





## Dear Farmer

You have just made an excellent choice. Naturally we are very happy and wish to congratulate you for having chosen Pöttinger. As your agricultural partner, we offer you quality and efficiency combined with reliable servicing.

In order to assess the spare-parts demand for our agricultural machines and to take these demands into consideration when developing new machines, we would ask you to provide us with some details.

Furthermore, we will also be able to inform you of new developments.



## Important information concerning Product Liability.

According to the laws governing product liability, the manufacturer and dealer are obliged to hand the operating manual to the customer at the time of sale, and to instruct them in the recommended operating, safety, and maintenance regulations. Confirmation is necessary to prove that the machine and operating manual have been handed over accordingly.

For this purpose,

- **document A** is to be signed and sent to Pöttinger,
- **document B** remains with the dealer supplying the machine,
- and the customer receives **document C**.

In accordance with the laws of product liability, every farmer is an entrepreneur.

According to the laws of product liability, property damage is damage caused by a machine and not to it. An excess of Euro 500 is provided for such a liability.

In accordance with the laws of product liability, entrepreneurial property damages are excluded from the liability.

**Attention!** Should the customer resell the machine at a later date, the operating manual must be given to the new owner who must then be instructed in the recommended regulations referred to herein.

## Pöttinger Newsletter

[www.poettinger.at/landtechnik/index\\_news.htm](http://www.poettinger.at/landtechnik/index_news.htm)

The latest expert information, useful links and entertainment

# INSTRUCTIONS FOR PRODUCT DELIVERY



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According to the product liability please check the above mentioned items.

Please check. ☒

- ☐ Machine checked according to delivery note. All attached parts removed. All safety equipment, drive shaft and operating devices at hand.
- ☐ Operation and maintenance of machine and/or implement according to operating instructions explained to the customer.
- ☐ Tyres checked re. correct pressure.
- ☐ Wheel nuts checked re. tightness.
- ☐ Drive shaft cut to correct length.
- ☐ Correct power-take-off speed indicated.
- ☐ Fitting to tractor carried out: to three-point linkage
- ☐ Trial run carried out and no defects found.
- ☐ Functions explained during trial run.
- ☐ Pivoting in transporting and operating position explained.
- ☐ Information given re. optional extras.
- ☐ Absolute need to read the operating manual indicated.

In order to prove that the machine and the operating manual have been properly delivered, a confirmation is necessary.

For this purpose please do the following:

- sign the **document A** and send it to the company Pöttinger or via the internet to [www.pottinger.at](http://www.pottinger.at)
- **document B** stays with the specialist factory delivering the machine.
- **document C** stays with the customer.

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### SUPPLEMENT

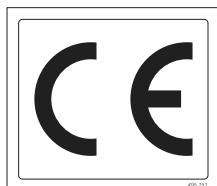
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Attention!

Safety hints to observe in supplement!

## CE sign



The CE sign, which is affixed by the manufacturer, indicates outwardly that this machine conforms to the engineering guideline regulations and the other relevant EU guidelines.

### EU Declaration of Conformity (see supplement)

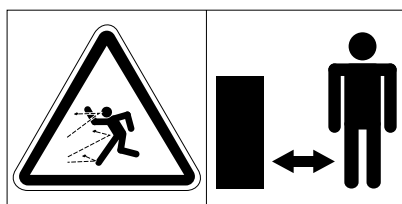
By signing the EU Declaration of Conformity, the manufacturer declares that the machine being brought into service complies with all relevant safety and health requirements.



**Recommendations  
for work safety**

**All points referring  
to safety in this  
manual are  
indicated by this  
sign.**

## Meaning of warning signs



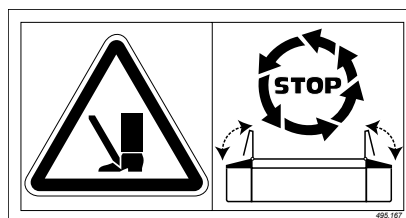
Danger - flying objects; keep safe distance from the machine as long as the engine is running.



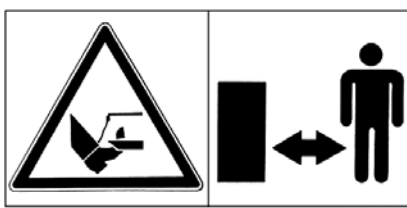
Stay clear of swinging area of implements



Wait until all machine components have stopped completely before touching them.



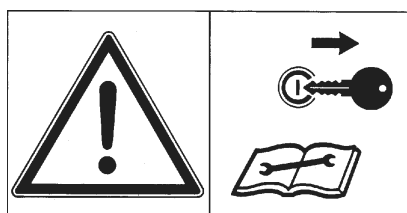
Close both side protective coverings before engaging p.t.o..



Stay clear of mower knife area as long as tractor engine is running with PTO connected.



Never reach into the crushing danger area as long as parts may move.

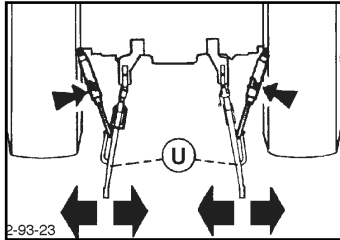


Shut off engine and remove key before performing maintenance or repair work.

## Attaching implement to tractor

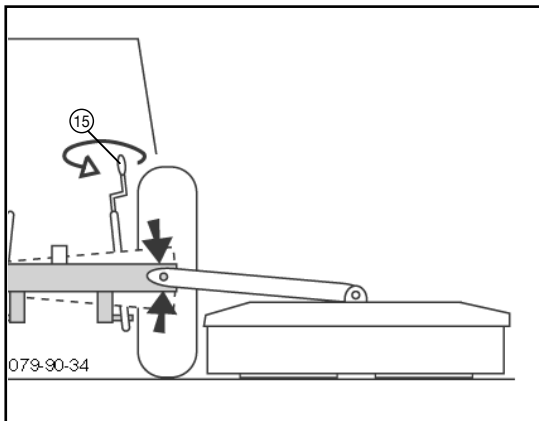
### Centre-mount (M) mower unit to tractor

- Adjust lower link accordingly.
- Secure the lower hydraulic link so that the appliance cannot swing sideways.



### Frame in horizontal position

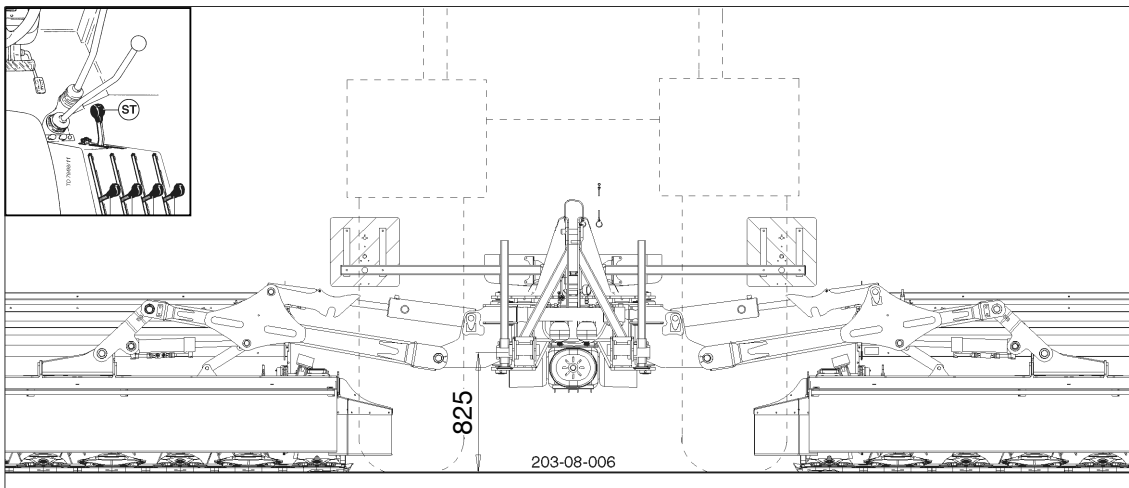
- Bring frame into horizontal position by adjusting linkage arm spindle (15).



### Setting lower link height

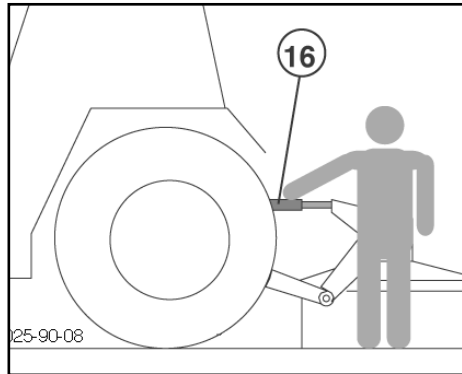
- Adjust tractor's hydraulics (ST) using bottom stop.

This height allows optimal evenness when working on uneven ground and need not be changed for swinging cutter bar up.

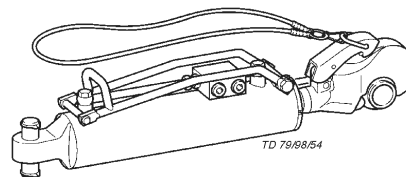


### Setting upper link height using spindle

- By turning upper link spindle (16) the cutting height is adjusted.



A hydraulic upper link is recommended.  
(double-action hydraulic connection)



**Safety hints:**

see supplement-  
A1 points 7.), 8a.  
- 8h.)



**Safety hints**

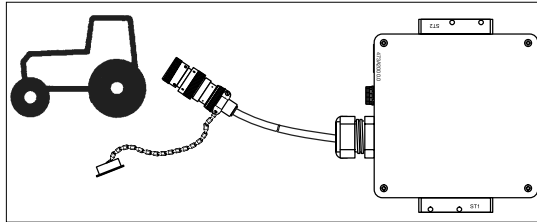
This appliance is  
designed only  
for use with  
tractors (not  
for automotive  
machines).

In the case of  
automotive  
machines, the  
driver's visual  
range is restricted  
when the two  
outer mower  
bars are raised  
in the transport  
position.

## Electrical connection to tractor

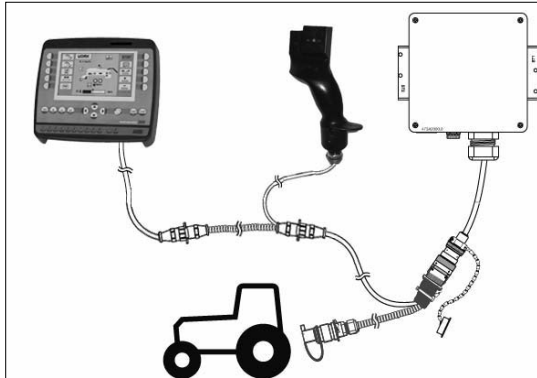
### Operational unit with ISO bus control:

- Connect 9-channel ISO plug to ISO Bus socket on the tractor



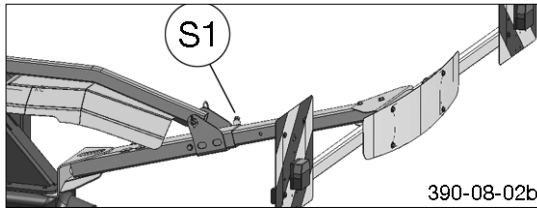
### Operational unit without ISO bus control:

- Connect cable between 9 channel ISO plug and 3 channel DIN 9680 socket on tractor or operational unit.



### Lighting:

- Connect 7-channel plug to tractor
- Adjust position of lighting carrier (S1)
- Check lighting function on mower and clean

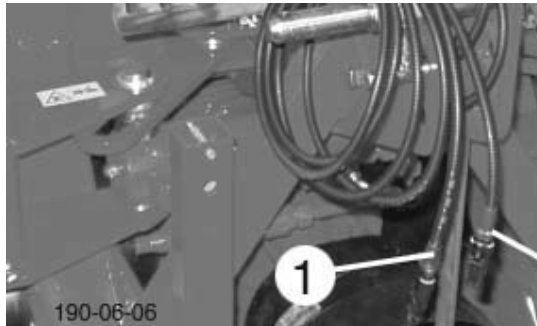


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## Connect sensor cable from front mower

### Electrical cable connections between front mower unit and mower combination

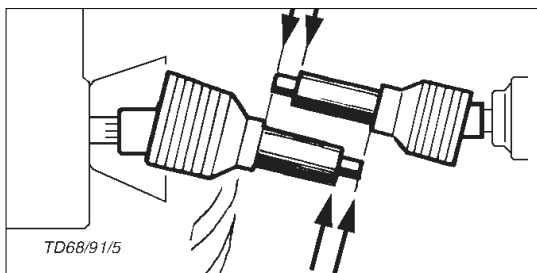
- 3 channel cable for sensor kit (1)
- (Starting from the back lay sensor cable from tractor so that the cable can't be damaged, e.g. tyres, exhaust pipe, ...)



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## Fitting drive shaft

- Before operating for the first time, drive shaft is to be checked and adapted if necessary. See also chapter „Drive Shaft“ in supplement B.



TD68/9 1/5



**Important!**

**Before putting the tractor into operation check vehicle safety (lights, brake unit, protective covering, .....).**

## Hydraulic connection

### Minimal hydraulic system:

- 1 x single-action hydraulic connection (EW) with unpressurized backflow (T)

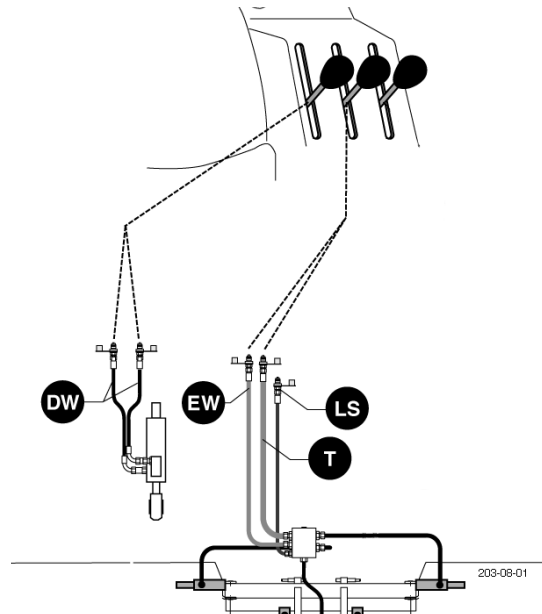
### Optimal hydraulic system:

- 1 x single-action hydraulic connection (EW) with unpressurized backflow (T)
- 1 x double-action hydraulic connection (DW) for the hydraulic upper link

or

Load-sensing hydraulic connection (LS) (Optional equipment)

- 1 x double-action hydraulic connection (DW) for the hydraulic upper link



### Settings

Screw (7) on the hydraulic unit must also be adjusted accordingly.



**Important!**

**Disconnect electrical connection (E2, E3).**

### Tractors with a „Load sensing“ system

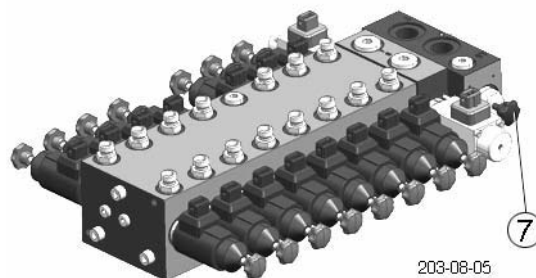
- Screw (7) on the hydraulic unit must be screwed in all the way

### Tractors with a closed hydraulic system

- Screw (7) on the hydraulic unit must be screwed in all the way

### Tractors with a open hydraulic system

- Completely unscrew screw (7) on the hydraulic unit



## Observe rotation direction of cutting discs

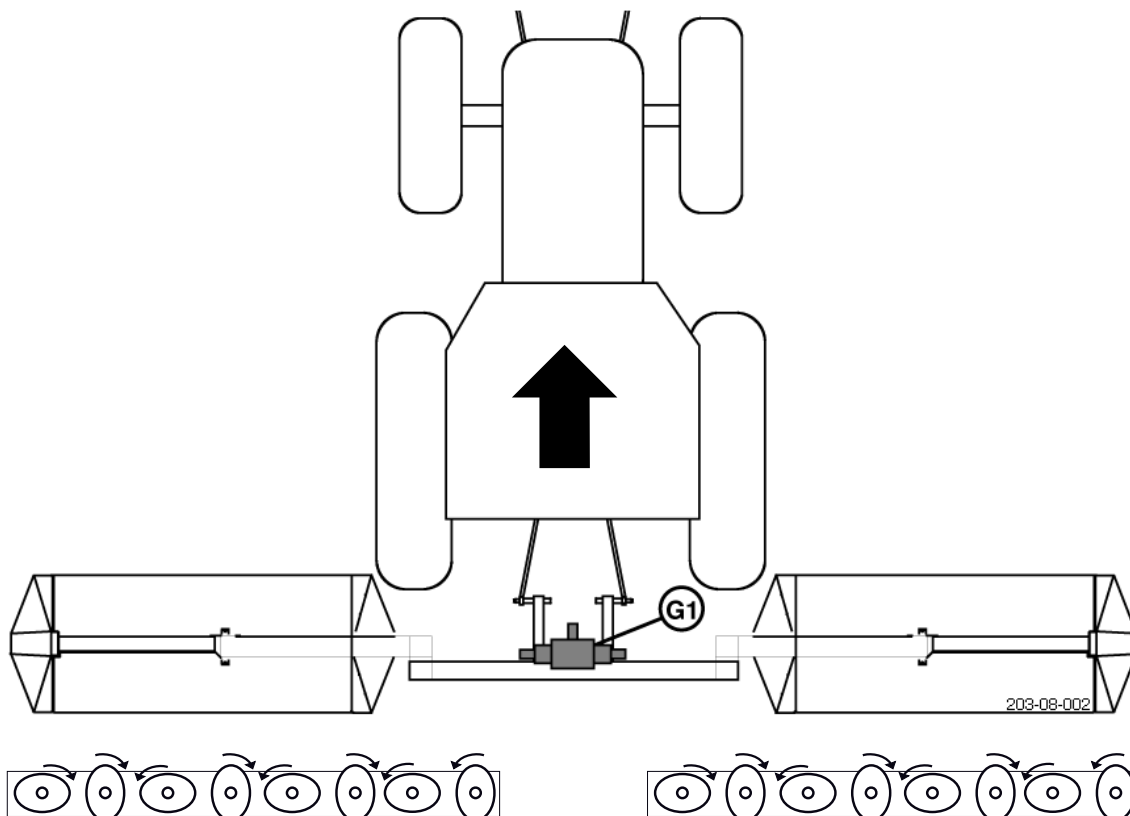
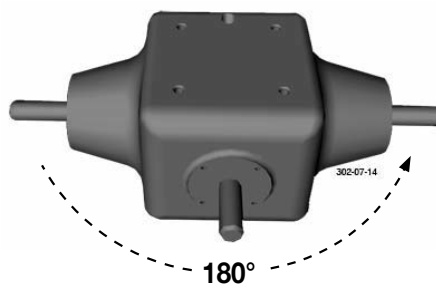
- Select appropriate rotation direction for the drive
- If the necessary p.t.o. rotation direction cannot be selected from the tractor, rotate the mechanism (G) 180°.



### Note!

Before reinstalling a gearing on the machine:

- Swap ventilation screw and drain plug positions.
- The correct ventilation screw position is on top.



## Conversion from working to transport position



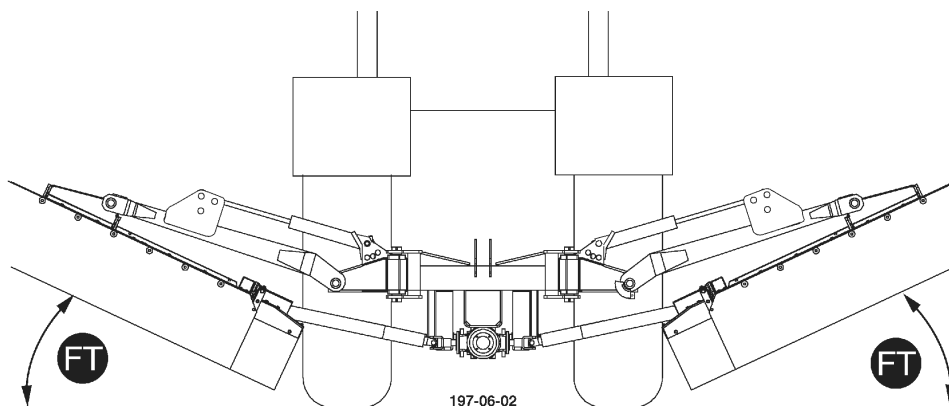
- Before swivelling the cutter bar up, turn off the drive and wait for the mower discs to come to a complete standstill.
- Make sure that swivel area is free and that nobody is standing in the danger area.



### Safety Precaution!

Changing from working position to transport position is only to be carried out on even, firm ground.

- Only transport the machine in the transport position!



## Raising for road transport

This button will only function when all cutting bars are in the field transport position (FT)

- Turn drive off and wait for standstill
- Swing in all hoop guards on the cutting bars

### Variant with "Power Control"

Press **button**  to activate its function

Press **button**  and all cutting bars swivel until the end position is reached.

### Variant with "ISOBUS-Terminal"


Briefly press  **Softkey button**, function is activated

Briefly press  **Softkey button**, all mower units swivel to the end position

## Lowering into field transport position

### Variant with "Power Control"

Press **button**  to activate its function

Press **button**  and all mower units swivel to field transport position (FT)

### Variant with "ISOBUS-Terminal"

Briefly press  **Softkey button**, function is activated

Briefly press  **Softkey button**, all mower units swivel to field transport position (FT).

- Swing out all hoop guards on the mower

## Driving on public roads

- Observe the official regulations of your country.
- Driving on public roads must be carried out in the transport position only
- Protection devices must be in proper condition.
- Before travelling bring all swivelling parts into their correct positions and secure against dangerous changes to position.
- Check that lighting functions before travelling.
- Important information can also be found in the supplement of this operating manual.

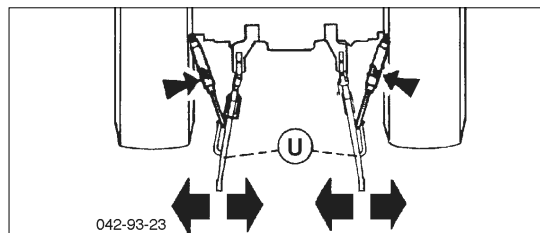


**Attention!**

**Be alert to the maximum permissible transportation height (4m)!**

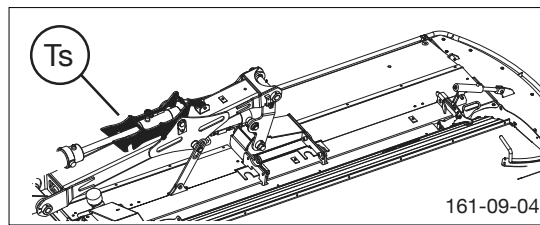
### Hydraulic lower link

- Fix the hydraulic lower link (U) in such a way that the machine cannot swing out sideways.

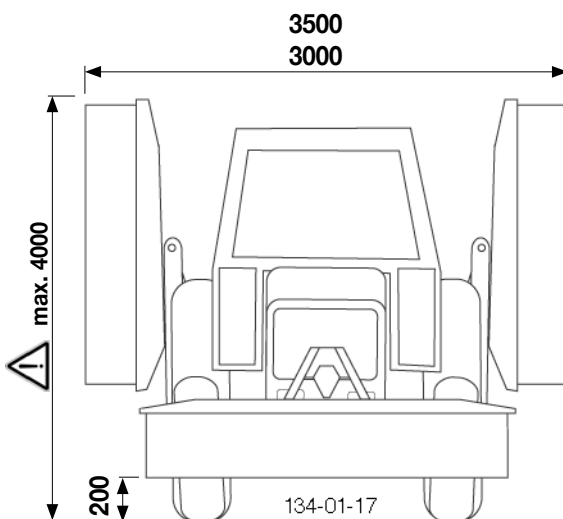


### Transport safeguard (Ts)

- Before travelling check transport safeguards!  
Both mower units are properly secured with safety hooks!



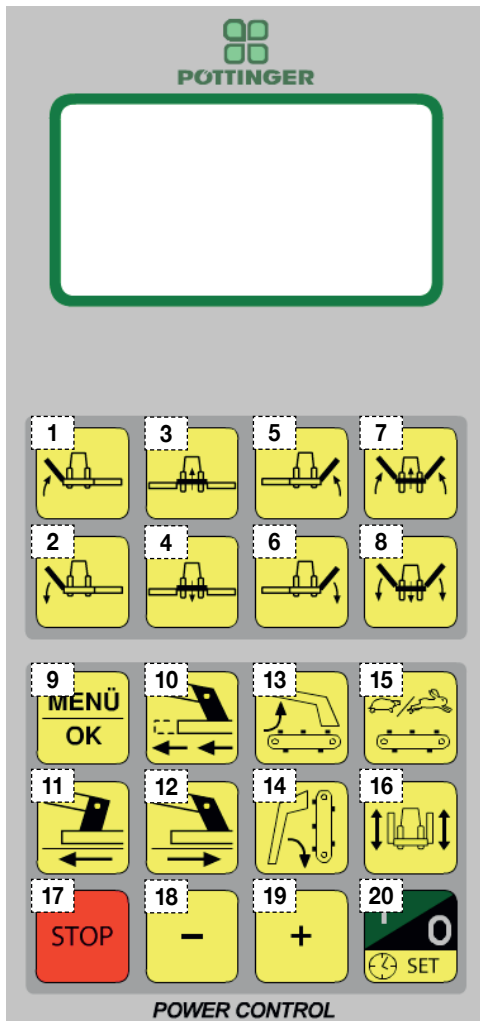
## Transport position



**Attention!**

**Parking the machine in the transport position is forbidden. Danger of tipping!**

## Control panel



### Display indicator:

- Main indicator
- Special menu
  - **SET**
    - Settings for machines
    - Raising/lowering the time difference setting
  - **TEST** (sensor test)
  - **KAL** (Calibrating the sensors)
  - **DATA** ((software versions, operating hours)
- Alarms



**Note!**

Always store control panel in a weather-resistant location.

### Description of the buttons:

- 1 Raise left cutter bar
- 2 Lower left cutter bar
- 3 Raise centre cutter bar
- 4 Lower centre cutter bar
- 5 Raise right cutter bar
- 6 Lower right cutter bar
- 7 Raise all cutter bars
- 8 Lower all cutter bars
- 9 Special menu / OK
- 10 "Lateral traversing" selection
- 11 Decrease working width / Lateral traversing left
- 12 Increase working width / Lateral traversing right
- 13 no function
- 14 no function
- 15 no function
- 16 Select "transport position"
- 17 STOP
- 18 Alter menu value (-)
- 19 Alter menu value (+)
- 20 ON / OFF button

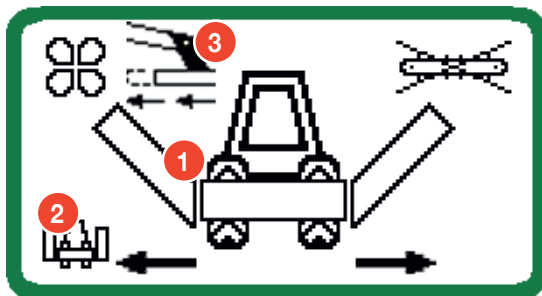


**Note!**

A malfunction caused through incorrect sensor values can put the control into an undefined state. Pressing the **STOP** button for 10 seconds will reset the control to the normal state. This is confirmed by an audible signal. Then bring the mower units to the working position again.

### Display

When the machine is turned on, the machine's current status is displayed on the work screen.



### Symbol description:

- 1 Machine's operating status
- 2 "Transport position" selection activated
- 3 "Lateral traversing" selection activated

## Power control initial operation

### Switching control panel ON and OFF

- pressing the I/O button



**Note!**

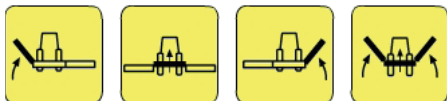
After turning off the control panel (AUS). Move the hydraulic control valve to the O position.


This is particularly necessary for tractors with open hydraulic systems, otherwise oil heating occurs.

## Button functions

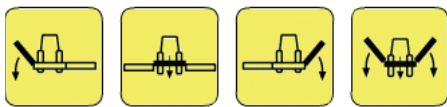
### Buttons to start a swivelling function


Function of "Raise mower units" buttons



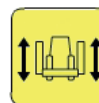
- By pressing one of the buttons, the corresponding mower unit is raised
- From the working to the pre-turnover position
- To swing from the pre-turnover to the transport position, press the "transportposition" selection button first 
- Raising the mower unit can be interrupted by the following means:
  - Pressing the corresponding "LOWER" button
  - Pressing the STOP button

Function of "Lower mower units" buttons



- \* By pressing one of the buttons, the corresponding mower unit is lowered
- From the pre-turnover to the working position
- To swing from the transport to the pre-turnover position, press the "transportposition" selection button first. 
- Lowering the mower unit can be interrupted by the following means:
  - Pressing the corresponding "RAISE" button
  - Pressing the STOP button

### "Transport position" selection button



Button function:

- This button has a preselection function
  - Preselection is shown as a symbol in the display
- The button must be used to:
- lower from the transport to the pre-turnover position
  - raise from the pre-turnover to the transport position



Take note!

By pushing the "Transport position" key  for 3 seconds, the side protection hydraulic hoses are switched without pressure (e.g. before uncoupling).



Take note!

When the "STOP" button is pressed then all functions are stopped



Note!

Turn drive off before swinging into transport position

## WORK-menu

The control panel starts when switched on with the WORK menu. This displays the machine's current function stands.

### Lateral traversing



#### Buttons for lateral traversing

Increase working width /  
Lateral traversing right



Decrease working width /  
Lateral traversing left



"Lateral traversing" selection



#### Button functions:

- If either the "Increase working width" or "Decrease working width" button is pushed then both mower units travel in the selected direction until the end position
- If the button "Lateral traversing" is pushed then the mower unit moves only after either the "Lateral traversing left" or "Lateral traversing right" button is pushed

Lateral traversing left:

- First, the right mower unit travels inward until the minimum working width is reached
- Then the left mower unit travels outward until the maximum working width is reached

Lateral traversing right:

- First, the left mower unit travels inward until the minimum working width is reached
- Then the right mower unit travels outward until the maximum working width is reached

#### Meanings of Indicators:

- a** "Lateral traversing" preselect button
- active:** the whole mower unit is moved left or right (e.g. on a slope)
- inactive:** the mower unit working width is altered

#### **b c** Display working width

Both arrows face outward = maximum working width

Both arrows face inward = minimum working width



Note!

The "Increase working width" and "Decrease working width" buttons are push-to-lock (function is carried out by briefly pressing the button)

The function is interrupted using the STOP button or by pushing the button for the opposite direction

If the function is interrupted using the STOP key then no arrows appear on the display



Note!

When mowing on slopes it makes sense to position both mower units on the upside. This will then prevent any striations



Note!

Adjusting the working width is only possible in the working or off-road transport positions. If adjustment is to be made in the transport position and one of the two mower units is in the off-road transport position at maximum working width, firstly bring both mower units to the minimum working width so as not to exceed the transport height of 4 m



Note!

Navigating to input fields takes place with the arrow buttons on the console



Note!

Altering the respective configuration takes place with the plus and minus buttons on the console



Note!

The menu can be exited at any time by pressing the "I/O" button



## SET-menu

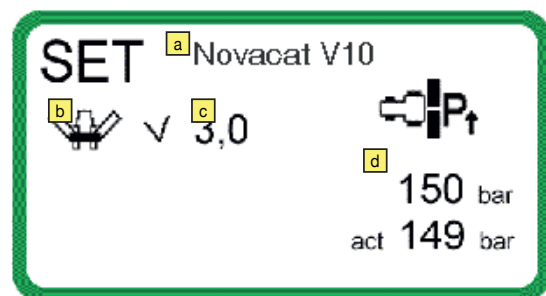
The following menu pages are displayed by pressing the



“Menu” button on the console

The SET menu comes after the WORK menu.

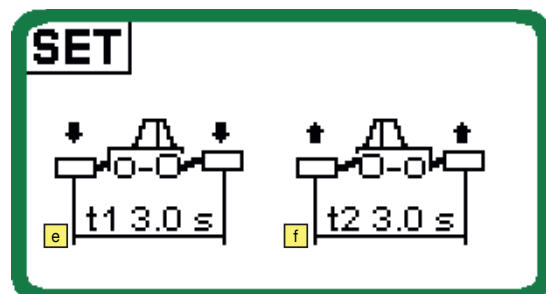
## Configuration of machines



## Meanings of Indicators:

- a** Choice of machine types  
Adjustable types: NC 10000
- b** Centre mower available  
Tick = mower is co-controlled  
Cross = mower is not co-controlled
- c** Working width of front mower  
Adjustable value: 3,0 m (Novacat 306 F)  
3,5 m (Novacat 356 F)
- d** Set relief pressure  
Both side mowers must be located in the working position  
The current relief pressure is shown  
Max. value is 230 bar

## Time difference when raising and lowering



- e** t1 .... time difference when lowering
- f** t2 .... time difference when raising  
Setting range for both sides: 0.0 secs – 0.9 secs  
Times are set using the plus and minus buttons in 0.1 second intervals.  
A speed specific distance control is not possible

## TEST-menu

The following menu page are displayed by pressing the



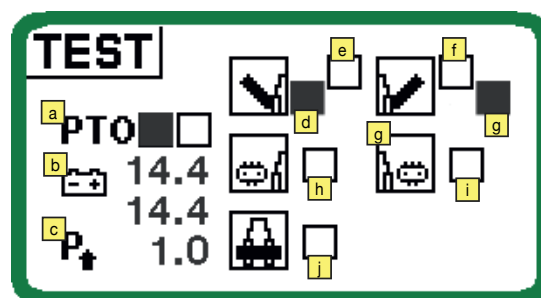
“Menu” button on the console.

The TEST menu comes after the SET menu

## Sensortest

A black coloured square means:

Sensor / switch delivering signal “1”



## Meanings of Indicators:

- a** PTO  
In the left field the sensor function during p.t.o still stand is checked.  
In the right field the sensor function during turning p.t.o is checked. This field has a black background when the p.t.o turns faster than 10 r.p.m
- b** Voltage indicator  
The **top voltage indicator** shows the lowest measured distribution voltage value since work started. This value is stored until the next new start.  
The **bottom voltage indicator** shows the current measured distribution voltage value.
- c** Pressure measuring transmitter voltage indicator  
This indicator shows the current pressure measuring transmitter voltage level output. Consequently the function can be checked aided by the data sheet.
- d** S5  
Off-road transport/working position left mower
- e** S15  
Transport position left mower
- f** S13  
Transport position right mower
- g** S3  
Off-road transport/ working position right mower
- h** S9  
Left cross conveyor belt
- i** S10  
Left cross conveyor belt
- j** S7  
Front mower position



## Note!

Navigating to input fields takes place with the arrow buttons on the console



## Note!

Altering the respective configuration takes place with the plus and minus buttons on the console



## Note!

The menu can be exited at any time by pressing the “I/O” button



## KAL-menu

The following menu page are displayed by pressing the



“Menu” button on the console.

The KAL menu comes after the TEST menu.



### Menu function:

Calibrating angular sensors is necessary through a sensor exchange. The function serves to memorize the voltage level at end positions.

- Starting the minimum and maximum working widths is button activated. (The function is only active when the button is pressed)

For this all mower units must be in the off-road position

- Calibrating procedure for an angular sensor
  - Press “Decrease working width” button until both mower units reach the internal stop
  - Press “Increase working width” button until both mower units reach the external stop
  - Press “Menu/OK” button for 2 seconds
  - Storage is confirmed by an audible signal

## DATA-menu

The following menu page are displayed by pressing the



“Menu” button on the console.

The DATA menu comes after the KAL menu.



### Meanings of Indicators:

- a Σh Hours of operation
- b Software version



### Note!

Navigating to input fields takes place with the arrow buttons on the console



### Note!

Altering the respective configuration takes place with the plus and minus buttons on the console





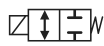
### Note!

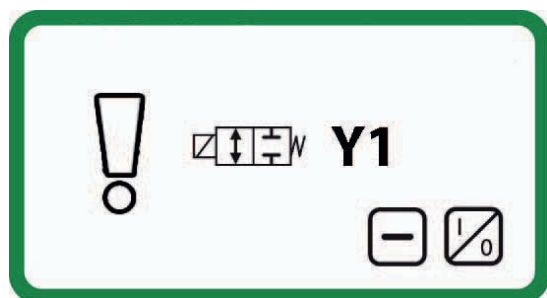
The menu can be exited at any time by pressing the “I/O” button



## Diagnosis function

Monitoring the job calculator for

- Operating voltage	
- Power supply sensor	
- Short circuit to earth or 12 V	
- Parting of a cable	
- Overload	



**Switch outputs** (Example: Y1 = raise distributing valve)

With fault recognition

- the alarm mask appears and an alarm signal is audible
- the relevant symbol and fault appears



A fault is confirmed with the "ESC" button



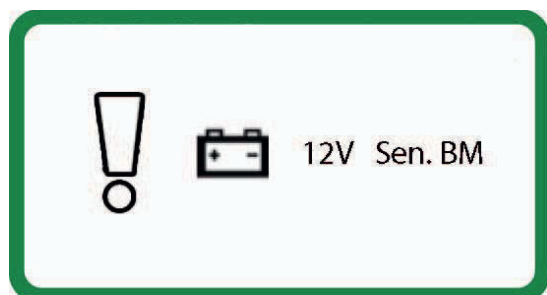
The diagnosis function for each individual channel can be switched off until the next system start using the "Minus" button



**Note!**

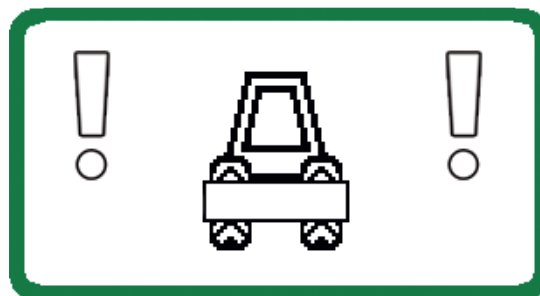
When a fault function occurs, every required function can be manually produced using the emergency operation (see chapter "Electro-hydraulic")

**Sensor inputs** (Example: Power supply < 10 V)



**Note!**

Alarms for the power supply cannot be switched off



## Time out monitoring

When, after pressing the "Raise front mower or all mowers", the front mower sensor is not reached after 6 seconds.

**Note:**

When this message is displayed, the front mower S7 sensor is not active.

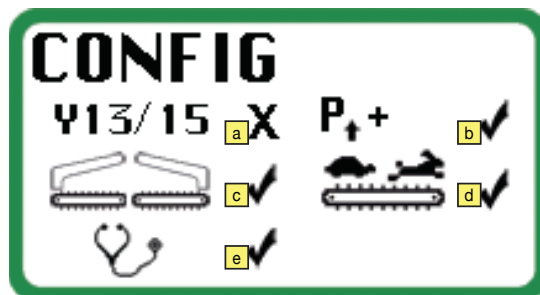
**Immediate action:**

- Check whether the front mower has been activated in the SET menu!
- Check sensor lines!

## Configuration Menu



After pressing the "Menu" key on the control console for 10 seconds, the following menu will appear.



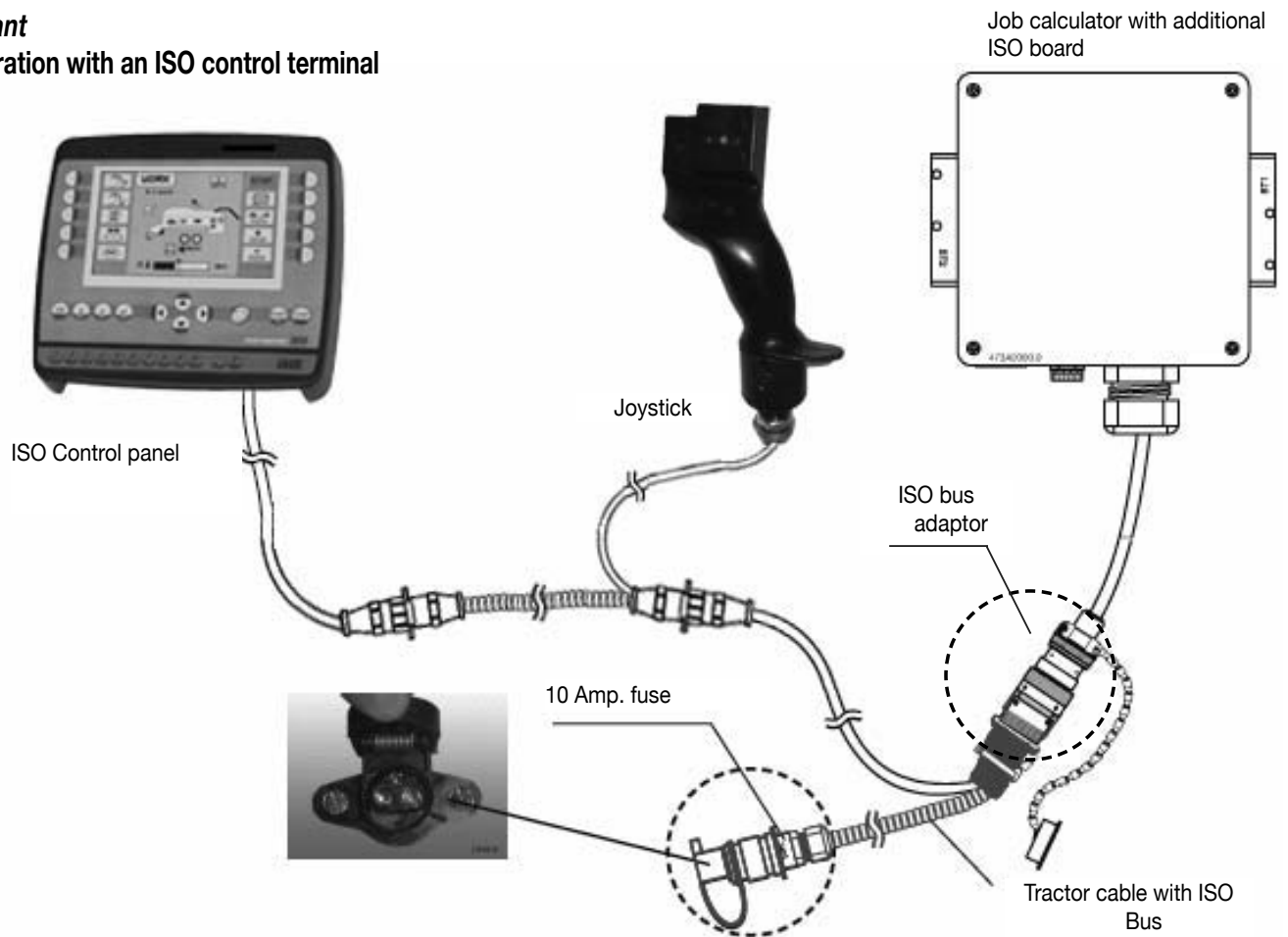
Press the "I/O" key on the control console to leave the menu.

## Meaning of Indications:

- a** Swivelling assistance  
Deactivate this configuration on Novacat X8 and X8 Collector
- b** Hydraulic relief
- c** Single cross conveyor belt swivelling
- d** Regulating speed of the cross conveyor belts
- e** Diagnosis function for inputs and outputs  
(Tick = active / cross = inactive)

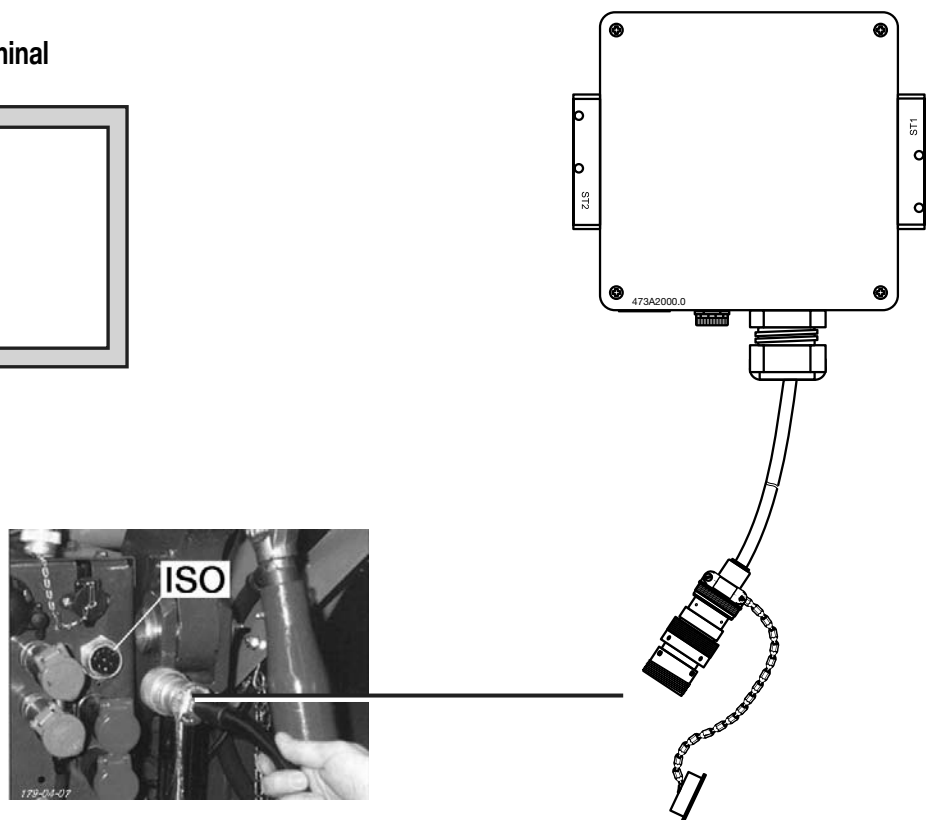
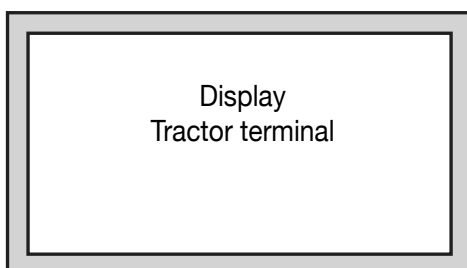
## Variant

### Operation with an ISO control terminal

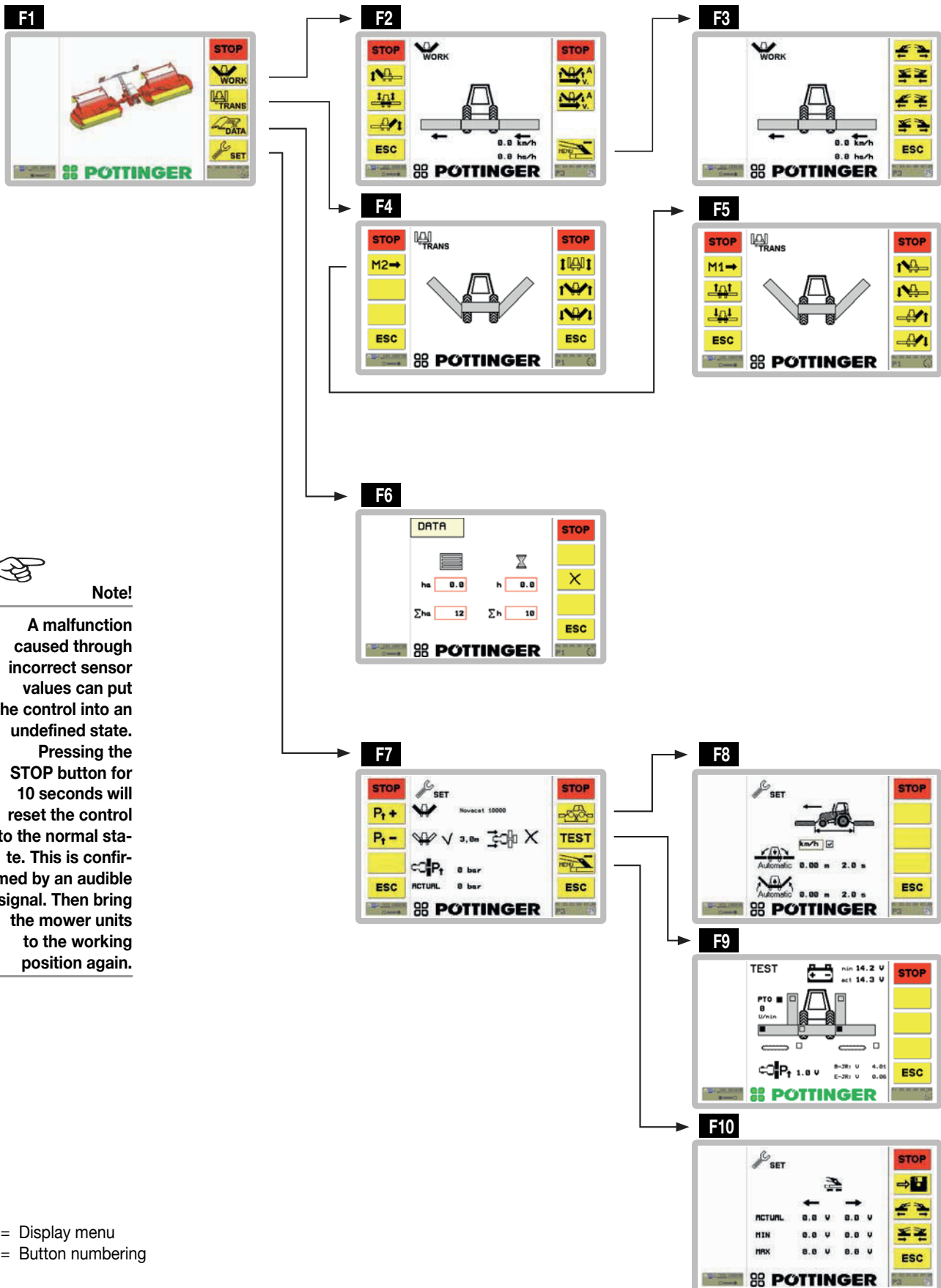


## Variant

### Operation via ISO Bus tractor terminal



# Operation ISO-terminal



## Button indication

### Start menu



- T1 STOP
- T2 Work menu
- T3 Transport menu
- T4 Data menu
- T5 Set menu

#### STOP button function

To stop all procedures currently running

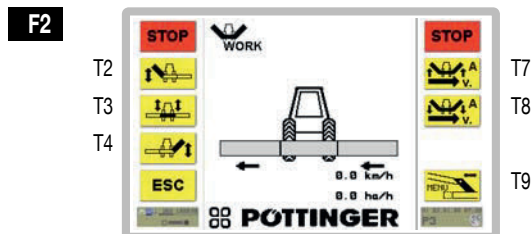


#### ESC button function:

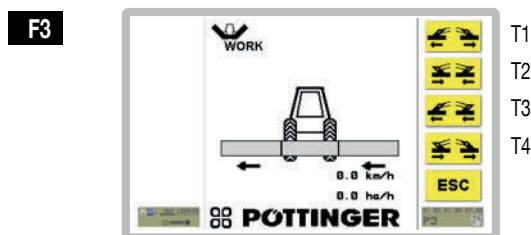
To return to previous menu



### Work menu

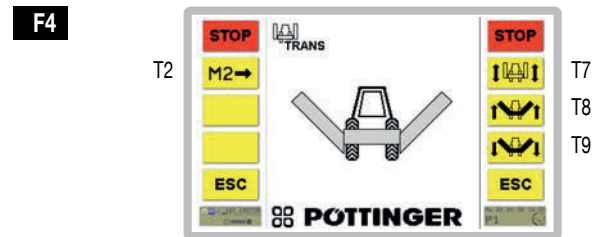


- T2 Raise / lower left mower unit
- T3 Raise / lower middle mower unit
- T4 Raise / lower right mower unit
- T7 Automatic "Raise mower units" function
- T8 Automatic "Lower mower units" function
- T9 Navigating the "Lateral traversing" menu
  - change to screen (F3)

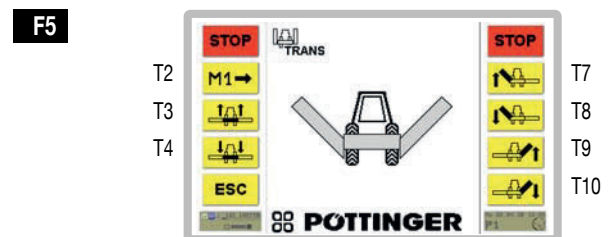


- T1 Increase working width
- T2 Decrease working width
- T3 Lateral traversing left
- T4 Lateral traversing right

### Transport menu

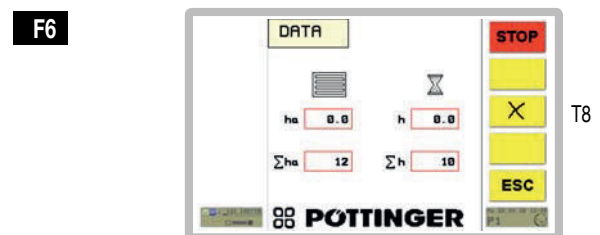


- T2 Change to side 2 (switch to mask (F5))
- T7 Change from working position to transport position" selection
  - Press T7 key for 3 seconds -> the side protection hydraulic hoses are switched without pressure (e.g. before uncoupling).
- T8 Raise cutter bars into road transport position
- T9 Lower cutter bars into working position



- T2 Change to side 1 (switch to mask (F4))
- T3 Lift front mower
- T4 Lower front mower
- T7 Lift left mower unit
- T8 Lower left mower unit
- T9 Lift right mower unit
- T10 Lower right mower unit

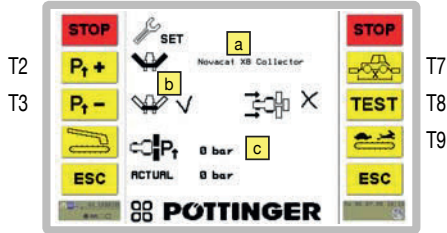
### Data menu



- T8 Clear time counter (ha, h)

## Set menu

F7



T2 Increase relieving pressure

T3 Decrease relieving pressure

a Activate/deactivate front mower

b Set front mower working width

T7 Navigating the "Time-traverse dependant lowering/raising" menu - change to screen (F8)

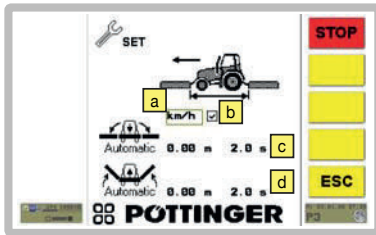
T8 Navigating the "Test" menu

- change to screen (F9)

T9 Navigating the "Calibrating lateral traversing" menu

- change to screen (F10)

F8



### Meanings of Indicators:

a Adjusting time or traverse dependant lowering/raising

km/h = depending on path and speed

sec = depending on time

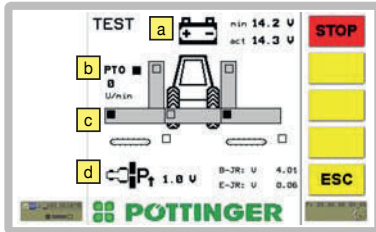
b Speed signal from tractor available or not available

c Adjusting the values for lowering

d Adjusting the values for raising

Display (meter (M) or seconds (sec))

F9



### Meanings of Indicators:

a Voltage indicator

The top voltage indicator shows the lowest measured distribution voltage value since work started. This value is stored until the next new start.

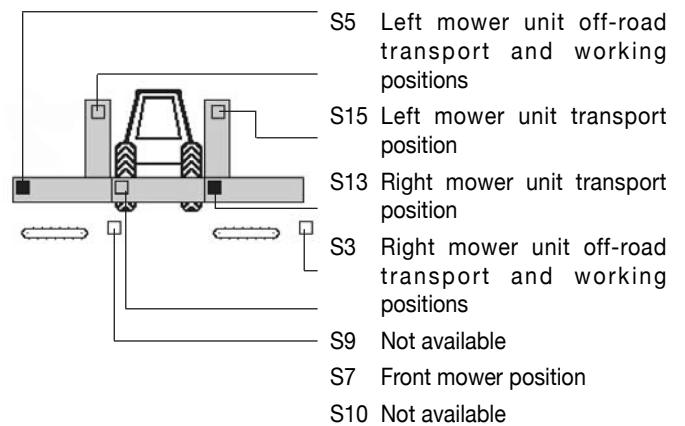
The bottom voltage indicator shows the current measured distribution voltage value.

b PTO

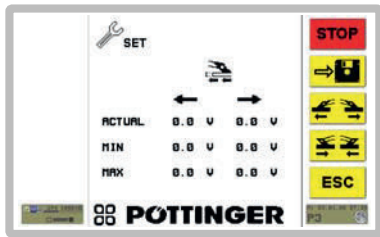
In the right field the sensor function during turning p.t.o is checked. This field has a black background when the p.t.o turns faster than 10 r.p.m

c Momentary sensor stand display

A black square indicates an active sensor. When activating and not activating the sensors, the square must change between black and white.



d Pressure measuring transmitter voltage indicator

**F10**


T2

T3

T4

- T2 Store values
- T3 Calibration – maximum working position
- T4 Calibration – minimum working position



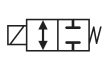
**Menu function:**

Calibrating angular sensors is necessary through a sensor exchange. The function serves to memorize the voltage level at end positions.

- For this all mower units must be in the off-road position.
- Calibrating procedure
  - Press “Decrease working width” button until both mower units reach the internal stop.
  - Press “Increase working width” button until both mower units reach the external stop.
  - Save

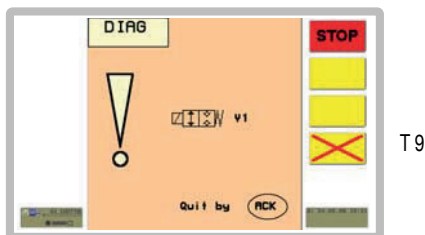
## Diagnosis function

Monitoring the job calculator for

Operating voltage	
Power supply sensor	
Short circuit to earth or 12 V	
Parting of a cable	
Overload	

**Switch outputs** (Example: Y1 = raise distributing valve)

**Diag**



With fault recognition

- the alarm mask appears and an alarm signal is audible
- the relevant symbol and fault appears

A fault is confirmed with the "ACK" button

The diagnosis function for each individual channel can be switched off until the next system start using the "Minus" button

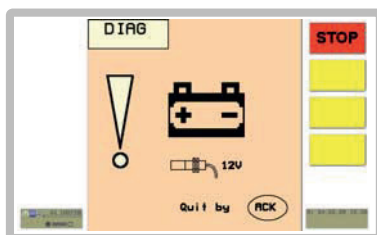


**Note!**

When a fault function occurs, every required function can be manually produced using the emergency operation (see chapter "Electro-hydraulic")

**Sensor inputs** (Example: Power supply < 10 V)

**Diag**



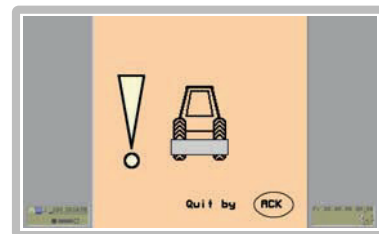
**Note!**

Alarms for the power supply cannot be switched off

## Time out monitoring

When, after pressing the "Raise front mower or all mowers", the front mower sensor is not reached after 6 seconds.

**Diag**



**Note:**

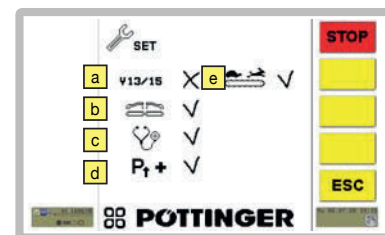
When this message is displayed, the front mower S7 sensor is not active.

**Immediate action:**

- Check whether the front mower has been activated in the SET menu!
- Check sensor lines!

## Configuration Menu

Starting from SET Menu (F6) press "Test" key **TEST** for 10 seconds to open the Diagnosis Menu.

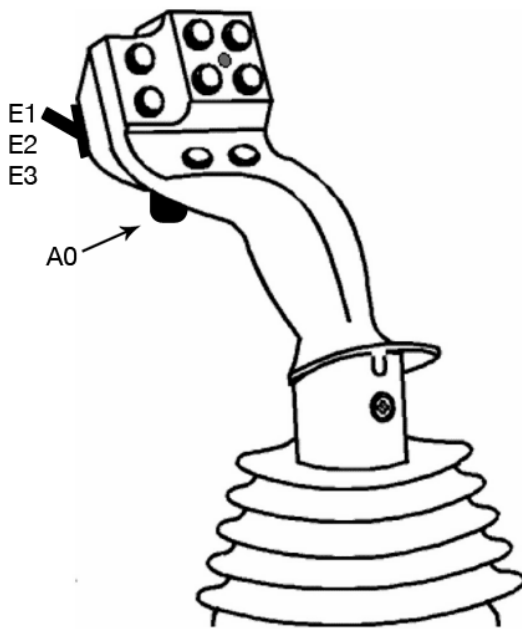


- a Swivelling assistance**  
Deactivate this configuration on Novacat X8, X8 Collector and V10!
- b Single cross conveyor belt swivelling**  
(only for Novacat X8)
- c Diagnosis function for inputs and outputs**
- d Hydraulic relief**
- e Regulating speed of the cross conveyor belts**  
(only for Novacat X8)

(Tick = active / cross = inactive)

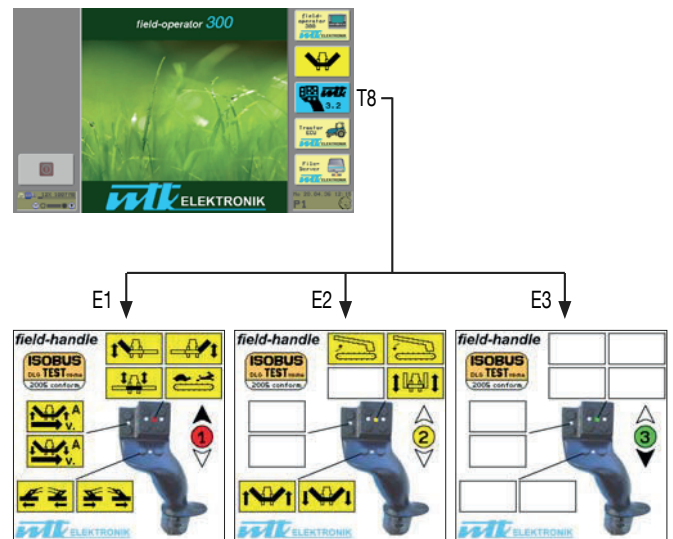
## Joystick - Mower Configuration

On the joystick there are 8 equal function buttons (1 – 8), a green clearing button (A0) and a level switch (E1/E2/E3). Eight different functions can be grouped per level (E1/E2/E3) with the buttons = max. 24 various functions can be carried out with the joystick.



### Checking the joystick function buttons grouping

From the Start menu commence by pushing T8. With the level switch (E1/E2/E3) change to the respective overview. The grouped function buttons are distinguished by the function symbol.



## Setting the Joystick

### Setting the joystick function buttons grouping

From the Start menu commence by pushing T6 and in the menu "Field-operator 300" press T9 to arrive at the joystick setting menu.



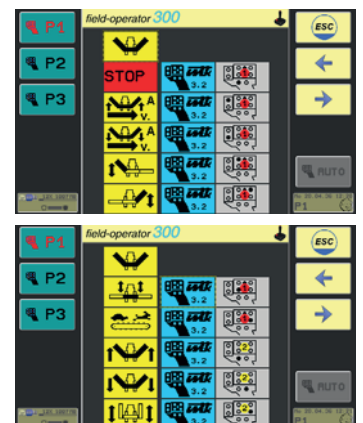
1. Select the function symbol using the joystick key block.
2. Select the level on the joystick using the level switch (E1/E2/E3)
3. Press the green clearing button (A0) on the joystick and simultaneously select the required function button (1 - 8)
4. The following symbols appear on the display:



The "Stop" function is function button 7 at level 1 on the joystick.

**Attention:** The numerals on the joystick symbol (1/2/3) show the relevant switch position!

- 1 Switch up (LED lights up red)
- 2 Switch centre (LED lights up yellow)
- 3 Switch down (LED lights up green)
5. Set all other groupings of function buttons following the same procedure



## Important points before starting work

### 1. Check

- Check the condition of knives and the knife holder.
- Check cutting drums for damage (see also chapter "Maintenance").

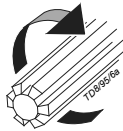
### 2. Switch-on the machine only in working position and do not exceed the prescribed power take-off speed.

A transfer, which is located near the gear, advises which p.t.o. speed your mower unit is equipped for.

**1000 Upm**

- Turn the p.t.o. on only when all safety devices (coverings, protective aprons, casings, etc.) are in proper condition and attached to the implement in the correct protective positions.

### 3. Pay attention to correct p.t.o. direction of rotation!



### 4. Damage protection!



The surface to be mowed must be free of obstructions or foreign objects. Such objects (e.g. large stones, pieces of wood, boundary stones, etc.) can damage the mower unit.

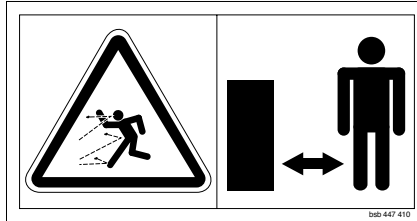
### In the event of a collision

- Stop immediately and switch off the drive.
- Carefully check the implement for damage. The mowing discs and their drive shaft must be checked in particular.
- Have the implement checked also by a specialist workshop if necessary.

### After any contact with foreign objects

- Check the condition of knives and the knife holder (see chapter "Maintenance and service").
- Retighten all knife screw fittings.

### 5. Stay clear while engine is running.



- Keep people out of the danger zone - foreign bodies which can be ejected by the mower could injure them.

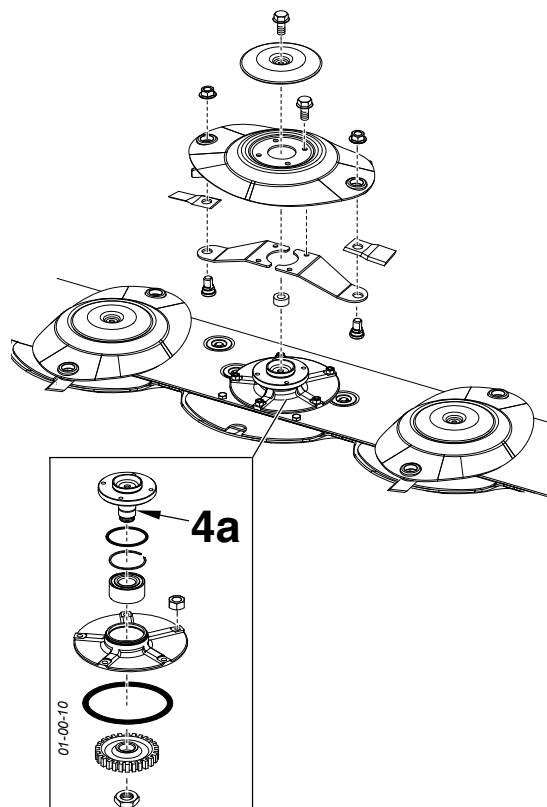
Special care is necessary on or near stony ground.

### 6. Wear hearing protection



The noise level in the workplace can deviate from the measured value (see Technical Data) partly because of the differing cabin types of various tractors.

- If a noise level of 85 dB (A) is reached or exceeded, the farmer must have suitable hearing protection in readiness (UVV 1.1 §2).
- If a noise level of 90 dB (A) is reached or exceeded, the hearing protection must be worn (UVV 1.1 § 16).



**Safety hints:**

see supplement-A1 points 1. - 7.)



**Attention!**

**After the first hours of operation**

- Retighten all knife screw fittings.



**Attention!**

**Check all protection devices before operation. In particular ensure that the side protection is properly folded down in the transport position!**

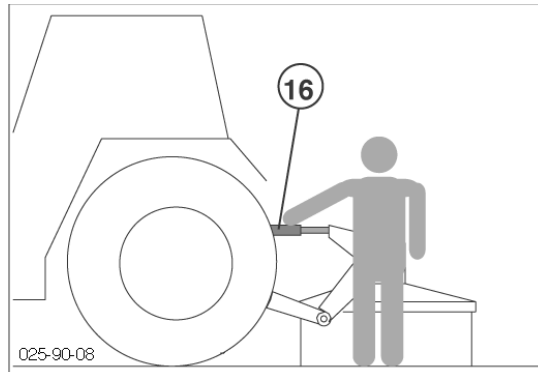
## Mow

1. Adjust cutting height by turning upper link spindle (inclination of the cutting discs max. 5°).

2. To mow, gradually supply power to the p.t.o. before entering the crop and bring the mowing discs up to full revs.

Smoothly increase the p.t.o. speed, in order to avoid noises in the free-wheel conditioned by the system.

- Adjust travel speed to terrain and crop.



### Adjustment:

- Frame horizontal (15).
- Fix hydraulic lower links in a way that the machine cannot swing out sideways.

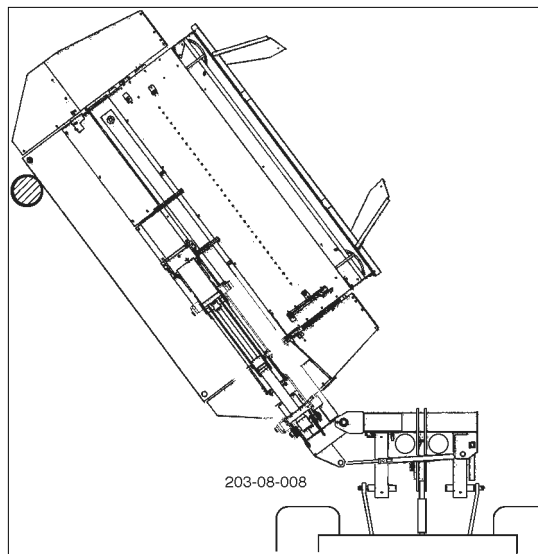
## Collision safety device

When mowing around trees, fences, boundary stones etc., collisions between the cutter bar and obstacles can occur despite careful and slow driving. Therefore, in order to prevent such damage, collision protection has been planned for the cutting device.

### How the hydraulic collision safety device functions

When a collision with an obstacle occurs, the cutter bar swivels back far enough for it to pass by.

- Then compressed air swings the cutter bar back automatically to the starting position.



Attention!

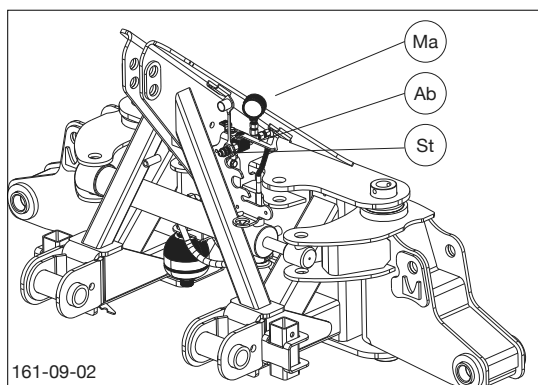
It is not the intention of the collision safety device to prevent damage to the machine when working at full speed.

### Setting reservoir pressure:

- Set servo valve depressurised on tractor
- Connect plug-in connector (St) to tractor
- Open stop valve (Ab)
- Move servo valve on tractor until set pressure is reached -> see manometer (Ma) display

**Set pressure: 110 bar**

- Close stop valve (Ab)



## Working on slopes



**Take care when turning on slopes!**

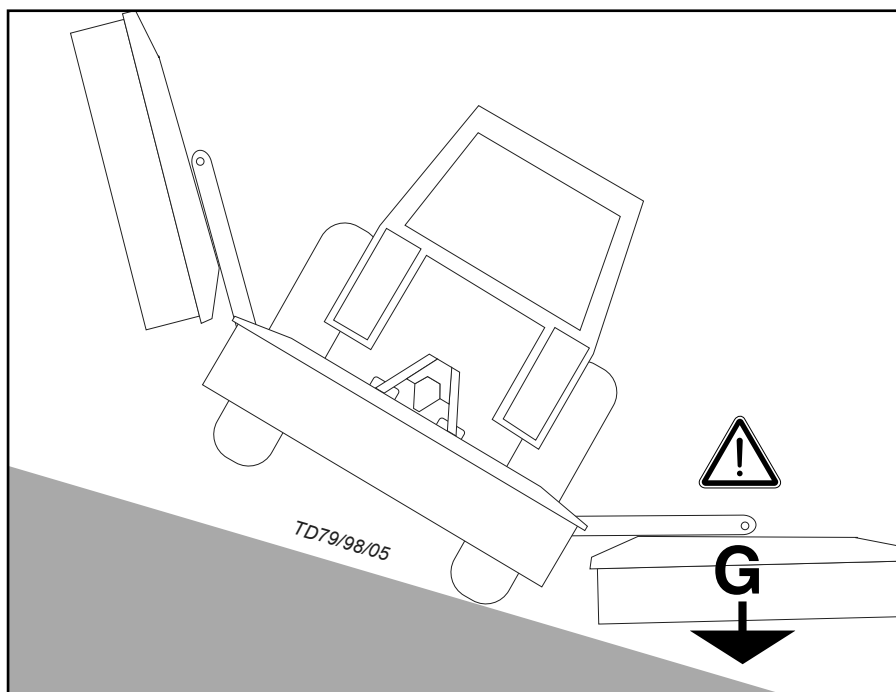
**The tractor's travelling characteristics are influenced by the weight (G) of the mower unit. This can lead to dangerous situations, especially on slopes.**

### Safety advice

- Reduce speed in curves accordingly.
- It is better to travel in reverse on a slope than to carry out a risky turning manoeuvre.

### Danger of tipping occurs

- when the mower units are in a raised position
- when travelling in a curve with the mower units raised



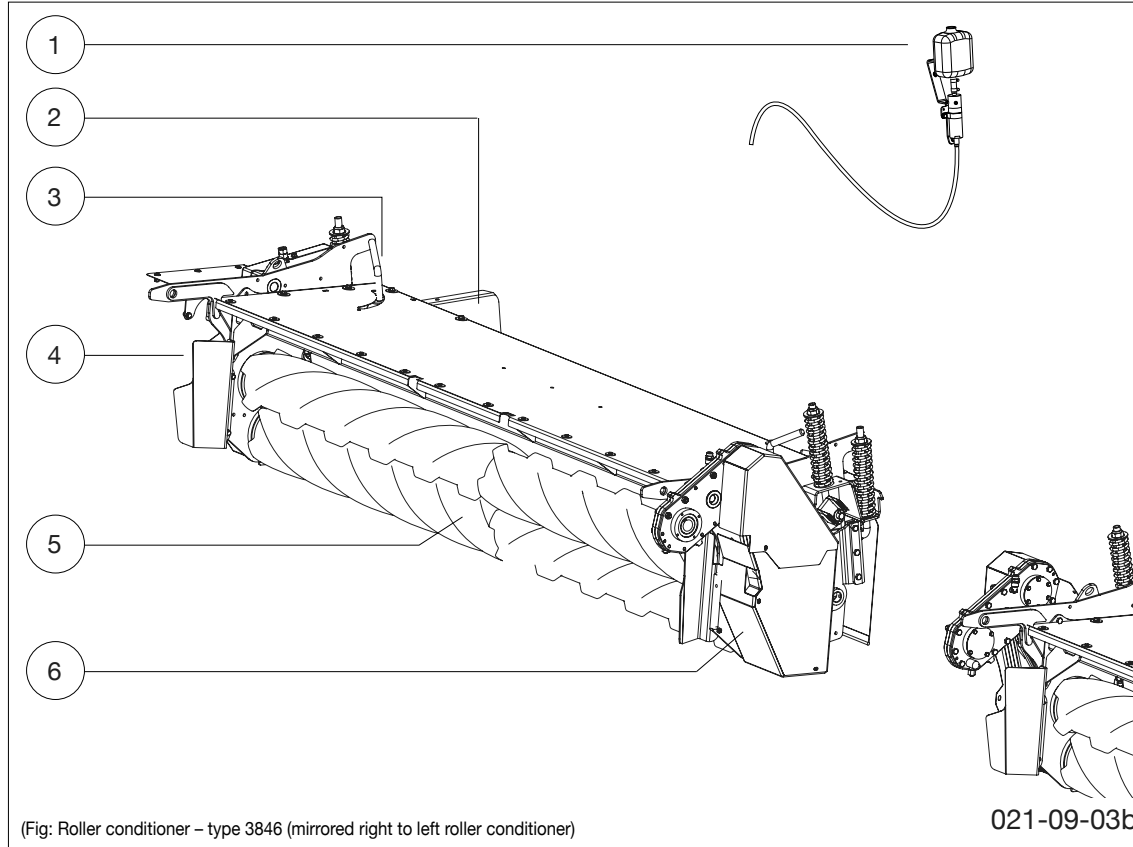
## Operation

The roller conditioner is suitable for lucerne and clover types. Two driven intermeshing rollers crush the fodder. This damages the plant's natural wax coating and the drying time is accelerated.



### Safety tip:

Before initial operation read and observe the operator's manual, especially the safety tips.



(Fig: Roller conditioner – type 3846 (mirrored right to left roller conditioner))

### Designations:

- |   |                                   |
|---|-----------------------------------|
| (1) Central lubricating unit (on lighting carrier)  | (4) Maintenance unit: chain drive |
| (2) Adjustable swath board                          | (5) Upper and lower rubber roller |
| (3) Adjusting unit for swath board (left and right) | (6) Maintenance unit: belt drive  |

## Adjustment possibilities

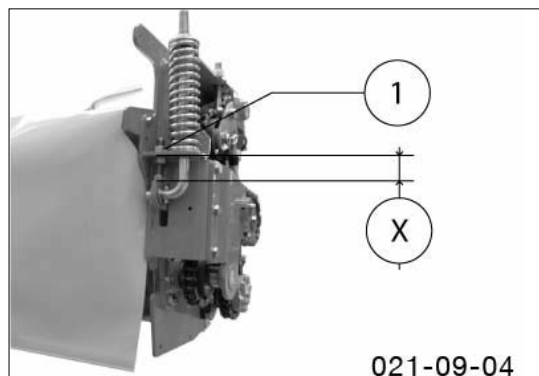
When delivered the roller conditioner is preset for medium intensity. For optimum adaptation to the surrounding conditions the following adjustments can be made:

### Distance of rollers from each other:

The roller gap is set identically on the left and right side with the adjusting screw (1). (Fig: 021-09-04) base setting: (X) = 45 mm.



By reason of component tolerances an uneven roller gap can occur despite the base setting. Check and if needed reset the adjusting screw (1) on one side.



### Warning!

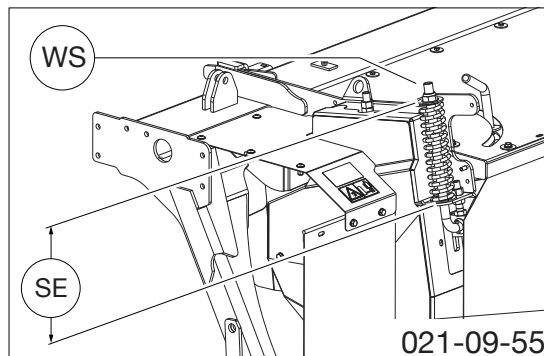
Rotating components, danger of catching. Never open or remove protection devices when the motor is running.

## Upper roller spring tension:

The upper roller is moveable and is tensioned left and right with a spring.

The spring tension intensity can be adjusted at any time with nut (WS).

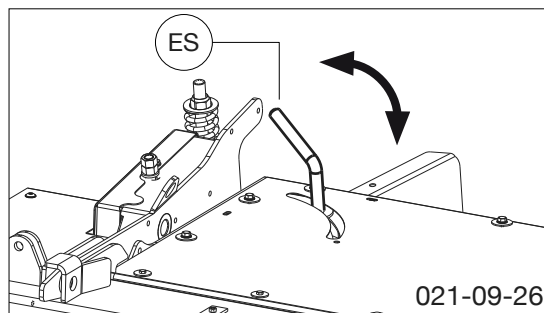
(Fig: 021-09-55)



**Standard setting (SE): 210 mm**

## Set swath width:

The swath boards shape the cut and conditioned fodder to the desired swath width. Adjusting the swath board is carried out identically left and right by opening and adjusting the adjusting screw (ES). (Fig: 021-09-26)



## Operation

### Travelling speed:

Adapt the speed to fodder consistency. Travelling to fast reduces conditioning quality and evenness.

### Working without roller conditioner:

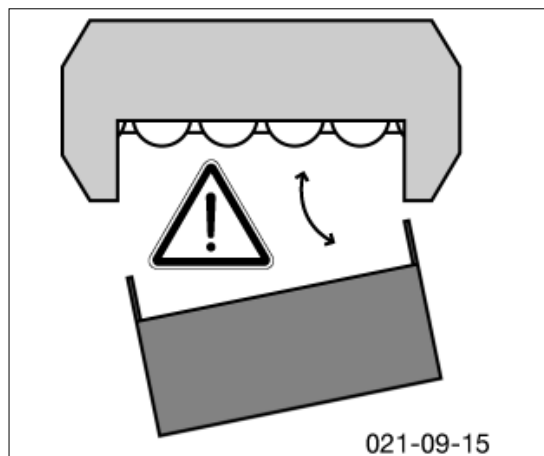
If required the roller conditioner can also be removed and replaced with a tine conditioner or swath former. (Contact sales department for more information.)

As a unit a machine with roller conditioner is fitted correctly with the proper protective devices. Should the conditioner be removed then the mower unit is no longer completely cased. In this case mowing must not take place without fitting additional protective devices!



**Beware!**

**Danger of injury through flying parts. Keep people at a sufficiently safe distance during mowing.**



**Take note!**

**If the roller conditioner is removed, the disc mower cutting blades can be accessed freely. Great danger of injury now exists. For mowing without a conditioner, protective devices especially designed for this type of operation must be fitted to the mower bar. For a new machine with conditioner these protective devices are not included in the delivery; these parts must be ordered additionally (see spare parts list, component group "REAR PROTECTION")**

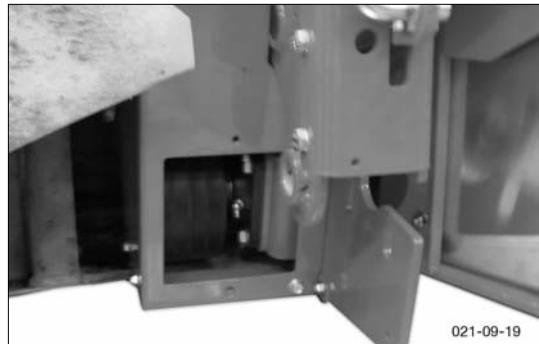
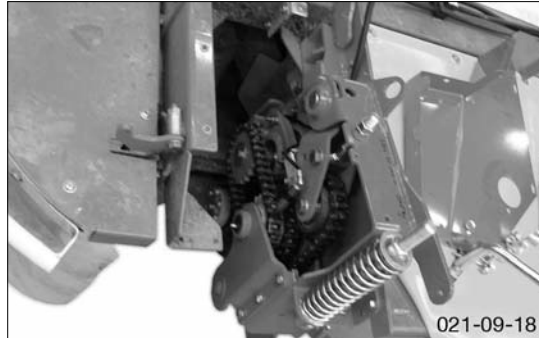
## Maintenance

### Cleaning: (every 20 operating hours)

- Unscrew the chain drive casing cover (Fig: 021-09-18)
- Unscrew the belt drive maintenance opening cover (Fig: 021-09-19)
- Remove deposited dirt
- Clean rubber rollers



**Dirt can impair lubrication that will subsequently cause equipment damage!**



**Take care!**

**Turn motor off and remove key before any maintenance and repair work**

### Chain drive maintenance unit (Fig: 021-09-17)

#### Lubrication: (every 20 operating hours)

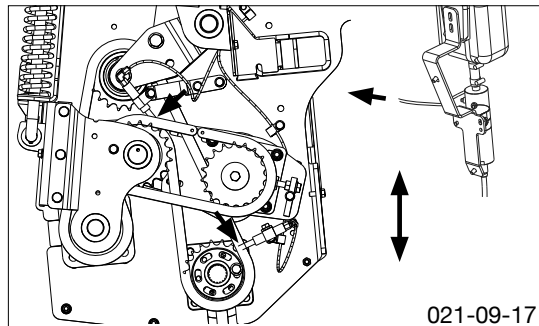
The driving chains are lubricated through the central lubricating device.

A lubricating impulse is released every time the mower is raised

- Lubricating device function check
- Check oil level. (Oil container is located on the lighting carrier)



**Check the central lubricating device oil level before each operation. Operating with insufficient lubrication leads to drive chain damage.**



**Note:**

**The following oils are recommended for the central lubricating device:**

- HEES 46 synthetic oil

- HLP 46 hydraulic oil

**Use only new oil!**

### Chain tension: (every 60 operating hours)

(Fig: 021-09-16)

#### Short drive chain

Check chain tension with your thumb on the checking point (PP1). Optimal tolerance: 3.5 – 5 mm.

Alter chain tension:

- Loosen (3) screws
- Adjust straining screw (WS1)

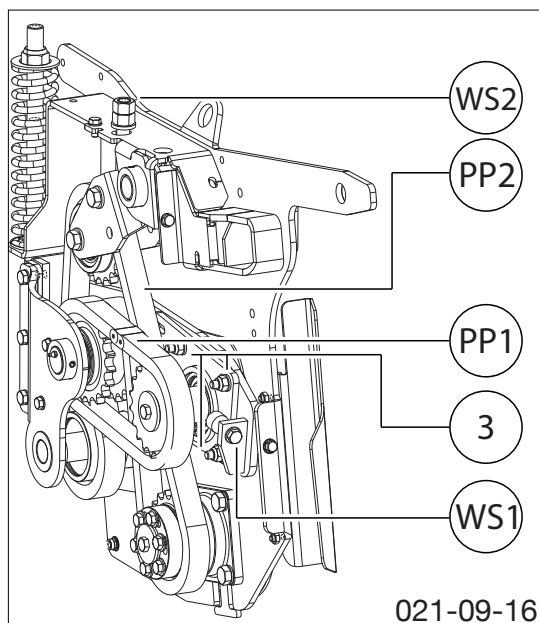


#### Long drive chain

Check chain tension with your thumb on the checking point (PP2). Optimal tolerance: 5 – 8 mm.

Alter chain tension:

- Adjust straining screw (WS2)



**Altering the roller position:** (when required) (Fig: 021-09-11)

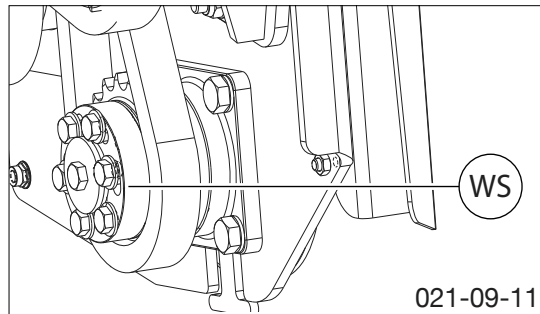
After the drive chains have been tensioned several times the roller position changes.

Alter roller position:

Loosen the screws (WS) and rotate the roller. Set the position of the lower roller so that the profile of both rollers is optimally interlock and not touch each other.



**Optimal roller position prevents premature wear and tear of the rubber rollers.**



**Drive belts: (when required)** (Fig: 021-09-12)

Check belt tension:

- Standard setting (SE): 175 mm

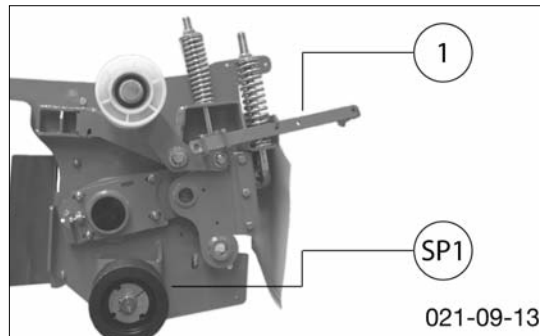
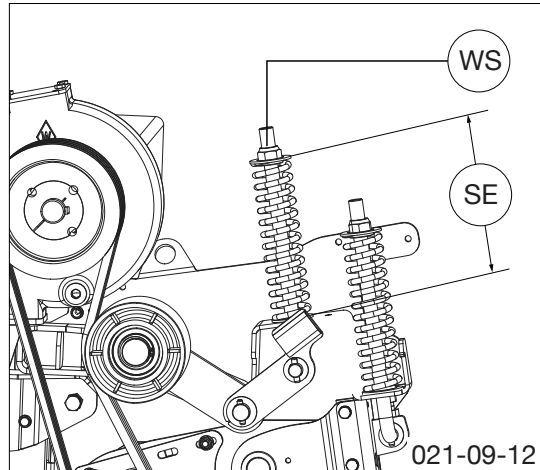
Alter belt tension:

- Adjust screw (WS)

Replace belts:

When the drive belts show signs of damage or wear, they must be replaced. **(Attention: Always replace the complete belt set!)**

- Loosen belt tension. To assist, the belt tightener can be deactivated using the cutter quick-change spanner (1) (Fig: 021-09-13)
- Replace belts
- Reset belt tension

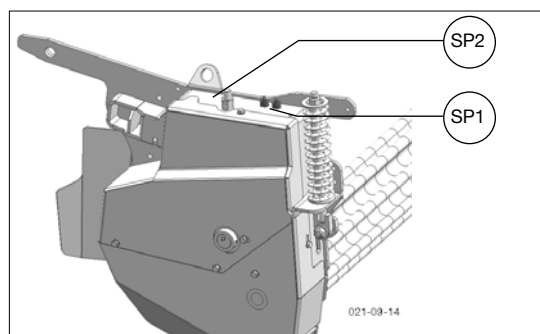


**Lubrication:** (Fig: 021-09-13/14)  
**(every 20 operating hours)**

- SP 1

**(every 100 operating hours)**

- SP 2



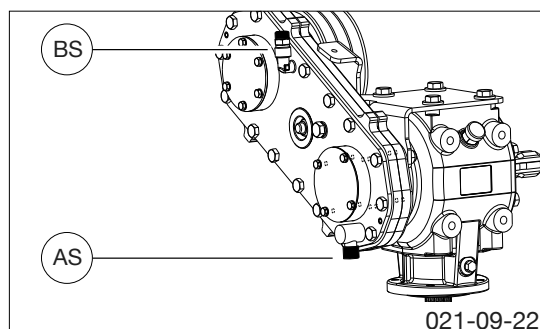
**Gear oil:** (Fig: 021-09-22)

(every 100 operating hours)

Gearing is always located on the inner side of the cutter bar

- Open drain plug (AS) and drain oil.
- Fill with gear oil (700 ml) through the refill screw (BS)

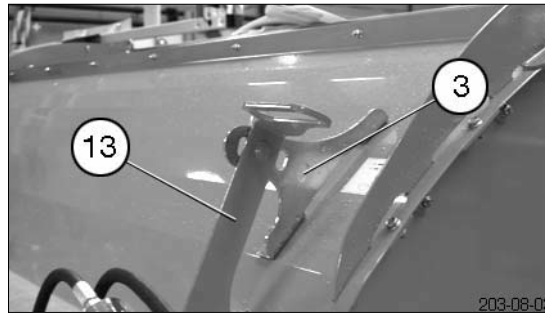
**(Fully synthetic oil for high temperature lubrication, ISO VG class 220)**



## Mowing with the conditioner

### The conditioning effect can be modified:

- with lever (13), which adjusts the gap between adjustable plate and rotor. The conditioning effect is most intense with the lever at the bottom of its travel (Pos. 3). However the crop should not be chopped.



## 700 r.p.m. for rotor

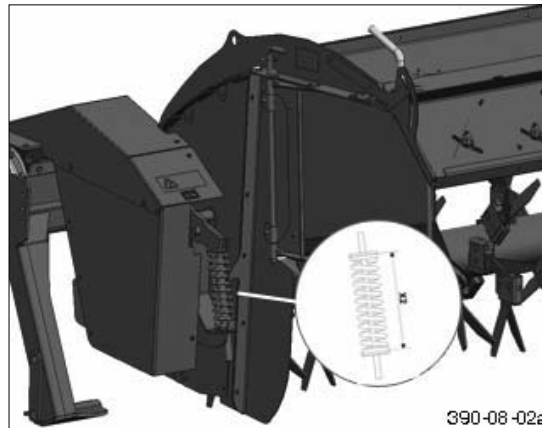
- less damage to crop

Pulley, belt and belt guard must be replaced.  
See replacement parts list for parts.

## Correct belt tension

### Check X2 size

Rotor speed (r.p.m)*	Measurement X2 (mm)
700	192
900	202

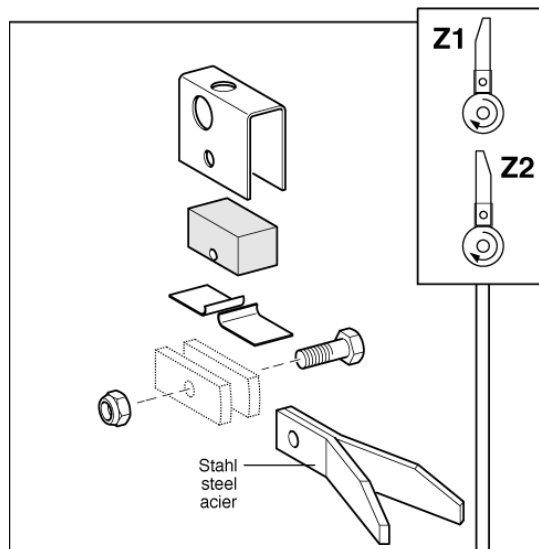


## Position of the rotor prongs

**Pos. Z1:** position of the rotor prongs for normal operating conditions

**Pos. Z2:** for difficult operating conditions if for example the chaff wraps around the rotor

The rotor prongs turn 180° (pos.Z2). This prong position removes the problem in most cases. The preparation effect is thereby somewhat reduced.



\* depending on which pulley the tine conditioner is fitted with)

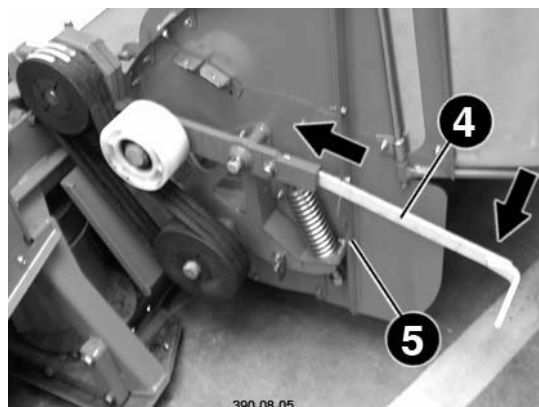
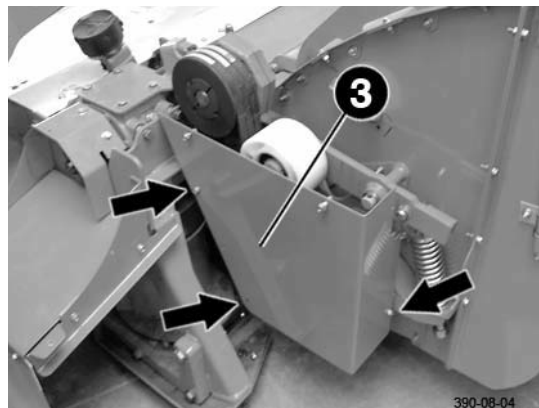
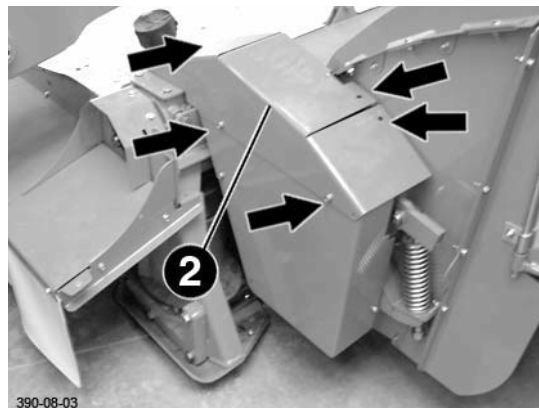
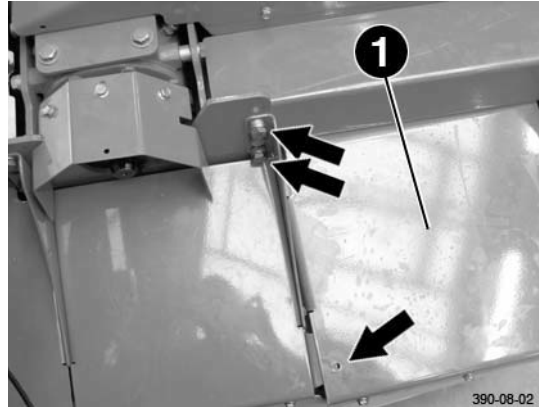
## Dismounting and mounting the conditioner

### 1. Decrease relieving pressure

- Lower pressure to approx. 80 bar using the operating device
- For procedure see "Power control" or "ISO Bus" operation

### 2. Remove safeguards

- Remove safeguard (1)
- Remove safeguard (2)
- Remove safeguard (3)



### 3. Remove belts

- Insert flat lever (4)
- Push flat lever down and secure in catch (5)
- Remove belts



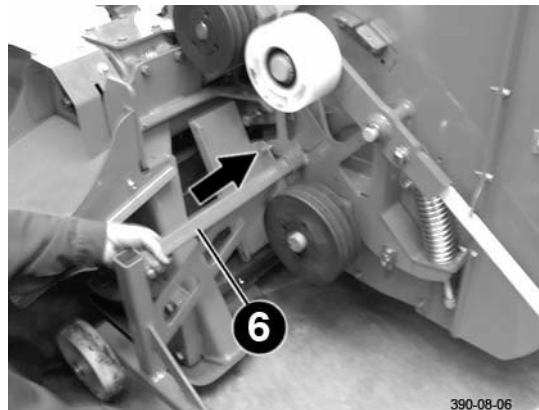
#### Warning!

Before dismounting the conditioner reduce the relief hydraulic pressure.

Otherwise the danger exists that the mounting frame of the cutter bar could swivel up in jerks and jolts when uncoupling the lower link.

#### 4. Fit transport wheels

- Fit transport wheels (6) left and right



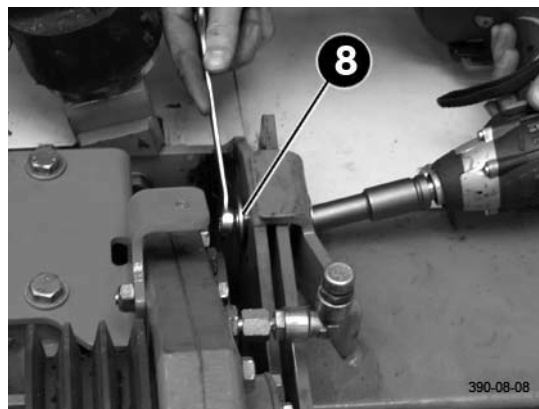
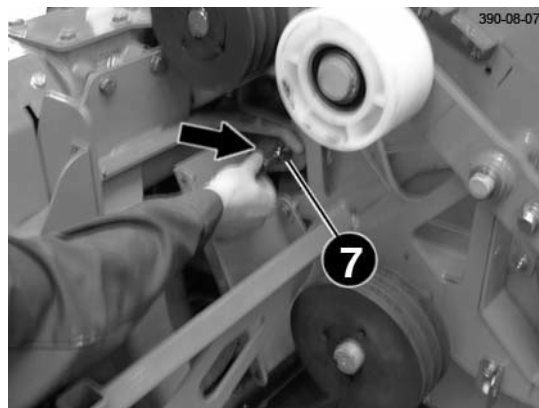
#### Important!

When mowing without conditioner, protective elements and the both swath formers must be mounted additionally on the cutter bar. Parts see spare parts list.

#### 5. Release left and right locks

- Unscrew adjusting screw (7) left and right
- Remove screw (8) left and right
- Conditioner is now released from mower unit

Note: The upper guard plate on the left side must be removed first



#### 6. Remove conditioner

- Pull conditioner out the back of the machine
- Always park conditioner steadfast.

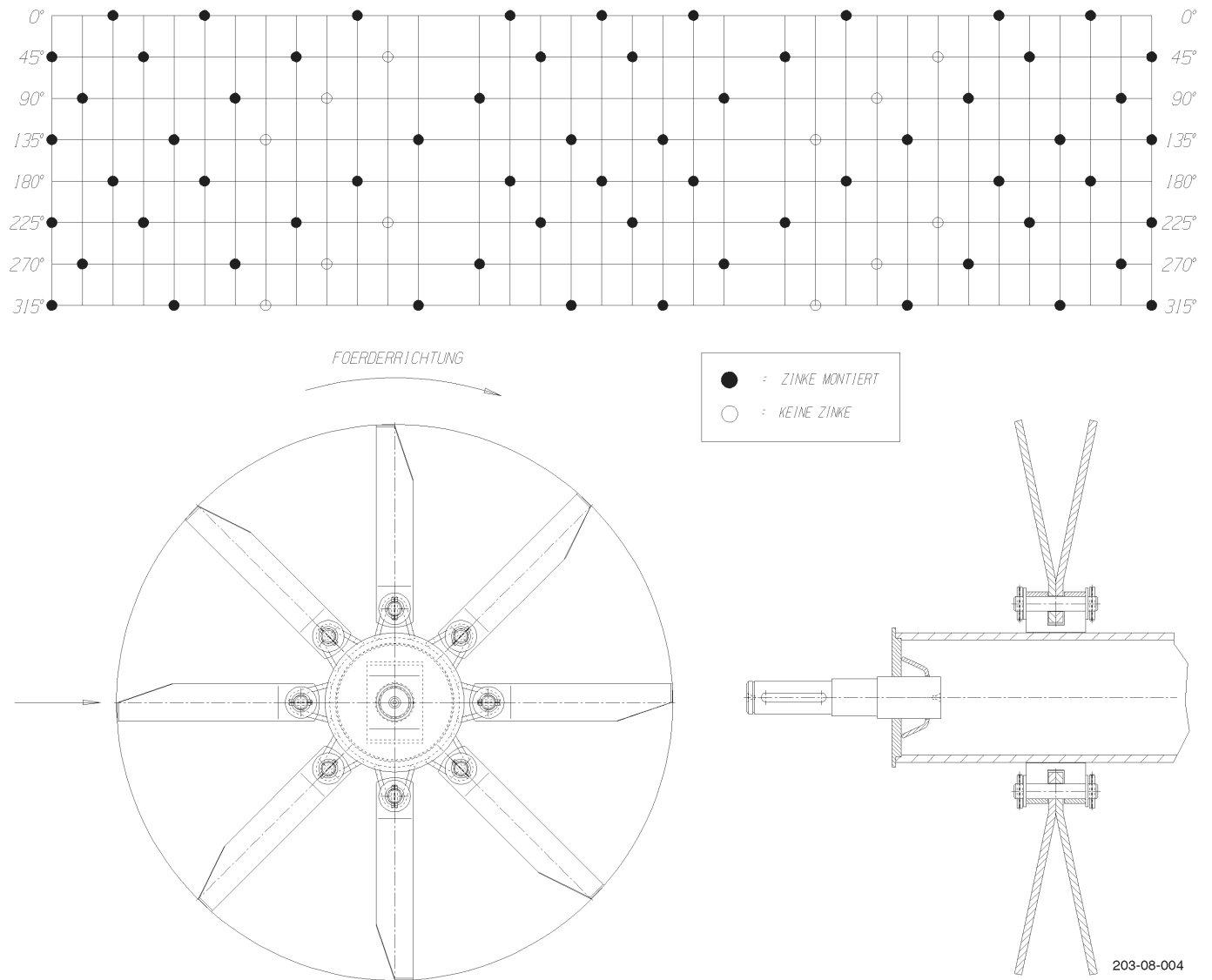
#### 7. Refit guard plate

#### 8. Fit protective elements or swath former

Mounting the conditioner takes place in the corresponding reverse order.

# NOVACAT V10

(Type 3846)



## Mowing without Conditioner

Take particular notice when the conditioner is detached from the cutter bar

### Safety hint

A machine with a conditioner (CR) as a complete unit is fitted with proper protection elements.

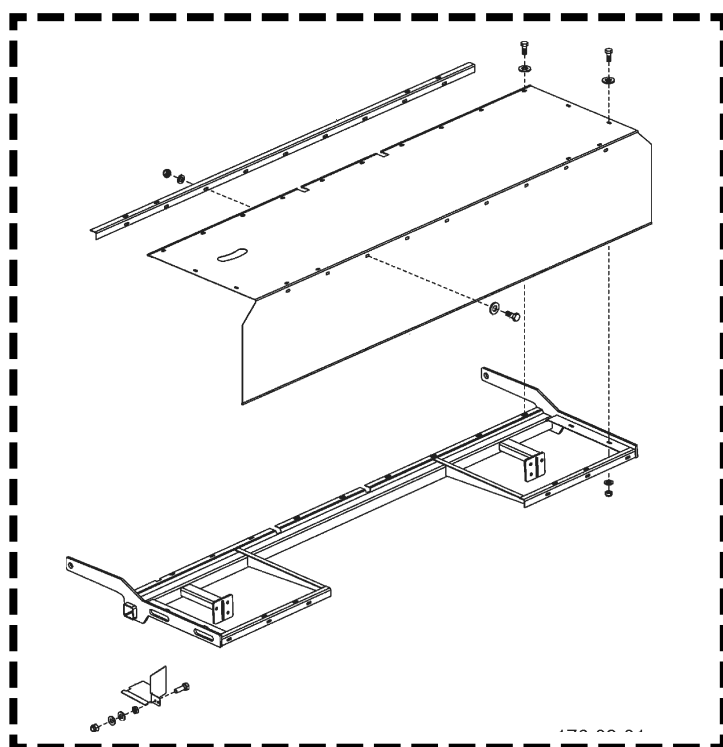
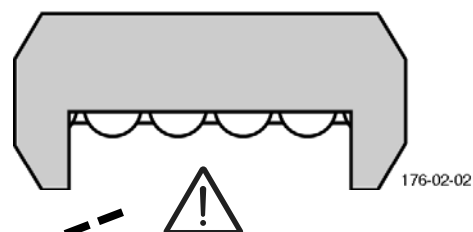
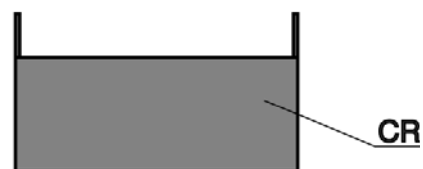
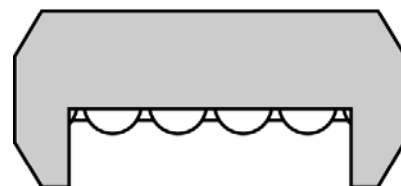
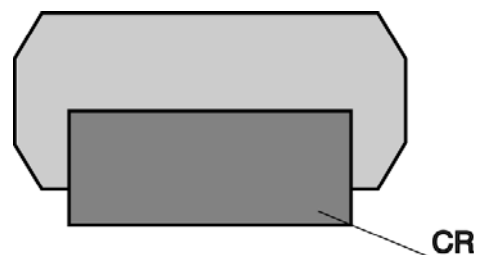
Should the conditioner be detached however, the mowing unit no longer has complete protection covering. In this situation mowing may not take place without additional protection elements!



**Beware!**

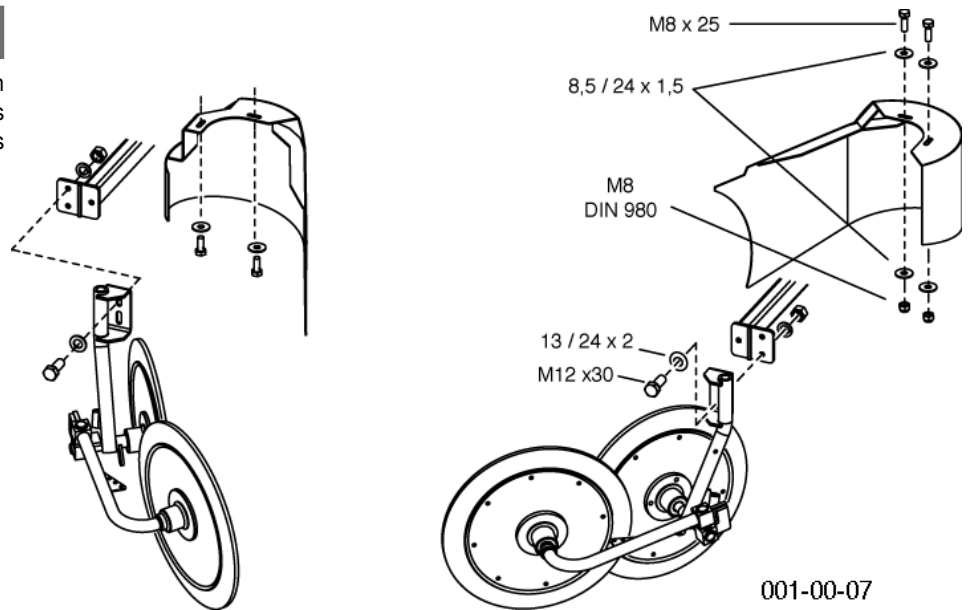
Protection elements, especially intended for this mode of mowing, must be fitted to the mowing unit.

These protection elements are not included in the delivery of a new machine with a conditioner, the parts must be additionally ordered (see Spare Parts List, component group "REAR PROTECTION").



## Swath Discs

With the swath discs a narrower swath is formed when mowing. This prevents them from being run over by the tractor's wide tyres.

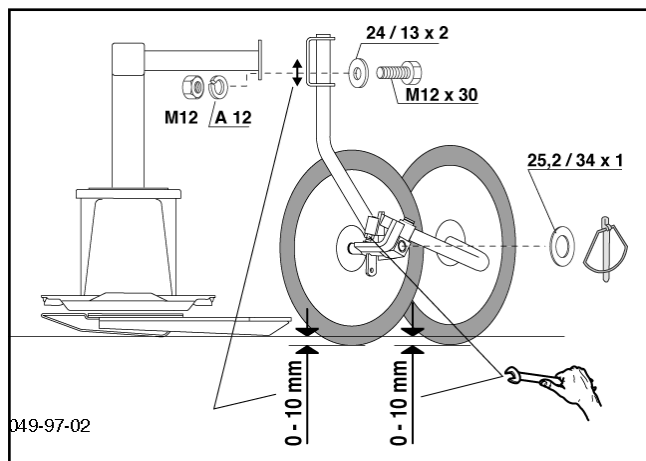
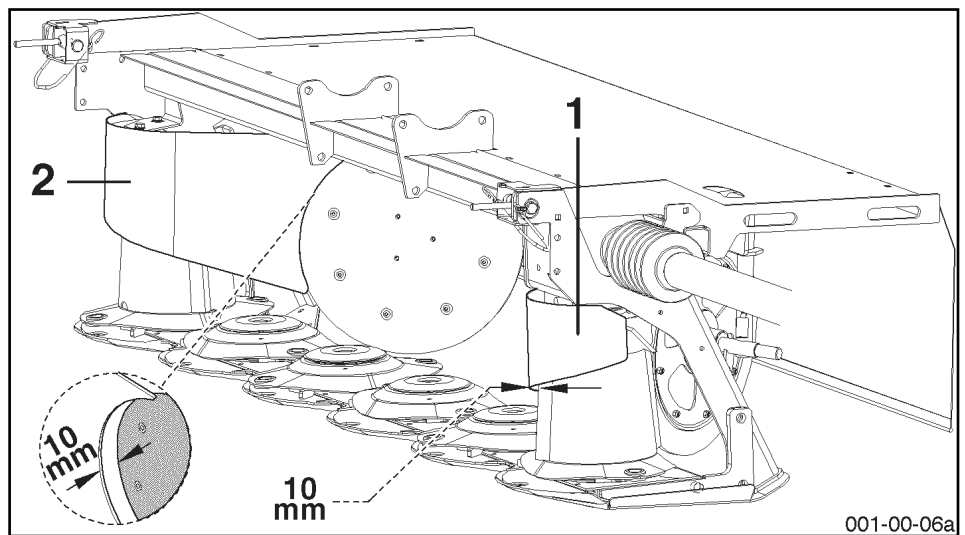
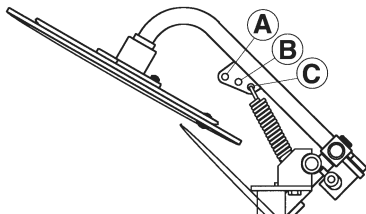


## Mount guide plates

- left (1) and right (2)

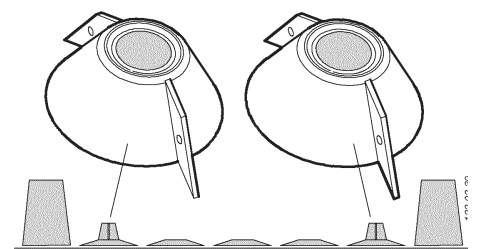
## Setting both tension springs

- A = for high dense forage
- B = basic setting
- C = for short forage



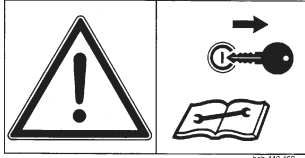
## Flat cone conveyor (Optional extra)

- Flat cone conveyor are recommended to improve the conveyance rate of swath deposits, particularly with heavy, thick fodder components
- For individual parts see Spare Parts List



## Safety point

- Turn engine off when adjustment, service and repair work is to be done.



## General maintenance hints

In order to keep the implement in good condition after long periods of operation, please observe the following points:

- Tighten all screws after the first hours of operation.

### In particular check:

- blade screws on the mowers
- tine screws on the swather and tedder.



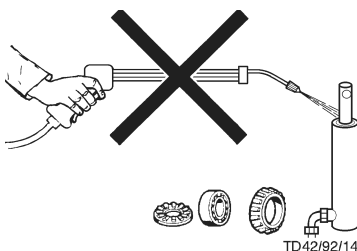
## Spare part

- The **original components and accessories** have been designed especially for these machines and appliances.
- We want to make it quite clear that components and accessories that have not been supplied by us have not been tested by us.
- The installation and/or use of such products can, therefore, negatively change or influence the construction characteristics of the appliance. We are not liable for damages caused by the use of components and accessories that have not been supplied by us.
- Alterations and the use of auxiliary parts that are not permitted by the manufacturer render all liability invalid.

## Cleaning of machine parts

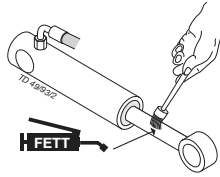
**Attention!** Do not use high-pressure washers for the cleaning of bearing- and hydraulic parts.

- Danger of rust!
- After cleaning, grease the machine according to the lubrication chart and carry out a short test run.
- Cleaning with too high pressure may do damage to varnish.



## Parking in the open

When parking in the open for long periods of time, clean piston rods and then coat with grease.



## Winter storage

- Thoroughly clean machine before storage.
- Put up protection against weather.
- Change or replenish gear oil.
- Protect exposed parts from rust.
- Lubricate all greasing points according to lubrication chart.

## Drive shafts

- see notes in the supplement

### For maintenance please note!

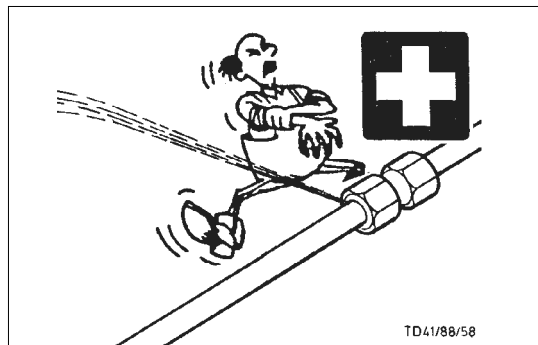
The instructions in this operating manual are always valid.

In case there are no special instructions available, then the notes in the accompanying drive shaft manufacturer's instructions are valid.

## Hydraulic unit

### Caution! Danger of injury or infection!

Under high pressure, escaping fluids can penetrate the skin. Therefore seek immediate medical help!



### After the first 10 operating hours and then every consecutive 50 operating hours

- Check the hydraulic unit and lines for tightness and retighten screw connections if necessary.

### Before operation

- Check hydraulic hoses for wear.

Replace worn or damaged hydraulic hoses immediately. The replacement hoses must meet the manufacturer's technical requirements.

Hose lines are subject to natural ageing. The period of use should not exceed 5 – 6 years.



### Safety points!

- Turn engine off when adjustment, service and repair work is to be done.

- Do not work under the machine without safe support.

- Retighten all screws after the first hours of operation..



### Repair Instructions

Please refer to repair instructions in supplement (if available)

## Oil change on cutter bar

### Changing oil

- Change oil after first 100 operating hours the at least once a year
- Raise cutter bar on the outer side
- Take out oil drain plug (62), let run out and duly dispose waste oil.

**Quantity:** 4,0 Liter SAE 90

### Cutter bar oil level check

- Under normal operating conditions, oil is to be replenished annually.

#### 1. Lift one side of the mower bar (X1) and support.

X1 = Dimension from the ground to the upper edge of the mower bar

- The side where the oil refill screw is located remains on the ground.
- Lift the other side of the mower bar about X1 and support with a suitable prop.

X1 = 235 mm

#### 2. Let mower bar stand in this position for some 15 minutes.

- This time is necessary to allow the oil to gather in the lower area of the mower bar.

#### 3. Remove oil refill screw (63).

The oil level is measured at the oil refill screw hole.

#### Important!

In doing so the cutter bar must be in horizontal position.

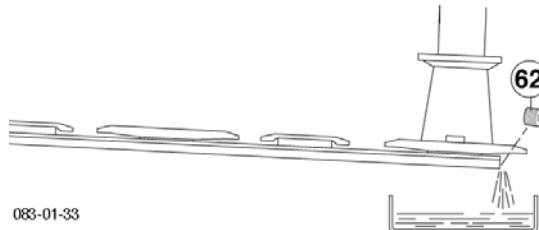
- Take out oil filler plug (63) and top up oil "SAE 90"

#### 4. Oil level check

- Measure the distance up to the level of the oil.
- The oil level is correct when the oil comes up to the level screw<sup>1)</sup> (OIL LEVEL).



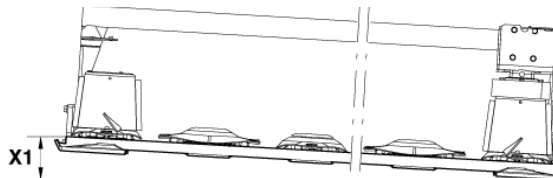
- Too much oil leads to the mower bar overheating during operation.
- Too little oil does not guarantee the necessary lubrication.



**Note:**

- Change oil when at operating temperature.

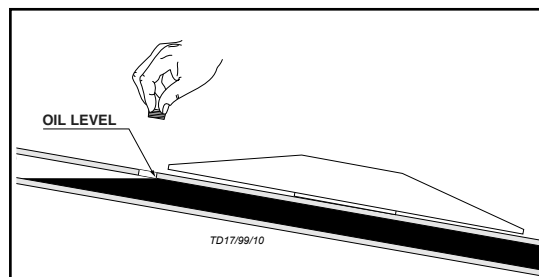
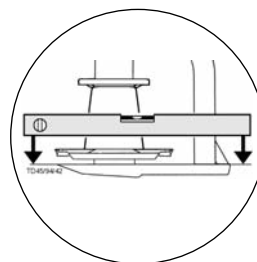
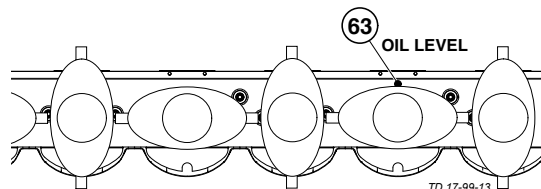
The oil is too viscous when cold. Too much old oil remains stuck to the gearwheels and because of this any suspended matter present cannot be removed from the gearing.



**Note:**

- Check the level of the oil at a working temperature.

When cold, the oil is too viscous. Too much used oil would stick to the gear teeth, thus giving a false reading.



<sup>1)</sup> The oil filler plug (63) is also the level screw (OIL LEVEL)

## Gearing maintenance



**Note:**

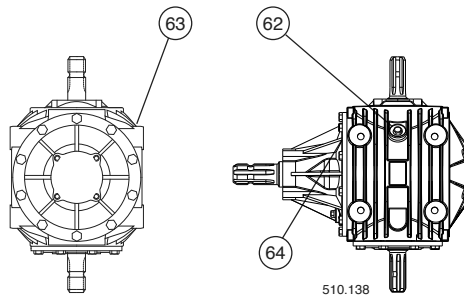
Under normal operating conditions, oil is to be replenished annually (OIL LEVEL).

### Starting transmission (EG)

- Change oil after the first 50 operating hours.
- Change oil after 100<sup>h</sup> at the latest.

**Quantity:**

4,0 Liter SAE 90

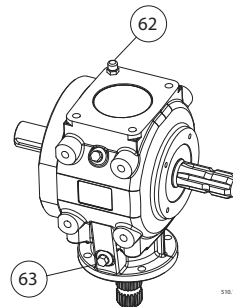


### Angular gear (WG)

- Change oil after the first 50 operating hours.
- Change oil after 100<sup>h</sup> at the latest.

**Quantity:**

0,8 Liter SAE 90

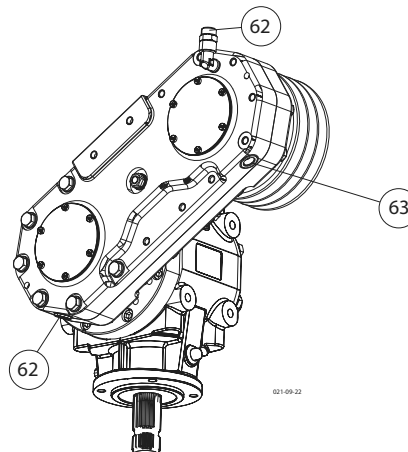


### Spur gear for conditioner (SG)

- Change oil after the first 50 operating hours
- Change oil after the 100th hour at the latest

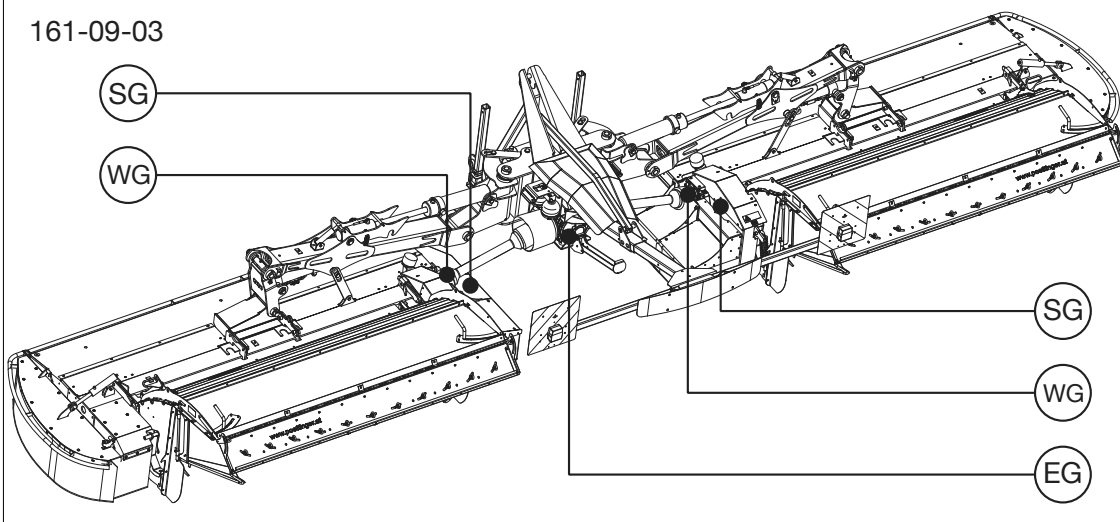
**Quantity:**

0,7 litre fully synthetic oil for high temperature lubrication, ISO VG class 220



- \* Filler opening (62)
- \* Oil outlet (63)
- \* Oil level control (OIL LEVEL)

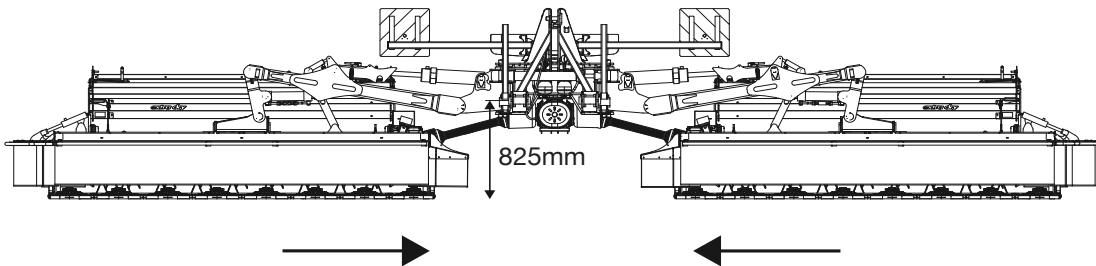
161-09-03



## Maintaining mower cardan shafts

Select the following mower setting for maintenance to both mower cardan shafts:

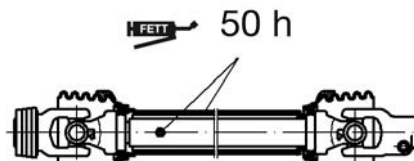
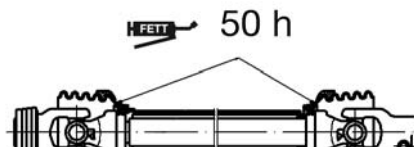
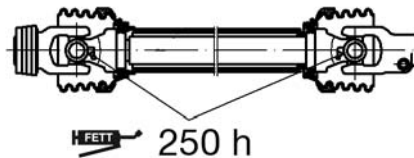
- Set lower link height to approx. 825 mm
- Set the mower units to the "Working position - narrow".
- Position the mower in such a way that the cardan shafts are extended by 50 - 60 mm. Uncover the grease nipples by pushing the black sleeve aside.



161-09-06

### Lubricating points

- 2x cardan joints: grease every 250 operating hours  
Quantity: Grease until the grease escapes at the seals
- 2x protective sleeve bearings (outside at the protective funnels): grease every 50 operating hours  
Quantity: 3 strokes
- 2x profiled tube grease nipples and the associated inner protective sleeve bearings: every 50 operating hours (opposite each other)  
Quantity: profiled tube grease nipples including the inner protective sleeve bearing: 5 strokes



#### Note:

**The grease nipples are arranged opposite each other. Both nipples need to be greased.**

### Friction and overrunning clutch

Venting the clutch:

1. At least once a year (preferably after the winter break, before the first use in the spring)
2. After a longer period of inoperation.
3. After repeated washing of the machine.

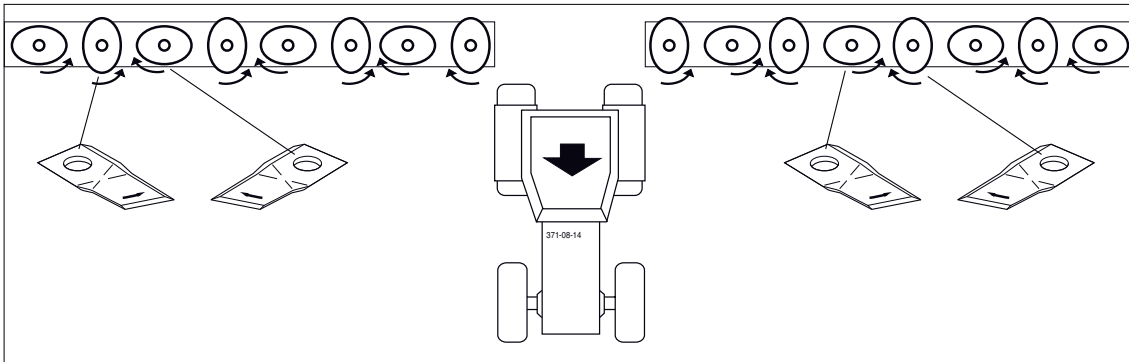
## Installing cutter blades



**Take note!**

The arrow on the cutter blade shows the cutter disc's direction of turn.

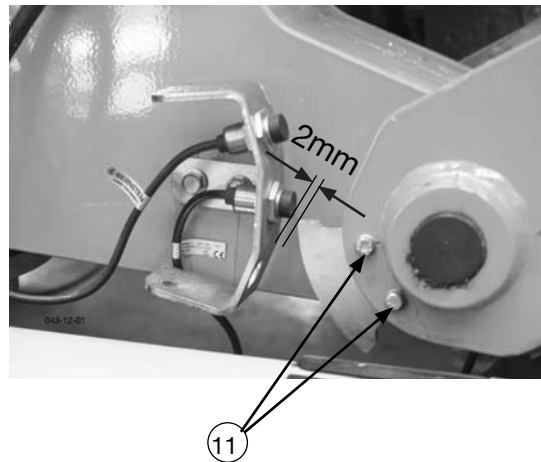
- To install, clean back plates from varnish.



## Setting the field transport position (end-of run turns)

The following guide is valid for both cutter bars.

1. Set sensors' gap (2 mm).
2. Raise both cutter bars until hydraulic cylinders have travelled in to a measurement of "1170 mm".
3. Loosen plate screws (11).
4. Move plate (10) in slot until edge is positioned just at sensor (S1).
5. Retighten plate screws.

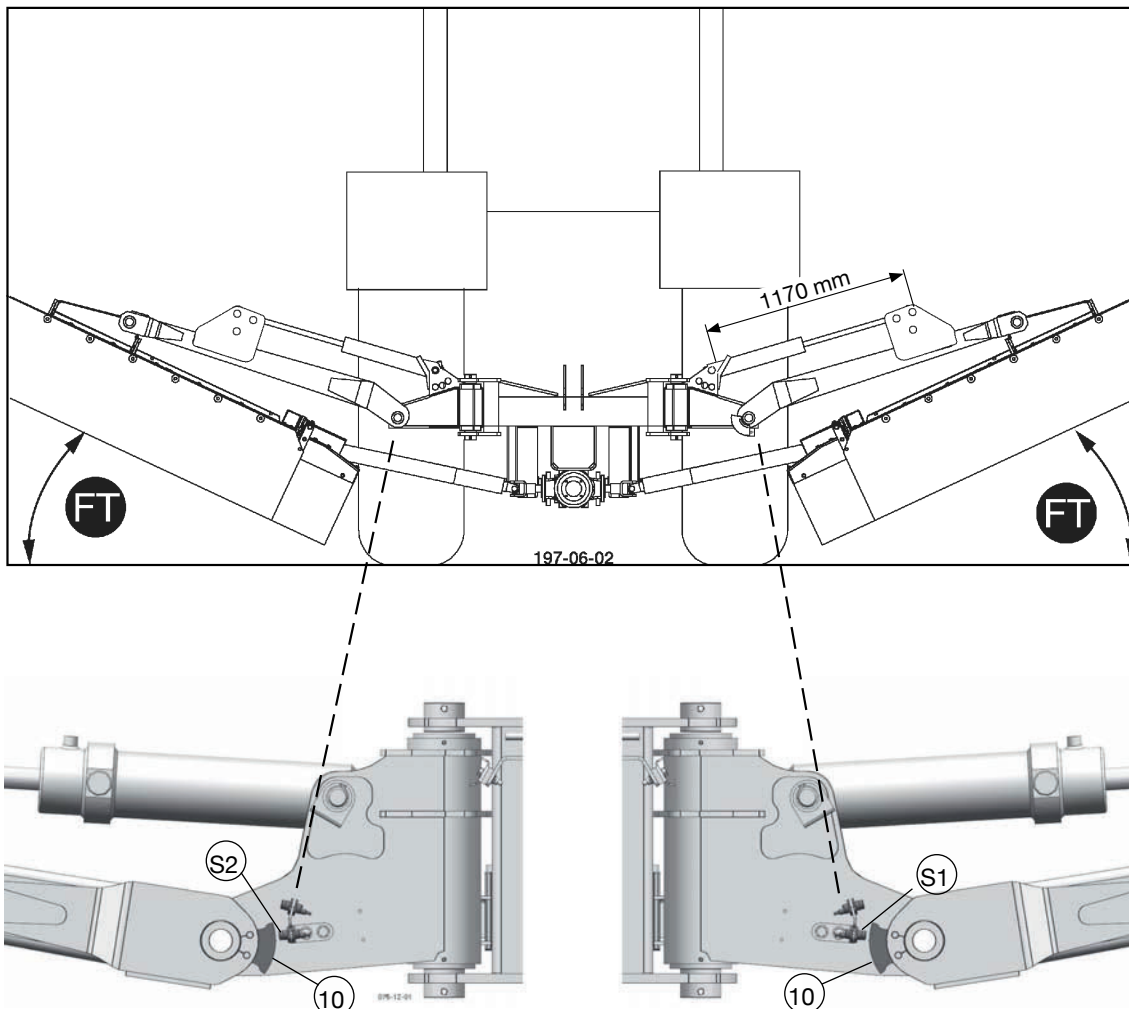


### Adjustment of sensors

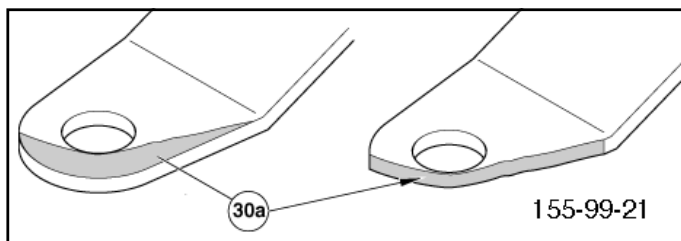
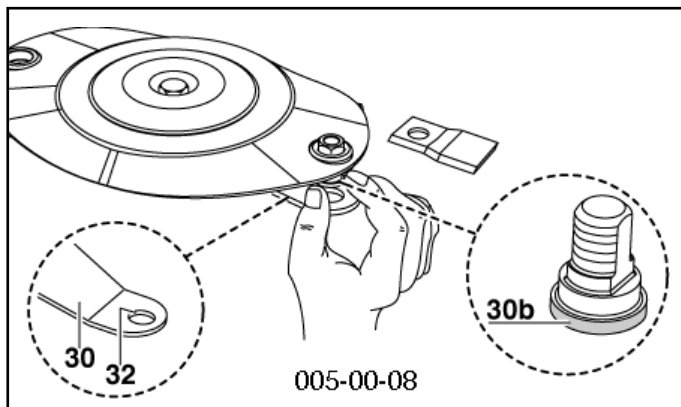
Always carry out adjustments and controls in that operating position where the distance from the sensor is smallest.

When doing this, a possible assembly clearance should also be taken into account.

**Distance 2 mm**

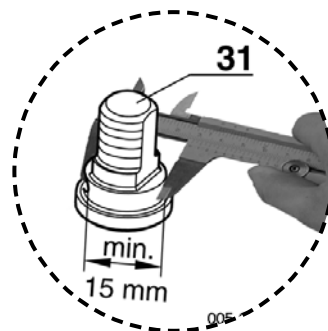


## Checking wear on mowing blade holders



### Wearing parts are:

- mounting of mowing blades (30)
- bolts of mowing blades (31)



### Attention!

**Danger of accident if wearing parts are worn**

If such wearing parts are worn out they must not be used any longer.

Otherwise accidents may be caused through parts that are flung away (e.g. mowing blades, fragments...)

### Process of visual control:

1. remove mowing blades
2. remove grass and dirt
  - around pin (31)



### Check the suspension of mowing blades as to wear and other damage:

- every time before bringing the machine into operational use
- several times during use
- immediately after hitting an obstacle (e.g. a stone, piece of wood, metal,...)



### Attention !

#### Danger of accident if:

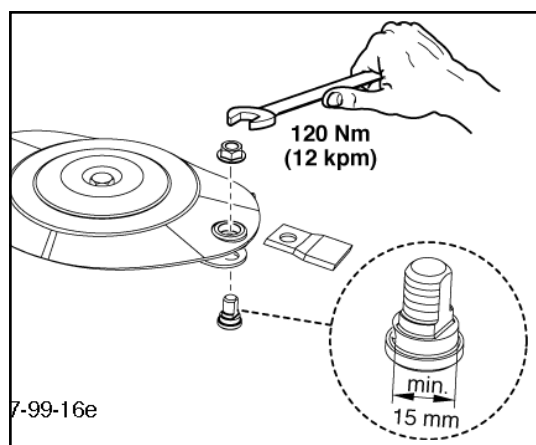
- the central part of pin of blade must have a minimum of 15 mm
- the wearing area (30a) has reached the edge of the boring
- the pin of the blade is worn in the lower part (30b)
- the pin of the blade is no longer firmly seated



If you notice one or several of these characteristics of wear stop mowing at once!

Worn parts must be replaced by original parts made by Pöttinger immediately !

Screw down the pin of the blade with the nut with 120 Nm.



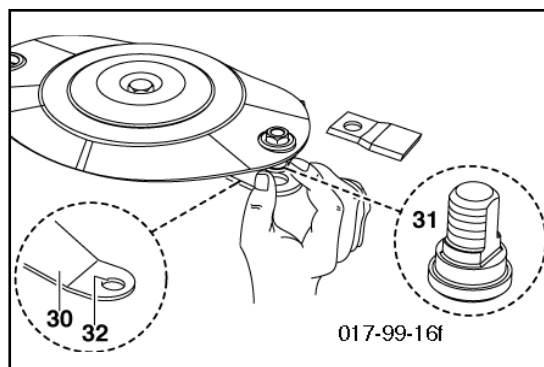
## Holder for a quick change of cutter blades



### Attention!

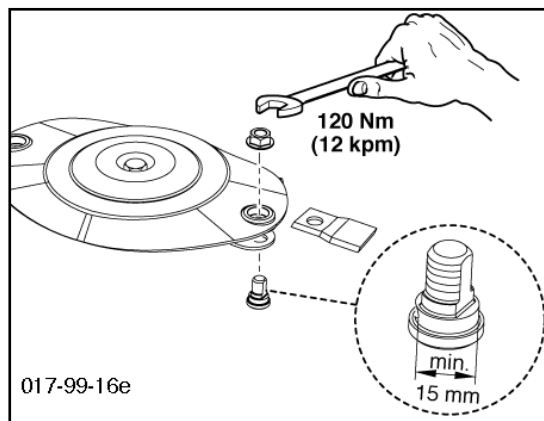
#### For Your Safety

- Regularly check that cutter blades are tightened firmly!
  - Cutter blades on a cutter disc should wear out simultaneously (danger of imbalance). Otherwise they are to be replaced with new ones (replace in pairs).
  - Buckled or damaged cutter blades must not be used further.
- Buckled, damaged and/or worn cutter blade holders (30) should not be used further.



## Checking the mowing blade suspension

- Normal check every 50 hours.
- Check more often when mowing on stony terrain or in other difficult operating conditions.
- Check immediately after driving over a hard obstacle (e.g. stones pieces of wood, ect).

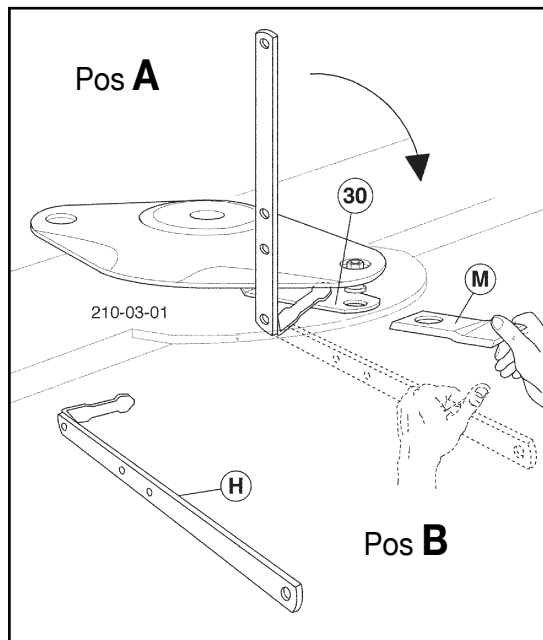


### Carry out a check

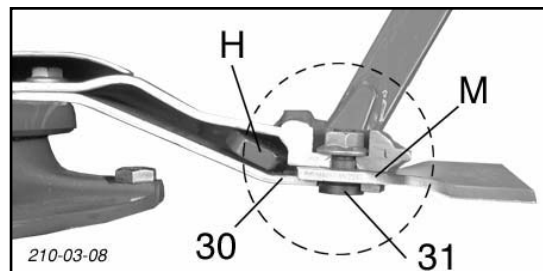
- as described in chapter „Changing the Cutter Blades“

## Changing the Cutter Blades

- Insert lever from left or right side on the cutter disc "Pos A" until it stops.
- Swing lever from "pos. A" to "pos. B" and push the movable holder (30) down.



- Remove cutter blade (M)
- Clean forage remains and dirt away.
  - around the bolts (31) and inside the borehole (32)
- Check:
  - blade bolts (31) for damage, wear and fitting
  - holder (30) for damage, change in position and fitting
  - borehole (32) for damage.
  - Side surfaces must not show signs of deformation
- Install cutter blades
- Visual check! Check that blade (M) is correctly positioned between blade bolts (31) and holder (30) (see diagram).



- Swivel lever (H) to "A" again and remove.



### Take note!

**Damaged, buckled and worn out parts must not be used further (danger of accident).**

## Disruptions and remedies to power failure

When there is a disruption in the electrical unit, the required hydraulic function can be carried out by means of an emergency application.













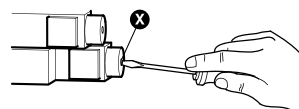
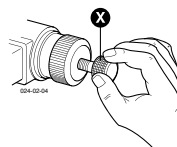
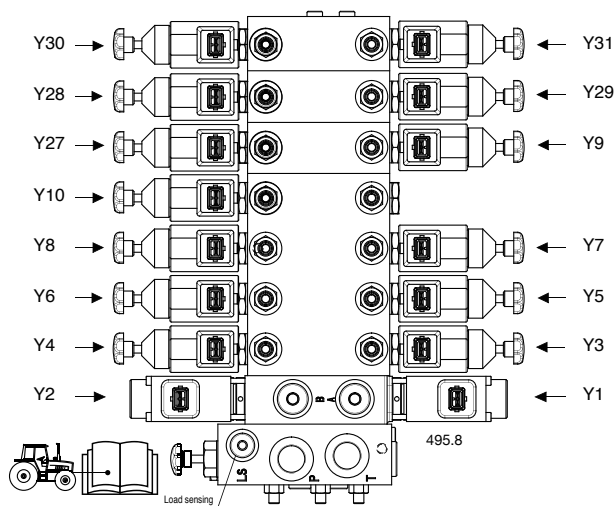
Be alert to the dangers involved with all raising and lowering, and on and off switching activities!

The hydraulic block is located under the front protective cover.

To carry out the desired hydraulic function

- Screw in the correct valve knob
- Turn on servo-valve on the towing vehicle
- The hydraulic function will be carried out
- Afterwards, unscrew the relevant valve knob again

	Remark	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y13	Y15	Y27	Y28	Y29	Y30	Y31
	FT	X		X														
	TP	X		X								X						
	AP			X								X						
	FT			X														
	FT	X				X												
	TP	X				X							X					
	AP					X							X					
	FT					X												
	FT / TP	X						X										
	AP							X	X									
	TP		X								X							
	TP										X							
	FT	X								X					X			
	FT		X							X					X			
			X	X	X	X	X					X	X					
				X	X	X	X					X	X					
		X															X	X
			X														X	X
		X														X	X	
			X													X	X	



## Technical data

Description	NOVACAT V10 (Type 3846)	NOVACAT V10 ED (Type 3846)
Three-point linkage	Kat III	Kat III
No. of mowing discs	2 x 8	2 x 8
No. of knives per disc	2	2
Working width [m]	8,76 - 9,98	8,76 - 9,98
Transport width with - 3,0 m frame [m]	2,99	2,99
- 3,5 m frame [m]	3,42	3,42
Ground clearance in transport position [mm]	150	150
Transport height [m]	3,99	3,99
Transport length [m]	2,62	2,62
Required power [kw/PS]	99 / 135	110 / 150
Coverage up to [ha/h]	12,0	12,0
Max. p.t.o. speed [U/min <sup>-1</sup> ]	1000	1000
Torque limiter [Nm]	1100	1100
Weight <sup>1)</sup> [kg]	2300	2720
Permanent sound emission level [db(A)]	93,6	93,6

All data subject to revision.

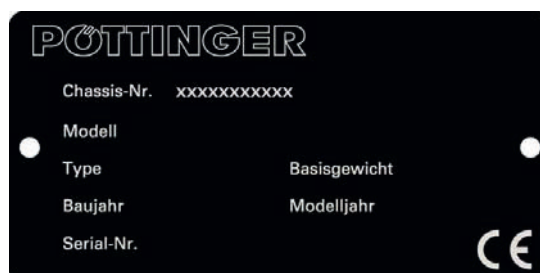
### Necessary connections

- Hydraulic connection
  - see chapter "Attaching to tractor "
  - pressure min.: 140 bar
  - pressure max.: 200 bar
- 7 channel connection for the lighting equipment (12 volt)
- 3 channel connection for the electro-hydraulic system (12 volt)

### Position of Vehicle Identification Plate

The chassis number is engraved on the name plate illustrated on the left. Warranty claims, enquiries and spare parts orders cannot be made without quoting the chassis number.

Please enter the number on the title page of the Operating Instructions immediately on taking delivery of the vehicle/equipment.



1) Weight: Variations possible depending on machine features.

### The defined use of the mower unit

The „**NOVACAT V10 (Type 3846)**“ mower is intended solely for normal use in agricultural work.

- The mowing of grassland and short stemmed fodder.

Any other uses outside of these are regarded as undefined.

The manufacturer takes no responsibility for any resulting damage which occurs henceforth. The risk is carried by the user alone.

- The keeping of operating, service and maintenance requirements layed down by the manufacturer also come under the heading of „defined use“.

# ***SUPPLEMENT***

Things will run better with  
genuine Pöttinger parts

**Original**  
*inside*



- **Quality and precise fitting**
  - Operating safety.
- **Reliable operation**
- **Longer lasting**
  - Economy
- **Guaranteed availability** through your Pöttinger Sales Service.

The decision must be made, "original" or "imitation"? The decision is often governed by price and a "cheap buy" can sometimes be very expensive.

***Be sure you purchase the "Original" with the cloverleaf symbol!***

  
**PÖTTINGER**



### Recommendations for work safety

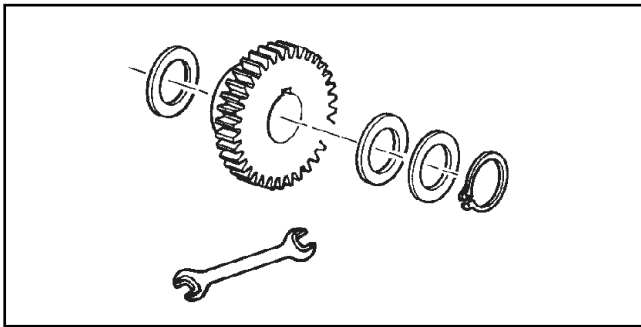
All points referring to safety in this manual are indicated by this sign.

#### 1.) Defined use

- See "Technical Data".
- The keeping of operating, service and maintenance requirements laid down by the manufacturer also come under the heading of "defined use".

#### 2.) Spare parts

- The **original components and accessories** have been designed especially for these machines and appliances.
- We want to make it quite clear that components and accessories that have not been supplied by us have not been tested by us.
- The installation and/or use of such products can, therefore,



negatively change or influence the construction characteristics of the appliance. We are not liable for damages caused by the use of components and accessories that have not been supplied by us.

- Alterations and the use of auxiliary parts that are not permitted by the manufacturer render all liability invalid.

#### 3.) Protection devices

All protection devices must remain on the machine and be maintained in proper condition. Punctual replacement of worn and damaged covers is essential.

#### 4.) Before starting work

- Before commencing work, the operator must be aware of all operating devices and functions. The learning of these is too late after having already commenced operation!
- The vehicle is to be tested for traffic and operating safety before each operation.

#### 5.) Asbestos

- Certain sub-supplied components of the vehicle may contain asbestos due to technical reasons. Observe the warning on spare parts.

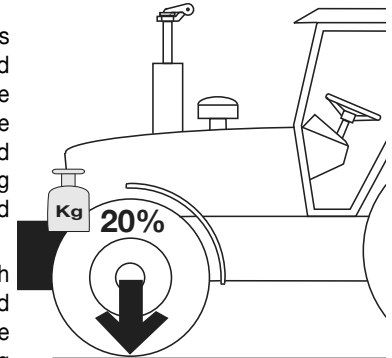


#### 6.) Transport of persons prohibited

- The transport of persons on the machine is not permitted.
- The machine may only be driven on public roads when in the position stipulated for road transport.

#### 7.) Driving ability with auxiliary equipment

- The towing vehicle is to be sufficiently equipped with weights at the front or at the rear in order to guarantee the steering and braking capacity (a minimum of 20% of the vehicle's tare weight on the front axle).
- The driving ability is influenced by ground conditions and by the auxiliary equipment. The driving must be adapted to the corresponding terrain and ground conditions.
- When driving through curves with a connected appliance, observe the radius and swinging mass of the appliance.
- When travelling in a curve with attached or semimounted implements, take into account the working range and swing mass of the implement!



#### 8.) General

- Before attaching implement to three-point linkage, move system lever into a position whereby unintentional raising or lowering is ruled out!
- Danger of injury exists when coupling implement to tractor!
- Danger of injury through crushing and cutting exists in the three-point linkage area!
- Do not stand between tractor and implement when using three-point linkage external operation!
- Attach and detach drive shaft only when motor has stopped.
- When transporting with raised implement, secure operating lever against lowering!
- Before leaving tractor, lower attached implement to the ground and remove ignition key!
- Nobody is to stand between tractor and implement without tractor being secured against rolling using parking brake and/or wheel chocks!
- For all maintenance, service and modification work, turn driving motor off and remove universal drive.

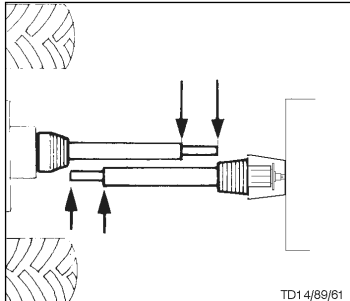
#### 9.) Cleaning the machine

Do not use high-pressure washers for the cleaning of bearing- and hydraulic parts.



## Matching driveshaft to tractor

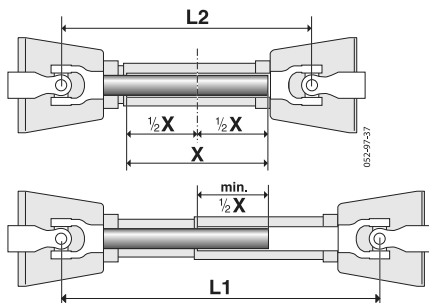
To determine the actual length required, hold the two halves of the driveshaft side by side.



TD14/89/61

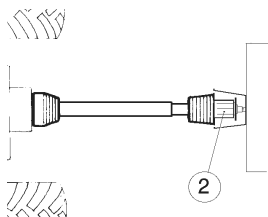
### Procedure for cutting to length

- To determine length required, set implement in closest working position (L2) to tractor, hold driveshaft halves side by side and mark off.



### Important!

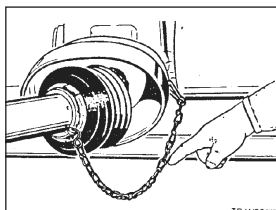
- Note the maximum operating length (L1)
  - Try to attain the greatest possible shaft overlap (min.  $\frac{1}{2} X$ )!
- Shorten inside and outside tube guard by the same amount.
- Fit torque limiter (2) of drive shaft to implement end of driveshaft!



- Always check that drive shaft locks are securely engaged before starting work.

### Retaining chain

- Use chain to prevent tube guard from rotating. Take care that chain does not impede driveshaft pivoting.

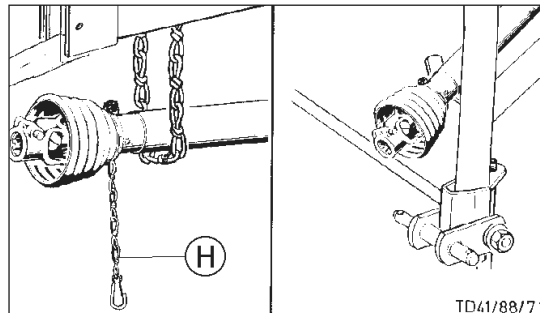


TD4/68/63

## Rules for working

Never exceed the maximum p. t. o. speed when using the implement.

- When the p.t.o. is switched off, the implement hitched up may not stop at once. Do not go close to the implement until all motion has stopped; only then may work be done on it.
- When the implement is parked, either remove the driveshaft and store it, or secure it with a chain. Do not use retaining chain (H) for this.



TD41/88/71

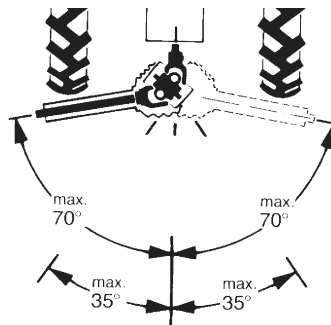
### Wide-angle joint:

Maximum angle of deflection when working/stationary: 70°

### Standard joint :

Maximum angle of deflection when stationary: 90°

Maximum angle of deflection when working: 35°



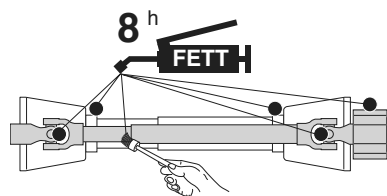
### Maintenance



Replace worn-out covers/guards at once.

- Lubricate with a brand-name grease before starting work and every 8 hours worked.
- Before any extended period of non-use, clean and lubricate driveshaft.

For winter working, grease the tube guards, to avoid them freezing together.





### How a cam type cut out safety clutch works

This overload clutch switches the torque transmitted to zero if overloaded. To revert to normal operation, stop the p.t.o. drive briefly.

The clutch reengages at a speed below 200 rpm.

#### IMPORTANT!



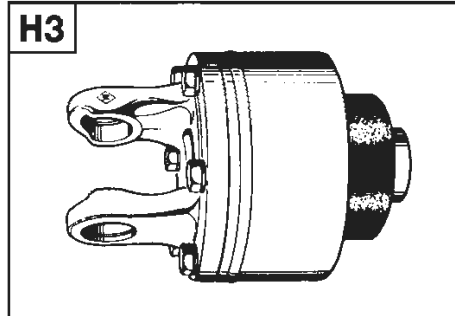
Re-engaging is also possible by decreasing the p.t.o. r.p.m.

#### TAKE NOTE!

The overload clutch on the driveshaft is not a "Full up" indicator. It is purely a torque limiter designed to protect the implement against damage.

Driving the right way will avoid triggering the clutch too often, and thus causing unnecessary wear on it and the implement.

Lubricating interval: 500 hrs (Special lubricant)



### Important for driveshafts with friction clutch

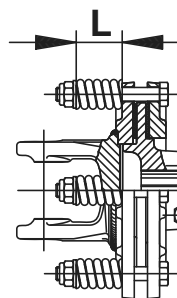
Torque is limited with overloading and brief torque peaks and evenly transferred during slipping.

Prior to initial operation and after long periods out of use, check friction clutch for proper function.

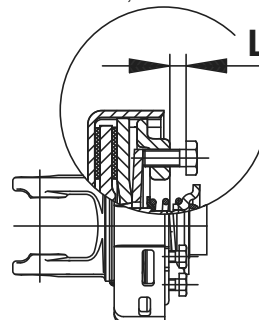
- Measure dimension „L“ at compression spring of K90, K90/4 and K94/1 or at set screw of K92E and K92/4E.
- Loosen screws to release the pressure on the friction disk.  
Slip the clutch.
- Tighten set screws to dimension „L“.

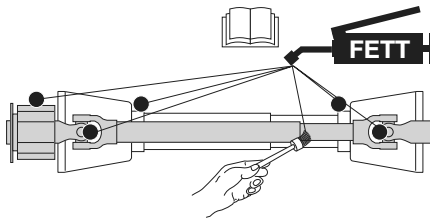
Clutch is ready for use.

K90, K90/4, K94/1



K92E, K92/4E





D	Schmierplan
X <sup>h</sup>	alle X Betriebsstunden
40 F	alle 40 Fahren
80 F	alle 80 Fahren
1 J	1 x jährlich
100 ha	alle 100 Hektar
FETT	FETT
	= Anzahl der Schmiernippel
	= Anzahl der Schmiernippel
(IV)	Siehe Anhang "Betriebsstoffe"
Liter	Liter
*	Variante
	Siehe Anleitung des Herstellers

F	Plan de graissage
X <sup>h</sup>	Toutes les X heures de service
40 F	Tous les 40 voyages
80 F	Tous les 80 voyages
1 J	1 fois par an
100 ha	tous les 100 hectares
FETT	GRAISSE
	= Nombre de graisseurs
	= Nombre de graisseurs
(IV)	Voir annexe "Lubrifiants"
Litre	Litre
*	Variante
	Voir le guide du constructeur

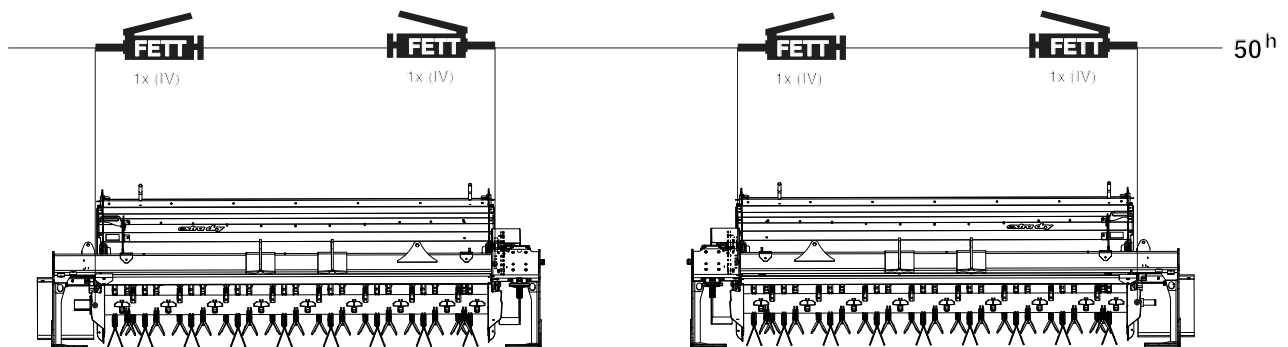
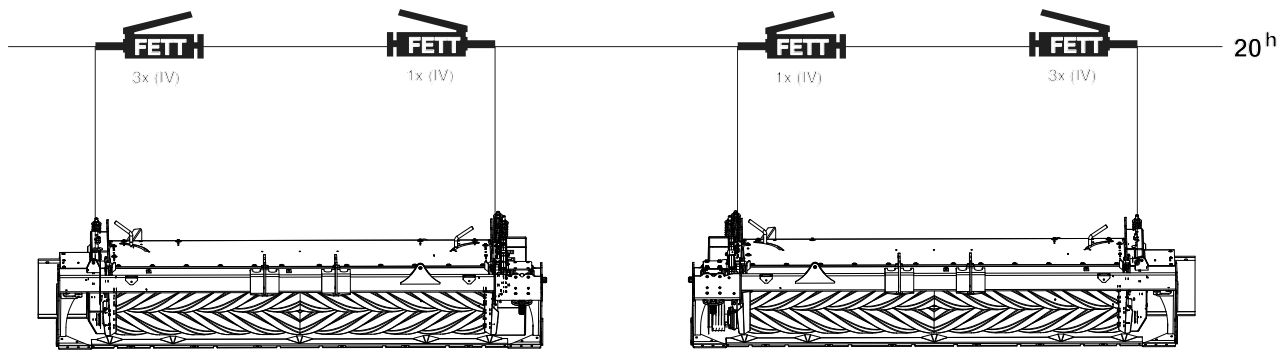
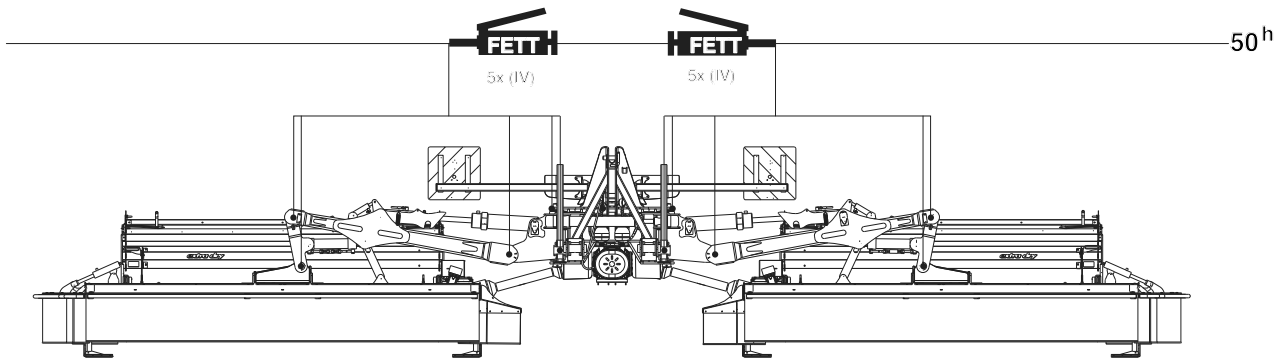
GB	Lubrication chart
X <sup>h</sup>	after every X hours operation
40 F	all 40 loads
80 F	all 80 loads
1 J	once a year
100 ha	every 100 hectares
FETT	GREASE
	= Number of grease nipples
	= Number of grease nipples
(IV)	see supplement "Lubrifiants"
Liter	Litre
*	Variation
	See manufacturer's instructions

NL	Smeerschema
X <sup>h</sup>	alle X bedrijfsuren
40 F	alle 40 wagenladings
80 F	alle 80 wagenladings
1 J	1 x jaarlijks
100 ha	alle 100 hectaren
FETT	VET
	= Aantal smeernippels
	= Aantal smeernippels
(IV)	Zie aanhangsel "Smeermiddelen"
Liter	Liter
*	Varianten
	zie gebruiksaanwijzing van de fabrikant

E	Esquema de lubricación
X <sup>h</sup>	Cada X horas de servicio
40 F	Cada 40 viajes
80 F	Cada 80 viajes
1 J	1 vez al año
100 ha	Cada 100 hectáreas
FETT	LUBRICANTE
	= Número de boquillas de engrase
	= Número de boquillas de engrase
(IV)	Véase anexo "Lubrificantes"
Liter	Litros
*	Variante
	Véanse instrucciones del fabricante

I	Schema di lubrificazione
X <sup>h</sup>	ogni X ore di esercizio
40 F	ogni 40 viaggi
80 F	ogni 80 viaggi
1 J	volta all'anno
100 ha	ogni 100 ettari
FETT	GRASSO
	= Numero degli ingrassatori
	= Numero degli ingrassatori
(IV)	vedi capitolo "materiali di esercizio"
Liter	litri
*	variante
	vedi istruzioni del fabbricante

P	Plano de lubrificação
X <sup>h</sup>	Em cada X horas de serviço
40 F	Em cada 40 transportes
80 F	Em cada 80 transportes
1 J	1x por ano
100 ha	Em cada 100 hectares
FETT	Lubrificante
	= Número dos bocais de lubrificação
	= Número dos bocais de lubrificação
(IV)	Ver anexo "Lubrificantes"
Liter	Litro
*	Variante
	Ver instruções do fabricante



161-09-05

## Edition 1997




The performance and the lifetime of the farm machines are highly depending on a careful maintenance and application of correct lubricants. our schedule enables an easy selection of selected products.




The applicable lubricants are symbolized (eg. "III"). According to this lubricant product code number the specification, quality and brandname of oil companies may easily be determined. The listing of the oil companies is not said to be complete.

Gear oils according to operating instructions - however at least once a year.

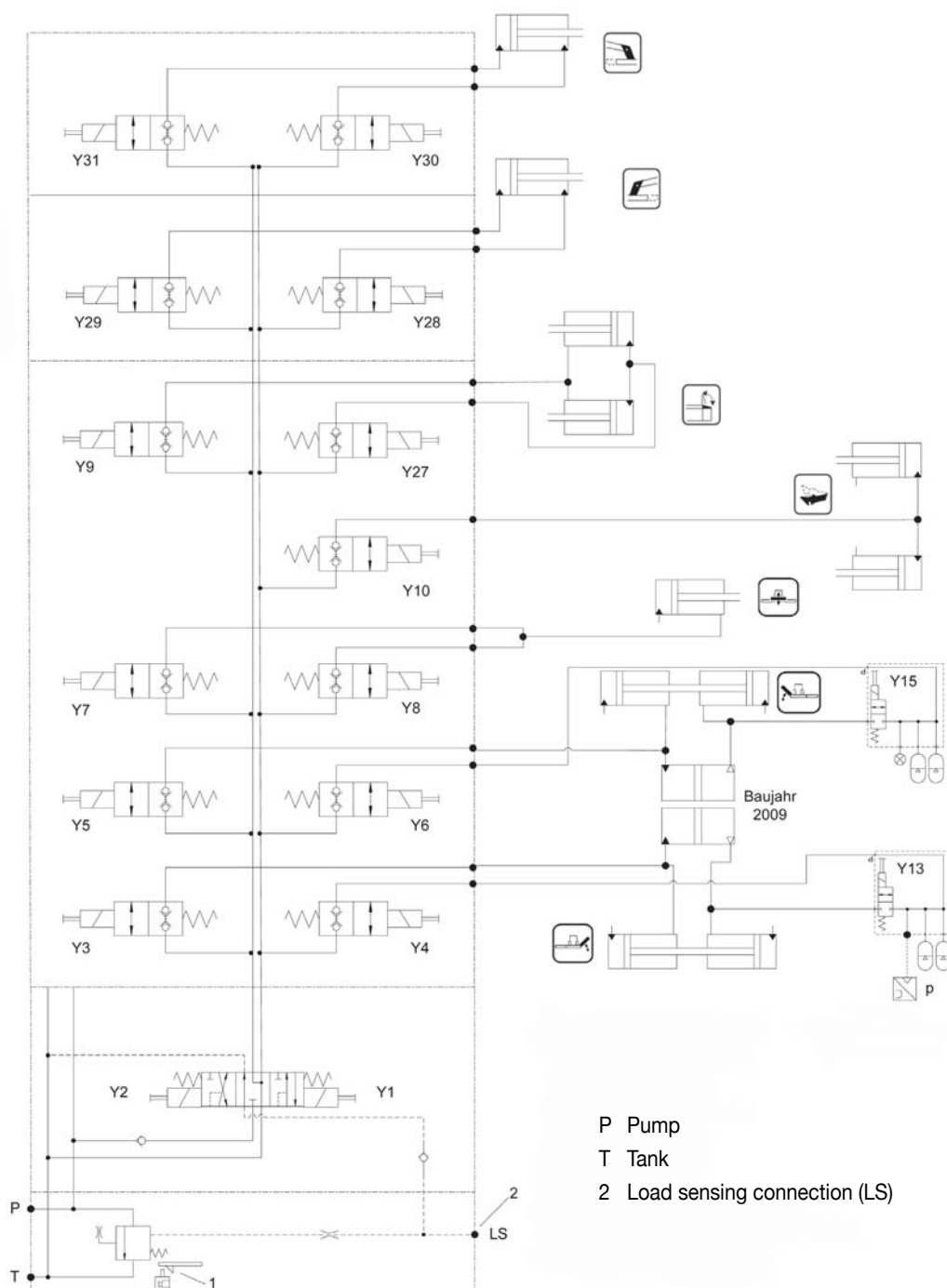
- Take out oil drain plug, let run out and duly dispose waste oil.

Before garaging (winter season) an oil change and greasing of all lubricating points has to be done. Unprotected, blanc metal parts outside (joints, etc.) have to be protected against corrosion with a group "IV" product as indicated on the reverse of this page.

Betriebsstoff-Kennzahl Lubricant indicator Code du lubrifiant Numero caratteristico del lubrificante Smeermiddelen code	I				V	VI	VII
gefordertes Qualitätsmerkmal required quality level niveau de performance demandé caratteristica richiesta di qualità verlangte kwaliteitskenmerken	HYDRAULIKÖL HLP DIN 51524 Teil 2  Siehe Anmerkungen ** ***	Motorenöl SAE 30 gemäß API CD/SF  motor oil SAE 30 according to API CD/SF  huile moteur SAE 30 niveau API CD/SF  olio motore SAE 30 secondo specifiche API CD/SF	Getriebeöl SAE 90 bzw. SAE 85 W-140 gemäß API-GL 4 oder API-GL 5  gear oil, SAE 90 resp. SAE 85 W-140 according to API-GL 4 or API-GL 5  huile transmission SAE 90 ou SAE 85 W-140, niveau API-GL 4 ou API-GL 5  olio per cambi e differenziali SAE 90 o SAE 85W-140 secondo specifiche API-GL 4 o API-GL 5	Li-Fett (DIN 51 502, KP 2K)  lithium grease  graisse au lithium  grasso al litio	Getriebefließfett (DIN 51 502:GOH  transmission grease  graisse transmission  grasso fluido per riduttori e motoroduttori	Komplexfett (DIN 51 502: KP 1R)  complex grease  graisse complexe  grasso a base di saponi comp- lessi	smeerolie SAE 90 of 85 W- 140 volgens API-GL 5  gear oil SAE 90 resp. SAE 85 W-140 according to API-GL 5  huile transmission SA 90 ou SAE 85 W-140, niveau API GL 5  olio per cambi e differenziali SAE 90 o SAE 85 W-140 se- condo specifiche API-GL 5

Firma Company Société Società	I				V	VI	VII	NOTATIONS
AGIP	OSO 32/46/68 ARNICA 22/46	MOTOROIL HD 30 SIGMA MULTI 15W-40 SUPER TRACTOR OIL UNIVERS. 15W-30	ROTRA HY 80W-90/85W-140 ROTRA MP 80W-90/85W-140	GR MU 2	GR SLL GR LFO	-	ROTRA MP 80W-90 ROTRA MP 85W-140	* The international specification J 20 A is necessary for compound operation with wet brake tractors.
ARAL	VITAM GF 32/46/68 VITAM HF 32/46	SUPER KOWAL 30 MULTI TURBORAL SUPER TRACTORAL 15W-30	GETRIEBEÖL EP 90 GE- TRIEBEÖL HYP 85W-90	ARALUB HL 2	ARALUB FDP 00	ARALUB FK 2	GETRIEBEÖL HYP 90 GETRIEBEÖL HYP 90 EP MULTI HYP 85W-140 EP	HLP - (D) + HV hydraulic oils
AVIA	AVILUB RL 32/46 AVILUB VG 32/46	MOTOROIL HD 30 MULTIGRADE HDC 15W-40 TRACTAVIA HF SUPER 10 W-30	GETRIEBEÖL MZ 90 M MULTI HYP 85W-140	AVIA MEHRZWECKFETT AVIA ABSCHMIERFETT	AVIA GETRIEBEFLESSFETT	AVIALUB SPEZIALFETT LD	GETRIEBEÖL HYP 90 EP MULTI HYP 85W-140 EP	** HLP - (D) + HV hydraulic oils
BAYWA	HYDRA LKÖL HLP 32/46/68 SUPER 2000 CD-MC * HYDRA HYDR. FLUID * HYDRA LKÖL MC 530 ** PLANTO HYD 40N ***	SUPER 2000 CD-MC SUPER 2000 CD HD SUPERIOR 20 W-30 HD SUPERIOR SAE 30	SUPER 8090 MC HYPOID 80W-90 HYPOID 85W-140	MULTI FETT 2 SPEZIALFETT FLM PLANTOGEL 2 N	GETRIEBEFLESSFETT NLGI 0 RENOLIT DURAPLEX EP 00 PLANTOGEL 00N	RENOPLEX EP 1	HYPOID 85W-140	*** HLP + HV hydraulic oils with avegetable oil basis, biodegradable and therefore environmentally friendly.
BP	ENERGOL SHF 32/46/68	VISCO 2000 ENERGOL HD 30 VANELLUS M 30	GEAR OIL 90 EP HYPOGEAR 90 EP	ENERGREASE LS-EP 2	FLIESSFETT NO ENERGREASE HTO	OLEX PR 9142	HYPOGEAR 90 EP HYPOGEAR 85W-140 EP	
CASTROL	HYSPIN AWS 32/46/68 HYSPIN AWH 32/46	PX SUPER DIESEL 15W-40 POWERTRANS	EPX 80W-90 HYPOY C 80W-140	CASTROL GREASE LM	IMPERVIA MMO	CASTROL GREASE LMX	EPX 80W-90 HYPOY C 80W-140	
ELAN	HLP 32/46/68 HLP-M M32/M46	MOTORÖL 100 MS SAE 30 MOTORÖL 104 CM 15W-40 AUSTROTRAC 15W-30	GETRIEBEÖL MP 85W-90 GETRIEBEÖL B 85W-90 GETRIEBEÖL C 85W-90	LORENA 46 LITORA 27	RHENOX 34	-	GETRIEBEÖL B 85W-90 GETRIEBEÖL C 85W-140	
ELF	OLNA 32/46/68 HYDRELF 46/68	PERFORMANCE 2 B SAE 30 8000 TOURS 20W-30 TRACTORELF ST 15W-30	TRANSSELF TYP B 90 85W-140 TRANSSELF EP 90 85W-140	EPEXA 2 ROLEXA 2 MULTI 2	GA O EP POLY G O	MULTIMOTIVE 1	TRANSSELF TYP B 90 85W-140 TRANSSELF TYP BLS 80 W-90	
ESSO	NUTO H 32/46/68 NUTO HP 32/46/68	PLUS MOTORÖL 20W-30 UNIFARM 15W-30	GEAR OIL GP 80W-90 GEAR OIL GP 85W-140	MULTI PURPOSE GREASE H	FIBRAX EP 370	NEBULA EP 1 GP GREASE	GEAR OIL CX 80W-90 GEAR OIL CX 85W-140	
EVVA	ENAK HLP 32/46/68 ENAK MULTI 46/68	SUPER EVAROL HD/B SAE 30 UNIVERSAL TRACTOR OIL SUPER	HYPOID GA 90 HYPOID GB 90	HOCHDRUCKFETT LT/SC 280	GETRIEBEFETT MO 370	EVVA CA 300	HYPOID GB 90	
FINA	HYDRAN 32/46/68	DELTA PLUS SAE 30 SUPER UNIVERSAL OIL	PONTONIC N 85W-90 PONTONIC MP 85W-90 85W-140 SUPER UNIVERSAL OIL	MARSON EPL 2	NATHAN 00	MARSON AX 2	PONTONIC MP 85W-140	
FUCHS	* TITAN HYD 1030 * AGRI FARM STOU MC 10W-30 * AGRI FARM UTTO MP * PLANTO HYD 40N ***	* AGRI FARM STOU MC 10W-30 * TITAN UNIVERSAL HD	* AGRI FARM GEAR 80W-90 * AGRI FARM GEAR 85W-140 * AGRI FARM GEAR LS 90	* AGRI FARM HITEC 2 * AGRI FARM PROTEC 2 * RENOLIT MP * RENOLIT FLM 2 * PLANTOGEL 2-N	* AGRI FARM FLOWTEC 000 * RENOLIT SO-GFO 35 * RENOLIT DURAPLEX EP 00 * PLANTOGEL 00N	* RENOLIT DURAPLEX EP 1	* AGRI FARM GEAR 8090 * AGRI FARM GEAR 85W-140 * AGRI FARM GEAR LS 90	
GENOL	HYDRA LKÖL HLP 32/46/68 HYDRAMOT 1030 MC HYDRA LKÖL 530 ** PLANTO HYD 40N ***	MULTI 2030 2000 TC HYDRAMOT 15W-30 HYDRAMOT 1030 MC	GETRIEBEÖL MP 90 HYPOID EW 90 HYPOID 85W-140	MEHRZWECKFETT SPEZIALFETT GLM PLANTOGEL 2 N	GETRIEBEFLESSFETT PLANTOGEL 00N	RENOPLEX EP 1	HYPOID EW 90 HYPOID 85W-140	
MOBIL	DTE 22/24/25 DTE 13/15	HD 20W-20 DELVAC T330 SUPER UNIVERSAL 15W-30	MOBILUBE CX 90 MOBILUBE HD 90 MOBILUBE HD 85W-140	MOBIL GREASE MP	MOBILUX EP 004	MOBILPLEX 47	MOBILUBE HD 90 MOBILUBE HD 85W-140	
RHG	RENOLIN B 10/15/20 RE- NOLIN B 32 HV/46HV1	EXTRA HD 30 SUPER HD 20 W-30	MEHRZWECKGETRIEBEÖL SAE 90 HYPOID EW 90	MEHRZWECKFETT RENOLIT MP DURAPLEX EP	RENOSOD GFO 35	RENOPLEX EP 1	HYPOID EW 90	
SHELL	TELLUS S2/S 46/568 TELLUS T 32/746	AGROMA 15W-30 ROTELLA X 30 RIMULA X 15W-40	SPIRAX 90 EP SPIRAX HD 90 SPIRAX HD 85/140	RETINAX A ALVANIA EP 2	SPEZ. GETRIEBEFETT H SIMINIA GREASE O	AEROSHELL GREASE 22 DOLUM GREASE R	SPIRAX HD 90 SPIRAX HD 85W-140	
TOTAL	AZOLLA ZS 32 46 68 EQUINIS ZS 32 46 68	RUBIA H 30 MULTAGRI TM 15W-20	TOTAL EP 85W-90 TOTAL EP B 85W-90	MULTIS EP 2	MULTIS EP 200	MULTIS HT 1	TOTAL EP B 85W-90	
VALVOLINE	ULTRAMAX HLP 32/46/68 SUPER TRAC FE 10W-30 ULTRAMAX HLP 32 ** ULTRAPLANT 40 ***	SUPER HPO 30 STOU 15W-30 SUPER TRAC FE 10W-30 ALL FLEET PLUS 15W-40	HP GEAR OIL 90 oder 85W-140 TRANS GEAR OIL 80W-90	MULTI LEX EP 2 VAL-PLUX EP 2 PLANTOGEL 2 N	RENOLIT LZR 000 DEGRALUB ZSA 000	DURAPLEX EP 1	HP GEAR OIL 90 oder 85W-140	
VEEDOL	ANDARIN 32/46/68	HD PLUS SAE 30	MULTIGRADE SAE 80/90 MULTIGEAR B 90 MULTIGEAR C SAE 85W-140	MULTIPURPOSE	-	-	MULTIGEAR B 90 MULTI C SAE 85W-140	
WINTERSHALL	WOLAN HS (HG) 32/46/68 WOLAN HVG 46 ** WOLAN HR 32/46 *** HYDROLFLUID *	MULTI-REKORD 15W-40 PREMANO REKORD 30	HYPOID-GETRIEBEÖL 80W-90, 85W-140 MEHRZWECKGETRIEBEÖL 80W-90	WOLUB LFP 2	WOLUB GFW	WOLUB AFK 2	HYPOID-GETRIEBEÖL 80W-90, 85W-140	

## Hydraulic plan



## Legend:

- |    |   |     |   |
|----|---|-----|---|
| Y1 | Distributing valve - raise                  | Y10 | Seat valve - transport safety flaps (ew)  |
| Y2 | Distributing valve - lower                  | Y13 | Seat valve - right hydraulic relief       |
| Y3 | Seat valve - right mower unit               | Y15 | Seat valve - left hydraulic relief        |
| Y4 | Seat valve - Filling right hydraulic relief | Y27 | Seat valve - side protection hinging (dw) |
| Y5 | Seat valve - left mower unit                | Y28 | Seat valve - lateral traversing left      |
| Y6 | Seat valve - Filling left hydraulic relief  | Y29 | Seat valve - lateral traversing left      |
| Y7 | Seat valve - middle mower unit              | Y30 | Seat valve - lateral traversing right     |
| Y8 | Seat valve - float position middle mower    | Y31 | Seat valve - lateral traversing right     |
| Y9 | Seat valve - side protection hinging (dw)   |     |   |

## Connection diagram

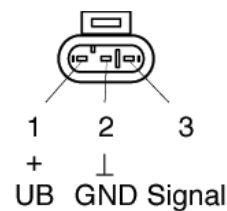
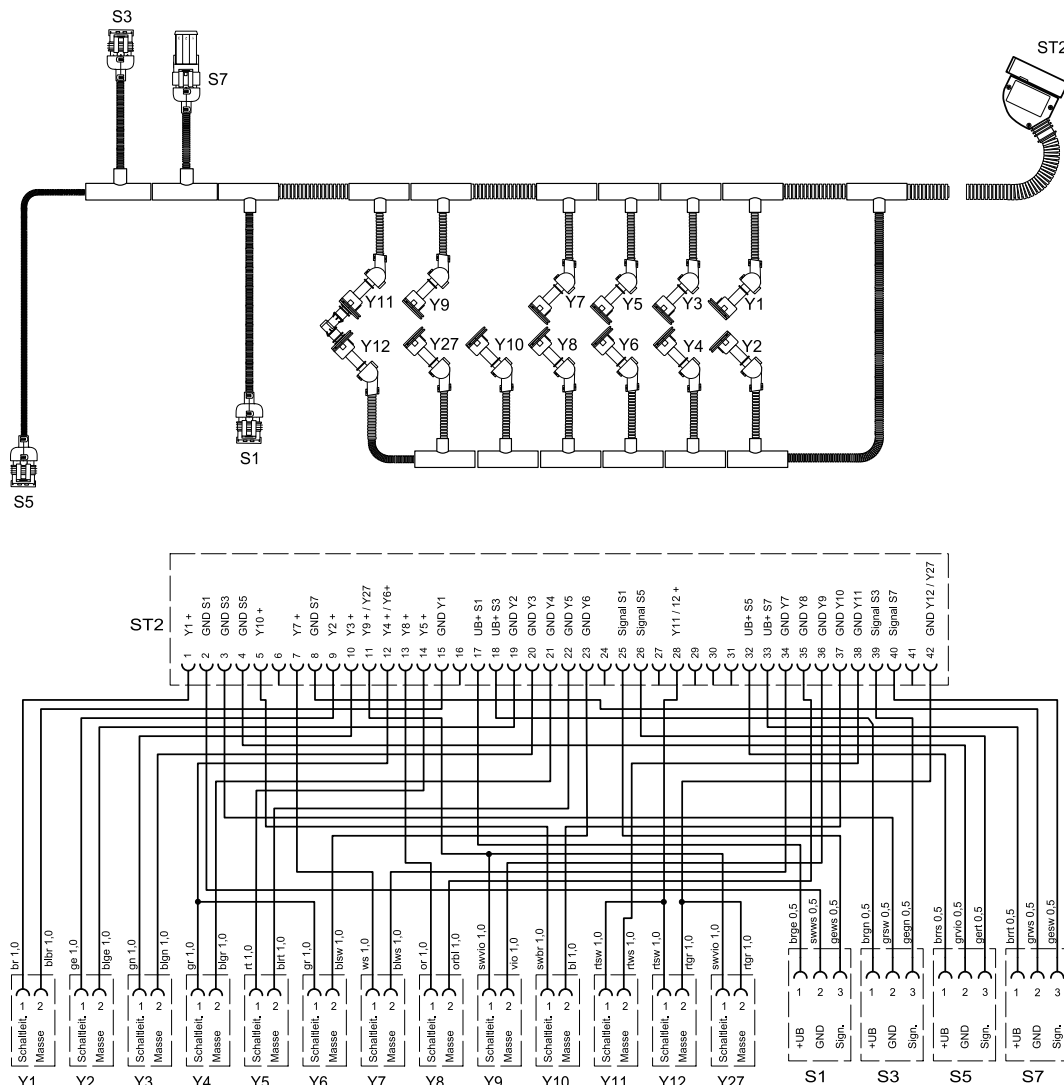


### Note!

All connector diagrams are viewed from outside.

### Colour code:

bl	blue
br	brown
gn	green
gnge	green/yellow
gr	grey
rt	red
sw	black
ws	white



### Legend:

Y1 - Y27 see hydraulics plan

- S1 Hall switch – p.t.o. shaft r.p.m.
- S3 Inductive sensor – mower right position
- S3 Inductive sensor – mower left position
- S7 Inductive sensor – mower centre position

## Connection diagram

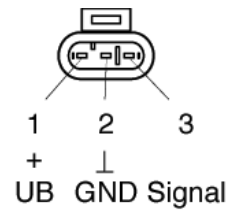
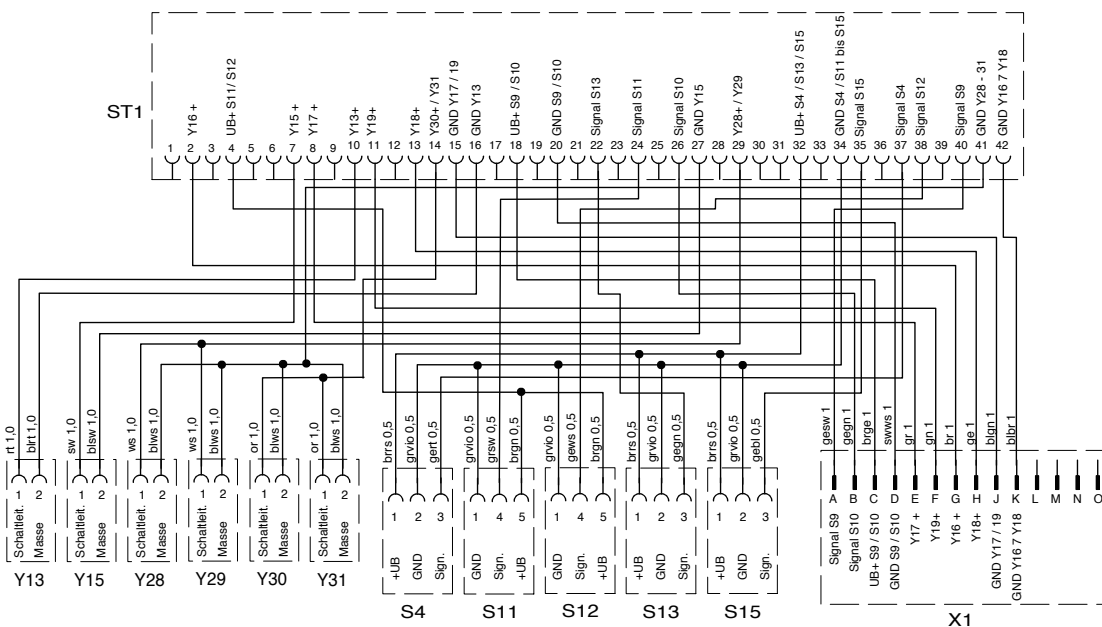
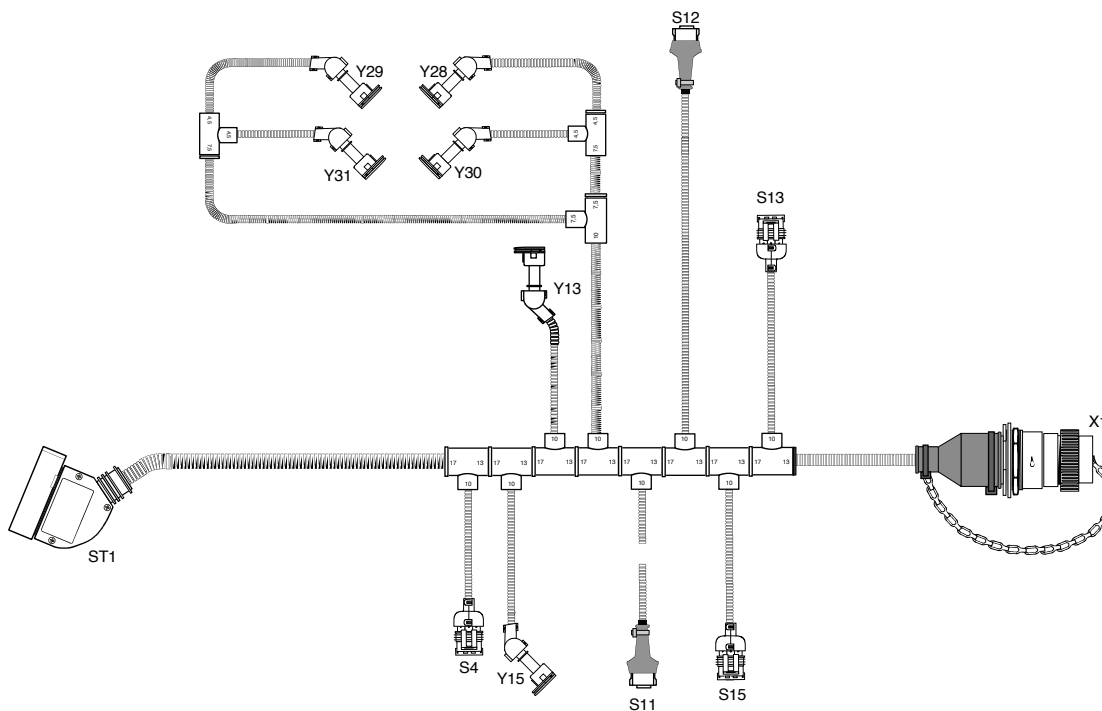


### Note!

All connector diagrams are viewed from outside.

### Colour code:

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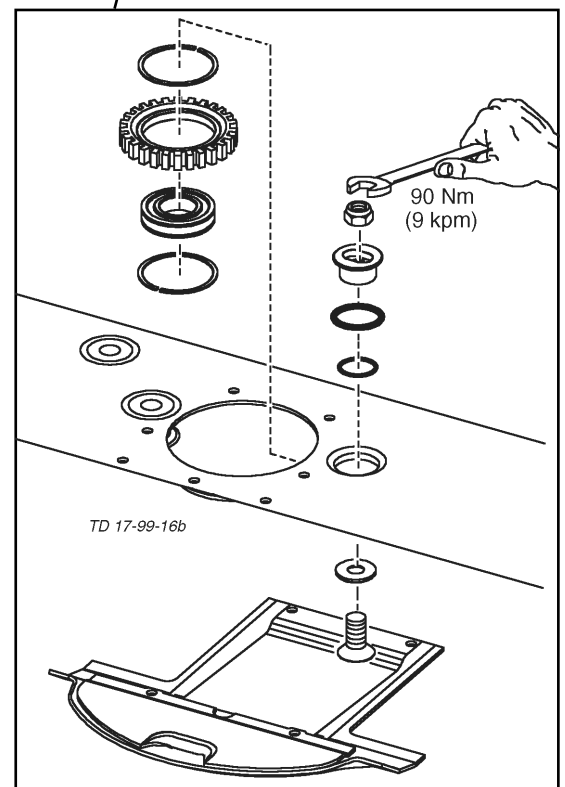
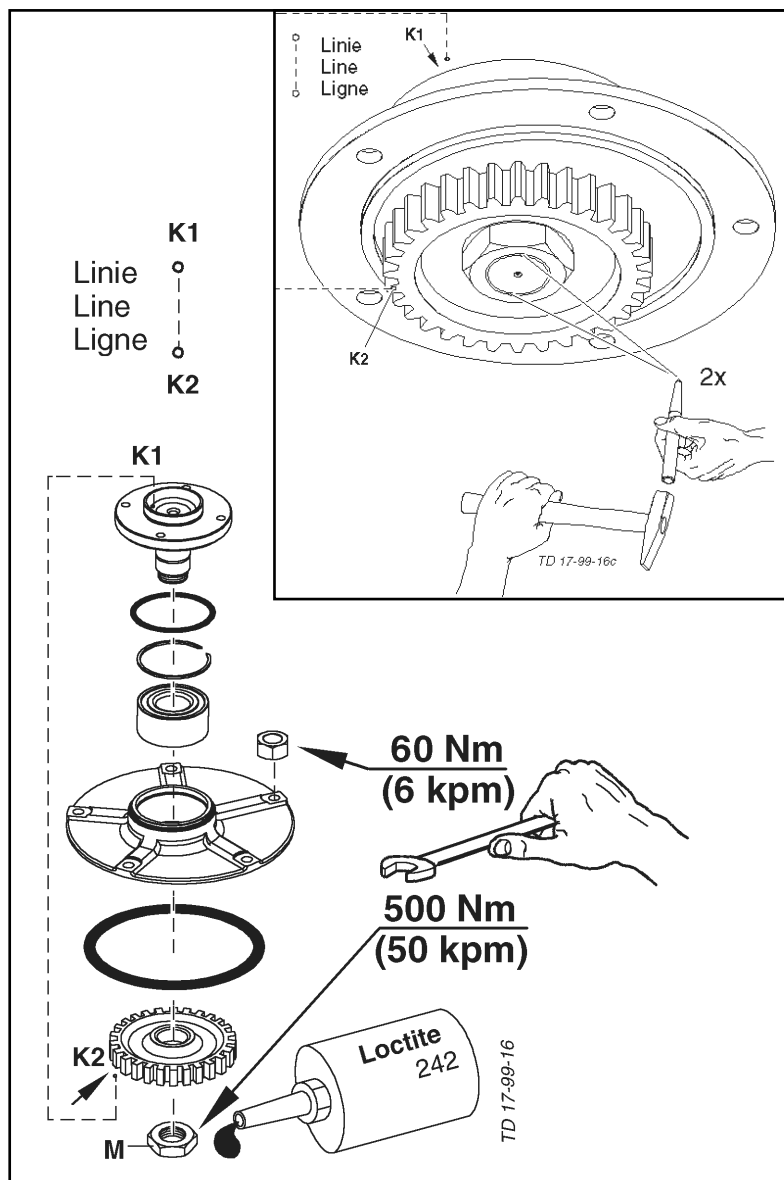
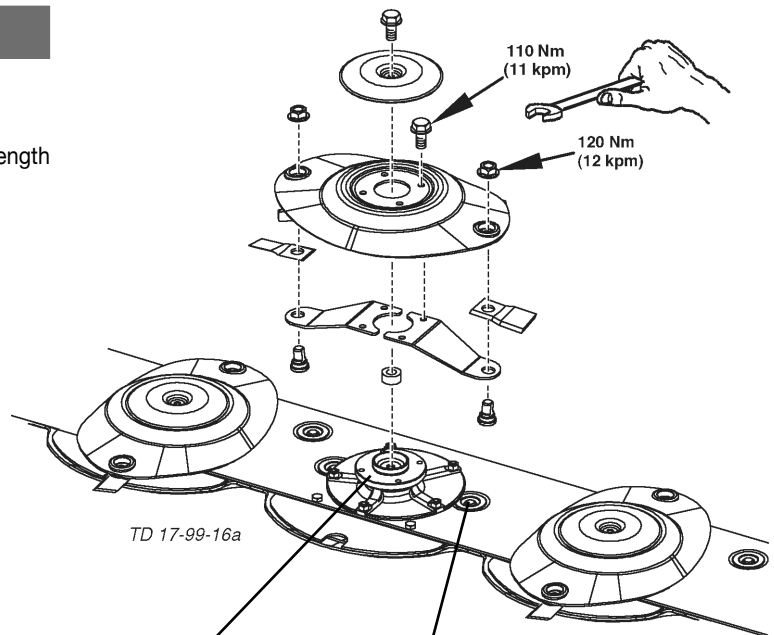
### Legend:

Y13 - Y31 see hydraulics plan

- S4 Pressure transformer - hydraulic relief
- S11 Angle sensor - lateral traversing left
- S12 Angle sensor - lateral traversing right
- S13 Sensor - transport position, right
- S15 Sensor - transport position, left

## Repairs on the cutter bar

- Adjust markings in a line (K1, K2).
- Only screw the nut (M) on when there is sufficient thread length in order to prevent any damage.
- Secure nut (M) against loosening.
  - with „Loctite 242“ or an equivalent product
  - and center-point (2x)



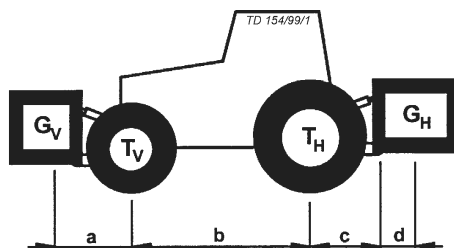
## Combination of tractor and mounted implement



The mounting of implements on the front or rear three point linkage shall not result in exceeding the maximum permissible weight, the permissible axle loads and the tyre load carrying capacities of the tractor. The front axle of the tractor must always be loaded with at least 20 % of the unladen weight of the tractor.

Make sure before buying an implement that these conditions are fulfilled by carrying out the following calculations or by weighing the tractor/implement combination.

### Determination of the total weight, the axle loads, the tyre load carrying capacity and the necessary minimum ballasting



For the calculation you need the following data:

$T_L$ [kg]	unladen weight of tractor	1	$a$ [m]	distance from centre of gravity for combined front mounted implement/front ballast to front axle centre	2	3
$T_V$ [kg]	front axle load of unladen tractor	1				
$T_H$ [kg]	rear axle load of unladen tractor	1	$b$ [m]	Tractor wheelbase	1	3
$G_H$ [kg]	combined weight of rear mounted implement/rear ballast	2	$c$ [m]	distance from rear axle centre to centre of lower link balls	1	3
$G_V$ [kg]	combined weight of front mounted implement/front ballast	2	$d$ [m]	distance from centre of lower link balls to centre of gravity for combined rear mounted implement/rear ballast	2	

- 1 see instruction handbook of the tractor
- 2 see price list and/or instruction handbook of the implement
- 3 to be measured

### Consideration of rear mounted implement and front/rear combinations

#### 1. CALCULATION OF MINIMUM BALLASTING AT THE FRONT $G_{V \min}$

Record the calculated minimum ballasting which is needed at the front of the tractor into the table.

$$G_{V \min} = \frac{G_H \cdot (c + d) - T_V \cdot b + 0,2 \cdot T_L \cdot b}{a + b}$$

#### Front mounted implement

#### 2. CALCULATION OF THE MINIMUM $G_{H \min}$

$$G_{H \min} = \frac{G_V \cdot a - T_H \cdot b + 0,45 \cdot T_L \cdot b}{b + c + d}$$

Record the calculated minimum ballasting which is needed at the rear of the tractor into the table.

### 3. CALCULATION OF THE REAL FRONT AXLE LOAD $T_{V \text{ tat}}$

(If with the front mounted implement ( $G_V$ ) the required minimum front ballasting ( $G_{V \text{ min}}$ ) cannot be reached, the weight of the front mounted implement has to be increased to the weight of the minimum ballasting at the front!)

$$T_{V \text{ tat}} = \frac{G_V \cdot (a + b) + T_V \cdot b - G_H \cdot (c + d)}{b}$$

Record the calculated real front axle load and the permissible front axle load of the tractor into the table.

### 4. CALCULATION OF THE REAL TOTAL WEIGHT $G_{\text{tat}}$

(If with the rear mounted implement ( $G_H$ ) the required minimum rear ballasting ( $G_{H \text{ min}}$ ) cannot be reached, the weight of the rear mounted implements has to be increased to at least the weight of the minimum ballasting at the rear!)

$$G_{\text{tat}} = G_V + T_L + G_H$$

Record the calculated real and the permissible total weight given in the instruction handbook for the tractor into the table.

### 5. CALCULATION OF THE REAL REAR AXLE LOAD $T_{H \text{ tat}}$

Record the calculated real and the permissible rear axle load given in the instruction handbook for the tractor into the table.

$$T_{H \text{ tat}} = G_{\text{tat}} - T_{V \text{ tat}}$$

### 6. TYRE LOAD CARRYING CAPACITY

Record double the value (two tyres) of the permissible load carrying capacity into the table (see for instance documentation provided by the tyre manufacturer).

#### Table

	Real value according to calculation	Permissible value according to instruction handbook	Double permissible tyre load carrying capacity (two tyres)
Minimum ballasting front/rear	<div style="border: 1px solid black; padding: 5px; display: inline-block;">/ kg</div>	---	---
Total weight	<div style="border: 1px solid black; padding: 5px; display: inline-block;">kg</div>	<div style="border: 1px solid black; padding: 5px; display: inline-block;">kg</div>	---
Front axle load	<div style="border: 1px solid black; padding: 5px; display: inline-block;">kg</div>	<div style="border: 1px solid black; padding: 5px; display: inline-block;">kg</div>	<div style="border: 1px solid black; padding: 5px; display: inline-block;">kg</div>
Rear axle load	<div style="border: 1px solid black; padding: 5px; display: inline-block;">kg</div>	<div style="border: 1px solid black; padding: 5px; display: inline-block;">kg</div>	<div style="border: 1px solid black; padding: 5px; display: inline-block;">kg</div>

**The minimum ballasting has to be attached to the tractor either in form of a mounted implement or ballasting weight!**

**The calculated values must be less or equal (<) the permissible values!**

The CE norm is not valid in the United States of America and Canada.



## EC Conformity Declaration

*Original Conformity Declaration*

*Name and address of the manufacturer:*

**PÖTTINGER Landtechnik GmbH  
Industriegelände 1  
AT - 4710 Grieskirchen**

*Machine (interchangeable equipment):*

**mower  
Type  
Serial no.**

Novacat V10	V10 ED	V10 RC
3846	3846	3846

*The manufacturer declares that the machines adhere to all relevant provisions in the following EU directive:*

**machinery 2006/42/EG**

*In addition to this, the manufacturer also declares adherence to the other following EU directives and/or relevant provisions*

*Source of applied, harmonised norms:*

EN ISO 12100

EN ISO 4254-1

EN ISO 4254-12

*Source of applied miscellaneous technical norms and / or specifications:*

*Person responsible for documentation:*

Andreas Gadermayr  
Industriegelände 1  
A-4710 Grieskirchen

A handwritten signature in black ink, appearing to be "MB", written over a horizontal line.

Markus Baldinger,  
CTO R&D

A handwritten signature in black ink, appearing to be "JL", written over a horizontal line.

Jörg Lechner,  
CTO Production

Grieskirchen, 01.08.2016

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