

GTCR 34-40

Wheel Type Offset Disc Harrow (Heavy Duty)





Presentation

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e appreciate the preference and would like to congratulate you for excellent choice you just made, since you have acquired a product manufactured with **BALDAN**



IMPLEMENTOS AGRÍCOLAS S/A technology.

This manual will guide you through the procedures required since its acquisition until operational procedures of usage, safety and maintenance.

BALDAN assures that it has delivered this implement for resale in full and in perfect conditions.

Resale was responsible for the custody and maintenance during the period in its possession, and also for the assembly, retightening, lubrication and overhaul.

During the technical delivery, dealer should guide the user regarding maintenance, safety, their obligations in eventual technical assistance, strict compliance with the warranty term and reading the instructions manual.

Any technical assistance request while in warranty must be made to the dealer from whom you have purchased it.

We reiterate the need for a careful read of the warranty certificate and compliance of all items from this manual, because by doing so you will increase the life of your device.



GTCR 34-40

Wheel Type Offset Disc Harrow (Heavy Duty)

BALDAN IMPLEMENTOS AGRÍCOLAS S/A. CNPJ: 52.311.347/0009-06

CNPJ: 52.311.347/0009-06 Insc. Est.: 441.016.953.110



Scan the QR Code on the identification plate of your device and access this Instruction Manual online.







Index

PRESENTATION	03
BALDAN WARRANTY	07
GENERAL INFORMATION	08
To the owner	08
SAFETY RULES	09-12
To the operator	09
PPE Equipment	12
WARNINGS	13-14
COMPONENTS	15
GTCR - Wheel Type Offset Disc Harrow (Heavy Duty)	15
DIMENSIONS	16
GTCR 34 / 36 / 40 Discs	16
SPECIFICATIONS	17
GTCR - Wheel Type Offset Disc Harrow (Heavy Duty)	17
ASSEMBLY	18-34
Assembly of discs section	18
Assembly of discs section - GTCR 34 discs	19
Assembly of discs section - GTCR 36 discs	20
Assembly of discs section - GTCR 40 discs	21
Assembly of the right main frame in left main frame	22
Assembly of gangs	23
Assembly of gangs in main frames	24
Assembly of the discs section on the gangs	25
Assembly of the scrappers	26
Assembly of the wheel shaft support	27
Assembly of wheel shaft support in main frame	28
Assembly of the wheels	29
Assembly of the hitch drawbar	30
Assembly of the hitch drawbar cylinder	31
Assembly of the hydarulic cylinder on the main frames	32
Signpost assembly	33
HITCH	35
LEVELING	36-37
REGULATIONS	38
Transport regulation - Part I	38
Transport regulation - Part II	39
Transport regulation - Part III	40
Adjustment of disc harrow opening	41
Workina depth adjustment - Part I	42



Index

Working depth adjustment - Part II	43
Disc Harrow Displacement adjustment - Part I	44
Disc Harrow Displacement adjustment - Part II	45
OPERATIONS	46
Recommendations for operation - Part I	46
Recommendations for operation - Part II	47
Direction of maneuvers	47
How to start harrowing	48
Harrow from the outside in	48
Harrow from the inside out	49
Blocks with contour lines	49
CALCULATIONS	50
Approximate hourly production	50
MAINTENANCE	51
Tires pressure	51
Lubrication	52
Greases and equivalents table	52
Lubricate every 24 hours of work	53
Disc section bearings adjustments	54
Bearing oil	54
Operational Maintenance	55
Care	56
General cleaning	56
General cleaning	57
Disc harrow conservation - Part I	57
Disc harrow conservation - Part II	57
LIFTING	59
Lifting points	59
OPTIONAL	59
Cutting disc	59
IDENTIFICATION	60



Baldan Warranty

BALDAN IMPLEMENTOS AGRÍCOLAS S/A ensures the dealer normal performance of the implement for a period of six (6) months as of the delivery date on the retail invoice to the first final consumer.

During this period, **BALDAN** undertakes to repair defects in material and/or of manufacture of its liability, including labor, freight and other expenses of the dealer's liability.

In the warranty period, request and replacement of eventual defective parts shall be made to the dealer of the area, who will submit the faulty piece for **BALDAN** analysis.

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

After analyzing the replaced items by **BALDAN** Technical Assistance, and concluding that it is not a warranty, then the dealer will be responsible for the costs related to the replacement; as well as material expenses, travel including accommodation and meals, accessories, lubricant used and other expenses arising from the call out to Technical Assistance, and **BALDAN** company is authorized to carry the respective invoice in the name of the resale.

Any repair carried out in the product within the dealer warranty deadline will only be authorized by **BALDAN** upon previous budget presentation describing parts and workforce to be executed.

The product is excluded from this term if it is repaired or modified by representatives not belonging to the **BALDAN** dealer network, as well as the application of non-genuine parts or components to the user's product.

This warranty is void where it is found that the defect or damage is caused by improper use of the product, failure to follow instructions or inexperience of the operator.

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

Manufacturing and/or material defects, object of this warranty term, will not constitute, under any circumstances, grounds for termination of a purchase agreement, or for indemnification of any nature.

BALDAN reserves the right to change and/or perfect the technical characteristics of its products, without previous notice, and without obligation to proceed in the same way with the products previously manufactured.



General Information

To the owner

BALDAN IMPLEMENTOS AGRÍCOLAS S/A is not responsible for any damaged caused by accident due to usage, transportation, or in the improper or incorrect transportation of its implement, whether by negligence and/or inexperience of any person.

Only people with complete knowledge of the tractor and the implement should carry their transportation and operation.

BALDAN is not responsible for any damaged caused in unpredictable or unrelated situations to the normal use of the implement.

The incorrect handling of this equipment may result in severe or fatal accidents. Before starting the equipment, carefully read the instructions contained in this manual. Make sure that the person responsible for the operation is instructed as the correct and safe handling. Also make sure that the operator has read and understood the instructions manual of the product.



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

The purpose of this Regulatory Standard is to establish the precepts to be observed in the organization and in the work environment, in a manner compatible with the planning and development of agriculture, livestock, forestry and aquaculture activities with the safety and health and environment work environment.

MR. OWNER OR OPERATOR OF THE EQUIPMENT. Read and carefully comply with provisions of NR-31.

For more information, refer to the site and read in full NR-31. http://portal.mte.gov.br/legislacao/normas-regulamentadoras-1.htm



Safety Rules

To the operator



THIS SYMBOL INDICATES IMPORTANT SAFETY WARNING. IN THIS MANUAL, WHENEVER YOU FIND IT, READ THE FOLLOWING MESSAGE CAREFULLY AND PAY ATTENTION TO THE POSSIBILITY OF PERSONAL ACCIDENTS.

ATTENTION



Carefully read the instructions manual to learn about the recommended safety practices.

ATTENTION



Only start to operate the tractor when you are properly seated and with the seat belt locked.

ATTENTION



Do not transport people or equipment on the tractor.

?∖ ATTENTION



There are risks of severe injuries due to tipping when working sloped terrains. Do not over speed.

?\ ATTENTION



Do not work with the tractor if the front has insufficient ballast to the rear equipment. Should there be a trend to lift, add weights or ballasts to the front or the front wheels.

ATTENTION



Before performing any maintenance in your equipment, make sure it is properly stopped. Avoid being run over.

?\ ATTENTION



Be careful when handling the GTCR support leg, as there is a risk of accidents.



Safety Rules



FOLLOW ALL RECOMMENDATIONS, WARNINGS AND SAFE PRACTICES RECOMMENDED IN THIS MANUAL. UNDERSTAND THE IMPORTANCE OF YOUR SAFETY. ACCIDENTS MAY LEAD TO DISABILITY OR INCLUDING **DEATH. REMEMBER, ACCIDENTS CAN BE AVOIDED!**

ATTENTION



Do not make adjustments with the GTCR in operation. When doing any service on the GTCR, turn the tractor first. Use appropriate tools.

ATTENTION



When looking for possible leaks in hoses, use a cardboard or wood. never use your hands. Avoid fluid incision into the skin.

ATTENTION



When transporting the GTCR, do not exceed the speed of 25Km/h or 15 MPH, avoiding risks of damages and accidents.

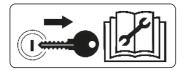
!\ ATTENTION





When working with the GTCR, do not exceed the speed of 12Km/h or 7 MPH, avoiding risk damages and accidents.

ATTENTION



Remove the ignition key before performing any maintenance on the GTCR. Protect yourself from possible injury or death caused by an unforeseen GTCR start up. If the GTCR is not properly engaged, do not start the tractor.

ATTENTION



Hydraulic oil works under pressure and may cause serious injuries if there are any leakages.

Periodically check hoses for conservation. If there are any sign of leakage, replace them immediately. Before connecting or disconnecting hydraulic hoses, relief system pressure by activating the command with the tractor power switched off.



Safety Rules

ATTENTION



Always maintain places of access and work free of residues such as oil or grease to prevent accidents.

ATTENTION



Before commencing work or transportation to GTCR, check for any nearby persons or obstructions.

ATTENTION



Avoid heating parts near the fluid lines. Heating may generatee fragility in the mate-

rial, rupture and exit of the pressurized fluid, causing burns and injuries

ATTENTION



Keep the joint area free while the GTCR is in operation.

In closed curves, prevent tractor wheels

from touching the head.

<u>(1)</u>

ATTENTION



Never weld the tiremounted wheel, the heat may cause increased air pressure and cause the tire to burst.

When filling the tire, position yourself besides the tire, never in front of it. To inflate a tire, always use a containment device (inflation cage).

?\ ATTENTION



Always stay away from the active elements of the GTCR (discs), they are sharp and can cause acci-

dents.

When performing any service in the discs, wear safety gloves.

A

ATTENTION



Disposing of waste improperly affects the environment and the environment, as it will pollute rivers, canals or the soil. Inform yourself about the proper way of recycling or disposing residues.

PROTECT THE ENVIRONMENT!



Safety Rules

PPE Equipment

ATTENTION

DO NOT WORK WITH THE GTCR WITHOUT WEARING PPE (SAFETY EQUIPMENT). IGNORING THIS WARNING MAY CAUSE DAMAGES TO HEALTH, SEVERE ACCIDENTS OR DEATH.

When performing certain procedures with the **GTCR**, wear the following Safety Equipment (PPE):





O IMPORTANT

Safety practice must be performed in all stages of working with the GTCR, thus avoiding accidents such as impact of objects, fall, noise, cuts and ergonomics, in other words, the person responsible for operating the GTCR is subject to internal and external bodily damage.

OBSERVATION

All PPEs (Safety Equipment) should have certificate of authenticity.









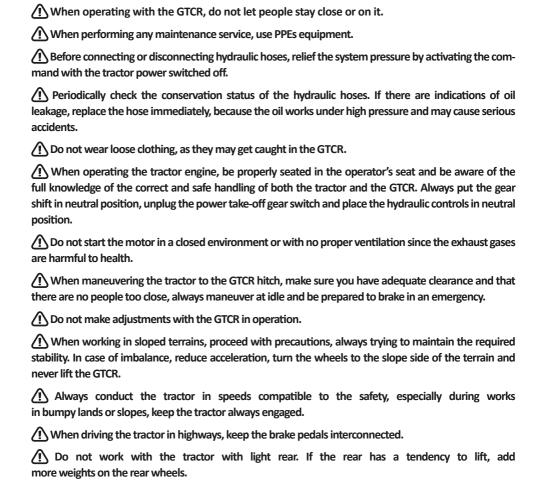








Warnings



GTCR 34-40 13

!\ Do not travel on highways especially at night. Use warning signs throughout the course

/!\ When leaving the tractor, put the gear lever in neutral position and apply the parking brake. Never

leave the GTCR on the tractor in the raised position of the hydraulic system.

If you need to travel with the GTCR on highways, consult traffic authorities.

!\ The GTCR must be turned off before any maintenance work.



Warnings

The GTCR must not be operated by untrained people, i.e. people who do not know to properly operate it.

① Do not transport or work with the GTCR near obstacles, rivers or streams.

The transportation of people on self-propelled machines and implements is forbidden.

Changes to the original GTCR characteristics are not allowed, as they may alter the safety, operation and life of the GTCR.

Read all safety information contained in this manual and the GTCR carefully.

Read or explain all the procedures of this manual to the operator who cannot read.

Always check that the GTCR is in perfect conditions of use. In the event of any irregularity that may interfere with the operation of the GTCR, ensure proper maintenance before any work or transportation.

Maintenance and especially inspection in GTCR risk areas should be done only by a qualified or qualified worker, observing all safety guidelines. Before starting maintenance, disconnect all GTCR drive systems.

Periodically check all components of the GTCR before using it.

① Due to the equipment used and work conditions on field or in maintenance areas, precautions are required. Baldan has no direct control over precautions, so it is the owner's responsibility to implement safety procedures while working with GTCR.

• Check the recommended minimum tractor power for each GTCR model. Only use tractor with power and ballast compatible with the load and topography of the terrain.

• When transporting the GTCR, travel at speeds compatible with the terrain and never exceed 16 km/h, as this reduces maintenance and consequently increases the life of the GTCR.

Alcoholic beverage or some medications may cause loss of reflexes and change the operator's physical conditions. Therefore, never operate this GTCR under the influence of these substances.

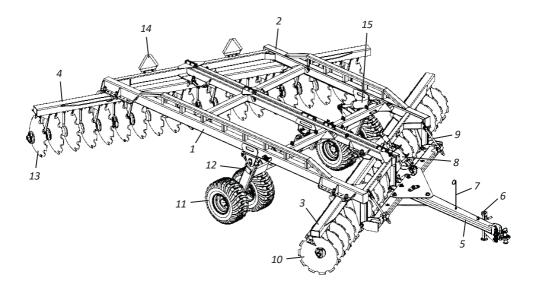
Read or explain all the procedures of this manual to the operator who cannot read.



Components

- GTCR Wheel Type Offset Disc Harrow (Heavy Duty)
- 1. Right Main Frame
- 2. Left Main Frame
- 3. Right gang
- 4. Rear gang
- 5. Hitch drawbar
- 6. Lifting support
- 7. Hose support
- 8. Drawbar articulation cylinder

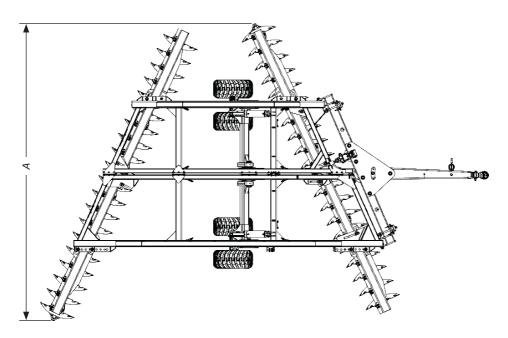
- 9. Stabilizer rod
- 10. Scrapper
- **11.** Tyre
- 12. Support of wheel shaft
- **13.** Disc
- 14. Signpost
- 15. Wheels articulation cylinder

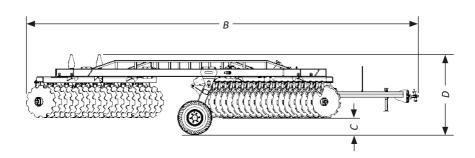




Dimensions

• GTCR 34 / 36 / 40 Discs





Model	No. of Discs	Measure A (mm)	Measure B (mm)	Measure C (mm)	Measure D (mm)
GTCR	34	5240	9500	400	1865
GTCR	36	5870	9637	400	1865
GTCR	40	6500	9750	400	1865



Specifications

• GTCR - Wheel Type Offset Disc Harrow (Heavy Duty)

Model	No. of Discs	Width of Job (mm)	Diameter of the Discs (ø)	Discs Concave (mm)	Diameter Shaft (ø)
	34	5160	30" - 32" - 34"	12	2.1/4"
GTCR	36	5783	30" - 32" - 34"	12	2.1/4"
	40	6402	30" - 32" - 34"	12	2.1/4"

N	Model	No. of Discs	A	Weight Approximate (Kg)		Power Tractor (HP)	Tyre	s
			30"	32"	34"		Quantity	Model
		34	7710	7921	8170	365 à 380	04	400x60
(GTCR	36	7915	8110	8375	386 à 415	04	400x60
		40	8570	8740	9030	430 à 460	04	400x60

Disc spacing	340 mm
Working depth	
Recommended maximum working speed	
Recommended maximum transport speed	* .

Baldan reserves the right to change and or improve the technical characteristics of its products, without prior notice, and without obligation to do so with previously manufactured products. Technical specifications are approximate and reported under normal working conditions.

INTENDED USE OF GTCR

- The GTCR was developed for soil preparation works in large areas and in various types of terrain.
- The GTCR must be conducted and operated only by a properly instructed operator.

UNAUTHORIZED USE OF GTCR

- To avoid damage, serious accident or death, DO NOT transport people over any part of the GTCR.
- It is NOT permitted to use the GTCR to attach, tow or push other attachments or accessories.
- The **GTCR** must NOT be used by an inexperienced operator who does not know all the driving, command and operation techniques.



Assembly

The GTCR leaves the factory dismantled. To assemble it, follow the instructions below:

The Assembly from **GTCR** must be done by reselling, through trained, qualified and qualified people for this job

⚠ Before starting Assembly by **GTCR**, look for an ideal location where you can easily identify parts and Assembly.

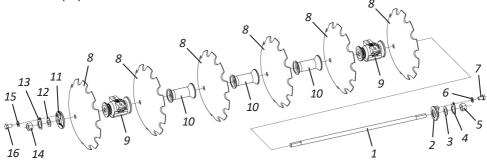
① Do not wear loose clothing, as they may get tangled in the GTCR.

Assembly

Assembly of discs section

When starting Assembly from GTCR, always start with the disc set for this, proceed as follows:

- 01 Place on the shaft (1) the concave thrust washer (2), flat washer (3), lock (4), nut (5), fixing it with the pressure washer (6) and the screw (7).
- **02** Then place the disc (8), bearing (9), another disc (8), separator spool (10) on the shaft (1), and so on.
- 03 When the set is complete with all the discs, bearings, separating reels, place the convex thrust washer (11), flat washer (12), lock (13), nut (14), tightening it with the key until it is firm the set.
- **04** Once this is done, put on the disc set and tighten the nut (14) with impacts. When you are almost getting maximum tightness, adjust the lock (13) with the convex washer (11), always tightening the nut until the drilling coincides, fix it with the pressure washer (15) and the screw (16).



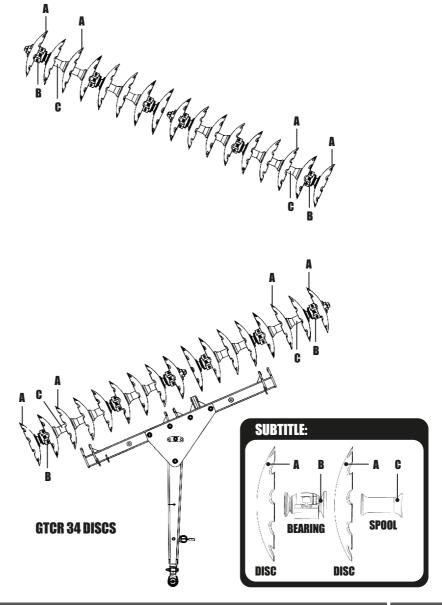
ATTENTION

Check the right side of the separator spools and bearings, according to the concavity of the discs.



• Assembly of discs section - GTCR 34 discs

Check out the Assembly of the disc sections of GTCR 34 discs.

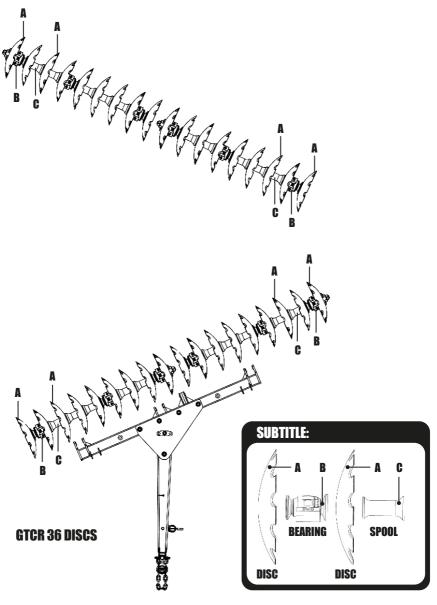




Assembly

• Assembly of discs section - GTCR 36 discs

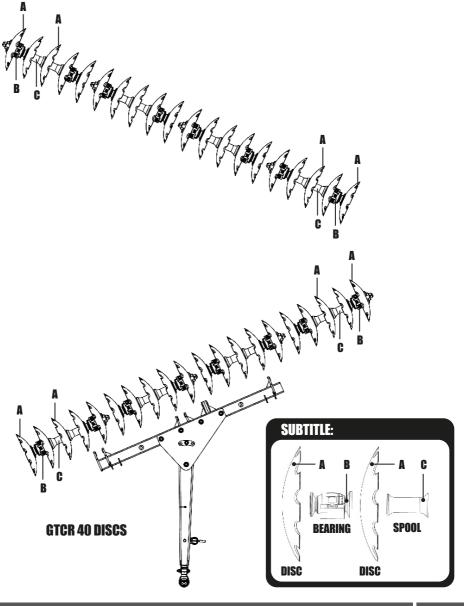
Check out the Assembly of the disc sections of GTCR 36 discs.





• Assembly of discs section - GTCR 40 discs

Check out the Assembly of the disc sections of GTCR 40 discs.



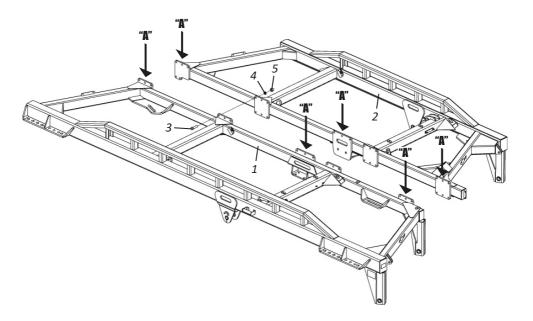


Assembly

· Assembly of the right main frame in left main frame

Start the GTCR Assembly for the main frame for this, proceed as follows:

01 - Couple the right upright (1) with the left upright (2), fixing using the screws (3), lock washers (4) and nuts (5).



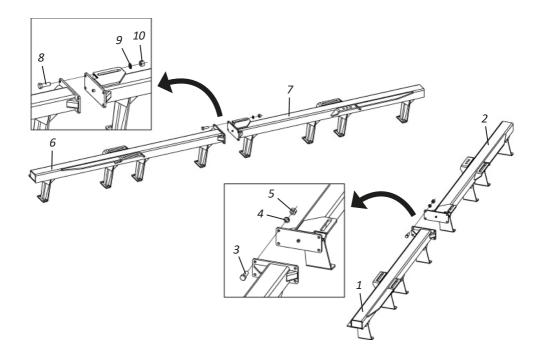
NOTE | Fix the uprights with the screws (3), lock washers (4) and nuts (5) at all other points "A".



Assembly of gangs

After coupling the main frames, attach the gangs. For this, proceed as follows:

- 01 Place the front and rear frames in a flat, clean place.
- **02** Then, attach the right front frame (1) to the left front frame (2) by fixing using the screws (3), lock washers (4) and nuts (5).
- **03** Then, attach the right rear frame (6) to the left rear frame (7) by fixing using the screws (8), lock washers (9) and nuts (10).



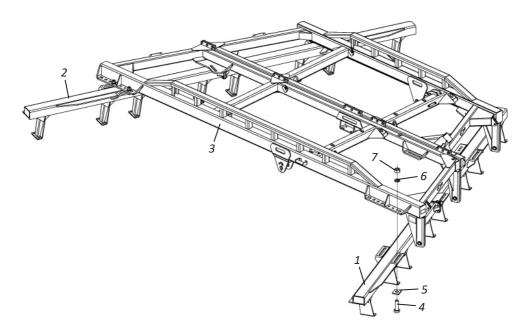


Assembly

Assembly of gangs in main frames

After attaching the gangs, fix the gangs to the main frames. For this, proceed as follows:

- 01 Place the front (1) and rear (2) frames in a flat, clean place.
- **02** Then, place the upright (3) on the front (1) and rear (2) frames, fixing them through the screw (4), lock (5), lock washer (6) and nut (7).





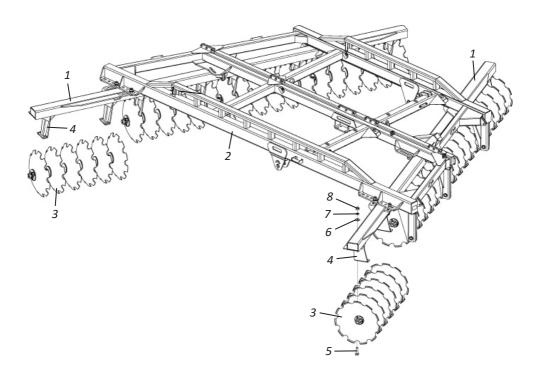
Repeat the above procedure for the Assembly of the frames in the right central amount.



· Assembly of the discs section on the gangs

After fixing the frames (1) on the upright (2), fix the disk sections (3) for this, proceed as follows:

- 01 Lift the front or rear of the grid and place the disc section (3) in line and match the drilling of the shoes (4) with those of the bearings and make the fixation using the screws (5), flat washers (6), lock washers (7) and nuts (8).
- **02** Then, lift the other part of the grid and repeat the operation, checking the concavity of the disks from one section to the other, which should be opposite.
- 03 When finishing the Assembly, check that the shoes (4) were facing the concavity of the discs.





When mounting the disc sections on the gangs, note that the gang shoes should face the disc's concavity.

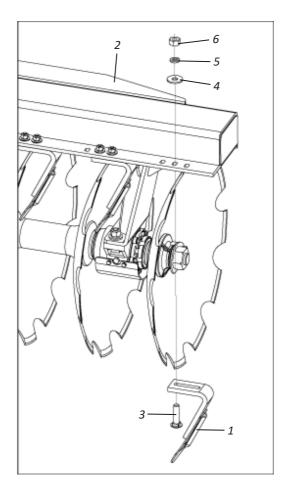


Assembly

Assembly of the scrappers

After mounting the disc sections on the gangs, fix the scappers (1). For this, proceed as follows:

01 - Place the scappers (1) on the gangs (2), fixing using the screws (3), plain washers (4), pressure washers (5) and nuts (6).



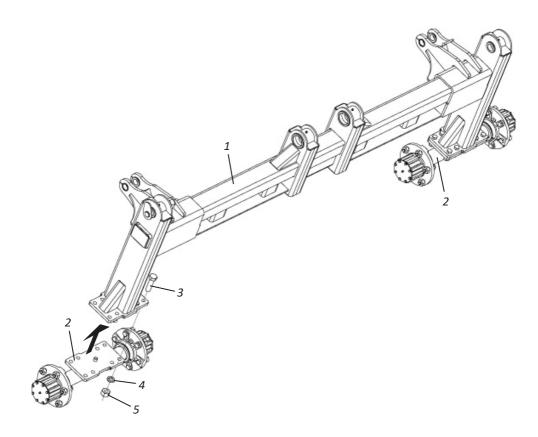




• Assembly of the wheel shaft support

To mount the wheel shaft support (1), proceed as follows:

01 - Couple the wheel axles (2), to the wheel shaft support (1) by fixing through the screws (3), lock washers (4) and nuts (5).



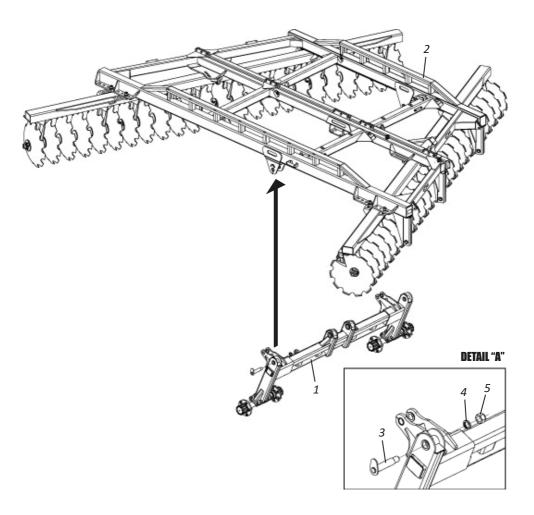


Assembly

• Assembly of wheel shaft support in main frame

After assembling the wheel axle support, fix the wheel shaft support (1) to the upright (2) for this, proceed as follows:

01 - Attach the wheel axle support (1) to the main frame (2) fixing through the pins (3), lock washers (4) and nuts (5), **as shown in detail "A".**

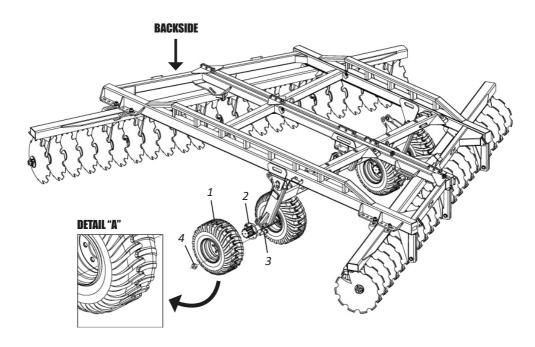




Assembly of the wheels

After mounting the wheel axle support, fix the tires (1) for this, proceed as follows:

01 - Couple the tires (1) on the wheel shaft support (2) using the screws (3) and nuts (4).





All tires must be mounted with anti-traction, that is, with the claws facing the front of the GTCR as shown in detail "A".

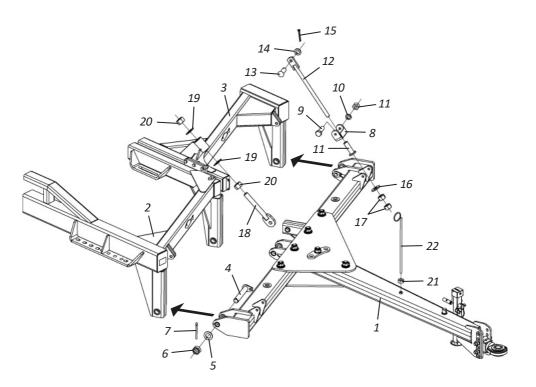


Assembly

Assembly of the hitch drawbar

To assemble the hitch drawbar, proceed as follows:

- **01** Engage the hitch drawbar (1), on the uprights (2 and 3) fixing through the pins (4), flat washers (5), nuts (6) and cotter pins (7).
- **02** Then, fix the support (8), through the screws (9) and nuts (10) and place the bushing (11) the rod (12), fixing with the pin (13), flat washer (14), cotter pin (15), plain washers (16) and nuts (17).
- 03 Then, place the rod (18) and secure with the flat washers (19) and nuts (20).
- 04 Finish by placing the nut (21) and the hose support (22).

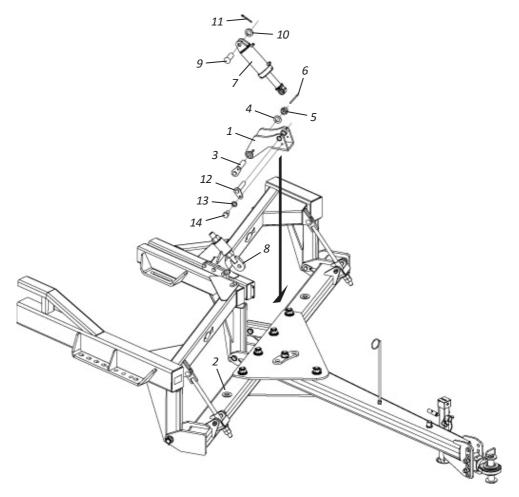




Assembly of the hitch drawbar cylinder

To mount the hydraulic cylinder on the hitch drawbar, proceed as follows:

- **01** Place the articulation support (1) on the crossbar (2) fixing with the pin (3), washer (4), castle nut (5) and cotter pin (6).
- **02** Then, attach the base of the hydraulic cylinder (7) to the regulator (8) fixing through the pin (9), washer (10) and cotter pin (11).
- **03** Then, attach the hydraulic cylinder rod (7) to the articulation support (1), fixing through the pin (12), pressure washer (13) and screw (14).



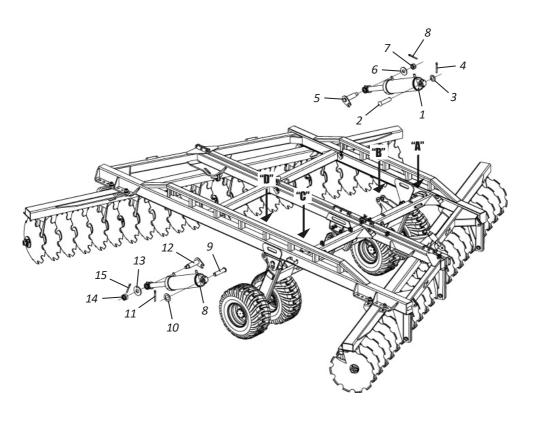


Assembly

· Assembly of the hydarulic cylinder on the main frames

To mount the hydraulic cylinders on the main frame, proceed as follows:

- 01 Aconnect the base of the hydraulic cylinder (1) at point "A", fixing through the pin (2), flat washer (3), cotter pin (4) and the hydraulic cylinder rod (1) at point "B", through the pin (5), plain washers (6), castle nut (7) and cotter pin (8).
- **02** Then, attach the hydraulic cylinder base (8) to point "C", fixing through the pin (9), flat washers (10), cotter pin (11) and the hydraulic cylinder rod (8) to point "D", through the pin (12), flat washer (13), castle nut (14) and cotter pin (15).

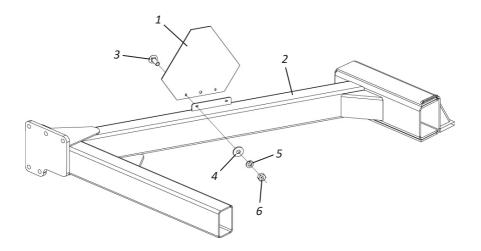




Signpost assembly

To mount the signposts on the uprights, proceed as follows:

01 - Attach the sign plate (1) to the left central post (2) using the screws (3), plain washers (4), lock washers (5) and nuts (6).



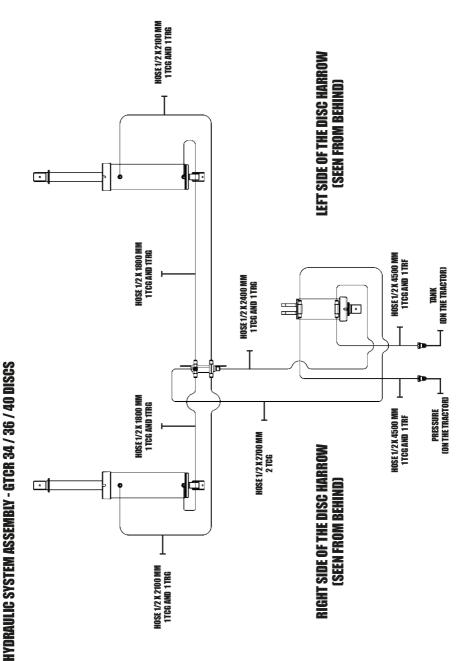


ATTENTION DO NOT operate or transport the GTCR mainly on highways without road signs.



Repeat the above procedure to mount the signpost on the right post.





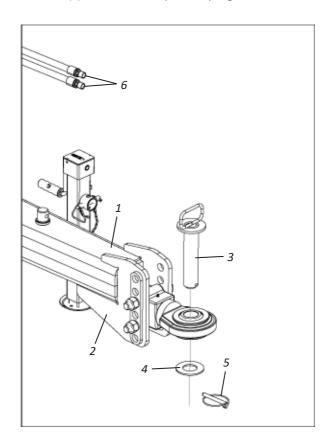


Hitch

DISC HARROW ATTACHMENT TO TRACTOR DRAWBAR

To couple the **GTCR**, proceed as follows:

- 01 Level the GTCR coupling header (1) in relation to the tractor coupling through adjustments(2) of the coupling wheel. Then, slowly approach the harrow in reverse with the tractor, paying attention to the application of the brakes.
- **02** Proceed to hook the **GTCR** to the tractor by fixing it through the hitch pin (3), flat washer (4) and lock (5).
- 03 Finally, attach the hoses (6) to the tractor's quick coupling.





When engaging the GTCR, look for a safe and easily accessible place. Always use low gear with low acceleration.

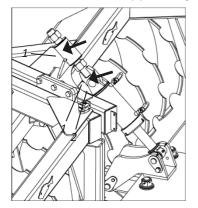


Leveling

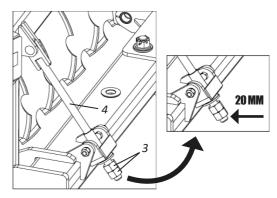
LEVELING OF THE DISC HARROW - PART I

To level the GTCR, proceed as follows:

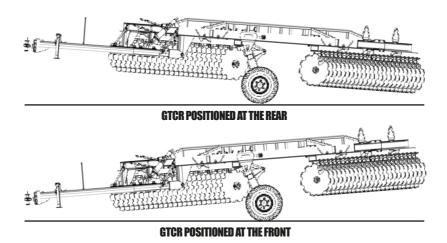
- 01 Place the tractor and GTCR in a flat location.
- O2 Then, before lifting the GTCR, loosen the nuts (1) of the central rods (2) halfway.



03 - Then, loosen the nuts and locknuts (3) of the header bars (4) leaving them at a distance of 20 mm from their face.



04 - Then, actuate to lift the grid and observe if the GTCR is positioned in the front or rear.



05 - Depending on the position of the GTCR, make the following adjustments:

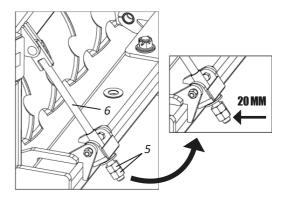


Leveling

LEVELING OF THE DISC HARROW - PART II

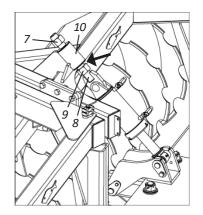
06 - REAR POSITION:

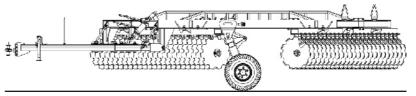
With the GTCR in this position, first lower it by relieving the hydraulic system. Then tighten the nuts and locknuts (5) of the header rods (6) every 10 mm. Then, activate the hydraulic system to raise the GTCR and check its position. If you still need to adjust it, lower it again, tighten the nuts and locknuts (5) + 10 mm and again lift it up and check again. Repeat this procedure until the GTCR is level.



07 - FRONT POSITION:

With the GTCR in this position, first lower it by relieving the hydraulic system. Then, loosen the upper nuts (7) of the central bars (8) every 10 mm. Then, tighten the lower nuts (9) until they touch the face of the bushing (10). Then, activate the hydraulic system to raise the GTCR and check its position. If you still need to adjust it, lower it again, loosen the upper nuts (7) + 10 mm and again lift it up and check again. Repeat this procedure until the GTCR is level.





GTCR LEVEL POSITION



The measures mentioned in the leveling are initial parameters for leveling the GTCR.

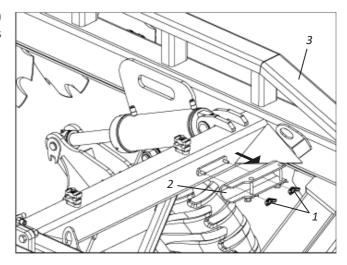


Regulations

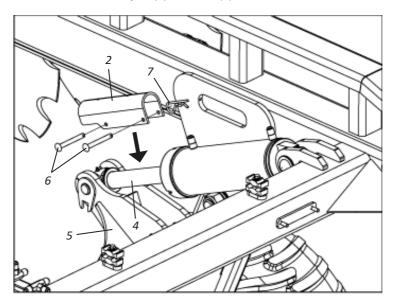
• Transport regulation - Part I

Before transporting the GTCR, proceed as follows:

01 - Loosen the wing nuts (1) and remove the latches(2) from the upright (3).



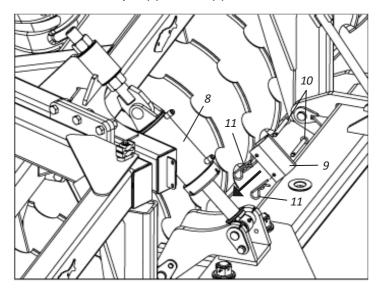
02 - Then, fully activate the stroke of the hydraulic cylinders (4) of the wheel (5), place the locks (2) and secure them with the pins (6) and locks (7).



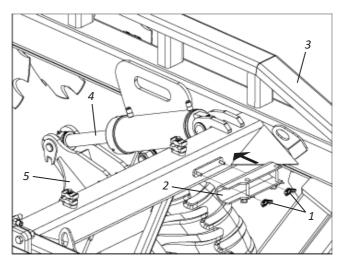


Regulations

- Transport regulation Part II
- **03** Then, fully activate the stroke of the hydraulic cylinders (4) of the wheel (5), place the locks (2) and secure them with the pins (6) and locks (7).



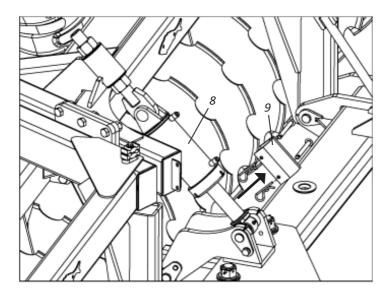
04 - When the transport is finished, remove the locks (2) of the hydraulic cylinders (4) from the wheel (5) and fix them again on the upright (3) using the wing nuts (1).





Regulations

- Transport regulation Part III
- 05 Then, also remove the lock (9) of the hydraulic cylinder (8) from the header.





Do not transport the GTCR without placing the locks (2) on the hydraulic cylinders (4) of the wheel (5) and on the hydraulic cylinder (8) of the header. Ignoring this warning could damage the hydraulic cylinders.

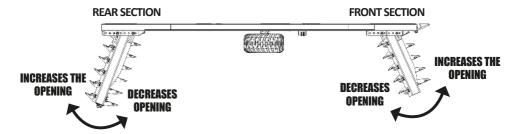


Regulations

Adjustment of disc harrow opening

To obtain the ideal penetration of the discs, the opening of the grid must be regulated, which varies according to the type of soil:

- TERRAINS WITH GREATER DIFFICULTY IN PENETRATION: The disc harrow opening must be increased.
- LIGHT AND LOOSE TERRAIN: The grid opening must be decreased.



INCREASES OPENING: Greater Depth.

DECREASES OPENING: Less Depth.

To increase or decrease the opening of the grid, proceed as follows:

- 01 Loosen the nuts (1), lock washers (2), plain washers (3), remove the locks (4) and screws (5).
- 02 Then adjust the frames (6) by decreasing or increasing their opening.
- **03** Then, fix the frame (6) upstream again (7) using the screws (5), locks (4) flat washers (3), lock washers (2) and nuts (1).

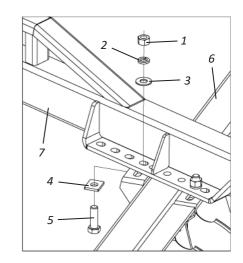
O IMPORTANT

To start the work we recommend using a medium opening in the disc sections. If you need more penetration, increase the opening angle of the rear section.

The front section generally does not operate with a larger opening than the rear section. The wheels also assist in disc depth control.

O NOTE

We advise you to control the working depth of the GTCR by opening the disc sections and use the tires only in places where the GTCR penetrates too much.



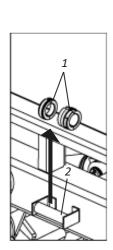


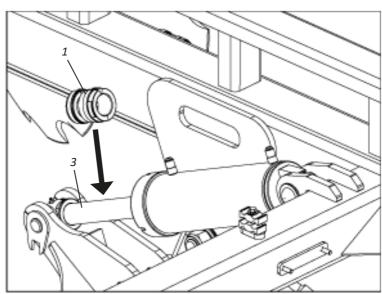
Regulations

• Working depth adjustment - Part I

To adjust the working depth through the tires, the limiting rings (1) that are placed on the rods of the hydraulic cylinders are used, obtaining numerous working depth regulations. To adjust the working depth, proceed as follows:

- 01 Remove the limiting rings (1) from the amount (2).
- **02** Then, actuate the rods of the hydraulic cylinders (3) of the wheel until the necessary measure.
- **03** Then, place the limiting rings (1) on the rods of the hydraulic cylinders (3) until the entire space between the coupling of the rod and the piston of the hydraulic cylinder (3) is filled.

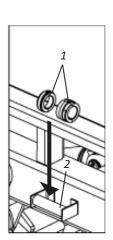


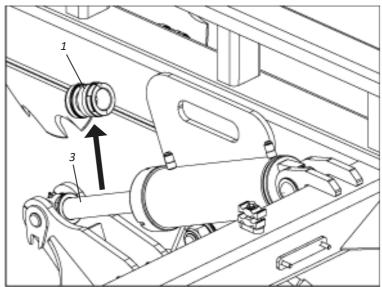




Regulations

- Working depth adjustment Part II
- **04** After finishing the work with the **GTCR**, remove the limiting rings (1) from the hydraulic cylinders (3) of the wheel and place them in the upright (2).





IMPORTANT

After adjustment, GTCR will always operate at the same depth, both in hard and loose terrain, this is because the limiting rings (1) are limiting the travel of the wheel's hydraulic cylinder (3), that is, preventing the wheels from oscillating.



The limit rings (1) that come with the GTCR, have different sizes that combined offer various depth regulations.

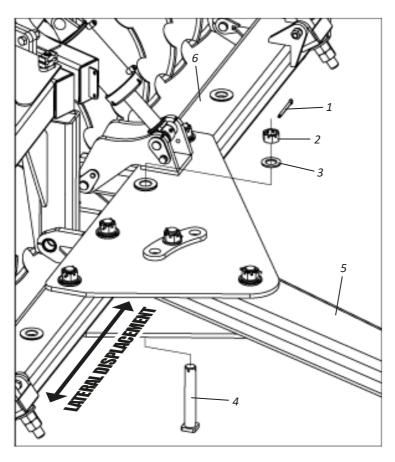


Regulations

• Disc Harrow Displacement adjustment - Part I

The displacement of the disc harrow must be done when the disc harrow is not giving a perfect finish, that is, leaving a trail of the tractor. For the disc harrow to work centrally with the tractor's traction line, proceed as follows:

- **01** Remove the cotter pins (1), loosen the castle nuts (2), flat washers (3) and remove the screw (4).
- 02 Then, move the coupling header (5) on the crossbar (6), making the ideal adjustment.
- 03 Finish by fixing the screws (4), flat washers (3), castle nuts (2) and cotter pins (1).

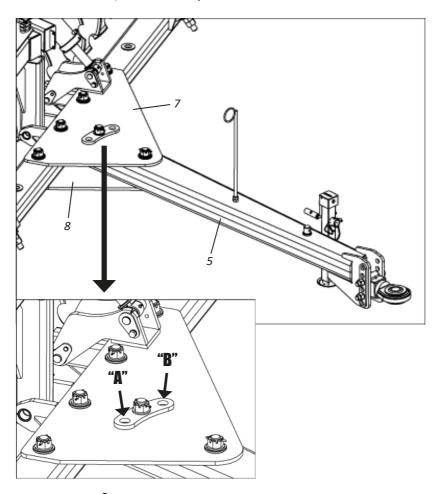




Regulations

• Disc Harrow Displacement adjustment - Part II

Under normal working conditions and during transport, the coupling header (5) must remain in the central hole of the upper (7) and lower (8) plates. When changing the coupling header (5) to the other holes "A" and "B", small lateral displacements of the GTCR are obtained.





The GTCR header and the tractor drawbar must be as aligned as possible with the working direction.

The tractor drawbar must remain loose during work and secure during transport.



Operations

• Recommendations for operation - Part I

The preparation of the **GTCR** and the tractor will save you time as well as a better result in field work. The following suggestions may be useful to you.

STRUCTURE

After the first day of work with the **GTCR**, retighten all screws, nuts and check the condition of the pins and locks of the grid structure. Then perform a general tightening on all the screws and nuts of the grid structure every 24 hours of work.

DISCS SECTION

Special attention to **GTCR** disc sections. Retighten all bolts and nuts on the disc sections daily during the first week of use. Then, retighten the bolts and nuts of the disc sections periodically.

GENERAL RECOMMENDATIONS

- **01** Adjust the tractor according to the contents of the instruction manual, always using the front and rear weights to stabilize the equipment.
- 02 Always do the coupling to the tractor at slow speed and with great care.
- **03** When using **GTCR** it is important to check the coupling and cross leveling system to make sure that the discs will have the same depth of penetration into the ground.
- 04 After coupling and leveling, the next Regulations will be made directly in the field of work, analyzing the terrain in its texture, humidity and the types of operations to be done with GTCR.
- **05** On the tractor, choose a gear that allows you to maintain a certain reserve of power, ensuring against unforeseen efforts.
- 06 Observe the working and transport speeds specified on page 10. We do not recommend exceeding speeds to maintain service efficiency and avoid possible damage to the GTCR.
- **07** When executing maneuvers at the headlands, first activate the hydraulic cylinders gradually, lifting the disk sections.
- **08** Do not disconnect any hoses without first relieving the pressure in the circuit. To do this, operate the control levers a few times with the engine off.
- 09 Remove sticks or any other object that may get caught in the discs.



Operations

- Recommendations for operation Part II
- 10 In compacted terrain where disc penetration is difficult, the depth can be minimal, making work unsatisfactory. In these cases, the application of other more suitable products is recommended.
- 11 During work or transportation, the tractor drawbar must remain fixed.
- **12** When performing any maintenance on the **GTCR**, it must be lowered to the ground and the engine turned off.
- **13 GTCR** has several Regulations, however, only local conditions can determine the best regulation.

In case of doubt, never operate or handle the GTCR, consult the After Sales. Telephone: 0800-152577 / E-mail: posvenda@baldan.com.br

Direction of maneuvers

During harrowing (with the discs on the ground), DO NOT maneuver to the right, as the angles formed by the disc sections will transmit great effort to the equipment, especially the traction components.



With the disk sections on the ground it is necessary to perform maneuvers on the left (closed side of the GTCR) avoiding overloads.



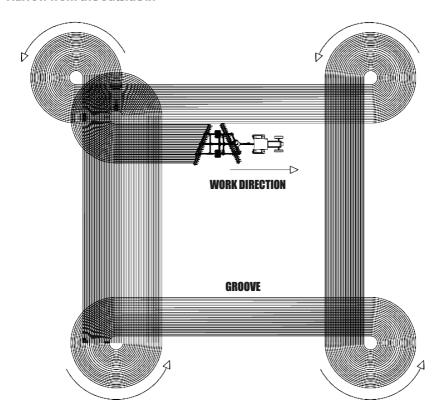
Operations

· How to start harrowing

When starting the railing, one must always follow the terraces or contour cord, starting the operation in the sense that the terrace is always on the left side of the tractor.

NOTE Before starting operations with the GTCR, check it completely, retightening all the screws, nuts, hose terminals, shafts and especially the disk sections.

Harrow from the outside in



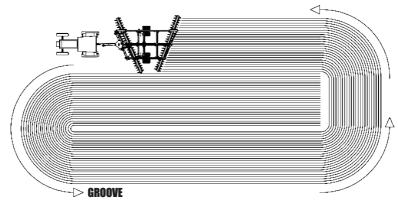
Try to drive the tractor in order to obtain a good performance between the steps of the GTCR. Avoid the formation of windrows or streaks without railing.



Operations

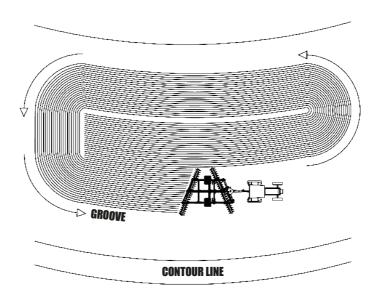
· Harrow from the inside out

In this direction, greater perfection is obtained. When walking on headers too much, you may want to start another block.



Blocks with contour lines

For terrains with contour line, it is usual to start with two blocks at a time, starting the work with the contour line on the left side of the tractor. When you reach the middle of the contour line, you may want to start another block to reduce fuel consumption.





Calculations

• Approximate hourly production

To calculate the approximate hourly output of **GTCR**, use the following formula:

$$A = \frac{L \times V \times I}{V}$$

WHERE:

A = Area to be worked

L = Working width of the harrow (in meters)

V = Average speed of the tractor (in meters/hour)

F = Production factor: 0.90

X = Value of the hectare: 10,000 m²

Example: A GTCR 34 disks, how much Ha it will produce in an hour of work at an average speed of 7 km / h.

 $A = 5,16 \times 7.000 \times 0,90 = 3,25 \text{ Ha/h}$

$$A = ?$$

L = 5,16 m

V = 7.000 m/h

F = 0.90

X = 10.000 m² (Calculated in hectare)

Model	Nr of Discs	Working Width (mm)	Average Speed (m/h)	Production Factor	Approximate Production in Hectare Hour
GTCR	34	5160	7.000	0,90	3,25
	36	5783	7.000	0,90	3,64
	40	6402	7.000	0,90	4,03

The formula for calculating the approximate production, refers to the calculation of areas to work or worked by **GTCR**. If you want to know the time it will take to work an area of known value, just divide the value of this area by the hourly production of **GTCR**.

Example: How much time "X" will it take for a 34-disc GTCR grid to produce 35 hectares, at an average speed of 7km / h?

$$X = 35 \text{ Ha} = 10,76 \text{ hours approximately to work } 35 \text{ hectares.}$$



The hourly production of GTCR can vary due to factors that change the rhythm of work such as (humidity and hardness of the soil, slope of the ground, inadequate regulations and speed of work).



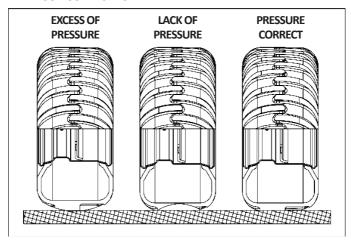
Maintenance

GTCR was developed to provide you with the maximum performance under terrain conditions. Experience has shown that periodic maintenance of certain parts of the **GTCR** is the best way to help you avoid problems, so we suggest checking.

Tires pressure

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

TYRE 400 X 60 14 LONAS



USE: 52 LBS/POL²

ATTENTION

Never weld the tire-mounted wheel, heat can cause an increase in air pressure and cause the tire to explode.

When inflating the tire, position yourself next to the tire, never in front of it.

When inflating the tire, always use a containment device (inflation cage).

Assembly the tires with suitable equipment. The service should only be performed by people trained for the job.



O NOTE

When inflating tires, do not exceed the recommended inflation.

The tire pressure of the tractor must be made according to the manufacturer's recommendation.



Maintenance

GTCR was developed to provide you with the maximum performance under terrain conditions. Experience has shown that periodic Maintenance of certain parts of the GTCR is the best way to help you avoid problems, so we suggest checking.

Lubrication

Lubrication is indispensable for good performance and longer durability of **GTCR** moving parts, contributing to savings in Maintenance costs.

Before starting the operation, carefully lubricate all grease fittings, always observing the lubrication intervals on the next page. Make sure the quality of the lubricant, as to its efficiency and purity, avoiding using products contaminated by water, earth and other agents.

Greases and equivalents table

Manufacturer	Types of grease recommended		
Petrobrás	Lubrax GMA-2		
Atlantic	Litholine MP 2		
Ipiranga	Ipiflex 2		
Castrol	LM 2		
Mobil	Grease MP		
Texaco	Marfak 2		
Shell	Alvania EP 2		
Esso	Multi H		
Bardahl	Maxlub APG-2EP		
Valvoline	Palladium MP-2		
	Tutela Jota MP 2 EP		
Petronas	Tutela Alfa 2K		
	Tutela KP 2K		

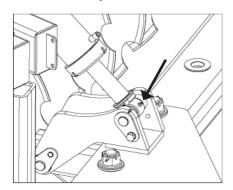


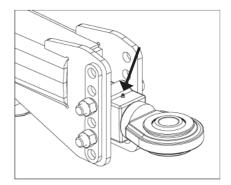
If there are manufacturers and / or equivalent brands that are not listed in the table, consult the manufacturer's technical manual.

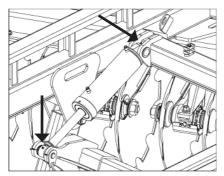


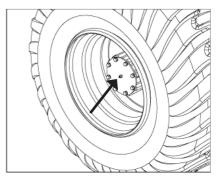
Maintenance

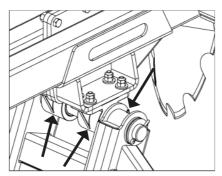
• Lubricate every 24 hours of work











ATTENTION

When lubricating the GTCR, do not exceed the amount of new grease. Enter a sufficient amount.

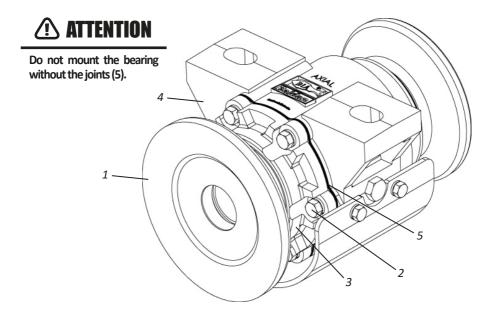


Maintenance

• Disc section bearings adjustments

When the disc section bearings have gaps, proceed as follows to adjust them:

- 01 Remove the washer (1).
- 02 Then, loosen the screws (2) and remove the cover (3) from the bearing (4).
- **03** Then, remove one or two gaskets (5) from the bearing cover (3) (4). Replace the cover (3) and retighten it.
- **04** If the gap persists, you can face the cover (3) to increase the adjustment, then mount it on the bearing with as many joints as necessary.
- 05 The bearing must rotate freely, that is, without looseness.



• Bearing oil

In the first days of working with GTCR, check the oil level of the bearings daily, then check every 120 hours of work.

The oil change must be done every 1200 hours of work. Use 90 API GL4 transmission oil, MIL-L-2105; SAEJ306, May / 81: SAE 80W, 90 and 140.



The ideal oil level is when it reaches the plug hole. To check the oil level of the bearing, look for a flat place.



Maintenance

• Operational Maintenance

PROBLEMS	PROBABLE CAUSES	SOLUTIONS	
The tires are	Work area with stones, stumps or crop remnants with stems that cause tire pitting.	Eliminate the elements that cause damage to the tires before the period of use of the GTCR.	
damaged.	The tires are not inflated, causing deformations.	Maintain adequate tire pressure.	
Strange noise	Loose wheels or wheel hub with game.	Retighten the wheel nuts and adjust wheel hub bearings.	
on wheels.	Bearing break.	Identify the occurrence and replace damaged parts.	
Quick coupling no adapts.	Couplings of different types.	Exchange them for males and females of the same type.	
Leak in	Thread sealant is missing.	Use thread sealant tape and carefully retighten.	
hoses hydraulic.	Insufficient tightening.	Retighten carefully.	
	Damaged repairs.	Replace terminals.	
Leak in	Insufficient tightening.	Retighten carefully without excess.	
quick couplings.	Damaged repairs.	Replace repairs.	
	Hitches of different brands.	Use quick couplings same brand.	
Quick couplings do not engage.	Mixing of needle type couplings with ball type couplings.	Always use quick couplings of the same type.	
	System pressure.	Relieve pressure to do the hitch.	



Maintenance

- Care
- **01** Before each job, check the condition of all hoses, pins, screws, bearings, discs and sections. When necessary, retighten them.
- 02 The speed of travel must be carefully controlled according to the conditions of the terrain.
- 03 GTCR is used in several applications, requiring knowledge and attention during handling.
- 04 Only local conditions can determine the best way to operate the GTCR.
- **05** When assembling or disassembling any part of the **GTCR**, employ suitable methods and tools.
- **06** Observe the lubrication intervals carefully at the different **GTCR** lubrication points. Observe the lubrication intervals.
- **07** Always check if the parts show wear. If replacement is required, always require original Baldan parts.
- 08 Always keep GTCR discs sharp.



Adequate and periodic Maintenance is necessary to ensure the long life of GTCR.

Maintenance

- General cleaning
- 01 When storing the GTCR, do a general cleaning and wash it thoroughly with water only. Check that the paint has not worn out, if it has, apply a general coat, apply protective oil and lubricate the GTCR completely. Do not use burnt oil or any other type of abrasive.
- 02 Lubricate the GTCR fully. Check all the moving parts of GTCR, if they show wear or looseness, make the necessary adjustment or replacement of the parts, leaving the grid ready for the next job.
- **03** After all Maintenance care, store the grid in a covered and dry place, properly supported.

Avoid: - The discs are directly in contact with the ground.

- Compression of springs.
- That the hydraulic hoses are properly plugged.



Maintenance

- General cleaning
- 04 When connecting or disconnecting hydraulic hoses, do not allow the ends to touch the ground. Before connecting the hydraulic hoses, clean the connections with a clean, lint-free cloth. Do not use burlap!
- 05 Replace all stickers, especially warning ones that are damaged or missing. Make everyone aware of their importance and the dangers of accidents when instructions are not followed.
- 06 After all Maintenance care, store your GTCR on a flat surface, covered and dry, away from animals and children.
- 07 We recommend washing the GTCR with water only at the beginning of the work.



ATTENTION Do not use chemicals or abrasives to wash the GTCR, as this may damage the paint and adhesives.

Disc harrow conservation - Part I

To extend the life and appearance of the GTCR for longer, follow the instructions below:

- 01 Wash and clean all components of the grid during and at the end of the work season.
- 02 Use neutral products to clean the grid, following the safety and handling guidelines provided by the manufacturer.
- 03 Always carry out maintenance during the periods indicated in this manual.
 - Disc harrow conservation Part II

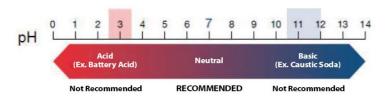
The practices and care below if adopted by the owner or operator make a difference to GTCR conservation:

- 01 Be careful when washing with high pressure; do not direct the water jet directly at the connectors and electrical components. Isolate all electrical components;
- 02 Use only water and NEUTRAL detergent (pH equal to 7);
- 03 Apply the product, strictly following the manufacturer's instructions, on the wet surface and in the correct sequence, respecting the application and washing time;
- 04 Stains and dirt not removed with the products, must be removed with the help of a sponge.
- 05 Rinse the machine with clean water to remove all chemical residues.



Maintenance

- 06 Do not use: Detergents with basic active ingredient (pH greater than 7), can damage / stain the paint on the grid.
 - Detergents with an acid active ingredient (pH less than 7), act as a paint stripper / zinc remover (protection of parts against oxidation).



- 07 Allow the machine to dry in the shade, so that water does not accumulate in its components. Too fast drying can cause stains on your paint.
- 08 After drying, lubricate all chains and grease fittings according to the recommendations in the operator's manual.
- 09 Spray the entire machine, especially the galvanized parts, with protective oil, following the manufacturer's application guidelines. The protector also prevents dirt from adhering to the machine, facilitating later washing.
- 10 Observe the curing time (absorption) and application intervals as recommended by the manufacturer.

Do not use any other type of oil to protect the grill (used hydraulic oil, "burnt" oil, diesel oil, castor oil, kerosene, etc.).

We recommend the following protective oils: - Bardahl: Agro protetivo 200 or 300 - ITWChemical: Zoxol DW - Série 4000

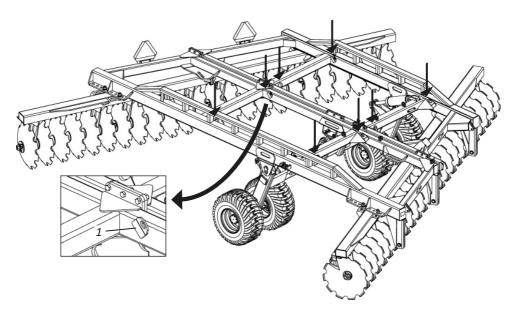
Ignoring the conservation measures mentioned above may result in the loss of warranty for painted or zinc plated components that may present oxidation



Lifting

Lifting points

GTCR has several lifting points located in the uprights. When assembling or maintaining the **GTCR**, if you have to hoist with a winch, it is essential to engage the chains at the lifting points.



Optional

• Cutting disc

GTCR can be optionally purchased with 30 ", 32" or 34 "cutting discs.



NOTCHED DISC



Identification

• Identification plate

To see the parts catalog or to request technical assistance from Baldan, always inform model (01), serial number (02) and date of manufacture (03), which is on your **GTCR** nameplate.



ATTENTION

The drawings in this Instruction Manual are merely illustrative.



In case of doubts, never operate or handle your equipment without referring to Post-Sales.

Telephone: 0800-152577

e-mail: posvenda@baldan.com.br

PUBLICATIONS

Code: 53850104901 | CPT: GTCR344013319A







Identification

Product Identification

Please make the correct identification of the data below, to always have information about the service life of your equipment.

Owner:
Dealer:
Property:
City:
State:
Certificate of Warranty no.:
Implement:
Serial No:
Purchase Date:
Invoice:



<u>Notes</u>





• Notes	



BALDAN IMPLEMENTOS AGRÍCOLAS S/A ensures the dealer normal performance of the implement for a period of six (6) months as of the delivery date on the retail invoice to the first final consumer. During this period, BALDAN undertakes to repair defects in material and/or of manufacture of its liability, including labor, freight and other expenses of the dealer's liability.

In the warranty period, request and replacement of eventual defective parts shall be made to the dealer of the area, who will submit the faulty piece for **BALDAN** analysis. When this procedure is not possible and the resolving capacity of the dealer is exhausted, the dealer will request the support of **BALDAN Technical Assistance** through a specific form distributed to dealers. After analyzing the replaced items by Baldan Technical Assistance, and concluding that it is not a warranty, then the dealer will be responsible for the costs related to the replacement; as well as material expenses, travel including accommodation and meals, accessories, lubricant used and other expenses arising from the call out to Technical Assistance, and Baldan company is authorized to carry the respective invoice in the name of the resale. Any repair carried in the product within the dealer warranty deadline will only be authorized by **BALDAN** upon previous budget presentation describing parts and work to be performed.

The product is excluded from this term if it is repaired or modified by representatives not belonging to the **BALDAN** dealer network, as well as the application of non-genuine parts or components to the user's product. This warranty is void where it is found that the defect or damage is caused by improper use of the product, failure to follow instructions or inexperience of the operator.

It is agreed that this warranty does not cover tires, polyethylene tanks, cardan, hydraulic components, etc., which are equipment guaranteed by their manufacturers. Manufacturing and/or material defects, object of this warranty term, will not constitute, under any circumstances, grounds for termination of a purchase agreement, or for indemnification of any nature.

BALDAN reserves the right to change and/or perfect the technical characteristics of its products, without previous notice, and without obligation to proceed in the same way with the products previously manufactured.



Inspection and Delivery Certificate

SERVICE BEFORE DELIVERY: This implement was carefully prepared by the sale organization, with all its parts inspected according to the manufacturing prescriptions.

DELIVERY SERVICE: The user was informed about the current warranty terms and instructed on the usage maintenance precautions.

I confirm that the user has been informed about the current warranty terms and instructed on the usage maintenance precautions.

Implement:	Serial Number:
Date:	Tax Number:
Dealer:	
Telephone:	CEP:
City:	State:
Owner:	
Telephone:	
Address:	Number:
City:	State:
E-mail:	
Sale date:	
Signature / Dealer Stamp	



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Implement:	Serial Number:
Date:	Tax Number:
Dealer:	
Telephone:	CEP:
City:	State:
Owner:	
Telephone:	
Address:	Number:
City:	State:
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Date:	_ Tax Number:	
Dealer:		
Telephone:	_ CEP:	
City:	State:	
Owner:		
Telephone:		
Address:	Number:	
City:	State:	
E-mail:		
Sale date:		
Signature / Dealer Stamp		

3rd copy - Manufacturer (Please send completed within 15 days).

1.74.05.0059-5

AC MATÃO ECT/DR/SP

RESPONSE CARD

NO STAMPING IS REQUIRED

THE STAMP WILL BE PAID BY:



BALDAN IMPLEMENTOS AGRÍCOLAS S/A.

Av. Baldan, 1500 | Nova Matão | CEP: 15993-900 | Matão-SP. | Brasil Tel: (16) 3221-6500 | Fax: (16) 3382-6500 www.baldan.com.br | email: sac@baldan.com.br | Export: Tel: +55 (16) 3221-6500 | Fax: +55 (16) 3382-4212 | 3382-2480 email: export@baldan.com.br



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