VENCE TUDO®

OPERATION MANUAL

11/2020
Review 00

CORN HEAD
BOCUDA Série 08

TECHNICAL DELIVERY CERTIFICATE #_____

Make sure that the directives below are being performed by the dealer of your preference, and that the technical assistance was effective:

1. Equipment instructions and directions for use.
2. Servicing, conservation, lubrication and rules for safe use.
3. Appropriate use and settings for optional items.
4. Inspecting and retightening necessary points and verifying the settings.
5. Presentation of the operator manual and parts catalog.
6. Delivery of the additional parts box, according to operator manual.
7. Make sure that this certificate was filled out correctly.

DEALER:_____PHONE #: ( )_____
CITY:_____STATE:_____POSTAL CODE:_____-_____
INVOICE SALE TO CLIENT #:_____DATE:_____/_____/_____
TECHNICIAN OR MECHANIC IN CHARGE:_____
MACHINE:_____
MODEL:_____SERIAL:_____MAN.:_____/_____/_____
OPTIONAL ITEMS:_____

CLIENT:_____
ADDRESS:_____PHONE #: ( )_____
CITY:_____STATE:_____POSTAL CODE:_____-_____

DELIVERY AND TECHNICAL ASSISTANCE SURVEY	Great	Good	Regular
The equipment was delivered within the deadline.			
The technical delivery was able to clarify all doubts.			
The equipment demonstration was satisfactory.			
The equipment was delivered in perfect conditions accompanied by its accessories.			
Technical assistance or ordered parts were provided efficiently.			
The dealer is able to provide parts or technical assistance upon request.			

Suggestions:

NOTE: After verifying and carrying out the 07 (seven) items above and filling out this document, sign it and send it to the Vence Tudo Customer Service Department in, at most, a year.

Not sending this technical delivery certificate prevents the warranty from being analyzed.

_____ _____

Authorized Dealer Signature **Client Signature**

PRESENTATION

The agricultural implement industry, **VENCE TUDO** - founded in 1964 in Alfredo Brenner, District of Ibirubá, state of Rio Grande do Sul - has been following the mission defined by its founder, Nelson Lauxen, which is to incessantly seek developments in agriculture that promote quality and gains in productivity, using resistant, easily handled agricultural implements.

VENCE TUDO has, as its mission, to develop their products based on user needs through partnerships with universities, research centers and its engineering team, continually improving its products within the most state-of-the-art concepts..

The products are tested exhaustively after development by the farmers themselves, in the most varied regions, being put under a number of conditions of use, seeking to asses their level of resistance and operation. After the product is approved in field tests, the process then moves on to mass production within modern, quality concepts.

Client satisfaction with **VENCE TUDO** products is our main concern.

The purpose of this manual is to familiarize you with the operation of your equipment and the minimum care needed to ensure a long useful life. As important as it is to learn how to take care of the equipment and operate it correctly, it is also important to have knowledge on a few issues that can compromise the warranty, such as negligence, misuse, non-authorized adaptations and others that attempt to adapt the equipment in some way. Consequently, we recommend you read the Warranty Certificate attentively.

The parts catalog contains all of the information necessary for parts replacement.

Interpreting this certificate correctly will provide you with skills to perform any replacements needed, according to the equipment model that is detailed and described..

If any questions arise during the equipment's operation, contact **VENCE TUDO LTDA**, so that our **CUSTOMER SERVICE DEPARTMENT** can answer any questions, further improving our customer service, ensuring a strong relationship between **VENCE TUDO** and **FARMERS**.

We take this opportunity to congratulate you for choosing a **VENCE TUDO** product, and we can assure you we are entirely dedicated to keeping you satisfied.

VENCE TUDO
Indústria, Comércio, Importação
e Exportação Ltda.

TO THE VENCE TUDO CLIENT

Farmers, congratulations on acquiring a VENCE TUDO product, since our product development is mainly user satisfaction based. Your satisfaction when profiting by using our implements is shared by us. Our intent is to service our partners, the farmers, with the utmost seriousness and trust, since it is your profitability that ensures we are building strong and profitable agriculture.

This product is developed under the most judicious concepts in production agriculture technology. Using the most modern industrial manufacturing equipment, our key interest is in developing a strong, resistant product that effectively answers your needs, with high durability and a long useful life.

WARRANTY NUMBER_____

The VENCE TUDO product warranty covers the our clients regarding workmanship defects or material defects that may compromise product operation, except when involving components purchased from third-parties, which are all insured by their own manufacturers. This warranty extends for a 01 (one) year period from the date of purchase.

CONDITIONS

1- The product is insured against any manufacture defects found, given that the pieces and components were provided by VENCE TUDO Ltda and delivered by authorized companies or personnel.
2- The pieces and/or components covered by the warranty shall be replaced or reimbursed if the defects are verified by Technical Assistance or by a person authorized by VENCE TUDO Ltda. Parts that present wear due to use as a result of operating conditions and factors connected to the specific formation and features of each soil are excluded. The filled out technical delivery certificate must be presented together with the purchase invoice.
3- Once the warranty conditions are satisfied, VENCE TUDO Ltda ensures the repair of the defect, or replacement of the component, free of charge. If the warranty is cancelled or is no longer in force, technical assistance will be charged at a price equivalent to one day of service provision and parts and components replacement, per day of service needed, if necessary.

WARRANTY CANCELLATION

The warranty will be void in the following cases:

1- Damages caused to the equipment due to misuse, abuse, neglect or lack of adequate servicing, in non compliance with manufacturer instructions published in the corresponding operation manual.

2- Damage caused by accidents or natural agents.

3- Repairs, modifications, or violation of parts and components performed by unauthorized people.

4- Amending, erasing, or suppressing information on the Technical Delivery certificate, Warranty Certificate, purchase invoice or identification plate.

ATTENTION

If your product presents a defect while still under warrantee, contact the dealer or manufacturer, exclusively.

The product shall only be repaired or disassembled in the presence of personnel that is duly accredited be the manufacturer, with original spare parts, under penalty of the warranty being void from that moment on.

SAFELY FILE YOUR INVOICE. IT IS YOUR PROOF OF WARRANTY.

CLIENT: _____

ADD.: _____ CITY: _____ STATE: _____

MODEL: _____ SERIAL: _____ YEAR: _____

DATE OF DELIVERY: ____/____/_____

DEALER: _____ CITY: _____STATE: _____

I faithfully declare for indisputable effect, that I have received, PRODUCT (Model): _____ on this date, in compliance with the aforementioned specification, in a perfect state of conservation and the warranty modality used was accepted by me.

CLIENT: _____

DEALER: _____

Detach here

TECHNICAL DELIVERY CERTIFICATEA Number _____

CLIENT: _____ CITY: _____

ADDRESS: _____ STATE: _____

MODEL: _____ SERIAL: _____

DEALER: _____ CITY: _____

Invoice number: _____ Date of sale: ____/____/____

DEALER, SEND THIS CERTIFICATE TO THE MANUFACTURER IMMEDIATELY AFTER DELIVERY.

Detach here

I hereby declare that I have received the aforementioned model on this date, in compliance with the specifications above, in perfect conditions, accepting the warranty modality.

DATE: ____/____/____

CLIENT: _____

DATE OF DELIVERY: _____/_____/_____

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1. IDENTIFICATION

When contacting the VENCE TUDO Technical Assistance, please inform the following: Product MODEL, YEAR, and SERIAL NUMBER. This information can be found on the Product Identification Plate, always attached to the left side of the chassis.

Always use original VENCE TUDO parts for replacements. Use the PARTS CATALOG.

All information contained in this Operation Manual is subject to variations. Weights, dimensions and specifications are merely approximate, and the illustrations do not necessarily reflect the equipment in its standard condition. To obtain exact information about any model in particular, consult your VENCE TUDO Distributor/Representative.

The VENCE TUDO Ltda Agricultural Implement Industry is constantly seeking improvements, therefore reserving the right to introduce modifications to its products, at any time, in order to best answer the needs and expectations of its consumers, without incurring in the obligation of implementing these modifications in products that were already sold.

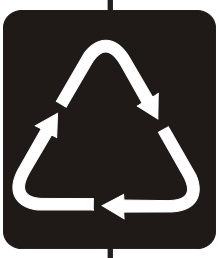
2. ENVIRONMENTAL PRECAUTIONS

Dear user,

We value nature.

The uncontrolled ejection of residues into the soil and water harms the life of all living beings on the plant.

Always observe the recommendations regarding chemical product use, following the dosages recommended by the manufacturer and the agronomist in charge. Excess of chemical products and their misuse can affect people, animals and the environment.



Ejecting lubricating oils and fuels, plastic containers and agrochemicals, etc., in the soil and water, directly interferes in the ecosystem's balance, affecting everything from the superficial soil layer to the underground aquifers.

Handle these residues appropriately, and gather information on how to recycle or reuse them.

By performing these actions, you will be contributing to the conservation and balance of the ecosystem.

ATTENTION

The layer of straw on the soil is important to maintain organic matter, humidity and live organism levels. These factors also promote soil aeration and reduce the effects of compacting.

Use the regulated straw slicer to distribute the straw evenly.

Adopt management methods that contribute to reducing diseases, plagues and invading species.

Follow the agronomic recommendations on the use of fertilizers, pesticides and corrective substances. The excessive use and misuse of chemical substances can contaminate the soil and water tables.

Comply with the legislation in force when discarding lubricants and agrochemical containers, and any product (solid, liquid or gas), that can provoke any type of environmental damage.

3. SAFETY REGULATIONS

3.1. Important instructions when receiving the equipment

• Visually inspect all equipment components to make sure there are no damages due to transport.

• Damages resulting from transport are not covered by the warranty. If transport does cause damages, immediately inform the Vence Tudo Expedition department.

3.2. Identify safety information

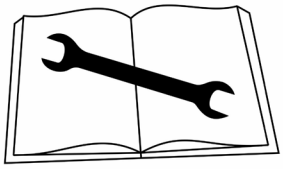
When you see this symbol on your equipment and in this manual, be aware of possible injuries. This symbol indicates a risky situation and represents a safety alert (danger, alert and warning).

Follow the recommended safety precautions and practices for operation. Safety warnings such as DANGER, ATTENTION, are located close to specific dangers. The word CAUTION calls your attention to safety messages in this manual.

3.3. Follow the safety instructions

The equipment follows the WORK SAFETY IN MACHINES AND EQUIPMENT NR-12 regulation.

ATTENTION



Carefully read all safety messages in this safety operational manual and the safety warnings on your equipment.

- Keep the safety labels in good conditions. The labels should be replaced if damaged or lost.
- To replace labels, contact the Parts Central or a Vence Tudo authorized dealer.
- Learn to operate your equipment correctly.
- Do not allow anyone to operate the equipment without training.
- Maintain your equipment in good conditions for use.
- Changes in the original features of the equipment are not authorized, since they can alter product operation, safety, and useful life.

If any part of this manual is unclear and you need technical assistance, contact the Technical Assistance department or an authorized dealer.

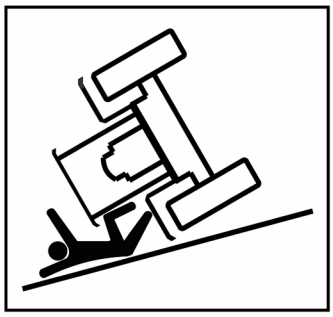
3.4. Predicted use

- This equipment is meant exclusively for harvesting.
- It should be driven and used by a trained operator.

3.5. Forbidden use

- It is forbidden to tow, connect or push other elements or accessories that are not designated as fit.
- To avoid serious injuries or death, do not transport people or objects on parts of the equipment.
- The equipment should only be used by an experienced operator that knows the commands and driving techniques in full.
- After being coupled to the combine:
  - It is forbidden to get on or off the equipment while it is in operation.

⚠ ATTENTION



Improper use of the equipment, especially on irregular terrain, slopes or inclines, can cause it to tip. Pay attention if it is raining, snowing, or if there is ice or any other condition that promotes slippery roads. If necessary, lower the machine and check soil consistency.

To avoid being crushed, never leave the machine while it is in movement, not even if it tips.

3.6. Operate and transport the equipment safely

- Only operate the equipment when all protections are installed and in the correct position.
- Keep a distance when the equipment is in operation.
- Keep a distance from any moving mechanisms, such as gears, chains and shafts (*Figure A and B*).

Figure A

Figure B

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

- The equipment has special features such as the lateral excess, which do not allow transit on public roads or highways. If the equipment must be moved, ask the competent bodies and proceed according to the transit legislation in force.

- Be extremely careful when coupling and uncoupling the header. Do not allow anyone to remain between the header and the combine. Make sure the equipment is well supported and firm before operations.

- Periodically analyze all equipment safety components before use.

- Verify if the equipment is in perfect conditions of use. In the event of any irregularities that might interfere in equipment operation, perform the appropriate servicing before any operation or transport.

- After tuning and inspecting the equipment, make sure no tools were left inside the header.

- Always turn of the combine motor and activate the parking breaks when proceeding to tune or perform another procedure on the header. Remove all control levers, lower the header against the ground or raise it and apply the security lock to the cylinder.

- Make sure no one is near the header whenever activating, raising or lowering it to the ground.

- Do not allow children to play near or on the header during servicing, transport operations or when storing the header, under any circumstances.

- Use appropriate clothes and shoes, before and during any type of operation. Avoid using loose clothes that can get caught in the header's movable parts.

- Do not operate near obstacles, rivers or streams.

- Avoid holes, ditches and obstacles that can cause the equipment to overturn, especially on inclines.

- Fully assess the place of work before any operation. Check if there are any obstacles near the equipment, such as trees, walls and electrical grids that offer risk of serious, or fatal injuries.

- Use appropriate speeds when harvesting, transporting and performing maneuvers with the header. High speeds can cause damages to the components, parts and sets, and put people and animals at risk.

- Do not transit through roads or paths at night.

- Drive carefully and slowly on bumpy terrain.

- Avoid slopes that are too steep for the equipment to operate on to avoid overturning.

- If bushing occurs and the elements cannot be removed with the reversing system, stop the motor before attempting to clear the header manually.

- Always turn the combine off when cleaning any part or header component.

- Always remember that safety requires ATTENTION, CAUTION, CONCENTRATION and PRUDENCE when performing operations such as coupling and uncoupling, tuning, inspecting, servicing and storing the header.

- Be careful when handling the jack or support leg and hydraulic cylinders, since there is risk of injury (*Figure C*).

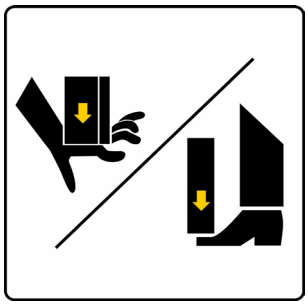


Figure C

3.7. Transporting the equipment on trucks

- To safely transport the equipment, use belts to fix the equipment to the truck's flatbed.

3.8. Avoid heating parts that are next to the fluid rows

- Warming the fluid rows can cause fragility in the material, ruptures, and output of the pressurized fluids, leading to burns or injuries. (*Figure D*).

Figure D

3.9. Avoid fluids that are under high pressure

- Do not handle hoses with pressurized fluids. If pressurized fluids leak, they can penetrate the skin causing serious injuries. (*Figure E*).

Figure E

- Avoid danger by decreasing the pressure of the hydraulic systems before disconnecting them. Tighten all connections before applying pressure.
- Seek medical attention immediately in the event of an accident. Any fluid that penetrates the skin should be surgically removed within a few hours in order to avoid gangrene.
- Only technicians specialized in this type of system can perform repairs. Consult the Vence Tudo Technical Assistance department or an authorized dealer.

3.10. Emergency procedures

- Be prepared for any fires.
- In case of fire or any risk to the operator, he or she should leave the combine's cabin as fast as possible and seek a safe locationo.
- Keep emergency, doctor, ambulance, hospital, and fire department phone numbers close to your phone.

3.11. Safety lights and devices

Operate in safety when transporting the implement on public roads allowed by transit laws. To do this, follow the recommendations:

- Check rearview mirrors frequently.
- Always use your sidelights to indicate your direction.
- The rotating lights should be in position over the cabin, and turned on.
- Use the headlights, emergency lights, and sidelights during the day and night.
- Respect traffic signs.
- Always keep warnings, headlights and light signs clean so that they can be seen. Also check if headlights, signs, emergency lights and warnings are working correctly. If they are not, ask a technician to perform repairs.

In addition to the safety resources described herein, caution and awareness of a qualified operator also contribute to the safety of other people who are close to the equipment.

3.12. Equipment servicing safety measures

- Always keep the equipment in good working conditions, performing the recommended servicing procedures according to the operation frequency and products involved.
- Pay attention to any sign of wear, noise and any point that shows lack of lubrication. If the equipment breaks or a component presents failure, contact your authorized dealer or the Vence Tudo Parts Central to replace it for another original part.
- It is recommended that servicing always be performed by trained and qualified professionals, with all equipment mechanisms turned off.
- Whenever a servicing procedure is needed, use the safety equipment indicated in this manual (*Figure F*).

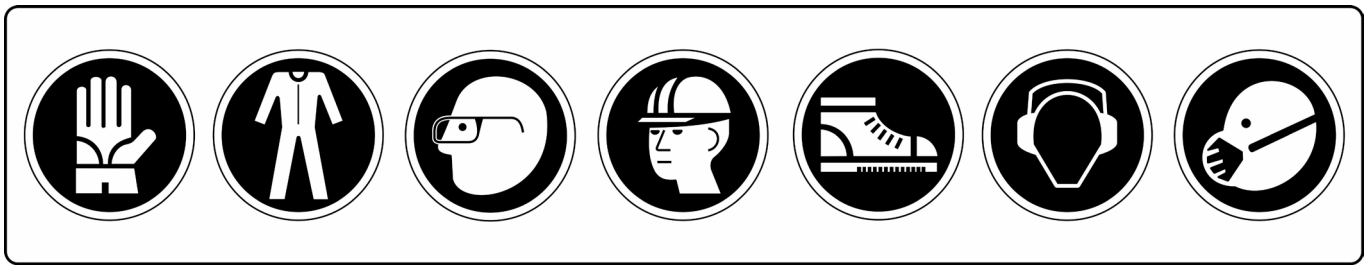
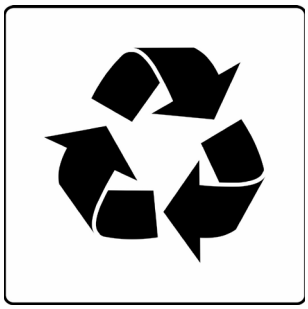


Figure F

- Do not smoke, or install any electric device in the proximity of inflammable products, either on the equipment or those in storage.
- Lack of appropriate servicing and operation by unprepared personnel can cause serious accidents, in addition to damages to the equipment.
- After repairs, check that the parts are moving correctly.
- If any questions arise, request technical assistance perform the servicing.
- After using the equipment, wash the equipment, thus increasing its useful life.
- Modifications or adaptations to the project can affect its useful life and void the warranty, therefore, they can only be performed with the authorization of Vence Tudo.

- Keep the work area dry and clean.
- Safely support any elements of the equipment that need to be raised to perform servicing.

3.13. Appropriately discharge residue



- Inappropriate residue discharge can threaten the environment and ecology.
- Use a leak and escape-proof container when draining fluids.
- Do not spill residue on the ground, through the drainage system, or in waterways.
- Seek information from your local environment or recycling center about the appropriate way of recycling or discarding residues.

4. SERVICING

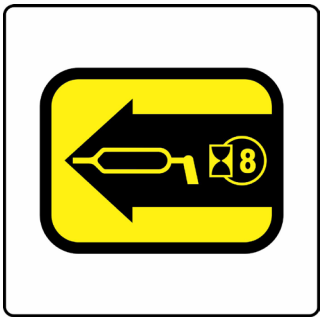
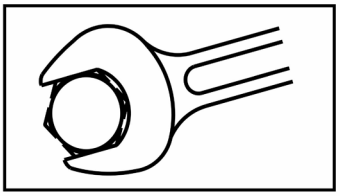


Figure G

To fully enjoy the features of this equipment with greater durability and precision, take precautions such as the following:

- Lubricate the grease nipples every 8 hours of work (*Figure G*). Before lubricating, clean them with a cloth. If defective, replacement will be needed.
- Fully clean the equipment when the harvest is completed to remove dust, remains and dirt that might maintain humidity and cause oxidation (rust).
- Paint all parts that are chipped or worn.



ATTENTION

Retighten nuts and bolts after the first 8 hours of work.

5. GENERAL INFORMATION

1. Upon receiving your **BOCUDA Série 08 HEADER**, it is extremely important to verify the condition of the product and additional parts box, especially regarding the use of original components.
2. The right and left side identifications are considered taking into account the view of the header from the rear to the front (driver position when in the combine).
3. When removing any set from the header, always be careful to separate the parts that are removed from its respective components or parts. This is so they are not used on other machines or equipment in your property.
4. This manual uses merely illustrative figures for explanations and demonstrations. The images may not correspond exactly to the product, which can be changed without prior notice.
5. The disposition of rows and spacing between harvest rows varies according to the desired option. Make sure you are assembling or servicing the correct model.
6. If any questions arise regarding servicing or settings, please contact our **VENCE TUDO** technical assistance department.

6. IDENTIFYING THE COMPONENTS

6.1. Isometric front view

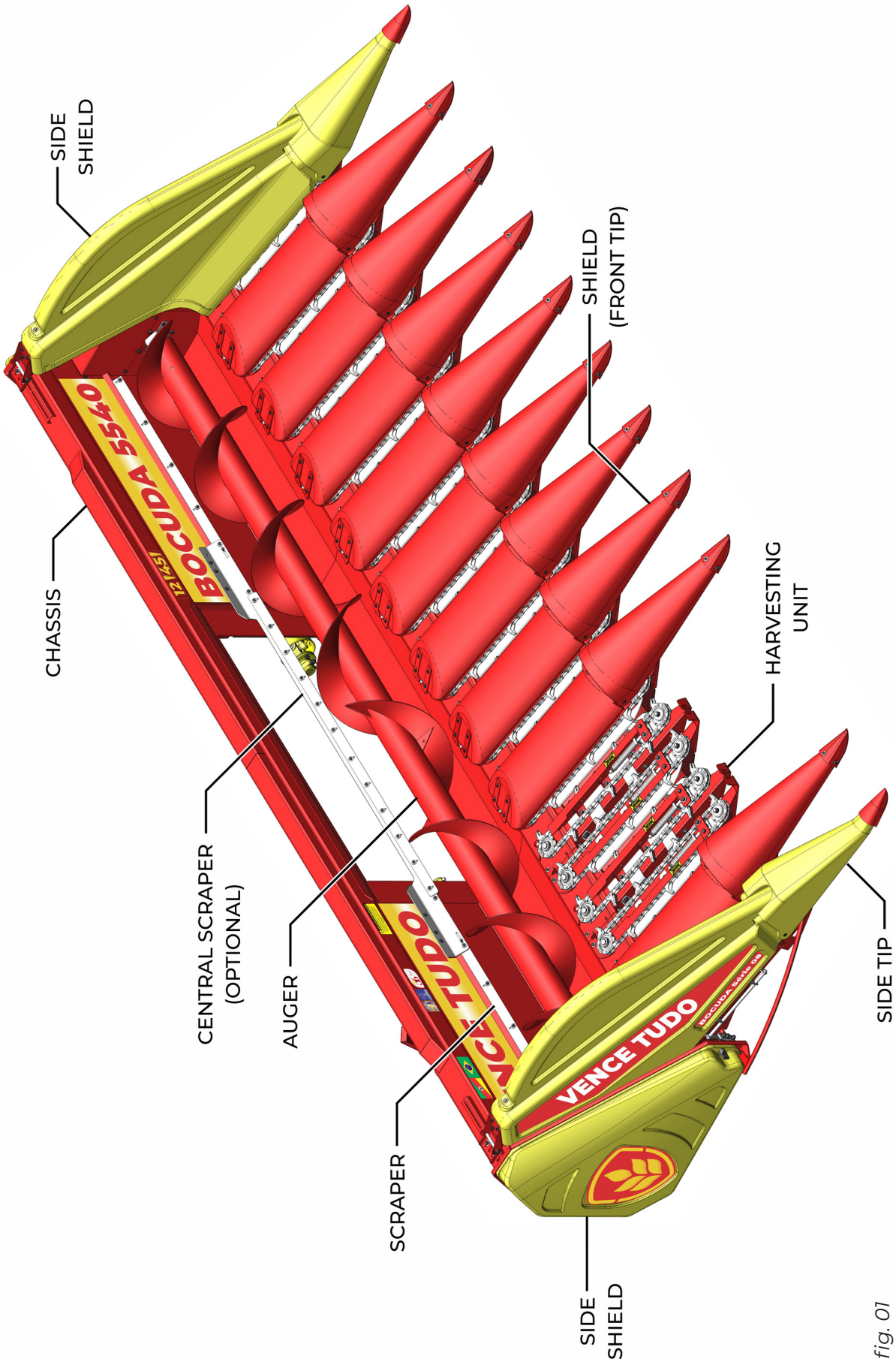


fig. 01

6.2. Isometric rear view

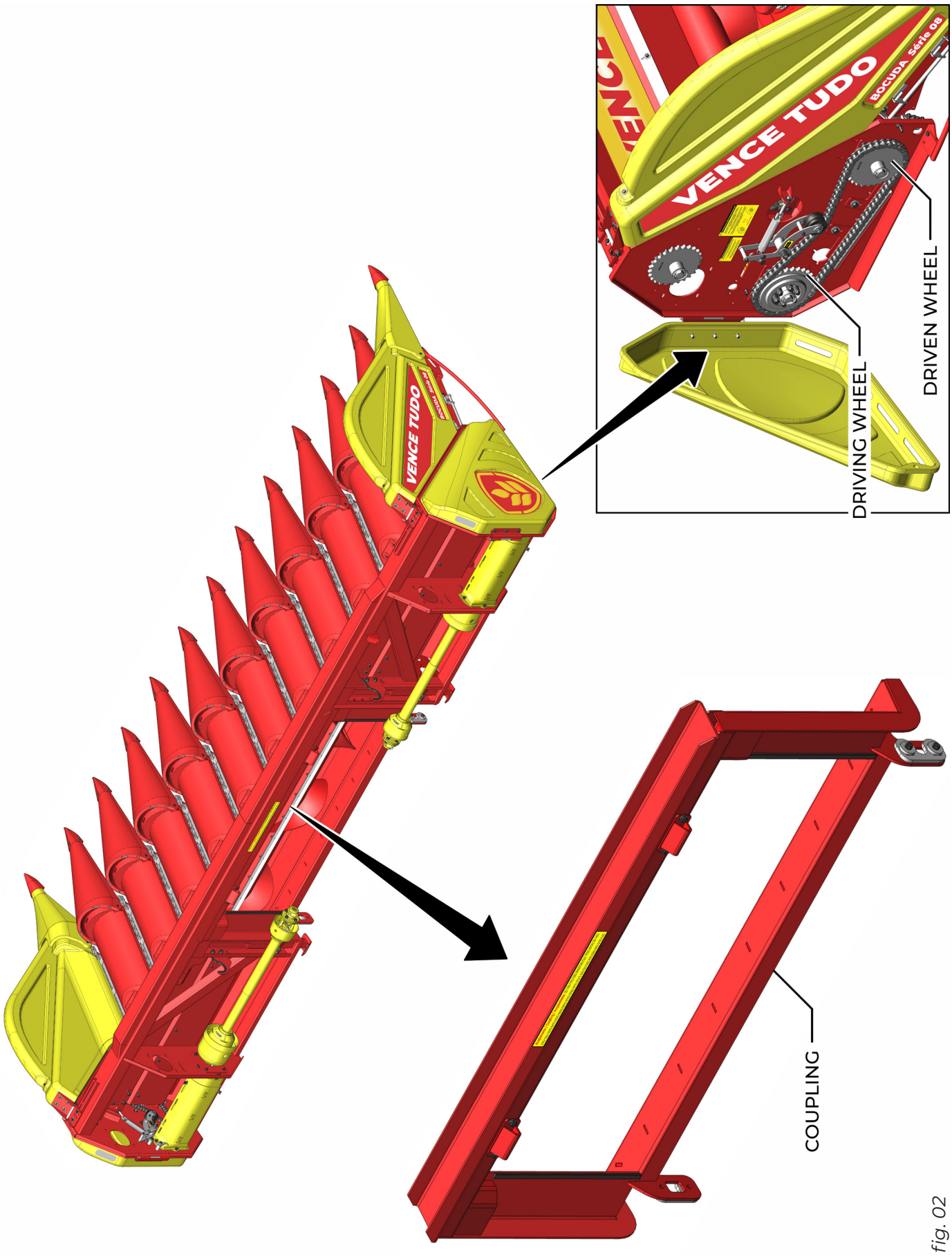


fig. 02

6.3. Harvesting unit component details

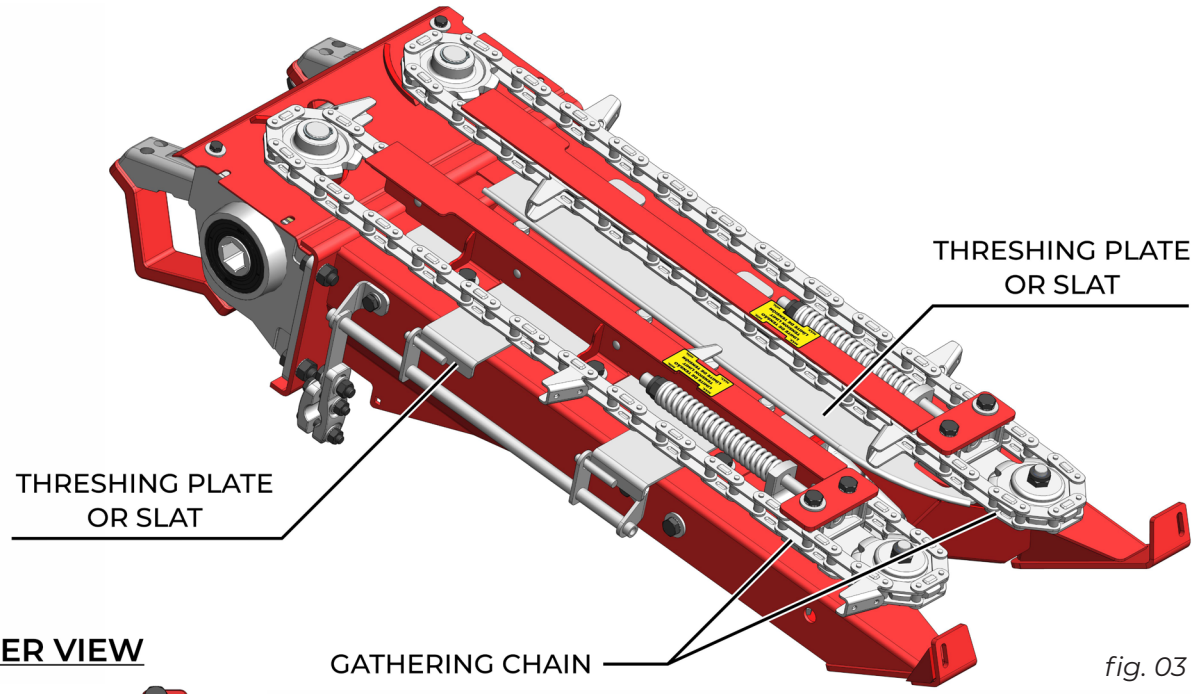


fig. 03

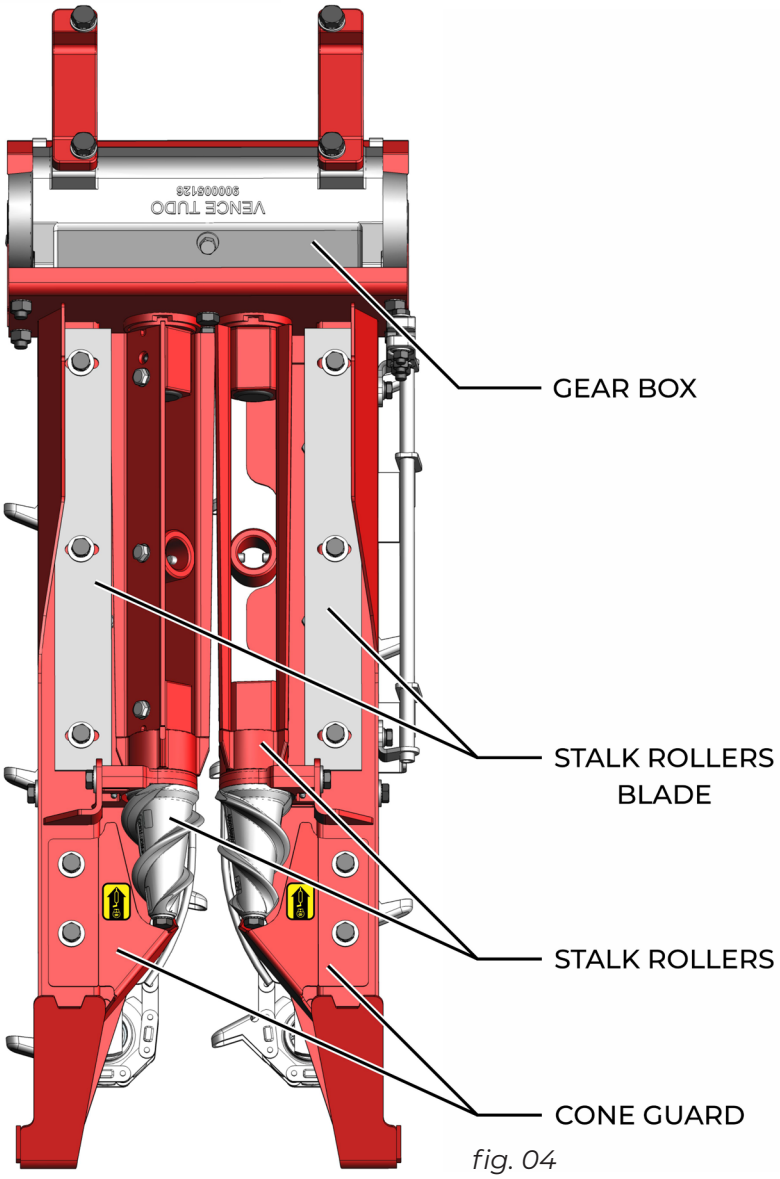


fig. 04

7. GENERAL FEATURES

CHASSIS: Sole basic structure. Single blocko.

COUPLING: Universal - Interchangeable for various models through the specific coupling kit.

STALK ROLL: With angular supports, they pull the cobs down, combining high speed and smooth operation, thus avoiding that other material be sent into the machine with the cobs in the best way possible. They are fixed to a rotating element (bearings) at the extremities. A fluted spiral is fixed to an extremity.

GATHERING CHAIN: Gathering chains transport the corn stalk to the stalk rollers, and cobs to the auger. Tension is maintained through self-adjustable helicoid springs.

AUGER: Equipped with short, synchronized blade sections, which keep corn cobs from being thrown off the header. It has a drive safety system which is a clutch.

HARVESTING UNIT: Rigid structure fixed by screws and clamps that support the stalk rollers, gathering chains and gear box. Allows adjustable slats to be fixed. There is a direct relation between the unit speed and the row unit speed, and the combine moving speed.

GEAR BOX: Mounted on an independent structure and frame with a drive shaft that works through reconditioned bevel gears, bathed in oil, mounted on a main axis, transmitting the central crown torque through angular gear, which is always equal for both stalk rollers.

SAFETY SYSTEM: There is a clutch in harvesting unit transmission shafts, and in the auger. A friction disk prevents damages to the transmission system.

TRANSMISSION RELATION: Obtained through the action of roller chains and sprockets.

ARTICULATED TIPS - ROWS: Floating, articulated low angular profile on gathering chains with a disarming system that activates when obstacles are presented, ensuring system efficiency.

8. TECHINCAL SPECIFICATIONS

8.1. Basic dimensions

a) Front view

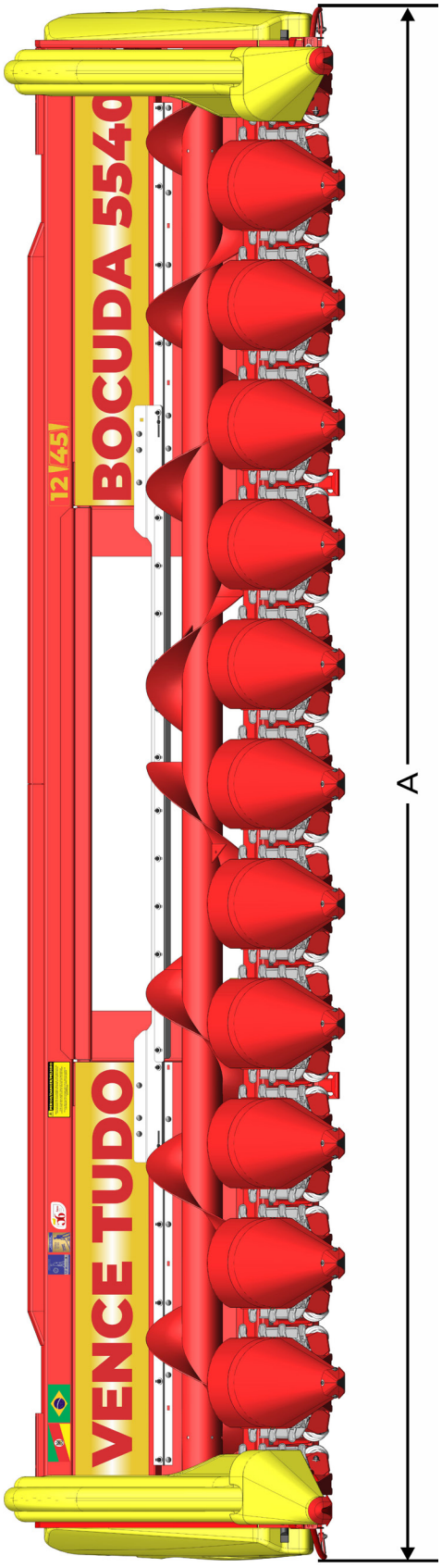


fig. 05

CHASSIS MODEL	MEASUREMENT A
3240	3555
3700	4015
4120	4435
4650	4965
5050	5365
5540	5854
5930	6254
6050	6361
6490	6801

CHASSIS MODEL	MEASUREMENT A
6530	6854
6910	7221
7030	7354
7380	7691
7530	7854
7720	8031
8170	8481
8615	8926
8630	8954

CHASSIS MODEL	MEASUREMENT A
9070	9381
9530	9854
10020	10344
10510	10834
10950	11274
11330	11654
11530	11854
11800	12124
12030	12354

*Dimensions in mm

b) Side views

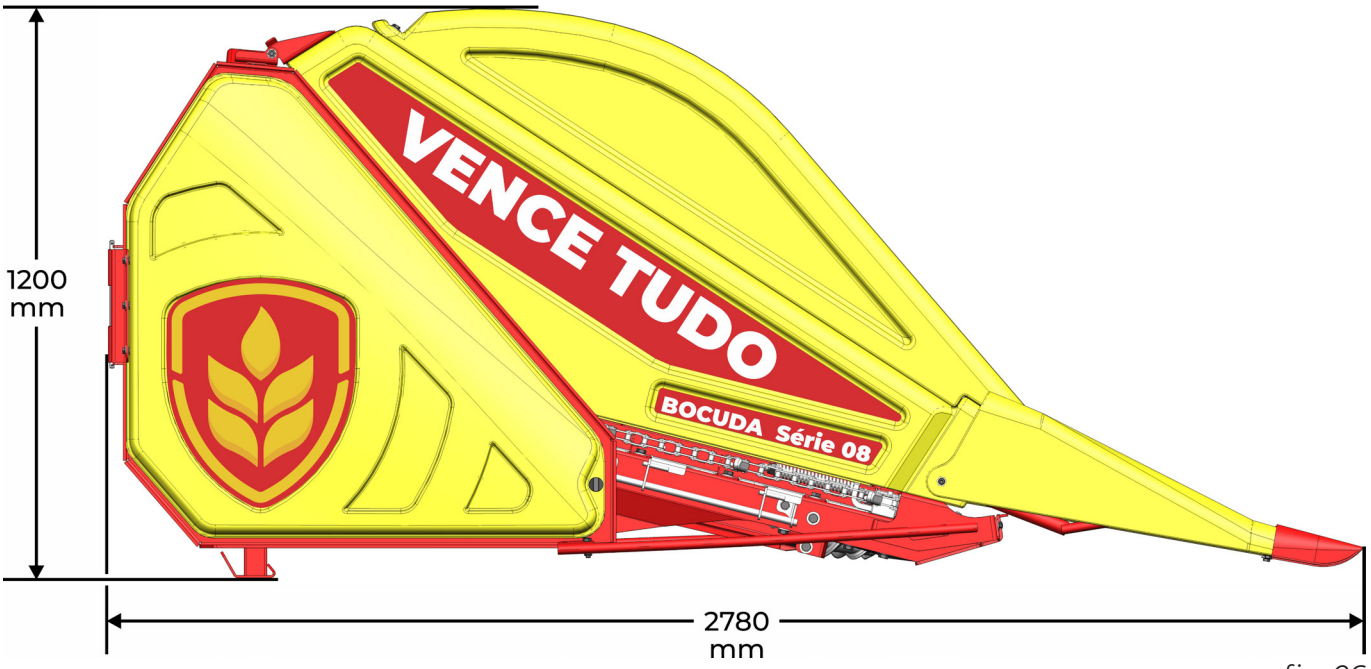


fig. 06

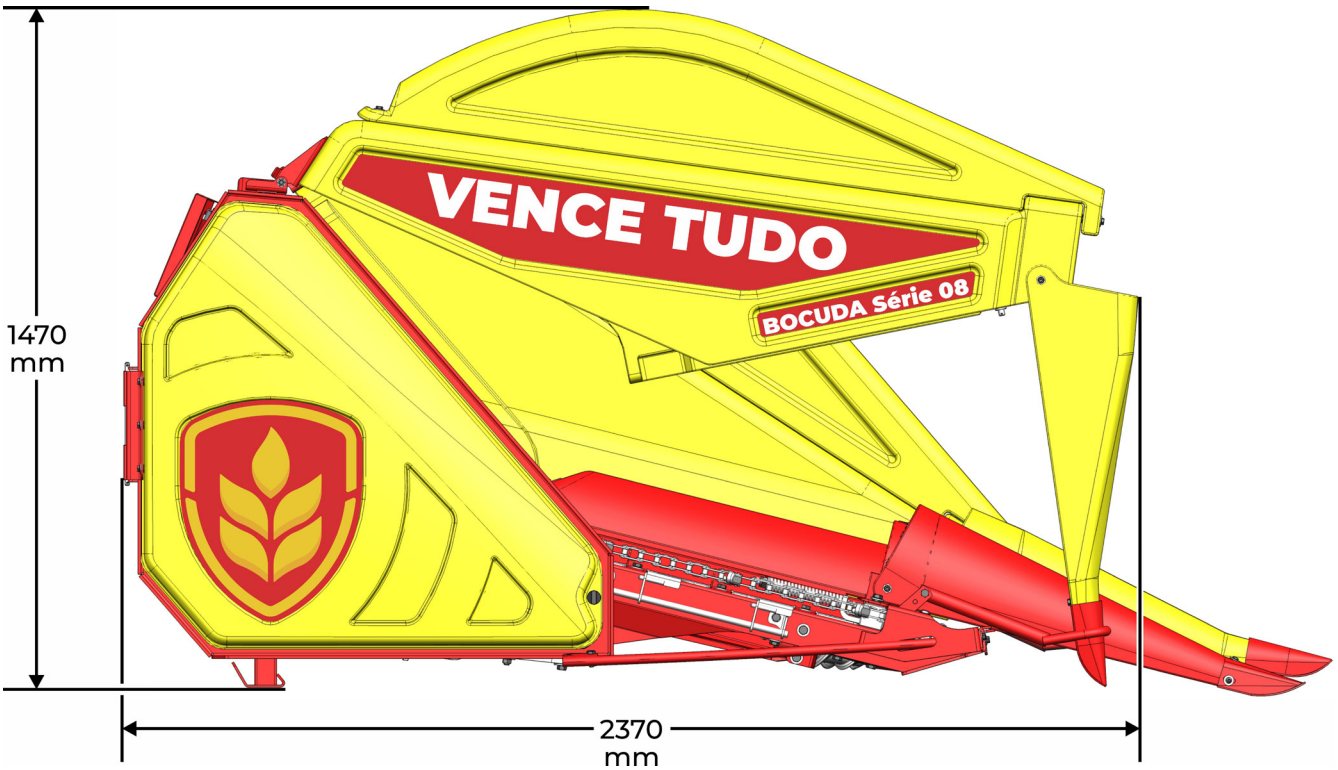


fig. 07

8.2. Definition of allowed spacing, shield model and approximate weight

CHASSIS	SHIELDS TO BE USED ACCORDING TO EACH SETTING (#. OF ROWS AND SPACING)								APPROXIMATE WEIGHT (kg) ACCORDING TO VARIABLES
	# OF ROWS	45	50	45-50	55-60	65-70	75-80	85-90	
		SPACING (cm)							
3240	7	45		45					1805
	6		50-52	50-52	55**				1690
	5				60-62	65-67			1550
	4						75-77-80-82	85-87-90	1425
3700	8	45		45					2020
	7		50-52	50-52					1890
	6				57-60-62				1765
	5					70-72	75-77-80**		1650
	4							85-87-90	1490
4120	9	45		45					2225
	8		50	50					2095
	7				55-57-60				1975
	6					65-67-70-72			1840
	5						75-77-80-82	85-87-90	1715
4650	10	45		45					2440
	9		50	50					2315
	8				55-57				2190
	7					65-67-69**			2065
	6						75-77-80-82		1945
	5							85-87-90	1785
5050	11	45		45					2680
	10		50	50					2560
	9				55-57**				2440
	8				60-62	65**			2315
	7					70-72	75		2195
	6						80-82	85-87-90	2045
5540	12	45		45					2905
	11		50	50					2790
	10				55				2675
	9				60-62				2525
	8					65-67-70-72**			2400
	7						75-77-80-82		2280
	6							85-87-90	2125
5930	13	45		45					3110
	12		49	49					2995
	10				60				2740
	9					65-67			2605
	8					72	75-77		2495
	7						80-82	85-87-90	2350
6050	12		50	50					3005
	11				55				2895
	10				60				2750
	9					65-67-69			2625
	8					72	75-77-79		2515
	7							85-87-90	2360
6490	14	45		45					3325
	13		50**	50**					3210
	11				57-60**				2960
	10					65			2830
	9					70-72	75		2730
	8						80-82	85	2585
	7							90	2415
6530	13		50	50					3270
	11				60				3015
	10					65-66			2890
	9					70-72	75		2785
	8						80-82	85	2640
	7							90	2475

CHASSIS	SHIELDS TO BE USED ACCORDING TO EACH SETTING (#. OF ROWS AND SPACING)								APPROXIMATE WEIGHT (kg) ACCORDING TO VARIABLES
	# OF ROWS	45	50	45-50	55-60	65-70	75-80	85-90	
		SPACING (cm)							
6910	15	45		45					3535
	14		49	49					3430
	13		52	52					3275
	12				57				3170
	11				62				3025
	10					67-70			2905
	9						75-77-80**		2805
	8							85-87-90	2650
7030	14		50	50					3475
	11					65			3105
	10					70-72			2955
	9						75-76-77-80		2850
	8							85-90	2700
7380	16	45		45					3735
	15		49**	49**					3630
	14		52	52					3480
	13				55-57				3375
	12				60-62				3235
	11					65-67			3105
	10					72	75		3010
	9						80-82	85	2870
	8							90	2700
7530	15		50	50					3685
	12				62				3290
	11					67-69-70			3175
	10					72	75-76-77		3070
	9						80-82	85-87	2925
	8							90	2760
7720	17	45		45					3980
	16	47		47					3830
	15		51	51					3725
	14				55				3630
	13				60				3485
	12					65			3365
	11					70-72			3215
	10						75-77-80		3120
	9							85-87-90	2965
8170	18	45		45					4205
	17	47		47					4060
	16		50	50					3955
	15				55**				3860
	14				57				3705
	13				62				3565
	12					70**			3455
	11						75		3355
	10						80-82	85	3215
	9							90	3045
8615	19	45**		45**					4405
	18	47		47					4260
	17		50	50					4160
	16		52	52					4010
	15				57				3915
	14				60-62				3775
	13					65			3655
	12					70-72			3505
	11						75-77-80		3415
	10							85-87-90**	3270
8630	19	45		45					4430
	17		50	50					4180
	14				60-62				3795
	13					65			3675
	12					70-72			3530
	11						75-76-77-80		3440
	10							85-90	3290

CHASSIS	SHIELDS TO BE USED ACCORDING TO EACH SETTING (#. OF ROWS AND SPACING)								APPROXIMATE WEIGHT (kg) ACCORDING TO VARIABLES
	# OF ROWS	45	50	45-50	55-60	65-70	75-80	85-90	
		SPACING (cm)							
9070	20	45		45					4620
	18		50	50					4375
	17		52	52					4225
	16				57				4135
	15				60				3995
	14					65			3875
	13					70			3730
	12						75-77		3635
	11						80-82	85	3500
	10							87-90	3335
9530	21	45		45					4580
	20	47		47					4740
	19		50	50					4645
	18		52	52					4495
	17				55-56				4410
	16				60				4230
	15				62	64,5**			4155
	14					66-67-69			4010
	13					72	75		3920
	12						77-80-82		3770
	11							85-87-90	3620
10020	22*	45		45					4775
	21	47		47					4640
	20		50	50					4855
	19		52	52					4705
	18				55				4625
	17				59,5**				4485
	16				62				4330
	15					65-67			4215
	14					70-72			4070
	13						75-77		3980
	12						80-82	85	3850
	11							90	3680
10510	23*	45		45					4995
	22*	47		47					4860
	21		50	50					4790
	20		52	52					4945
	19				55				4865
	18				57-59**				4725
	17				62				4570
	16					65			4460
	15					69-70			4315
	14					72	75-77**		4235
	13						80-82		4080
	12							85-87-90	3935
10950	24*	45		45					5200
	22*		49,7	49,7					4995
	21		52	52					4860
	20				54,7				5090
	19				57				4935
	18				60				4800
	17					65			4690
	16					67-69			4545
	15					72			4385
	14						75-77-79-80		4320
	13						82		4150
	13							85	4175
	12							90	4010

CHASSIS	SHIELDS TO BE USED ACCORDING TO EACH SETTING (#. OF ROWS AND SPACING)								APPROXIMATE WEIGHT (kg) ACCORDING TO VARIABLES
	# OF ROWS	45	50	45-50	55-60	65-70	75-80	85-90	
		SPACING (cm)							
11330	25*	45		45					5380
	24*	47		47					5250
	23*		49	49					5180
	22*		51-51,5	51-51,5					5045
	20				56				5140
	19				60				5005
	18				62				4850
	17					65-66-67			4740
	16					70-72			4600
	15						75-76-77		4520
	14						80-82		4370
	13							85-87-90	4225
11530	23*		50	50					5230
	22*		52	52					5095
	21				55				5035
	19				60				5050
	17					67			4785
	16					72			4645
	15						75-76-77		4570
	14						80-82		4415
	13							90	4275
11800	26*	45		45					5580
	24*		49	49					5385
	23*		51	51					5250
	21				55				5055
	20				59,5**				5225
	19				62				5070
	18					65			4965
	17					69-70			4820
	16					72	75		4755
	15						77-80		4600
	14						82	85	4460
	13							90	4290
12030	24*		50	50					5435
	23*		52	52					5300
	22*				55				5250
	20				60				5275
	18					66-67			5015
	17					70-72			4875
	16						75		4805
	15						79-80		4655
	14							85-87	4515
	13							90	4345

NOTES:

- *It may be necessary to acquire extra parts for the correct assembly of the components when there are changes to the assembly settings. The parts can be purchased through the VENCE TUDO Central Parts department, or through a VENCE TUDO authorized dealer.*
- *The number of rows with this symbol (*) indicate the weight of the line's aluminum GEAR BOX.*
- *Spacing with this symbol (**) indicates that assembly is only possible without deck plates system.*
- *The weight measurements can vary up to 150 kg, less or more.*
- *The weight and capacity dimensions, as well as any other information presented in this manual, are approximate and subject to changes without prior notice.*

9. 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.

Carefully follow lubrication intervals for the different parts of the equipment. Lubricate according to recommendations.

9.1. Lubrication points

⚠ ATTENTION

Grease is recommended to lubricate chains and auger transmission.

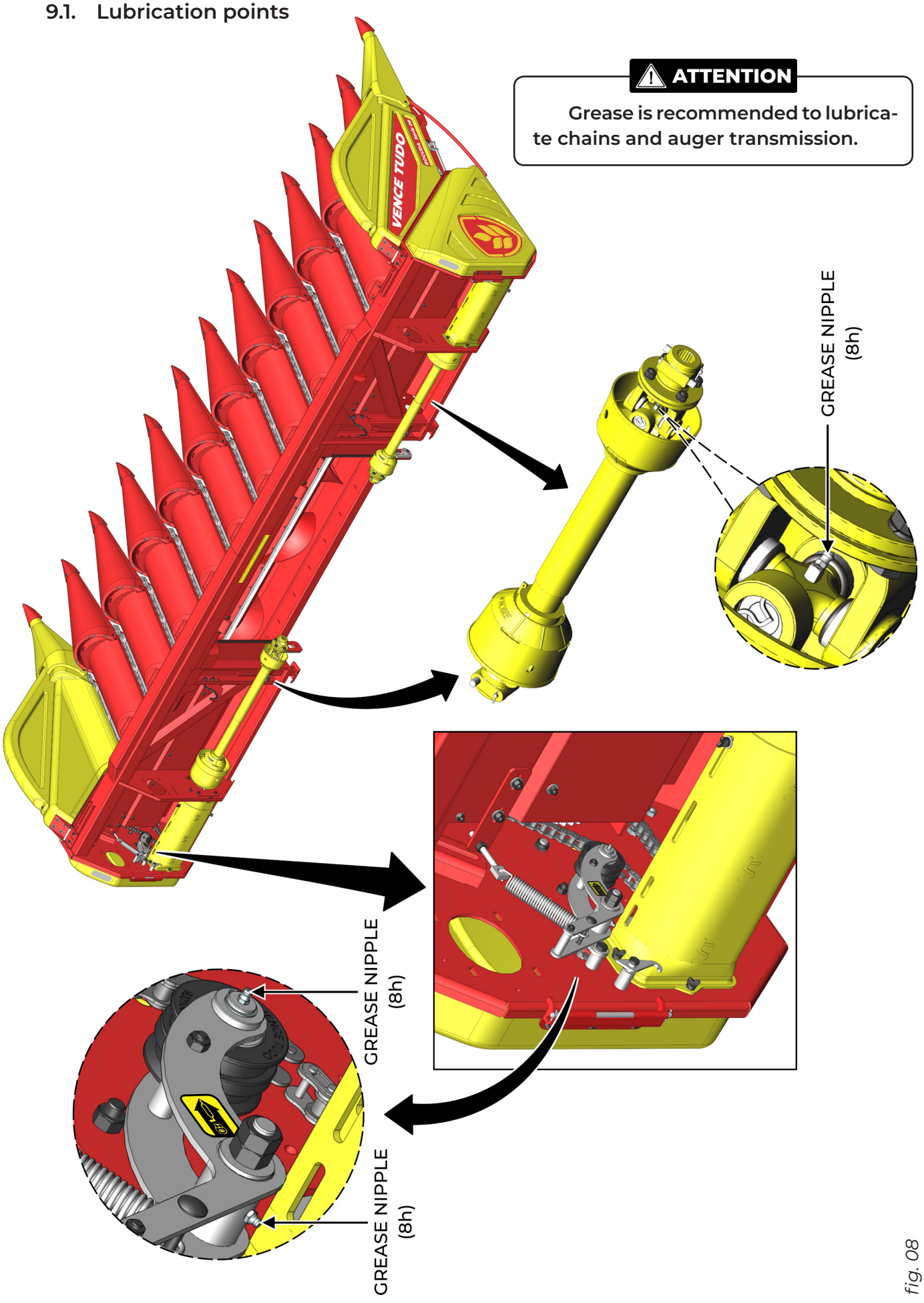


fig. 08

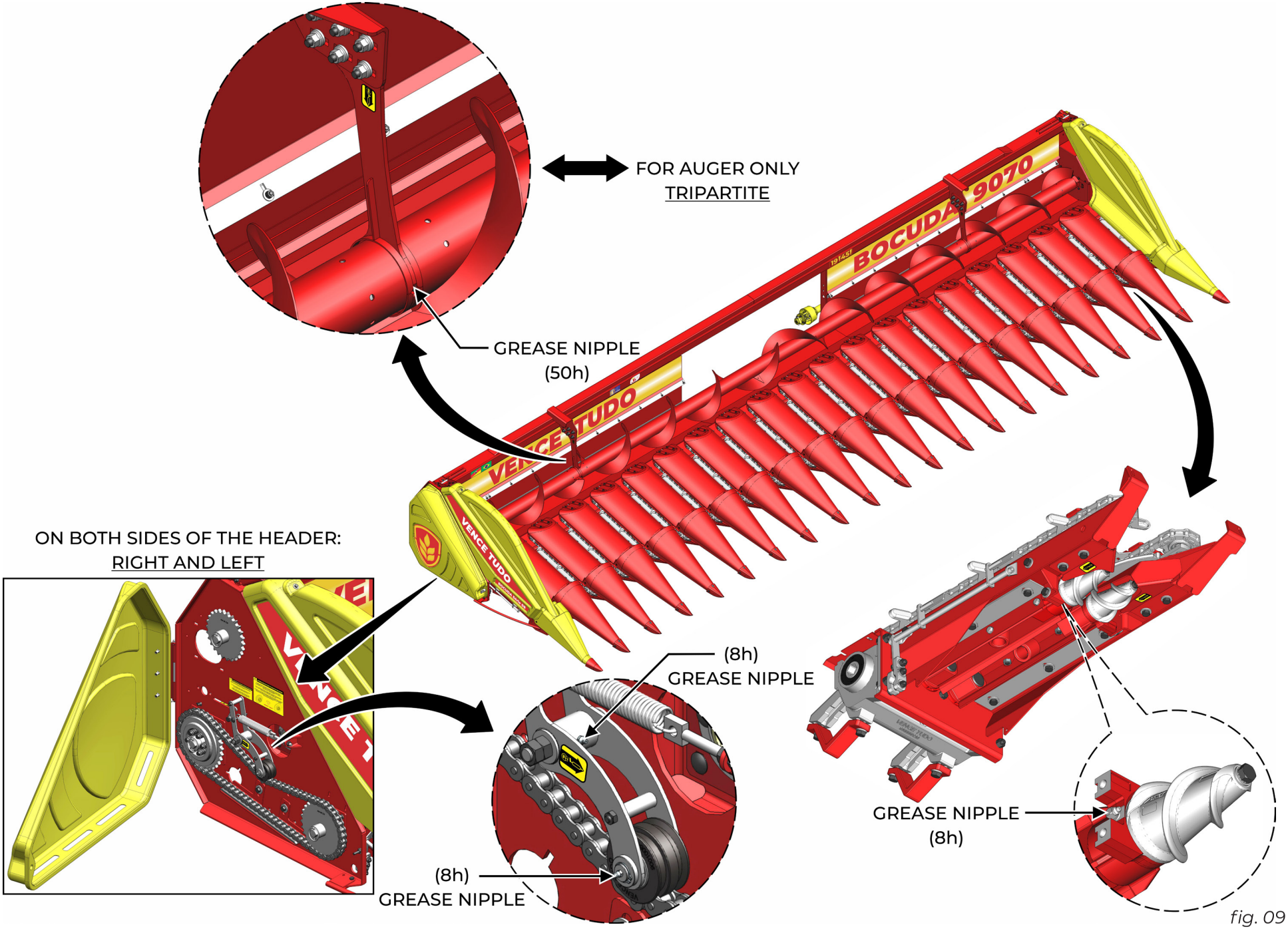

FOR AUGER ONLY
TRIPARTITE
GREASE NIPPLE
(50h)
ON BOTH SIDES OF THE HEADER:
RIGHT AND LEFT
(8h)
GREASE NIPPLE
(8h)
GREASE NIPPLE
(8h)
GREASE NIPPLE

fig. 09

- Gear Box

The gear boxes were projected to have a long useful life that does not need frequent servicing. However, the gear box oil levels must be checked periodically, as follows:

1. Thoroughly clean around the stopper (A) (*fig. 10*), located on the upper part of the box, then removing it with ***the utmost care so that no dirt enters through the bore***;

2. Use the dipstick to measure the level (B) (*fig. 11*) by placing it in the corresponding opening;

3. If necessary, replace enough oil to keep the level between the minimum and maximum indicated on the dipstick (*fig. 12*);

4. Inspect the gear boxes during the first days of header operation. Review them ***every 50 hours*** of work.

5. Change the lubricant oil ***every 450 hours of work*** or at the end of each harvest, removing the stopper (C) (*fig. 13*) and proceeding as in item 2.

6. Use the ***LUBRICATING OIL SP 680*** or another that is compatible ***(SAE 90)*** in a proportion of 1.5 liters per gear box.

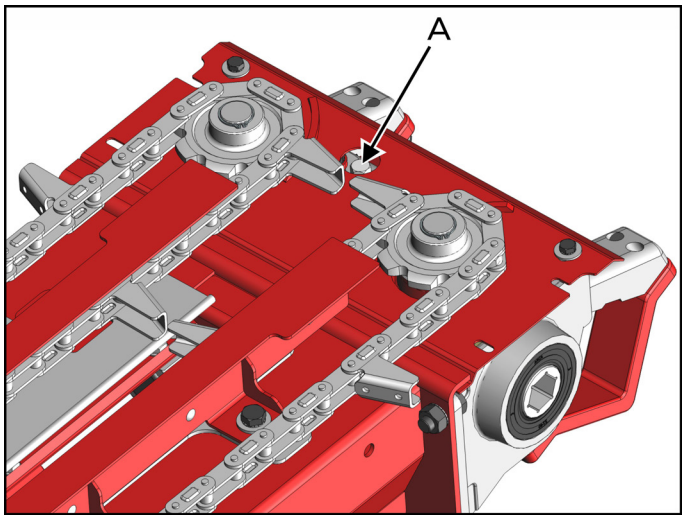


fig. 10

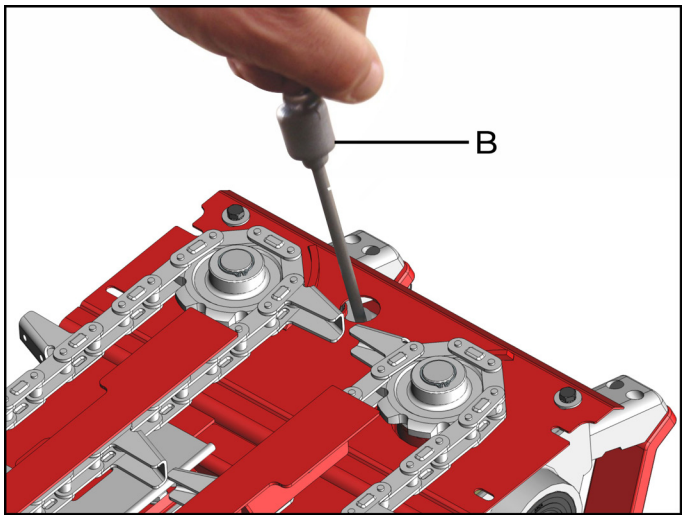


fig. 11

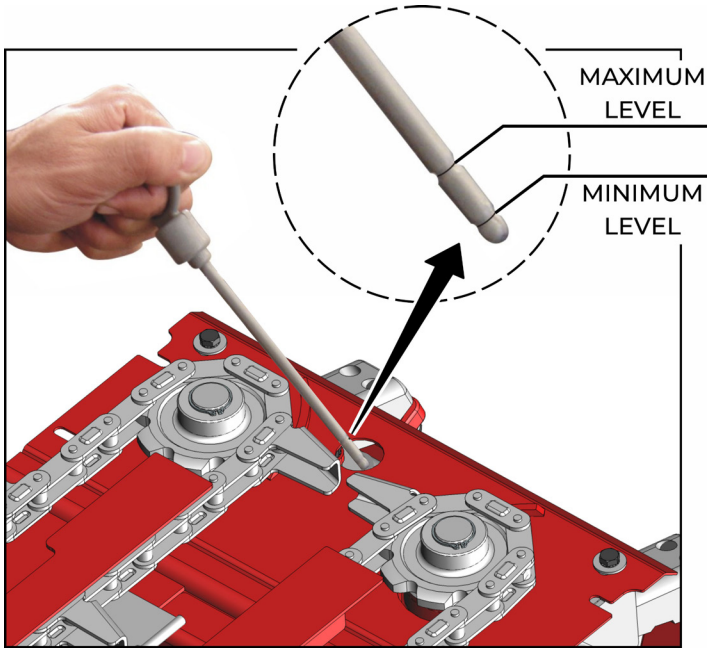


fig. 12

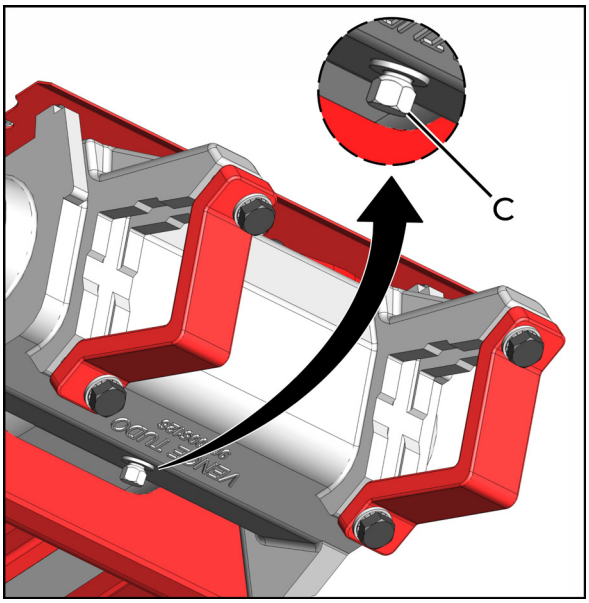


fig. 13

WHEN PLACING THE OIL, CHECK ITS LEVEL, LOWER THE HEADER TO THE GROUND, ON LEVEL GROUND, SO THAT THE BOXES ARE IN A COMPATIBLE ANGLE.

ATTENTION

Periodically clean the gear box breathers, since they have the important task of helping in the internal temperature exchange and in the oil's lubricating action.

10. PREPARATION

10.1. General considerations

The success of the corn harvest, with minimal losses, depends on the quality of the work performed and the useful life of any equipment depends on appropriate adjustments that satisfy the particular conditions of each property or crop.

We will briefly go over the functional aspects of the **VENCE TUDO CORN HEADER, BOCUDA SÉRIE 08** to guide you:

- **SHIELDS (FRONT TIP) AND SIDE TIPS:** fixed between the corn rows, used to direct the plants to the center of the harvesting unit.
- **STALK ROLLERS:** puxam os talos de milho para baixo.
- **THRESHING PLATES:** after the corn canes are pulled by the stalk rollers, the cobs are delivered to the threshing plates and a small hole keeps them from passing through. The stalk rollers pull the canes and the cobs are released.
- **GATHERING CHAINS:** capture the corn cobs and direct them to the auger that leads them to the combine's feeding belt, then moving on to its threshing drum.

10.2. Coupling and uncoupling

To coupling, follow the steps below:

1. Bring the header positioning joint closer to the header coupling structure, coupling them at the top. Suspend the header at approximately 50 cm from the ground, until the base reaches a height that allows easy access.
2. Fix the base using hooks or pins, according to the model of the combine.
3. Assemble the transmission system between the header and the combine using shafts.
   Attention: The VENCE TUDO CORN HEADER, BOCUDA SÉRIE 08, are mounted by the manufacturer using 21-groove shafts with standard dimensions, meaning that there might be a need to adjust the shaft's length, or to replace the 21-groove driver flange for a 6 groove part, according to the combine model. This part is available in the parts box that comes with your Vence Tudo Header.
4. To uncouple the header, inversely perform the process mentioned in the previous, leaving the header at a height that allows you to couple the header again, using the support legs.

- **Shaft length adjustment**

The shaft length should be adjusted when the distance between the header and the combine transmission shaft impedes mounting. The shaft should allow assembly on the ***header's maximum and minimum horizontal inclination point***. To perform this adjustment, follow the instructions below:

a) Dismount the shaft protection covers.

b) To determine the shaft's length, couple half of the header and the other half on the combine, placing the semi-shafts in parallel and in the header's operating positions. The shaft should have a minimum clearance of 10 cm during maximum contraction.

c) Cut the tube and massive bar (male and female) according to the desired measurements. Remove the burr and metal shavings that result from cutting. Lubricate the telescopic parts and mount the protections once again.

10.3. Height setting

Adjust the combine's height according to the crop, positioning it according to the side and central tips, which should be set so that they are aligned in relation to the ground (*see figures 14 and 15*).

- **Articulated tips**

The articulated rows are used to raise and gently drive the corn canes into the stalk rollers.

Under normal conditions, the tips should be set so that they merely touch the ground. On irregular terrain or those with excess weed, the tips should be positioned as high as possible in relation to the ground.

Set the tips as follows:

1. Begin with one of the header's side tips (A) (*fig. 14*), and adjust the others using the first as a guide;
2. Move the regulator bracket (C) (*fig. 15*) that is fixed on the harvesting unit (D) up or down, until reaching the desired angle for the central tips (B) (*fig. 14*).
3. If the angle is still not correct, use the extra hole in the switch lever (E) (*fig. 15*) found in the harvesting units (D).

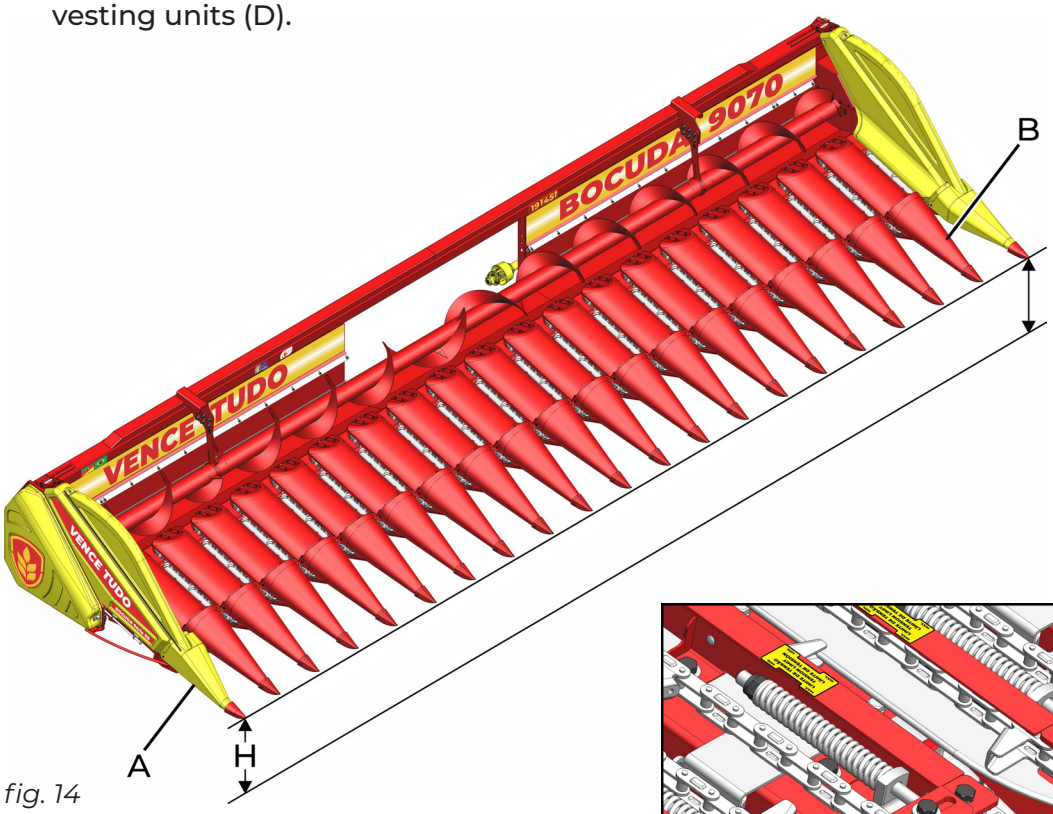


fig. 14

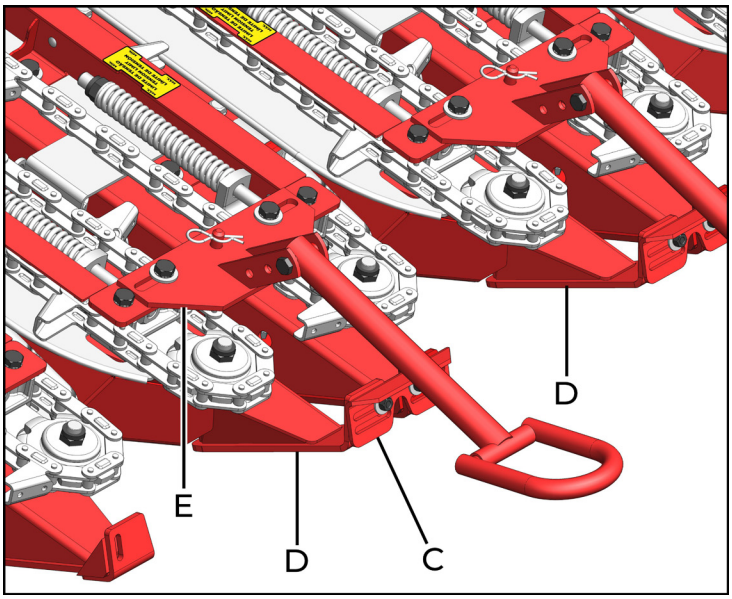


fig. 15

⚠ WARNING ⚠
CORN ON PATH

When harvesting conditions are sever, the side tips (A) (*fig. 14, page 35*) should be kept 40 mm higher than the shields - front tips (B), and the shields - front tips should be perfectly aligned throughout the header. If your header carries a height sensor, it is recommended that the shields carrying the sensor rods be kept 15 mm lower than the other shields, in order to optimize the system.

NOTE: Poor adjustment of the tips causes the shields to break, which, in turn, guarantees equipment misuse. In this case, the manufacture warranty is terminated.

10.4. Harvesting unit rotation options

The VENCE TUDO CORN HEADER, BOCUDA SÉRIE 08, has setting options for the harvesting units' rotation. The models are mounted with a 30-teeth driving gear, and a 29-teeth driven gear. The rotations can be adjusted according to the harvesting conditions at hand to ensure optimized harvesting performance.

The sprocket mounting options can be observed in the table below:

OPÇÃO	MOTRIZ	MOVIDA	FATOR DE MULTIPLICADOR DE ROTAÇÃO
1	30	29	1,03
2	30	26	1,15
3	30	23	1,30
4	29	30	0,97
5	26	30	0,87
6	23	30	0,77

NOTE: The 23-teeth sprocket comes with the parts box. The 26- and 29-teeth sprockets are available on the header, mounted on the transmission.

10.4.1. Transmission rotation change

The VENCE TUDO CORN HEADER, BOCUDA SÉRIE 08, is factory-mounted with 30-teeth (A) (*fig. 16*) and 29-teeth (B) the transmission sprockets (clutch), where position 1 always will be driving and position 2, driven. This ratio can be changed according to the harvest speed desired by the operator. However, the 30-teeth sprocket (clutch) (A) must always be kept in one of the positions 1 or 2, and the 29-teeth sprocket (B) can be replaced either with the 26-teeth sprocket (C) or 23-teeth part that is shipped along in the additional parts box.

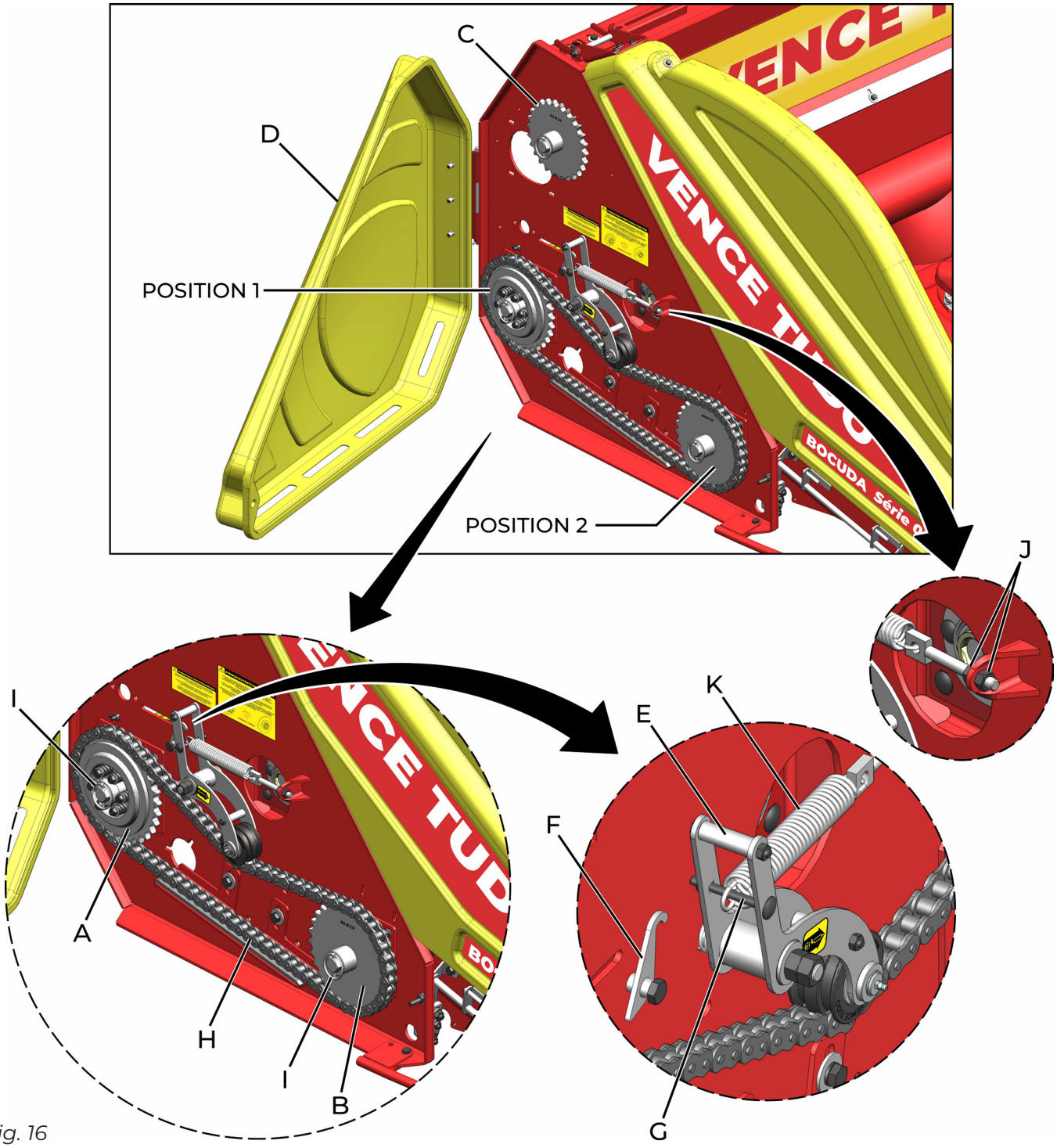


fig. 16

To change the ratio of the transmission sprockets, follow the instructions below:

1. Open the side hood (D) (*fig. 16*);
2. Pull the tensioner (E) and engage the lock (F) on the screw (G) and then remove the chain (H);
3. Remove the lock pins with ring (I) and replace the sprockets (A) and/or (B), according to the desired option;
4. Reassemble the lock pins with ring (I) and the chain (H). While mounting the chain, observe if there is any need to adjust its length. If so, use the splices and reductions available in the parts box to perform this adjustment;
5. Release the lock (F) by releasing the tensioner (E). If necessary, adjust the chain tension using the nuts (J) that stress the spring (K).

In case of extreme header bushing, it is possible to activate the reverse system of the combine transmission, taking care to turn off the header and threshing mechanisms.

10.4.1.1. Rotation according to selected options

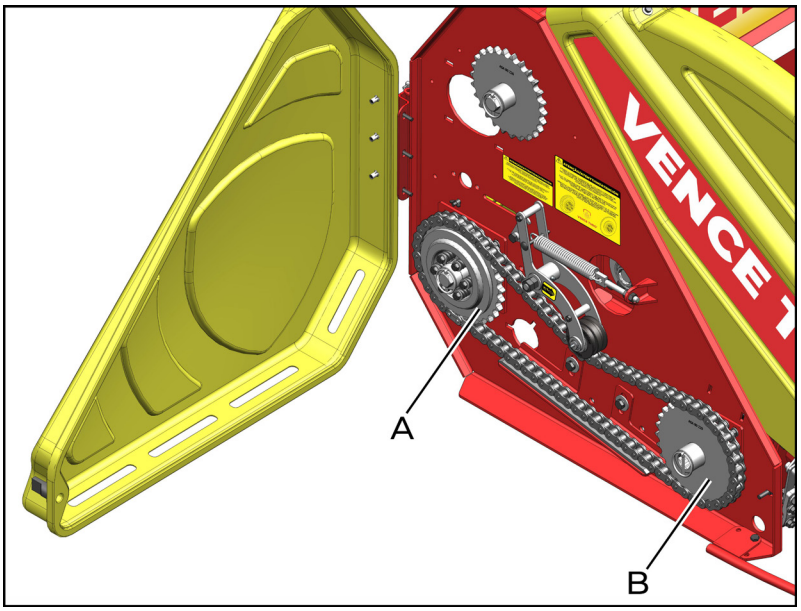


fig. 17

SIMULATION WITH 500 RPM IN THE TRANSMISSION SHAFT

SPROCKETS (A=Z30) (B=Z29)	
RPM IN THE TRANSMISSION SHAFT CASE	517
RPM OF THE PICKUP CHAINS	53
RPM IN THE ROLLERS	1002

SPROCKETS (A=Z29) (B=Z30)	
RPM IN THE TRANSMISSION SHAFT CASE	483
RPM OF THE PICKUP CHAINS	49
RPM IN THE ROLLERS	936

SPROCKETS (A = Z30) (B = Z26)	
RPM IN THE TRANSMISSION SHAFT CASE	577
RPM OF THE PICKUP CHAINS	59
RPM IN THE ROLLERS	1118

SPROCKETS (A = Z26) (B = Z30)	
RPM IN THE TRANSMISSION SHAFT CASE	433
RPM OF THE PICKUP CHAINS	44
RPM IN THE ROLLERS	840

SPROCKETS (A = Z30) (B = Z23)	
RPM IN THE TRANSMISSION SHAFT CASE	652
RPM OF THE PICKUP CHAINS	67
RPM IN THE ROLLERS	1264

SPROCKETS (A = Z23) (B = Z30)	
RPM IN THE TRANSMISSION SHAFT CASE	383
RPM OF THE PICKUP CHAINS	39
RPM IN THE ROLLERS	743

SIMULATION WITH 600 RPM IN THE TRANSMISSION SHAFT

SPROCKETS (A=Z30) (B=Z29)	
RPM IN THE TRANSMISSION SHAFT CASE	621
RPM OF THE PICKUP CHAINS	63
RPM IN THE ROLLERS	1203

SPROCKETS (A=Z29) (B=Z30)	
RPM IN THE TRANSMISSION SHAFT CASE	580
RPM OF THE PICKUP CHAINS	59
RPM IN THE ROLLERS	1124

SPROCKETS (A = Z30) (B = Z26)	
RPM IN THE TRANSMISSION SHAFT CASE	692
RPM OF THE PICKUP CHAINS	71
RPM IN THE ROLLERS	1341

SPROCKETS (A = Z26) (B = Z30)	
RPM IN THE TRANSMISSION SHAFT CASE	520
RPM OF THE PICKUP CHAINS	53
RPM IN THE ROLLERS	1008

SPROCKETS (A = Z30) (B = Z23)	
RPM IN THE TRANSMISSION SHAFT CASE	548
RPM OF THE PICKUP CHAINS	56
RPM IN THE ROLLERS	1061

SPROCKETS (A = Z23) (B = Z30)	
RPM IN THE TRANSMISSION SHAFT CASE	460
RPM OF THE PICKUP CHAINS	47
RPM IN THE ROLLERS	891

SIMULATION WITH 750 RPM IN THE TRANSMISSION SHAFT

SPROCKETS (A=Z30) (B=Z29)	
RPM IN THE TRANSMISSION SHAFT CASE	776
RPM OF THE PICKUP CHAINS	79
RPM IN THE ROLLERS	1503

SPROCKETS (A=Z29) (B=Z30)	
RPM IN THE TRANSMISSION SHAFT CASE	725
RPM OF THE PICKUP CHAINS	74
RPM IN THE ROLLERS	1405

SPROCKETS (A = Z30) (B = Z26)	
RPM IN THE TRANSMISSION SHAFT CASE	865
RPM OF THE PICKUP CHAINS	88
RPM IN THE ROLLERS	1677

SPROCKETS (A = Z26) (B = Z30)	
RPM IN THE TRANSMISSION SHAFT CASE	650
RPM OF THE PICKUP CHAINS	66
RPM IN THE ROLLERS	1259

SPROCKETS (A = Z30) (B = Z23)	
RPM IN THE TRANSMISSION SHAFT CASE	978
RPM OF THE PICKUP CHAINS	100
RPM IN THE ROLLERS	1895

SPROCKETS (A = Z23) (B = Z30)	
RPM IN THE TRANSMISSION SHAFT CASE	575
RPM OF THE PICKUP CHAINS	59
RPM IN THE ROLLERS	1114

10.4.1.2. Chain tuning

The drive transmission chain must be properly adjusted by using the tensioner, after the first 50 hours of operation and, from that on, at regular time spans.

Adjusting chain clearance is of fundamental importance for the proper operation of the transmission, in addition to extending the service life of the other system components, such as shafts, bearings and rollers.

Excessive tension favors the formation of an oil film between the chain components, causing premature wear and heating, in addition to causing stresses throughout the transmission system. On the other hand, excessive clearance is also harmful, as it causes vibrations and flexion of the chain, causing fatigue in the material.

To properly adjust the transmission chain, follow the instructions below:

1. Turn the rear sprocket (A) once (*fig. 18*) in the indicated direction until the lower part of the chain is tensioned;
2. Then, check that the clearance fits the recommended measures;
3. If necessary, readjust the spring tension, loosen the nuts (B) and (C), position the bracket (D) at the desired distance, then retighten the nuts (B) and (C).

ATTENTION

If the chain is too tight, it may overheat, causing premature wear.

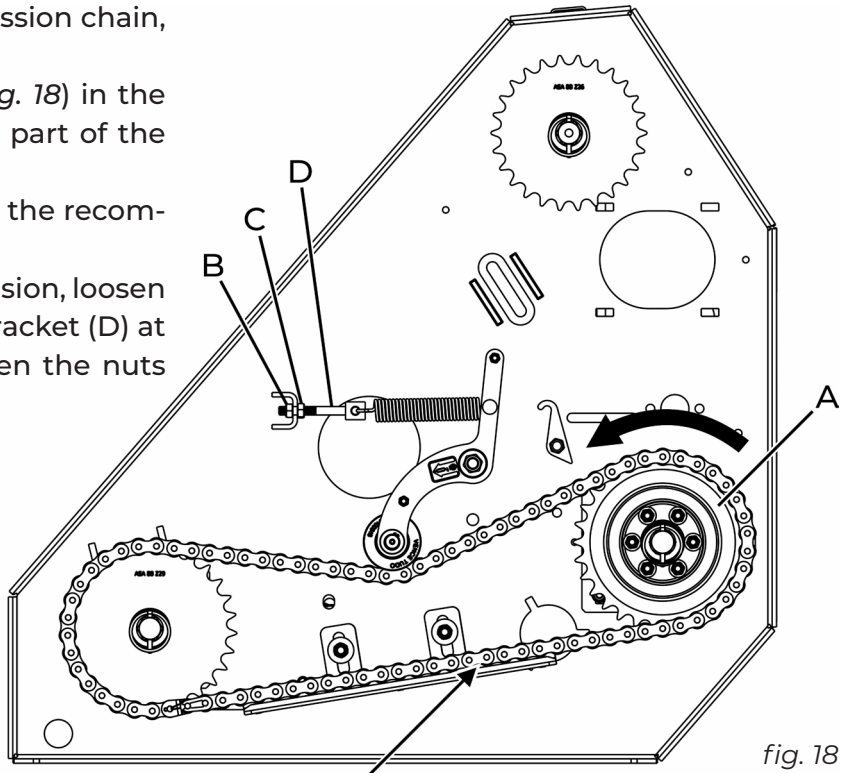


fig. 18

When adjusting the chain, analyze the figures below (*19 and 20*) and identify which of the transmission models your header features, leaving the recommended clearance as shown in the figures.

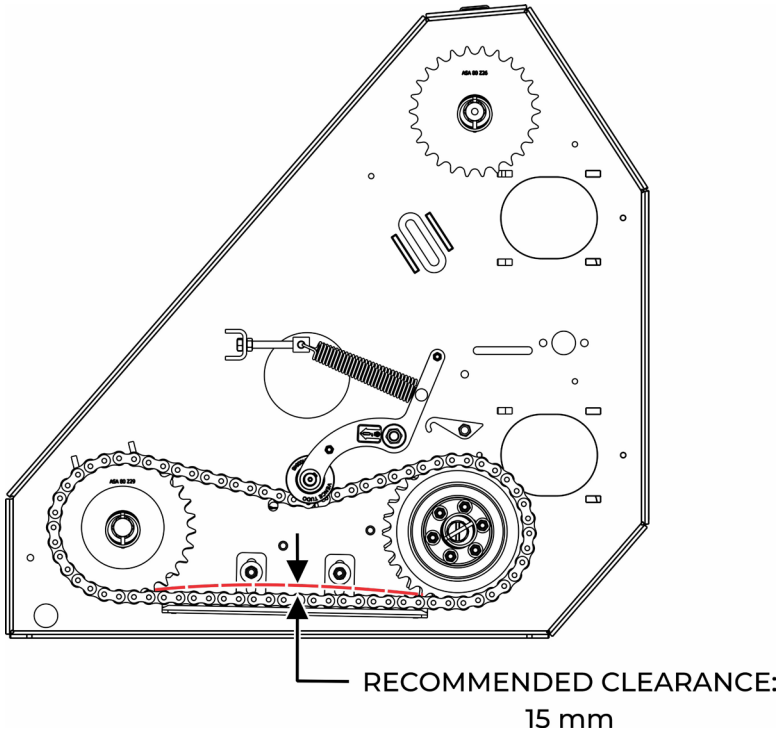


fig. 19

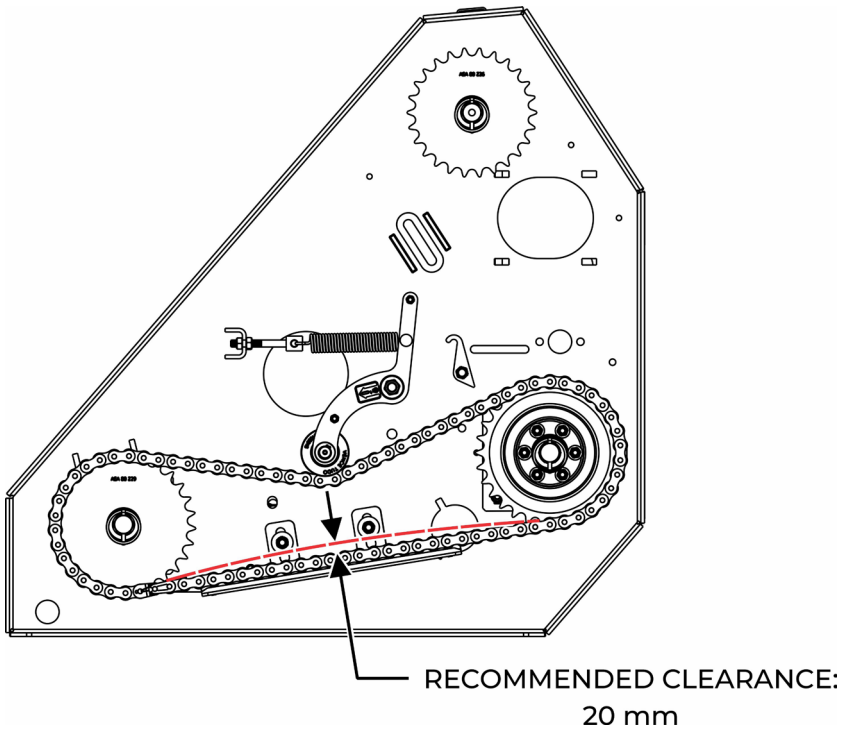


fig. 20

10.4.2. Rotation option in the auger

The auger system has three rotation setting options. Determining the best option depends on factors such as harvesting speed and corn variety. Follow the instructions below to set the auger rotation:

1. Remove the protection shield (A) (*fig. 21*);
2. Pull the tensioner (B) to release the chain tension (C). Lock the tensioner (B) by engaging the lock (D) on the screw (E);
3. Loosen the sprocket fixing screw (F);
4. Position the chain (C) in the desired sprocket (G) (Z13/15/17);
5. Align the chosen sprocket and the auger transmission sprocket, then fix it once more using the screw (F);
6. Release the tensioner (B);
7. If necessary, adjust the tension of the chain (C) using the (I) tensioner nuts (H) of the spring (I).

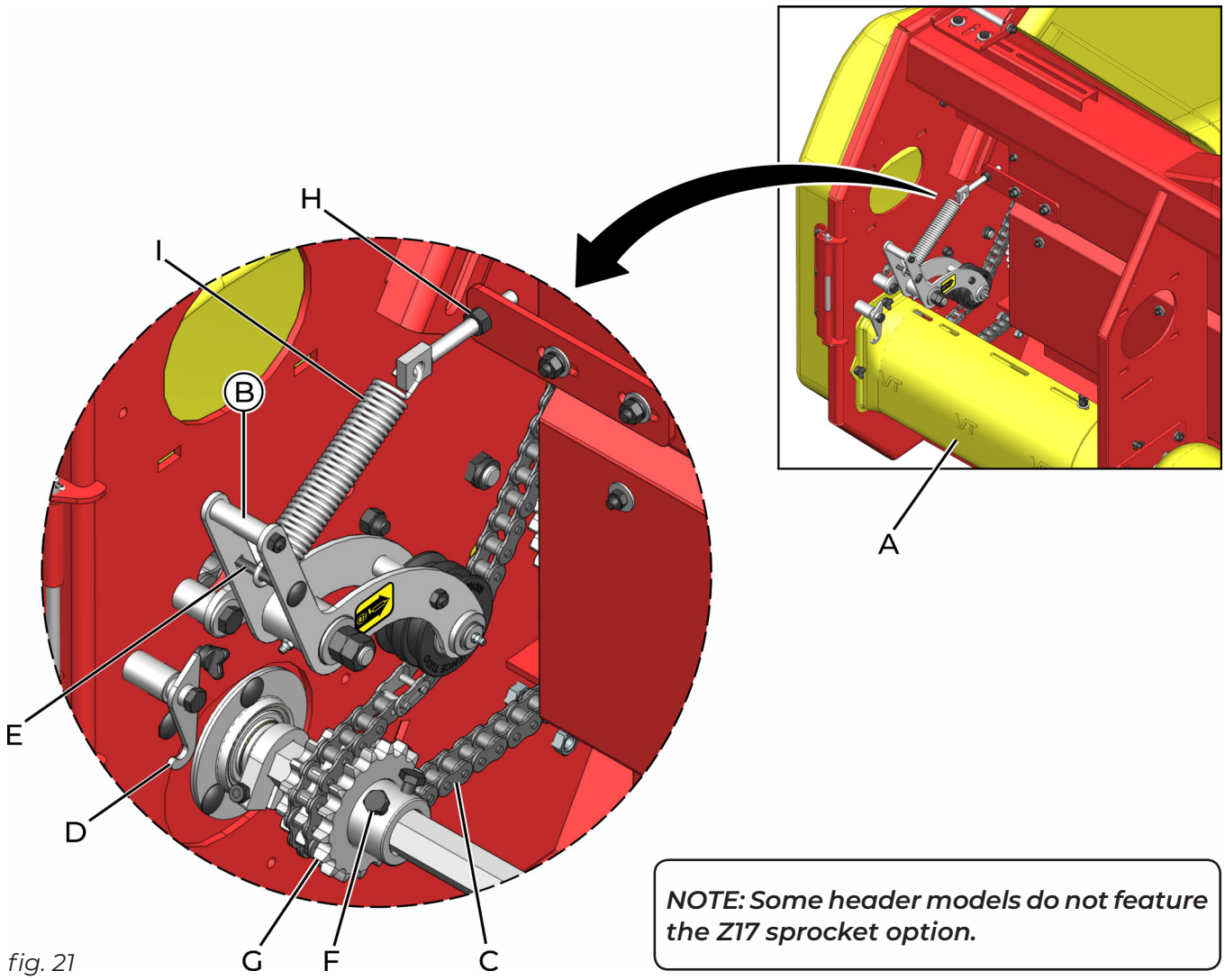


fig. 21

NOTE: Some header models do not feature the Z17 sprocket option.

10.4.2.1. Reference values for the auger's rotation

SIMULATION WITH 500 RPM IN THE TRANSMISSION SHAFT

OPTION 1:	SPROCKET Z13	108 RPM
OPTION 2:	SPROCKET Z15	125 RPM
OPTION 3:	SPROCKET Z17	142 RPM

SIMULATION WITH 600 RPM IN THE TRANSMISSION SHAFT

OPTION 1:	SPROCKET Z13	130 RPM
OPTION 2:	SPROCKET Z15	150 RPM
OPTION 3:	SPROCKET Z17	170 RPM

SIMULATION WITH 750 RPM IN THE TRANSMISSION SHAFT

OPTION 1:	SPROCKET Z13	163 RPM
OPTION 2:	SPROCKET Z15	188 RPM
OPTION 3:	SPROCKET Z17	213 RPM

10.4.2.2. Auger rotation value calculation

To calculate the value of the auger rotation, use the shaft rotation value, multiplying it by the factors in the table below:

FOR OPTION 1	SPROCKET Z13 = SHAFT ROTATION x 0.22
FOR OPTION 2	SPROCKET Z15 = SHAFT ROTATION x 0.25
FOR OPTION 3	SPROCKET Z17 = SHAFT ROTATION x 0.28

11. OPERATIONS

11.1. General information

Harvest using the most reduced gear possible until you are familiar with the VENCE TUDO CORN HEADER, BOCUDA SÉRIE 08.

Collect the corn rows as they were planted so that collecting odd rows or trying to find them by attempt and error isn't needed.

After collecting a few rounds, turn off the header and stop the combine motor. Check the chains, be careful with any possible bearing overheating, and tighten the screws.

Continue the harvest in a slower gear and increase until you reach the appropriate speed.

Operate with caution, so that the header remains in the rows.

Pay attention to the sound made by the slipping clutch, or any other strange sound.

If the header becomes obstructed, reduce the advancing speed, or stop the combine, until it is cleared.

11.2. Working speed

The combine's forward movement should be approximately the same as the gathering chains' movement backwards. The VENCE TUDO CORN HEADER, BOCUDA SÉRIE 08, allows you to change the rotation to a more appropriate speed.

Notice that if the header advances too fast, the gathering chains push the corn canes to the front and rip the cobs from the canes.

If the header advances too slowly, the gathering chains throw the corn canes inside the header, cutting the canes or throwing away the cobs.

11.3. Open and close: central and side shields

If there is need to open the central and/or lateral shields to perform any adjustments or inspections in the harvesting units, proceed as follows:

1- Remove the "R" pin clamp (A) (*fig. 22 and 23*), suspend the shields (B) (*fig. 22*), support the tip (C) on the tip bracket (D);

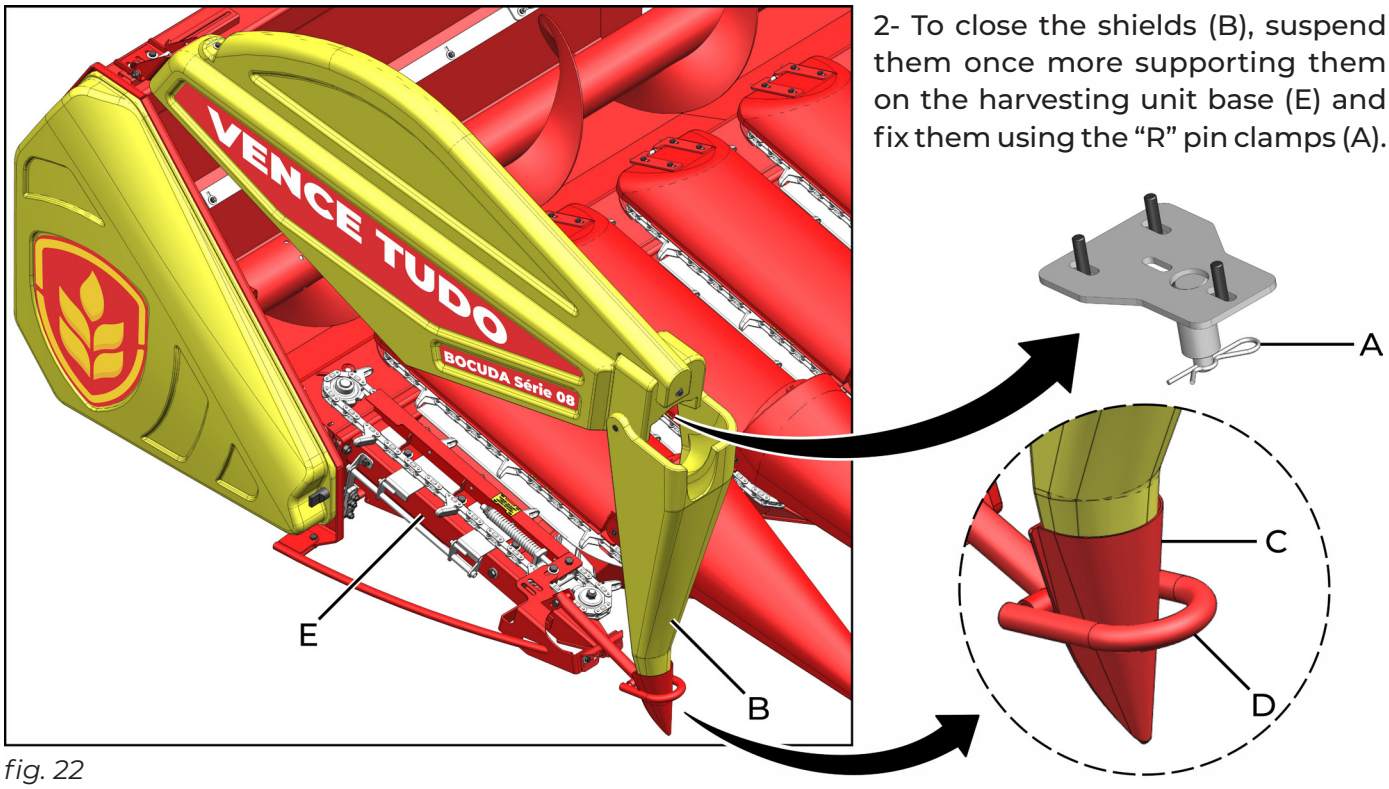


fig. 22

2- To close the shields (B), suspend them once more supporting them on the harvesting unit base (E) and fix them using the "R" pin clamps (A).

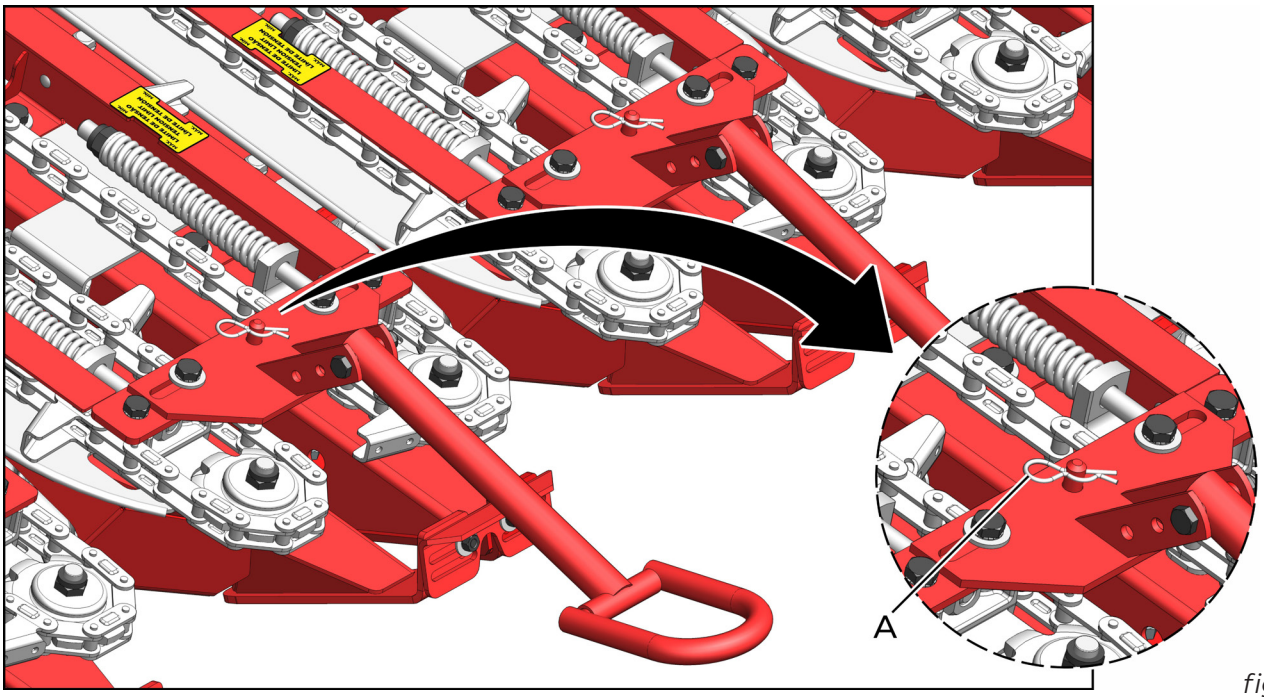


fig. 23

11.4. Gathering chains

Chain (A) (*fig. 24*) has a tension that should remain between the minimum and maximum, according to *figure 24*.

Tension is maintained by the tensioner (B) through the spring (C). These springs are set to the minimum tension by the manufacturer 175mm. To adjust the chain tension, regulate the nut (D) according to your need.

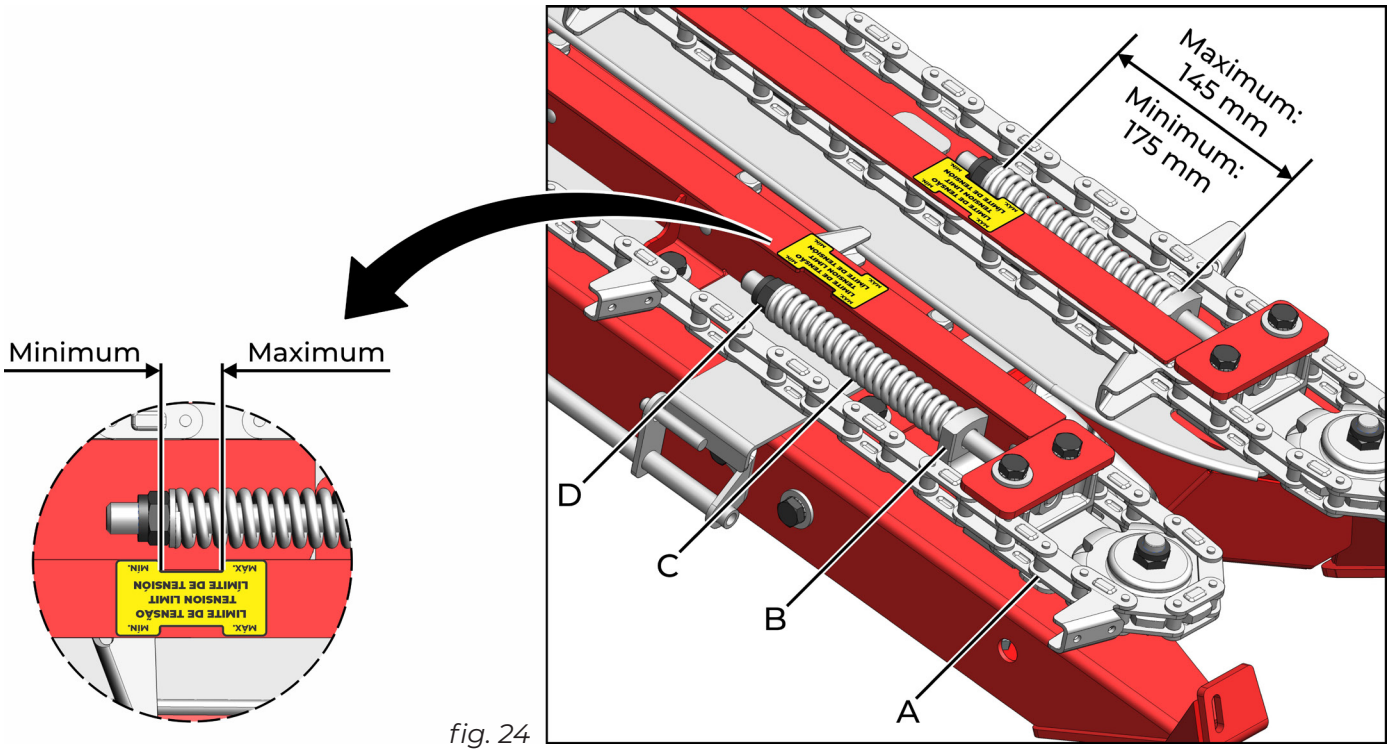


fig. 24

ATTENTION

Do not adjust the harvesting unit while it is operating.

11.5. Adjust the drag conveyors

Gathering chains are factory-assembled with the drag conveyors (A) (*fig. 25*) interspersed with each other and should be kept this way.

ATTENTION

When harvesting close to the ground, pay attention to rocks or other obstructions in the harvesting unit. Obstructions will damage the mechanisms.

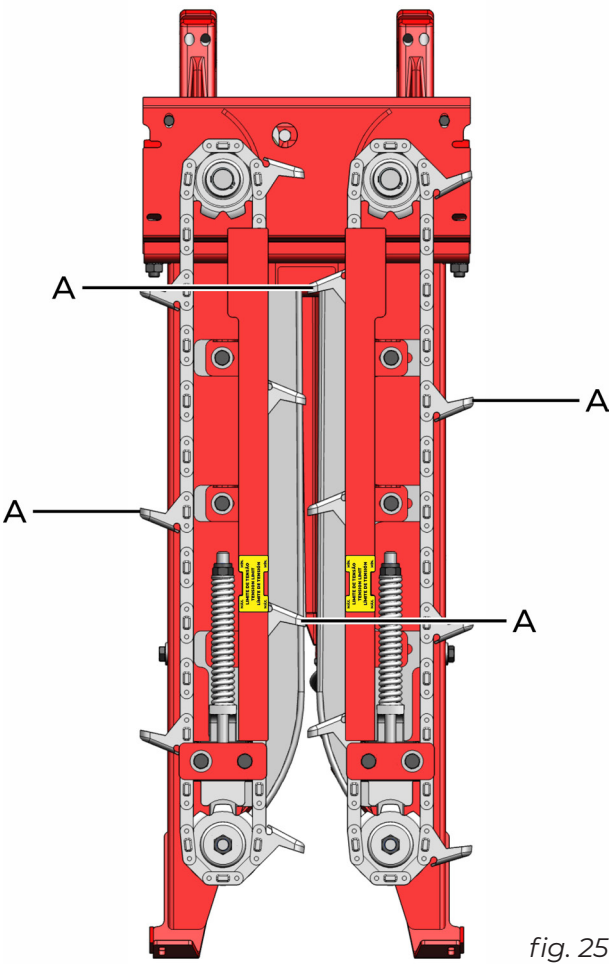


fig. 25

11.6. Threshing plates

The threshing plates (A) (*fig. 26*) are positioned on the base of the gathering chains (B) and are in charge of detaching the corn cobs from the canes as they are pulled down by the pickup rollers (C).

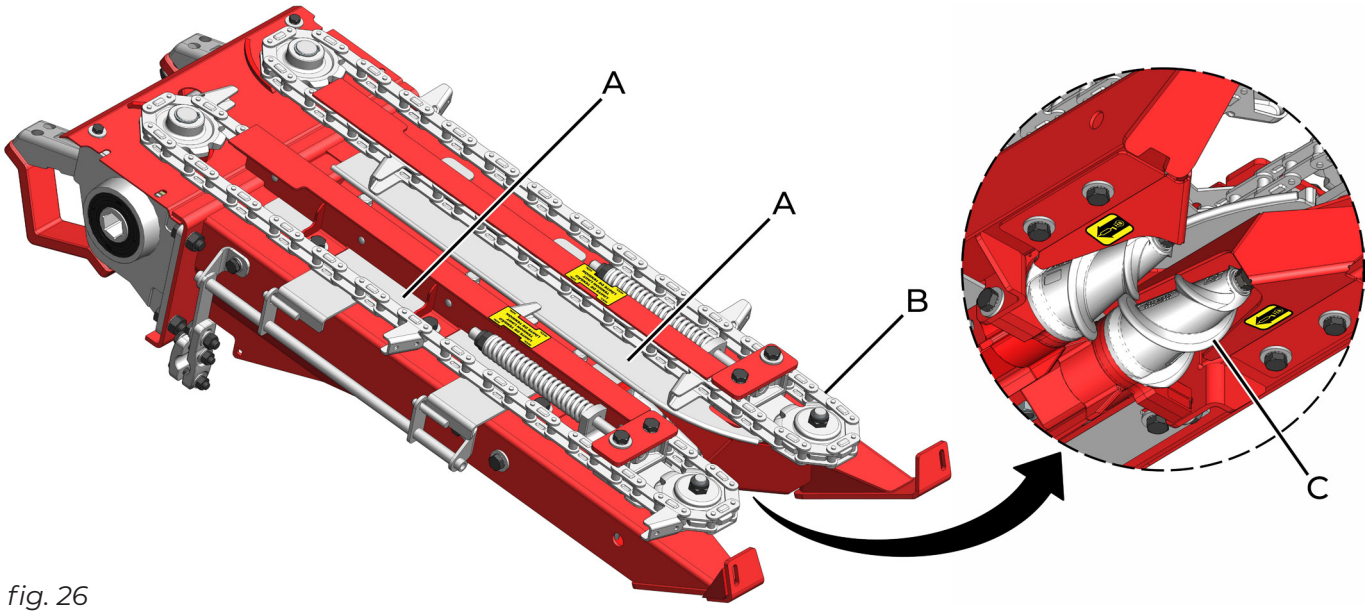


fig. 26

11.6.1. Threshing plates regulating system

The VENCE TUDO CORN HEADER, BOCUDA SÉRIE 08, allows the assembly of three different systems for adjusting the threshing plates, which can be manual and individual or with a mechanical or electric deck plates system, according to the model purchased by the customer. The system's deck plates openings can vary between 15 mm to 45 mm. Using this system grants you a significant differential, since it allows you to better adjust to your harvest in the most variable situations, according to the corn variety. The correct setting reduces the entrance of straw, avoiding losses due to corn cob size variation.

11.6.1.1. Manual and individual system

The threshing plates (A) (*fig. 27*) are factory-mounted spaced 28 mm at the initial end and 34 mm at the final end, as shown in *figure 28*. Such spacing is suitable for most field conditions. However, if adjusting the threshing plates (A) is needed, this system allows for it. It is done manually and individually using the screws (B) (*fig. 27*), which must be loosened to adjust the desired measurement, after which they must be retightened. It is noteworthy that the measurement at the initial end is always less than at the final end, this variation should be approximately 6 mm.

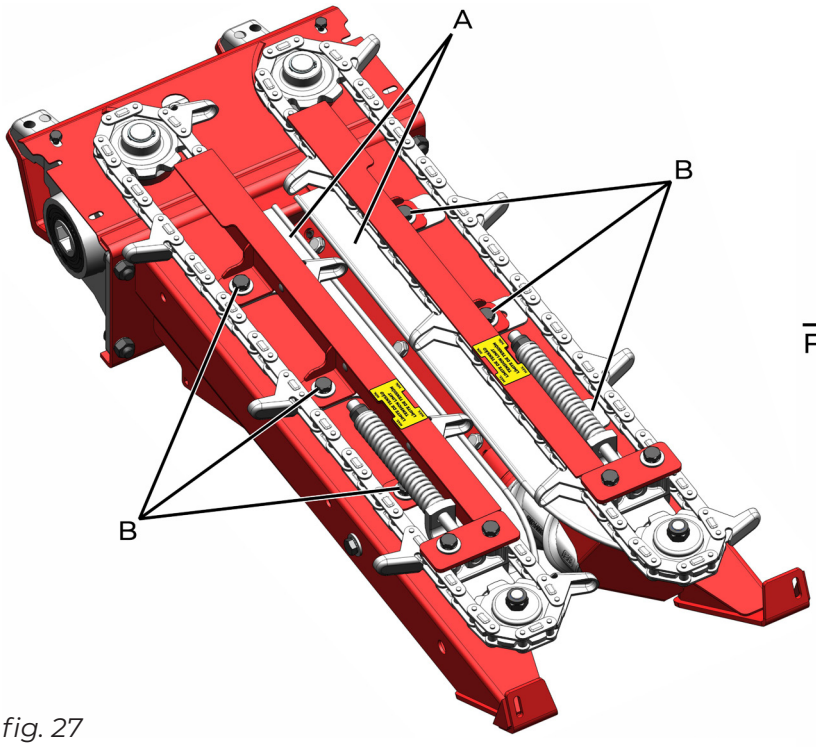


fig. 27

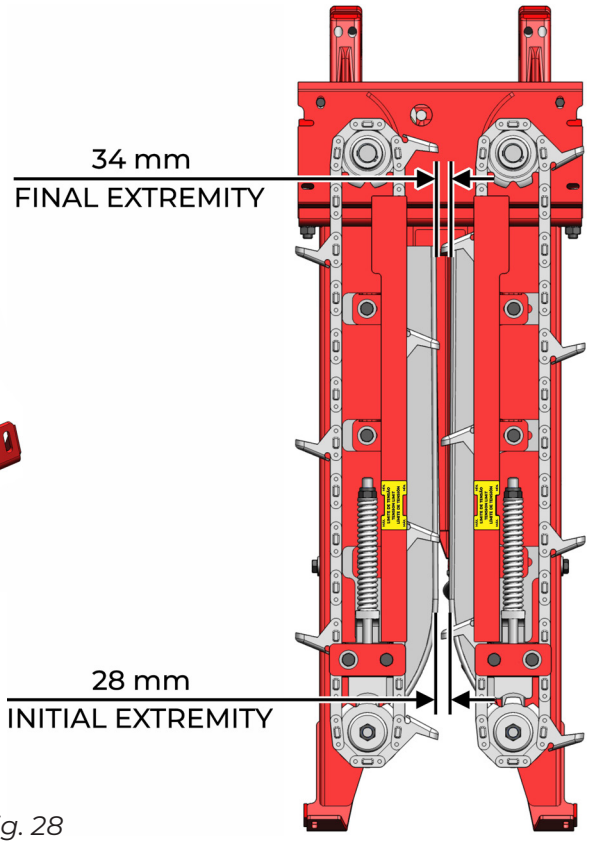


fig. 28

11.6.1.2. Mechanical system

This system has a regulator (A) (fig. 29) at the bottom of the header, which, when adjusted, tunes the threshing plates of all rows simultaneously.

To adjust them, move the lock (B) and with the aid of the key (C), which is fixed on the chassis. Then, lock the regulator again.

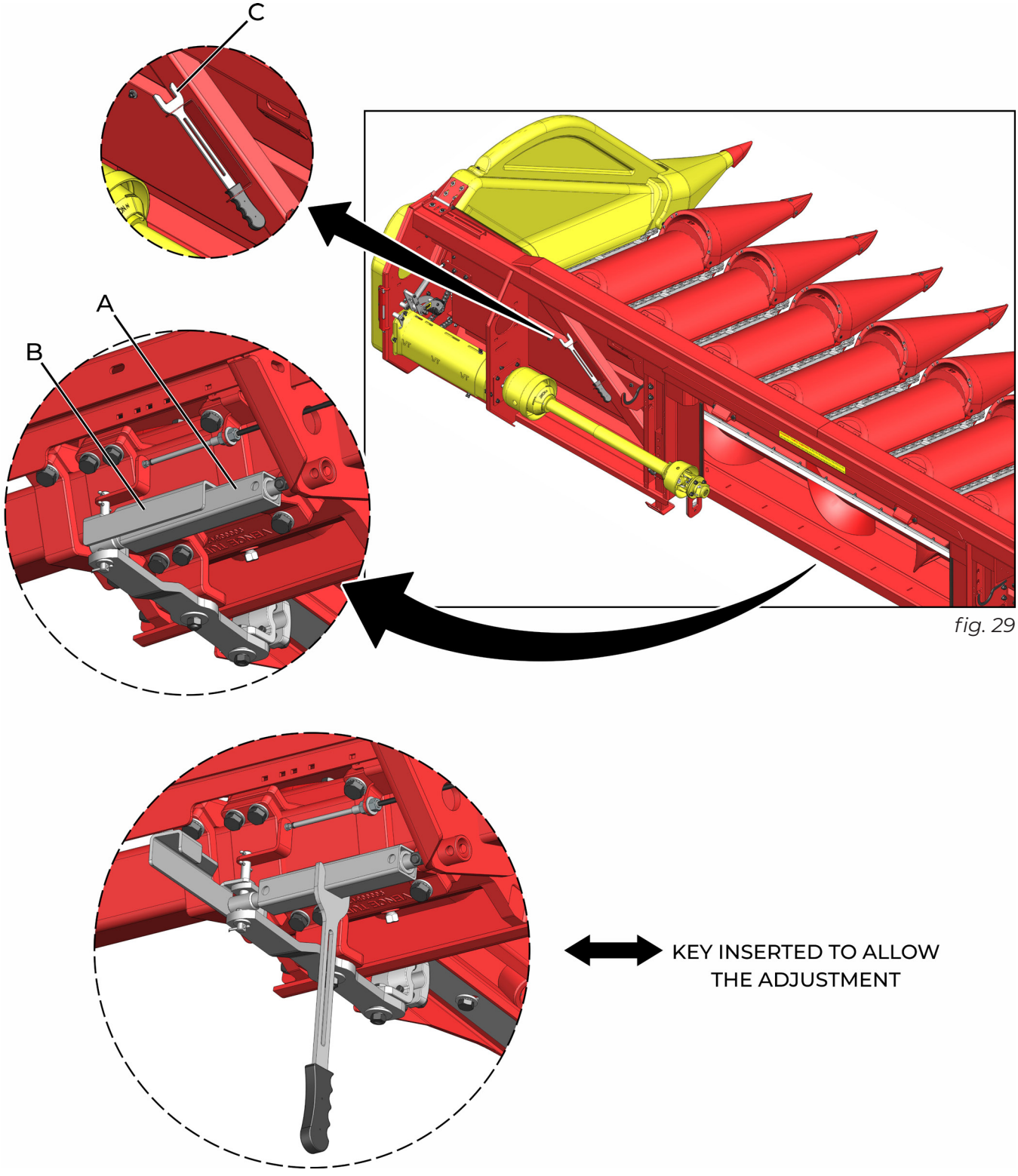


fig. 29

The adjustment made can be verified through the indicator with a graduate scale, which is located at the rear of the header, on the right side, as shown in *figure 32* (*page 48*).

NOTE: Chassis models 3240 and 3700 do not feature an indicator with graduate scale.

11.6.1.3. Electrical system

This system features an electric actuator (A) (*fig. 30*) that, through a control (B) (*fig. 31*) mounted on the combine, can carry out the opening and closing movement of the threshing plates.

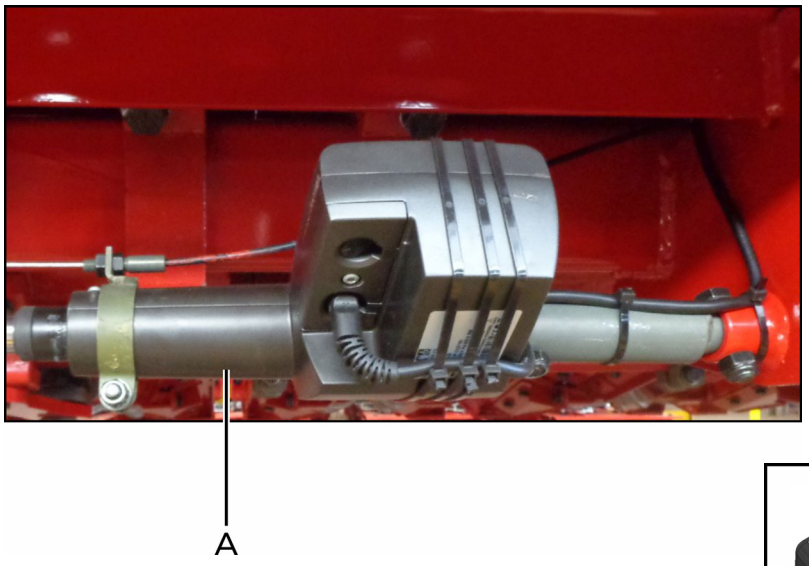


fig. 30

This actuator (A) works at 12V and should be connected to the combine's electric circuit, or in some cases, can be connected to a "cigarette lighter" plug inside the cabin.

This system allows to regulate the threshing plates instantly.

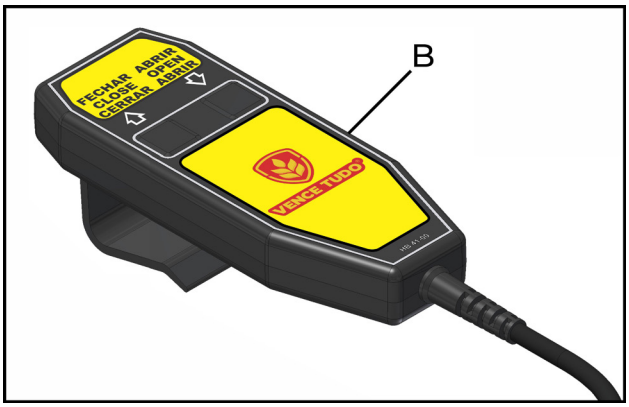


fig. 31

There is an indicator (C) (*fig. 32*) on the header with a graduate scale that can be seen from the combine, allowing the operator to know what measurement is being applied to the plates.

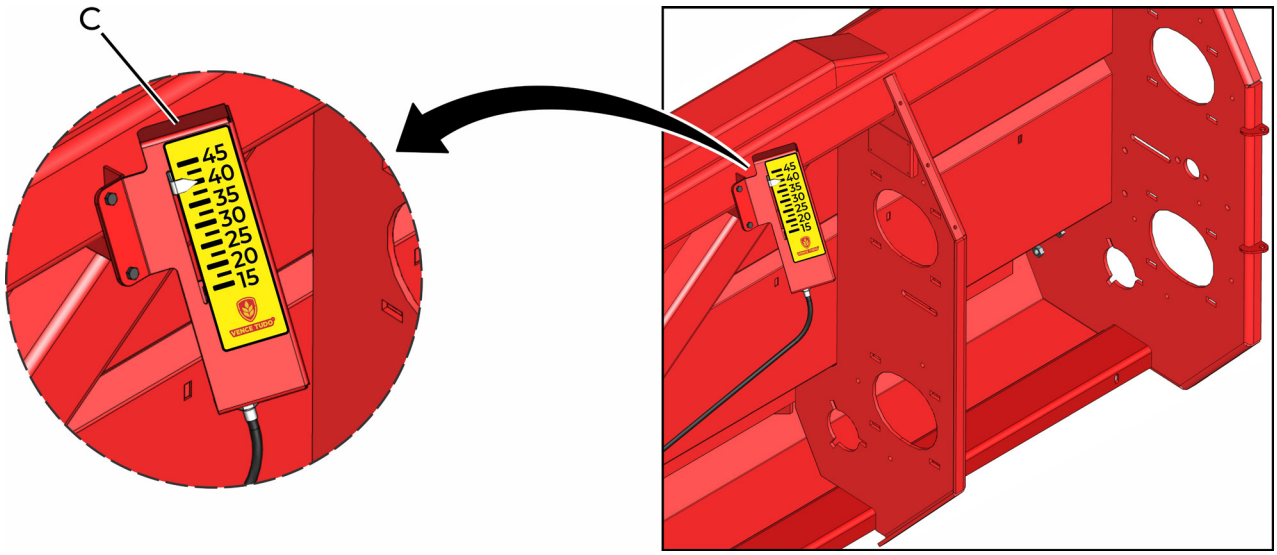


fig. 32

11.6.1.3.1. Combine electrical installation

The control box (A) (*fig. 33*) has a double-sided tape (B) for its attachment. We recommend it be placed inside the combine cabin, so that it be well fixed and protected, according to *fig. 34*.

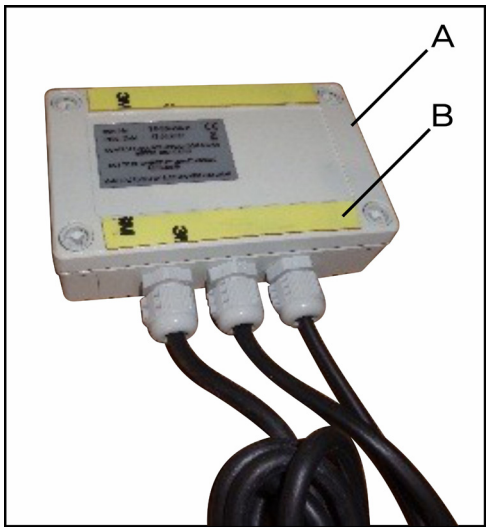


fig. 33

fig. 34

After fixing the control box, turn on the cigarette lighter harness (A) (*fig. 35*), power cable, connecting the tip (B) of this cable to the middle output ("cigarette lighter" type plug) of the box (C) (*fig. 36*), which is also located inside the combine cabin.

fig. 35

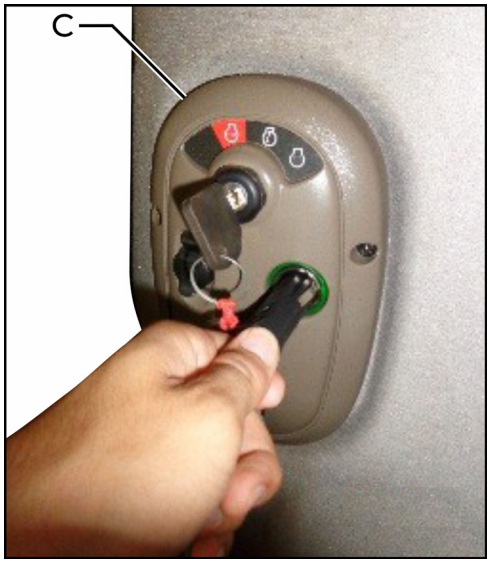


fig. 36

NOTE: If the combine does not have a "cigarette lighter" type plug in its cabin, there is a second cable (D) (*fig. 37*) that accompanies the deck plates set. It should be connected directly to the battery.

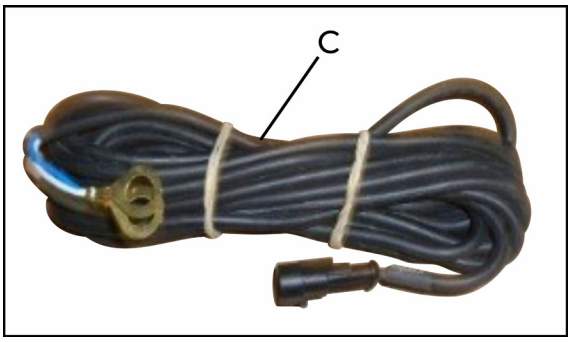


fig. 37

When directing the cable that was connected to the control box (*fig. 38*) and then connected to the header, use the space indicated in *figure 39* to pass this cable, fixing it so it does not interrupt the operation of the machine's joints, thus, avoiding it is ruptured.

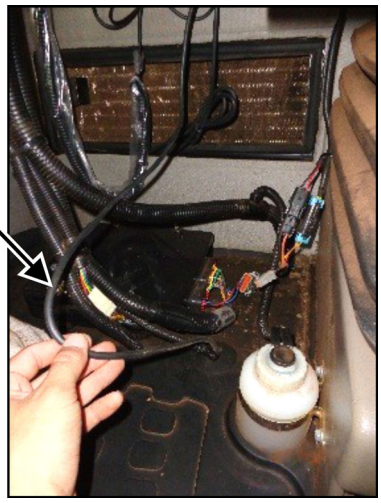


fig. 38

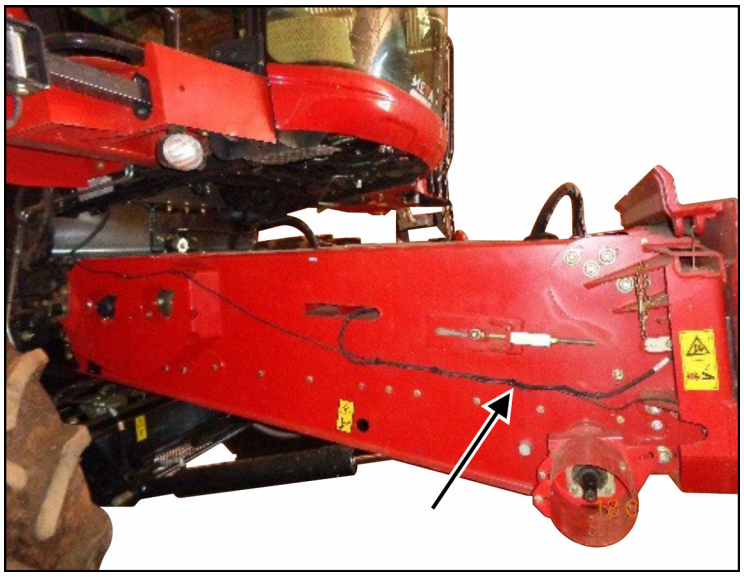


fig. 39

Turn on the combine to test the deck plates system. Use the control (*fig. 40*) to test the system limits.

fig. 40

There! The deck plates system has been successfully installed. Regulate the system according to the thickness of the corn stalk and the size of the cobs.

11.6.1.3.2. Problems installing the deck plates system

If you face installation problems, check the following:

1. If the power cables are well fitted and if they present any breaks.
2. Check the combine energy outlet.
3. Check if there is anything interrupting the operation of the threshing plates in the harvest rows.
4. Check the fuse inside the "cigarette lighter" type plug along with the power cable (*fig. 41*).

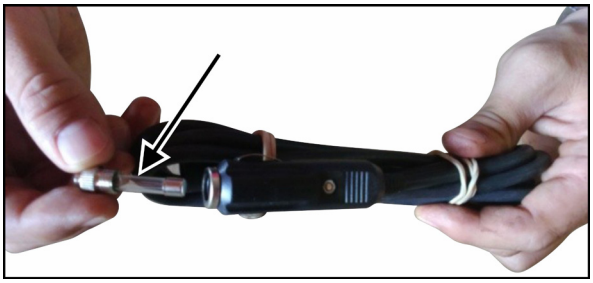


fig. 41

NOTE: Contact VENCE TUDO technical assistance if the problem persists.

11.7. Stalk rollers

11.7.1. Cleaning the stalk roll

The rollers (B) blades (A) (*fig. 42*) avoid the impurities to enter the stalk rollers. Their sides should be adjusted in a way that ensures they are as close as possible to the rollers, without touching the streaks. To regulate, loosen the screws (C) and adjust at a ***minimum distance of 0.5 mm***.

ATTENTION

Maintain feet and hands away from the stalk rollers when the header is in operation.

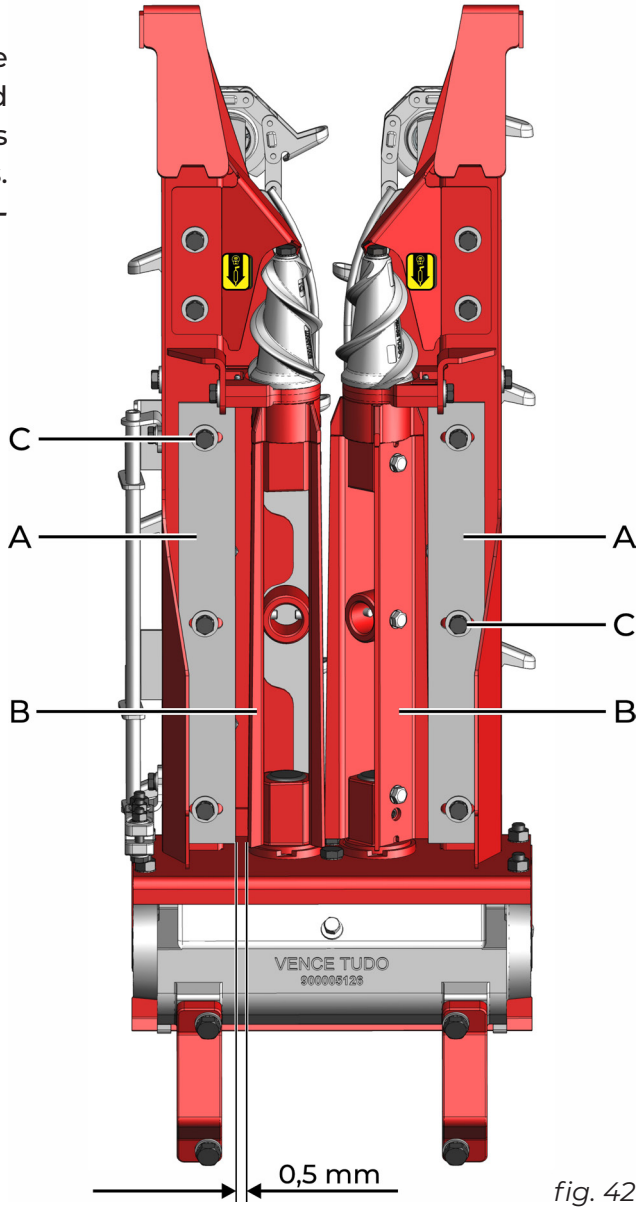


fig. 42

11.7.2. Rollers front protection shield

The position of the front protection shields (A) (*fig. 43*) of the stalk rollers (B) should be adjusted correctly in order to avoid the entry of any material that can get caught in the rollers. The adjustment should be made by moving the protection shields (A) and loosening the screws (C) so that they are as close as possible to the rollers, leaving minimum clearance.

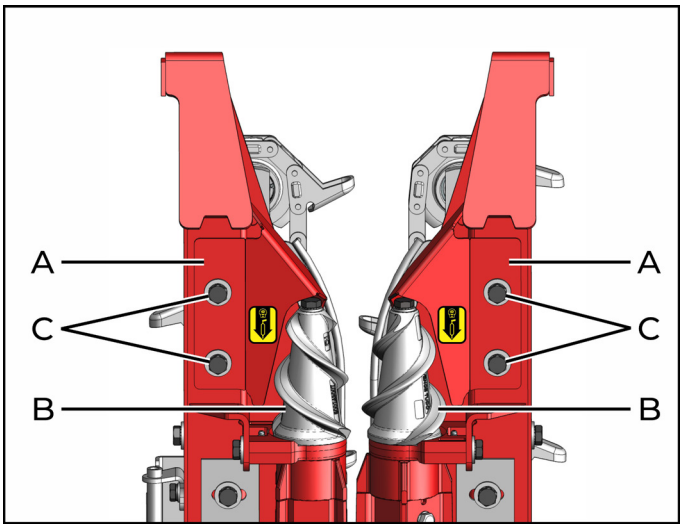


fig. 43

11.8. Clutch

The VENCE TUDO CORN HEADER, BOCUDA SÉRIE 08, has a drive shaft safety system: the clutch. There are 3 clutches in all, one (A) (*fig. 44*) for the rows activated on the left side, another (B) for the rows activated by the right side, and another (C) for the auger.

If the clutch skids at any time during operation, stop the corn header immediately, seek the cause, and repair. All clutch elements are adjusted by the manufacturer.

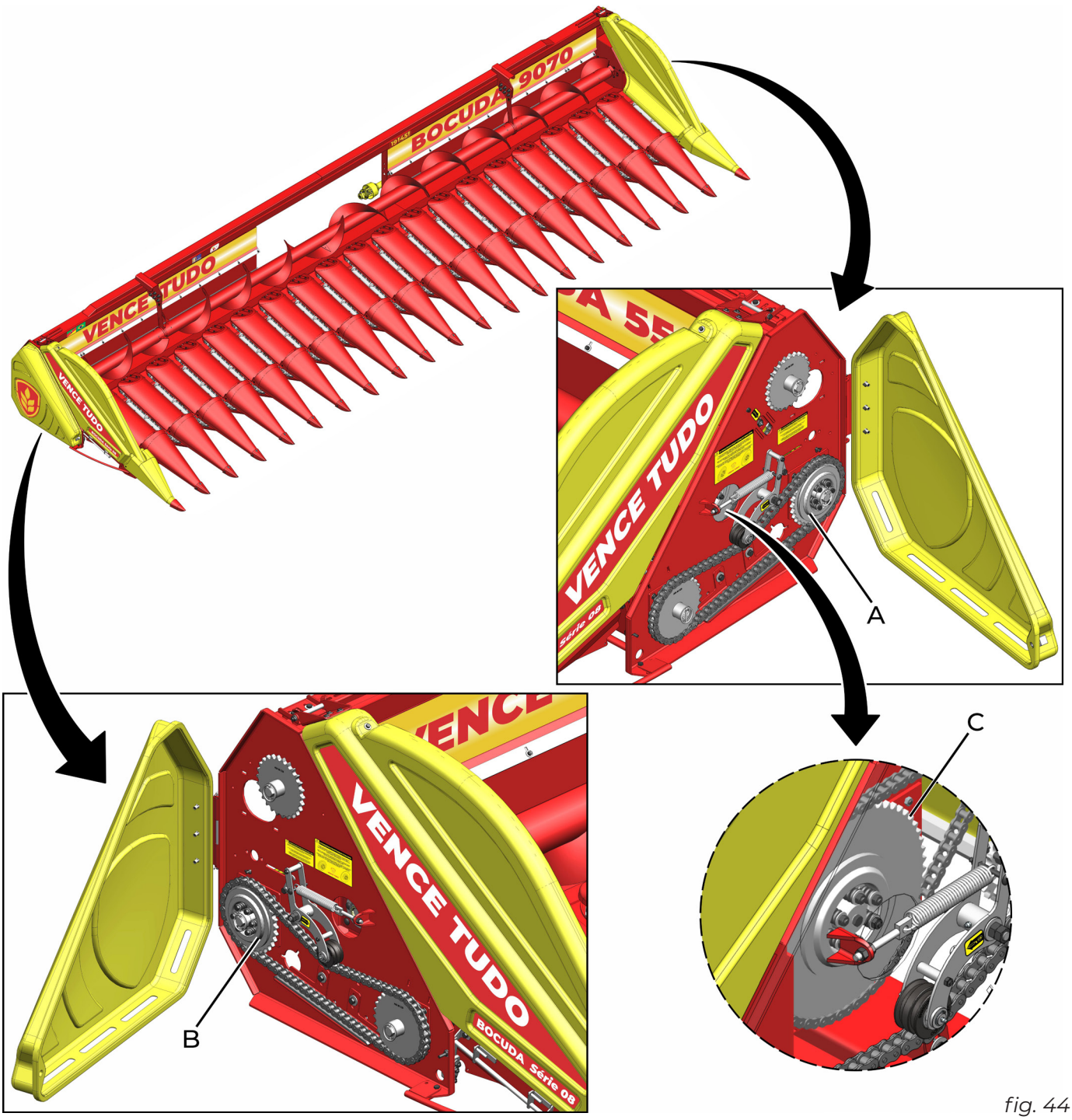


fig. 44

11.8.1. Clutch: Transmission

At the end of the drive shaft of the harvesting units and the auger, it has a safety and protection mechanism for the transmission system: the clutch.

The clutch can also be set according to the harvesting conditions. When the clutch is “skidding” frequently, stop immediately, look for the cause and fix it. If there is nothing obstructing the harvesting unit or auger, the springs (A) (*fig. 45*) pressure can be adjusted. It is important to evenly tighten the nuts (B). Never tighten the nuts in a way that fully compresses the spring. This will cause the system to lose functionality and can cause damage to the system.

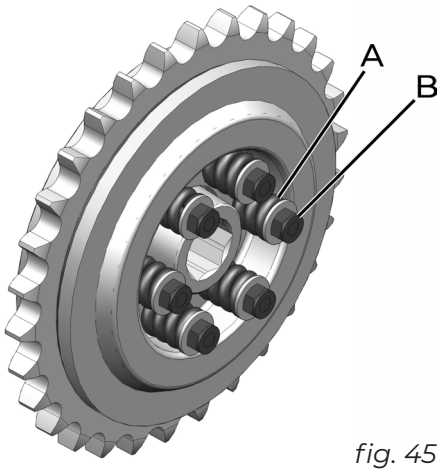


fig. 45

Guidelines on clutch servicing:

1. Disassemble the clutch, removing all nuts (B) (*fig. 46*). To disassemble the clutch you must remove the drive shafts;
2. Assess the friction discs (C) (*fig. 46*) and replace if they present wear or “fractures”;
3. Reassemble the clutch observing the spring (D) (*fig. 47*) closure measurement (A) (*fig. 46*). Keep in mind that this is an initial adjustment, and further adjustments might be required during the harvest if the clutch skids.

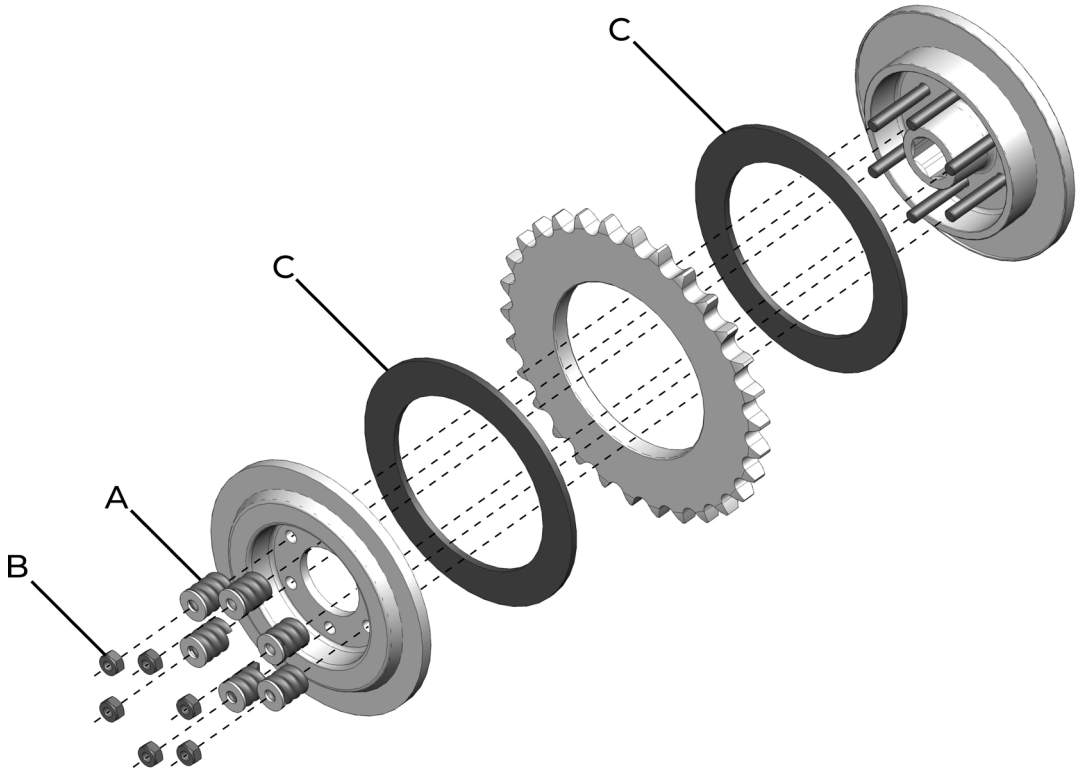


fig. 46

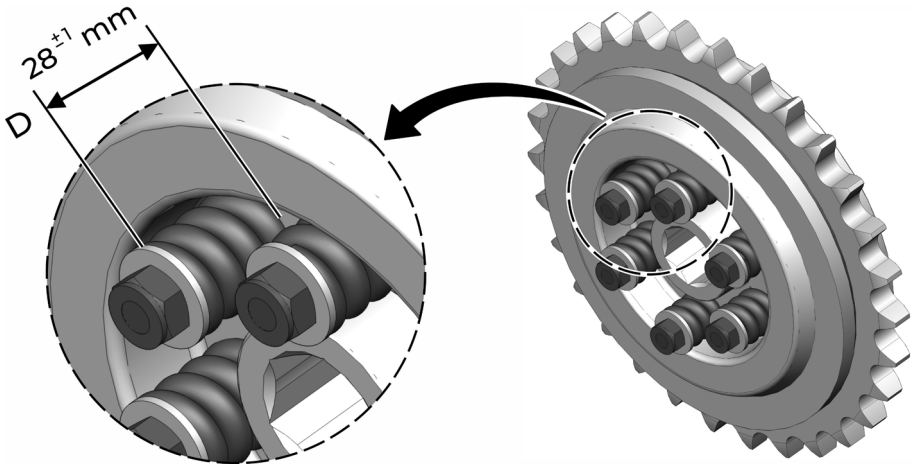


fig. 47

11.8.2. Clutch: Auger

The transmission of the auger is provided with a safety system: the clutch (A) (*fig. 48*). All clutch elements are adjusted at the factory and the same procedures as the previous item must be adopted. However, for this clutch, observe the measurement (B) (*fig. 48*) for spring closing.

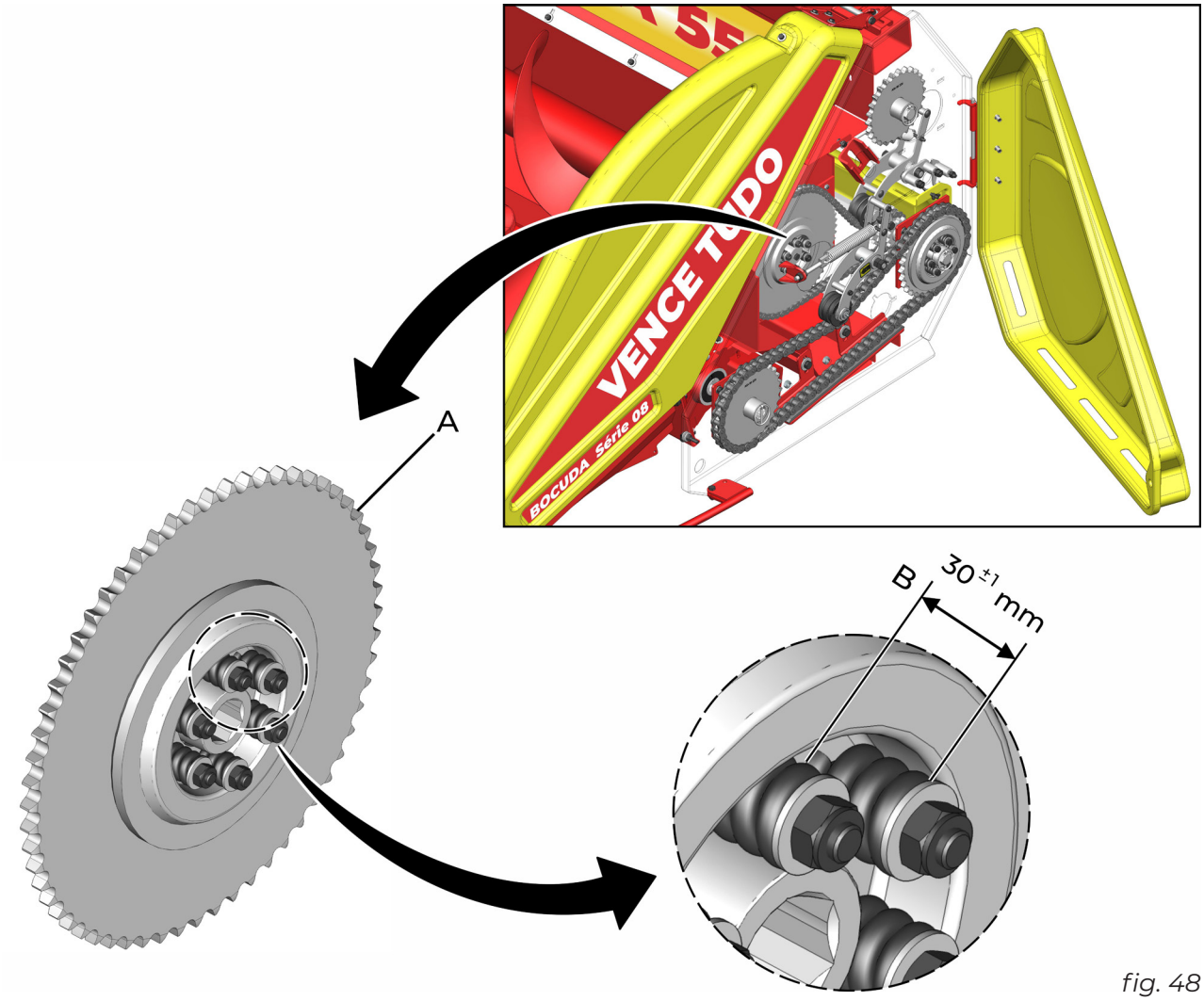


fig. 48

11.9. Auger scraper

To improve the efficiency of the auger (A) (*fig. 49*), the header has a scraper upper (B) and lower (C) system. This scraper can be adjusted to be as close as possible to the auger helicoid. See the clearance indicated between the auger and the scraper in *figure 50*.

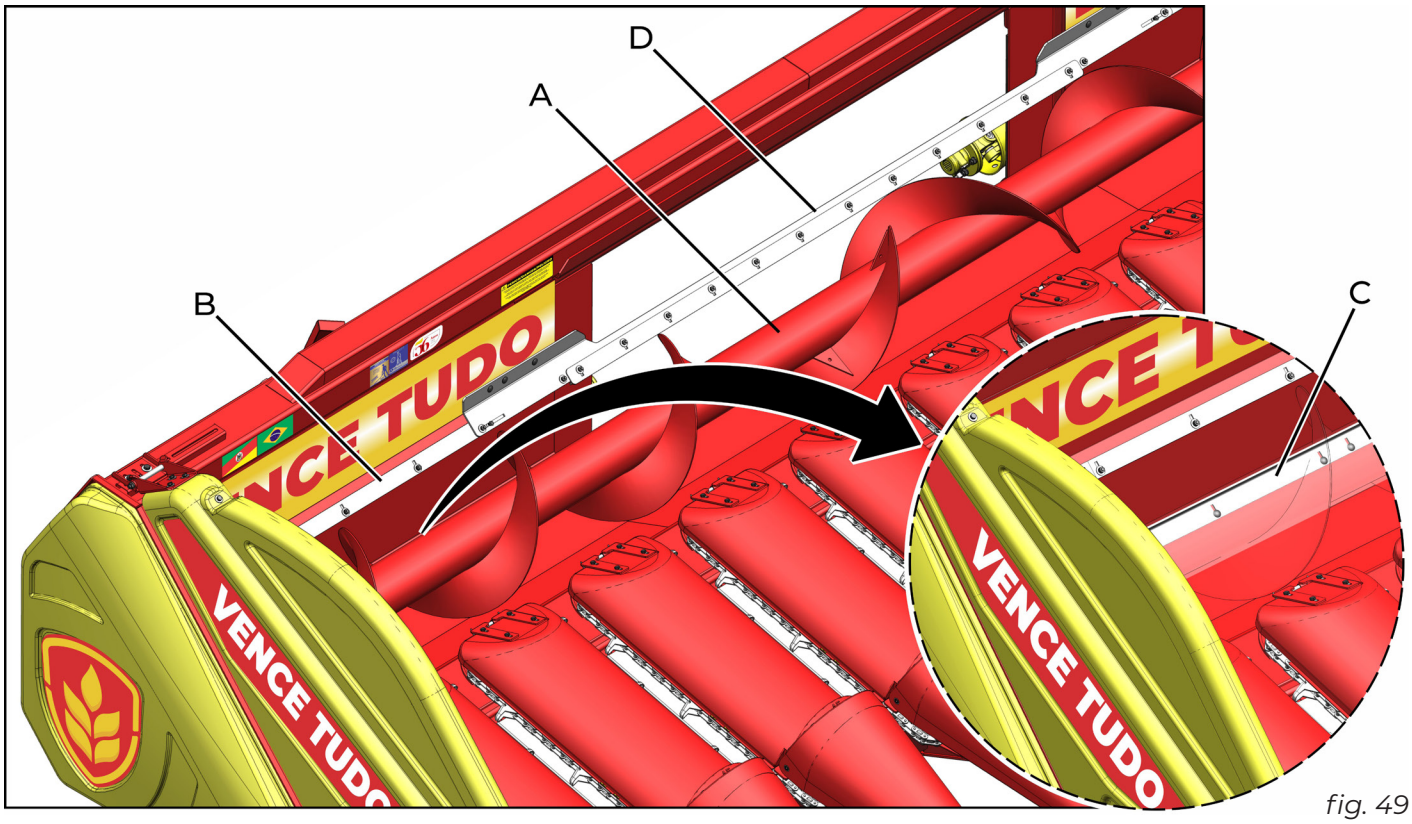


fig. 49

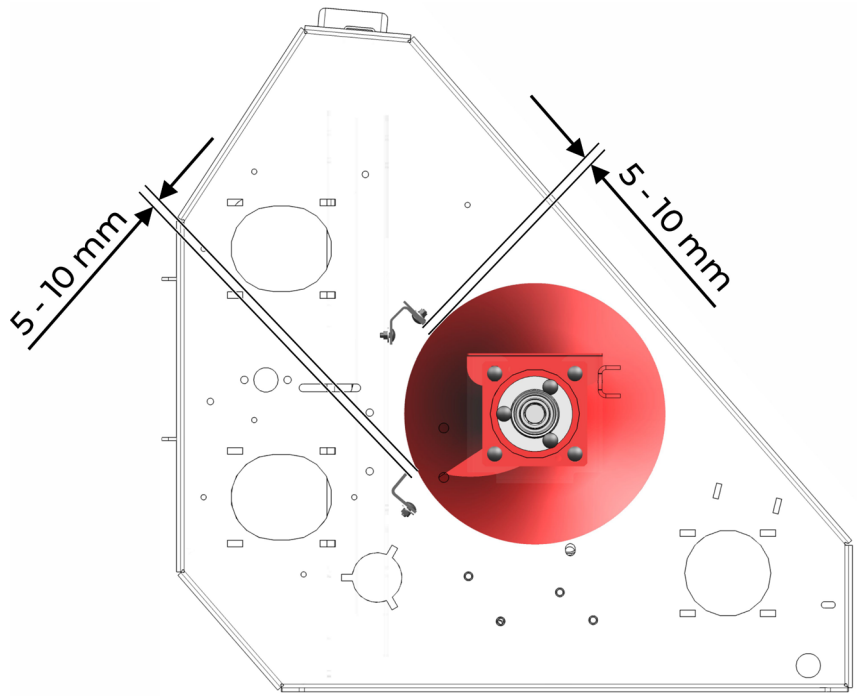


fig. 50

When harvesting where there is a large ratio of invasive plants, the central scraper (D) (*fig. 49*) should be assembled to avoid accumulating material in the middle of the auger. The middle scraper is an optional set and can be acquired separately from the header.

12. SERVICING

⚠ ATTENTION

Never service with the header in operation.

During tuning and servicing operations, be extremely careful, as it will require lifting the harvester, using the header's safety devices and/or chocks, along with the header's hydraulic lift cylinders.

Only use original VENCE TUDO parts as makeshift parts, in addition to de-characterizing the product, will prevent warranty assessments if using the equipment warranty certificate is required.

Inspect the header checking if any parts are worn or defective. If they are, replace these parts for new ones.

Do not use burnt oil or diesel oil to clean and lubricate the header.

12.1. General tuning

Periodically check how tight the internal and external shield fixing screws are to avoid losses and possible damage to movable elements. This procedure should be performed daily, inspecting all screws before beginning the harvest.

12.2. Chain alignment, tension and lubrication

NEVER LUBRICATE OR ADJUST THE CHAINS WITH THE COMBINE MOTOR IN OPERATION.

12.2.1. Side chains

Row unit and auger drive and transmission chain tensions should be checked ***every 50 hours*** using tensioners and considering their correct alignment and that of the drive shafts.

12.2.2. Gathering chains

The gathering chains tension is maintained by means of the spring assembled in the tensioner. Check the tension and functional conditions of the gathering chains every 50 hours. In case of replacement due to wear, exchange it, making sure that the drag conveyors on both chains are interspersed with each other.

The gathering chains can be removed and reassembled without having to disconnect them.

12.3. Servicing at the beginning of the harvest

Judiciously clean the header, adjusting the feeding chains. Also check their tension.

Adjust all transmission chains. Check the gear box oil level and complement if needed.

Review the entire header and check screw and pin fixation, tightening if needed.

Activate the header at a medium operaion speed for a few minutes. Check the bearings for any excess heating and probable clearances.

READ THE OPERATION MANUAL INSTRUCTIONS ONCE MORE.

12.4. Servicing at the end of the harvest period

Fully clean the header once the harvesting period is over. Remove the straw buckets, weeds and dust that attract humidity and cause corrosion.

Do not direct high pressure water jets to the bearings, sealings or any other damageable components when washing.

Check the status of screws and other screwed elements, adjust and grease them.

Paint any damaged or chipped areas.

Store the header in a dry, protected location to extend its useful life.

12.4.1. Implement cleansing and conservation

- Wash and clean all header components when ending the harvesting season.
- Use neutral products to clean the machine, following the safety and handling guidelines provided by the manufacturer.
- Only use water and NEUTRAL detergent that has a pH equal to 7.
- Be careful when washing with high pressure. Do not direct the water jet directly to the electrical connections and components. Also avoid isolating all electrical components.
- Apply the product on wet surfaces, in the correct sequence, respecting application and washing times, following manufacturer instructions.
- 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 (a pH over 7), since they can damage/stain the machine's paint;

  - Detergents with acid active principals (a pH under 7), since they act as zinc plating (the protective layer against oxidation) strippers/removers.

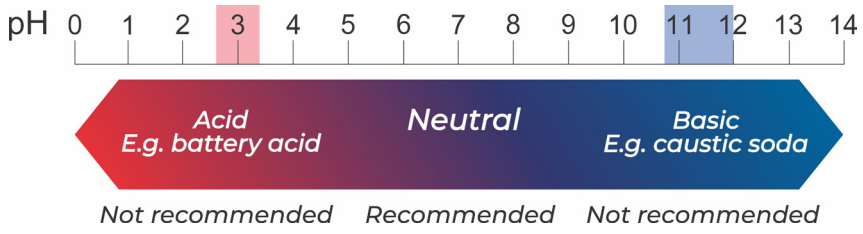


Figure 51 shows a new screw (A) and an oxidation screw (B) after applying chemical products with acid active principles (pH under 7), rinsing those chemicals and leaving the screws exposed to the weather:

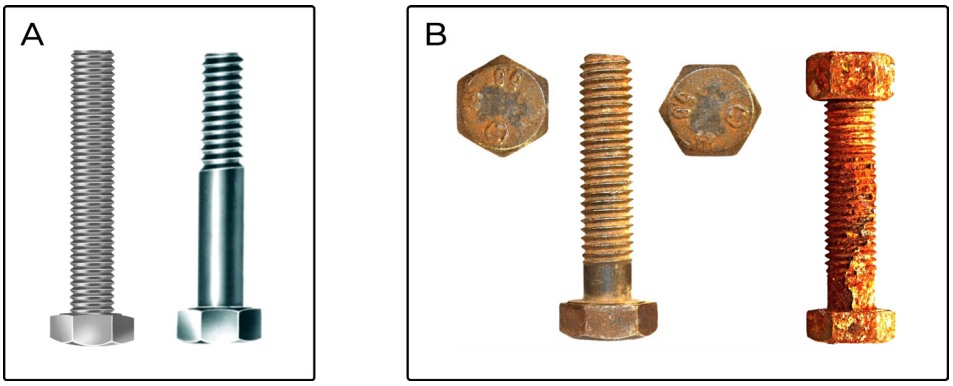


fig. 51

- 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 Operation 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.

Do not other oils to protect the machine (used hydraulic oil, burnt oil, diesel oil, castor bean oil, kerosene, etc.).

The following protective oils are recommended:

- Bardahl Agro protective 200 or 300;

- Chemtool Steel Curtainrpw500.

Not complying to the mentioned conservation measures can imply in loss of warranty on painted or zinc plated components that may present oxidation (rust).

13. FIELD OPERATION - HARVEST

Before starting the motor, make sure no one is close to the combine.

Avoid contact with moving parts.

The moving speed should enable full machine control and stability to be maintained the entire time. When possible, avoid operating near ditches, landfills and holes. Reduce speed when making curves, going down slopes, on irregular, slippery or muddy terrain.

A machine that is adrift can cause serious injuries or lead to the death of the operator and passers-by.

It is recommended that the following procedures be performed at field level once header tuning operations have been completed according to the guidelines described previously:

1. Turn on the combine, activating the header for ***10 minutes in low rotation***. Then, activate for another ***5 minutes in high rotation***.
2. Turn the combine off and check transmission chain tension. Perform any adjustments necessary to the chains so that they are sufficiently tensioned, avoiding wear in the chains and the sprockets, ensuring the transmission system functions as usual.
3. Check the gathering chains and harvesting unit guides.
4. To reduce losses in the corn header to a minimum, adjust the slats according to the thickness of the stems considering:
   4.1 Threshing plates are slightly ***more open in the front than the back;***
   4.2. Threshing plates are ***centralized on top of the pickup rollers.***
5. Adjust the articulated tips of the rows, alternating the angle in such way that they work as parallel as possible in relation to the ground. If, in any case, the corn is lying down, adjust the point of the tips a little lower so that they can move more easily under the stems that are on the ground, lifting them.
6. Check the auger feeder. If there are any problems feeding small cobs, place the auger in a position that is as close as possible to the harvesting base. Adjust to a position that is higher to facilitate transport when corn is dry or brittle.
7. The harvesting unit's transmission shaft has a safety system (clutch) that avoids damages and bushing. In extreme cases of bushing, do not hesitate to activate the reverse combine's transmission system (if there is one).
8. The operator should determine the harvesting speed according to field conditions.
9. If, for a reason, the header is overloaded, do not uncouple the threshing mechanism or reduce motor speed. Keep the motor in the speed of operation, reduce gears or deactivate the combine's traction system;
10. Harvest as soon as the corn is mature enough. A dry harvest is more difficult to handle and will increase kernel and cob losses, in addition to possibly leading to excess weeds entering the combine (such as straw blowers and bulk tanks), increasing humidity and grain loss.

ATTENTION

All tuning recommended in this operation manual should be considered basic tuning.

According to the soil and crop conditions, do not hesitate to tune to ensure the performance and functionality you require.

14. DIAGNOSING ISSUES

Any possible events and deficiencies in the VENCE TUDO CORN HEADER, BOCUDA SÉRIE 08 are due to incorrect adjustments and tuning.

A few probable causes for diagnosed difficulties and recommended solutions are described in the table below: If solving the problem at hand is not possible, contact the **VENCE TUDO TECHNICAL ASSISTANCE DEPARTMENT**.

PROBABLE CAUSES	RECOMMENDED SOLUTION
1. THRESHED COBS IN STALK ROLLERS	
- Incorrectly adjusted threshing plates.	- Adjust the threshing plates according to the instructions of pages 45 to 50.
2. CORN COB HARVEST LOSSES	
- Spacing between harvesting units does not match that of planting spacing.	- Adjust harvesting unit spacing according to plantation row spacing.
- Speed of gathering chains is too high or too low.	- Proceed to replace the driven sprocket of the transmission actuator in the harvesting units.
- Advancing speed is too high or too low	- Operate in a speed that is appropriate to the crop and soil conditions. Excess speed causes corn cobs to fall on the floor instead of the gathering chains. Insufficient speed makes cobs slide to the front and out of the header. Operate at a speed in which the gathering chains will direct the corn canes to the stalk rollers.
3. COLLECTING CORN CANES	
- Threshing plates are regulated too close to each other.	- Check that the threshing plates are in the correct position, adjusting them until they allow corn canes to freely pass through the pickup rollers.
- High combine travelling speed in relation to the speed of the stalk rollers.	- Adjust travelling speed according to the requirements of the pickup rollers in relation to the field and crop.
- Gathering chain drag conveyors are obstructed by roots	- Lower the adjustable tips.
- Stalk rollers supports are worn.	- Replace the supports.
4. BUSHING	
- Advancing speed too high, allowing excess material to enter the header	- Slow down to a speed that is appropriate to the crop and soil yield conditions excess speed produces bushing.
- Planted rows are not being harvested.	- Harvest the rows according to how they were planted. It is much easier to follow rows this way, reducing bushing and avoiding cob loss.
- Gathering chains are loose.	- Review the elements that apply tension to the chains (tensioners and springs), see if they are excessively worn.
- Weeds are caught around the stalk rollers.	- Adjust cutter bars as close as possible to stalk rollers.
- Corn canes break in the stalk rollers, or in the threshers.	- Check the adjustment of the threshing plates. Make sure they are centralized in relation to the stalk rollers and have the same distance from the center.
- Stalk rollers supports are worn.	- Replace the supports.

15. TECHNICAL RECOMMENDATIONS

TO NOT TUNE, CLEAN OR RETIGHTEN WITH THE HEADER IN MOVEMENT.

FOLLOW THESE PROCEDURES TO ENSURE YOUR HEADER FUNCTIONS PROPERLY:

1- AFTER THE FIRST 8 HOURS OF USE, RETIGHTEN ALL COMPONENTS.

2- TUNE THE EQUIPMENT (SPACING, CHAIN TENSION, STALK ROLLERS ETC.) BEFORE BEGINNING THE HARVEST.

3- CARRY OUT THE HARVEST IN THE SPEED RECOMMENDED FOR CORN CROPS BY THE COMBINE MANUFACTURER.

4- CLEAN THE MACHINE AT THE END OF THE HARVEST, WASHING AND LUBRICATING THE EQUIPMENT (USING DETERGENT-FREE PULVERIZATION PRODUCTS).

5- PROTECT THE EQUIPMENT AGAINST THE WEATHER WHEN NOT IN USE.

6- ONLY USE ORIGINAL PARTS WHEN PERFORMING REPLACEMENTS.

7- READ THE OPERATOR MANUAL INSTRUCTIONS CAREFULLY.

FAILURE TO OBSERVE THE HEREIN RELATED ITEMS MAY CAUSE SEVERE DAMAGE TO THE OPERATION AND CONSERVATION OF THE HEADER.

16. POSITIONING OF LABELS ON THE EQUIPMENT

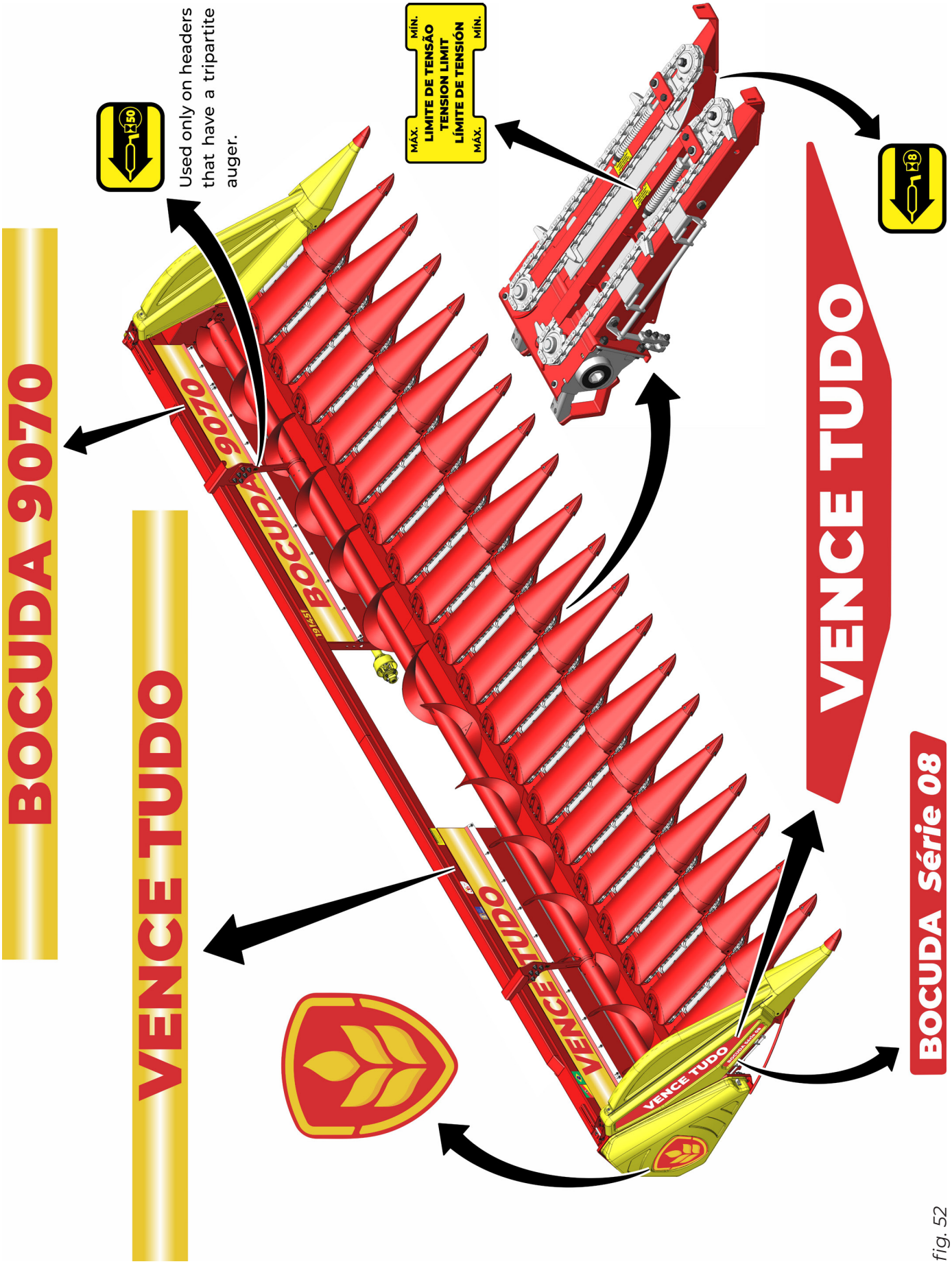


fig. 52

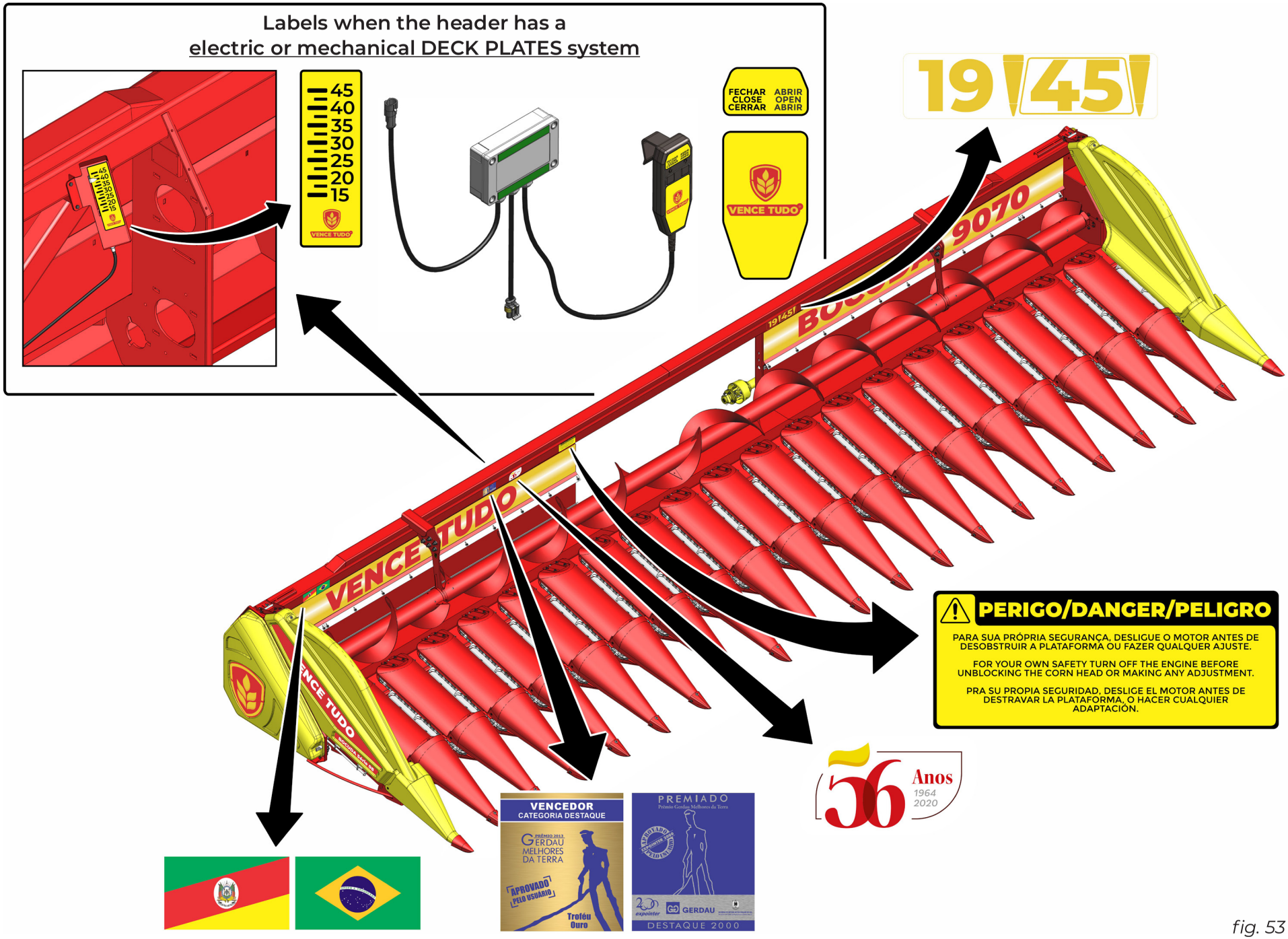

Labels when the header has a
electric or mechanical DECK PLATES system
45
40
35
30
25
20
15
VENCE TUDO
FECHAR CLOSE CERRAR
ABRIR OPEN ABRIR
VENCE TUDO
19 45
9070
PERIGO/DANGER/PELIGRO
PARA SUA PRÓPRIA SEGURANÇA, DESLIGUE O MOTOR ANTES DE DESOBSTRUIR A PLATAFORMA OU FAZER QUALQUER AJUSTE.
FOR YOUR OWN SAFETY TURN OFF THE ENGINE BEFORE UNBLOCKING THE CORN HEAD OR MAKING ANY ADJUSTMENT.
PRA SU PROPIA SEGURIDAD, DESLIGE EL MOTOR ANTES DE DESTRAVAR LA PLATAFORMA, O HACER CUALQUIER ADAPTACIÓN.
56 Anos
1964
2020
VENCEDOR
CATEGORIA DESTAQUE
GERDAU MELHORES DA TERRA
APROVADO PELO USUÁRIO
Troféu Ouro
PREMIADO
GERDAU
DESTAQUE 2000

fig. 53

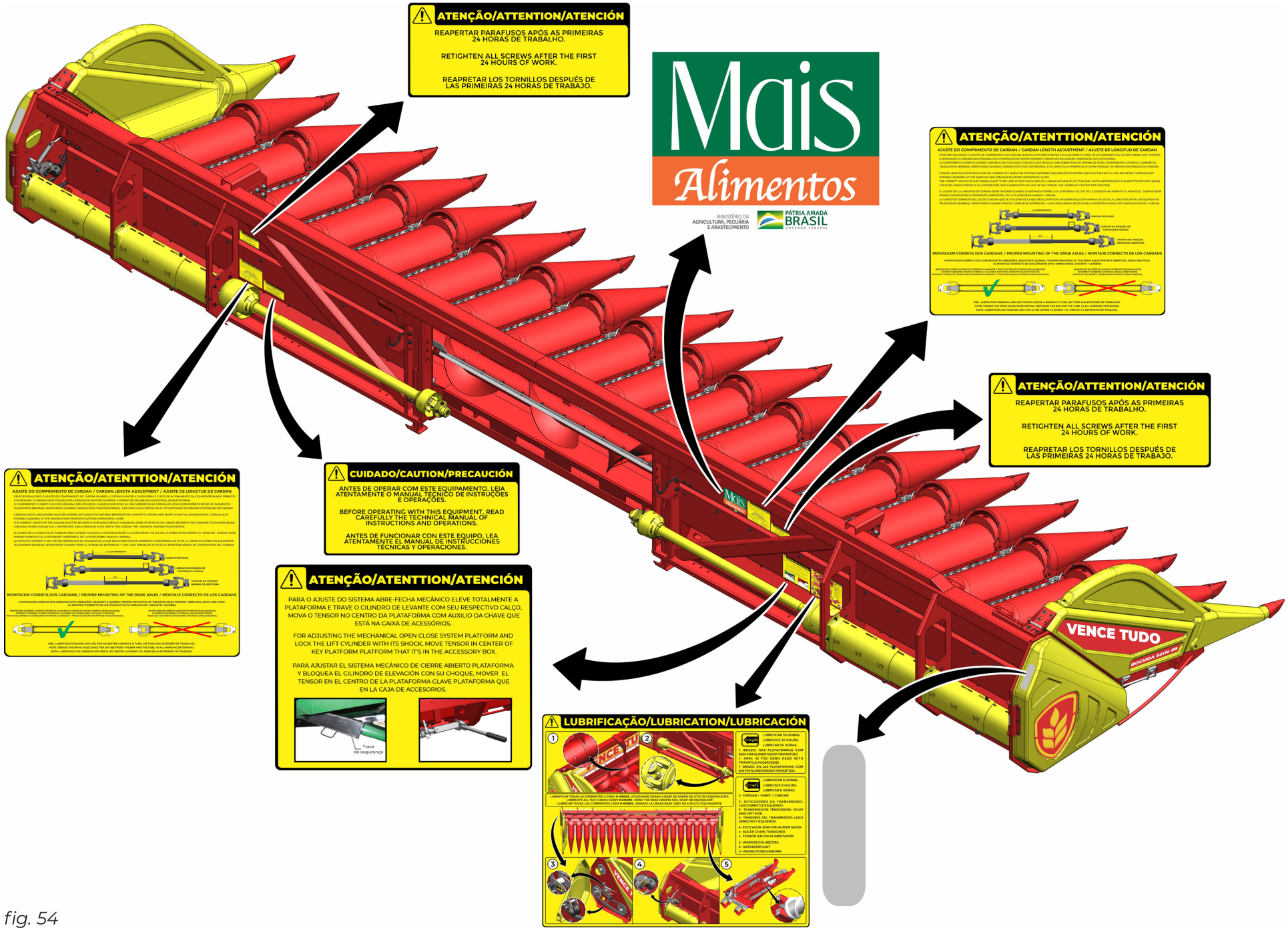

ATENÇÃO/ATTENTION/ATENCIÓN
REAPERTAR PARAFUSOS APÓS AS PRIMEIRAS 24 HORAS DE TRABALHO.
RETIGHTEN ALL SCREWS AFTER THE FIRST 24 HOURS OF WORK.
REAPRETAR LOS TORNILLOS DESPUÉS DE LAS PRIMEIRAS 24 HORAS DE TRABAJO.
Mais Alimentos
MINISTÉRIO DA AGRICULTURA, PECUÁRIA E ABASTECIMENTO
PÁTRIA AMADA BRASIL GOVERNO FEDERAL
ATENÇÃO/ATENTTION/ATENCIÓN
AJUSTE DO COMPRIMENTO DE CARDAN / CARDAN LENGTH ADJUSTMENT / AJUSTE DE LONGITUD DE CARDAN
MONTAGEM CORRETA DOS CARDANS / PROPER MOUNTING OF THE DRIVE AXLES / MONTAJE CORRECTO DE LOS CARDANS
ATENÇÃO/ATENTTION/ATENCIÓN
REAPERTAR PARAFUSOS APÓS AS PRIMEIRAS 24 HORAS DE TRABALHO.
RETIGHTEN ALL SCREWS AFTER THE FIRST 24 HOURS OF WORK.
REAPRETAR LOS TORNILLOS DESPUÉS DE LAS PRIMEIRAS 24 HORAS DE TRABAJO.
ATENÇÃO/ATENTTION/ATENCIÓN
AJUSTE DO COMPRIMENTO DE CARDAN / CARDAN LENGTH ADJUSTMENT / AJUSTE DE LONGITUD DE CARDAN
MONTAGEM CORRETA DOS CARDANS / PROPER MOUNTING OF THE DRIVE AXLES / MONTAJE CORRECTO DE LOS CARDANS
CUIDADO/CAUTION/PRECAUCIÓN
ANTES DE OPERAR COM ESTE EQUIPAMENTO, LEIA ATENTAMENTE O MANUAL TÉCNICO DE INSTRUÇÕES E OPERAÇÕES.
BEFORE OPERATING WITH THIS EQUIPMENT, READ CAREFULLY THE TECHNICAL MANUAL OF INSTRUCTIONS AND OPERATIONS.
ANTES DE FUNCIONAR CON ESTE EQUIPO, LEA ATENTAMENTE EL MANUAL DE INSTRUCCIONES TÉCNICAS Y OPERACIONES.
ATENÇÃO/ATENTTION/ATENCIÓN
PARA O AJUSTE DO SISTEMA ABRE-FECHA MECÂNICO ELEVE TOTALMENTE A PLATAFORMA E TRAVE O CILINDRO DE LEVANTE COM SEU RESPECTIVO CALÇO, MOVA O TENSOR NO CENTRO DA PLATAFORMA COM AUXILIO DA CHAVE QUE ESTÁ NA CAIXA DE ACESSÓRIOS.
FOR ADJUSTING THE MECHANICAL OPEN CLOSE SYSTEM PLATFORM AND LOCK THE LIFT CYLINDER WITH ITS SHOCK, MOVE TENSOR IN CENTER OF KEY PLATFORM PLATFORM THAT IT'S IN THE ACCESSORY BOX.
PARA AJUSTAR EL SISTEMA MECÁNICO DE CIERRE ABIERTO PLATAFORMA Y BLOQUEA EL CILINDRO DE ELEVACIÓN CON SU CHOQUE, MOVER EL TENSOR EN EL CENTRO DE LA PLATAFORMA CLAVE PLATAFORMA QUE EN LA CAJA DE ACCESORIOS.
Trava de segurança
LUBRIFICAÇÃO/LUBRICATION/LUBRICACIÓN
VENCE TUDO
BOCUDA Série 08

fig. 54

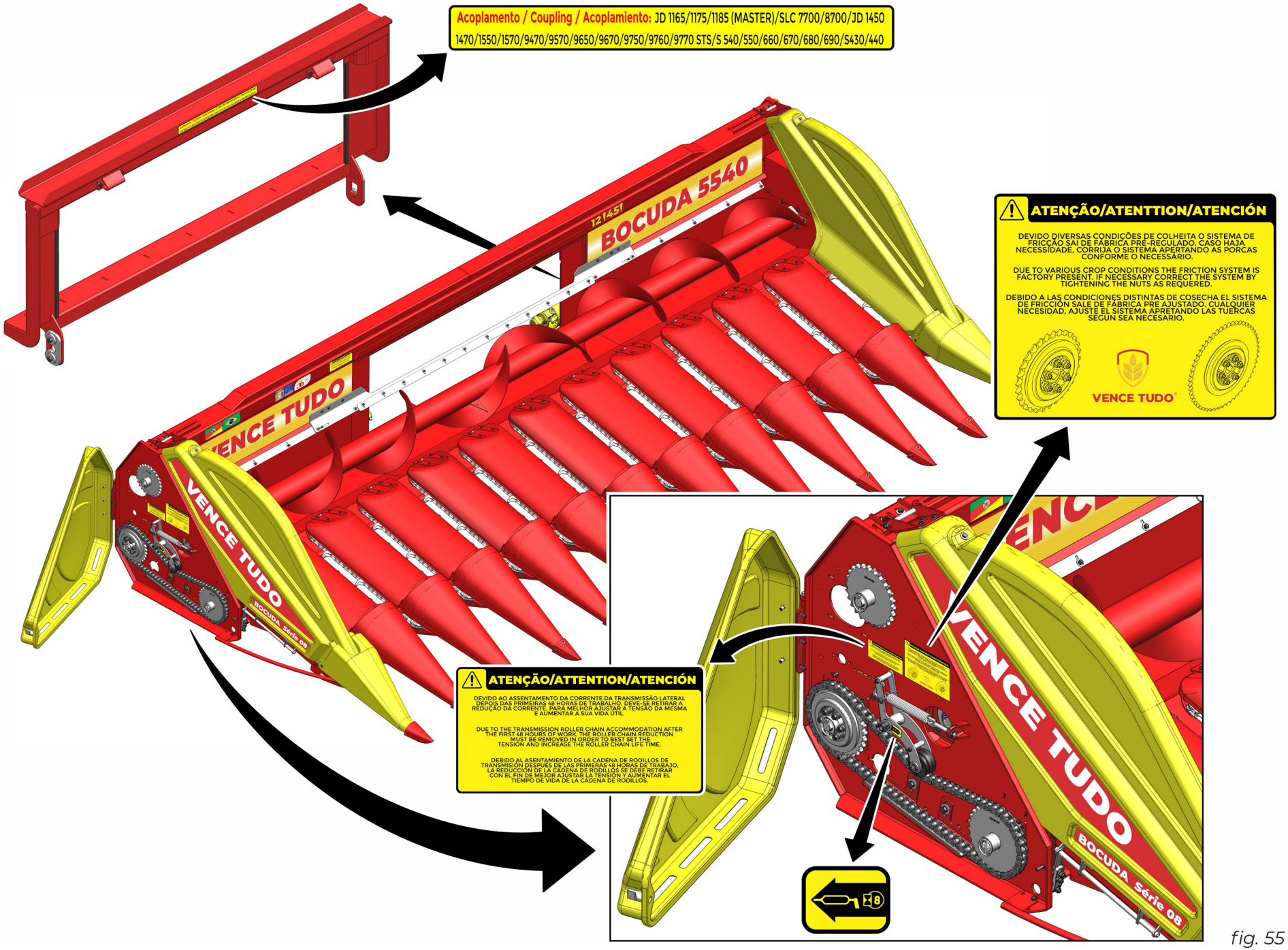
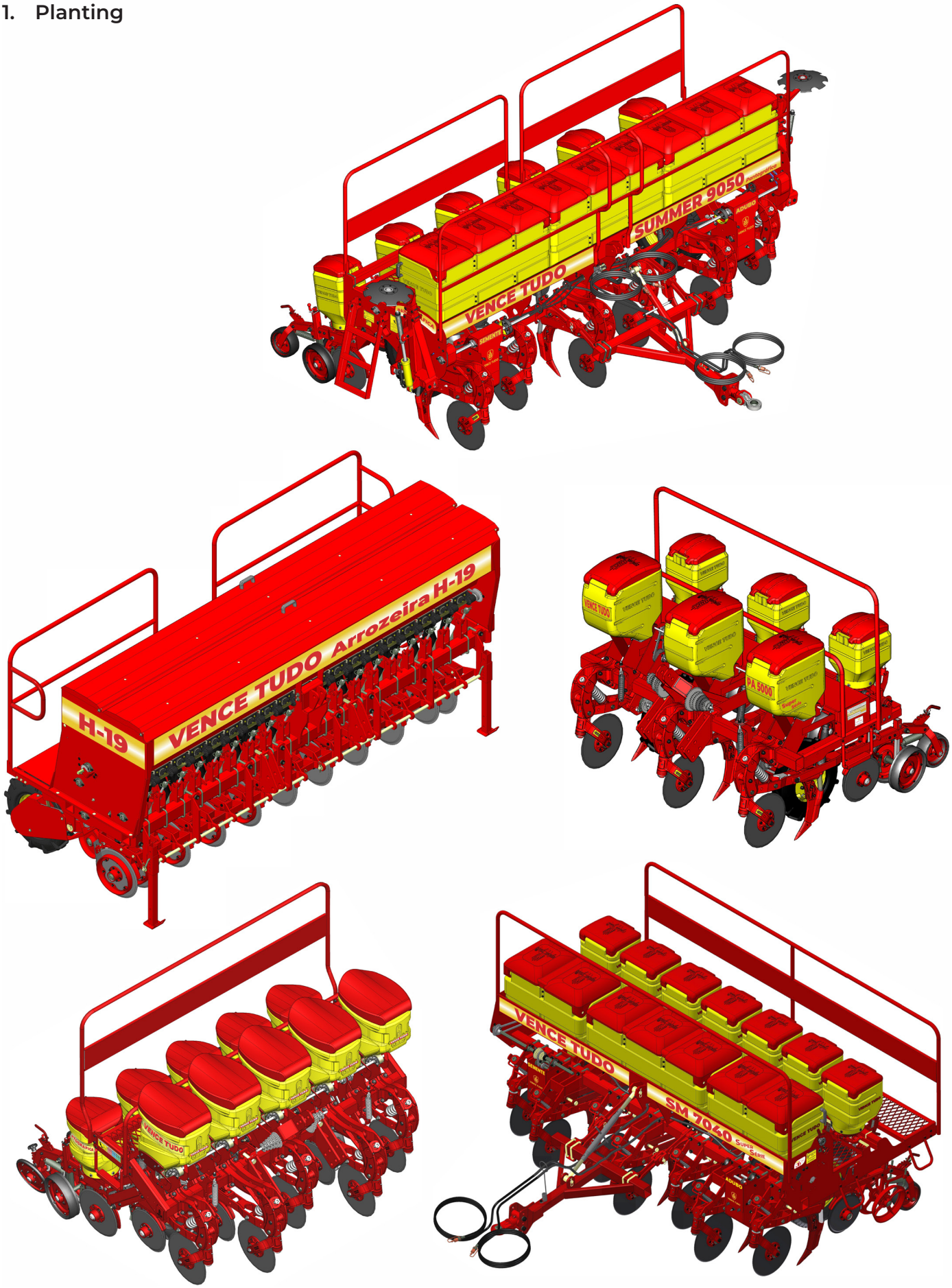

Acoplamento / Coupling / Acoplamiento: JD 1165/1175/1185 (MASTER)/SLC 7700/8700/JD 1450
1470/1550/1570/9470/9570/9650/9670/9750/9760/9770 STS/S 540/550/660/670/680/690/S430/440
BOCUDA 5540
VENCE TUDO
ATENÇÃO/ATENTTION/ATENCIÓN
DEVIDO DIVERSAS CONDIÇÕES DE COLHEITA O SISTEMA DE FRICÇÃO SAI DE FABRICA PRÉ-REGULADO. CASO HAJA NECESSIDADE, CORRIJA O SISTEMA APERTANDO AS PORCAS CONFORME O NECESSÁRIO.
DUE TO VARIOUS CROP CONDITIONS THE FRICTION SYSTEM IS FACTORY PRESENT. IF NECESSARY CORRECT THE SYSTEM BY TIGHTENING THE NUTS AS REQUERED.
DEBIDO A LAS CONDICIONES DISTINTAS DE COSECHA EL SISTEMA DE FRICCIÓN SALE DE FÁBRICA PRE AJUSTADO. CUALQUIER NECESIDAD, AJUSTE EL SISTEMA APRETANDO LAS TUERCAS SEGUN SEA NECESARIO.
VENCE TUDO
ATENÇÃO/ATTENTION/ATENCIÓN
DEVIDO AO ASSENTAMENTO DA CORRENTE DA TRANSMISSÃO LATERAL DEPOIS DAS PRIMEIRAS 48 HORAS DE TRABALHO, DEVE-SE RETIRAR A REDUÇÃO DA CORRENTE, PARA MELHOR AJUSTAR A TENSÃO DA MESMA E AUMENTAR A SUA VIDA ÚTIL.
DUE TO THE TRANSMISSION ROLLER CHAIN ACCOMMODATION AFTER THE FIRST 48 HOURS OF WORK, THE ROLLER CHAIN REDUCTION MUST BE REMOVED IN ORDER TO BEST SET THE TENSION AND INCREASE THE ROLLER CHAIN LIFE TIME.
DEBIDO AL ASENTAMIENTO DE LA CADENA DE RODILLOS DE TRANSMISIÓN DESPUÉS DE LAS PRIMERAS 48 HORAS DE TRABAJO, LA REDUCCIÓN DE LA CADENA DE RODILLOS SE DEBE RETIRAR CON EL FIN DE MEJOR AJUSTAR LA TENSIÓN Y AUMENTAR EL TIEMPO DE VIDA DE LA CADENA DE RODILLOS.
VENCE TUDO
BOCUDA Série 08
x8

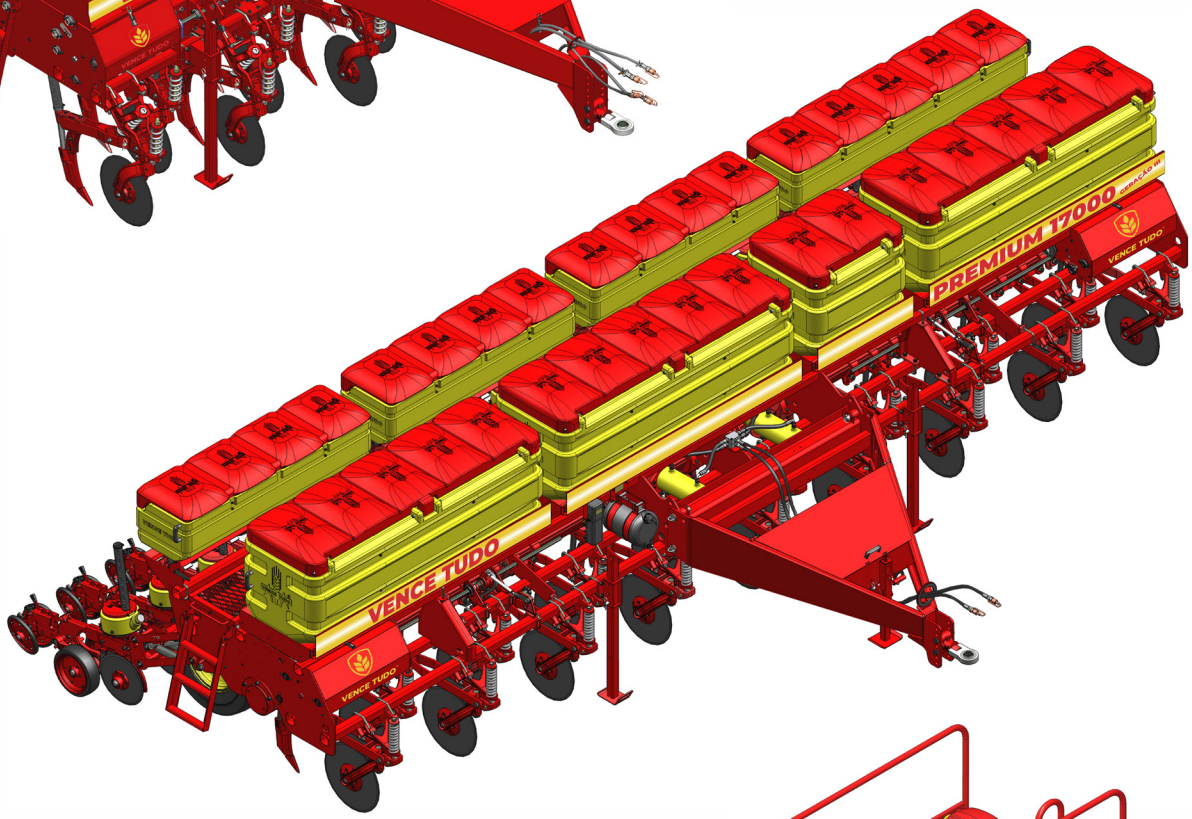
fig. 55

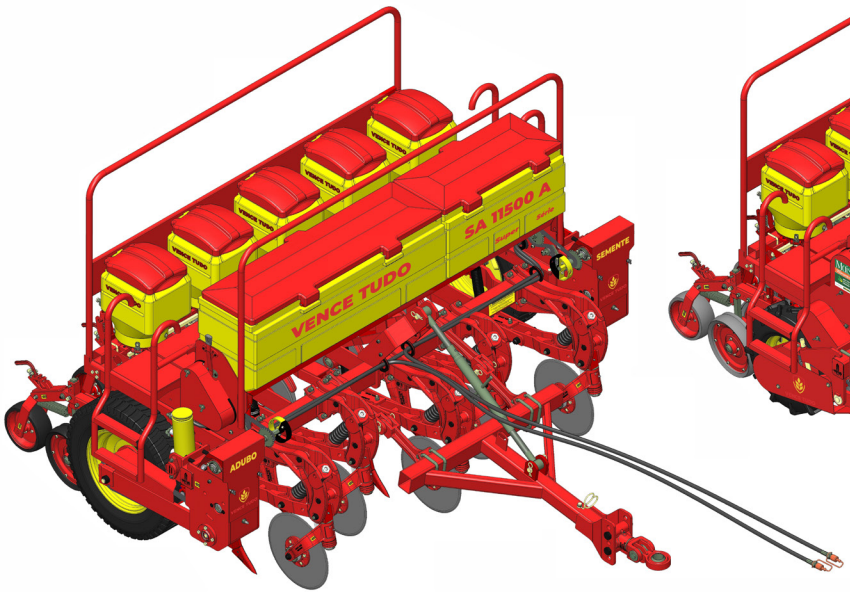
VENCE TUDO PRODUCTS

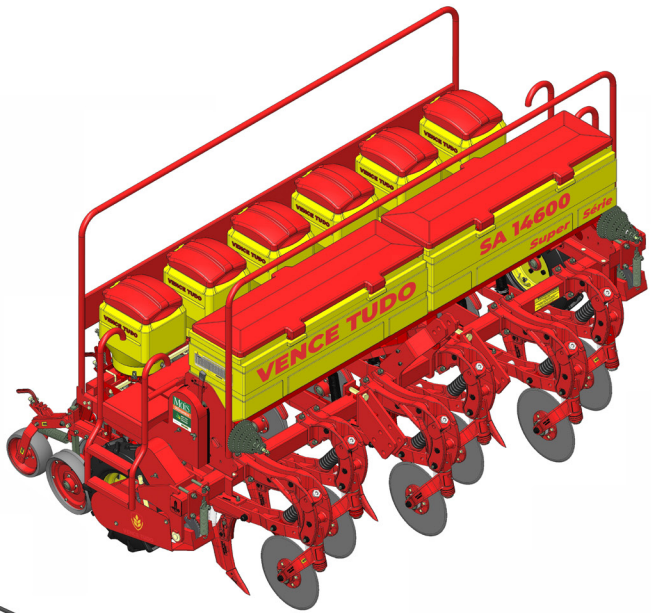
1. Planting

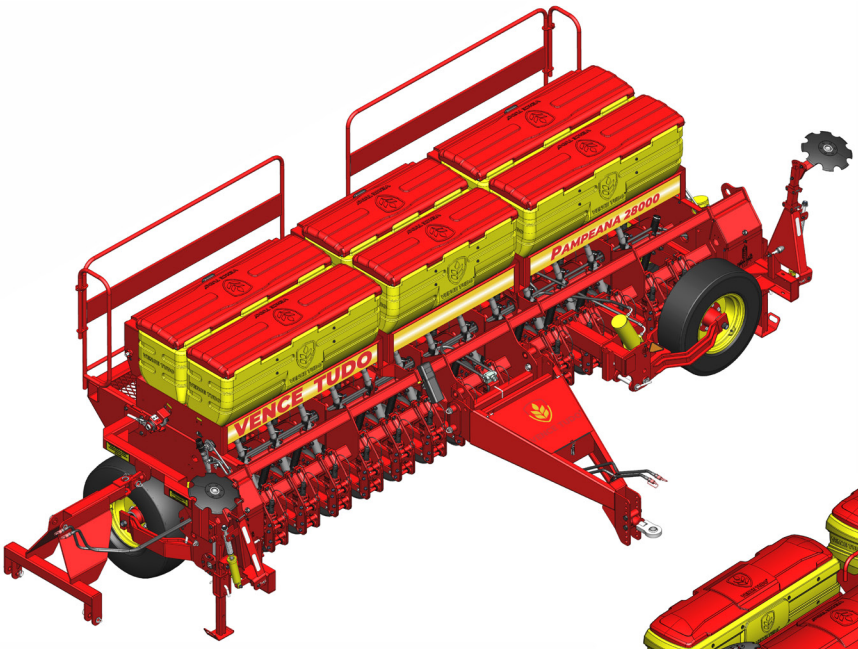


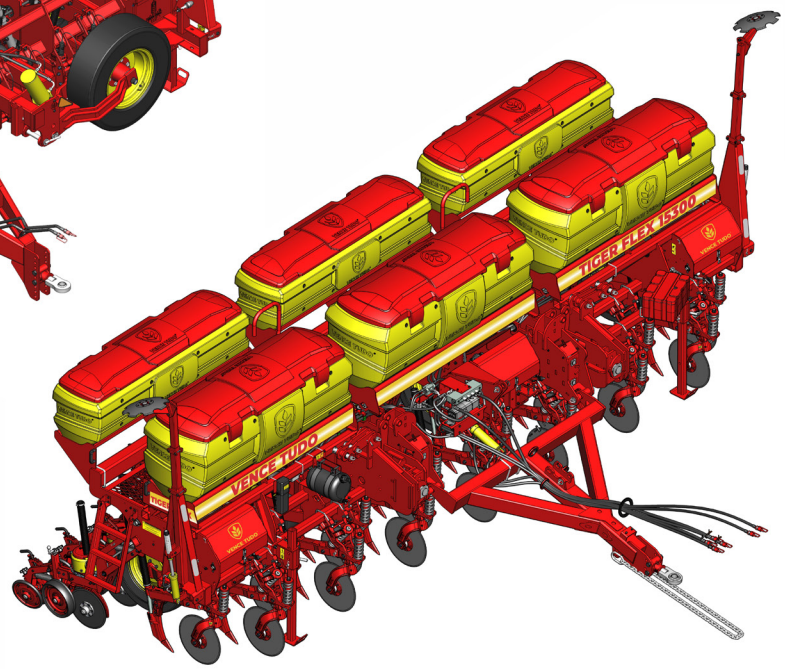

VENCE TUDO
PANTHER
SM 11000 Pneumática

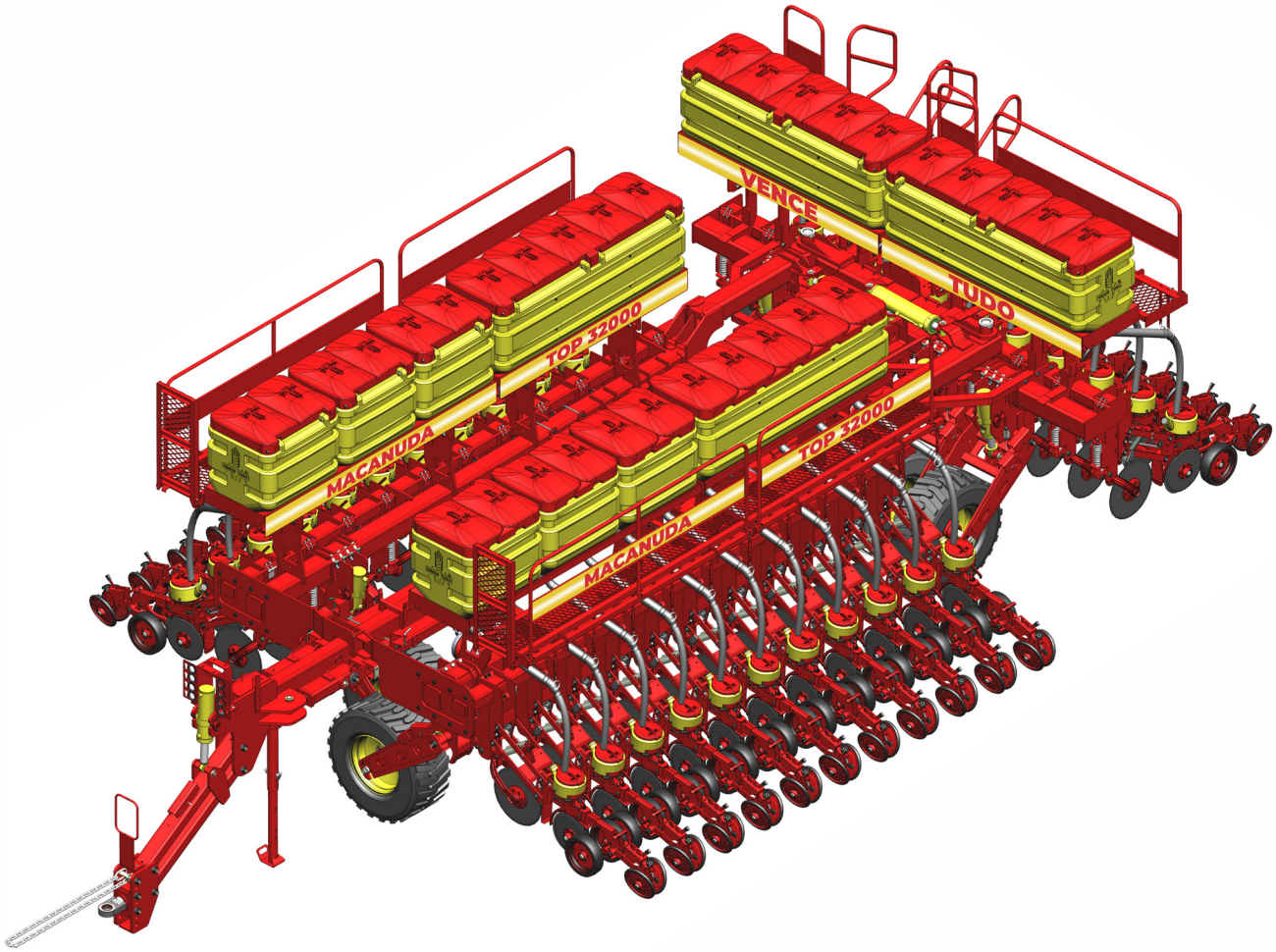

VENCE TUDO
PREMIUM 17000


VENCE TUDO
SA 11500 A
ADUBO
SEMENTE

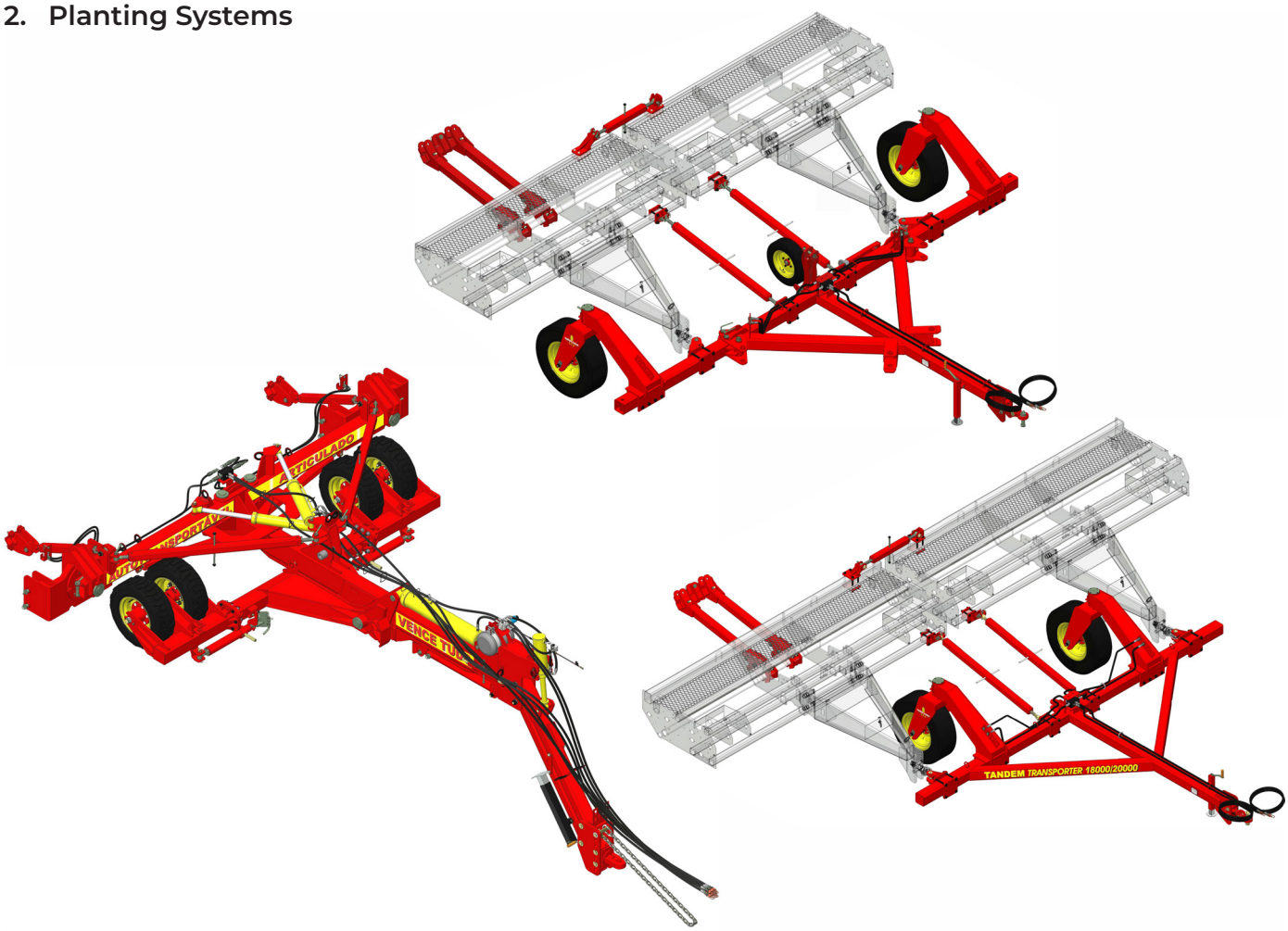

VENCE TUDO
SA 14600
Super Série


PAMPEANA 28000
VENCE TUDO

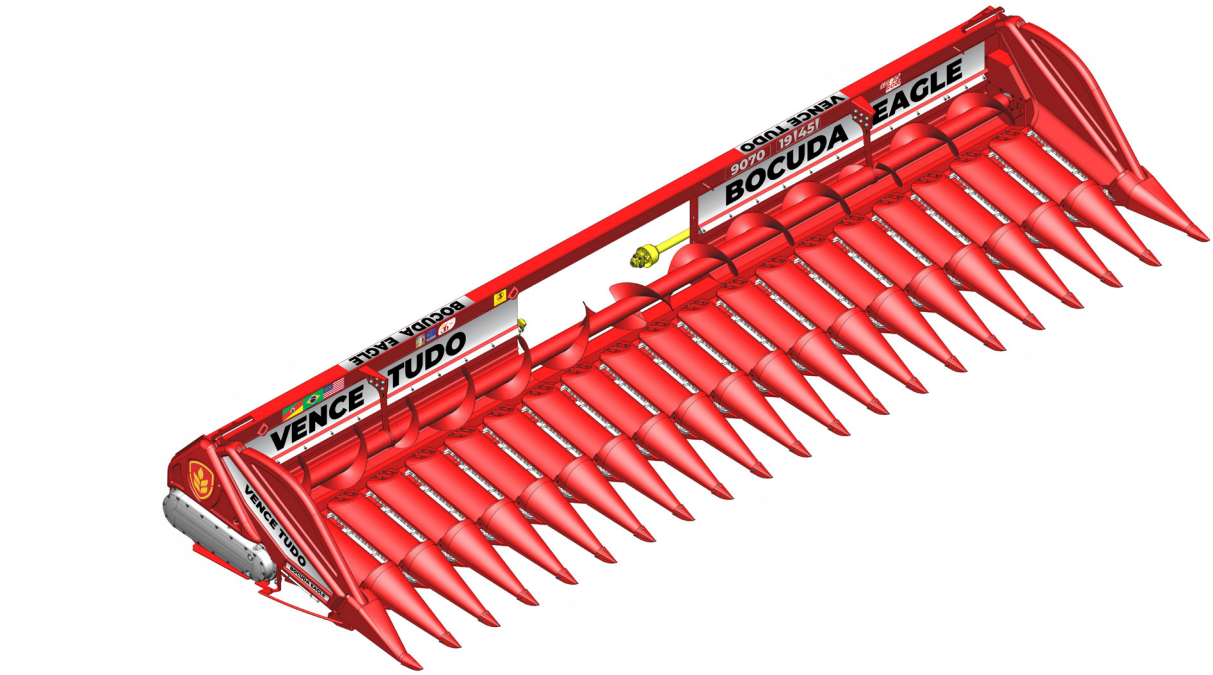

TIGER FLEX 15X00
VENCE TUDO


VENCE
TUDO
TOP 32000
MACANUDA
MACANUDA
TOP 32000

2. Planting Systems



3. Harvest



4. Implements

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