

CU3001 - CU3001P

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

Operator's manual

Translation of original manual

Edition	06.2020
Date of print	09.2020
Language	EN
Machine number	VPUCUCA14LGP20221
From	VPUCUCH14LGV20204
Model	Rigid/Folding
Document number	A135769140.EN-NA

kverneland group

Machine identification

In order to provide any assistance which you may need, your dealer needs to know certain information about your machine. Please provide this information below.

Designation	CU3001 - CU3001P
Working width	
Weight	
Serial number	VPUCUCA14LGP20221 - Rigid VPUCUCH14LGV20204 - Folding
Accessories	
Manufacturer address	
Manufacturer address	Kverneland Group Les Landes-Genusson S.A.S. 9 Rue du Poitou FR-85130 LES LANDES-GENUSSON Tel.: +33 (0)2 51 64 13 00 Fax: +33 (0)2 51 91 61 25

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Table of contents

Preliminary information 4
Onboard documents 4
Other applicable documents 5

Introduction 6
Who should read this operator's manual? 6
Meaning of symbols 6

Safety 7
For your safety 7
The DANGER, WARNING and CAUTION safety stickers 8
Safety rules 21
Other instructions 27

Presentation of the machine 28
Field of application 28
Usage clause 28
General Description 29
Technical specifications 30
Roller variants 35
Other optional equipment [+] 36
Deflector distribution 39
Optional configurations 44

Receipt and assembly 54
Inspection on receipt 54
Mounting the rear accessory [+] 54
Rear accessory configurations 55
Repositioning the rollers 64

Hitching 65
Hitching rigid machines 66
Hitching folding machines 66

Transport 67
Safety 67
Respect the transportation width 68
Lighting and signalling 68

Adjustments 69
Flexibility 69
Adjustment of working depth: 70
Adjusting the edging disc levellers 72
Adjustment of rear accessories 73
Rollers 78
Actiflex roller 80
Actipress Twin roller 81
Checking the rocker arm rotation 81

Unhitching 83
Safety instructions 83
Storage in unfolded position 83
Storage in folded position 83

Maintenance 84

intenance 85
Cleaning 85
85
Maintenance 85
Storage 85

Maintenance 86
For your safety 86
General 88
Greasing 89
Location of the wear rings 91
Checks and corrections 94
Levelling element wear 97
Levelling wear 98
Levelling wear 98
Replacing the tines 99
Coulter wear 101
Distributing plough points 103
Replacement of the hydraulic system parts 104

Hydraulic diagrams 105
Hydraulic unit 105

Warranty 108

Scrapping the machine 109
Metal parts 109
Tyres 109
Hydraulic fluid 109

Declaration of conformity 110
In accordance with Directive 2006/42/EC 110

Index 111

Onboard documents

The machine user manual is stored in the waterproof tubular document box fitted on the machine, generally near the coupling point.

After reading the document, put it back in the box.

This user manual is also available via
https://www.kvgportal.com/publicquest/

Other applicable documents

The machine documentation consists of this user manual, together with other documents:

Name	Description
Spare parts catalogue	Complete list of all spare parts available in the KVERNELAND GROUP after-sales service network. Online catalogue corresponding to the machine, available via **https://www.kvgportal.com/publicquest/**

Who should read this operator's manual?

This user's manual is aimed at farmers and individuals trained and certified in activities in the field of agriculture who have received training in use of this machine.

Safety note for the user
Familiarize yourself with the contents of this user's manual before starting to apply it or climbing on the machine. Performance and user safety both depend on it.

Note for the manager:
All personnel are to be regularly trained in the use of this machine. No person without the proper training or authorization is allowed to use this machine.

Instructions

The dealer provides the user with instructions related to the use and maintenance of the machine.

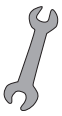
Meaning of symbols

Various symbols are used to provide added clarity. Their meanings are as follows:

- A dot is followed by a list
- ▸ A triangle precedes operations to be carried out.
- → An arrow refers back to other passages in the text.

Also, pictograms clearly indicate important instructions:

NOTE The term "Note" indicates advice and comments regarding use.



A key indicates advice on fitting or adjustment work.

X This sign indicates examples to assist with comprehension.

[+] A plus sign in square brackets indicates optional equipment.

Proposition 65 from the State of California

⚠ WARNING

Exhaust gases from the motor, some of its components, some of this machine's components and fluids contain or emit chemical compounds known in the State of California to be carcinogens, or the cause of congenital deformities and other reproductive disorders.

For your safety

This section contains general safety information. The various chapters in this user's manual include specific safety instructions.
Be sure to comply with all safety guidelines

- in the interest of your own safety,
- in the interest of the safety of others,
- to ensure the safety of the machine.

When handling agricultural machines, failure to follow instructions can result in multiple hazards. Therefore, always work with special care and never under pressure.

Note for the manager:
As required by law, you should regularly inform those working on the machine of the existence of safety instructions.

SAFETY PRIORITY

The “Safety priority” symbol is used in this manual and on the pictograms placed on the machine in order to warn the user of the presence of a risk of bodily injury. Read these instructions closely. It is essential that you read these instructions and the safety guidelines before assembling or using the machine.

DANGER

The warning term DANGER warning indicates an extremely hazardous situation, which if not avoided will lead to death or serious injury.

WARNING

The warning term WARNING indicates a potentially hazardous situation, which if not avoided could lead to death or serious injury. The hazards identified by the term WARNING present a lower risk of death or injury than those associated with the term DANGER.

CAUTION

The warning term CAUTION indicates a potentially hazardous situation, which if not avoided could lead to more minor or moderate injuries. The term CAUTION may also be used as a means of notification against hazardous practices, which in certain situations can cause injury.

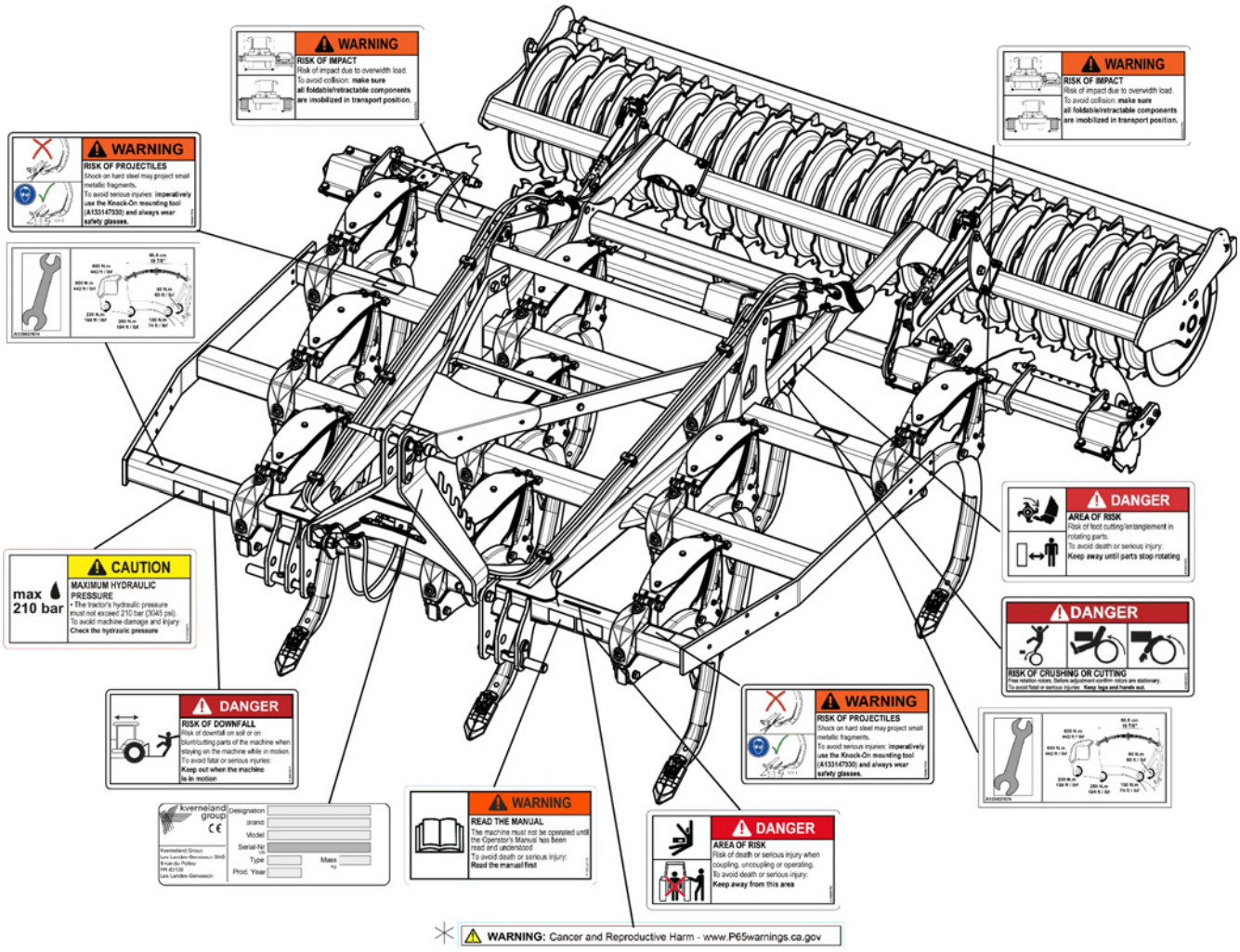
NOTE

This symbol indicates the presence of technical and operational information regarding personal safety around the machine.

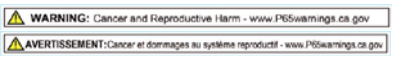
The DANGER, WARNING and CAUTION safety stickers

To ensure user safety, stickers are applied to the machine. Do not remove these stickers.
When the stickers become illegible or when they lose their adhesion, order new ones and place them in the corresponding places.

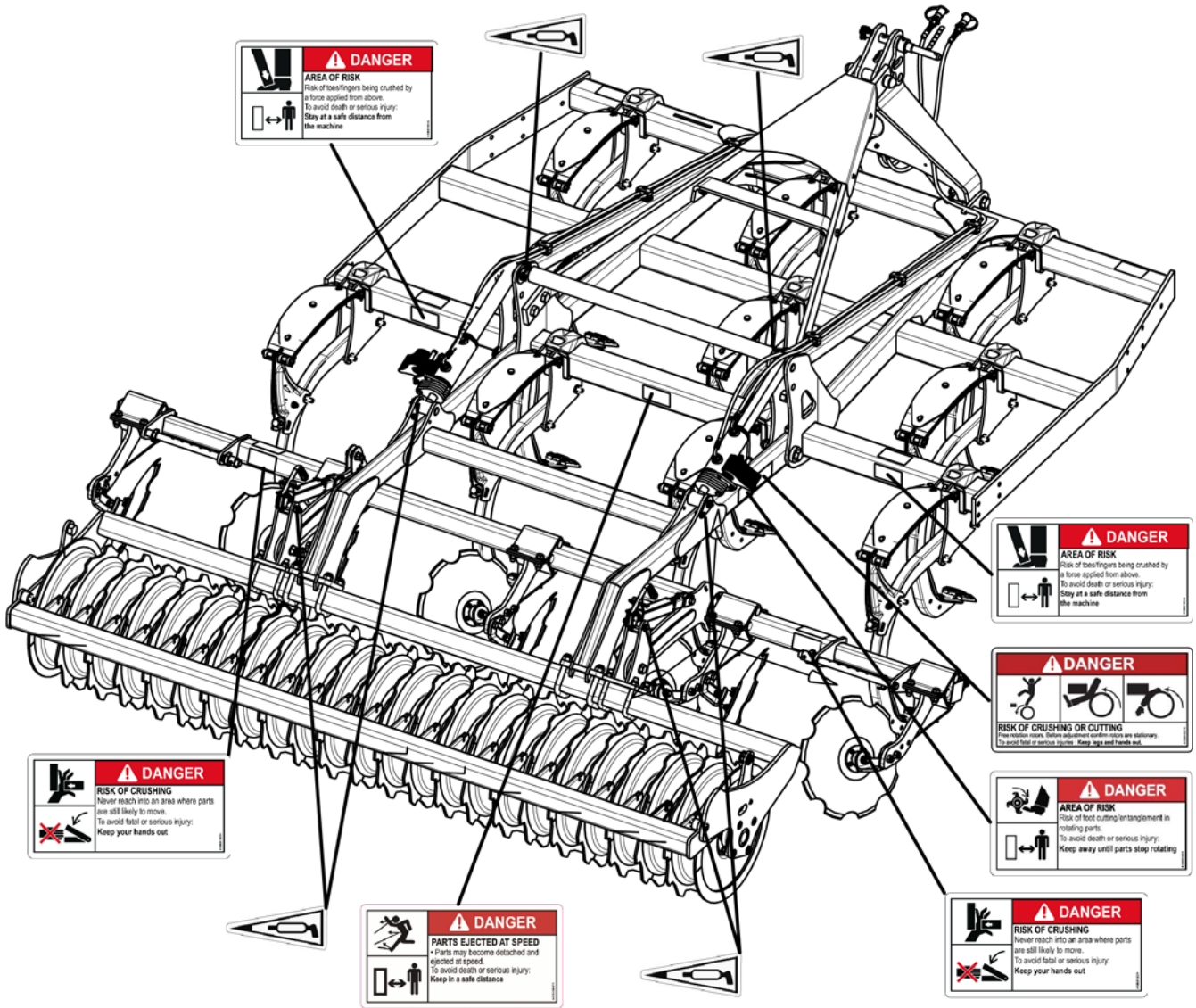
RIGID machine - Front



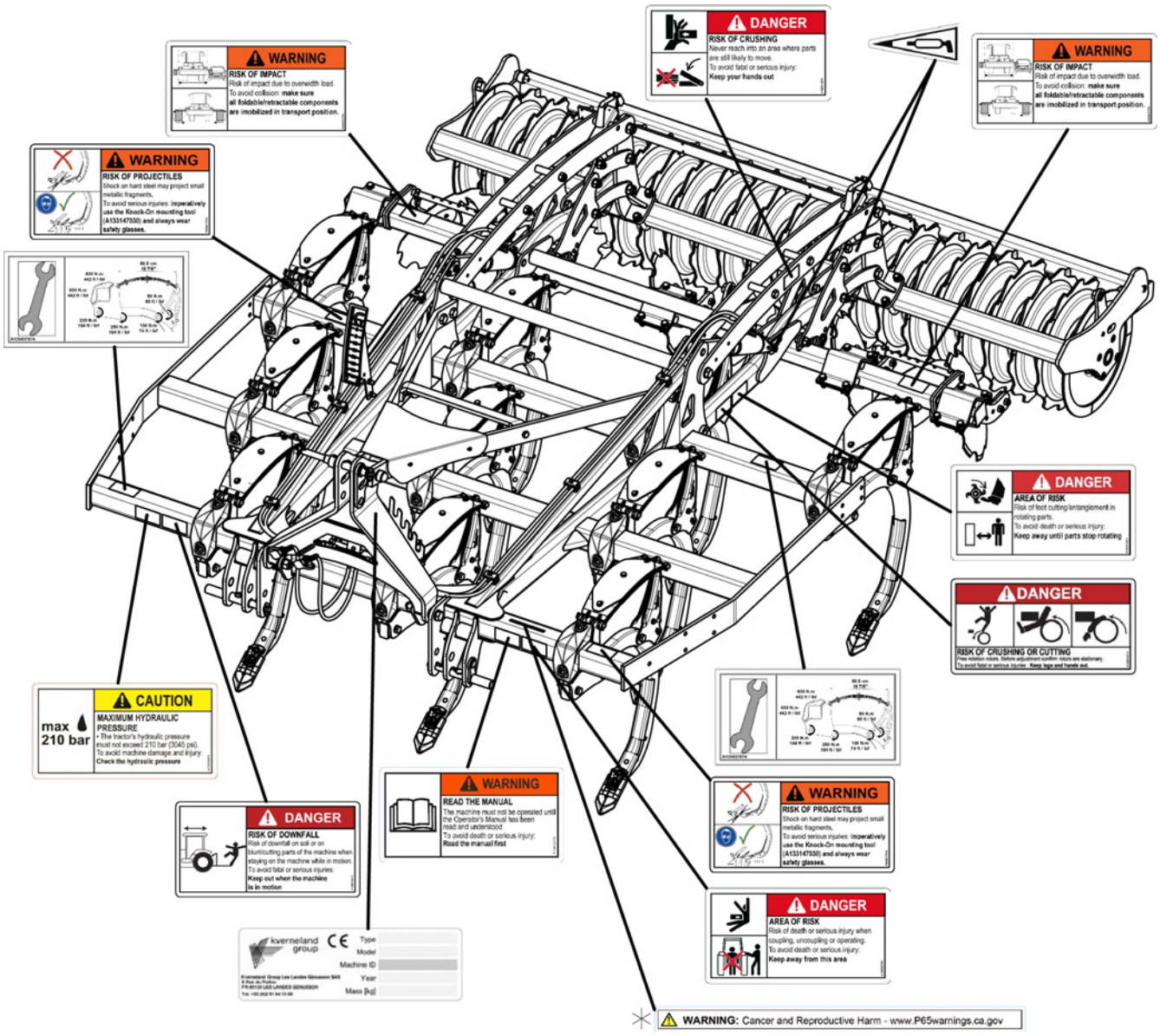
(*) : If French is required, please glue this sticker below EN sticker.
Other french stckers have to be placed on top of english ones.



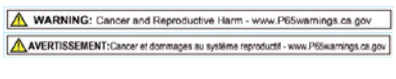
RIGID machine - Rear



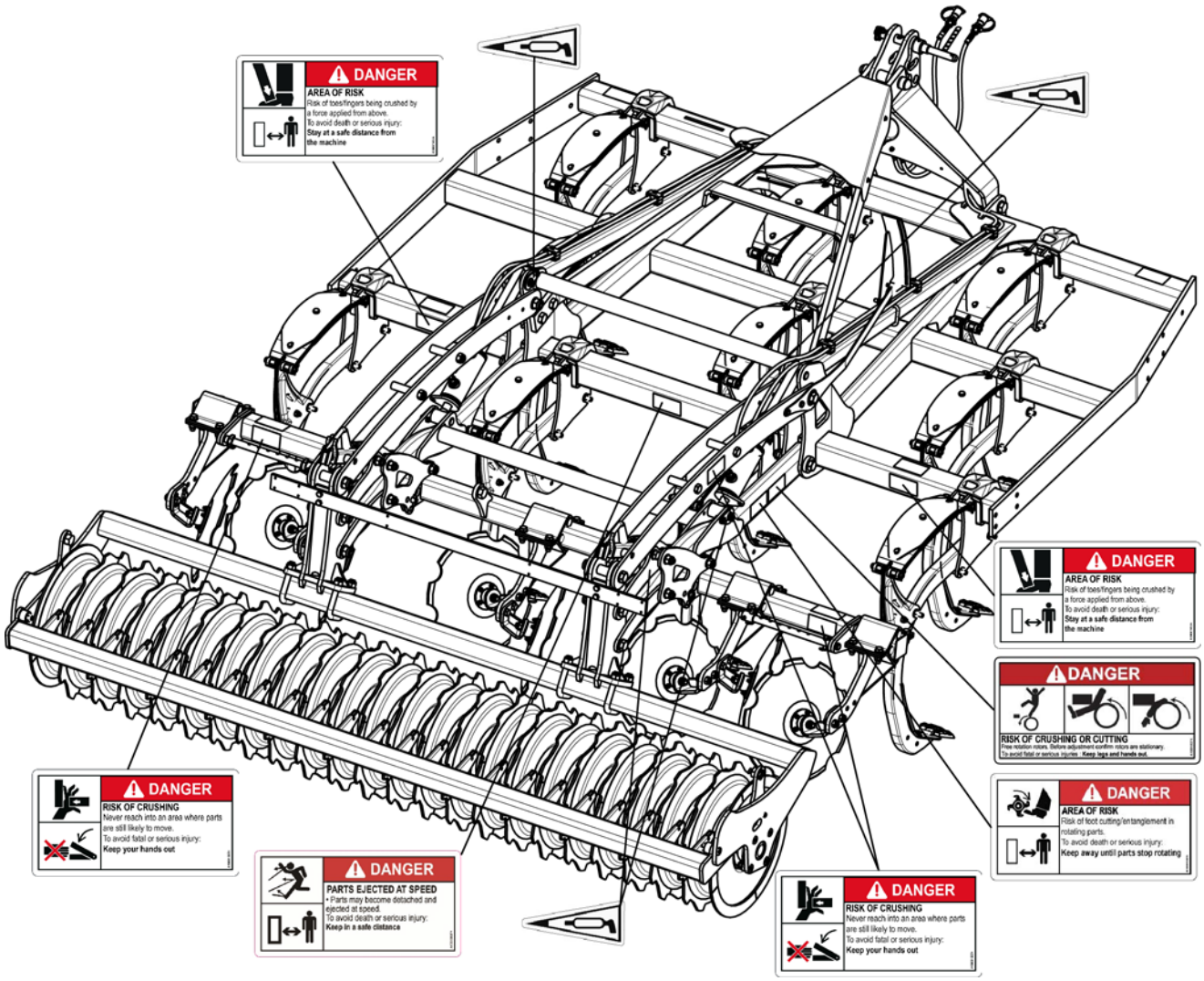
Pro RIGID machine - Front



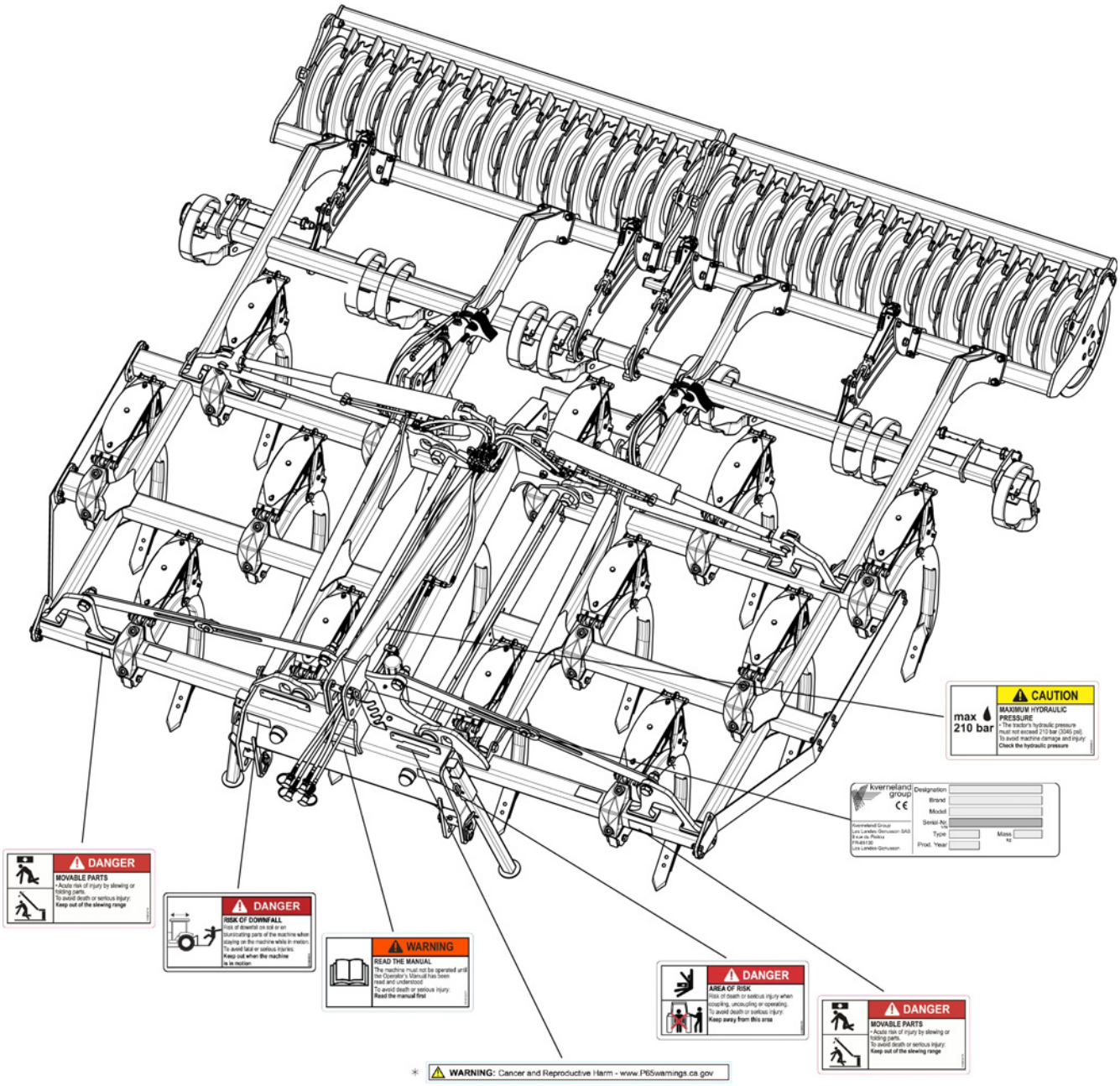
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Pro RIGID machine - Rear



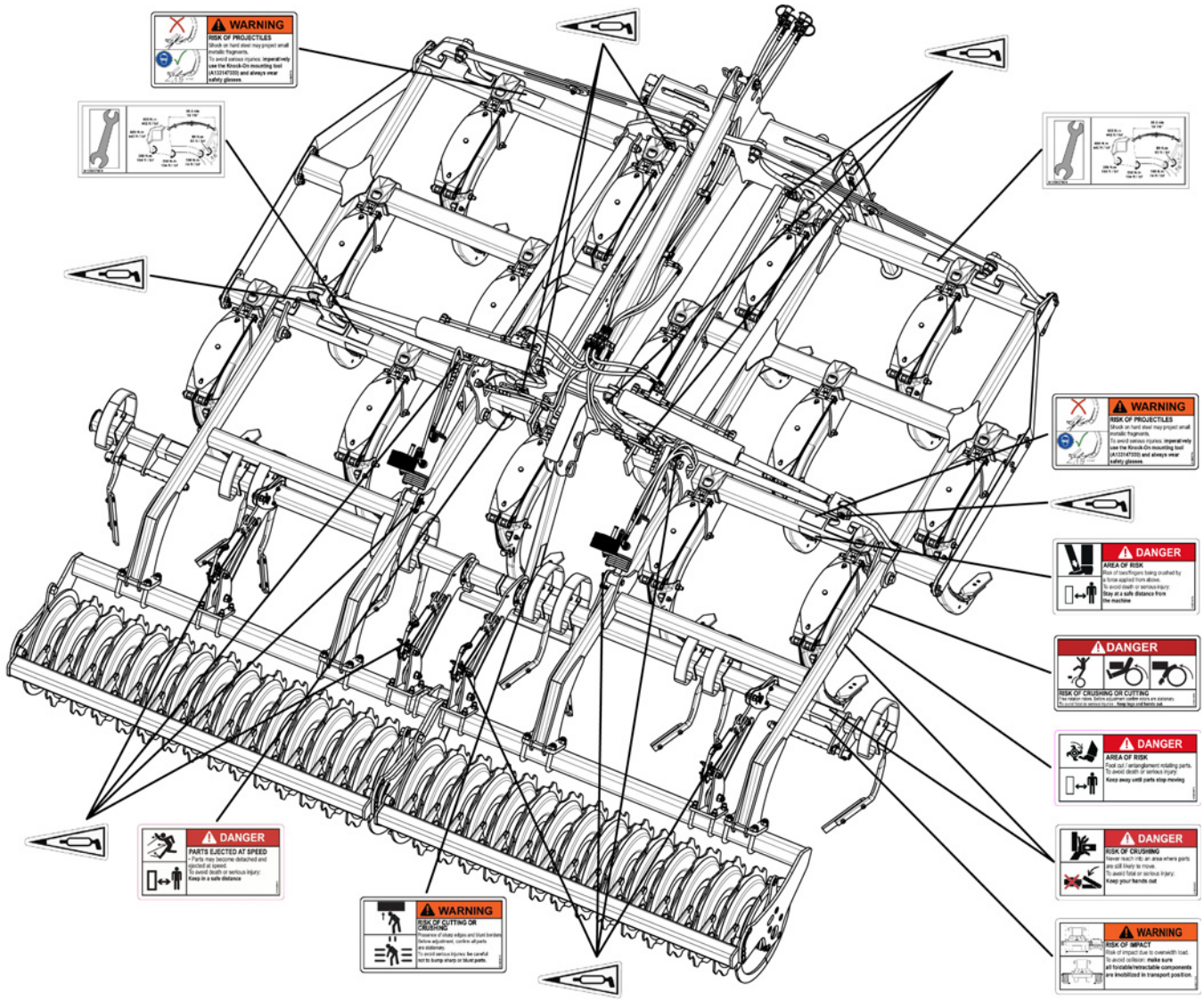
FOLDING machine - Front



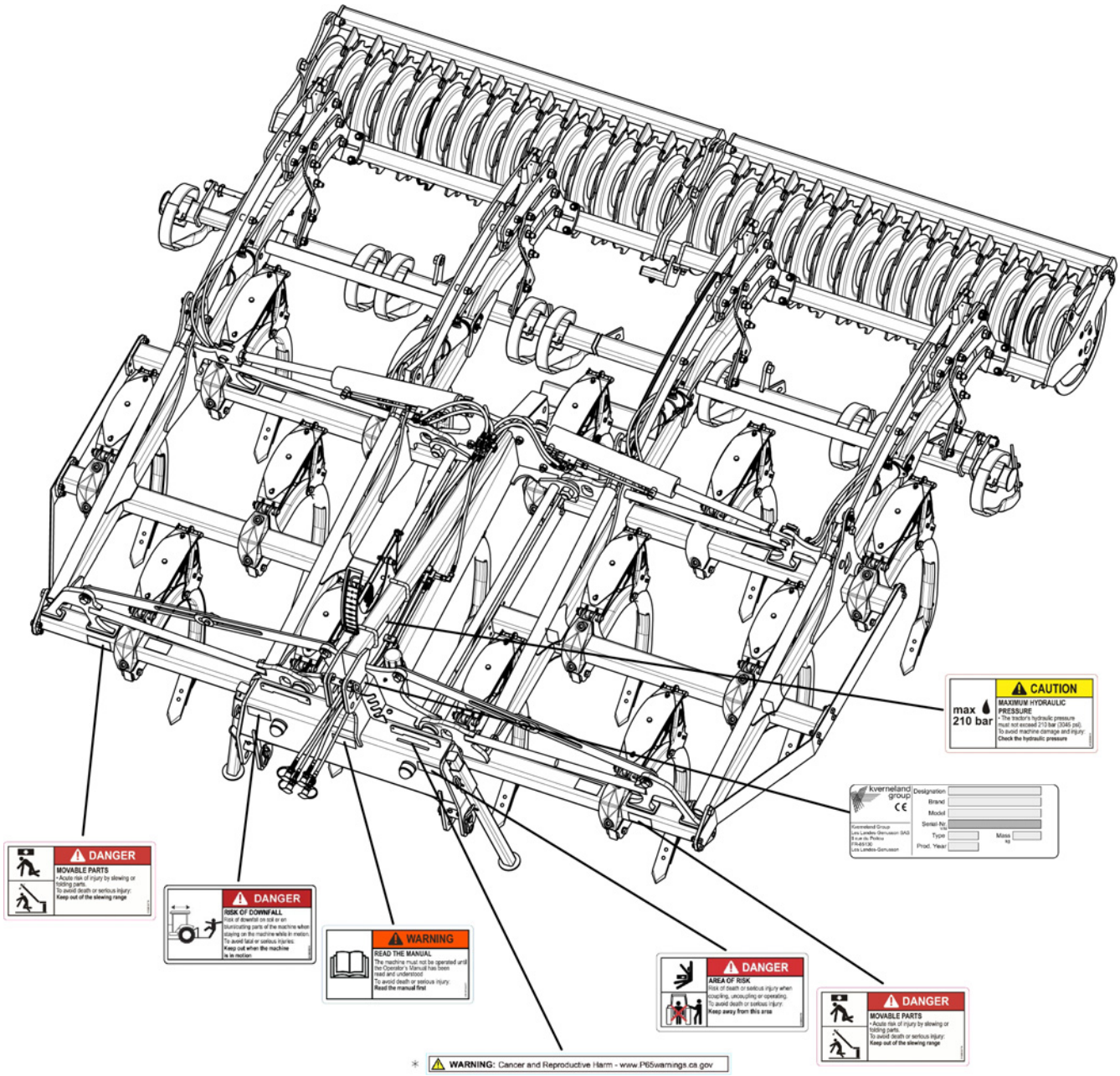
(*) : If French is required, please glue this sticker below EN sticker.
Other french stckers have to be placed on top of english ones.

WARNING: Cancer and Reproductive Harm - www.P65warnings.ca.gov
AVERTISSEMENT: Cancer et dommages au système reproductif - www.P65warnings.ca.gov

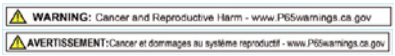
FOLDING machine - Rear



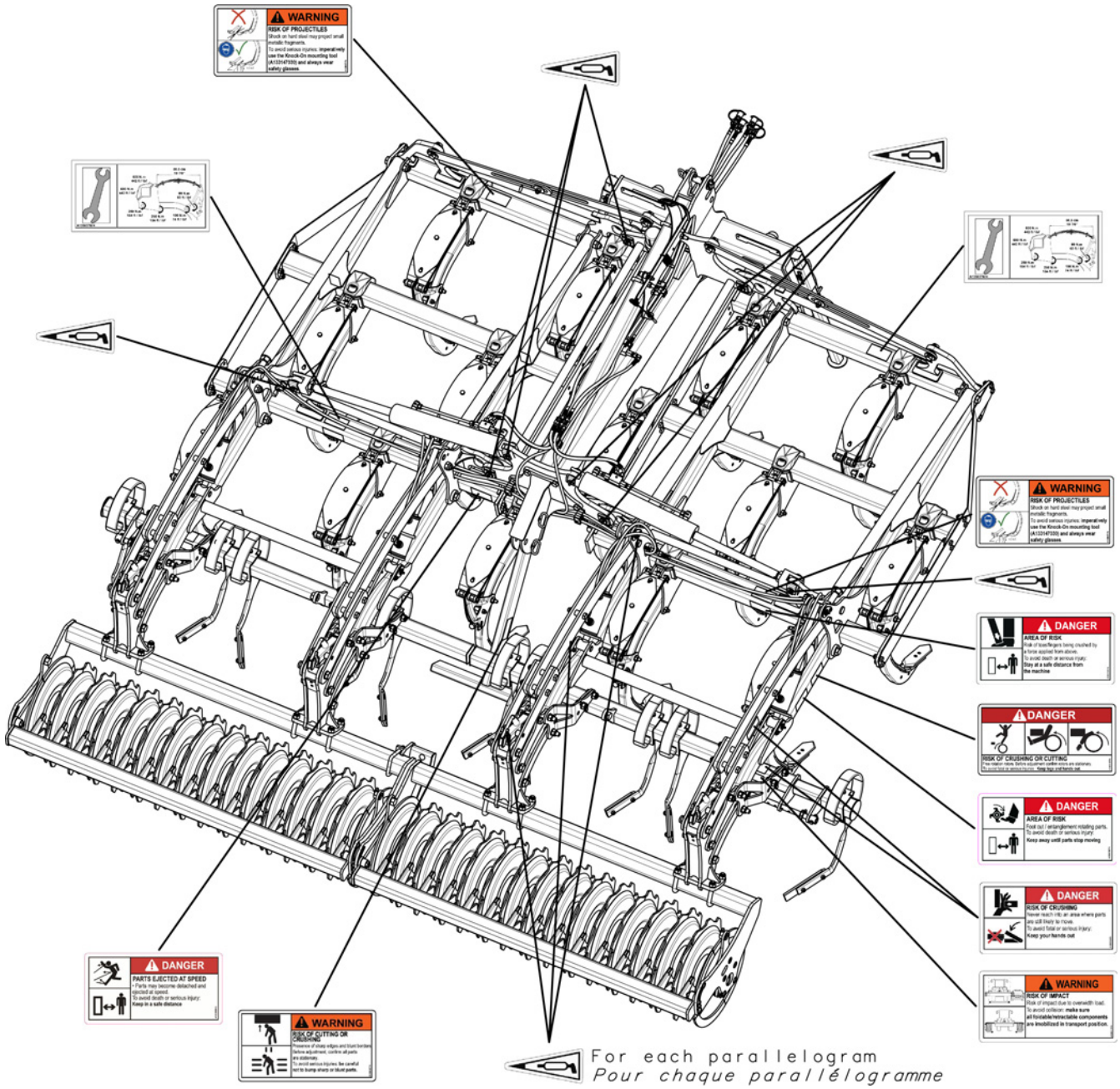
Pro FOLDING machine - Front



(*) : If French is required, please glue this sticker below EN sticker.
Other french stckers have to be placed on top of english ones.



Pro FOLDING machine - Rear



Meaning of safety symbols



DANGER:
Risk of cuts / crushing
Freely-rotating rollers Before beginning adjustments, ensure that the rollers have been immobilized. In order to avoid all serious or fatal injuries: keep your legs and hands outside the roller rotation zone.



DANGER:
Rotating parts can cause serious injuries or death.
Stand away from the range of movement of all rotating parts.



DANGER:
Hazardous zone
Risk of cuts/feet getting tangled in the rotating parts. In order to avoid all serious or fatal injuries:
Maintain a safe distance between you and the machine until all rotating parts have been immobilized.



DANGER:
Risk of crushing
There is a danger of hands being crushed in an area where there are likely to be moving parts. In order to avoid all serious or fatal injuries: keep your hands away from these areas.



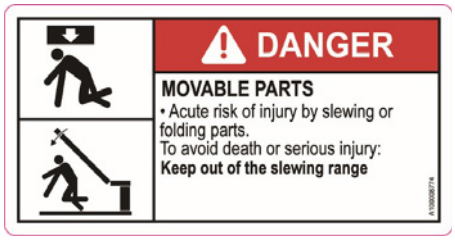
DANGER:
Hazardous zone
Risk of serious or fatal injury during machine hitching, unhitching or operations.
In order to avoid all serious or fatal injuries: Remain outside this zone.



DANGER:
Hazardous zone
Risk of crushed toes/fingers by a force applied from above.
In order to avoid all serious or fatal injuries: maintain a safe distance between you and the machine.



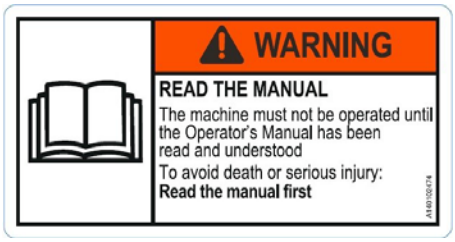
DANGER
Risk of falling
Risk of falling to the ground or onto cutting or blunt-edged parts of the machine while it is operating.
In order to avoid all serious or fatal injuries: never climb onto a moving machine.



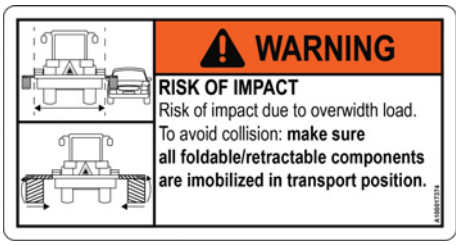
DANGER
Movable parts
Pivoting or folding moving parts may cause serious injuries or death.
Stand away from the range of movement of all pivoting parts.



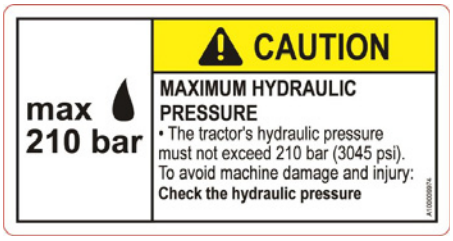
WARNING
Risk of cutting or crushing
Presence of sharp dges and blunt borders.
Before adjustment, confirm all parts are stationary.
To avoid serious injuries : be careful not to bump sharp or blunt parts.



WARNING
Read the maintenance manual
The machine must not be used prior to having read and understood the user's manual. To avoid serious or even fatal injuries: First read the user's manual.



WARNING
Risk of collision
Risk of collision due to overwidth load.
To avoid collision : make sure all foldable or retractable components are imobilized in transport position.



CAUTION
Maximum hydraulic pressure
The tractor's hydraulic pressure must not exceed 210 bar (3,045 psi).
To avoid machine damage and injuries: check the hydraulic pressure.

Meaning of symbols specific to the Knock-on accessory



CAUTION
Risk of projections in the event of hitting the coulter with a hammer.

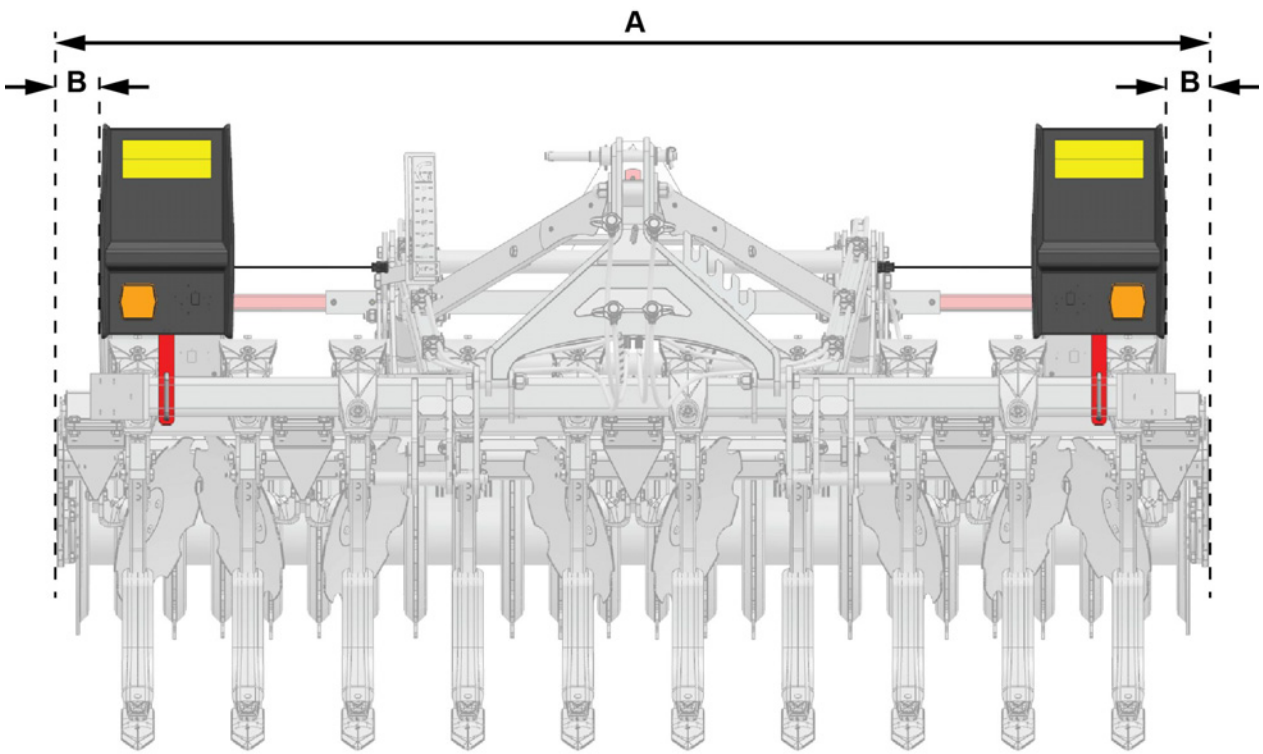
Signaling systems for North America

Signaling systems, panels and stickers are installed on the machine in order to ensure complete road safety. The signaling systems must always be functional. Under no circumstances are you to remove the panels and stickers, but instead you must replace them if they are missing or illegible. You can order new stickers just like a spare part from your specialist dealer.

The user must ensure that the tractor/machine unit is compliant with current prescriptions regarding machine transport on the road network.

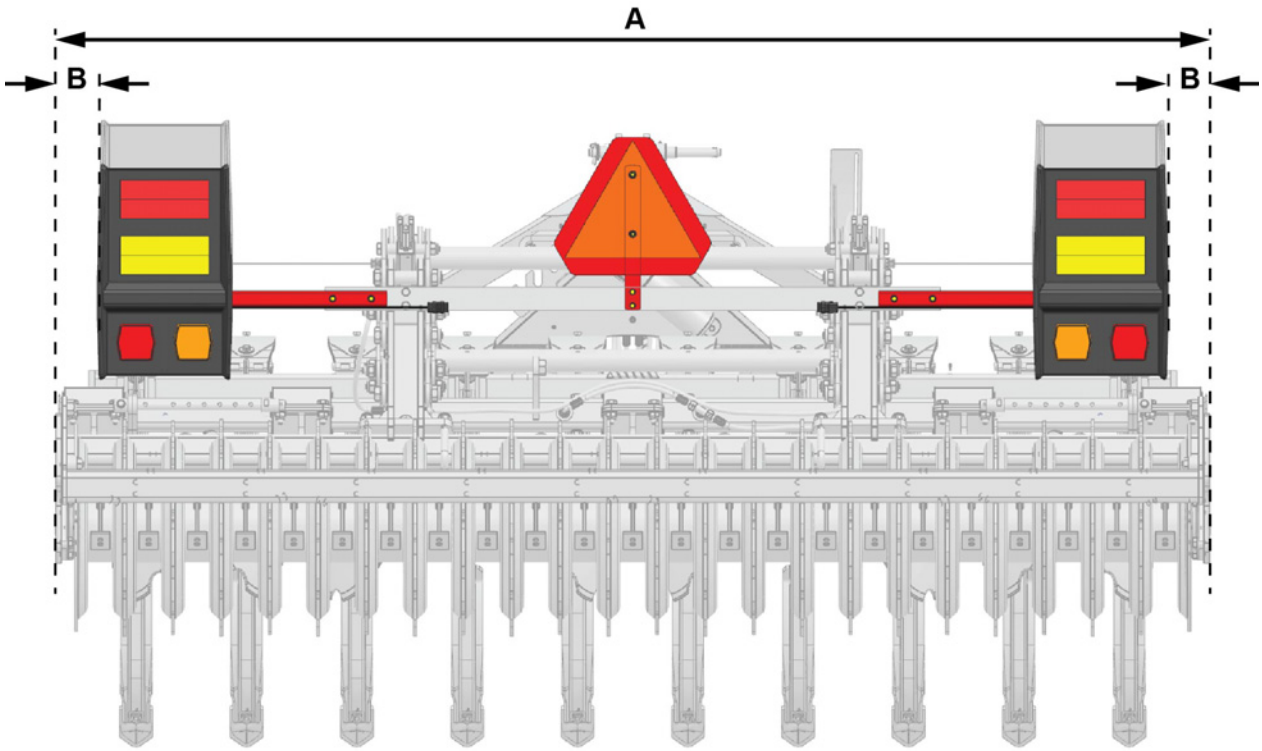
Signaling systems - RIGID machine

Front view



Repère	Dimensions
A	3.00m (*9'10*)
B	4.00m (*13'1*)

Rear view

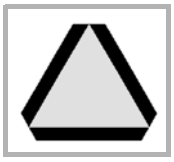


Marking	Dimensions
A	3.00m (*9'10*)
B	Max. 150mm (approx. *6"*)
C	4.00m (*13'1*)

The working depth of rollers must be set at its maximum level.

Panels

In some states of the United States and some Canadian provinces, additional signaling is mandatory for road transport:



Slow vehicle indicator
This triangle-shaped panel is placed so as to always remain visible in back of the machine while in the transport position. This signaling device is necessary:

- at a road speed of less than 50 km/h (30 mph)

  and
- if the hitched machine conceals the slow vehicle panel of the tractor when in transport position.



Maximum speed indicator
Circular panel bearing the indication 50 km/h or 30 miles per hour. This panel needs to be placed on the tractor when not already present and when the certified tractor speed exceeds 50 km/h (30 mph).

Safety rules

General recommendations

Before starting up, check that the machine is not endangering any persons and that the protection and safety devices (e.g. guards, hoods, warning labels, etc.) are in place and functional.

Before you start work, familiarize yourself with all the equipment, controls and functions on your machine. Once you have started, it is too late.

If an operating incident occurs:

- Shut down the machine immediately.
- Identify the cause of the incident.
- Carry out repairs out before starting up the machine again.

No work should be attempted on the machine delivered unless:

- all measures have been taken to prevent unintentional start-up (uncouple the power take-off and/or hydraulic hoses, tractor engine switched off, for example).
- chocks have been placed under the frame to prevent it falling,
- the vehicle has been immobilized using the appropriate systems.

Before leaving the tractor:

- Put the machine on the ground.
- Activate the hand brake.



- Remove the ignition key.

No one should stand between the tractor and the machine unless the vehicle is immobilized (hand brake, chocks, etc.), the engine is switched off and the ignition key removed.

Hitching

DANGER

Never stand between the machine and the tractor during maneuvers.
No one should stand between the tractor and the machine when maneuvering the tractor or during lifting operations. This could cause serious injury or even death.

Follow instructions for hitching to the letter:

- when maneuvering, select the tractor's lowest possible forward speed,
- the type of tractor hitch should be adapted to suit the machine's hitch,
- when hitching, position the tractor's hydraulic controls such that the hitch does not move during handling,
- the hitch must be locked and should not come detached by itself in the lower position.

The weight distribution is altered when the machine is hitched. The maximum load per vehicle axle (see manufacturer's notice) should not be exceeded. If there is insufficient loading on the front axle, extra weights must be installed, so that control over the vehicle's steering is retained.

When coupling or uncoupling the tool, put any support equipment provided in place to prevent the machine from becoming imbalanced.

Transport

IMPORTANT

Machine movement
On a curved road section, beware of machine movements as well as a shifting of the load. Adjust your forward speed accordingly.

Regulations

- Respect the driving code at all times when on the road on the road network.
- Check that your hitch meets local road safety requirements. If necessary, you are responsible for fitting and testing transport equipment (e.g. lighting, signals, guards) corresponding to the characteristics of your tractor-machine assembly and the applicable statutory requirements.
- Ensure that the machine's dimensions are compatible with the driving code.

Passenger transportation
Carrying persons on the working tool or during transport is prohibited.

Braking
For all movements, brakes must be coupled (no single wheel braking).

Trips off the farm field
No movement should be made outside an agricultural field or close to people, until folding extensions or folding or tipping accessories (where they exist) have been locked in the transport position.

Hydraulics
In transit, the hydraulic hoses of the folding jacks must be disconnected to prevent accidental unfolding.

Lifting

- During transport, lock the lower lift arms to prevent any sideways movement.
- During travel, the lift control must be positioned, so as to prevent the tool from being accidentally lowered.

Axle
For machines with a transport axle, secure the locking system in place prior to traveling on the road.

Locking of hydraulic jacks
On the machines fitted with locking devices, verify that the foldable parts of the machine have been correctly locked and moreover that the hydraulic safety equipment is well locked.

Use

DANGER

Avoid all contact of the machine with electrical voltage lines.
Any contact with electrical voltage lines can cause serious or even fatal injuries.
Take all necessary precautions in order to avoid any contact while handling the machine adjacent to electrical voltage lines.

WARNING

Be mindful of the return to the initial position of locked disc arms.
Any disc arms that are abnormally blocked in the raised position may suddenly return to their position and are therefore a source of serious danger.

- Keep away from the tine and never stand in its return of the disc arm.
- Raise the machine to eliminate any blockages.
- When the disc arm returns to the low position, verify that is well tightened and not locked.
- If the disc arm remains locked, do not attempt to unlock it. **Call a technician**.

Stay outside the zone where the machine's foldable parts are in motion.
No one should enter the folding extensions area or folding or tipping (where fitted) accessories movement area, until they have been locked by the system provided for this purpose. The system may be chain, a pin, a rigid connecting rod or a double control valve.

Do not take actions on a moving machine.
Any work on the machine is prohibited while the tractor is in motion. Maintain a safe distance of at least 5.00 m (*16'5"*) from the machine in motion (forward movement, movement of any part of the machine, movement of the tractor hitch).

Verify the peripheral areas of both the machine and tractor before starting up.
Before starting up, ensure that there is no one in the immediate vicinity (children, etc.). Ensure that you have sufficient visibility.

Wear safety shoes and maintain a safe distance when adjusting machines fitted with discs.
For machines fitted with covering discs, border discs, folding tines, leveling boards, track erasers or any other accessory that can be vertically adjusted, it is advisable to respect a safety distance, as the equipment could accidentally fall when being adjusted.
Wearing safety shoes is recommended.

Safety for children

WARNING

Do not assume that children will remain calmly in place where you last saw them.
Remain vigilant and turn off the motor if children are present in your work space.
Never let children play on the machine or use it.

IMPORTANT

Adapt your speed when the ground is sloped.
In the event of use on uneven terrain, the tractor can deviate from its path if it encounters a hole, ditch or other irregularity.
To remedy this problem, be sure to always drive at a speed adapted to the uneven ground.

Just one person is allowed on the tractor while it is running.
Allow only one person, the operator, on the tractor when it and the tool are in operation.

Maintenance

DANGER

Apply the brakes or immobilization system prior to any actions taken on the tractor-tool assembly.
Be sure to always apply the brakes or the vehicle immobilization system prior to any action taken on the tractor-tool assembly. Failing to do so may cause serious or even fatal injuries.

WARNING

Beware of sharp edges and corners.
When changing parts on the machine, you should pay attention to all parts with sharp edges or corners. We recommend that you wear safety equipment (hard hat, safety shoes, gloves...) in order to avoid any injury.

IMPORTANT

Beware of the return path of the high-pressure cleaning jet.
While cleaning the machine, beware of the return path of the high-pressure cleaning jet on some of the surfaces. This might cause bruises and contusions.

It is strictly forbidden to disassemble springs used as safety devices for working parts: This operation must only be performed by specialists.

For machines fitted with foldable extensions: Strictly follow the instructions in this user's manual for the assembly, disassembly and adjustment.

Before carrying out any welding works:

- Disconnect the electrical boxes (if present).
- Disconnect the tractor alternator and battery if it is hitched.

Regularly check that bolts are tight, tire pressures are correct and the hydraulic circuit is in good condition.

Be sure to never direct the high-pressure cleaning jet directly onto the following components, so as to prevent their deterioration:

- bearings,
- hydraulic hoses,
- electrical boxes
- any sensitive machine component.

Unhitching

WARNING

Never stand between the tractor and the machine during unhitching.
Before unhitching the machine, be sure that no one is positioned between the machine and the tractor.
Individuals may get pinned between the tractor and machine, thereby leading to serious or even fatal injuries.

In order to avoid any hazard during unhitching:

- Immobilize the tractor,
- lower the machine,
- engage the parking brake,
- make sure that the machine is on flat and sufficiently stable ground.
- operate the tractor's hydraulic lift slowly and carefully,
- Connect or disconnect hydraulic hoses, only if there is no pressure in the tractor's and machine's hydraulic system.

Hydraulic installation

DANGER

Any action taken on the hydraulic system must always be performed by a **trained and certified technician**.

For further information, refer to Chapter "Replacement of the hydraulic system parts" page 68.

Other instructions

Follow instructions
In addition to the instructions listed above, always follow:

- Accident prevention regulations
- generally recognized safety regulations, occupational health requirements and road traffic regulations,
- the notes found in the user's manual,
- instructions for use, maintenance and servicing.

Field of application

This machine is considered to be interchangeable equipment within the meaning of European directive **2006/42/CE** and is considered to be agricultural equipment within the meaning of directive **ASABE S390**.

This chapter contains general information about your machine as well as information concerning the following points:

- Usage clause.
- Characteristics.
- Description of machine components.
- Technical data.

Usage clause

This machine has been designed solely for normal agricultural use, i.e. for cultivating farmland. Any other use or misuse, for example, transport, land clearing or transmission of power to another machine is considered to be contrary to the intended use.

The manufacturer and specialist dealer decline any responsibility for damage caused by use other than normal use. **The user assumes all risks**.

Compliance with the conditions of use includes compliance with the manufacturer's user instructions.

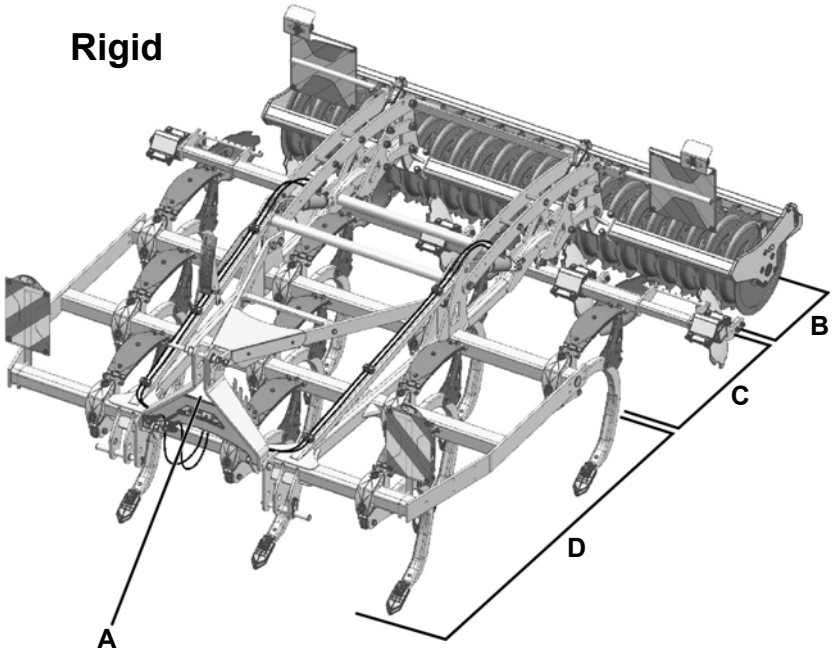
The safety instructions (detailed above) and rules regarding general safety, occupational health and road traffic must also be followed.

Modifications to the tool made by the customer or the use of spare parts or accessories that are not original parts will void the manufacturer's liability for all damage resulting from the modification.

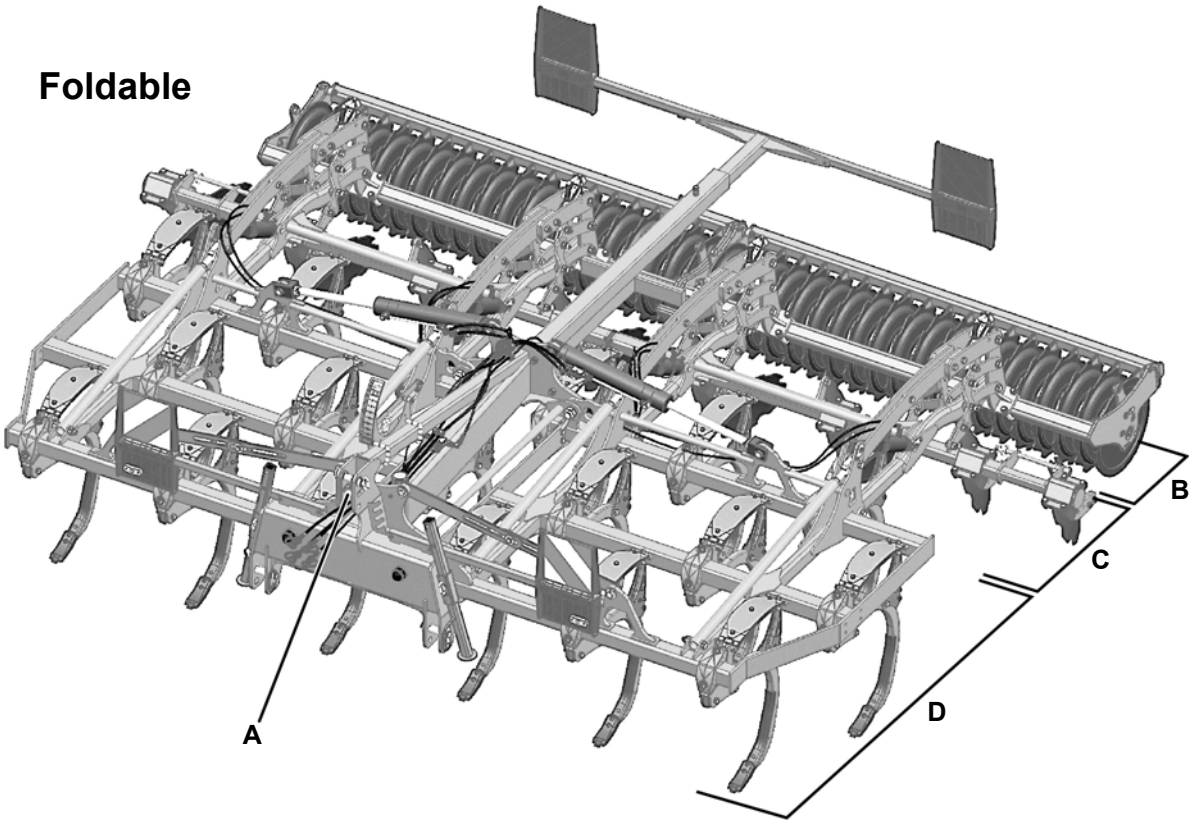
The manufacturer cannot be held liable for damage resulting from incorrect settings, choice of equipment, seed, fertilizer, treatments or farming strategy or for any other damage not directly related to the machine.

General Description

Rigid



Foldable



Reference	Designation
A	Hitching
B	Roller(s)
C	Levelling accessory
D	Stubble / cultivator module

Technical specifications

CU3001 & Rigid CU3001P

	CU3001 3000	CU3001P 3000	CU3001 3500	CU3001P 3500
Number of tines	10		12	
Working width	2.85 m *9'4"*		3.42 m *11'3"*	
Total width of rollers	3.00 m *9'10"*		3.50 m *11'6"*	
Transport width	3.00 m *9'10"*		3.50 m *11'6"*	
Number of rows	3			
Type of tines	Triflex 700 (non-stop) or bolt safety			
Spacing between the rows	750 mm *29 ½"*			
Underframe clearance	870 mm *34 ¼"*			
Spacing between the tines	285 mm 11 *¼*"			
Hitch category	Cat II / III			
Min./max. total power	90 ch / 240 ch 67 kW / 177 kW		110 ch / 270 ch 81 kW / 199 kW	
Working depth	5 cm - 30 cm *1 31/32"* to *11 13/16"*	5 cm - 35 cm *1 31/32"* to *13 25/32"*	5 cm - 30 cm *1 31/32"* to *11 13/16"*	5 cm - 35 cm *1 31/32"* to *13 25/32"*
Depth control	Hydraulic with spacers	Hydraulic continuous	Hydraulic with spacers	Hydraulic continuous
Levelling option	Tines or levelling discs			
Levelling adjustment	Mechanical	Mechanical	Mechanical	Mechanical
Rollers	Cage roller, Double cage, Actiring, Actiflex, Actipack, Actipress Twin			
Total weight with cage roller + Triflex tine	1,750 kg *3,858 lbs*	1,810 kg *3,990 lbs*	2,100 kg *4,630 lbs*	2,170 kg *4,784 lbs*
Total weight with Actiflex + Triflex tine	1,870 kg *4,123 lbs*	1,930 kg *4,255 lbs*	2,260 kg *4,982 lbs*	2,330 kg *5,137 lbs*
Total weight with Actipack + Triflex tine	2,020 kg *4,453 lbs*	2,080 kg *4,586 lbs*	2,430 kg *5,357 lbs*	2,500 kg *5,512 lbs*
Signalling and lighting kit	Optional			

CU3001 & CU3001P
Foldable

	CU3001 4000 F	CU3001P 4000 F	CU3001 4500 F	CU3001P 4500 F	CU3001 5000 F	CU3001P 5000 F
Number of tines	14		16		18	
Working width	3.85 m *12'8"*		4.40 m *14'5"*		4.90 m *16'1"*	
Total width of rollers	4.00m *13'2"*		4.50 m *15'*		5.00m *16'5"*	
Transport width	*2.85 m* *9'4"*					
Number of rows	3					
Type of tines	Triflex 700 (non-stop) or bolt safety					
Spacing between the rows	750 mm *29 ½"*					
Underframe clearance	870 mm *34 ¼"*					
Spacing between the tines	275 mm 11 *27/32*"				270 mm 10 *5/8*"	
Hitch category	Cat III					
Min./max. total power	130 ch / 300 ch 96 kW / 221 kW		150 ch / 325 ch 111 kW / 239 kW		170 ch / 350 ch 125 kW / 258 kW	
Working depth	5 cm - 30 cm *1 31/32"* to *11 13/16"*	5 cm - 35 cm *1 31/32"* to *13 25/32"*	5 cm - 30 cm *1 31/32"* to *11 13/16"*	5 cm - 35 cm *1 31/32"* to *13 25/32"*	5 cm - 30 cm *1 31/32"* to *11 13/16"*	5 cm - 35 cm *1 31/32"* to *13 25/32"*
Depth control	Hydraulic with spacers	Hydraulic continuous	Hydraulic with spacers	Hydraulic continuous	Hydraulic with spacers	Hydraulic continuous
Levelling option	Tines or levelling discs					
Levelling adjustment	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical
Rollers	Cage roller, Double cage, Actiring, Actiflex and Actipack					
Total weight with cage roller + Triflex tine	2,710 kg *5,975 lbs*	3,035 kg *6,691 lbs*	2,985 kg *6,580 lbs*	3,310 kg *7,298 lbs*	3,130 kg *6,901 lbs*	3,460 kg *7,628 lbs*
Total weight with Actiflex + Triflex tine	2,975 kg *6,559 lbs*	3,300 kg *7,276 lbs*	3,280 kg *7,231 lbs*	3,605 kg *7,948 lbs*	3,475 kg *7,661 lbs*	3,850 kg *8,488 lbs*
Total weight with Actipack + Triflex tine	3,190 kg *7,033 lbs*	3,515 kg *7,749 lbs*	3,510 kg *7,739 lbs*	3,835 kg *8,455 lbs*	3,720 kg *8,202 lbs*	4,050 kg *8,929 lbs*
Signalling and lighting kit	Optional					
Storage struts						

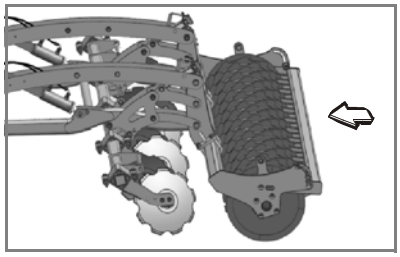
Types of coulters / fins by tine type

Image	Thread Size
Bolted coulters	
	**Plough point** 60 mm (*2 3/8"*)
	**Plough point** 60 mm *2 3/8"* **+ Blade** 320 mm *12 1/2"*
Knock-on coulters	
	80 mm *3"*
	80 mm *3"* **+ Blade** 320 mm *12 1/2"*
	150 mm *6"*
	250 mm *9 3/4"*
	320 mm *12 1/2"*
Carbide coulters	
	70 mm *2 3/4"*
	70 mm *2 3/4"*

Tine / deflector protection

Image	Thread Size
CU3001 and CU3001P	
	**Tine protector** 60 mm *2 3/8”*
	**Deflector** 80 mm *3”*
	**Spiral deflector (right and left)** 80 mm *3”*

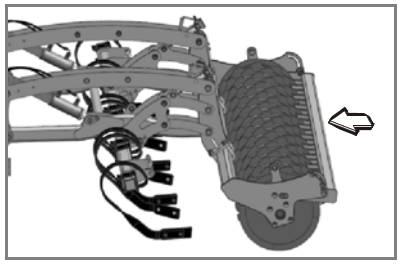
Rear accessory variants



There are three configurations mounted on a parallelogram:

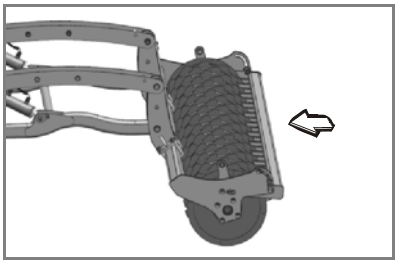
Levelling discs + roller [+]

- Working depth check by roller.
- The levelling is performed by notched discs mounted on rubber spring safety.
- Compaction is performed by the roller.



Tines + roller [+]

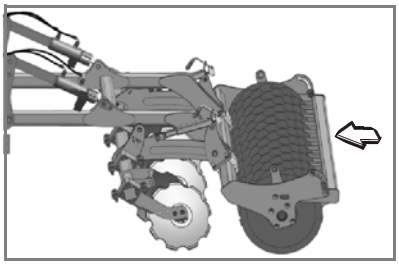
- Working depth check by roller.
- The levelling is performed by tines on spring mounted safety mechanisms.
- Compaction is performed by the roller.



Roller only [+]

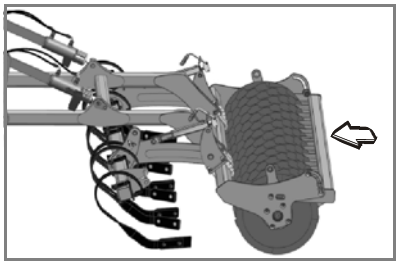
- Working depth check and compaction by roller.

<u>There are three configurations mounted on roller arms:</u>



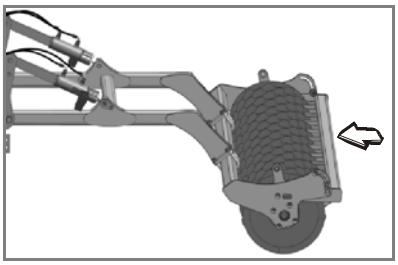
Levelling discs + roller [+]

- Working depth check by roller.
- The levelling is performed by notched discs mounted on rubber spring safety.
- Compaction is performed by the roller.



Tines + roller [+]

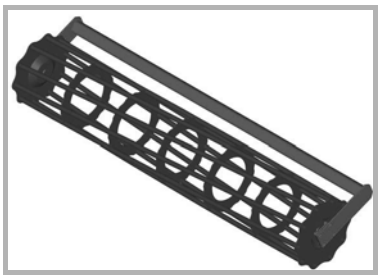
- Working depth check by roller.
- The levelling is performed by tines on spring mounted safety mechanisms.
- Compaction is performed by the roller.



Roller only [+]

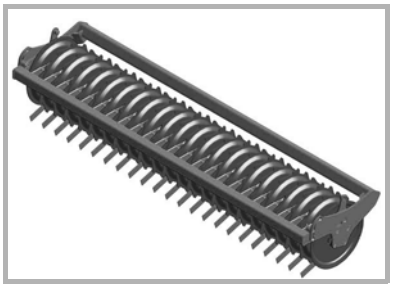
- Working depth check and compaction by roller.

Roller variants



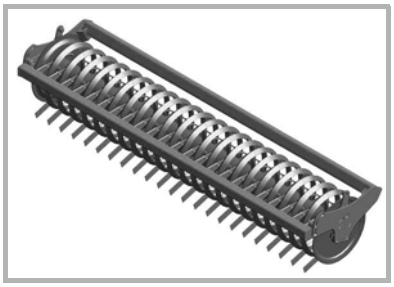
Cage roller diameter 550 mm [+] (*21 1/2”*)

- Compaction of light to medium soils.



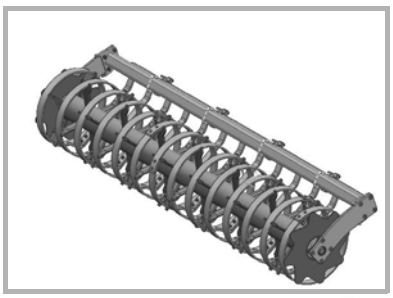
Actipack roller diameter 560 mm [+] (*22”*)

- Compaction and crumbing of all types of soil.
- This roller is also suitable for clay and sticky soils.



Actiring roller diameter 540 mm [+] (*21 1/4”*)

- Compaction and crumbing of all types of soil (but limited in excessively stony conditions).



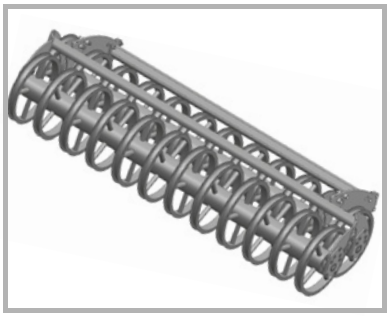
Actiflex roller diameter 580 mm [+] (*22 3/4”*)

- Compaction and crumbing of all types of soil.



Double tube/roller / bar [+]

- Crumbing, levelling and depth control for all types of soil.



Actipress Twin crossing roller diameter 565 mm [+] (*22 1/4”*)

- Crumbing, levelling, consolidation and improved depth control for all types of soil.
- This roller is also suitable for ground with an irregular surface and stony conditions.

Other optional equipment [+]

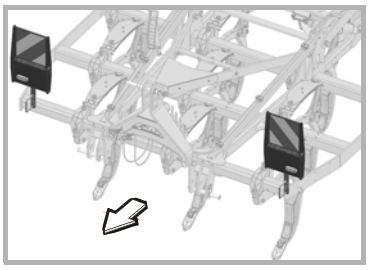
Signalling and lighting

All lights, reflectors, licence plates and signalling or warning panels on the tractor must be perfectly visible.

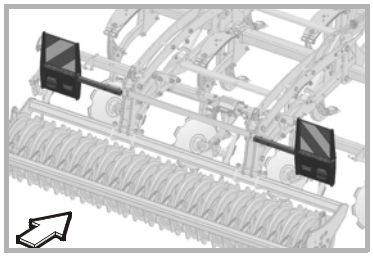
If this is not possible, you must install lights and a licence plate on the machine.

If necessary, contact your dealer to order a new lighting kit.

Rigid machines

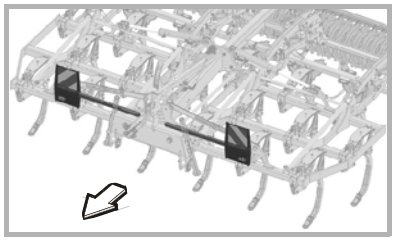


- Front

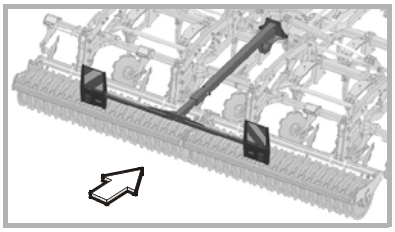


- Rear

Folding machines

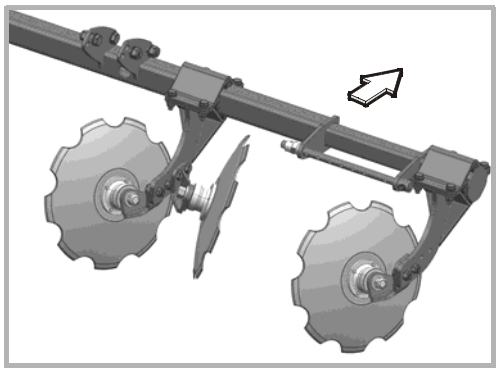


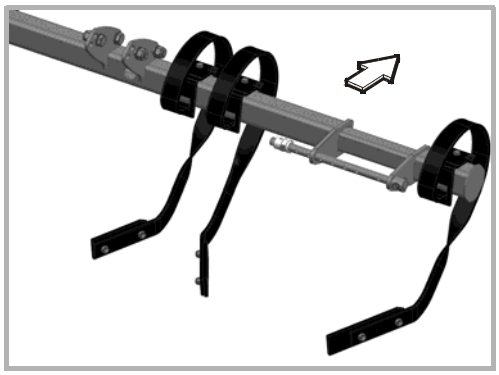
- Front



- Rear

Hydraulic edging discs and tines





Used to withdraw and extract the edge levelling components from the cab:

- Available only on rigid machines.

Storage struts [+]

CAUTION

Risk of collision

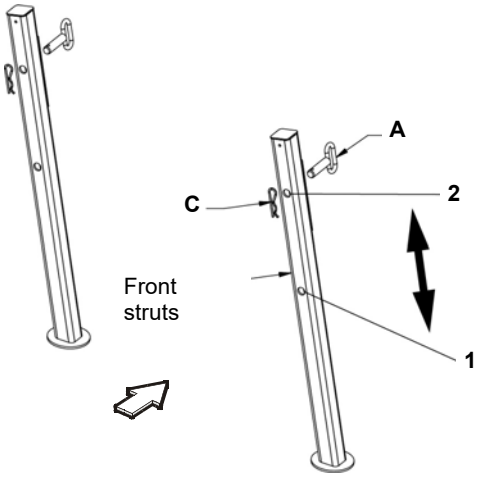
- Retract the struts before unfolding or folding the machine to avoid serious damage to the machine.

The struts are only available on folding machines.

When storing the machine, special struts can be used in order to store the machine in folded position to save space.

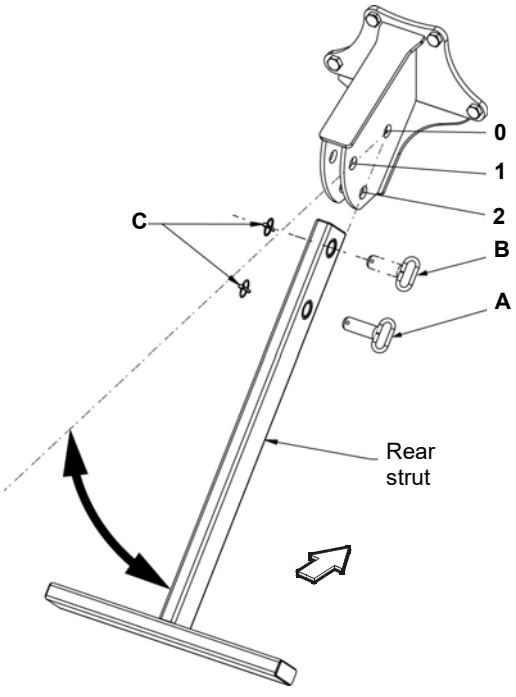
Proceed as follows:

- Raise the machine.
- Fold the machine.



Fitting the front struts

- Unpin and remove the spindle **A** from position "**1**" - Retracted.
- Place the strut in front of position "**2**" - Extracted, then put back the spindle **A**.
- Put back the pin **C** in the spindle **A**.
- Repeat the procedure for the second strut.



Fitting the rear strut

- Leave the spindle **B** in its position "**0**".
- Unpin and remove the spindle **A** from position "**1**" - Retracted.
- Place the strut in front of position "**2**" - Extracted, then put back the spindle **A**.
- Put the pin back in the spindle **A**.

Check that the struts are correctly fitted:

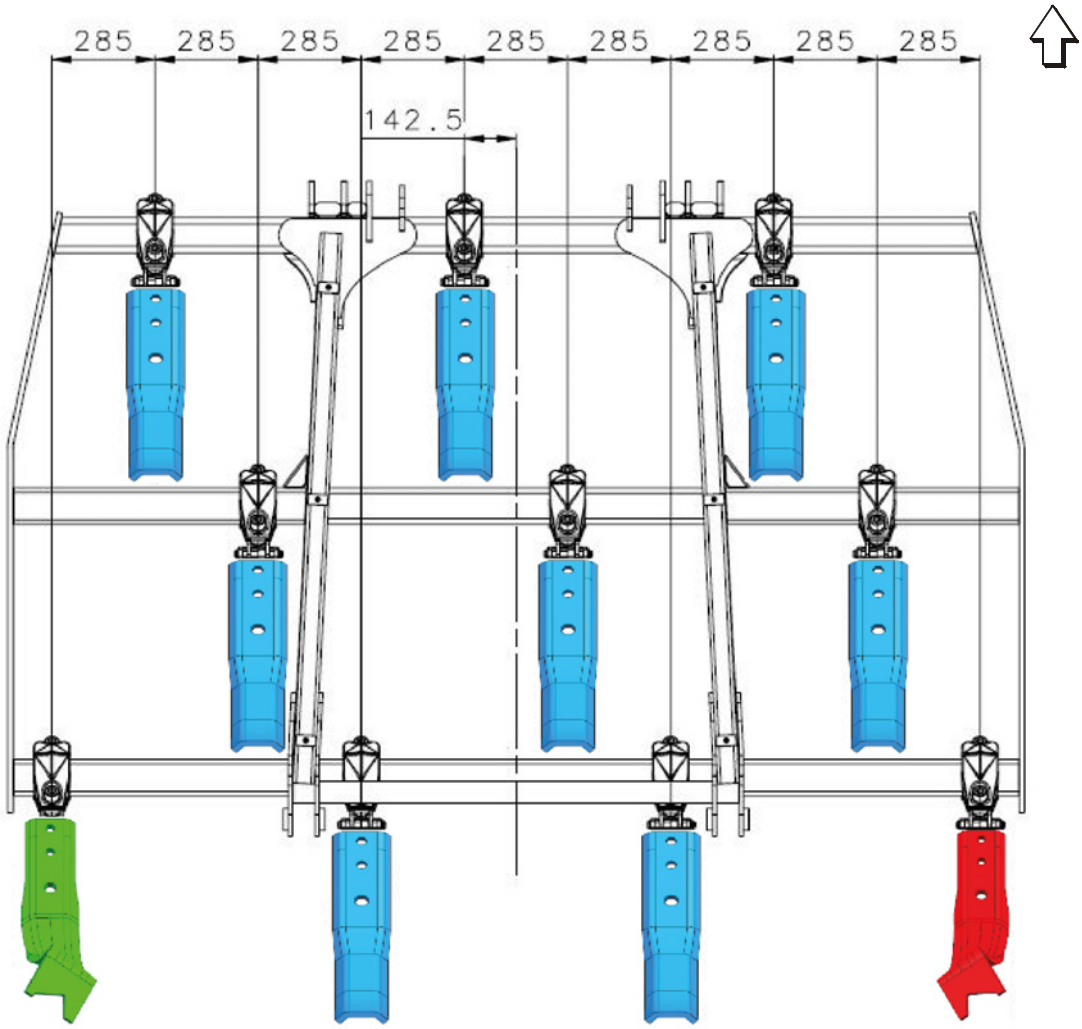
- Gently lower the machine.
- Check that the everything is stable.

Deflector distribution

It is possible to replace the tine protectors with deflectors. In this case, ensure you follow the configuration diagrams opposite that show the ex-factory configuration, in order to get a better result when working.

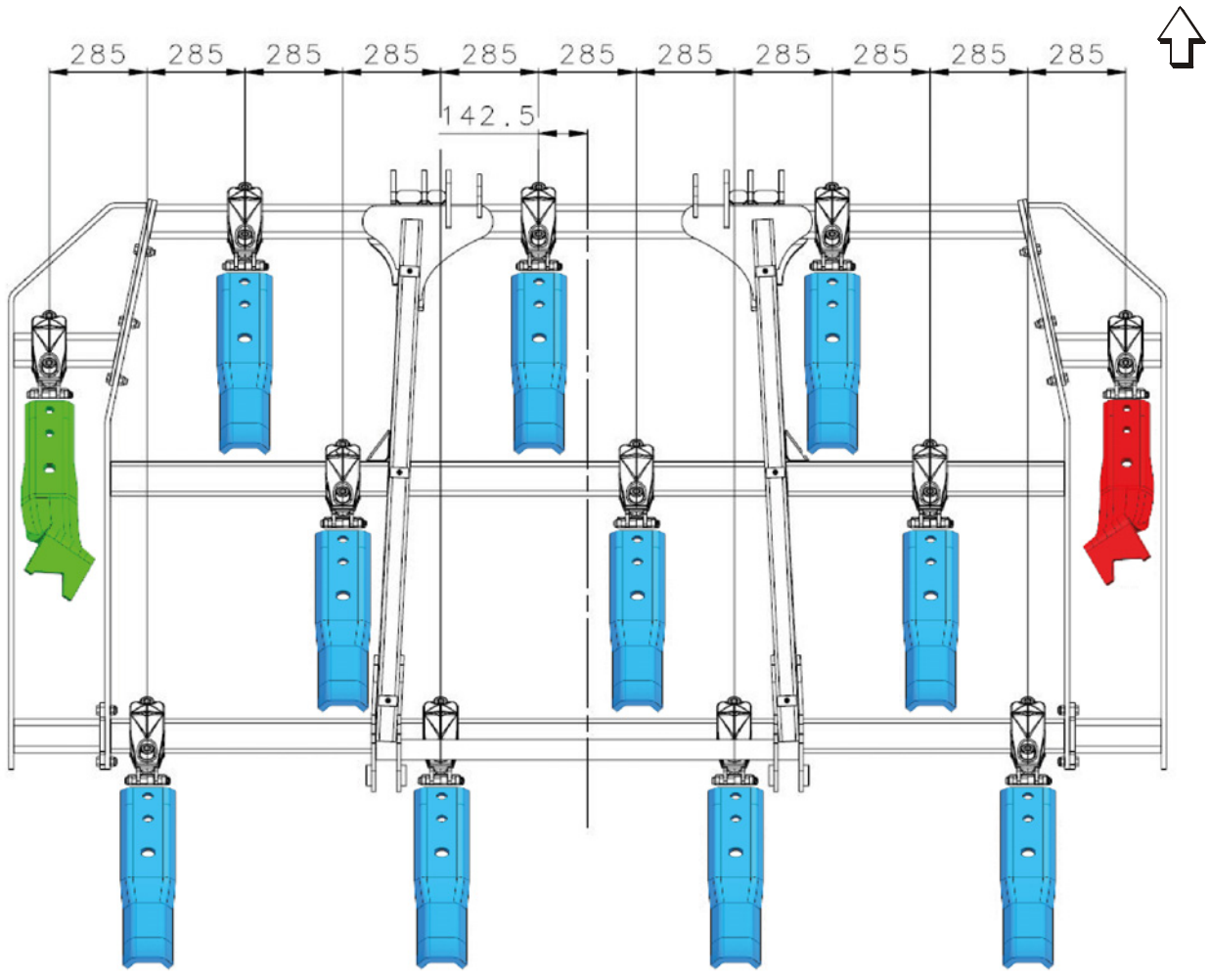
Tine deflectors			Tine protectors
			
Spiral Left	Spiral Right	Centred	-
x1	**x1**	**0**	**x8**

CU3001 / CU3001P 3.00m (9'10'') – 285mm (11'') pitch



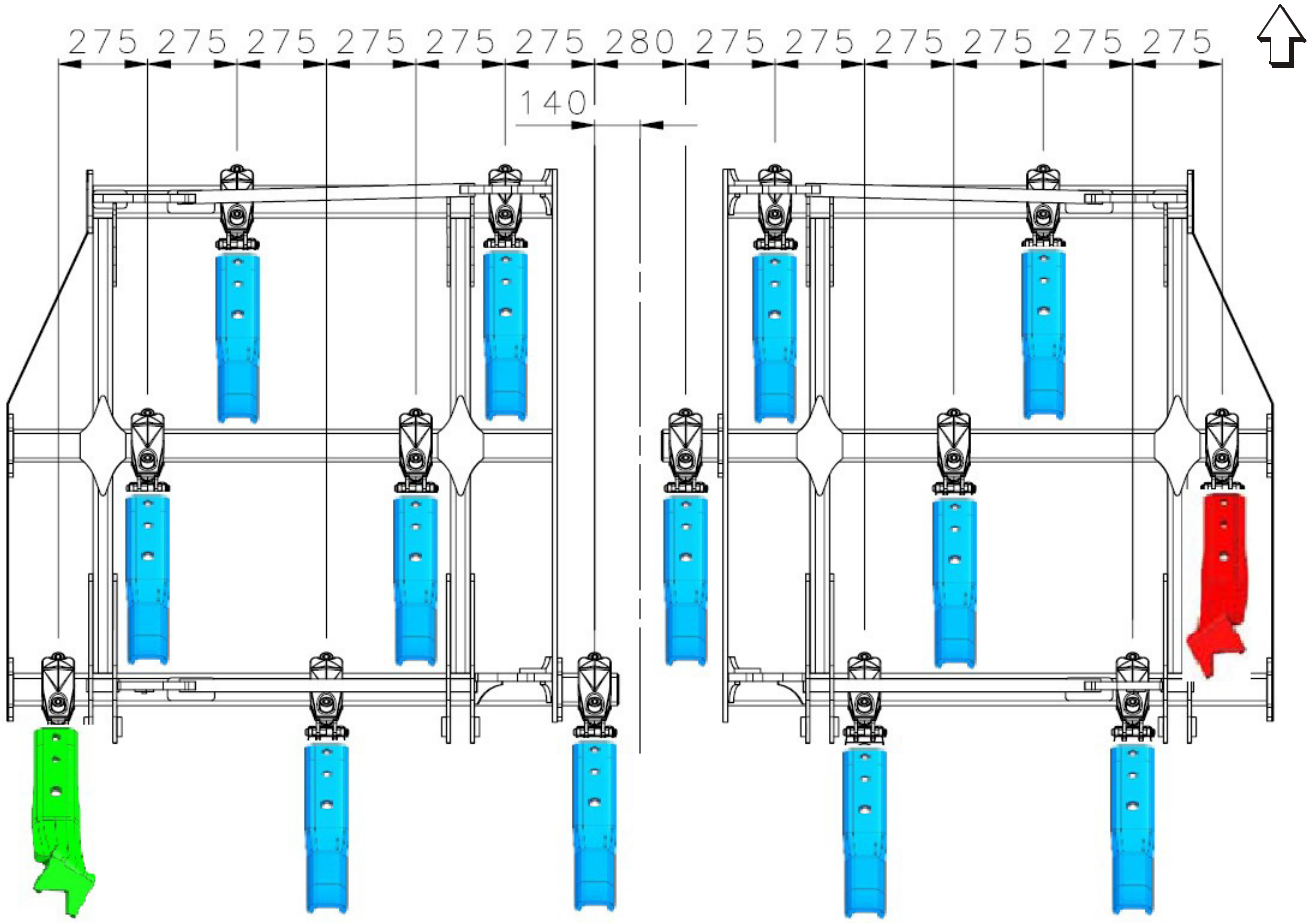
Tine deflectors			Tine protectors
			
Spiral Left	Spiral Right	Centred	-
x1	**x1**	**0**	**x10**

CU3001 / CU3001P 3.50m (11'5'') – 285mm (11'') pitch



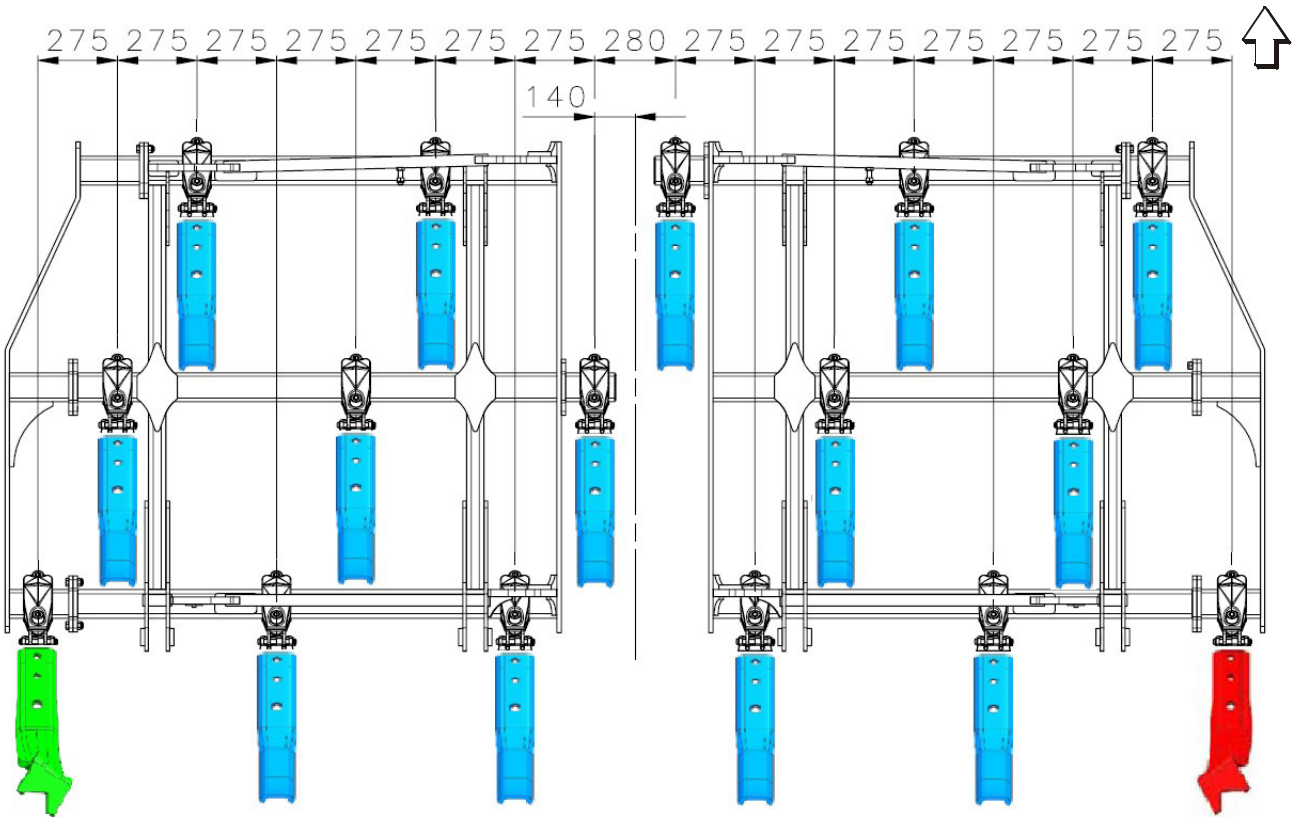
Tine deflectors			Tine protectors
			
Spiral Left	Spiral Right	Centred	-
x1	**x1**	**0**	**x12**

CU3001 / CU3001P 4.00 m (13'2'') – 275 mm (10 3/4'') pitch



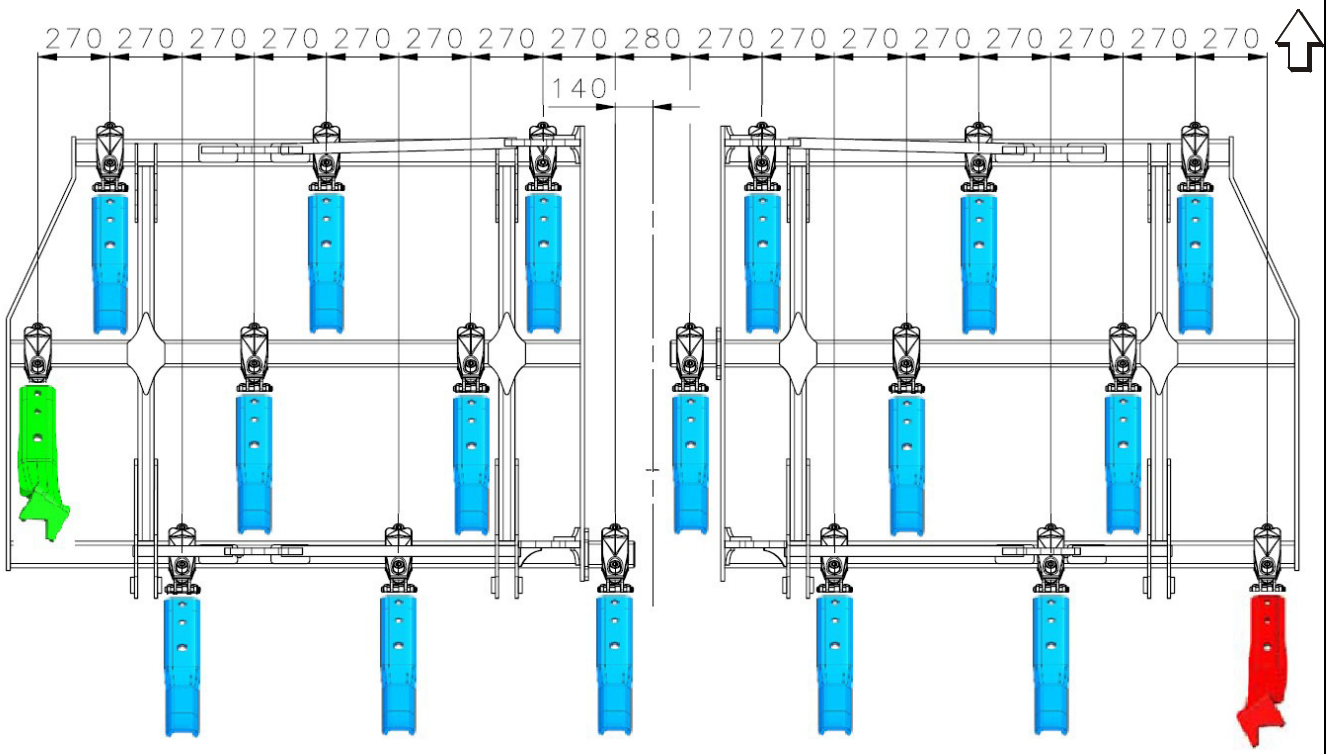
Tine deflectors			Tine protectors
			
Spiral Left	Spiral Right	Centred	-
x1	**x1**	**0**	**x14**

CU3001 / CU3001P 4.50 m (14'9") – 275 mm (10 3/4") pitch



Tine deflectors			Tine protectors
			
Spiral Left	Spiral Right	Centred	-
x1	**x1**	**0**	**x16**

CU3001 / CU3001P 5.00 m (16'5") – 275 mm (10 3/4") pitch

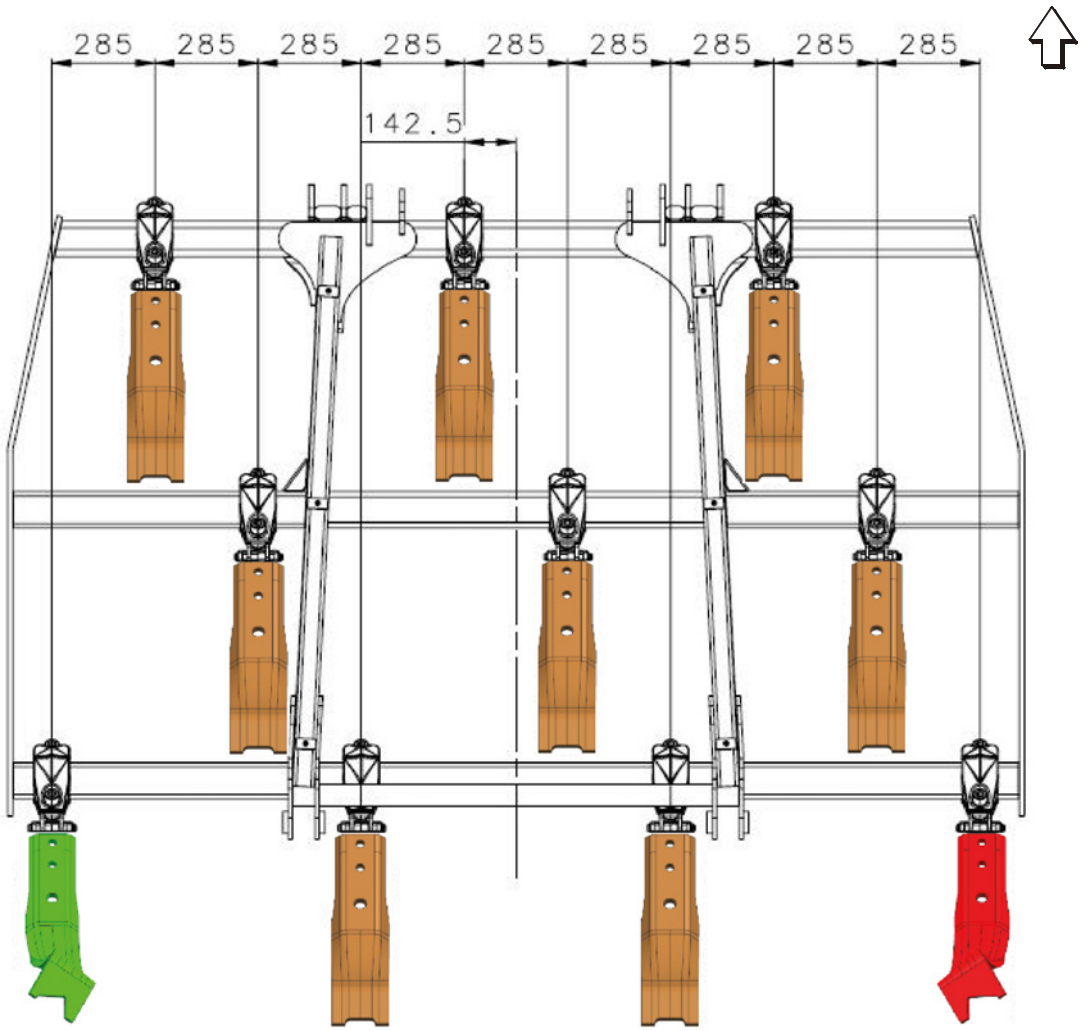


Optional configurations

Deflectors

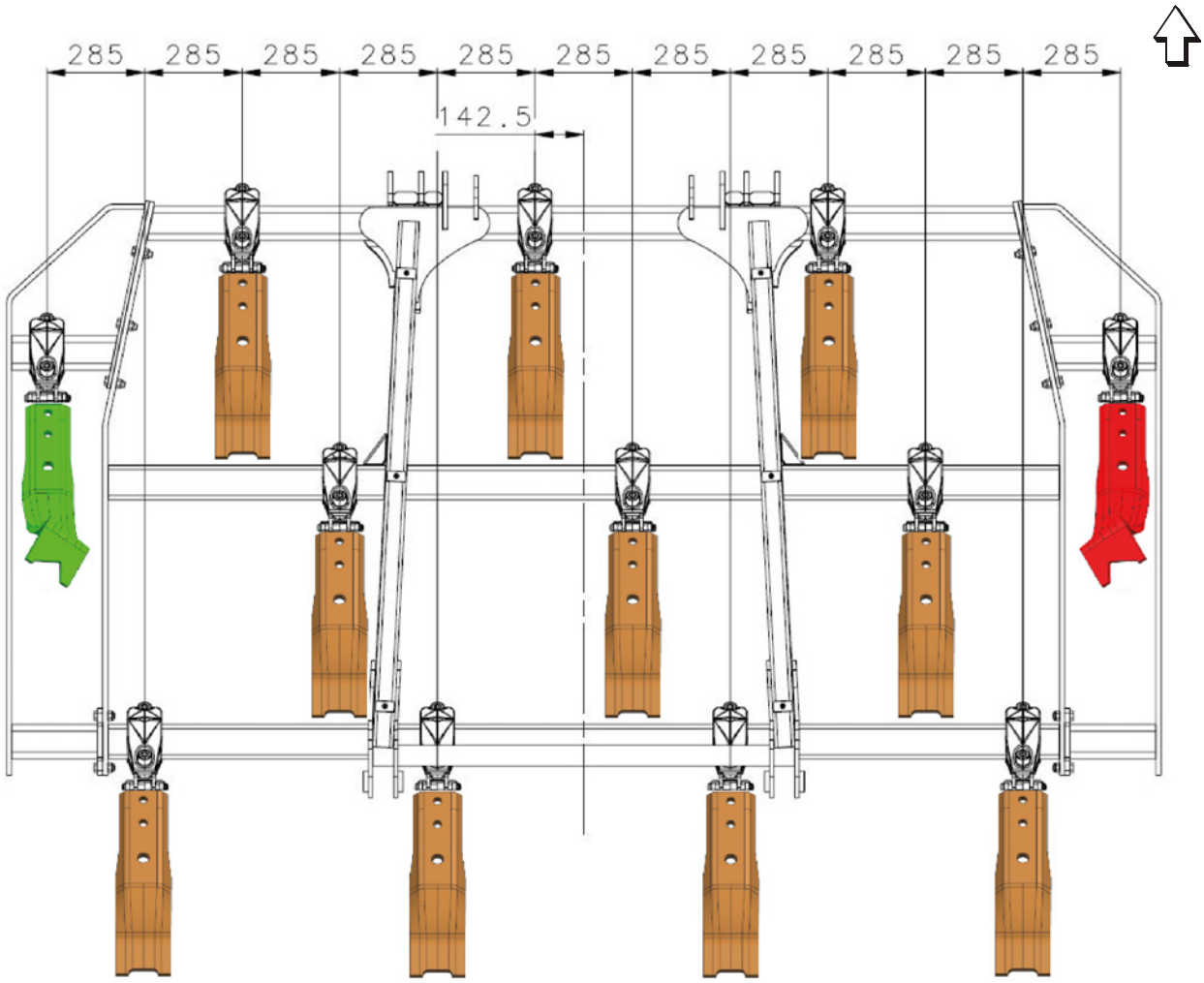
Tine deflectors			Tine protectors
			
Spiral Left	Spiral Right	Centred	-
x1	**x1**	**x8**	**0**

CU3001 / CU3001P 3.00m (9'10'') – 285mm (11 1/4'') pitch



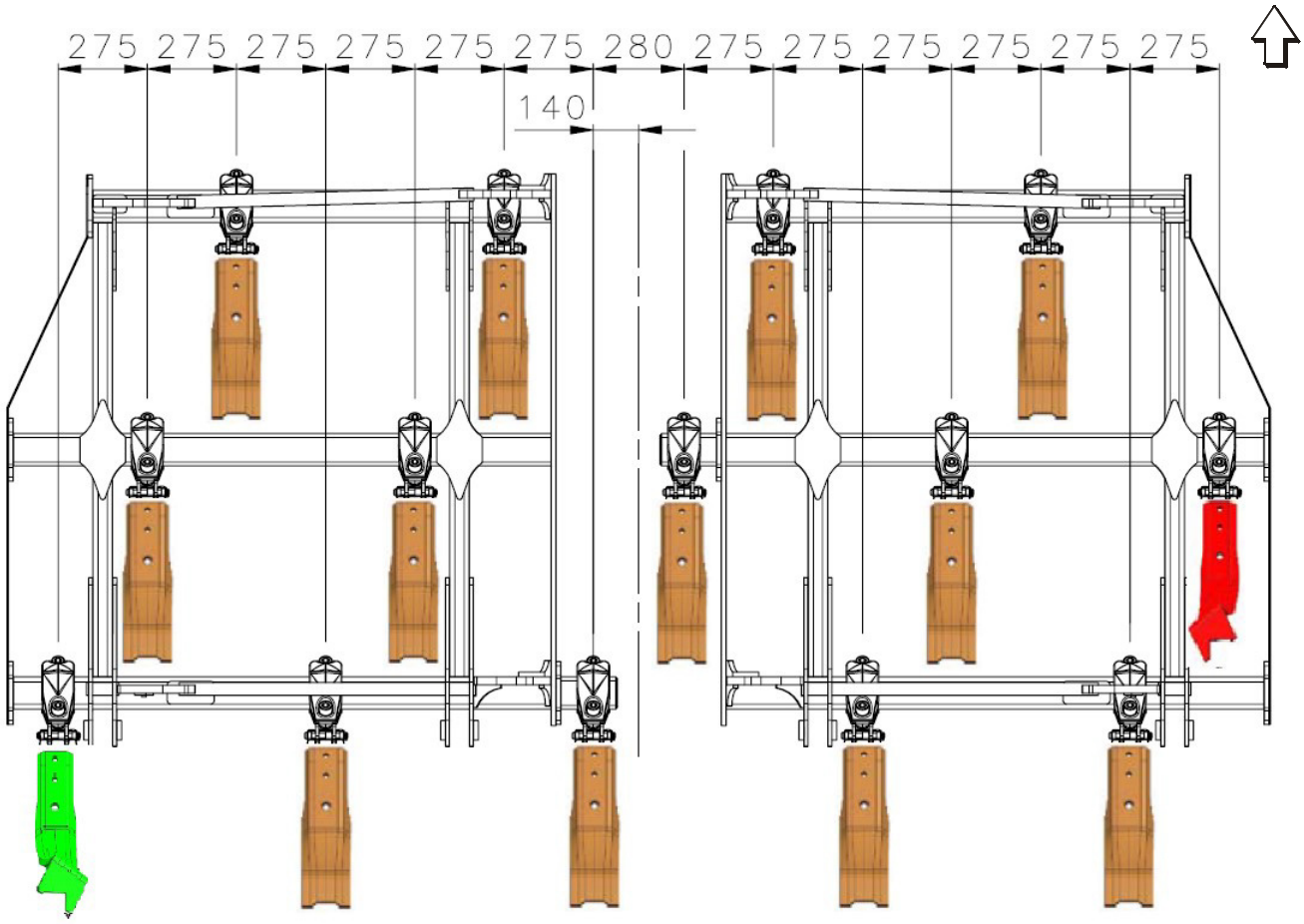
Tine deflectors			Tine protectors
			
Spiral Left	Spiral Right	Centred	-
x1	**x1**	**x10**	**0**

CU3001 / CU3001P 3.50m (11’5’’) – 285mm (11 1/4’’) pitch



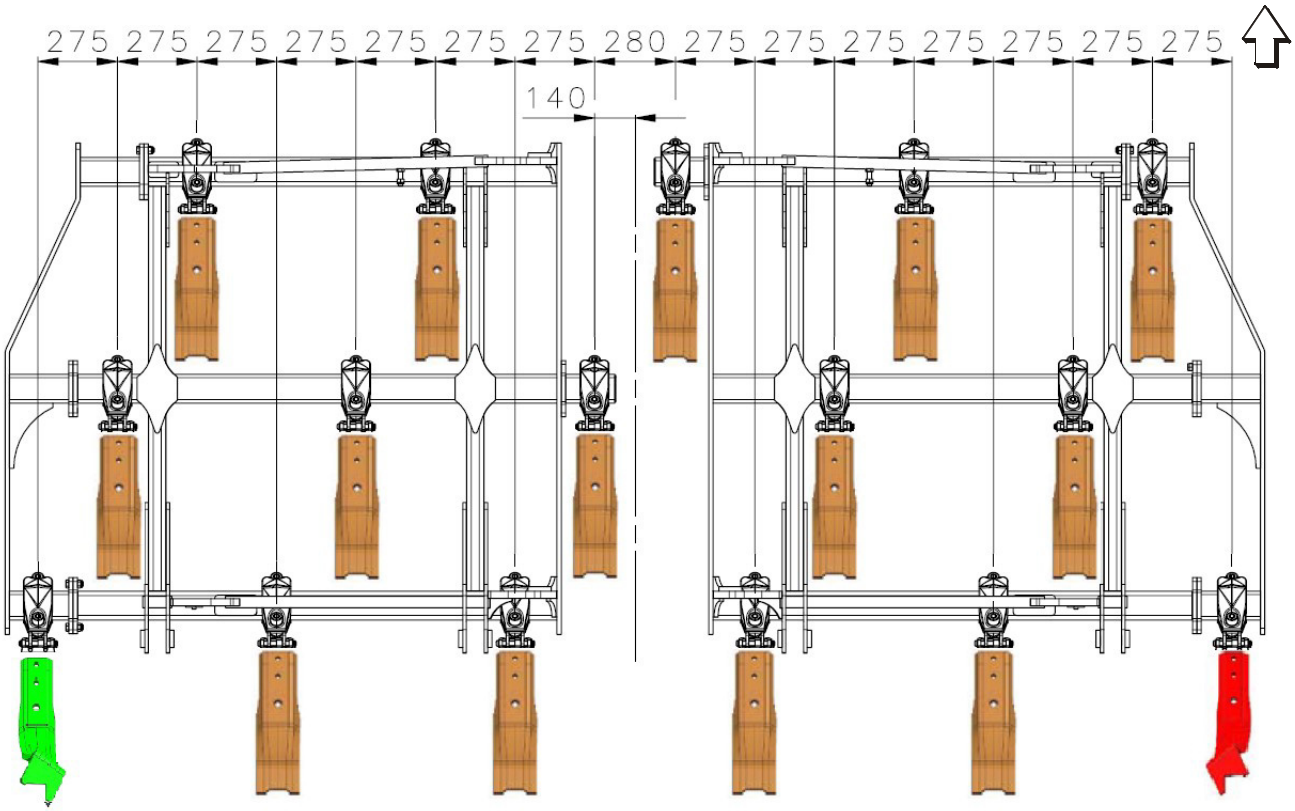
Tine deflectors			Tine protectors
			
Spiral Left	Spiral Right	Centred	-
x1	**x1**	**x12**	**0**

CU3001 / CU3001P 4.00m (13'2'') – 275 mm (10 3/4'') pitch



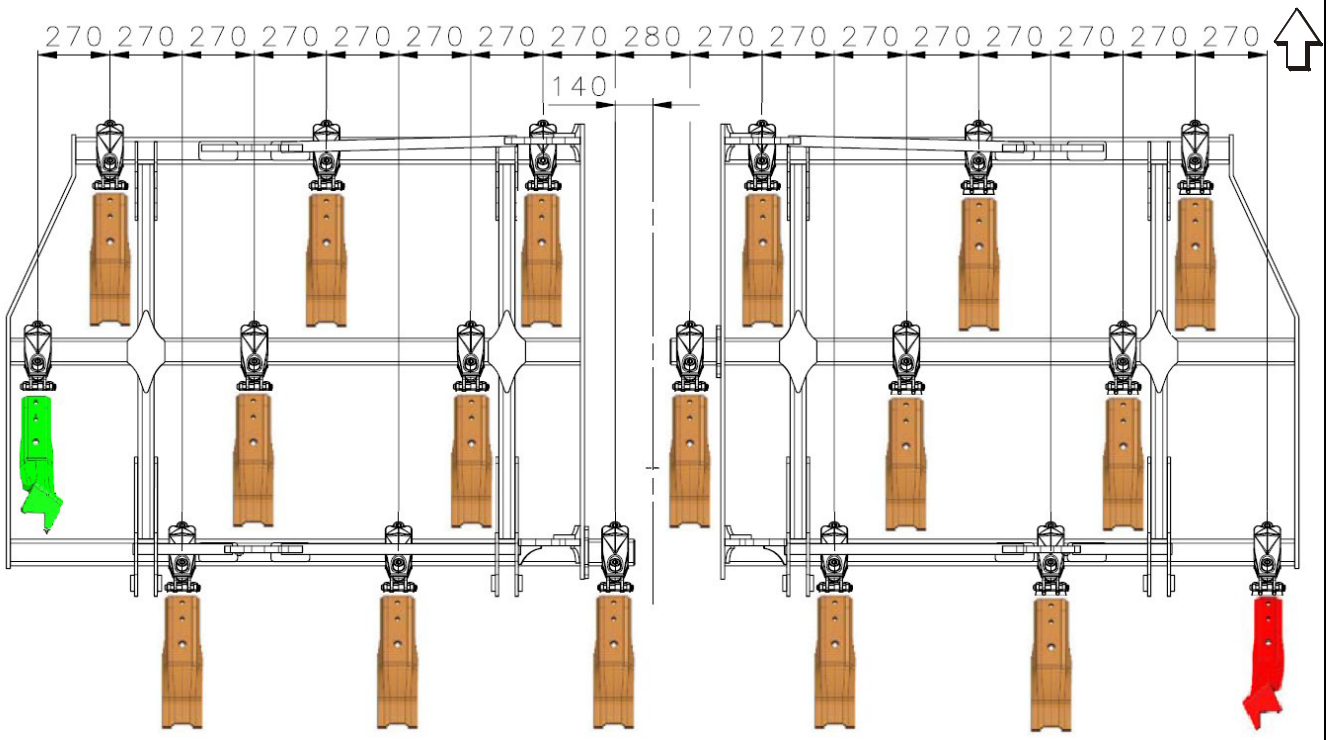
Tine deflectors			Tine protectors
			
Spiral Left	Spiral Right	Centred	-
x1	**x1**	**x14**	**0**

CU3001 / CU3001P 4.50m (14'9") – 275 mm (10 3/4") pitch

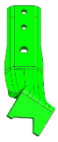


Tine deflectors			Tine protectors
			
Spiral Left	Spiral Right	Centred	-
x1	**x1**	**x16**	**0**

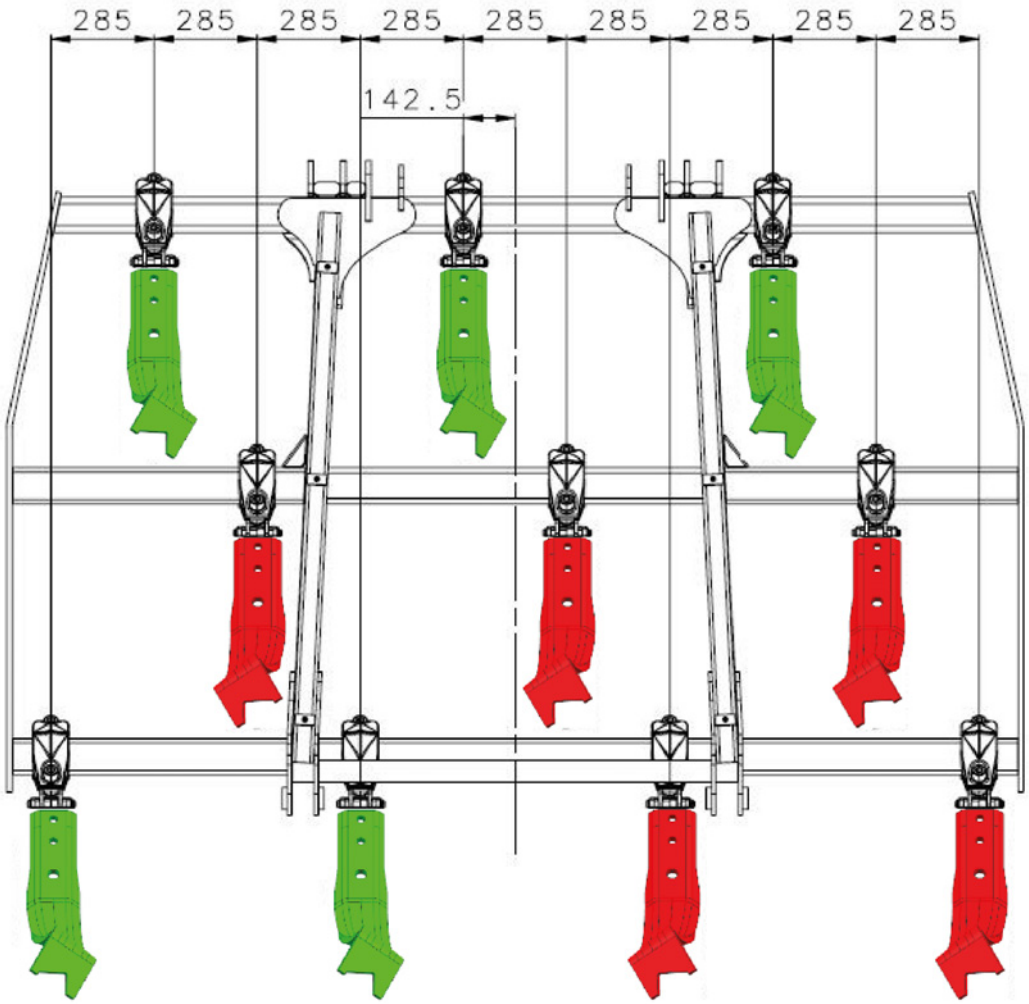
CU3001 / CU3001P 5.00m (16'5") – 270mm (10 1/2") pitch



Spiral deflectors

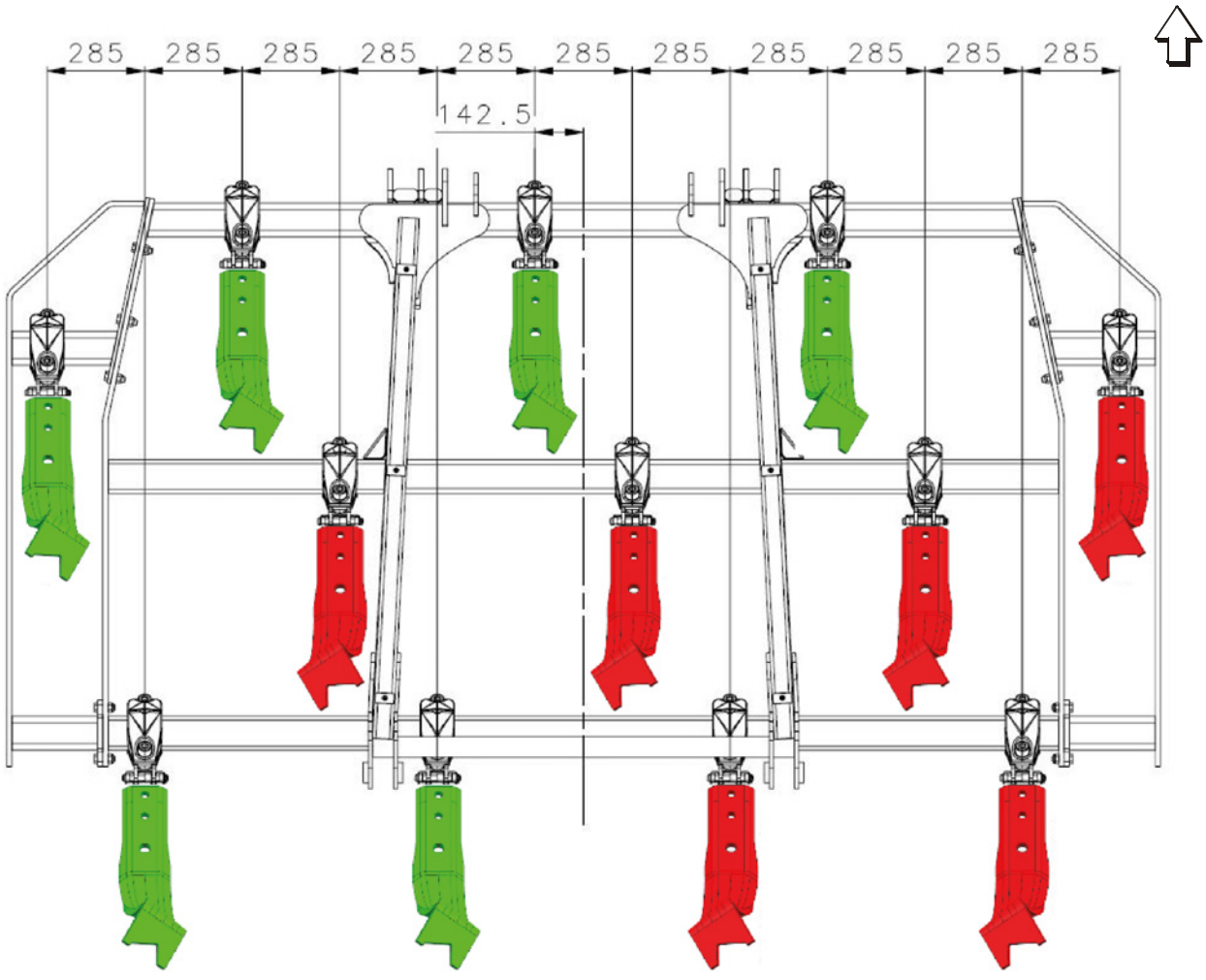
Tine deflectors			Tine protectors
			
Spiral Left	Spiral Right	Centred	-
x5	**x5**	**0**	**0**

CU3001 / CU3001P 3.00m (9'10'') – 285mm (11'') pitch



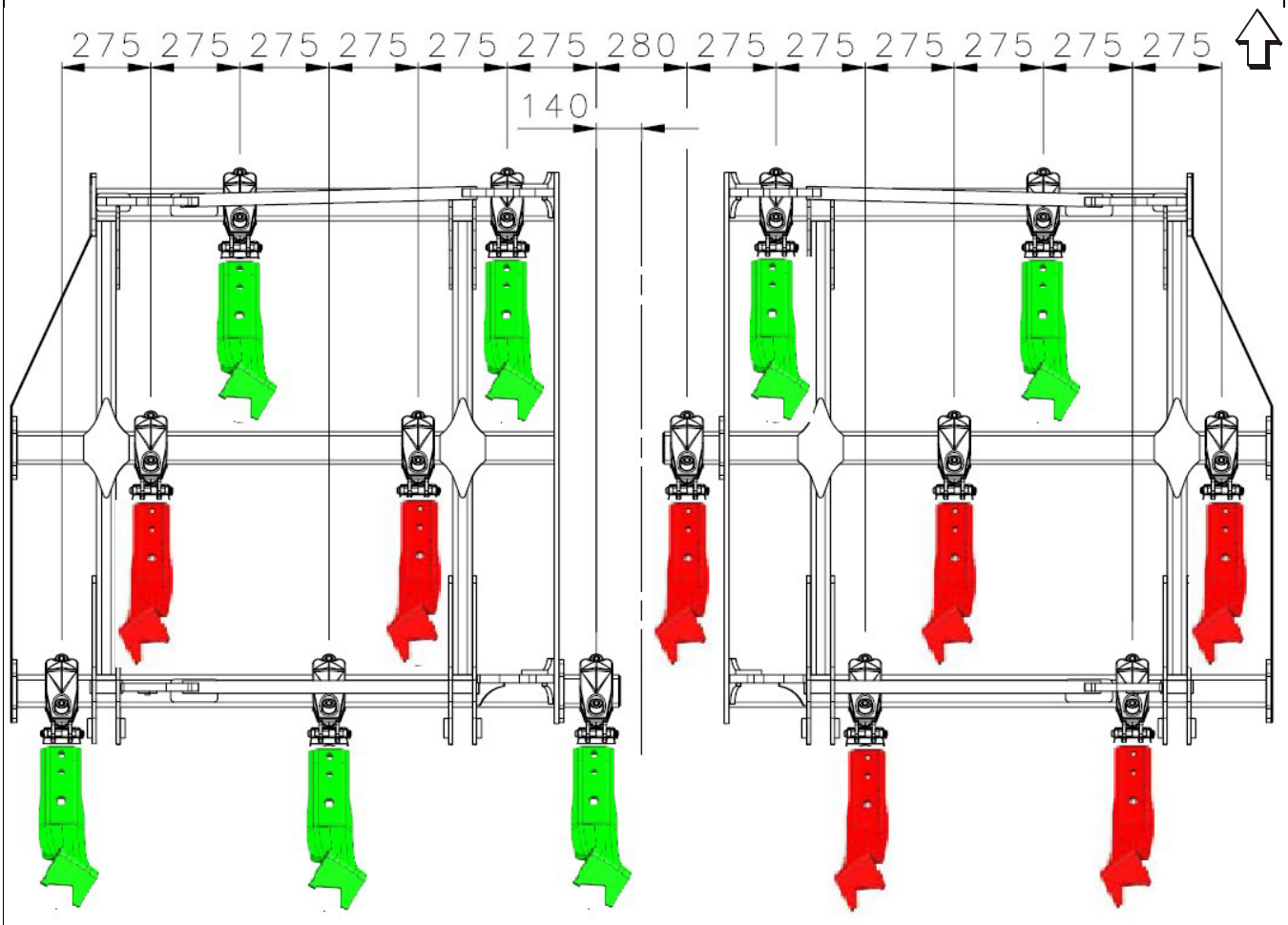
Tine deflectors			Tine protectors
			
Spiral Left	Spiral Right	Centred	-
x6	**x6**	**0**	**0**

CU3001 / CU3001P 3.50m (11'5'') – 285mm (11'') pitch



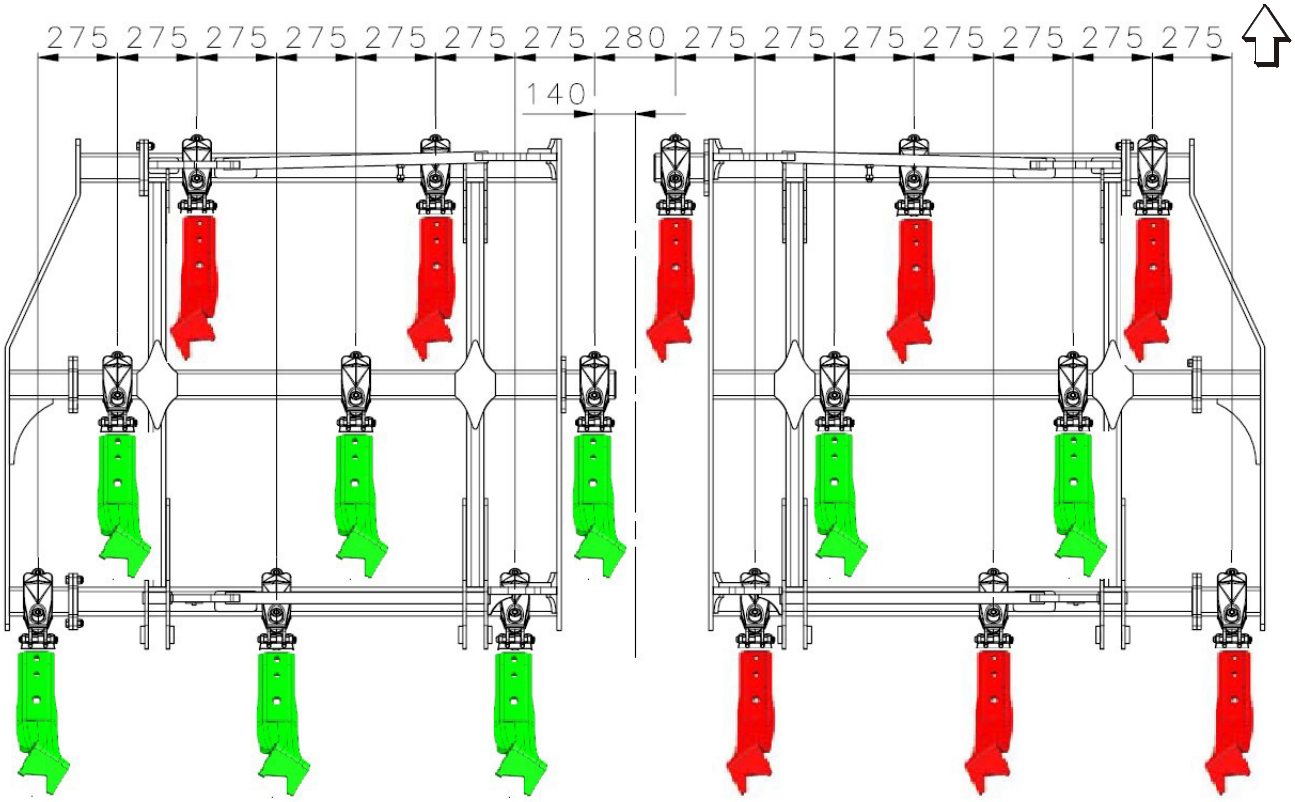
Tine deflectors			Tine protectors
			
Spiral Left	Spiral Right	Centred	-
x7	**x7**	**0**	**0**

CU3001 / CU3001P 4.00 m (13'2'') – 275 mm (10 3/4'') pitch



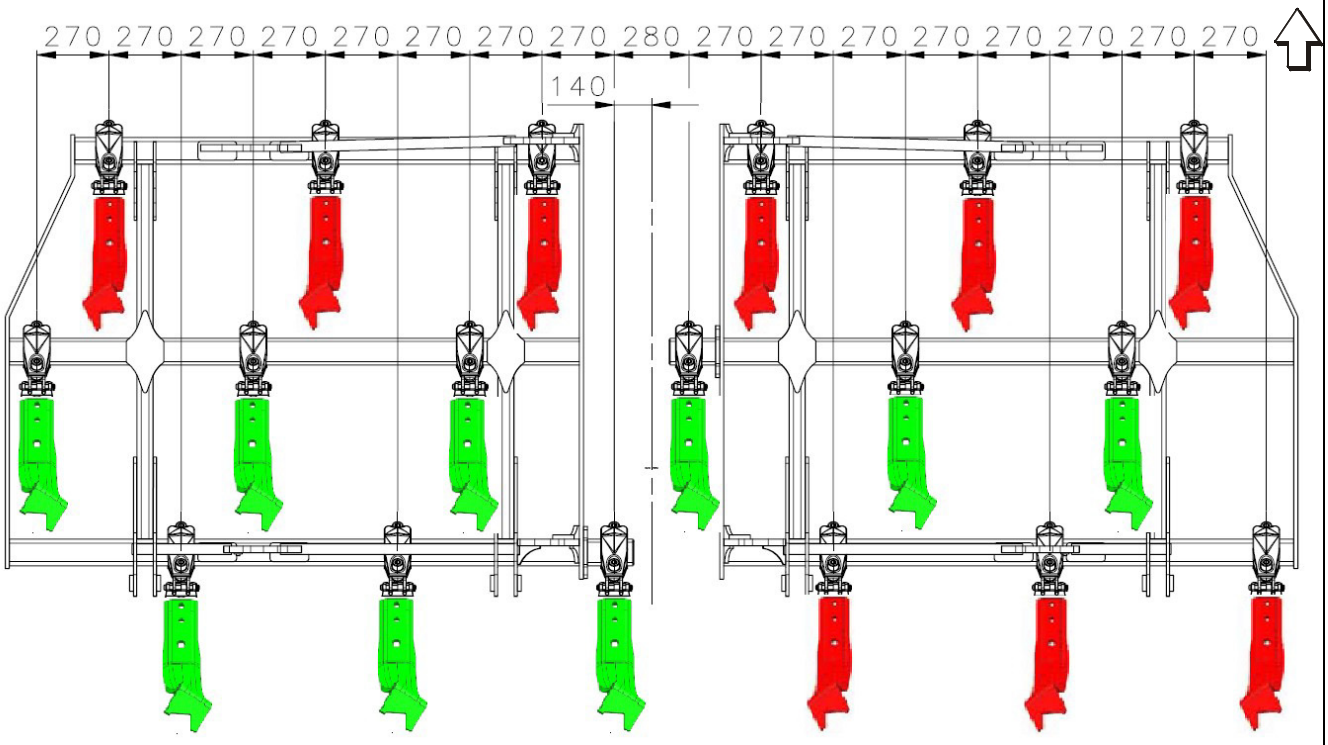
Tine deflectors			Tine protectors
			
Spiral Left	Spiral Right	Centred	-
x8	**x8**	**0**	**0**

CU3001 / CU3001P 4.50 m (14'9") – 275 mm (10 3/4") pitch



Tine deflectors			Tine protectors
			
Spiral Left	Spiral Right	Centred	-
x9	**x9**	**0**	**0**

CU3001 / CU3001P 5.00 m (16'5") – 270 mm (10 1/2") pitch

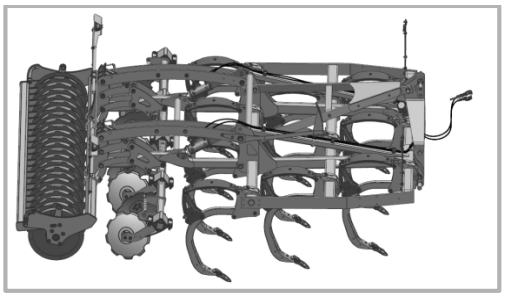


Inspection on receipt

CAUTION

The machine may be delivered partly disassembled
In this case, carefully follow the assembly instructions contained in the assembly handbook.

Mounting the rear accessory [+]



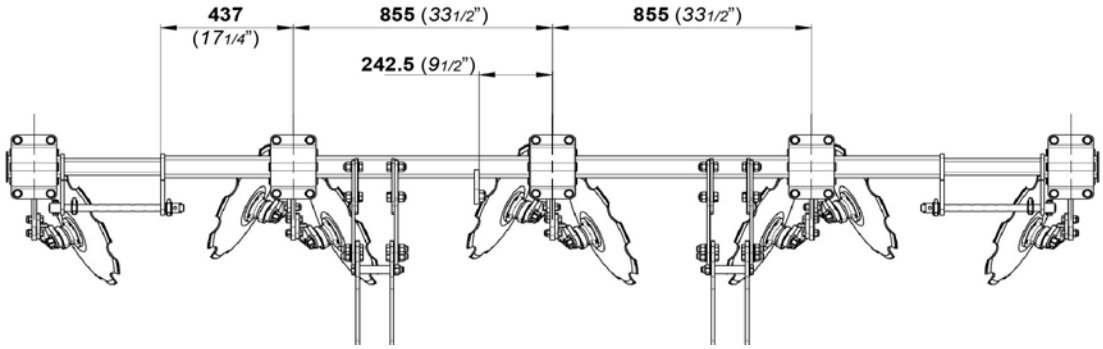
- Present the rear accessory (the roller depth adjustment system with or without the levelling system) to the rear of the machine.
- Check the alignment of the roller with the chassis.
- Tighten the attachments.
- Check that all attachments are tight.

Rear accessory configurations

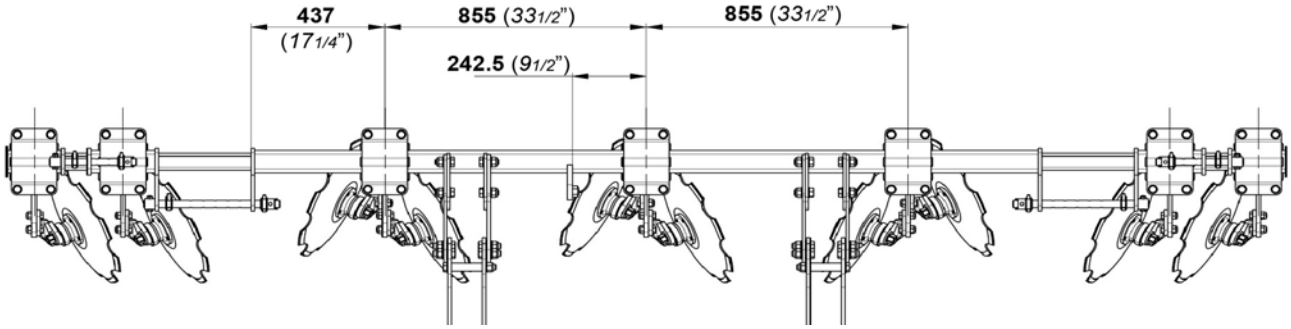
Levelling discs

CU3001P

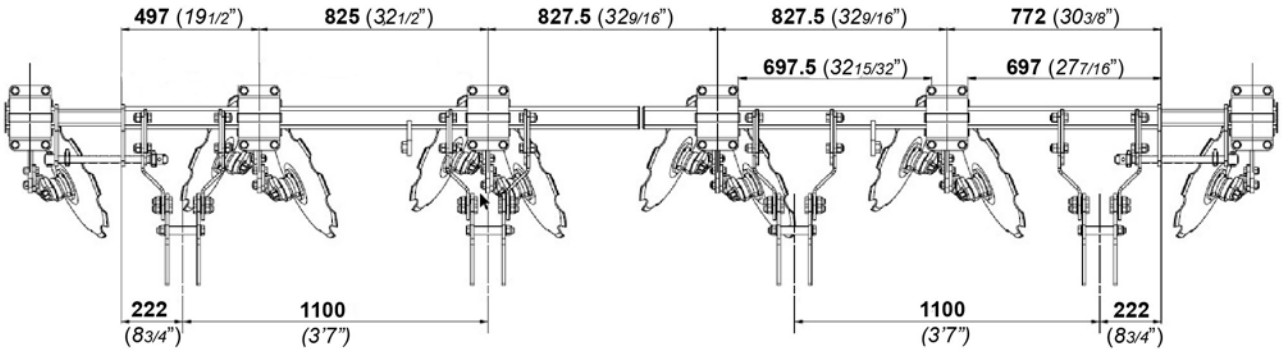
Rigid CU3001P 3.00 m (9’10’’)



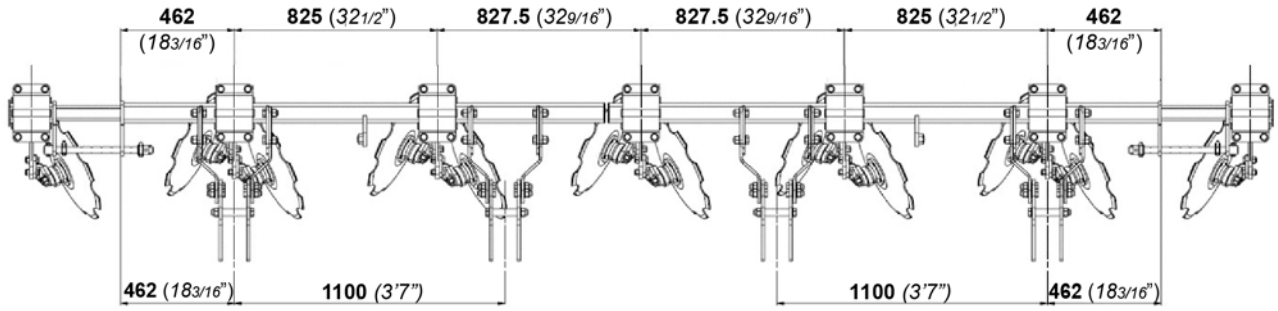
Rigid CU3001P 3.50m (11’6’’)



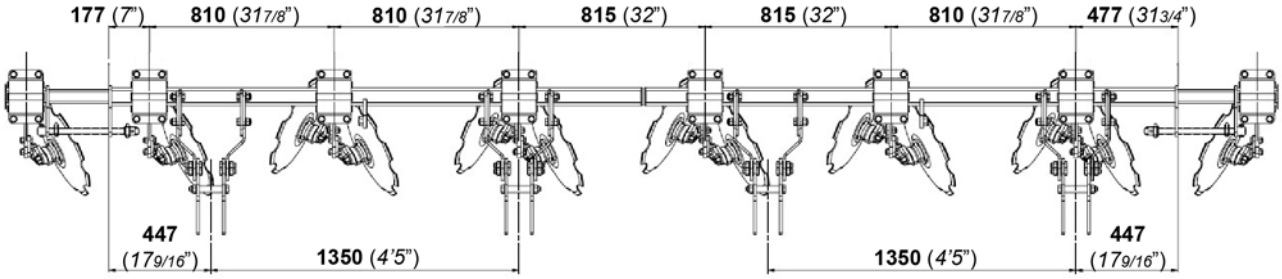
Folding CU3001P 4.00 m (13’2’’)



Folding CU3001P 4.50 m (14.9')

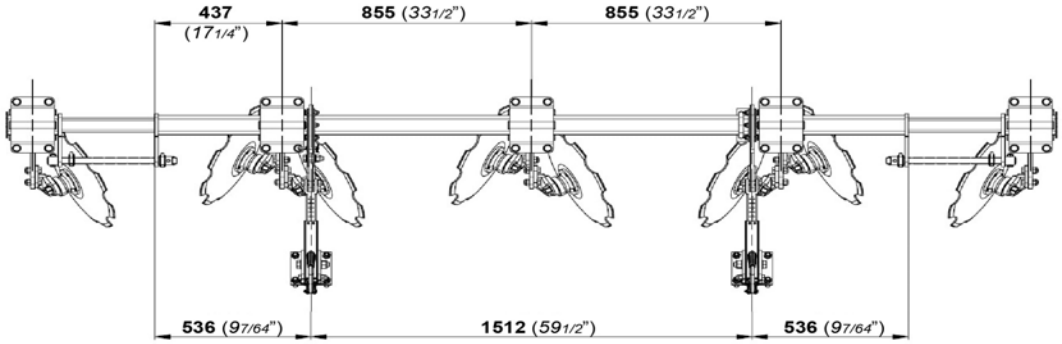


Folding CU3001P 5.00 m (16'5")

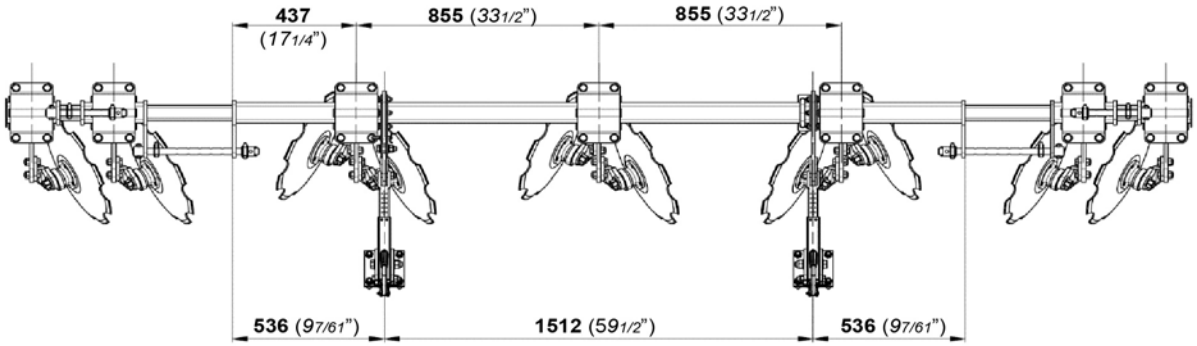


CU3001

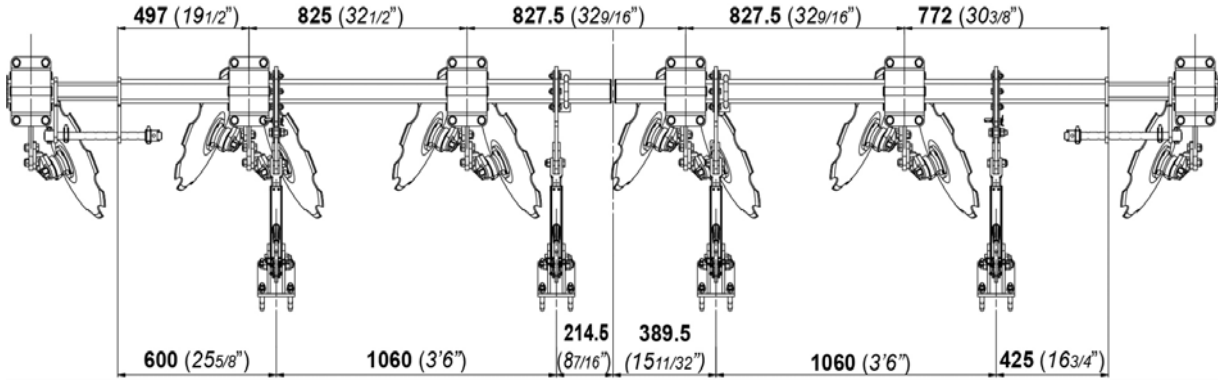
Rigid CU3001 3.00 m (9’10’’)



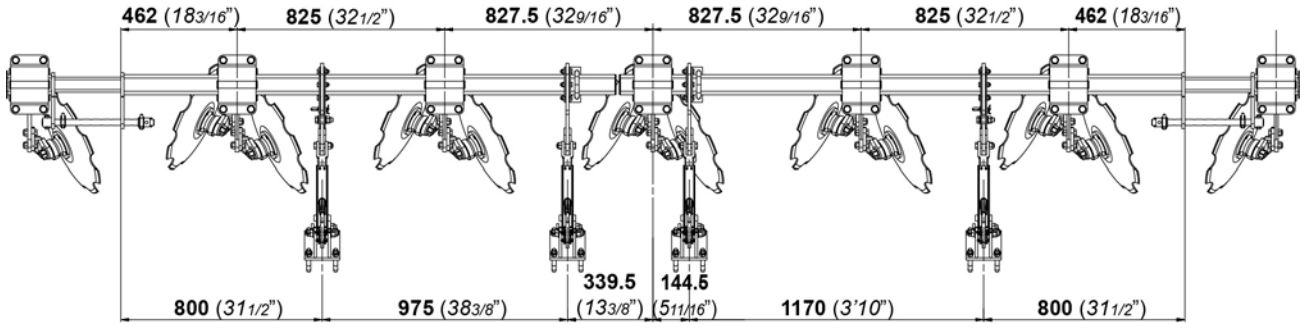
Rigid CU3001 3.50m (11’5’’)



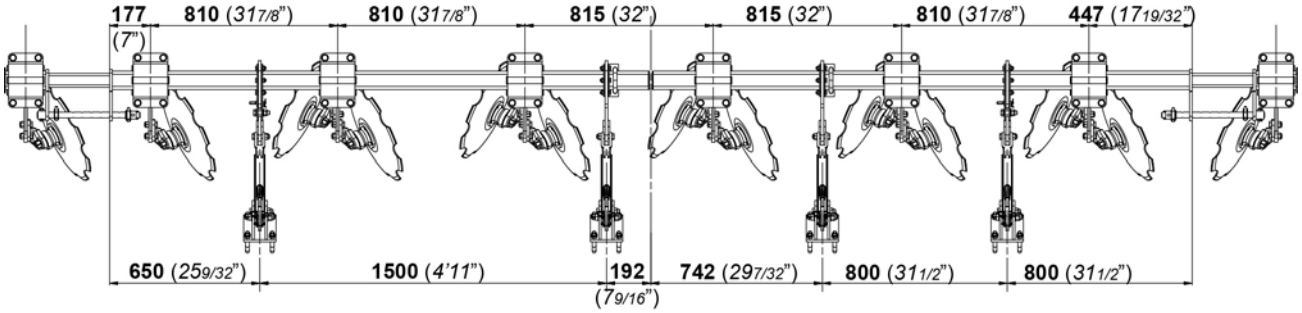
Folding CU3001 4.00 m (13’2’’)



Folding CU3001 4.50 m (14’9”)

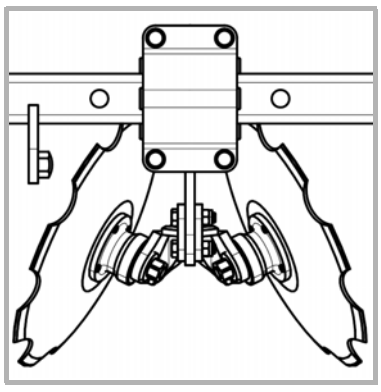


Folding CU3001 5.00m (16’5”)



Edging discs with the hydraulic option [+]

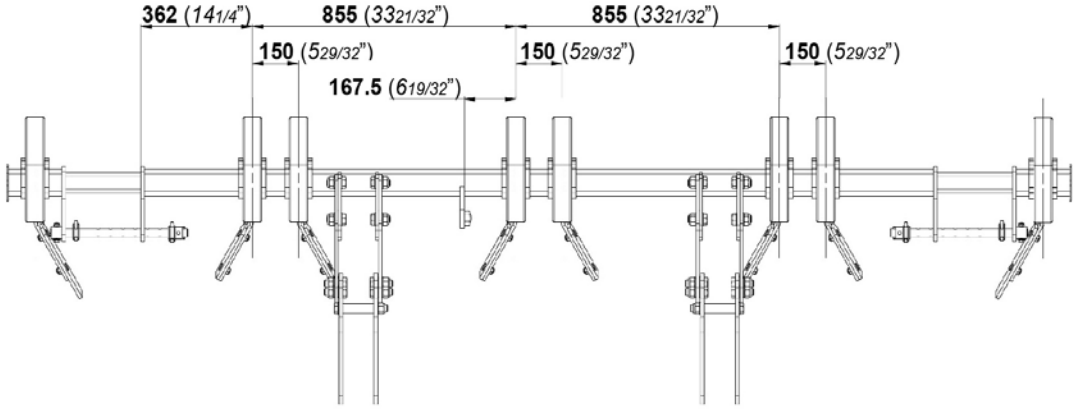
When the edging discs with hydraulic option is installed, the central discs are no longer offset but at the same level.



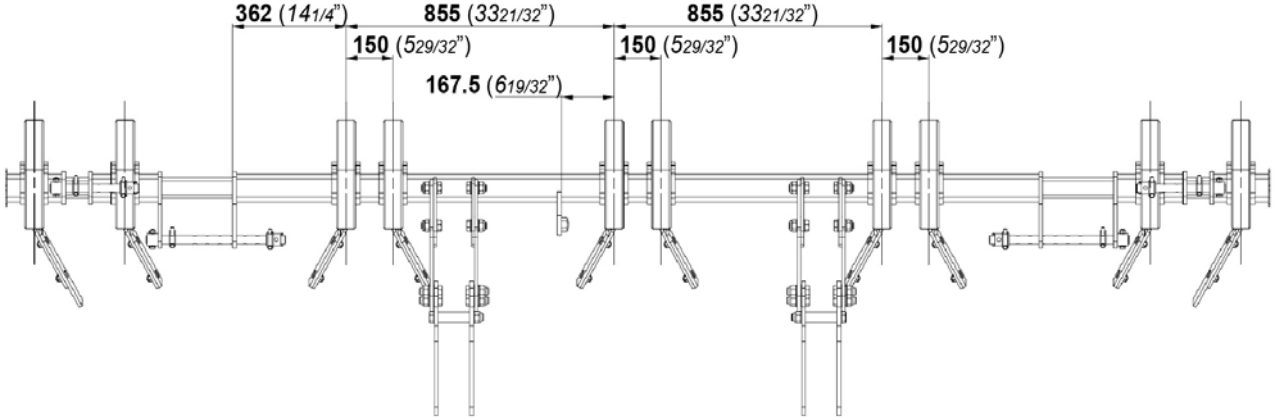
Levelling tines

CU3001P

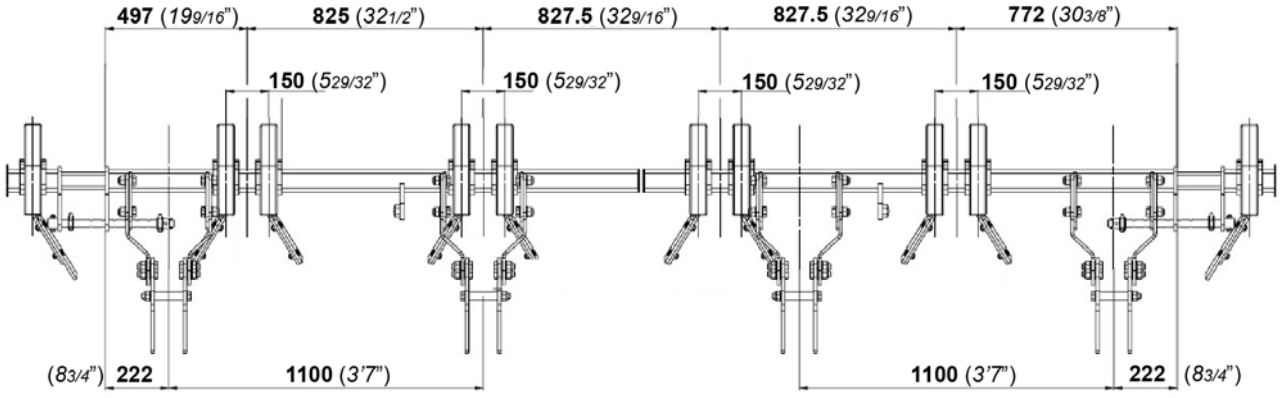
CU3001P 3.00m (9’10’’)



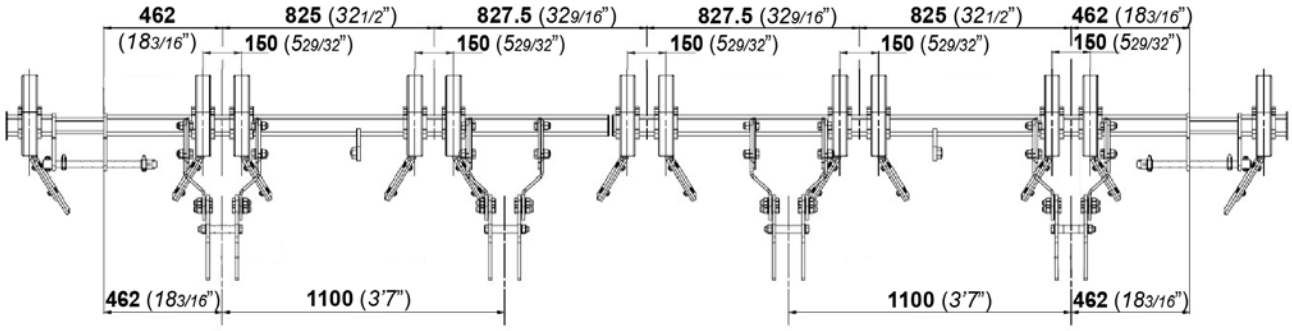
CU3001P 3.50m (11’5’’)



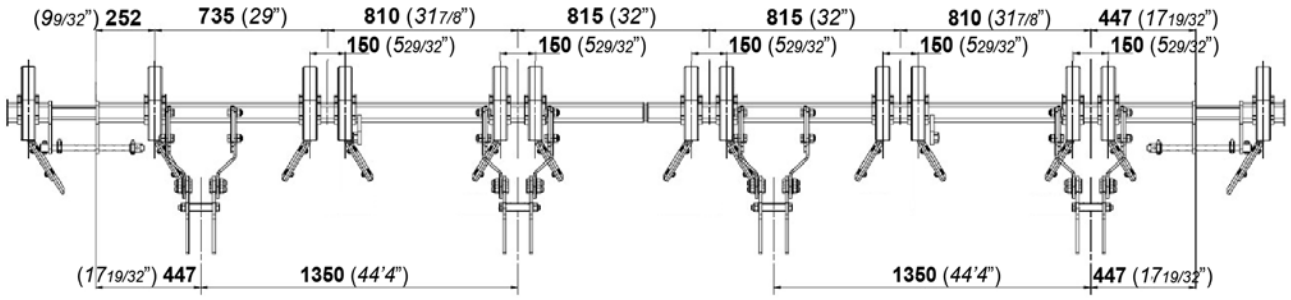
CU3001P 4.00m (13’2’’)



CU3001P 4.50 m (9’15’’)

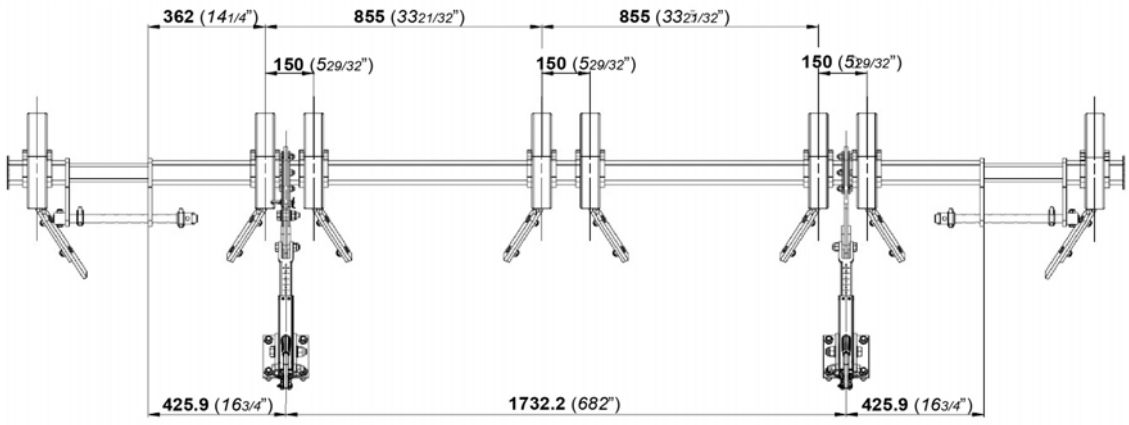


CU3001P 5.00 m (16’5’’)

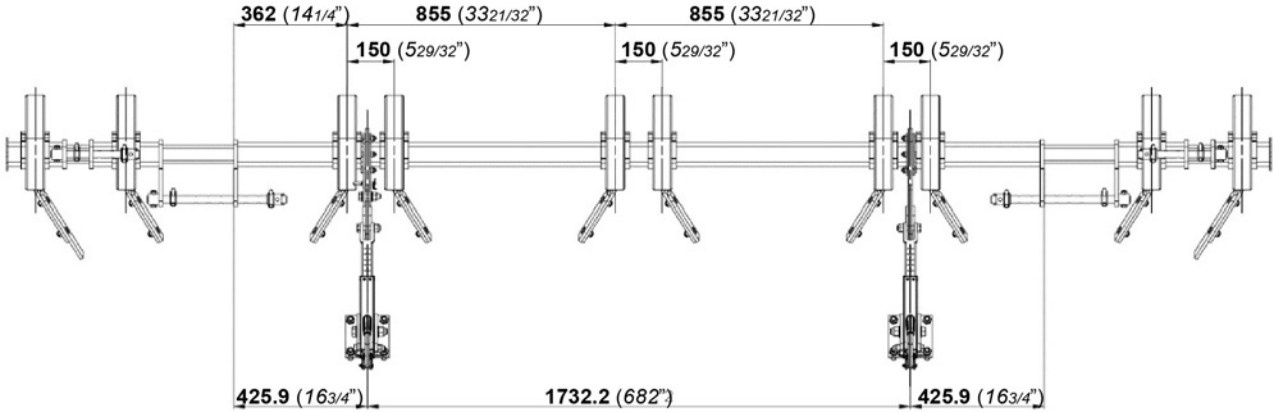


CU3001

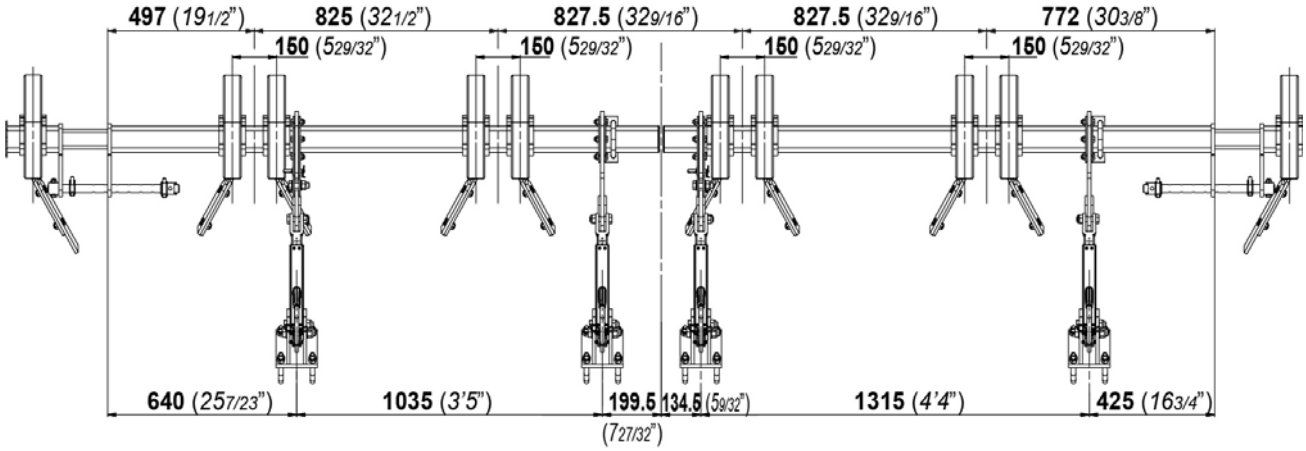
CU3001 3.00m (9’10’’)



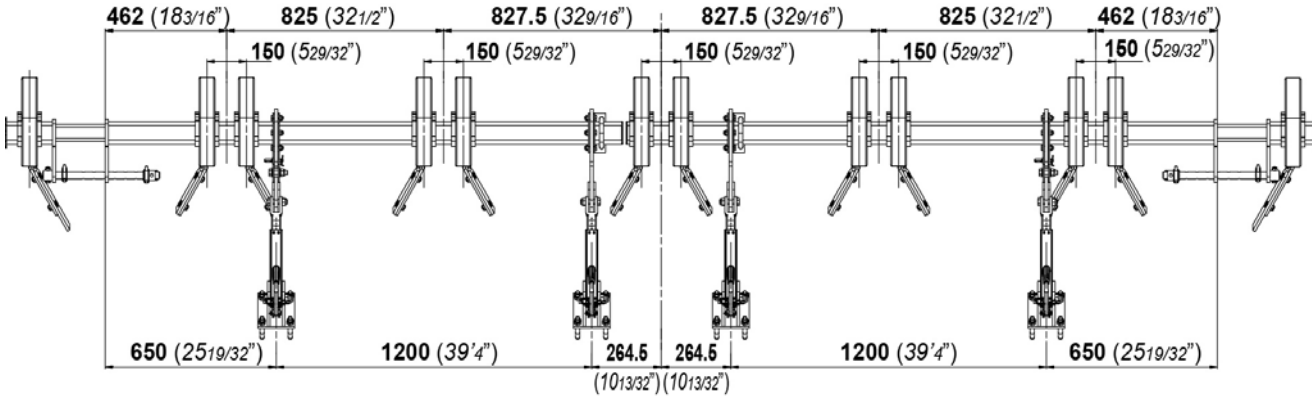
CU3001 3.50m (11’5’’)



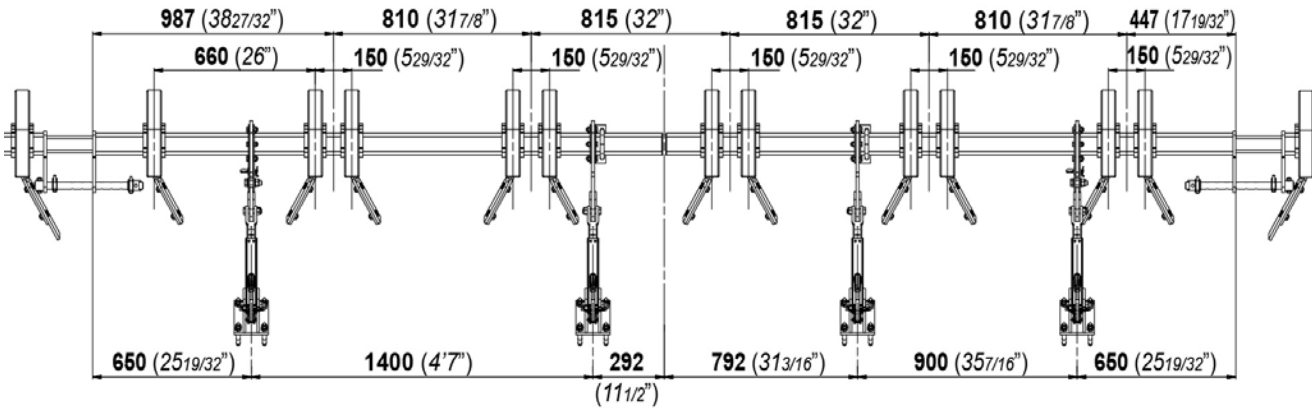
CU3001 4.00m (13’2’’)



CU3001 4.50 m (9’15’’)

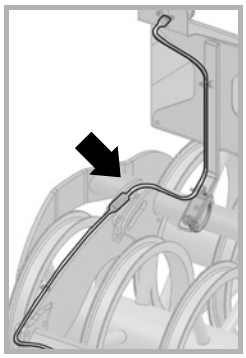


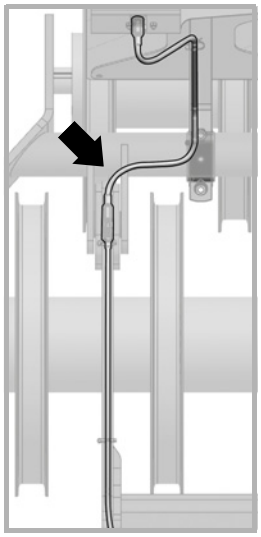
CU3001 5.00 m (16’5’’)



Repositioning the signalling equipment on the Actipress Twin

Rigid CU3001 machines

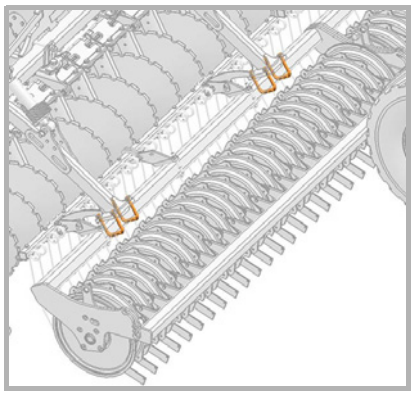


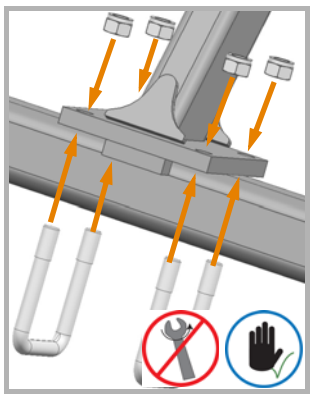


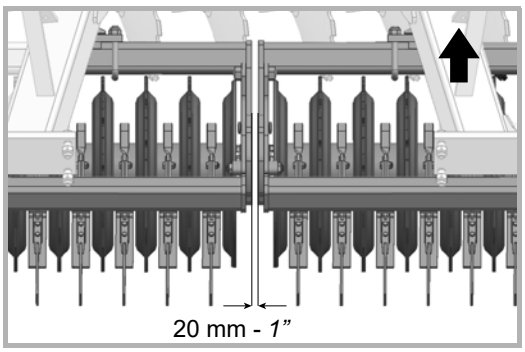
When fitting the signalling equipment on the roller frames:

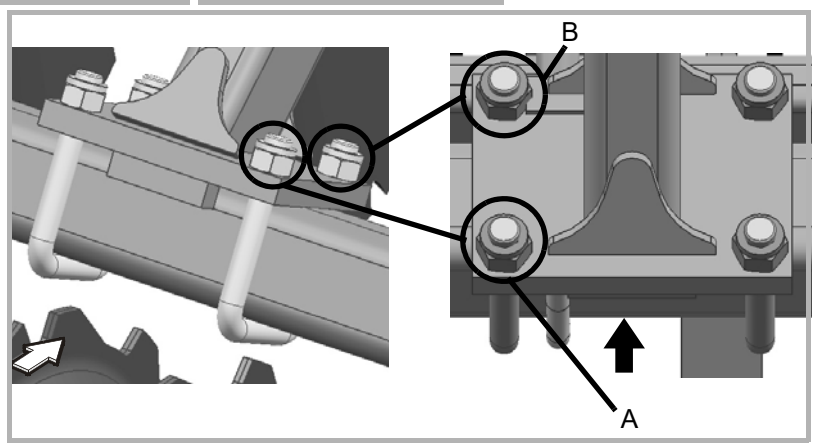
- Make sure that the lighting harnesses follow the recommended cable routing.

Repositioning the rollers

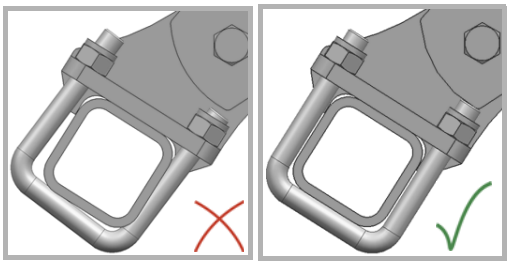


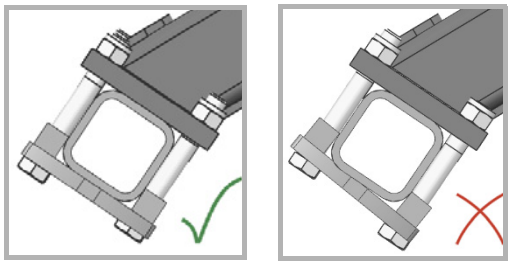






Attachment by bracket or by clamp





Valid for both attachment modes:

→ For the tightening torques, refer to section "Couples de serrage visserie standard" to page 57.

- Symmetrically present the roller(s) at the rear of the machine.
- Assemble the brackets, or the clamps.
- Bolt the brackets or clamps without tightening to the recommended torque.
- Check that the roller(s) is (are) aligned with the chassis, with a 20 mm *(1”)* gap in the centre.
- Tighten the nuts **A** until the tube of the roller touches the flat of the roller arms.
- Make sure that the rollers are correctly positioned in their brackets or clamps.
- Tighten the nuts **B** to the recommended torque.
- Lastly, tighten the nuts **A** to the recommended torque.
- Check all the tightening torques.

CAUTION

Danger zone

- Comply fully with safety instructions.
- Never stand between the tractor and the machine during the coupling operation.

WARNING

Risk of collision

All folding and unfolding operations must be made with the struts retracted.

- Before unfolding, pin the struts in the retracted position.
- Connect the hydraulic hoses to the tractor.
  - Dual effect for folding.
- Connect the road signals connector, if present.

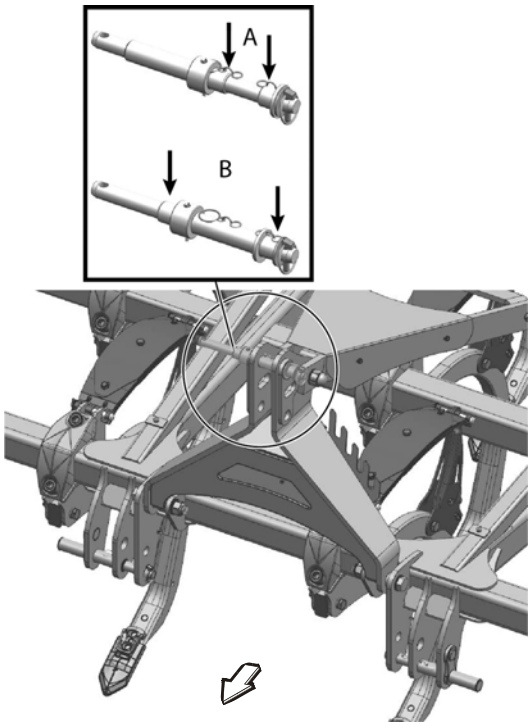
DANGER

Keep a safe distance from the machine/tractor assembly during operations.

Non-compliance with this instruction may cause serious injury or even death.

Check that the tractor and the machine are completely immobilised before working between the machine and the tractor.

Hitching rigid machines

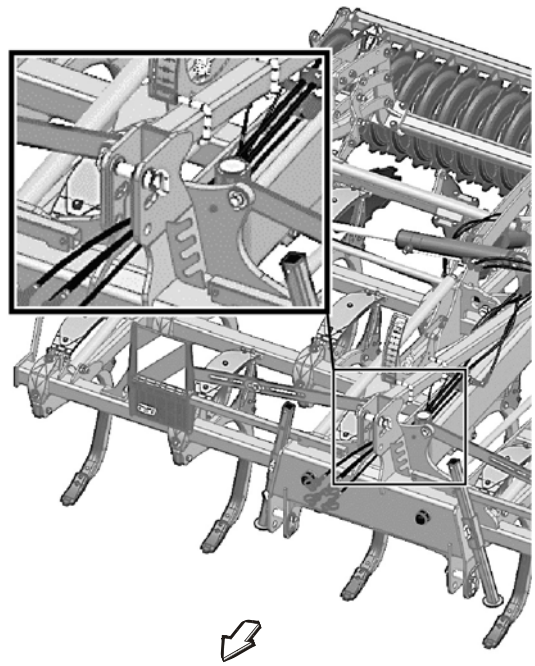


- Adjust the bar on the third point to the required coupling category.

No.	Description
A	Category **II** (For rigid machines only)
B	Category **III** (For rigid and folding machines)

- Bring the tractor to the machine.
- Couple the machine to the tractor lifting arms.
- Hitch the machine to the third point.
- Adjust the tractor arms so that the machine has the least amount of clearance possible to the right and the left.
- Connect the road signals connector, if present.
- If necessary, clean the hydraulic couplings to prevent impurities from entering the hydraulic circuit.
- Connect the hydraulic hoses to the tractor.
  - Dual effect for hydraulic depth control.
  - Dual effect for hydraulic retraction of the discs or levelling tines (if fitted).

Hitching folding machines



- Do not change the factory setting of the axis of the bar.
- Bring the tractor to the machine.
- Couple the machine to the tractor lifting arms.
- Hitch the machine to the third point.
- Adjust the tractor arms so that the machine has the least amount of clearance possible to the right and the left.
- Connect the road signals connector, if present.
- If necessary, clean the hydraulic couplings to prevent impurities from entering the hydraulic circuit.
- Connect the hydraulic hoses to the tractor.
  - Dual effect for hydraulic depth control.
  - Dual effect for folding.

Safety

Before travelling on roads with the machine, please read the following safety instructions carefully. Compliance with these instructions is important and helps you avoid accidents:

DANGER

Do not carry anyone on the machine
This could cause serious injury or even death.

CAUTION

Make sure that the machine complies with current requirements.

- Make sure that the machine is equipped with suitable signalling devices.
- Make sure that the machine is equipped with suitable warning and safety devices.
- Make sure that the machine complies with the following points:
  - permitted transport width,
  - permitted weight,
  - permitted axle loads,
  - permitted tyre load limits,
  - permitted total weight.

Make sure that the machine is equipped with all suitable warning and safety devices.

Always comply with the highway code.

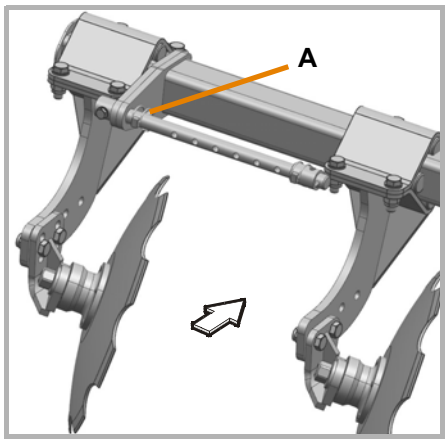
Remove plant debris, stones and large clumps of earth before driving on the road.

Non-compliance with the regulations in force shall engage the responsibility of the driver and owner of the machine.

Respect the transportation width

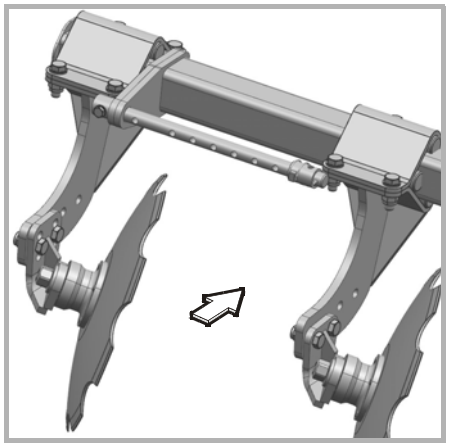
If you have a rigid machine equipped with levelling tines, make sure that the edge levelling tines are retracted. To do this, proceed as follows;

Manual device



- Remove pin **A** from its "work" position.
- Push fully the tube of the edge levelling device.
- Insert the pin in the correct hole for transport.
- Repeat on the other side.

Hydraulic device



- Actuate the distributor to fully retract the tubes of the edge levelling device.
- Disconnect the ***edge levelling*** function hydraulic lines from the tractor to avoid any
accidental operation during transport.

Lighting and signalling

- Ensure that the lighting, reflectors, licence plate, sign boards and warnings are always fully visible.
- If this is not possible, fit lights and a number plate to the machine.

Flexibility

Several types of coulter equipment (coulters + deflectors) can be equipped on CU3001 type tines to better adapt to the type of work to be carried out.

Coulter range

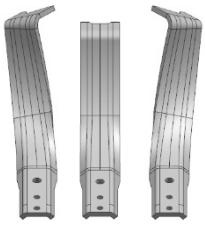
From superficial stubble tillage to deep tilling, using a coulter suited to the depth of the work lets you perform the right work while limiting the traction power and the energy required.

Coulter range									
									
Width (mm)	**60**	**320**	**80**	**320**	**150**	**250**	**320**	**70**	**320**
Width (*inches*)	***2 3/8”***	***12 1/2”***	***3”***	***12 1/2”***	***6”***	***10”***	***12 1/2”***	***2 3/4”***	***12 1/2”***
Depth (cm)	**10 - 35**	**5 - 15**	**10 - 35**	**5 - 15**	**8 - 25**	**5 - 15**	**5 - 15**	**10 - 35**	**5 - 15**
Depth (*inches*)	***4” - 13 3/4”***	***2” - 6”***	***4” - 13 3/4”***	***2” - 6”***	***3” - 9”***	***2”- 6”***	***2” - 6”***	***4” - 13 3/4”***	***2” - 6”***

Deflector range

The upper part of coulter equipment plays an important role on the work (mixing, required power and levelling).

If the machine tines are equipped with right and left deflectors, then when starting up, it is necessary to check the levelling quality. If required, it is possible to invert one or several pairs of deflectors in order to improve mixing or levelling quality.

Deflector range		
	Deflectors 	**Protector** 
Width (mm)	**80**	**60**
Width (*inches*)	***3”***	***2 3/8”***
Model available	**Right spiral/No spiral/Left spiral**	**No spiral**
Depth (cm)	**5 - 25**	**10 - 35**
Depth (*inches*)	***2” - 12”***	***4” - 14”***

Adjustment of working depth:

CAUTION

Danger of crushing and entrapment

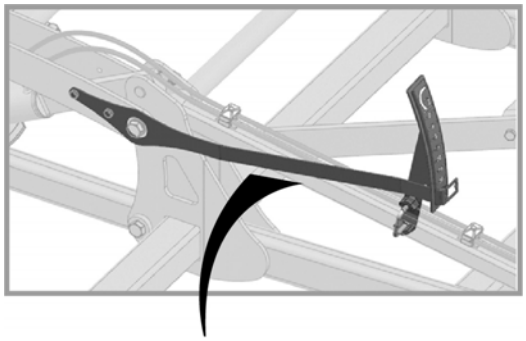
- Comply fully with safety instructions.
- Keep a safe distance during manoeuvres.

NOTE **Never turn the machine with the tool in the ground.**

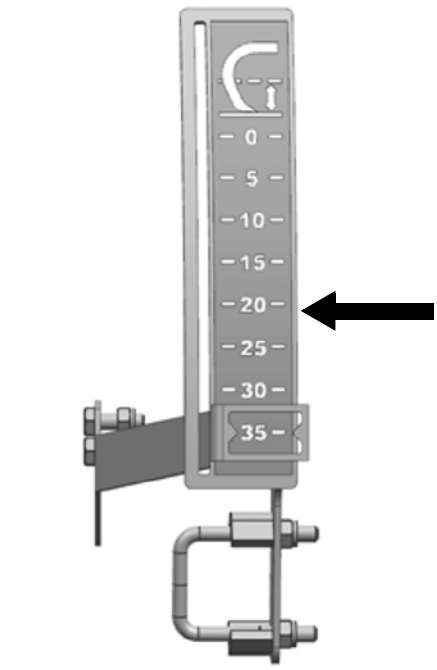
The working depth of the stubble tines and levelling systems is controlled by the rear roller and/or by the optional depth control wheels at the front of the machine.

Nevertheless, some levelling mechanisms have additional adjustments.

CU3001P

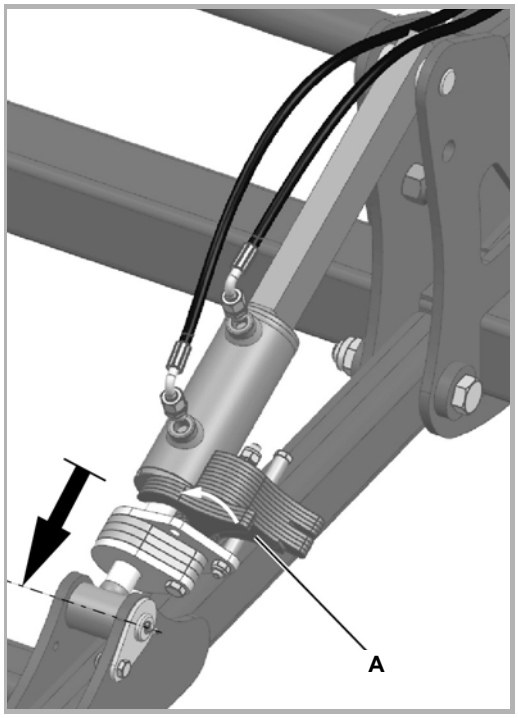


On machines fitted with a parallelogram system, the working depth is adjusted from the tractor cab. The arm position indicates the working depth in centimetres.



The label affixed to the mounting indicates a theoretical depth. It must be controlled and readjusted if necessary.
Machine horizontal alignment must also be checked and readjusted.

CU3001



Adjusting the working depth of the rollers is done hydraulically. The hydraulic cylinders allow the rollers to move. The working depth is set when the cylinders rest on the thickness spacers stacked on the rod. This stack limits cylinder travel and therefore determines the working depth.

The more chocks, the lower the working depth.

The adjustment principle is the same for the mounted rigid machines and the folding machines.

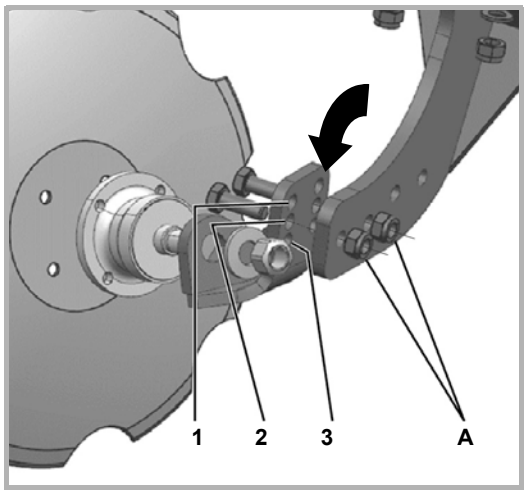
Raise and stabilise the machine:

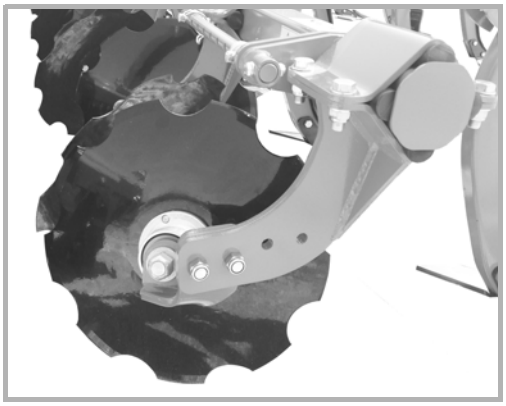
- Actuate the hydraulic distributor to lower the rollers.
- Add chocks **A** to the cylinder rods to reduce the working depth or remove them to increase it.
- Apply the same setting to all roller cylinders.
- Actuate the hydraulic distributor to raise the rollers until the cylinders are against their chocks.

Mounded rigid and folding machines		
Number of chocks engaged	Approximate working depth	
	(cm)	*(inches)*
0	30	*12”*
5	20	*8”*
10	10	*4”*
14	0	*0”*

- Place the machine on the ground and move forward a few metres.
- If necessary, correct the length of the third point so that the chassis remains parallel to the ground.

Adjusting the edging disc levellers





An uneven ground surface may require adjusting the height of the edging disc levellers.

The height can be adjusted by **±2 cm** (0.8") by moving the two bolts **A** in the "**1**", "**2**" or "**3**" position holes.

→ For the tightening torques:
see "Standard tightening torques" to page 94.

- Unscrew the two nuts **A** that hold the edging disc levellers.
- Remove the two screws.
- Line up the holes depending on the required position.
- Put back the two screws.
- Screw up the two nuts.

Adjustment of rear accessories

Proceed as follows to adjust the working depth of the levelling discs or levelling tines.

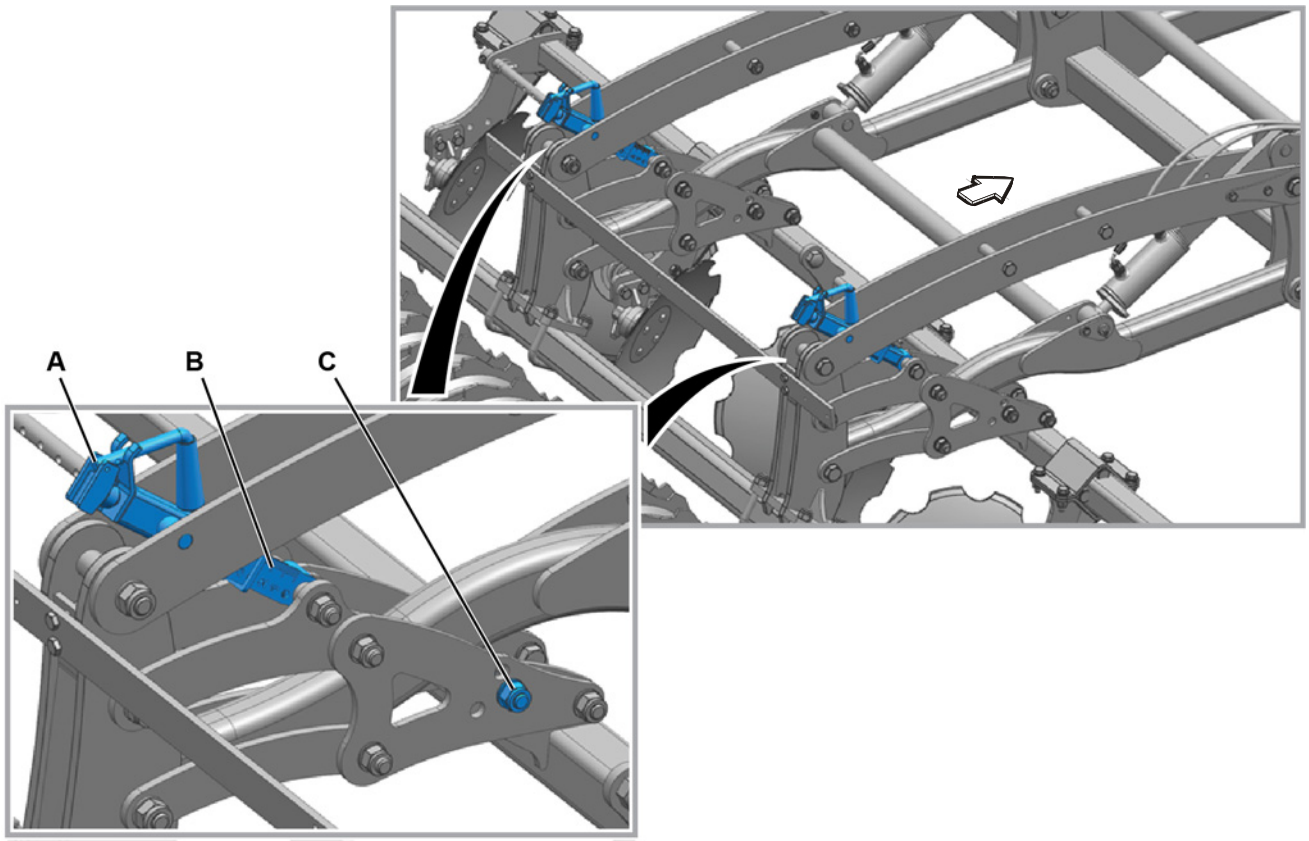
CU3001P

The levelling is positioned on a parallelogram connected to the roller mountings by handles.

The height of the levelling elements follows the height of the roller, but the levelling height must be adjusted if the working depth is changed significantly.

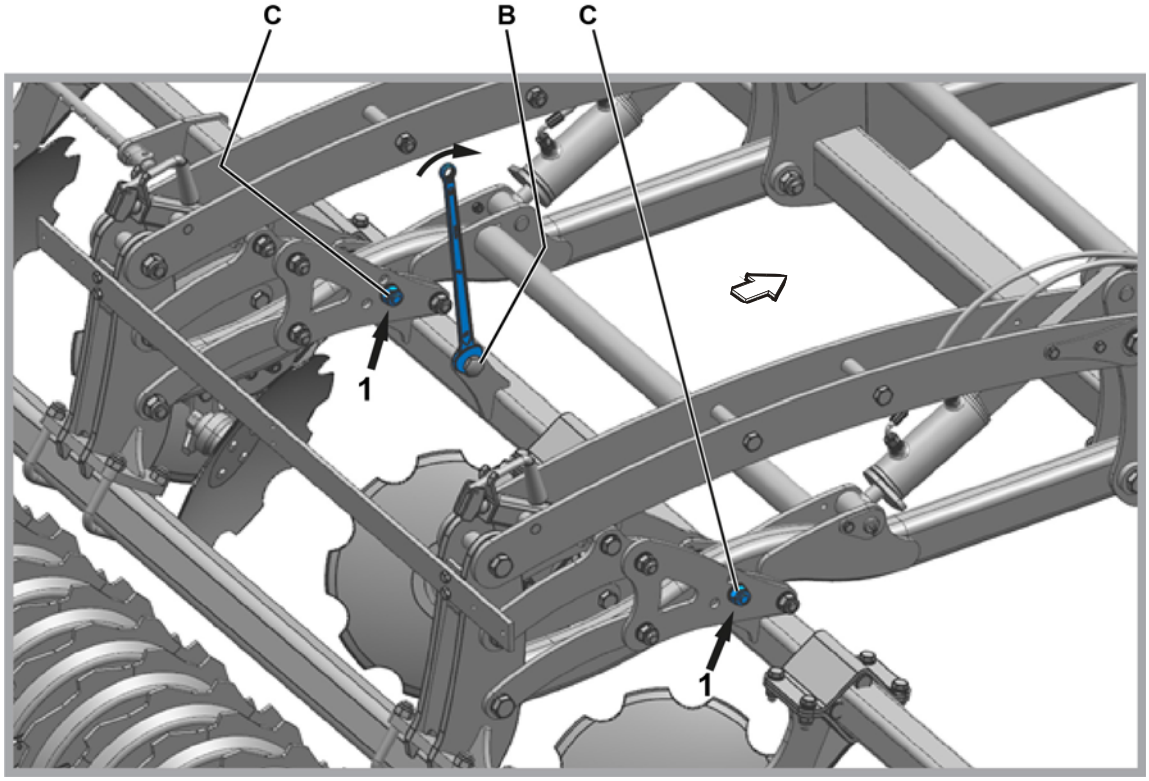
By default, the angular position of the levelling elements is optimum, but a slight angular adjustment can be carried out using the different positions of the parts **C**: see "Angular adjustment" to page 74.

Adjusting the height



- Raise the machine.
- Raise le levelling as much as possible using the handles **A**.
- Place the machine on the ground, keeping it horizontal.
- Using the handles **A** lower the levelling down to the ground without penetrating.
- Using the rule **B**, check that the adjustment is the same on both sides.
- Test and then correct the setting depending on the quality of levelling obtained.
  - The setting is correct when the soil is correctly levelled and shows no trace of the tines.

Angular adjustment



This adjustment is only required in case of difficult conditions where the levelling element height adjustment is not sufficient. Nevertheless, the adjustment at position “**1**” is the optimum adjustment for correct levelling.

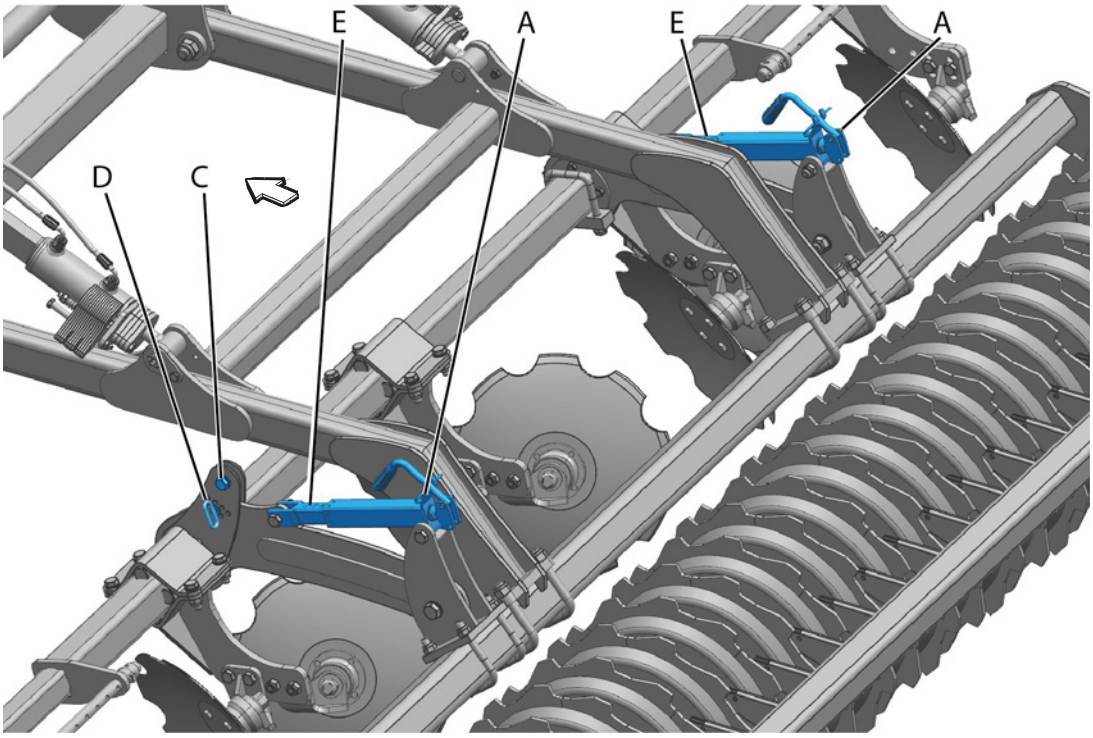
- Lower the machine to the ground.
- Unscrew the bolts **C**.
- Fit the wrench on the nut **B**.
- Raise the wrench to decrease the levelling.
- Remove the screws **C** and insert them in the holes of the required adjustment position.
- Put back the nuts on the screws **C** and tighten.
- If the working conditions change, return to position “**1**”.

CU3001

The levelling is positioned on arms linked to the roller mountings by handles.

The height of the levelling tines follows the height of the roller, but the levelling height must be adjusted if the working depth is changed (in **height** and **angle**).

Adjusting the angular height and adjustment



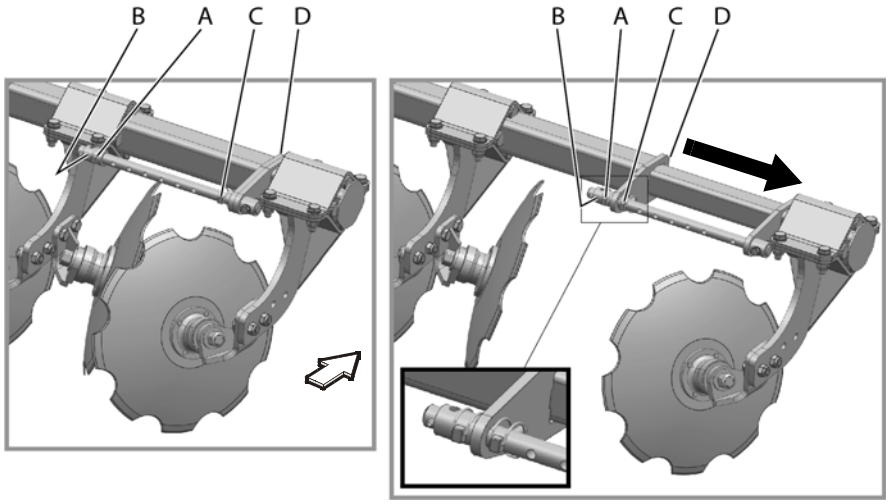
- Raise the machine.
- Raise le levelling as much as possible using the handles **A**.
- Place the machine on the ground, keeping it horizontal.
- Using the handles **A** lower the levelling down to the ground without penetrating.
- Using the rule **E**, check that the adjustment is the same on both sides.

Correct the levelling angle to achieve the same disc working depth:

- Remove the pins from the axes **D**.
- Fit the wrench on the nut **C**.
- Raise the wrench to decrease the levelling.
- Remove the axes **D**.
- Insert the axes into the desired adjustment holes.
- Refit the pins into their axes **D**.
- Test and then correct the setting depending on the quality of levelling obtained.
  - **The setting is correct when the soil is correctly levelled and shows no trace of the tines.**.

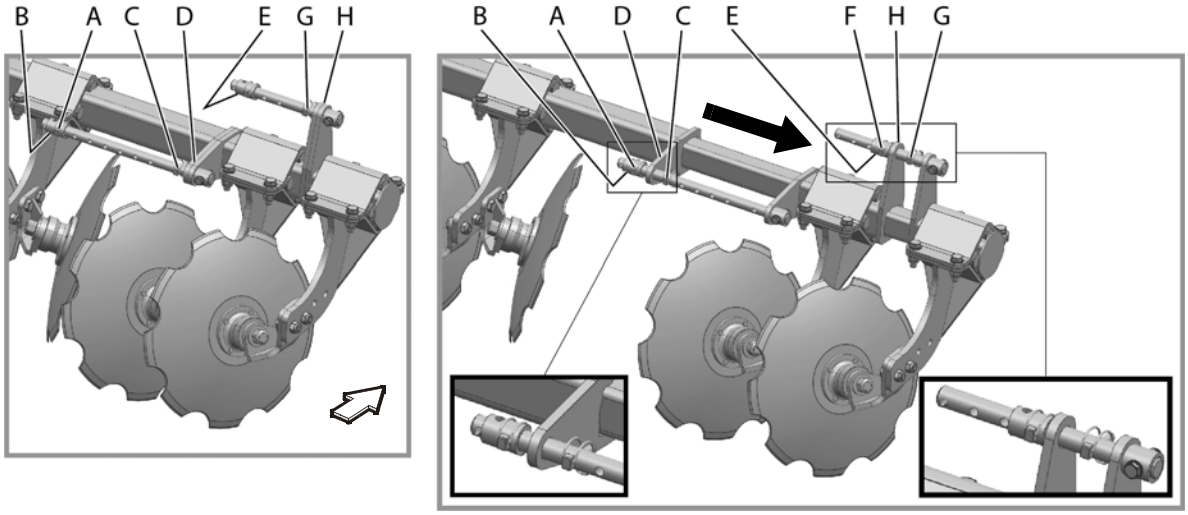
Edge levelling discs or tines

Mechanical - Single disc



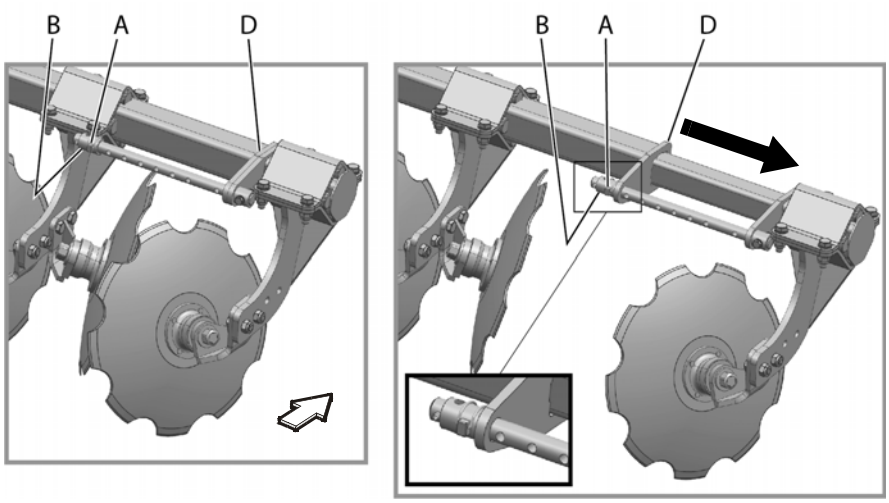
- Remove pins **A** and **C** blocking the position of socket **B**.
- Place socket **B** in the required position.
- Lock socket **B** with pin **A**.
- Extract the element until socket **B** touches plate **D**.
- Put back pin **C** in the free hole closest to plate **D**.

Mechanical 3.50 m (11'6") Double discs



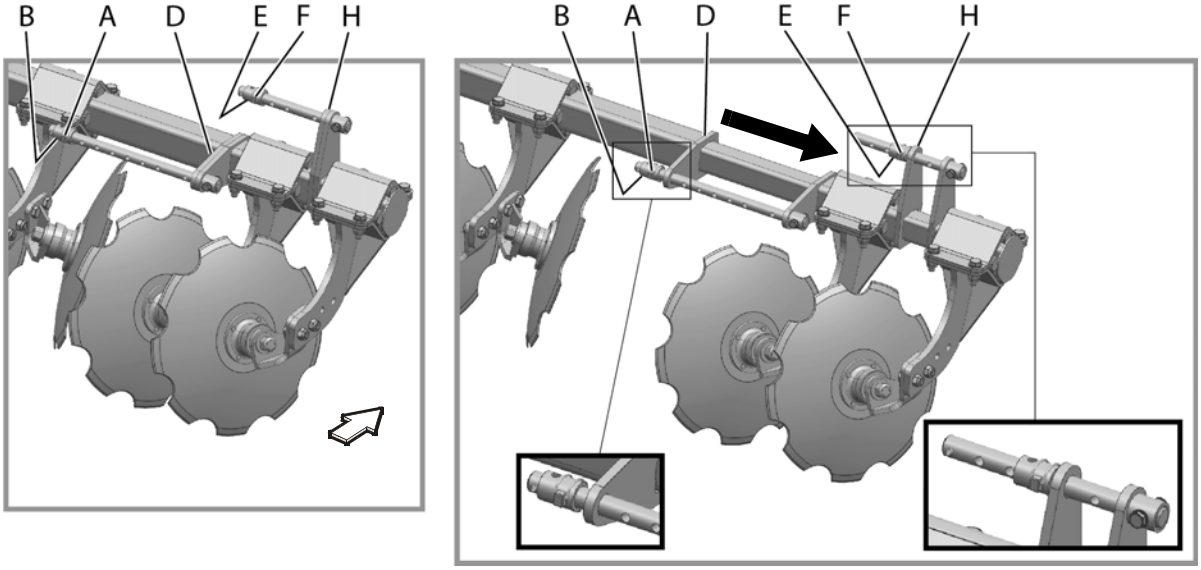
- Remove pins **A**, **C**, **F** and **G** blocking the position of sockets **B** and **E**.
- Place sockets **B** and **E** in the required position.
- Lock sockets **B** and **E** using pins **A** and **F**.
- Extract the element until sockets **B** and **E** touch plate **D**.
- Put back pins **C** and **G** in the free holes closest to the plates **D** and **H**.

Hydraulic - Single disc



- Remove pin **A** blocking the position of socket **B**.
- Place socket **B** in the required position.
- Lock socket **B** with pin **A**.
- Actuate the cylinder distributor to extract the tine until socket **B** touches plate **D**.

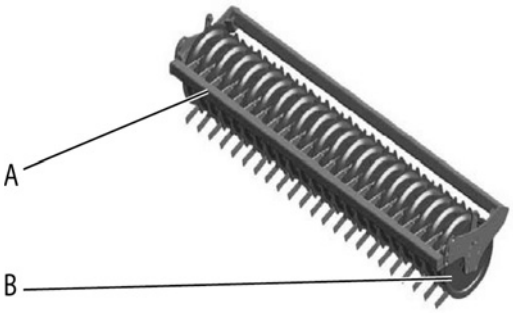
Hydraulic 3.50 m (11'6") Double discs



- Remove pins **A** and **F** blocking the position of sockets **B** and **E**.
- Place sockets **B** and **E** in the required positions.
- Lock sockets **B** and **E** using pins **A** and **F**.
- Actuate the cylinder distributor to extract the levelling elements until sockets **B** and **E** touch plates **D** and **H**.

Rollers

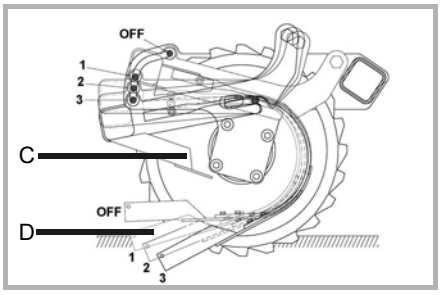
Actipack and Actiring



Reference	Description
A	Rear manifold
B	Disc roller

Active knife skids

Introduction



Use this configuration if you want:

- A levelled, fine tilth finish.
- To sow immediately after harrowing.

Adjust the knife skid height **D** according to the following:

- The soil characteristics,
  - Light or sandy soil: raised knife skid
  - Heavy, clay soil: knife skid in lower position
- the type of machine you are using,
- the position of the attachment arms (varies according to the working depth).

We recommend the lowest possible pressure on the knife skids as excessive pressure could cause:

- Increased wear of the knife skids,
- increased traction power requirement,
- a risk of blockage,
- etc.

The scrapers **C** do not have to be adjusted when changing from one setting to another. The scrapers are only used in the **OFF** position to clean the central tube.

Adjustment procedure

- Set the knife skids to position **1**.
- Adjust the working depth of the machine.
- Test at work.
- Check the quality of the work, if necessary:
  - Gradually increase the pressure on the knife skids by setting to position **2** or **3**.

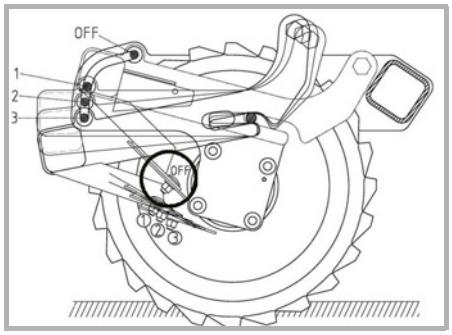
Passive knife skids

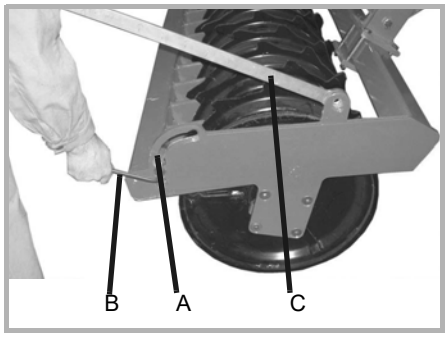
Introduction

Use this configuration if:

- You want a coarser level and surface finish in order to avoid any risk of surface breakdown.
- You are working in the autumn and you want to sow in the spring.
- You are not planning to sow for a long time.

Adjustment procedure on Actiring and Actipack

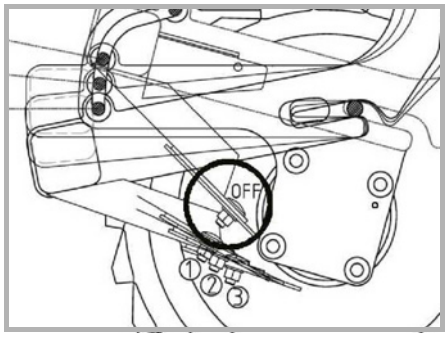




Raise the knife skids fully to put them in the **OFF** position (folded away).

- Loosen the locknut.
- Loosen the countersunk screw **A** with the small wrench **B** so that it protrudes by about 1 cm from its conical housing.
- Loosen the locknut on the other side.
- Engage the long wrench **C** on the welded nut located on the lower part, so that the rear rail is supported.
- While holding the wrench **C** in position, loosen the countersunk screw **A** with the small wrench **B** so that it protrudes by about 1 cm from its conical housing.
- Swing the rail to the required position (**1**, **2**, **3** or **OFF**).
- Still holding the wrench **B** in position, fully tighten the countersunk head screw **A**.
- Tighten the locknut.
- Go to the other side to completely screw in the other countersunk head screw **A**. If necessary, use the wrench **C** again to adjust the alignment of the screw in the desired position.
- Tighten the second locknut.

Scrapers on Actipack



If using scrapers on the roller:

- Set the scrapers to the **OFF** position.

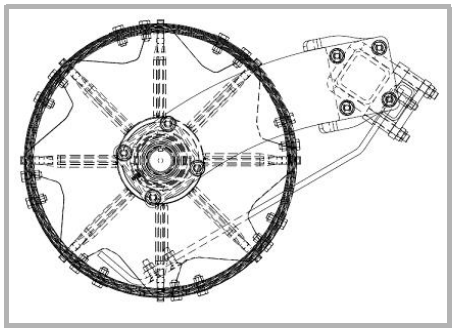
The scraper must not touch the central tube, respect a clearance of 5 mm (*3/16"*) to 10 mm (*6/16"*) from the tube.

Actiflex roller

CAUTION

Do not reverse while the roller is in contact with the ground. This could damage the blades, as there is no safety mechanism.

Configuration with the levelling blades

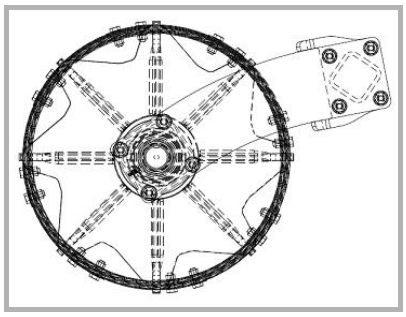


Use this configuration if you want:

- A levelled, fine tilth finish.
- To sow immediately after harrowing.

Configuration without the levelling blades

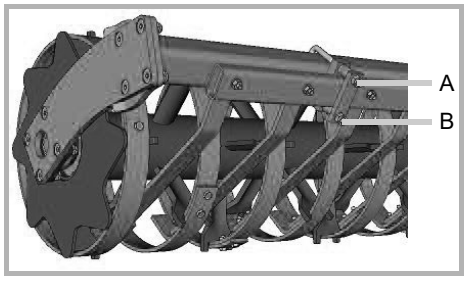
Introduction



Use this configuration if:

- You want a coarser level and surface finish in order to avoid any risk of surface breakdown.
- You are working in the autumn and you want to sow in the spring.
- You are not planning to sow for a long time.

Dismantle the levelling blade rail



- Loosen the nuts **A** and **B** on each support (Between 3 and 6 supports depending on the width).
- Remove the supports

Raise the levelling blade rail

- Put the mountings back in their position.
- Centre the levelling blades with respect to the rings.
- Tighten the nuts **A** and **B** on each mounting.

Actipress Twin roller

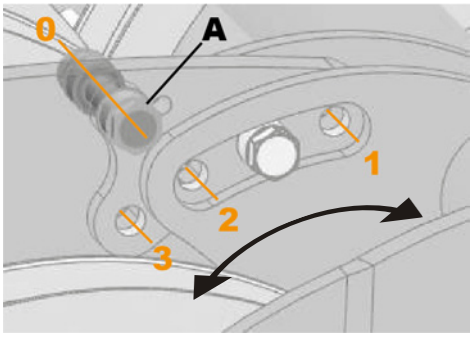
WARNING

- Comply fully with safety instructions.
- Keep at a safe distance when changing the settings.

There is a risk of the lower limbs being crushed.

IMPORTANT NOTE Never turn when the machine is in the ground.

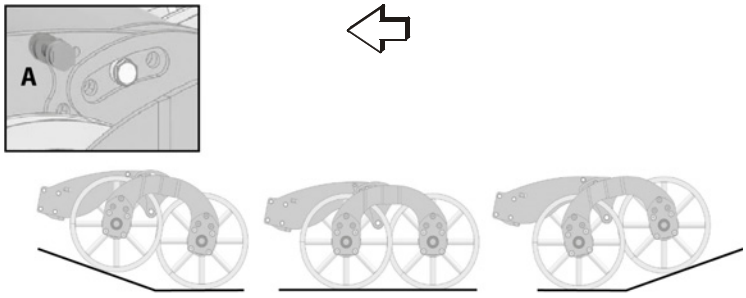
Checking the rocker arm rotation



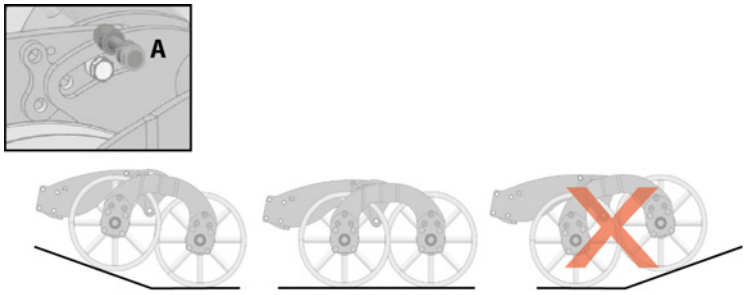
Actipress Twin can follow the ground profile correctly by pivoting ±11° forward or backward.

The pressure exerted by the front and rear rotor rings on the ground can be adjusted by moving the screw **A** and its bushes between the holes of the "**0**", "**1**", "**2**" or "**3**" positions.

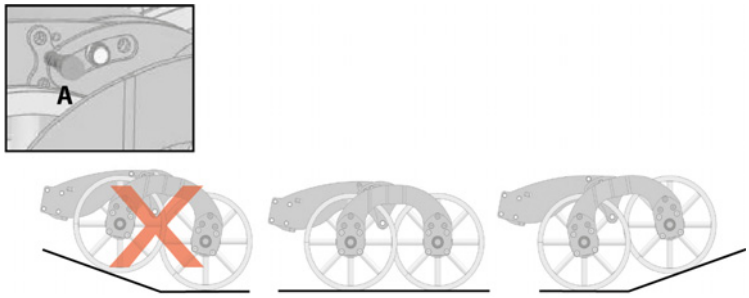
Position "0" - Screw A in Hole "0"



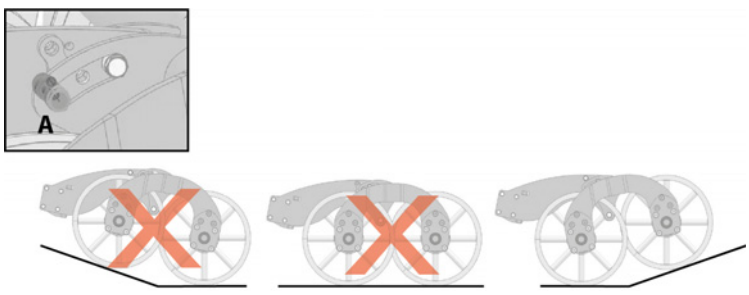
Position "1" - Screw A in Hole "1"



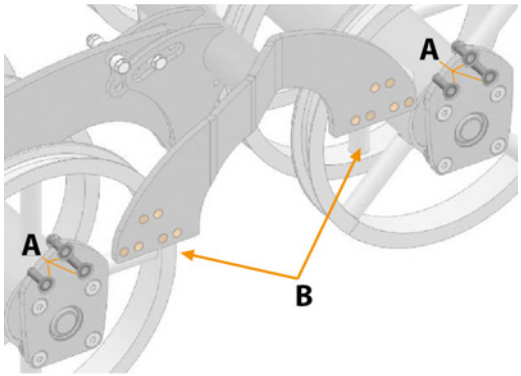
Position "2" - Screw A in Hole "2"



Position "3" - Screw A in Hole "3"



Adjusting the roller overlap

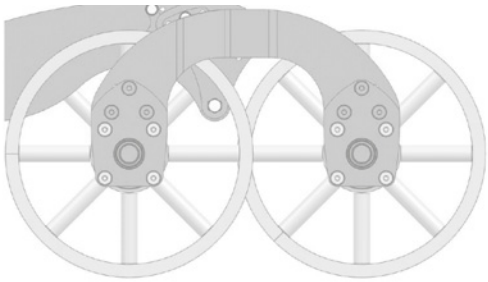


The overlap of the 2 rollers produces a self-cleaning effect on damp or sticky soils.
To change the overlap configuration:

→ For the tightening torques, refer to section "Couples de serrage visserie standard" to page 30

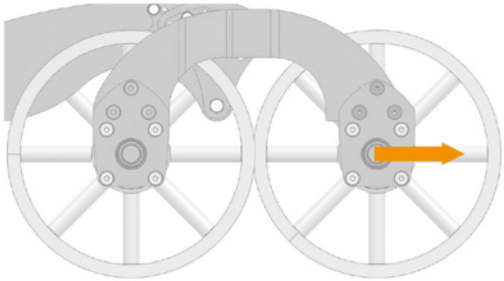
- Unscrew the 3 screws **A** of the roller to be switched.
- Place the rotor in the required position **B**.
- Put back the 3 screws **A** and tighten to torque.

Short overlap



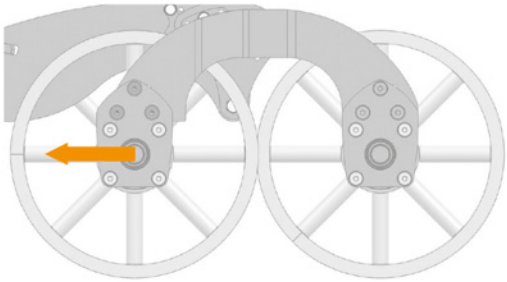
Intermediate overlap1

Rear roller moved away



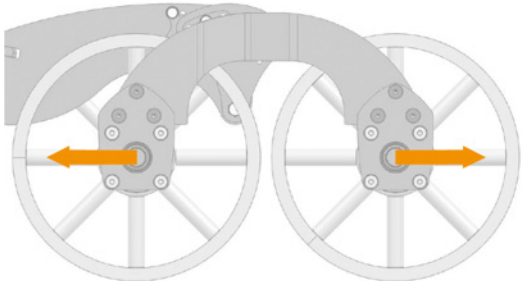
Intermediate overlap2

Front roller moved away



Wide overlap

Rear roller and front roller moved away



Choose the roller overlap suitable for the soil conditions:

- **short**: dry soil with few residues.
- **wide**: damp and sticky soil with lots of residues and stones
- or **intermediate**: for mixed conditions.

Safety instructions

WARNING

- Comply fully with safety instructions.
- There is a serious risk of injury when unhitching the machine.

To prevent any danger:

- Immobilise the tractor.
- Make sure that the machine is on flat and sufficiently stable ground.
- Never stand between the tractor and the machine.
- Actuate the hydraulic lift slowly and carefully.

Storage in unfolded position

If your machine is not fitted with struts, it must be stored in unfolded position.

- Unfold the chassis.
- Place the machine on flat and sufficiently stable ground.
- Disconnect the hydraulic hoses.
- Disconnect the road signals kit connector (if fitted).
- Unhitch the machine.

Storage in folded position

CAUTION

Risk of collision

- Retract the struts before unfolding or folding the machine to avoid serious damage to the machine.

If your machine is fitted with struts, it can be stored with the chassis folded to save space.
See "Storage struts [+]" to page 38.

In this case:

- Fold up the frame.
- Raise the machine sufficiently to allow the struts to go down completely.
- Lower the struts to bottom position.
- Lock the struts using the spindles.
- Place the machine on flat and sufficiently stable ground.
- Lower the machine until the struts touch the ground.
- Make sure that there are no obstacles or uneven surfaces under the feet of the struts.
- Disconnect the hydraulic hoses.
- Disconnect the road signals kit connector (if fitted).
- Unhitch the machine.

Cleaning

CAUTION

Never use a high pressure cleaner with a rotating nozzle to clean your machine. This could damage the machine.

The equipment may be cleaned using a high pressure cleaner.

- Use low pressure when cleaning bearings.
- Protect the cylinder rods.

Maintenance

To ensure that the machine has a long service life, we recommend that a protective coating of oil is applied at the end of each season. Use only a suitable, biodegradable oil such as rapeseed oil.

Storage

To keep your machine in good condition during storage:

- Clean it.
- Lubricate the various points listed in the Greasing section, page 89.
- Store your machine on a flat, stable surface.
- Apply grease on the jack rods to prevent corrosion.

Rigid machines

Storage - Specificities

- Make sure that the depth control cylinders are fully extracted.
- Position the machine on a stable and level surface.
- Disconnect the hydraulic hoses.
- Disconnect the road signals kit connector (if machine is present).
- Unhitch the machine.

For your safety

Specific instructions instructions

CAUTION

Conditions necessary for maintenance work
Carry out maintenance work only if you have the necessary knowledge and tools at your disposal. Lack of knowledge or the wrong tools can lead to accidents.

Use original replacement parts
Use only original replacement parts for safety-related components. Only parts of the appropriate dimensions, strength and material quality should be used. If parts other than original replacement parts are fitted, the warranty is void.

Do not use pneumatic grease pumps
Never use pneumatic grease pumps when lubricating the bearings. Their high pressure would damage the bearings.

WARNING

Prevent any unintentional movement of the machine
Carry out repairs or maintenance or eliminate malfunctions with the machine hitched only when:

- the power take-off has been deactivated,
- the engine is switched off,
- the ignition key is removed,
- the electronic control system has been deactivated.

An unexpected movement of the machine could cause serious injury.

Protection measures when handling oils and lubricants

Additives mixed with oils and lubricants can be harmful to your health. Since regulations do not require manufacturers to identify these hazards, it is essential that you follow the advice below:

WARNING

Avoid contact with the skin
Avoid all skin contact with these products. Contact with the skin may cause skin damage.

Protect your skin
Protect your skin when handling oils or lubricants by applying a protective cream on the skin or by wearing oil and lubricant-proof gloves. Oils may cause health problems. Never use oil to clean your hands.
Never use oil or lubricants to clean your hands. Swarf in such liquids can also cause injury.

Do not wear clothing contaminated with oil
Remove garments heavily soiled with oil as quickly as possible. Oils may cause health problems.

Used oil must be collected and disposed of.
In the event of wounds to the skin caused by oil or lubricants, contact a doctor immediately.

General

These notes refer to routine maintenance work. For any maintenance work, the machine must be configured and locked in its working position. If the transport position is necessary for any maintenance work, refer to section 86.

RECOMMENDATIONS Work carried out with the manual grease pump:
Lubricate with two squeezes of the grease pump If you feel resistance during the second squeeze, do not proceed further. Excess grease will open seals. Dust and dirt can penetrate bearings and cause premature wear.

In principle

This table provides a brief explanation of the main maintenance points.

Work	Execution
Lubricate	Apply grease on sliding surfaces with a brush.
Oil	Unless otherwise indicated, use only vegetable oils such as rape seed oil. Mineral oils are not suitable. Used oils are dangerous to your health and their use is strictly prohibited.
Replacement	Replace the part concerned by following the instructions contained in the maintenance chapter.
Inspection	Inspection is sometimes necessary when you replace a part.
Comply with maintenance intervals.	All data refers to an average usage of the machine. If used more intensively (for example by agricultural works businesses), shorten maintenance intervals accordingly. Shorter maintenance intervals are also advisable under extreme working conditions (considerable quantities of dust).

Greasing

WARNING

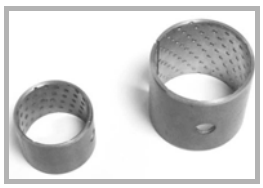
For all greasing operations, the machine must be in the park position with the tines on the ground to avoid any risk of crushing.

CAUTION

The wear rings must be changed when they stop protecting the different parts of the machine.

If used wear rings are not replaced, damaged machine parts will not be covered by the warranty.

If damaged rings are not replaced, their housing may also suffer from wear.



Most of the machines articulations use wear rings.

- Regularly check the condition of the articulations (lubrication and lack of play).
- Replace wear rings if significant play appears on a ringed articulation.



The pictogram opposite appears next to the greasing points on the machine to enable you to locate the machine's greasing points quickly.

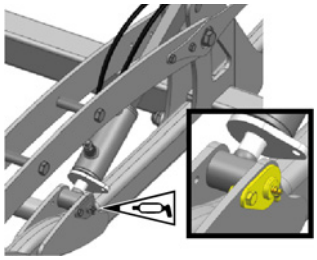
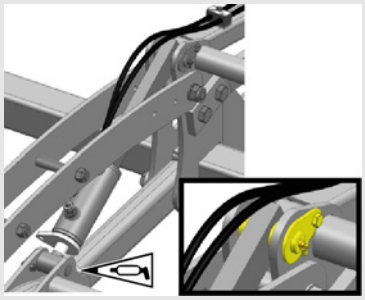
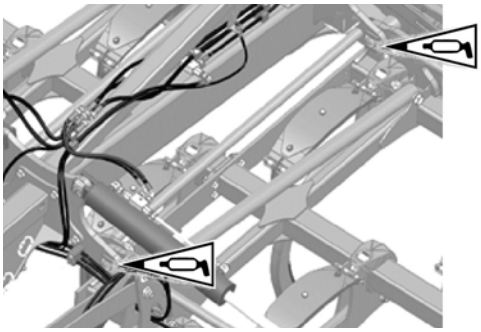
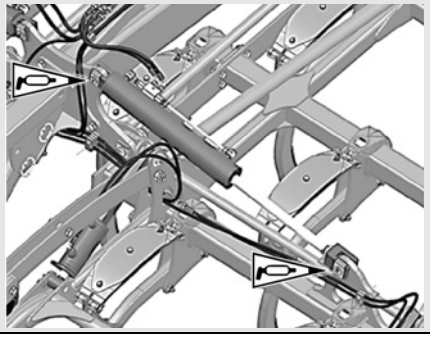
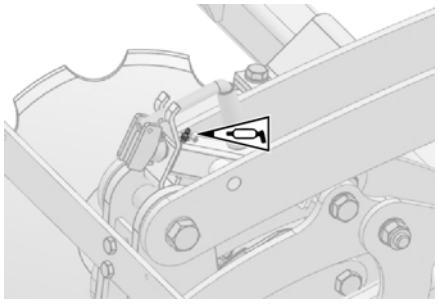
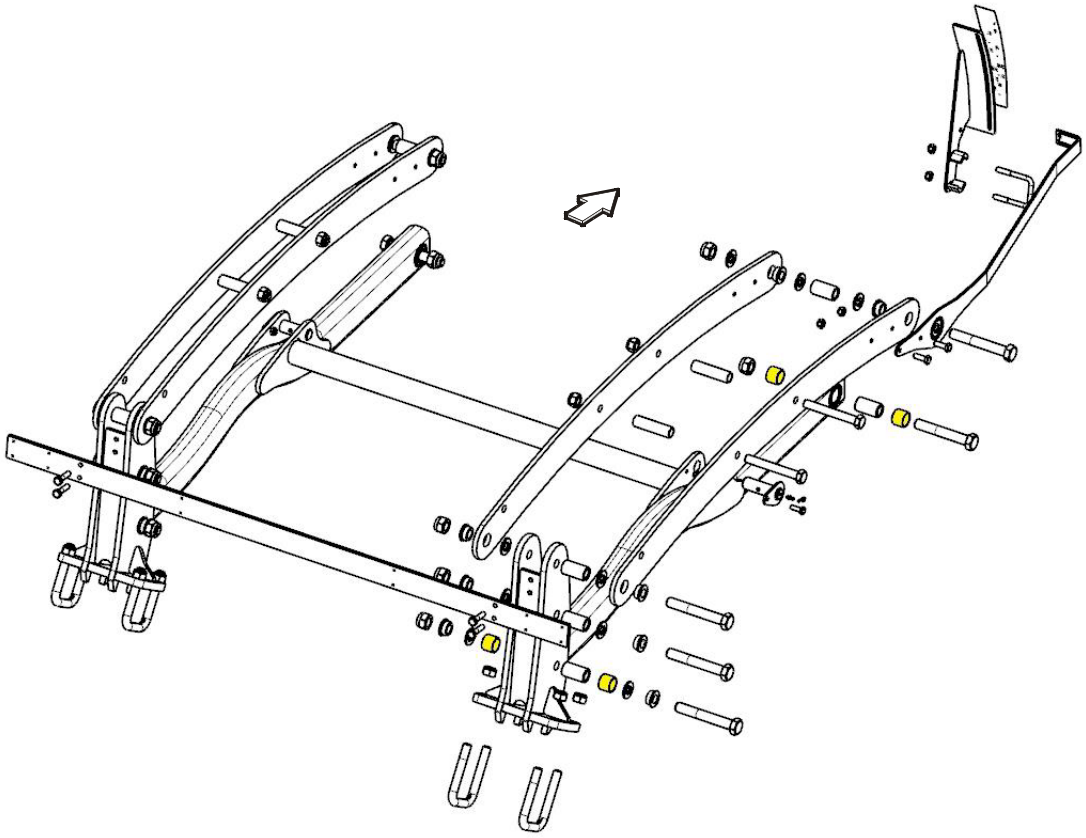
Image	Part	Frequency		
		Every day	Every 40 hours	Every year
	Depth control cylinders		X	
	Depth control cylinders		X	

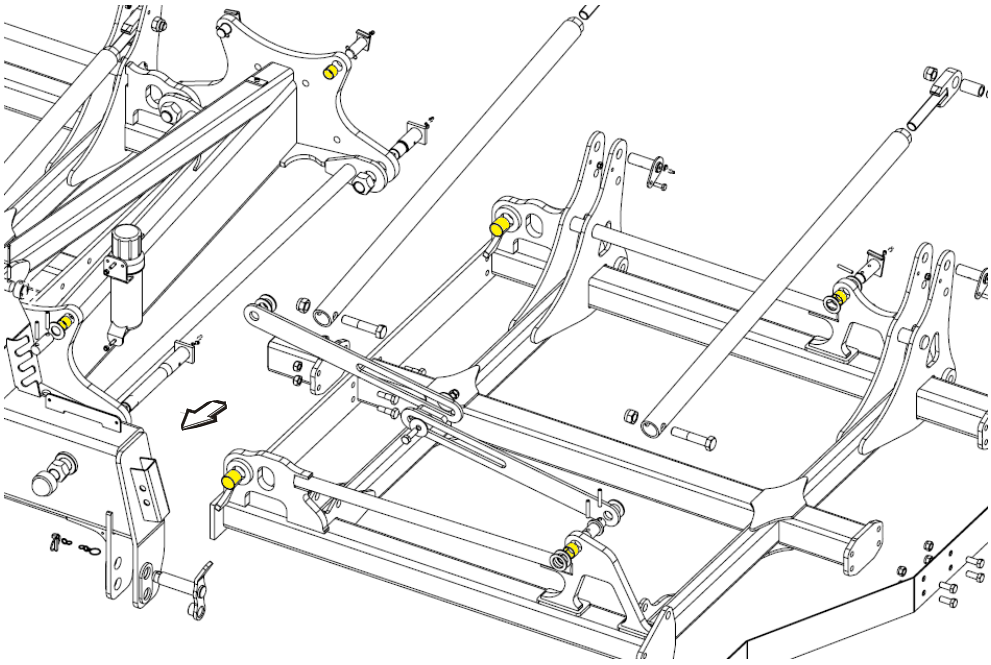
Image	Part	Frequency		
		Every day	Every 40 hours	Every year
	Folding side pivot		X	
	Folding cylinders		X	
	Crank		X	
	Double tube roller/bar	X		

Location of the wear rings

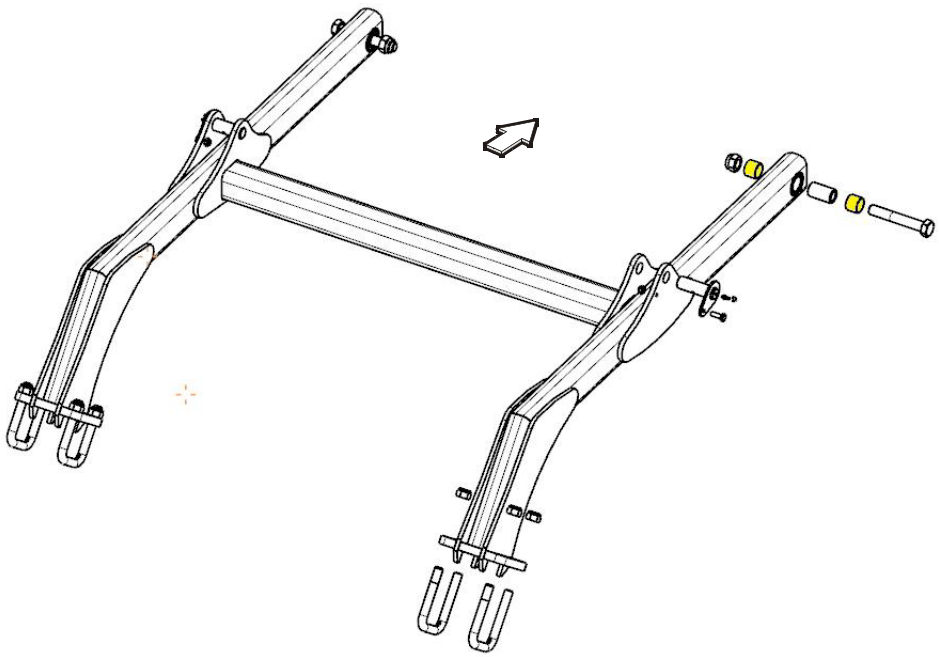
Rigid CU3001P



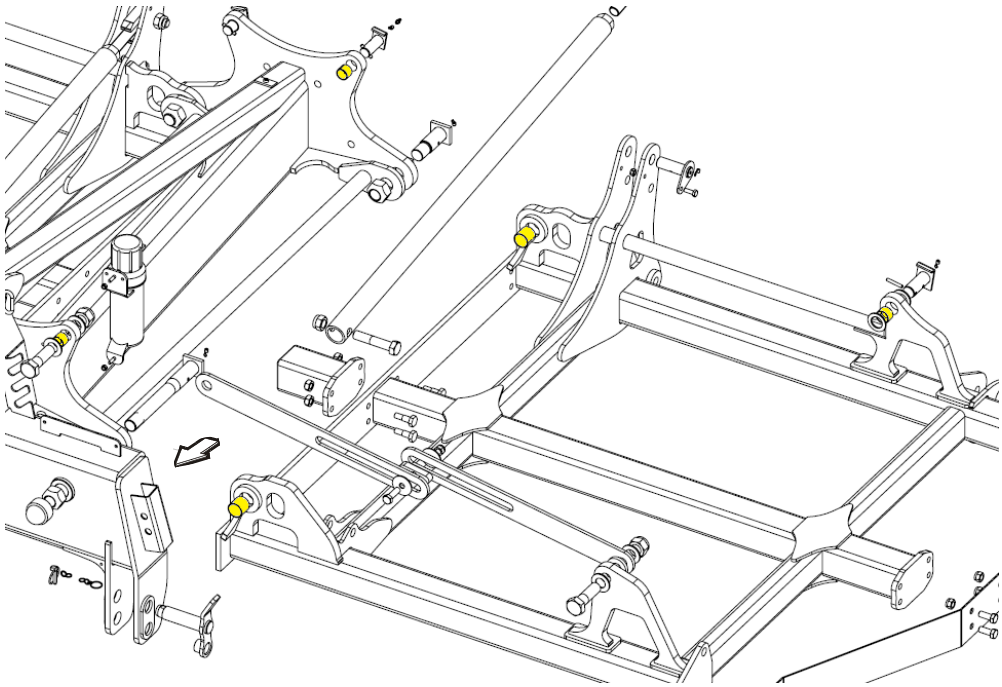
Folding CU3001P



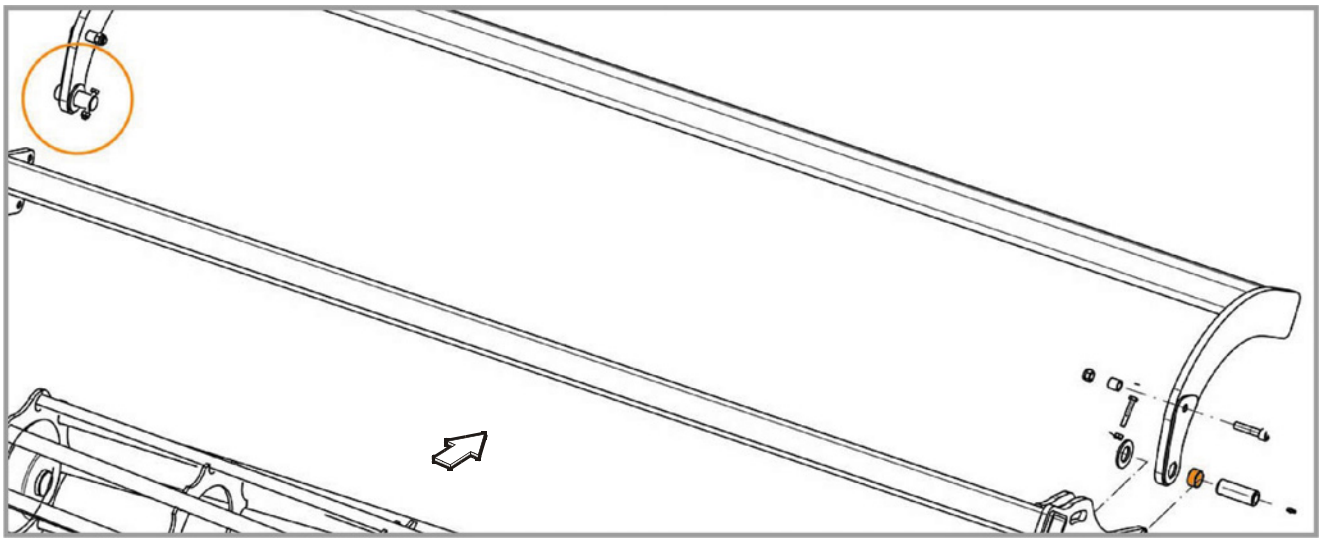
Rigid CU3001



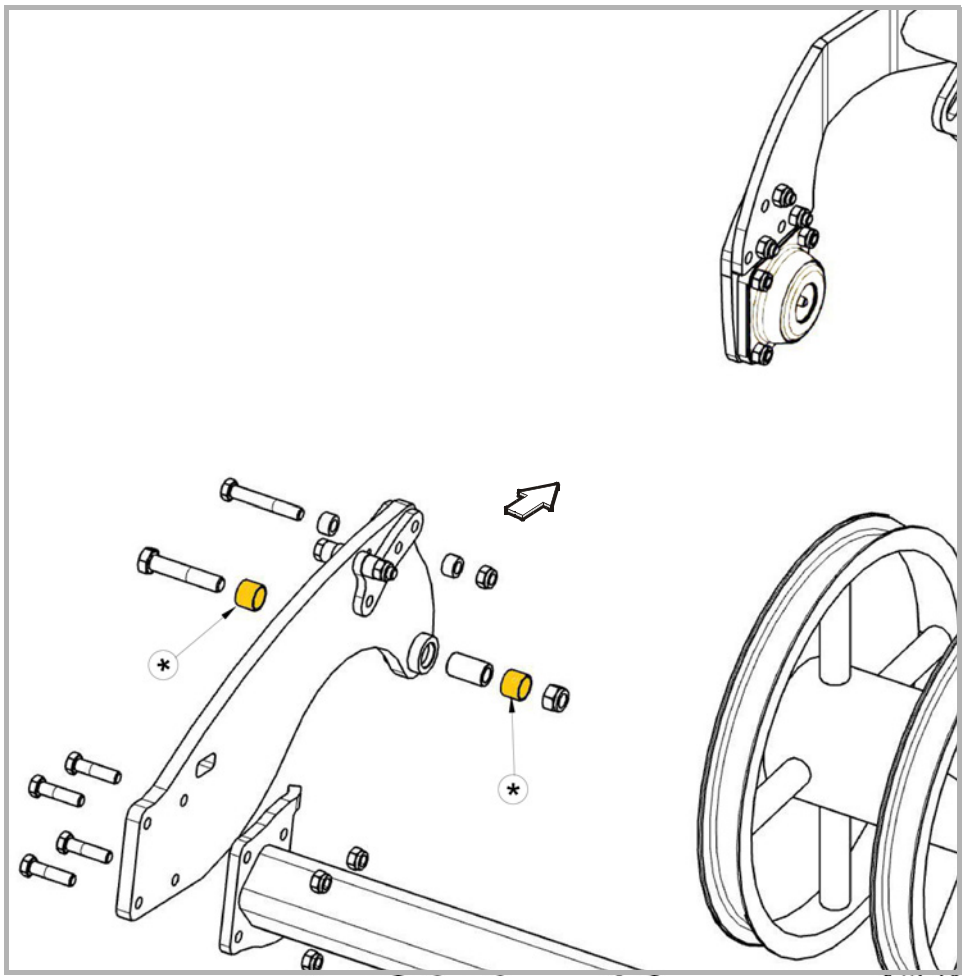
Folding CU3001



Double tube roller bar



Actipress Twin roller



Checks and corrections

Screwed assemblies

Regularly check wheel nuts for tightness and the hub clearance adjustment.

All the bolts must be tightened:

- After the initial period of use.
- According to the frequency of use.
- At least once per season.

Standard tightening torques

Unless otherwise specified, all screwed assemblies should be tightened in accordance with the table below. The values shown apply to rigid assemblies with normal thread pitches and no bearing washer. Values provided for assembly with no special lubrication:

Diameter of screw	Quality 8.8		Quality 10.9		Quality 12.9	
	N.m	*ft.lbf*	N.m	*ft.lbf*	N.m	*ft.lbf*
3	1.41	*1.04*	2.07	*1.53*	2.43	*1.79*
4	3.22	*2.38*	4.74	*3.50*	5.5	*4.06*
5	6.4	*4.72*	9.4	*6.94*	11	*8.12*
6	11.1	*8.19*	16.3	*12.03*	19.1	*14.10*
8	27	*20*	39	*29*	46	*34*
10	53	*39*	78	*58*	92	*68*
12	92	*68*	136	*100*	159	*117*
14	148	*109*	218	*161*	255	*188*
16	232	*171*	341	*252*	399	*294*
18	330	*244*	469	*346*	549	*405*
20	471	*348*	667	*492*	781	*576*
22	648	*478*	920	*679*	1077	*795*
24	809	*597*	1148	*847*	1343	*991*
27	1201	*886*	1706	*1259*	1997	*1474*
30	1628	*1201*	2311	*1706*	2704	*1996*
33	2216	*1635*	3148	*2323*	3684	*2719*
36	2840	*2096*	4036	*2979*	4723	*3486*
39	3697	*2728*	5255	*3878*	6150	*4539*

Fasteners

CAUTION

Use only the screws supplied
The securing screws supplied are special screws for specific requirements. Commercially available screws will not stand up to the stresses on the machine. If you use inappropriate screws or if you do not tighten them to the recommended torque, the machine could be damaged.

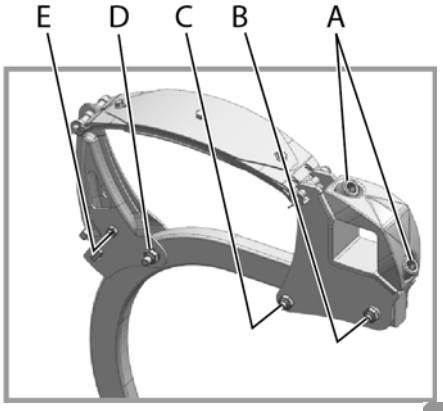
Using the machine with loose fasteners may damage it and cause accidents.

A number of the working or structural parts of the machine are assembled using a clamping technique. A flange and a welded brace form the link.

To guarantee proper tine operation, the bolt tightening torques must be checked and kept at the recommended values.

For tine attachments, the torque must be maintained at **600 N.m** (*440 ft.lbf*).

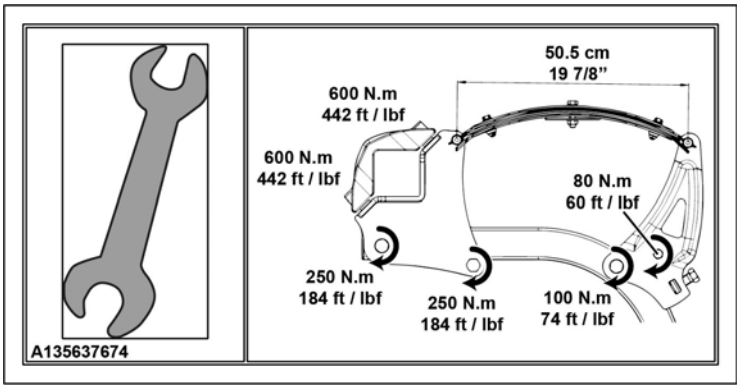
Triflex 700



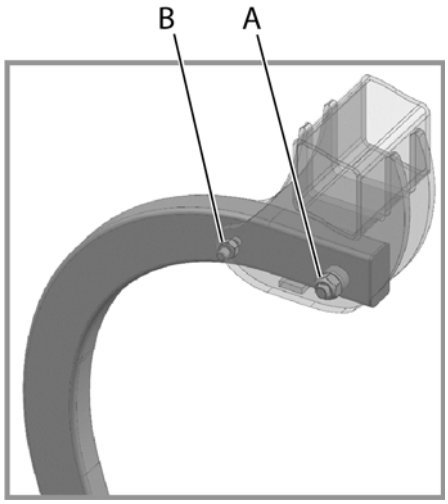
Bolt	Recommended torque
A	**600 N.m** (440 ft.lbf)
B	**250 N.m** (185 ft.lbf)
C	**250 N.m** (185 ft.lbf)
D	**100 N.m** (75 ft.lbf)
E	**80 N.m** (60 ft.lbf)

- Check and tighten, if necessary, after the first few hours of use.
- Regularly check (once a year, or more frequently if used intensively) and tighten if necessary.

These tightening torques are shown on the label affixed to the machine::



Tines with safety bolt

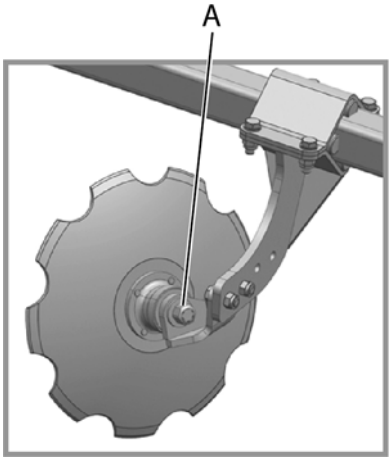


Bolt	Designation	Recommended torque
A	Pivot bolt	**250 N.m** (185 ft.lbf)
B	Safety bolts	Until contact

The tines are installed on the chassis with pivot bolts **A** and safety bolts **B**.

- Check and tighten, if necessary, after the first few hours of use.
- Regularly check (once a year, or more frequently if used intensively).

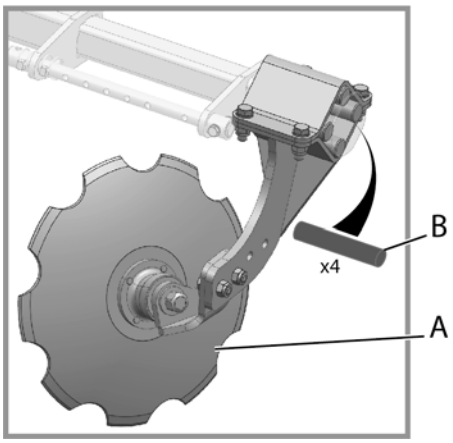
Levelling discs



- Check and tighten, if necessary, after the first few hours of use.
- Regularly check (once a year, or more frequently if used intensively) and tighten if necessary with a **torque of 400 N.m.**

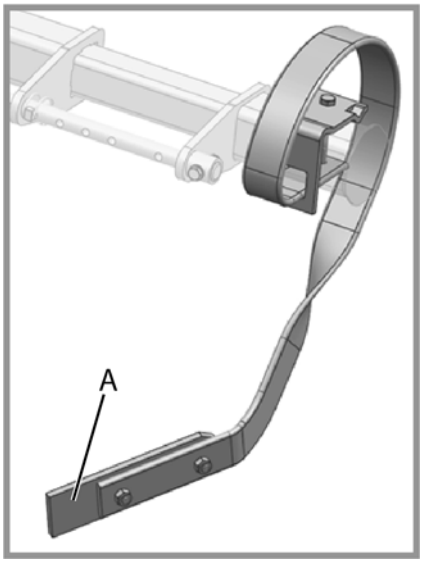
Levelling element wear

Levelling disks



- Replace the levelling discs **A** when they become too worn.
- Replace the pads **B** when they become too worn.

Levelling tines

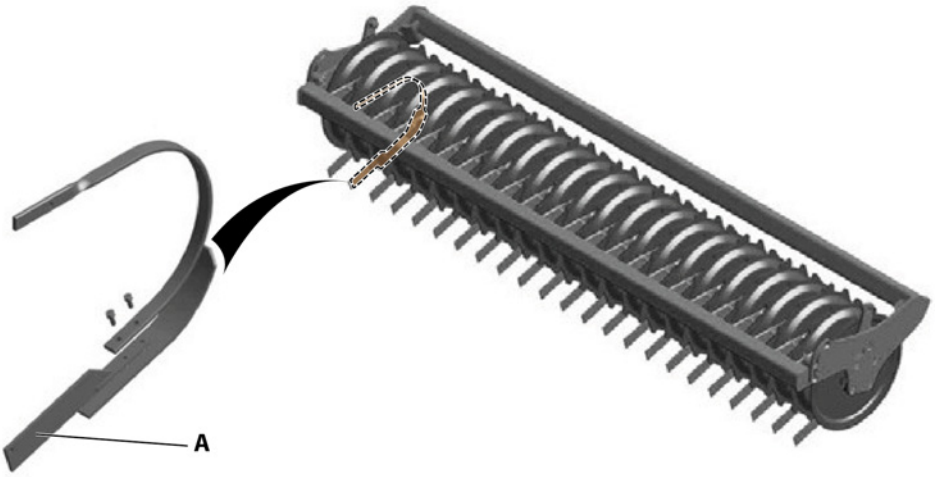


- Change the blades of the levelling tines **A** when they become too worn.

Levelling wear

Actipack and **Actiring**:

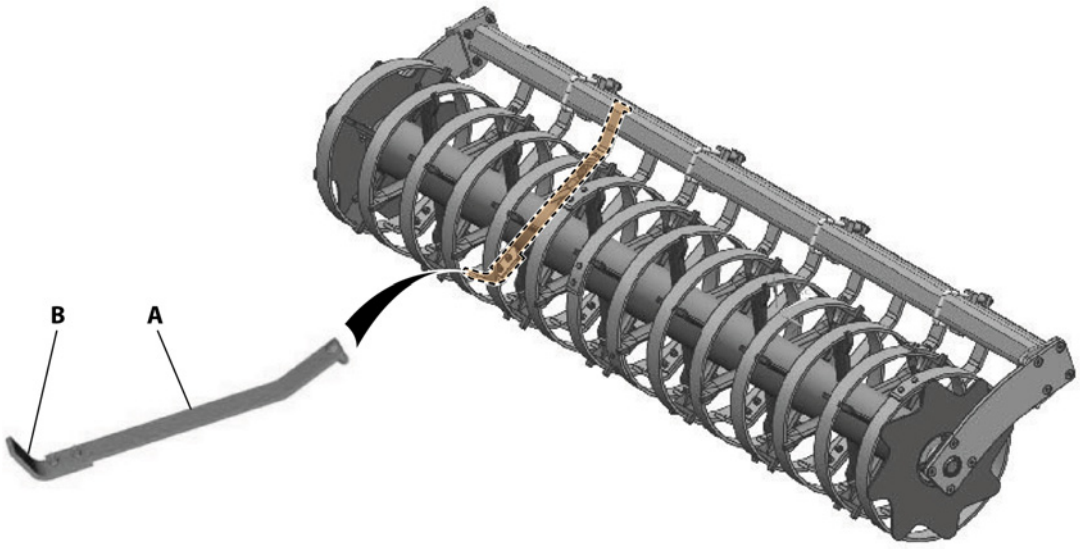
- Regularly check the wear of the knife skids **A**.
- Replace them before wear can cause the part to be lost during operation.



Levelling wear

Actiflex:

- Check that the screws are still tight after several hours of use.
- Regularly check the wear on the levelling blade coulters: Part **A** and **B**.
- Replace them before wear can cause the part to be lost during operation.
- After use and before storage, it is recommended that the roller is thoroughly cleaned, to remove any earth attached to it which may cause a nuisance when resuming work.



CAUTION

If the levelling tines are not replaced in time, parts which are too worn may be lost during work and the tines may in turn become worn.

Replacing the tines

WARNING

Never loosen more than one spring at the same time.

- Carry out the adjustment on one spring.
- Loosen the spring.
- Move onto the next spring.

If you loosen several springs at the same time, the machine may tip over. **This could result in injuries**.

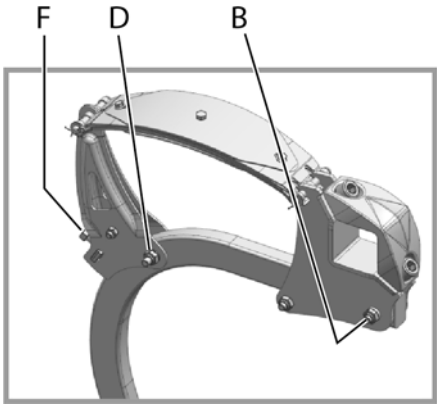
Any **tine that is abnormally blocked in the raised position** may suddenly return to its position and is therefore a **serious source of danger**.

- Keep away from the tine.
- Never place yourself along the tine return trajectory.

Over time and due to wear, it is necessary to **check that the bolts are tight** and that the **spring is taut**.

- Check that the initial tension of the springs is correct.
- Check that the gap between axes is correct.

Leaf spring tines



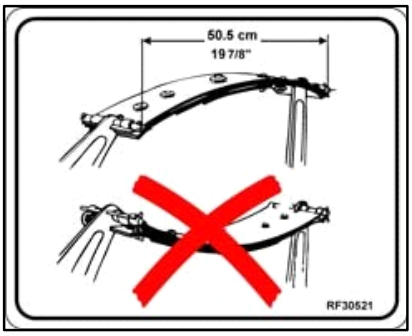
DANGER

Springs used as safety devices for working parts
Note that it is strictly prohibited for untrained or unqualified personnel to dismantle the springs used as safety devices for working parts. For your safety, you are recommended to have this task carried out by a specialist.

Risk of serious injury or even death.

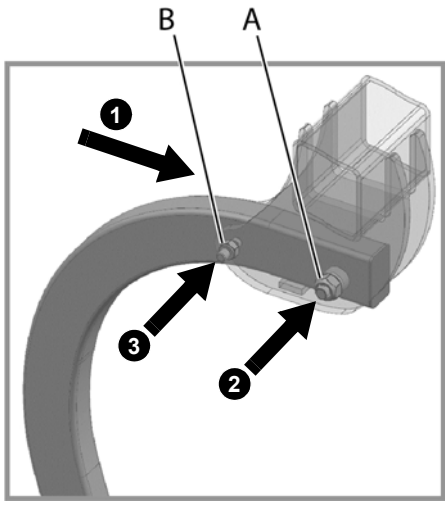
- Release the retaining screw **D** without removing it.
- Completely release the leaf spring using the tightening screw **F**.
- Unscrew and remove the pivot **B** and retaining **D** screws.
- Replace the tine.
- Tighten the pivot screw **B** to **250 N.m** (*185 ft.lbf*).
- Grease the clamping screw.
- Fit the retaining screw **D**.
- Using a suitable tool (e.g. a jack), compress the leaf spring upwards.
- Tighten the clamping screw until the gap between the centre of the

two axes is **50.5** cm (*20*").



- Tighten the retaining screw **D** to **100 N.m** (*75 ft.lbf*).
- Once the tine has returned to the low position, check that it is tight and does not jam at any point.

Tines with safety bolt



Replace the safety bolt after releasing:

- Check for remaining bolts.
- Inspect the hole and the operation of the pivot.
- Fit a new safety bolt **B**. Tighten it until metal-to-metal contact.

Replace the full tine:

- Take off safety bolt **B**.
- Hold the front tine and remove pivot bolt **A**.
- Install a new tine.
- Install and tighten pivot bolt **A** with a torque of **250 N.m**.
- Install and tighten safety bolt **B** until contact.

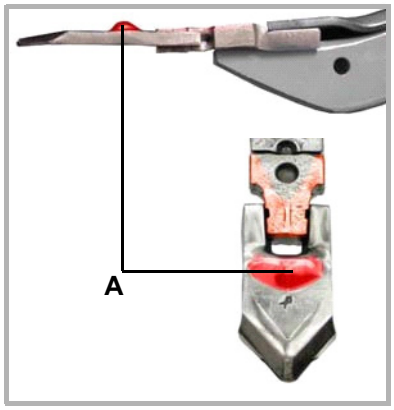
Coulter wear

CAUTION

If the coulters are not replaced in time, the over-worn parts could fall off during work and the tines could wear.
Excessive wear on the lower part of the tine could require its replacement in order to attach new coulters.

- Regularly check the wear of the coulters, tine protection and deflectors.
- Replace the coulters, tine protection and deflectors before they are too worn.

Knock-on coulters



All coulters are formed with a bulb **A** in the centre to protect the support. If worn, the coulter should be replaced.



The metal does not wear in the same way if the ground is dry or damp.

- Damp ground:
  The surface wears more rapidly than the part length. A hole will appear through the bulb indicating that the coulter must be changed so that it can continue to protect the support.
- Dry ground:
  The bulb plays a protective role until the end.

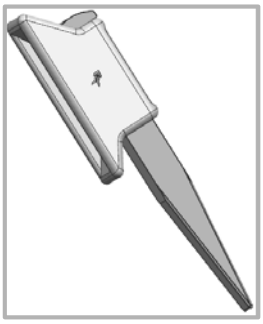
Replacing the knock-on coulters

CAUTION

Keep out of the danger zone.
When being dismantled, the shares may fall and cause injury.

Consequently, before you dismantle these coulters:

- Make sure that no part of your body is under these coulters.



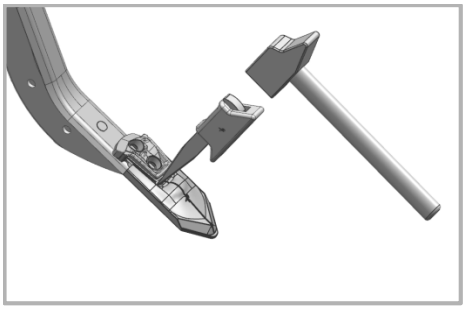
The specific **bevelled knock-on tool** must be used to replace the coulters. Wearing the following safety equipment is required:

- A visor or protective goggles to guarantee maximum protection of the face:



- Gloves:

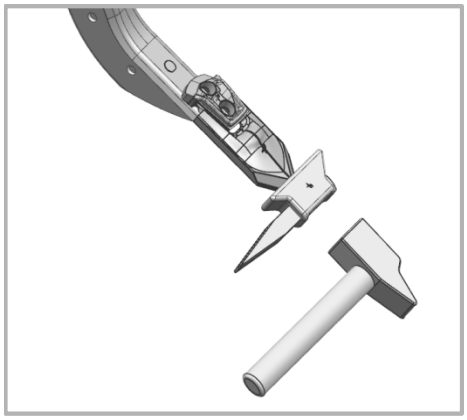




Dismantling

☑ Bevelled Knock-on tool
☑ Hammer (1.5 kg - *3.3 lbs* minimum)

- Insert the bevelled part between the coulter and its mount.
- Hit the other end with a hammer.



Reassembly

☑ Bevelled Knock-on tool
☑ Hammer (1.5 kg - *3.3 lbs* minimum)

- Place the end of the coulter point in the slot in the Knock-on tool.
- Hold the Knock-on tool firmly taking care not to be pinched when hitting.
- Give two or three firm hits to the coulter with a hammer in the direction of the blocking system to guarantee that the part remains in the support.

Distributing plough points

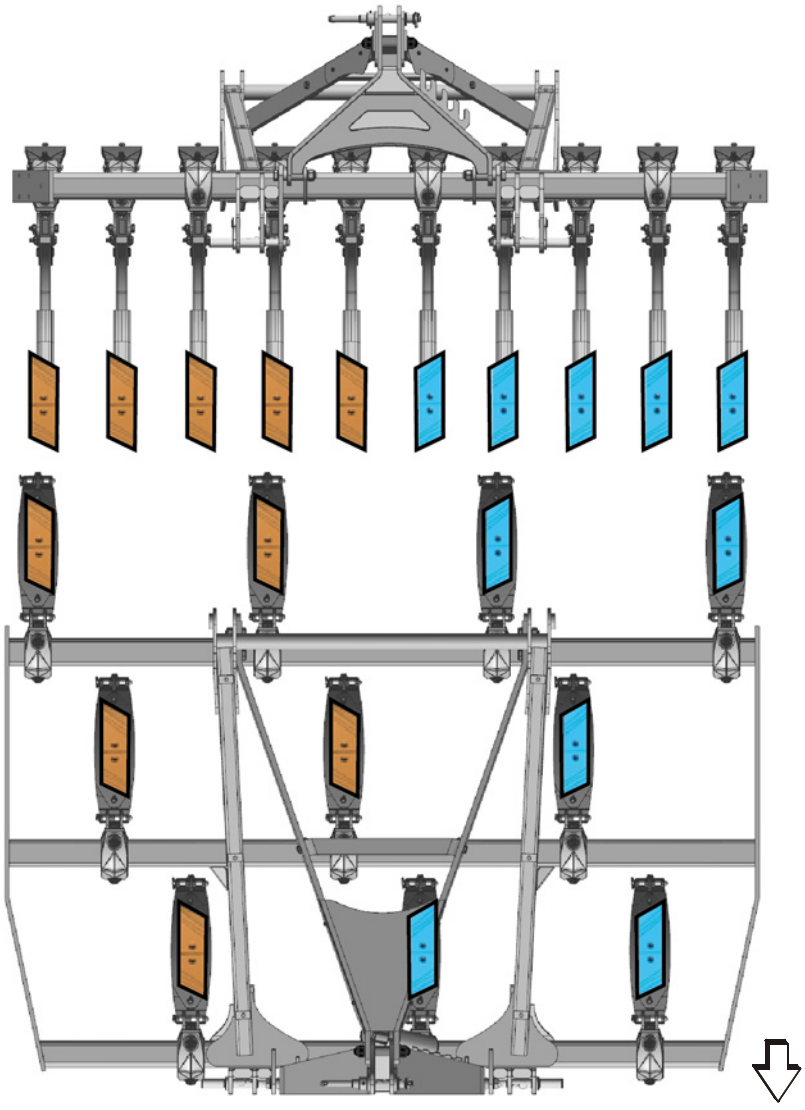
Standardisation of the symmetrical installation of 60 mm (*2 1/2"*) points irrespective of the type of machine and arrangement of tines.

- Right side: **straight points**:



- Left side: **left points**:





Replacement of the hydraulic system parts

DANGER

Work on the hydraulic system must only be carried out by a **trained and authorized technician**.

DANGER

The hydraulic system is pressurized.
Before any intervention on the hydraulic system:

- Lock the folding extension and all the hydraulically controlled accessories in rest position.
- Reduce the pressure between the tractor and the machine.
- Reduce the pressure between the hydraulic accumulators and the cylinders, even when the accumulators are located on the cylinders.

Failure to carry out these actions could result in serious injury or death.

The accumulators contain pressurized gas even when the hydraulic pressure has dropped.

The hydraulic circuits may be equipped with blocking components. Consequently, even if you think that the pressure has dropped, be careful.

- Ensure that the tractor and machine hydraulic systems are not pressurized.
- Identify the connectors using the color code to avoid incorrect connections (inverting the functions could cause accidents).

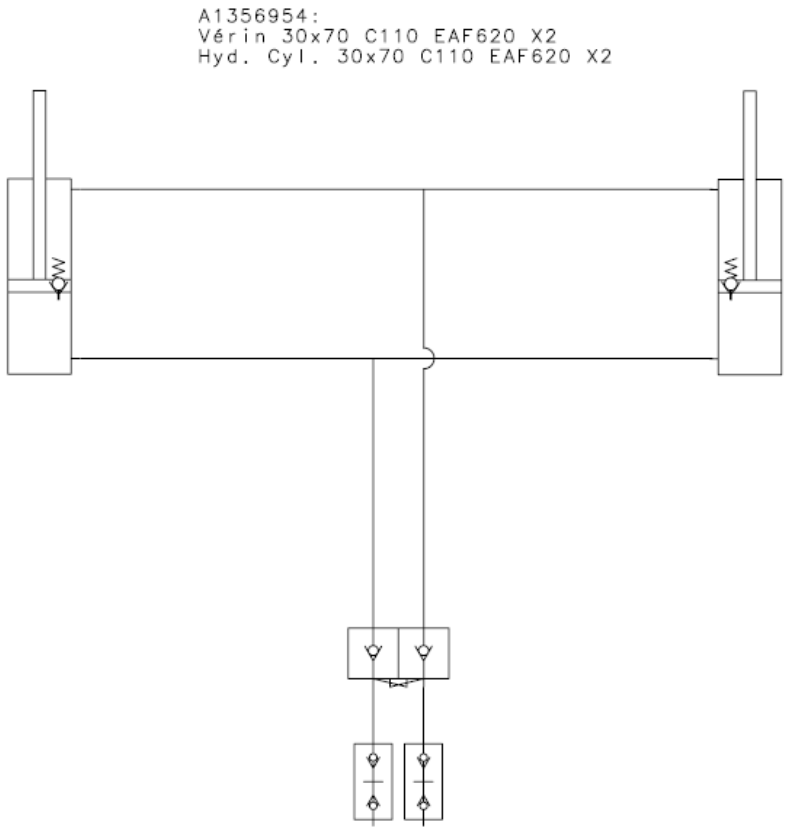
Hydraulic unit

CU3001 and CU3001P

Depth control

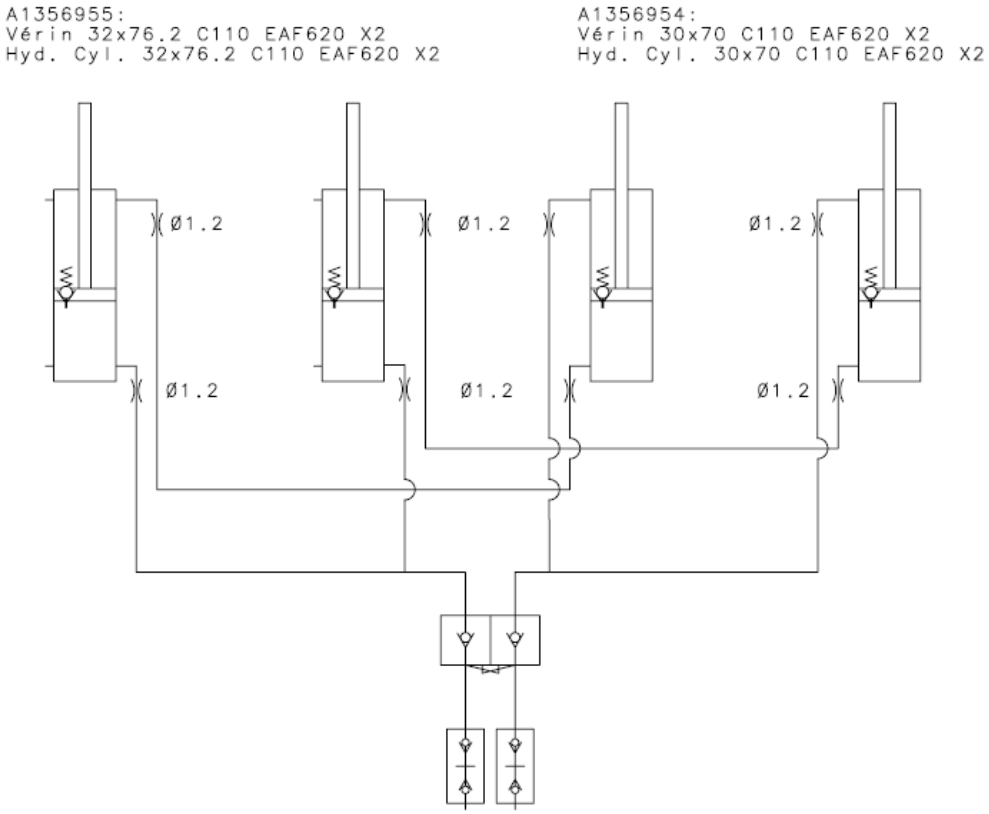
Fitted to the following models:

- Rigid:
  - 3.00 m (9'10"), 3.50 m (11'6"), Pro 3.00 m (9'10") and Pro 3.50 m (11'6").
- Folding:
  - 4.00 m (13'1"), 4.50 m (14'9") and 5.00 m (16'5").

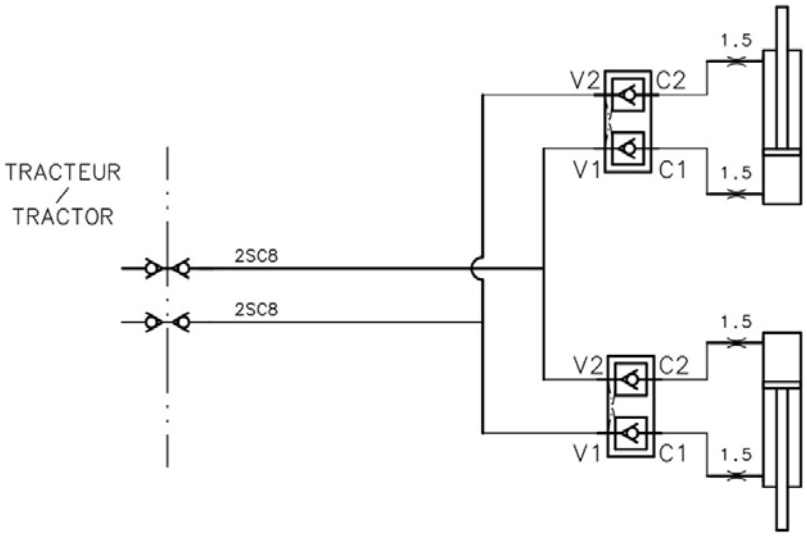


Fitted to the following models:

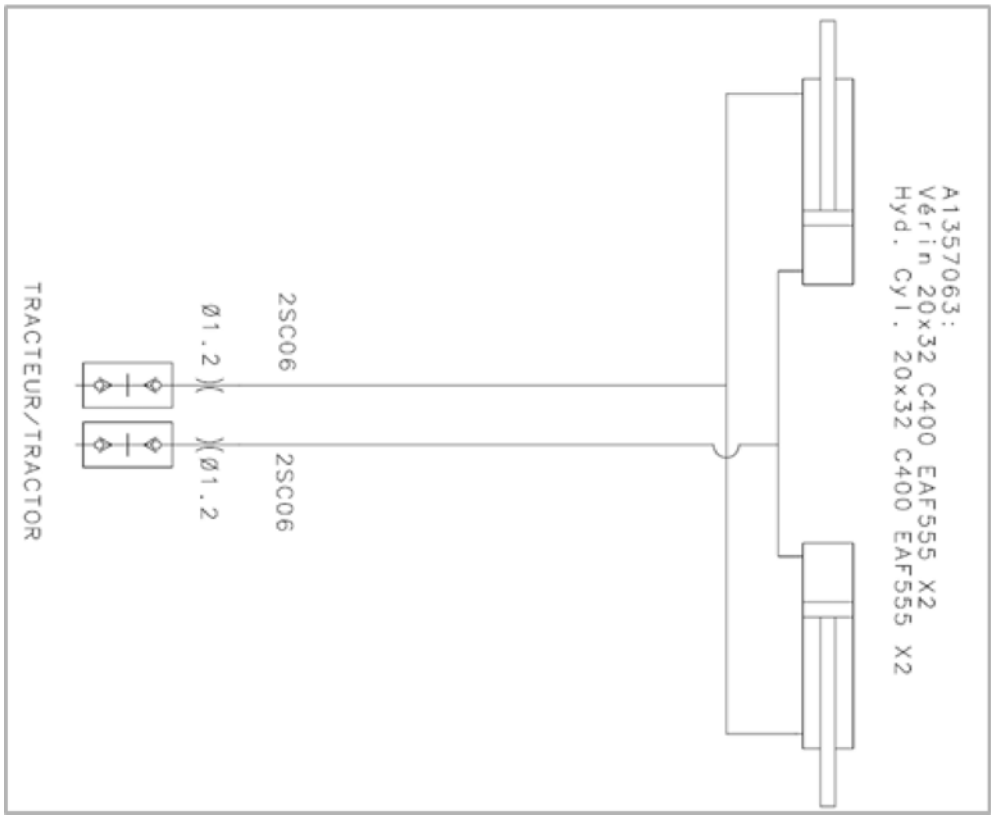
- Rigid: N/A
- Folding:
  - Pro 4.00 m (13'1"), Pro 4.50 m (14'9") and Pro 5.00 m (16'5").



Hydraulic folding



Hydraulic levelling extensions



On delivery of the tool, check that all accessories are present and that no damage has occurred during transport. Any claims must be made to us in writing within six (6) days.

The warranty will apply only if the conditions appearing on the delivery contract have been met by the buyer.

The warranty cannot apply if the machine:

- has been repaired by the customer without the dealer's approval,
- has been modified by fitting non-original parts.

At the end of the machine's life, it must be scrapped in accordance with environmental rules. Follow the appropriate instructions when disposing of the machine.

ATTENTION

Do not spread on the ground or pour into sewers used grease or other substances such as motor oil, hydraulic oil, coolant fluid, brake fluid, fuel, etc.

Metal parts

All metal parts may be sent to a scrap metal recycling centre.

Tyres

Tyres can be sent to a tyre recycling centre.

Hydraulic fluid

Collect hydraulic fluid in clean, sealed containers designed for this purpose. Avoid using food containers or drinks bottles.

Take hydraulic fluid and hoses to an appropriate recycling centre.

Declaration of conformity

In accordance with Directive 2006/42/EC

We,

Kverneland Group Les Landes-Genusson SAS
9, rue du Poitou
FR-85130 Les Landes-Genusson

declare under our sole responsibility that the product



CU3001 - CU3001P

EC identification plate, CE marking

CU3001 - CU3001P and accessories

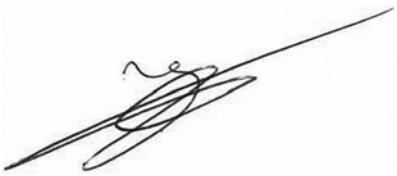
to which this declaration relates, meets the relevant health and safety requirements stipulated in EC Directive **2006/42/EC**.

To implement the safety and health requirements stipulated in the EC Directive, the following standards have been taken into account:

ISO 12100-1:2003
ISO 12100-2/2003
ISO 4254-1/2009

Kverneland Group Les Landes-Genusson S.A.S
9 Rue du Poitou
85130 LES LANDES-GENUSSON
FRANCE

Les Landes-Genusson, 2-11-2013



Hasan Kesek
Chairman and authorised EC representative

C

Clearance under the chassis 30, 31
Coulter 32, 69, 101, 102

D

Deflector 33, 39, 44, 49

F

Frame unfolded 83

H

Hydraulic edging discs 37
Hydraulic edging tines 37
Hydraulic fluid 109

L

Levelling 30, 31
Lubricants 87

M

Maintenance 85
Manager 8
Metal parts 109

O

Oils 87
Online documentation 4, 5

P

Pads 97
Pictograms 6

R

Rocker arm rotation 81
Roller overlap 82

S

Safety 7
- General recommendations 21
- Hitching 22
- Hydraulic system 27
- Maintenance 26
- Use 24

Safety rules 21
Storage 85
Struts 38
Symbols 6

T

Tightening torques 94
Transport 23
Tyres 109

U

User safety 7

W

Warranty 108