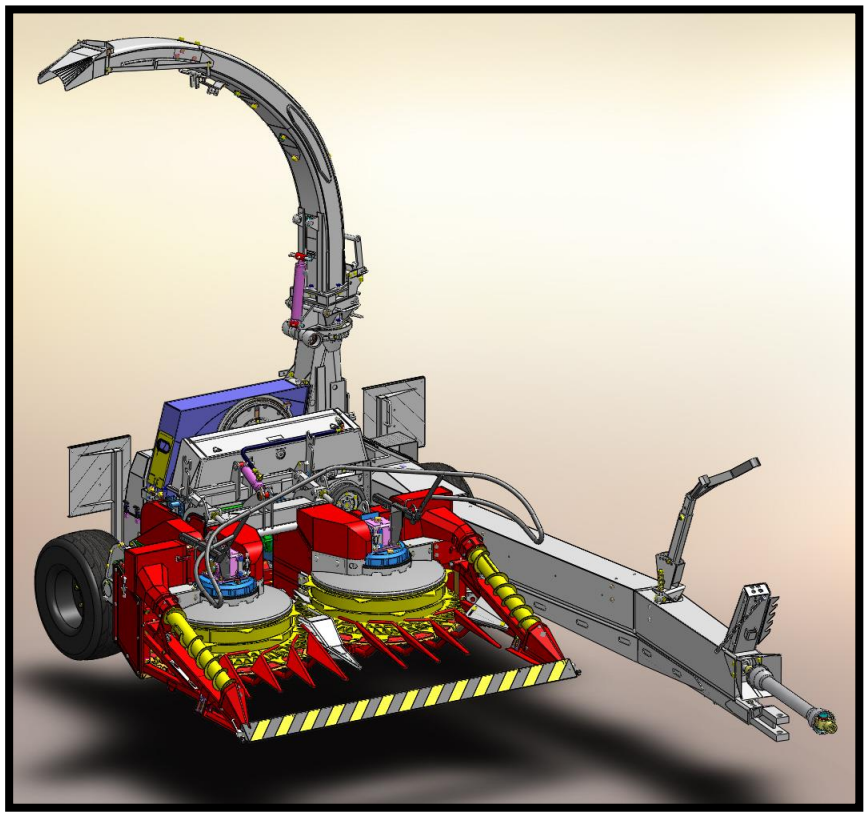
Forage harvester

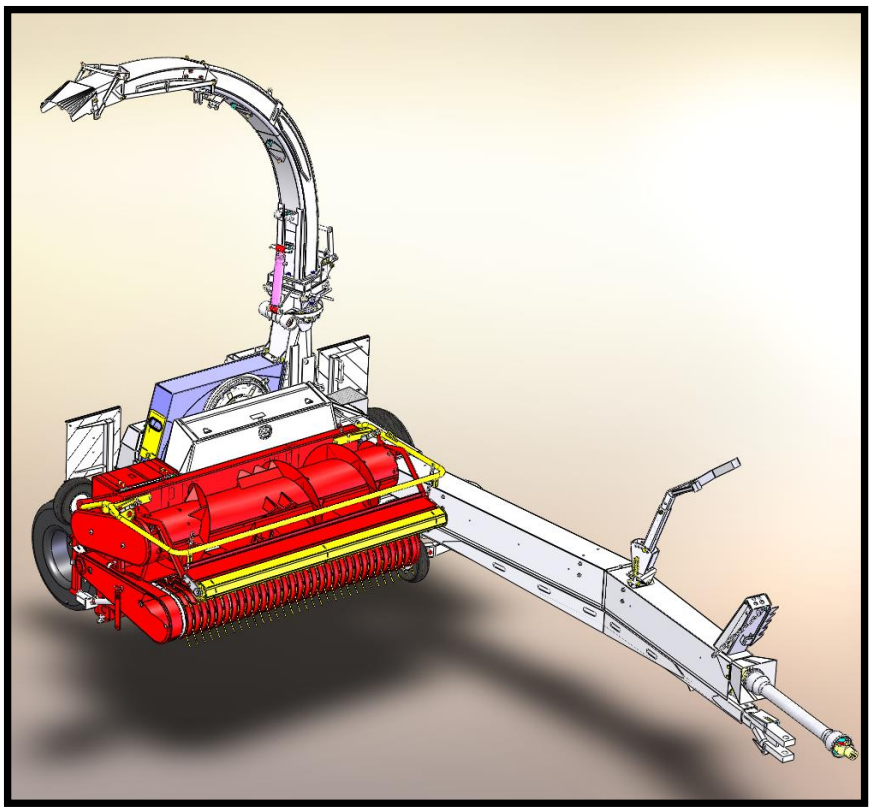
MEX 6

(Type 48830071+48830046/7 – Corn)
(Type 48830090/5+48830012 – Grass)

Instruction Manual No. 001/2017

Your Machine Identification No.





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MEANING OF THE WARNING SIGNS

Switch off the motor and remove the key before carrying out maintenance and repairs

Keep the hands away from the crushing area while there is a chance that the respective parts are in motion

Keep away from the vertical displacement area of the tractor's three-point hydraulic system

Wait for a complete stop of all of the machine's moving parts before touching them.

Do not open or remove the covers from gears, roller chains and belts, while these are moving

Install the protection cover before sharpening the blades

Keep a safety distance from the machine - danger of projection

Do not stay on the platform or stair while the machine is being displaced

Keep away from the articulation area of the machine - danger of pinching/crushing

Keep away - danger rolling/dismembering/ crushing

Avoid the collision with electrical cables, danger of electric shock/electrocution

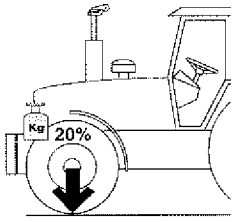
Do not climb on the machine whenever there are moving components, danger of dragging

Rotating blades, danger of cutting, perforation or crushing to the hands or feet

PUTTING INTO USE

General safety tips for the use of the machine

Tips for manoeuvres with the machine



There is a danger of overturning when you work on slopes.
Driving should be adapted to the terrain and ground conditions.
The tractor vehicle should be equipped in a sufficient form with weights at the front or at the back in order to guarantee the capacity to drive and brake (a minimum of 20% of the tare weight of the vehicle on the forward axle).
Transporting people on the machine is not permitted.

Tips for coupling and uncoupling

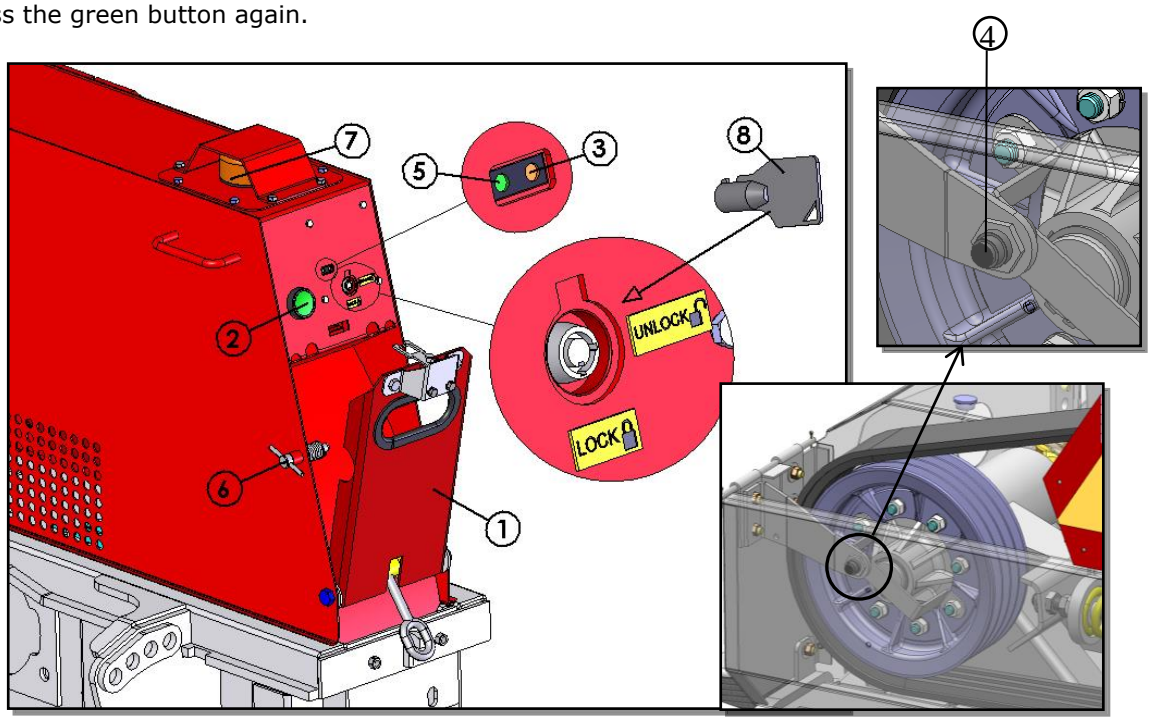
There is a risk of injury when you couple the device to the tractor!
While the machine is moving backwards, do not pass between it and the trailer during the coupling.
It is strictly prohibited to place yourself between the tractor and the machine if these have not been totally immobilised with a parking brake and/or blocks on the wheels.
The coupling or uncoupling of the transmission cardan should only be undertaken when the motor has stopped.

STOP

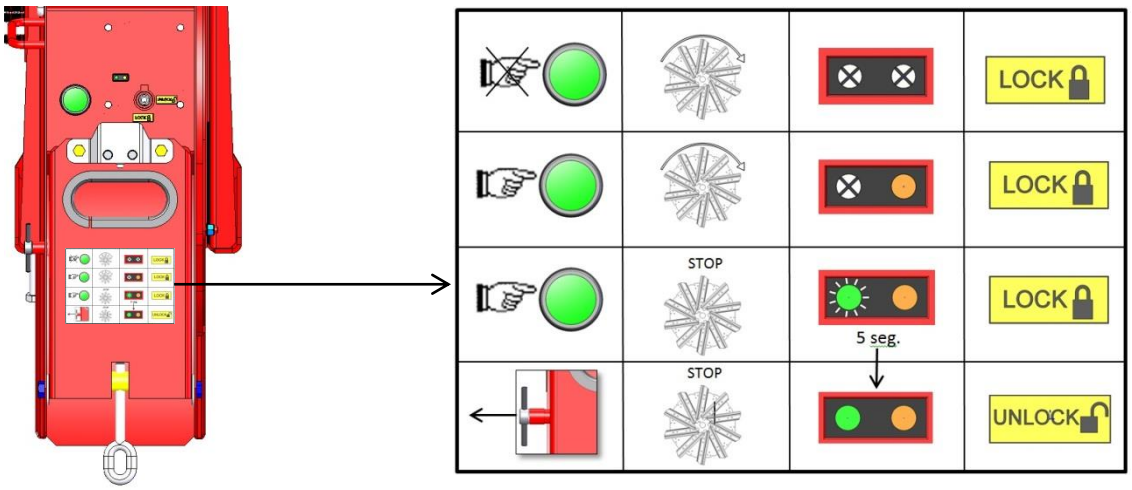
Take care when opening the lid of the blades disc!
For the purposes of maintenance, the lid of the blades disc must be opened regularly.
After stopping the P.T.O. of the tractor, remove the transmission cardan, there is risk of injury if the P.T.O. is started up accidentally.

Opening of the blades disc lid

The blades disc lid is equipped with a safety system that prevents it from opening unless the blades disc has completely stopped. It operates as follows:
Press the green button (2) to unlock the door (1). If the orange light (3) goes on, this means the blades disc is still in motion (sensor 4 is still detecting motion) and the system is still preventing the lid from opening. If the green light (5) also goes on, this means the disc is already stopped; it will blink for 5 seconds until it goes on permanently, indicating the system is unlocked, and allowing you to open the door (1) by pulling handle (6). After 15 seconds, the system locks again. If the door (1) is still closed, press the green button again.



While the door (1) is open, or if it is not properly closed, light (7) remains on.
In case of electrical malfunction or in the absence of electric power supply (maintenance/storage) the system stays locked; to unlock it, use key (8), supplied with the machine, and turn it to UNLOCK.
After repairing the malfunction or after making the electrical connection to the tractor, lock the system again by turning the key to LOCK; if you forget to do so, the light will stay on, turning off as soon as you turn the key to LOCK.
Remove the key and keep it together with your tractor's key.



Parking/storing the equipment:
When the equipment is parked, remove the transmission cardan and store it or secure it with a chain.

Only use the machine in accordance with the regulations!
Usage Regulations:
- See "Technical Information" Chapter.
- See "Definition of use of the machine" Chapter.

The load limits of the machine may not be exceeded.
Additionally, comply with the power limits of the tractor to be used.

Travelling on public routes
- Comply with the traffic rules in force.
- Lighting devices should be installed, applied perpendicular to the route.
- Pay attention to the total height of the machine, it must not exceed 4 m from the ground; for this, use the hydraulic articulation of the discharge pipe (see chapter ***"how to fold down the pipe")***
- Pay attention to the additional length of the machine.
- Total length of the machine in transport:
  - -3.14 m - with the corn cutter and collector head
  - - 2.90 m- with the grass pickup of 1.90 m.

PUTTING INTO USE

Before starting work

a. Before starting work, the operator should have knowledge about all of the functioning devices and their functions. It is too late to learn these aspects if work has already begun!

b. The machine should be tested for safety in travelling and functioning before each operation.

c. There is a danger of crushing or dismembering in the areas of the pickup, cutting unit, rear lid and higher extension zones. Everyone should stand well back from these areas before the hydraulic equipment and the transmission are switched on.

d. Before driving the vehicle, the driver should ensure that no one is in danger and that there are no obstructions. If the driver is not able to see and to have a general view of the road directly behind the machine, he should be helped by somebody during manoeuvres in reverse.

e. Comply with the safety tips in relation to the machine. You may find an explanation of the meaning of the graphic warning symbols on page 4.

f. Comply also with the tips in the relevant chapters and in the supplement to this functioning manual.

g. Check the hydraulic hoses regularly and replace old and damaged hydraulic hoses. The replacement hoses should comply with the technical requirements of the manufacturer.

h. For all maintenance, service and modification works, switch off the transmission motor and remove the universal transmission.

Check before use

The following tips should make the operation of the machine simpler for you. You may find detailed information on specific points in the relevant chapters of this instruction manual.

1. Check that all of the safety equipment (covers, shields, etc.) is in good condition and installed in the correct position.

2. Lubricate the machine in accordance with the lubrication scheme. Check the oil levels.

3. Check if the tyres have the correct air pressure.

4. Check if the wheel nuts are tightened firmly.

5. Check the correct rpm of the P.T.O.

6. Carry out the electrical connections to the tractor and check whether they are correct. Take note of the tips in the instruction manual!

7. Carry out the following adaptations:
   - Height of the drawbar
   - Positioning of the electrical cables
   - Transmission axle

8. Affix the machine using only the fittings supplied.

9. Cut the transmission cardan at the correct length and check the functioning of the free wheel. (see page 67).

10. Check the functioning of the electric controls.

11. Connect the hydraulic hoses to the tractor.
    - Check the hydraulic hoses against the existence of damages and wear and tear.
    - Certify that the connections are correct.

Definition of the use of the machine

The machine "**MEX 6 "** is designed only for normal use in agricultural work.

Corn cutting, collecting and milling machine: For the harvesting of silage corn
Machine for collecting and cutting green forage (grass): For collecting and cutting grass

Any other use apart from this is held as inadequate. The manufacturer does not bear any responsibility for any damage that results from this. The risk is borne only by the user.
The maintenance of the functioning, service and maintenance requirements stipulated by the manufacturer is also under the designation of "defined use".

Safety tips

1. Connect the P.T.O.
Connect the P.T.O. only when all of the safety devices (covers, protective aprons, coatings, etc.) are in good conditions and are affixed to the device in the correct protective positions.

2. Connect the machine only in the working position and do not exceed the prescribed start-up speed (for example, max. 1000 rpm).
A sticker located close to the gears will advise you on the speed for which the machine is equipped.

3. Pay attention to the correct rotation direction of the P.T.O.!

4. Use ear protection
- The noise level at the place of work could differ from the measured values (see Technical Information) in part due to the different types of cabins in various tractors.
- If the noise level of 85 dB (A) is reached or exceeded, the farmer should have adequate ear protection available.

Safety indication

for the supplementary installation of electrical and electronic installations and/or components
- See supplement

Correct loading:

To load the Mex6 correctly, it is recommended to use:
1x-Belt with ±3 m.
2x-Belt with ±1 m.
1x-Set of 3 belts or chains, with suspension shackles.

1st-Position the 1 m belts around the axles and place the loops in the shackles.

2nd-Apply a protection in the belt/chain, to protect the machine's paintwork.

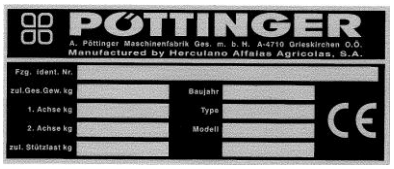
3rd-Place the folded 3 m belt in the front coupling and position the loop in the shackle.

4th-Position the machine in the truck's platform, with the drawbar to the front. If possible, it should be positioned at an angle to the platform, so that it does not move during transportation.

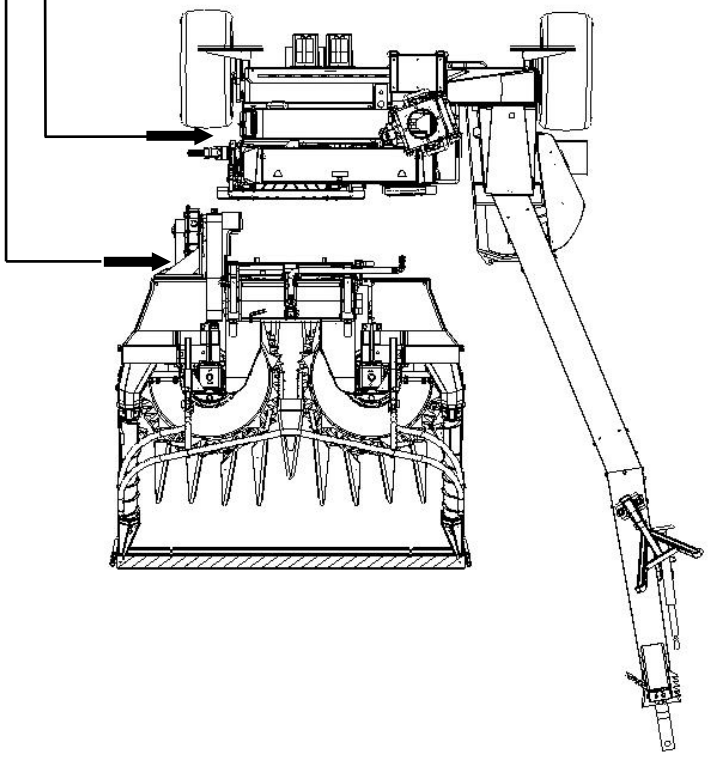
Note: It is very important the loading is carried out as recommended; the company declines all responsibility for any damage during unloading.

POSITION OF THE SERIAL NUMBER/FRAMEWORK OF THE MACHINE AND IDENTIFICATION OF THE BASE DEVICE AND THE ACCESSORIES

The serial number of the machine is engraved on the plaque presented and also on the structure.
The requests for activation of the guarantee and questions shall not be dealt with if this number is not supplied.
Please write the number on the first page of the instructions manual immediately after receiving the vehicle/machine.

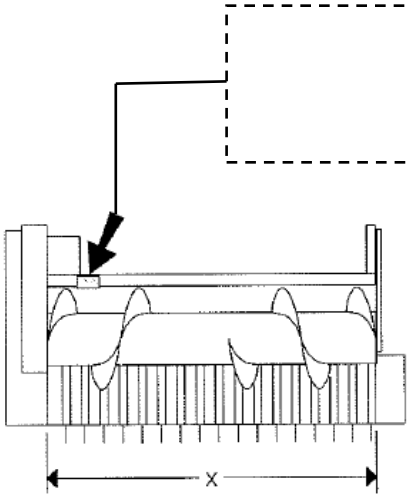


TOWED VERSION MEX 6-CORN----
OR
TOWED VERSION MEX 6-GRASS-----



3 or 4-LINE HEAD FOR CORN---
(WIDTH OF CUT: 2.00 or 2.35 m)

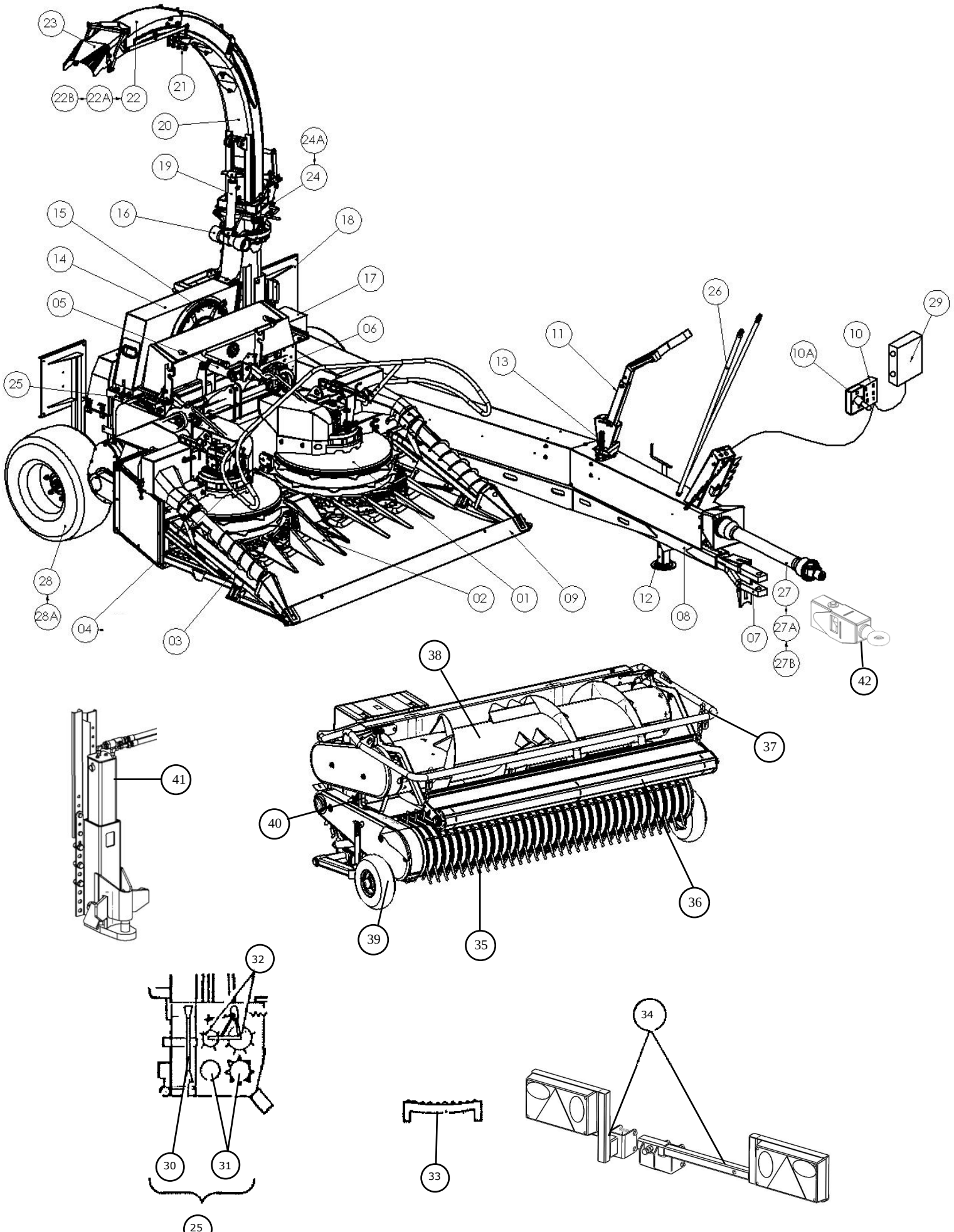
GRASS PICKUP
(width of collection X=1900 mm)



THE MOST IMPORTANT COMPONENTS

1 = Collection drums (corn)
2 = Front guide nozzles (corn)
3 = Spindles for collecting fallen corn (corn)
4 = Upper guide (corn)
5 = Hydraulic cylinder for regulating the height of the cut (corn)
6 = Stoppers for regulating the height of the cut (corn)
7 = Coupling to the tractor
8 = Drawbar
9 = Protection of the front nozzles
10 = Control box for the machine functions
10A= Joystick to control pipe rotation and flap articulation.
11 = Pipe support
12 = Mechanical support on the ground
13 = Pipe support tensioners
14 = Blades disc lid
15 = System for sharpening the blades
16 = System for rotating the pipe
17 = Hydraulic block
18 = Rear indicators
19 = Pipe articulation cylinder
20 = Ejector pipe
21 = Flap regulating cylinder
22 = Pipe extension L=1.8 m. (corn)
22A= Pipe extension W=1.00 m. (grass)
22B= Pipe extension W=1.40 m. (option)
23 = Discharge nozzle
24 = Pipe articulation with vertical extension of 0.70 m. (corn)
24A= Pipe articulation with vertical extension of 0.50 m. (grass)
25 = Collecting and milling unit
26 = Hydraulic hoses for connecting to the tractor
27 = P.T.O. cardan 1 3/8” 6 ridges
27A = P.T.O. cardan 1 3/8” 21 ridges
27B = P.T.O. cardan 8x32x36
28 = Transport wheels with hydraulic regulation (corn)
28A = Fixed transportation wheels (grass)
29 = Control box for the metal detector (option)
30 = Blades disc
31 = Lower intake rollers
32 = Upper intake rollers
33 = Corn chopping system (corn)

34 = Rear lights (optional)
35 = Pickup drum (grass)
36 = Deflector (grass)
37 = Security tube (grass)
38 = Auger (grass)
39 = Support wheel (grass)
40 = Safety device (grass)
41 = Rear coupling for trailer
42 = Towing eye 50mm (optional)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Technical information

(Subject to modification for the purposes of technical development)

Power requirements:

3-line head for corn:	of 96 KW (130 HP)
Pickup	of 74 KW (100 HP)
P.T.O. rotation	1000 rpm
Diameter of the blades disc	1220 mm
Opening for forage	800 cm
Number of blades	max. 10
Permanent level of sound emission	89.2 dB(A)

Weights:

Mex6 machine with discharge pipe	approx. 2100 kg
Accessories:	approx. 850 kg
3-line head for corn:	Approx. 510 kg
Pickup 1.90 m	

Dimensions:

Mex6 machine (for corn or grass)	
Length	4.99 m (corn)-4.72 m (grass)
Width	3.14 m (corn)-3.01 m (grass)
Height with extension of 0.5 m at work	4.56 m
Height with extension of 0.7 m at work	4.76 m
Height with extension of 0.5 m at transport	2.70 m
Height with extension of 0.7 m at transport	3.20 m

Load capacity in rear coupling:

Model	Vertical load (max.)		Towable load (max.)	
	40 km/h	25 km/h	40 km/h	25 km/h
Grass	2350 kg	2500 kg	12000 kg	16000 kg
Corn	2000 kg	2500 kg	12000 kg	16000 kg

Necessary plugs

1 double-effect hydraulic plug
min. pressure.: 140 bar
max. pressure.: 180 bar

1 plug with 7 pins for lighting (12 volt)
1 plug with 3 pins (12 volt) (see appendix)

Tyres	Application	Max. pressure (bar)	Tightening torque (Nm)	L.I. (Kg)	S.I. Km/h
340/55-16	Mex 6	4,0	320	140 (2500 kg)	A8 (40 km/h)
13x5.00-6	Grass pickup	2,5	------	52 (200 kg)	A6 (30 km/h)

Optional equipment:

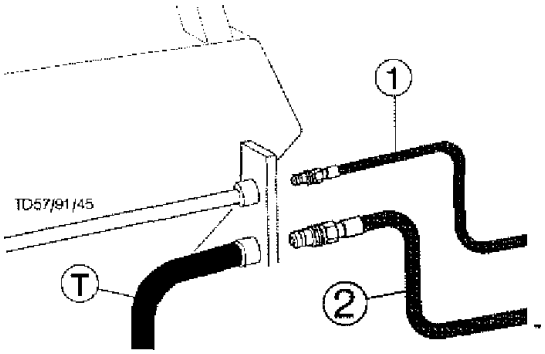
- Horizontal extension of the pipe (1.0/1.40/1.80 m)
- Vertical extension of the pipe (0.5/0.7 m.)
- Metal detector
- Electrical installation for travelling on public routes
- Transmission cardan in accordance with the P.T.O. of the tractor
- Load sensing system
- Rear coupling for trailer

All of the information is subject to revision.

FIRST CONNECTION TO THE TRACTOR

HYDRAULIC CONNECTION

VERY IMPORTANT: Before making the hydraulic connection to the tractor, check the oil condition. If it is contaminated, change it, otherwise the hydraulic block and remaining hydraulic components of your machine could be damaged.



The machine needs 1 double hydraulic circuit, to activate the hydraulic block, in order to do this:

- Connect the pressure line (1) and the oil return tube (2) (the tube with the bigger diameter is the oil return tube), the command lever of the line on the tractor has to be positioned so that the hose of the greatest diameter is making the return to the tank.

Note:

If the oil heats up during functioning, and the tractor only has a constant flow rate pump, then it should be linked to a simple effect line (see image).

- Connect the pressure hose (1) to the single action control unit. Connect the oil return hose (2) (with the bigger diameter) to a direct connection to the oil deposit.

If the tractor allows it, reduce the oil flow rate

REGULATION OF THE HYDRAULIC BLOCK:

Pos. "H±10 mm" to closed hydraulic system

Tractor with variable flow rate pump

Before making the connection, the LS screw on the hydraulic block should be adjusted to the quota of ±10 mm (totally fasten LS)

Pos. "H±17 mm" to open hydraulic system

Tractor with constant flow rate pump

The position of the LS screw on the hydraulic block should be adjusted to a quota of ± 17 mm. (totally unfasten LS)- (factory configuration).

Warning!

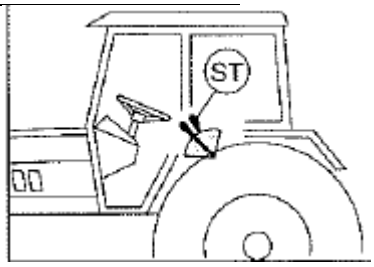
If this is not done, the overload valve on the hydraulic system of the tractor is continuously in use and an excessive heating of the oil will take place.

If the tractor has a closed hydraulic system and the hydraulic block is in the position "A=17" then the hydraulic oil will heat up (especially due to the constant pumping of the maximum quantity of oil).

Solution: Place the tuner LS on pos. "A=10 mm"
LS = Load detection

FIRST CONNECTION TO THE TRACTOR

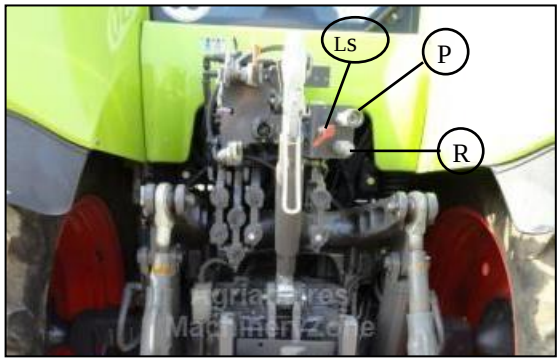
Connection of the hydraulic hoses, for tractors with fixed flow rate pump.



- Disconnect the P.T.O. before making the connection
- Place the lever (ST) of the control unit in the fluctuating position (neutral position),
- Ensure that the rapid valves are clean.
- Make the hydraulic connection of the hydraulic block. A double effect
- Check if the hose of the smaller diameter is the one with pressure.

Connection of the hydraulic hoses, for tractors with variable flow rate pump.

- Disconnect the P.T.O. before making the connection
- Connect the return hose (larger diameter-3/4") to valve (R), the pressure hose (1/2") to valve (P) and, finally, the smaller diameter hose (1/4") to valve (LS).



Power source

Necessary connections to the tractor

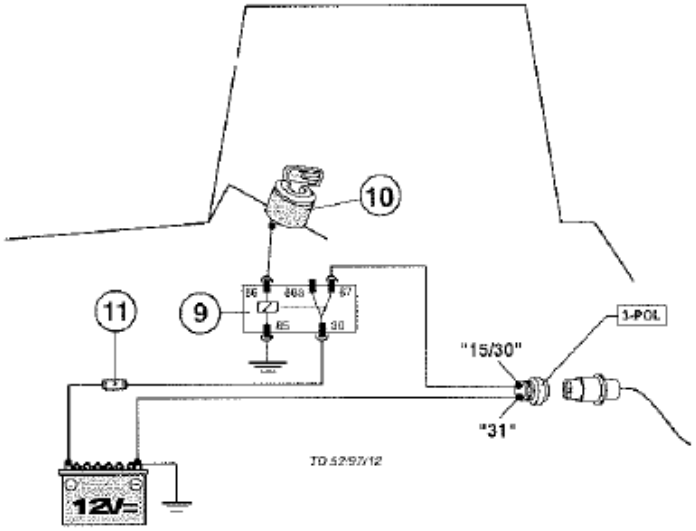
3-prong current plug

- Connect the attached 3-prong plug to the rear of the tractor
- Power source through a relay (9)

  The relay is connected to the ignition switch (10).

  - The diameter of the conductor is at least 4 mm^2
- Fuse 16A (11)

You may find a complete diagram of the electrical connections on the list of spare parts.

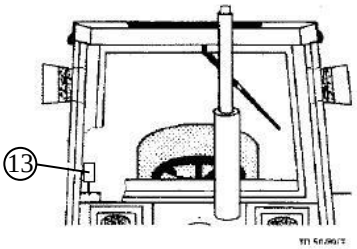


This connection may only be made by a specialist
Do not connect directly to the ignition switch
- There is a risk of fire or damage to the electrical unit.

- **Use only fuses at the recommended power as the use of stronger fuses will destroy the electrical unit!**

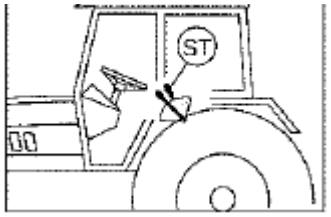
Establish the connection with the tractor

- After concluding the work as demonstrated, connect the three-pin jack to the tractor power socket.
- Check if the lights on the command panel (13) are working
- Install the command (magnetic base) in the interior of the tractor in an accessible (metallic) place with good visibility.



INITIAL CONNECTION TO THE TRACTOR

- Switch the lever (ST) to the "ON" position and affix it.
  Check if the hose of the smaller diameter is the one with pressure, otherwise reverse the connection of the hoses or reverse the position of the ST lever, affixing it again.
- The system is protected with a 15A fuse on the power jack of the command (5)



Explanation of the command functions

A = This button has two functions: When it is continuously pressed, it switches on and off the command, when it is pressed with one simple touch it commutes the functions in accordance with the colour of the bulb (green or red)

B1/C1 (red) = Executes function **1** for orientation of the discharge nozzle

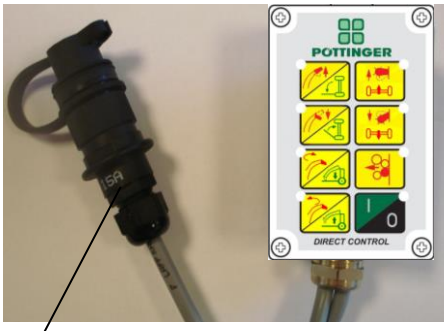
D1/E1 (red) = Executes function **2** for the rotation of the discharge pipe

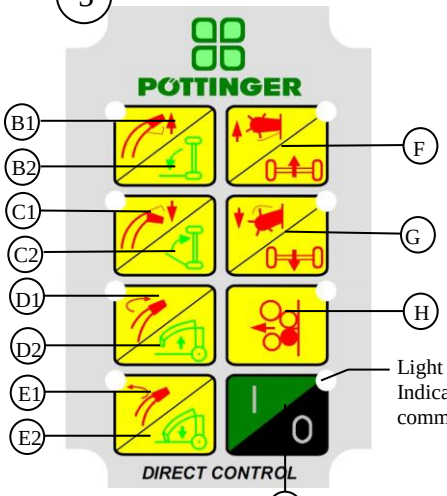
F/G (red)= Executes function **3** of coming closer/ /moving away from the ground of the corn/grass cutting head and simultaneously raises/lowers the transport wheels **8** (only corn version), this button also executes the activating function of the skid **5** for assisting assembly/disassembly of the grass pickup, whereby you just need to connect the respective rapid valve to the hydraulic block of the machine.

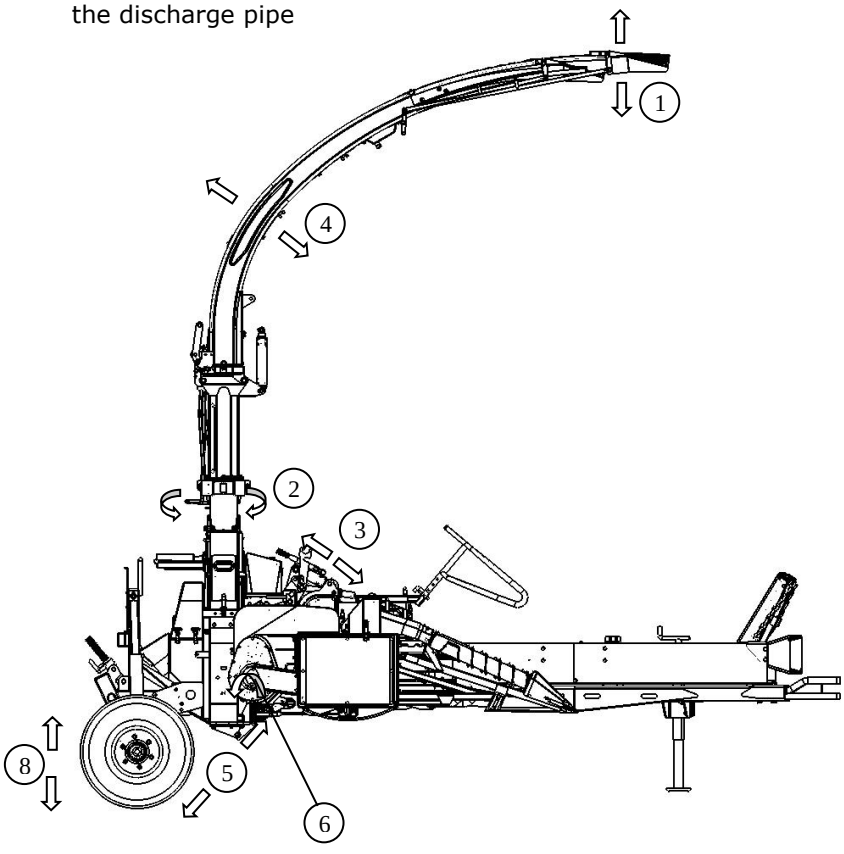
H (red) = Executes function **6** which reverses the rotation of the head and the feed rollers, whereby you just need to press the button. When you stop pressing, the direction of rotation returns to the initial one.

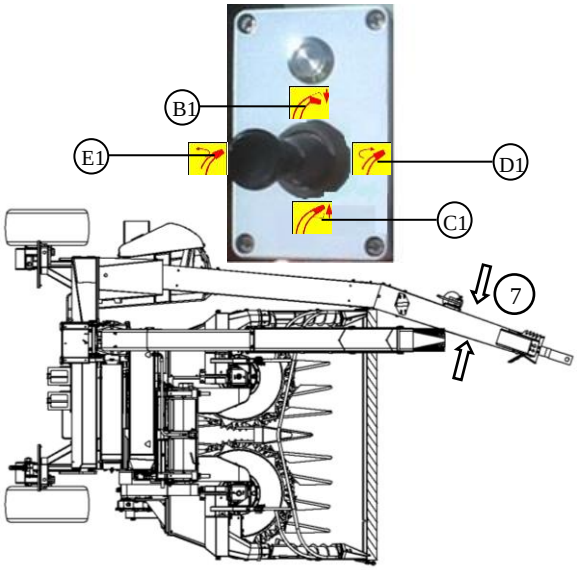
B2/C2 (green) = Executes function **7** for positioning the drawbar: transport/work

D2/E2 (green) = Executes function **4** for the articulation of the discharge pipe





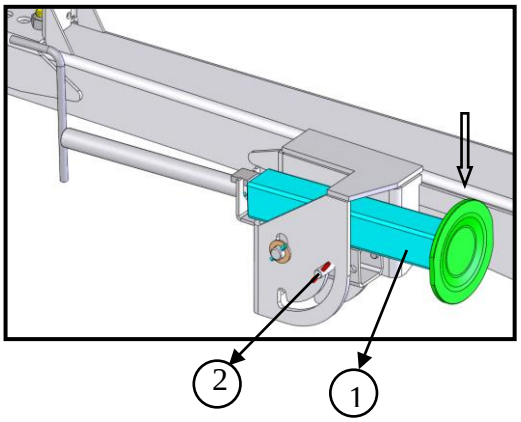


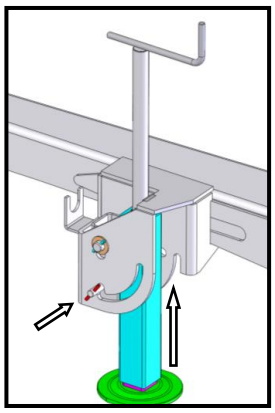


Coupling the machine to the tractor

- Place the mechanical support (**1**) vertically and locked; to do so, proceed as follows:

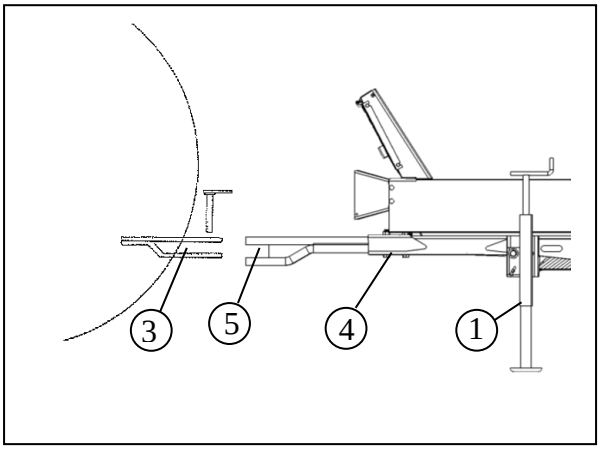
- Pull the latch (**2**), move the support downwards slightly, in the direction of the arrow, the existing spring will complete the movement until it is vertical, **(take special care not to pinch your hands)**. - After it is positioned vertically, the spring will move the rest upwards, placing it in the safety position; check that latch (**2**) is locked.

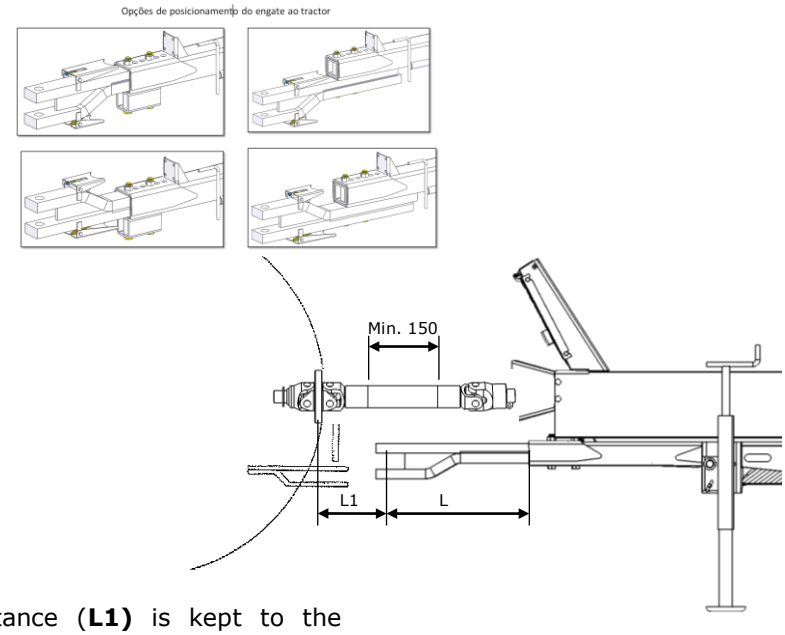




Regulate the height of the drawbar until it is levelled with the coupling of the tractor (**3**); this operation should be undertaken with the wheel train in the working position (corn version), that is, down.

- You should take care that the drawbar (**4**) is as much as possible on the horizontal. If necessary, change the drawbar coupling position, according to the options below. (**5**).





Attention!

Distance (**L**) should be adjusted, so that distance (**L1)** is kept to the minimum possible.

This adjustment should be undertaken in order that the transmission cardan is as much as possible on the horizontal.

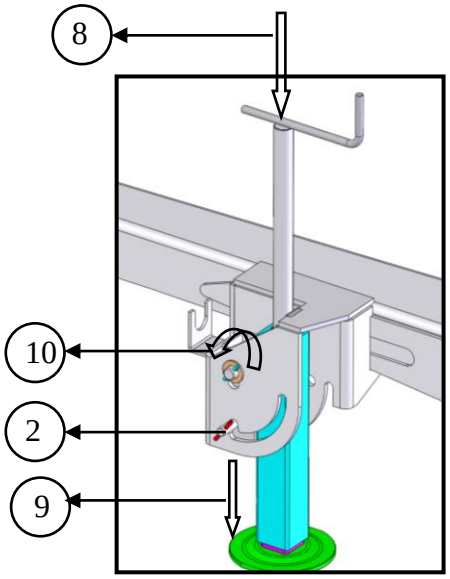
- Couple the machine to the tractor only when all of the safety shields are in place.

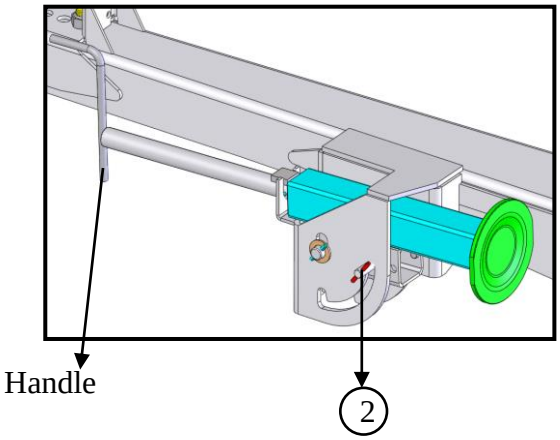
- There is a risk of injury by crushing, perforation and cutting in the area where the machine is coupled to the tractor!

- Cut the transmission cardan as necessary in order to guarantee the minimum quota of overlapping of 150 mm (see chapter on the p.t.o. transmission cardan).

Collect, rotate laterally and secure the support (**1**) horizontally; to do so, proceed as follows:
- Pull latch (2) with the right hand, and push the support in the direction of the arrow with the left hand (8), or with the foot in the direction of the arrow (9), rotate slightly in the direction of the arrow (10), the spring will help to complete the movement until it is positioned horizontally.
- Check that latch (2) is locked.

Attention: The support will only be completely horizontal, with latch (2) locked, if the handle is as indicated in the figure.





Metal detector (FKS)- option

Equipment to be assembled on the tractor:

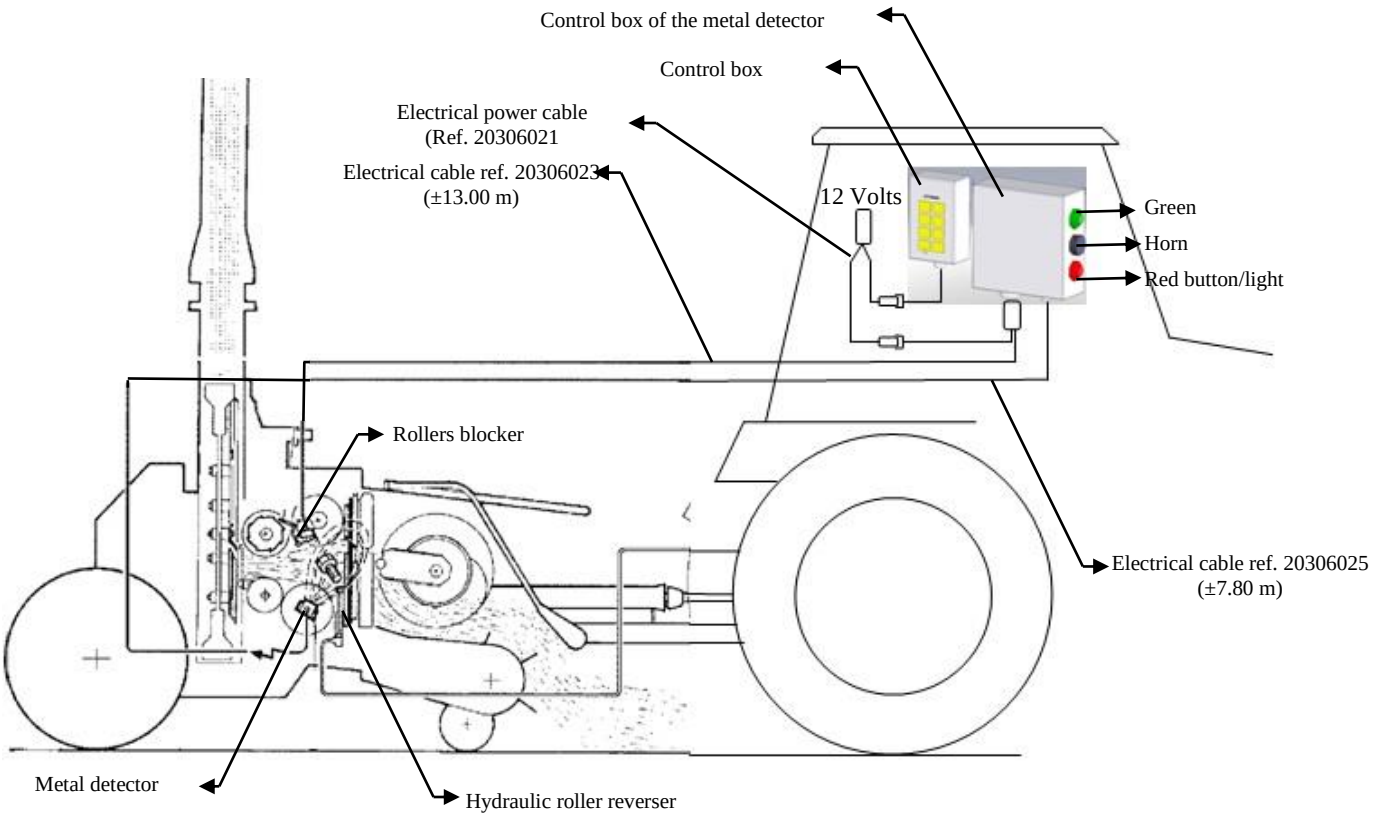
- Install the control box of the metal detector, and the control box inside the tractor **in a safe place and within the driver's reach**.
- Connect the electrical power cable to the two boxes and to the respective jack of the tractor.
- Switch on the green button, the light goes on, if this does not happen, check the connections of the cables.

Explanation of the functioning of the metal detector:

On the control box of the metal detector, there is a green button/light, to switch on/off the metal detector and a red button/light to cancel. There is also a warning horn.

1- When you press the green button, the respective light goes on and the detection system is active.
2- Then press the red button, to redefine the metal detector (stand by), and the red light will go off.
3- During the work, whenever the system detects any foreign metal object at the entrance to the feed rollers, the red light will go on, the horn is switched on and immediately the rollers are blocked, then they reverse their direction of rotation.
4- After checking that the metallic object has been totally removed, press the red button and the feed rollers will once again take up the normal direction of work.

- If the red light and the horn are in permanent warning, check the electrical cable ref. 20306025.



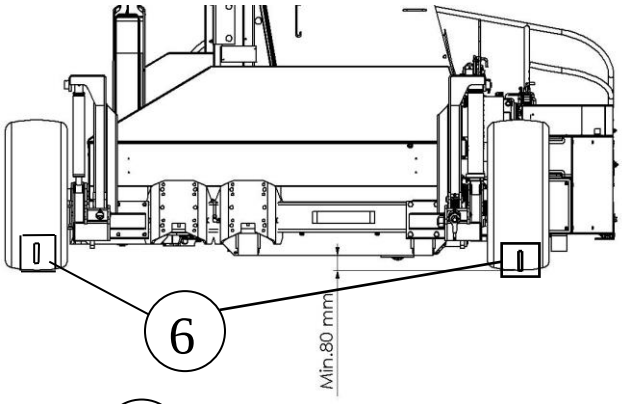
Maintenance note:

When you undertake any soldering work on the machine equipped with a metal detector, there is a risk of magnetisation. If the metal detector is not working correctly, it will have to be demagnetised; in order to obtain help, contact our after-sales service.

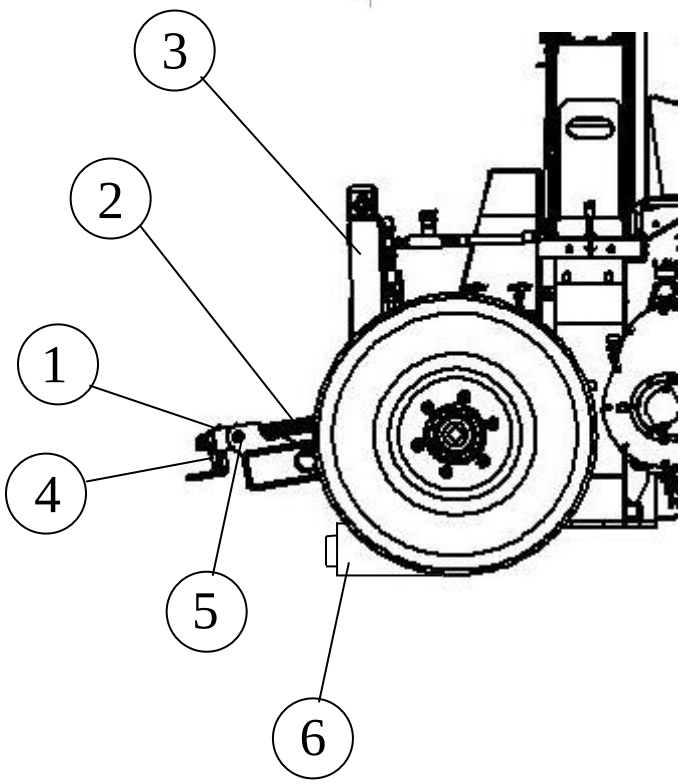
Adjusting the height of the work/transport (corn version)

To adjust the working height:
- Place the blocks (6) behind the wheels
- Place the tuner (1) as close as possible to the tip of the grooved shaft (2).
- With the machine command, lower the wheel train (3) to the desired height (this depends on the desired cutting height), if the machine does not lower due to the incline of the terrain, do a reverse, continuing to press the command.
- Adjust the tuner (1) until it leans against the stop (5) and then turn the safety counter-nut (4) until it leans against the tuner (1).

In this way, whenever you need to raise the machine (manoeuvres) and once again place it in working position, this is always at the previously regulated height.

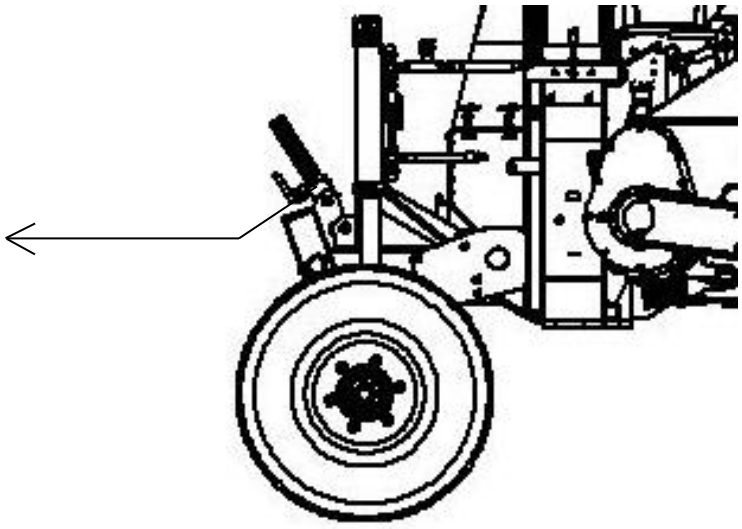


Attention: The minimum working height possible is designed so that the back of the machine is at a distance off the ground of 80 mm, if the terrain is quite irregular and with obstacles (ex.: stones), for the protection of the machine, increase the distance from the ground, proceeding as described above.



In order to place the machine in the transport position:
- With the machine command, raise the wheel train to the maximum.
- Adjust the tuner (1) until it leans against the stop (5) and then turn the safety counter-nut (4) until it leans against the tuner (1).

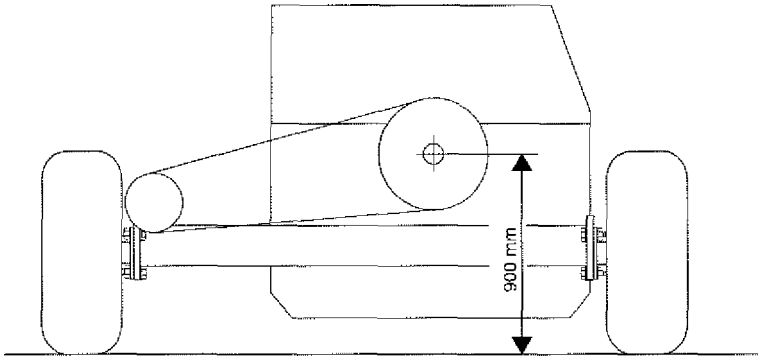
Attention: Never transport the machine without the tuner (1) placed in the described position, otherwise this could cause a rupture in one of the hydraulic hoses and lead to an accident.



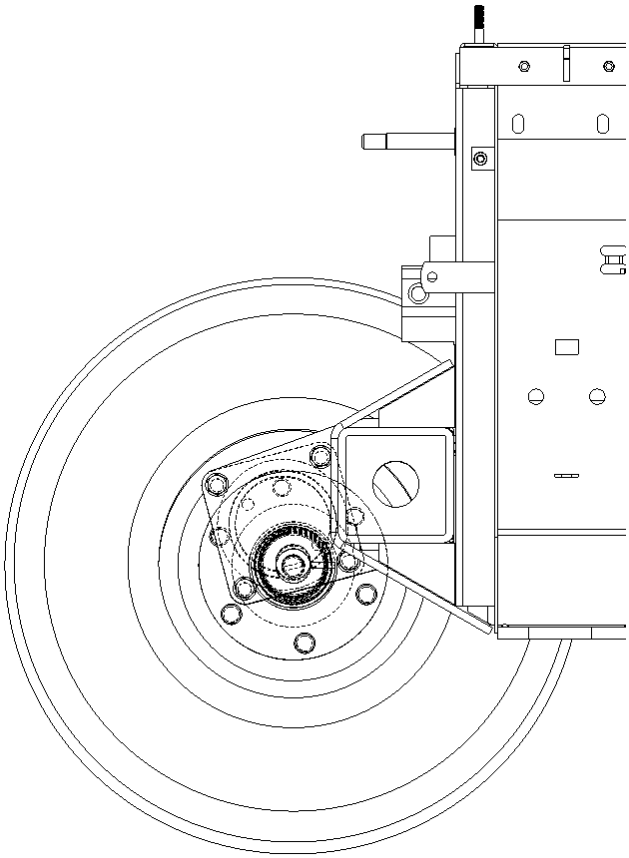
Note: All of these procedures should be executed on the two wheels in the same way

Adjusting the height of the work (grass version)

The working height advised for the grass version is 900 mm from the centre of the blades disc to the ground.



To obtain this measurement (900 mm), the assembly of the wheels must be as indicated in the picture:



Regulation of the drawbar for work/transport

In order to place the drawbar in the transport position:
- Couple the machine to the back part of the tractor
- Make the hydraulic connections to the tractor
- Collect the support (4)
- Place the support (4) on the horizontal and affix it.
- If yours is a corn machine, check if the stop (3) is in place and in the **"3 lines"** position, otherwise the drawbar will collide with the corn head and damage it.

To change between **"4 lines"** and **"3 lines"** positions, see chapter **"corn cutting head for 4 lines"**

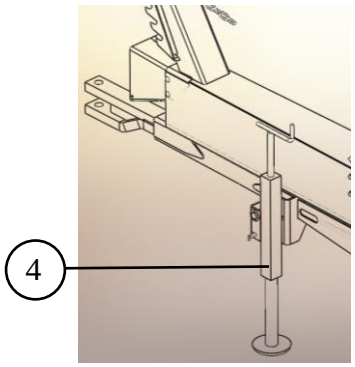
- Hydraulically activate the cylinder (2) (take special care with the movement of the drawbar - the proximity of persons may cause accidents)

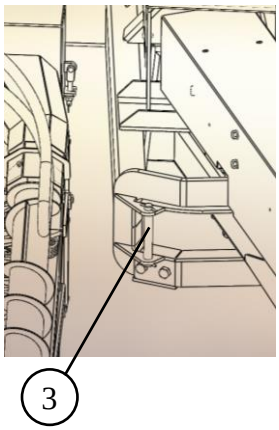
In order to place the drawbar in the working position:
- Couple the machine to the back part of the tractor
- Make the hydraulic connections to the tractor
- Collect the support (4)
- Place the support (4) on the horizontal and affix it.
- Regulate the width W in accordance with the width of the tractor.
- The maximum W quota to the machine for grass is 1450 mm, that is, the maximum width of the tractor =2900 mm.
- The maximum W quota to the machine for corn, operating with 3 lines, is 1400 mm, that is, the maximum width of the tractor = 2800 mm.

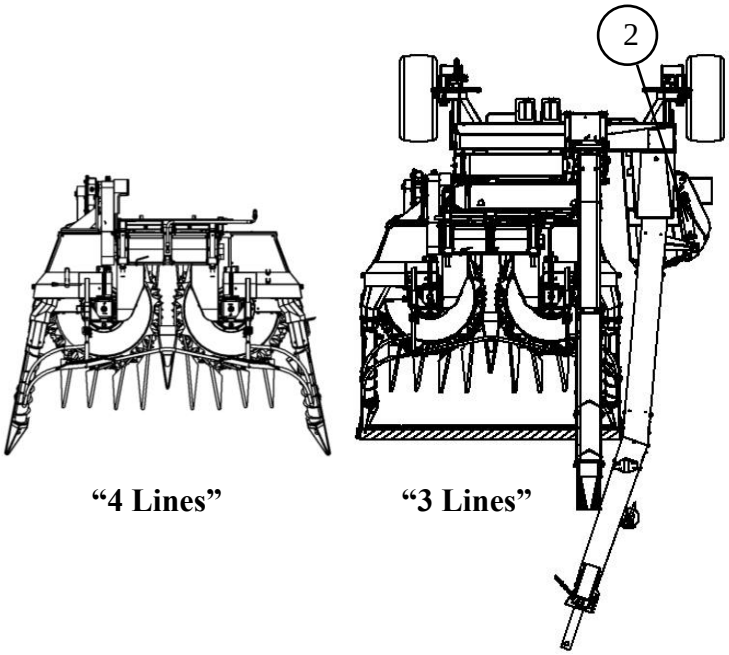
And, operating with 4 lines, it is 1225, that is, the maximum width of the tractor = 2450 mm.

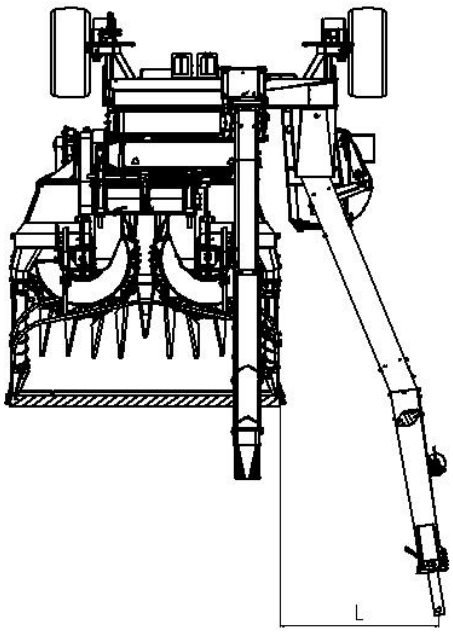
The hydraulic cylinder to move the drawbar is equipped with a safety valve, in order to guarantee that the articulation is completely locked.

- Use regulator (7) to adjust the drawbar displacement speed



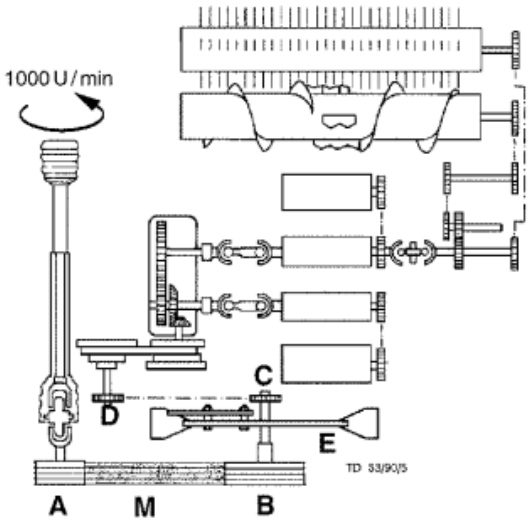




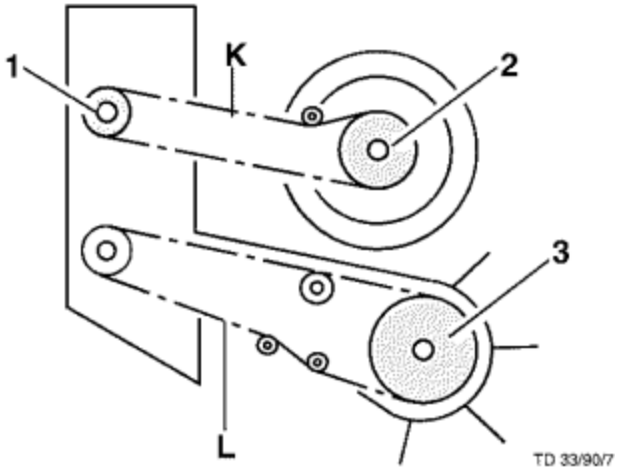


Tuning of the work rotation

Recommended rotation of the blades disc to the corn cutting head and grass pickup, depending on the Tractor power



Blades disc - rotation speed.
The table below indicates the rotation speed of the blades disc, by means of the relation of the selected transmission



Grass pickup - feed rotation.

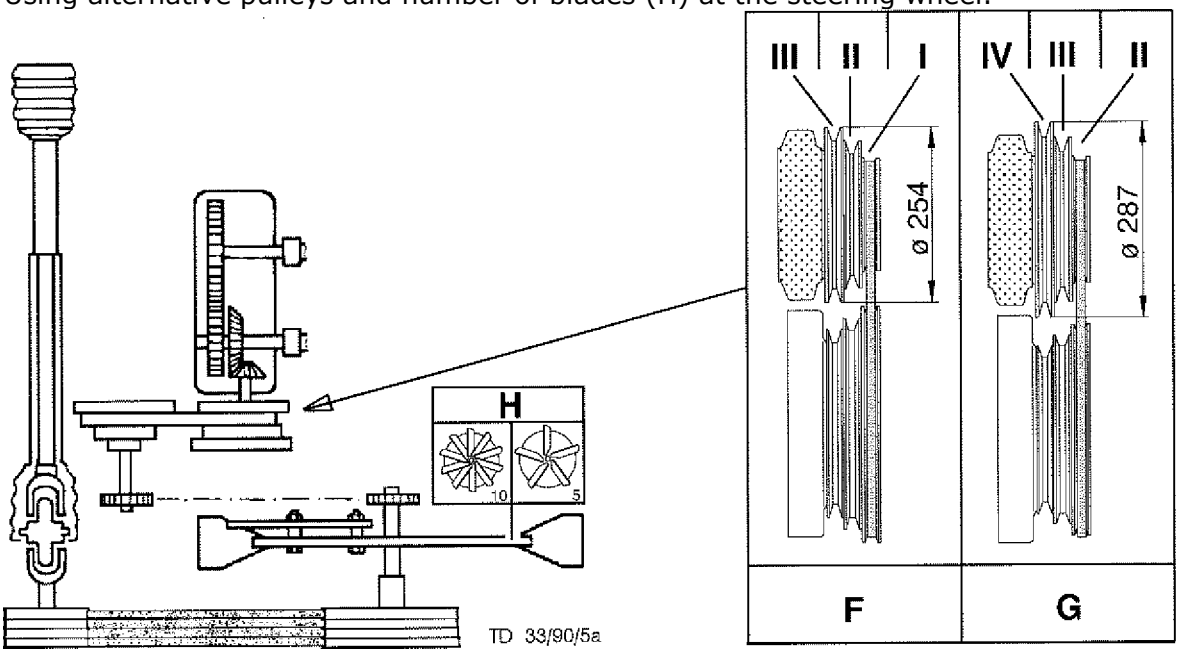
The table indicates the gears and pulleys appropriate for each rotation speed desired for the blades disc.

	PS (KW)	E	A	B	M	C	D	1	2	3	K	L
	85 - 135 (63 - 100)	540 #	240	440	3320	23	15	23	34	29	90	106
	130 - 160 (95 - 118)	590 #	265	449	3370	23	15	23	34	29	90	106
	140 - 170 (105 - 125)	600 #	272	449	3370	23	15	23	34	29	90	106
	150 - 180 (110 - 135)	620 #	275	440	3370	23	15	23	34	29	90	106
	180 - 210 (135 - 158)	720 #	275	380	3320	23	15	23	34	29	90	106
	85 - 135 (63 - 100) 130 - 160 (95 - 118) 150 - 180 (110 - 135)	800	305	380	3320	19	19					

- Standard version

Adjusting the length of the cut

Using alternative pulleys and number of blades (H) at the steering wheel.



F = pulley for corn

G = pulley for grass

H = number of blades at the steering wheel (10/5)

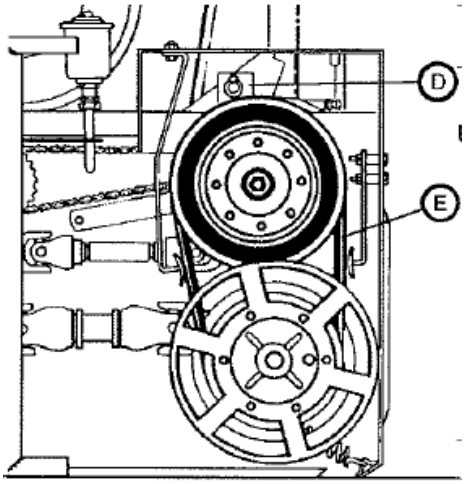
F	Theoretical cutting length				
	10	5		10	5
I	5	10	I	7	14
II	7	14	II	11	22
III	9	18	III	15	30

Avoid, if possible

G	Theoretical cutting length				
	10	5		10	5
II	7	14	II	11	22
III	9	18	III	15	30
IV	12	24	IV	19	38

Avoid, if possible

Alteration of speed of the feed rollers



Move the V belt.

The speed of the feed roller is altered by repositioning the V belt on the three alternative pulleys. To move the V belt (E), use the hydraulic inversion switch (D) (V belt loosened).

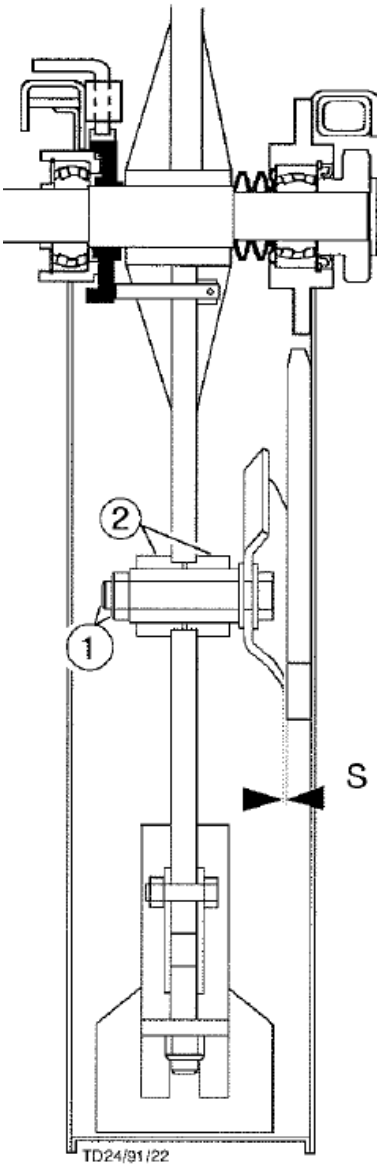
Assembly or removal of the blades

(To open the blades disc lid see page 6)

Number of blades

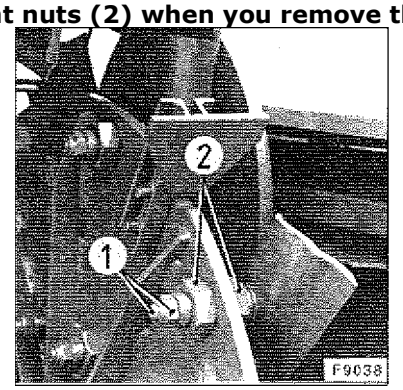
The blades may be assembled or removed at any time without the need to readjust them when they are replaced.

It is only necessary to ensure that there is no imbalance at the steering wheel (only 10 or 5 blades should be installed).



Attention!

When you remove the blades, only loosen the cutter retention nut (1). Do not touch the adjustment nuts (2) when you remove the blades



Replace the blades in the same place.

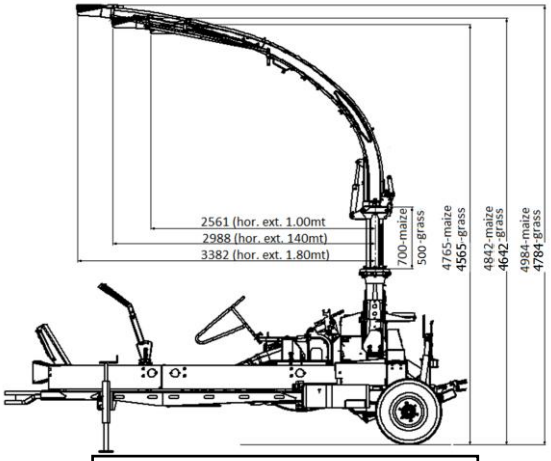
- After the first 10 hours of operation, check the tightness of the hexagonal nuts (1) and the gap between the blades and the counter-blade (S=0-0,5 mm)

Transport by road

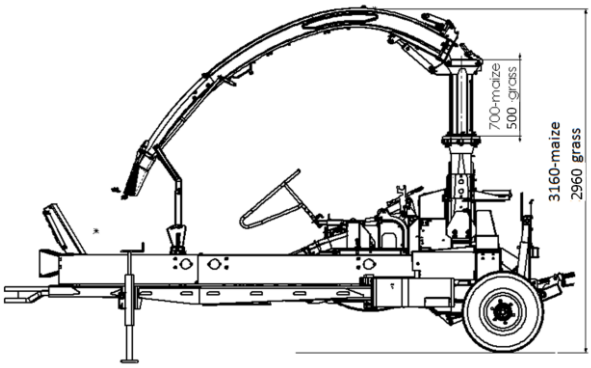
Important!

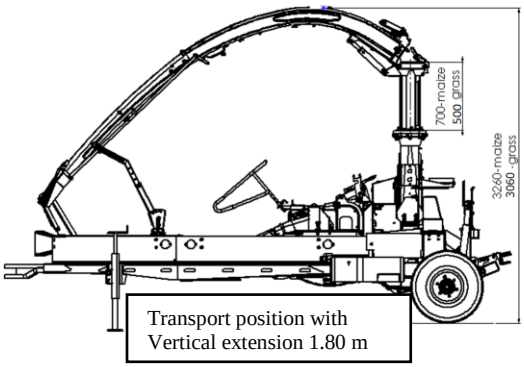
- When driving with the MEX 6, do not exceed the maximum permitted speed (25 km/h) and adapt the speed to the conditions of the road.

-Pay attention to the total height of the discharge pipe.

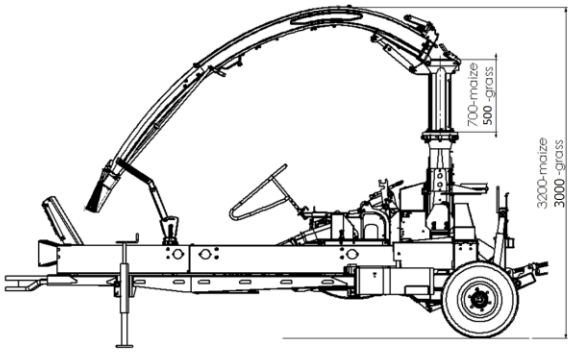


Working position with
Vertical extension 1.00/1.40/1.80 m





Transport position with
Vertical extension 1.80 m



Transport position with
Vertical extension 1.40 m

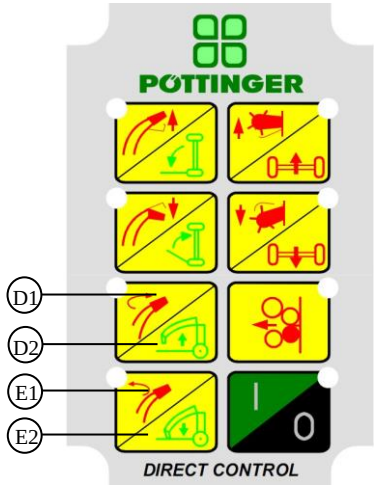
How to fold down the pipe:

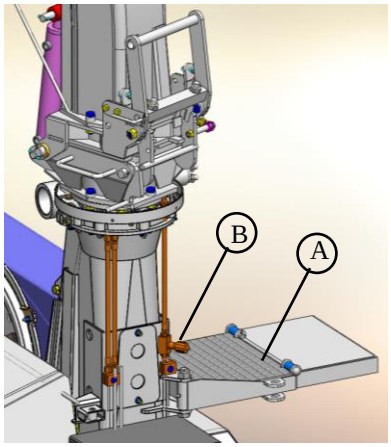
- Make the hydraulic connection of the machine hydraulic block to the tractor, as described above (initial connection to the tractor),

- Turn the pipe to the front in the direction of the drawbar using the D1 and E1 functions of the command,

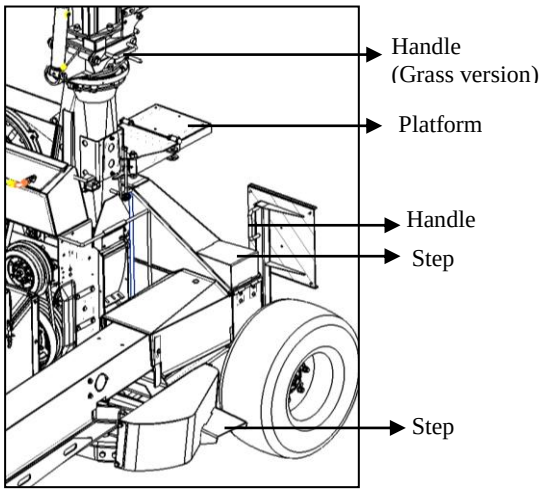
- Check whether the hydraulic regulator (B) is completely closed (clockwise),

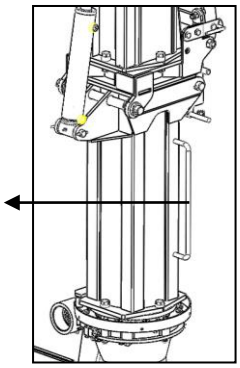
- Place the A platform as indicated in the picture.



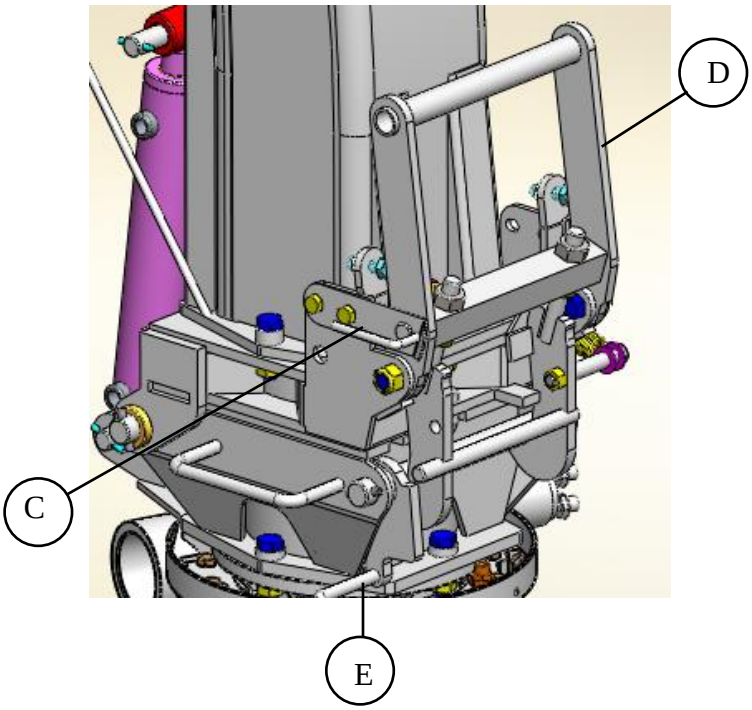


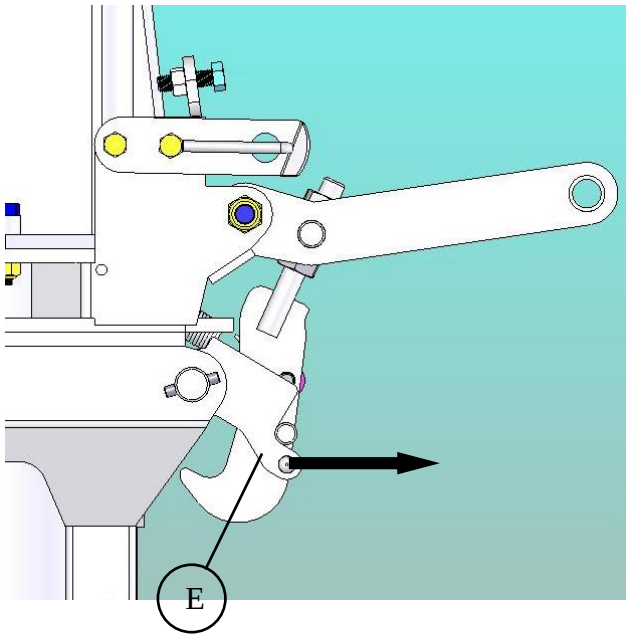
- To access the platform, use the steps and handles for this purpose, shown in the figures below. **Take special care since there is the risk of falling.**





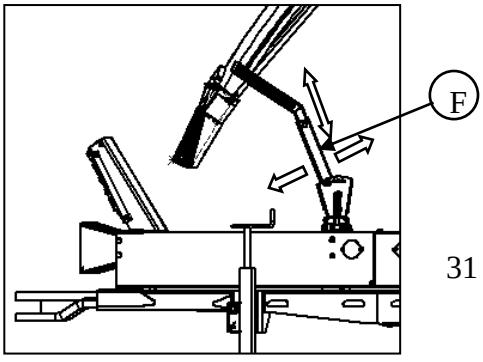
- With your left hand, pull the unlocker (C) and simultaneously pull lever (D) using the right hand.
- Then place the element (E) as indicated in the picture





- With the (E2) function of the command, lower the pipe, control the descent by opening the regulator as much as necessary (B)
- If necessary, use the pipe rotation function (D1 or E1) to make the support (F) come closer, adjust the support if necessary, in accordance with the horizontal extension being used (see pictures "transport position" in previous page)

- After the pipe has been perfectly supported, close the regulator (B) again.

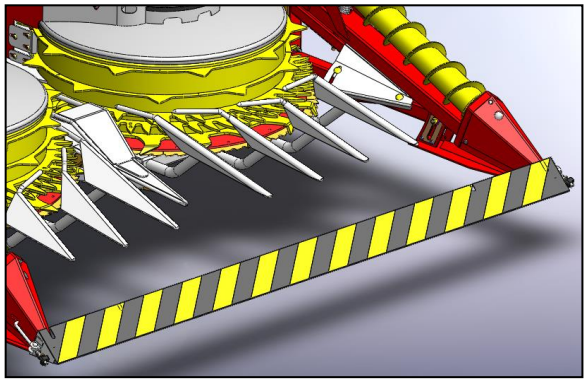


Attention ⚠

Before initiating the transportation, place the safety devices on the corn cutting head or on the grass pickup.

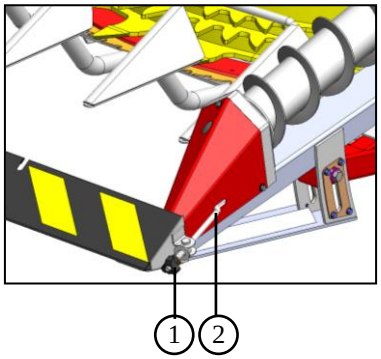
- For the corn cutting head:

- Protection of the front nozzles

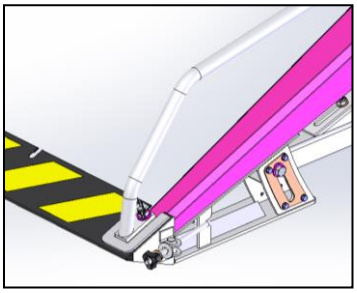


Placing the protection for transportation

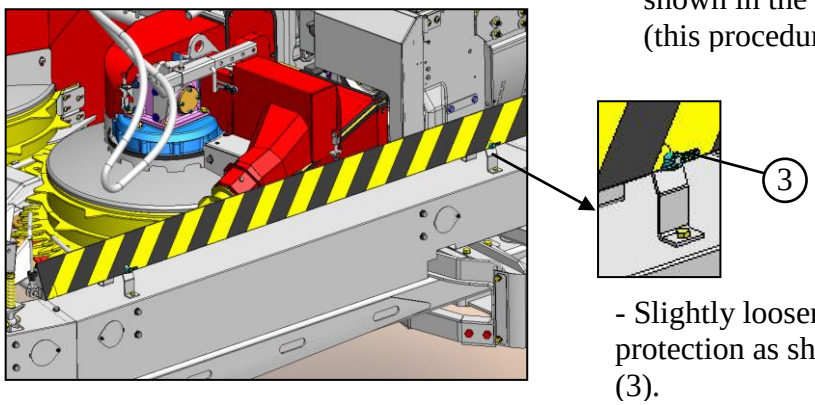
Model with lateral spindles



Model without lateral spindles



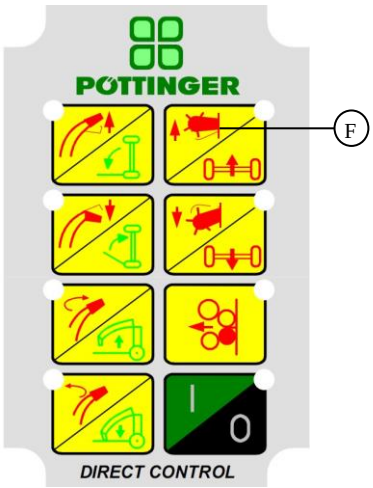
- Completely loosen nut (1), position hook (2) as shown in the picture, retighten nut (1)
(this procedure should be carried out in both sides)

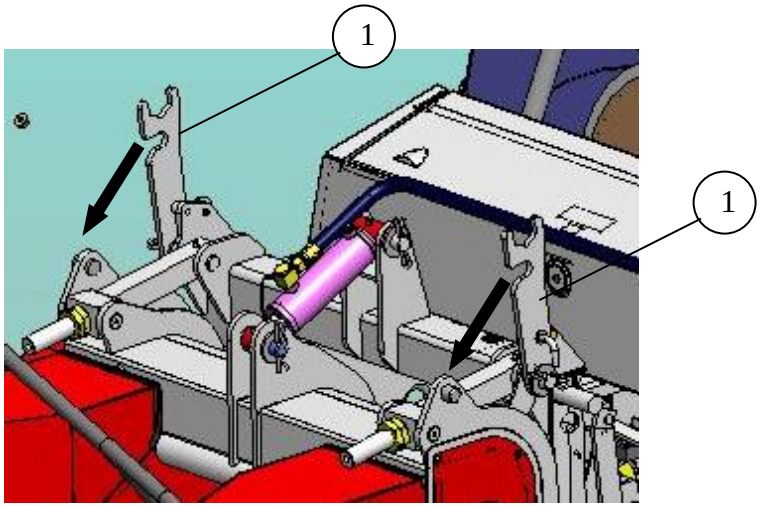


- Slightly loosen the 4 wing nuts (3), place the protection as shown in the figure and retighten the nuts (3).

Placing the protection for transportation

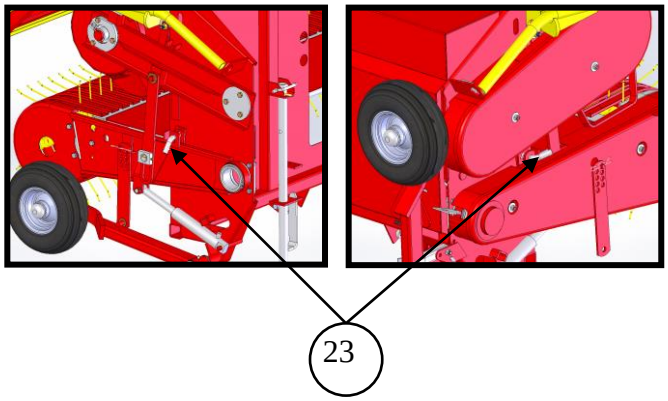
- Raise the cutting head to the (F) function of the command, place the safety levers (1) in the position indicated by the arrow.





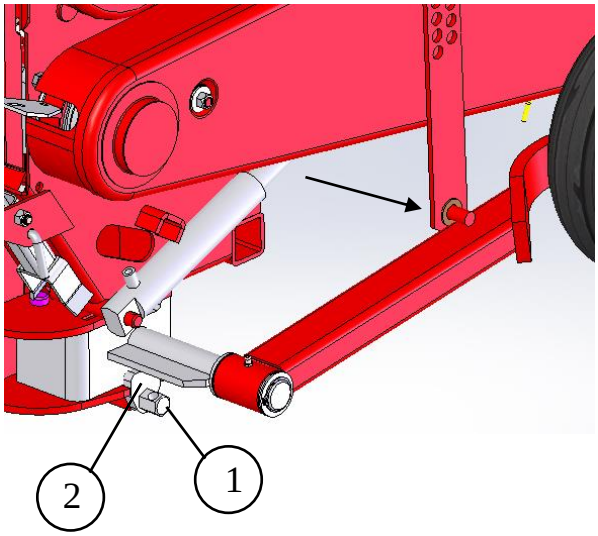
- For grass pickup:

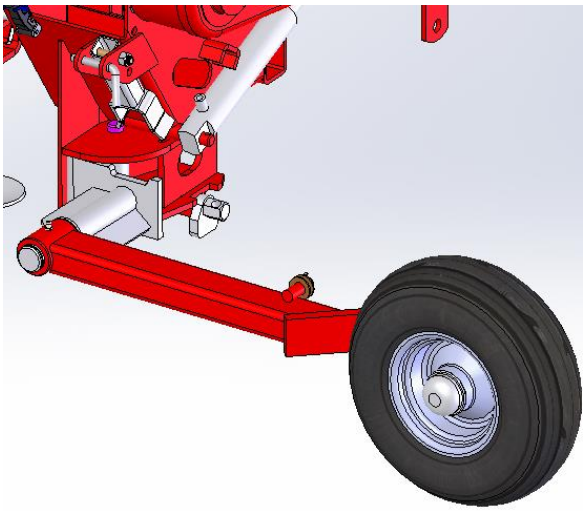
Raise the grass pickup at the (F) function of the command, and place the safety pins (23).



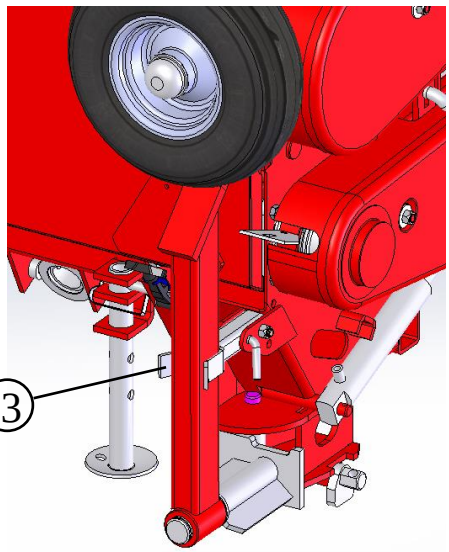
Place the grass pickup's right wheel in transport position; to do so:

- Remove the perforated support in the location indicated by the arrow; loosen screw (1) with an open end wrench 22 or a metal rod Ø 12 max., so that the latch can be rotated below (2).



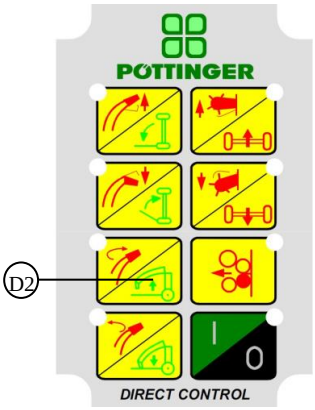


- Rotate the wheel support horizontally as shown in the picture,



- Then, rotate vertically and place the support (3) as shown in the picture.

Operating in a field



How to place the pipe in the working position

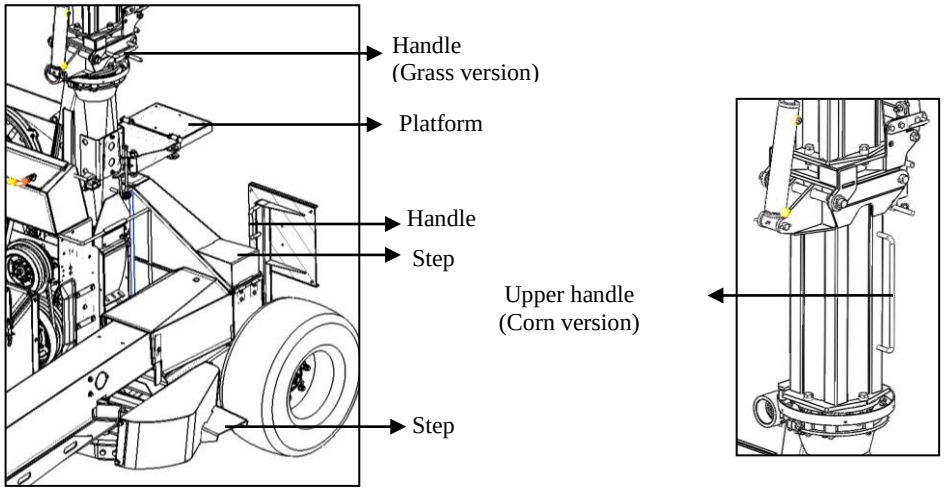
- Make the hydraulic connection of the machine hydraulic block to the tractor, as described above (initial connection to the tractor).
- With the D2 function of the command, raise the pipe, controlling the rise speed with regulator B.

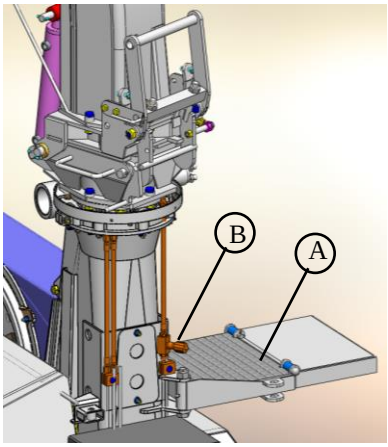
Attention: You should keep a minimum safety distance throughout this operation, since there is the risk of the pipe falling.

After the pipe is completely vertical, close regulator B (clockwise).

- Place platform A as indicated in the figure.
- To access the platform, use the steps and handles for this purpose, shown in the figures below.

Take special care since there is the risk of falling.





- Push the lever in the direction of the arrow, so that it is positioned as shown in fig. 2. Verify that axle (1) is perfectly inserted into the locker orifice (2); otherwise adjust screw (3) to attain this result.
- Return platform A to its initial position.

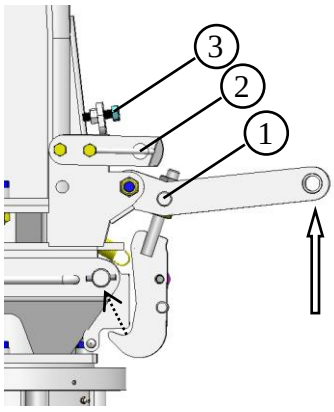


Fig. 1

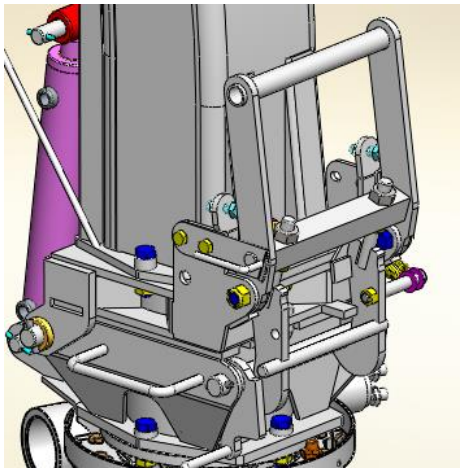


Fig. 2

Working recommendations

- Before commencing each work session, check whether all of the screws and pins are tightened and whether the drive shaft was correctly assembled and stuck between the machine and the tractor.

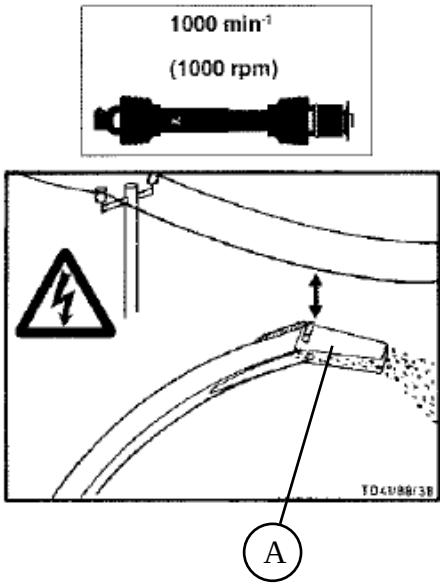
- **Switch off the tractor motor before working on the machine (do not leave it simply disengaged). Your foot can easily slip from the pedal. "Wait for a complete stop**".

- Adjust the working speed in accordance with the working conditions.

- During the operation of the machine, the permitted P.T.O. rotation (1000 rpm) may not be exceeded.

- When you remove blockages, never place yourself in the danger zone at the power entrance to the accessories! Remove blockages by simply reversing the power or with the motor and the P.T.O. switched off!

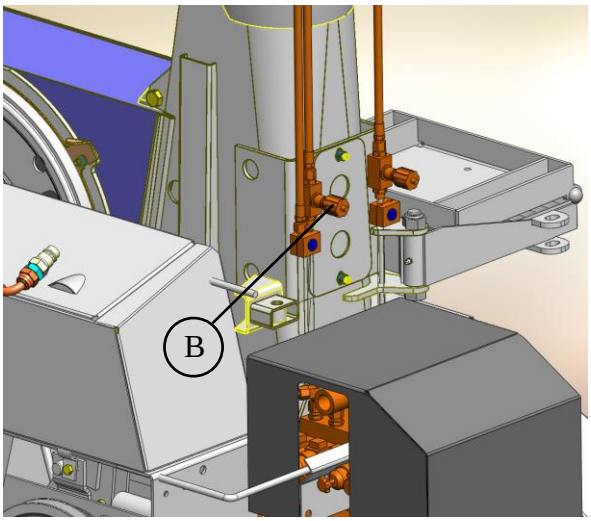
- Manual charging is not permitted!



- Control the beginning of the movement of the machine slowly with the tractor clutch to avoid damage.

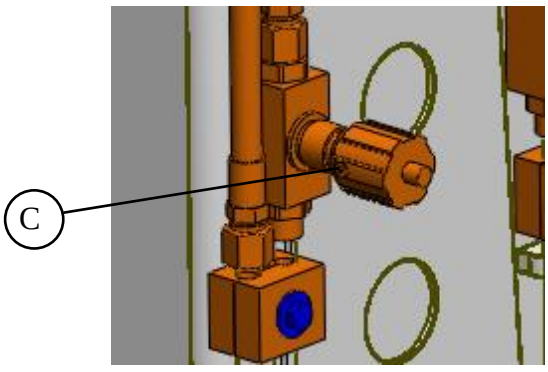
- Avoid placing yourself in the exhaust zone of the machine!

- Comply with the safety distance from overhead electrical cables



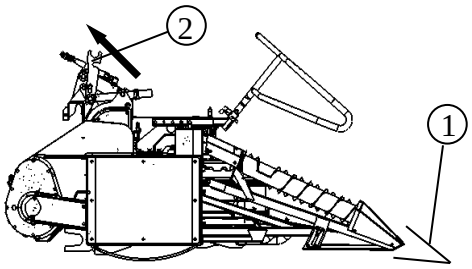
Regulation of the upper flap movement (A)

The movements of the flap may be regulated according to the user preferences; in order to do this, use regulator (B).
After carrying out the regulation, do not forget to block the regulator in pin (C)



Operating in a field

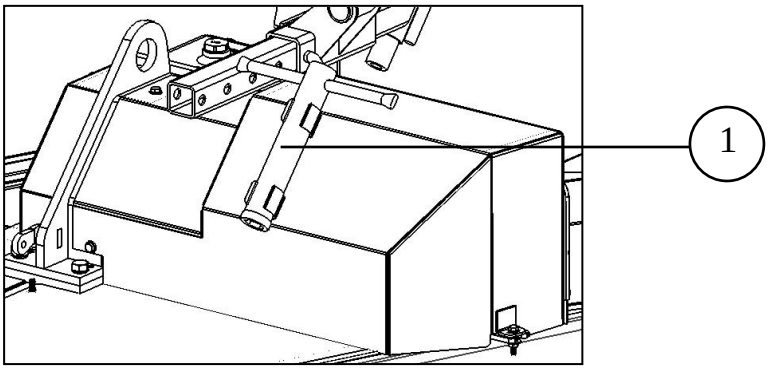
- Remove the protection from the front nozzles in the corn accessory (1), remove the safety levers (2) in the direction of the arrow.

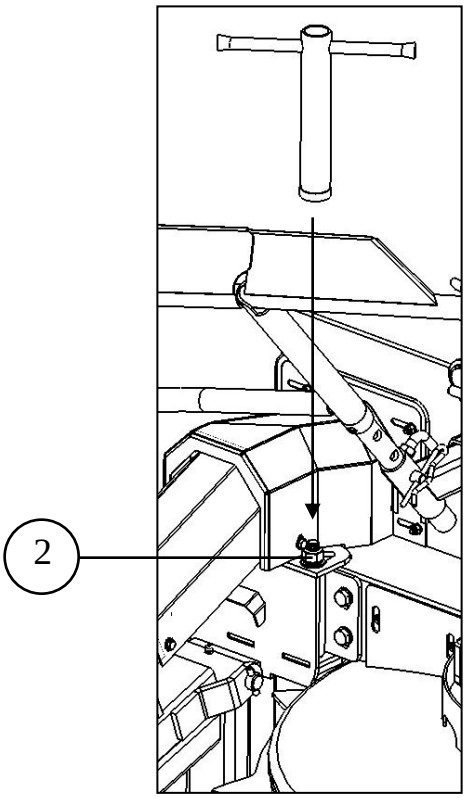


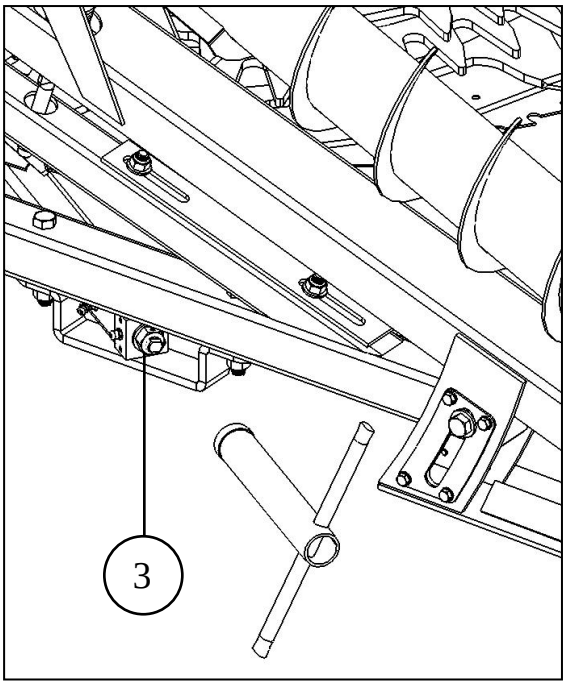
Corn cutting head for 4 lines

The corn cutting head is ready to operate with 4 lines.
This feature should be used to cut the path openings (beginning of the harvest) whenever the tractors are wider than 2.20 m.
- The useful inner width will be 2.35 m.
- The outer width will be 2.70 m. (**Do not travel on public routes while the machine is in this position**).

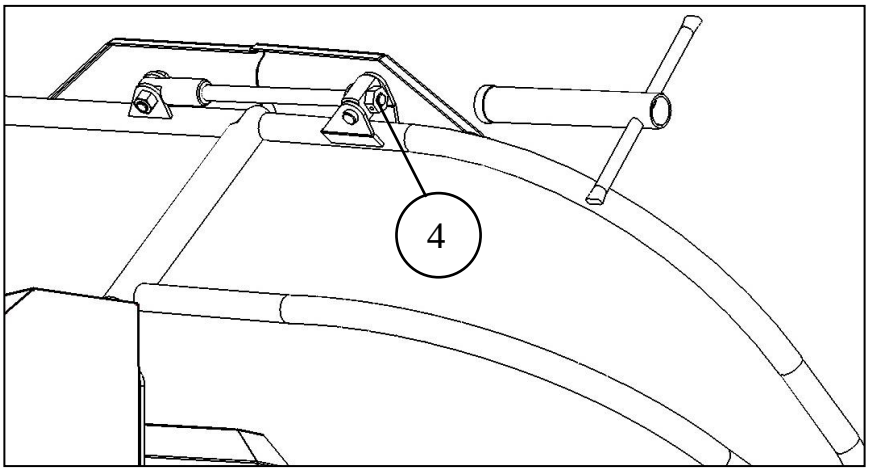
In order to prepare the machine for 4 lines, proceed as follows:
- With key (1), slightly loosen screw (2); then, using the same key, turn strut (3) counter-clockwise, until the required opening is achieved.
- Retighten screw (2)





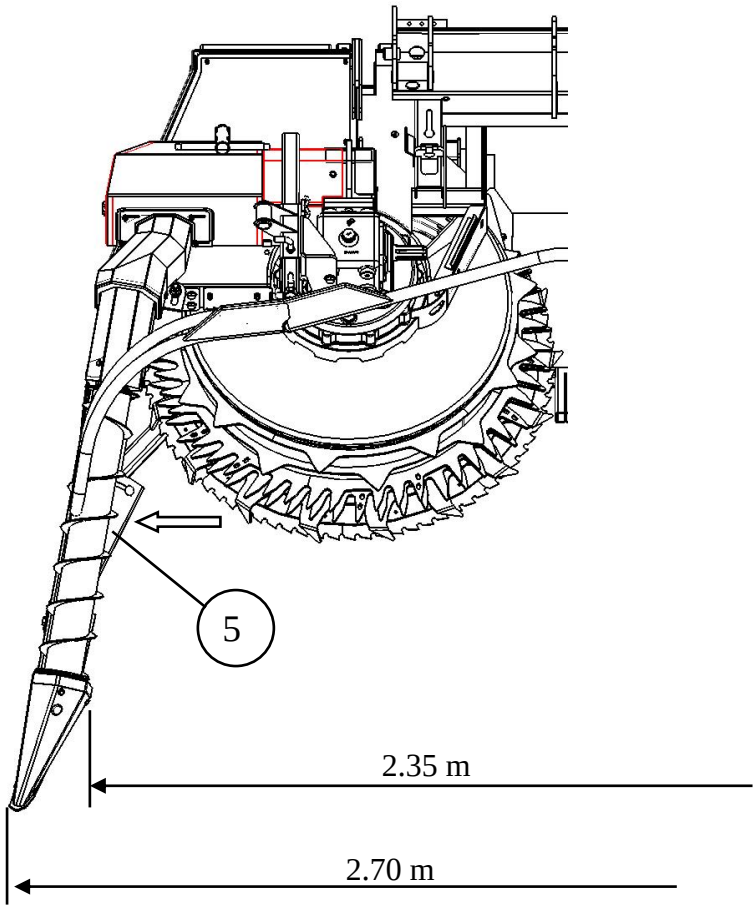


- Using the same key (1) turn strut (4) clockwise, to adjust the guide to the new work length.



- After carrying out all the adjustments as described above, the positioning achieved must be as shown in the picture below.
In order to achieve better results in cutting the lines nearer the edge of the machine, element (5) should be adjusted in the direction indicated by the arrow, as much as possible.

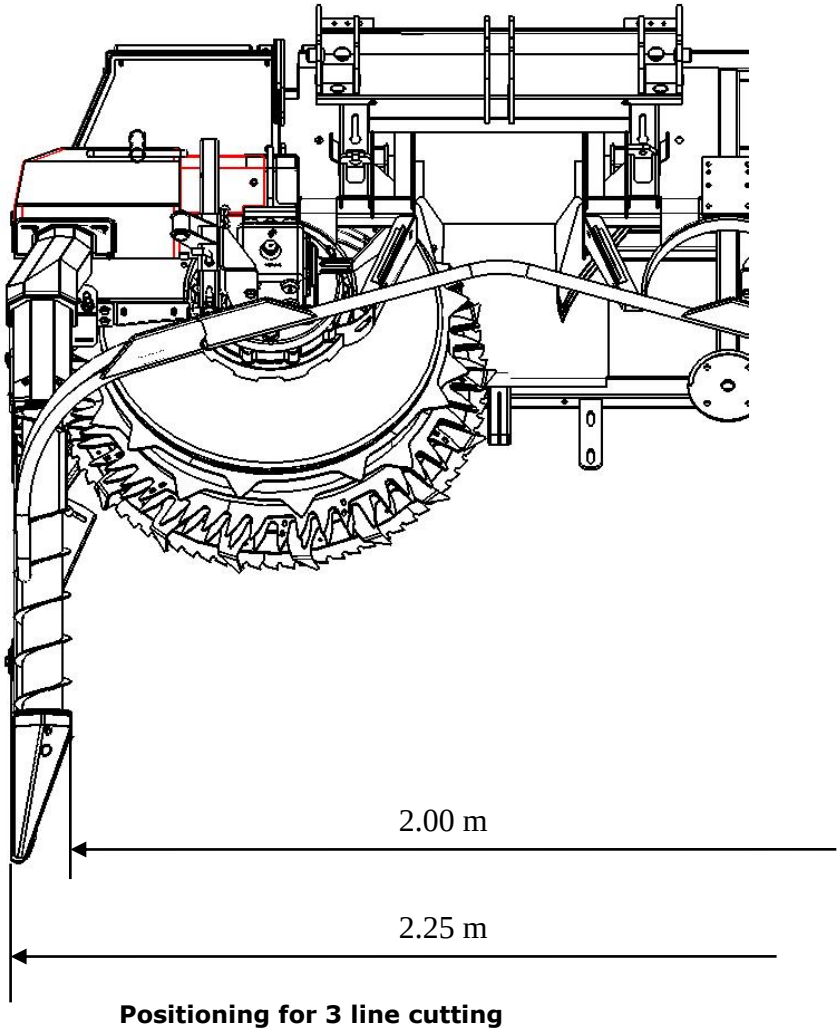
Note: In order to operate with the machine in this position, an increase in available power will be required.



Positioning for 4 line cutting

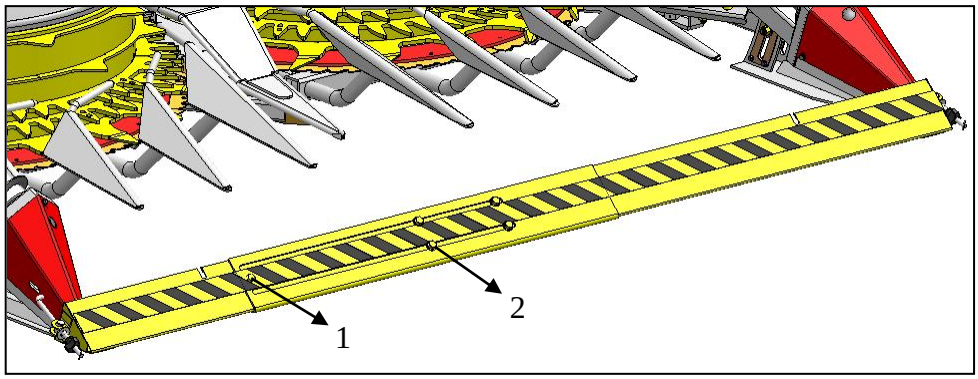
Warning: Be particularly careful while manoeuvring the machine in this position (4 lines), since the machine will be wider than the tractor.

To return the machine to the 3-line position, proceed in the reverse order, as described above.

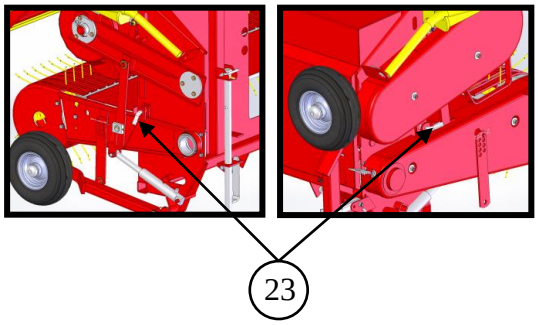


Positioning for 3 line cutting

If you choose to transport the machine in the "4 lines" position **(not recommended, since the width is in excess of 2.50 m),** install the front nozzles protection; to do so, adjust it to the machine's width.
- Completely remove screw (1) and slightly loosen screws (2), install the protection as shown in the picture and retighten all screws.



- On the grass pickup, remove the safety pin (23)

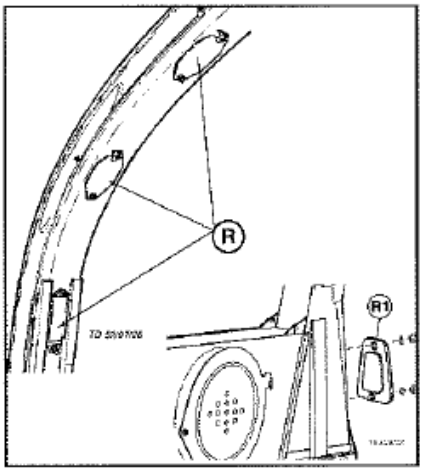


- Slowly put the machine into motion, then increase the P.T.O. rotation to 1000 min-1 (rpm).

This rotation should be maintained as constant as possible in order to guarantee a consistent and complication-free operation.

- **The moving speed depends on the following factors:**

- Performance of the tractor
- Quantity of forage to be cut
- Conditions of the terrain
- Method of harvesting (trailer behind the machine or parallel to the machine)
  - When you make turns with the trailer installed at the back, pay attention to the distance between the machines.

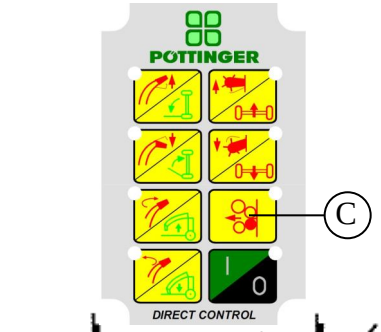


Pipe blockage

Switch off the motor and remove the key.
- Wait until the machine has completely stopped.
- Remove the shields (R, R1)
- Remove the blockage
- Reinstall the shields (R, R1)

Blockages, foreign objects and blowing power

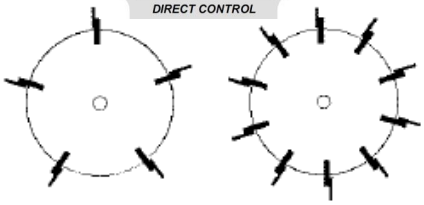
In the case of a blockage or if a foreign object is collected, you should use the reversing system.
- Reverse the power mechanism, using the push button (C).



Attention!

Do not take up again the original power direction (stop pressing button C), without ensuring that the entrance to the machine is unblocked or the foreign object has been removed

- The blowing power may be adjusted by means of the number of shovels installed at the wheel: 5 or 10 shovels uniformly distributed.



How to switch off the machine

General notes

- Place the safety lever (1) in the position indicated by the arrow. (Corn)
- Put the safety pin in place (23)-(Grass)
- When you leave the tractor, always lower the accessories to the ground.
- When you switch off the machine, protect it so that it does not move or fall.
- As a principle, make sure that the machine is well protected against bad weather.
- Move the mechanical support (2) downwards; to do so, proceed as follows:
  - Pull the latch (3), move the support downwards slightly, in the direction of the arrow, the existing spring will complete the movement until it is vertical, **(take special care not to pinch your hands)**.
  - After it is positioned vertically, the spring will move the support upwards, placing it in the safety position; check that latch (3) is locked.
  - Adjust the support height so that it is perfectly supported on the ground.

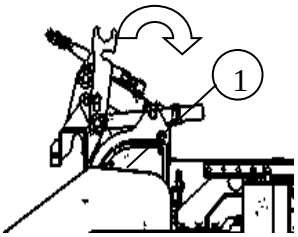
- Disconnect the hydraulic hoses and uncouple the P.T.O. transmission cardan.
- Disconnect the electric cables on the tractor.
- Attach the magnetic control box (9) to the drawbar, or
Disconnect the jack (10) and keep the command in a safe place.
- Uncouple the machine from the tractor.

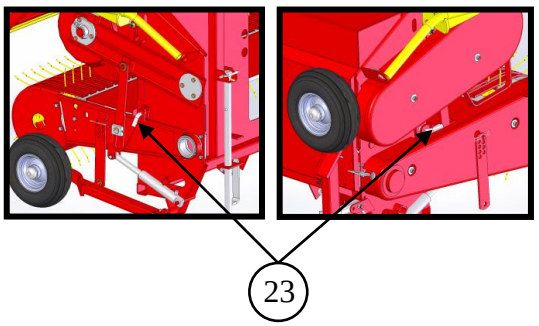
Cleaning

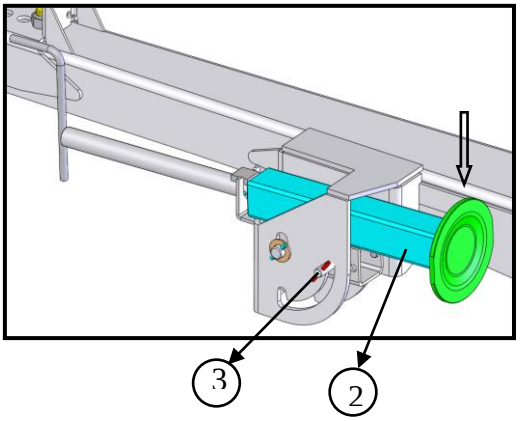
- In order to obtain more details, see the Maintenance chapter "Repairs".

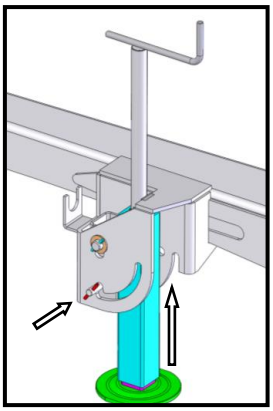
Due to the material residues, the machine should be carefully cleaned at the end of the season.

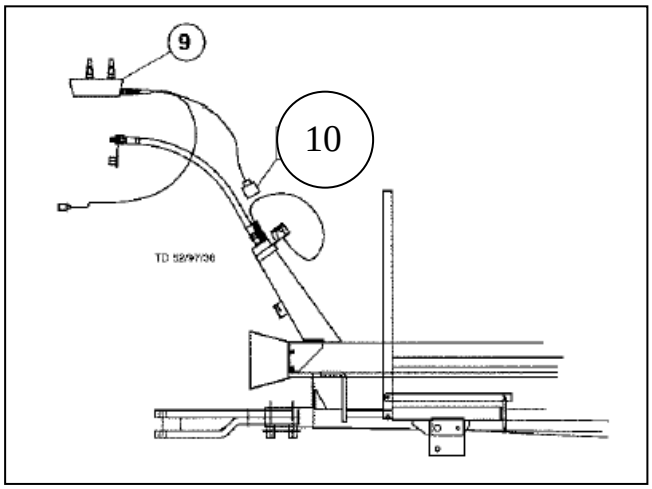
Ensure that you comply with the instructions for lubrication and maintenance (see the chapter on "Maintenance Care").

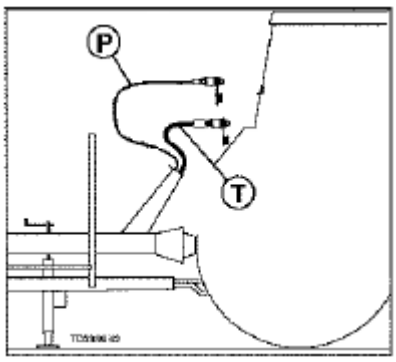








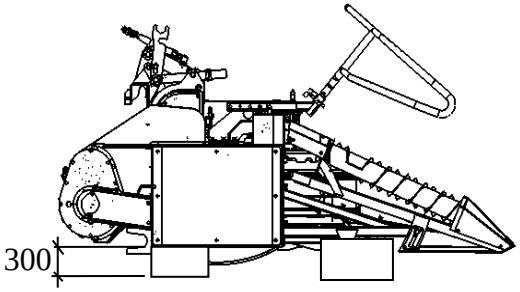




Assembly of the corn cutting head

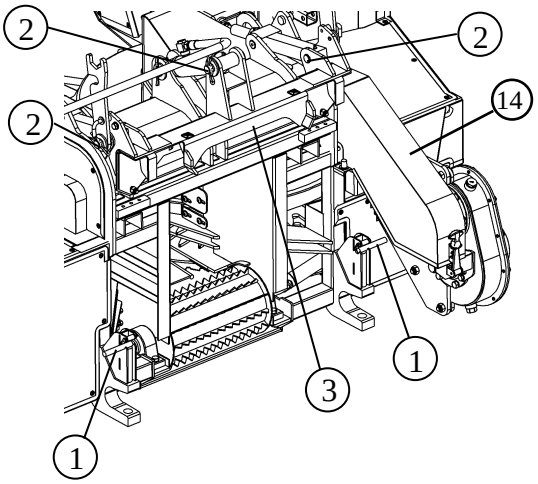
Note: The disassembly is undertaken in the reverse order.

The assembly or removal of the corn accessory should be undertaken on a flat surface (or compensated with supports).



Safety advice

Attention! **There is risk of injury if the P.T.O. is started up accidentally. Therefore it is absolutely necessary to remove the drive shaft before beginning this work.**



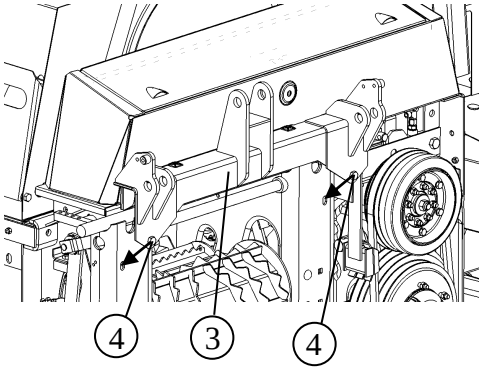
- Support the corn head on four points in order that it is approximately 300 mm from the ground,

- Place the bolts (1) in the indicated position

- Remove the bolts (2)

- Remove the piece (3)

- Remove the shield (14)



- Apply the piece (3) at the place indicated

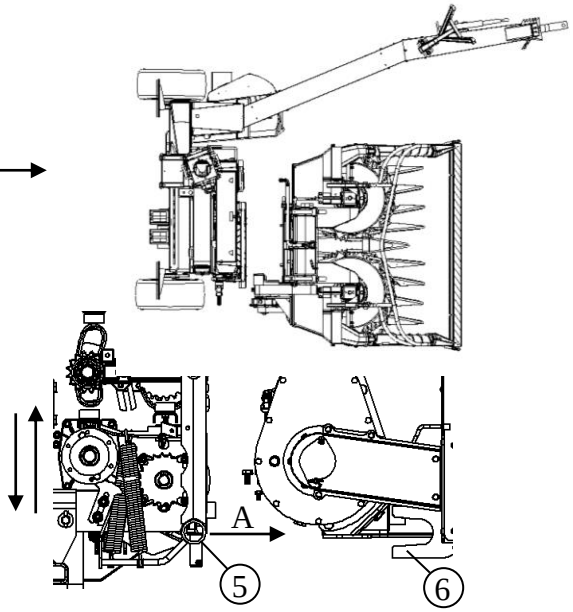
- Affix the screws (4) at the place indicated

- Place the drawbar in the working position

- Bring the machine closer to the head as indicated by the arrow (A)

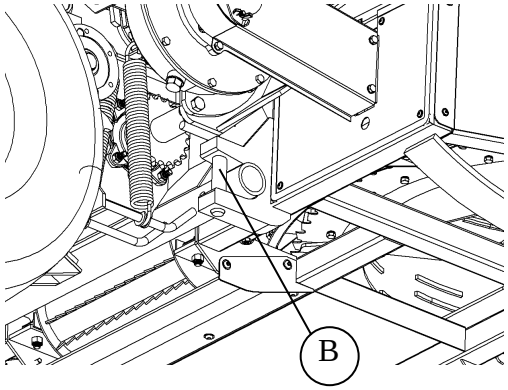
Attention: This manoeuvre must be done with the help of another person, to indicate to you the correct alignment (see fig.) for coupling, thereby avoiding damage.

A →

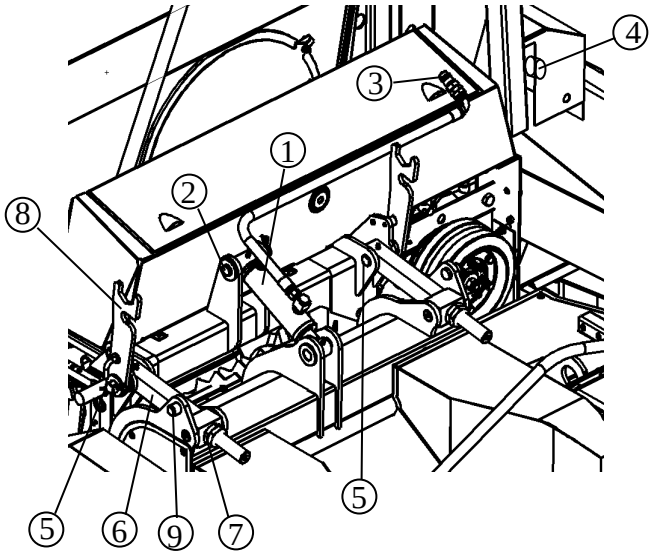


- In order to guarantee the vertical alignment between the tube (5) and the piece (6), use the hydraulic train of the machine to raise or lower the machine as necessary.

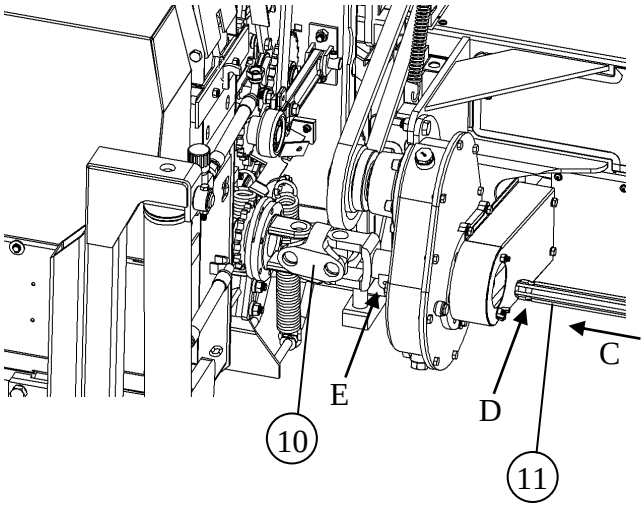
- Place the lower bolts (B) in the position indicated in the picture.



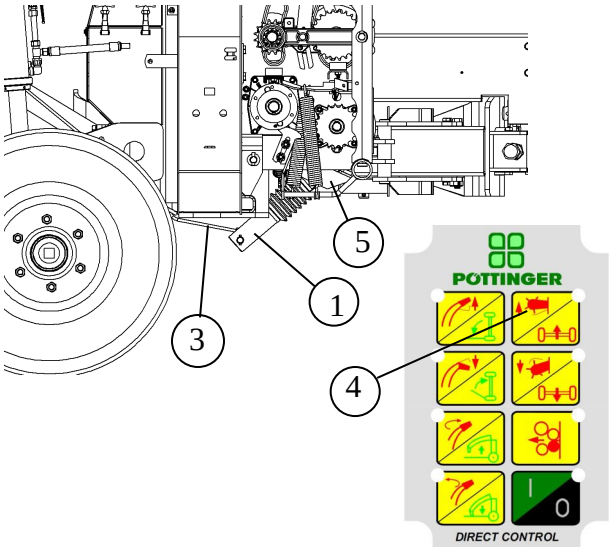
- Connect the hose (3) to the rapid valve (4) of the hydraulic block, make the hydraulic connection of the machine to the tractor, with the command of the machine, open or close the cylinder (1) until you manage to apply the bolt (2). Then, apply the bolts (5). In order to bring the struts (6) closer to the hole, just loosen the nuts (7) sufficiently, place the safety lever (8) down and fit in the pin (9)



- Apply the transmission cardan (10) as indicated in the picture, push the shaft (11) in the direction of the arrow (C) and, at the same time, press the safety pin of the cardan (E) until the notch (D) covers the pin.



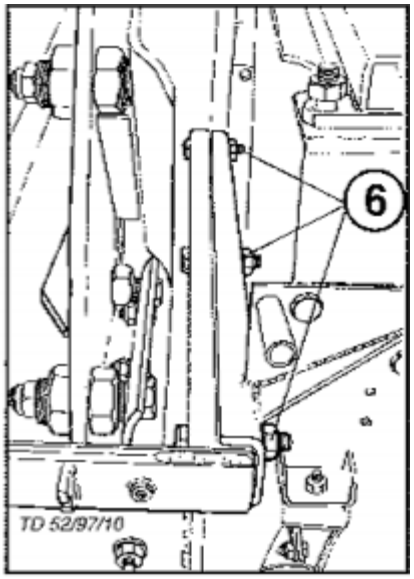
In order to assemble and disassemble the corn head, you may also use the system of the lower hydraulic skid (1) (option in the corn version); for this you will have to:



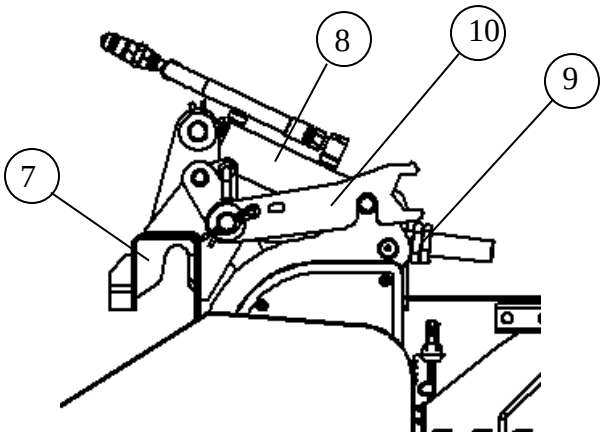
- Hydraulically connect the hose (3) to the rapid valve of the hydraulic block of the machine
- Activate the cylinder (1) on the button (4) so that the skid (5) is supporting the group of rollers

- Remove the shield (2)

- Remove the screws (6)

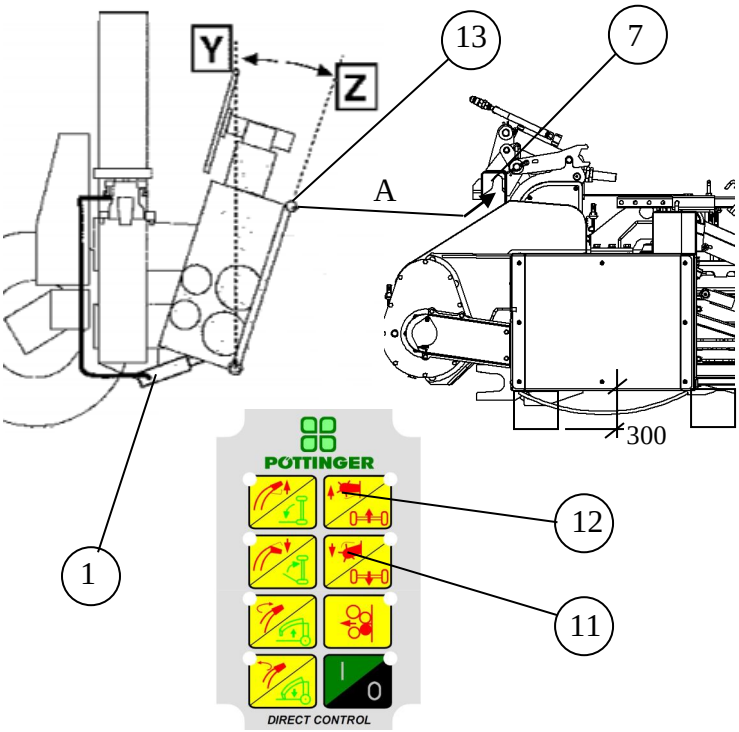


- The piece (7) has to be rigid with the rest of the corn cutting head, for this you shall have to close the cylinder (8), completely tighten the nuts (9), and place the levers (10) in the position indicated in the picture.

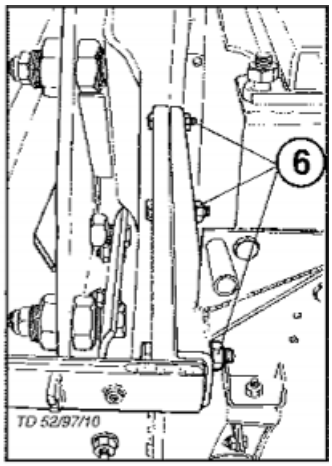


- Place the corn cutting head supported on 4 points in order that it is at least 300 mm from the ground.

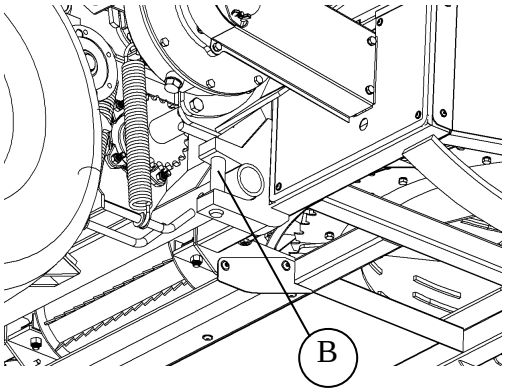
With the button (11) of the command, move the group of rollers to the position (Z)
- Move the machine closer to the corn head in the direction of the arrow (A) in order to fit the stick (13) in the piece (7).
- Activate the hydraulic cylinder with the button (12) in order to place the group of rollers and the head in position (Y).



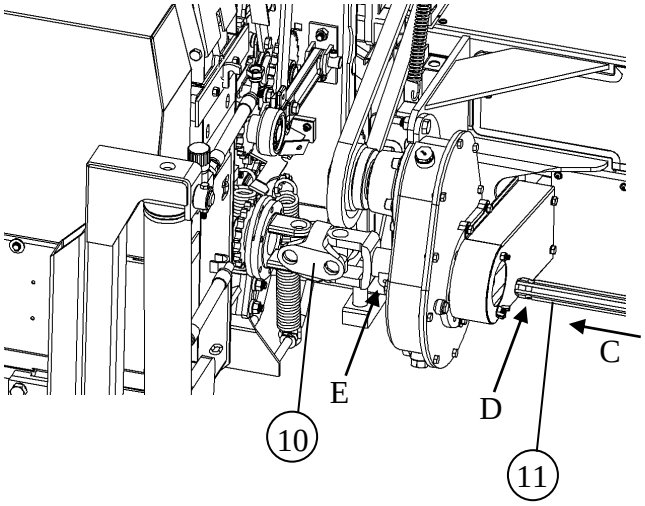
- Position and tighten screws (6)



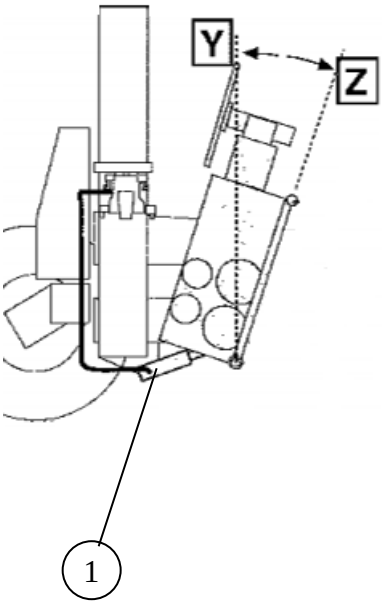
- Place the lower bolts (B) in the position indicated in the picture.



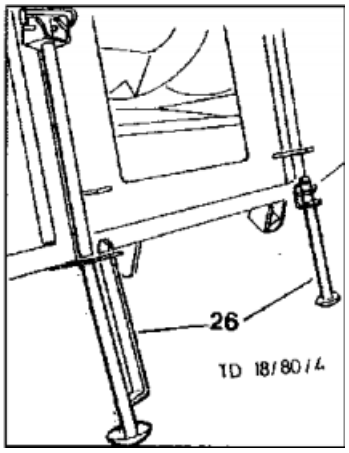
- Apply the transmission cardan (10) as indicated in the picture, push the shaft (11) in the direction of the arrow (C) and, at the same time, press the safety pin of the cardan (E) until the notch (D) covers the pin.



Very important:
In order to work with the corn cutting head, remove the cylinder (1) and its support, so that you do not damage them while working.

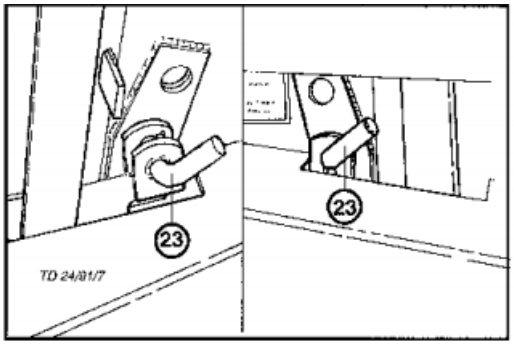


Assembly of the pickup accessory in the machine.

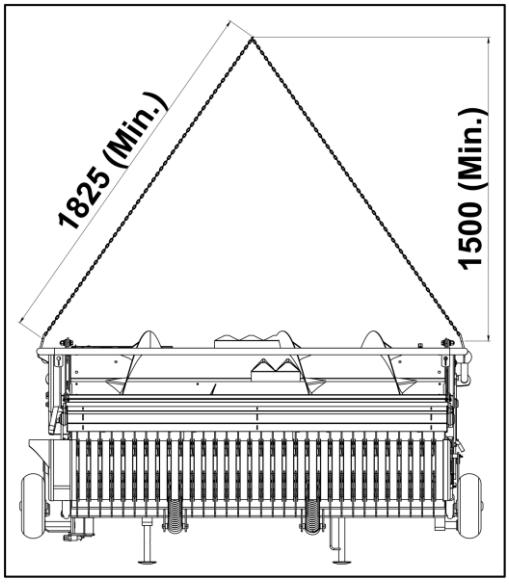


Safety advice
There is risk of injury if the P.T.O. is started up accidentally.
Therefore it is absolutely necessary to remove the drive shaft before beginning this work.

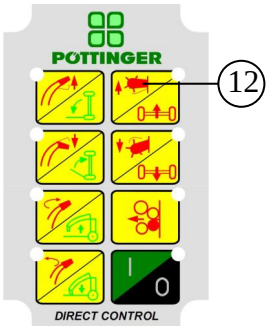
- Pull out the supports (26) completely and lock them. The pickup drum should be secured with pins (23) onto the central hole of the frame.
Attention! Do not use the hydraulic elevator when the pickup accessory is stuck (23)!

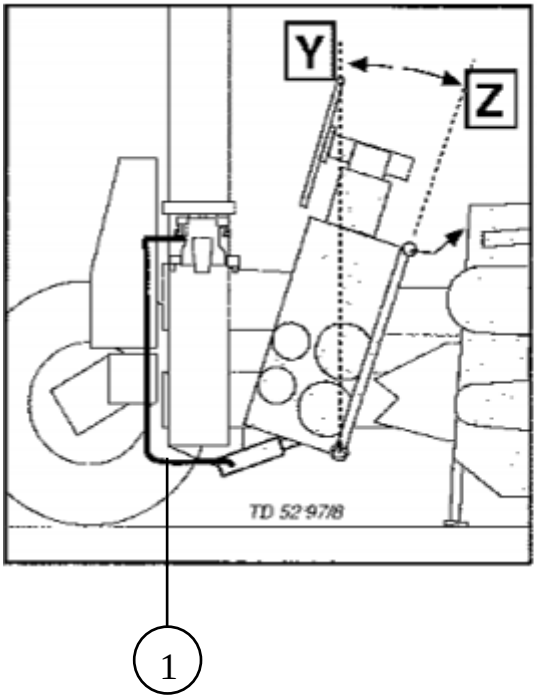


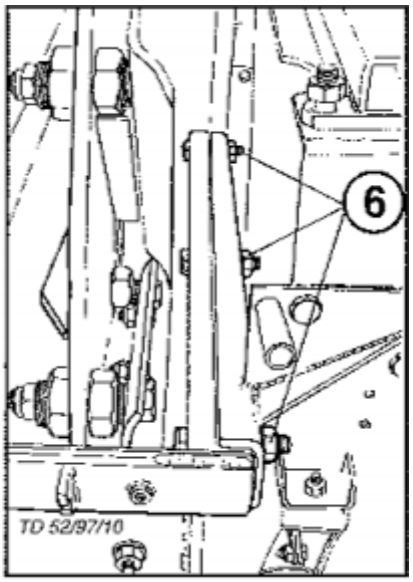
If you choose to suspende the pickup, to facilitate the assembly/disassembly, take into account the condition of the image below, otherwise it will cause damage to the pickup.

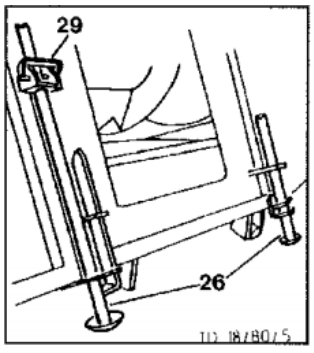


- Hydraulically connect the hose (1) to the rapid valve of the hydraulic block of the machine
- Carefully suspend the pickup accessory in the folded and lowered machine, hydraulically (Pos. Z).
- Press the button (12) to raise the pickup.
  - The hydraulic cylinder secures the whole admission apparatus (Pos. Y).
- Insert the 3 screws of the piece (6) in the frame again.



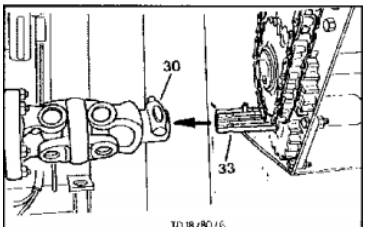






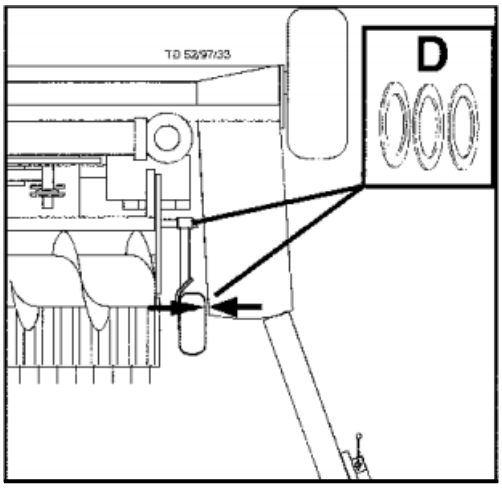
- Affix both supports (26) in the highest position with the pins (29).

Assembly of the transmission for the grass pickup (1900)



- Insert the profile shaft (33) into the cardan (30) and secure it

Check the distance between the pickup's left wheel and the main chassis and, if they come into contact with each other, arrange the rings (D) to create a gap between them. This gap (5 mm recommended) must not be excessive, otherwise the wheel might collide with the pickup's structure.

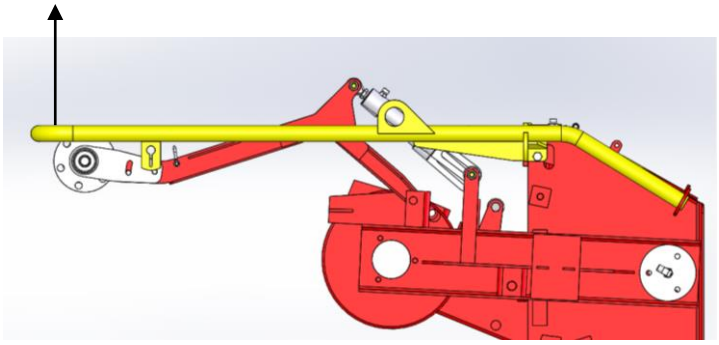


- Connect the hydraulic hoses of the pickup, to the quick valves in the Mex6 hydraulic block.
- Make a test of the hydraulic movements: (up/down the pickup, and the hydraulic wind guard).

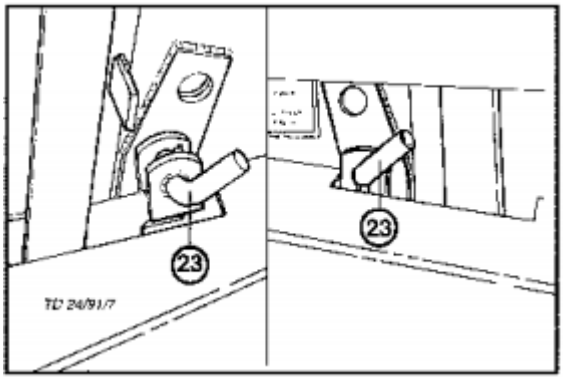
Quick valves in Mex6 hydraulic block.

Hydraulic hoses of the pickup

Attention: During the test of the hydraulic wind guard (the same command as the reverse system), make sure that no one has hands on the protection rod, there is a risk of entrapment.

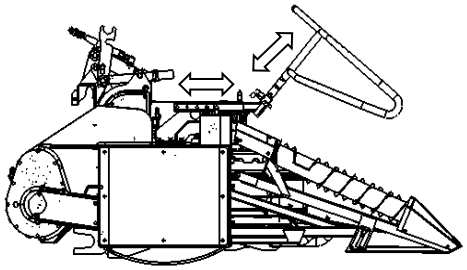


After the successful assembly of the pickup accessory, the screws (23) should be removed once again.



Adjusting and tuning the corn head

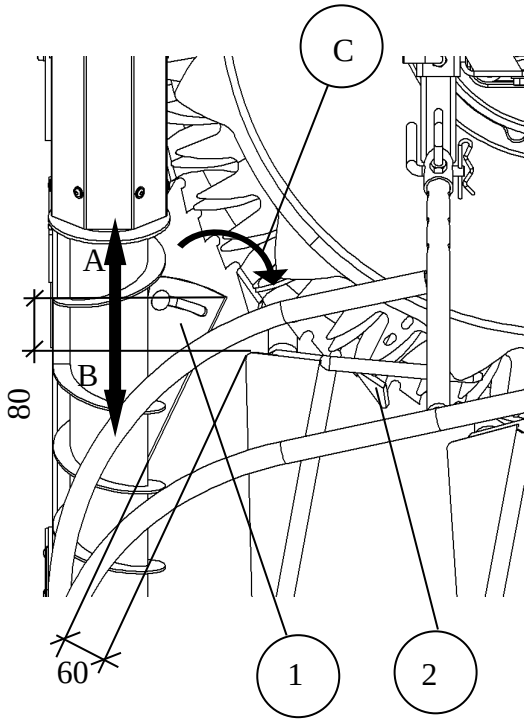
- The upper guide may be regulated on the horizontal and on the vertical (see picture) in accordance with the height of the corn to be cut.



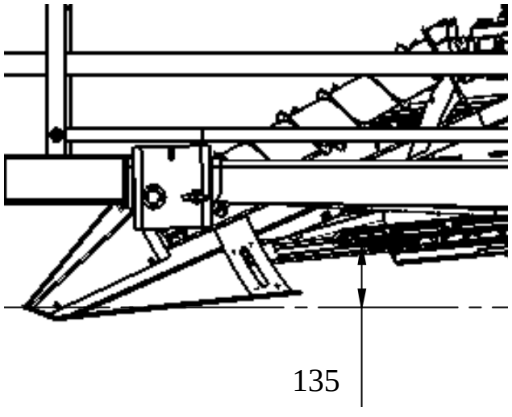
- The lateral guides may be tuned in accordance with the conditions of the corn and the height of the cut

- Tuning of element (1) is undertaken with tuners A, B and C in order to guarantee the quotas mentioned in the picture, and that it does not interfere with elements (2), this positioning applies to most situations.
When the corn is of small dimensions, and element (1) falls and divides the corn before it is cut, then you need to move element (1) in the direction (A) and once again tune the movement (C) so that it does not interfere with element (2).

Very important: Check that element (1) does not interfere with element (2) (manually rotate the collection drum), because if that happens, it will damage the machine during the start-up.



- Due to the existence of stones and other obstacles on the terrain that could damage the lower zone of the machine, you should not do cuts **lower** than 135 mm.



General maintenance advice

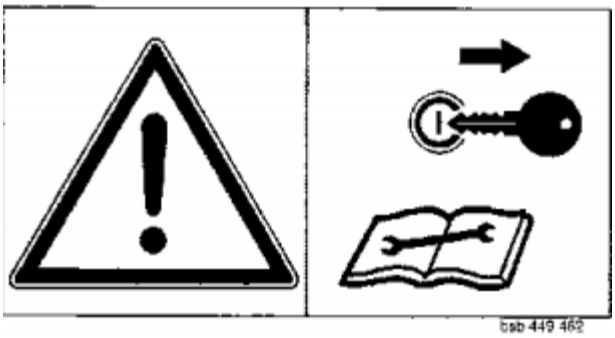
In order to keep the accessory in good conditions even after a long service life, please respect the following advice.

Safety points:

- Switch off the motor if you need to do adjustments, maintenance or repairs.

- Do not work underneath the machine without a secure support.

- Tighten the screws again after the first hours of operation.

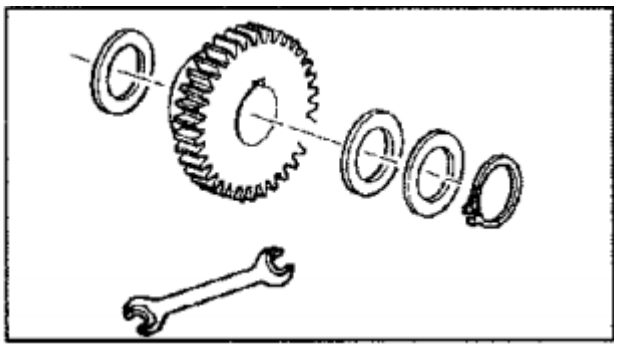


Spare parts

a. The original components and accessories were designed specifically for these machines and applications.

b. We would like to be clear that components and accessories that have not been supplied by us have not been tested.

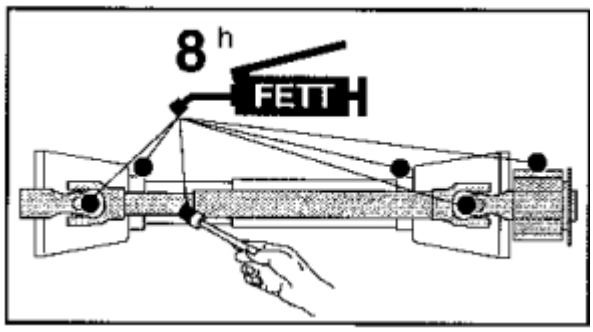
c. The installation and/or use of such products may, therefore, alter or negatively influence the construction characteristics of the device. We are not responsible for damages caused by the use of components and accessories that have not been supplied by us.



d. Alterations and the use of auxiliary pieces that are not permitted by the manufacturer shall invalidate any responsibility.

Maintenance, Repairs

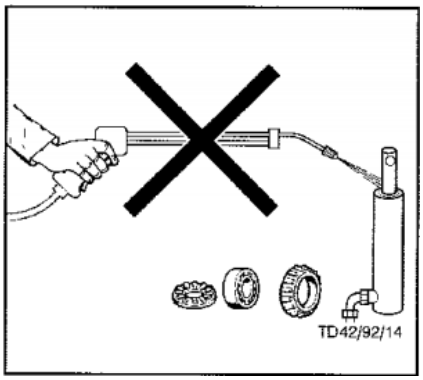
Drive shafts



- Lubricate the drive shafts every 8 hours of functioning.
- Disassemble the sliding sections and lubricate them well.

Cleaning the machine parts

Attention! Do not use high pressure cleaners to clean the rolling or hydraulic pieces.



- Risk of the appearance of rust!
- After cleaning, lubricate the machine in accordance with the lubrication scheme and do a short test.
- Cleaning at too high a pressure could cause damages to the paintwork.

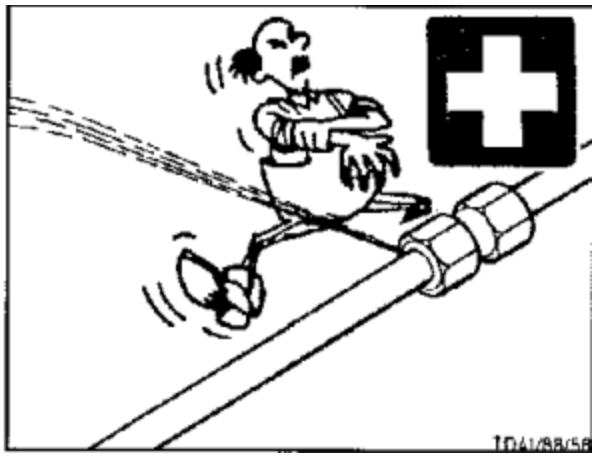
Winter Storage

- Carefully clean the machine before storage. Install protection against bad weather.

Protect the pieces that are exposed to oxidisation.
Lubricate all the lubrication points in accordance with the lubrication table.

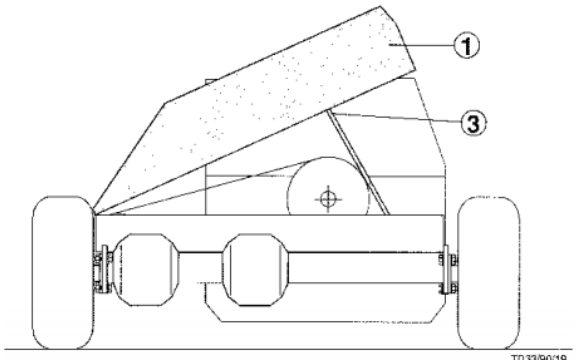
Hydraulic unit

Careful! Danger of injuries or infection!

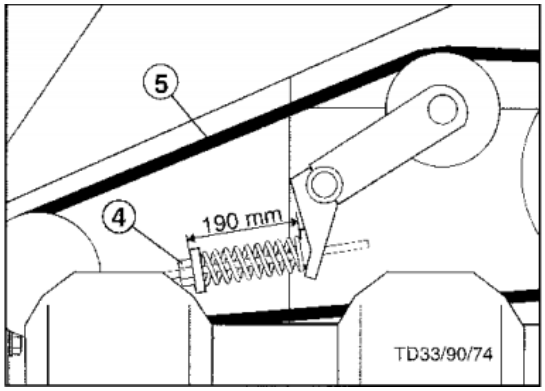


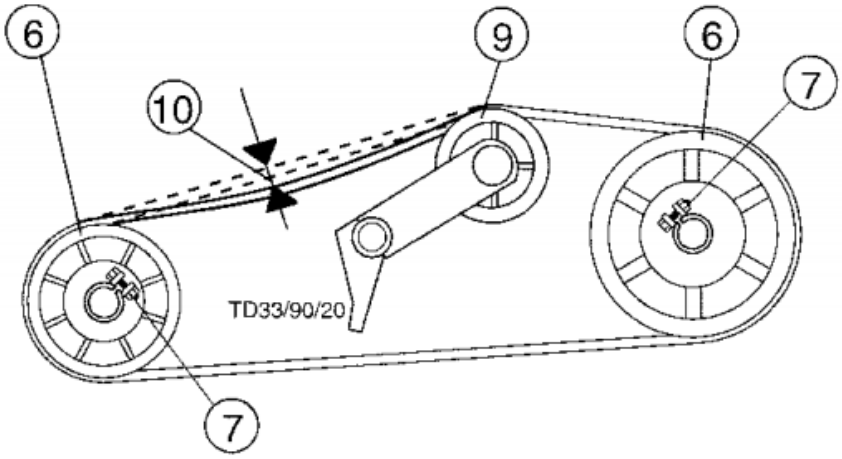
Changing the pulleys of the V belt:

- Detach the rear protective lid (1) and move it upwards until the support (3) is in the safety position.



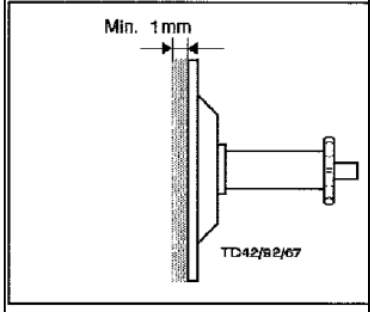
- Loosen the nuts (4) on the tensioner of the V belt.
- Remove the V belt (5).
- After loosening the nuts (7), remove the pulleys (6) from the supports and apply the alternative pulleys (8).
- Assemble the V belt (5) and adjust the initial tension with the V belt tensioner (9). Take care to ensure that the adjustment nuts (4) are centred. (length of extension (10) approx. 15 mm).

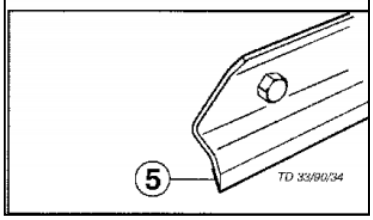




240⌀	540 U/min	440⌀	
265⌀	590 U/min	449⌀	
275⌀	620 U/min	440⌀	**GRASS PICKUP**
305⌀	800 U/min	380⌀	**CORN cutting HEAD**

Sharpening the blades





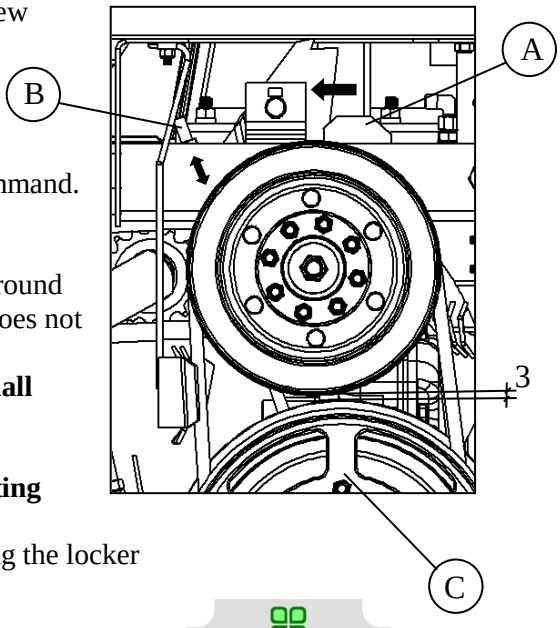
General

The correct adjustment, together with the correct sharpening of the blades guarantees that the forage is cut with precision, and saves energy.

The integrated sharpening device allows uniform sharpening of all of the 10/5 blades in an operation.

Safety tips

- Before sharpening, check the adjustment of the sharpening disc and the condition of the blades.
- Check the wear of the sharpening disc. A gap of at least 1 mm from the plate to the edge.
- When the coated area (5) is worn off due to sharpening, then new blades need to be installed.



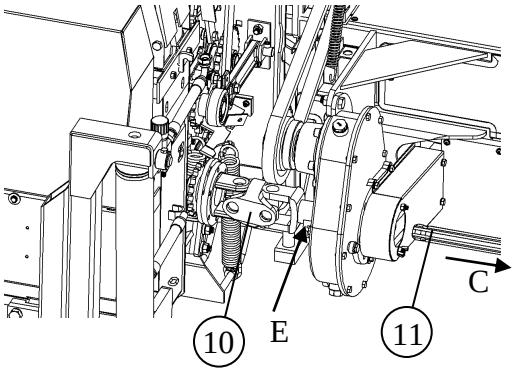
• Before sharpening remove the movement from the corn/collector head, in order to do this:

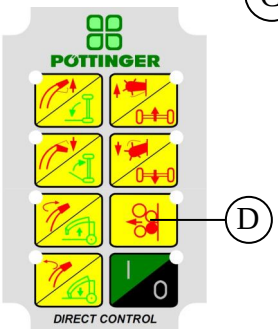
- Hydraulically activate the reverser on the button (D) of the command.
- Continuing to press the button, move the element (A) in the direction of the arrow.
- Stop pressing button (D), the pulleys shall be at a distance of around 3 mm, enough for the pulley (C) not to have movement. If this does not happen, regulate the distance between pulleys on the tuner (B).

Note: In order to have movement on the head/pickup, you shall have to place element (A) in the initial position.

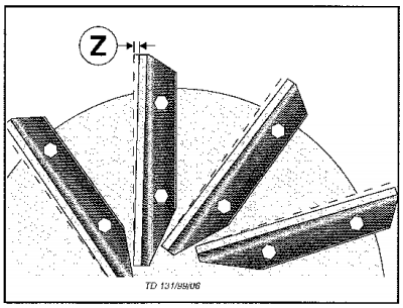
. Another possibility to remove movement from the corn cutting head and sharpen the blades in safety is the following:

- Remove the shaft (11) in the direction of the arrow (C), pressing the locker (E) of the cardan (10)





Always use eye protection when undertaking the tuning.



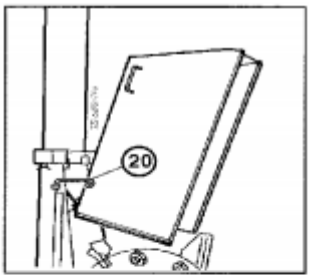
Fault correction• When the exterior (Z) of the blade is worn away more than the interior:

- Check if the sharpening disc is correctly adjusted.

Adjusting the blade sharpening disc

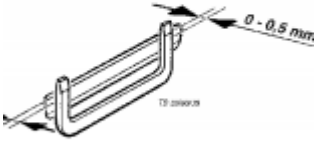
Safety advice
There is risk of injury if the P.T.O. is started up accidentally. Therefore it is absolutely necessary to remove the drive shaft before beginning this work.

1. Place the machine in the working position and raise the pickup/head for corn.
2. Switch off the tractor motor.
3. Open the box shielding of the blades disc box and secure it with the hook (20).
4. Adjust the blade exactly parallel (0 - 0.5 mm) to the corresponding cutter.
5. Rotate this adjusted blade as far as the abrasive disc and adjust the disc so that it is exactly parallel (C - C) as can be seen above.



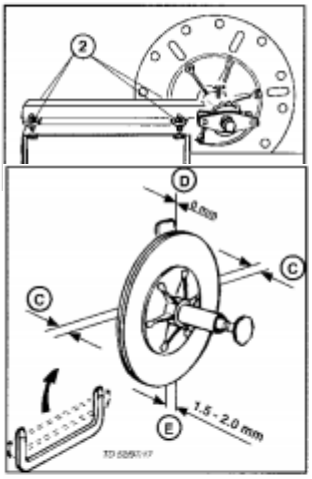
Adjustment

Place the adjustment screws (2) appropriately.



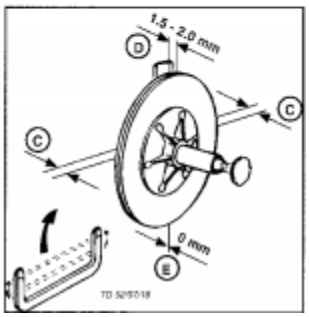
Adjustment > 10 blades

- Seen from the side, the blade should touch the abrasive disc at the top (D) and there should be a gap at the back (E) of 1.5-2 mm.
- In the same way, adjust all of the other blades in relation to the abrasive disc in the form mentioned above.

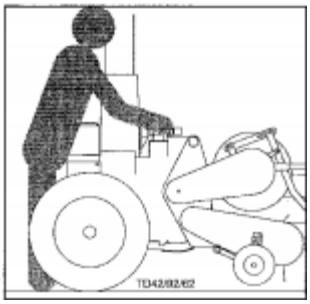


Adjustment > 5 blades

- Seen from the side, the blade should touch the abrasive disc at the back (D) and there should be a gap at the top (E) of 1.5-2 mm.
- In the same way, adjust all of the other blades in relation to the abrasive disc in the form mentioned above.



Sharpening procedure



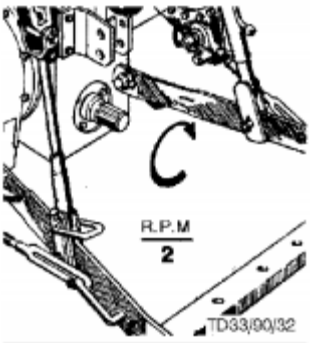
For your safety

•When you use the sharpening equipment, position yourself behind the machine.

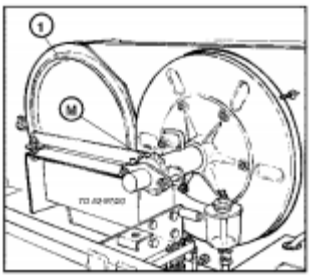
• Disconnect the movement of the corn head/pickup (see the chapter on safety tips "Sharpening of blades")

• The sharpening or adjustment should be undertaken when the head/pickup is raised.

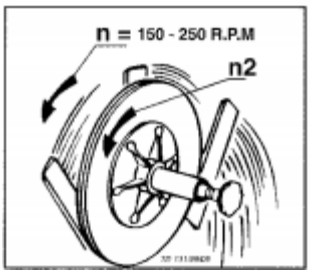
• Sharpen at half the rotation of the P.T.O (rpm).



- Open the protective lid (1).
- Move the sharpening disc by means of the adjustment nut (M) to the position in order that the sharpening can take place along the whole length of the blade (indicated by a shower of sparks or examining the blade after a short period of sharpening).
  • The sharpening disc should not rotate faster (n2) than the blades disc (n).



  - The sharpening disc should rotate at approximately 150-250 rpm in the same direction as the blades disc, if it is in the correct position and at the correct adjustment of the pressure of the sharpening disc.
    If this is not the case, the pressure of the sharpening disc on the blades should be altered accordingly or its position should be checked.
  - Sharpen the blade along the whole length (normally 2-5 minutes).
    If the shower of sparks becomes weaker with the passage of time and the pressure of the sharpening disc weakens, this is because of dirt on the disc; move it away for some time and restart the operation again.
    The sharpening disc will clean itself, this operation is very important, because it is the only way to get perfect contact between the blade and the disc.

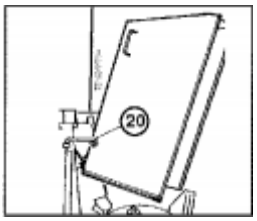


  - Retrieve the disc as soon as the sharpening process is completed, fold it down and unplug the power plug.
  - Raise the lid of the blades disc
  - Check the edge

Safety advice

⚠ **There is risk of injury if the P.T.O. is started up accidentally. Therefore it is absolutely necessary to remove the drive shaft before beginning this check.**

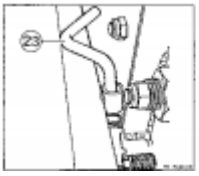
Adjusting the blades disc

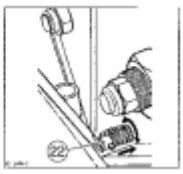


Safety advice

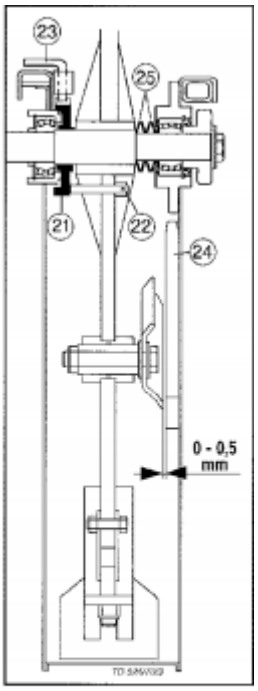
⚠ **There is risk of injury if the P.T.O. is started up accidentally. Therefore it is absolutely necessary to remove the drive shaft before beginning this work.**

- Open the lid
  - Affix it to the tower with the hook (20).
- Check the space between the blades and the cutting mouth.
  - The gap should be 0-0.5 mm, if this does not happen:





- After pulling backwards and rotating the safety pin (22) of the adjustment nut (21), the latter should be blocked with the attached key (23).
- By rotating the blades disc in the opposite direction to the cut, the blade moves up against the counter-blade (24), check the gap (around 0.5 mm).
- Then, affix the adjustment nut (21) with the safety pin (22), remove the key (23) and keep it.
- Finally, rotate the blades disc a few times by hand.



Attention!

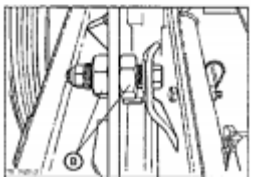
- For the integrated grain crusher, check the lateral gap of the crushers.
  - The individual readjustment of each blade is only necessary if the range of the sharpening ring (25) has already been exhausted due to frequent adjustments in the cutting wheel (the sharpening rings are seated one against the other).

Attention!

It is absolutely necessary to insert the closing bar (23) correctly and to remove it in accordance with the adjustment pressure.

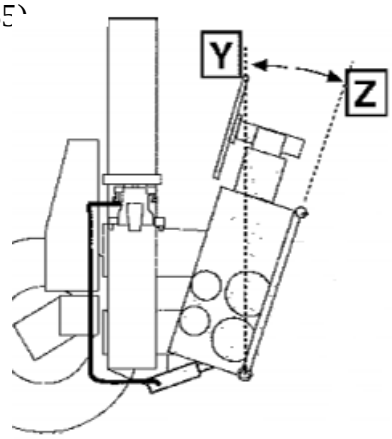
Replacing the blades

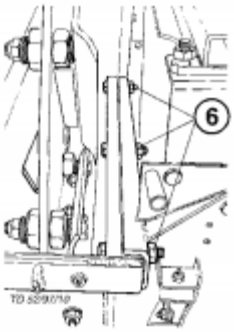
- Remove the worn out blades
- Then pull and rotate the safety pin (22), affix the adjustment nut (21) with the key (23) and rotate the blades disc 3 1/2 times (= 7 mm of adjustment) in the direction of the cutting.
- Then, affix the adjustment nut (21) with the safety pin (22), remove the key (23) and keep it.

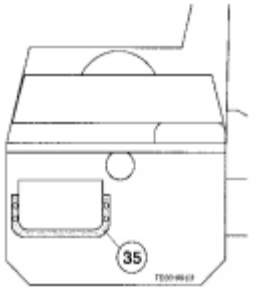


- Screw on each blade securely and adjust each side edge of the cutting with the counter-blade, (0.5 mm) using the adjustment nuts (B).
- Finally, rotate the blades disc a few times by hand.

- When loosening the 3 hexagonal screws (6), the group of intake rollers may be folded hydraulically from position (Y) to position (Z) hydraulically (option in the corn version), thereby facilitating the repairs of the intake rollers and the counter-blade (35).





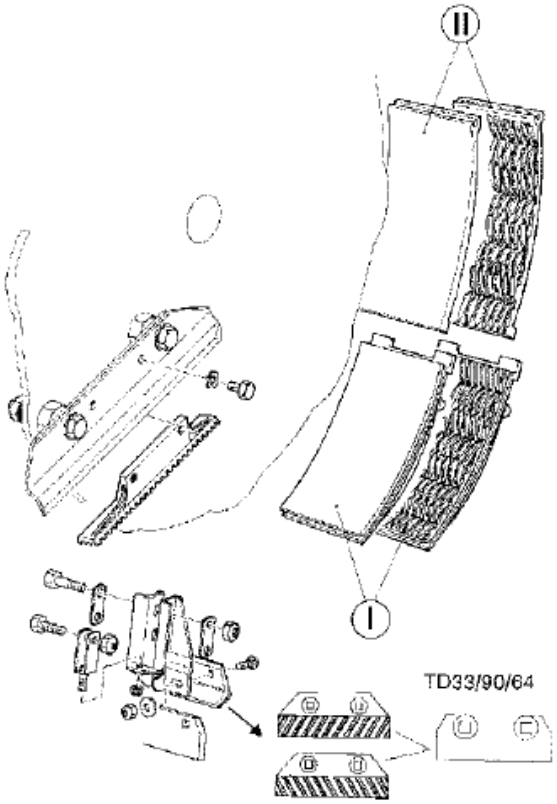


Reversal or replacement of the counter-blade

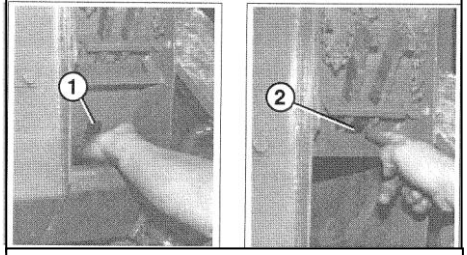
- After loosening the four hexagonal screws of the counter-blade, this may be reversed or replaced.
  - You should reverse the counter-blade after 150 ha of work and after another 150 ha of work you should replace it. Reversing or replacing the counter/blade in time saves energy and improves the quality of the cut.

- In the case of the replacement of the counter-blade, the blades must be readjusted.
- The abrasive disc readjusted.

Corn chopper set:

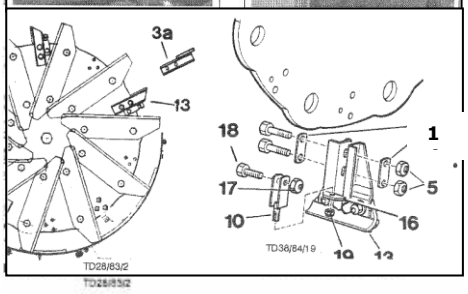


Installation of the Corn Chopper Kit

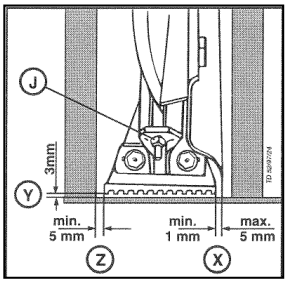


Push plate **II**, allowing the clamp spring (1) to attach to plate (2).

- Open the top lid and remove the ventilator (3a).
- Assemble an adjustable ventilator (13) using
  - Two covering plaques (14)
  - Two hexagonal screws M14x50
  - Locking nuts M14.
- Tighten nuts (5) only slightly.
- Insert the grooved screw (10) by means of the covering plaque (16);

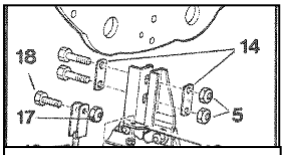


  - Insert the hexagonal screw (18) in the blades disc and tighten screw (10) slightly.
- Rotate the blades disc by hand until the regulator stops at plate II, at the exact position of the gaps (X, Y and Z).



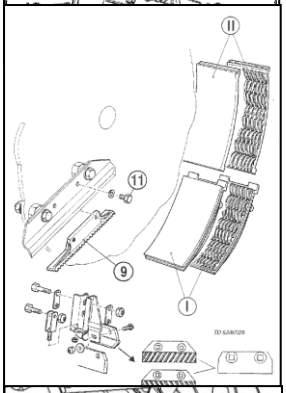
  - The axial gap (X) between the ventilator and the blade should be 5 mm max.
    (The reference measure (Z) should be at least 5 mm.)
  - If the adjustment gap (Z) is under (5 mm) readjust the ventilators.
- The radial gap (Y) between plates II and the ventilator should be adjusted to about 3 mm by means of the adjustment nut (J).
  - After tightening the adjustment nut (J), tighten the safety nuts (5).

  The grain ventilator may not be radially shaken!
  - Tighten the nut (5) with the start-up torque of M=165 Nm.
  - Tighten the hexagonal nut (19)
  - Finally, tighten the hexagonal nut (17) with the start-up torque of M=120 Nm.



Attention!

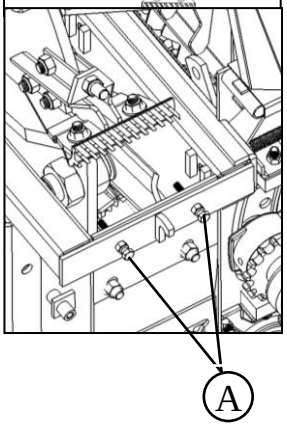
The smaller the gap (Y), the better the ventilation, and, consequently, the higher the projection capacity



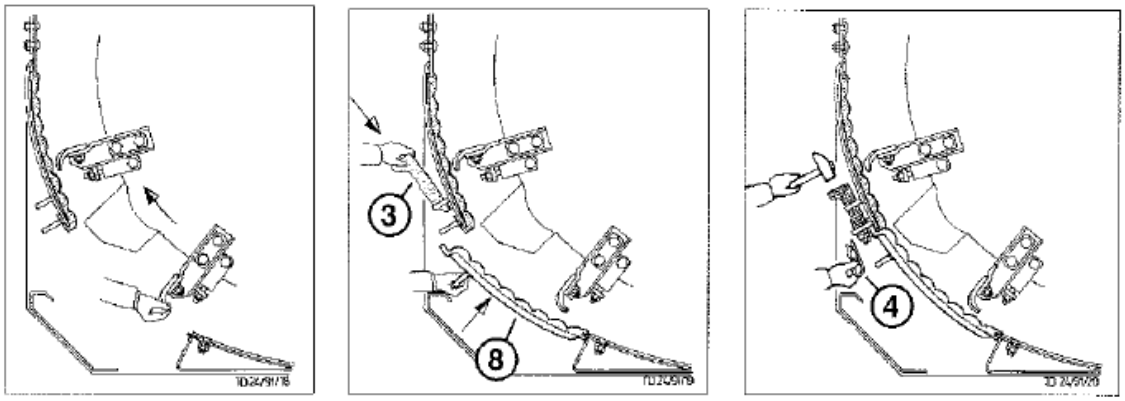
- Rotate the blades disc again and check that there is no interference.
- Adjust regulator screws A placing them against the already regulated ventilator.
- Adjust gap Y using nut J, placing the ventilators against the regulator screws A.
- Gaps X and Z are regulated as described above.

- Tighten the remaining nuts with the torques described above.

- Move screws A so that they do not interfere with the ventilators.



- Insert the crushing plaque I (8), rotate it backwards
and secure it to both of the blocks (3).
- Insert the blocks with a hammer and affix them with cotter pins (4).



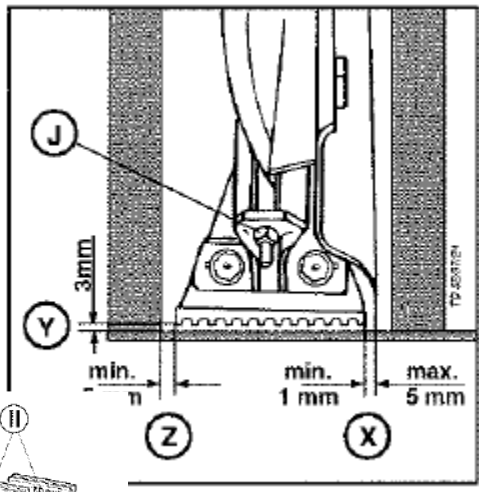
- Assemble the protective piece (9) between the blades and the cutting wheel, using a hexagonal screw M1 4X25 (11) and spring ring.

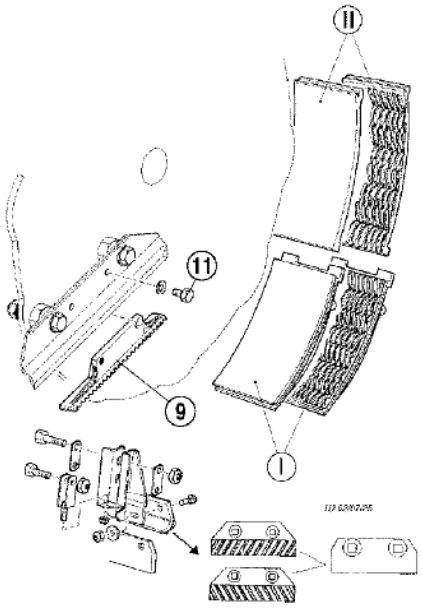
Attention!

- Rotate the blades disc to check for any interference
  - Close the blades disc box.

Pay special attention!

- All of the nuts of the grain crusher, as well as of the protective pieces (9), should be retightened every 10 hours of work.
- The central readjustment of the blades disc makes the crushers come close laterally to the counter-blade over time.
- If the gap (X) goes down to 1 mm, it should be readjusted to 5 mm again.
- The reference measure (Z) should be at least 5 mm.





Maintenance care to be taken into account

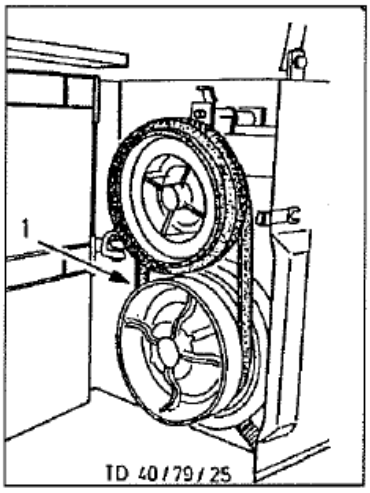
General information

Accurate care and correct maintenance will ensure constant readiness and a long useful life for the machine; especially recommended is the use of a good lubricant and compliance with the lubrication instructions. To check or once again fill the transmission oil, the machine should be levelled.

Attention! After each cleaning with a high-pressure machine

Lubricate the machine in accordance with the lubrication scheme and do a short test.

Lubrication instructions



The transmission box to the group of rollers functions in a SAE 90 transmission oil bath, which should be replaced once per year. The quantity of oil is approximately 0.5 L.
Periodically check the oil level. For this, with the machine on the horizontal, remove the screw (1). If oil does not come out, add it.

The transmission system of the corn head comprises three gear boxes that are equally immersed in SAE 90 transmission oil which should be replaced once per year. The quantities are as follows:

-Box (2) -1.5L-To check the minimum level, see figure (A)
- The removal of the oil should be done by vacuum
-Box (3) -2 L-To check the minimum level, see figure (B)
- The removal of the oil is done through the orifice (D)
-Box (4) -2 L-To check the minimum level, see figure (C)
Add more if the level is not overlapping the display
- The removal of the oil is done through the orifice (F)

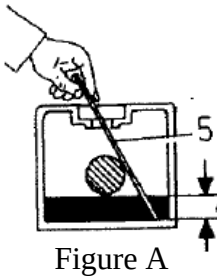
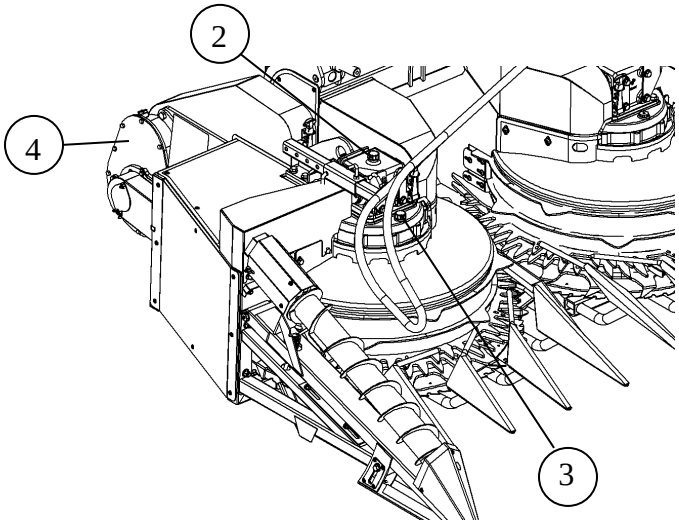


Figure A



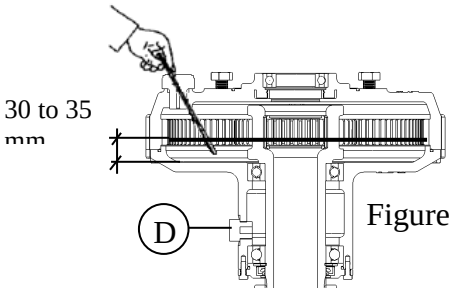


Figure B

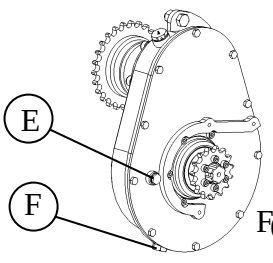


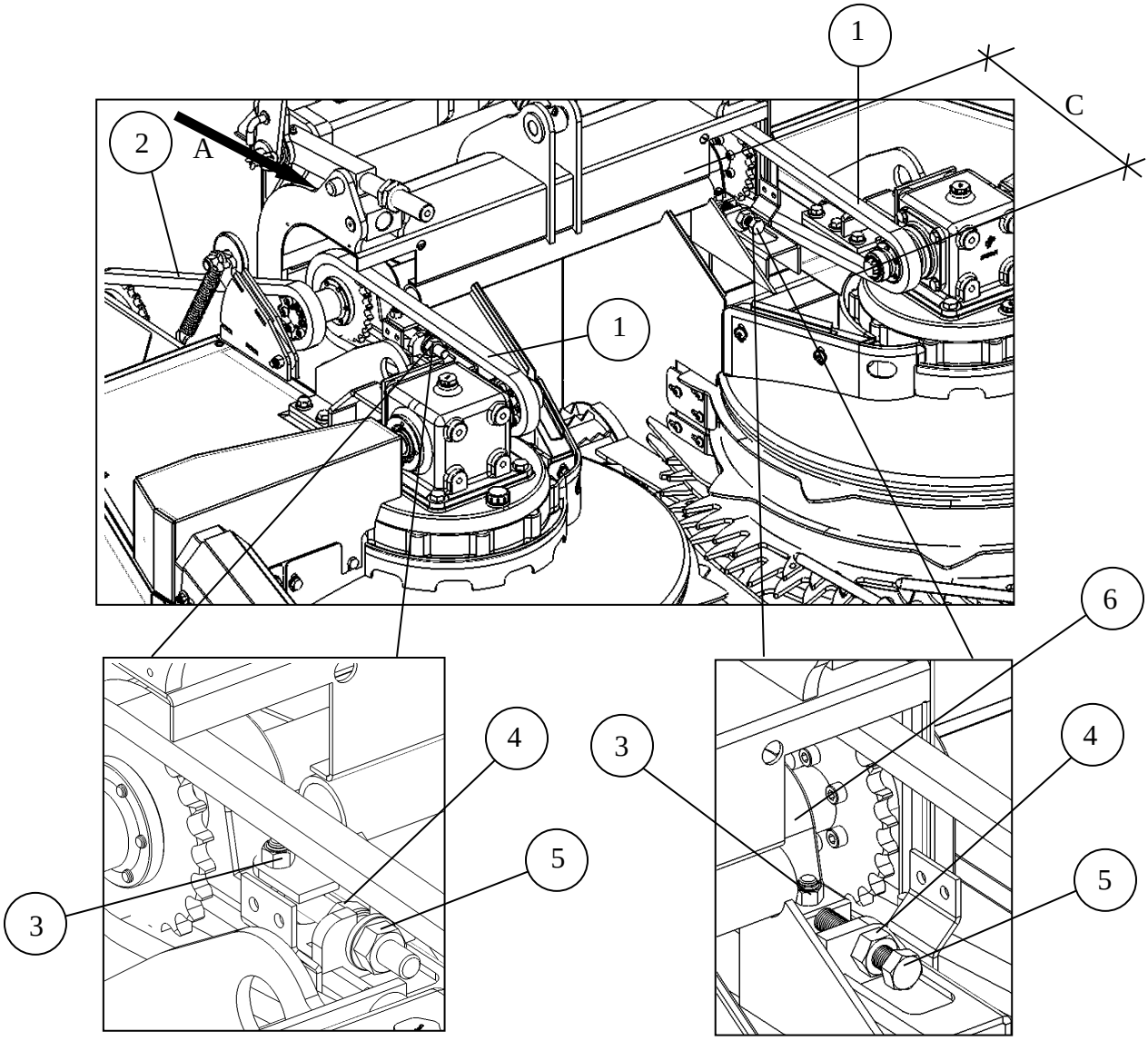
Figure C

Winter Storage

- The moving parts (group of rollers, blades disc, rotating collection drums, etc.), as well as the chains should be oiled to protect them from rusting.
- The machine should be stored well protected from harsh winter weather.

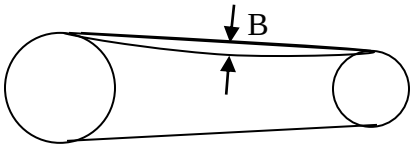
Tuning the currents of the corn head:

- After the first 10 hours of work, the transmission chains should be checked and adjusted if necessary

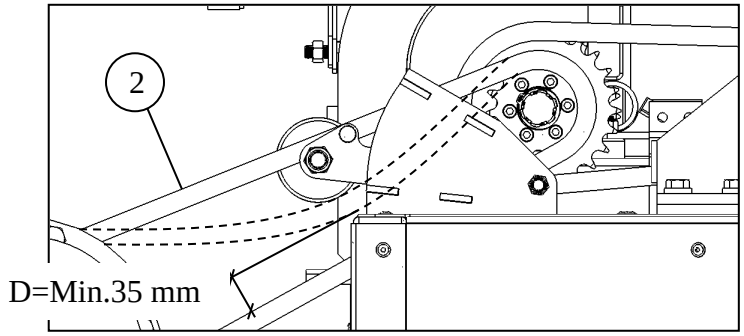


To tune the chains (1):

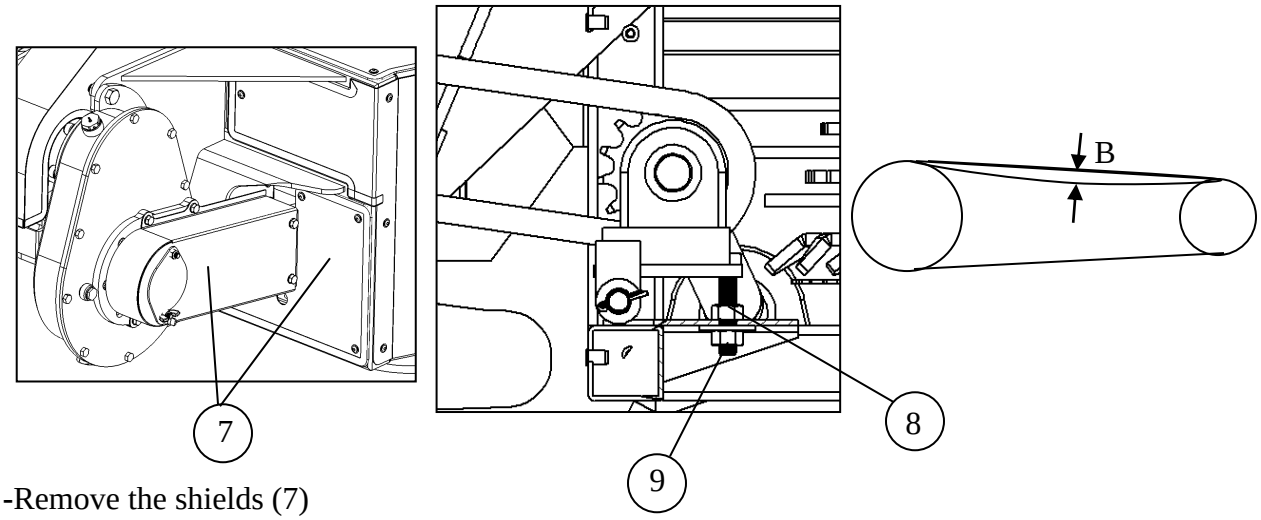
- Remove the protective shields
- Slightly loosen the nuts (3)
- Do not forget to loosen the nuts that are to be found in the rear part of the bearing (6), in order to have access to these nuts, use the orifice indicated by arrow A.
- Loosen the counter-nuts (4)
- Adjust the chains with the elements (5) in order to obtain a quota (B) of approximately 5-7 mm



Attention, the distance (C) between the axles has to be equal on both sides.
- Tighten the counter-nuts again (3) and (4).
- Check how the chain (2) is. If distance D is inferior to that indicated, you will have to remove one or more links or replace the chain (recommended option)

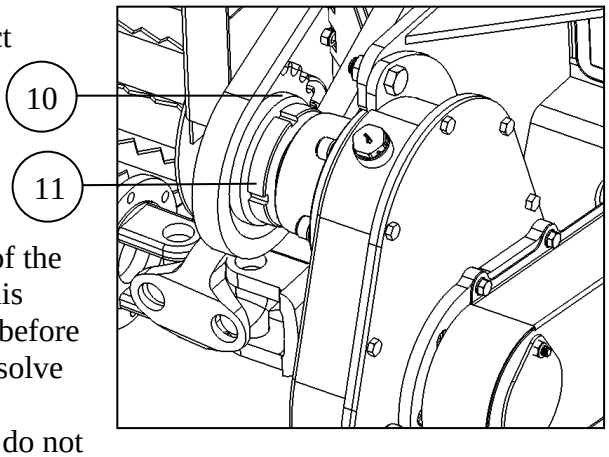


Central roller chain:



-Remove the shields (7)
- Loosen the counter-nut (8)
- Tighten the nut (9) until you get a quota (B) of 5/7 mm
- Retighten the nut (8)
- Replace the shields

-Protective clutch of the corn head:



The corn head is equipped with a clutch (10), to protect the machine from possible objects that could cause damage and to soften the reversals that are necessary. Its tuning is made in the factory. Nevertheless, when placing the machine in the working rotation and when undertaking the reversal of rotation, if you notice a group of horizontal rollers of the shredder stopping and making an accentuated noise, this means that the general clutch of the shredder is acting before that of the head, which should not happen. In order to solve this, you will have to slightly loosen nut (11) so that whenever it does a reversal, the rollers of the shredder do not

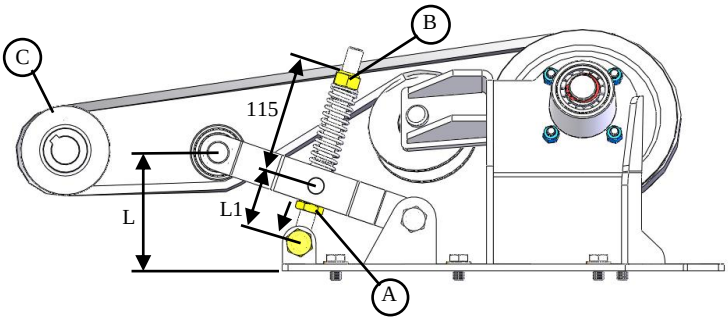
stop, with the head clutch acting first and softening the impact of the change in rotation.

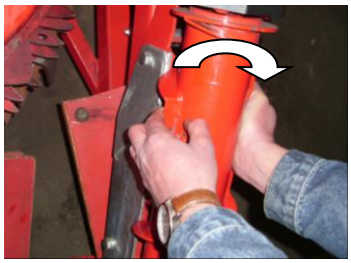
- The reversal of the rotation should only be used when it is strictly necessary (blockage of the feed mouth), because the reversals inflict wear on the clutch discs, which could result in the corn cutting and collection drums at work in more severe conditions stopping with the strain; then you will have to tighten the nut (11), if the problem persists then you will have to replace the clutch discs.

If you replace the clutch discs, to tune the clutch again tighten nut (11) in order to ensure the conditions described previously.

-Tuning the belts of the lateral spindles:

If the lateral spindles stop during work, due to the effort caused by the fallen corn, adjust the chain tension in order to decrease distance "L". To do so, tighten nut "A" in the direction shown by the arrow. (If distance "L1" is already at its lowest, change the chain (type A 53 ¼").





To check if the chain is correctly tensioned, proceed as follows:

- Turn off the tractor (to avoid any accident)

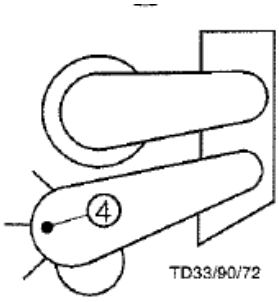
With both hands, as indicated in the figure, rotate the spindle towards the outside of the machine (opposite to the normal working direction), applying a force of approximately 250N (25 kg/f), so that the chain slides in pulley C, with no movement from the latter. If you are unable to rotate the spindle, remove tension from the chain by moving nut A in the direction opposite to the one indicated by the arrow.

(Note: Each complete turn of nut A implies a tension change of about 80 N. (8 kg/f)

After achieving the proper chain tension, adjust nut B, in order to ensure the indicated quota (115 mm)

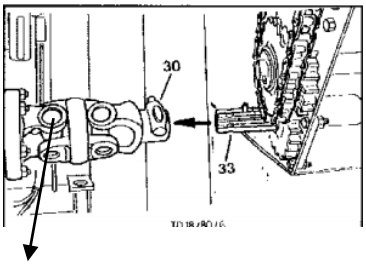
Take special care not to overtension the belt, otherwise, in case of a blockage caused by any foreign object, the belt or the cardan could be damaged.

In case of blockage during work, stop as quickly as possible, otherwise the chain will be damaged due to its friction in pulley C.



Maintenance instructions for the grass pickup accessory
The only point of lubrication (4) of the pickup accessory is on the left-hand side of the front plaque of the drum and should be lubricated with grease every 20 hours of work.

Attention!
For technical reasons, this lubrication point should be oiled when the collector is in use.
In order to avoid possible accidents, you should proceed with special care!



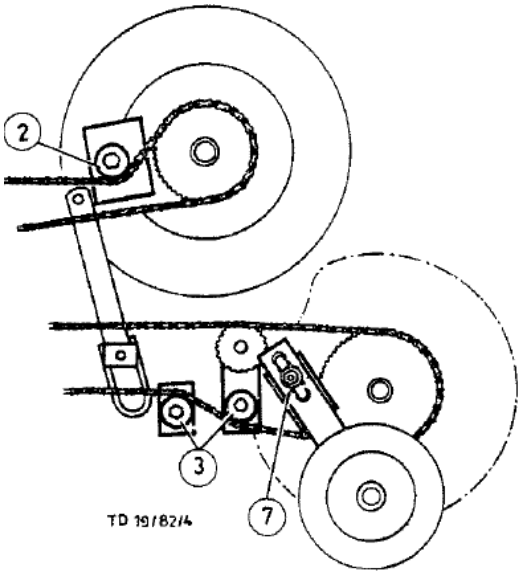
•The lubrication points of the transmission, of the collector should be lubricated frequently with grease.

After each 6 hours of functioning
Apply grease

Max. air pressure: 2,5 bar

Stretching of the transmission chain of the auger roller:

- Remove the roller protection
- Loosen the hexagonal screw (2).
- Adjust the chain
- Tighten the hexagonal screw again
- Replace the protection



Stretching of the transmission chain of the pickup device:

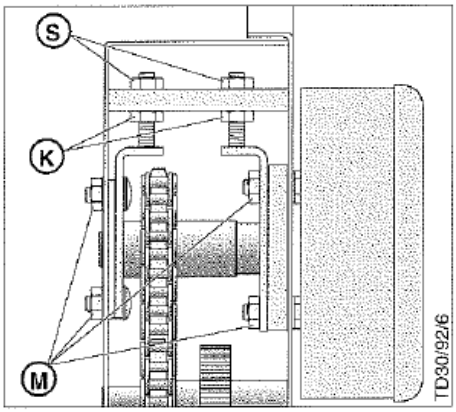
- Remove the pickup protection
- Loosen the hexagonal screw (3) (at the front or at the back)
- Adjust the chain
- Tighten the hexagonal screw again
- Replace the protection

Adjust the feed roller:

- Remove the pickup protection
- Loosen the hexagonal nut (7) at the support of the wheel
- Adjust the feed roller:
- Tighten the hexagonal nut (7) again
- Replace the protection

Tuning of the transmission chain of the auger roller

- Open the protection
- Loosen the hexagonal screws (M).
- Rotate backwards the counter-nuts (K)
- Adjust the chain by rotating the hexagonal screws (S)



Attention!

Rotate both of the hexagonal screws (S) equally and in order, so that you avoid the shaft inclining,

- Tighten the hexagonal screws (M) again.
- Tighten the counter-nut (K)
- Close the protection

Lubrication:

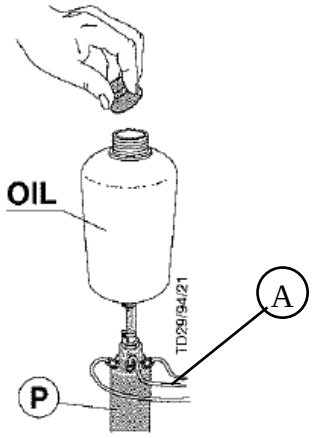
Automatic Lubrication of the Chain

Function:

Whenever the corn head or the grass pickup is elevated hydraulically, the pistons of the oil pump (P) are activated. This action causes a small quantity of lubricant to be transported each time to the individual lubrication points.

This pump has 7 outlets available, 3 for the shredder machine and 4 for the pickup/corn head. Therefore, whenever you couple the grass pickup or the corn head, remember to connect the corresponding tubes (A).

Attention: Whenever you uncouple the grass pickup or the corn head, remember to disconnect the corresponding (A) tubes, otherwise they could be damaged.

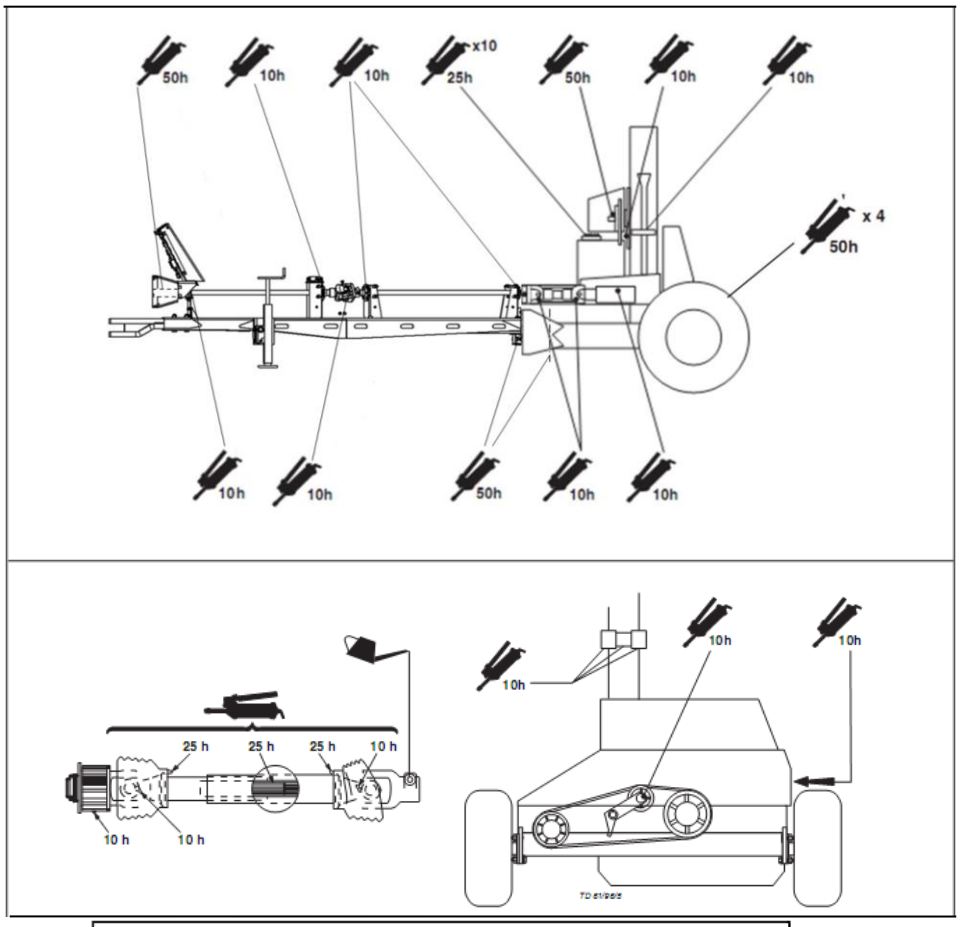


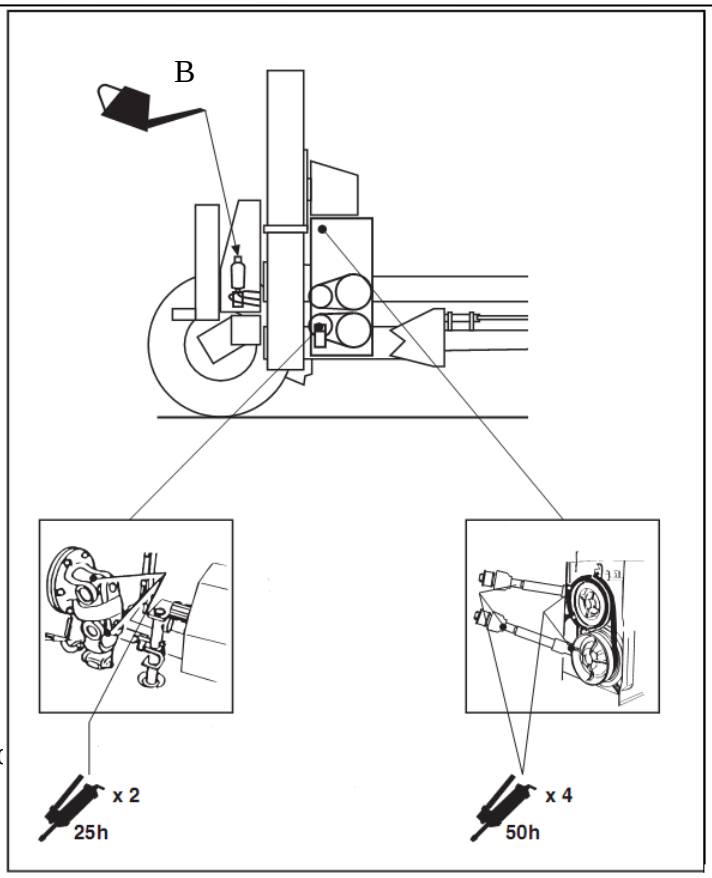
Before use

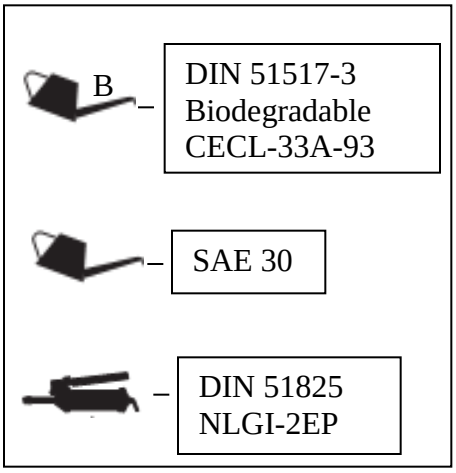
Check the oil level (OIL) in the recipient and fill it again if necessary.

Please use only oil that is environmentally safe and biodegradable.

Location of the lubrication points of the Mex6

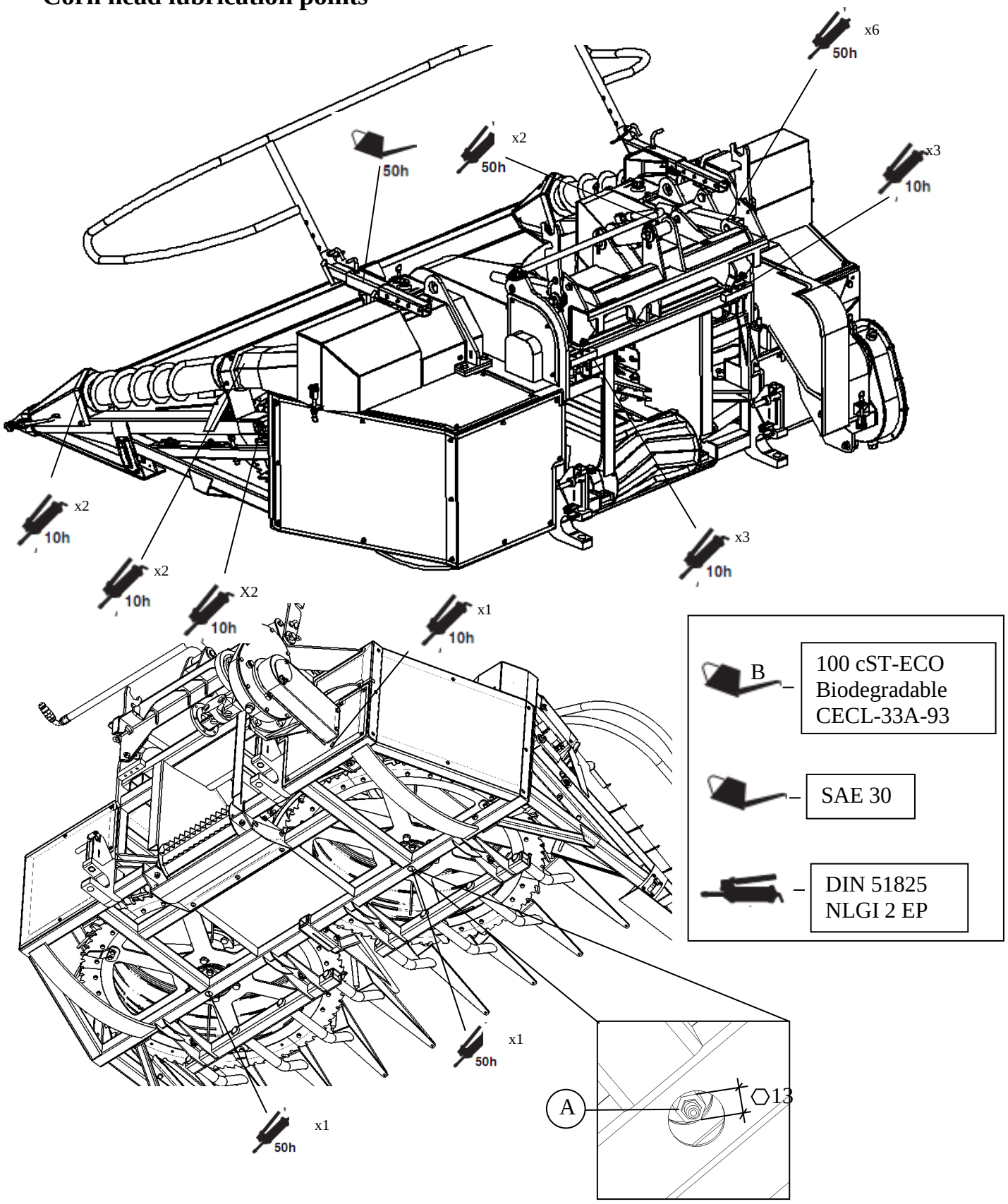






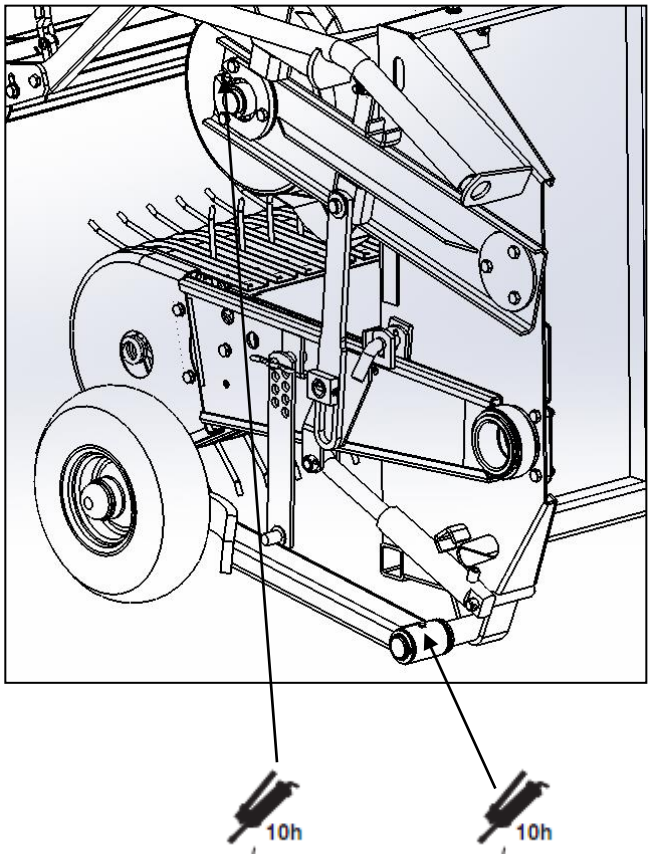
Pc

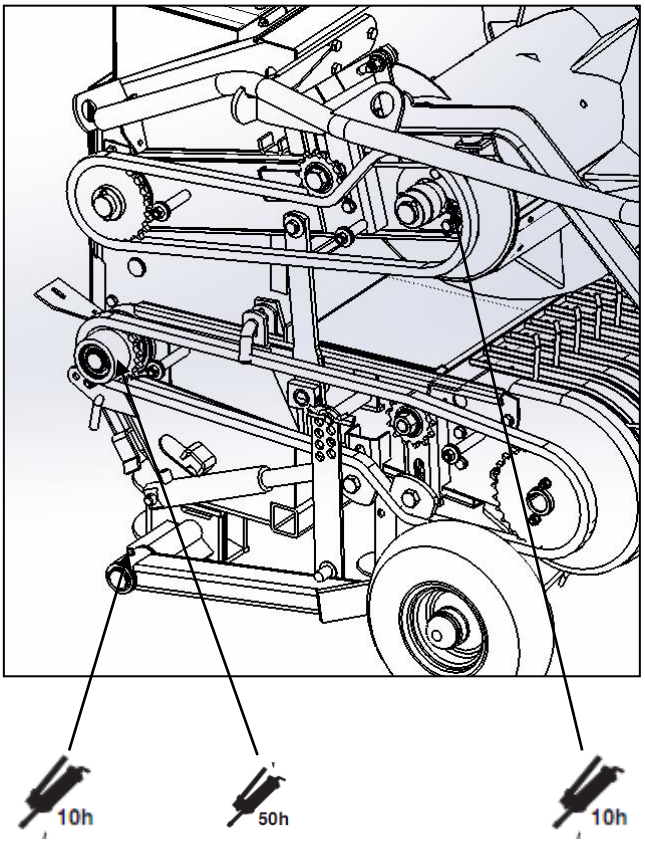
Corn head lubrication points

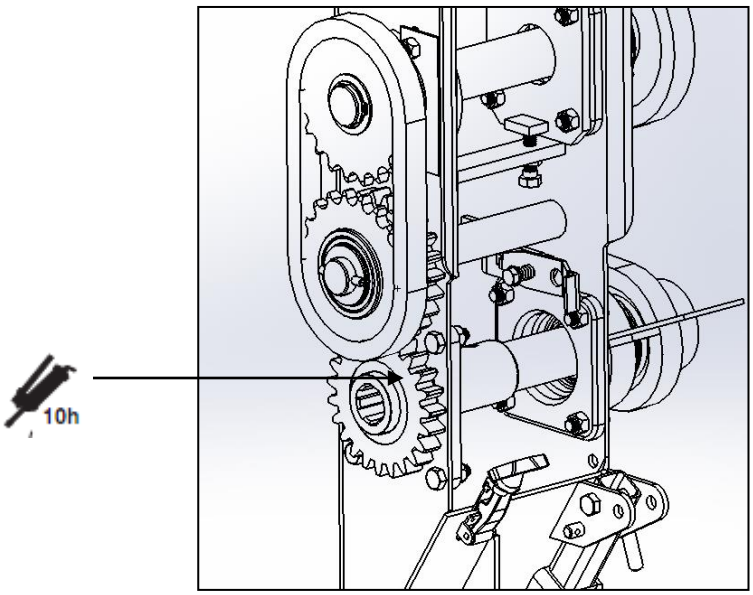


Important note: Whenever you need to remove the corn cutting drums, do not forget to first take out element (A).

Lubrication points of the grass pickup







Before a breakdown may be repaired, disconnect the power plug and the tractor motor and wait for all of the moving parts to be immobilised. Never try to resolve a breakdown with the machine in use.
- Switch off the motor and remove the key.

General

All machines will break down every now and then. The following information should help you to recognise the problems. You should always try to resolve the problem as soon as possible.

Breakdown	Solution
1. Noise of the beat during use:	Adjust the tension of the chain.
2. Overheating of the gear box:	Check the level and the quantity of oil.
3. Heating of a cap:	Lubricate the machine in accordance with the lubrication plan.
Admission	
4. The clutch of the admission roles acts:	Blockage or foreign substance at the mouth of the entrance
5. The clutch of the admission roles acts just a little:	Replace the clutch or the springs
6. The corn is not collected in a clean form:	
7. The admission does not function at full speed:	Examine the level of the cut and the elements of the cut Check the tension of the belt in V.
Blades disc	
8. The stems of the corn are not cut in a clean form and at the desired height:	Adjust the blades disc to the counter-blade or sharpen the blades.
Ventilation	
9. Very weak ventilation:	The shovels are very worn, so replace them.
10. The ventilation tube blocks at start-up due to a fault in reaching the necessary rotation speed:	Clean the blower tube.
Corn head	
11. Blocked with foreign matter:	Put the machine functioning in reverse for a short space of time, wait for the moving parts to stop, remove the foreign matter.
12. Blockage or blocking of the admission channel:	Check the functioning of the central roller
13. Pushes the corn forward without cutting it	Adjust the upper guide Check if the front nozzles are free of obstructions
14. Drums stop during work	Adjust the clutch or replace the discs
15. The lower cutting discs stop and do not cut	Replace the bearing rollers of the disc (piece no. 9 of set 21307008/9).
16. The lateral spindles stopped.	Check the tensioner and adjust if necessary.

Grass pickup

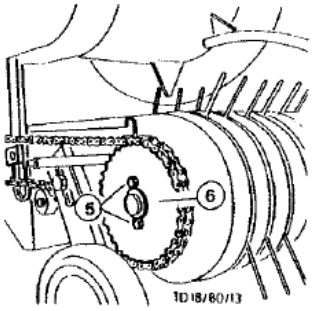
17. Blockage with foreign matter

Put the machine functioning in reverse for a short period of time; when the moving parts come to a complete halt, remove the foreign matter.

18 The teeth are bent or burying in the ground:

Adjust the feed roller height correctly

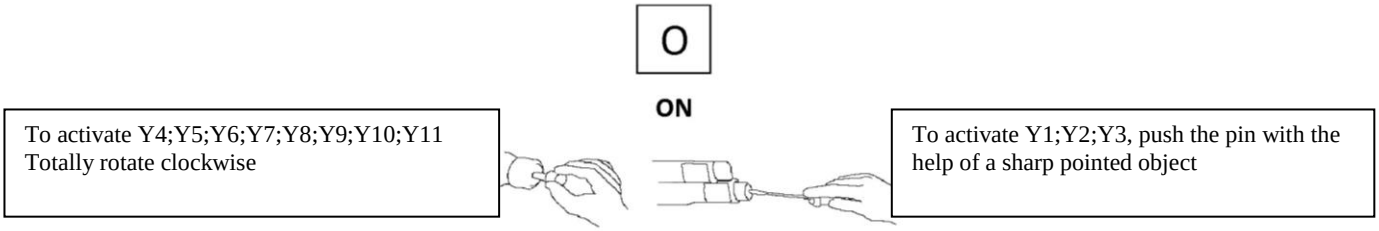
19 The pickup drum stopped:

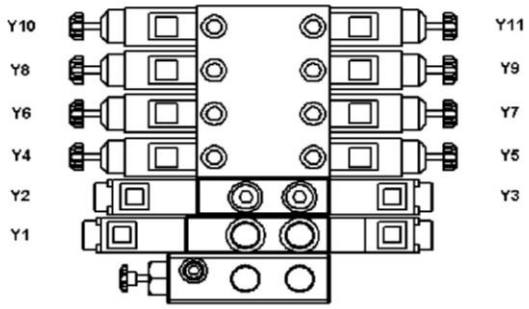


The fuses (5) broke; replace with new ones, tighten them properly and install the protection.

Breakdowns and solutions for electrical faults

When there is a fault in the electrical unit, the necessary hydraulic function may be performed by means of an emergency manual intervention.

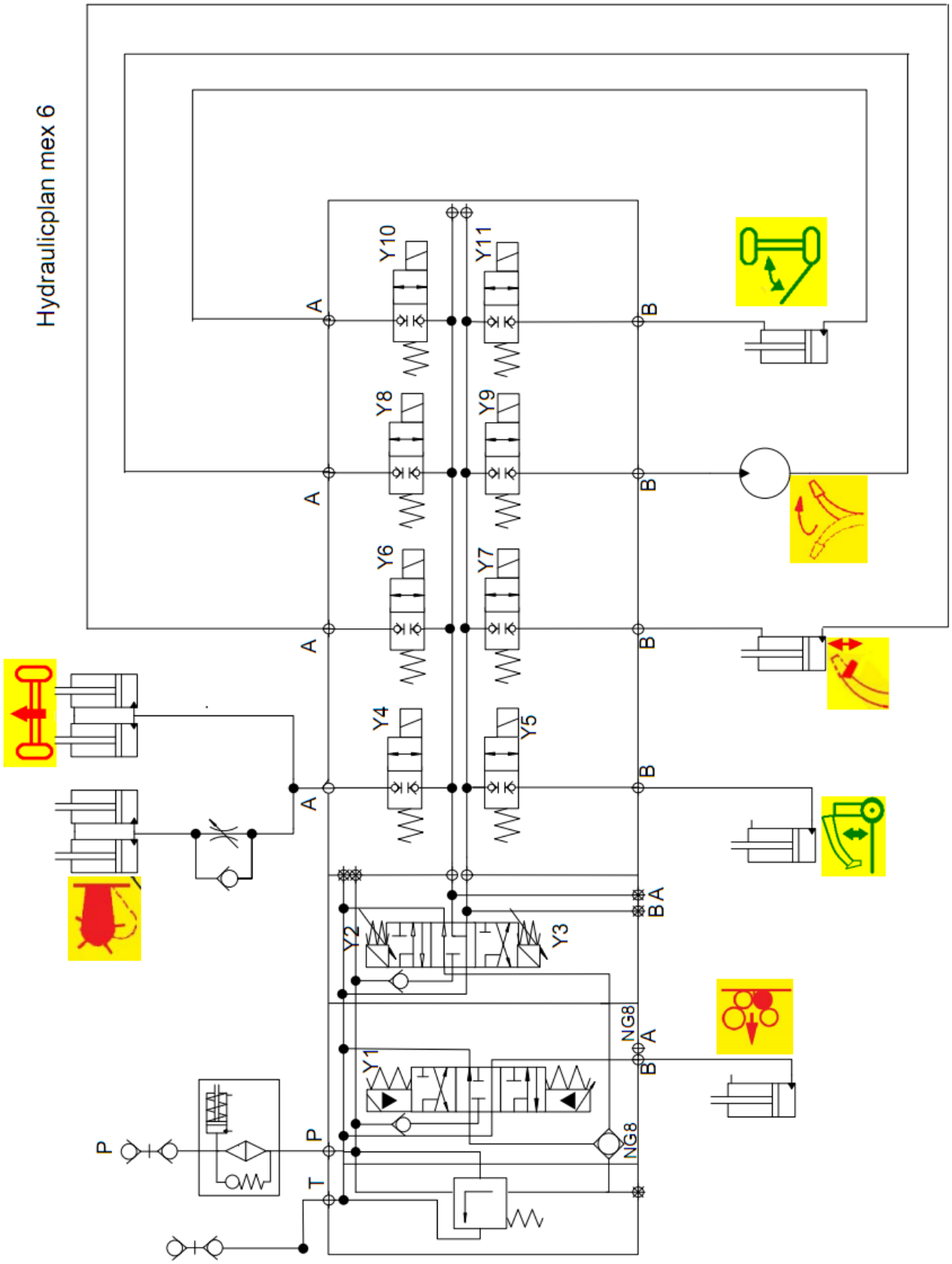




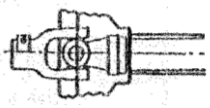
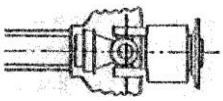
The attached scheme of functions presents the respective button that should be used for each necessary function.
Be careful with the dangers involved in the raising and lowering and operations of activation or

BLOCO HIDRÁULICO / BLOCK HYDRAULIC

MEX VI	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11
MOVER PALA (CIMA) UP FLAP		O				O	O				
MOVER PALA (BAIXO) DOWN FLAP			O			O	O				
ROT. CANO DIREITA RIGHT SPOUT ROT.		O						O	O		
ROT. CANO ESQUERDA LEFT SPOUT ROT.			O					O	O		
PICK-UP CIMA PICK-UP		O		O							
PICK-UP BAIXO DOWN PICK-UP				O							
INVERSOR REVERSING	O										
LANÇA ABRE OPEN THILL		O								O	O
LANÇA FECHA CLOSE THILL			O							O	O
REVIR. CANO P/ BAIXO DOWN SPOUT					O						
REVIR. CANO P/ CIMA UP SPOUT			O		O						
	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11

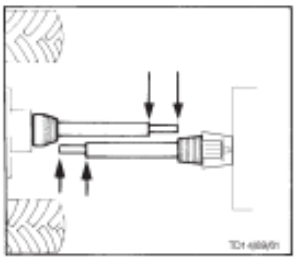

Hydraulicplan mex 6
Y10
Y11
Y8
Y9
Y6
Y7
Y4
Y5
Y2
Y3
Y1
A
B
P
T
NG8

Tractor/machine transmission cardan application options

Type of cardan	 Tractor side Shaft PTO	 Machine side Shaft PTO	Code
Normal angle	W2500-1”3/8 –Z=6 (option)	1”3/8 –Z=21	20503077
	W2500-1”3/8 –Z=21 (option)	1”3/8 –Z=21	20503078
	W2500- Z=8x32x38 (option)	1”3/8 –Z=21	20503079
Wide angle	WWE2580-1”3/8 –Z=6 (standard)	1”3/8 –Z=21	20503092
	WWE2580-1”3/8 –Z=21 (option)	1”3/8 –Z=21	20503100
	WWE2580-1”3/8 –Z=8x32x38 (option)	1”3/8 –Z=21	20503099

Transmission cardan - application and maintenance

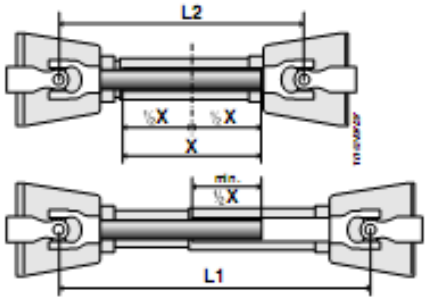
Attention!
Use only the cardan supplied, otherwise you will lose your right to the guarantee.



Adjust the cardan
The correct length is determined by overlapping the two parts of the cardan.

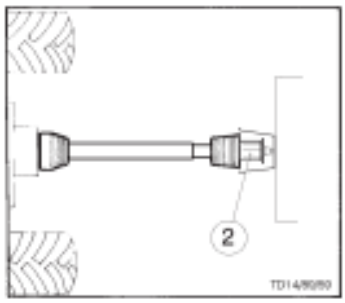
Process of cutting the length

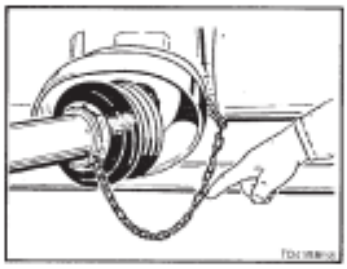
To shorten the halves of the cardan, the overlapping should be done in the shortest working positions (L2).



Attention!

Aim for the maximum possible overlapping of the tubes (min.
½X
- Cut the inside and outside protector tubes equally.
• ¡Place the limit torque module 2 beside the machine
• Before putting the machine into movement, check if the safety latches of the cardan are properly placed





Safety chain

- Check if the protection tubes have chains to stop them rolling

Check if the cardan has enough space to turn

Working instructions

During the working of the machine, the rotation regime indicated on the cardan should not be surpassed

After switching off the tractor transmission, the machine will continue to move for some time due to inertia, so any intervention in the shaft should only be carried out after the machine has come to a complete stop.
When parking the machine it is advisable for the cardan to be properly suspended by means of a chain, or the articulated support positioned below. (Do not use the chains from the cardan protection tubes).

1) Care to be taken if you use a torque limiter
A torque limiter is a clutch that interrupts transmission to the machine in the case of an overload. In order to re-establish transmission to the machine, it is necessary to reduce the rotation of the shaft to a regime of less than 200 rpm.

Attention!

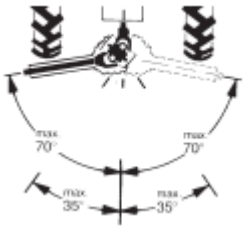
The torque limiter is not a filling indicator, it is a simple overload safety element that seeks to protect the machine from damage.

By means of sensible and careful work, you will avoid the frequent activation of the torque limiter, protecting it and the machine from possible damage.

2) Articulation of the homocinetic joint

Maximum angle at work and at rest 70º.

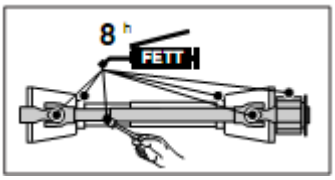
3) Articulation of the normal joint



Maximum angle at rest 90º.
Maximum angle at work 35º.

Maintenance

Damaged protection tubes should be replaced as quickly as possible
- Before starting any work and every 8 hours of work, lubricate with grease
- Before any prolonged stoppage, clean and lubricate the cardan



During winter, the protection tubes should be lubricated to stop them from freezing.

“EC” compliance declaration

This piece of equipment complies with the requirements of European Parliament and Council Directive 2006/42/EC, of 17 May 2006, transposed into Portuguese law by Decree-Law no. 103/2008 of 24 June 2008.

The EC Compliance Declaration is attached to this Instruction Manual.