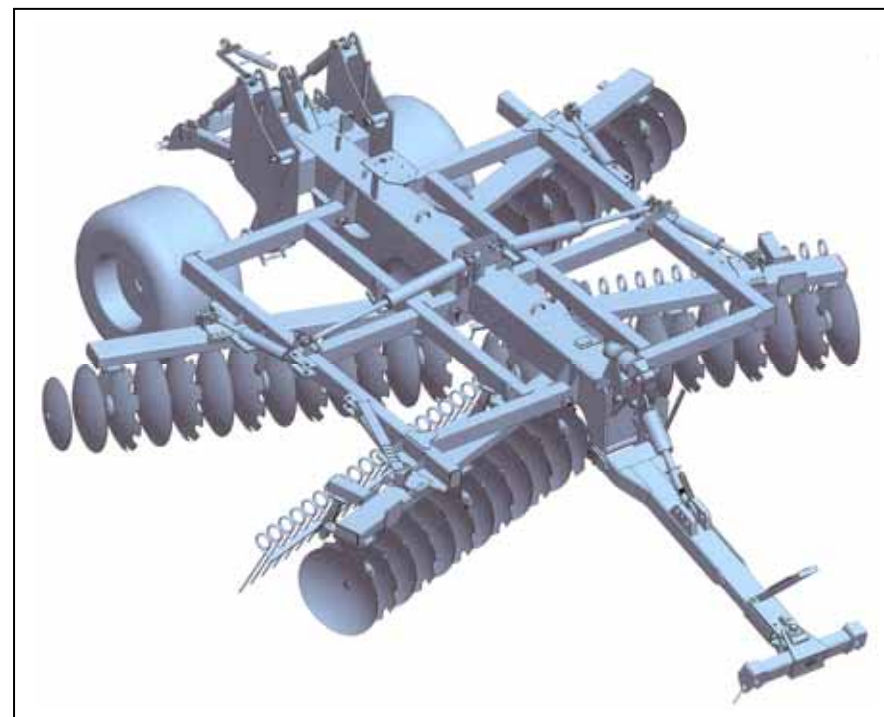


XRV PROFIL N°2

OPERATOR' MANUAL 2005



49230 MONTFAUCON-MONTIGNE / FRANCE

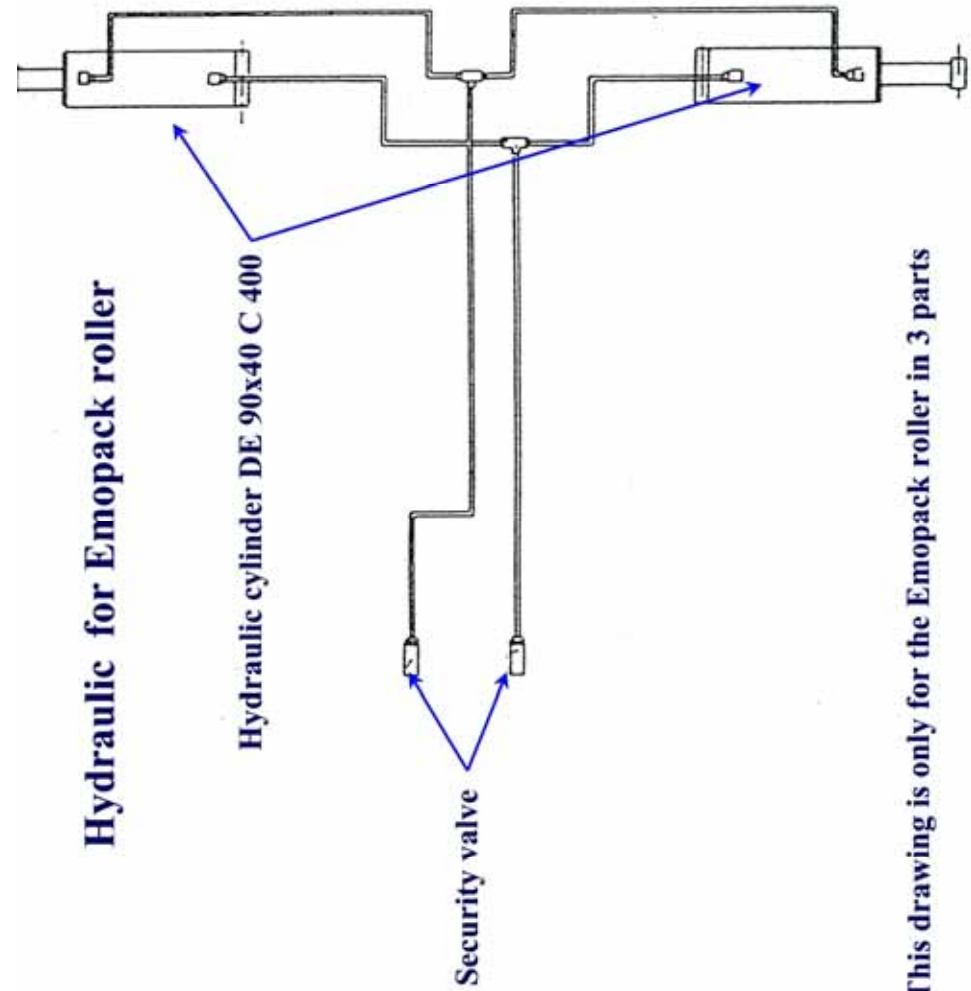
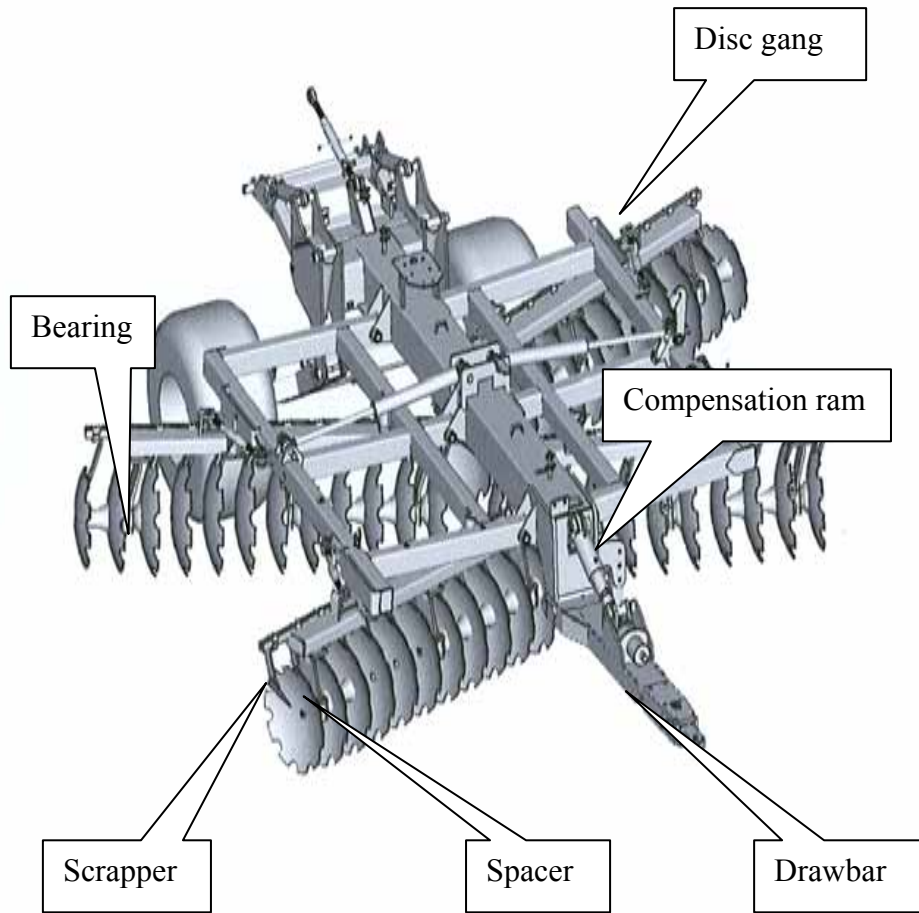
TEL. (+33) 2 41 64 72 67 - FAX (+33) 2 41 64 67 73

Email : Contactfr@gregoire-besson.fr

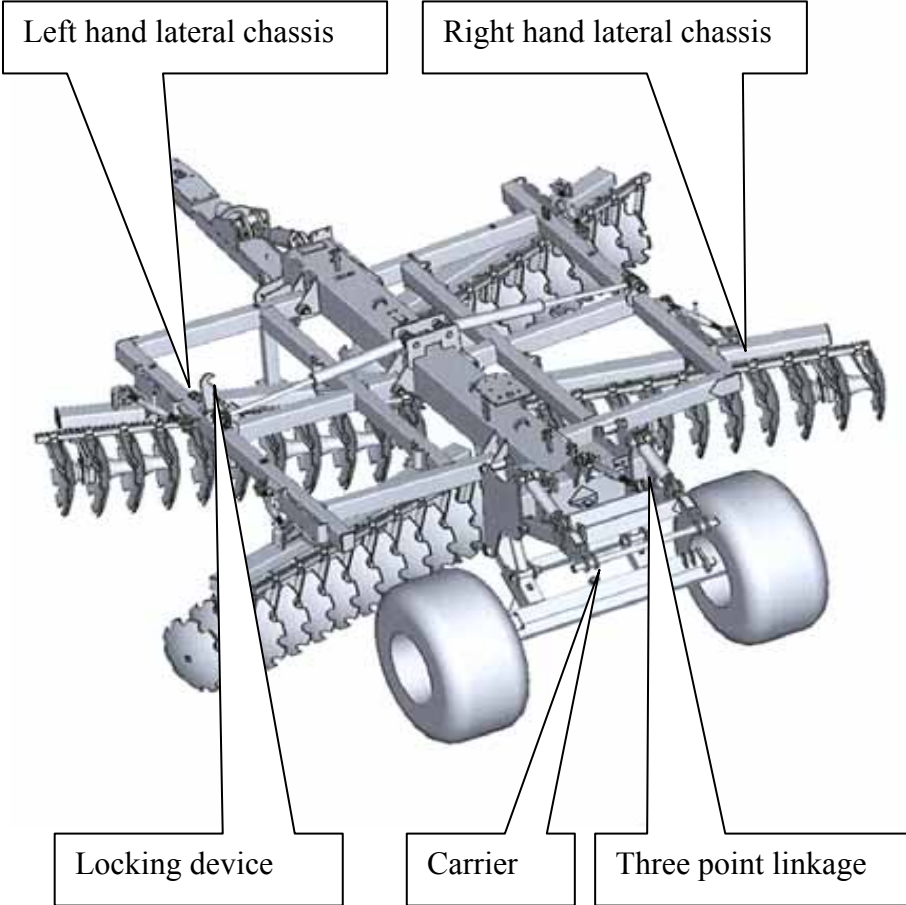
Web : www.gregoire-besson.fr



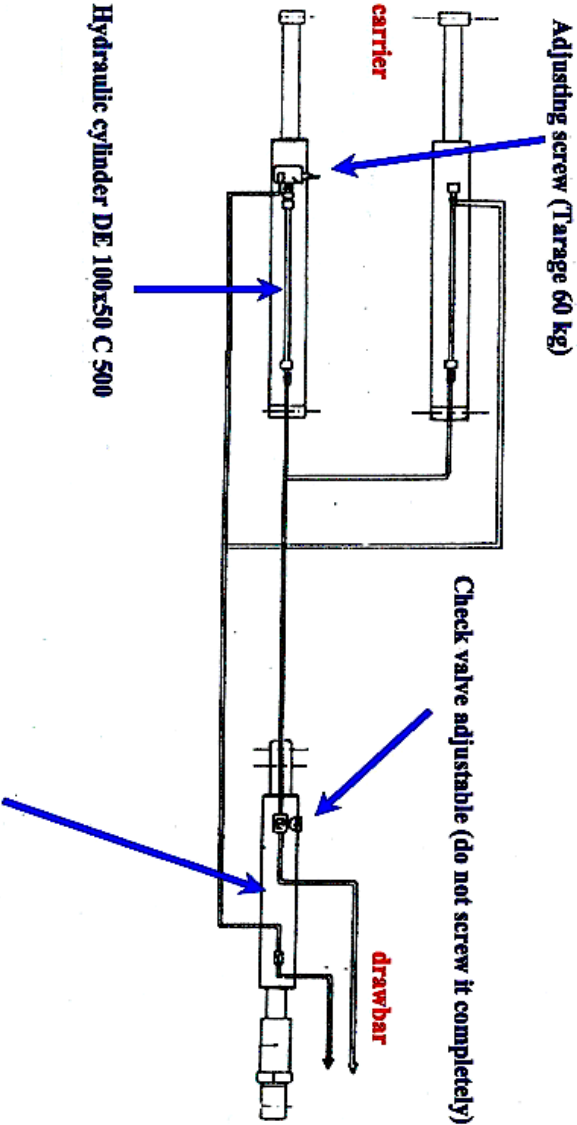
**IDENTIFICATION OF THE IMPLEMENTS
FRONT VUE**



IDENTIFICATION OF THE IMPLEMENTS REAR VUE



HYDRAULIC FOR CARRIER AND DRAWBAR.



SAFETY INSTRUCTIONS :

Warning:



The XRV Profil "GREGOIRE-BESSON" has been designed and manufactured to be used only for usual agricultural works.

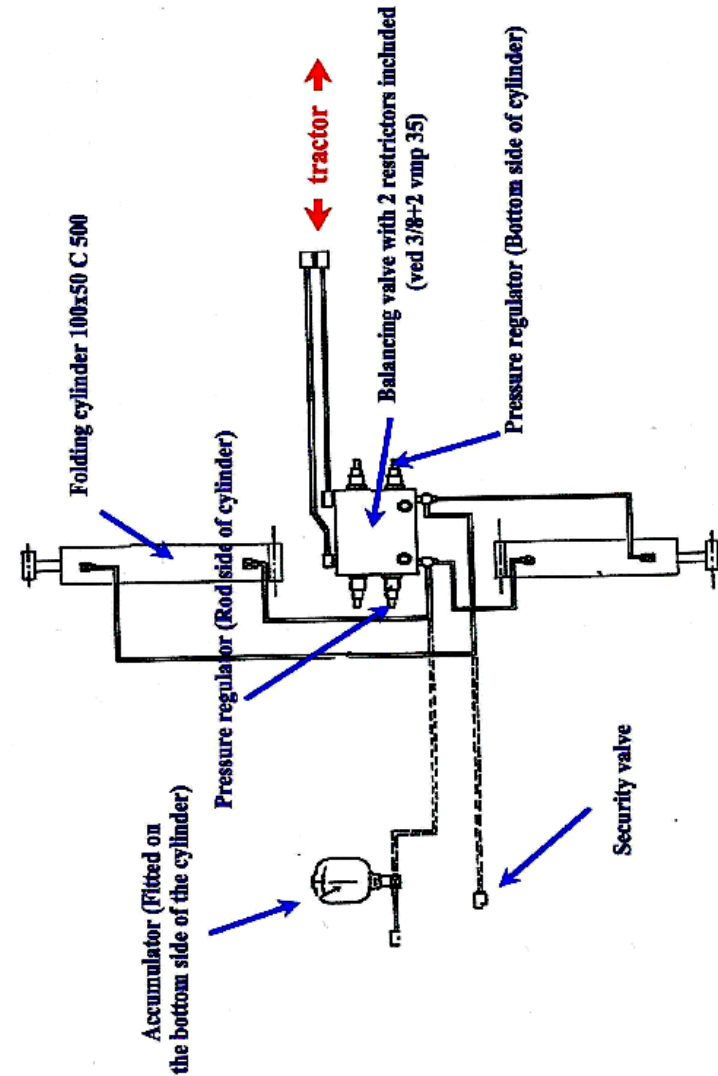
A : ADJUSTMENTS :

- * Never carry out adjustments and maintenance work, when the disc is in operation..
- * Wear appropriate safety clothes when doing maintenance work.
- * Ensure a safety area around the disc.
- * Do not carry out any adjustments and maintenance work without perfectly understanding the procedures.
- * Use the appropriate tools and equipments.

RECOMMANDATIONS

- * Get used to the disc harrow functioning and disc harrow controls. Do not let anybody use the disc without previous training.
- * Only the operator is allowed to be in the tractor cab. He can not leave his seat during is working.
- * Nobody is allowed to be on the implements during the work..
- * In case of unfolding the disc gangs and the roller, be sure that there is nobody standing in the turnover area of the implements. Operate the folding system only from the cab of the tractor.

Hydraulic for folding system



MAINTENANCE

General joints of the different machines need a regular maintenance.

Grease the general moving device every 14 hours.

The bearings of the disc gangs will be greased every day, according to the use frequency. (Do not grease in an intensive way ; a few grease gun pumps are sufficient).

Use a grease recommended for ball bearings. When the soil is abrasive and sandy, greasings can be carried out more frequent.

Check the pressure and the tightening of the wheels which equip the wheeled carriage.

In case of dismantling of a complete disc gang with carrying tube, steady it correctly before taking it apart from the chassis.

Before loosening the disc gang, remove the breaking nut. Note the assembling order.

When you reassemble discs, bearings, spacers and ½ spacers, check that the support sides on the discs are correct.

Grease the worm and the inner side of the nut. Tighten the nut at the end of the shaft with a power of about 150 Kg/m.

During maintenance, be sure that the safety instructions are respected. Maintenance area must be clean, dry and well lighted.

In case of intervention or unmaking of a disc gang with lifted machine, do systematically a shoring by means of holders.

- * All the articulation and greasing points must be greased at regular intervals with quality grease.
- * Check regularly tightening of nuts and bolts.
- * Keep a correct tyre inflation pressure. Do not exceed recommended inflation pressure.

WHEEL 15 R 22.5	→ 6.0 bars
WHEEL 500x45-22.5	→ 3.3 bars
WHEEL 600x50-22.5	→ 2.7 bars
WHEEL 11.5-80x15.3	→ 4.6 bars

WARNING

Explosion of the tyre with rim can provoke serious injuries. Only experienced people are allowed to repair tyres and rims with the appropriate tools.

- * Always use original genuines parts..

NB : These wheels are only fitted from 56 discs.

Grease all moving parts every 14 hours of operation.

The disc bearings must be greased daily. Do not over grease, a few pumps of the grease gun are sufficient).

Use grease recommended for ball bearing. On abrasive or sandy soils, greasing intervals should be reduced.

Check tyre pressures in addition to wheels nuts.

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If removing a disc gang, complete with its supporting beam, wedge the latter before releasing from the frame.

When reassembling the disc gangs, bearings, bobbins, ensure that the mating faces are correctly positioned.

Grease the thread as well as the nut. Tighten the nut with a bar to a torque of approximately 150 kg /M.

**THE GOOD MAINTENANCE OF YOUR IMPLEMENTS
GUARANTEES ITS LONG LIFE**

- * If the disc is unused after the season, clean it carefully to prevent from every risk of corrosion and dampness.
- * If necessary, carry out paint touching up
- * Check, if there is some worn or broken parts, and place an order, to be sure to have your implements ready for the next season.
- * Park your disc under cover .
- *



d) Hydraulic fittings

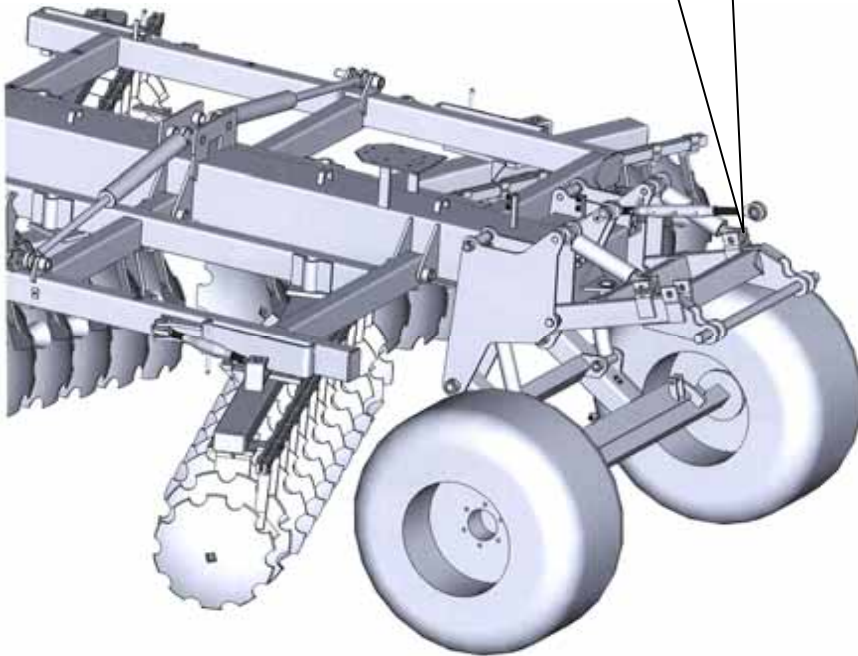
The hydraulic connections are subjected to high pressures.

- * When the disc is equipped with several plugs, be sure to put them right.
- * Before plugging a push-pull, be sure that the pressure is null from the tractor valves..
- * If a hose is damaged don't hesitate to replace it..
- * Never search a leak of oil with your finger. Leaking fluids and especially oil can provoke some very serious injuries.
- * In case of an intervention on the hydraulic system, bring the implement in contact with the ground; stop the pressure by switching off the engine and then acting the spool valve.

ADVICES TO SET UP CORRECTLY YOUR DISC HARROWS

<i>PROBLEMS</i>	<i>ORIGIN</i>	<i>SOLUTIONS</i>
<i>Working depth insufficient</i>	<i>Not enough angling</i> <i>The depth wheels are touching the ground, or the rear roller is too low.</i>	<i>Increase the angling</i> <i>Lift the wheels or the roller.</i>
<i>Working depth too deep</i>	<i>To much angling</i> <i>The wheels or the rear roller are too high</i>	<i>Put the wheels or the roller down.</i> <i>Reduce the angling.</i>
<i>Stuffing of the disc gangs.</i>	<i>Scrappers not correctly adjusted.</i> <i>Working conditions not suitable</i>	<i>Adjust the scrappers.</i> <i>Reduce the angling.</i>

*Three point linkage
Hydraulic version in option*



e : Transport on the road

Before folding the implement, be sure that nobody is on the machine. **16** ing area.

- * Drive at a reasonable speed in conformity with the road legislation, and in any case be sure to control the tractor and the disc in all configuration.
- * Do not drive when somebody is standing near the tractor or the disc harrows.
- * Comply with all the safety rules when driving on bends or narrow roads.
- * During transport, the machine must be fitted with warning lights, which have to be removed during work to prevent them from any damage.
- * Take all the precautionary measures when you leave the tractor : stopped motor, removed ignition key, put the parking break in case of.
- * During transport nobody is allowed to climb on the disc or between the tractor and the machine.
- * Check regularly the hitch on the disc and the tractor.

HITCHING TO THE TRACTOR

- Ensure that all hydraulic couplings are clean before connecting the spool valves.
- Checked that the hydraulic hoses are fitted correctly :

Yellow : Hydraulic folding for disc gangs.

Red : Hydraulic for drawbar and carriage wheel.

No colour : Hydraulic to control the rear roller to control the depth..

- Fix the roller ball in the tractor arms, or in the tractor hook, when the disc harrow is equipped with a turning ring.
- Be sure that the length of the 2 tractor arms are identical.
- Lift the disc, and lift the support leg to his highest position level.
- Put the support leg in working position (up).
- Unfold the 2 disc gangs, until to have the discs touching the ground.
- During the work, the drawbar has to go a little bit up. You can adjust his orientation by manoeuvring the turnbuckle T, which is fitted between the chassis and the drawbar. The châssis must be parallel to the ground. In transport the disc is equipped, with 2 locking kits which will secure automatically the disc gangs and the roller in vertical position.

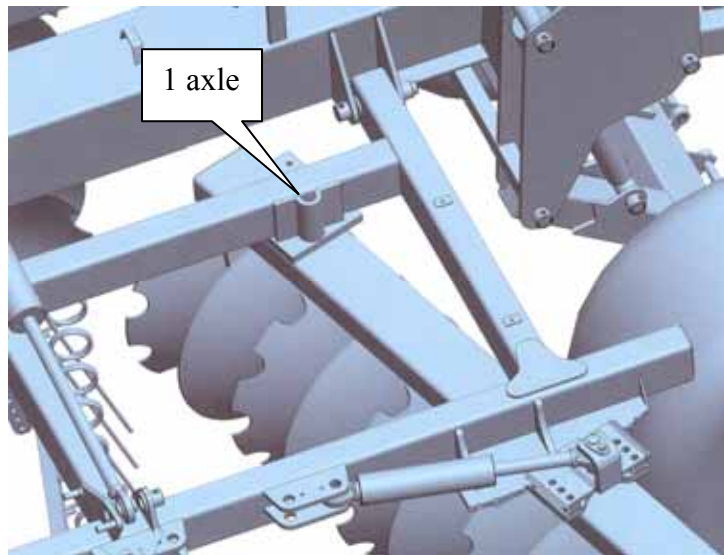
DISC GANGS ASSEMBLY

Warning : This operation is dangerous due to the fact of the weight of the disc gangs, between 350 to 1000 kg depending of the model, and also because of the difficulties to fix the disc gangs. This operation is requiring some people qualified for such intervention.

A telescopic handler or a crane, are required to lift the disc gangs. Be sure that the weight of the disc gangs will not exceed the lifting capacity of the crane or the telescopic handler.

The disc gangs are fitted on the 2 lateral chassis by using 1 axle.

The spanner to tight the nuts is fitted on the drawbar.



The rear three point can be equipped with 2 hydraulic rams in option. With this option it is possible to modify the pressure of the packer roller during the work.

A indicator placed in front of the three point linkage give to the driver the working depth of the implement.

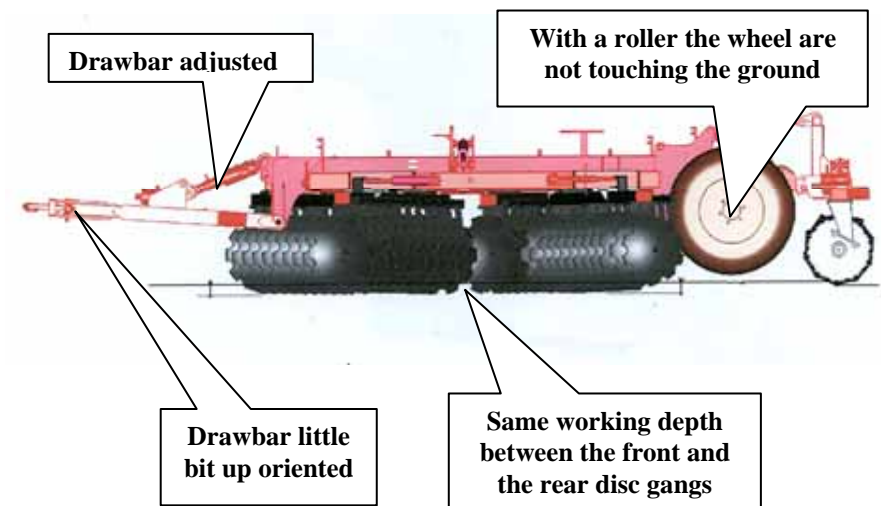
To obtain a perfect job it is important to follow the advices which are following :

Adjust the angling of the disc gangs in function of the soil conditions. In hard conditions it is better to open the angle.

In case of a small hill in the centre before the pass of the roller, reduce the angling of the rear disc gang.

It's important to have the disc harrow parallel to the soil. Same working depth between the front and the rear disc gangs. To obtain the good setting it's important to adjust the turnbuckle fitted on the drawbar, but also to adjust correctly the three point of the rear roller.

In case of rear roller in three parts, it is important to check if the 3 rollers are working equally, if it is not the case you can adjust the pressure from the hydraulic check valve fitted at the front of the disc. Tight the small screw, without blocking it, to keep the implement horizontally during the work.



NB : These wheels are only fitted from 56 discs
The 2 wheel supports are bolted on each sides on the 2 lateral chassis.

The wheels keep a constant working depth depending of the relief. The adjustment is operated by a manual turnbuckle (T) placed on the top of the support. To increase the working depth, reduce the length by turning the turnbuckle. Opposite manoeuvre to reduce the working depth.

To obtain a good finishing it is important to have the same adjustments on both sides.

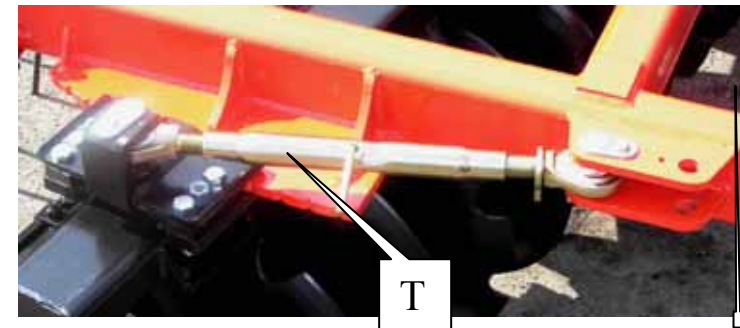


This adjustment depends of the soil conditions and the working width.

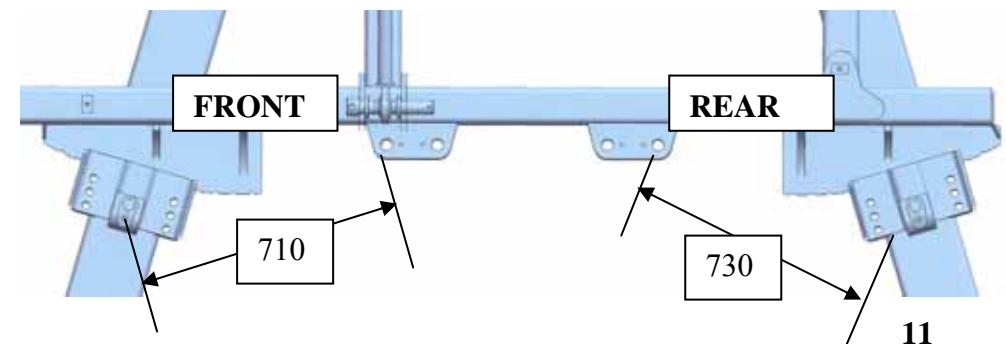
Increasing the angle, will increase the aggressivity of the discs by reducing the distance between the rear tyres of the tractor and the disc gangs. It is better to increase the angle in heavy soil, and reduce it in light conditions.

A good compromise is necessary between the rear and front disc gangs. If in the central part, there is a small hill, you will have to reduce the angling of the rear disc gang, and by opposition if the disc is making a small hole, increase the angling (Opposite way of the front disc gang).

To modify the angle : Screw or unscrew the adjusting drawbar rod T



ANGLING ADJUSTMENTS



TRANSPORT POSITION :

Important : When you are operating the folding or unfolding, be sure that nobody is in the manoeuvring area.

Use the distributor linked with the yellow hydraulic hoses. Push the distributor until the 2 disc gangs (eventually the 2 roller gangs) are locked together in vertical position.

To go from the transport position to the working position, pull you distributor in the opposite way. The locking system will be unlocked automatically.

