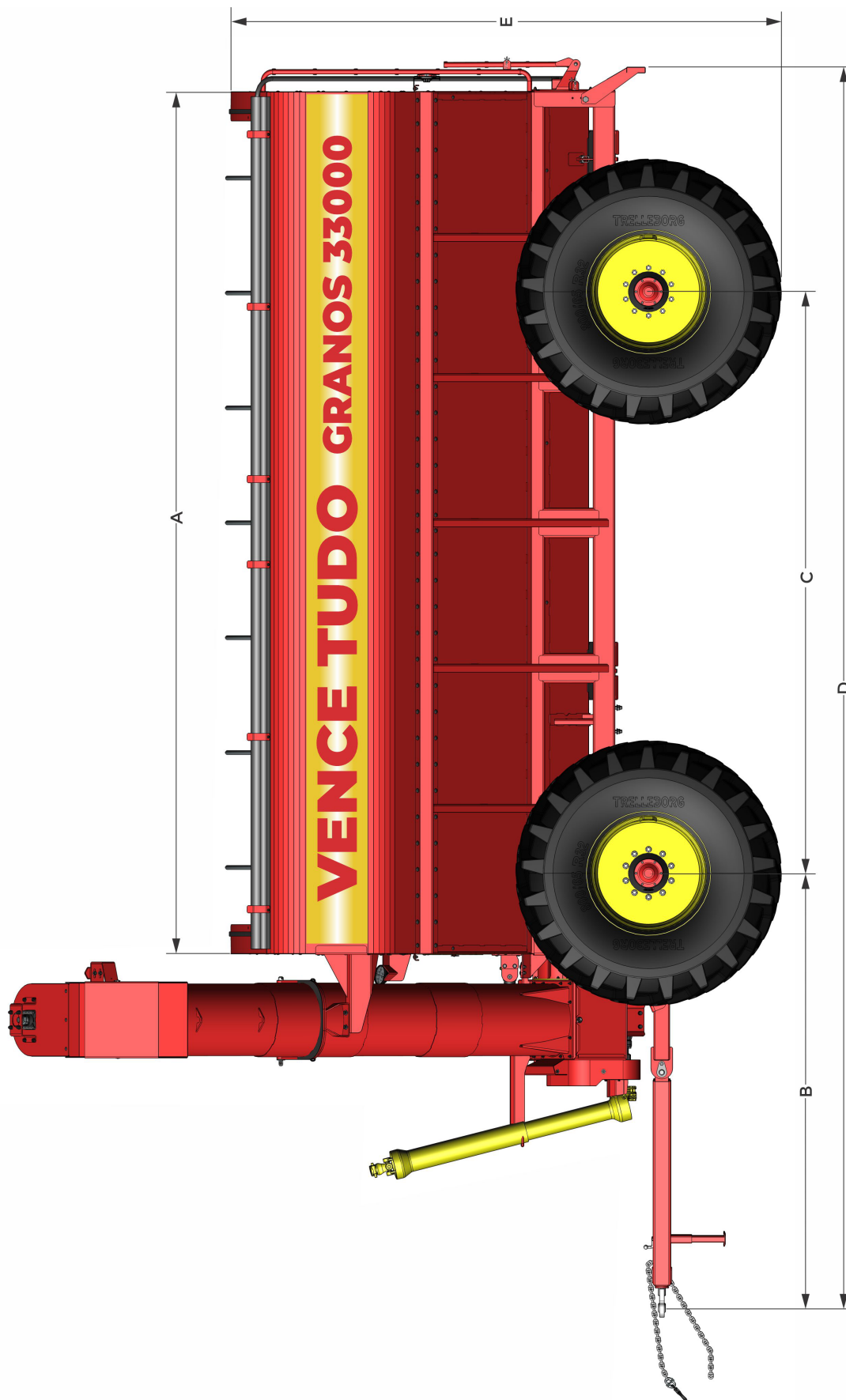
Specific soybean weight= 720Kg/m<sup>3</sup>

Specific big corn weight = 900 Kg/m<sup>3</sup>



## 7. FEATURES

### 7.1. Basic dimensions: side view



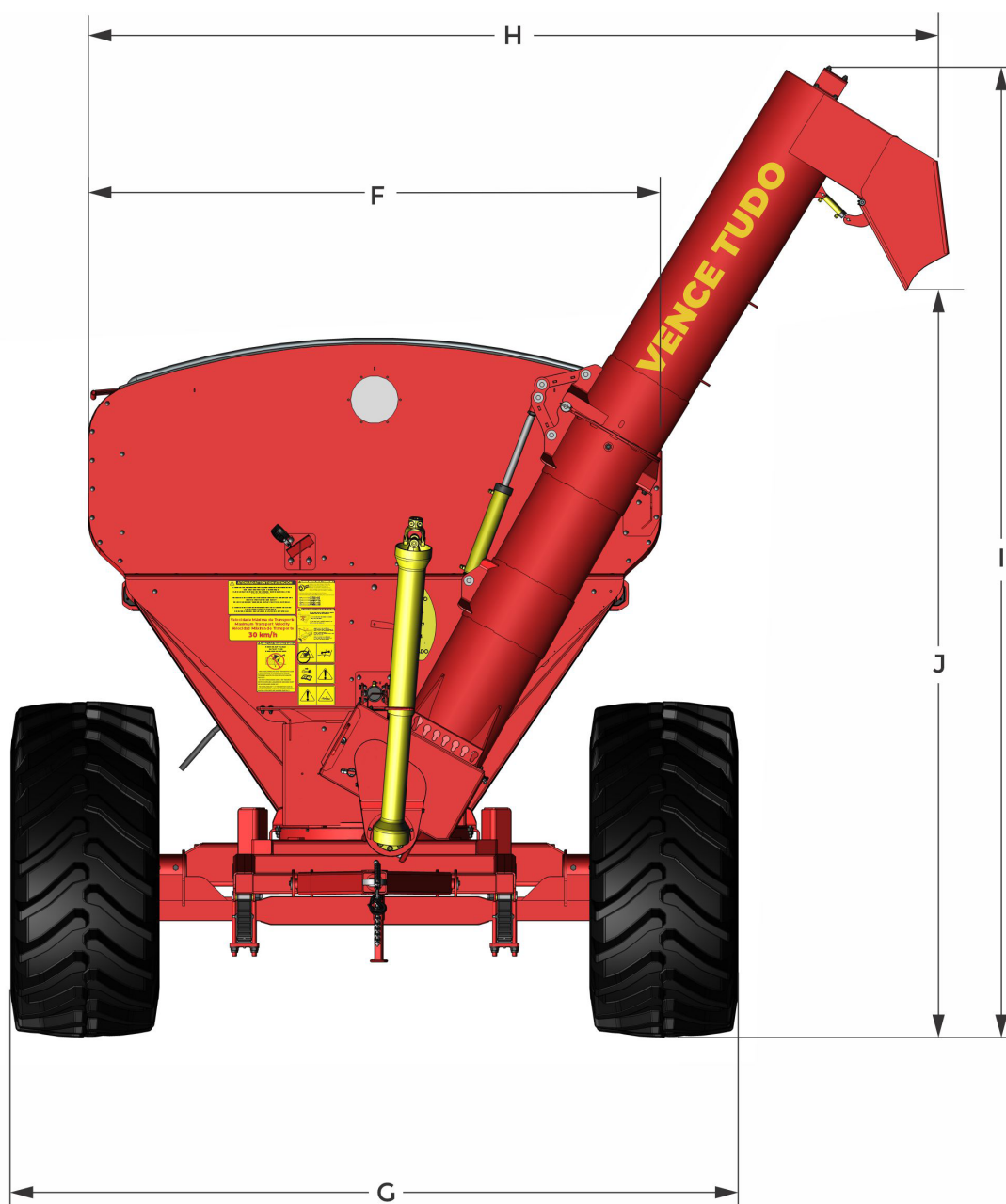
| Model               | A    | B    | C    | D    | E    |
|---------------------|------|------|------|------|------|
| <i>Granos 26000</i> | 5042 | 2691 | 3568 | 7425 | 3726 |
| <i>Granos 33000</i> | 6002 | 3091 | 4049 | 8703 | 3826 |

Dimensions in mm.

table 03



## 7.2. Basic dimensions: front view



| Model               | F    | G    | H    | I    | J    |
|---------------------|------|------|------|------|------|
| <i>Granos 26000</i> | 3184 | 3660 | 5028 | 5316 | 4505 |
| <i>Granos 33000</i> | 3184 | 3918 | 5120 | 5446 | 4622 |

table 04

Dimensiones em mm.

| Inclination of nozzle |      |      |
|-----------------------|------|------|
| Closed cylinder       | H    | J    |
| <i>Granos 26000</i>   | 4981 | 4108 |
| <i>Granos 33000</i>   | 5111 | 4225 |

table 05

Dimensiones em mm.



### 7.3. Dimensions of lift assemblies



| WHEEL / TIRES                            | GRANOS MODEL    | A    | B    | C    |
|--|-----------------|------|------|------|
| WHEEL DW 20"x30" (PNEU 23.1-30)          | 26000           | 2451 | 3040 | 3628 |
| WHEEL DW 20"x32" (PNEU 24.5-32)          | 26000 AND 33000 | 2423 | 3055 | 3686 |
| WHEEL DW 27"x32" (PNEU 30.5L32)          | 26000 AND 33000 | 2377 | 3193 | 4001 |
| WHEEL DW 27"x30.5" (PNEU 850/50-30,5)    | 26000 AND 33000 | 2346 | 3196 | 4046 |
| WHEEL DW 20"x30.5" (PNEU 650/65-30,5)    | 26000 AND 33000 | 2381 | 3028 | 3681 |
| WHEEL DW 25"x26" (PNEU 28.1-26 OU 28L26) | 26000 AND 33000 | 2422 | 3192 | 3961 |

table 06

Dimensiones em mm.



## 7.4. General Features

**HEADER AND DIRECTION SHAFT:** Articulated and robust. Granos 26000 and 33000 can be assembled with a set of direction shaft “Rocker” or “5th wheel”.

**CHASSIS:** Tubular structure, providing greater rigidity and robustness.

**LIFT ASSEMBLY:** Shaft tips easy to replace, wheel hub with 10 holes.

**HOPPER:** Made of carbon steel plates with capacity for 26000 and 33000 liters.

Easy tarp system as standard. Level display Lower penstocks arranged longitudinally, allowing gravitational unloading in hopper and easy access for cleaning and maintenance.

**DISCHARGE PIPE** Ø500mm pipe, fed by sweeping thread (horizontal), with flow controlled by the internal guillotine penstock, hydraulically driven. Temperate helicoids, driven through the transmission controlled by shaft coupled to the tractor’s power outlet (TDP). The helicoids are housed with self-compensating bearings, providing lightness and operational safety. The upper helicoid is housed and supported by helical springs, providing stability in coupling and operation.

Opening and closing of the hydraulically driven pipe, coupled to the articulation system that provides less effort to the cylinder in addition to assist in locking the pipe in the discharge position. The unloading pipe has an hydraulically controlled and driven nozzle system, facilitating the accommodation of the load on the truck.

**SAFETY:** Granos has a rear bumper, as well as a safety chain on the header. As an option, the brake kit is available.

**LIGHTING SYSTEM:** It has led lights, providing greater security when traveling by road, as well as a work light for night activities.

## 8. GENERAL INFORMATION

**1-** Upon receiving your Granos, it is extremely important to check the condition of the product, especially regarding the use of original components;

**2-** The right and left side identifications are considered taking into account the view of the machine from the rear to the front;

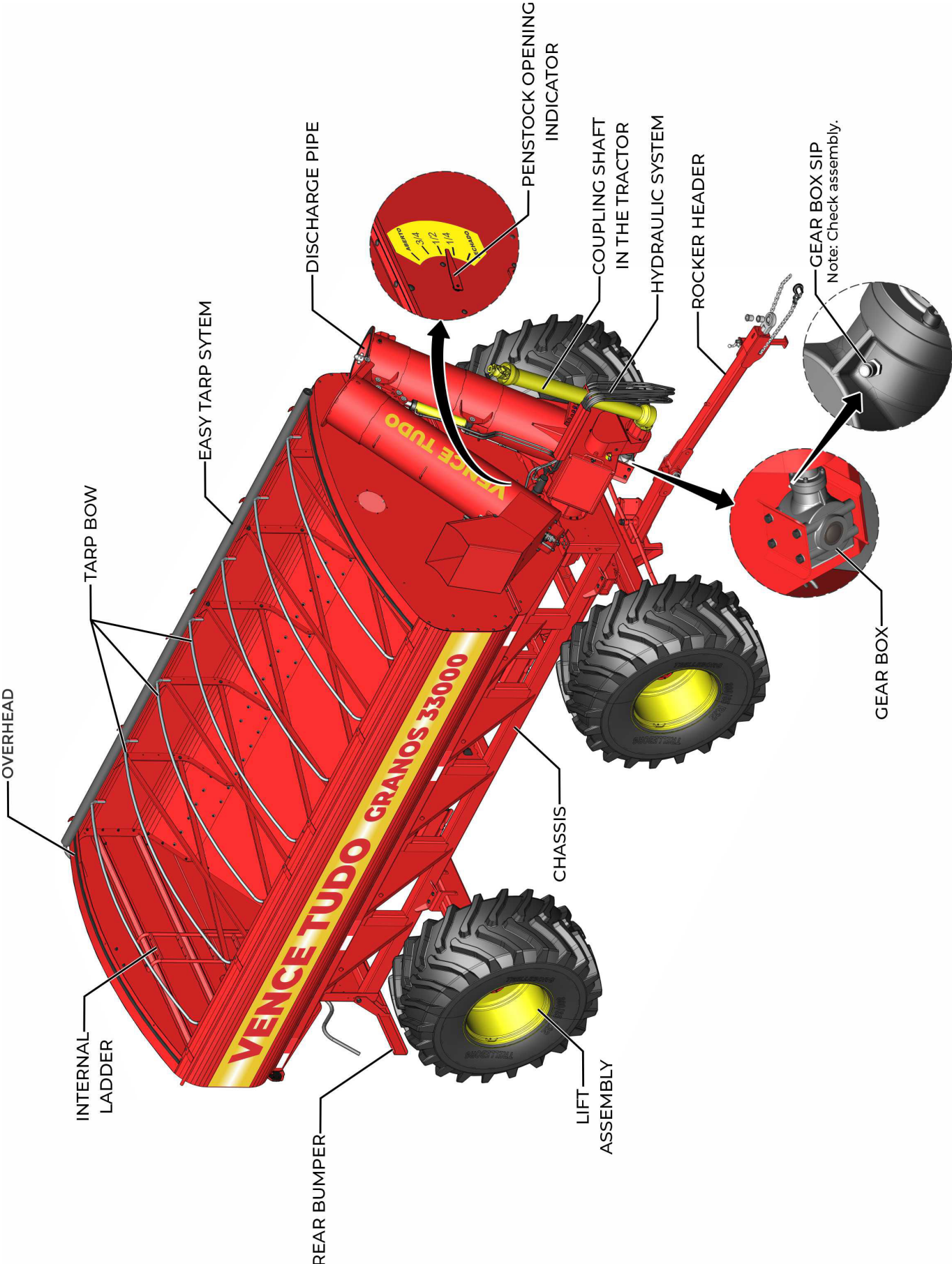
**3-** To store your Granos, always keep it in a flat and firm place.





# 9. IDENTIFYING THE COMPONENTS

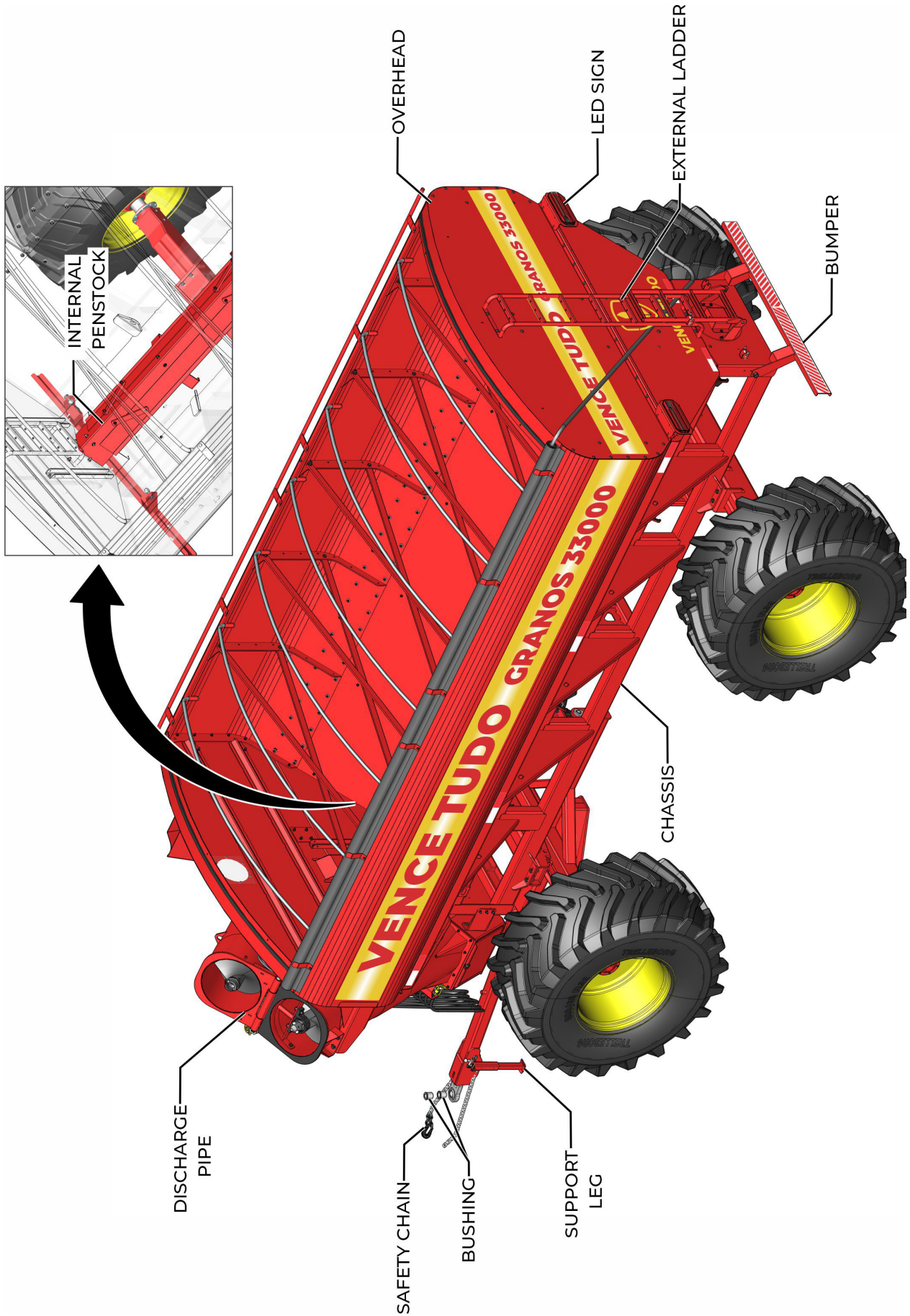
## 9.1. Front view





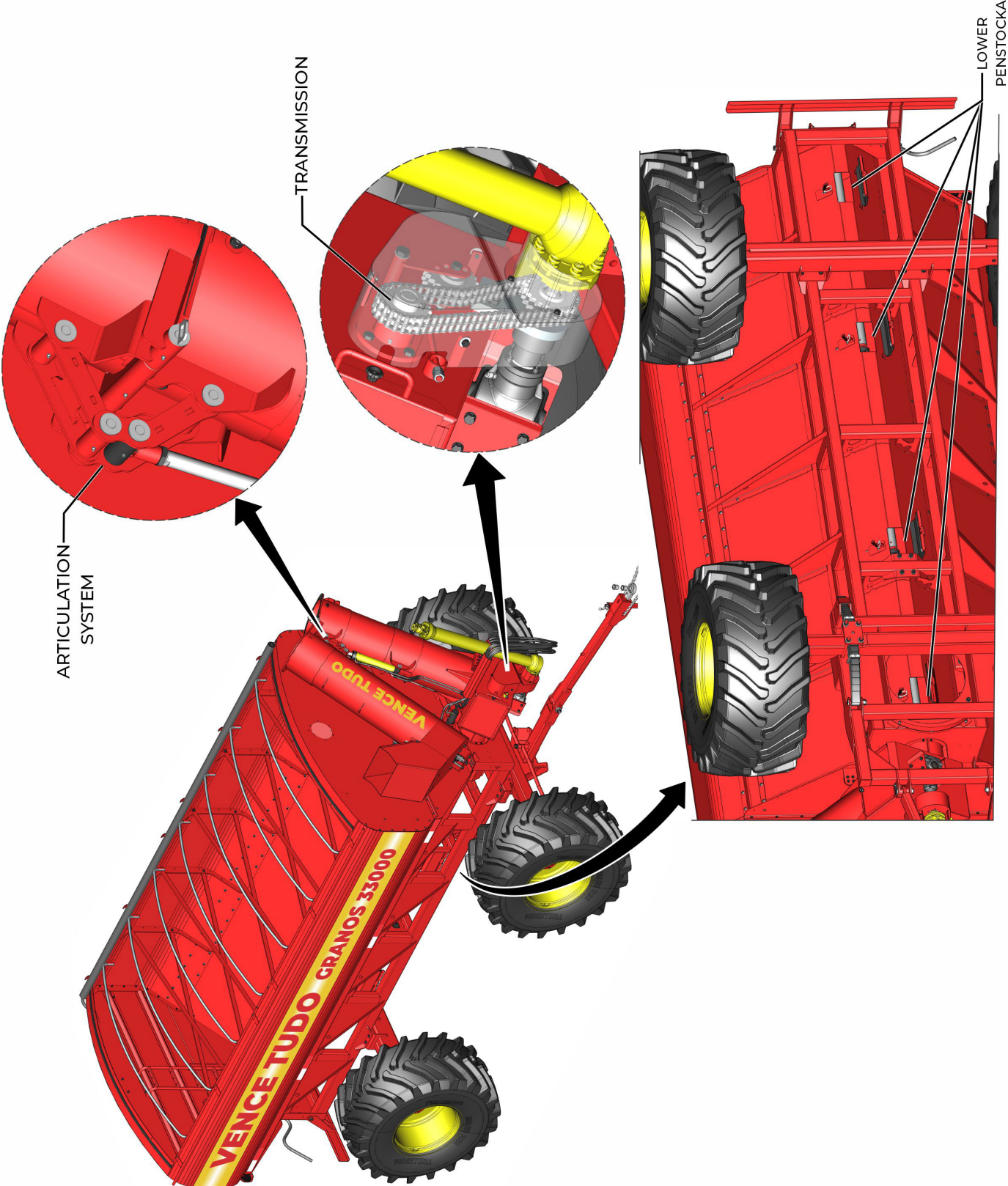


## 9.2. Rear View





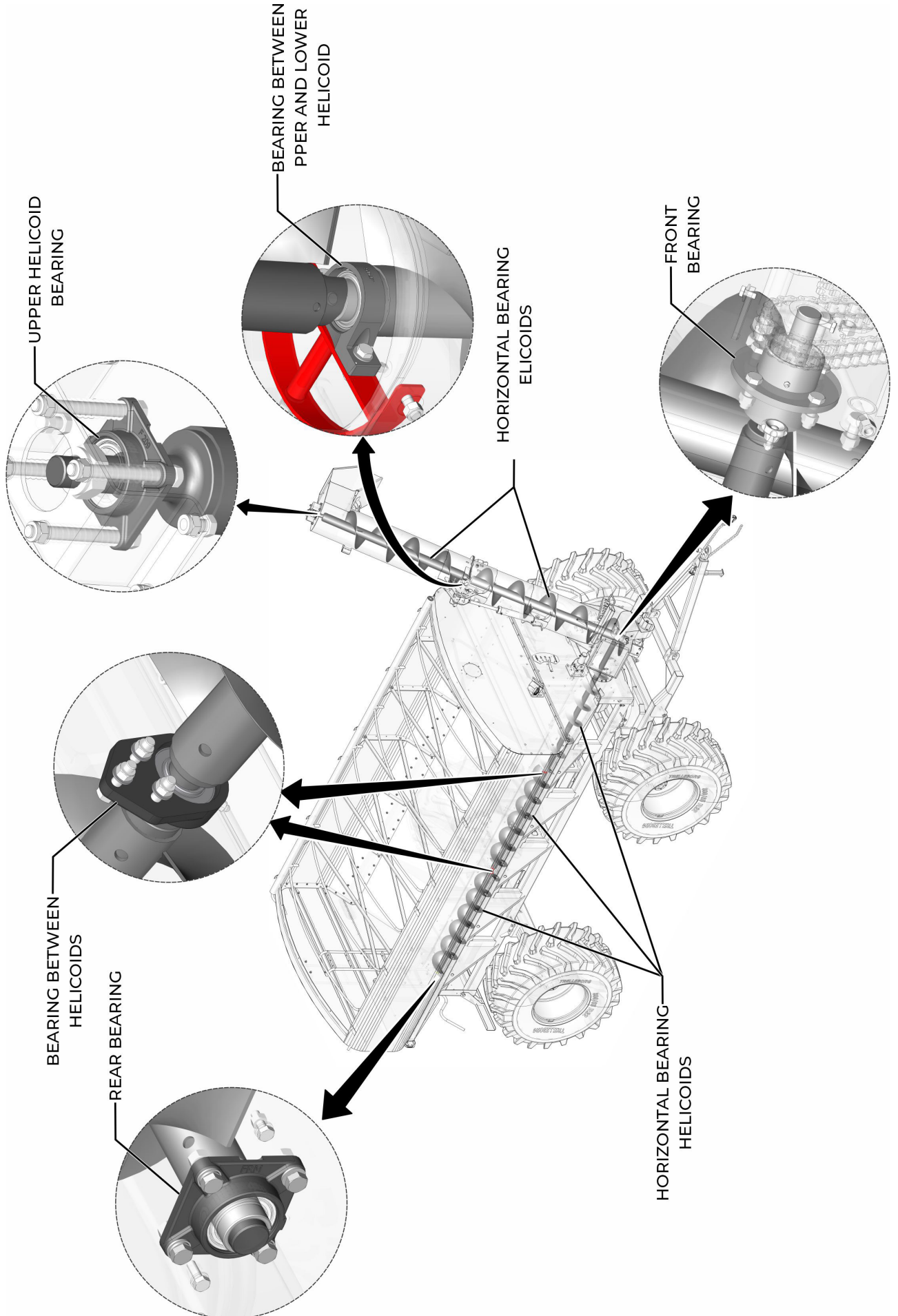
9.3. Lower View







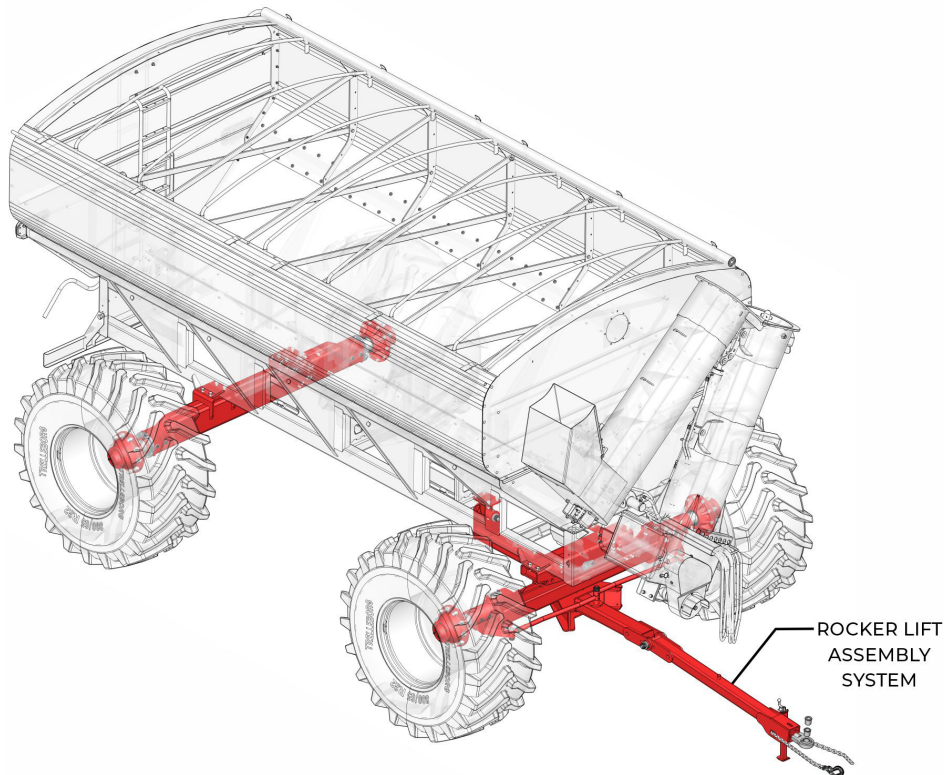
### 9.4. Helicoids view



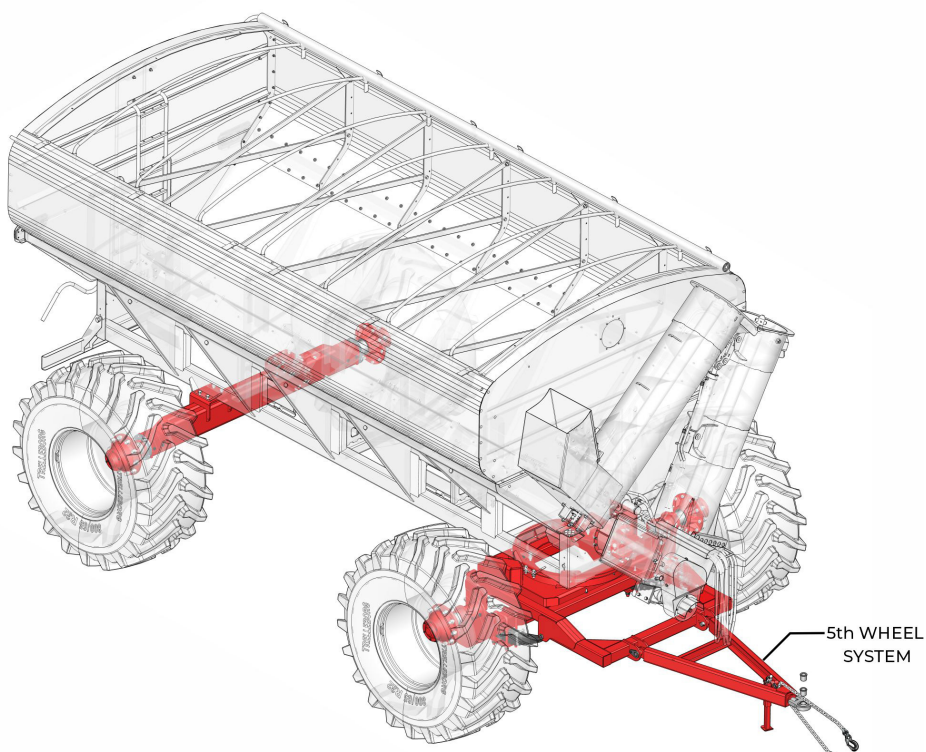


## 9.5. Directional systems view

- VERSION WITH ROCKERS Rocker-type directional axis, which has a greater turning angle providing a smaller radius for maneuvers Greater lateral inclination, with the possibility to limit it. Low maintenance cost.



- VERSION WITH 5TH WHEEL: Directional axle with slope (double ball spinning wheel) providing better agility and safety in maneuvers, allowing the wheels to copy the tractor's turning radius, accompanied by a semi-elliptical spring beam system absorbing the impacts resulting from the ground, providing greater comfort and operational stability.



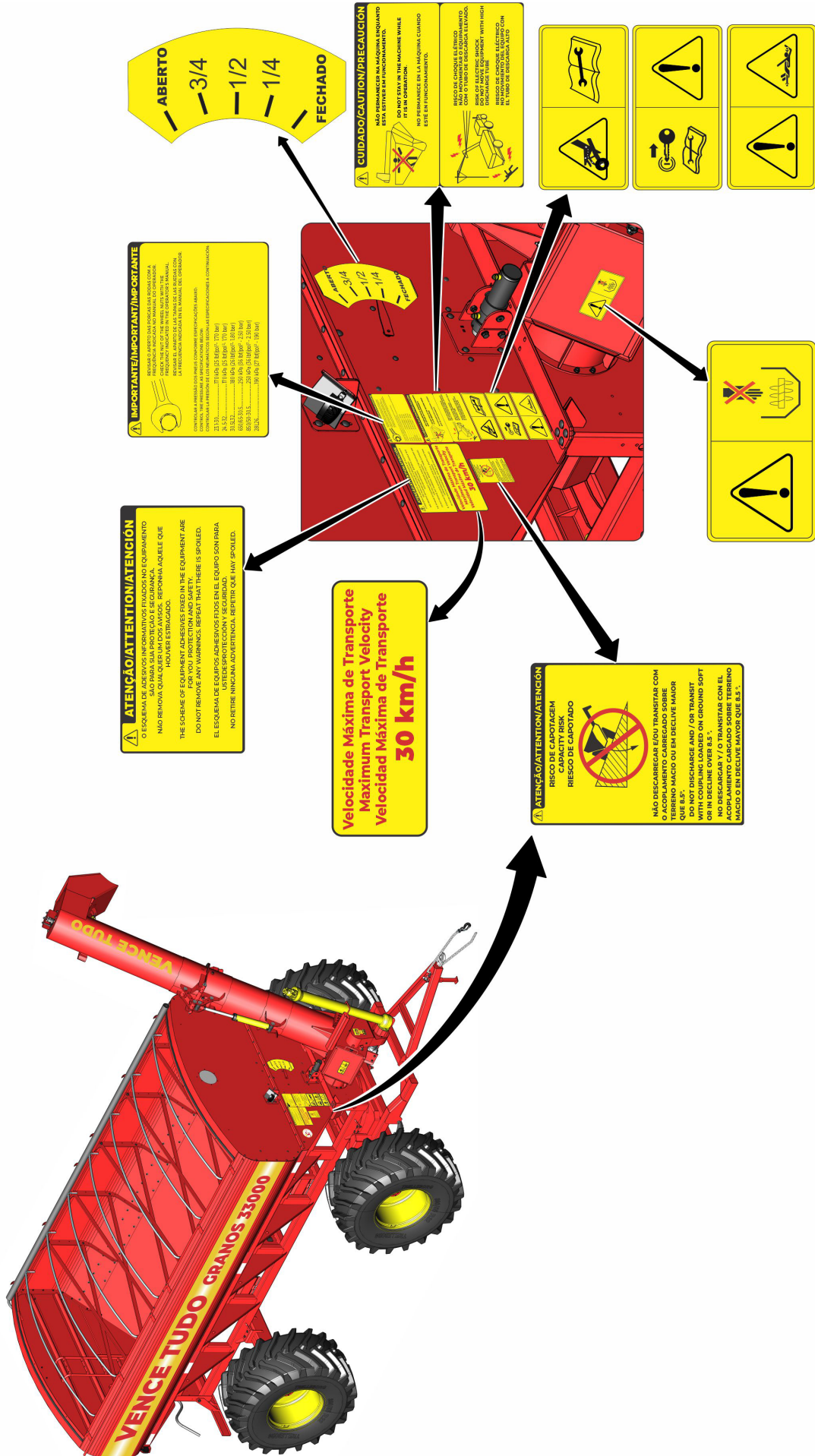




## 10. POSITIONING OF LABELS ON THE EQUIPMENT

### 10.1. Front View













## 11. MACHIEN PREPARATION

### 11.1. Assembly of wheels

To assemble the wheels, follow the instructions below:

- 1- Take the GRANOS chassis to a height that allows the hub axle to be mounted on the chassis bushing;
- 2- Always assemble the wheels with the fan (A) (fig. 01) out;
- 3- Rotate the axle (B) of the hub until the holes (C) of the axle and the holes (D) of the bushing (E) align, then mount the hex head bolt M18x180 (F) and the self-locking nut (G).

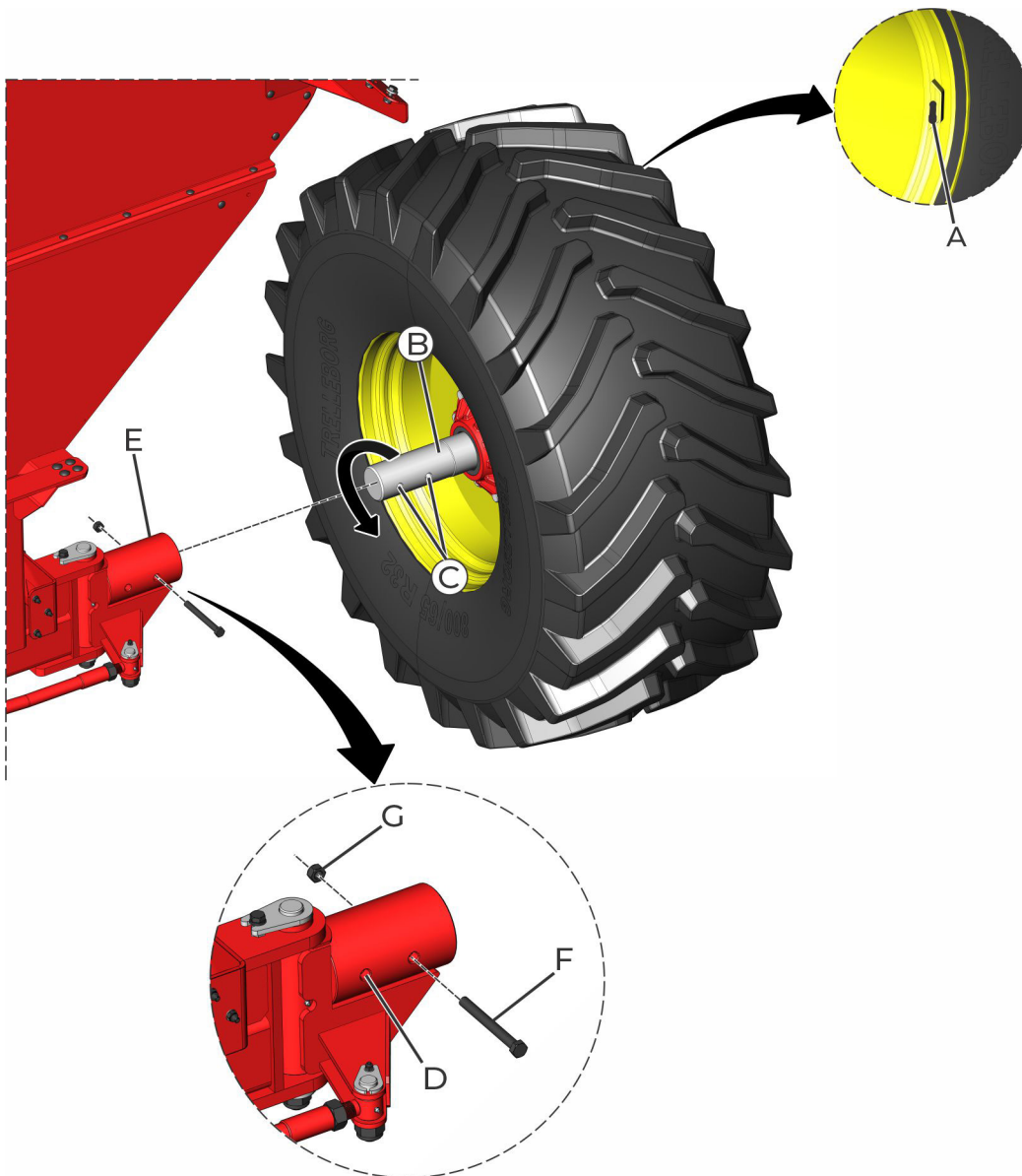
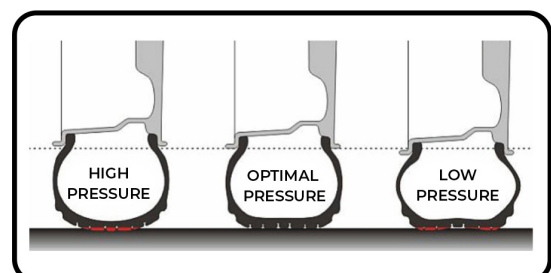


fig. 01

### 11.2. Tire pressure

Using ideal pressure for the work allows perfect contact with the ground, maintaining essential flexibility for the long durability of the tires. The use of low or high pressures may cause serious and irreversible damage to the tires. Check the tire pressure according to the specifications below:





| TIRES                 | PRESSURE                                     |
|-----------------------|--|
| TIRE 23.1-30          | 170 kPa (25 lbf/pol <sup>2</sup> - 1.70 bar) |
| TIRE 24.5-32          | 170 kPa (25 lbf/pol <sup>2</sup> - 1.70 bar) |
| TIRE 30.5L32          | 180 kPa (26 lbf/pol <sup>2</sup> - 1.80 bar) |
| TIRE 650/65-30,5      | 250 kPa (36 lbf/pol <sup>2</sup> - 2.50 bar) |
| TIRE 850/50-30,5      | 250 kPa (36 lbf/pol <sup>2</sup> - 2.50 bar) |
| TIRE 28.1-26 OU 28L26 | 190 kPa (27 lbf/pol <sup>2</sup> - 1.90 bar) |

table 07

### 11.3. Hitch

The tip of the grain cart accompanies two bushing options with different diameters, Ø35.7 and Ø40, to be adapted according to the tractor pin.

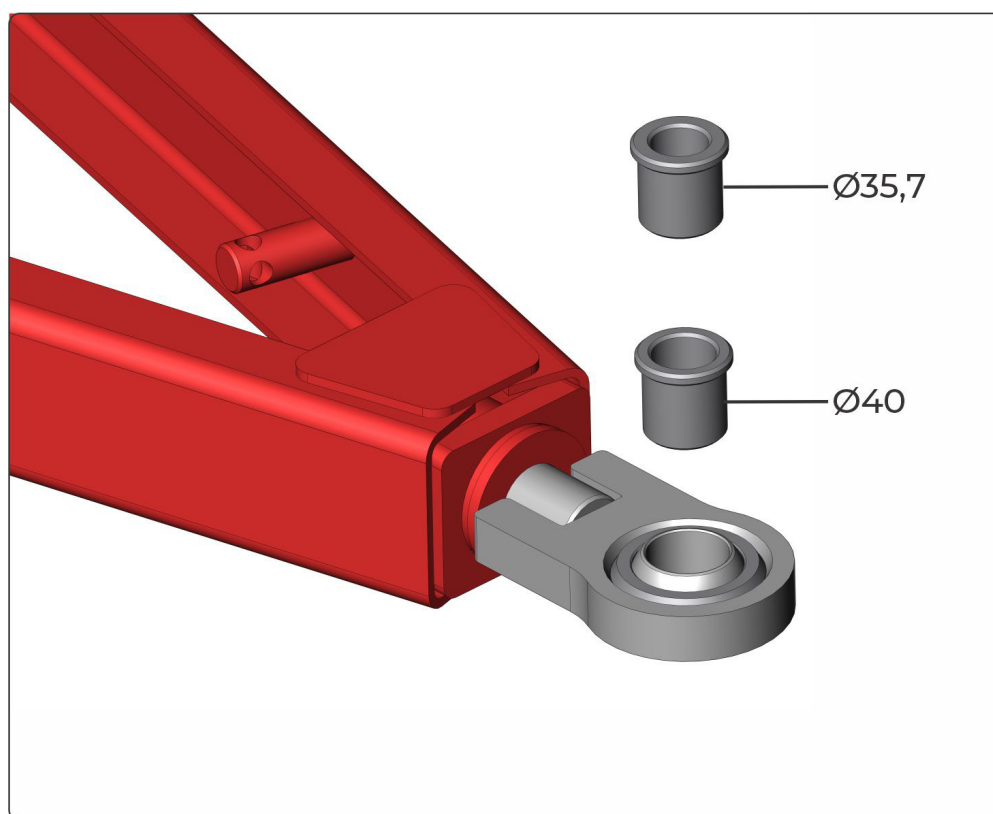


fig. 02

### 11.4. Granos Coupling - tractor

Couple or uncouple Granos to the tractor in a flat and firm area.

Carry out the tractor in reverse gear, directing it to Granos, with the tractor in idle. Always be careful to stop the tractor moving (braking) at any time.

Fix the Granos header to the tractor drawbar and attach the safety chain.

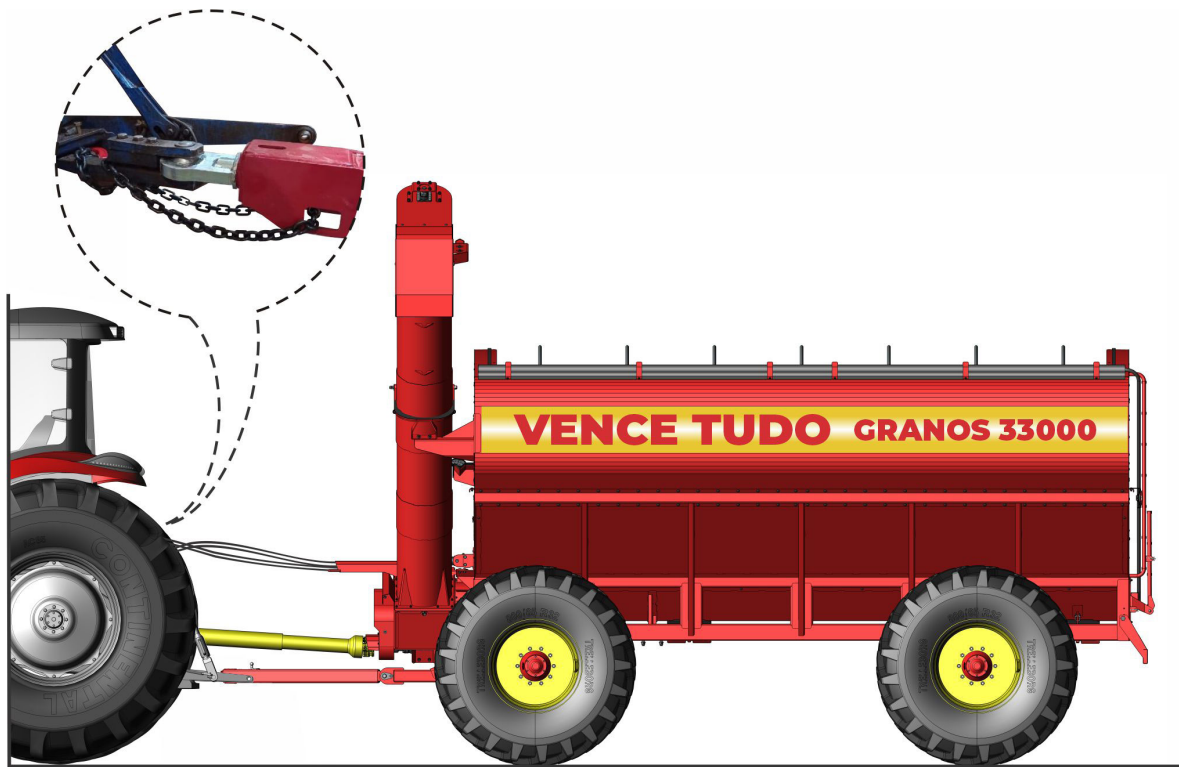


fig. 03

Try to keep the header as leveled as possible with the ground. To level, change the height of the tractor drawbar (1), if necessary. These normally allow for 2 or 4 height positions as illustrated below. Refer to the tractor manual.

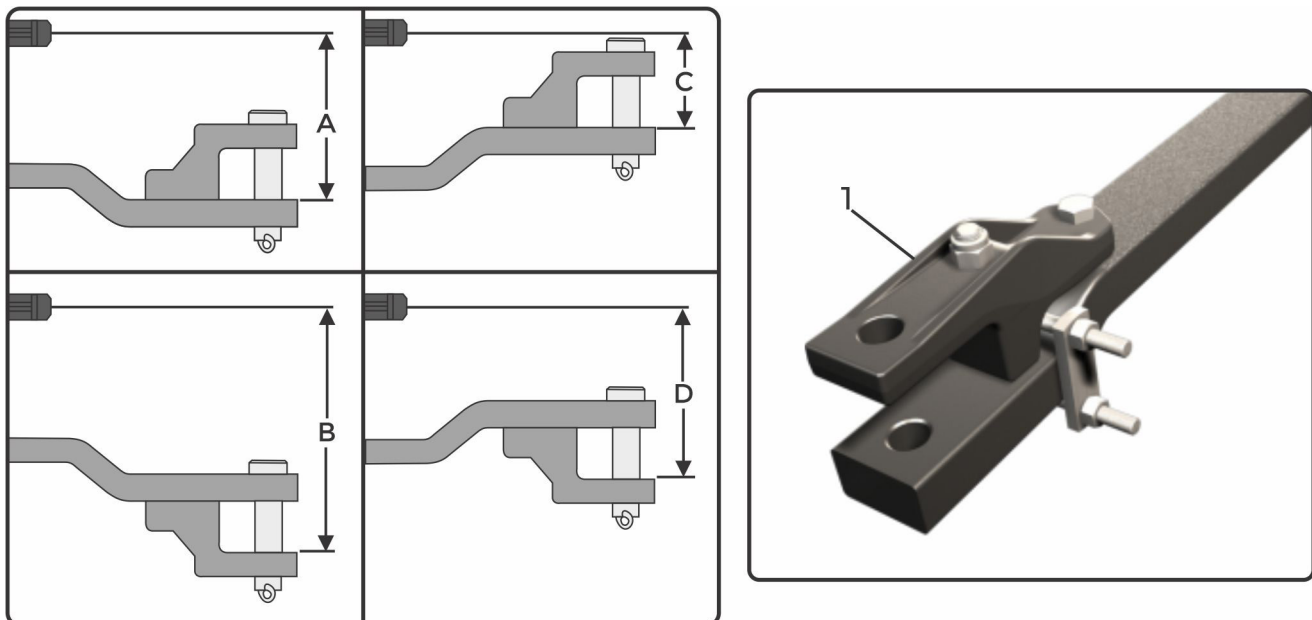


fig. 04



## ⚠ ATTENTION

**When coupling the grain cart, always install the lock pin on the coupling header of the tractor bar.**

### 11.4.1. Shaft length adjustment

To properly adjust the shaft, follow the instructions below:

- 1- Couple the Granos header on the tractor's drawbar;
  - 2-Turn the steering wheel of the tractor until one of the rear tires is as close to the header as possible;
  - 3- Disassemble the shaft and remove its protections, connect the slot terminal to the tractor's power outlet;
  - 4- Bring the pipe close to the shaft bar until they are side by side, then check if there is a minimum slack of 2cm (fig. 07) at each end, if there is no slack, mark the pipe and the bar with a 2cm measure and cut them;
  - 5- With a file, remove the burrs resulting from the cut, on the pipe and the bar.
  - 6- Grease the shaft pipe internally.
  - 7- Reassemble the shaft protections.
- OBS.:** Before assembling the bar inside the shaft pipe, add grease to the pipe.  
When using a different tractor, make these adjustments again if necessary.

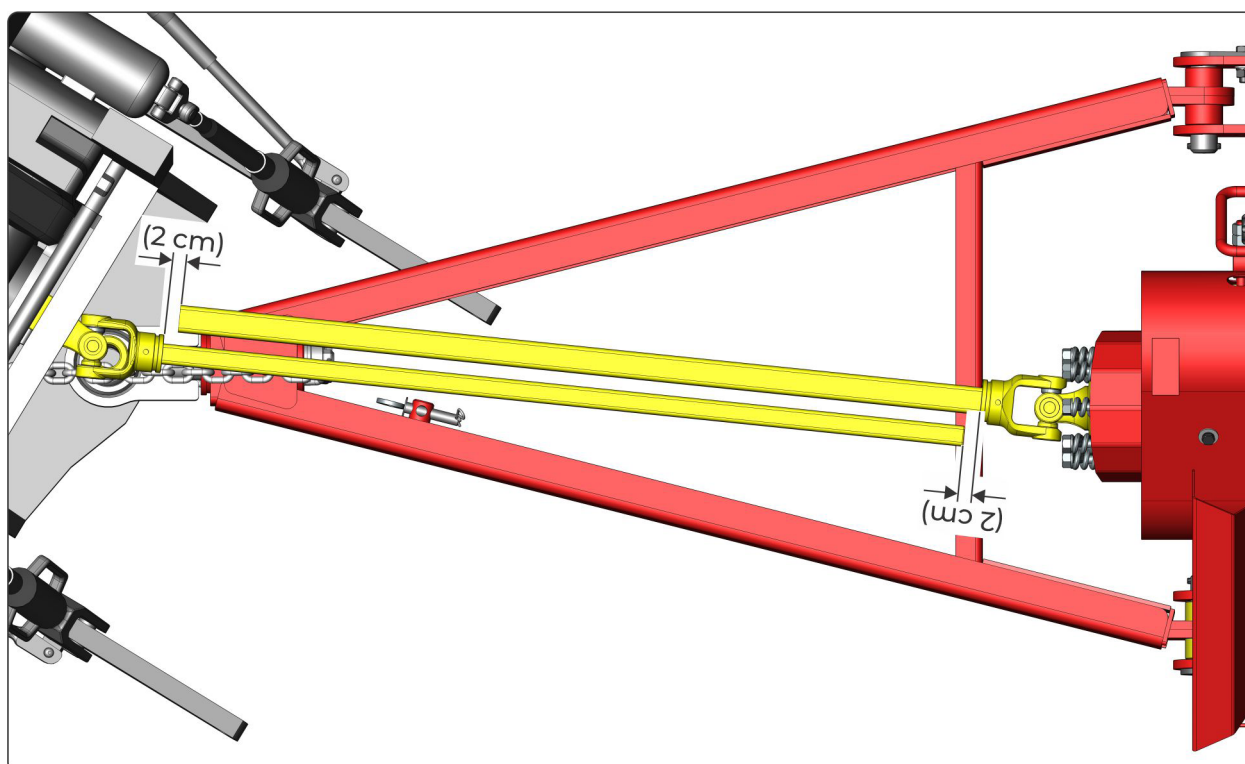


fig. 05

### 11.4.2. Maximum shaft position and angle

Whenever you connect the shaft to the tractor's power outlet, check whether the shaft has a square bar and pipe, the terminals must be assembled aligned in the same position.

The maximum angle the shaft supports when it is in motion is 30°, if that value is exceeded, turn the TDP off.

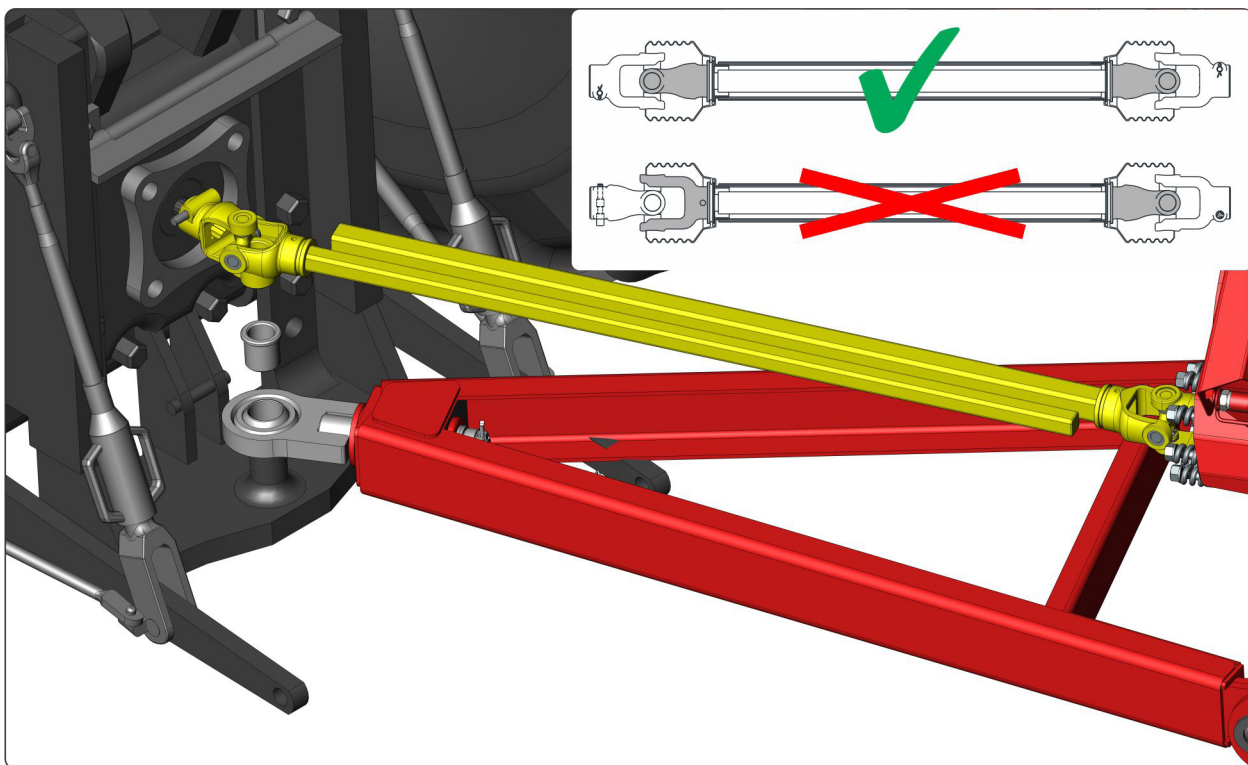


fig. 06

### 11.4.3. Coupling the hydraulic system to the tractor

After the coupling of Granos, the hydraulic system hoses are assembled on the remote control of your tractor (hydraulic system outlet sockets), located at the rear. Check the correct pressure and return positions making sure that they do not cause any operational problems.

Clean the hose terminals thoroughly with a clean cloth. Push the fitting against the support with one hand and with the other put the hose terminal and release the quick hitch.

Granos has 3 pairs of hoses to open/close the penstock, open/close the pipe and to tilt the nozzle.

If the tractor does not have 3 compartments available on the tractor's remote control, we suggest the dividing valve is purchased (item sold separately), so that all the commands available on the implement can be used, facilitating its operations.

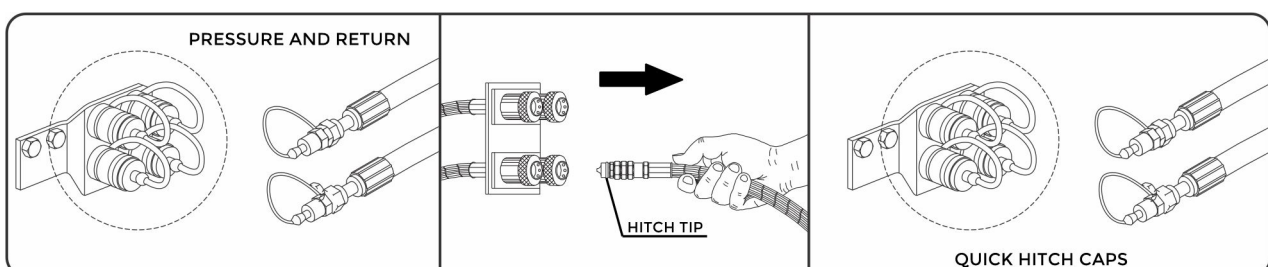
likewise, if your Granos has the hydraulic brake kit (optional), you will need one more compartment available on the remote control.

**NOTE:** If you cannot fit the hose into the hitch, remove the pressure by pressing the needle on the end of the hose against a clean surface.

When detaching the hoses from the hydraulic systems on the remote control of your tractor, located at the rear, the pressure in the circuit must be totally released. To do so, turn off the tractor and activate the cylinders so that the coupled set or accessory is supported on the ground. Move the control lever until there is no more pressure in the hoses.

Uncouple the hoses applying the same procedure used for coupling.

**NOTE:** After uncoupling the hoses, replace the protective caps on the quick hitch to prevent dirt from entering.







#### 11.4.4. Access to hopper

The external rear ladder (A) (fig. 07), must be opened only to climb on the upper part of the grain cart. During the remaining the time, it must remain folded and fixed through the pin (B) and the lock pin R (C).

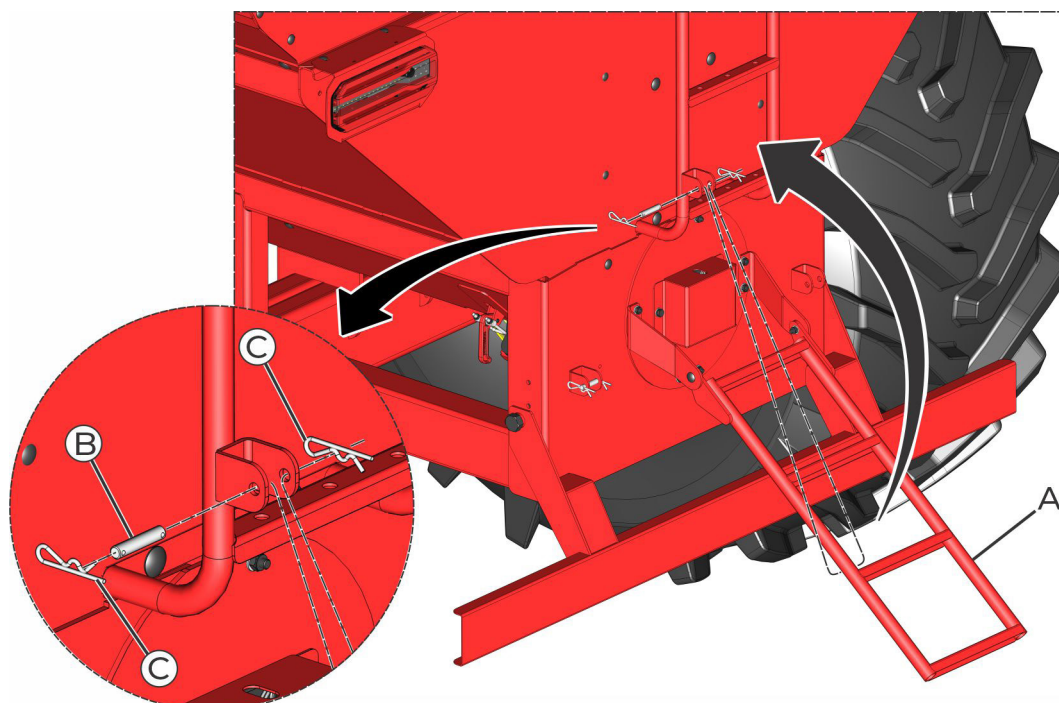


fig. 07

When a worker uses the internal ladder (A) (fig. 08), he must make sure that no grains are loaded in it, thus avoiding risk of suffocation, the cart cannot be put into operation either, in order to prevent accidents with the machine auger.

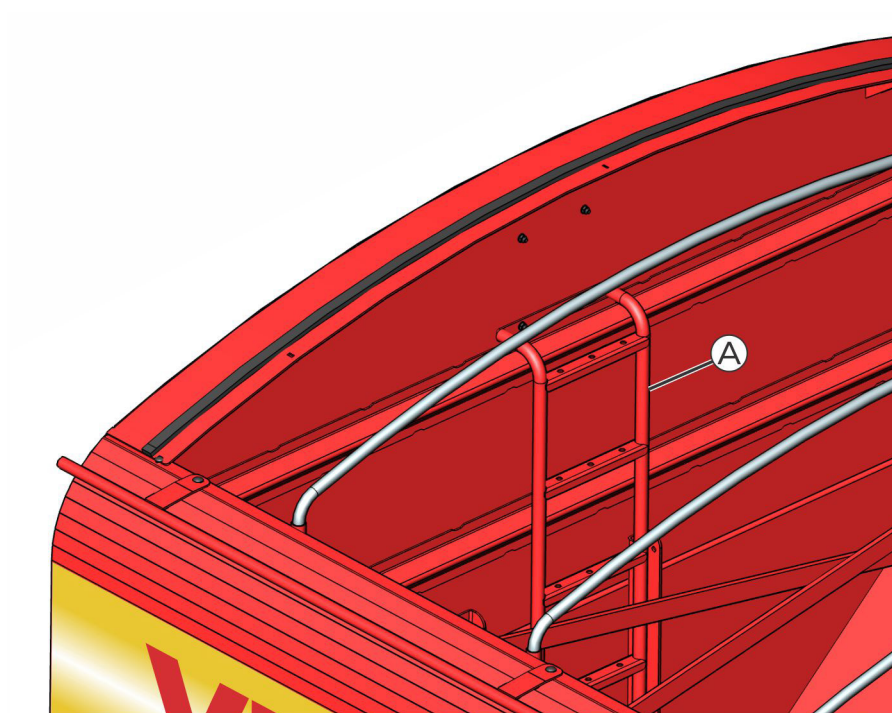


fig. 08



## 12. OPERATION

### 12.1. Preliminary operations

- Before putting the Granos into operation, check that the inside of the tank is clean, free of stones, tow, wood.
- With Granos coupled to the tractor, connect the shaft to the TDP and the hydraulic hoses;
- Gently activate the upper pipe to the discharge position, then turn on the tractor's TDP and check that the helicoids are not unbalanced, this can be noticed by excessive vibration, which may cause interference of the helicoid's spiral plates with the pipe. If you experience this problem, contact the Vence Tudo technical assistance department immediately;
- Activate the cylinder to open the penstock and check if it opens and closes fully;
- Turn TDP off;
- Close the penstock again and retrieve the upper discharge pipe to its support.

### 12.2. Displacement

The transportation position (fig.09), is used to move the cart from one place to another with or without grains in its hopper. However short the distance to be covered, it is essential that the discharge pipe remains closed, in the resting position, in order to prevent accidents and protect its articulation components, increasing the life of the equipment.

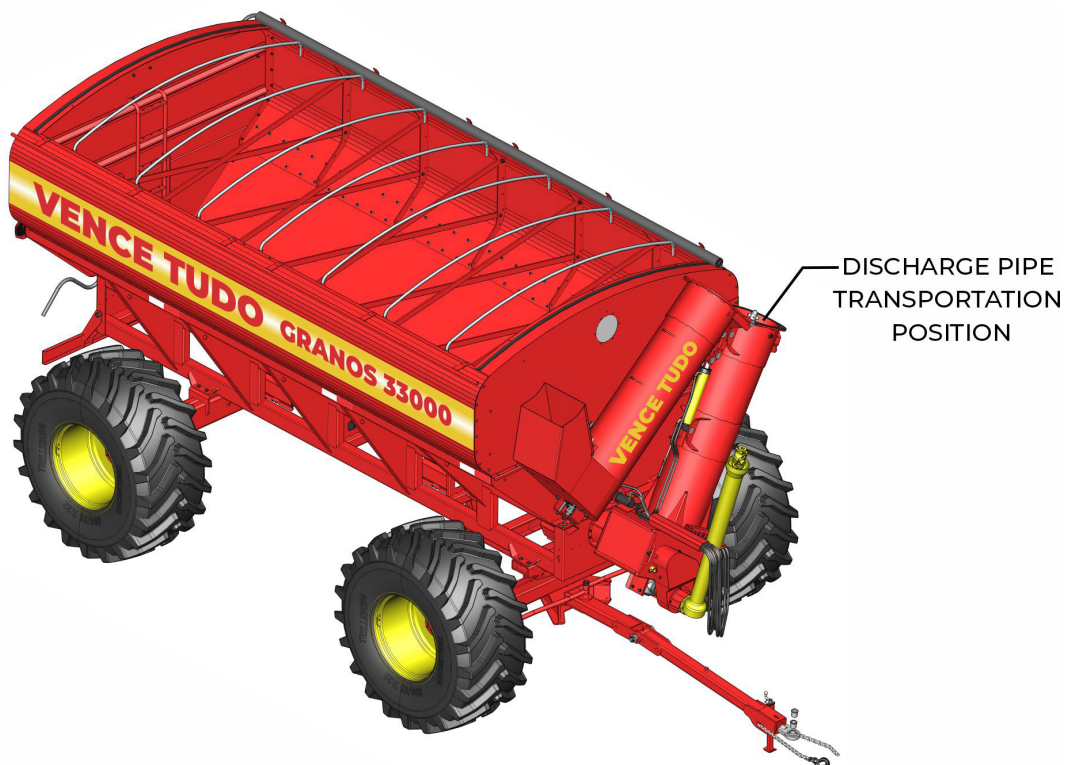


fig. 09



**ATTENTION**

Maximum transportation speed is 20 km/h.



The soil does not offer great risks to transport your grain cart, however, we must avoid terrain with lateral inclinations greater than 8.5 °, in relation to the horizontal line, thus discarding the risk of possible overturning, especially when your equipment is under full load.



fig. 10

### 12.3. Grain unloading

The unloading of the cargo can be carried out in two ways, using the unloading pipe to transfer the cargo from Granos to another vehicle, or gravitationally in hoppers, using the lower penstocks.

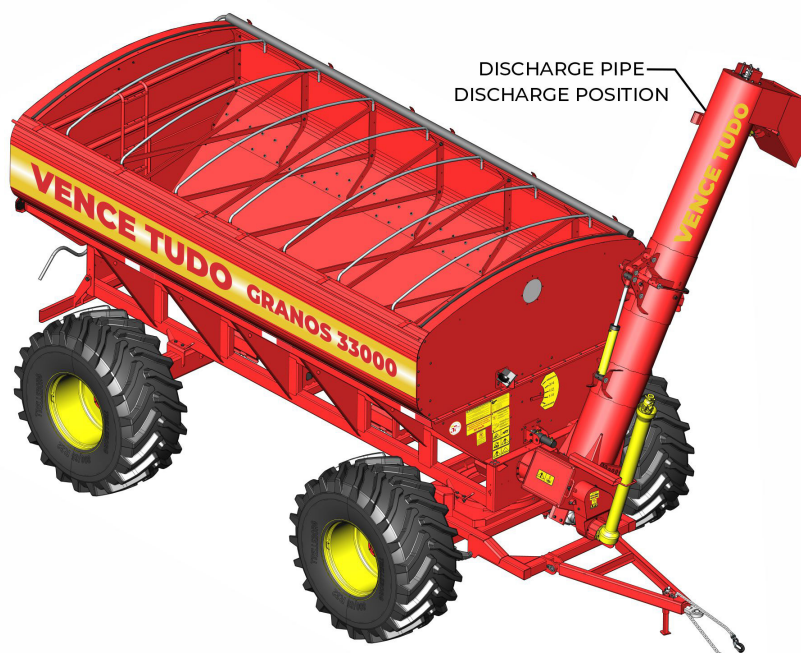


fig. 11





### 12.3.1. Unloading to another vehicle / depot

Slowly approach the other vehicle, observing the distance so that the nozzle is correctly positioned under the other hopper and taking care not to hit the pipe or the lift assembly in it. During unloading, keep the tractor in line with your cart, as shown in figure 12.

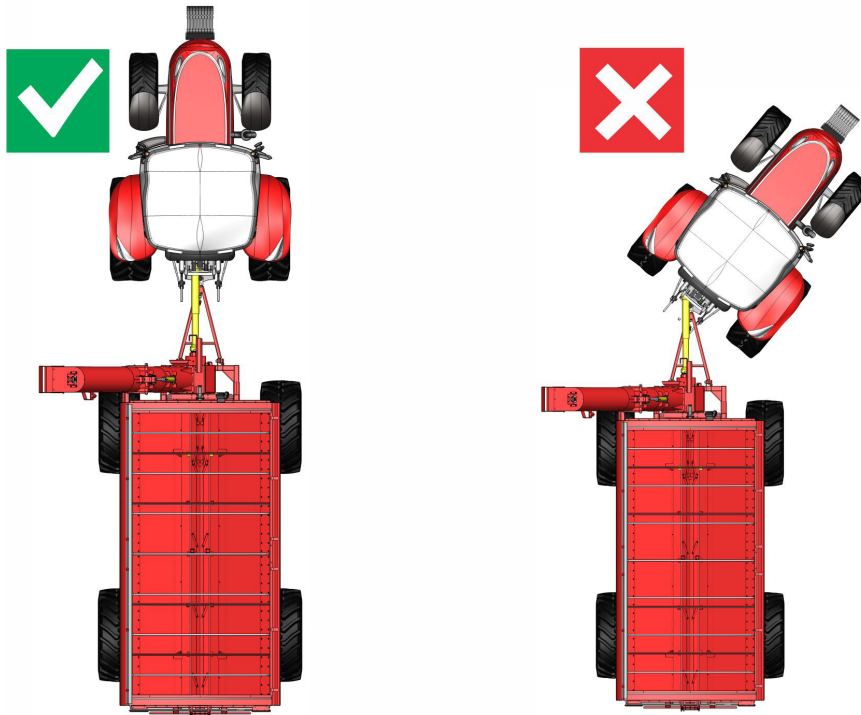


fig. 12

With the tractor and implement aligned, it is easy to perform longitudinal displacement to distribute the load in the other hopper in addition to avoiding overloads on the shaft.

After positioned, activate the hydraulic cylinder to open the discharge pipe, leaving it in the working position.

#### 12.3.1.1. System activation

Note the penstock indicator so that it is in position "A" ("closed").



fig. 13



Actuate the lever / button of the power outlet (TDP) progressively until reaching the working speed of 540 rpm, with the helicoids in continuous movement, open the penstock, through the hydraulic cylinder while monitoring through the indicator.

### 12.3.1.2. System shutdown

When loading is finished, or the deposit needs changing, close the penstock, keeping the power outlet activated until tall grains that are still in the tube are transferred. Only after verifying it is fully empty, the shaft can be turned off, gradually reducing its rotation until it stops. Avoid shutdown at high speed.



Under no circumstances open the penstocks before activating the power outlet, or shut down with the penstocks open.

Failure to do so can overload the system by reducing the system's useful life or even breaking mechanisms.

### 12.3.1.3. Guiding nozzle

Throughout the process of unloading the grain from your grain cart, it is allowed to move the steering nozzle, by means of a hydraulic cylinder (A) (fig. 14), thus allowing a better accommodation of the load on the truck.

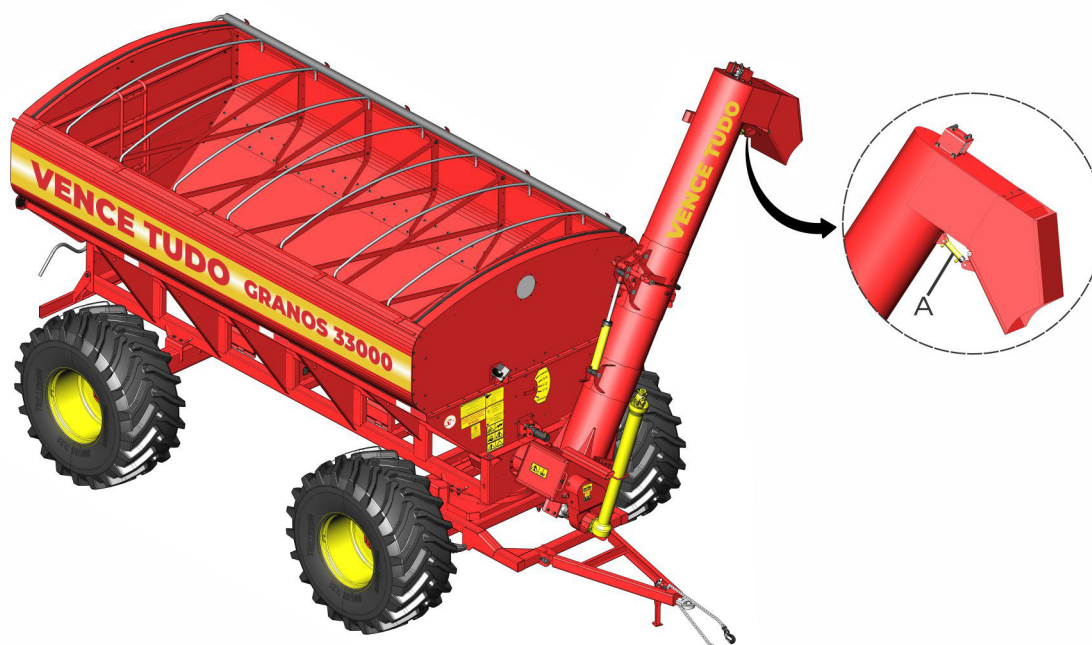


fig. 14

### 12.3.2. Gravitational unloading in hopper

The system for opening the lower penstocks is carried out manually, consisting of 4 units, distributed longitudinally.

Open the manual penstocks before opening the internal penstock through the hydraulic cylinder.

As an aid, the lower penstock of the pipe (B) can be released, according to figure 16, activating the sweeping helicoids through the power outlet, maintaining the rotation lower (max. 400rpm).

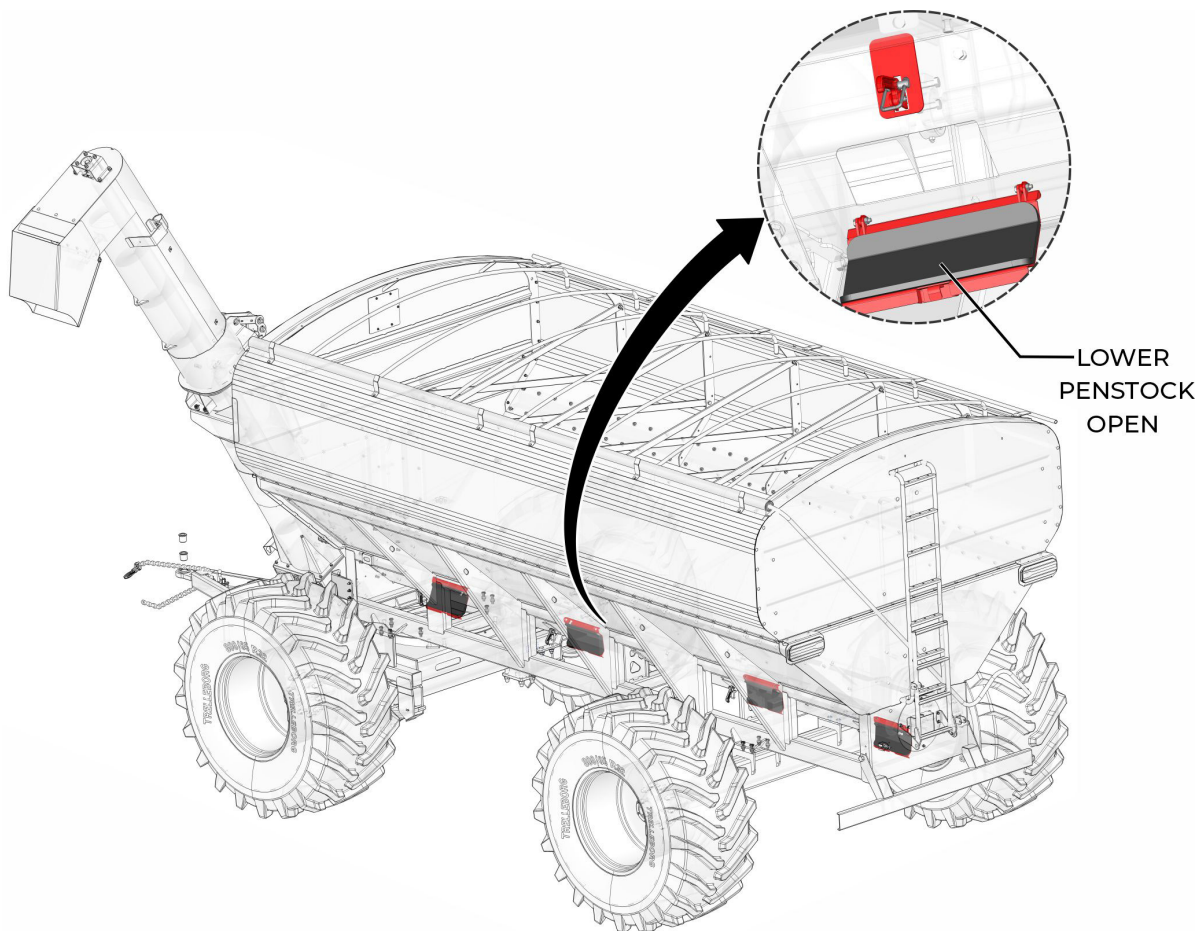


fig. 15

### 12.3.3. Discharge pipe cleaning

Located at the bottom of the discharge pipe, there are two manual penstocks, one upper (A) (fig.16) and one lower (B) (fig.16), which can only be opened when maintenance or cleaning is required. otherwise, the penstock must remain completely closed in order to prevent the escape of grains when the discharge tube is activated.

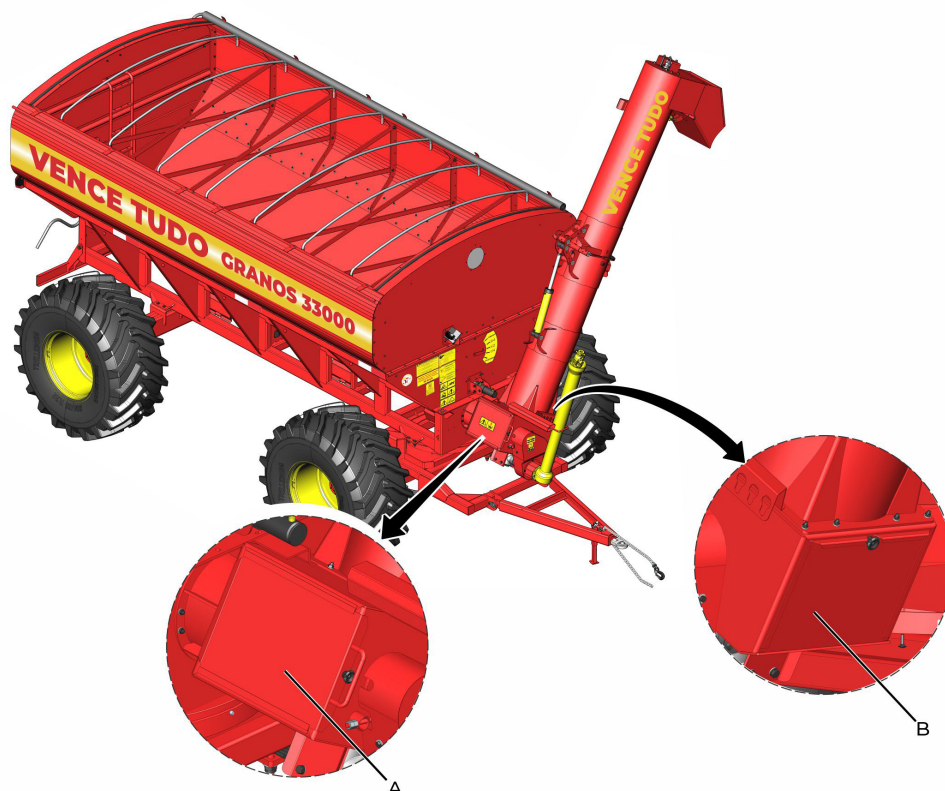


fig. 16





## 12.4. Easy tarp system

The easy tarp system is manually activated, and is intended to be practical and agile, to cover and protect the cargo of Granos, and it is carried out by only one operator.

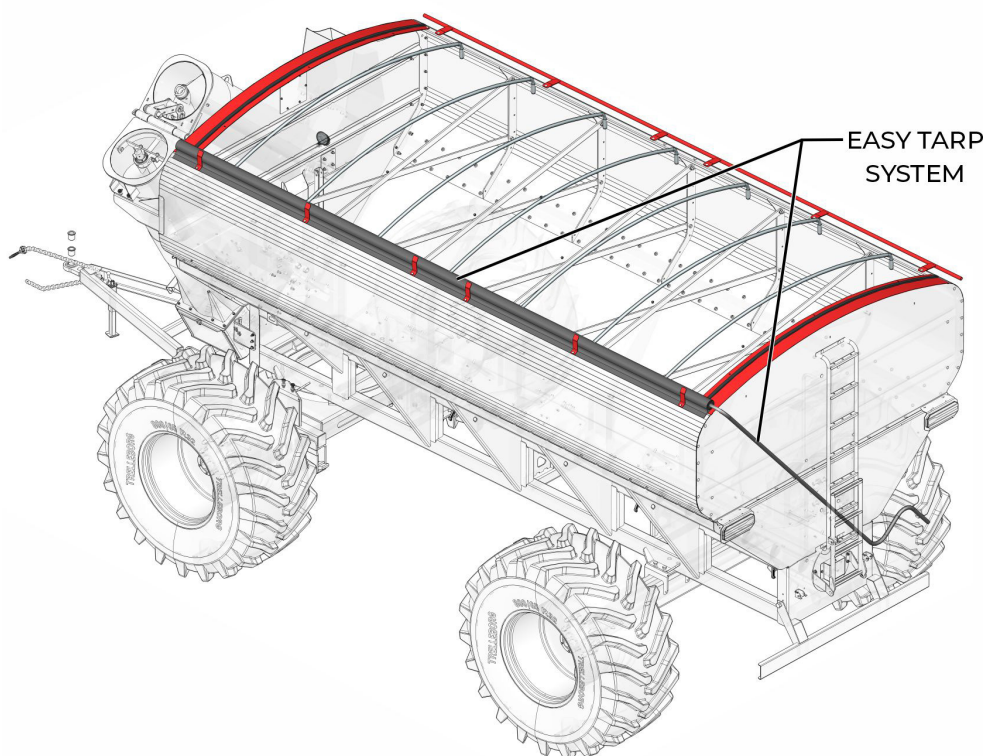


fig. 17

### **Operation:**

- Disconnect the crankshaft (A) (fig. 18) from the support.

NOTE: Ensure correct locking on the right side (B) (fig. 18), leaving the tarp well stretched so that it does not accumulate water, causing entry into the hopper or damage to the tarp itself.

- Move backwards with the crank, generating a certain angle in relation to the implement, until you can smoothly rotate.
- Turn the crank to its resting and locking point;
- Lock the crank again.

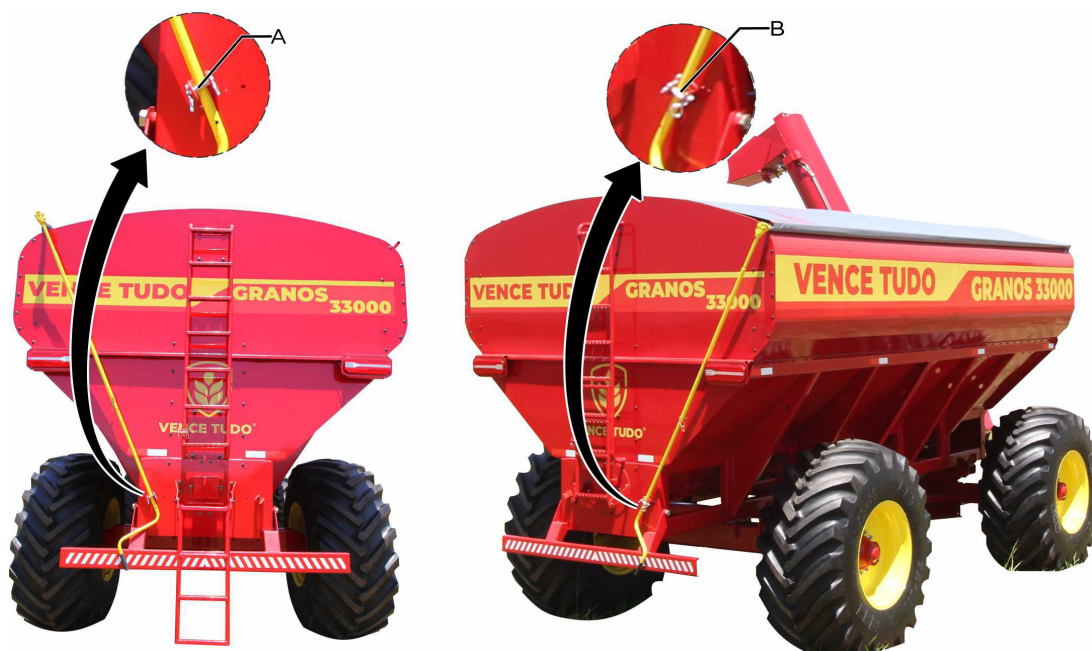


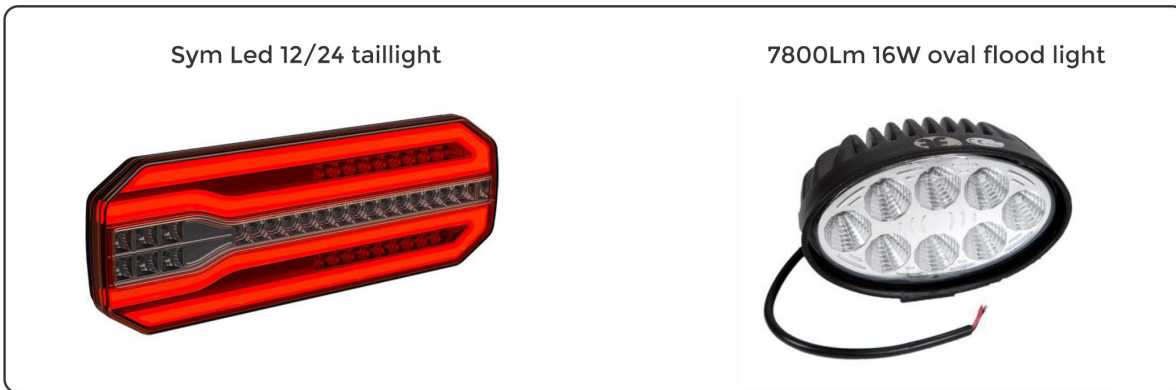
fig. 18





### 12.5. Lighting system

The lighting system of Granos carts is entirely in led, providing high quality lighting and low energy consumption. The taillights are universal, that is, they have no side for assembly.



Outlet assembly diagram:

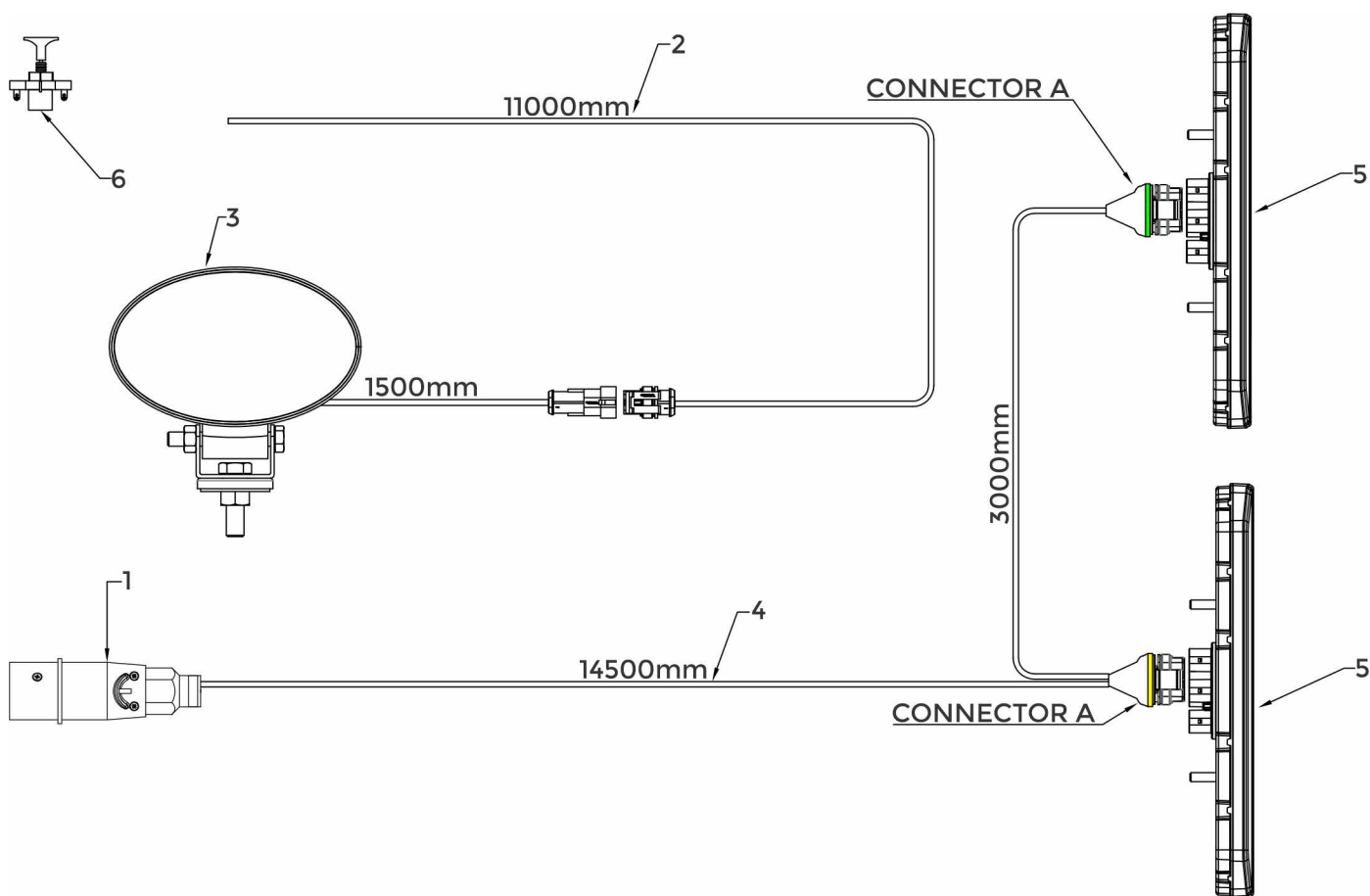


| TERMINAL NUMBER | FUNCTION        |
|-----------------|-----------------|
| 1               | GROUND (-)      |
| 2               | HEADLIGHTS      |
| 3               | LEFT DIRECTION  |
| 4               | BRAKES          |
| 5               | RIGHT DIRECTION |
| 6               | POSITION        |
| 7               | AUXILIARY (12V) |

table 08



Circuit:



- 1 - 7-pole male electrical outlet (ISO 1185)
- 2 - Work light whip
- 3 - 1800Lm 16W oval flood work light
- 4 - Tail lights whip
- 5 - 12 / 24v symled taillight
- 6 - Universal switch



## 12.6. Diagnosing Issues

| PROBLEM  | POSSIBLE CAUSE   | REMEDY  |
|--|--|---|
| Bushings   | Discharge interrupted with pipes still full;   | Do not force! Open the lower and pipe penstocks to release the grain, reducing the initial torque load, preventing damage to the transmission and other components; |
|  | Internal penstock opened before the helicoids are activated;                           | Close the penstock and proceed in the same way as the item above;   |
|  | Breakage of the rotating pin of the helicoids coupling;                                | Provide the replacement;  |
|  | Damage to any of the helicoids;  | Provide for correction or replacement if necessary;   |
| There is no product flow or it is not continuous | Foreign objects at the bottom of the hopper obstructing the supply of the capture box; | Check and remove the obstruction;   |
|  | Penstocks closed;  | Check the opening / closing indicator;  |
|  | Excess moisture in the grain or reservoir with some type of fluid;                     | Work with moisture levels recommended for harvesting; Clean and dry the hopper and discharge pipe;  |
| Penstocks do not open                            | Defective cylinder;  | Evaluate physical components and arrange for correction or replacement if necessary;  |
|  | Rupture of any guillotine opening component;   | Replace component;  |
| Overheated gear box                              | Low oil level;   | Check oil level and quality, in addition to periodic maintenance;   |
| Vibration or strange noises                      | Unbalanced helicoids;  | Evaluate helicoids fixations and alignment; Evaluate job rotation at TDP;   |
|  | Strange or inappropriate objects inside the hopper or in the discharge pipe;           | Remove such objects;  |
|  | Bearings, bolts, nuts or other loose components  | Check positioning and retighten components;   |
|  | Alignment of shaft terminals   | Check the alignment and assembly according to the instructions on page. 39  |
|  | Wear, excessive slack or lack of lubrication in the shaft joints                       | Check for slacks, wear and re-lubrication. If necessary, arrange for the replacement of damaged components;   |
|  | Wear or slack in the transmission chain and gears;                                     | Assess the physical state of the components, lubrication and chain tension.   |
|  | Wear of gears or shafts of the gear box  | Assess the box oil level and quality, as well as the physical state and gear of the gears;  |
| Damage to the grains                             | Unbalanced helicoids;  | Evaluate helicoids fixations and alignment; Evaluate job rotation at TDP  |
|  | Excessive TDP rotation;  | Work within the specified rotation;   |



| PROBLEM                               | POSSIBLE CAUSE                          | REMEDY  |
|---------------------------------------|---|---|
| Directional and lateral instability   | Tire inflation pressure;                | Check calibration according to specifications;                                    |
|                                       | Loose wheels;                           | Check nut tightness and possible damage or lack of nut and bolt;                  |
|                                       | Excessive load;                         | Use implement within the limits of load and volume capacity;                      |
|                                       | Speeding;                               | Obey the speed limit;   |
|                                       | Uneven load;                            | Load the cart evenly;   |
|                                       | Couple to tractor;                      | Lack of a reducing bushing or incorrect bushing in the hitch,resulting in slacks; |
| Leakage in hoses with fixed terminals | Insufficient tightening;                | Retighten carefully;  |
|                                       | Lack of sealing material on the thread; | Use thread sealant tape and carefully retighten;                                  |
| Leaks on quick hitches                | Lack of sealing material on the thread; | Use thread sealant tape and carefully retighten;                                  |
|                                       | Damaged repairs;                        | Replace repairs;  |
| Quick hitches do not couple           | Different types of hitches;             | Check the hitch pattern and replace it as needed;                                 |

table 09

### 13. OPTIONAL ITEMS

#### 13.1. Hydraulic brake kit (optional)

Granos has as an optional sales item the drum brake kit (A) hydraulically driven, which is installed on the rear axle of the implement.

The cart brake must be set to assist braking, and should not be used as the main brake.

Follow the instructions below to install the kit, if it did not come assembled from the factory:

- Raise and chock the rear of Granos so that all lift assemblies can be removed;
- remove the lift assemblies (B);
- Remove the hubs (C);

- Add the 7 "brake set (D) and fix it to the rear axle flanges;

Reassemble the cubes (C) and fix them;

- Add the brake drum (A);

- Assemble the cylinders (E);

- Pass and attach the hoses to the chassis. After that, connect them;

- When installing the brakes, keep the adjusting bolts completely loose. The adjustment of the braking pressure will be made later;

- Reassemble the lift assembly by tightening the nuts according to the torque specifications.



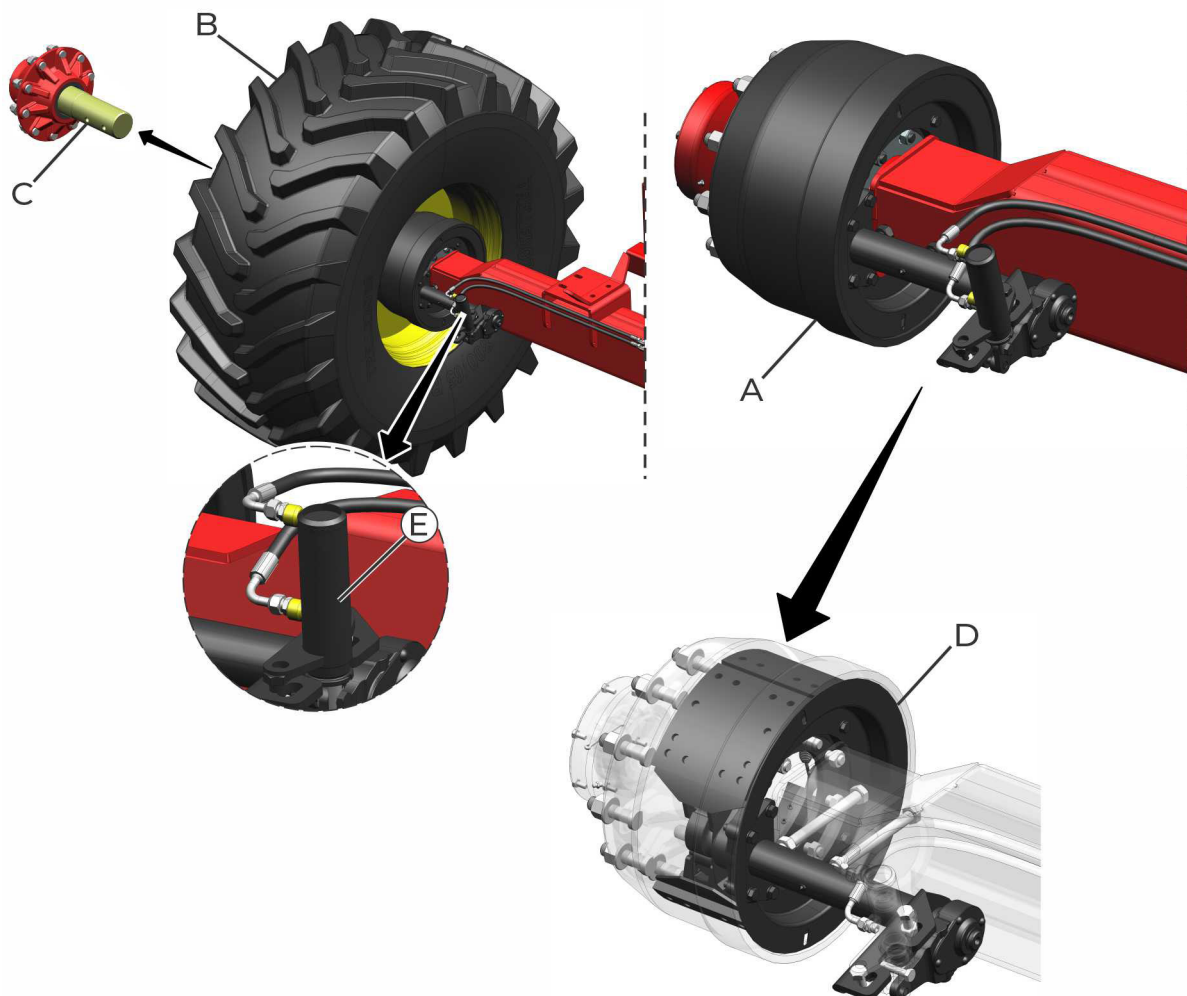


fig. 19

**Brakes Regulation:**

- The adjustment is made through the hex head bolt (A) (fig. 20), positioned at the bottom of the set. Tightening must be carried out progressively, until the desired braking is obtained. Make sure the wheel turns loose and lightly when the brake is not applied.

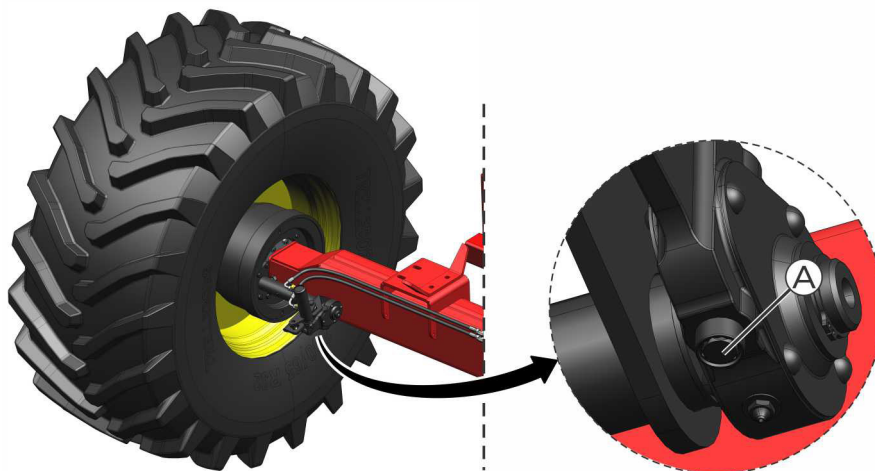


fig. 20

**Operation:**

- The activation and release of the brakes is carried out hydraulically, that is, it is necessary that the hoses are correctly coupled to the tractor's remote control (pressure and return). To actuate, push the lever gently and progressively. To release, pull the lever back, returning the oil to the tank, releasing the brakes.



## 14. SERVICING AT THE END OF THE HARVESTING PERIOD

### 14.1. Lubrication

Proper grease-based lubrication consists of not allowing excess or lack of material in any place, as both situations impair machine operations.

A regular supply combined with an adequate quantity of grease are basic conditions to achieve greater efficiency of bearings and joints. The grease supply interval should be shorter when operating conditions are considered severe (heavy loads, constant shocks from the bearings, influence of the environment with high temperatures, high dust content and contact with water).

With a grease gun or pump, lubricate the lubrication points so that the new grease enters and expels the deteriorated grease portion. Before lubricating, clean the grease nipples with a cloth and, if defective, replace them.

### 14.2. Implement cleansing and conservation

- **Consequences of good or bad use and conservation**

To extend the useful life and appearance of your machine and its components, thus maintaining its resale value for a longer time, here is important information:

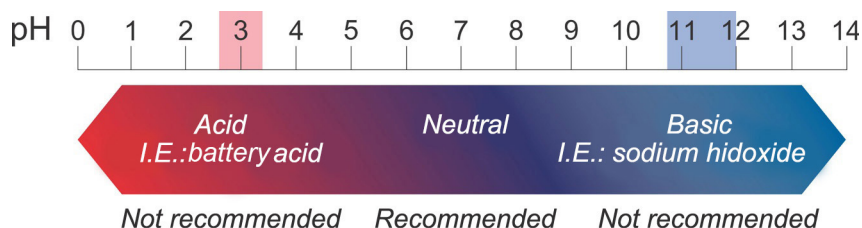
- Wash and clean all cart components during and at the end of the harvesting season.
- Remove any product residues that may have remained in the hopper and pipes.
- Use neutral products to clean the machine, following the safety and handling guidelines provided by the manufacturer.
- Always carry out maintenance in the periods indicated in the Operation Manual.



**The way the implement is used and the care taken by the customer, make the difference for its good conservation.**

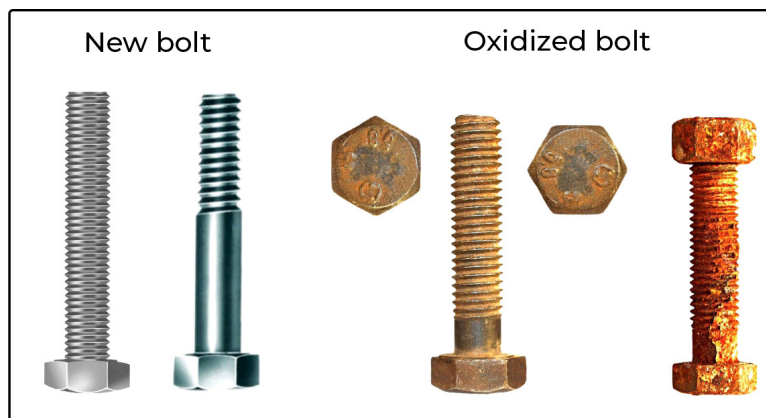
#### Important actions for the conservation of your machine:

- Be careful when washing with high pressure. Do not direct the water jet directly at the connectors and electrical components, also isolate all electrical components.
- Only use water and NEUTRAL detergent that has pH equal to 7.
- Apply the product, strictly following the manufacturer's instructions, on the wet surface and in the correct sequence, respecting the application and lifting time.
- Stains and dirt not removed with the products, must be removed with the help of a sponge.
- Rinse the machine with clean water to remove all chemical product residue.
- The use of the following elements is not recommended:
  - Detergents with basic active principals (pH over 7), since they can damage/stain the machine's paint.
  - Detergents with acid active principals (pH under 7), since they act as zinc plating (the protective layer against oxidation) strippers/removers.





See below a new bolt and its oxidation state after applying chemicals with an acid active ingredient (pH less than 7), rinsed and exposed to the weather:

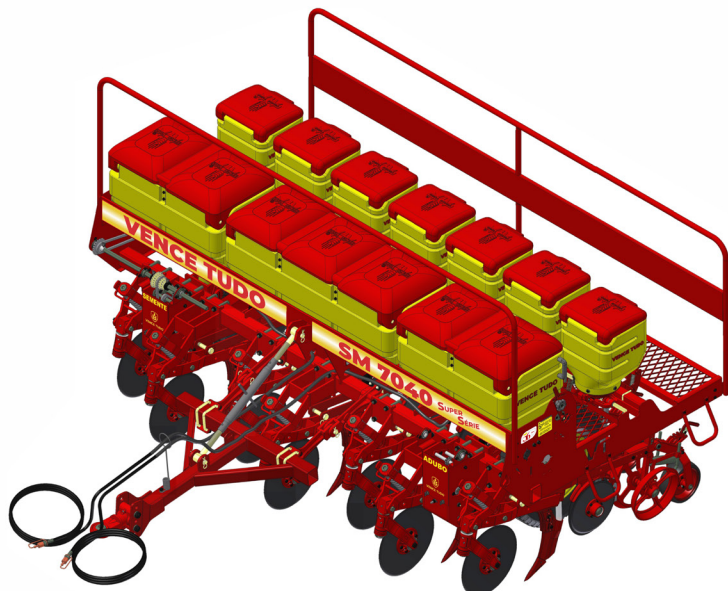
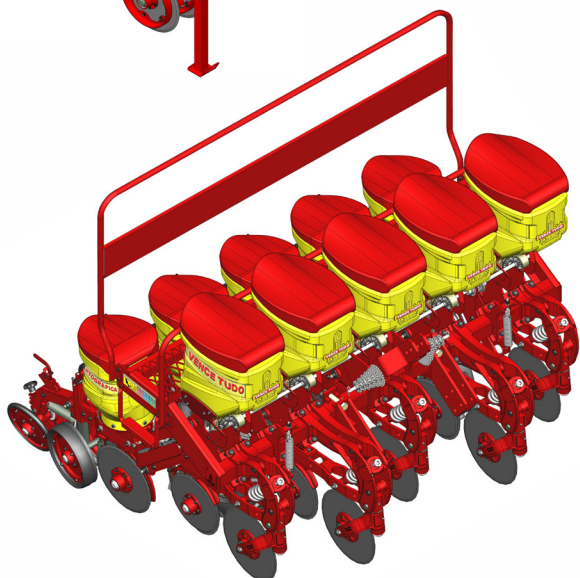
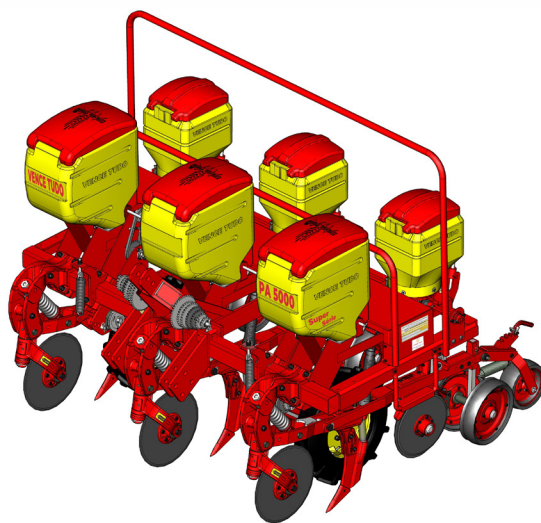
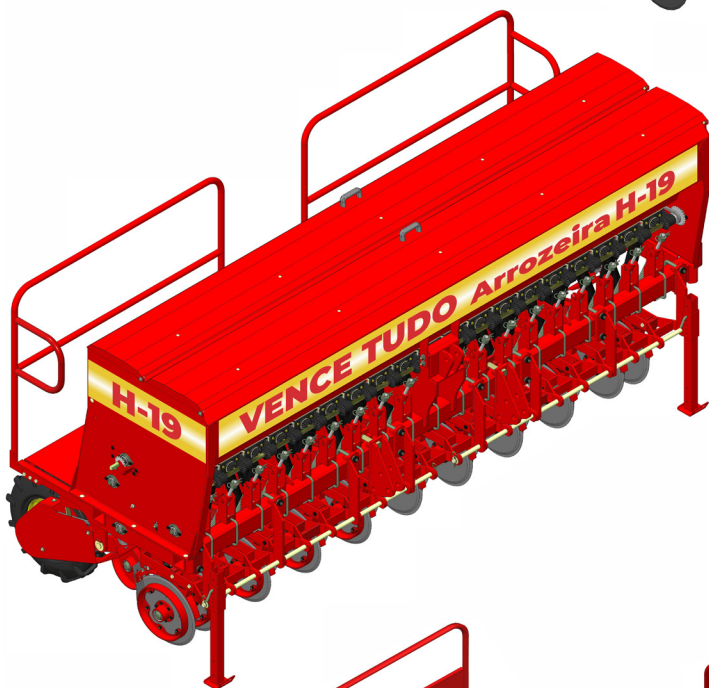
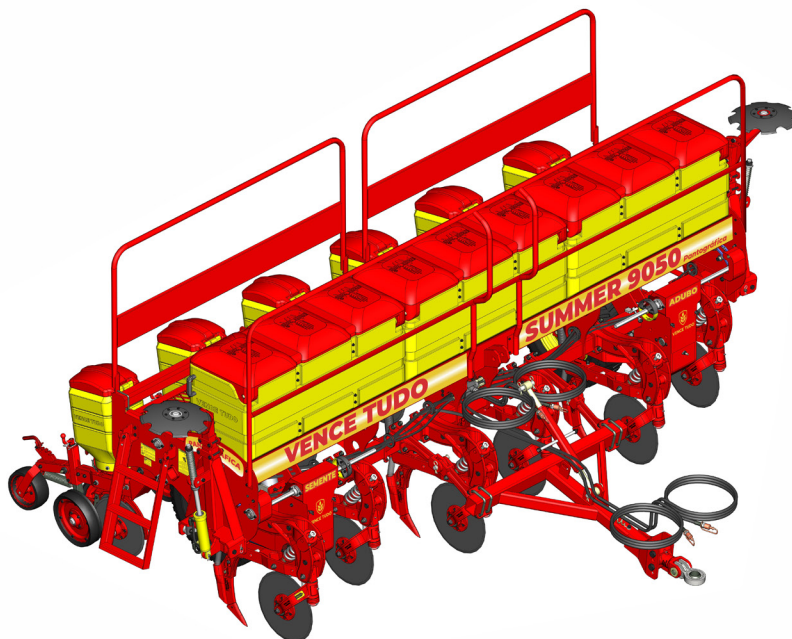


- Leave the machine to dry in the shade, so it doesn't accumulate water in its components. Drying too fast can cause stains to the painting.
- Lubricate all chains and grease nipples according to the recommendation in the Operating Manual once the machine is dry.
- Pulverize the entire machine with protective oil, especially the zinc plated parts, following the manufacturer's application guidelines. The protective oil also keeps dirt from adhering to the machine, facilitating further cleaning.
- Follow the cure time (absorption) and application intervals according to the manufacturer's recommendations.

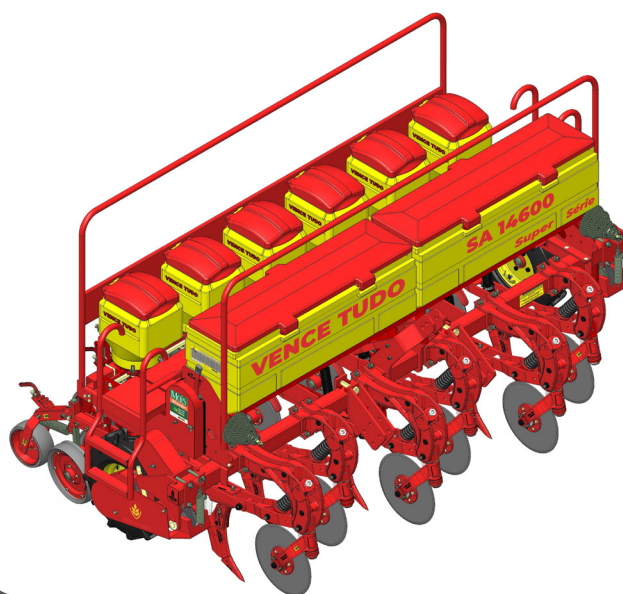
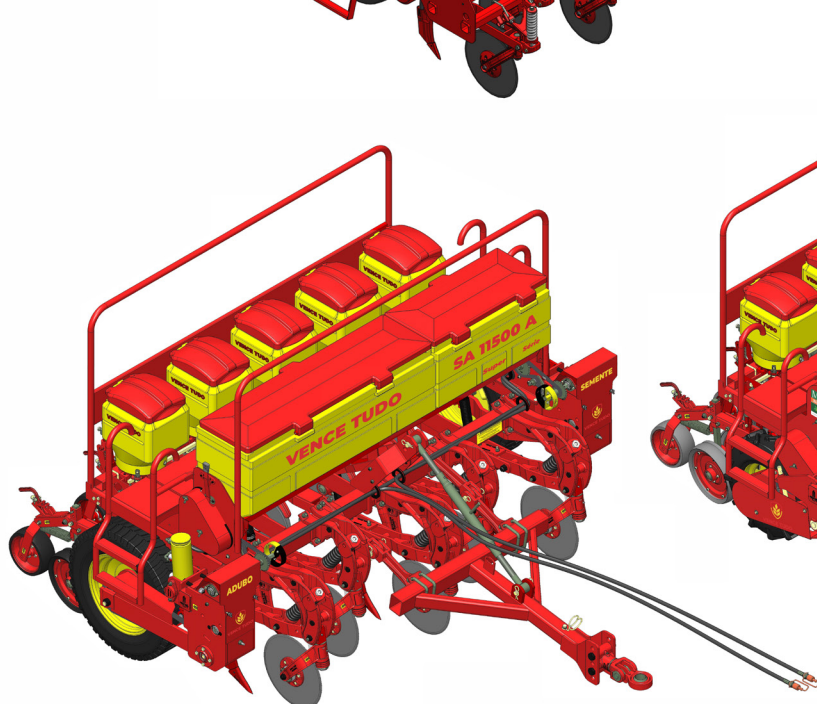
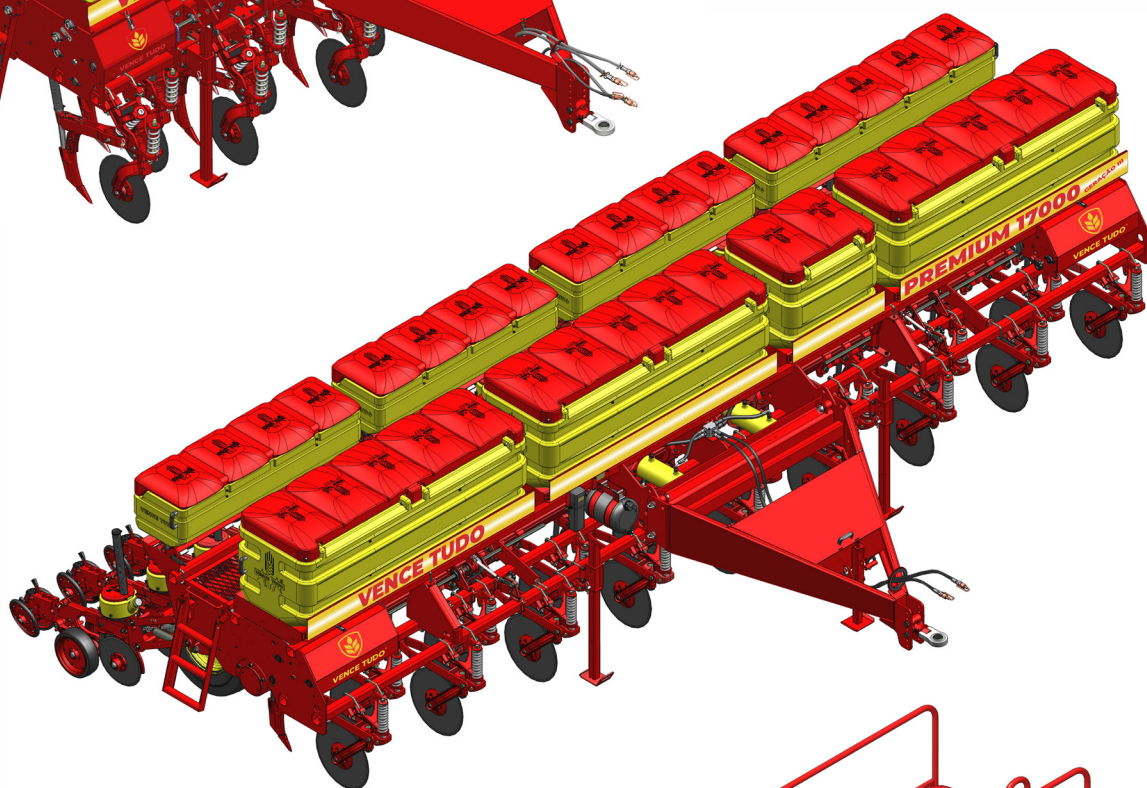


## VENCE TUDO PRODUCTS

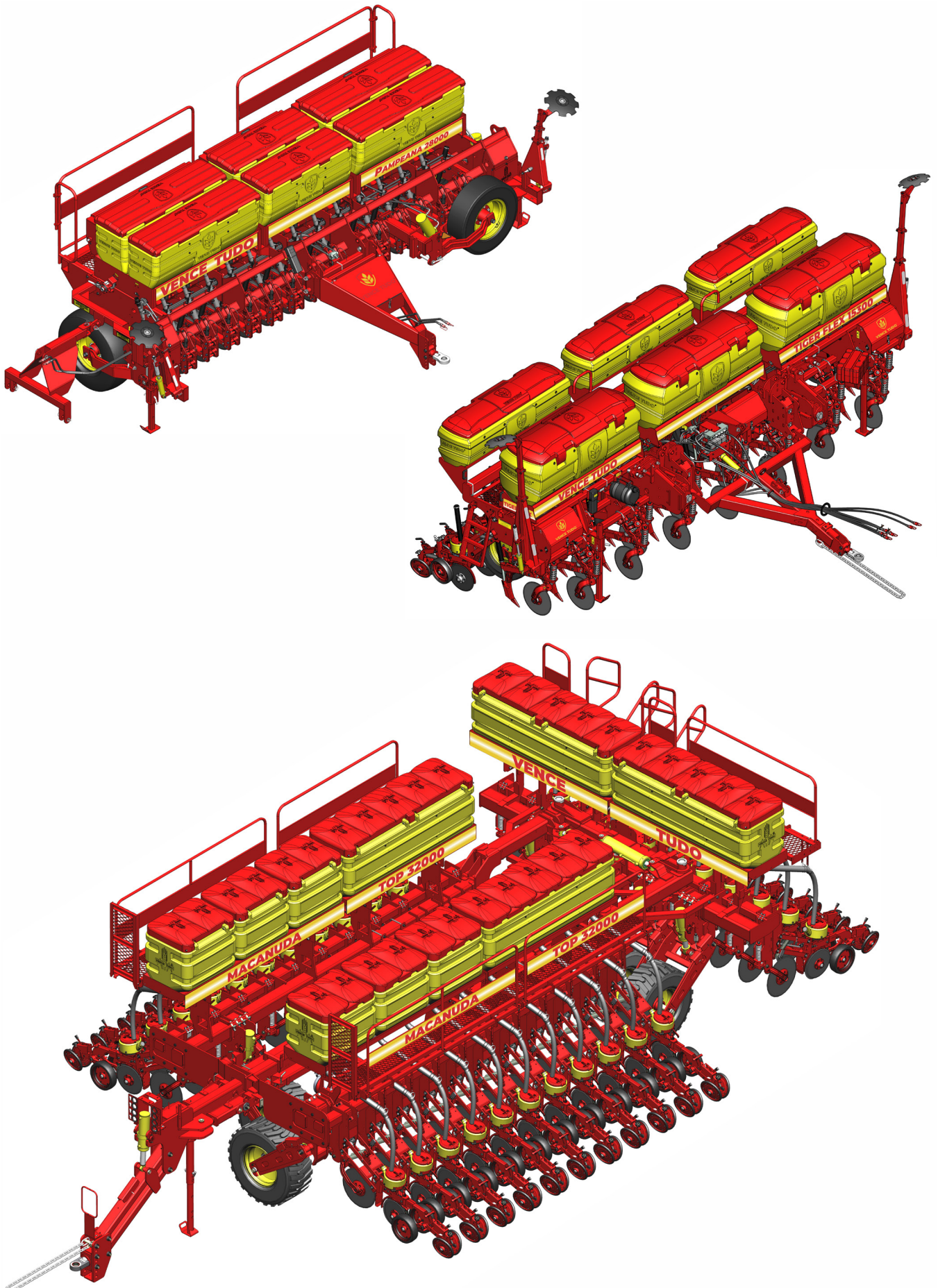
### 1. PLANTING:





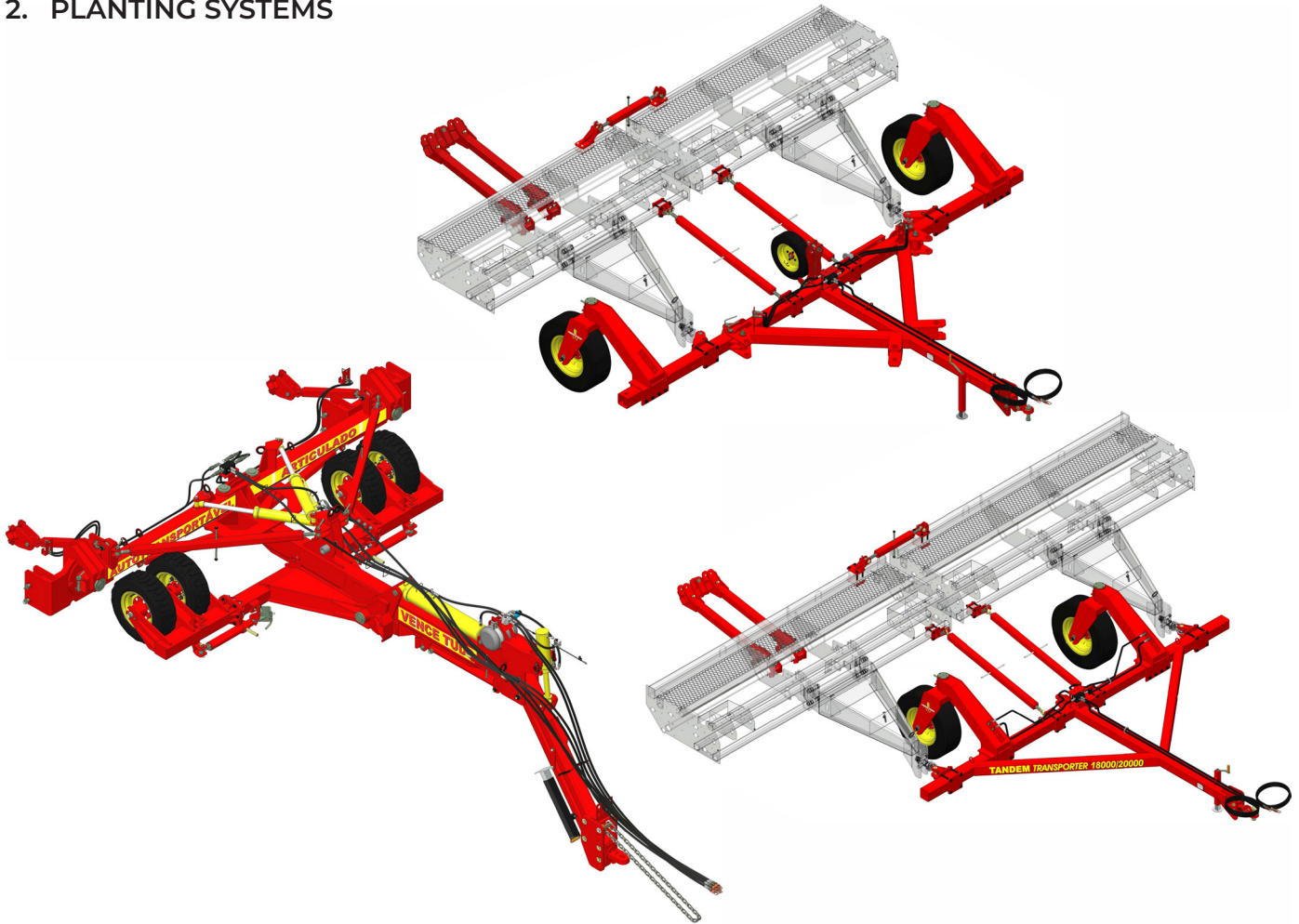








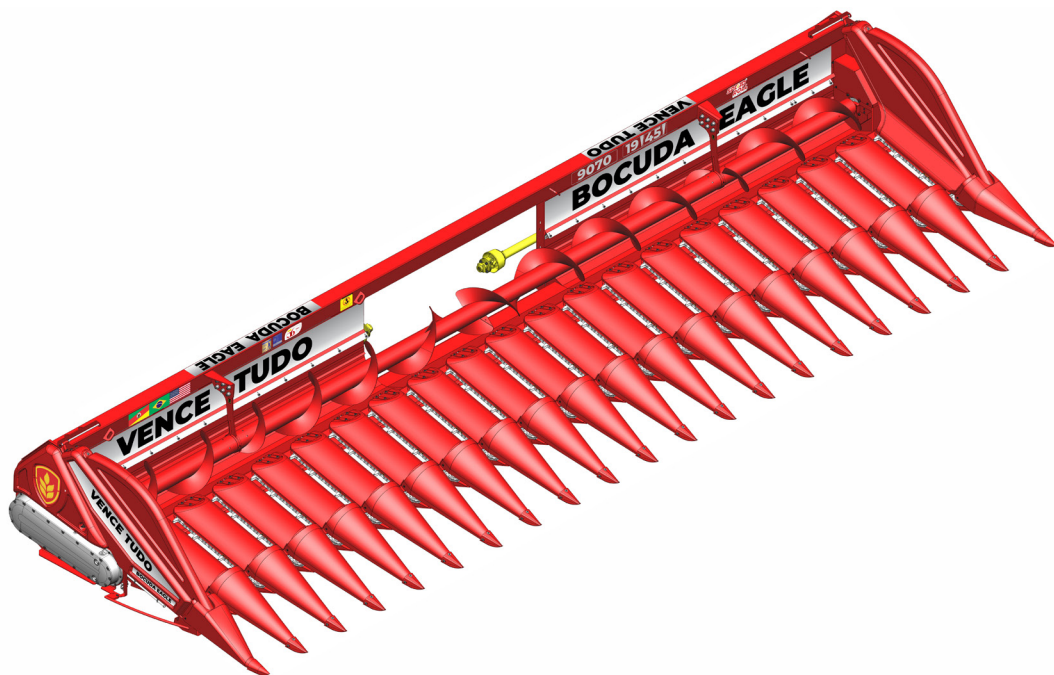
## 2. PLANTING SYSTEMS



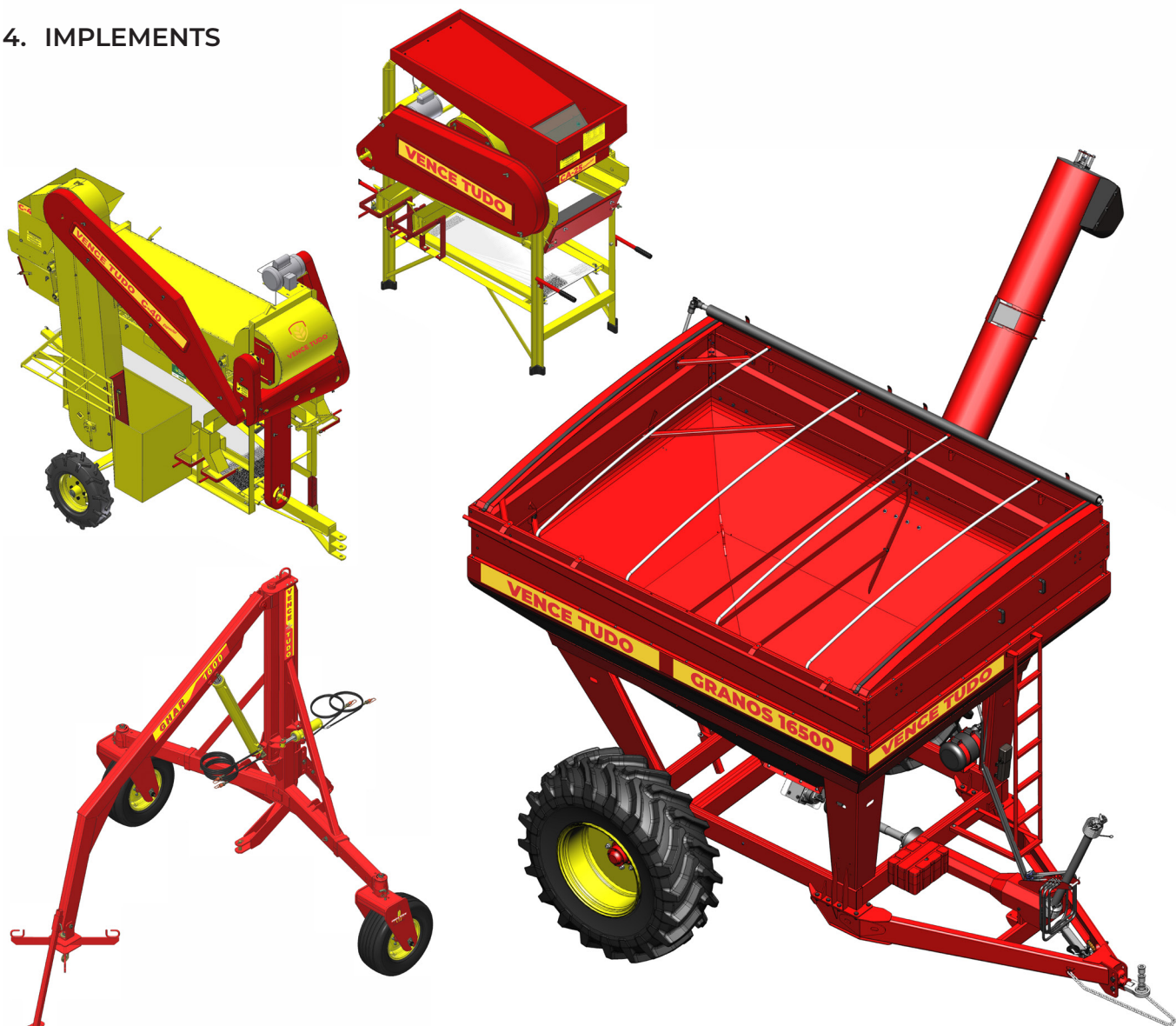
## 3. HARVEST







#### 4. IMPLEMENTS





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