

Operator's manual

Translation of the original Operating Manual

Nr. **99+3841.EN.80K.0**

A horizontal number line with 11 equally spaced tick marks. The line is open at both ends, with vertical bars at the far left and far right. There are 10 intervals between the 11 tick marks.

Chassis Nr.

Disc mower

NOVACAT 8600 Collector

(Type PSM 3841 : +..01028)



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.

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INSTRUCTIONS FOR PRODUCT DELIVERY



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Industriegelände 1
A-4710 Grieskirchen
Tel. 07248 / 600 -0
Telefax 07248 / 600-2511

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
- **document B** stays with the specialist factory delivering the machine.
- **document C** stays with the customer.

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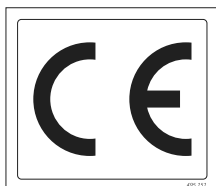
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Recommendations
for work safety

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

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)

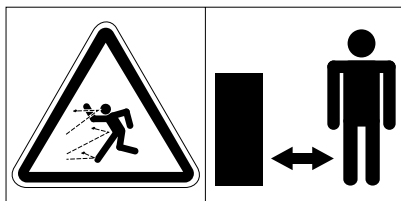
By signing the EU Declaration of Conformity, the manufacturer declares that the machine being brought into service complies with all relevant safety and health requirements.



**Recommendations
for work safety**

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

Meaning of warning signs



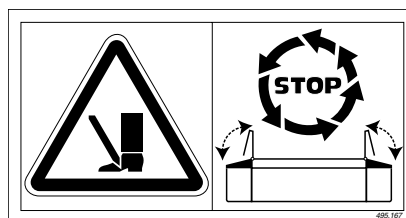
Danger - flying objects; keep safe distance from the machine as long as the engine is running.



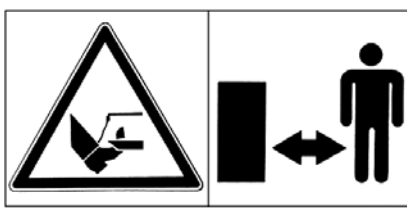
Stay clear of swinging area of implements



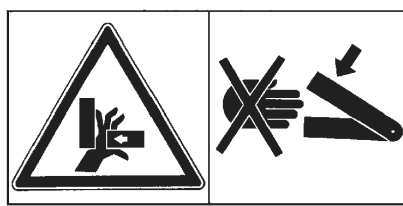
Wait until all machine components have stopped completely before touching them.



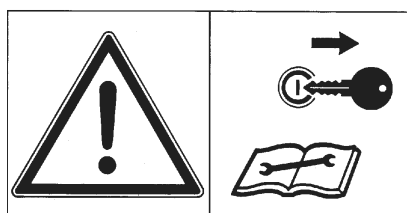
Close both side protective coverings before engaging p.t.o..



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.

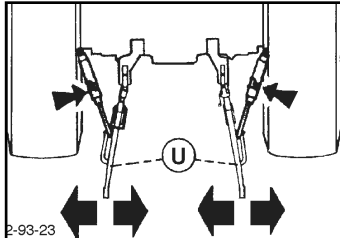


Shut off engine and remove key before performing maintenance or repair work.

Attaching implement to tractor

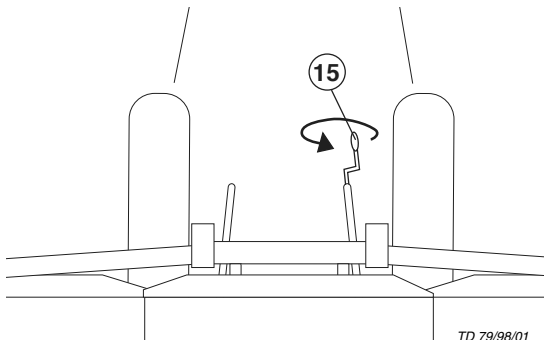
Centre-mount (M) mower unit to tractor

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



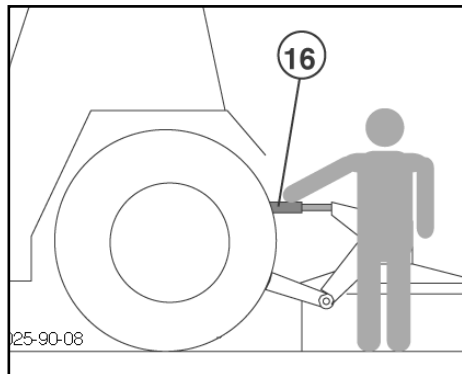
Frame in horizontal position

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

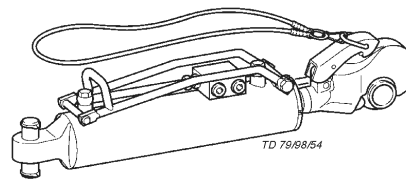


Setting upper link height using spindle

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



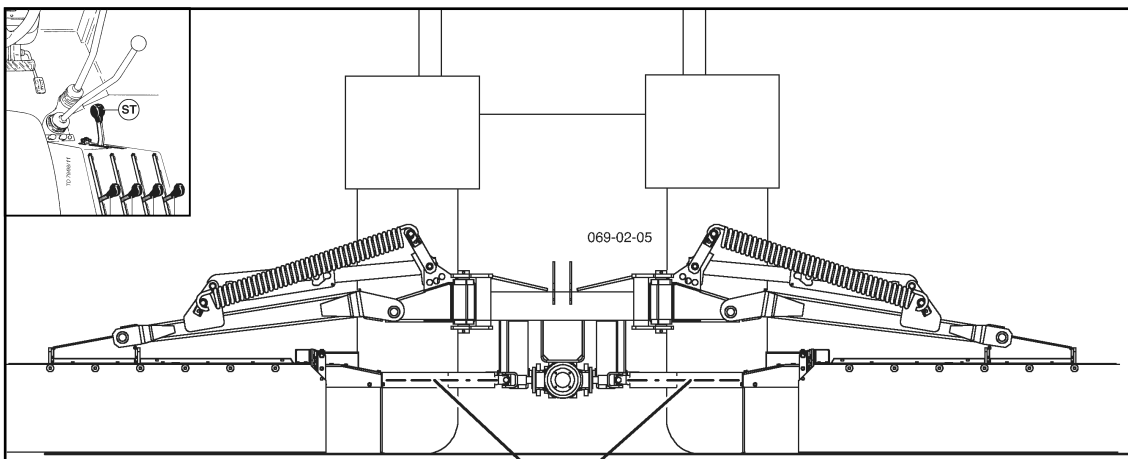
A hydraulic upper link is recommended.
(double-action hydraulic connection)



Setting lower link height

- Adjust tractor's hydraulics (ST) using bottom stop.
- The drive shaft (GW) should be about horizontal when mowing.

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



Safety hints:

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



Safety hints

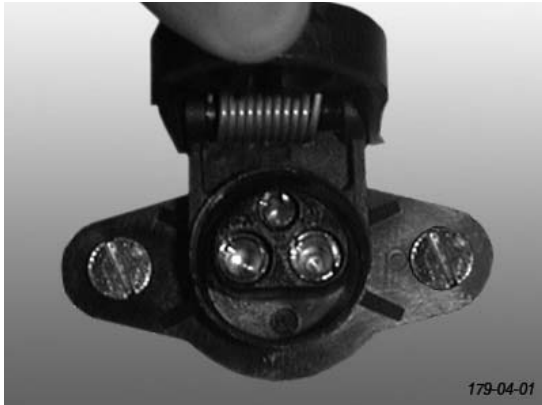
This appliance is
designed only
for use with
tractors (not
for automotive
machines).

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.

To make the connection to the tractor

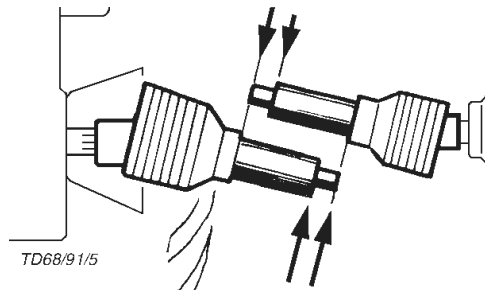
Operation:

- Connect the 3-channel plug to the DIN 9680 socket on the tractor



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.



Important!

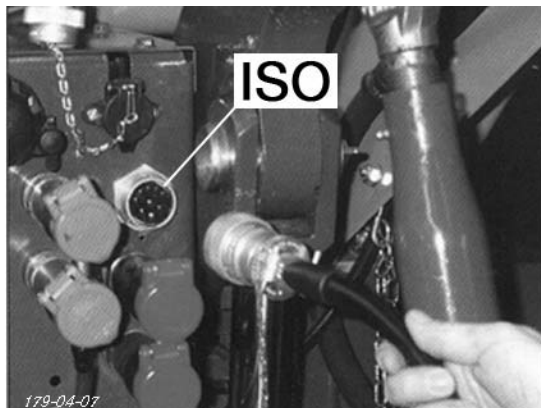
Before putting the tractor into operation check vehicle safety (lights, brake unit, protective covering,).

Lighting:

- Connect 7-channel plug to tractor
- Check that lighting is functioning on wagon

For tractors with ISO Bus control

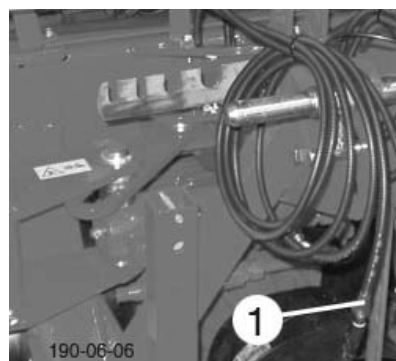
- Connect 9-channel ISO plug to ISO Bus socket on the tractor



Connecting the Sensor and valve cables from front mower unit

Electrical cable connections between front mower unit and mower combination

- 3 channel cable for sensor kit (1)



Hydraulic connection

Minimal hydraulic system:

- 1 x single-action hydraulic connection (EW) with unpressurized backflow (T)
- 1 x double-action hydraulic connection (DW), for the starting lock

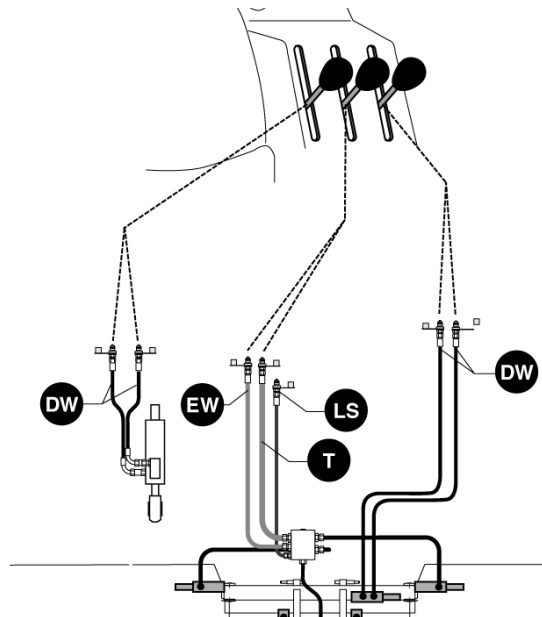
Optimal hydraulic system:

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

Tractors with a "Load sensing" system

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

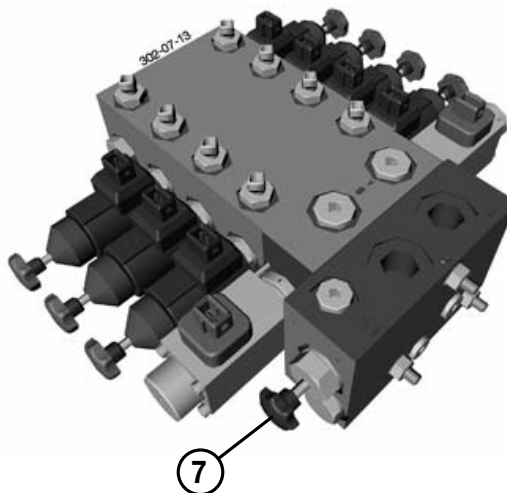
Tractors with a closed hydraulic system

JOHN DEERE, CASE MAXUM, CASE MAGNUM, FORD Series 40 SLE

- 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



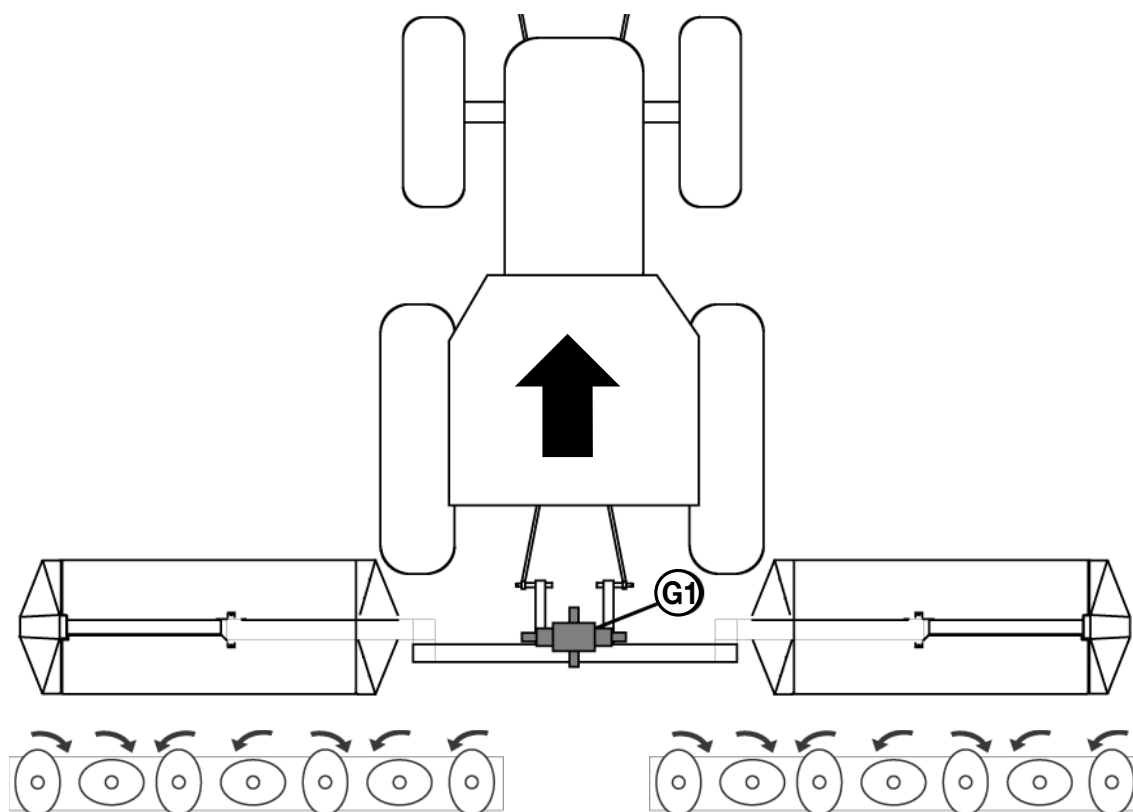
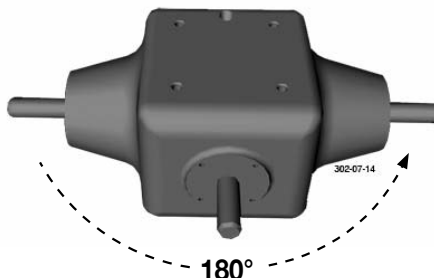
Observe rotation direction of cutting discs

- 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:

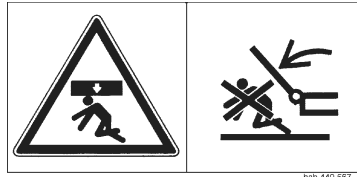
- Swap ventilation screw and drain plug positions.
- The correct ventilation screw position is on top.



Conversion from working to transport position



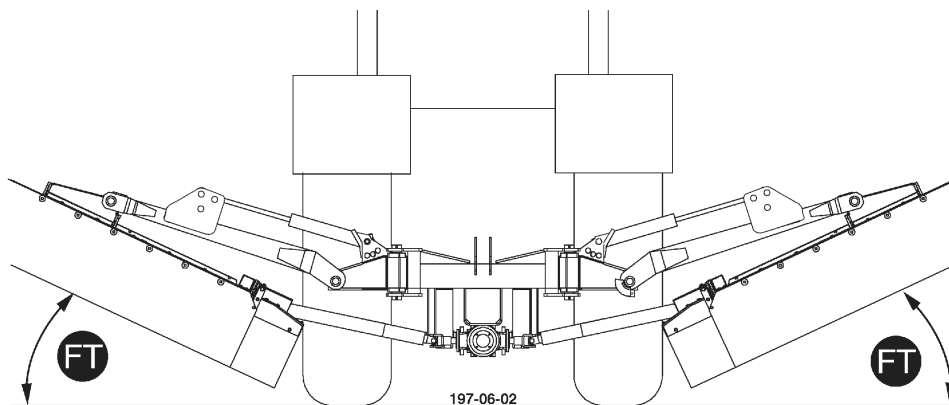
- Before swivelling the cutter bar up, turn off the drive and wait for the mower discs to come to a complete standstill.
- Make sure that swivel area is free and that nobody is standing in the danger area.



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).

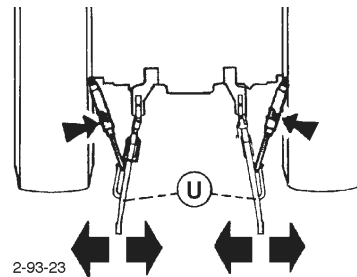
- Swing out all hoop guards on the mower

Driving on public roads

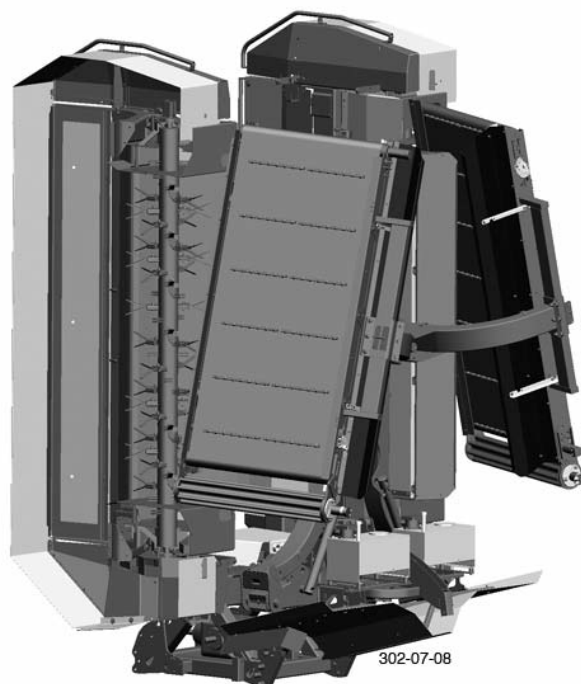
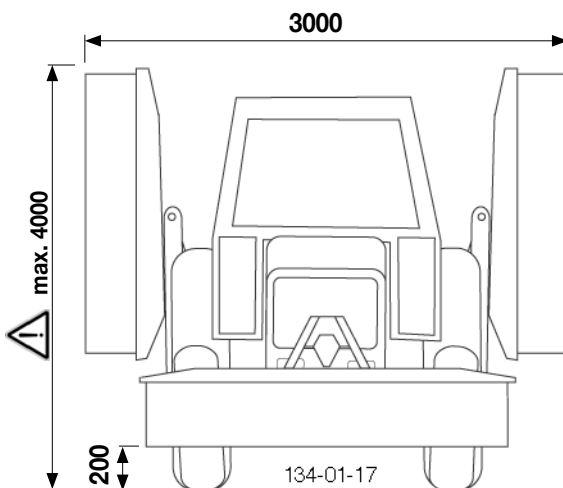
- Observe the official regulations of your country.
- Driving on public roads must be carried out in the transport position only
- Protection devices must be in proper condition.
- Before travelling bring all swivelling parts into their correct positions and secure against dangerous changes to position.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

Hydraulic lower link

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



Transport position



Unhitch device from tractor



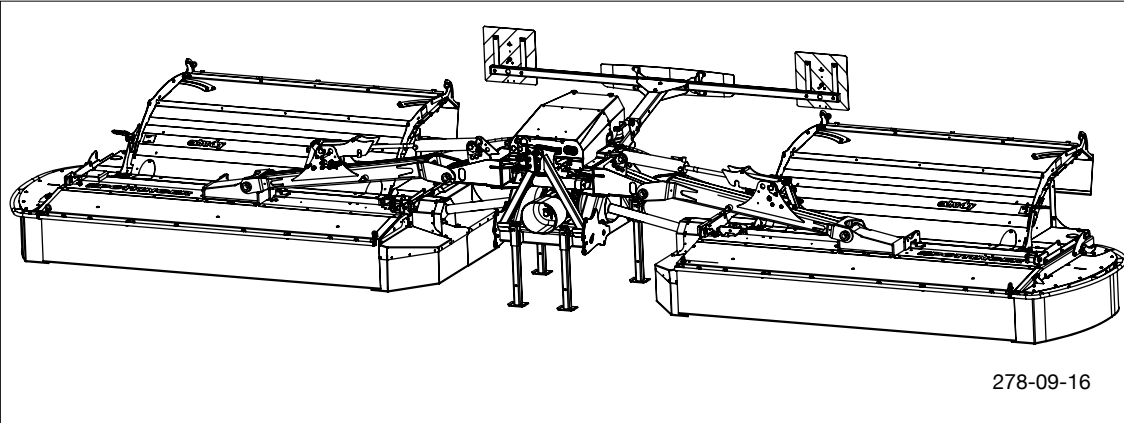
Caution!

Only park the mower combination in the working position (both mower units are folded down). Maximum danger of tipping over if the mower combination is parked in the transport position.



Safety note:

Only park the disc mower on firm, level ground and ensure a secure position.



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 (for example max. 540 rpm).

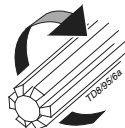
540 Upm

1000 Upm

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

- 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.

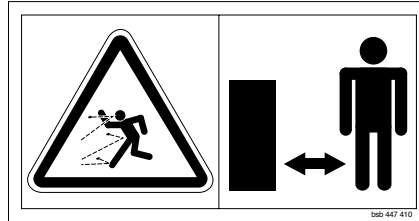
In the event of a collision

- Stop immediately and switch off the drive.
- Carefully check the implement for damage. The mowing discs and their drive shaft must be checked in particulare.
- 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.

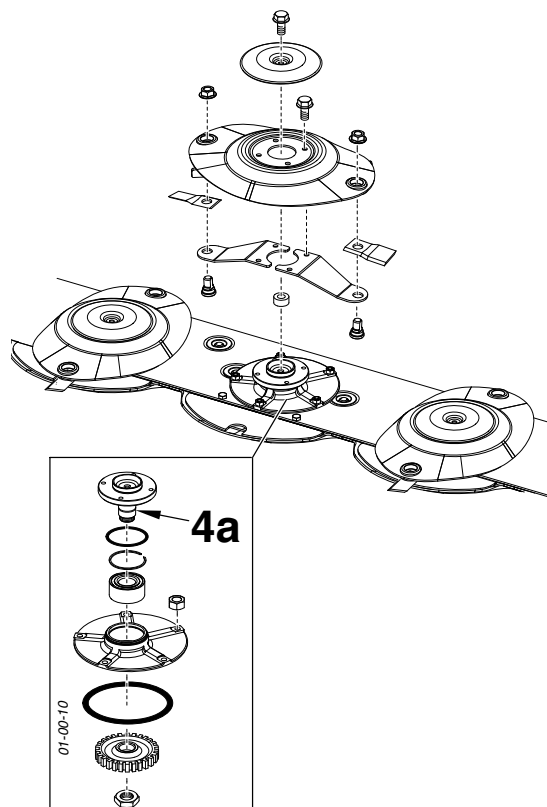
Special care is necessary on or near stony ground.

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.

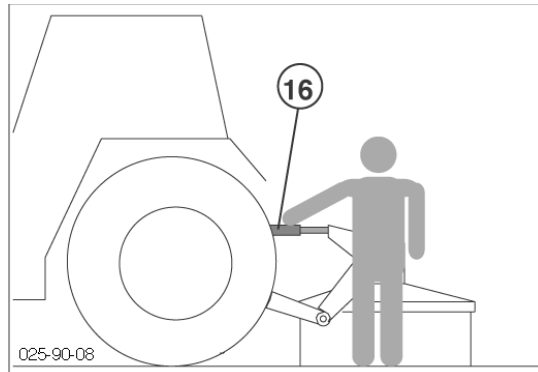
Mow

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.

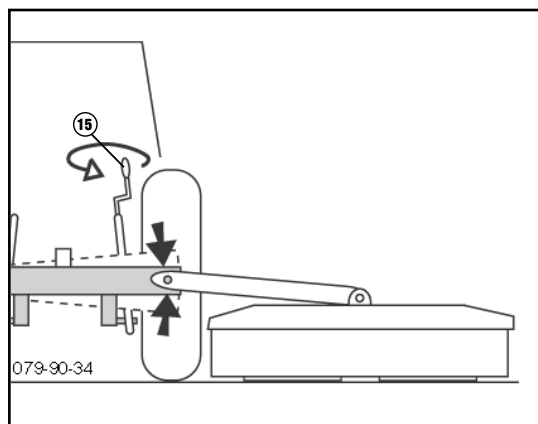
Smoothly increase the p.t.o. speed, in order to avoid noises in the free-wheel conditioned by the system.

- 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.



Attention!

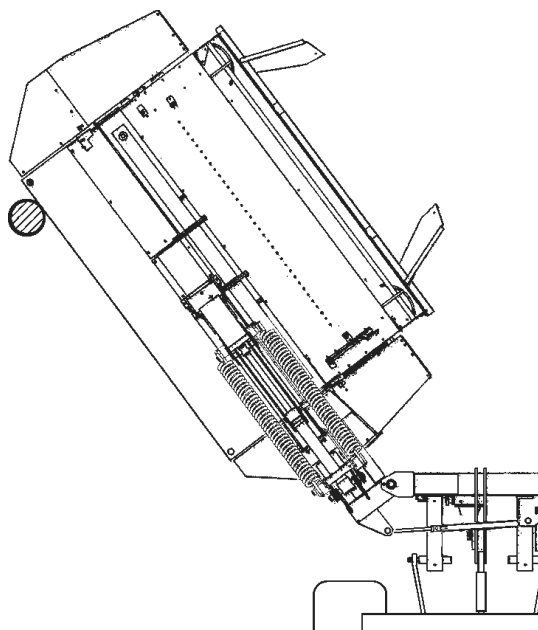
It is not the intention of the collision safety device to prevent damage to the machine when working at full speed.

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 the cutter bar can be swivelled back hydraulically into the operating position.

To do this, actuate the double-action control valve (ST).



Working on slopes



Take care when turning on slopes!

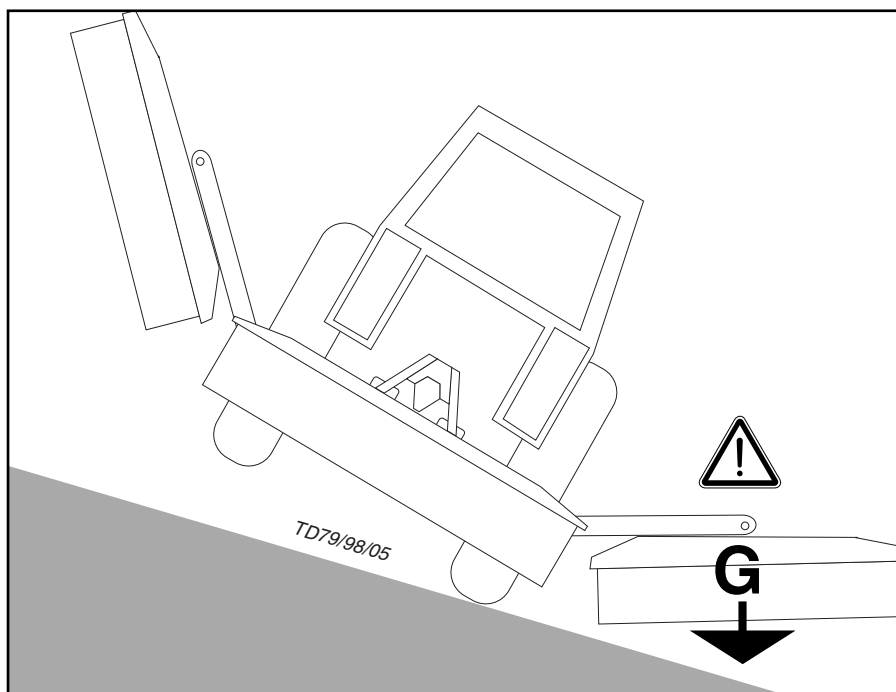
The tractor's travelling characteristics are influenced by the weight (G) of the mower unit. This can lead to dangerous situations, especially on slopes.

Safety advice

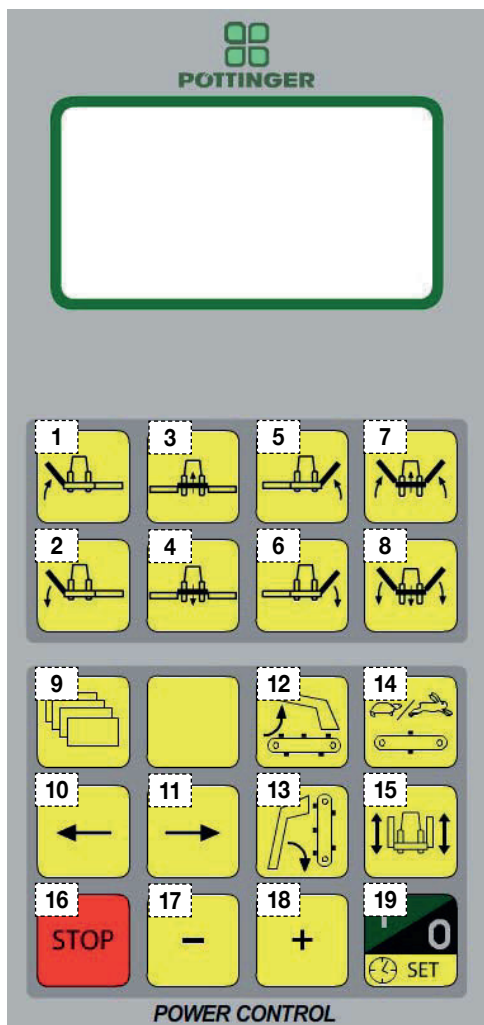
- Reduce speed in curves accordingly.
- It is better to travel in reverse on a slope than to carry out a risky turning manoeuvre.

Danger of tipping occurs

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



Control panel



Display indicator:

- Main indicator
- Special menu
 - **SET**
(Settings for machines, setting the time differences, setting the speed control)
 - **TEST** (sensor test)
 - **DATA** (software versions, operating hours)
- Alarms



Note!!

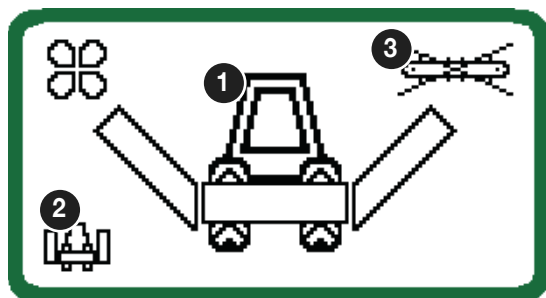
Always store control panel in a weather-resistant location.

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
- 10 Navigation menu - forwards
- 11 Navigation menu - reverse
- 12 Swing cross conveyor belt out
- 13 Swing cross conveyor belt in
- 14 Cross conveyor belt speed (slow/fast)
- 15 Select transport position
- 16 STOP
- 17 Alter menu value (-)
- 18 Alter menu value (+)
- 19 ON / OFF

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 Conveyor belt status (swung in/out)

Power control initial operation

Switching on operating device

- pressing the I/O button

Switch off the control panel and job calculator by

- pressing the I/O button

Note!!



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

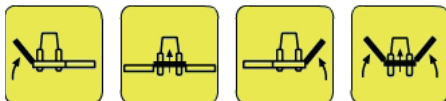
This is particularly necessary for tractors with open hydraulic systems, otherwise oil heating occurs.

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 "transport position" selection button first.

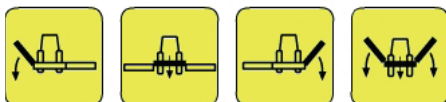


- Raising the mower unit can be interrupted by the following means:

- 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 "transport position" 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!

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

STOP

Buttons to operate the cross conveyor belt

Swing cross conveyor belt out



Swing cross conveyor belt in



Function of buttons:

- By pressing the button the cross conveyor belt swings up or down
- When cross conveyor belts are swung out they are shown as symbols on the display



Take note!

When the "Select transport position" button is pressed then the cross conveyor belts can no longer be activated.

The cross conveyor belts can only be activated in the pre-turnover position

Cross conveyor belt speed rate



Button function:

- By pressing the button the cross conveyor belt speed rate is changed between fast and slow
- On the display the tortoise (slow) and hare (fast) symbols represent the speed of the relevant cross conveyor belt
- The relevant settings are carried out in the SET menu.

SET-menu

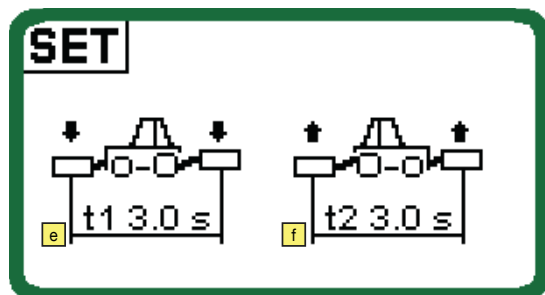
The following menu pages are displayed by pressing the "Menu" button on the console



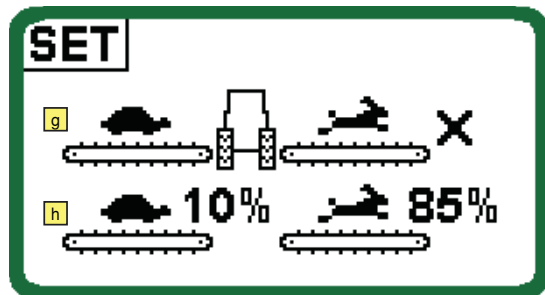
Configuration of machines



Time difference when raising and lowering



Speed control of cross conveyor belts



With the operating method "Speed variance left and right", the speed between both cross conveyor belts is changed so that one belt is always running faster than the other.

The tortoise (slow) and hare (fast) symbols indicate the speed of the relevant cross conveyor belt.

Speed indication is shown only when the cross conveyor belts are in the working position.

Meanings of Indicators:

- a Choice of machine types**
Adjustable types: NC 8600 / NC 8600 Collector
- b Centre mower available**
Tick = mower is co-controlled
Cross = mower is not co-controlled
- c Set relief pressure**
Both side mowers must be located in the working position
The current relief pressure is shown
Max. value is 230 bar
- d Speed control of cross conveyor belts**
Tick = speed control is activated
Cross = speed control is deactivated

- 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

- g Set operating method**
Tick = varying speed between left and right cross conveyor belt (for mowing in lineal contours)
Cross = Even speed for both cross conveyor belts with the possibility of switching between two speed rates
- h Set speed rate**
Two speed rates can be set for cross conveyor belts
Setting: in 5% intervals
Setting range: 5-100%

Note!



This menu will not be shown if the speed control is not activated in the configuration of machines



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



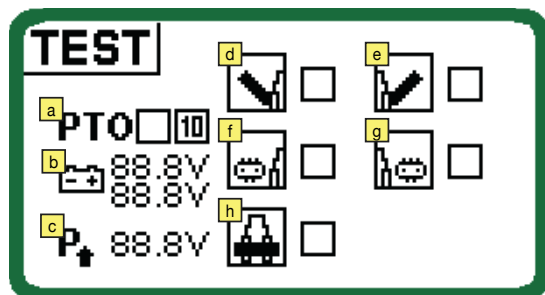
TEST-menu

The following menu pages 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 Left mower unit sensor

e Right mower unit sensor

f Left cross conveyor belt position switch

g Right cross conveyor belt position switch

h Centre mower unit sensor



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



DATA-menu

The following menu pages are displayed by pressing the "Menu" button on the console.

The DATA menu comes after the TEST menu





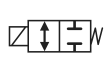
Meanings of Indicators:

a Hours of operation

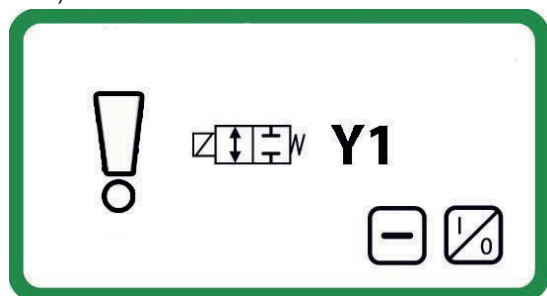
b Software version

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



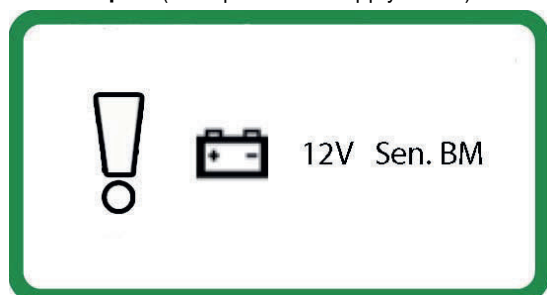
The diagnosis function for each individual channel can be switched off until the next system start using the "Minus" button



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)



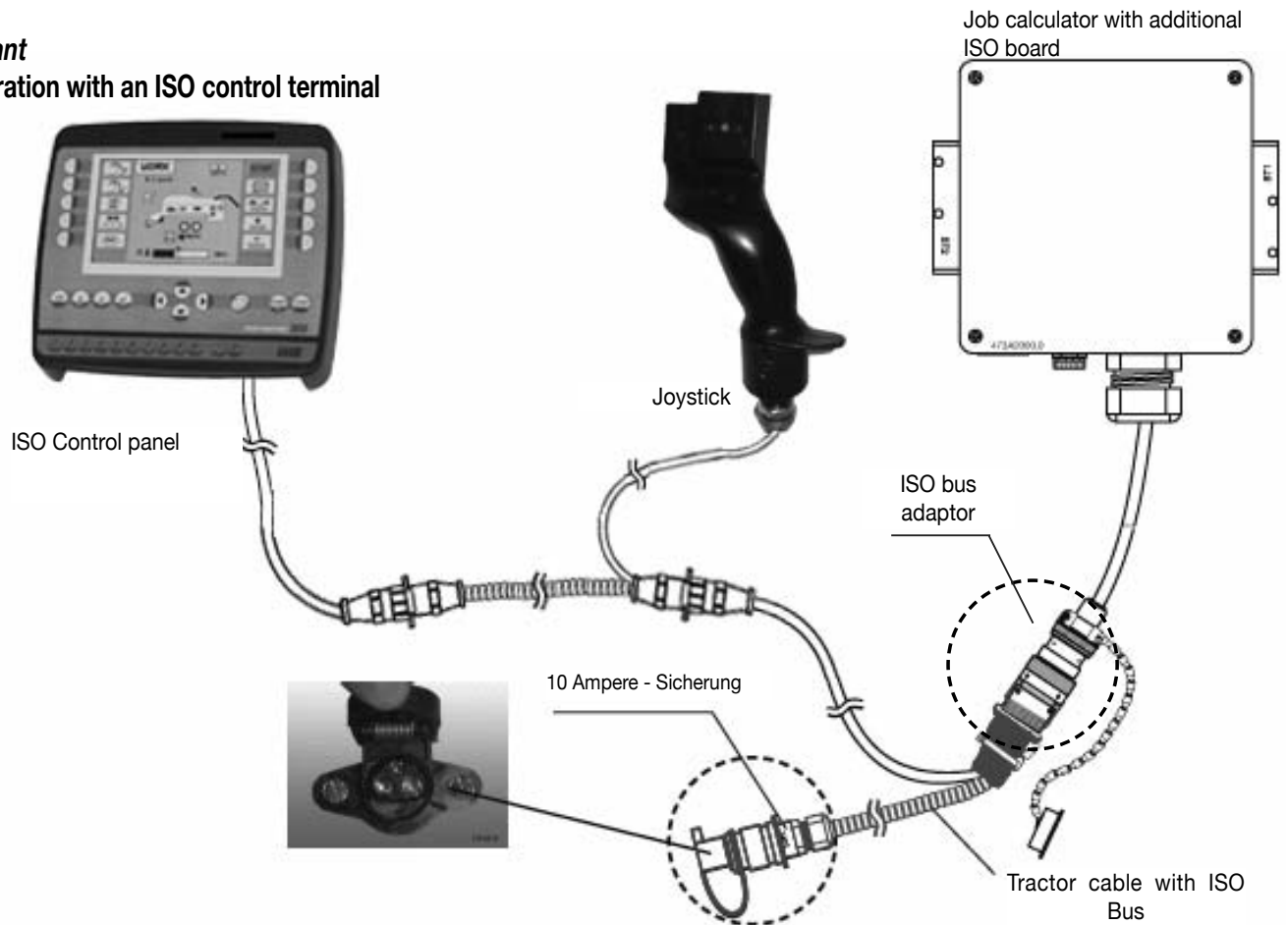
Note!



Alarms for the power supply cannot be switched off

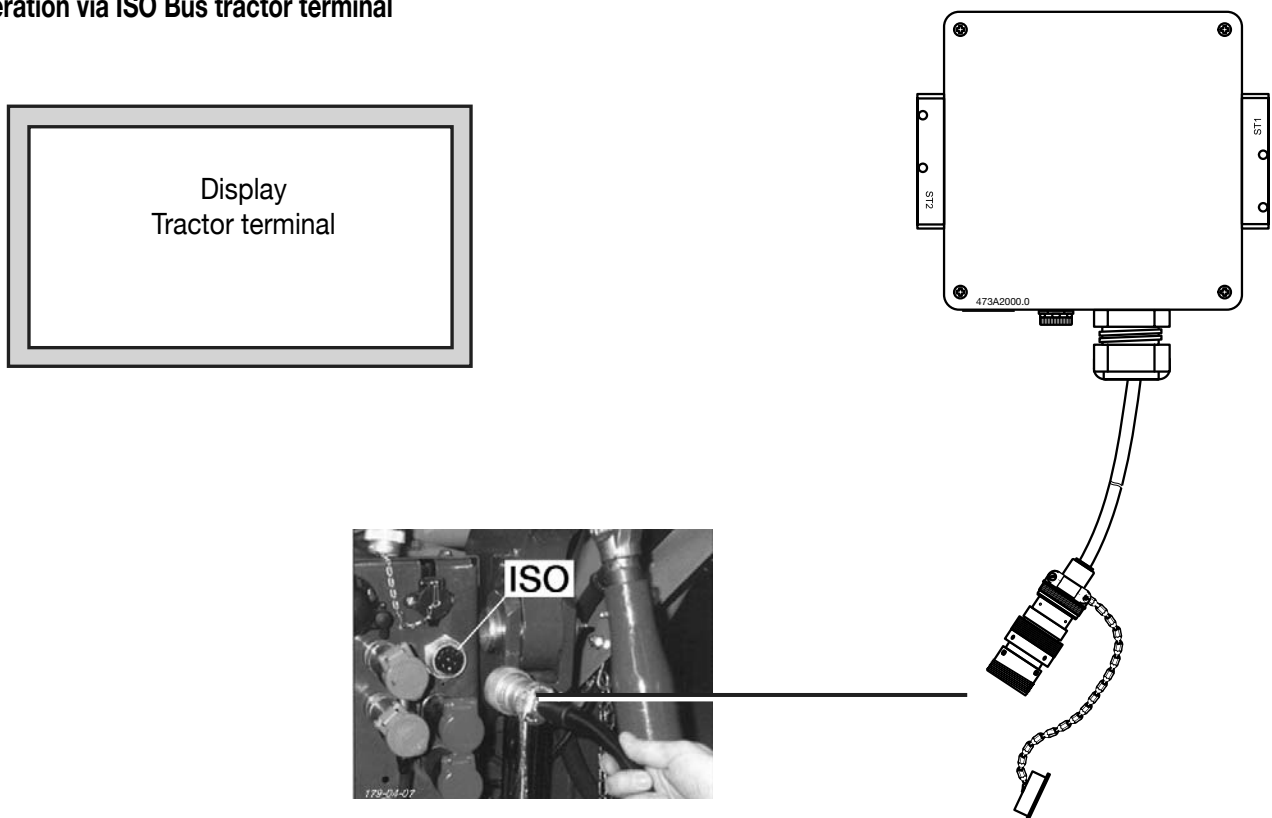
Variant

Operation with an ISO control terminal

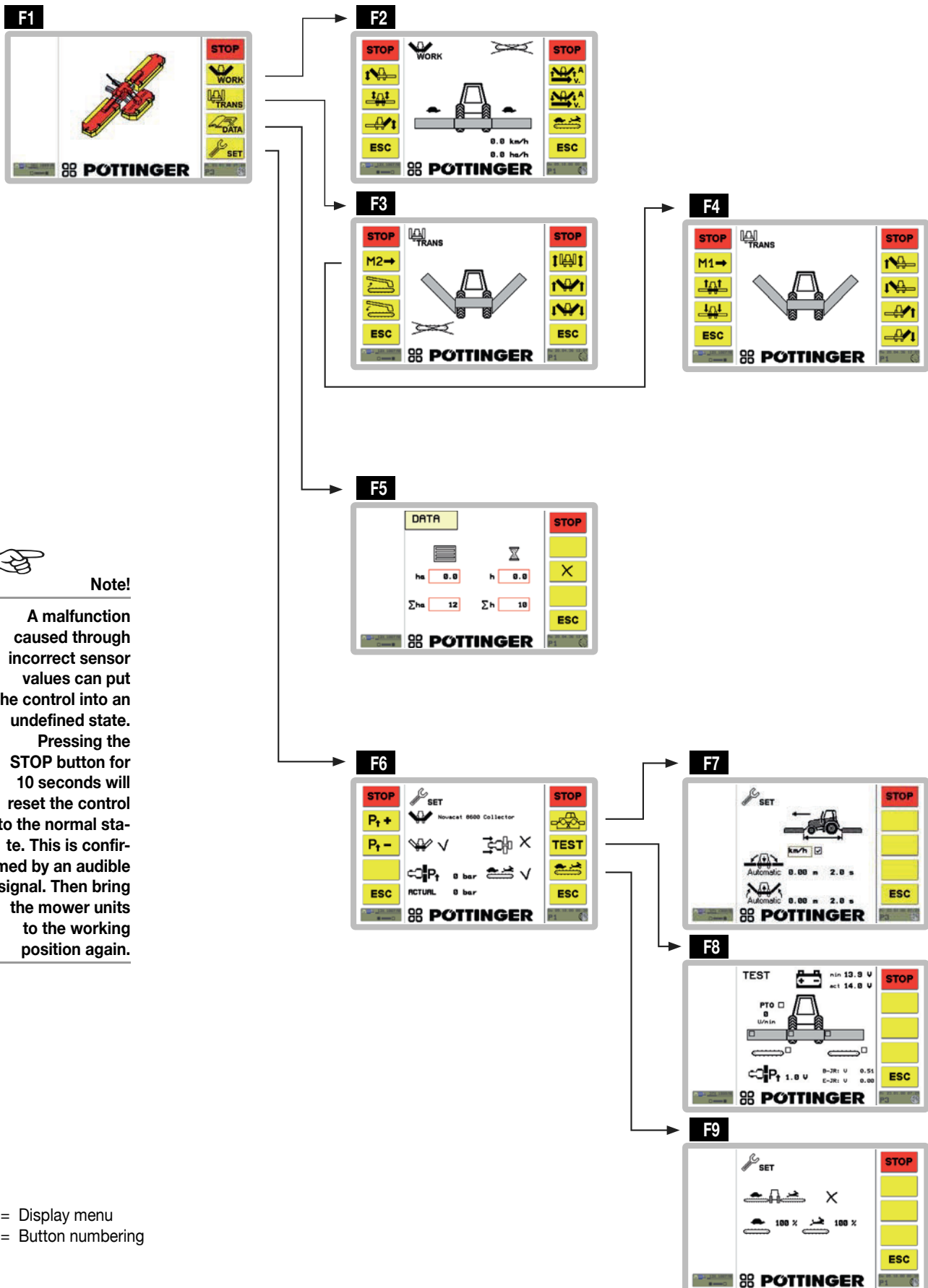


Variant

Operation via ISO Bus tractor terminal

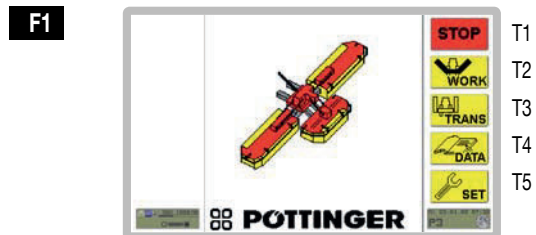


Operation ISO-terminal



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

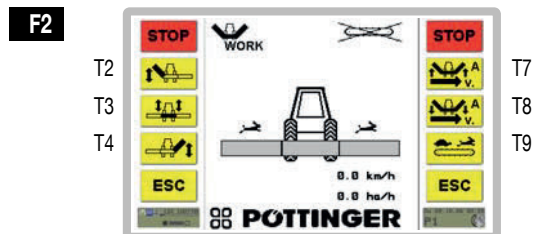


ESC button function:

To return to previous menu



Work menu



T2 Raise / lower left mower unit

T3 Raise / lower middle mower unit

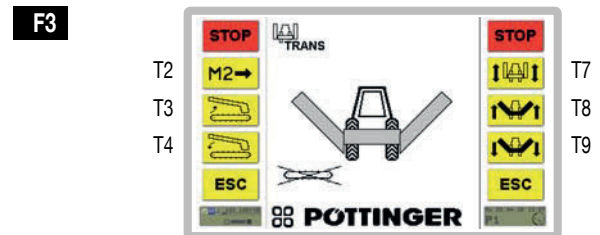
T4 Raise / lower right mower unit

T7 Automatic "Raise mower units" function

T8 Automatic "Lower mower units" function

T9 Cross conveyor belt speed (slow/fast)

Transport menu



T2 Change to page 2 (Switch to mask (F4))

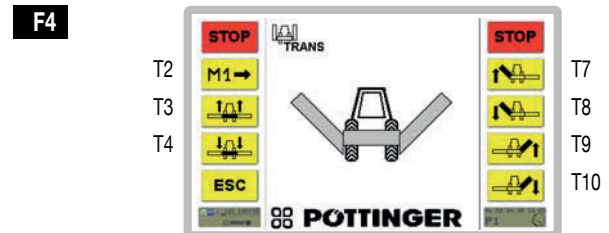
T3 Swing cross conveyor belts out

T4 Swing cross conveyor belts in

T7 Change from working position to road transport position

T8 Raise cutter bars into road transport position

T9 Lower cutter bars into working position



T2 Change to page 1 (Switch to mask (F3))

T3 Raise front mower

T4 Lower front mower

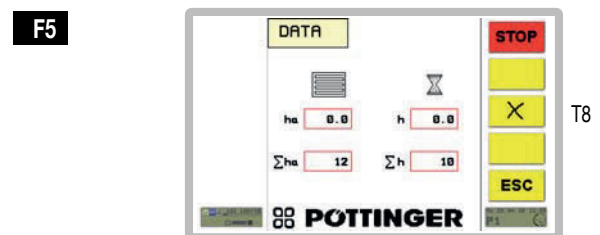
T7 Raise left mower unit

T8 Lower left mower unit

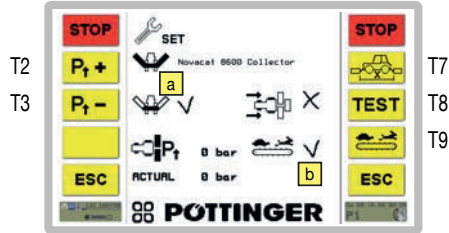
T9 Raise right mower unit

T10 Lower right mower unit

Data menu



T8 Clear time counter (ha, h)

Set menu
F6

T2 Increase relieving pressure

T3 Decrease relieving pressure

a Activate/deactivate front mower

b Activate/deactivate cross conveyor belt

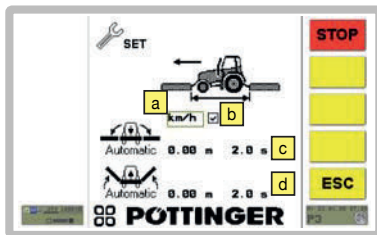
T7 Navigating the "Time-traverse dependant lowering/raising" menu - change to screen (F7)

T8 Navigating the "Test" menu

- change to screen (F8)

T9 Navigating the "Calibrating lateral traversing" menu

- change to screen (F9)

F7

Meanings of Indicators:
a Adjusting time or traverse dependant lowering/raising

km/h = depending on path and speed

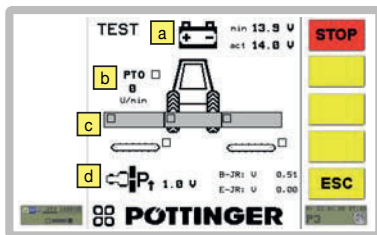
sec = depending on time

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))

F8

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

Meanings of Indicators:
a **Tick** = varying speed between the left and right conveyor belt (for mowing in contour lines)

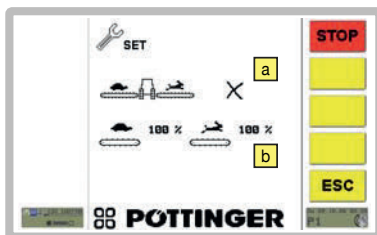
Cross = equal speed of both cross conveyor belts with the possibility to change between two speeds

b **Setting speeds**

Two speeds can be set for cross conveyor belts



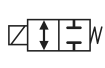
Setting: in 5% steps

Setting range: 5 – 100%

F9


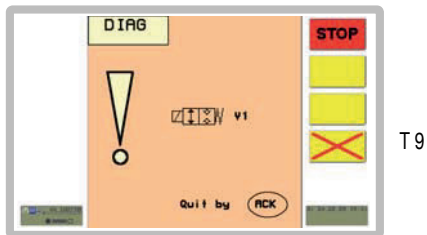
Diagnosis function

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

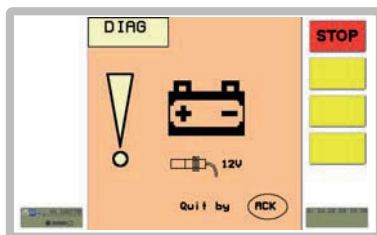


Note!

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



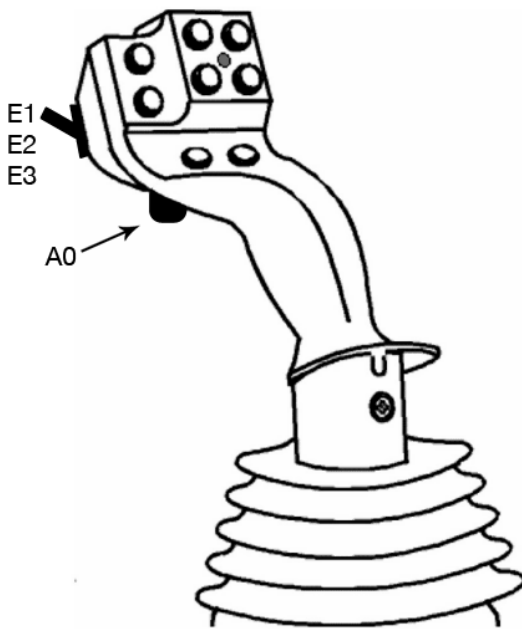
Note!



Alarms for the power supply cannot be switched off

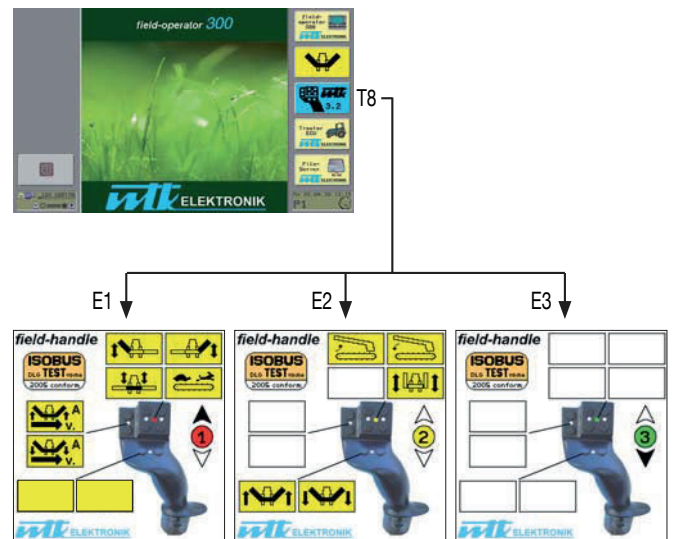
Joystick - Mower Configuration

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!

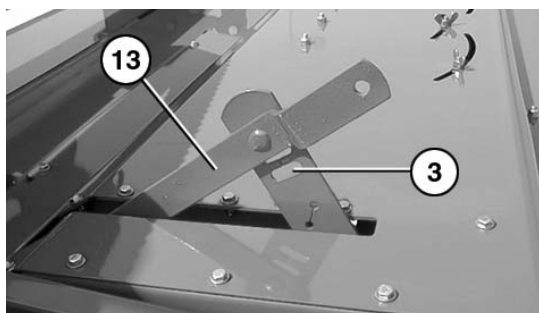
- 1 Switch up (LED lights up red)
- 2 Switch centre (LED lights up yellow)
- 3 Switch down (LED lights up green)
5. Set all other groupings of function buttons following the same procedure



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.

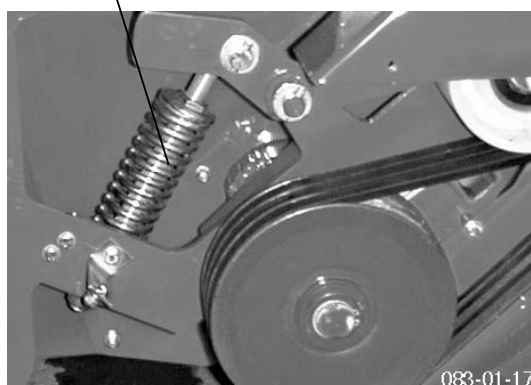
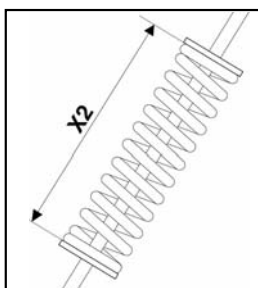


Correct belt tension

Check X2 size

NOVACAT 8600:

X2 = 164 mm (side mowers)

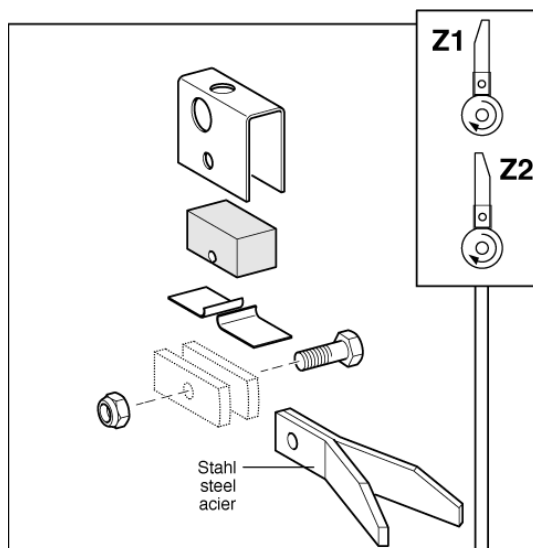


Position of the rotor prongs

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

Pos. Z2: for difficult operating conditions if for example the chuck 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.



Dismounting and mounting the conditioner

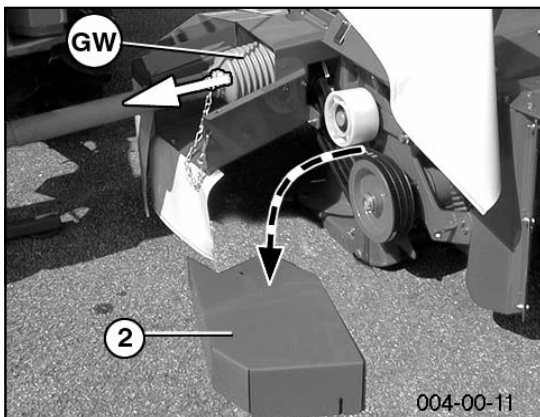
1. Loosen locking mechanism (1) and swing protection (2) up.



- engage protective frame in holder (3)
- left and right

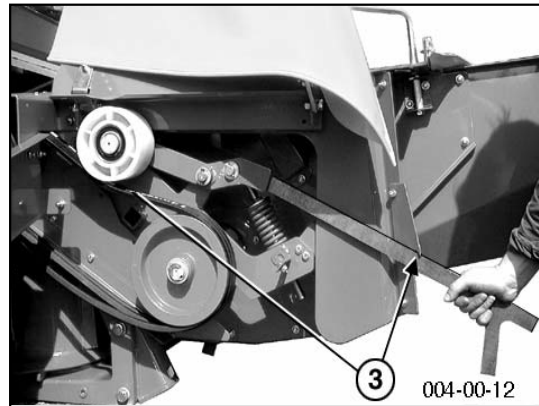


2. Remove the belt protection (2) and withdraw the drive shaft (GW) from the gear.



3. Remove belts

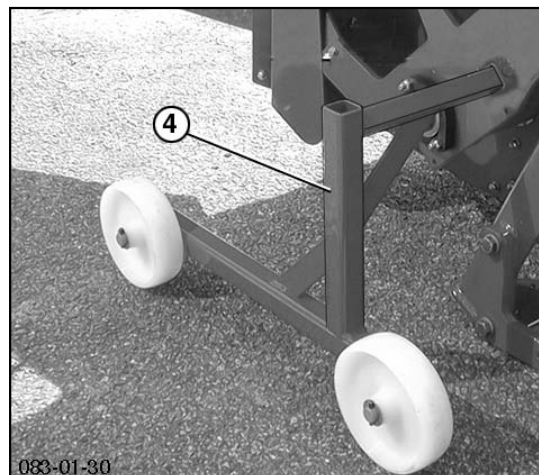
- Release the tension using lever (3) beforehand



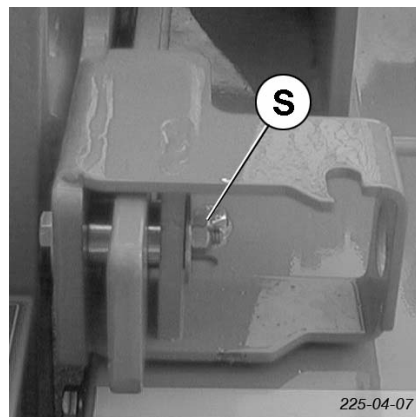
4. Fit transport wheels (4)

- left and right

5. Remove screw (S)



- left and right
- (Spring loaded positioning bolt = optional)



Attention!

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

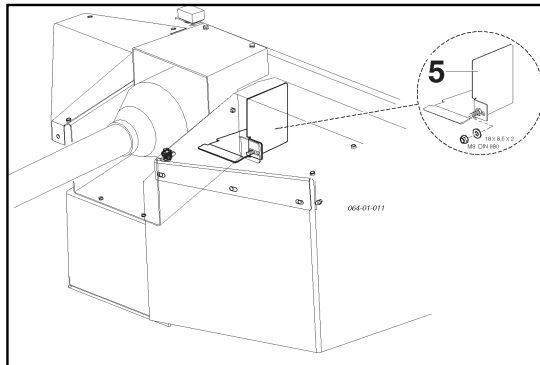


Important!

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

6. Always park conditioner (CR) steadfast.

7. Mount the guard (5)

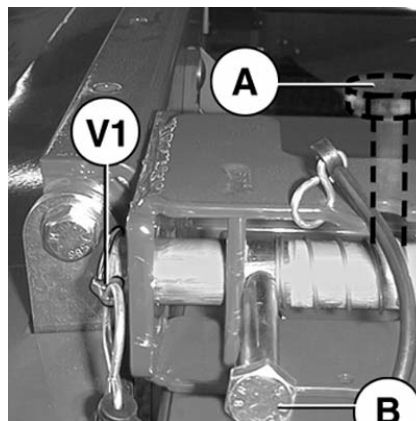


This guard (5) prevents the penetration of dirt into the gear area.

Mounting the conditioner takes place in the corresponding reverse order.

Optional

- Spring loaded positioning bolt
- Remove linch pin (V1) and release bolts
- Pos. A = released • Pos. B = Locked



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.

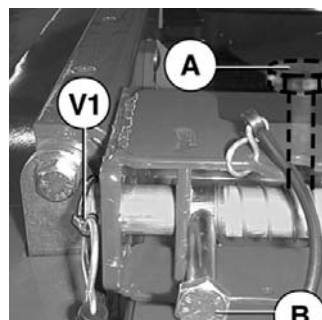
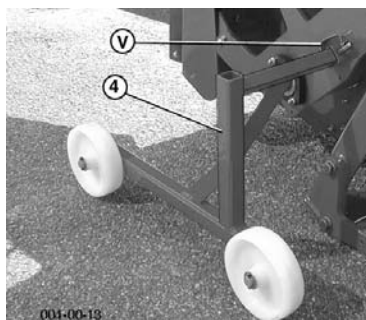
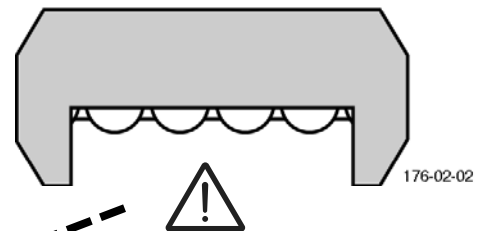
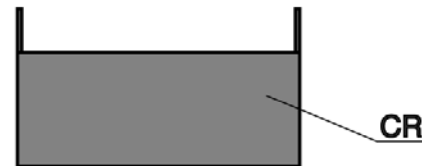
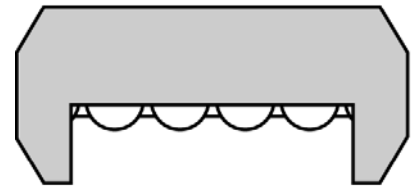
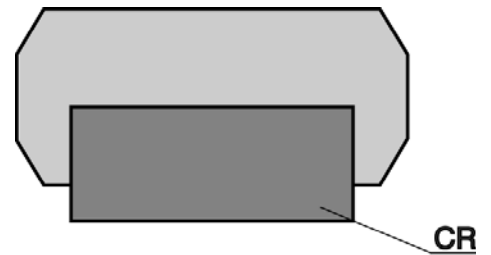
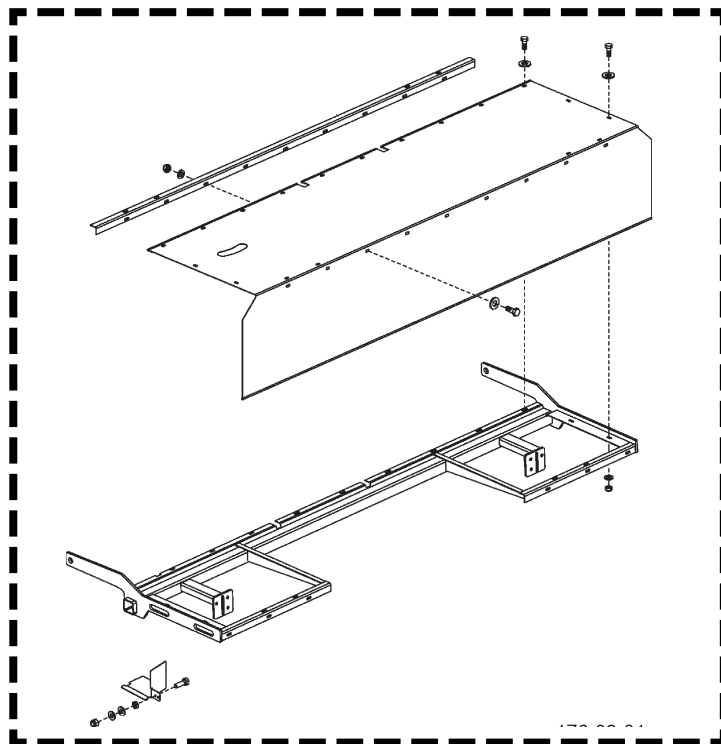
Should the conditioner be detached however, the mowing unit no longer has complete protection covering. In this situation mowing may not take place without additional protection elements!



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").



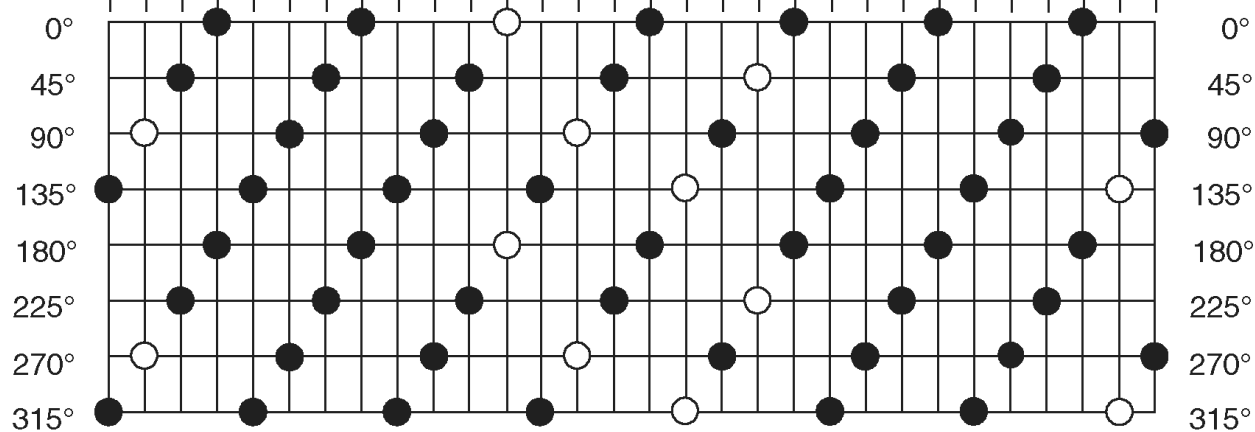
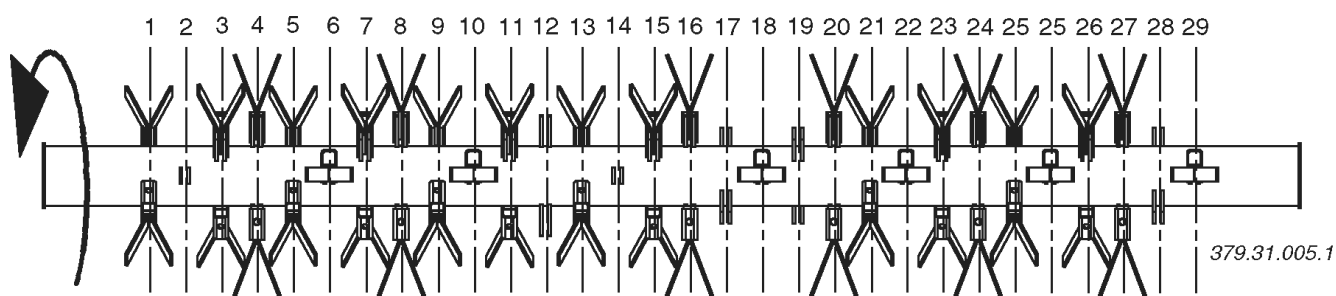
Optional extra

- Chassis (4)
- Spring-loaded fixing bolts (A-B)



For mowing without conditioner (CR)

- Observe safety hint (above) without reservation!



NOVACAT 8600 (Type 384)
NOVACAT 8600 Collector (Type 3841)

Roller Conditioner



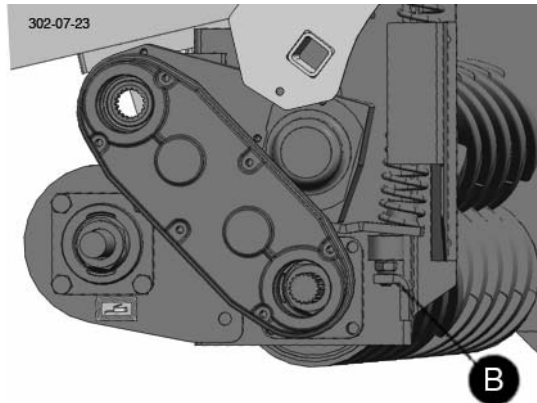
Note!

Dismounting and mounting the roller conditioner
- see chapter „CONDITIONER“

Settings

Side pressure springs

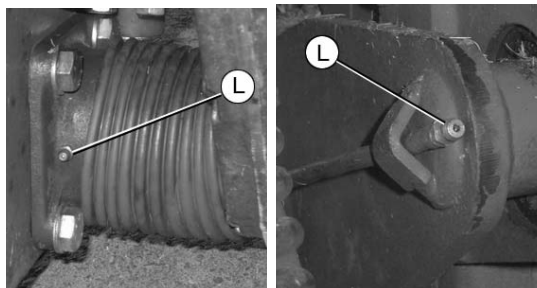
- to set the gap between the rubber cylinders
- adjustable through screw (B)



Cleaning and maintenance

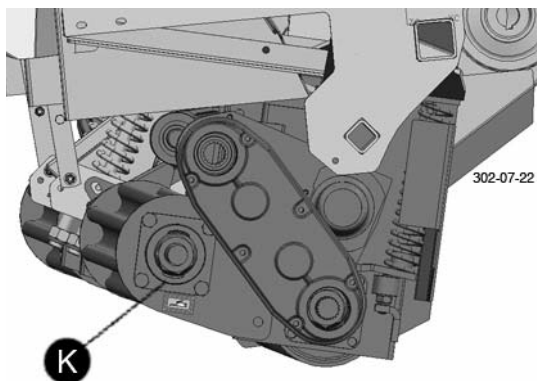
Clean with water after every operation

- the rubber cylinders
 - the side bearing
- (if using a high pressure cleaner see chapter „Maintenance and Service“)



After every operation, grease

- the lower roller side bearings (L) left and right
- the upper roller side bearing (L)
- the third roller bearing (K)

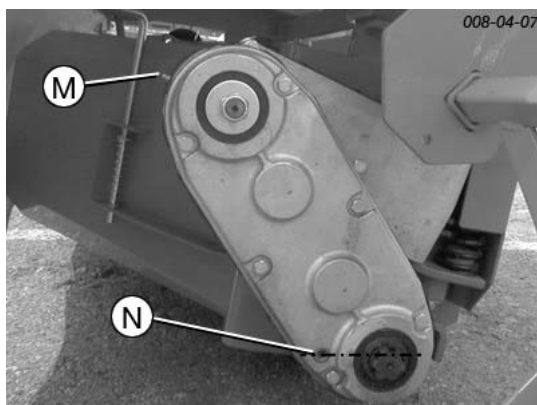


Lubricate after every 100 hours of operation

- the upper roller gearing (M) right

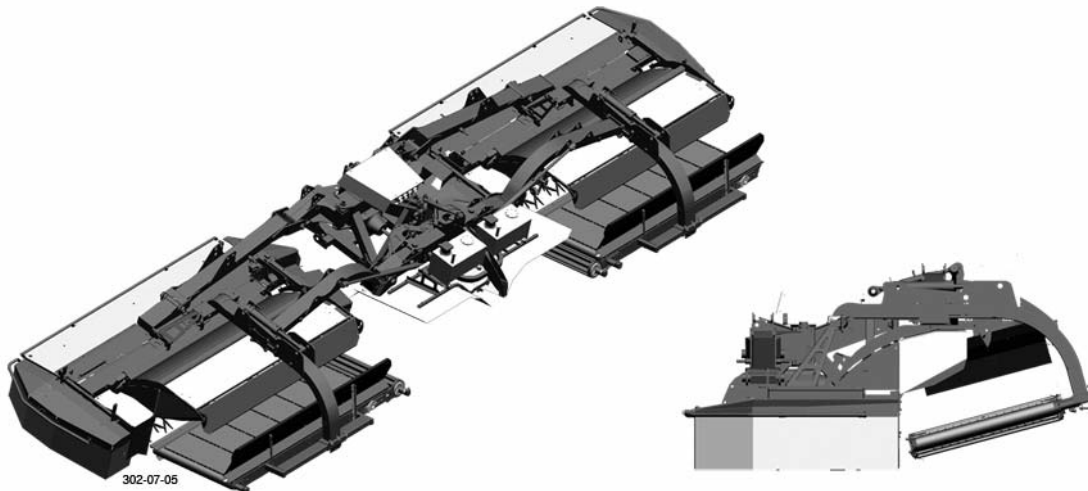
After every 500 operating hours

- change the oil
- fill with SAE 90 (III) oil to the mark (N)



Operating methods

1. Mowing with cross conveyor belts swung in (3 swaths)



The cross conveyor belts are always in this position when swinging from transport to work position

- Swinging cross conveyor belts in and out takes place via the operating console.



Note!

The mower unit can be used in three ways.

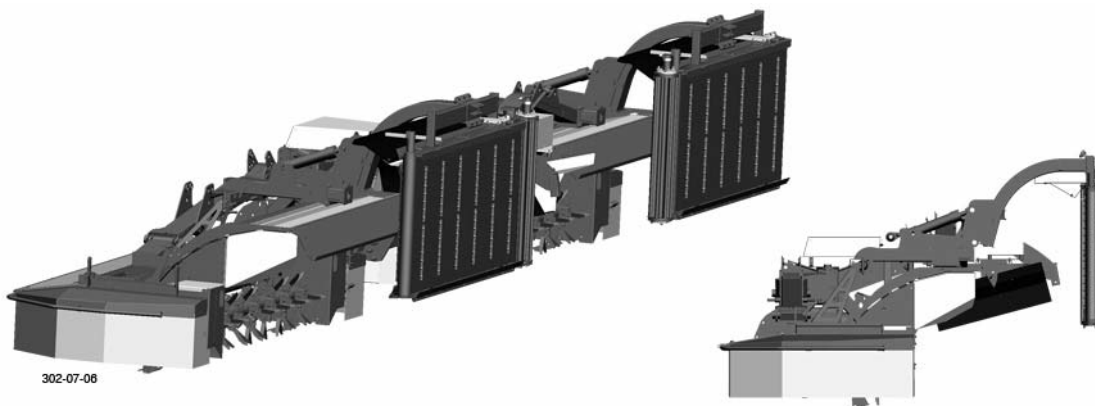
The cross conveyor belts are fixed to the mower units and therefore always swing with them when changing from transport to working position.



Attention!

When changing from working to transport position the cross conveyor belts must be swung in (danger of collision)

2. Mowing with cross conveyor belts swung out (single swath)



When not making swaths the cross conveyor belts can be swung out

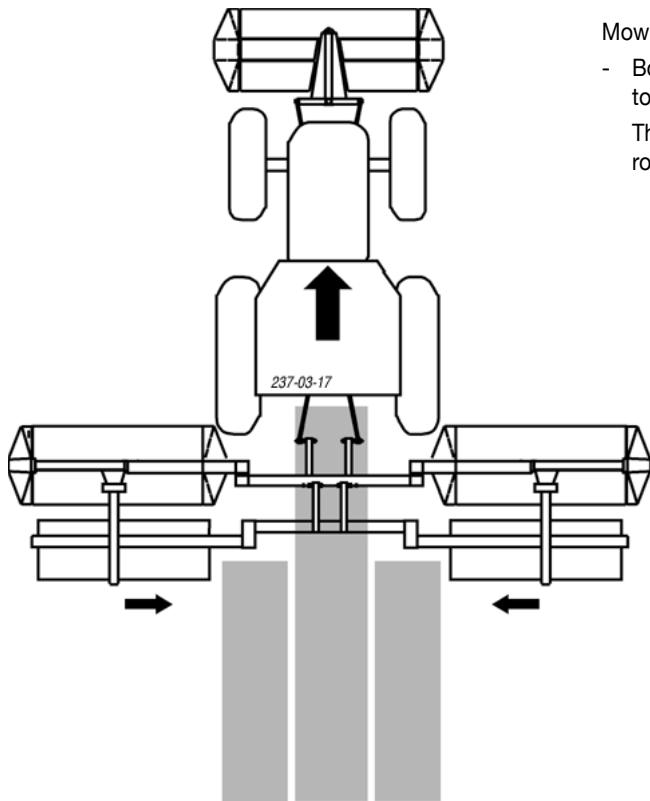
- Swinging cross conveyor belts in and out takes place via the operating console.

3. Mowing without cross conveyor belts

When not being used for longer periods the cross conveyor belts can be removed.

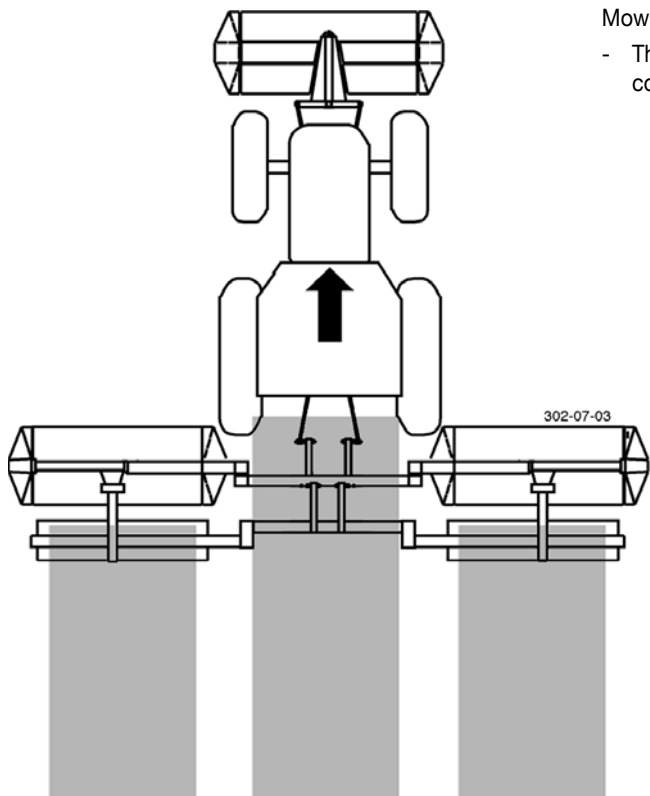
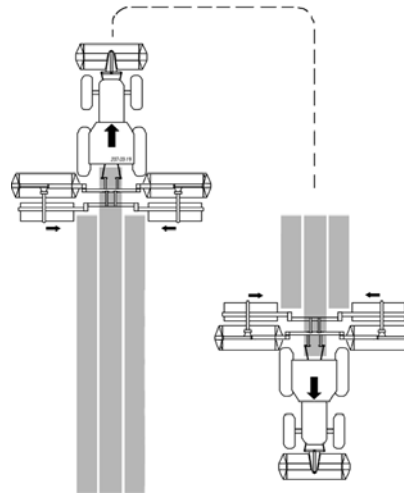
- The tractor will have less load
- See chapter "Dismounting the Cross Conveyor Belts" for removing.

Swath courses



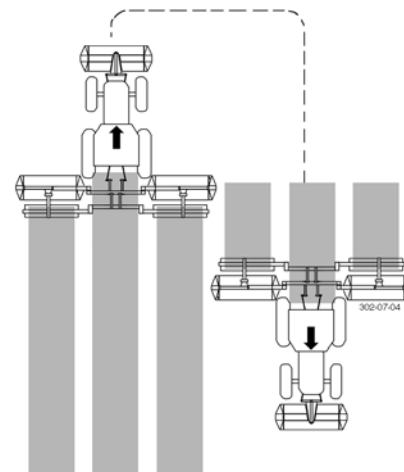
Mowing with cross conveyor belt

- Both conveyor belts transfer the cut forage to the centre to create a "third swath"
- The swath width can also be narrowed using the extra rollers.



Mowing without cross conveyor belt

- The cut forage is deposited in the swath width of the conditioner (= single swath formation)



Dismounting the Cross Conveyor Belt

1. Bring the mower units to the pre-turnover position



Attention!

Stand the cross conveyor belt on level, firm ground only.

When mounting and dismounting the cross conveyor belt ensure that nobody is between the mower combination and cross conveyor belt unit. Danger of crushing!

2. Fold down both support stands located on the left and right conveyor belt frames.

3. Lower mower units to the ground

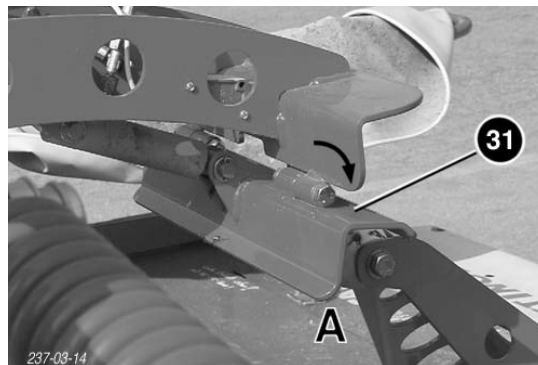
4. Remove locking plates (31)

- Remove screws



Careful!

In so doing the bracket can flick up



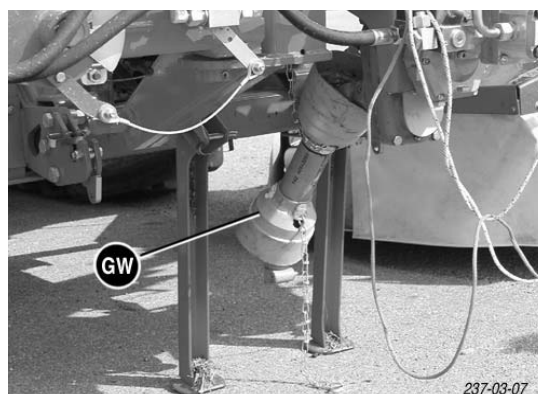
5. Fold down both support stands on the mounting frame

6. Disconnect the electrical and hydraulic connections

- Disconnect hydraulic lines (4x)
- Separate electrical cable
- Unplug and slip lighting cable from tractor

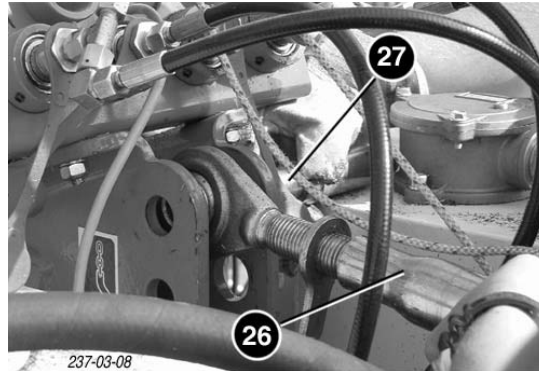


7. Uncouple the cardan shaft (GW).



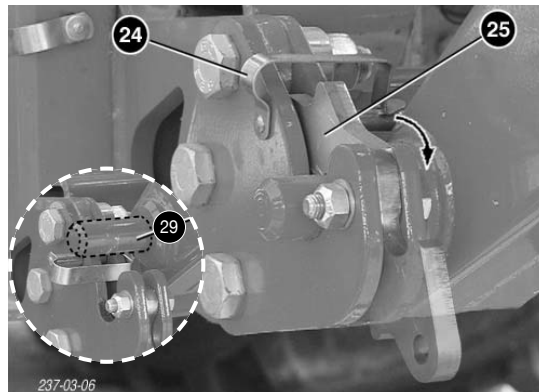
8. Unhitch the upper linkage

- Loosen upper linkage (26) by turning spindle
- Remove upper linkage pins (27)



9. Open the lower linkage bracket

- Remove spring pin (24) and fold away lower linkage lock (25).
- Leave danger area
- Lower the mower unit mainframe until the lower linkage pins (29) are free
- Drive the mower unit out slowly

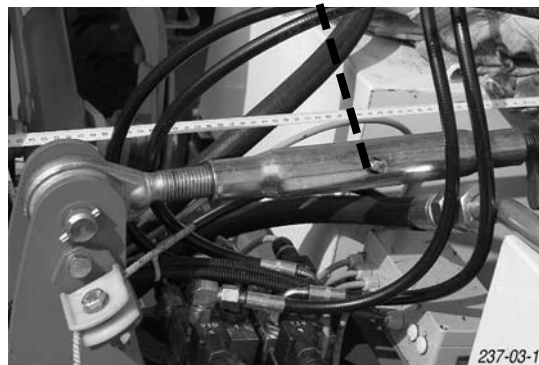
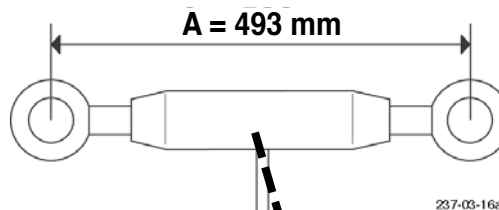


Mounting the Cross Conveyor Belt

1. Move mower unit up to the cross conveyor belt

2. Link the cross conveyor belt with the mower unit

- Lift mainframe until lower linkage pins (29) catch. Then continue lifting until support stands move freely.
- Lock both lower linkage pins with bracket (25) and secure with linch pin.
- Couple cardan shaft (GW)
- Swing middle support stand and secure (3x)
- Lower mainframe until upper linkage pins can be inserted into holes.
- Secure upper linkage pins with linch pin
- Adjust upper linkage length (A = 493 mm) by turning spindle



3. Connect lines

- Connect hydraulic hoses
- Connect electrical connections

4. Lift both mower units until support stands move freely

- Swing support stands up and secure (2x).

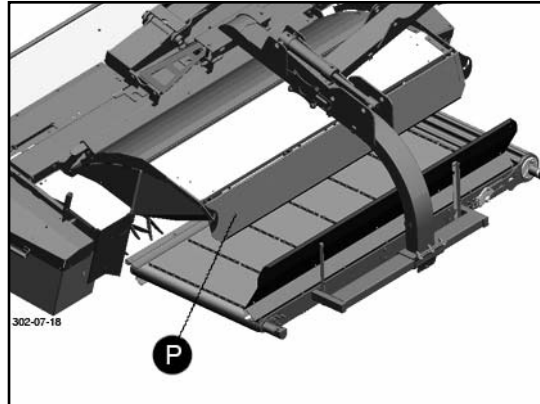


Attention!

When mounting and dismantling the cross conveyor belt ensure that nobody is between the mower combination and cross conveyor belt unit. Danger of crushing!

Cross conveyor belt operation

- Set the deflector (P) so that the cut forage is thrown to the middle of the cross conveyor belt.
- * Cross conveyor belt speed can be set via the control (see operating console description)
- * When operating on slopes (lineal contours) a varying cross conveyor belt speed can be set (see operating console description)
 - the downside can run faster than the upside



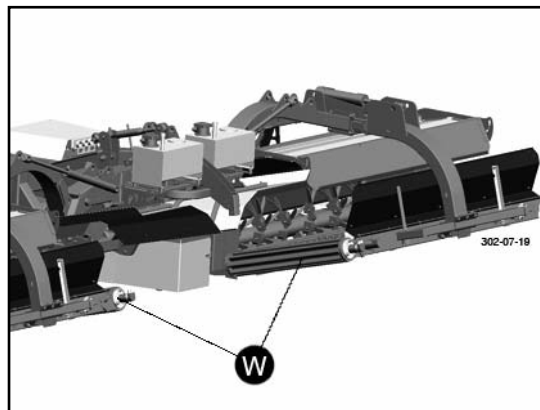
Note!

Regularly check the belt run to prevent premature wear and tear (see chapter "Maintenance")

Accelerator rollers (W 1)

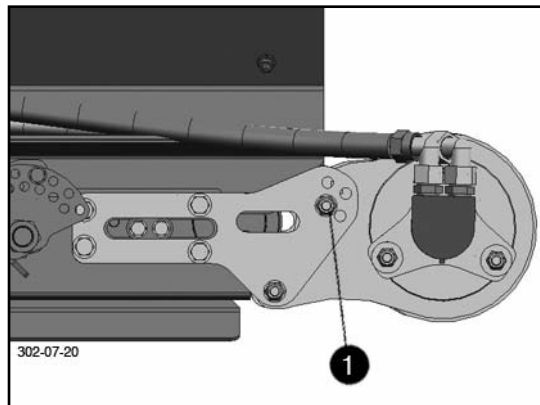
Accelerator rollers are used to transfer the cut forage further into the middle.

- Accelerator rollers can be set higher
 - doing this can alter the throw distance



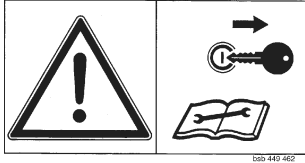
Setting

- Remove screw (1) (front and back)
 - Move roller to the desired position
 - Insert screw (1) into suitable hole pattern and tighten
- All points of the roller must be secured identically



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.

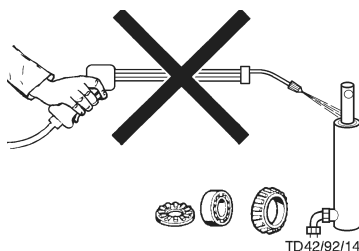
Spare part

- 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.

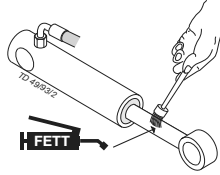
- Danger of rust!
- After cleaning, grease the machine according to the lubrication chart and carry out a short test run.
- Cleaning with too high pressure may do damage to varnish.



TD42/92/14

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!

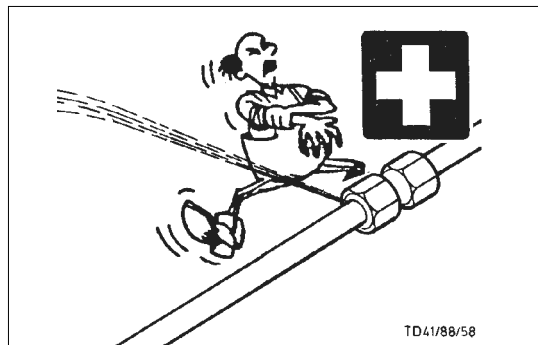
The instructions in this operating manual are always valid.

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.



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.

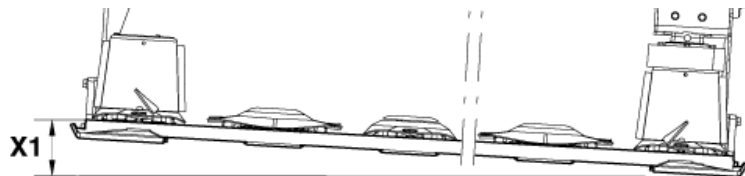
Quantity:

NOVACAT 8600: 3,5 Liter SAE 90

Cutter bar oil level check

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

NOVACAT 8600: X1 = 38 cm



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

- 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.

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.

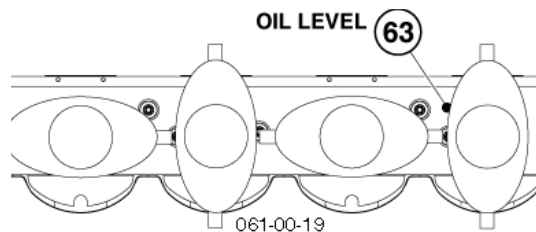
3. Remove oil refill screw (63).

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"



Note:

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

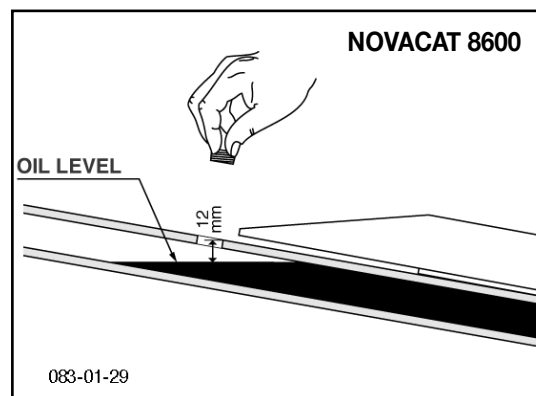
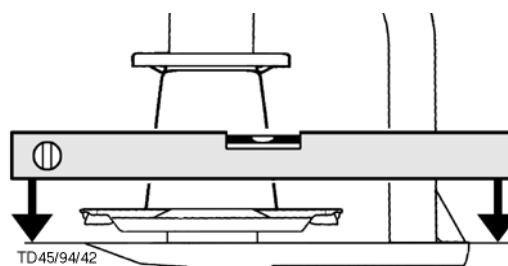
When cold, the oil is too viscous. Too much used oil would stick to the gear teeth, thus giving a false reading.

4. Oil level check

- Measure the distance up to the level of the oil.
- The oil level is correct when the measurement is 12mm.



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



1) The oil filler plug (63) is also the level screw (OIL LEVEL)

Gearing maintenance



Note:

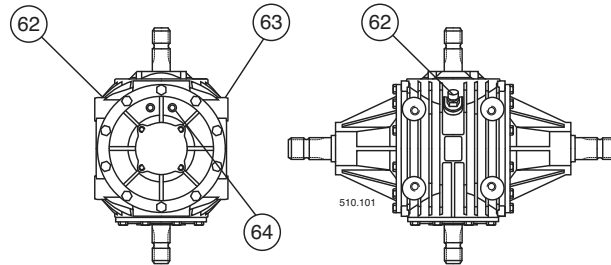
Under normal operating conditions, oil is to be replenished annually (OIL LEVEL).

Starting transmission

- Change oil after the first 50 operating hours.
- Change oil after 100^h at the latest.

Quantity:

4,3 Liter SAE 90

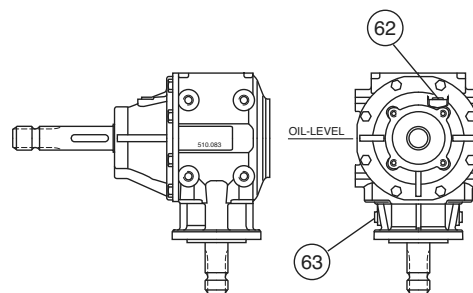


Angular gear

- Change oil after the first 50 operating hours.
- Change oil after 100^h at the latest.

Quantity:

0,8 Liter SAE 90



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

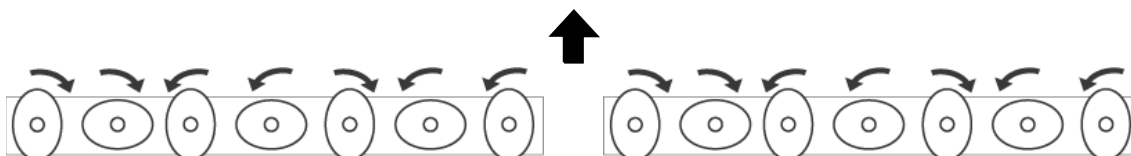
Installing cutter blades



Take note!

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

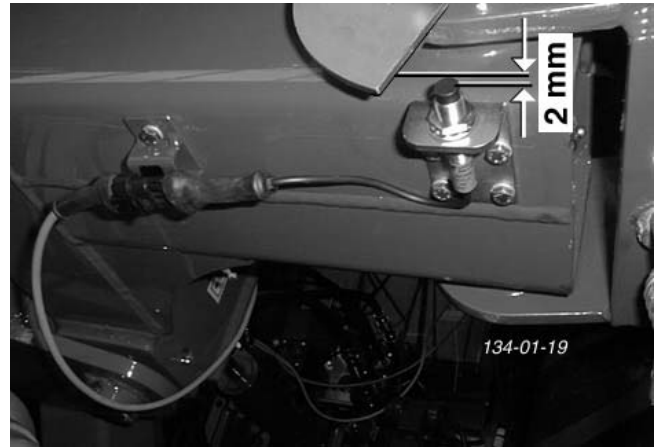
- To install, clean back plates from varnish.



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 "1100 mm".
3. Loosen plate screws (10).
4. Move plate (10) in slot until edge is positioned just at sensor (S1).
5. Retighten plate screws.

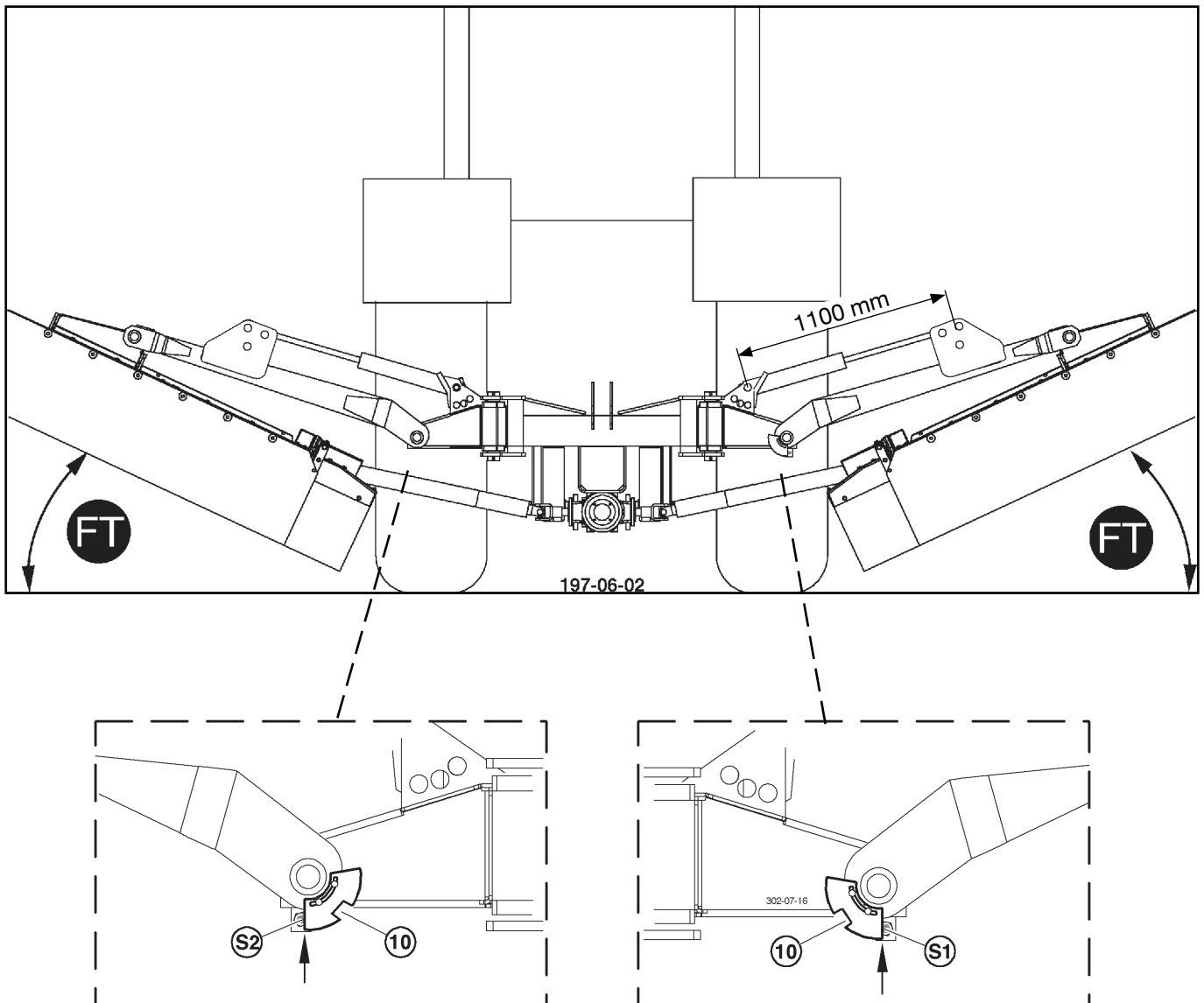


Adjustment of sensors

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

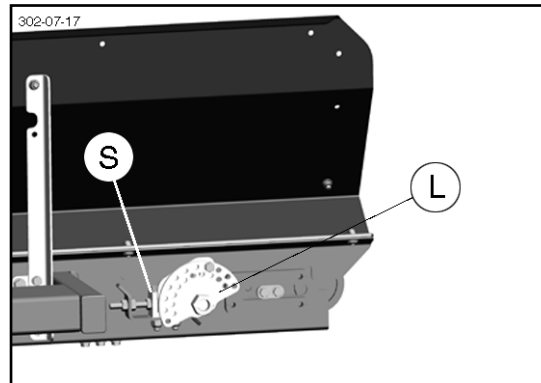


Cross conveyor belt maintenance

- Set belt tension by turning the punched disk (L)
- Set the position of the rollers by moving the tensioning block (S)
 - Set rollers so belt runs in the middle

Possible reasons for high belt wear and tear:

- Belt tension too low
- Belt not running in the middle



Important!

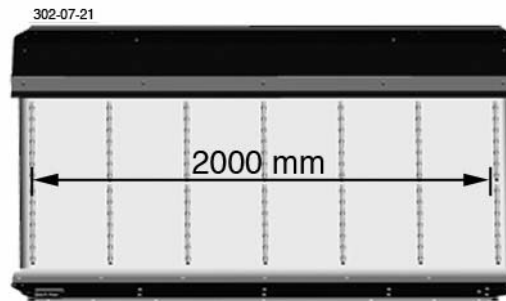
**Check belt run after
10, 25, 50 hours
and then every 50
hours thereafter**

**The belt must not
run off-centre**

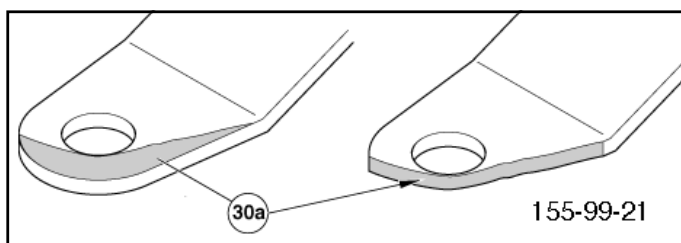
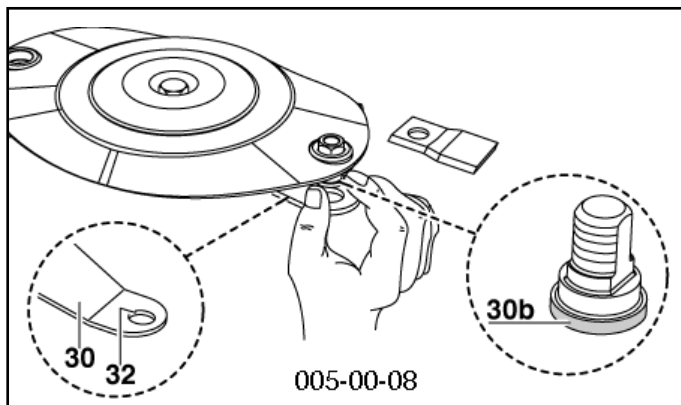
**The belt must run
in the middle on
both rollers**

Setting belt tension

- Tension the belt approx. 0.4 - 0.5%
- Setting advice:
- Mark 2000 mm on a loose belt (see sketch)
 - Tension belt until marked distance reaches 2008 – 2010 mm

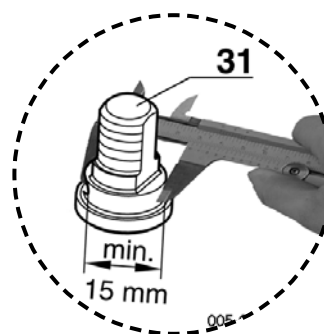


Checking wear on mowing blade holders



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:

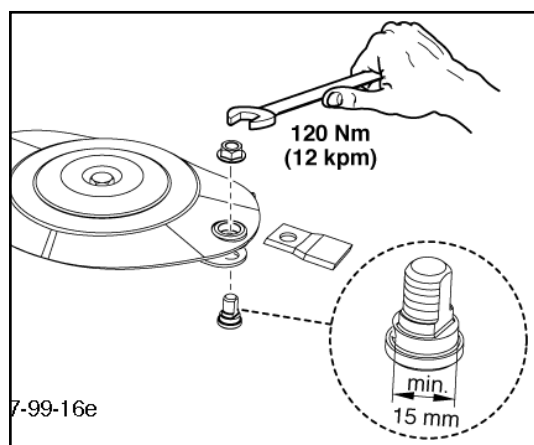
- the central part of pin of blade must have a minimum of 15 mm
- the wearing area (30a) has reached the edge of the boring
- the pin of the blade is worn in the lower part (30b)
- the pin of the blade is no longer firmly seated



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.



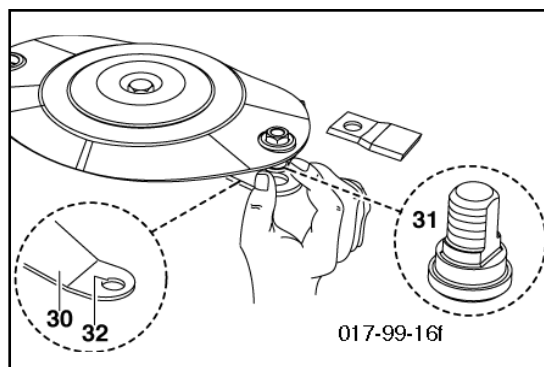
Holder for a quick change of cutter blades



Attention!

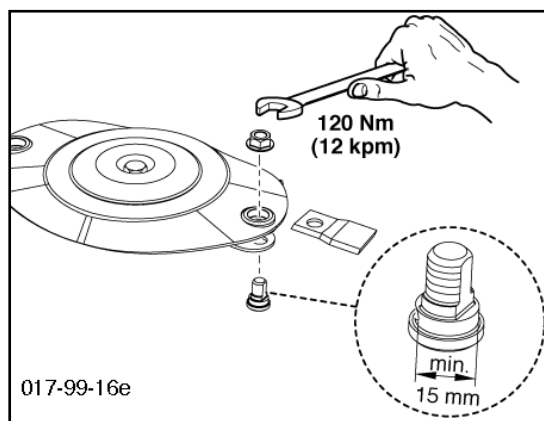
For Your Safety

- 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).

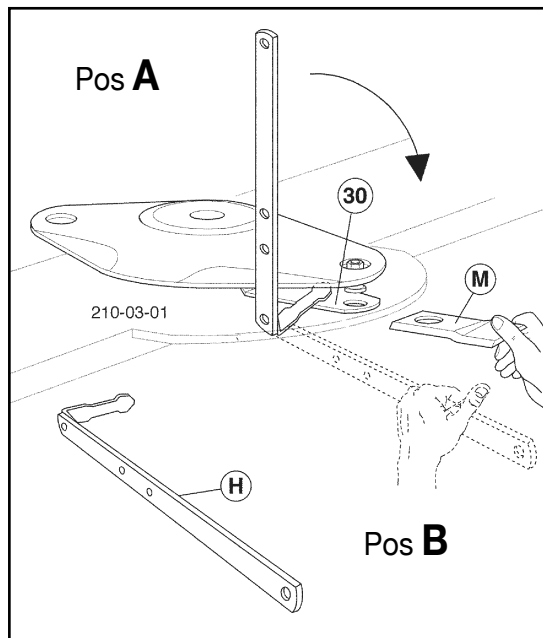


Carry out a check

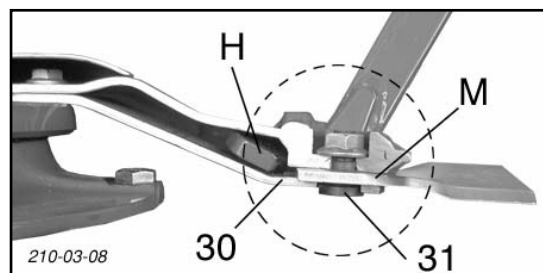
- as described in chapter „Changing the Cutter Blades“

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.










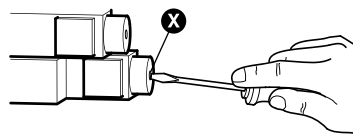
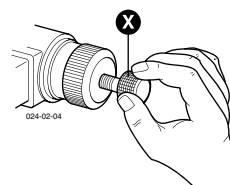
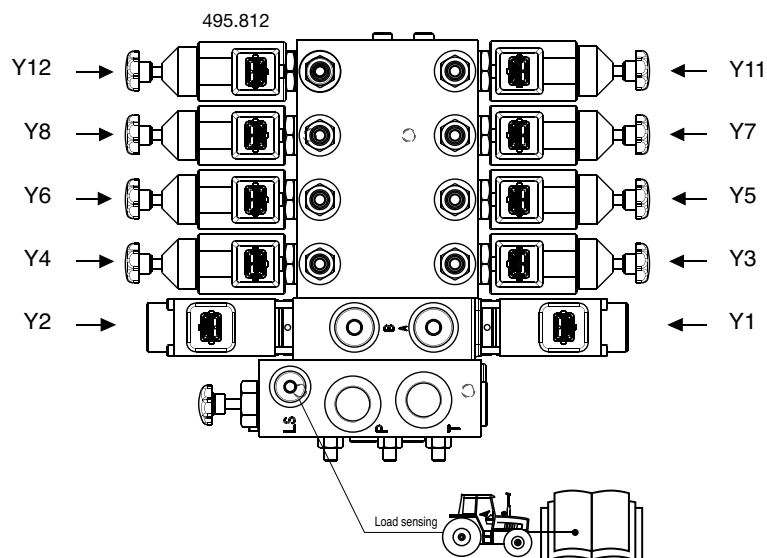
Be alert to the dangers involved with all raising and lowering, and on and off switching activities!

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

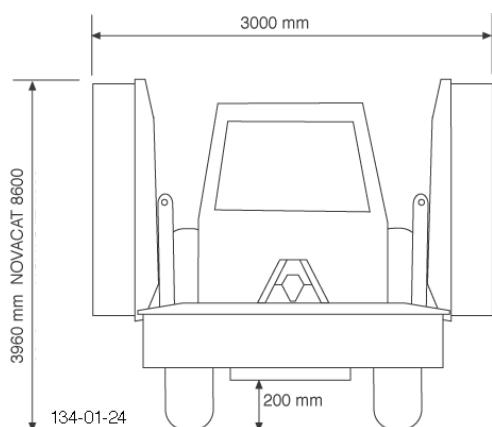
	Remark	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y11	Y12	Y13	Y15	Y18	Y19
 ↑	FT	X		X										X	
	TP	X		X								X			
 ↓	AP			X								X		X	
	FT			X											
 ↑	FT	X				X									X
	TP	X				X							X		
 ↓	AP					X							X		X
	FT					X									
 ↑ ↓	FT / TP	X						X							
	AP							X	X						
 ↑ ↓	FT	X								X	X				
	FT		X							X	X				
 ↑ ↓			X	X	X	X	X					X	X		
				X	X	X	X					X	X		
		Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y11	Y12	Y13	Y15	Y18	Y19



Technical data

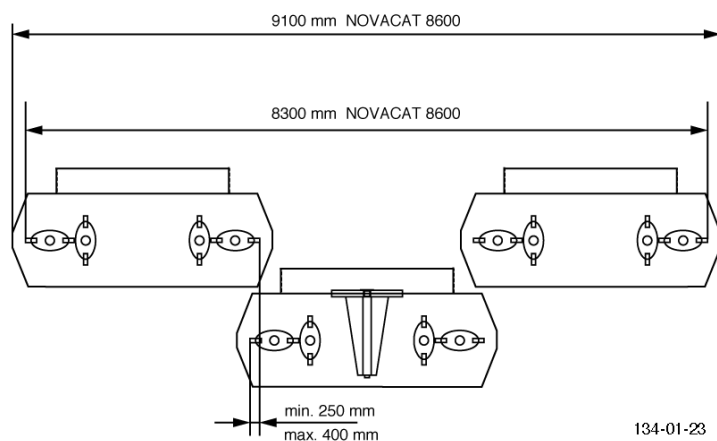
Description		NOVACAT 8600 Collector (Type 3841)
Three-point linkage		Kat III
No. of mowing discs		2 x 7
No. of knives per disc		2
Required power	[kw/PS]	110 / 150
Coverage up to	[ha/h]	10,0
Max. p.t.o. speed	[U/min ⁻¹]	1000
Torque limiter	[Nm]	1100
Weight ¹⁾		
- Basic implement	[kg]	1800
- with „Extra dry“	[kg]	2490
- with „Collector“	[kg]	3140
Permanent sound emission level	[db(A)]	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)



 PÖTTINGER <small>A. Pöttinger Maschinenfabrik Ges. m. b. H. A-4710 Grieskirchen Oberösterreich</small>			
	Modell <input type="text"/>		
	Type <input type="text"/>	Ges. Gew <input type="text"/>	
Masch. Nr. <input type="text"/>			

Position of Vehicle Identification Plate

The factory number (Masch. Nr. / Fgst.Ident.Nr.) is imprinted on the accompanying Vehicle Identification Plate (as shown) and on the frame. Guarantee issues and further inquiries cannot be processed without the factory number being stated.

Please enter the number onto the front page of the operating manual immediately after taking delivery of the vehicle/implement.

The defined use of the mower unit

The „**NOVACAT 8600 Collector (Type PSM 3841)**“ 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

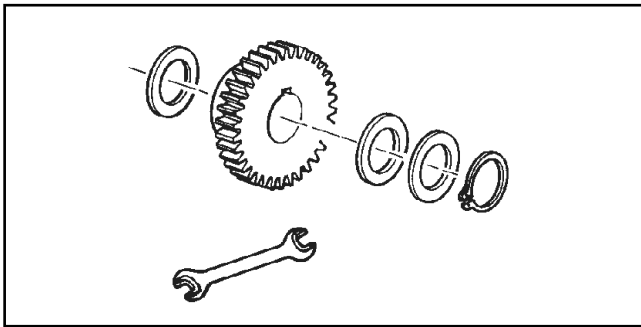
All points referring to safety in this manual are indicated by this sign.

1.) Defined use

- See "Technical Data".
- The keeping of operating, service and maintenance requirements layed 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 accesories 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.

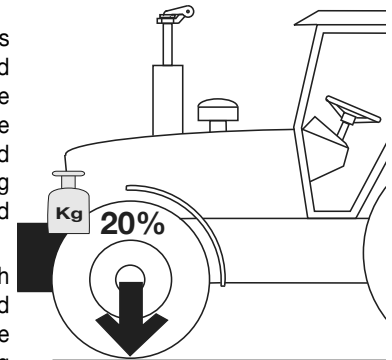


6.) Transport of persons prohibited

- 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.

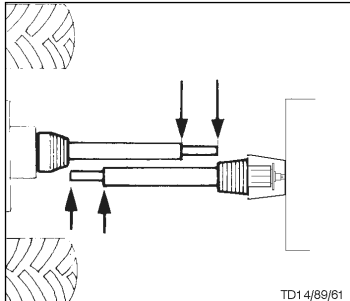
9.) Cleaning the machine

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



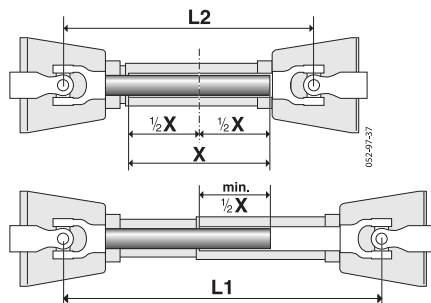
Matching driveshaft to tractor

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



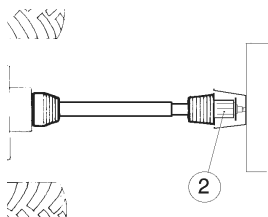
Procedure for cutting to length

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



Important!

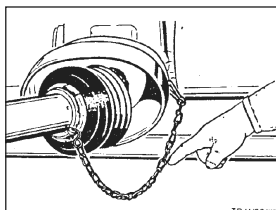
- Note the maximum operating length (L1)
 - Try to attain the greatest possible shaft overlap (min. $\frac{1}{2} X$)!
- Shorten inside and outside tube guard by the same amount.
- Fit torque limiter (2) of drive shaft to implement end of driveshaft!



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

Retaining chain

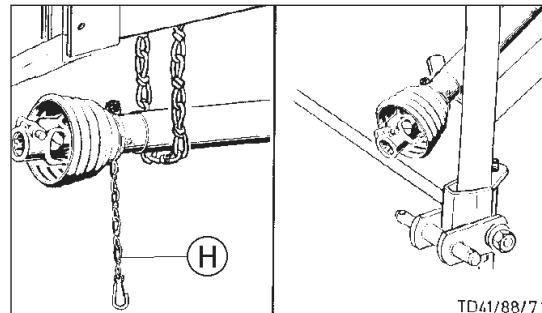
- Use chain to prevent tube guard from rotating. Take care that chain does not impede driveshaft pivoting.



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.



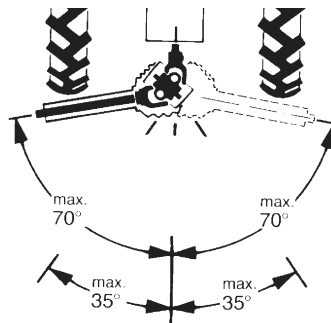
Wide-angle joint:

Maximum angle of deflection when working/stationary: 70°

Standard joint :

Maximum angle of deflection when stationary: 90°

Maximum angle of deflection when working: 35°



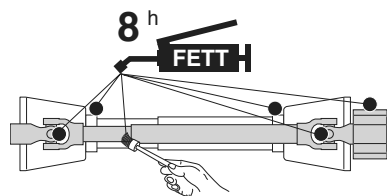
Maintenance



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.



Important!

Only use the indicated or accompanying drive shaft, otherwise the right to claim under guarantee for any possible damage does not exist.



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!



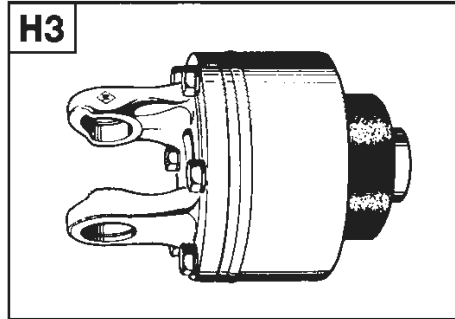
Re-engaging is also possible by decreasing the p.t.o. r.p.m.

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

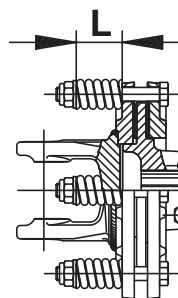
Torque is limited with overloading and brief torque peaks and evenly transferred during slipping.

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

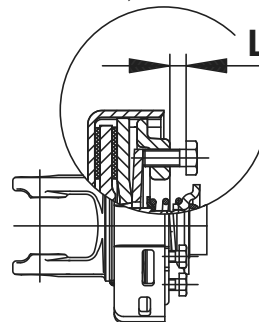
- Measure dimension „L“ at compression spring of K90, K90/4 and K94/1 or at set screw of K92E and K92/4E.
- Loosen screws to release the pressure on the friction disk.
Slip the clutch.
- Tighten set screws to dimension „L“.

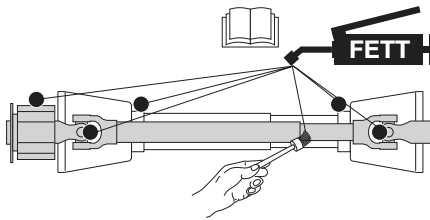
Clutch is ready for use.

K90, K90/4, K94/1



K92E, K92/4E





D Schmierplan

X^h	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^h	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"
Liter	Litre
*	Variante
	Voir le guide du constructeur

GB Lubrication chart

X^h	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^h	alle X bedrijfsuren
40 F	alle 40 wagenladingen
80 F	alle 80 wagenladingen
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

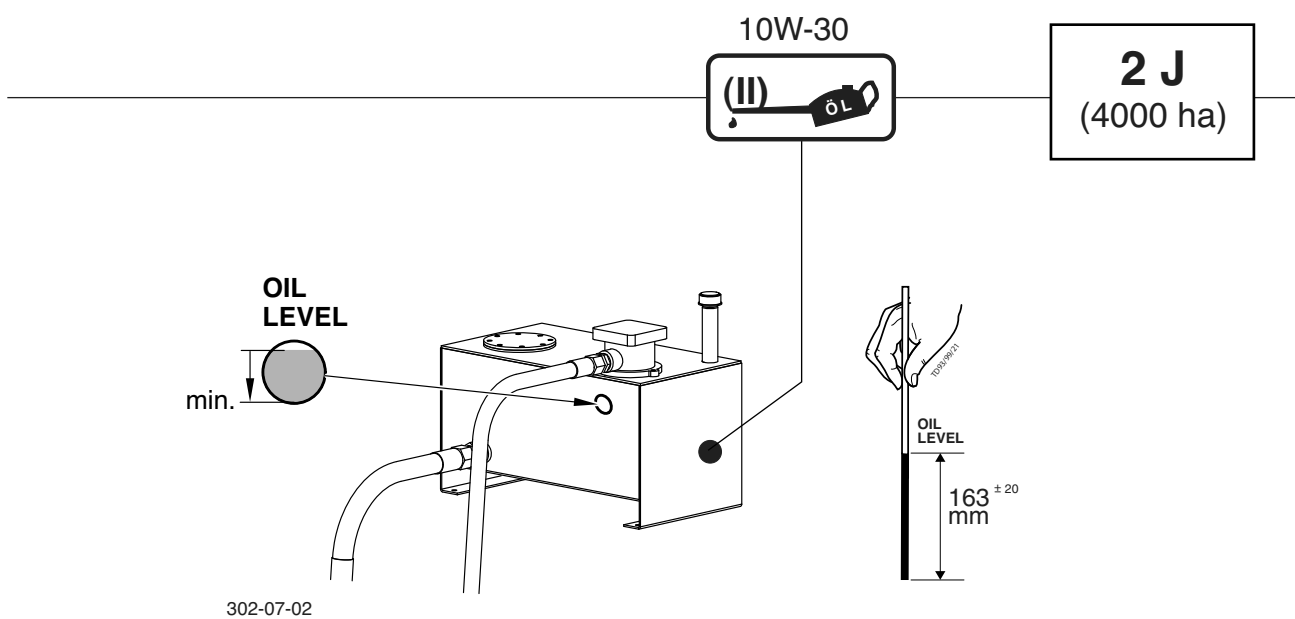
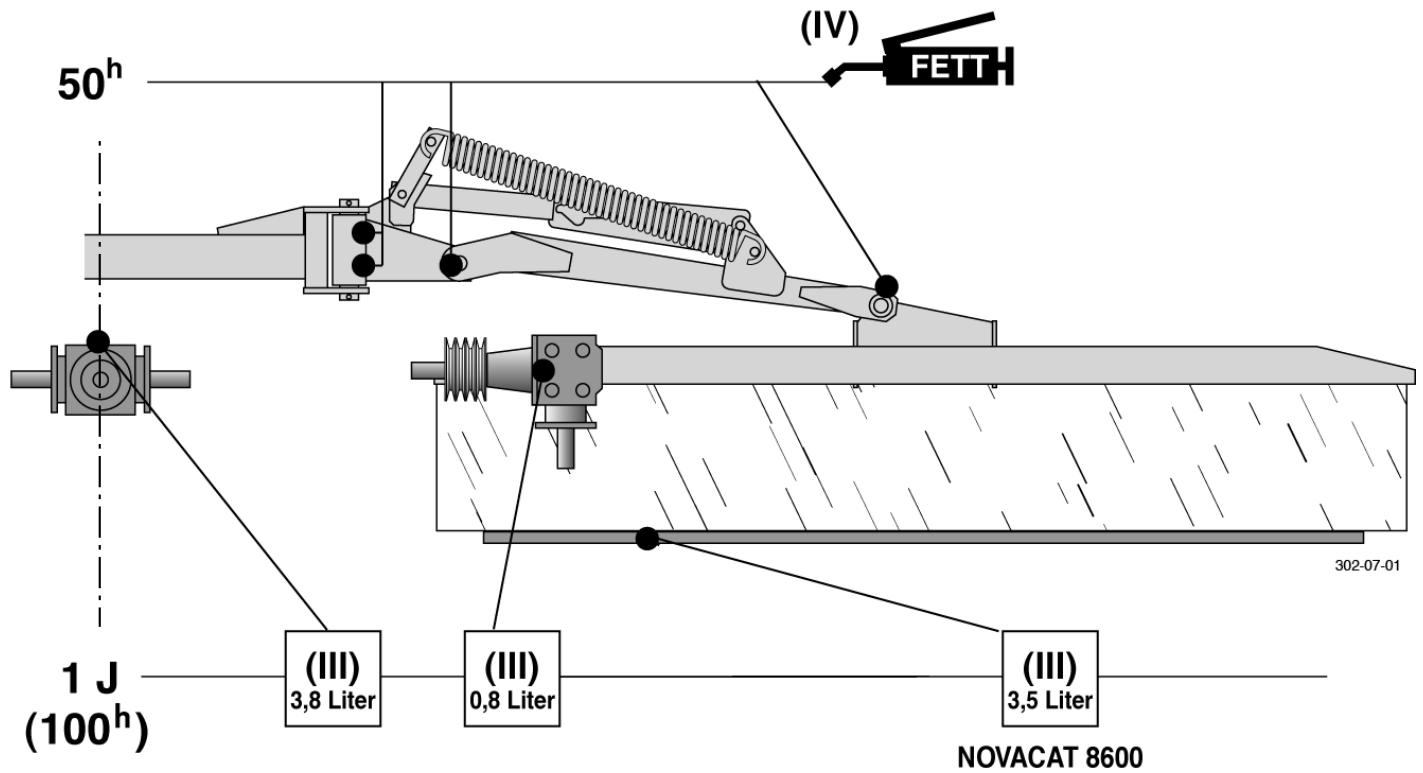
X^h	Cada X horas de servicio
40 F	Cada 40 viajes
80 F	Cada 80 viajes
1 J	1 vez al año
100 ha	Cada 100 hectáreas
FETT	LUBRICANTE
	= Número de boquillas de engrase
	= Número de boquillas de engrase
(IV)	Véase anexo "Lubrificantes"
Liter	Litros
*	Variante
	Véanse instrucciones del fabricante

I Schema di lubrificazione

X^h	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^h	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



Ausgabe 1997

Leistung und Lebensdauer der Maschine sind von sorgfältiger Wartung und der Verwendung guter Betriebsstoffe abhängig. Unsere Betriebsstoffauslistung erleichtert die richtige Auswahl geeigneter Betriebsstoffe.

Im Schmierplan ist der jeweils einzusetzende Betriebsstoff durch die Betriebsstoffkennzahl (z.B. "III") symbolisiert. Anhand von "Betriebsstoffkennzahl" kann das geforderte Qualitätsmerkmal und das entsprechende Produkt der Mineralölfirmen festgestellt werden. Die Liste der Mineralölfirmen erhebt keinen Anspruch auf Vollständigkeit.

Getriebeöl gemäß Betriebsanleitung - jedoch mindestens 1 x jährlich wechseln.

- Ölablaßschraube herausnehmen, das Altöl auslaufen lassen und ordnungsgemäß entsorgen.

Vor Stilllegung (Winterperiode) Ölwechsel durchführen und alle Fettschmierstellen abschmieren. Blanke Metallteile außen (Gelenke, usw.) mit einem Produkt gemäß "IV" in der umseitigen Tabelle vor Rost schützen.

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 brand name 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.

Édition 1997

Le bon fonctionnement et la longévité des machines dépendent d'un entretien soigné et de l'utilisation de bons lubrifiants. Notre liste facilite le choix correct des lubrifiants.

Sur le tableau de graissage, on trouve un code (p.ex. "III") se référant à un lubrifiant donné. En consultant ce code on peut facilement déterminer la spécification demandée du lubrifiant. La liste des sociétés pétrolières ne prétend pas d'être complète.

Pour l'huile transmission consulter le cahier d'entretien - Vidanger les boîtiers et carters au moins une fois par an.

- retirer le bouchon de vidange, laisser l'huile s'écouler et les dispositions nécessaires au recyclage de celle-ci

Avant l'arrêt et hiver: vidanger et graisser les éléments sensibles avec un produit type "IV" pour les protégés de la rouille (consulter tableau au verso).

Edizione 1997

L'efficienza e la durata della macchina dipendono dall'accuratezza della sua manutenzione e dall'impiego dei lubrificanti adatti. Il nostro elenco dei lubrificanti Vi agevola nella scelta del lubrificante giusto. Il lubrificante da utilizzarsi di volta in volta è simbolizzato nello schema di lubrificazione da un numero caratteristico (per es. "III"). In base al "numero caratteristico del lubrificante" si possono stabilire sia la caratteristica di qualità che il progetto corrispondente delle compagnie petrolifere. L'elenco delle compagnie petrolifere non ha pretese di completezza.

Motori a quattro tempi: bisogna effettuare il cambio dell'olio ogni 100 ore di funzionamento e quello dell'olio per cambi come stabilito nel manuale delle istruzioni per l'uso (tuttavia, almeno 1 volta all'anno).

- Togliere il tappo di scarico a vite dell'olio; far scolare l'olio e eliminare l'olio come previsto dalla legge anti-inquinamento ambientale.




Effettuare il cambio dell'olio ed ingrassare tutte le parti che richiedono una lubrificazione a grasso prima del fermo invernale della macchina. proteggere dalla ruggine tutte le parti metalliche esterne scoperte con un prodotto a norma di "IV" della tabella riportata sul retro della pagina.

Olie in aandrijvingen volgens de gebruiks-aanwijzing verwisselen - echter tenminste 1 x jaarlijks.

- Aftapplug er uit nemen, de olie aftappen en milieuvriendelijk verwerken.

Voor het buiten gebruik stellen (winterperiode) de olie-wissel uitvoeren en alle vetrijppl smeerpunten doorsmeren. Blanke metaaldelen (koppelingen enz.) met een product uit groep "IV" van de navolgende tabel tegen corrosie beschermen.

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 85 W-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 motoriduttori	Komplexfett (DIN 51 502: KP 1R) complex grease graisse complexe grasso a base di saponi complessi	Getriebeöl SAE 90 bzw. 85 W-140 gemäß 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 secondo specifiche API-GL 5

Firma	I				V	VI	VII	ANMERKUNGEN
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	* Bei Verbundarbeit mit Nabbremsen-schleppern ist die internationale Spezifikation J 20 A erforderlich ** Hydrauliköle HLP-(D) + HV *** Hydrauliköle auf Pflanzenölbasis HLP + HV Biologisch abbaubar, deshalb besonders umweltfreundlich
	VITAM GF 32/46/68 VITAM HF 32/46	SUPER KOWAL 30 MULTI TURBORAL SUPER TRAKTORAL 15W-30	GETRIEBEÖL EP 90 GETRIEBEÖL HYP 85W-90	ARALUB HL 2	ARALUB FDP 00	ARALUB FK 2	GETRIEBEÖL HYP 90	
ARAL	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 MULTITHYP 85W-140	AVIA MEHRZWECKFETT AVIA ABSCHMERZFETT	AVIA GETRIEBEFLEISSFETT	AVIALUB SPEZIALFETT LD	GETRIEBEÖL HYP 90 EP MULTITHYP 85W-140 EP	
AVIA	HYDRAULIKÖL HLP 32/46/68 SUPER 2000 CD-MC HYDRA HYDR. FLUID + HYDRAULIKÖL MC 530 ** PLANTO HYD 40N ***	SUPER 2000 CD-MC SUPER 2000 CD HD SUPERIOR 20 W-30 HD SUPERIOR SAE 30	SUPER 80/90 MC HYPOID 80W-90 HYPOID 85W-140	MULTI FETT 2 SPEZIALFETT FILM PLANTOGEL 2 N	GETRIEBEFLEISSFETT NLGI 0 RENOLIT DURAPLEX EP 00 PLANTOGEL 00N	RENOPLEX EP 1	HYPOID 85W-140	
BAYWA								
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	RX 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 AUS-TROTRAC 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 HYDREL F 46/68	PERFORMANCE 2 B SAE 30 8000 TOURS 20W-30 TRACTORELF ST 15W-30	TRANSELF TYP B 90 85W-140 TRANSELF EP 90 85W-140	EPEXA 2 ROLEXA 2 MULTI 2	GA O EP POLY GO	MULTIMOTIVE 1	TRANSELF TYP B 90 85W-140 TRANSELF TYP BLS 80 W-90	
ESSO	NUTO H 32/46/68 NUTO HP 32/46/68	PLUS MOTORÖL 20W-30 UNIFORM 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 GX 80W-90 GEAR OIL GX 85W-140	
EVVA	ENAK HLP 32/46/68 ENAK MULTI 46/68	SUPER EWAROL HD/B SAE 30 UNIVERSAL TRACTOR OIL SUPER	HYPOID GA 90 HYPOID GB 90	HOCHDRUCKFETT LT/SC 280	GETRIEBEFETT MO 370	EVA 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 EP L 2	NATRAN 00	MARSON AX 2	PONTONIC MP 85W-140	
FUCHS	RENOLIN 1025 MC *** TITAN HYDRAMOT 1030 MC ** RENOGEAR HYDRA * PLANTO HYD 40N ***	TITAN HYDRAMOT 1030 MC TITAN UNIVERSAL HD	RENOGEAR SUPER 80/90 MC RENOGEAR HYPOID 85 W-140 RENOGEAR HYPOID 90	RENOLIT MP RENOLIT FILM 2 RENOLIT ADHESIV 2 PLANTOGEL 2 N	RENOSOD GFO 35 DURAPLEX EP 00 PLANTOGEL 00N	RENOPLEX EP 1	RENOGEAR SUPER 80/90 MC RENOGEAR HYPOID 85W-140 RENOGEAR HYPOID 90	
GENOL	HYDRAULIKÖL HLP 32/46/68 HYDRAMOT 1030 MC * HYDRAULIKÖL 320 ** 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	GETRIEBEFLEISSFETT PLANTOGEL 00N	RENOPLEX EP 1	HYPOID EW 90 HYPOID 85W-140	
MOBIL	DTE 22/24/25 DTE 13/15	HD 20W-20 DELVAC 1230 SUPER UNIVERSAL 15W-30	MOBILUBE GX 90 MOBILUBE HD 90 MOBILUBE HD 85W-140	MOBILGREASE MP	MOBILUX EP 004	MOBILPLEX 47	MOBILUBE HD 90 MOBILUBE HD 85W-140	
RHG	RENOLIN B 10/15/20 RENOLIN B 32 HV148HV1	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 S32/S 46/S68 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 SIMMNING GREASE C	AEROSHELL GREASE 22 DOLUIM GREASE R	SPIRAX HD 90 SPIRAX HD 85W-140	
TOTAL	AZOLLA ZS 32, 46, 68 EQUIVIVS 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 HVL P 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 90W-90	MULTILUBE EP 2 VAL-PLEX EP 2 PLANTOGEL 2 N	RENOLIT ZH 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 MULTI-GEAR B 90 MULTIGEAR C SAE 85W-140	MULTIPURPOSE	-	-	MULTIGEAR B 90 MULTI C SAE 85W-140	
WINTERSHALL	WIOLAN HS (HG) 32/46/68 WIOLAN HYG 46 WIOLAN HR 32/46 *** HYDROLFLUID *	MULTI-REKORD 15W-40 PRIMANOL REKORD 30	HYPOID-GETRIEBEÖL 80W-90, 85W-140 MEHRZWECKGETRIEBEÖL 80W-90	WIOLUB LFP 2	WIOLUB GFW	WIOLUB AFK 2	HYPOID-GETRIEBEÖL 80W-90, 85W-140	

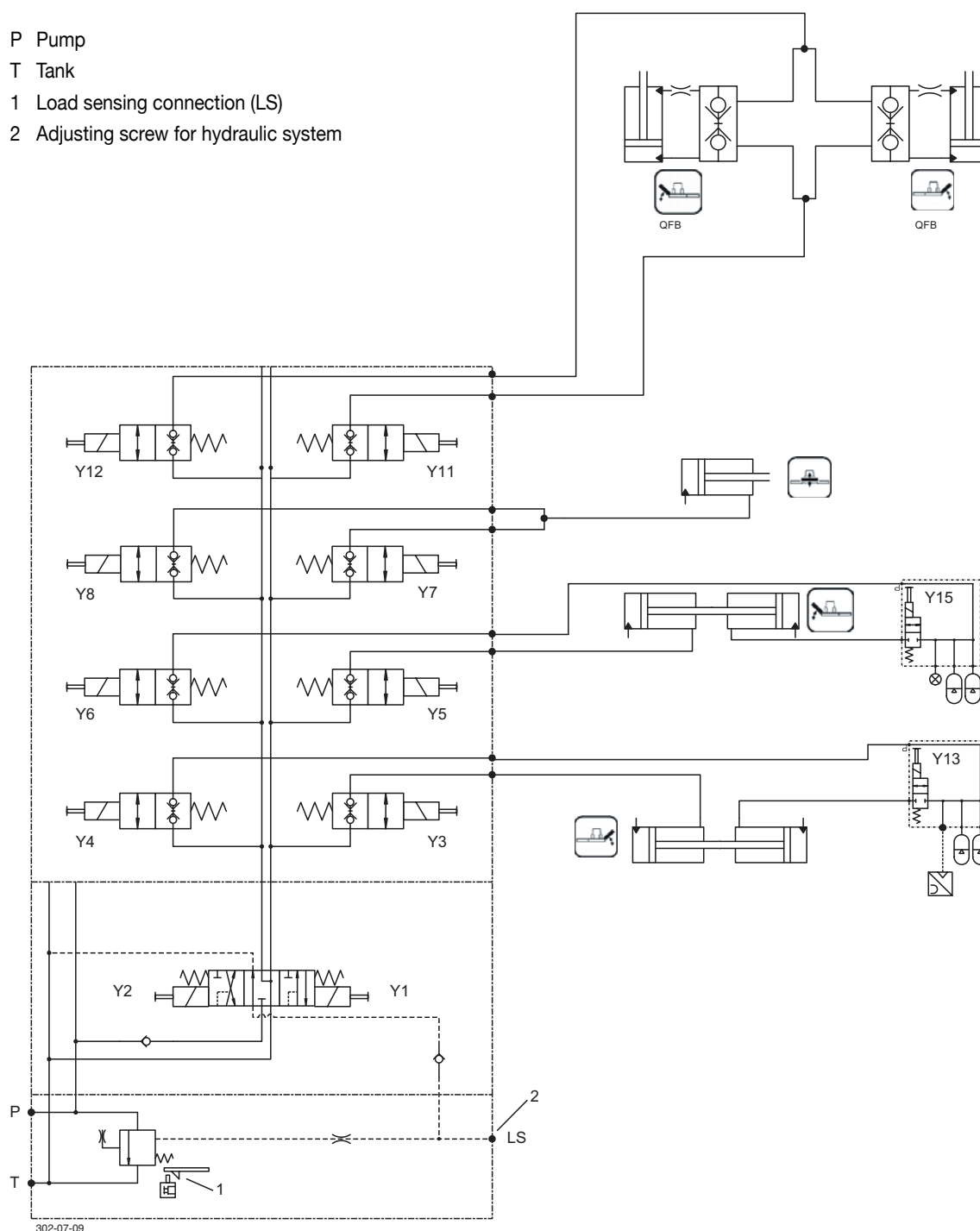
Hydraulics plan

P Pump

T Tank

1 Load sensing connection (LS)

2 Adjusting screw for hydraulic system



Legend:

Y1 Distributing valve - lower

Y2 Distributing valve - raise

Y3 Seat valve - right mower unit

Y4 Seat valve - Filling right hydraulic relief

Y5 Seat valve - left mower unit

Y6 Seat valve - Filling left hydraulic relief

Y7 Seat valve - middle mower unit

Y8 Seat valve - float position middle mower

Y11 Cross conveyor belt - swing (dw)

Y12 Cross conveyor belt - swing (dw)

Y13 Seat valve - right hydraulic relief

Y15 Seat valve - left hydraulic relief

Y16 Flow control - right cross conveyor belt

Y17 Flow control - left cross conveyor belt

Y18 Seat valve - on/off right cross conveyor belt

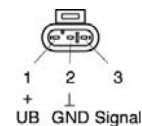
Y19 Seat valve - on/off left cross conveyor belt

Connection diagram



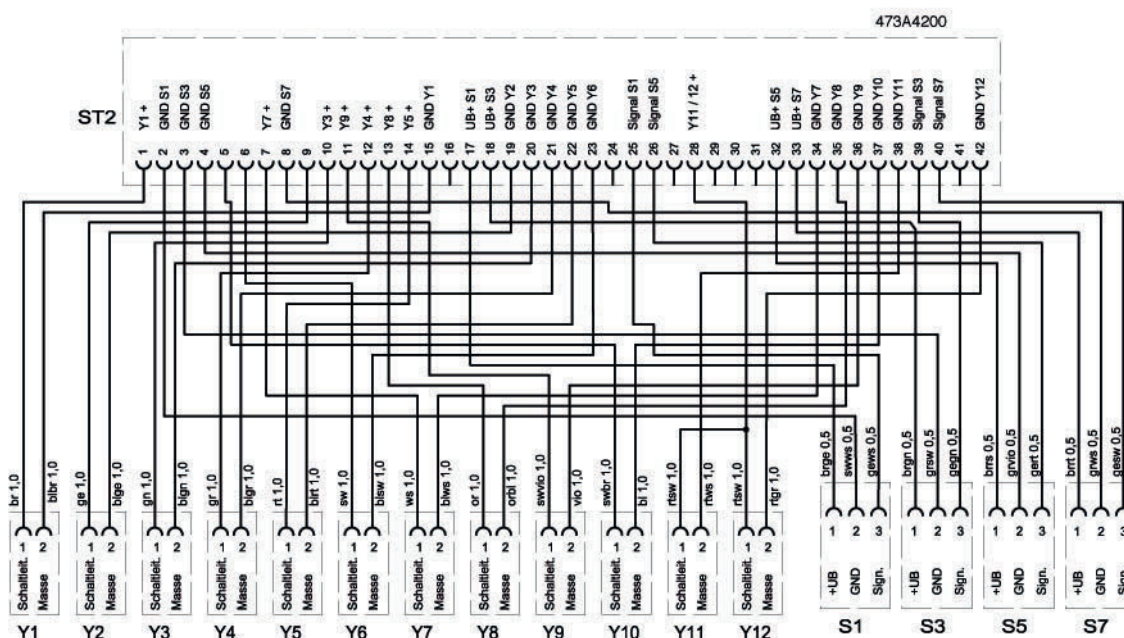
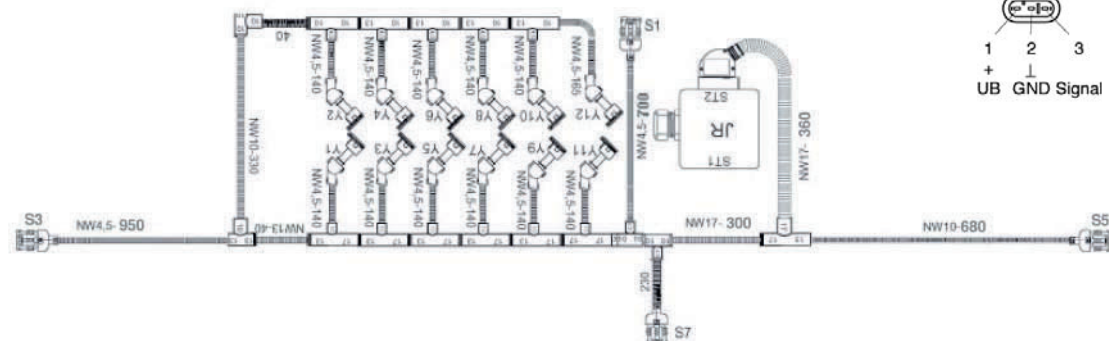
Note!

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:

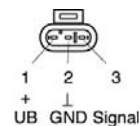
- Y1 Distributing valve - lower
- Y2 Distributing valve - raise
- Y3 Seat valve - right mower unit
- Y4 Seat valve - Filling right hydraulic relief
- Y5 Seat valve - left mower unit
- Y6 Seat valve - Filling left hydraulic relief
- Y7 Seat valve - middle mower unit
- Y8 Seat valve - float position middle mower

- Y9 -
- Y10 -
- Y11 Cross conveyor belt - swing (dw)
- Y12 Cross conveyor belt - swing (dw)
- S1 Sensor - r.p.m.
- S3 Sensor - right mower
- S5 Sensor - left mower
- S7 Sensor - middle mower

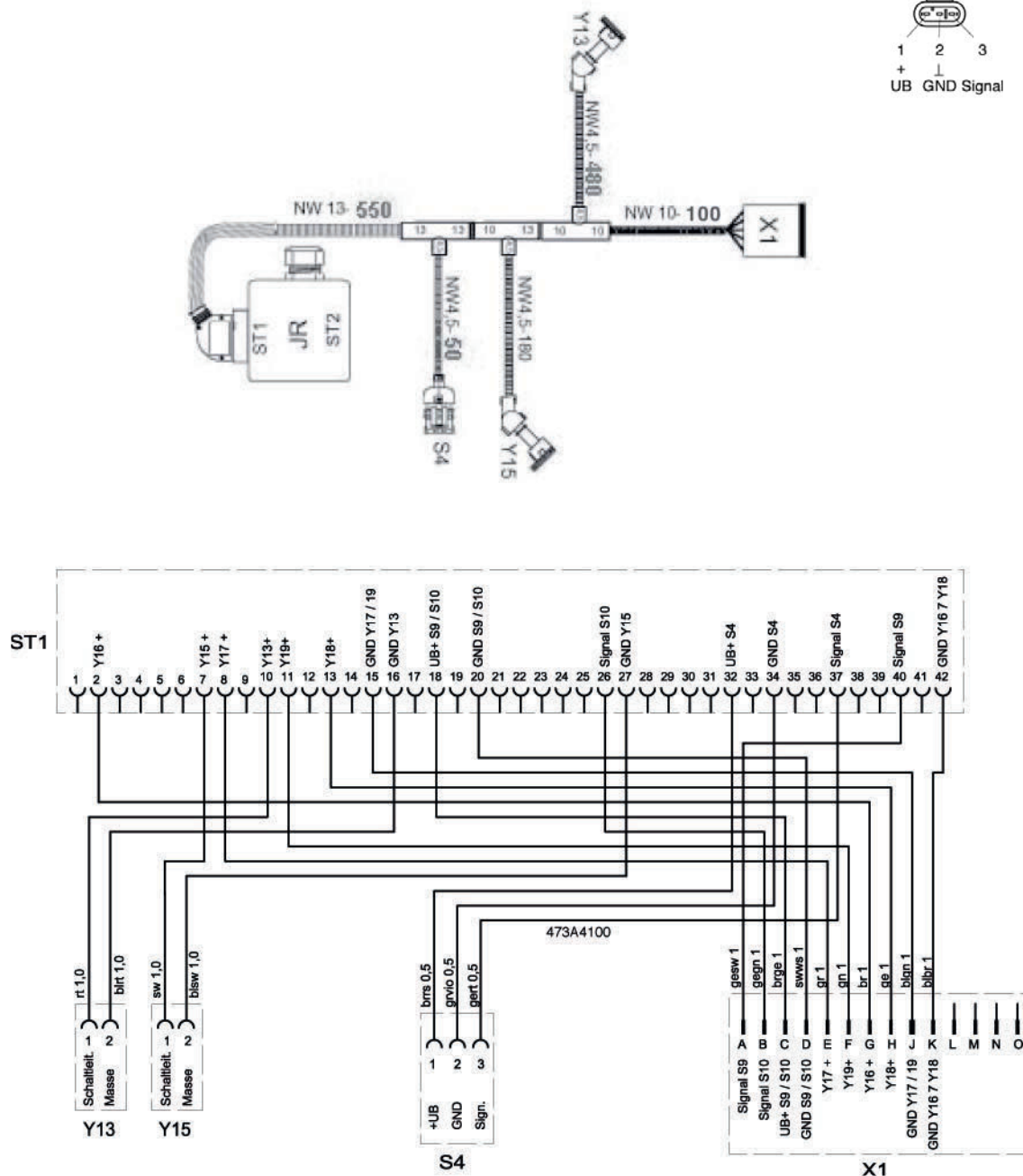
Electrical wiring diagram (Hydraulic relief)

**Note!**

All connector diagrams are viewed from outside.

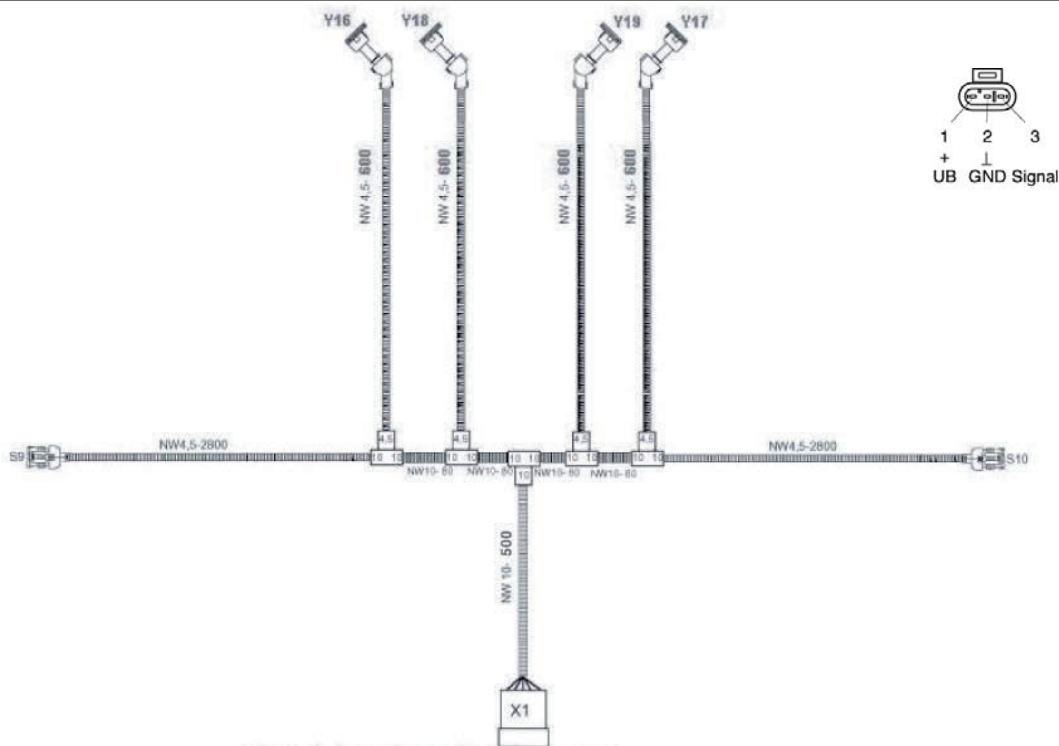
**Colour code:**

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

**Legend:**

- Y13 Seat valve - right hydraulic relief
- Y15 Seat valve - left hydraulic relief
- S4 Pressure sensor
- X1 Connection plug

Connection diagram (Cross conveyor belt)

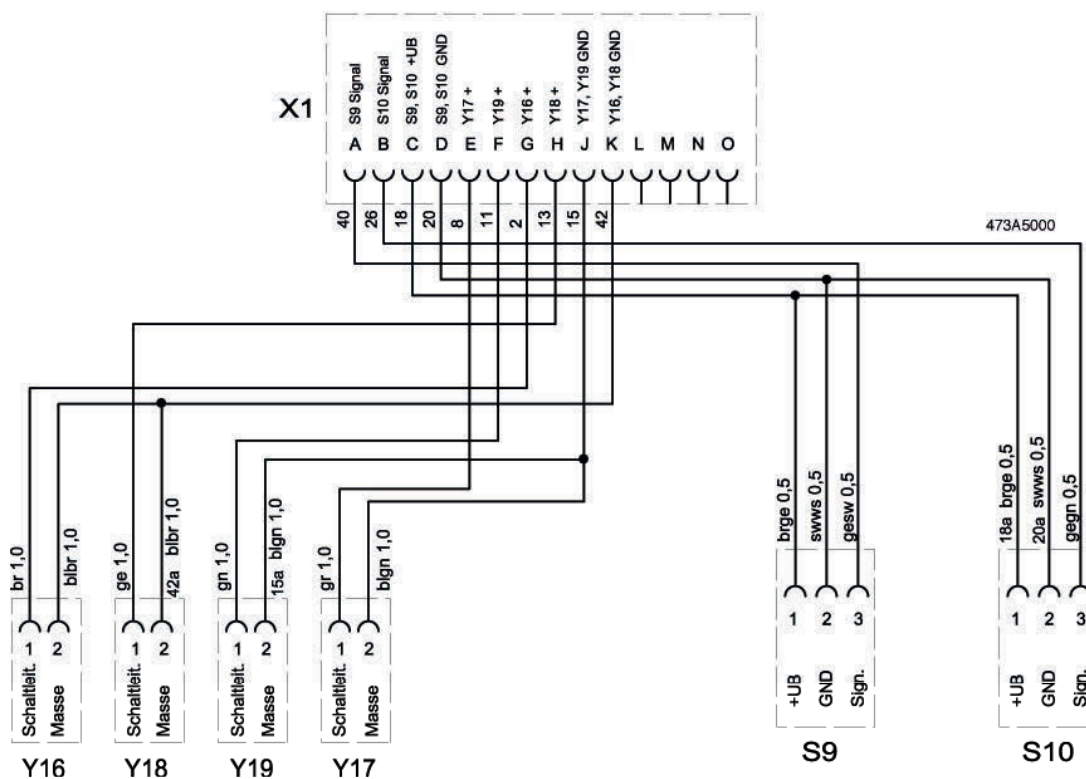


Note!

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



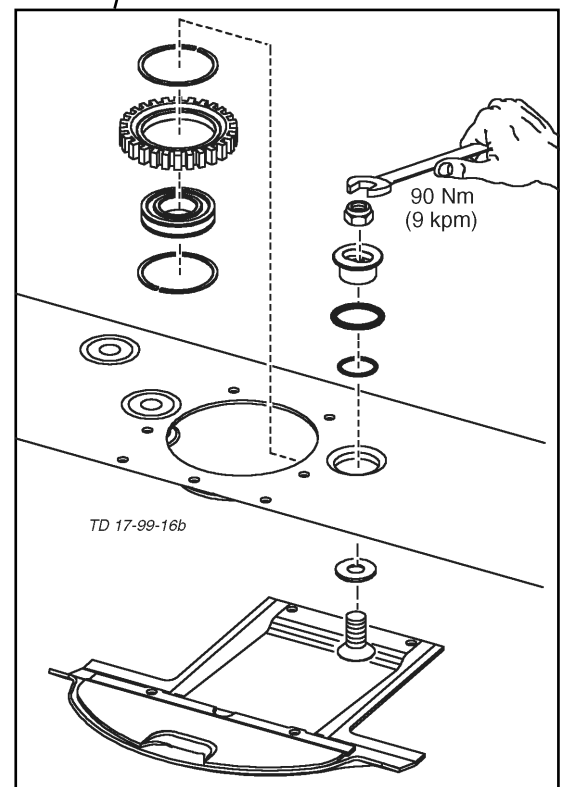
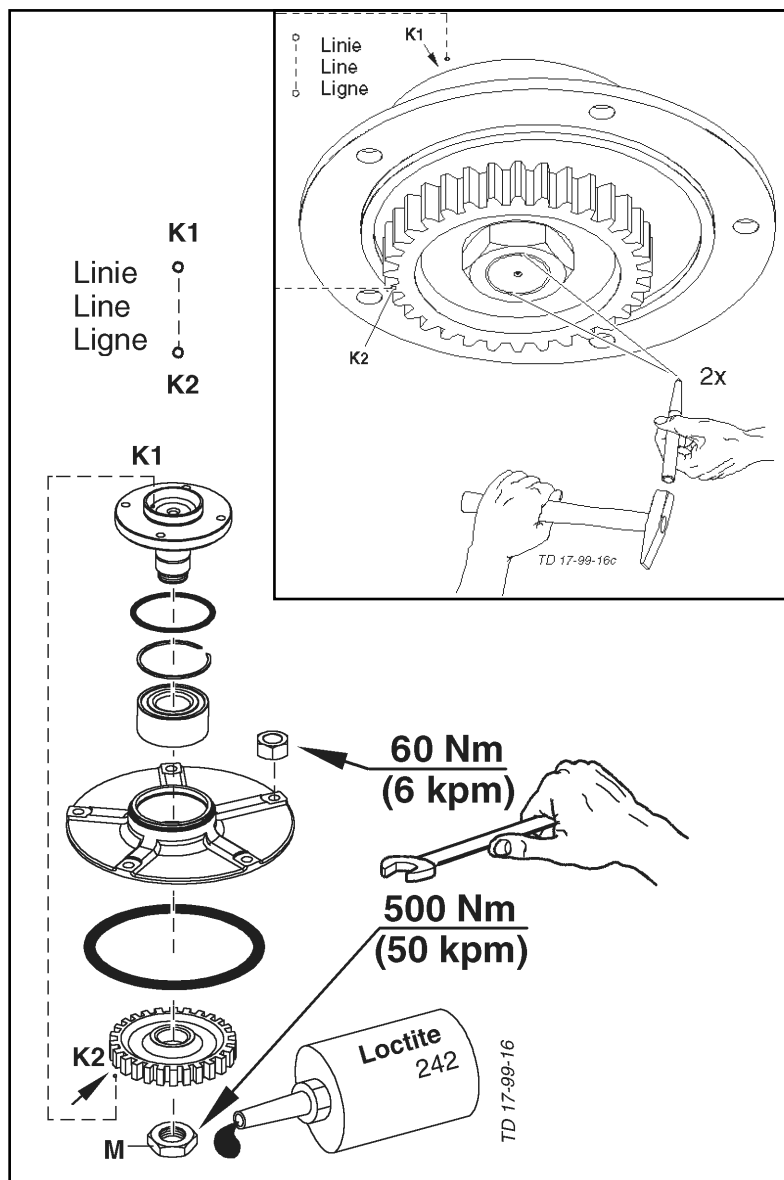
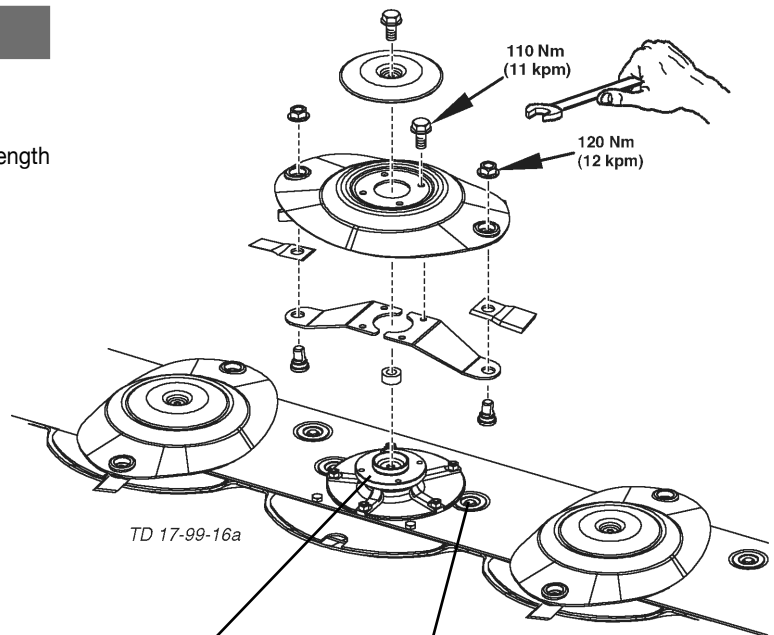
Legend:

- Y16 Flow control - right cross conveyor belt
- Y17 Flow control - left cross conveyor belt
- Y18 Seat valve - on/off right cross conveyor belt
- Y19 Seat valve - on/off left cross conveyor belt

- S9 Sensor - right cross conveyor belt
- S10 Sensor - left cross conveyor belt

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)



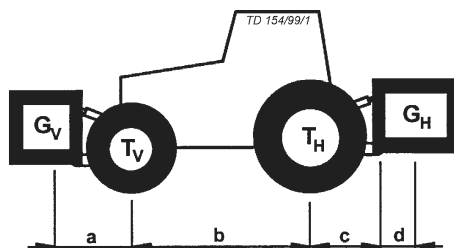
Combination of tractor and mounted implement



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_{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!

Appendix 1

EC Certificate of Conformity
conforming to EEC Directions 2006/42/EG

We ALOIS PÖTTINGER Maschinenfabrik Gesellschaft m.b.H.
(name of supplier)

A-4710 Grieskirchen; Industriegelände 1

(full address of company - where this concerns authorized agents within the Common Market, also state the company name and manufacturer)

declare in sole responsibility, that the product

Disc mower

NOVACAT 8600 Collector

Type 3841

(make, model)

to which this certificate applies, conforms to the basic safety and health requirements of
EEC Directions 2006/42/EG,
(if applicable)

and to the other relevant EEC Directions.

(title and/or number and date of issue of the other EEC Directions)

(if applicable)

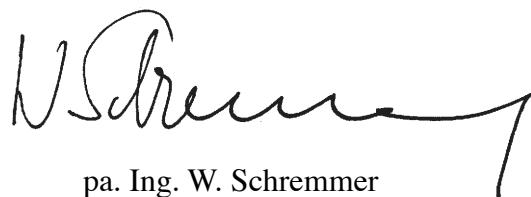
To effect correct application of the safety and health requirements stated in the EEC Directions,
the following standards and/or technical specifications were consulted:

EN 292-1 : 1991

EN 292-2 : 1991

EN 745

(title and/or number and date of issue of standards and/or specifications)



pa. Ing. W. Schremmer
Entwicklungsleitung

Grieskirchen, 23.01.2007

(Place and date of issue)

(Name and job function of authorized person)

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