

SCB

Serie 5 Tynes



Instruction Manual



Baldan

www.baldan.com.br



INTRODUCTION

We appreciate your purchase and congratulate you for the excellent choice you just made because you have purchased a product manufactured with technology from **BALDAN IMPLEMENTOS AG-RÍCOLAS S/A**. This handbook will guide you through the procedures that are necessary since its acquisition up to the operating procedures of use, security and maintenance.

The **BALDAN** ensures that have delivered this farming implement to the dealer in perfect conditions.

The dealer is responsible for the custody and maintenance of this farming implement and also for the assemblage, retightening, lubrication and overhaul.

In the technical delivery, the dealer must advise the user on its maintenance, security, its obligations under any technical assistance, the strict observance of the guarantee and reading the instruction handbook.

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

We reiterate the need for careful reading of the guarantee certificate and observance of all items in this handbook, as doing so, the useful life of your farming implement will increase.



Instruction Manual



INDEX

Introduction	3
Index.....	5
Warranty.....	7
Product warranty	7
General information.....	8
Owner	8
Safety rules	9
Warnings	10
Components.....	11
Technical specifications.....	13
Assembly	14
Assembling the screwed structure.....	14
Assembling the subsoiling rods.....	15
Arrangement of rods in the chisel.....	15
Assembling the coupling header	16
Assembling the wheel.....	16
Assembling the hydraulic system	17
Assembling the cutting discs	17
Assembling the harrowing roller.....	18
Coupling the chisel.....	19
Coupling the scb-cr.....	19
Coupling the scb-h.....	19
Centering the chisel	20
Leveling the chisel	20
Adjustments and operations	21
Adjusting the chisel depth	21
Adjusting the automatic disarming load of rods.....	21
Operations	22
Disarm and reset of rods.....	22
Transport.....	23
Preparing the chisel for transport	23





Maintenance	24
<i>Tire pressure</i>	<i>24</i>
<i>Lubrication</i>	<i>24</i>
Maintenance	25
<i>Grease points</i>	<i>25</i>
<i>Lubricate every 10 hours of work</i>	<i>25</i>
<i>Lubricate every 60 hours of work</i>	<i>25</i>
Care	26
<i>Adjusting the bearings</i>	<i>26</i>
<i>Care</i>	<i>26</i>
<i>General cleaning</i>	<i>26</i>
Identification	27

WARRANTY

PRODUCT WARRANTY

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

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

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

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

After analyzing the items replaced by the **BALDAN** Technical Assistance, and if the conclusion is that it is not a case of warranty, then the costs related to the replacement will be supported by the dealer; as well as the material costs, travel including stays and meals, accessories, lubricant used and other expenses deriving from the request to the Technical Assistance, in this case, **BALDAN** is authorized to make the billing on behalf of the dealer's name.

Any repair done by the dealer on the product within the warranty period, will only be authorized by **BALDAN** upon prior presentation of the budget describing the parts and the works to be performed.

Is excluded from this warranty the product that is repaired or modified in workshops that do not belong to the **BALDAN** dealers network, as well as the application of non-genuine parts or components on the user product.

This warranty will become void if it is determined that the defect or damage is the result of misuse of the product, failure to follow the instructions or the inexperience of the operator.

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

Defects in workmanship and or material, object of this warranty shall not be, under any circumstances, grounds for the termination of the contract of sale, or for compensation of any nature.

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



OWNER

- 01 - **BALDAN IMPLEMENTOS AGRÍCOLAS S/A**, will not be responsible for any damage caused by an accident due to the use, transport or improper or incorrect storage of your implement, whether in case of negligence and/or inexperience of any person.
- 02 - Only persons who have the full knowledge of the tractor and the implement must perform their transportation and operation.
- 03 - **BALDAN** will not be responsible for any damage caused due to unpredictable situations or beyond the normal use of the implement.

The mishandling of this equipment can result in serious or fatal accidents. Before switching on the equipment, carefully read the instructions of this manual. Make sure that the person responsible for the operation is instructed on the proper and safe handling of the equipment. Also make sure that the operator has read and understood the product instructions manual.

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



This Regulatory Norm aims to establish the principles to be observed in the organization and the work environment, in a way consistent with the planning and development of the agriculture, livestock, forestry, forest exploitation and aquaculture activities regarding the safety and health and the working environment

IF YOU ARE THE OWNER OR THE OPERATOR OF THE EQUIPMENT.
Read and carefully follow the NR-31 provisions.

*For more information, visit the website and read the complete NR-31.
<http://portal.mte.gov.br/legislacao/normas-regulamentadoras-1.htm>*

GENERAL INFORMATION

SAFETY RULES



This symbol indicates important safety warning. Whenever you find it in this handbook, carefully read the message that follows and be aware as for the possibility of personal injury.

⚠ ATTENTION



- Read the instructions handbook carefully to learn more about recommended safety practices.

⚠ ATTENTION



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

⚠ ATTENTION



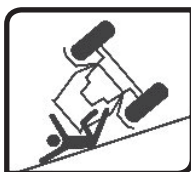
- Do not operate the tractor if the front is light. With a tendency to rise, add weights on the front or front wheels.

⚠ ATTENTION



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

⚠ ATTENTION



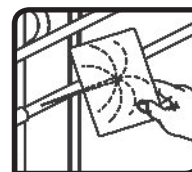
- There are risks of serious injury by tilting when working on slopes.
- Do not use excessive speed.

⚠ ATTENTION



- Keep yourself away from the active elements of the machine (discs), they are sharp and can cause accidents.
- When carrying any service on discs, use safety gloves on hands.

⚠ ATTENTION



- When looking for a possible leak in hoses, use a piece of cardboard or wood, never use your hands.
- Avoid the incision of fluid on skin.

⚠ ATTENTION



- The hydraulic oil works under pressure and can cause serious injuries, in case of leaks. Periodically check the condition of hoses.
- If there are signs of leaks, replace them immediately.
- Before connecting or disconnecting the hydraulic hoses, relieve the system pressure, triggering the command with the tractor off.



- 01-⚠ When operating the agricultural wagon, do not allow people to stay close to it or on it.
- 02-⚠ When performing any assembly or disassembly service, use gloves to protect your hands.
- 03-⚠ Before connecting or disconnecting hydraulic hoses, relieve the system pressure triggering the command with the tractor turned off.
- 04-⚠ Periodically check the hydraulic hoses conditions. If there is evidence of oil leaks, immediately replace the hose because the oil works under high pressure and can cause serious accidents.
- 05-⚠ Do not wear loose clothing as they can curl up on the equipment.
- 06-⚠ When turning the tractor engine on, by properly seated in the operator's seat and aware of the correct and safe management both of tractor and implement. Always put the shifter in neutral, turn off the engine and put the hydraulic command in the neutral position.
- 07-⚠ Do not turn on the engine indoors or without adequate ventilation, because the exhaust fumes are harmful.
- 08-⚠ When maneuvering the tractor to the implement hitch, make sure to have the necessary room and that there is nobody very close. Make maneuvering in low gear and be prepared to brake in an emergency.
- 09-⚠ Do not make adjustments with the implement in operation.
- 10-⚠ When working on slopes, proceed with caution when trying to maintain the necessary stability. In case of unbalance, reduce the throttle and turn the wheels of the tractor to the side of the slope.
- 11-⚠ Always drive the tractor at speeds compatible with safety, especially when working on uneven ground or slopes. Keep the tractor always engaged.
- 12-⚠ When driving on roads, keep the tractor brake pedals interconnected and use safety signs.
- 13-⚠ Do not operate the tractor if the front is light. If there is a tendency to rise, add weights on the front or front wheels.
- 14-⚠ Leaving the tractor, put the shifter in neutral and apply the parking brake.
- 15-⚠ Alcoholic beverages and some medications can cause loss of reflexes and change the physical conditions of the operator. Therefore, never operate this equipment, under the influence of these substances.
- 16-⚠ Read or explain all the procedures above to the operator who cannot read.

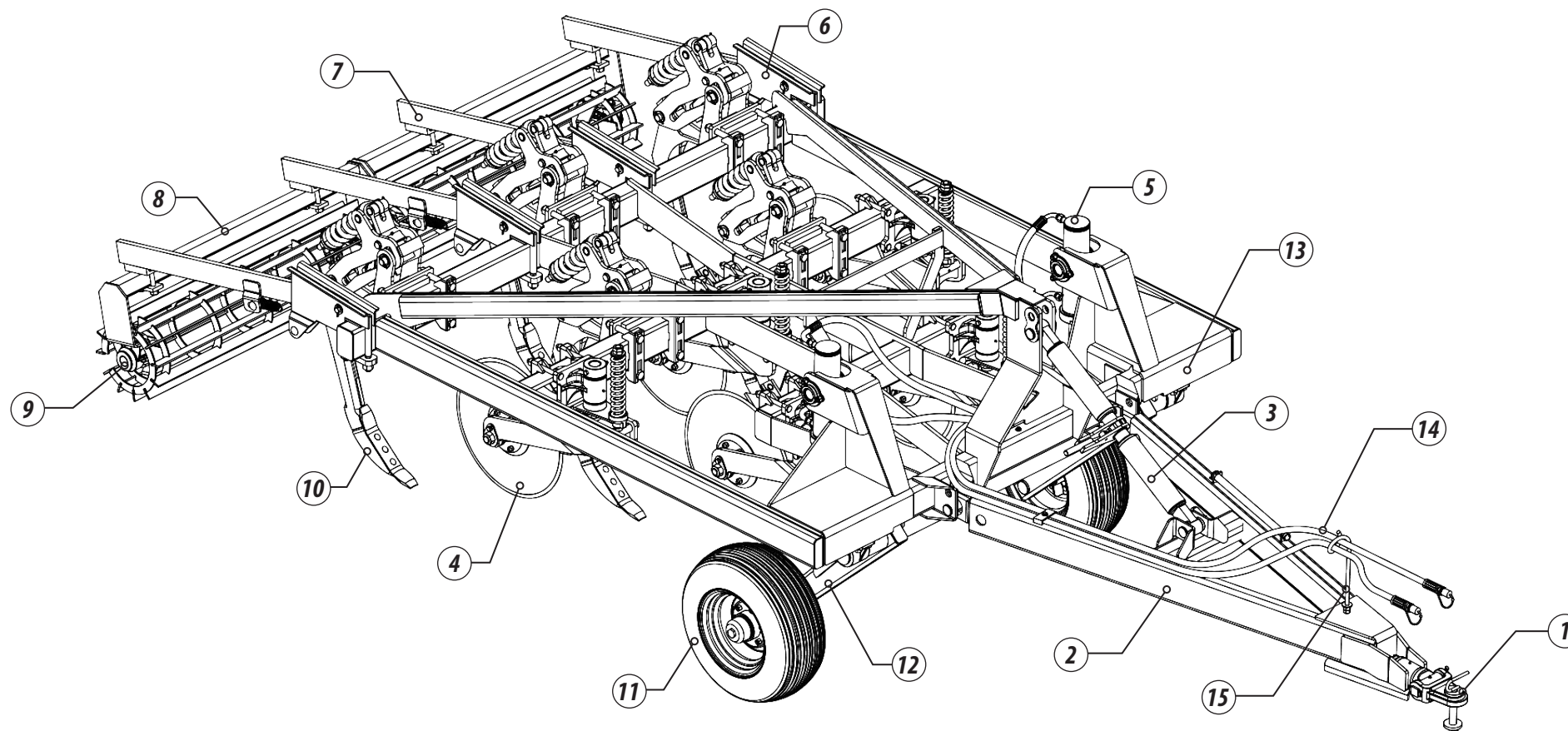
If case of doubt, ask the After-sales.
Phone: 08000-152577 / E-mail: posvenda@baldan.com.br

WARNINGS

COMPONENTS

SCB-CR - BALDAN REMOTE CONTROL SUGARCANE CHISEL

Figura 1



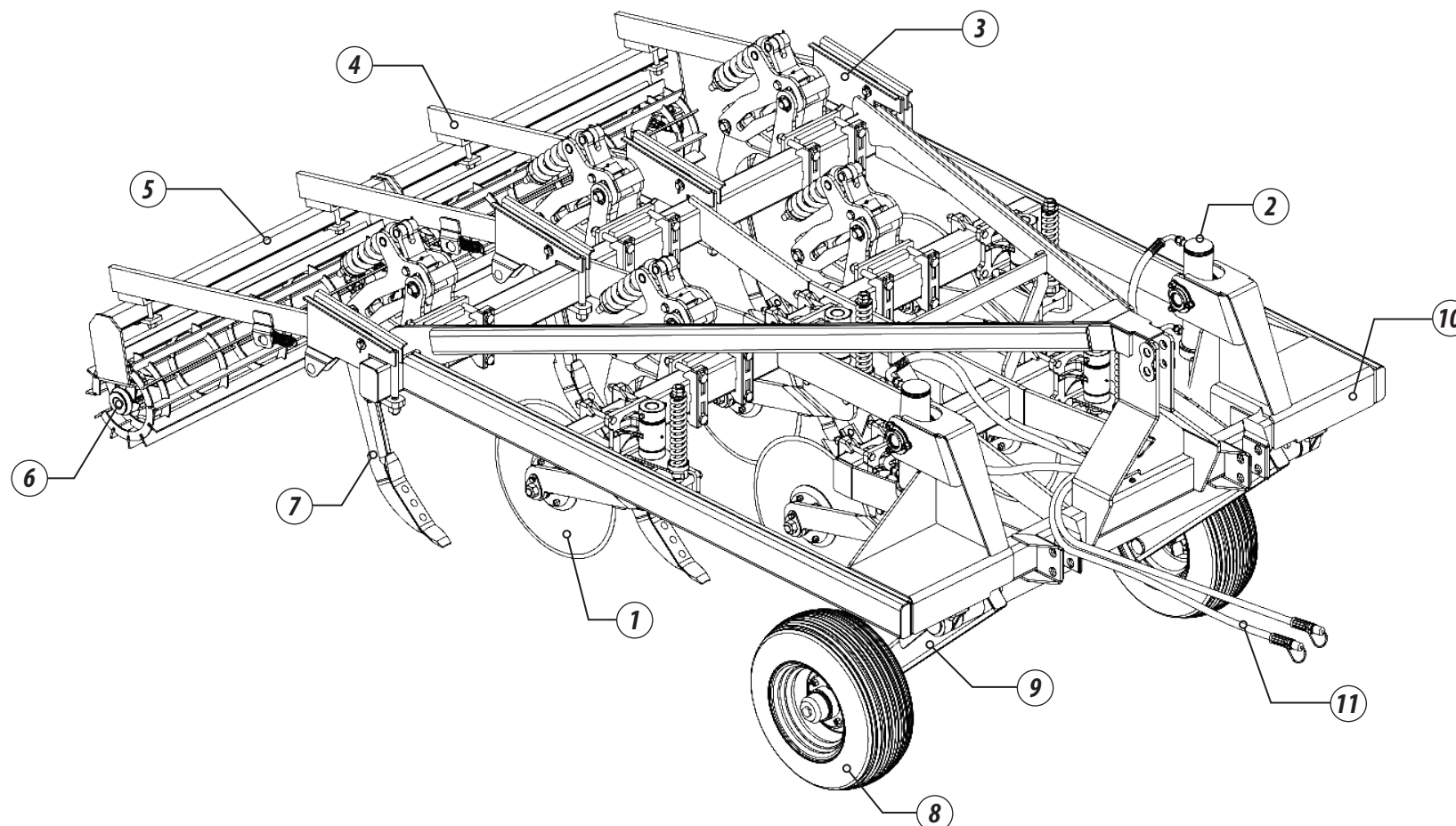
- 1- Coupling shackle
- 2- Coupling Header
- 3- Header regulator
- 4- Complete cutting disc
- 5- Hydraulic Piston

- 6- Harrowing roller fixation bracket
- 7- Harrowing roller oscillating bar
- 8- Harrowing roller
- 9- Harrowing roller bearing
- 10- Rod with disarm automatic and reset

- 11- Complete wheel
- 12- Wheel articulation support
- 13- Frame
- 14- Hydraulic hoses
- 15- Hydraulic hoses support

SCB-H - BALDAN HYDRAULIC SUGARCANE CHISEL

Figura 2



- 1- Complete cutting disc
- 2- Hydraulic Piston
- 3- Harrowing roller fixation bracket
- 4- Harrowing roller oscillating bar

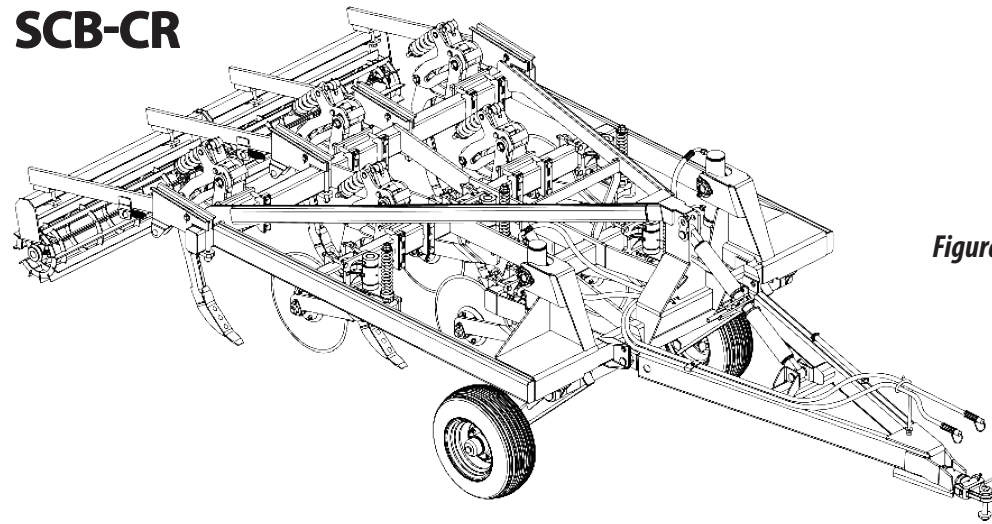
- 5- Harrowing roller
- 6- Harrowing roller bearing
- 7- Rod with disarm automatic and reset
- 8- Complete wheel

- 9- Wheel articulation support
- 10- Frame
- 11- Hydraulic hoses

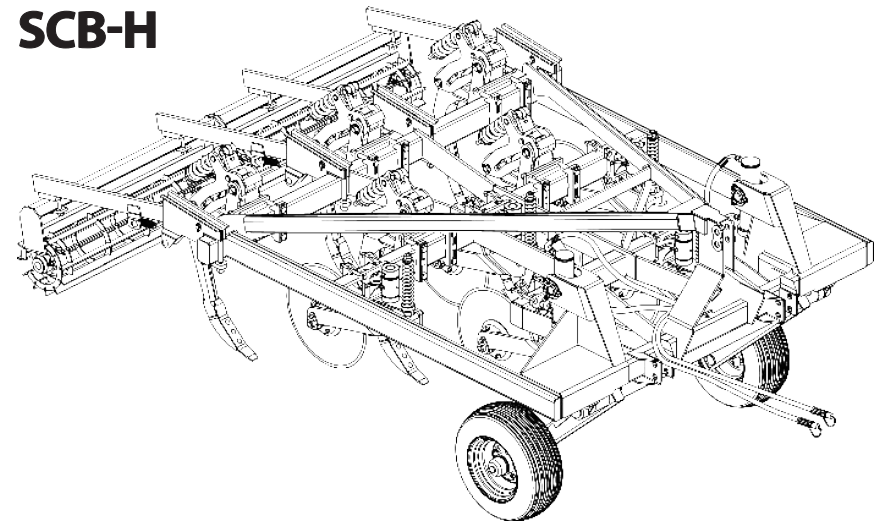
COMPONENTS

TECHNICAL SPECIFICATIONS

SCB-CR



SCB-H



Figuras 3

Model	No. rods	No. discs	Total length	Approx. weight	Tractor power	
					Tyres	Crawler
SCB-CR	5	5	6800 mm	3400 kg	180 - 240 hp	150 - 210 hp
SCB-H	5	5	4400 mm	3050 kg	240 - 270 hp	150 - 210 hp

Table 1

- Cutting disc 26" x 6mm
- Espacing between rods / discs 375 | 450 | 510 mm
- Total width 2940 mm
- Total height 1950 mm
- Tyres 11L-15



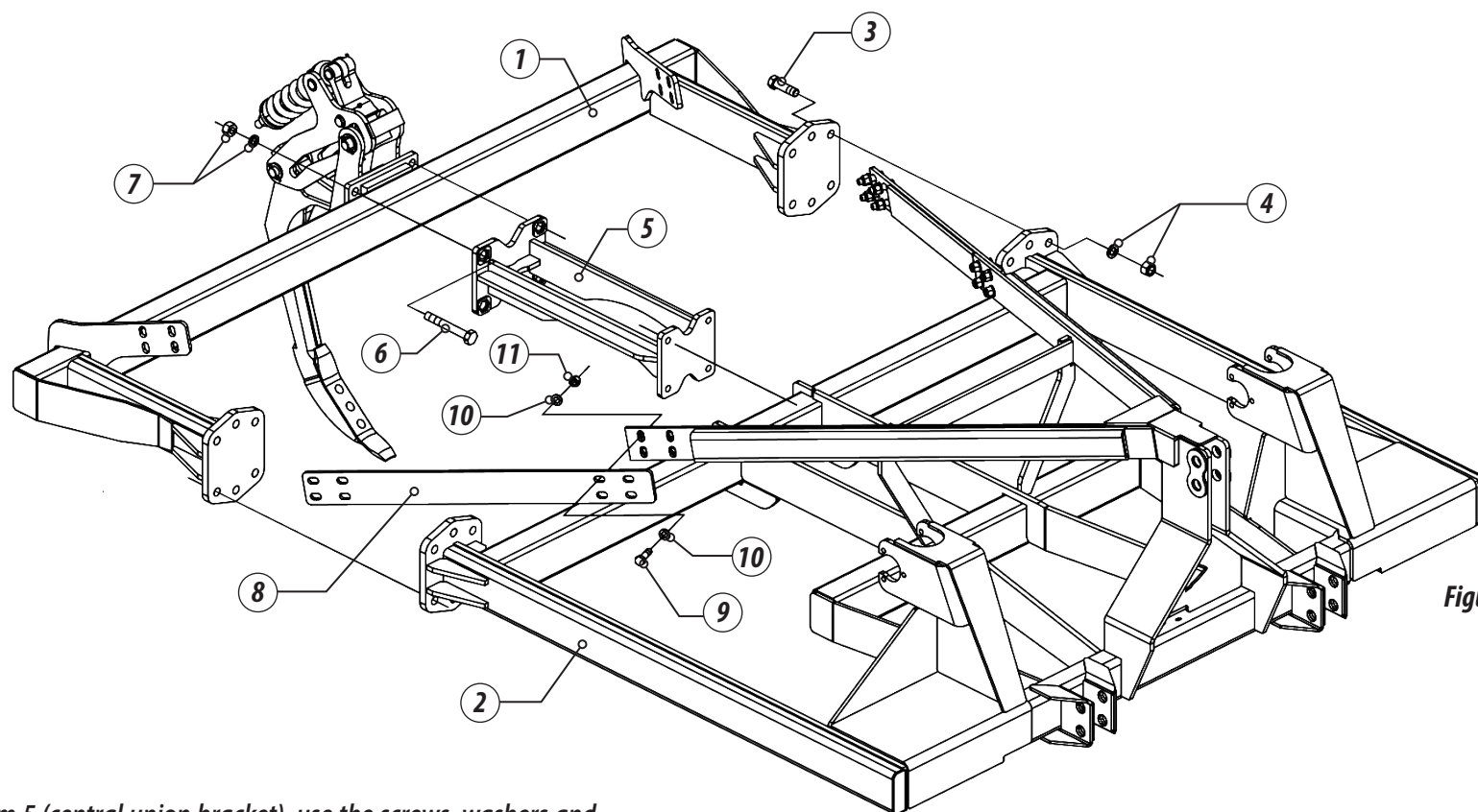
IMPORTANT

Baldan reserves the right to change technical specifications of this product without previous notice.
The technical specifications are approximate and informed under normal working conditions.

- Check the parts with the parts list that is inside the packaging box.
- The simplest and safest procedure to assemble the chisel is to use trestle or the like.

ASSEMBLING THE SCREWED STRUCTURE

01 - Attach the rear structure (1) in the front structure (2) using the screws (3), washers and nuts (4), then, attach the central union bracket (5) through screws (6), washers and nuts (7). Attach the stabilizing support (8) through the screws (9), flat washers (10) and nuts (11).



By fixing item 5 (central union bracket), use the screws, washers and nuts, as this support will be fixed along with the rod.

ASSEMBLY

ASSEMBLY

ASSEMBLING THE SUBSOILING RODS

02 - Insert the rods (1) in the frame (2), put the clamps (3), the screws (4) and lock with washers and nuts (5).

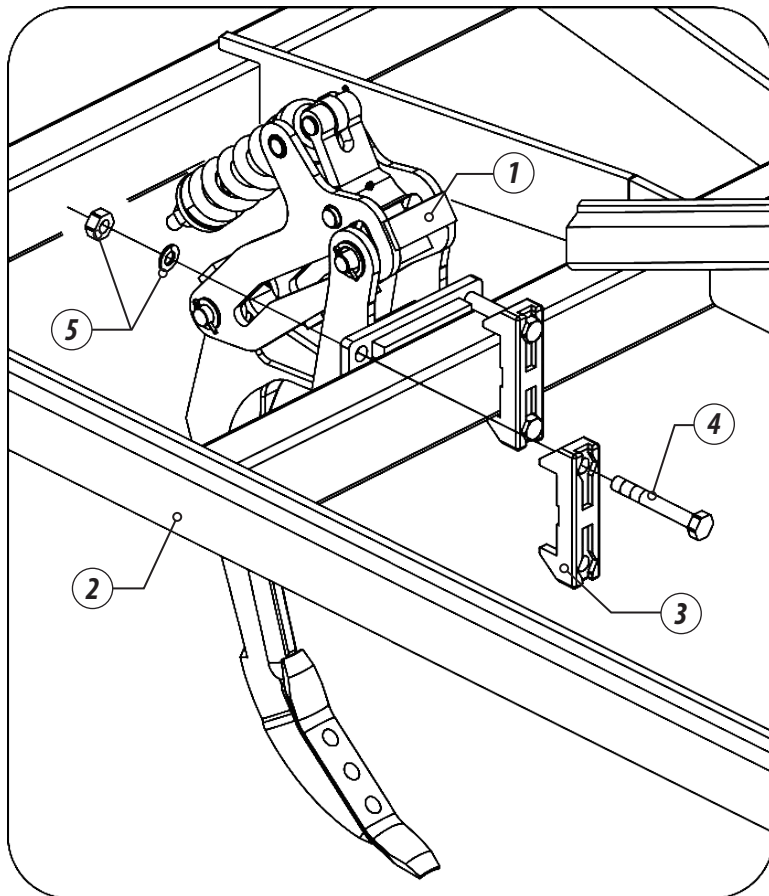


Figura 5

ARRANGEMENT OF RODS IN THE CHISEL

03 - The following figure shows the correct arrangement of rods in the chisel.

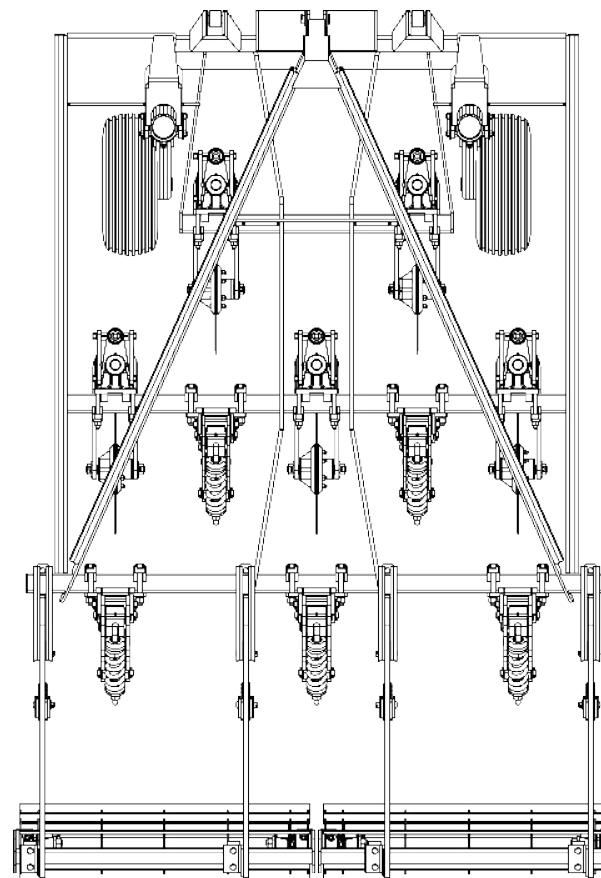


Figura 6

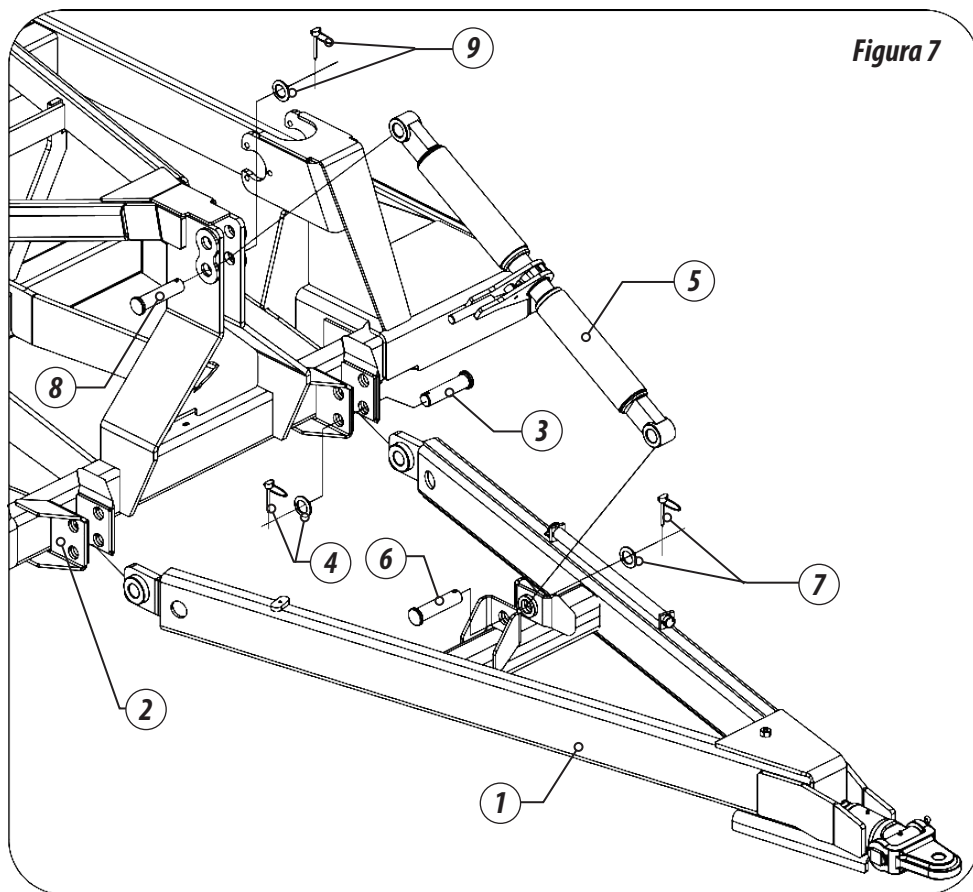


ATTENTION

The number of rods is always odd, then, start assembling by the central rod, heading to the other with the desired spacing.

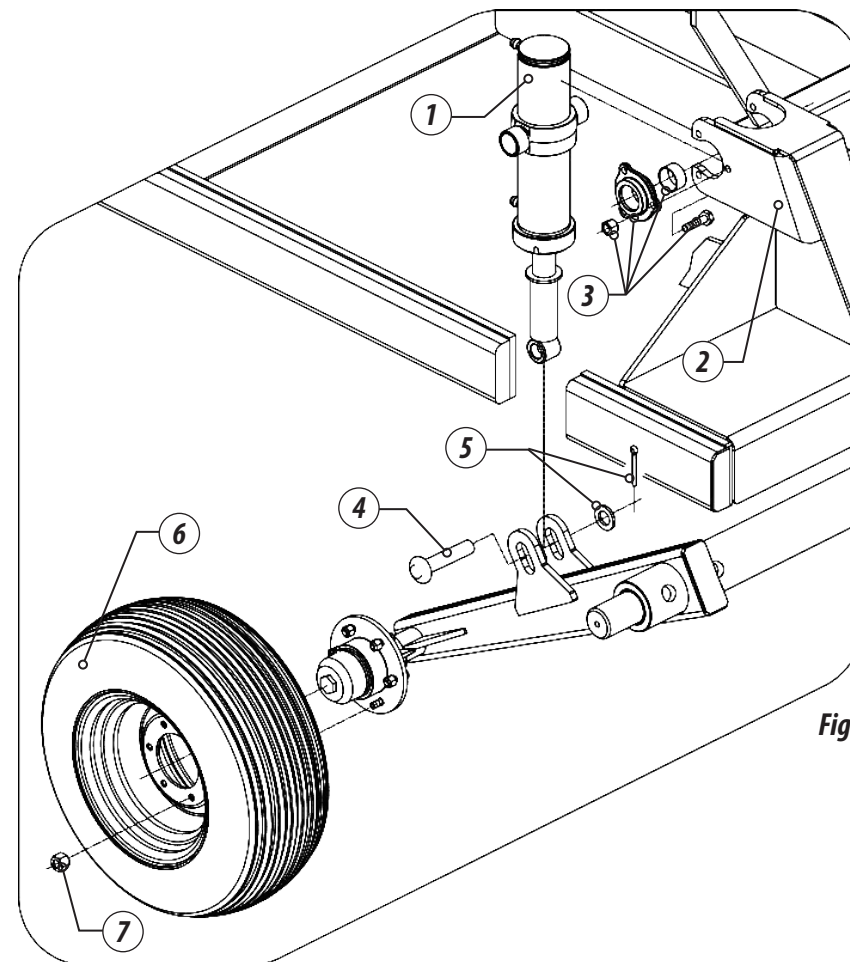
ASSEMBLING THE COUPLING HEADER

- 04 - Put the coupling header (1) on the frame coupling (2) locking with pins (3) washer and cotter pin (4), place the regulator (5) in the header, locking with the pin (6), washer and cotter pin (7) and in the frame with the pin (8) washer and cotter pin (9).



ASSEMBLING THE WHEEL

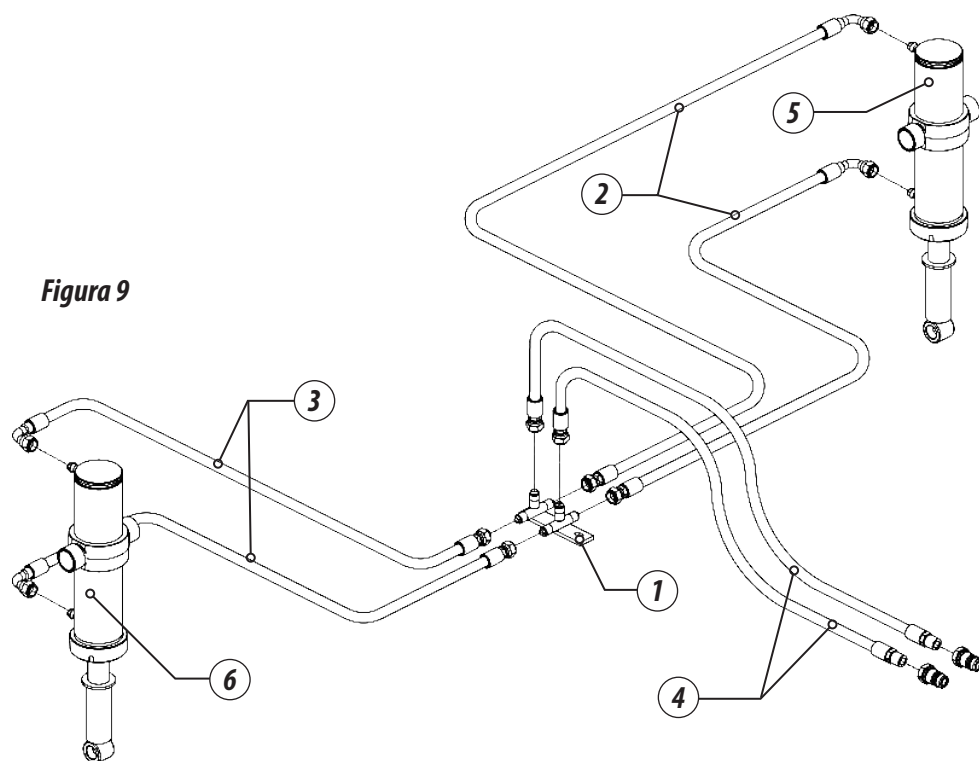
- 05 - Assemble the piston (1) in the structure (2), locking it with the parts (3) pin (4), washer and cotter pin (5).
- 06 - Put the complete wheel (6) on the shaft hub and lock with the nuts (7).



ASSEMBLY

ASSEMBLING THE HYDRAULIC SYSTEM

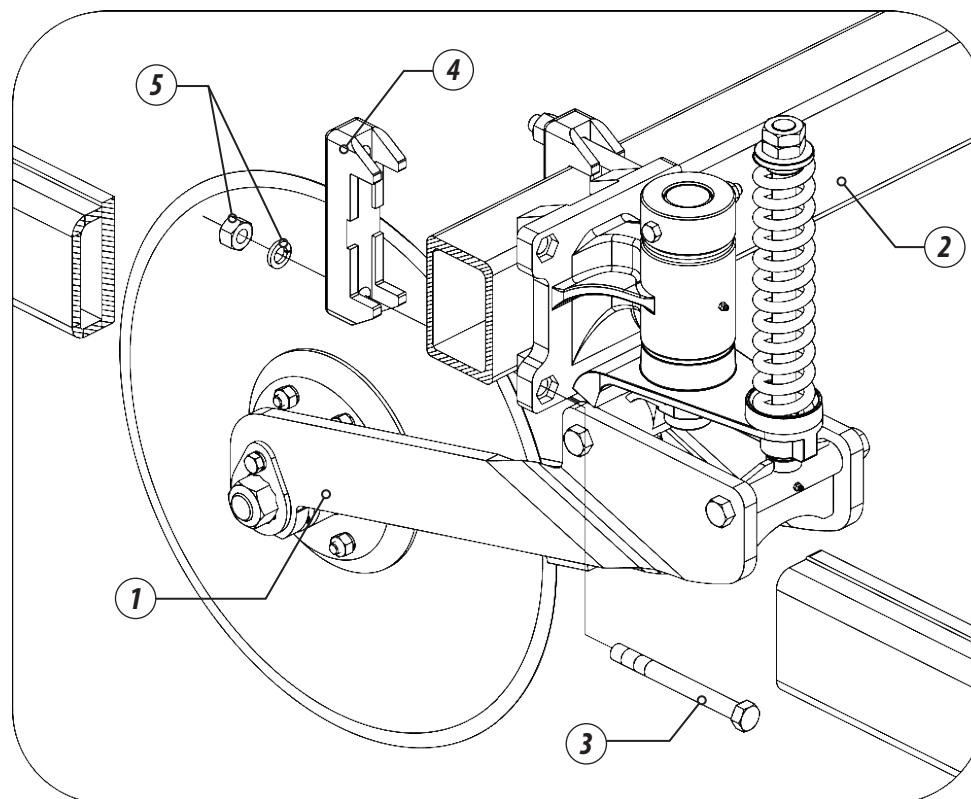
- 07 - Set the oil distributor (1), proceed to connection of hoses (2,3,4) in the distributor (1), the hoses (2) in the left piston (5) and hoses (3) in the right piston (6), as shown in Figure 08.



ATTENTION | Do not reverse the hose connections.
Do not let the ends of hoses touch the ground.

ASSEMBLING THE CUTTING DISCS

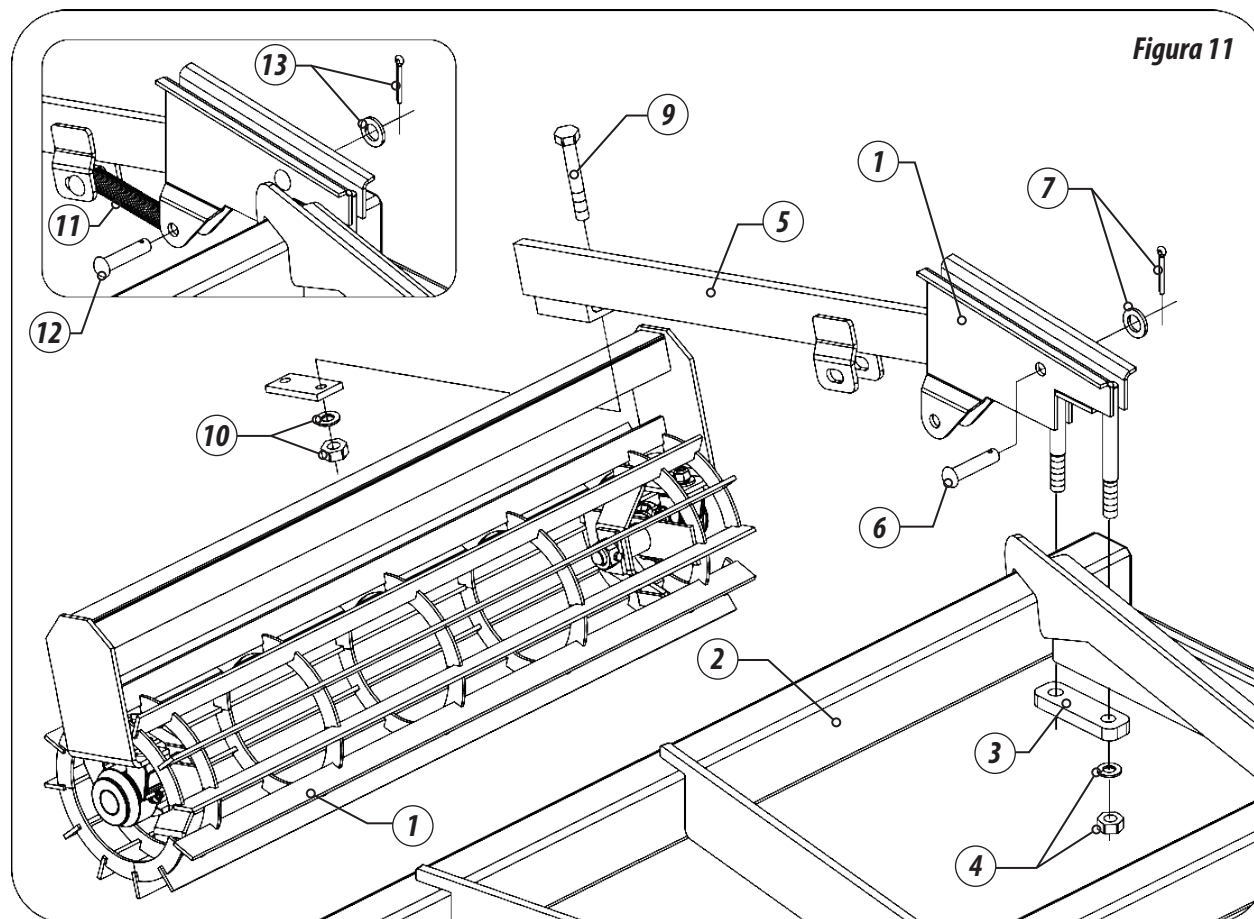
- 08 - Attach the complete cutting disc (1) in the structure (2) using the screws (3), clamps (4), washer and nut (5).



IMPORTANT | The cutting discs (1) must be assembled in the same alignment as the rods.

ASSEMBLING THE HARROWING ROLLER

- 09 - Place the support (1) on the structure (2) with the plate (3), washer and nut (4).
- 10 - Attach the sway bar (5) between the support (1) and lock with pin (6), washer and lock (7).
- 11 - Attach the harrowing roller (8) on the support (1) with the screw (9), washer and nut (10).
- 12 - Then, place the spring (11) between the sway bar (5) and the support (1) locking with the pin (12), washer and cotter pin (13).



NOTE | The assembly of the harrowing roller applies only to model SCB-CR.

COUPLING THE CHISEL

- Before coupling the chisel to the tractor, make sure it is ready for operation as follows:

01 - Place ballasts on the wheels, as specified in the tractor's instruction handbook.

02 - Adjust the height of the coupling header through the regulator (1). Couple the chisel on the tractor drawbar through the pin (2) and lock (3).

COUPLING THE SCB-CR

03 - Connect the hoses (4) the tractor's quick hitch.

04 - Before connecting or disconnecting the hydraulic hoses, stop the tractor engine, relieve the circuit pressure by triggering the control levers fully.

05 - Make sure that when releasing the pressure of the system, no one is near the area.

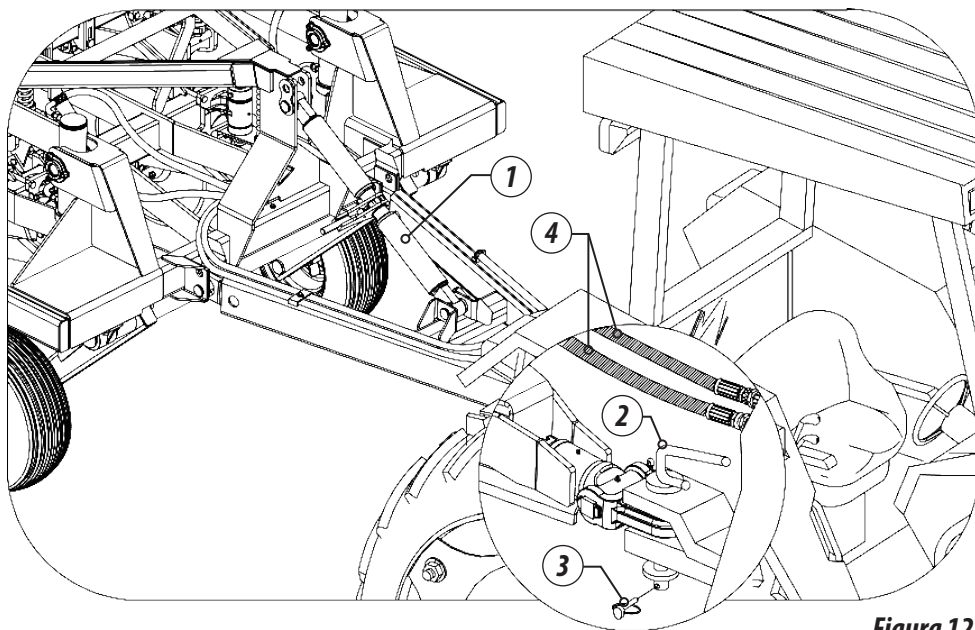


Figura 12

COUPLING THE SCB-H

06 - Engage the tractor's lower left arm with the hitch pin (1) in support "A" of the chisel.

07 - Engage the 3rd point of the tractor in support "B" of the chisel.

08 - With the aid of the height adjustment lever "D", connect the tractor's right lower arm to support "C" of the chisel.

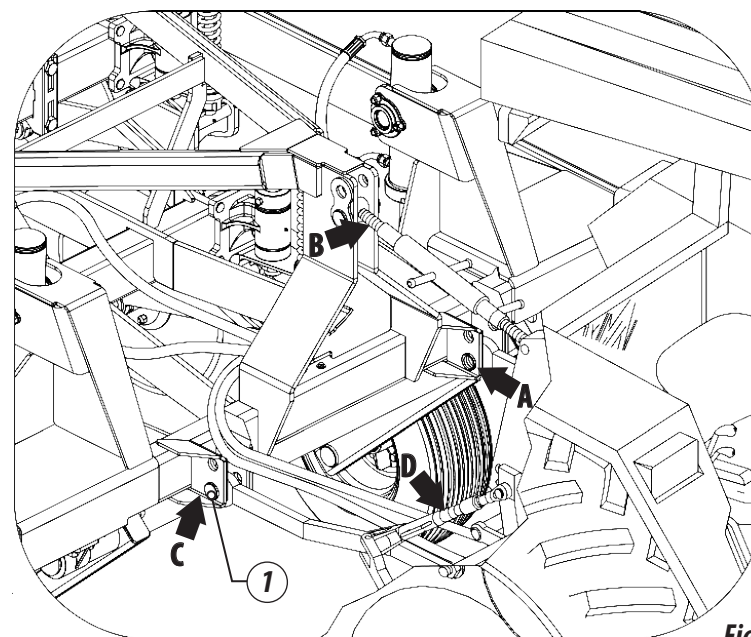


Figura 13



IMPORTANT

By attaching the equipment, find a safe and easily accessible place, always use low gear with low throttle.

CENTERING THE CHISEL

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

01 - Align the top hitch of the chisel with the 3rd point of the tractor, make sure the distances "D" of the hydraulics' lower arms are equal in relation to the tires.

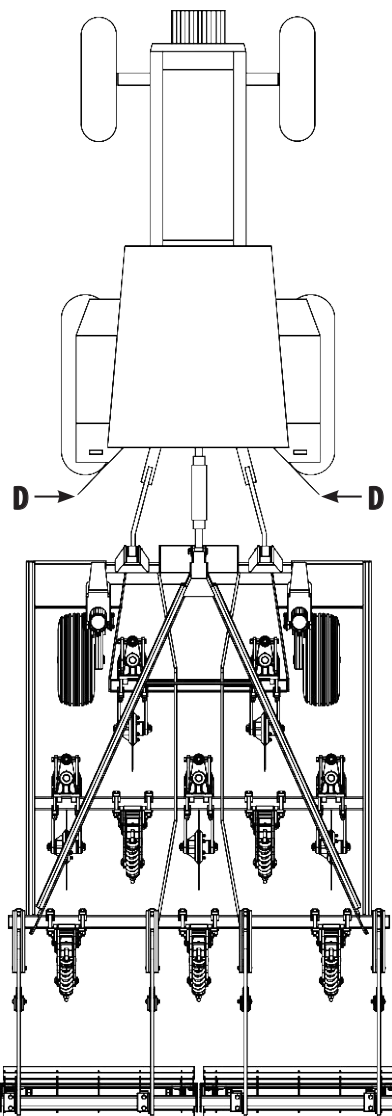


Figura 14

COUPLING THE CHISEL

LEVELING THE CHISEL

- To level the chisel, proceed as follows:
 - 02 - The tractor must be on level ground: Then, level the chisel in the transversal direction (width) through the crank of the hydraulics' lower right arm.
 - 03 - Note that measures "A" that must be equal on both sides.
 - 04 - The longitudinal leveling (length) is done through the arm of the 3rd point.
 - 05 - Note that the rods must be parallel to the ground, that is, all must touch it in the same plane.

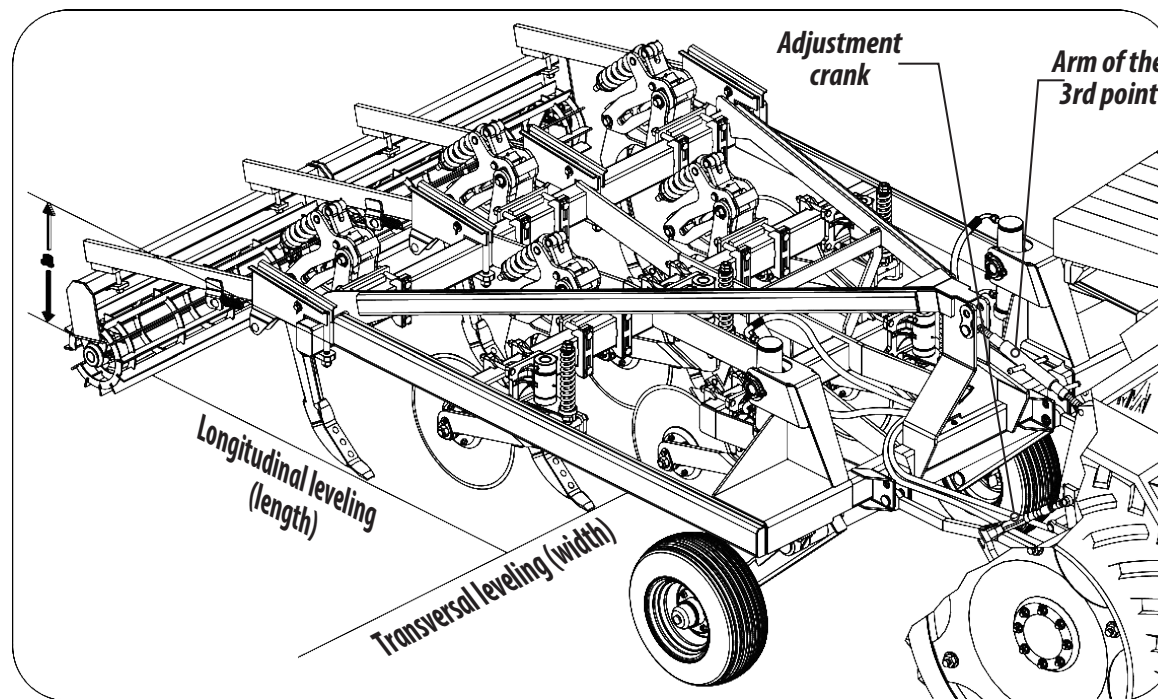


Figura 15

ADJUSTMENTS AND OPERATIONS

ADJUSTING THE CHISEL DEPTH

- 01 - The working depth of rods is limited by the wheels (1) which are driven by hydraulic pistons (2).
- 02 - Determine the working depth of rods, then lift the wheels through the hydraulic pistons to the determined extent, place limiting rings (3) on the piston rods.
- 03 - After adjustment, the depth will be constant; this is because the rings are limiting the piston path, preventing wheels from oscillating, keeping always the same depth.

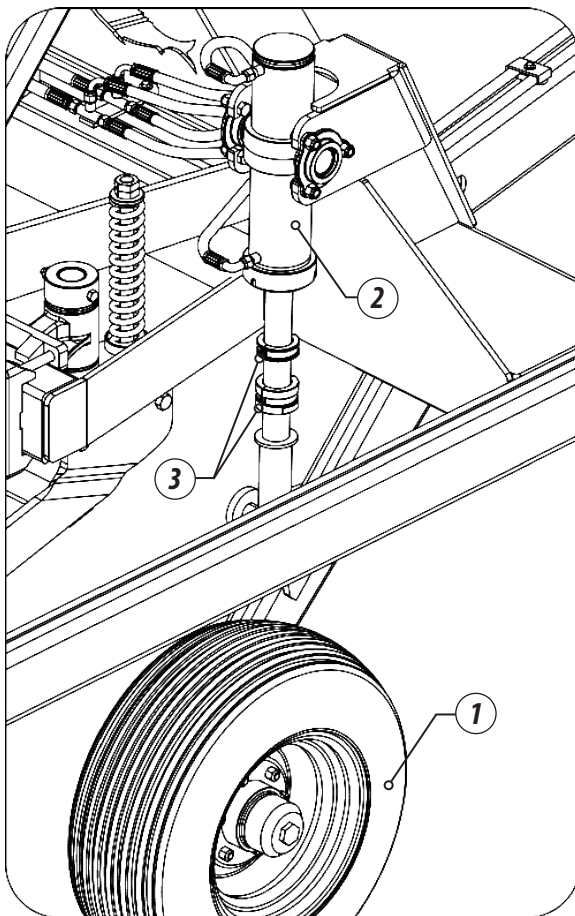


Figura 16

ADJUSTING THE AUTOMATIC DISARMING LOAD OF RODS

- 04 - The automatic disarm of rods leaves the factory with the adjustment of pre-determined load, that is 33.5 cm in the spring length.

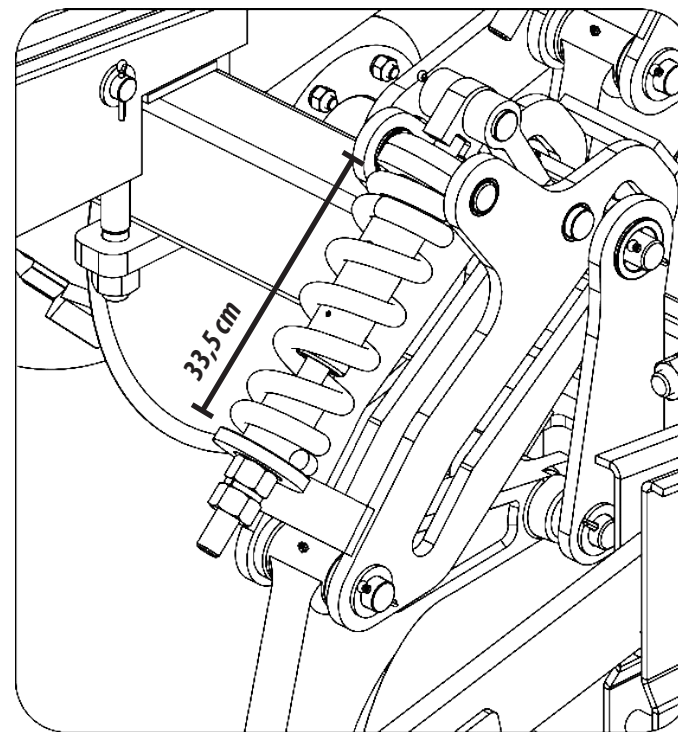


Figura 17

⚠ ATTENTION

There is no need for other settings in the rod disarm system. If constantly disarming, check the soil conditions, which may be very hard or with high compression.

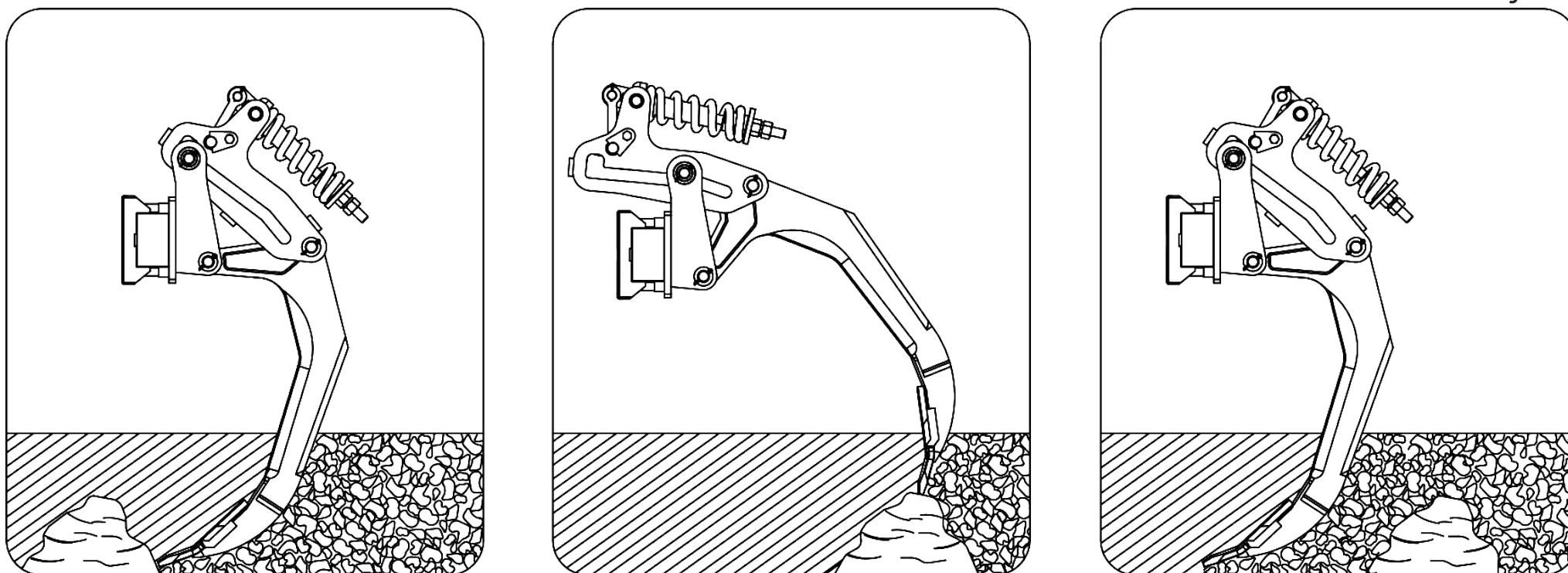
🔄 NOTE

For better use of the chisel in a vibratory form, operate with the lowest possible pressure. Under normal working conditions, the rod does not disarm.

DISARM AND RESET OF RODS

- 01 - The subsoiling should be done on relatively dry land to break the desired soil layer, usually known as hardcover, or simply compacted layer.
- 02 - Check the compacted soil depth through a penetrometer or trench and adjust the working depth of rods.
- 03 - The rods are equipped with an exclusive system of automatic disarm and reset that when finding obstacles disarm and return to normal working position by simply lifting the implement.

Figura 18



IMPORTANT

When operating with the chisel, choose a gear that allows the tractor to maintain a certain power reserve against unforeseen efforts.

NOTE

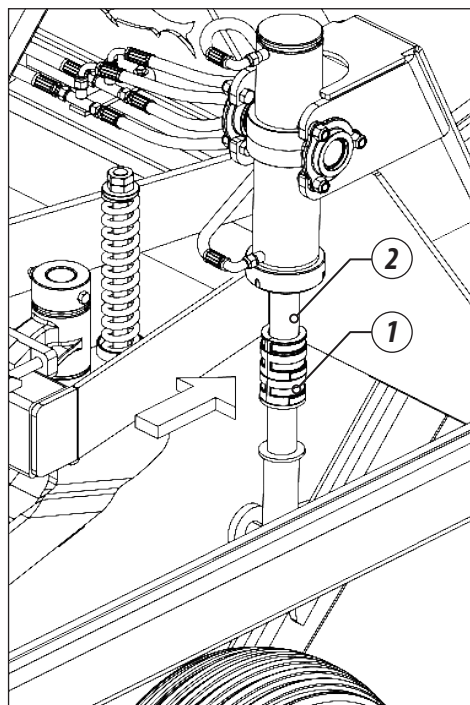
The working speed varies with soil conditions. An average speed of 4-5 Km / hour is recommended.

OPERATIONS

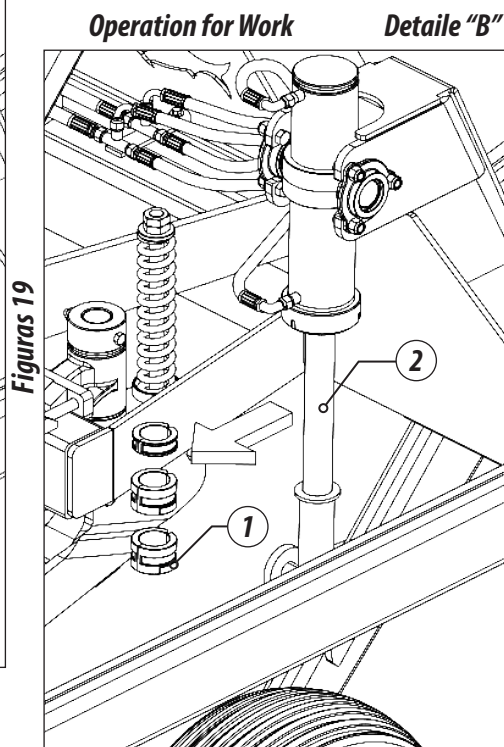
TRANSPORT

PREPARING THE CHISEL FOR TRANSPORT

- Before transporting the chisel, you should prepare it as follows:
 - 01 - When transporting the chisel, place the limiters (1) on the piston rod (2) as shown in Detail "A".
 - 02 - To operate the chisel, do the opposite procedure by removing the limiters (1) from the piston rod (2) as shown in detail "B".



Operation for Transportation Detail "A"



Figuras 19

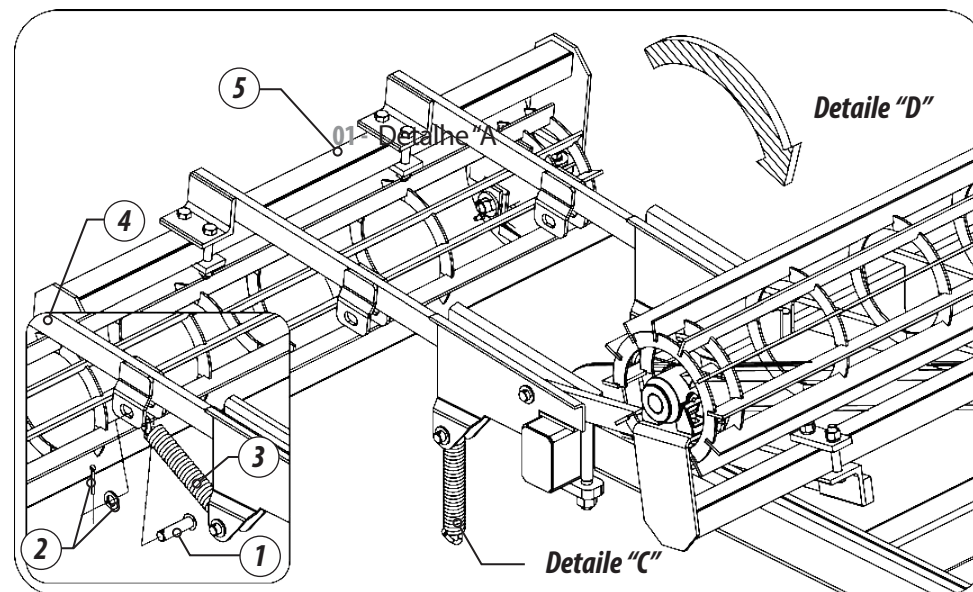


Figura 20

⚠ ATTENTION | If there is need to raise a roller, use appropriate equipment

🔧 IMPORTANT | Before performing the operation of lifting the harrowing roller, loose the springs between the sway bars and the rod supports.

03 - Remove the pin (1) washer and lock (2) that fix the spring (3) of the sway bar (4), leaving the spring free, as shown in detail "C".

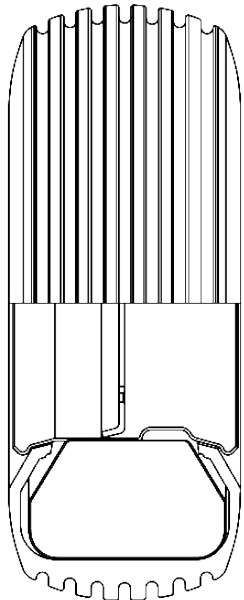
04 - Then, move the harrowing roller (5) upwards so that the roller is over the chisel, as shown in detail "D". Figure 19.



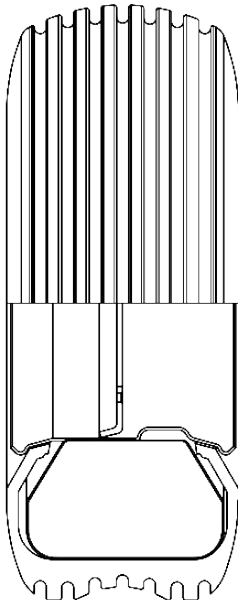
TIRE PRESSURE

- 01 - Tires should always be properly calibrated to avoid premature wear due to excess or lack of pressure and ensuring accuracy in distribution.
- 02 - Before calibrating the tires, check out the correct calibration below.

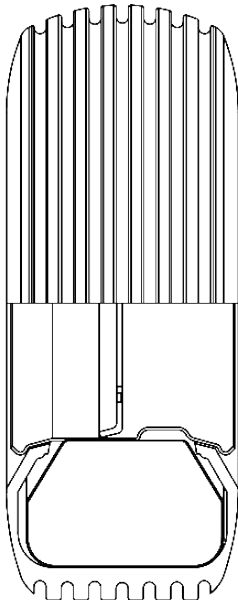
EXCESS PRESSURE



LACK OF PRESSURE



CORRECT PRESSURE



TIRES 11L X 15: USE 52 POUNDS / INCH.

LUBRICATION

- 01 - Lubrication is essential for good performance and durability of the seeder moving parts, helping to reduce maintenance costs.
- 02 - Before starting operation, lubricate all grease fittings carefully always observing lubrication intervals in the following pages.
- 03 - Make sure the lubricant is of good quality; avoid using products contaminated by water, dirt and other agents.

Manufacturer	Type of recommended grease
Petrobrás	Lubrax GMA 2
Atlantic	Litholine MP 2
Ipiranga	Super Graxa Ipiranga Ipiranga Super Graxa 2 Ipiflex 2
Castrol	LM 2
Mobil	Mobilgrease MP 77
Texaco	Marfak 2 Agrotex 2
Shell	Retinax A Alvania EP 2
Esso	Multipurpose grease H
Bardahl	Maxlub APG 2 EP



IMPORTANT

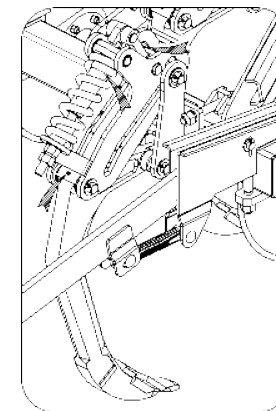
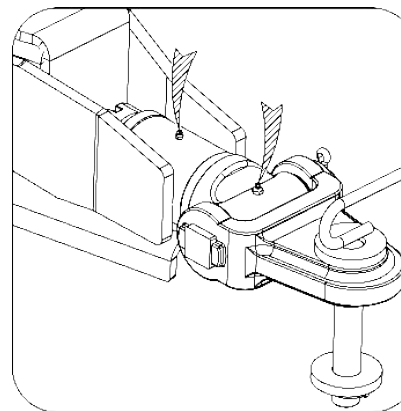
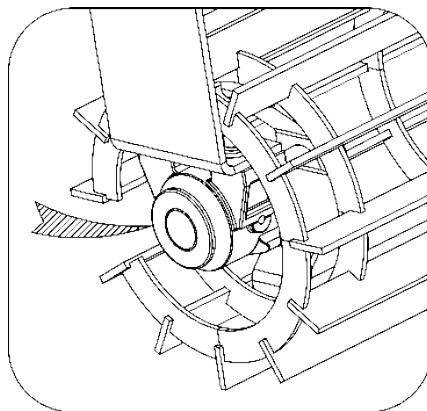
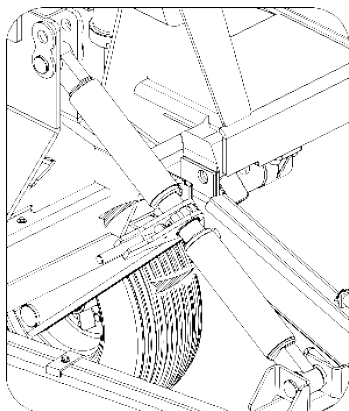
If there are other lubricants and / or equivalent greases not listed in this table, refer to the manufacturer's technical handbook.

MAINTENANCE

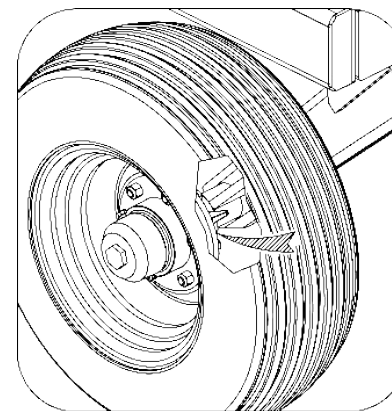
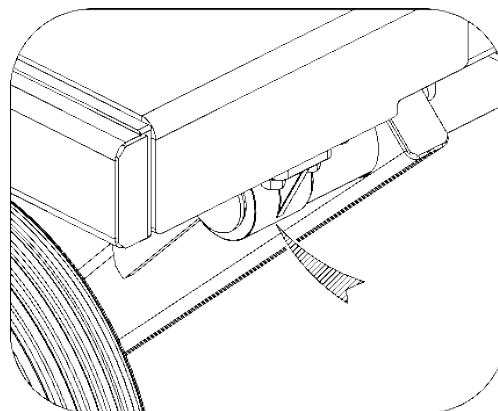
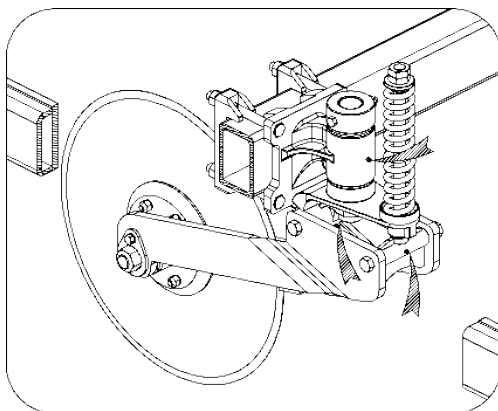
GREASE POINTS

⚠ ATENCIÓN | *When lubricating the chisel, do not exceed the amount of new grease. Introduce the sufficient quantity.*

LUBRICATE EVERY 10 HOURS OF WORK

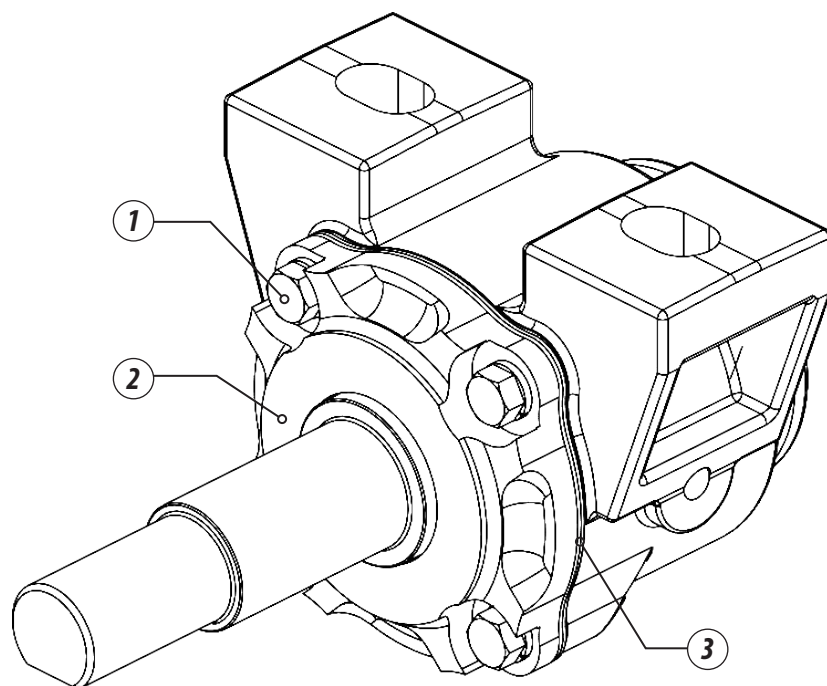


LUBRICATE EVERY 60 HOURS OF WORK



ADJUSTING THE BEARINGS

- When bearings show gaps, adjust them as follows:
 - 01 - - Loosen the screws (1);
 - 02 - - Remove the gasket (3) from the bearing cover and replace it again.
 - 03 - **Note: Do not assemble the bearing without the gasket.**
 - 04 - If the gap persists, you can face the cover (2) to increase the adjustment, then assemble it on the bearing with as many joints are required.
 - 05 - The bearing should turn freely i.e. without axial or radial clearances.
 - 06 - Grease the bearing again. The amount of grease used is 150 grams.



CARE

- 01 - Make the daily check of the conditions of all pins and screws before start using the chisel.
- 02 - Every 12 hours of work, re-tighten the screws and nuts.
- 03 - The displacement speed must be carefully controlled according to terrain conditions.
- 04 - The Baldan sugarcane chisel models SCB-CR and SCB-H are used in various applications requiring knowledge and attention during handling.
- 05 - Only local conditions will determine the best form of operation.
- 06 - When assembling or disassembling any part of the chisel, use adequate methods and tools.
- 07 - Always check if the parts do not show wear. If they need replacement, require Baldan original parts.

GENERAL CLEANING

- Due to the corrosive action of time, we recommend cleaning the equipment before storing it to preserve and extend its useful life. To do this, proceed as follows:
 - 01 - First, make a general cleaning, removing all traces of product. Then rinse it thoroughly. **Do not use chemical cleaners to wash the chisel, this may damage its painting.**
 - 02 - Then, check if the paint did not wear, if that happened, make a full coat on all these points.
 - 03 - Lubricate the chisel completely and check if the moving parts present wear or looseness, make the necessary adjustment or replacement of parts, leaving the chisel ready for the next work.
 - 04 - When connecting or disconnecting hydraulic hoses, do not let the ends
 - 05 - touch the ground. Before connecting the hydraulic hoses, clean the connections with clean, lint-free cloth (do not use burlap).
 - 06 - After all the maintenance care, store your chisel in a safe and appropriate place, duly supported. Avoid discs, rods and rollers from direct contact with the ground.

IDENTIFICATION

PRODUCT IDENTIFICATION

- To consult the parts catalog or request technical assistance from Baldan, always indicate the model (1), serial number (2) and manufacturing date (3), found on the product identification plate.



ATTENTION

The drawings in this instructions manual are for illustrative purposes only. To enable a better overview and detailed instructions, on some drawings in this manual, safety devices (covers, shields, etc..) were removed. Never operate the agricultural wagon without these devices.



MARKETING

Edition of Catalogs and Manuals

Code: 6055010243-1 | **CPT:** SCB01918



CONTACT

*In case of doubt do not operate or handle the equipment, please contact our **After-sales Service**.*

Phone: 0800-152577

E-mail: posvenda@baldan.com.br

PRODUCT IDENTIFICATION

- Do the identification below to always have the properly informations about your equipment life time.

Owner: _____

Dealer: _____

Farm: _____

City: Country:

Model: _____ **Warranty:** _____

Serial No.: _____ **Invoice No.:** _____

Date of purchase: ____ / ____ / ____

NOTES



BALDAN IMPLEMENTOS AGRÍCOLAS S/A.

Av. Baldan, 1500 | Nova Matao | Zip code: 15993-000 | Matao-SP | Brazil

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

Home Page: www.baldan.com.br | e-mail: sac@baldan.com.br

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

e-mail: export@baldan.com.br



60550102431