PRESENTATION

The Industry of Agricultural Implements **VENCE TUDO** was founded in 1964 in Alfredo Brenner, District of Ibirubá in Rio Grande do Sul. It has been following a mission determined by the founder Nelson Lauxen, which is to look for the agricultural development indefatigably, through resistant agricultural implements, of easy handling, with great quality and productivity earnings for the farmer.

VENCE TUDO, as years go by, from generation to generation has led faithfully this mission; seeking to develop its products from the users' needs by partnerships with universities, research centers and with its engineering group; constantly improving its products in the most technologically advanced concepts.

After being developed by the company, the products are exhaustively tested for months, by the farmers themselves in the most different regions, being placed under several use conditions, to evaluate their resistance and functioning level. After the product has been approved in its field tests, it will start to be produced on a large scale to the market within the most modern industrial and quality control methods.

The customer's satisfaction with **VENCE TUDO** products is our main concern.

The purpose of this manual is to familiarize you with the equipment functioning and with a little care so it lasts a long time, without problems. In addition, as important as learning to take care and handle it correctly is to know some aspects that may compromise with the warranty, due to negligence, bad use, not authorized adaptations that you may have. This way, we advise the careful reading of the Warranty Certificate.

The parts catalogue contains all the necessary information for parts replacement. The correct interpretation of this manual, will give you conditions to do the necessary replacement according to the equipment models identified and described.

If any doubts come over during any work operation, get in touch with **VENCE TUDO LTDA**; therefore, we can solve your doubts through the CUSTOMER TECHNICAL ASSISTANCE so that we can improve our customer service, being sure of a strong relationship between **VENCE TUDO** and **YOU**.

We take the opportunity to congratulate you on having chosen a **VENCE TUDO** product, and we can assure that we have great interest in satisfying you.

VENCE TUDO
Industry, Trade, Import
and Export Ltd.

TO THE VENCE TUDO CUSTOMER

Farming friend, you are from congratulations when acquiring a product ***VENCE TUDO****; the development of our products is based mainly on the user's satisfaction. Your satisfaction in the hour of picking the profits generated through our implements is ours also. Our thought is to assist with the largest seriousness and our trust partner, you farmer, because it is through your profitability that we are in no doubt of building a strong and lucrative agriculture.*

For a production inside of the considered concepts of the high agricultural technology this product was developed. The most modern equipment is used for the industrial manufacture, aiming at the development of a strong and resistant product, which it comes to take care of your needs, with high durability and long useful life.

WARRANTY #_____

The warranty of the VENCE TUDO products, it is assured to the acquirer, for the period of 01 (one) year; starting from the acquisition date; against manufacture or material defect that may cause the operational compromising of the product, except for components acquired of third, which have their own manufacturer's warrantees.

CONDITIONS

1- The product has warranty on any registered manufacturing defect, as long as VENCE TUDO Ltda. has supplied all the parts and components; in addition, delivered by duly authorized companies or people;

2- The parts and/or components covered by the warranty will only be replaced or compensated, if the Technical Assistance or a person duly authorized by VENCE TUDO Ltda. to verify some defect. It will be excluded the parts, which suffer slow wear and tear for the use, due to operational conditions, and factors related to formation and characteristics of each soil. The presentation of the technical delivery certificate correctly filled up and the purchase bill are essential.

3- If the conditions of the warranty are satisfied, VENCE TUDO Ltda. assures the repair of the defect or component's replacement, at no charge. In case of canceling or expiration of the warranty, the technical assistance will be collected to the price of the day of the installment of the service, as well as the replacement of parts and components, if necessary.

CANCELLATION OF THE WARRANTY

The warranty loses its usefulness in the following cases:

1- Damages caused to the equipment by bad use, abuse, negligence or lack of appropriate maintenance, in disagreement with the manufacturer's instructions published in the corresponding operation's manual;

2- Damages caused by accidents or natural agents;

3- Repairs, modifications or violation of parts and components performed by a non-authorized person;

4- Amendments, erasures or exclusion of data in the Technical Delivery Certificate occurred in the Certificate Warranting; in the purchase bill or in the identification plate cancel the warranty.

IMPORTANT

If the product shows any problem during the warranty time, get in touch, exclusively, your retailer or the manufacturer. Only a person properly authorized for the manufacturer can repair or to disassemble the product, as well as this representative should use only original parts under penalty of the warranty invalidation.

KEEP THE PURCHASE BILL IN A SAFE PLACE; IT IS THE PROOF OF THE WARRANTY.

CUSTOMER:_____
ADDRESS:_____CITY:_____ STATE:_____
MODEL: _____ SERIES:_____ YEAR:_____
DELIVERY DATE: ____/____/_____
RETAILER: _____ CITY: _____STATE: _____

I declare faithfully and with incontestable effect that I received, on this date the PRODUCT (Model): _____as above specified in perfect conservation conditions and the modality of the warranty was accepted by me.
CUSTOMER: _____
RETAILER: _____

Destaque aqui

TECHNICAL DELIVERY CERTIFICATE NUMBER:_____

CUSTOMER: _____ CITY: _____
ADDRESS: _____ STATE: _____
MODEL: _____ SERIES: _____
RETAILER: _____ CITY: _____
Purchase Bill #: _____ Date of Sale: ____/____/____

Destaque aqui

RETAILER, SEND THIS CERTIFICATE TO THE FACTORY AFTER DELIVERY SOON.

I declare having received on this date, the model described before, according to the specifications above in a perfect state and that the warranty terms were accepted by me.

DATE: ____/____/____

COSTUMER: _____

DELIVERY DATE: _____/_____/_____

INDEX

IDENTIFICATION

When getting in touch with the VENCE TUDO Technical Assistance Service, please inform the following data: MODEL, YEAR and SERIAL NUMBER of the product. These data are located in the Product's Identification Plate, fixed on the chassis, always on the left side.

When need to replace any parts, always use original VENCE TUDO parts. To make the identification of each part easier, see the PARTS CATALOGUE.

All the information enclosed in this Operation's Manual is subject to variations. Weight, dimensions and specifications are just approximated, and the illustrations do not reflect, necessarily, the equipment in its standard condition. For obtaining exact information about any specific model, please contact your VENCE TUDO Distributor / Representative.

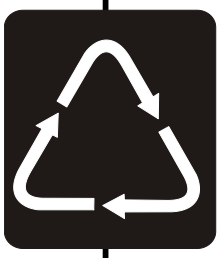
The Agricultural Implements Industry VENCE TUDO LTDA. in constant improvement, reserves the right to at any time to introduce changes in their products to best to meet the needs and expectations of their customers; without the obligation of doing the same on the products previously sold.

CARE WITH THE ENVIRONMENT

Mr. Farmer!

Let us value the nature.

The uncontrollable spilling of residues in the soil and in the water, it harms the life of all the living beings of the planet.



Spilling in the soil and in the water, lubricating and combustible oils, plastic packing, and of agrochemicals, etc; it interferes directly in the balance of the ecosystem from the superficial layer of the soil to the underground sheets of water.

Make the appropriate handling of the residues, knowing, as one should make the recycling and the reuse of the ones.

Acting this way you will be contributing with the conservation and the balance of the ecosystem.

IMPORTANT

The cut of the straw is a fundamental factor for the efficiency in the planting and establishment of the crop. The Technical Assistance does not admit that be used methods of handling not recommended at all. Avoid burnings: burning the straw is a crime against the ecosystem; because life on earth depends on it.

Use the straws chopper well regulated, and change the knives; if necessary.

Maintaining the standardization of distribution of the straw layer, it should be used the straw spreader well tuned.

It should be used straw crushers, if necessary.

Avoid the use of disc harrow in the straw rolling.

SAFETY RULES

⚠ WARNING

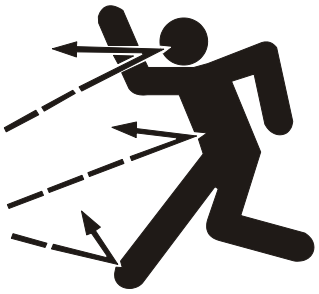
- The improper operation of this equipment can cause serious wounds or death. Before using it, be sure that the operator.

- Was instructed for safe and appropriate use;
- Read and understood the operation manual of the product;
- Removed people close to the operational area;
- Has knowledge and practice in the safe use of machines, its controls and its work place.

⚠ WARNING

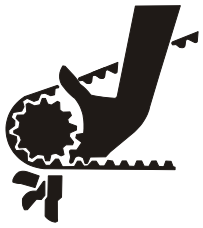
- Avoid falls. Keep the access to platforms clean. Use the supports to go up.

⚠ WARNING



- Stay away when the equipment is in operation.

⚠ WARNING



- The contact with dented wheels and chains in operation can cause serious accidents. Stop the motor to avoid wounds.
- Don't open the protections until all the mechanisms have stopped.

ATTENTION

THIS INDICATIVE SYMBOL SHOWS SITUATIONS OF SECURITY IN THIS OPERATION MANUAL. OBSERVE AND READ WITH ATTENTION THE MESSAGES TO PREVENT PERSONAL ACCIDENTS.

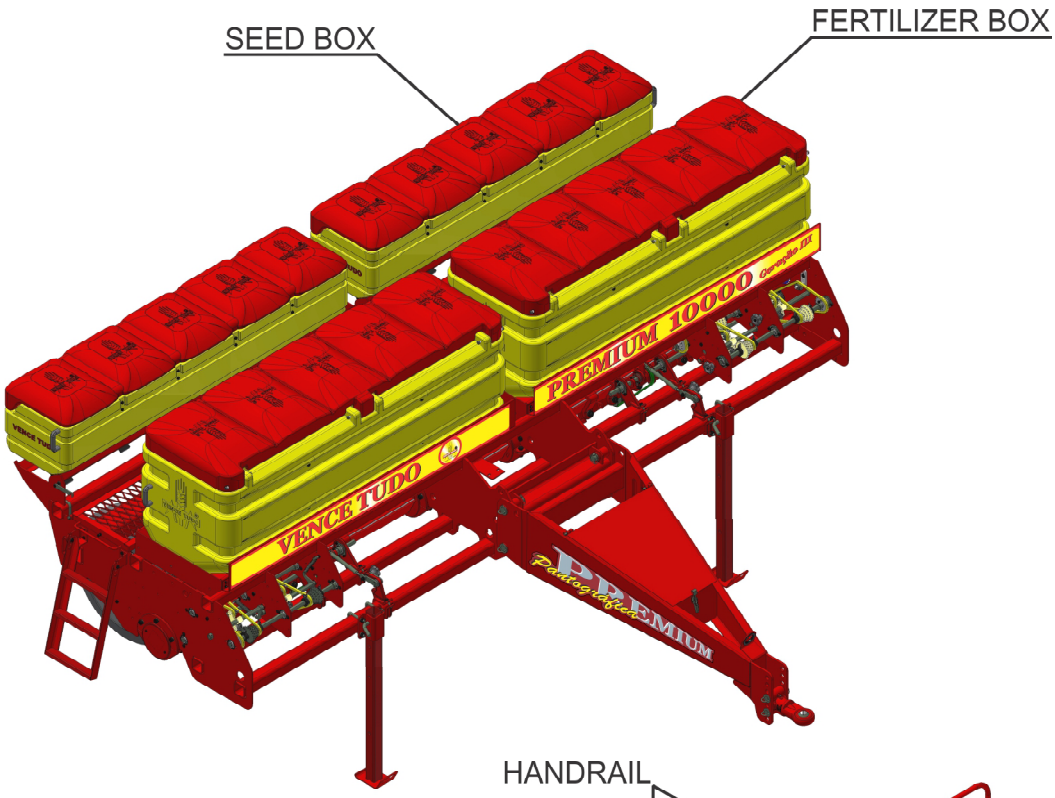
- **Only people with the complete knowledge of the tractor-seeder group should operate it and to do repairs in the components and kits; with the maximum security.**
- **The farmers should follow the recommendation on the use of chemical products in doses recommended by the manufacturer and the responsible agronomist always. People, animals and the environment can be affected by excess and the bad use of chemical substances.**
- **Keep arms and legs away from cutting discs and furrowers, because these can cause serious wounds.**
- **Keep in your mind always: that a careful and responsible operator is the best safety against accidents.**
- **Safety demands attention, caution, concentration and prudence during the transport, planting, maintenance and storage operations. In addition, this should be kept in your mind all the time.**
- **Only the presence the tractor's operator is allowed to keep on; during the transport operations and operation of the tractor-planter group.**
- **Do not allow any children to play close to or on the equipment; during the maintenances, transport, operation and storage.**
- **Wear appropriate clothes and shoes before and during any type of operation. Avoid wearing wide clothes that can be twisted by moveable parts of the seeder.**
- **Have complete knowledge of the land, where you will work with the seeder. In case, it is necessary, demarcates the place in possible dangerous points that can put in risk the life of the operator and your work safety.**
- **Appropriate speeds during the plantation, transport and maneuvers with the seeder should be used all the time. High speeds can cause damages to the kits, and still can put in risk people and animals lives.**
- **Never work without the protection devices and safety.**

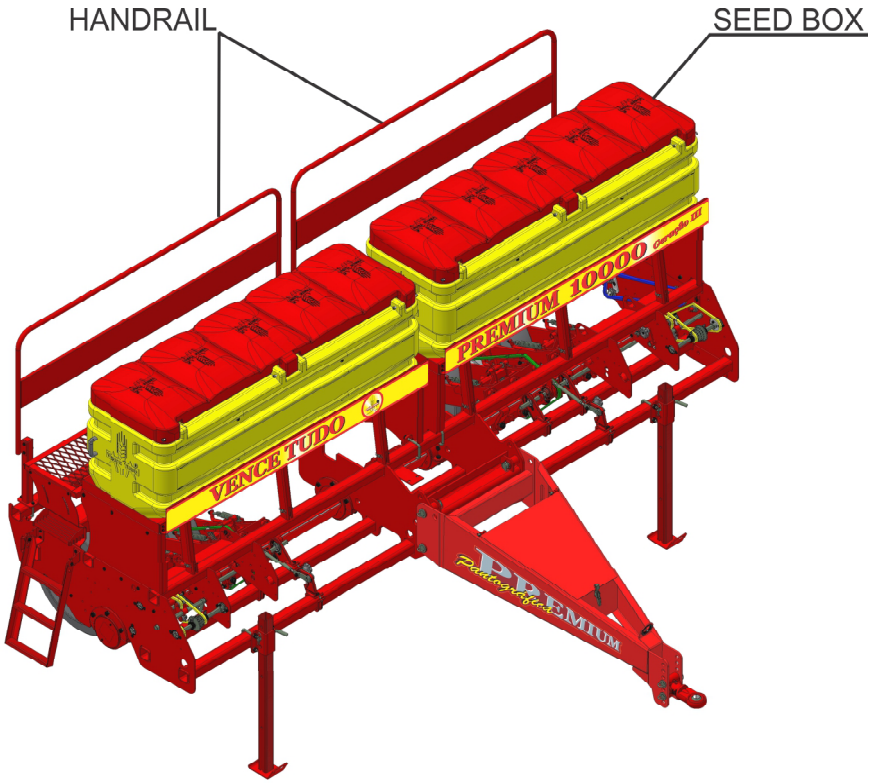
ATTENTION

- **Have the maximum of care when making the coupling of the tractor to the seeder. Do not allow anybody to stay between the seeder and the tractor.**
- **Be sure that there is not anybody or animals close to the seeder neither whenever you lift nor lower it to the ground.**
- **Never try to alter the adjustments, to clean, to lubricate or to remove any material from inside the seeder; when it is in movement.**
- **Keep the access platform to the seeder clean always and free from oils and greases.**
- **Always turn the engine off before leaving the tractor's seat and be sure that the parking brake was applied.**
- **Work with the seeder always in the speed and potency suitable.**
- **Be moved with caution and attention in narrow places.**
- **Do not travel on roads or highways, mainly during the night. You should use warning signs and scouts, when make long travels with the machine.**
- **When decoupling the seeder, make this in flat and firm place. Be sure that the seeder is very leaning and firm on the ground before accomplishing the decoupling.**
- **Be sure that there is not anybody close to the seeder or tools left inside theirs hoppers, before operating it.**
- **Keep the shield plates in their places.**
- **Read the OPERATION MANUAL, before any operation and follow the warnings fixed on the machines.**
- **After repairs, be sure that all the parts are running correctly.**
- **Do not transport the seeder loaded. Fill it, when it is in the field.**

ATTENTION

WHEN TURNING THE MACHINE TO THE SYSTEM SEED (ONLY SEED) AND THE IT HAS SEED BOX POPPER, IT MUST BE REMOVED AND MOUNTED IN ITS PLACE THE HANDRAIL. THIS AMENDMENT IS NECESSARY FOR SECURITY REASONS, AND ARE THE RESPONSIBILITY OF THE USER OF THE MACHINE.





TECHNICAL SPECIFICATIONS

BASIC FEATURES	MODELS																											
	PREMIUM 10000							PREMIUM 11000							PREMIUM 12000							PREMIUM 13000						
Row Number	**10**	**9**	**8**	**7**	**5**	**11**	**10**	**9**	**8**	**7**	**6**	**12**	**11**	**9**	**8**	**7**	**6**	**13**	**12**	**11**	**10**	**9**	**8**	**7**				
Row Spacing in cm	45*	50*	-	60	75																							
				65	76				60	70*	80			55	65	75*	85						70	80*				
				70*	80	45*	50*	55	65	75*	85	45*	50	60	70	76	90	45*	50*	55	60	65	75	90				
					85					76	90					80							76					
					90																							
Seed Capacity (Soybean)	Total Capacity		Capacity per line			Total Capacity		Capacity per line				Total Capacity		Capacity per line				Total Capacity			Capacity per line							
Premium Popper	610Kg / 790l.		61Kg / 79l.			650Kg / 840l.		60Kg / 77l.				707Kg / 915l.		60Kg / 77l.				776Kg / 1005l.			60Kg / 77l.							
Premium Seed	1430Kg / 1850l.		143Kg / 185l.			1560Kg / 2017l.		142Kg / 184l.				1710Kg / 2214l.		142Kg / 184l.				1838Kg / 2381l.			141Kg / 183l.							
Approximate Capacity Fertilizers	2070Kg / 1850l.		207Kg / 1850l.			2260Kg / 2017l.		206Kg / 184l.				2480Kg / 2214l.		206Kg / 184l.				2667Kg / 2381l.			205Kg / 183l.							
Number of Wheels / Tires	4 Internal / 4 Militar 700 - 16"					4 Internal / 4 Militar 700 - 16"						4 Internal / 4 Militar 700 - 16"						4 Internal / 4 Militar 700 - 16"										
Approximate Weight (Kg)	5.100					5.750						6.300						6.800										
Approximate Power of Tractor (cv)	100 - 130					110 - 140						12 - 150						130 - 160										

* In these spacings will be necessary to displacement the planting line with interference on the beam, + or - 2 cm to the left or right.

* Minimum spacing between wheels = 47cm

TECHNICAL SPECIFICATIONS

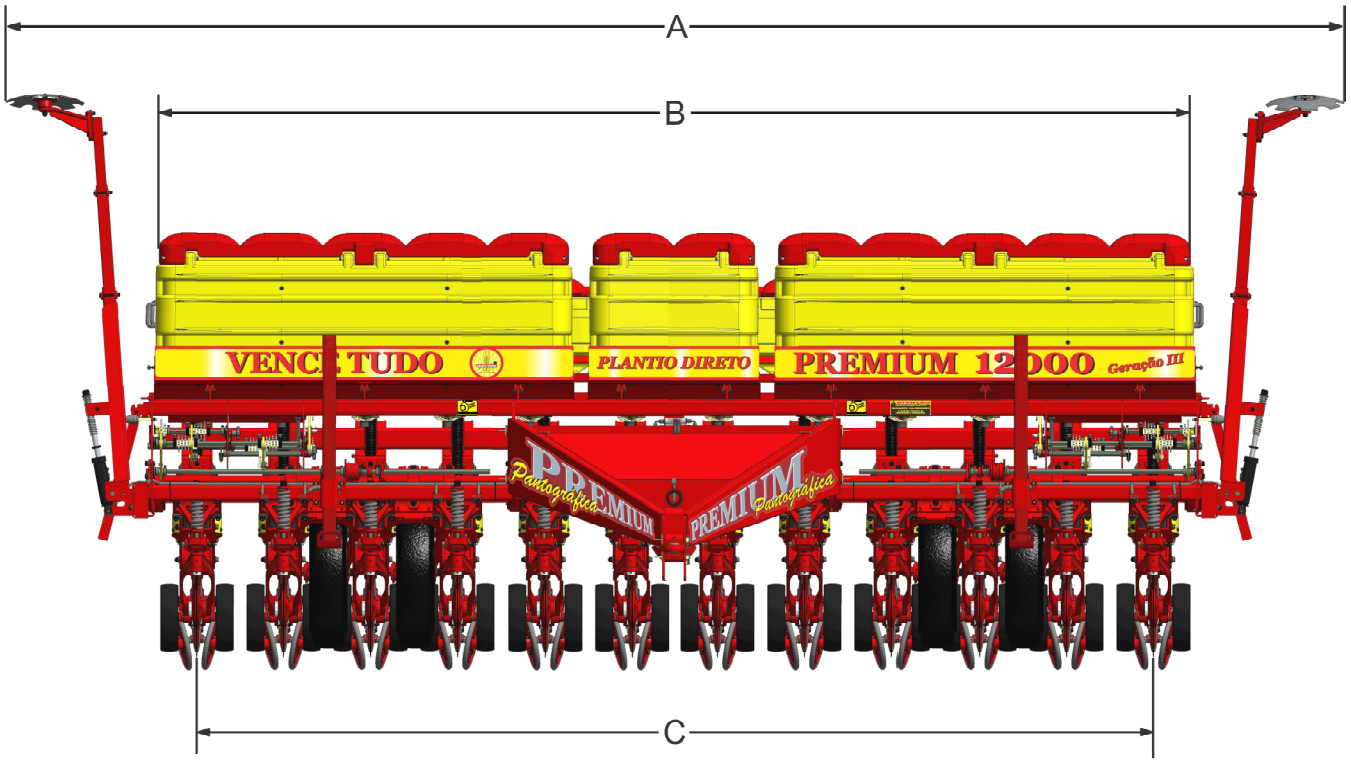
BASIC FEATURES	MODELS	PREMIUM 14000							PREMIUM 15000							PREMIUM 16000							
		14	13	11	10	9	8	7	15	14	11	10	9	8	16	15	13	12	11	10	9	8
Row Number																						
Row Spacing in cm		45*	50	55 60	65	70*	75 76 80 85	90	45*	50*	60 65	70	75* 76	80 85 90	45*	50	55	60	65	70 75 76	80*	85 90
Seed Capacity (Soybean)	Total capacity	845Kg / 1095l.					Capacity per line		915Kg / 1185l.					Capacity per line	942Kg / 1220l.							Capacity per line
Premium Popper		1990Kg / 2578l.					60Kg / 78l.		2142Kg / 2775l.					61Kg / 79l.	2271Kg / 2942l.							59Kg / 76l.
Premium Seed		2887Kg / 2578l.					142Kg / 184l.		3108 Kg / 2775l.					143Kg / 185l.	3295Kg / 2942l.							142Kg / 184l.
Approximate Capacity (Fertilizers)							206Kg / 184l.							207Kg / 185l.								206Kg / 184l.
Number of Wheels / Tires		4 Internal / 4 Militar 700 - 16''							6 Internal / 6 Militar 700 - 16''						6 Internal / 6 Militar 700 - 16''							
Approximate Weight (kg)		7.100							7.900						8.500							
Approximate Power Tractor (cv)		140 - 170							150 - 180						160 - 190							

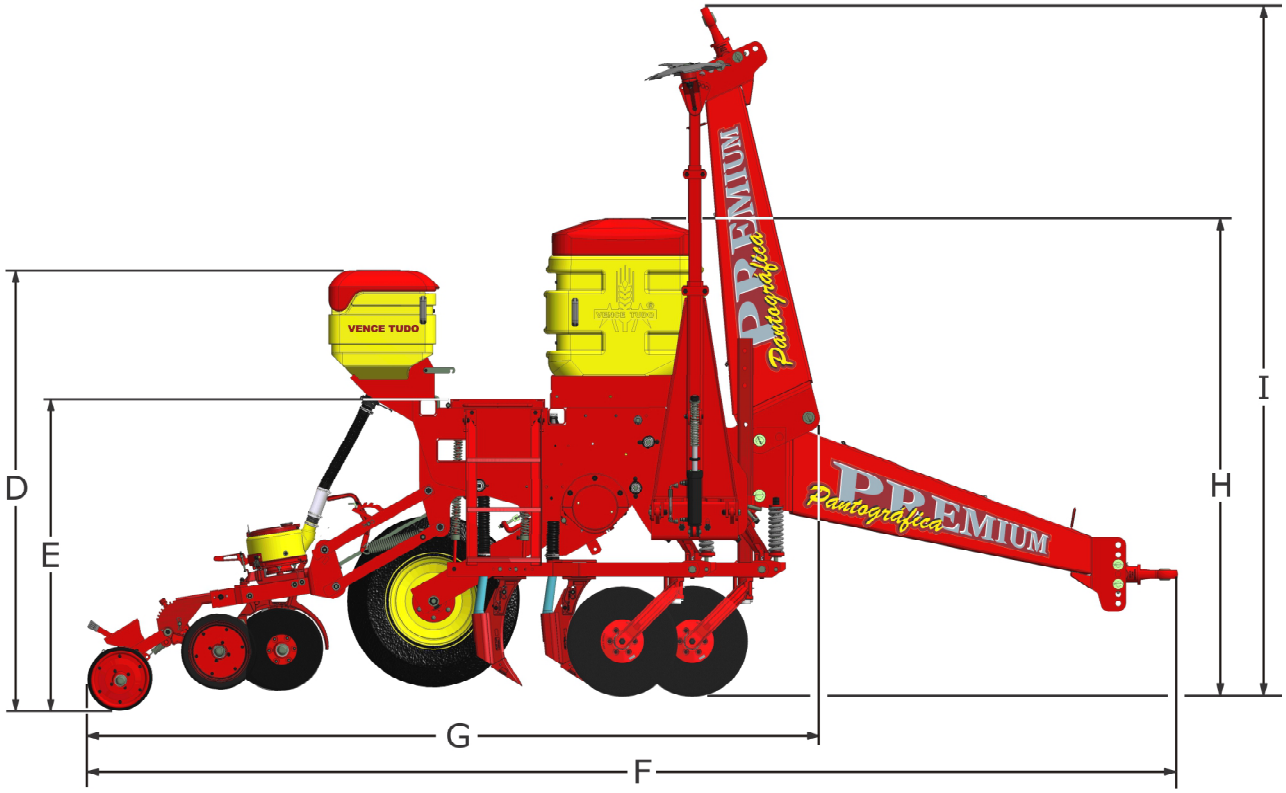
* In these spacings will be necessary to displacement the planting line with interference on the beam, + or - 2 cm to the left or right.

* Minimum spacing between wheels = 47cm.

NOTE: - The dimensions, weights and capacities as well as any other information shown in this manual are subject to change without notice.

Basics Dimensions





MODELS	A	B	C	D	E	F	G	H	I
PREMIUM 10000	6110	4470	4130	1950	1300	5110	3450	2140	3175
PREMIUM 11000	6560	4890	4580	1950	1300	5110	3450	2140	3175
PREMIUM 12000	7010	5370	5030	1950	1300	5110	3450	2140	3175
PREMIUM 13000	7460	5810	5480	1950	1300	5110	3450	2140	3175
PREMIUM 14000	7910	6300	5930	1950	1300	5110	3450	2140	3175
PREMIUM 15000	8400	6820	6420	1950	1300	5110	3450	2140	3175
PREMIUM 16000	8850	7300	6870	1950	1300	5110	3450	2140	3175

Dimensions in (mm).

General Characteristics

COUPLING: The machine is pulled by tractor's drawbar.

HEADER: It is jointed. It has adjustment for coupling height in the tractor's drawbar. It allows positioning for transport and/or storage.

CHASSIS: It is monoblock type.

WHEELED: It is composed of wheels, with free track. It is formed by flanged rims and fixed by screws. This wheeled has special tires military type model 700/16 ".

LIFT SYSTEM: It is driven through two hydraulic cylinders with compensation of volume by differential of area. It is coupled to the tractor's hydraulic system throughout of a hydraulic control.

LIFT SYSTEM OF THE PLANTING LINES: Easy and practical engagement of planting lines lift for corn planting with traditional spacings, eliminating the need to disassemble it.

FERTILIZER RESERVOIR: Modulated, built in anticorrosive structural polyethylene with medium density.

SEED RESERVOIR: Individual, assembled in each planting line. Build in medium density polyethylene.

FERTILIZER METER MECHANISM: Meter mechanical endless thread type.

SEED METER MECHANISM: Horizontal mechanical meter system made of metal plate and horizontal perforated seed discs.

TRANSMISSION RATIO: Performed through the combination of multiple sliding gear and gear basic of transmission.

CUTTING MECHANISM OF THE STRAW: Vertical cutting disc, with lateral swing, with pressure through helical spring.

PLACER AND CONVEYOR MECHANISM OF THE FERTILIZER: Furrow opener knife-type with replaceable point and safety fuse. It has adjustments for different depths. Its work pressure is obtained through of the action of helical springs.

SEED PLACEMENT: Through offset discs of 15" through pantographic lines with exclusive, drive through cardan axle without the use of chains, providing constant rotation on disc distributor of seed. With pressure system of easy and wide setting ensuring planting with constant pressure and uniform in any situation on the ground.

SEED / FERTILIZER PLACEMENT (Optional): Composed by two discs mounted in "V", offset, curve conveyors for placing seeds and fertilizers. Its work pressure is obtained through the action of helical springs.

DEPTH GAUGE WHEELS / PRESS WHEELS MECHANISM: Free depth control wheels in "V" shape with coating flexible rubber.

GENERAL INFORMATION

1 - *When receiving your planter, check the product's conditions and the attachments box. This is of great importance; mainly in relation to the use of original components;*

2 - *The right and left-hand is considered taking into account that the observation of the machine is made backwards ahead;*

3 - *To withdraw any plantation kit for the placing on the other, it must be always careful to separate the parts withdrawn with their respective components or parts. Thus, those parts are not used in other machines or equipments of your property;*

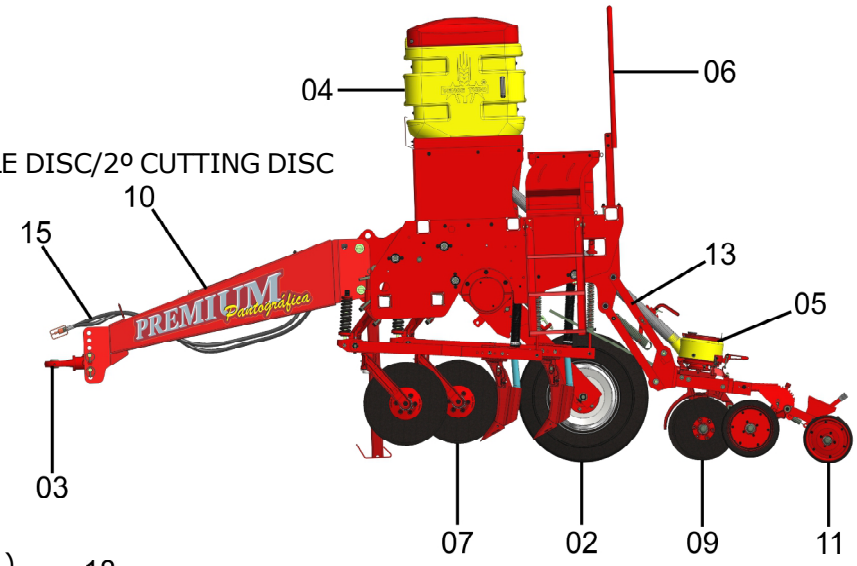
4 - *Due to the planter design to be with internal tires, the minimum spacing among the wheels is of 450 mm for all of the models assembled with opener knife furrower and with double discs;*

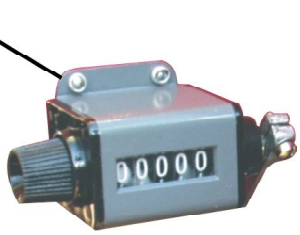
5 - *The crop of the soybean is used in this manual, identifying the operations for the summer crops, as corn, sorghum and others.*

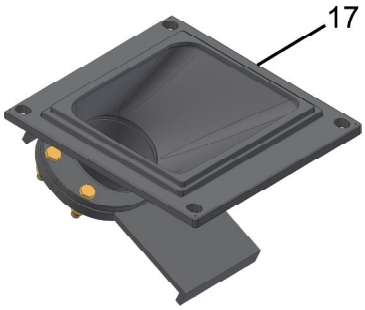
6 - *The disposition of the planting lines varies in accordance with the planters models. Be sure that is making the assembly or maintenance of the correct model.*

COMPONENTS IDENTIFICATION
SYSTEM SEED

01- CHASSIS
02- WHEELED
03- HITCH HEADER
04- SEED RESERVOIR (SEED)
05- SEED RESERVOIR (SEED)
06- HANDRAIL
07- CUTTING STRAW SYSTEM
08- FURROW OPENER KNIFE/DOUBLE DISC/2º CUTTING DISC
09- SEED PLACEMENT
10- HEADER
11- COMPACTION MECHANISM
12- DEPTH GAUGE WHEELS
13- PANTOGRAPHIC SYSTEM
14- TRANSMISSION RATIO
15- HYDRAULIC SYSTEM
16- SUPPORT FOOT
17- SEED DRIVER
18- HECTARE COUNTER (OPTIONAL)



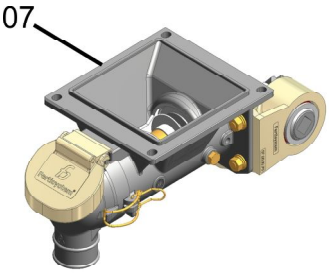


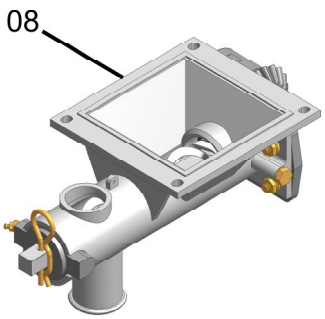


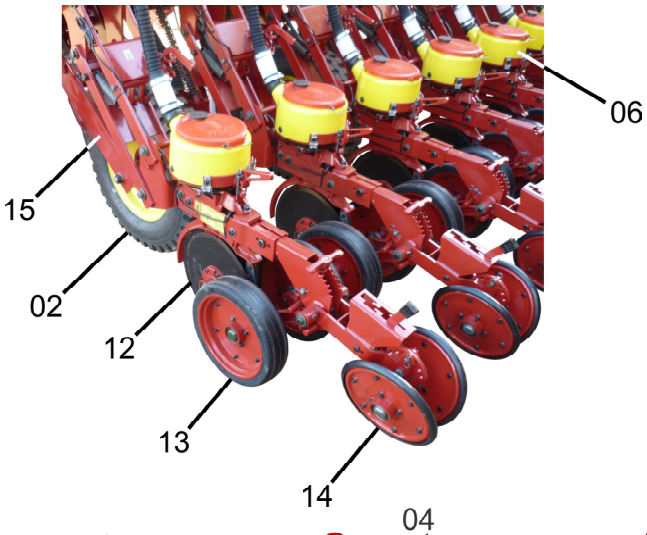
COMPONENTS IDENTIFICATION

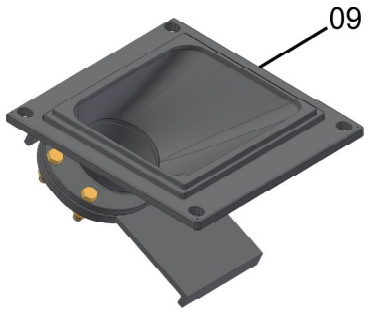
SYSTEM POPPER

01- CHASSIS
02- WHEELED
03- HITCH HEADER
04- FERTILIZER RESERVOIR
05- SEED RESERVOIR (POPPER)
06- RESERVOIR POPPER
07- FERTILIZER METER - FERTISYSTEM
08- FERTILIZER METER - ENDLESS TREAD (OPTIONAL)
09- SEED DRIVER
10- CUTTING STRAW SYSTEM
11- FERTILIZER PLACEMENT
12- SEED PLACEMENT
13- DEPTH GAUGE WHEEL
14- COMPACTION MECHANISM
15- PANTOGRAPHIC SYSTEM
16- TRANSMISSION RATIO
17- HYDRAULIC SYSTEM
18- SUPPORT FOOT
19- HEADER
20- ROW MARKER (OPTIONAL)









PREPARING

Header and Support of the Planter

To lift the header, remove the lock pins with loop (A) (fig. 01) and remove the pins (B), then lift the header and place the pins in the holes (C) (D), so locking it with the lock pins with loop (A).

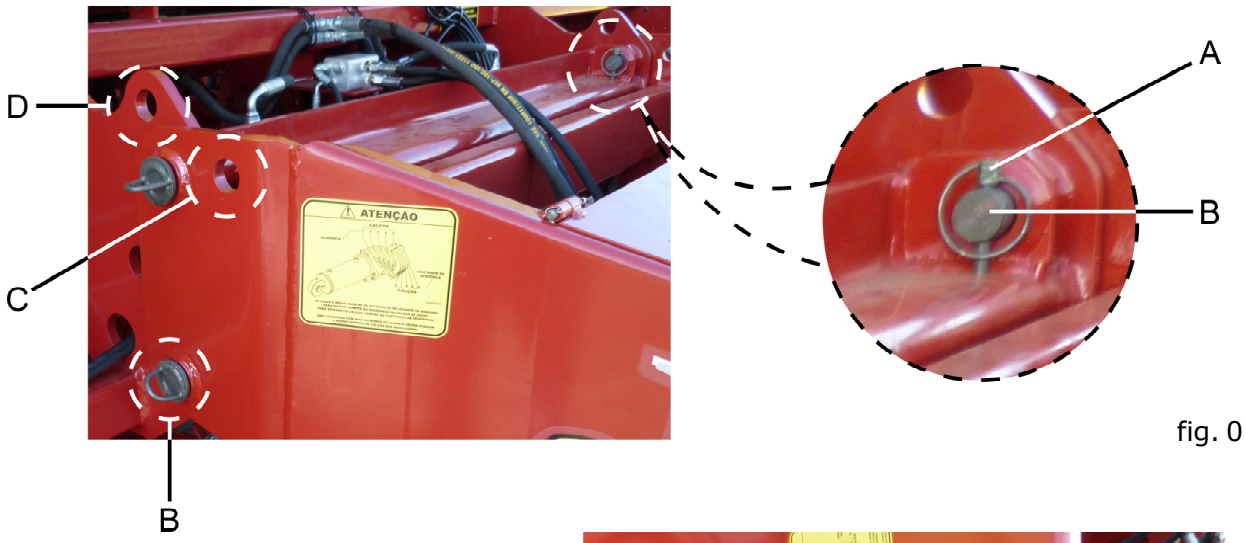
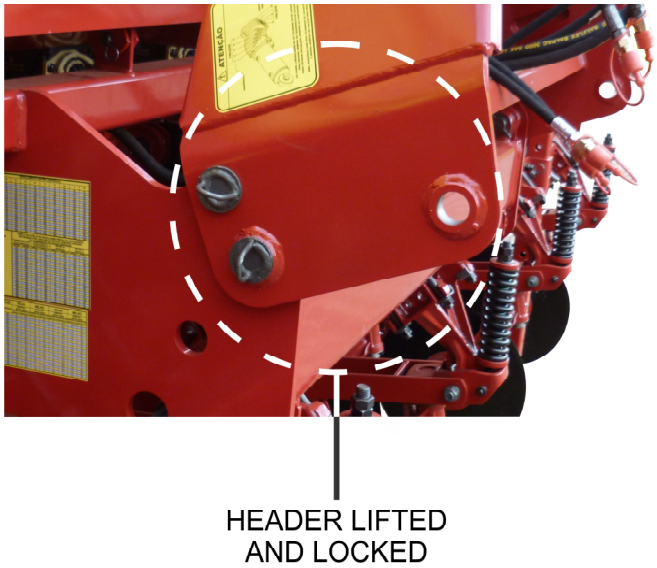


fig. 01



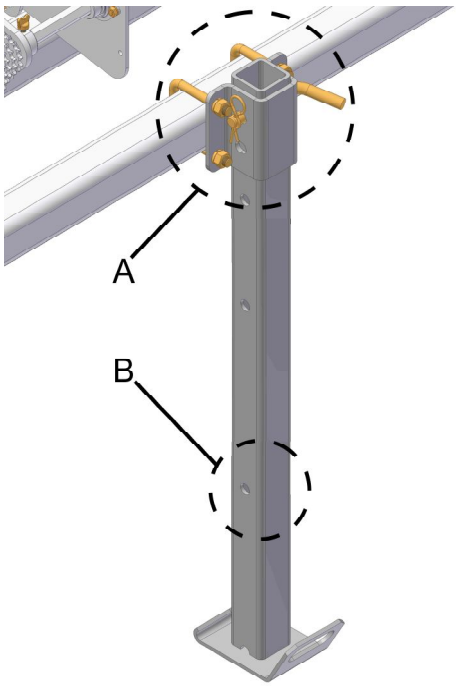


fig. 02

Foot holder in lift position (A) (fig. 02). It should be used to support the planter in level and firm place.

For planter be in the transport position, lift the foot holder until the last hole (B).

Tractor

It is recommended the use of ballast weight in enough amount to perform the work of planting with better efficiency. This amount must be in relation to the weight of the machine and terrain slope.

Coupling of Planter – Tractor

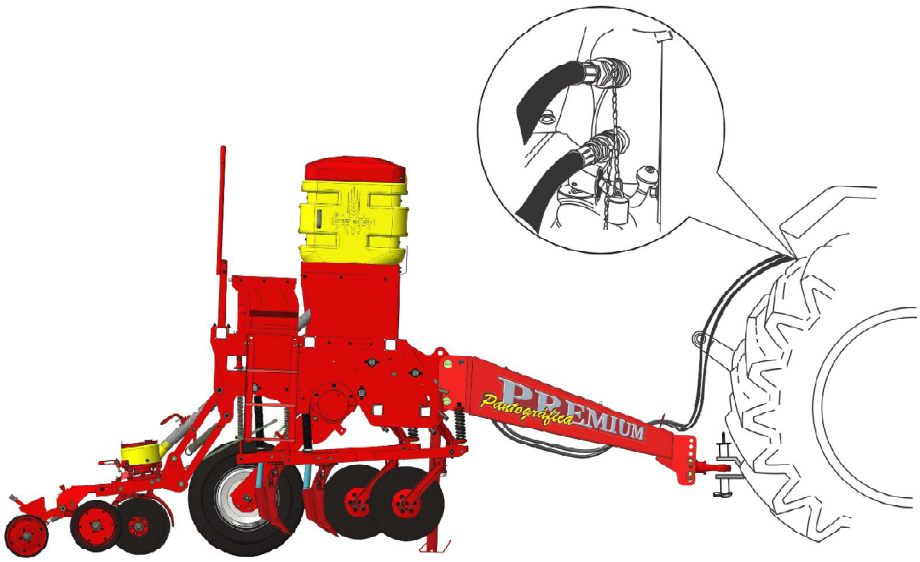
Couple or decouple the planter from the tractor in level and firm place only;

Perform the displacement with the tractor in slow gear in the direction to the planter and be always paying special attention to stop the movement of the tractor (to brake);

Attach the header of planter to the tractor's drawbar;

Make the connection of the hydraulic hoses;

Place the planter in planting position performing leveling.



Planting Operation

Read correctly and follow the instructions together with this in the **operation manual.**

Clean completely up the planter before starting the planting operation. Check, if all the mechanisms are moving freely and retighten all the components of fastening.

Concerning the **planting furrowers lines,** be sure that all the shear bolts are under conditions of use. Check, if the **internal scrapers** of the double discs are in perfect conditions and adjusted correctly. Note the **furrower knife points** if necessary replace them.

Always check the conditions of the **springs**. Replace them in the case of break and lack of pressure. Do not attempt to repair a spring weakened, which may cause a serious accident. During the idle time of the planter, keep the springs without pressure.

Free or broken **screws, nuts, pins** can lose some part of high cost, which probably will curve or break, damaging other components of the equipment. Due to these causes replace and retighten them, when necessary.

Maintain the **chains** aligned and always in an appropriated tension for the work which corresponds to an oscillating equal to the width of the chain. Never add a new link in a chain used. Do not use a new chain in a sprocket used.

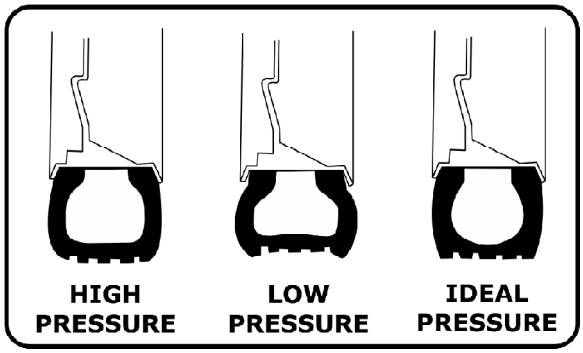
Check the alignment of **sprockets**; they should be maintained free of sludges before, during and after planting operation. Accomplish the lubrication so that the sprockets do not work without oil.

Before planting, lubricate all **grease fittings** cleaning them with a soft cloth to prevent the dirt can provoke the blockage of the channel. If they present defect, replace them.

Before starting to work with the planter, make a **general retighten** in all the components, nuts and bolts. Check the placement of pins, stop pins and cotter pins "R", to avoid possible losses during the working operation. Repeat the operation of **retighten** after the first hours of work.

Tires Pressure

For a great contact with soil, use an ideal pressure pro the work, so the essential flexibility for the long durability of the tires will be getting. The use of low or high pressures may cause serious and irreversible damage to the tires. It is recommended for tires **6.50/16 the pressure of 46 lbs/pol²** for assembling with the water, according to the manufacturer for the normal conditions of use.



Lubrication

Be sure that the planter is lubricated properly. Depending directly on this procedure is the revenue, conservation and the productivity of it.

Sets for Planting

Support bars compose these sets, where are attached the plastic reservoirs with horizontal seed metering mechanisms and system drive of set. These sets are attached on the planting lines.

For planting with 90cm row spacing, it should be isolated through the non-use the seed distributor systems with reservoirs of intermediate planting lines (reservoirs not used), making removal the seed metering plates from the planting lines.

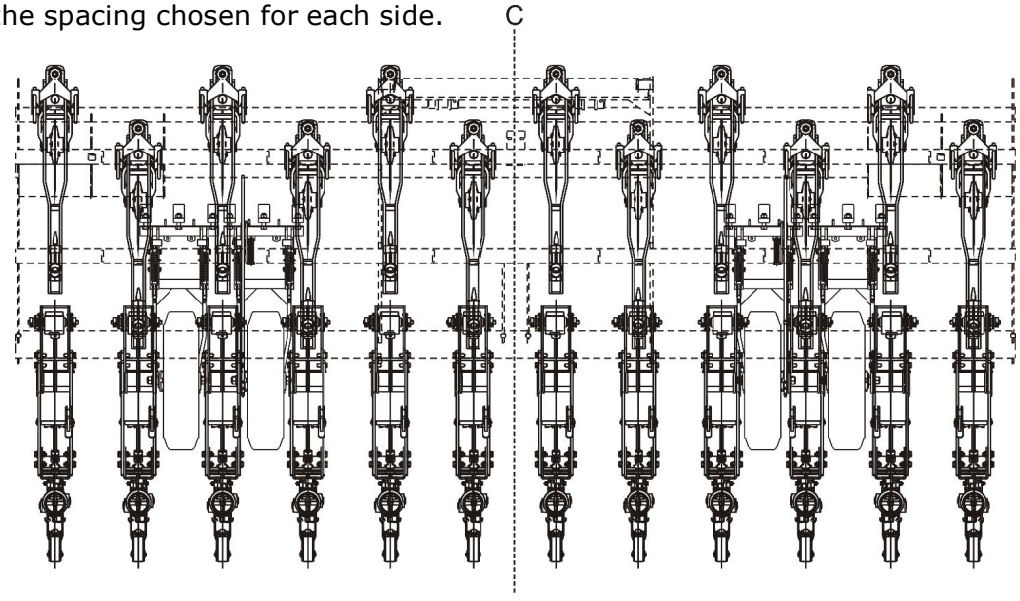
Row Spacing of Planting

The PREMIUM Generation III Planters leave the factory with minimum spacing as the number of lines requested. They allow the possibility to choose other spacing as the model of planter, with inclusion or exclusion of lines, according to the culture that require greater or lesser distance between lines.

POSITION OF THE PLANTING LINES ON THE CHASSI

1 – Even number of lines

Mark the center (C) of the chassis and make the measurement of half spacing to the right and half to the left. Looking at these points the first two lines, starting from these points, mark the other with the spacing chosen for each side.

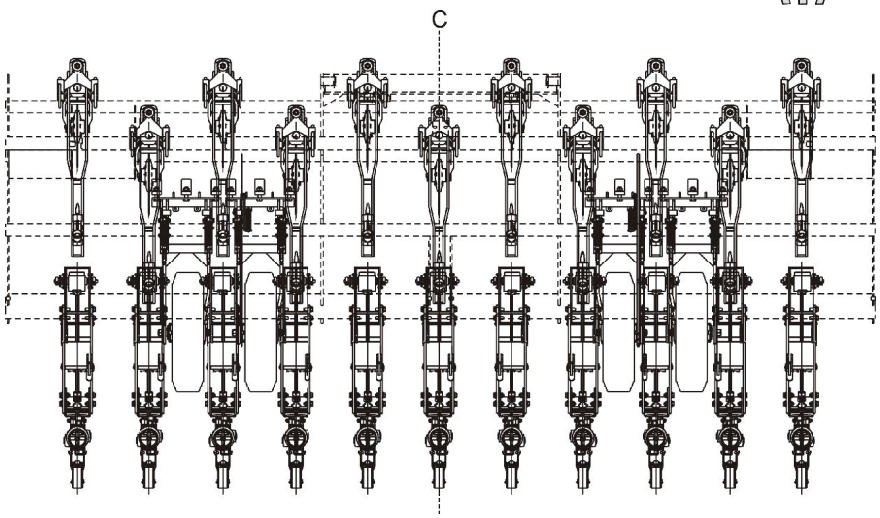


2 – Odd Number of Lines

Mark the center of the chassis (C) and assemble a line.

From the center line, mount the other with the spacing chosen for each side.

The smallest number of lines should always be fitted to the front tube of the planter.



*** In the models with spacing of 45 cm, will be necessary to shift the line with interference of wheeled of + or - 2cm to the left or to the right.**

Changing the Row Spacing - Seeds and Fertilizers Lines

PROCEDURES FOR CHANGING OF ROW SPACING:

1 - Make the change of the row spacing in plane, firm and clean place.

2 - Lower the foot support.

3 - Put braces on both rear ends of the chassis.

4 - Engage(s) hydraulic cylinder(s) lowering the planting lines.

5 - Release the pressure(s) hydraulic cylinder(s).

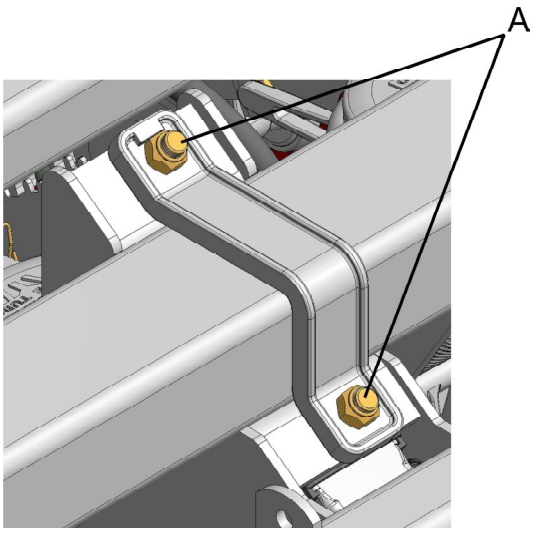
6 - Loosen the nuts and bolts of the clamps: the support of pantographic line (A) (fig. 03), the support of fertilizer line (B), the wheeled support (C).

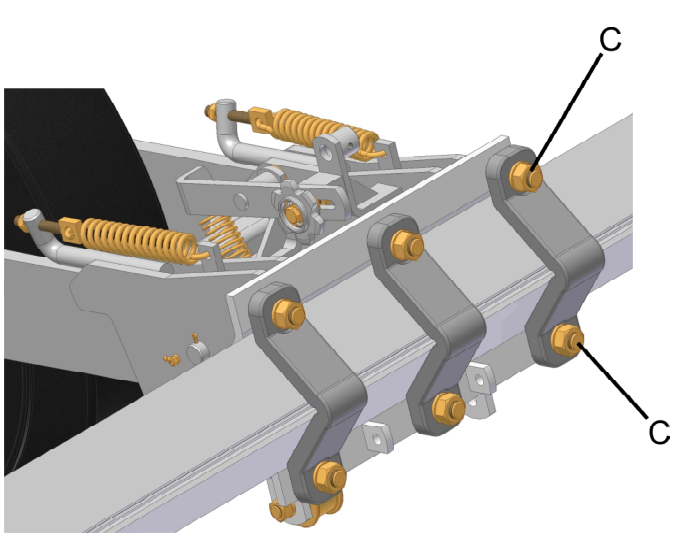
7 - Remove the fertilizer conveyors.

8 - Remove or move the lines close to the tires, having more space for the displacement required.

9 - Move all assemblies for the positions, as the spacing chosen.

10 - Tighten all the bolts and nuts that secure the sets.





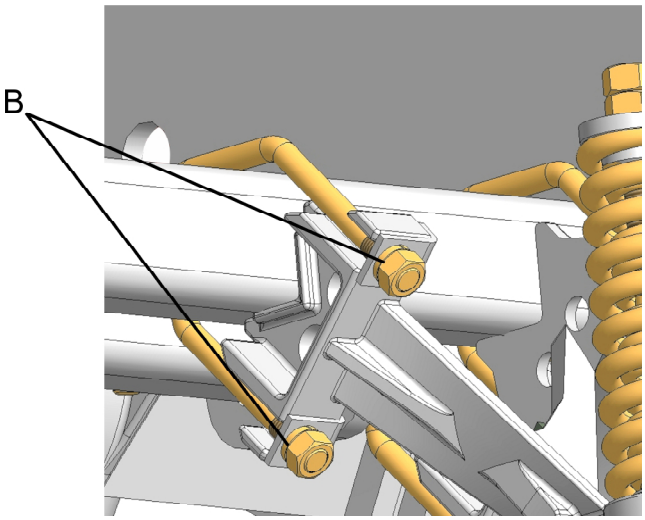


fig. 03

Seed Distribution System

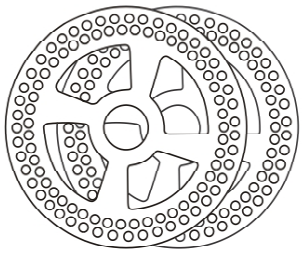
The correct adjustment of the seeder to obtain a final stand suitable for the crop to be established should be considered the variety to be sown, the germination of seed (GS) and effect of seed.

The correct choice of the seed distributor discs should be determined from the size and shape of the seeds.

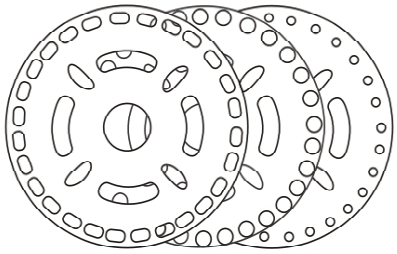
SEED METER PLATES

If you already have the seed meter plates set, make the choice of seeds to be planted so that they can be distributed from the meter plates that came with the accessory box or the planter. However, if the seed type to be distributed does not fit any of the kits, that accompany the planter, it is required to acquire optional seed meter plates for this, just get in touch with a reseller VENCE TUDO.

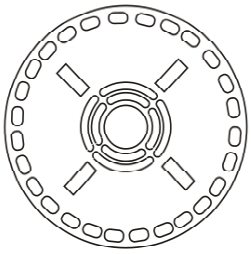
MODELS OF THE SEED METER PLATES AVAILABLE:



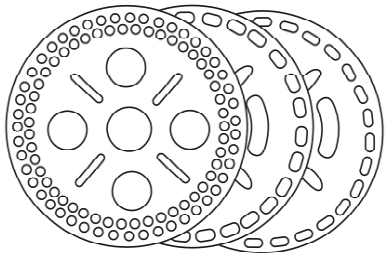
SOYBEAN



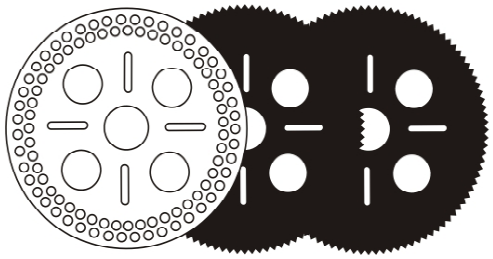
CORN



SUNFLOWER



BEANS



SORGHUM

CROP	COLOR METER PLATE	HOLES NUMBER	HOLE	HOLE TYPE
SOYBEAN GRAIN BY GRAIN*	Grey	90	8 mm	Round double row
SOYBEAN GRAIN BY GRAIN*	Grey	90	9 mm	Round double row
CORN	Red	28	10x14,5 mm	Oblong
CORN	Green	28	9x13,5 mm	Oblong
CORN	Grey	28	8,5x11,5 mm	Oblong
CORN	Blue	28	12 mm	Round
BEANS **	Grey	28	12 mm	Round

* For soybean, the model meter plate grain by grain the seed must have uniform size and shape so that two seeds do not occupy the same hole in the meter plate.

** For bean, uses the same meter plates for corn plus the option for beans (disc grain by grain).

MODELS OF THE OPTIONAL SEED METER PLATES:

CROP	COLOR METER PLATE	HOLES NUMBER	HOLE	HOLE TYPE
SOYBEAN GRAIN BY GRAIN*	Grey	90	7 mm	Round double row
BEAN GRAIN BY GRAIN	Light Grey	72	7x12 mm	Oblong double row
SORGHUM	Red	86	5,5 mm	Round double row
SORGHUM	Green	86	4,5 mm	Round double row
SUNFLOWER	Dark Green	28	5,5x11 mm	Oblong
SUNFLOWER	Turquois Blue	28	5x13 mm	Oblong
SUNFLOWER	Light Turquois Blue	28	7,5x11,5 mm	Oblong
SUNFLOWER	Purple	28	5,9x11 mm	Oblong
SUNFLOWER	Lilac	28	5x11,5 mm	Oblong

IMPORTANT

1- Choose a batch or variety of crop that has the best uniformity and quality of the seeds, which will be planted;

2- When choosing the seed meter plate the form and size of the seeds should be noted;

3- When the seed receives treatment with: insecticides, fungicides and other inoculants, and this application has water added, seeds will grow in size due to the formed film by these treatments and by absorption water by the seed;

4- After noting the all-prior items adding the technical recommendation for the crop, the seed to be sowed should have a certain slack within the alveolus or meter plate hole. This gap should be considered the outer diameter of the seed;

5- It is important the use of graphite powder with seeds. It is acts like a lubricant of the meter plates, reducing the friction between the parts that make up the distributor mechanism and helps keeping the seeds fall conveyor seeds smooth. The use of graphite powder does not cause damage to or interfere with seed germination; it is a product inert and non-phyto-toxic. **Use 100 grams of graphite powder per 100 kg of seeds.**

The correction of the germination of seed (GS) and the percentage of slippage determine an adequate stand to planting.

The correct adjustment of the planter is a fundamental factor for crop yield, since the number of plants per meter determines the final stand of the crop. Use the table of seed setting as a reference.

REPLACEMENT OF THE SEED METER PLATES

Choose the correct meter plate and make the replacements needed. As the same way do the clean up frequently.

For checking or replacing meter plates, engage lever (A) (fig. 04) and lift the reservoir (B), release the plate (C) through clamps (D).

fig. 04

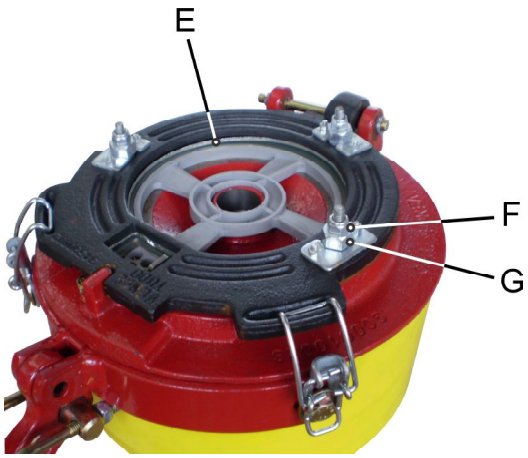


fig. 05

Checking or replacing meter plates, do the adjusting ring correcting the clearance (E) (fig. 05), through the release of the nut (F), and adjustment of possible backlash of meter plate-ring kit with adjusting nut (G). **Pay particular attention to the meter plate rotate freely, without clearance.**

After regulated clearance, retighten the nut (F) for locking the system.

Assembly of Seed Meter Boxes and Changing of Rollers

1- Loose the fixing bolt from seed box, removing it;
2- Remove the holding pin from jointer of roller (A) (fig. 06);
3- Withdraw the jointer and change the roller model if necessary (B);
4- Note the roller model (C) to be used. It should be conformable with the holes of the disc to be used, with single or double row.

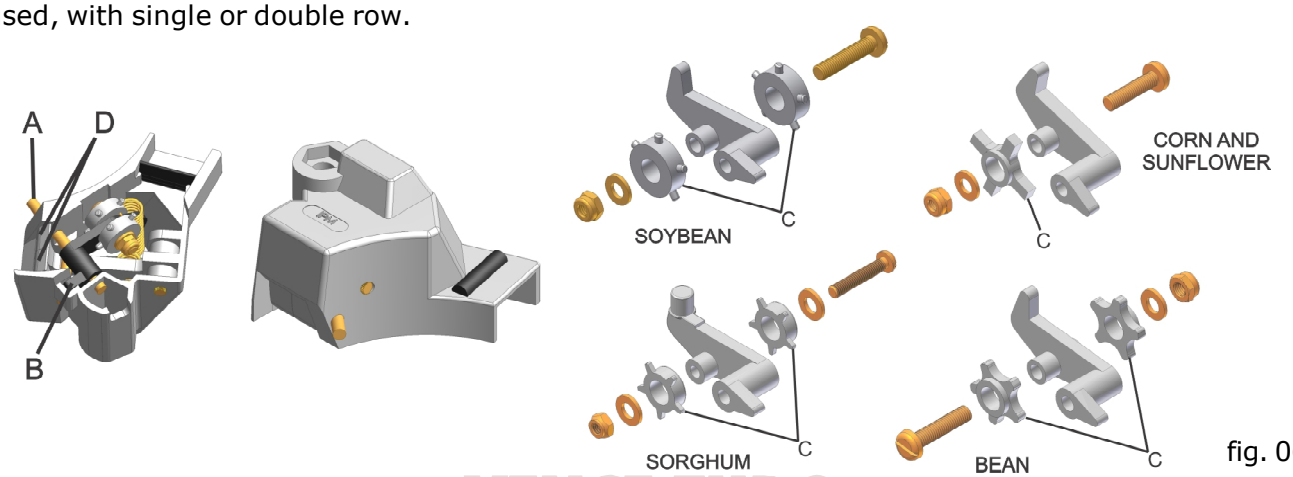


fig. 06

IMPORTANT

The working position of the roller must be in the center hole of the meter plate. If it is used out of the working position will cause wear on the meter plates and distribution problems of seeds.

Check, if scrapers triggers (D) are free after assembling seed meter boxes.

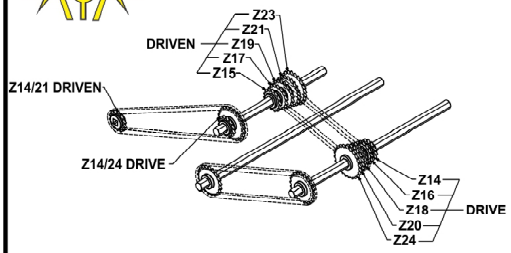
Proceed to clean inner seed meter box, at least, once a day for untreated seeds and twice a day when using treated seeds.

Setting the Seed Distribution

TABLE TO HELP IN THE PRIOR ADJUSTMENT FOR SEED DISTRIBUTION

FERTILIZER PLANTER PREMIUM GERAÇÃO III

SEED TRANSMISSION RIGHT SIDE

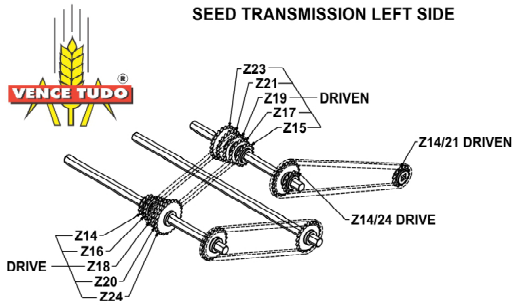


SPROCKETS ARRANGEMENT		SOYBEAN		CORN		SOYBEAN		CORN	
DRIVE	DRIVEN	SEEDS / LINEAL METER		SEEDS / LINEAL METER		SEEDS / LINEAL METER		SEEDS / LINEAL METER	
		DRIVE Z14 DRIVEN Z14	DRIVE Z24 DRIVEN Z14	DRIVE Z14 DRIVEN Z14	DRIVE Z24 DRIVEN Z14	DRIVE Z14 DRIVEN Z21	DRIVE Z24 DRIVEN Z21	DRIVE Z14 DRIVEN Z21	DRIVE Z24 DRIVEN Z21
Z14	Z15	12.1	20.6	3.7	6.4	8	13.8	2.5	4.2
Z14	Z17	10.6	18.3	3.4	5.7	7.1	12.1	2.3	4.9
Z14	Z19	9.5	16.3	3	5	6.3	10.8	2	3.4
Z14	Z21	9	15.4	2.8	4.8	6	10.3	1.9	3.2
Z14	Z23	7.9	13.4	2.5	4.2	5.2	9	1.7	2.9
Z16	Z15	13.7	23.4	4.3	7.4	9	15.6	2.9	4.9
Z16	Z17	12.1	20.7	3.8	6.5	8.1	13.8	2.5	4.3
Z16	Z19	10.9	18.5	3.4	5.8	7.3	12.4	2.3	3.9
Z16	Z21	10.3	17.6	3.2	5.5	6.9	11.7	2.1	3.6
Z16	Z23	8.9	15.3	2.8	4.8	5.9	10.1	1.9	3.2
Z18	Z15	15.5	26.5	4.8	8.2	10.3	17.7	3.2	5.5
Z18	Z17	13.6	23.4	4.2	7.3	9	15.5	2.8	4.8
Z18	Z19	12.2	20.8	3.8	6.5	8.1	13.9	2.5	4.3
Z18	Z21	11.5	19.9	3.6	6.2	7.7	13.1	2.4	4.1
Z18	Z23	10.1	17.3	3.2	5.4	6.7	11.5	2.1	3.6
Z20	Z15	17.1	29.5	5.3	9.2	11.4	19.5	3.5	6
Z20	Z17	15.1	25.9	4.7	8.1	10.1	17.2	3.1	5.4
Z20	Z19	13.5	23.2	4.2	7.2	9	15.4	2.8	4.8
Z20	Z21	12.8	22	4	6.9	8.5	14.6	2.6	4.6
Z20	Z23	11.2	19.2	3.5	6	7.5	12.8	2.3	4
Z24	Z15	20.6	35.2	6.4	11	13.7	23.5	4.2	7.3
Z24	Z17	18.2	31.1	5.7	9.7	12.1	20.7	3.8	6.5
Z24	Z19	16.5	27.8	5.1	8.7	11	18.8	3.4	5.8
Z24	Z21	15.5	26.4	4.8	8.2	10.3	17.7	3.2	5.5
Z24	Z23	13.4	22.9	4.2	7.2	8.9	15.3	2.8	4.8

TABLE TO HELP IN THE PRIOR ADJUSTMENT FOR SEED DISTRIBUTION

FERTILIZER PLANTER PREMIUM GERAÇÃO III

SEED TRANSMISSION LEFT SIDE



SPROCKETS ARRANGEMENT		SOYA		MAÍZ		SOYA		MAÍZ	
DRIVE	DRIVEN	SEEDS / LINEAL METER		SEEDS / LINEAL METER		SEEDS / LINEAL METER		SEEDS / LINEAL METER	
		DRIVE Z14 DRIVEN Z14	DRIVE Z24 DRIVEN Z14	DRIVE Z14 DRIVEN Z14	DRIVE Z24 DRIVEN Z14	DRIVE Z14 DRIVEN Z21	DRIVE Z24 DRIVEN Z21	DRIVE Z14 DRIVEN Z21	DRIVE Z24 DRIVEN Z14
Z14	Z15	12.1	20.6	3.7	6.4	8	13.8	2.5	4.2
Z14	Z17	10.6	18.3	3.4	5.7	7.1	12.1	2.3	4.9
Z14	Z19	9.5	16.3	3	5	6.3	10.8	2	3.4
Z14	Z21	9	15.4	2.8	4.8	6	10.3	1.9	3.2
Z14	Z23	7.9	13.4	2.5	4.2	5.2	9	1.7	2.9
Z16	Z15	13.7	23.4	4.3	7.4	9	15.6	2.9	4.9
Z16	Z17	12.1	20.7	3.8	6.5	8.1	13.8	2.5	4.3
Z16	Z19	10.9	18.5	3.4	5.8	7.3	12.4	2.3	3.9
Z16	Z21	10.3	17.6	3.2	5.5	6.9	11.7	2.1	3.6
Z16	Z23	8.9	15.3	2.8	4.8	5.9	10.1	1.9	3.2
Z18	Z15	15.5	26.5	4.8	8.2	10.3	17.7	3.2	5.5
Z18	Z17	13.6	23.4	4.2	7.3	9	15.5	2.8	4.8
Z18	Z19	12.2	20.8	3.8	6.5	8.1	13.9	2.5	4.3
Z18	Z21	11.5	19.9	3.6	6.2	7.7	13.1	2.4	4.1
Z18	Z23	10.1	17.3	3.2	5.4	6.7	11.5	2.1	3.6
Z20	Z15	17.1	29.5	5.3	9.2	11.4	19.5	3.5	6
Z20	Z17	15.1	25.9	4.7	8.1	10.1	17.2	3.1	5.4
Z20	Z19	13.5	23.2	4.2	7.2	9	15.4	2.8	4.8
Z20	Z21	12.8	22	4	6.9	8.5	14.6	2.6	4.6
Z20	Z23	11.2	19.2	3.5	6	7.5	12.8	2.3	4
Z24	Z15	20.6	35.2	6.4	11	13.7	23.5	4.2	7.3
Z24	Z17	18.2	31.1	5.7	9.7	12.1	20.7	3.8	6.5
Z24	Z19	16.5	27.8	5.1	8.7	11	18.8	3.4	5.8
Z24	Z21	15.5	26.4	4.8	8.2	10.3	17.7	3.2	5.5
Z24	Z23	13.4	22.9	4.2	7.2	8.9	15.3	2.8	4.8

IMPORTANT

If necessary to determine the amount of pounds of seed per hectare, use the same method for calculating the amount of fertilizer.

TRANSMISSION OF SEED AXLE

Operate the lever (A) (fig. 07) to relieve the stretcher (B) of chain. Move the gears on the axle, aligning the gears chosen with the chain, position the thrust bushings (C), release the lever (A) releasing the stretcher (B).

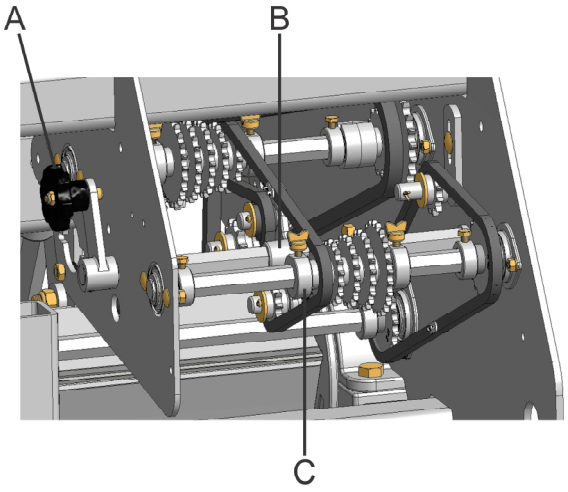


fig. 07

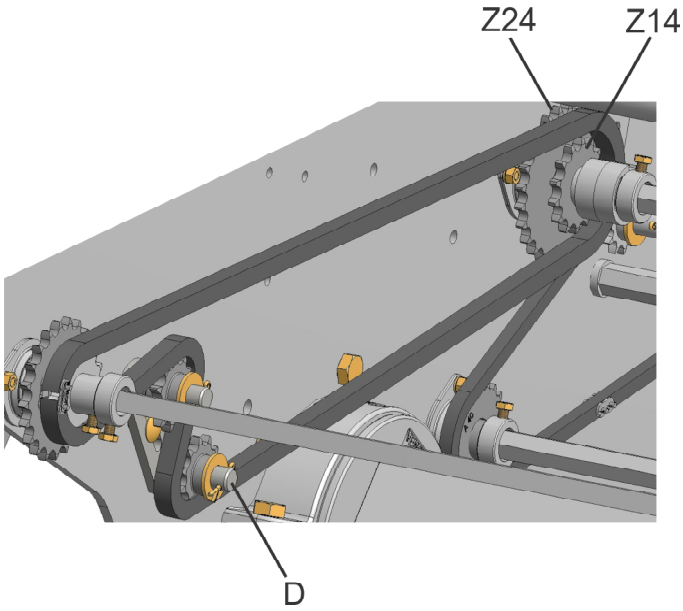


fig. 08

Keep the chain stretched through the stretcher (D), (fig. 08). Use sprockets **Z24** and **Z14** as an additional option for adjustments, making the necessary changes.

EXAMPLE

ESTIMATE FOR DETERMINING THE POPULATION OR NUMBER OF PLANTS / Ha

Number of plants per linear meter	**N**
Final population per hectare (estimated)	**50000 plants**
Row spacing (m)	**0,80 m (80 cm)**
1 Hectare	**10.000 m**
Germination of seed (GS)	**96%**
Approximate percentage of slip	**5%**
Perimeter of the wheel	**2,426 m**

1 ha = 10.000 m² _____ 50.000 plants
*** 19,40m² _____ N**

*** 19,40m²** = Row spacing x wheel perimeter x number of turns of the wheel
*** 19,40m²** = 0,80m x 2,426m x 10

$$N = \frac{19{,}40\text{m}^2 \times 50.000}{10.000}$$

N = 97 m

$$N = \frac{97\text{ m}}{*24{,}26\text{ m}} = 4 \text{ plants / linear meter}$$

*** 24,26 = 10 turns of drive wheel x 2,426m Wheel perimeter**

CORRECTION OF THE GERMINATION OF SEED (PERCENTAGE)

N = 4 plants / linear meter _____ 96%
N _____ 100%

N = 4,16

CORRECTION OF SLIP (PERCENTAGE)

N = 4,37

4,37 is the number of plants / linear meter should be used in the setting of planter.

APPROXIMATE TABLE – NUMBER OF SEEDS PER HECTARE

Seed/ Linear Meter	Distance Between Seeds (cm)	Row Spacing (cm)					
		45	50	70	75	80	90
4,0	**25,0**	88.889	80.000	57.143	53.333	50.000	44.444
5,0	**20,0**	111.111	100.000	71.429	66.667	62.500	55.556
5,2	**19,2**	115.556	104.000	74.286	69.333	65.000	57.778
5,4	**18,5**	120.000	108.000	77.143	72.000	67.500	60.000
5,6	**17,9**	124.444	112.000	80.000	74.667	70.000	62.222
5,8	**17,2**	128.889	116.000	82.857	77.333	72.500	64.444
6,0	**16,7**	133.333	120.000	85.714	80.000	75.000	66.667
6,2	**16,1**	137.778	124.000	88.571	82.667	77.500	68.889
6,4	**15,6**	142.222	128.000	91.429	85.333	80.000	71.111
6,6	**15,1**	146.667	132.000	94.286	88.000	82.500	73.333
6,8	**14,7**	151.111	136.000	97.143	90.667	85.000	75.556
7,0	**14,3**	155.556	140.000	100.000	93.333	87.500	77.778
7,5	**13,3**	166.667	150.000	107.143	100.000	93.750	83.333
8,0	**12,5**	177.778	160.000	114.286	106.667	100.000	88.889
8,5	**11,7**	188.889	170.000	121.429	113.333	106.250	94.444
9,0	**11,1**	200.000	180.000	128.571	120.000	112.500	100.000
9,5	**10,5**	211.111	190.000	135.714	126.667	118.750	105.556
10,0	**10,0**	222.222	200.000	142.857	133.333	125.000	111.111
11,0	**9,1**	244.444	220.000	157.143	146.667	137.500	122.222
12,0	**8,3**	266.667	240.000	171.429	160.000	150.000	133.333
13,0	**7,7**	288.889	260.000	185.714	173.333	162.500	144.444
14,0	**7,1**	311.111	280.000	200.000	186.667	175.000	155.556
15,0	**6,7**	333.333	300.000	214.286	200.000	187.500	166.667
16,0	**6,2**	335.556	320.000	228.571	213.333	200.000	177.778
17,0	**5,9**	377.778	340.000	242.857	226.667	212.500	188.889
18,0	**5,6**	400.000	360.000	257.143	240.000	225.000	200.000
19,0	**5,2**	422.222	380.000	271.429	253.333	237.500	211.111
20,0	**5,0**	444.444	400.000	285.714	266.667	250.000	222.222
22	**4,5**	488.889	440.000	314.286	293.333	275.000	244.444
24	**4,2**	533.333	480.000	342.857	320.000	300.000	266.667
26	**3,9**	577.778	520.000	371.429	346.667	325.000	288.889
28	**3,6**	622.222	560.000	400.000	373.333	350.000	311.111
30	**3,3**	666.667	600.000	428.571	400.000	375.000	333.333

Fertilizer Distribution System

FERTILIZER METER ENDLESS THREAD

Adjusting the amount of fertilizer in Kg/ha is performed through the endless thread (A) (fig. 09) and the exchange of drive (B) and driven sprockets (C) (fig. 10), driven (D) and drive "sprocket set" (E) (fig. 11), being that the fertilizer is moved through the endless threads (A) (fig. 09).

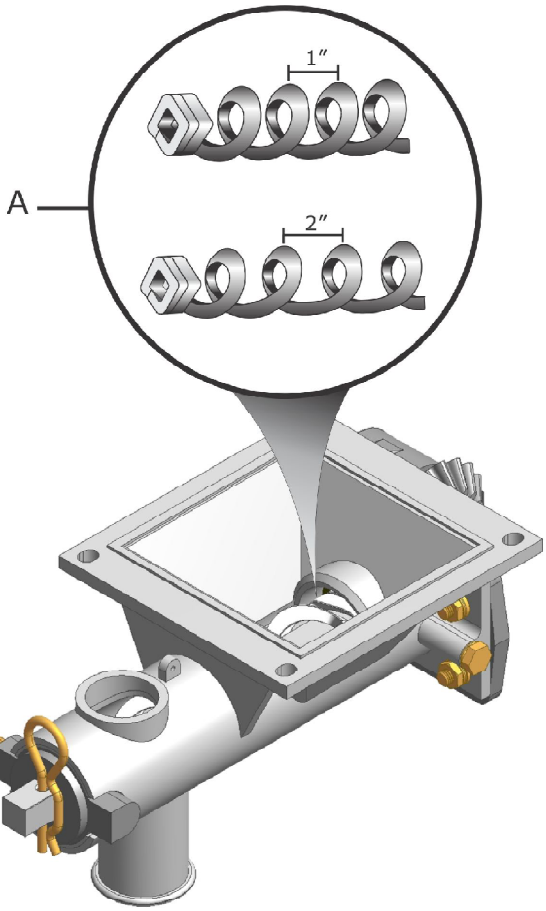


fig. 09

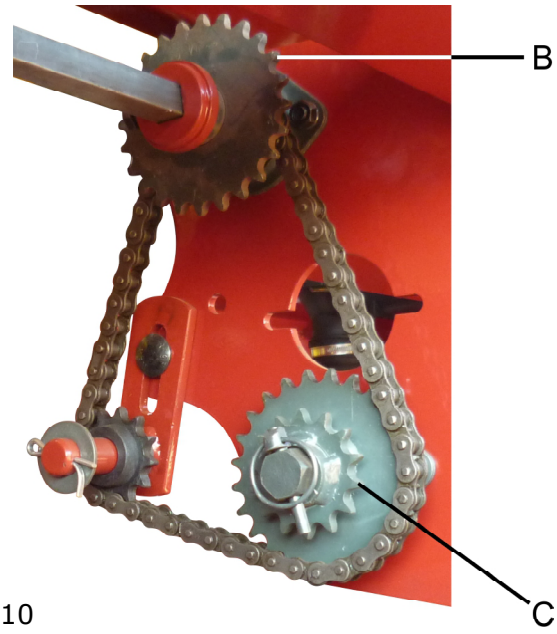


fig. 10

To adjust the "sprockets set" it is need to let loose the stretcher (F) (fig. 11).

Obtaining the amount of fertilizer required, if necessary, make the exchange of endless threads (see page 51) as specified in the table, as well as the correct verification of the number of teeth of the drive and driven sprockets.

Verify if the flow rate obtained is really desired. If necessary change the transmission ratio through the exchange of sprockets Z14/24 (B/C) (fig. 10).

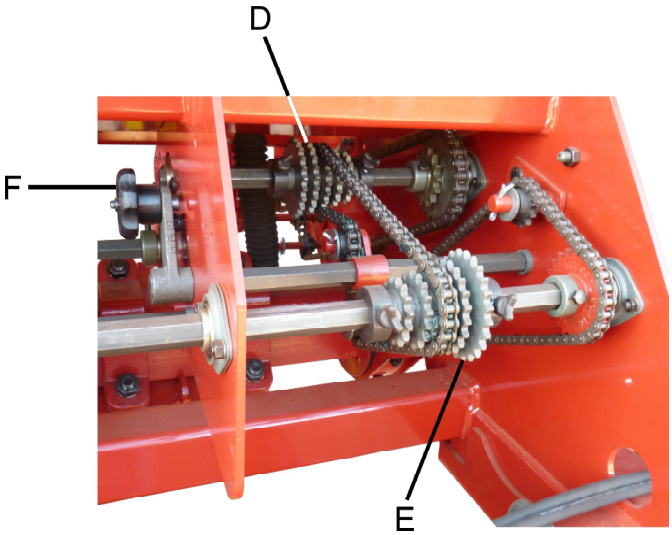


fig. 11

Rosca Sem Fim

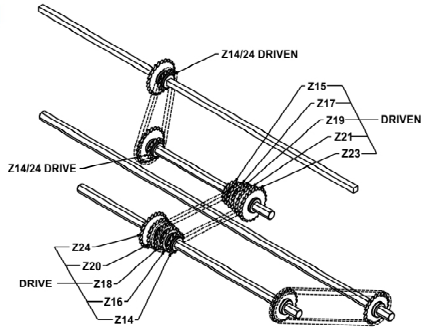
TABLE TO HELP IN PRIOR REGULATING OF FERTILIZER IN kg/ha x ROW SPACING x GRAMS PER LINE IN 20 LINEAL METER

(Note: To obtain the correct combination of sprockets, seek equal or approximately value in grams in the following the thread type to be used.)

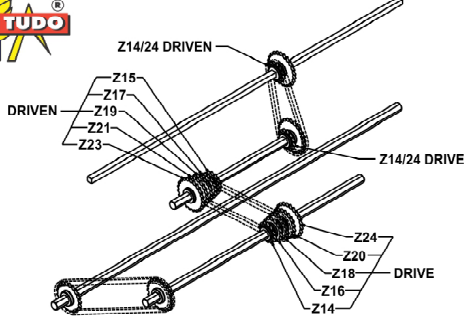
TABLE TO HELP IN PRIOR REGULATING OF FERTILIZER IN GRAMS PER LINE IN 20 METERS LINEAR THROUGH THE SPROCKETS ARRANGEMENT							
SPROCKETS ARRANGEMENT		DRIVE 14xDRIVEN 14 / DRIVE 24xDRIVEN 24		DRIVE 14 DRIVEN 24		DRIVE 24 DRIVEN 14	
DRIVE	DRIVEN	THREAD 1"	THREAD 2"	THREAD 1"	THREAD 2"	THREAD 1"	THREAD 2"
Z14	Z15	144	339	95	200	247	563
Z14	Z17	128	305	82	182	222	493
Z14	Z19	115	273	75	155	198	445
Z14	Z21	108	260	70	153	189	423
Z14	Z23	93	232	66	135	162	366
Z16	Z15	165	390	108	223	280	636
Z16	Z17	147	347	93	191	249	559
Z16	Z19	133	310	86	179	228	505
Z16	Z21	130	293	79	168	211	479
Z16	Z23	107	254	68	147	181	417
Z18	Z15	184	432	114	249	311	713
Z18	Z17	161	383	100	221	274	629
Z18	Z19	148	343	94	195	249	564
Z18	Z21	138	327	88	186	233	533
Z18	Z23	120	285	75	160	207	466
Z20	Z15	202	476	123	275	342	784
Z20	Z17	178	423	114	242	302	691
Z20	Z19	165	378	101	214	274	622
Z20	Z21	155	361	96	215	262	592
Z20	Z23	135	313	84	177	232	513
Z24	Z15	244	569	148	328	416	933
Z24	Z17	212	502	132	286	369	845
Z24	Z19	195	453	119	258	330	756
Z24	Z21	186	425	111	239	313	717
Z24	Z23	163	375	100	218	275	624

kg/ha	ROW SPACING (cm)									
	45	50	55	60	65	70	75	80	85	90
50	45	50	55	60	65	70	75	80	85	90
75	68	75	83	90	98	105	113	120	128	135
100	90	100	110	120	130	140	150	160	170	180
125	113	125	138	150	163	175	188	200	213	225
150	135	150	165	180	195	210	225	240	255	270
175	158	175	193	210	228	245	263	280	298	315
200	180	200	220	240	260	280	300	320	340	360
225	203	225	248	270	293	315	338	360	383	405
250	225	250	275	300	325	350	375	400	425	450
275	248	275	303	330	358	385	413	440	468	495
300	270	300	330	360	390	420	450	480	510	540
325	293	325	358	390	423	455	488	520	553	585
350	315	350	385	420	455	490	525	560	595	630
375	338	375	413	450	488	525	563	600	638	675
400	360	400	440	480	520	560	600	640	680	720
425	383	425	468	510	553	595	638	680	723	765
450	405	450	495	540	585	630	675	720	765	810
475	428	475	523	570	618	665	713	760	808	855
500	450	500	550	600	650	700	750	800	850	900
525	473	525	578	630	683	735	788	840	893	945
550	495	550	605	660	715	770	825	880	935	990
575	518	575	633	690	748	805	863	920	978	1035
600	540	600	660	720	780	840	900	960	1020	1080

FERTILIZER TRANSMISSION RIGHT SIDE



FERTILIZER TRANSMISSION RIGHT SIDE



Fertilizer Distribution System

FERTILIZER METER FERTISYSTEM

Adjusting the amount of fertilizer in Kg/ha is performed through the endless thread (A) (fig. 12) and the exchange of drive (B) and driven sprockets (C) (fig. 13), driven (D) and drive "sprocket set" (E) (fig. 14), being that the fertilizer is moved through the endless threads (A) (fig. 12).

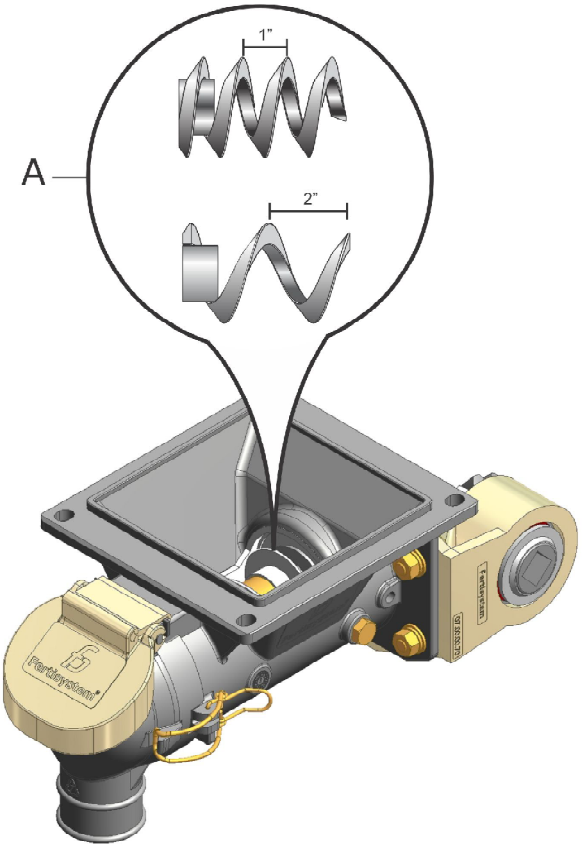


fig. 12

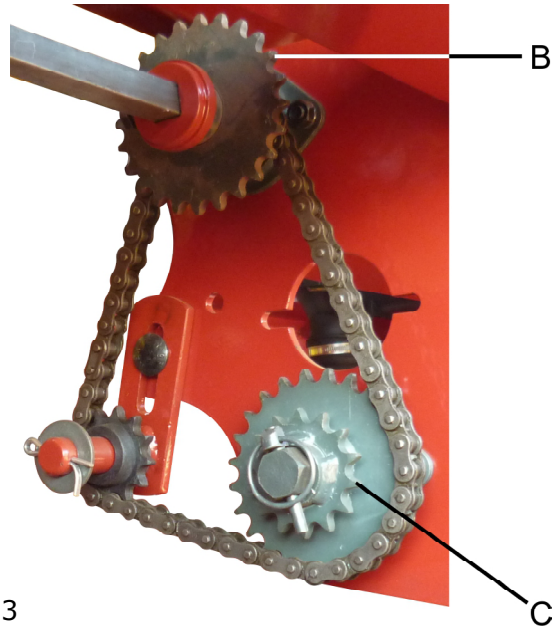


fig. 13

To adjust the "sprockets set" it is need to let loose the stretcher (F) (fig. 14).

Obtaining the amount of fertilizer required, if necessary, make the exchange of endless threads (see page 50) as specified in the table, as well as the correct verification of the number of teeth of the drive and driven sprockets.

Verify if the flow rate obtained is really desired. If necessary change the transmission ratio through the exchange of sprockets Z14/24 (B/C) (fig. 13).

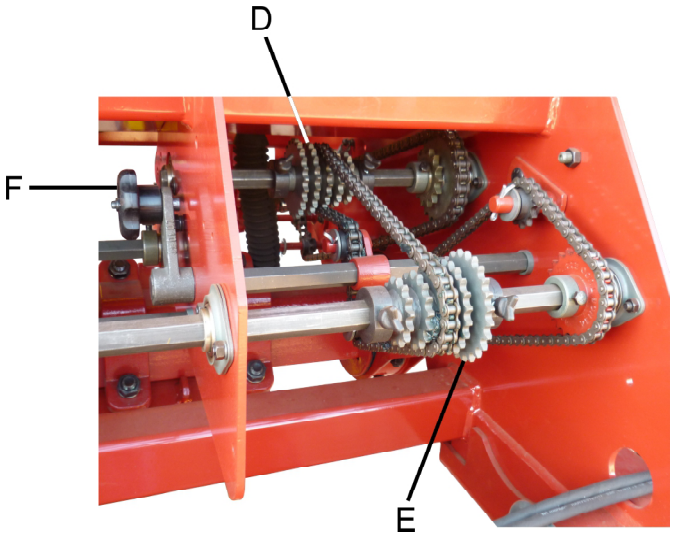


fig. 14

Fertisystem

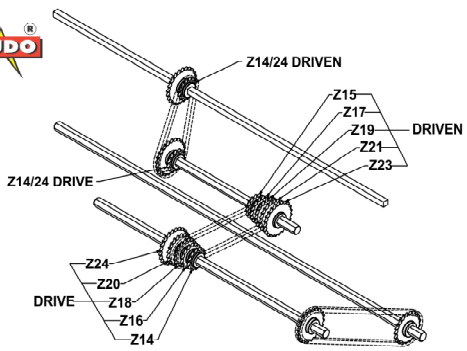
TABLE TO HELP IN PRIOR REGULATING OF FERTILIZER IN kg/ha x ROW SPACING x GRAMS PER LINE IN 20 LINEAL METER

(Note: To obtain the correct combination of sprockets, seek equal or approximately value in grams in the following the thread type to be used.)

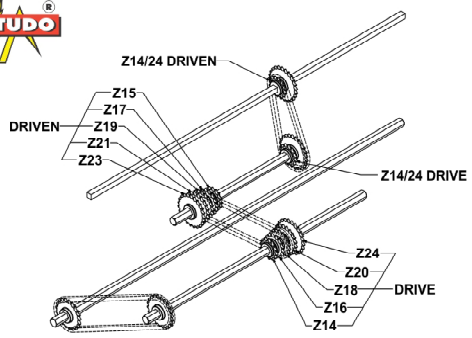
TABLE TO HELP IN PRIOR REGULATING OF FERTILIZER IN GRAMS PER LINE IN 20 METERS LINEAR THROUGH THE SPROCKETS ARRANGEMENT							
SPROCKETS ARRANGEMENT		DRIVE 14xDRIVEN 14 / DRIVE 24xDRIVEN 24		DRIVE 14 DRIVEN 24		DRIVE 24 DRIVEN 14	
DRIVE	DRIVEN	THREAD 1"	THREAD 2"	THREAD 1"	THREAD 2"	THREAD 1"	THREAD 2"
Z14	Z15	109	424	64	230	208	713
Z14	Z17	93	372	54	204	177	615
Z14	Z19	84	326	48	182	158	553
Z14	Z21	77	310	46	170	149	520
Z14	Z23	68	267	38	150	121	452
Z16	Z15	125	466	66	265	239	793
Z16	Z17	108	412	58	231	208	705
Z16	Z19	96	364	52	205	177	623
Z16	Z21	89	346	48	199	173	590
Z16	Z23	80	301	43	174	142	510
Z18	Z15	143	523	78	303	268	895
Z18	Z17	122	457	71	263	238	790
Z18	Z19	108	410	59	229	209	700
Z18	Z21	103	384	57	216	194	670
Z18	Z23	90	335	51	190	163	580
Z20	Z15	162	567	88	328	306	989
Z20	Z17	143	503	73	287	269	879
Z20	Z19	129	452	67	255	234	784
Z20	Z21	121	429	65	242	221	739
Z20	Z23	104	369	57	210	187	642
Z24	Z15	202	687	108	391	365	1184
Z24	Z17	177	598	92	343	315	1060
Z24	Z19	156	536	83	308	279	946
Z24	Z21	147	509	79	294	266	901
Z24	Z23	130	443	67	256	230	780

kg/ha	ROW SPACING (cm)									
	45	50	55	60	65	70	75	80	85	90
50	45	50	55	60	65	70	75	80	85	90
75	68	75	83	90	98	105	113	120	128	135
100	90	100	110	120	130	140	150	160	170	180
125	113	125	138	150	163	175	188	200	213	225
150	135	150	165	180	195	210	225	240	255	270
175	158	175	193	210	228	245	263	280	298	315
200	180	200	220	240	260	280	300	320	340	360
225	203	225	248	270	293	315	338	360	383	405
250	225	250	275	300	325	350	375	400	425	450
275	248	275	303	330	358	385	413	440	468	495
300	270	300	330	360	390	420	450	480	510	540
325	293	325	358	390	423	455	488	520	553	585
350	315	350	385	420	455	490	525	560	595	630
375	338	375	413	450	488	525	563	600	638	675
400	360	400	440	480	520	560	600	640	680	720
425	383	425	468	510	553	595	638	680	723	765
450	405	450	495	540	585	630	675	720	765	810
475	428	475	523	570	618	665	713	760	808	855
500	450	500	550	600	650	700	750	800	850	900
525	473	525	578	630	683	735	788	840	893	945
550	495	550	605	660	715	770	825	880	935	990
575	518	575	633	690	748	805	863	920	978	1035
600	540	600	660	720	780	840	900	960	1020	1080

FERTILIZER TRANSMISSION LEFT SIDE



FERTILIZER TRANSMISSION RIGHT SIDE



TRANSMISSION CHAINS

The transmission chains are factory pre-adjusted according to the distance between the axles of the sprockets. Eventually if need some maintenance or repair connecting links (B) or reduction links (A), remove the cotter pin (C) (fig. 15), making withdrawal of the number of connecting links, reduction links or free links.

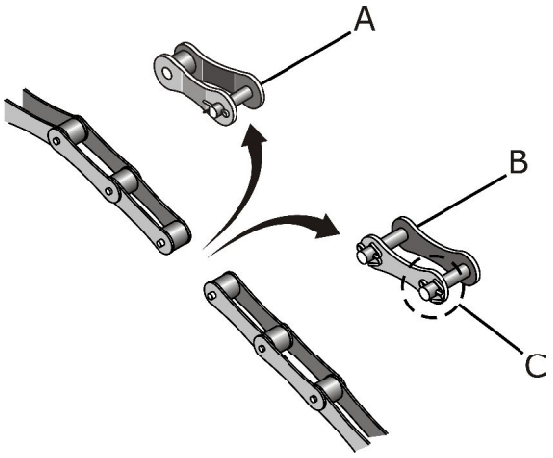


fig. 15

IMPORTANT

Keep chains with the tension and correct alignment using the stretchers on chains. This procedure will prevent damage and vibration problems to the system.

IMPORTANT

For the increase of productivity and the reduction of the losses of inputs, i.e., heterogeneity in the application along the area cultivated, one must have the maximum care in time to perform the adjustments of the planter. Make measurements daily in the desired quantities of fertilizer and seeds per hectare, because it is the planting that is defined the production of new crop to be harvested. For verification of the quantities obtained do the appropriate tests.

Note that the adjustment for changing flows is determined through the exchange of transmission ratios, through multiple sliding gears and basic gears.

Use it as a basis for the beginning of setting the tables set out in planter and attached to this manual.

For the corn crop, on lines where the fertilizer metering with endless thread are not being used, place the fertilizer blockings (A) (fig. 16).

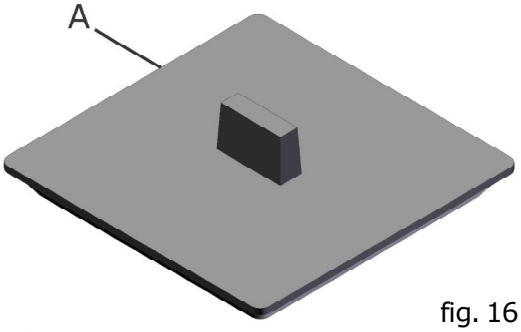


fig. 16

IMPORTANT

High speeds work affect the uniformity of distribution of the seeds.

Whenever there is a change in the wording, batch or manufacturer of fertilizer, make the measurements the quantities again.

ESTIMATE OF THE QUANTITY THE FERTILIZER AS ROW SPACING

For a good distribution the quantities of fertilizer in different row spacings, it is suggested a quick estimate where all data used can be replaced for other ones; do the following with these data:

EXAMPLE:	***DATA:***
Quantity fertilizer by ha:	200Kg
Row Spacing in m:	0,45 (m)
Perimeter drive wheel:	2,426m
Number turns drive wheel:	10turns
Grams line in 10 turns wheel:	X?

200 Kg/ha _____ **10000 m² = 1ha**
X _____ ***10,92 m²**

***10,92 m² =** number turns drive wheel x perimeter drive wheel x row spacing
***10,92 m² =** 10 x 2,426 x 0,45m

X = 0,218 Kg/ha

0,218 x 1000g = 218 grams by row in 10 turns of drive wheel

Hydraulic System

The Premium model 10,000 is fitted with **one** hydraulic cylinder. The models 11,000, 12,000, 13,000, 14,000, 15,000 and 16,000 are fitted with **two** lift hydraulic cylinders.

In sandy soils that are lighter and more loose, shims may be required (A) (fig. 17), which are fixed into the cylinder through the bracket (B) to help in depth control.

PLACEMENT OR REMOVAL OF THE HYDRAULIC CYLINDERS

Removing cylinder (E) (fig. 17) take away the security screw (C) from the pins (D); remove the hoses (F) from the cylinder and take away the pins (D).

To assembly cylinder, follow the steps above in the opposite order.

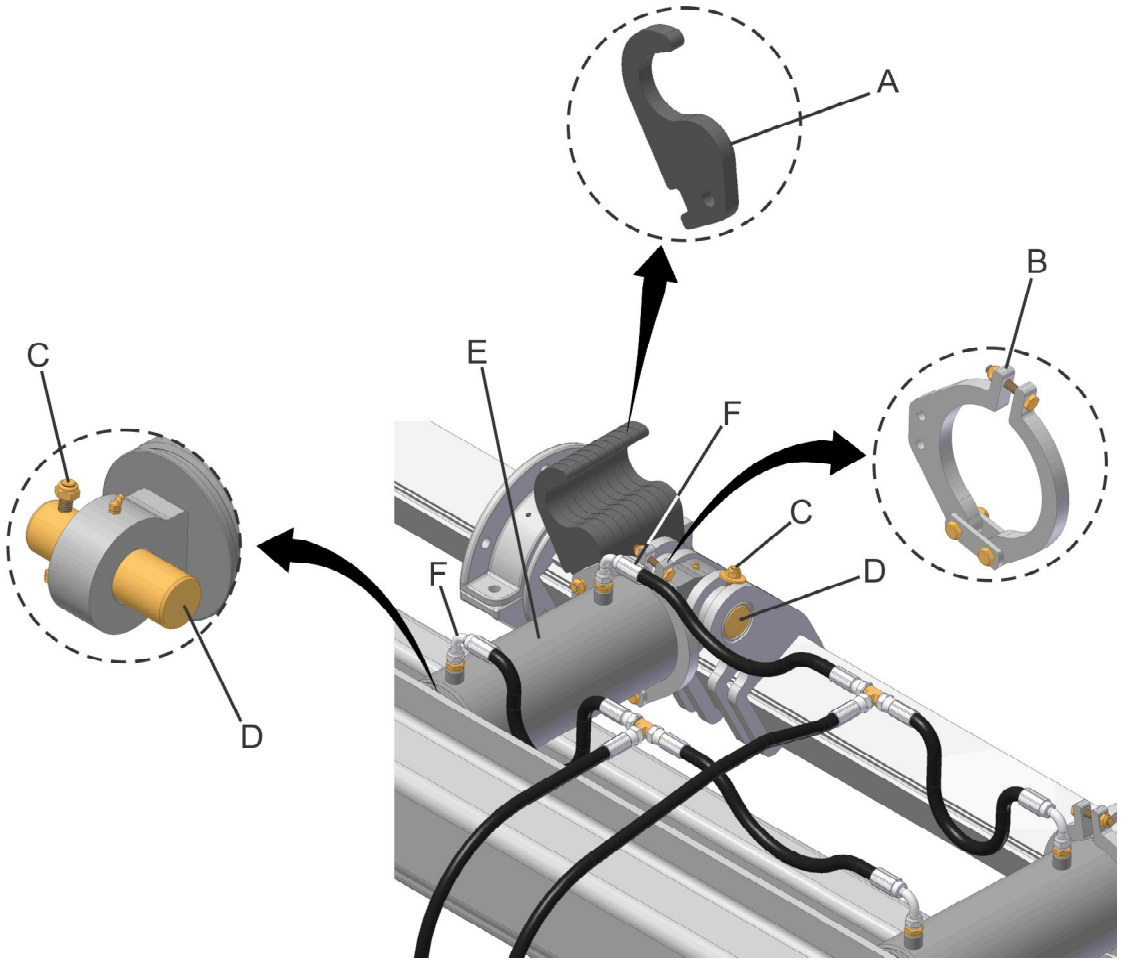


fig. 17

IMPORTANT

Put the security devices (A) (fig. 17) to avoid the overload on the hydraulic cylinders when transporting the planter.

PLACEMENT OF HOSES

Place the hose in the direction of flow tractor-planter (A) (fig. 18), the union fitting (B) on the rear of the cylinder (C).

Then attach the second hose, planter-tractor flow direction (D), the front union fitting (E). After the placing of the hoses in the cylinders, connect hoses to flow in the hydraulic control of the tractor and perform the depressurization or bleeding of the system following the instructions below.

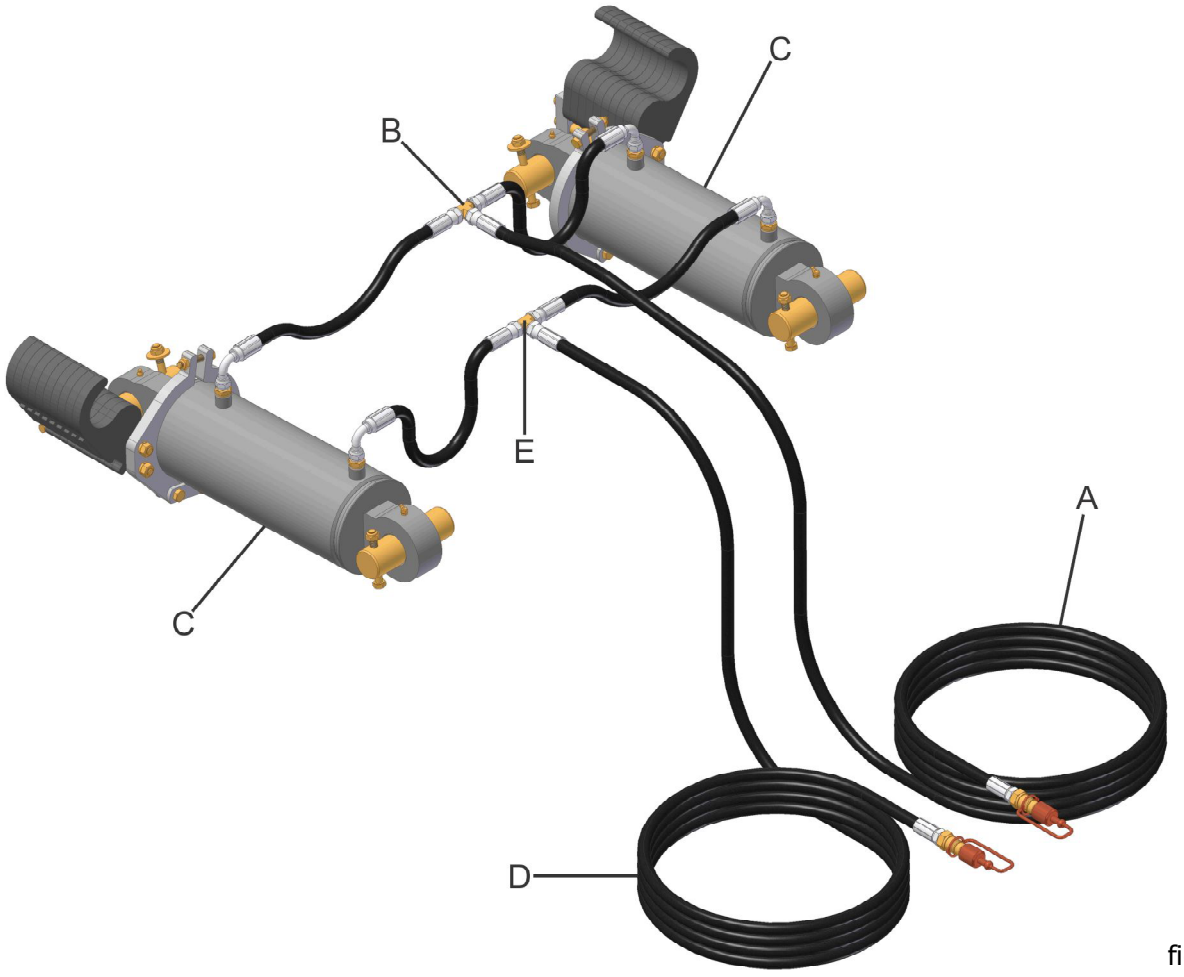


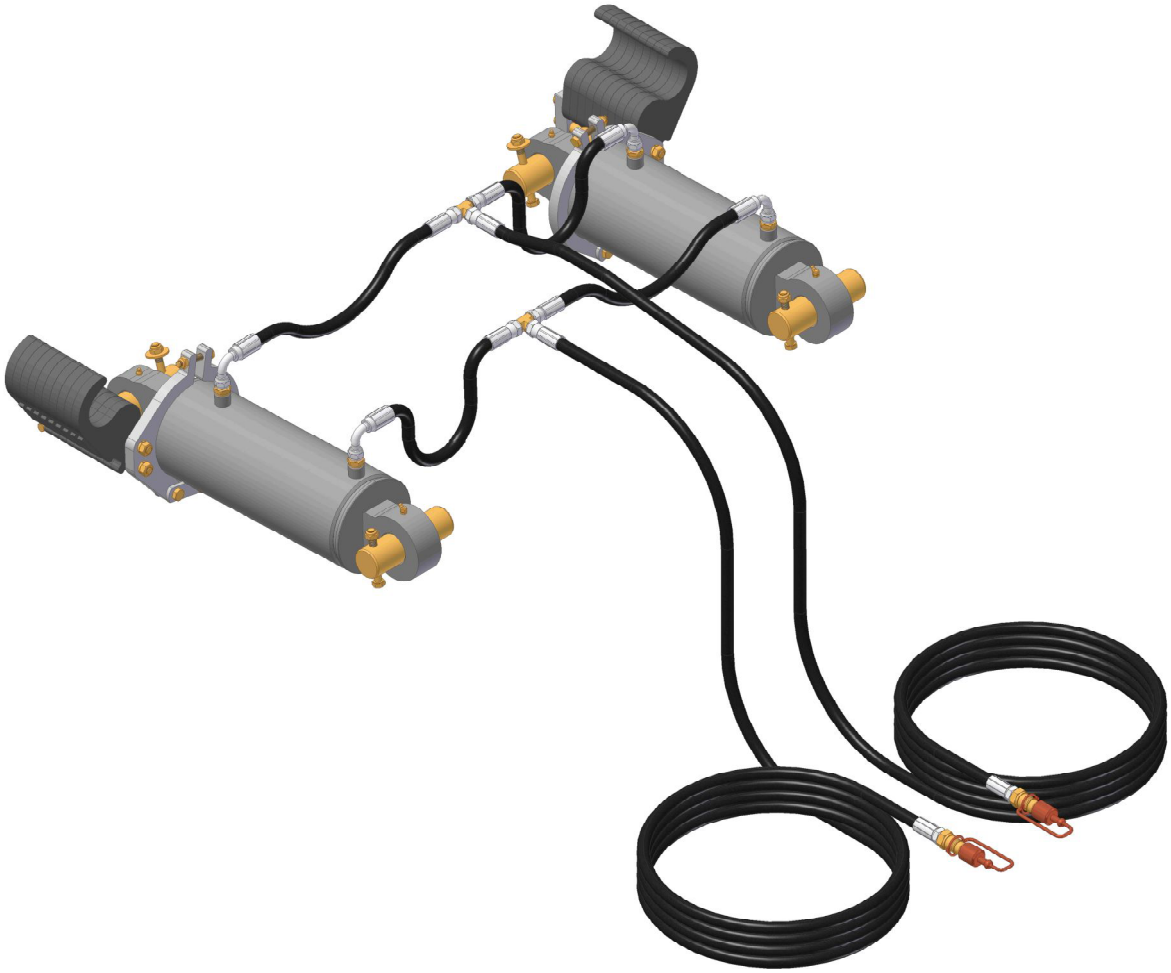
fig. 18

DEPRESSURIZATION OR BLEEDING OF THE AIR SYSTEM

1 - First, connect the hoses to the hydraulic valves system of the tractor;
2 - The hydraulic control lever should be dislocated to the raise position; reaching the extension of the cylinder hydraulic rod until to get the maximum pressure. Keep on pushing the system for 20 seconds;
3 - The hydraulic control lever should be dislocated to the lower position, so that the hydraulic cylinder rod is retracted, when the rod is totally retracted keep on pressing the system for 20 seconds;
4 - Proceed this way until the uniform lift of the planter;
5 - Check the pressure of the tractor's hydraulic system, which has a pressure-regulating valve, if you have difficulties in lifting the planter loaded or after the heating of the oil;
6 - Increase the pressure gradually until to get the lifting of planter in a standard speed of lift (approximately 120 kg/cm^2);
7 - Get in touch with **Vence Tudo** technical department, if the trouble persists.

IMPORTANT

THE HYDRAULIC SYSTEM SHOULD BE ADJUSTED WHEN IT IS WITH VERY HIGH PRESSURE.



SAFETY RULES – TRANSPORT

TRANSPORT ON TRUCK OR CART

- Use suitable ramps to load or unload the planter on trucks and carts. Do not accomplish these operations in improvised ravines because this may cause serious accidents.
- When using tow-car, use suitable points for the hoisting.
- Use the safety stops and lock adequately the wheels of planter, to support it correctly.
- Use mooring lines (cables, chains, ropes, etc.) in sufficient quantities to immobilize the planter during transport.
- Check the conditions of the load in the first 10 km of transport and after each 80 to 100 km. Observe if the mooring lines are not loosening. Check more frequently the cargo in roads with many holes.
- Be always attentive to the transport height, especially to the in electric networks and viaducts, etc.
- Check the existing laws on the limits of height and width of the load. Use flags, lights, and spotlights to alert other drivers, if necessary.
- The transport over long distances must be carried out on trucks or carts.

TRANSPORT WITH COUPLING IN THE TRACTOR'S DRAWBAR

When the transport of planter is carried out by means of coupling in the tractor's drawbar, make the following way:

- Do not make the transport with the planter filled.
- Observe the width of the planter in relation to the sites closest of way, mainly yard gates and roads with ditches.
- The tractor should travel with the headlamps turned on, for a better visualization.
- Transport by means of a tractor must not be carried out in long journeys.
- Not travel during the night.

OPERATION

IMPORTANT

The *PREMIUM Generation III* planters have different adjustments, which they have be observed. The local conditions should be considered to establish the better adjust those tunings.

Checking and adjusting the cutting parties (discs and furrow openers), turn the ratchet off to avoid losses.

Check carefully: the seed depth, compaction pressure and fertilizer position in relation to the seed.

Keep the planter leveled.

Check the seed distributors twice a day, making the removal and cleaning of the chemicals, if necessary.

Check the fertilizer meters and verify the proper functioning of them.

Use always fertilizer and seed free from impurities.

Keep the invariable speed in the whole plantation.

Never perform maneuvers or do the reverse gear with planting lines downloaded in soil.

The correct calibration of the tires is of the highest importance to maintain the homogeneity of planting.

Use the row spacings correctly to avoid future wastage.

Lubricate the planter correctly, observing the lubrication intervals.

Retighten screws after planting, checking also the conditions of pins and stop pins.

Ratchet

The *PREMIUM Generation III* planters are equipped with ratchets positioned in the intermediary transmission. When the plantation is started, the ratchet is driven automatically.

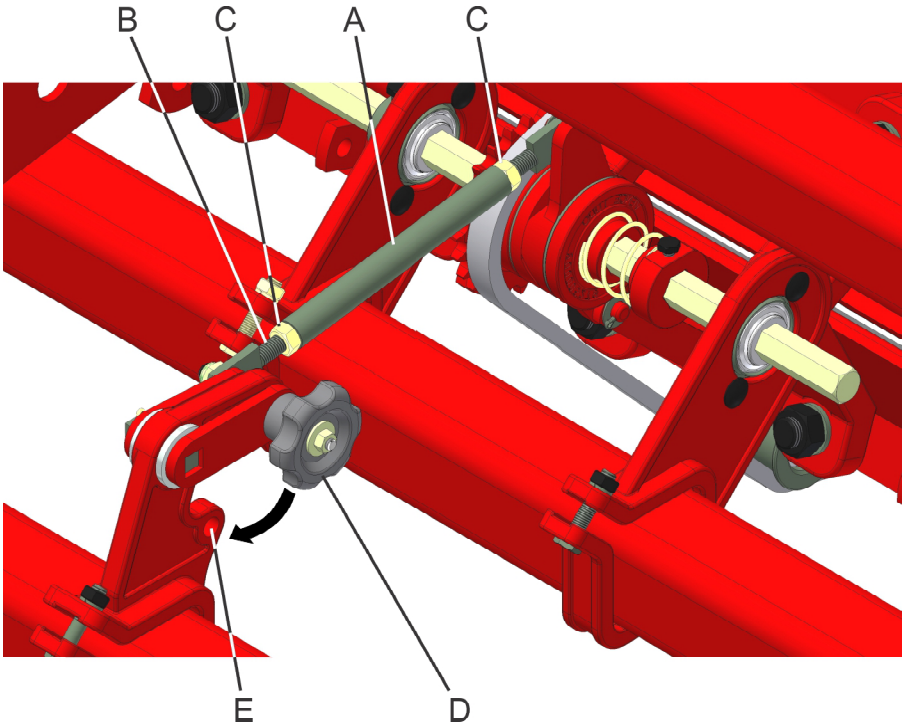


fig. 19

ADJUSTING ROD - LEVER RATCHET

Regulate the adjusting rod (B) (fig. 19), in such a way as to allow a greater or smaller opening time and drive clutch, via spindle (C) and nuts (D).

Adjusting Amplitude and Pressure of the Springs

SEED DOUBLE DISCS

For getting of bigger amplitude (height oscillation) of seed double discs, move the lever (A) (fig. 20) forward or backward. These settings depend on the unevennesses of soil and the planted area.

The planter must be lifted to become more easy the adjustment the lever (A).

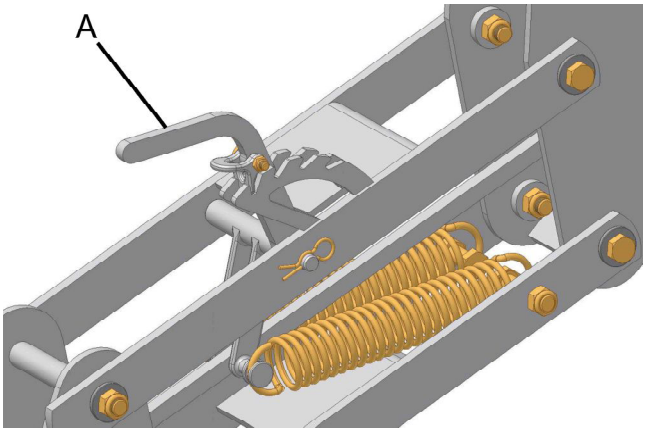


fig. 20

Depth and Position of Fertilizer Furrow Opener

The position of furrow opener can be adjusted in the vertical direction. So, just release the knife furrower (A) (fig. 21) and change the depth of furrow changing the position the screws (B).

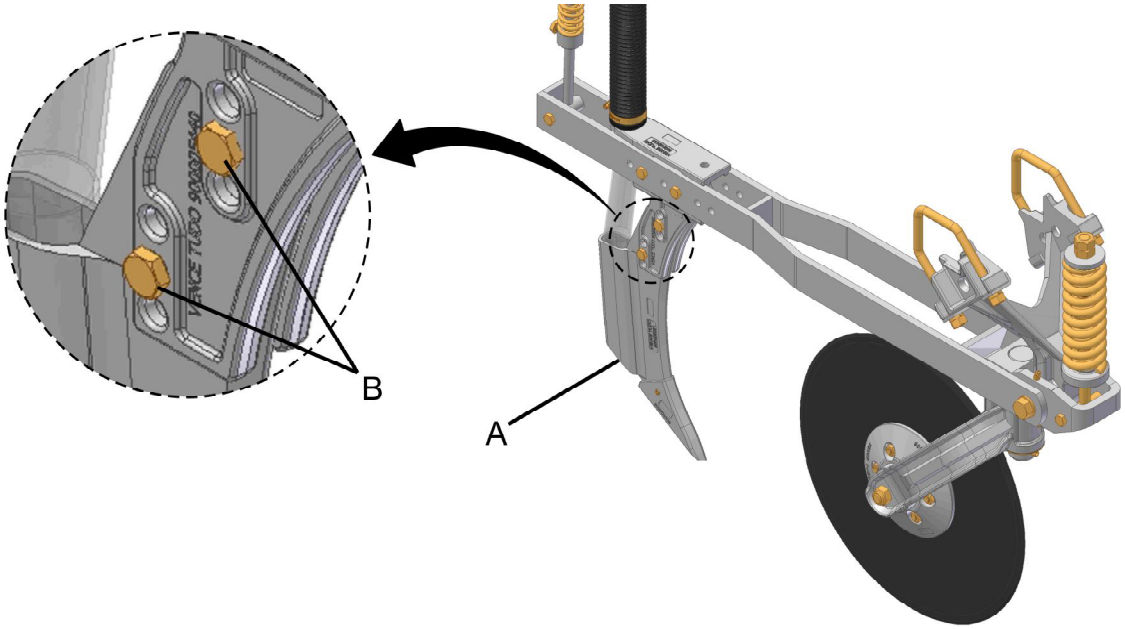


fig. 21

Depth Cutting and Fertilizer Furrow

The depth of the cutting disc is determined by increasing the pressure of the spring (A) (fig. 22) through the displacement with key guide (B), being it locked through the nut (C). Note that the measurement set should be the same in all the springs of the lines.

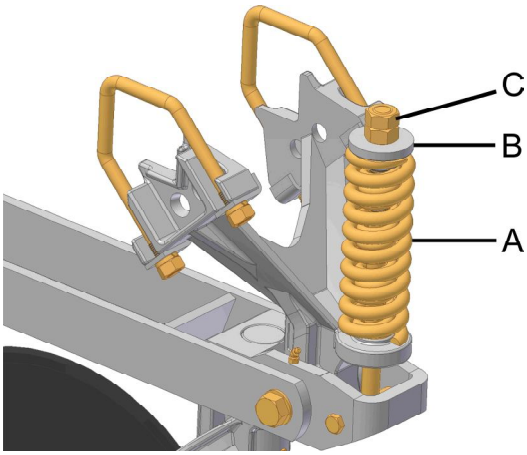


fig. 22

IMPORTANT

ALWAYS WORK AT DEPTHS RECOMMENDED TO THE CULTURE.

THE PLANTING OF SOYBEAN AND CORN DISTRIBUTION OF FERTILIZERS AND SEEDS ARE IN THE SAME PLANTING LINE. SO, IT SHOULD BE NOTED THAT THE DISTANCE BETWEEN THE SEED AND FERTILIZER TO APPROXIMATELY 5CM IN DEPTH, SO THAT THEY DO NOT CAUSE PROBLEMS IN GERMINATION. THE FERTILIZER SHOULD BE BELOW THE SEED.

Internal Scraper of Discs

Periodically accomplish the adjustment of the scrapers (A) (fig. 23) from the defased double discs. To make the tuning of the scrapers, tight the bolt and nut (B). Adjust of such a way that be maintained the efficiency of cleaning. Not to cause excessive wear in the internal scrapers (A); does not press them in surplus.

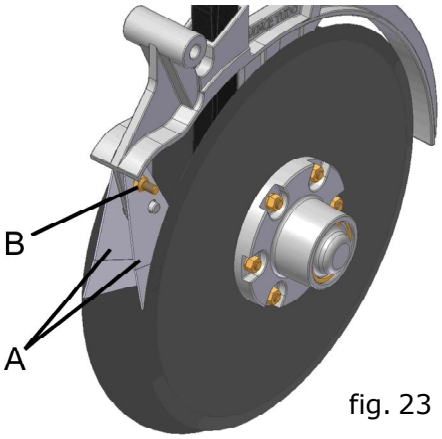


fig. 23

Isolation of Seed Planting Lines

For planting in spacings where necessary isolation of intermediate planting lines (planting lines not used), remove the seed meter plates and lift the planting line by using the following steps:

Take the pressure off the springs (C) (fig. 24), by means of lever (A), then remove the springs (C) ,remove the pin (B) and lift the planting line blocking it with the shim (D) (fig. 25) and reassembling the pin (B), locking it with the cotter pins.

The shim should be between the lateral (E) (fig. 25) (cross-sectional view), and the limiter point (F), as shown in detail in (fig. 25).

It is recommended the withdrawal of limiters/compactors and the seed double discs in order to decrease the weight lifted by avoiding any distortion in the structure of the planting lines.

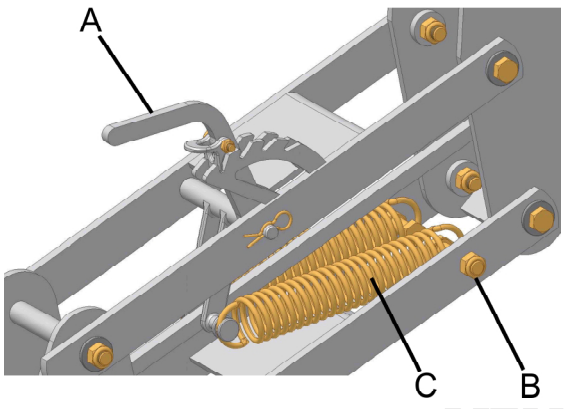


fig. 24

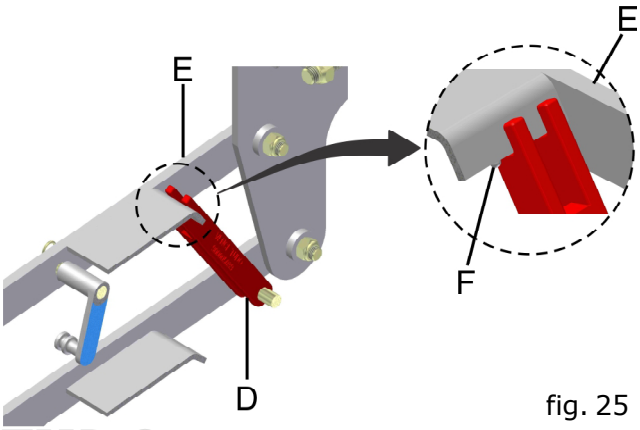


fig. 25

Setting for Seed Depth

It is very important the depth of planting the seed, as it is one of the factors that interfere with the emergency and germination of plants.

The press gauge wheels copy the irregularities of the terrain, which allows you to keep great uniformity in depth. The wheel assembly is mounted in strategic position, just behind the gapped seed double discs.

Depth Gauge Wheels

The limitation of depth is made individually through the depth gauge wheels (A) (fig. 26), that are adjusted by means of handle (B), being that each position enables the adjustment of 1 to 1cm, as needed.

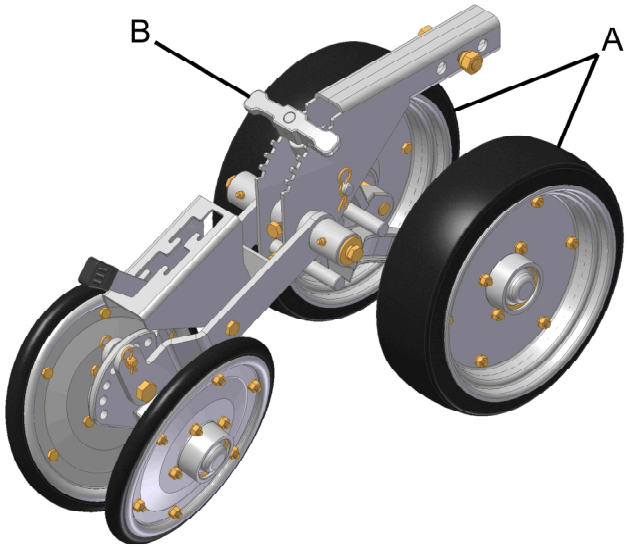


fig. 26

Press Wheel in "V" Shape

The press wheels in "V" shape (A) (fig. 27), carry out the ground pressure laterally in the seed and work with several options, according to the conditions of the soil, straw, moisture, etc.

Make the pressure setting through the lever (B). Through the pin and cotter pin (C) and the regulator (D), make the adjustment of the opening angle between the press wheels, allowing the removal or the approach of compaction in relation to the furrow of seeds.

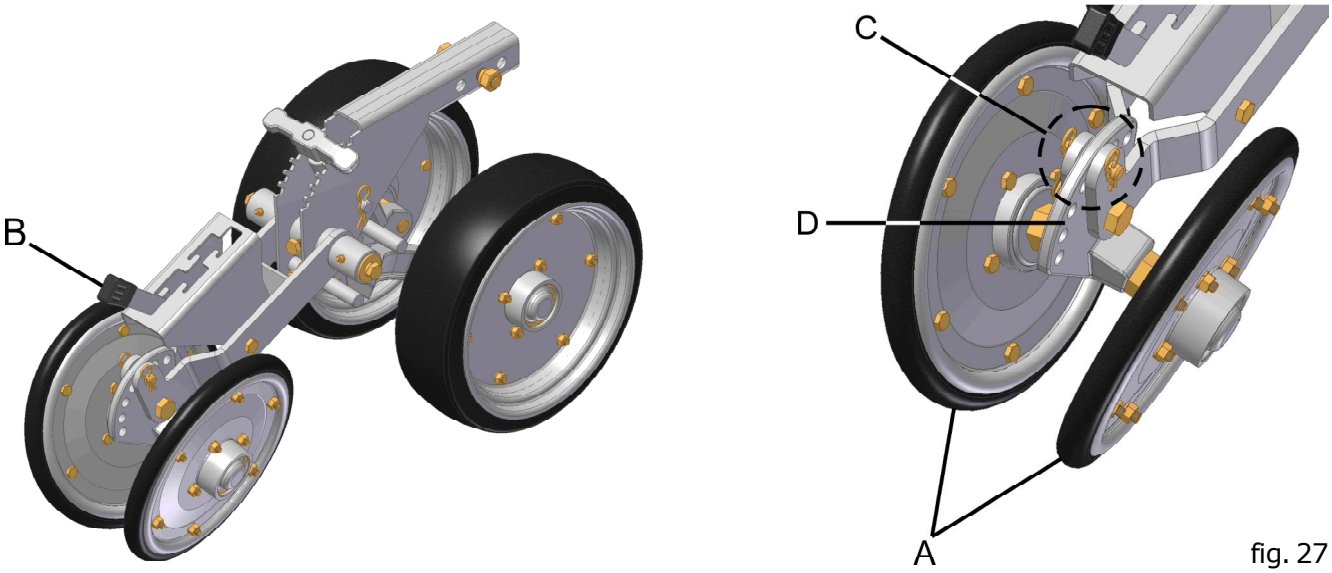


fig. 27

Double Discs for Fertilizer – Optional

The double discs are developed with the objective of carrying out a furrow in the shape of a "V" for the placement of fertilizer in the bottom of it. Formed by a set of offset double discs of 15" and 15 ", mounted on frame interchangeable attached by screws to the furrow opener line, being that the front cutting disc must be removed.

To obtain a greater penetration and greater depth of fertilizer, lift the planter and move the guide of helical spring (A) (fig. 28) from top to bottom through the nuts (B) giving more pressure for double disc.

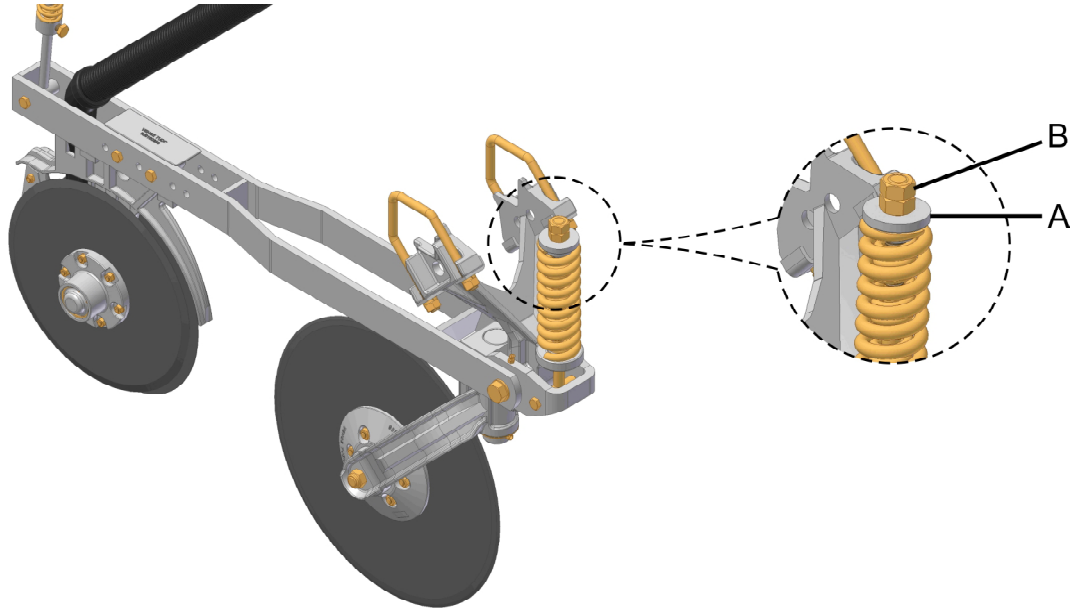
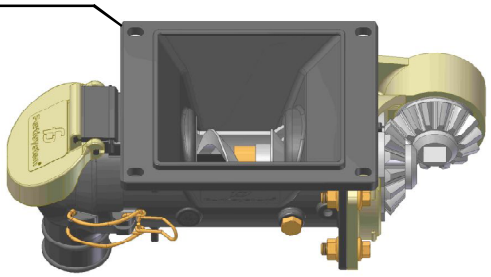


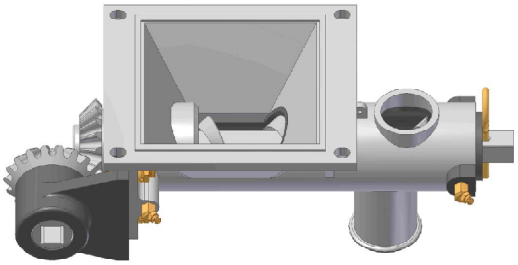
fig. 28

IMPORTANT

The type of soil, size of seeds and planting depth should be noted for making adjustments and do not affect the free plant emergence.

Fertilizer Meter
Fertisystem – Optional





Fertilizer Meter
Endless Thread – Optional

Row Marker – Optional

ATTENTION

When starting the planting operation, unlock the lock pin (A) (fig. 29) from the row marker (B), loosening from the support (C).

When transporting to do the maintenance services or store the planter, lock the marker arm through the pin (A).

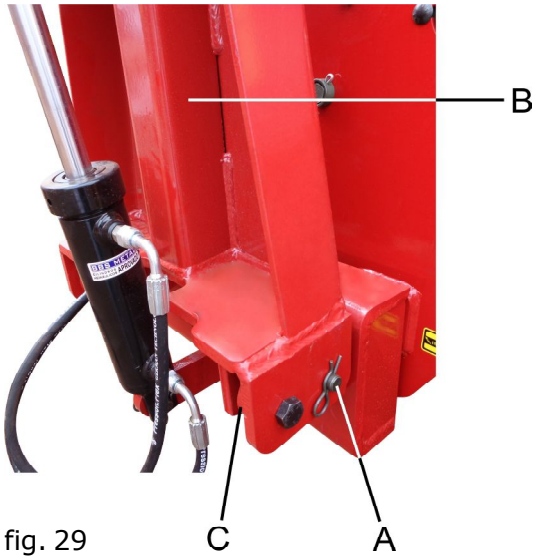


fig. 29

The marker discs allow great settings through the screw (D) (fig. 30).

Adjusting the distance of marker disc, loose the screws (E) from the arm (F).

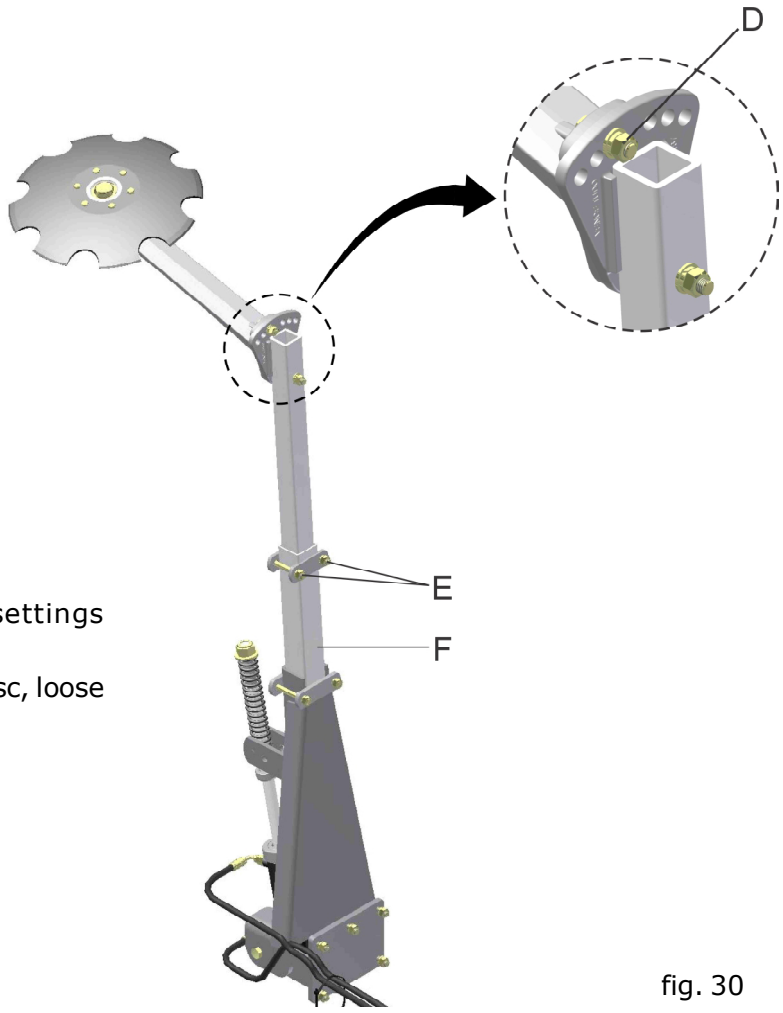


fig. 30

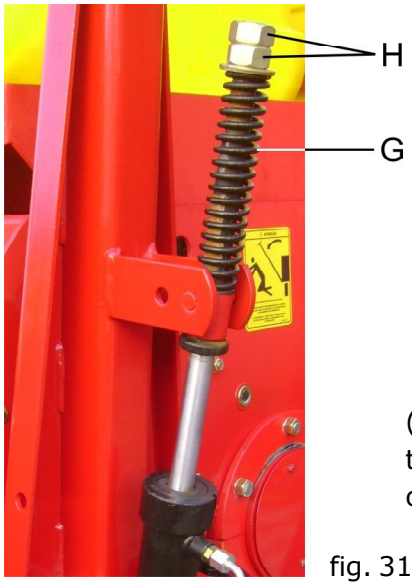
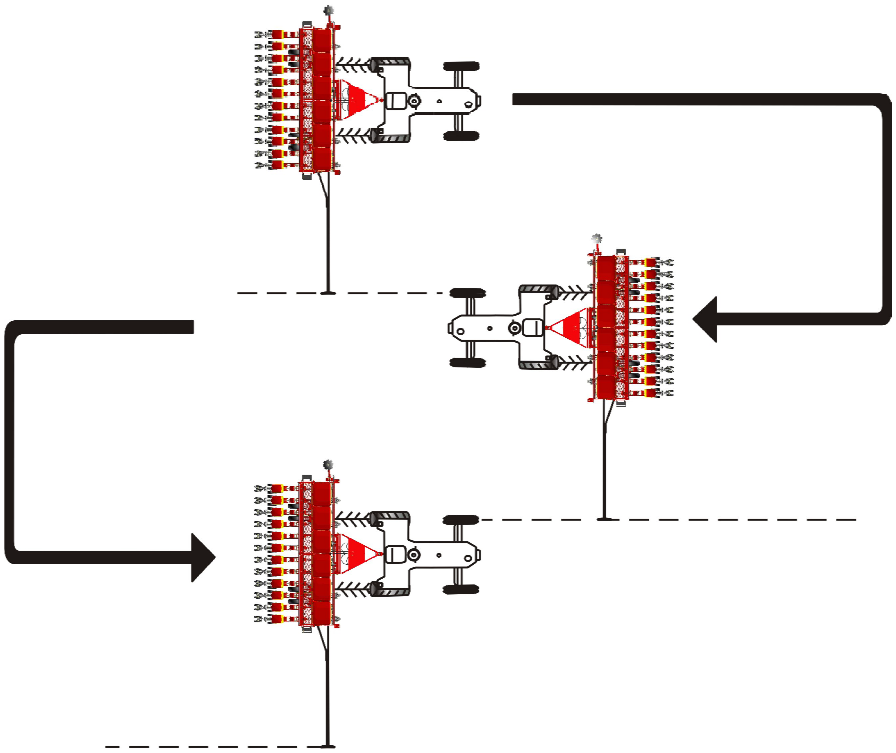


fig. 31

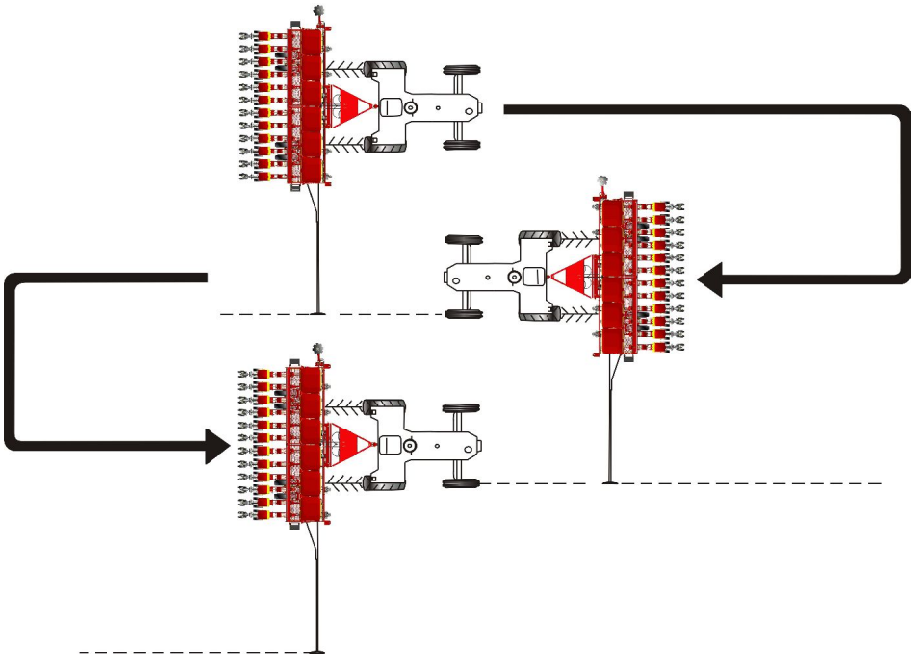
This type of row marker consists of a spring system copier (G) (fig. 31), getting adjustment of pressure through the nut (H), thus allowing a reading uniform and easy adjustment in various types of soil.

To facilitate the work and operation of planter, making it comfortable and practice, it is very important to use the row markers to obtain a uniform spacing, facilitating the cultivation and harvesting. To adjust, get the arm and the distance from the marker disc as the following calculation.

OPTION 1: Making the marking via front tire of the tractor (on the inside).



OPTION 2: Making the marking via tire out. This option should only be used when the spacings require, otherwise always use option 1.



To determinate and setting of practical way the length of arm the row marker in the field, note the following scheme:

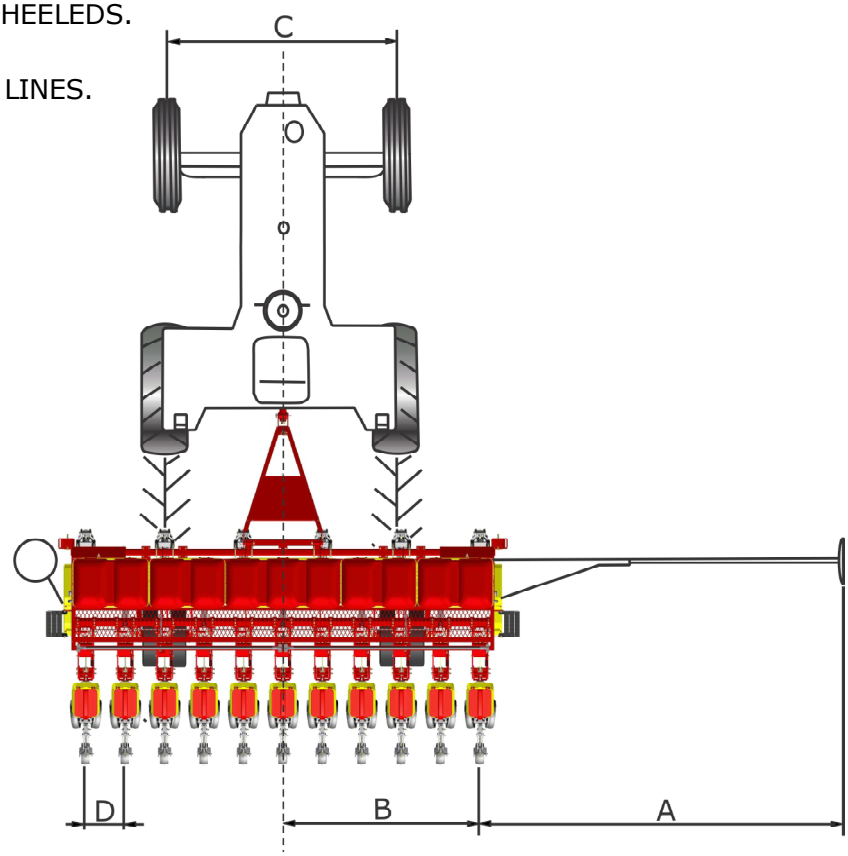
A= DISTANCE BETWEEN THE LAST ROW AND THE MARKER DISC.

B= DISTANCE BETWEEN THE CENTER OF CHASSI THE PLANTER AND THE LAST ROW.

C= DISTANCE BETWEEN THE FRONT WHEELEDS.

D= SPACING BETWEEN THE PLANTING LINES.

A = B - C / 2 + D



Mechanical Hectare Counter – Optional

Set consists of a counter clock beats and components that are part of it. By means of the displacement of the planter, the mechanism records the number of turns that the transmission system performs, through arithmetic calculations determined the table, we have average values of useful width, and thus obtaining constant where it is determined an approximate value of the number of hectares planted during the work. To calculate the hectares planted, divide the number found on the clock by constant, as the number of planting lines and the spacing adopted.

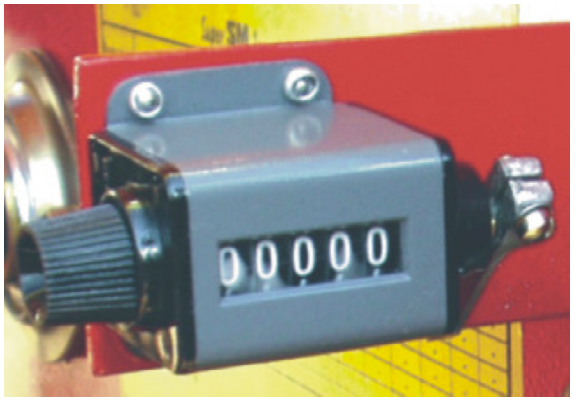


TABELA DE AUXÍLIO PARA CÁLCULO APROXIMADO DE ÁREA PLANTADA
TABLE TO HELP THE CALCULATION APPROXIMATE OF PLANTED AREA
TABLA DE AYUDA PARA CÁLCULO APROXIMADO DE ÁREA SEMBRADA
PREMIUM GERAÇÃO III

ESPAÇAMENTO ROW SPACING ESPACIAMIENTO (cm)	NÚMERO DE LINHAS / ROW NUMBER / NÚMERO DE LÍNEAS											
	5	6	7	8	9	10	11	12	13	14	15	16
45	—	—	—	—	1159	1043	949	870	803	745	696	652
50	—	—	—	—	1044	—	855	—	723	—	627	—
55	—	—	—	—	950	—	778	—	658	—	—	—
60	—	—	—	981	872	—	714	—	—	—	—	—
65	—	—	1034	905	—	724	658	—	—	—	—	—
70	—	—	960	840	—	672	—	—	—	—	—	—
75	1250	1042	—	781	—	625	—	—	—	—	—	—
80	1175	979	—	734	—	—	—	—	—	—	—	—
85	1109	924	—	693	—	—	—	—	—	—	—	—
90	1043	870	745	652	—	—	—	—	—	—	—	—

OBSERVAÇÃO: PARA CALCULAR A QUANTIDADE DE HECTARES PLANTADOS, DIVIDA O NÚMERO ENCONTRADO NO RELÓGIO MARCADOR PELA CONSTANTE ACIMA QUE INDICA A RELAÇÃO DO NÚMERO DE LINHAS E O ESPAÇAMENTO UTILIZADO.

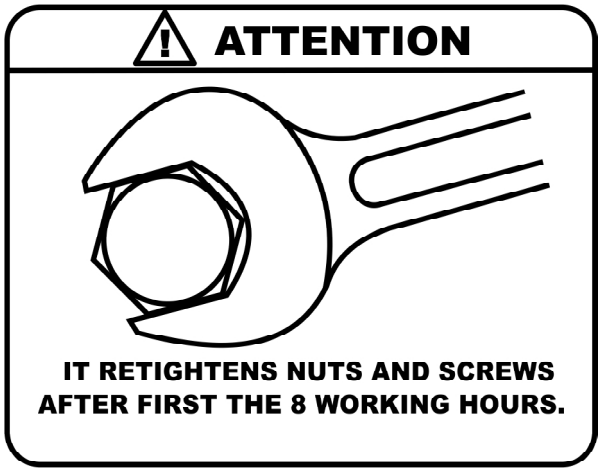
NOTE: TO ESTIMETE THE QUANTITY OF PLANTED HECTARES DIVIDE THE FOUND NUMBER ON THE MARKER CLOCK BY ABOVE INVARIABLE THAT SHOWS THE RELATION OF THE ROW NUMBER AND ROW SPACING.

NOTA: PARA CALCULAR LA CUANTIDAD DE HECTÁREAS SEMBRADAS, DIVIDA EL NÚMERO ENCONTRADO EN EL RELOJ MARCADOR POR LA CONSTANTE ARRIBA QUE INDICA LA RELACIÓN DEL NÚMERO DE LÍNEAS Y EL ESPACIAMIENTO UTILIZADO.

IMPORTANT

To get a correct work from the hectare counter there can not be in any way change the arrangements of the sprockets in the transmission system of the wheel and only on drive and driven sprockets respectively.

MAITENANCE



In order to preserve, efficiently, an agricultural machine or implement, one should take cares to increase its useful life and to improve its operation and utilization. This way, one should follow certain conservation rules that will save certain troubles; because a simple free screw of a component can interrupt the operation of a mechanism, stopping the work with the planter. These small cares is called periodic and preventive maintenance. It has low costs and provides large results in production and conservation.

IMPORTANT

Use original VENCE TUDO parts only. Using the improvised parts, will cause mischaracterize the product, avoiding the guarantee analysis of the equipment, this way.

Do not use burned oil or diesel oil for the cleaning or lubricating of the planter.

Inspect the planter checking if there are worn or broken parts, in case of the existence of them and if necessary, replace the defective parts.

When the planter is idle use the time to make the due repairs on it.

Use vegetable oil for the total protection of the planter. In case the use of vegetable oil is not possible, diesel oil, hydraulic or lubricant can be used only in the internal parts of the planter and protection of the rubberized parts and meter plates will be necessary.

Double and Cutting Discs

Every 500 hours of planting or a crop, accomplish the maintenance of the double discs, bearings and ball bearings, as follows:

- Remove the external cap, loosening the adjusting screws.
- Wash the hub and remove the old grease.
- Check if there is backlash in ball bearings, in such case adjusts them.
- Replace the worn parts that can affect the operation.
- Put new grease in the hubs and in the inside of the cap, setting up them again.
- Every 200 working hours, verify the existing backlash in bearings and ball bearings.

IMPORTANT

During the assembly, make the adjustment of the ball bearings so that the set of discs rotates freely.

Furrower Knife

Check and verify the points of opener knives. In any case, of excessive wear, replace them.

Depth Gauge and Press Wheels

Check every 200 hours the distance of backlash of the bearings, in this case, proceed with the necessary maintenances.

Store the planter in sheltered place and safe.

Maintain the planter properly leaning and avoid contact of their discs and furrowers directly with the soil.

ATTENTION

During operation and maintenance settings have the utmost care during labor, because the planter should be lifted to carry out the work using safety devices. Follow the safety rules described above.

Maintenance at the End of Harvest

CLEANUP OF THE TANKS

When finishing the plantation, do the cleaning of the reservoirs removing the remains of fertilizer and seeds. Open the metering systems to do the washing of the components of it.

1- Remove all conveyors (fertilizers and seeds), washing them just with water and mild soap and storing them in a place apart;
2- Paint all parts that need a new one;
3- Lubricate the whole machine;
4- Wash the fully planter and lubricate it with castor oil plant;
5- After performing all the operations of repairs and maintenance, store the planter in a dry and sheltered place with all its parts in working conditions; so you can get the most out of your investment.

FERTILIZER METER - FERTISYSTEM SELF-LUB

CHANGE, MAINTENANCE OR REPLACEMENT OF THE COATING AND WASHERS

At the end of the harvest season, check the coating (A) (fig. 32). if there is shown excessive wear, replace it by loosening and removing the screws (B). Check for wear on the felt (C), washer (D) and washer for cleaning (E). The excessive wear is checked when the fertilizer goes in great quantity by self-cleaning discharge hole, located on the underside of the body.

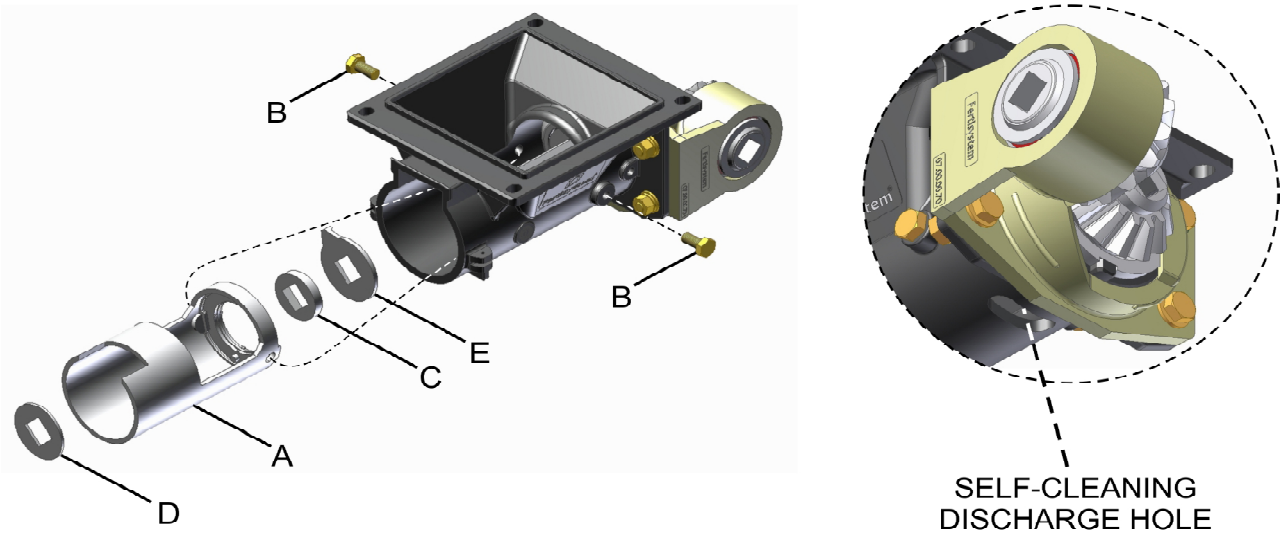


fig. 32

CHANGE, CLEANING OR REPLACEMENT OF SETS OF BEARING BUSH SET

To perform cleaning, maintenance or replacement of bearings and components of the assembly, proceed as follows:

1 - Remove the meter assembly of seeder through the removal of the drive axle and joining bushings. Loosen and remove the fixing bolts the meter in the reservoir of fertilizers from seeder;
2 - Remove the four screws and nuts (A) (fig. 33) of support bearing of transmission pinions (B);
3 - Loosen and remove the fixing bolts (C) the coating (D), by removing it from the set;
4 - Remove the bearing bushing (F) and the bearings (G). Remove the drive axle (H) and remove the bearing bushings of bearings and retainer (J) making the cleanings or replacements necessary;
5 - Remove the protection ring (N).

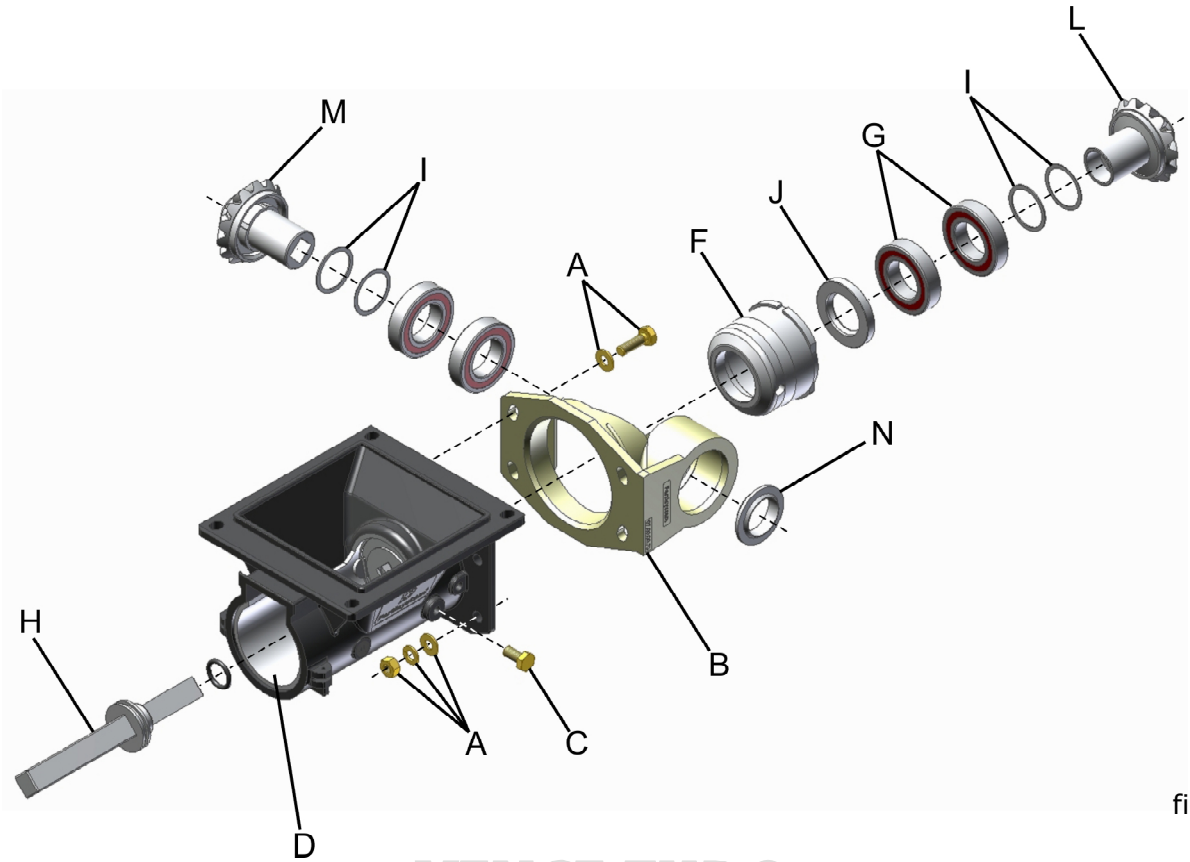


fig. 33

ATTENTION

Note carefully, that the adjusting washers (I) will have to be assembled; therefore they will provide a bigger or lesser space for the adjusting of the pinions (L and M). If there is need for the replacement of the pinions, it will have to be made in the set: driving-drive pinion (L) and driven pinion (M).

The retainer (J) must be replaced when disassembling it; since it will suffer damage this procedure.

FERTILIZER METER – ENDLESS THREAD

For the maintenance or change of the fertilizer meter - endless thread or, still, to do some repair in the internal part of it; proceed as follows:

1 - Loosen the screws (D) (fig. 34), that fasten the base of gears (E), releasing it;
2 - Remove the stop pin (H) and the axle (I) in the direction of the roll pin, which does not need to be disassembled;
3 - Remove the bushing (J) and the endless thread (L) by extremity ("X") of the housing (M);
4 - Lubricate daily the meters.

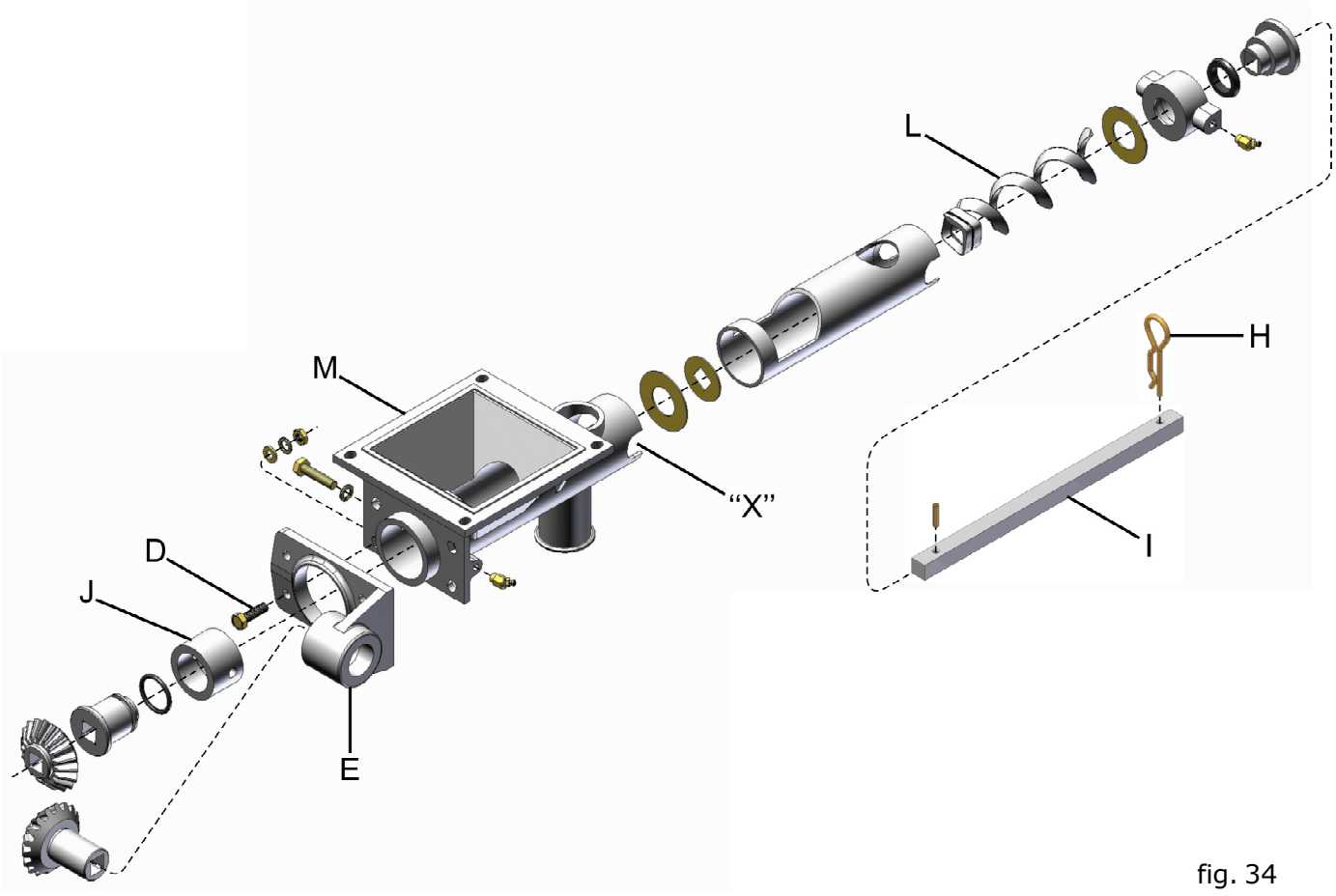


fig. 34

SEED DISTRIBUTORS

Hold a regular maintenance and cleaning in the seed meter boxes and in the precision seed meter plates (seed plates); eliminating the graphite powder, fungicides and inoculants contained in the seeds.

Also, do periodic maintenances during the planting, in according to the need; mainly, to eliminate the excess of products used during the treatment.

GEAR BOXES

Do the periodical maintenance and lubricant in the gear boxes from pantographic lines. To have access to the gear boxes (D) (fig. 36), lift the footboard (A) (fig. 35) and lock it through the screw (C) with the lock (B). Remove the lid of the box (E) (fig. 36) and the needed maintenance.

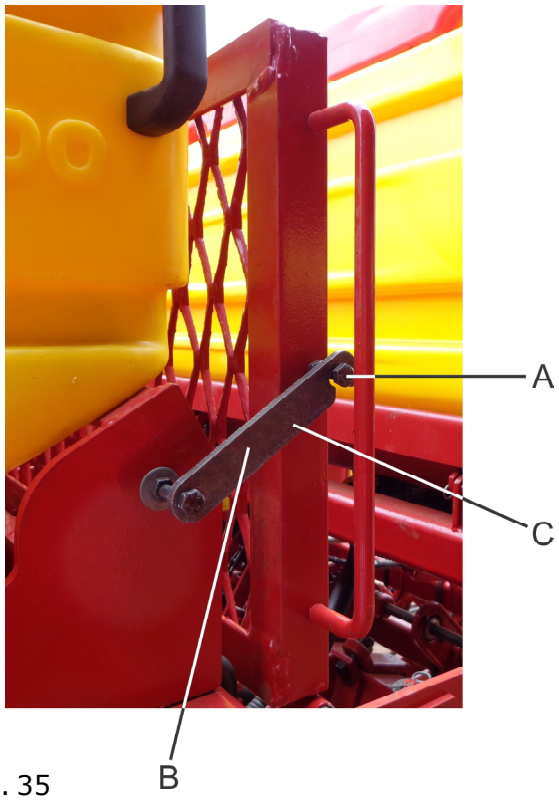


fig. 35

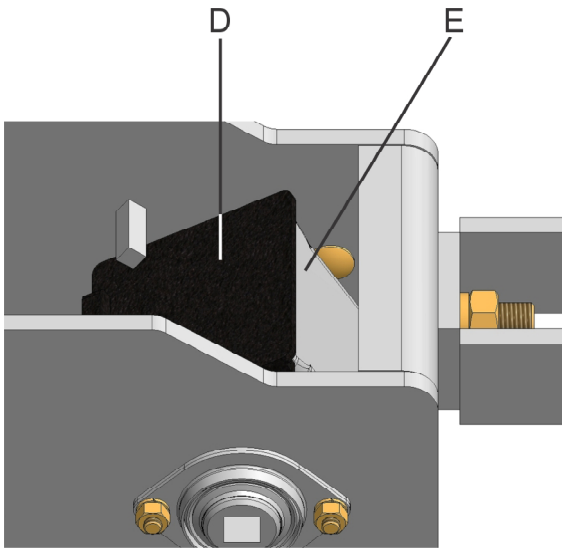


fig. 36

LUBRICATION

The correct lubrication with grease consists of not allowing the excess or lack of it in any site, because both situations are injured.

The regular supply of grease associated to the appropriate amount is basic condition to be reached a better effectiveness during the work of the bearings and joints. The interval of grease supply should be smaller, when occur stringent operational conditions (huge loads, regular collision of the bearings, influence of the environment with high temperatures, high dustiness and contact with the water).

Through a greasing pistol or bomb, lubricate the lubrication points so that the new grease enters and expels the deteriorated grease. Before lubricating, clean the grease fittings with a cloth, and if they are with defect, replace them.

TECHNICAL RECOMMENDATIONS

For a good quality operation of your planter, meet the following procedures:

1 - AFTER THE FIRST 8 WORKING HOURS, ACCOMPLISH THE RETIGHTENING OF ALL ITS COMPONENTS.

2 - MAKE THE LUBRICATION IN ALL THE POINTS, BEFORE BEGINNING THE OPERATION OF PLANTING.

3 - BEFORE STARTING THE PLANTATION, ACCOMPLISH THE ADJUSTMENTS (SPACING, SEED AND FERTILIZER).

4 - DO NOT ACCOMPLISH THE ADJUSTMENTS WITH THE PLANTER IN MOVEMENT.

5 - DO NOT MAKE THE DISPLACEMENT, SHED - CROP - SHED, WITH LOADED PLANTER.

6 - DO NOT STORAGE THE PLANTER WITH ITS RESERVOIRS FULL OF THE FERTILIZER AND SEEDS.

7 - WHEN RESTARTING THE PLANTATION, CHECK IF THE METER MECHANISMS ARE NOT OBSTRUCTED.

8 - DO NOT DO THE REVERSE GEAR WITH THE PLANTER IN POSITION OF PLANTATION.

9 - DO NOT ACCOMPLISH VERY CLOSED CURVES WHEN THE PLANTER BE IN THE OPERATION POSITION. ONLY MAKE MANEUVERS WITH THE PLANTER WHEN IT IS TOTALLY LIFTED AND OUT OF THE SURFACE OF THE SOIL.

10 - ACCOMPLISH THE OPERATION OF PLANTATION IN THE RECOMMENDED SPEED FOR THE CROP.

11 - AT THE END OF THE PLANTATION, MAKE THE CLEANING, WASHING AND LUBRICATION OF THE EQUIPMENT (USE PULVERIZATION PRODUCTS WITHOUT THE PRESENCE OF DETERGENTS).

12 - SHELTER THE PLANTER AGAINST WEATHER DURING THE IDLE PERIOD.

13 - USE ONLY VENCE TUDO ORIGINAL PARTS FOR THE REPLACEMENT.

14 - READ CAREFULLY THE OPERATOR MANUAL.

THE NON-OBSERVATION OF THE RELATED ITEMS CAN GET SERIOUS DAMAGES TO THE OPERATION AND CONSERVATION OF THE PLANTER.

Measurement of the Work Speed

For the measurement of the work speed, do as follows:

1 - Determine the time in seconds spent by the tractor-planter group to travel 50 meters, with the plntadora loaded;

2 - Measure more than once to obtain a rate;

3 - So, calculate according to the example below.

EXAMPLE:

Time: 32 seconds in 50 meters.

To travel 50 meters

50 m _____ 32 sec.
1000 m _____ X

X = 640 sec.

To travel 1 Km.

1 Km _____ 640 sec.
X _____ 3600 sec. (1h)

$$X = \frac{1 \times 3600}{640}$$

X = 5,6 Km/h - work speed

Measurements units:

1Kg.....1000g
1ha.....10000m²
1min.....60s
1hs.....3600s
1Km.....1000m

IMPORTANT

During the determination of the work speed, turn the ratchet off to avoid wastes of fertilizers and seeds.

ADDITIONAL PARTS BOX

The Vence Tudo Pull Fertilizer Planters, ***Premium Generation III*** models, comes from the factory with a box with spare parts, according to the option done by the customer to assist the most varied cultivation conditions. When receiving your planter, check and verify the parts according to the assembly option with the reseller, in accordance with the below:

PREMIUM Generation III - (FERTISYSTEM)

CODE	NAME
200120000	WK PIN
200146000	1" ENDLESS SPRING
200221001	PIN
900005039	LOCK
900015023	POINT
900100005	SOYBEAN METER PLATE 90H Ø9 - GREY
900100013	CORN METER PLATE 28H 10x14.8 - RED
900100017	CORN METER PLATE 28H Ø12 - BLUE
900100018	CORN METER PLATE 28H 8.5x11.5 - GREY
900100019	CORN METER PLATE 28H 8.9x13.5 - GREEN
900100062	ROSETTE 4 TEEHT - CORN/SUNFLOWER
900100156	LID
900100191	CORN SMOOTH RING - YELLOW
900100192	CORN RECESSED RING - GREEN
901112050	HEX. HEAD NUT M10x1.5x50 DIN 931 5.8 ZCA
920001001	HEX. NUT M10x1.5 DIN 934 ZCA
921050010	LOCK WASHER B10 DIN 127 ZCA
922013024	ROLL PIN 10x25 DIN 1481
922036690	LOCK PIN WITH LOOP 3/8"x2" ZCA
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PREMIUM Geração III - (ENDLESS THREAD)

CODE	NAME
200114008	1" ENDLESS THREAD
200120000	WK PIN
200221001	PIN
900005039	LOCK
900015023	POINT
900100005	SOYBEAN METER PLATE 90H Ø9 - GREY
900100013	CORN METER PLATE 28H 10x14.8 - RED
900100017	CORN METER PLATE 28H Ø12 - BLUE
900100018	CORN METER PLATE 28H 8.5x11.5 - GREY
900100019	CORN METER PLATE 28H 8.9x13.5 - GREEN
900100062	ROSETTE 4TEETH - CORN/SUNFLOWER
900100156	LID
900100191	CORN SMOOTH RING - YELLOW
900100192	CORN RECESSED RING - GREEN
901112050	HEX. HEAD SCREW M10x1.5x50 DIN 931 5.8 ZCA
920001001	HEX. NUT M10x1.5 DIN 934 ZCA
921050010	LOCK WASHER B10 DIN 127 ZCA
922013024	ROLL PIN 10x25 DIN 1481
922036690	LOCK PIN WITH LOOP 3/8"x2" ZCA
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NOTE: The quantities of the above parts vary in accordance with the arrangement of the planter.