Original inside

GB Operator's manual

Nr. 99 384.GB.80F.0

+ INSTRUCTIONS FOR PRODUCT DELIVERY . . . Page 3

NOVACAT 8600

(Type PSM 384 : + . . 01171-01402**)**

• Disc mower

Ihre / Your / Votre • Masch.Nr. • Fgst.Ident.Nr.

(GB) 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 liabilioty.

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.

(GB) INSTRUCTIONS FOR PRODUCT DELIVERY

Dokument D

PÖTTINGER Landtechnik GmbH
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. [X]

- ❑ 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 lenght.
- ❑ 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.poettinger.at
- **document B** stays with the specialist factory delivering the machine.
- **document C** stays with the customer.

Safety hints to observe in supplement!

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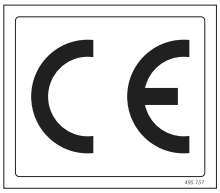


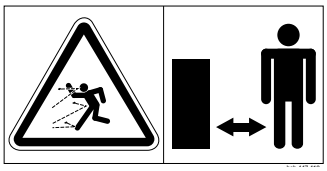
CE sign

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)

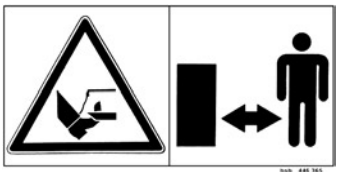
By signing the EU Declaration of Conformity, the manufacturer declares that the machine being brought into service complies with all relevant safety and health requirements.

Meaning of warning signs

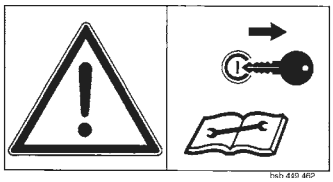


Danger - flying objects; keep safe distance from the machine as long as the engine is running.

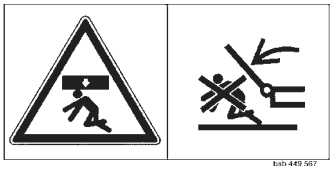
Wait until all machine components have stopped completely before touching them.



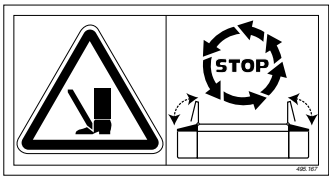
Stay clear of mower knife area as long as tractor engine is running with PTO connected.



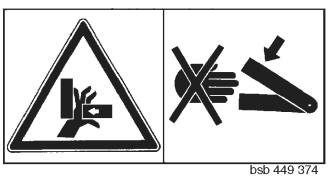
Shut off engine and remove key before performing maintenance or repair work.



Stay clear of swinging area of implements



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



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

Recommendations for work safety

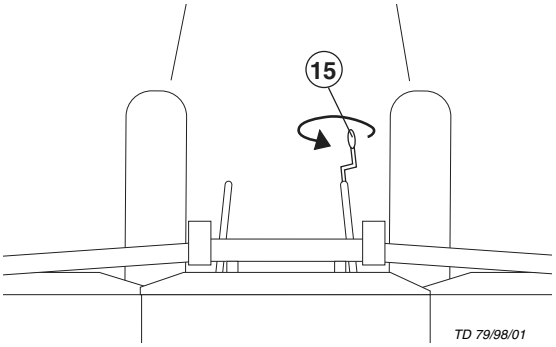
All points referring to satety in this manual are indicated by this sign.

Attaching implement to tractor

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

Centre-mount (M) mower unit to tractor

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



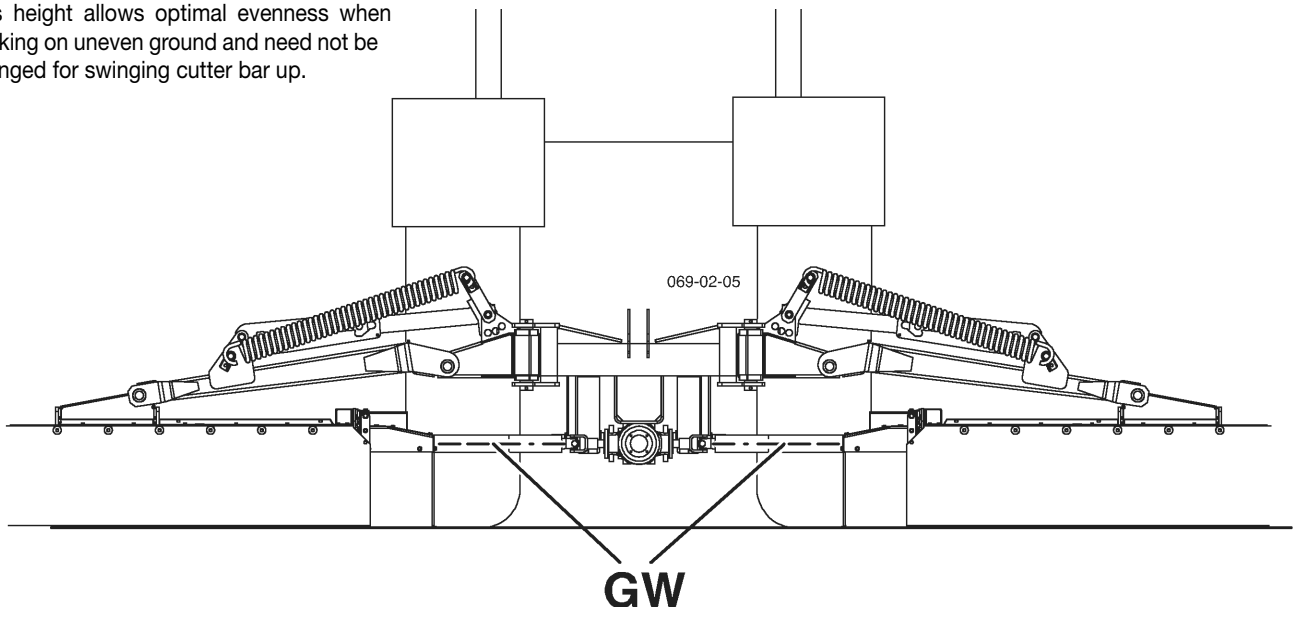
Frame in horizontal position

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

Setting lower link height

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

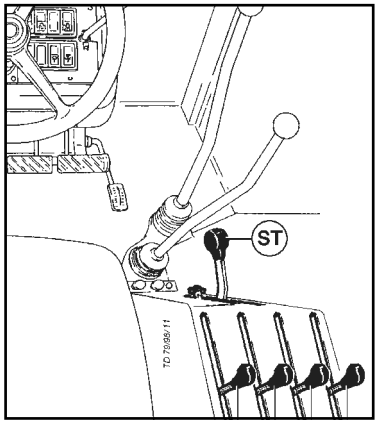
This height allows optimal evenness when working on uneven ground and need not be changed for swinging cutter bar up.



Hydraulic connection

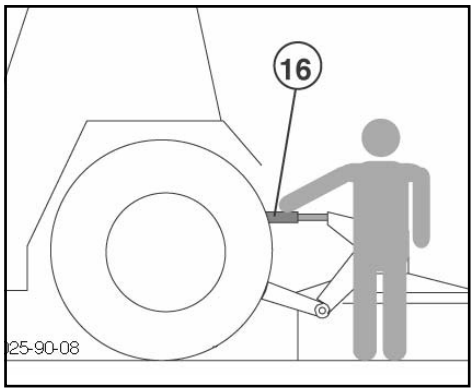
- see next page.

Connect hydraulic lines

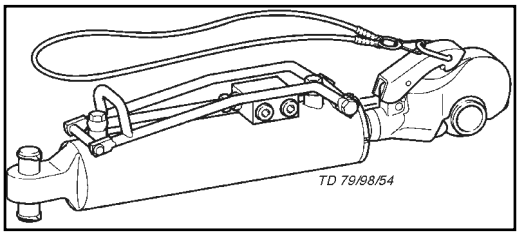


Setting upper link height using spindle

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

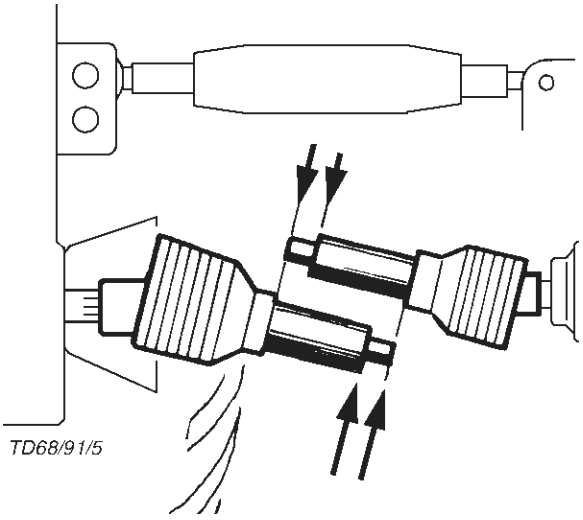


A hydraulic upper link is recommended. (double-action hydraulic connection)



Fitting drive shaft

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



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

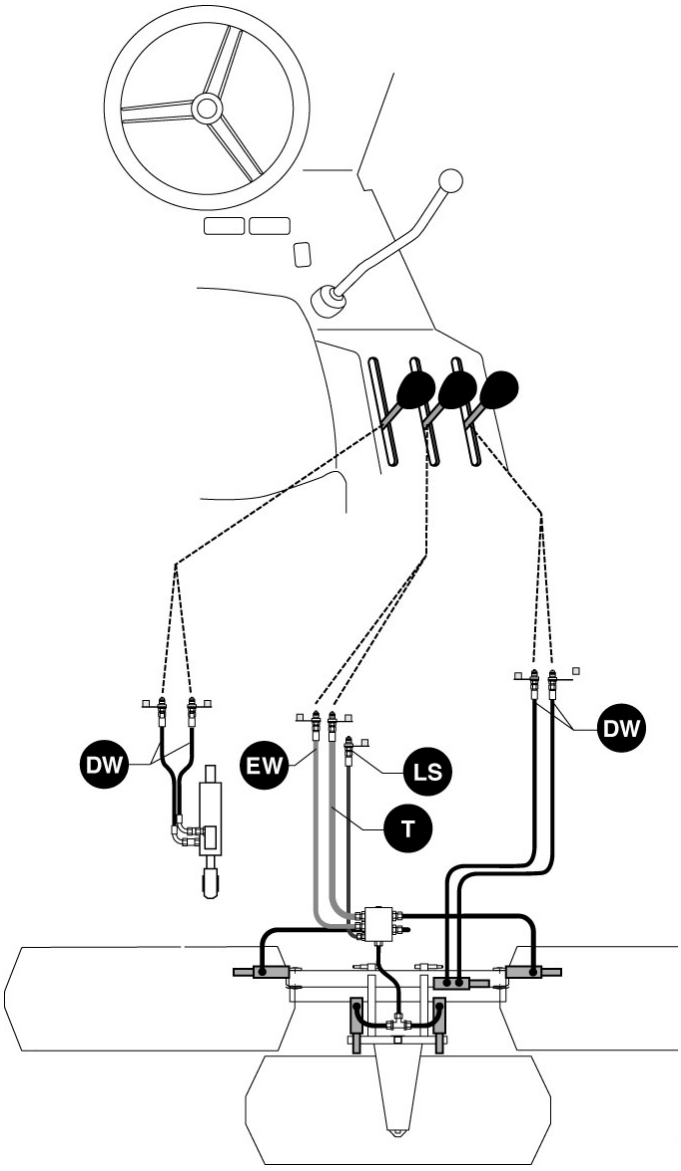
1 x double-action hydraulic connection (DW) for the hydraulic upper link

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.

1. Disconnect electrical connection (E2, E3).

Tractors with a "Load sensing" system

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

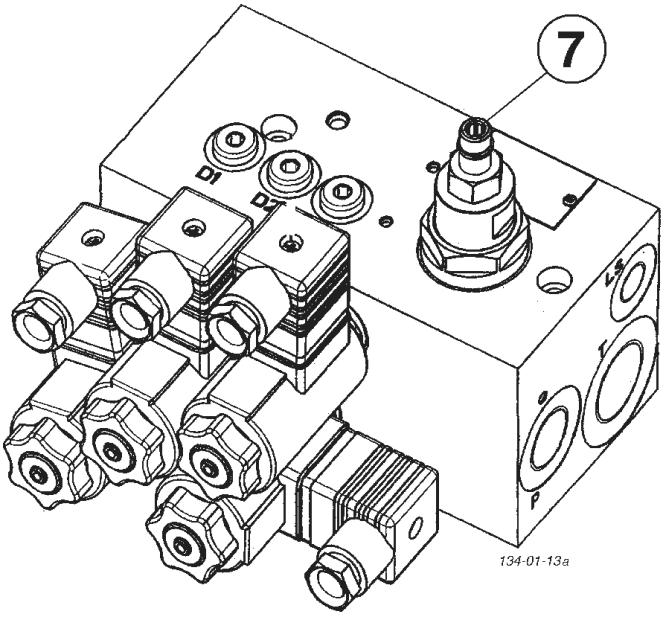
Tractors with a closed hydraulic system

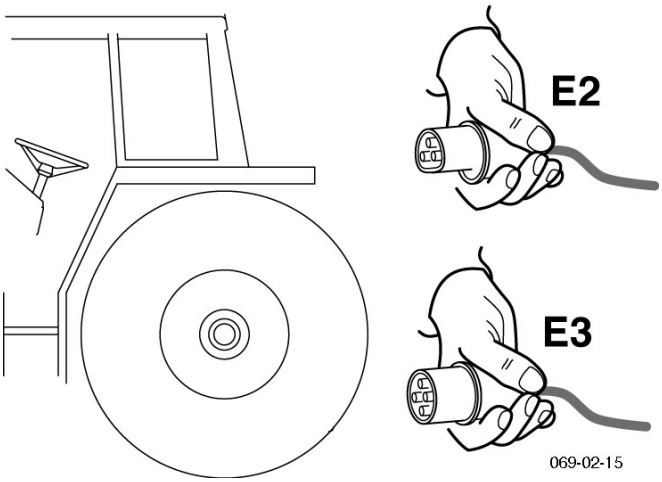
JOHN DEERE, CASE MAXUM, CASE MAGNUM, FORD Series 40 SLE

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

Tractors with a open hydraulic system

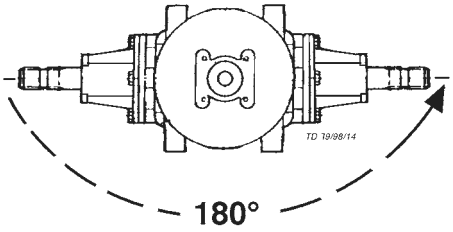
- Completely unscrew screw (7) on the hydraulic unit





Observe rotation direction of cutting discs

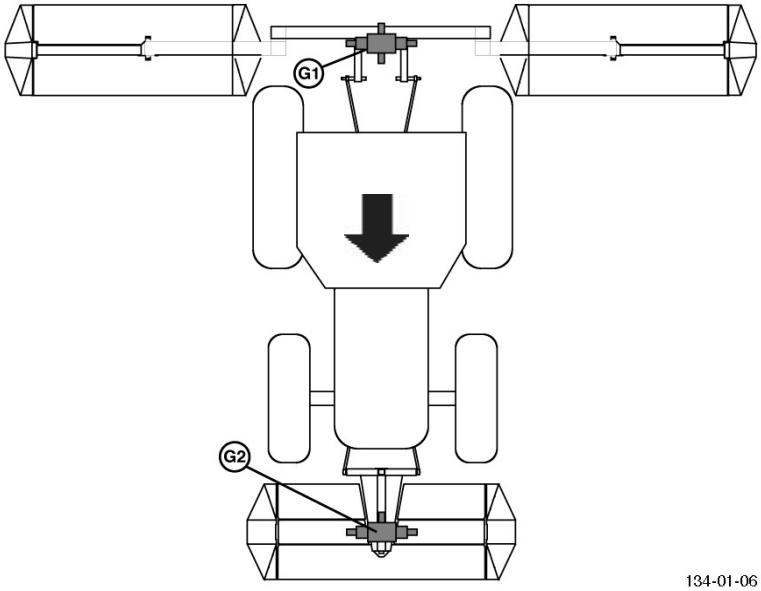
- Select appropriate rotation direction for the drive
  - if the necessary r.p.m. cannot be preselected on the tractor, then turn both gearings (G1, G2) **180°**.



Note!

Before reinstalling a gearing on the machine:

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



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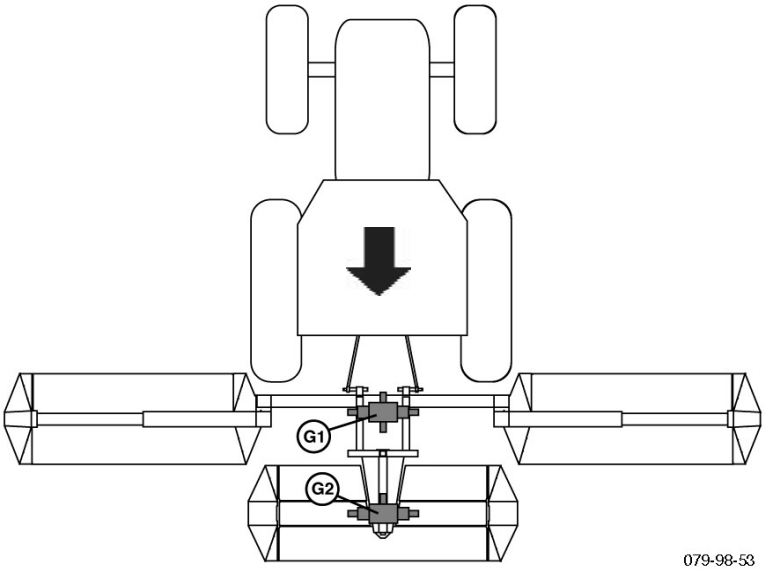

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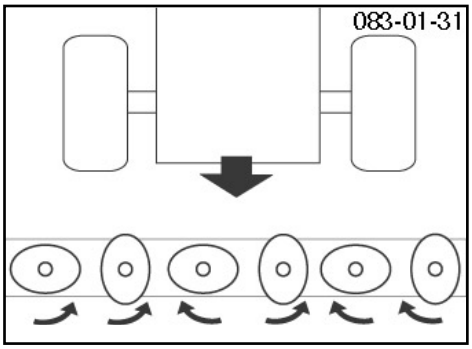
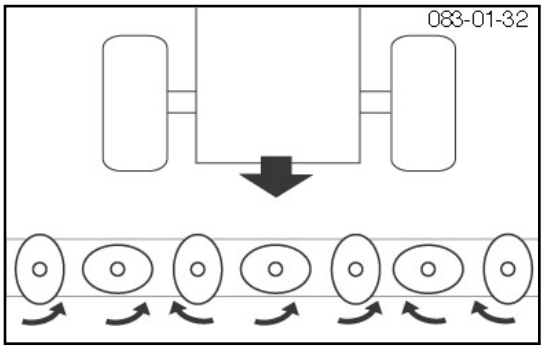


NOVACAT 7800



NOVACAT 8600

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.

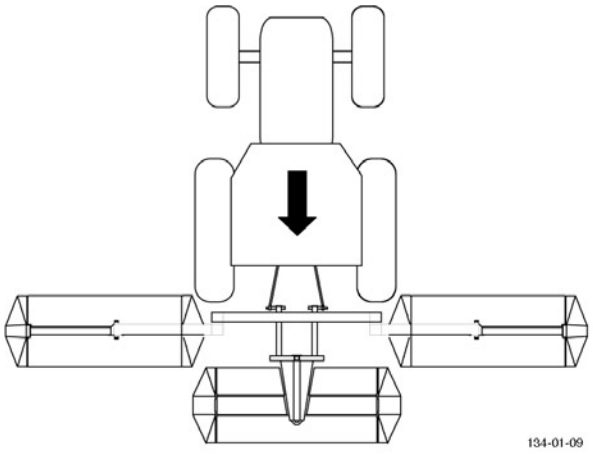
Combination 3

Safety hint: see supplement A1/ pt. 7, 8a-8h

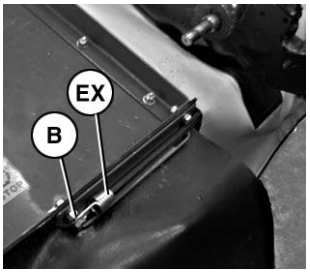
Take note!

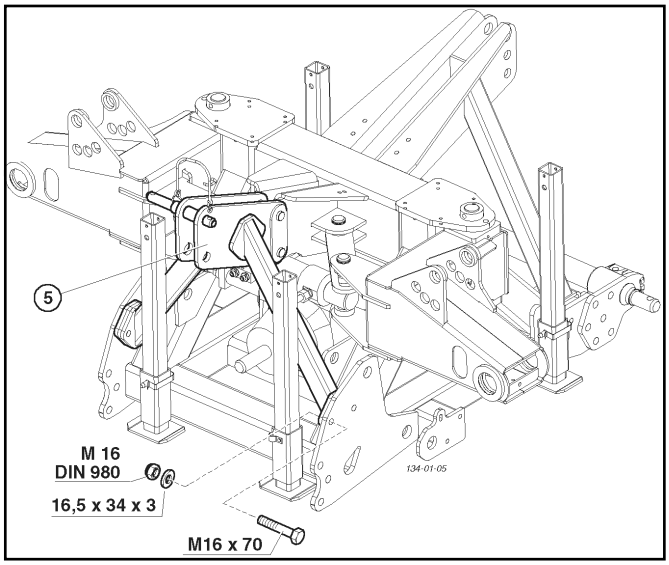
The lifting gear cannot be progressively raised or lowered. When the hydraulic control valve is activated, the central cutter bar is either completely raised or lowered (danger of crushing).

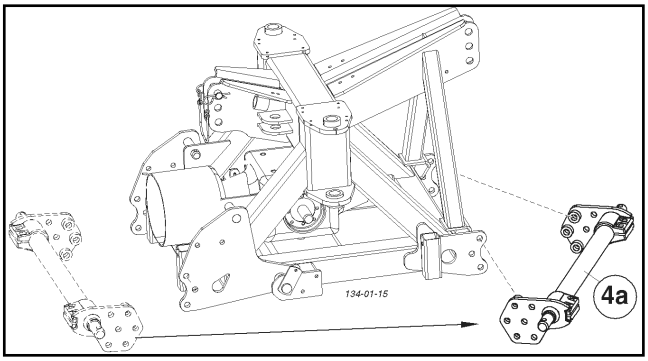
Should it be necessary to convert from Combination 2 to Combination 3, the following steps must be carried out:

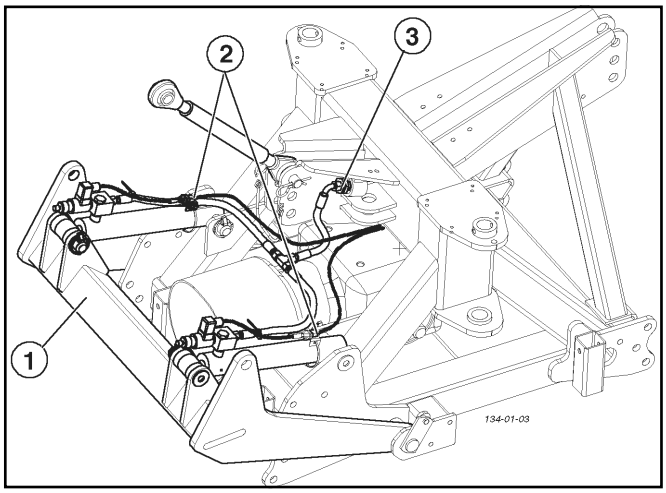


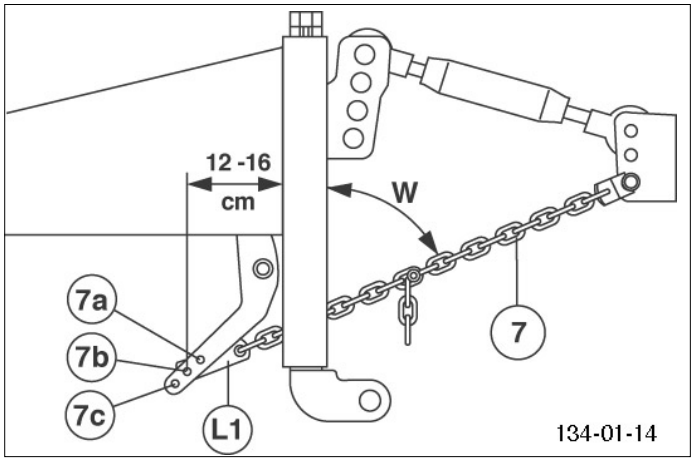
1. Remove adapter (pos. 5)
2. Detach attaching axle and install in pos. 4a
3. Install lifting gear (pos. 1)
4. Set up hydraulic connection (pos. 3)
5. Set up electric connection (pos. 2)
6. Attach mower unit to lifting gear (1)
   - Attach expander (EX)
7. Attach both chains (7)
   - when doing this, please note instructions in chapter on Adjustments



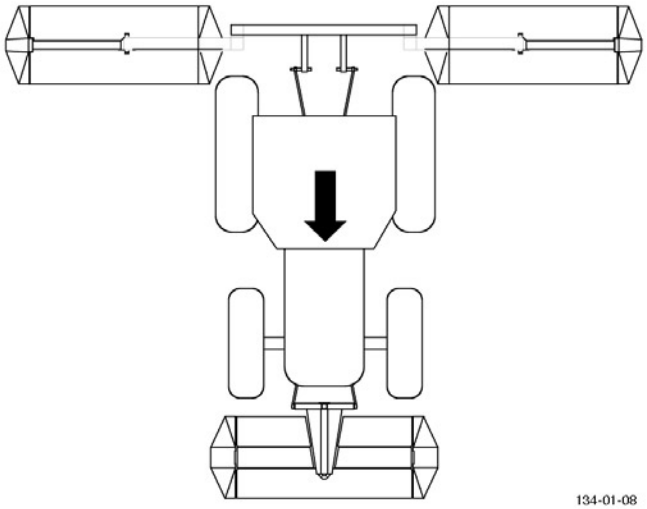


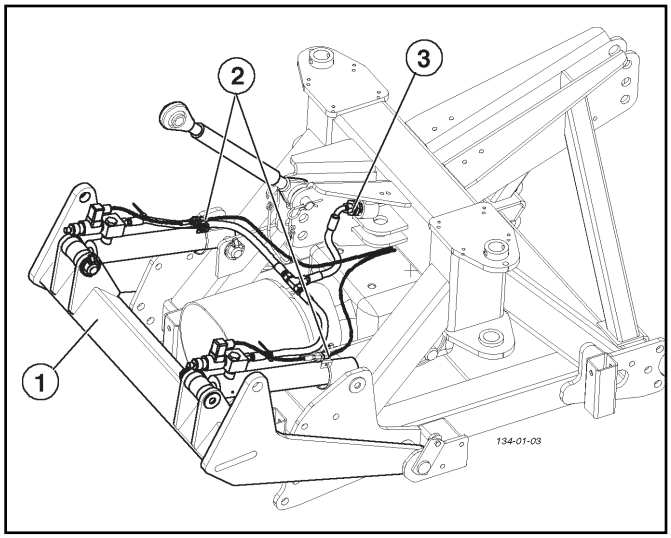






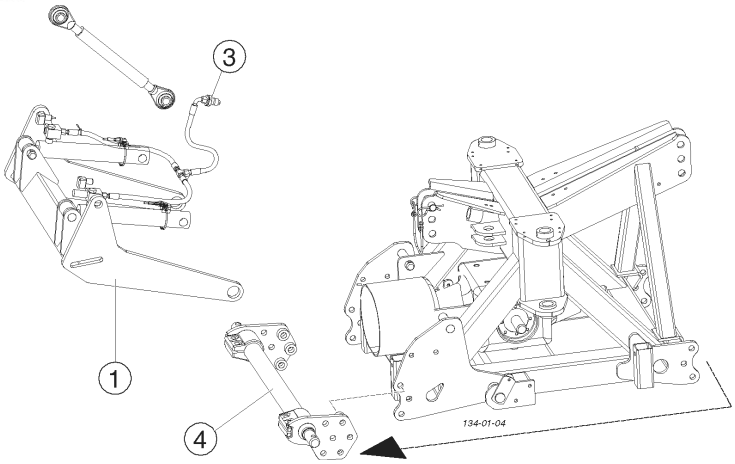
Combination 2





Should it be necessary to convert from Combination 3 to Combination 2, the following steps must be carried out:

1. Disconnect electrical connection (pos. 2)
   - Attach the cable to a suitable place on the frame
2. Disconnect hydraulic connection (pos. 3)
3. Detach lifting gear (pos. 1)
4. Mount attachment axle (pos. 4)
5. Attach adapter (pos. 5)
6. Attach mower unit to tractor´s lifting gear



Attach front mower to the lifting gear

When doing this, please also note instructions in the chapters on

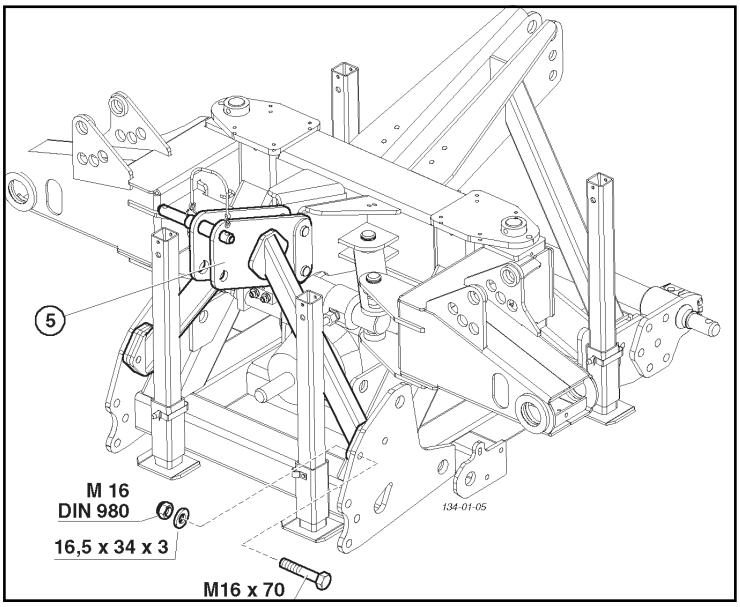
- Adjustments Front-Mower
- Special Attaching Kits

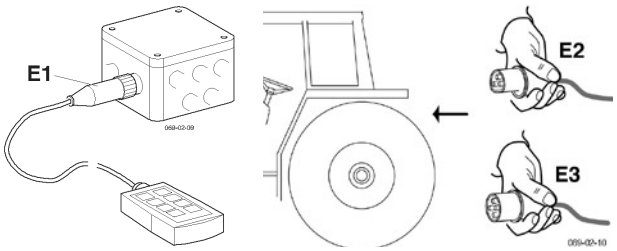
Establish power supply

Important!

* **Observe the cable connection sequence, otherwise operation through the control console will not function.**

1. Connect the control console cable to the switch box (E1)
2. Connect the power supply cable from the tractor (E2,E3)



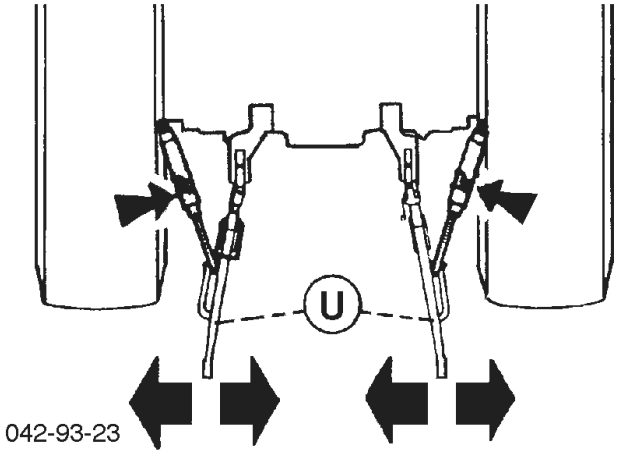


Driving on public roads

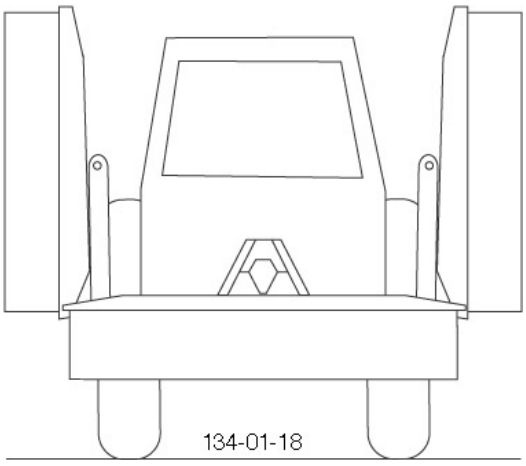
- Observe the official regulations of your country.
- Travelling on open roads may only be carried out as described in chapter "Transport position".
- Protection devices must be in proper condition.
- Before travelling bring all swivelling parts into their correct positions and secure against dangerous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

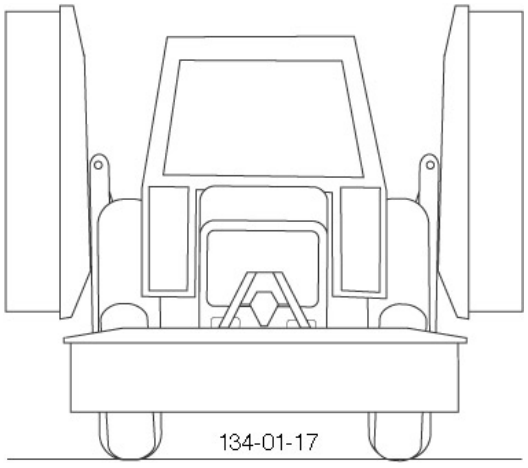
Hydraulic lower link

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



Transport position





"DIRECT CONTROL" device

In general

Before initial operation, various selections must be made using the "Direct Control" operation unit.

These selections are particularly important so that the electronic monitoring systems are functioning correctly.

After turning on the operation panel (ON)

The following LED will light up for about 0.5 secs:

* the LED for the selected hydraulic system
* the LED for the r.p.m. of the conditioner rotors

Selecting the hydraulic system

1. Make the connection to the switch box (E1)
2. Press and hold down the button for the hydraulic system needed

   A1 = closed hydraulic system (LED A1)

   B1 = open hydraulic system (LED B1)

   11 = "load sensing" hydraulic system (LED 11)
3. Couple power supply cable to tractor (E2)

   After about 5 seconds the relative LED lights up briefly and the selected hydraulic system is stored.

   When the storing process is completed, a short signal is heard.
4. Release the button (A1, B1, 11)

Setting the r.p.m of the conditioner rotors

1. Make the connection to the switch box (E1)
2. Press and hold down the button for the drive variant needed

Variant 1: Button 13

Rotor r.p.m on the left and right conditioner: 1019 min-1

Rotor r.p.m on centre conditioner: 844 min-1

Variant 2: Button 14

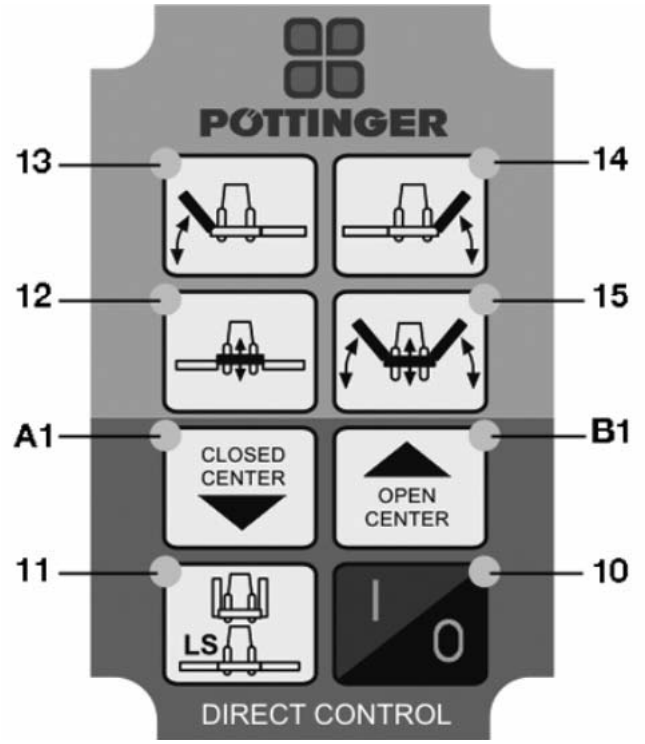
Rotor r.p.m on the left and right conditioner: 771 min-1

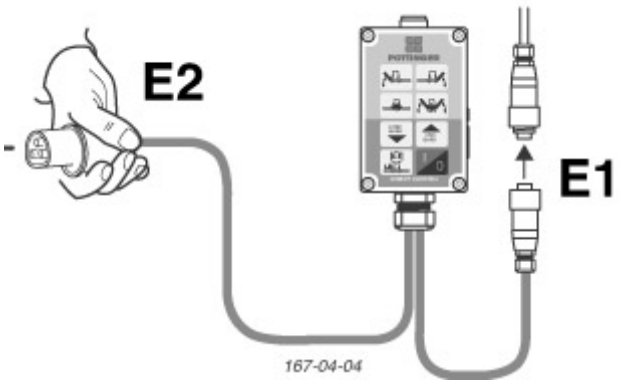
Rotor r.p.m on centre conditioner: 639 min-1

3. Couple power supply cable to tractor (E2)

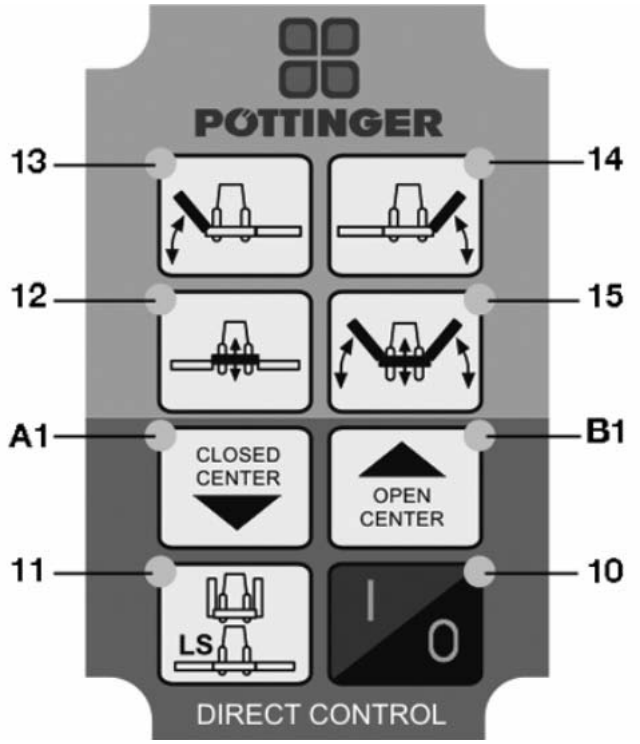
   After about 5 seconds the relative LED lights up briefly and the selected drive variant is stored.

   When the storing process is completed, a short signal is heard.
4. Release the button (13, 14)





Monitoring the r.p.m. of the conditioner rotors



In general:

During operation the desired r.p.m of each individual conditioner is monitored.

If the desired r.p.m. of a conditioner drops more than 180 min-1, a signal is heard and the LED of the respective button on the switch panel blinks quickly (12, 13, 14).

Cancelling: When the r.p.m increases again, the whistling and blinking passes at a slow rate. Only now can the button be pushed (cancelling) and the whistling and blinking will cease.

Note: In every instance the reason for the drop in r.p.m must be eliminated otherwise cancelling cannot take place.

- Decrease speed,
- remove blockage,
- repair plug connection and cable.
- replace faulty sensor.

Monitoring only functions when the sensor is plugged in and is not faulty.

Monitoring the r.p.m. of the p.t.o.

The p.t.o is monitored in order to prevent any damage to the cardan shaft when swinging the side mower unit out over the field transport position

The button 11 function (road transportation) can only be selected when the p.t.o sensor hasn't sent any impulses for at least 8 seconds.

- ***Drive shafts should no longer be turning.***

Elapsed time meter

Elapsed time will start to be counted as soon as the r.p.m of the p.t.o exceeds 300 min-1.

Elapsed time can be read on the LCD indicator inside the job calculator housing.

Elapsed time is displayed in the following format alternating with sensor diagnostics:

Elapsed time < 100:

14:36

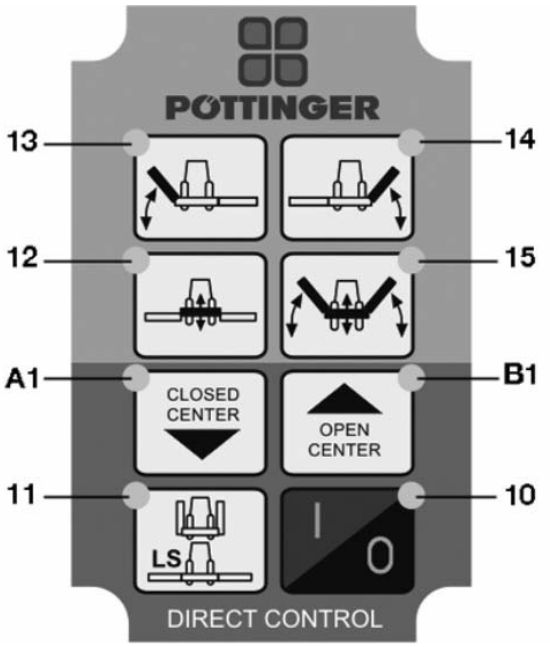
Elapsed time < 100>

0346

Description of the buttons

Press the relevant button to preselect the desired hydraulic function. If one of the two arrow buttons (A1, B1) are pushed afterwards, the desired hydraulic function will be carried out.

If a malfunction occurs: see "Establsih power supply" in the chapter "ATTACHING TO TRACTOR"



How to carry out desired hydraulic function

1. Press the button for desired function (11-15)

- The control light (LED) integrated in the button lights up.
- Through pressing any other button, the hydraulic function already selected will be deactivated, and the new hydraulic function activated.
- Pressing button a second time deactivates the hydraulic function once more.

2. Press one of the two arrow buttons (A1, B1)

- and the desired hydraulic function will be carried out

3. Deactivating the hydraulic function

- Press button, the integrated control light (LED) goes off.
- The hydraulic function has been deactivated.

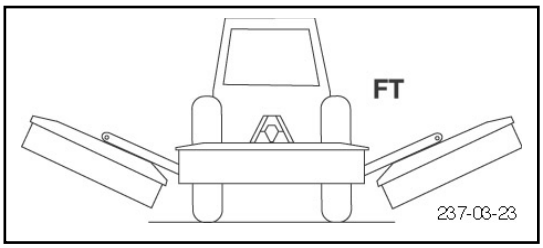
Safety warning: always deactivate the selected function.

Control light (LED)

If one of the control lights (LEDs) lights up, it means that that particular function has been activated.

The example on the illustration above shows

- The top left integrated control light (LED) is on
- Swing action of left mower unit has been activated



Meaning of the buttons on the control device

10 ON / OFF button

Important! After switching off the control device (OFF):

- ***switch hydraulic control valve to the 0 position. This is absolutely essential in the case of tractors with an open hydraulic system - otherwise the oil will overheat.***

11 Swings all mower units up and down

- Conversion from operating to transport position and vice versa (see button 15 also)
- "load sensing" hydraulic system (LED 11)

12 Swings front mower up and down

13 Swings left mower unit up and down

Rotor r.p.m on the conditioners 1019 min-1/844 min-1

14 Swings right mower unit up and down

Rotor r.p.m on the conditioners **771 min-1/639 min-1**

15 Swings all mower units up and down in the field transport position (headland turns)

A1 Downward swing movement "Lower"

Closed hydraulic system (LED A1)

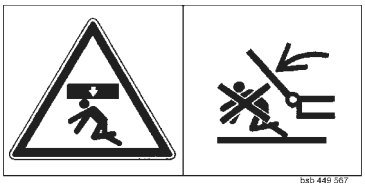
B1 Upward swing movement "Raise"

Open hydraulic system (LED B1)

Conversion from working to transport position

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!***
- ***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.***

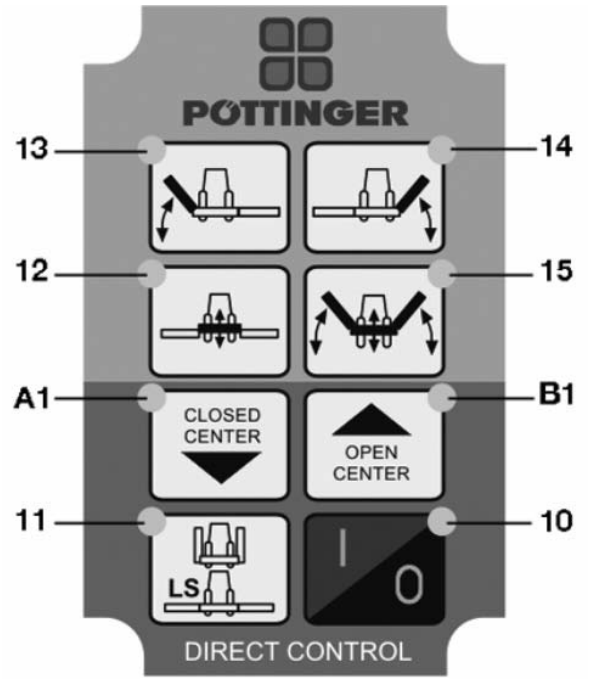


Conversion from operating to transport position

1. Press button **15**
2. Briefly press button **B1**

   Mower units swing into the field transport position (headland turns)
3. Press button **11**
4. Press button **B1** and hold

   Mower units swing into road transport position



Conversion from transport to operating position

1. Press button **15**
2. Press button **11**
3. Press button **A1** and hold

   Mower units swing into the field transport position (headland turns FT)
4. Briefly press button **A1**

   The mower units swing downwards (with delayed action);

   First the front mower, and then both side mowers; the swivel cylinders remain in the floating position.

Conversion from operating to field transport position (headland turns FT)

1. Press button **15**
2. Briefly press button **B1**

   The mower units swing upwards (with delayed action);

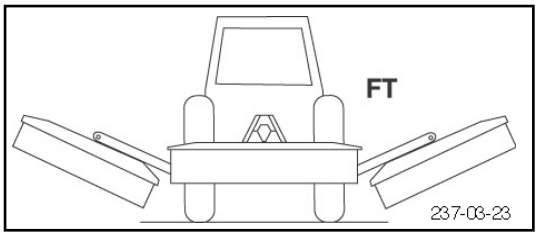
   first the front mower, and then both side mowers

Conversion from the field transport position (headland turns FT) to operating position

1. Button **15** must be activated (LED lights up)
2. Briefly press button **A1**

   The mower units swing downwards (with delayed action);

   First the front mower, and then both side mowers; the swivel cylinders remain in the floating position.



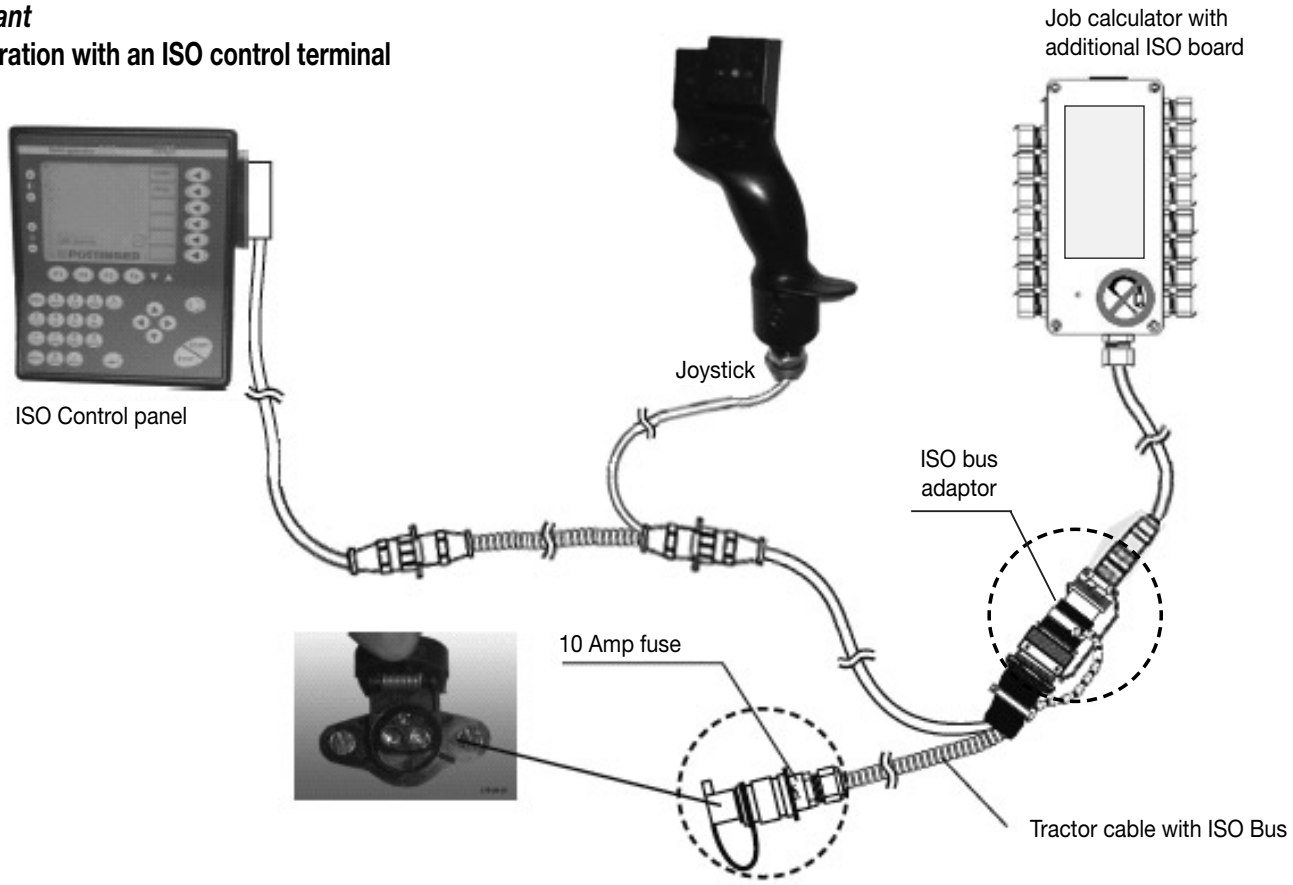
Important

Each mower unit can also be individually swung upwards and downwards.

1. Select desired hydraulic function (12, 13, 14)
2. Press button (A1, B1)

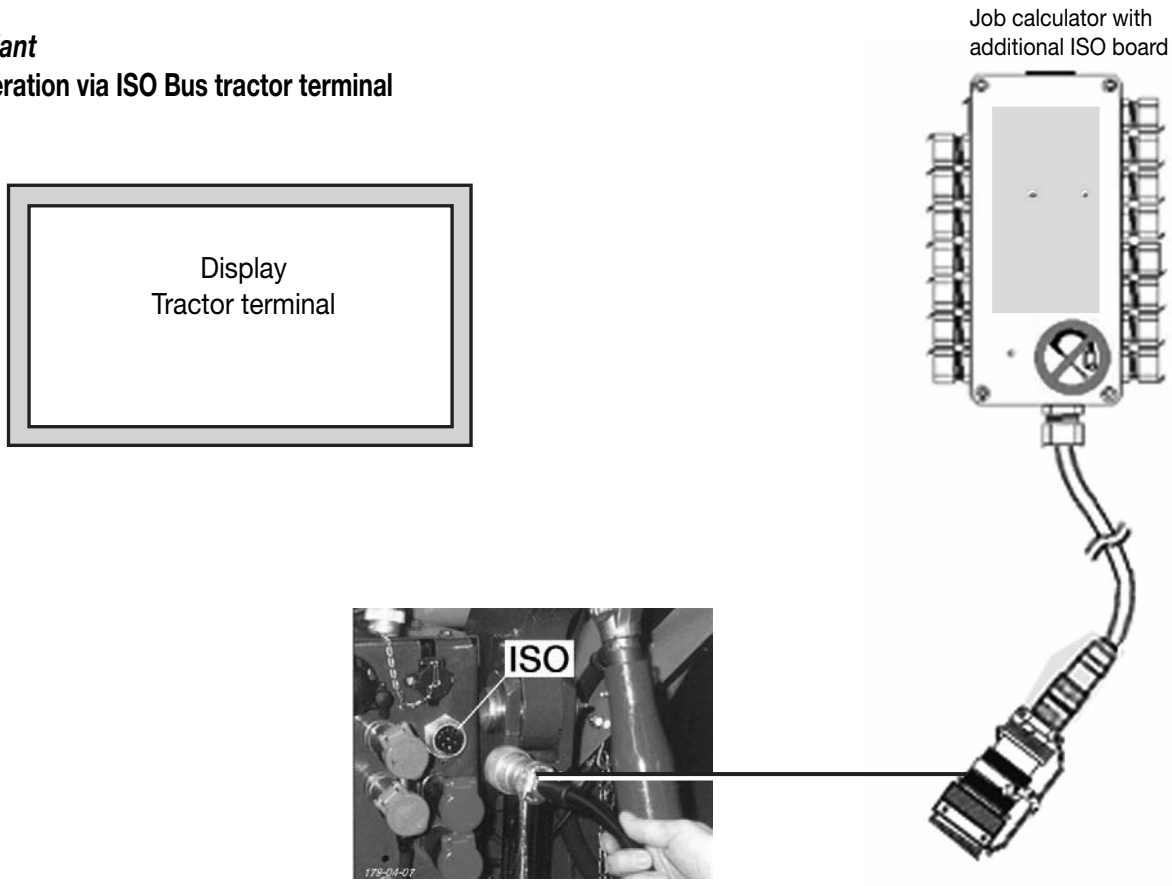
Variant

Operation with an ISO control terminal



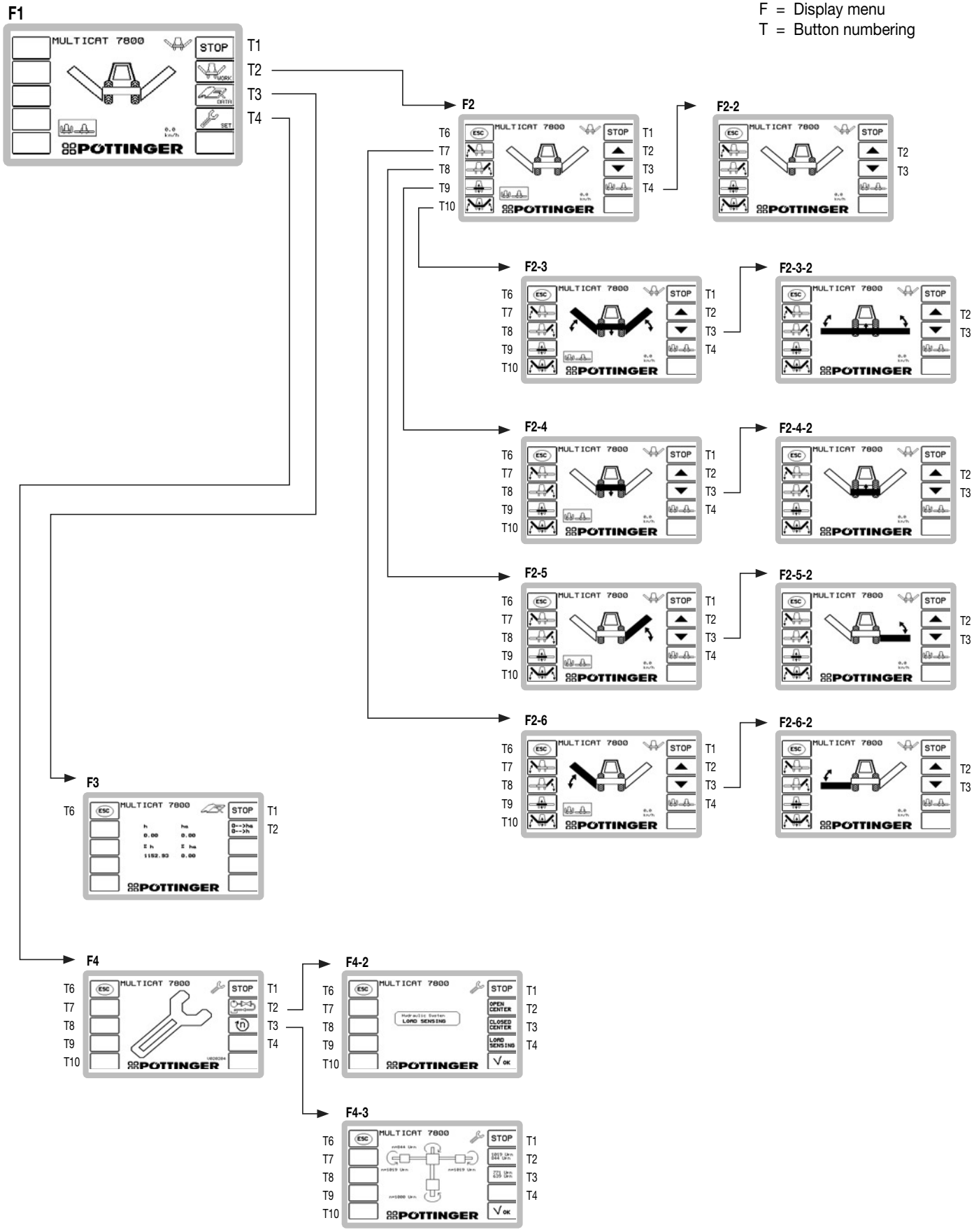
Variant

Operation via ISO Bus tractor terminal



Operation ISO-terminal

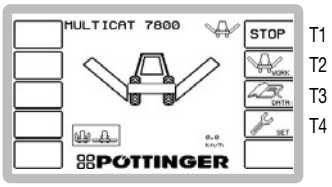
F = Display menu
T = Button numbering



Button indication

F1 - Start menu

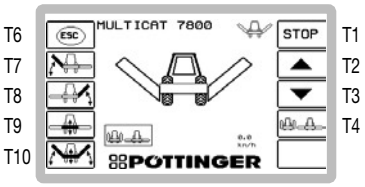
F1



T1 STOP
T2 Work menu
T3 Data menu
T4 Set menu

F2 - Work-Menü

F2



T1 STOP
T2 "Upward" according to preselection
T3 "Downward" according to preselection

T4 Conversion from operating to transport position
(preselection)
- Switch to another mask (F2-2)
- (Display indicator  disappears)

T2 - Raise cutter bars into road transport position
T3 - Lower cutter bars into working position

T6 Back a level

T7 Left cutter bar (preselection)
- Switch to another mask (F2-6)
- (display indicator )
- Lower left cutter bar with T3 key
- Switch to another mask (F2-6-2)
- (display indicator )
- Raise left cutter bar with T2 key

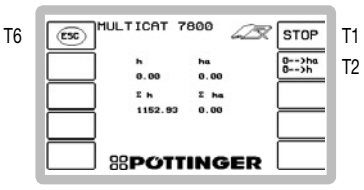
T8 Right cutter bar (preselection)
- Switch to another mask (F2-5)
- (display indicator )
- Lower right cutter bar with T3 key
- Switch to another mask (F2-5-2)
- (display indicator )
- Raise right cutter bar with T2 key

T9 Centre cutter bar (preselection)
- Switch to another mask (F2-4)
- (display indicator )
- Lower centre cutter bar with T3 key
- Switch to another mask (F2-4-2)
- (display indicator )
- Raise centre cutter bar with T2 key

T10 All cutter bar (preselection)
- Switch to another mask (F2-3)
- (display indicator )
- Lower cutter bars with T3 key
- Switch to another mask (F2-3-2)
- (display indicator )
- Raise cutter bars with T2 key

F3 - Data menu

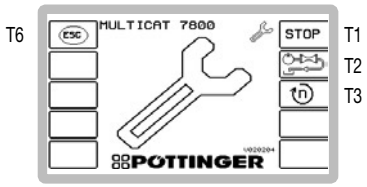
F3



T1 STOP
T2 Clears the hectare metre (ha) and hour counter (h)
T6 Back a level

F4 - Set menu

F4

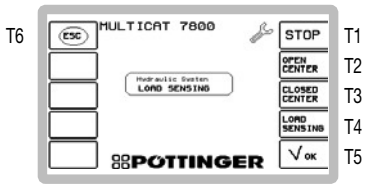


T1 STOP

T2 Selecting the hydraulic system

- Switch to another mask (F4-2)

F4-2

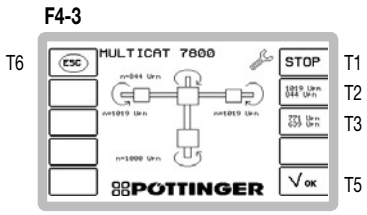


T2 closed hydraulic system
T3 open hydraulic system
T4 “load sensing” hydraulic system
T5 Store input

T3 Setting the r.p.m of the conditioner rotors

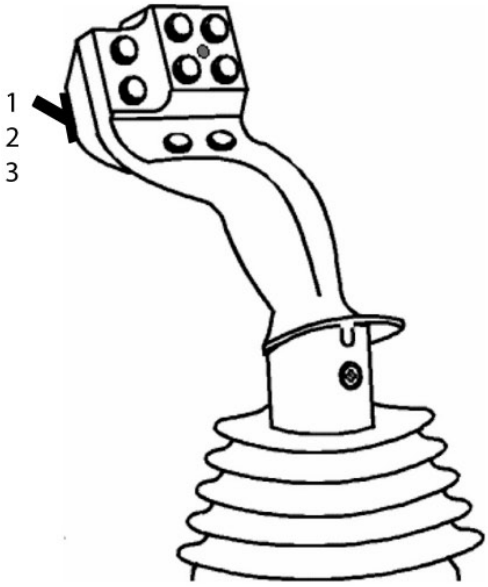
- Switch to another mask (F4-3)

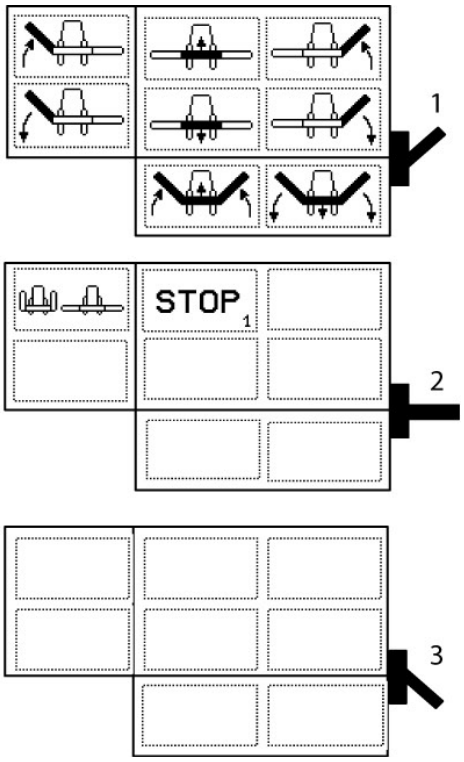
F4-3



T2 Rotor r.p.m on the left and right conditioner:
1019 min^{-1}
Rotor rpm for centre conditioner
844 min^{-1}
T3 Rotor r.p.m on the left and right conditioner:
771 min^{-1}
Rotor rpm for centre conditioner
639 min^{-1}
T5 Store input

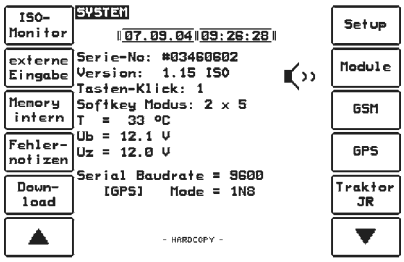
Joystick - Mower Configuration



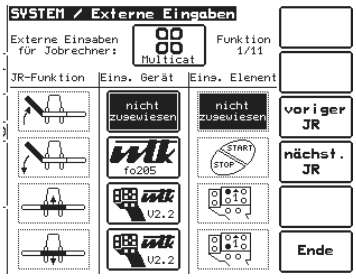


Setting the Joystick

- System Menu appears when “F4 key” on ISO control device is pressed



- Configuration Menu appears when “External Input” key on ISO control device is pressed



- Initial state is always (nicht zusewiesen)
- Select functions using the key block

- Select configuration style

  1 x pressing the button „+ (YES)“ or „- (NO) „

Variant 1

Can only be utilized twice: 1 function on the start key and 1 function on the stop key. Not necessary for joystick configuration

2 x pressing the button „+ (YES)“ or „- (NO) „

Variant 2

Allocate the required functions to the joystick key

- Continue switching using the “+ (YES)” key

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

1 Switch up (LED lights up red)

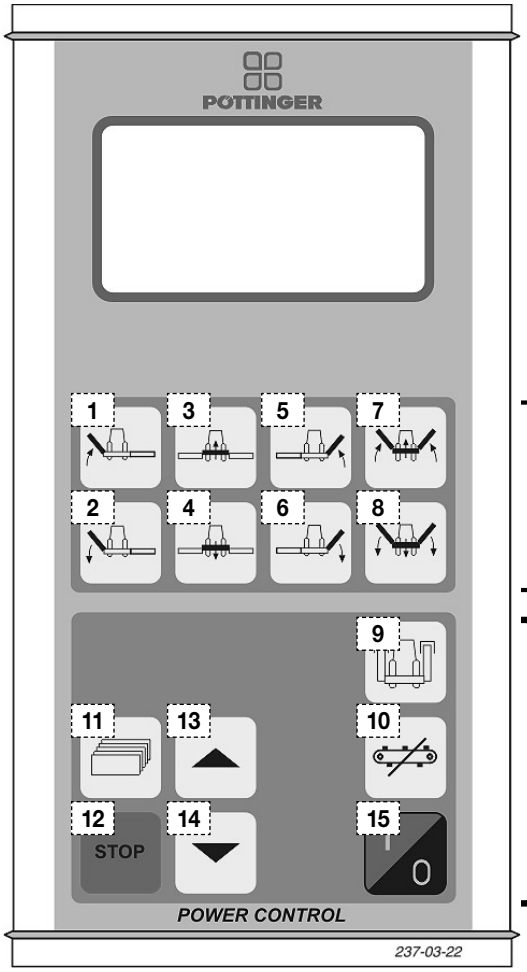
2 Switch centre (LED lights up yellow)

3 Switch down (LED lights up green)

Advantage:

Through pressing the joystick key the function can be directly controlled.

Control panel



Description of the buttons

Display indicator:

- Main indicator
- Special menu
  - sensor test
  - software versions
  - hydraulic system
  - operating hours / onboard voltage

Buttons:

1 Raise left cutter bar
2 Lower left cutter bar
3 Raise centre cutter bar
4 Lower centre cutter bar

Note! Keys 3 and 4 are ineffective if the cross conveyor belt is fitted to the mower

5 Raise right cutter bar
6 Lower right cutter bar
7 Raise all cutter bars
8 Lower all cutter bars

9 Road transport - button
10 Neutralize cross conveyor belt
11 Special menu - button
12 STOP
13 Navigation key upward
14 Navigation key downward
15 ON / OFF button

Important points!

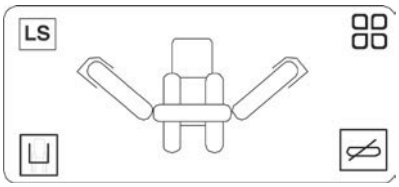
"POWER CONTROL" must be set for the selected hydraulic before initial operation.

- **closed hydraulic system**
- **open hydraulic system**
- **"load sensing" hydraulic system**

- see Menu Key (M) description

Display

The relevant hydraulic function is graphically shown on the display when any of the buttons is pushed, e.g. one of the buttons 1-8.



- **Always store control panel in a weather-resistant location.**

- **After turning off the control panel (AUS)**

  Move the hydraulic control valve to the O position.

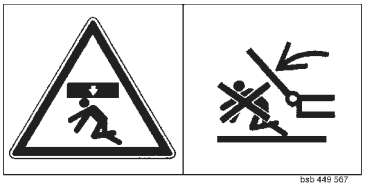
  This is particularly necessary for tractors with open hydraulic systems, otherwise oil heating occurs.

Conversion from working to transport position

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!**
- **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.**



Note!!

After turning off the control panel (AUS)

Move the hydraulic control valve to the O position..

Power control initial operation

Switching on operating device

- pressing the I/O button 

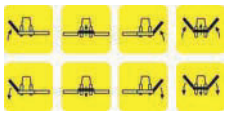
Switch off the control panel and job calculator by

- pressing the I/O button 

Functions

Buttons to start a swivelling function

- Press the allocated button and the hydraulic function is activated.
- Release the button and the hydraulic function is deactivated.



Note:

The buttons 3 and 4 are ineffective when the cross conveyor belts are mounted onto the cutter bar.

Road transport  preselection key

Selection to swing into the road transport position and the operating position

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 (only on machines with cross conveyor belts mounted)
- Swivel all cutting bars into the field transport position (FT)
- Press button 9 to activate its function.
- Press button 8 and all cutting bars swivel until the end position is reached.

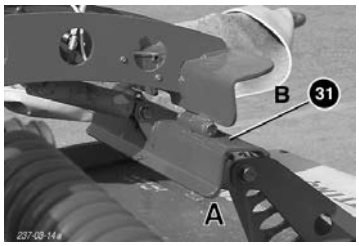
Button  STOP

Briefly pressing the key will stop all movements

Button  Cross conveyor belt

Button to release and lock both locking flaps (31)

- see chapter “Operating methods” also



Note:

If mowing without the cross conveyor belt, this key must be pressed before lowering out of the road transport position.

Navigation keys

 **Menu navigation (up)**

 **Menu navigation (down)**

Button  Special menu

This will switch over to the special menu.

The following functions and tests can be carried out (see paragraph “Special Menu” also)

- sensor test
- software versions
- hydraulic system
- operating hours / onboard voltage

End the menu

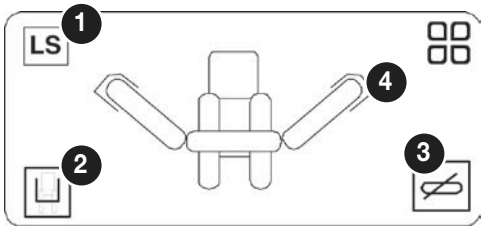
Pressing the button 11 saves altered settings and exits the menu.

Through pressing every other button settings will likewise be saved and the menu exited (except for 13, 14).

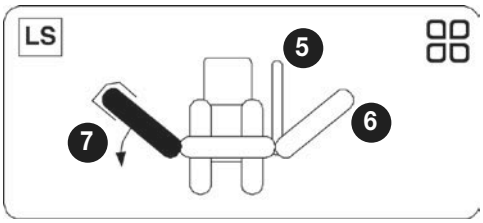
Main Indicator

The control device starts in the main menu

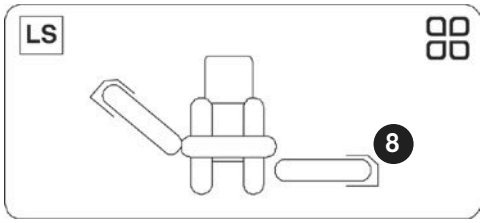
- Indicates following functions



1 Set hydraulic system
2 Activated road transport function
3 Activated conveyor belt neutralization
4 Mounted conveyor belt



5 Right conveyor belt neutralized and in road transport position
6 Right cutting bar in pre-turnaround position
7 Left cutting bar with mounted conveyor belt is lowered



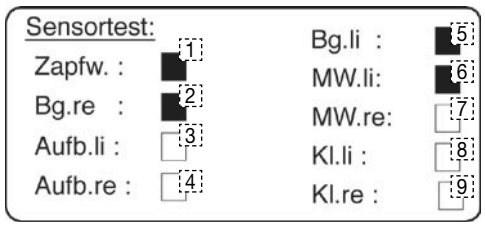
8 Right cutting bar with mounted conveyor belt in mowing position

Special menu

operating hours / onboard voltage

1 Machine operating hours
2 onboard voltage
Job calculator - mower unit (Multicat:)
Job calculator - cross conveyor belt (Förderband:)

Sensor test

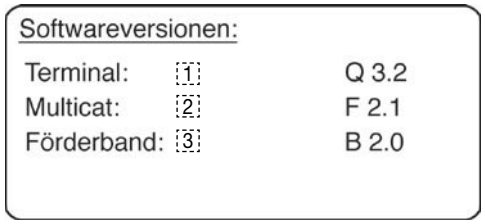


A small box shaded black means:
Sensor / Switch delivers signal “1”

1 Power take-off shaft r.p.m (Zapfw.:)
2 Switch hoop guard right (Bg.re :)
3 Conditioner r.p.m. left (Aufb.li:)
4 Conditioner r.p.m. right (Aufb.re:)
5 Switch hoop guard left (Bg.li :)
6 Cutter bar position left (MW.li:)
7 Cutter bar position right (MW.re:)
8 Switch flap left (Kl.li:)
9 Switch flap right (Kl.re:)

Software versions

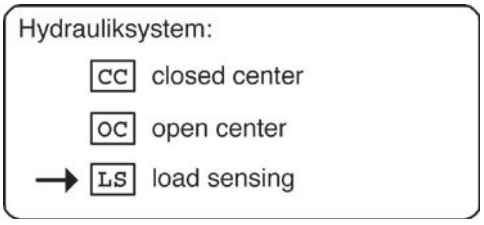
The software versions can be read here



1 Control panel (Terminal:)
2 Job calculator - mower unit (Multicat:)
3 Job calculator - cross conveyor belt (Förderband:)

Hydraulic system

“POWER CONTROL” must be set for the selected hydraulic before initial operation.



CC closed hydraulic system
OC open hydraulic system
LS “load sensing” hydraulic system

Important!
Furthermore, the switch (7) on the hydraulic block must be set (see chapter “Maintenance”)

Take care when turning on slopes!

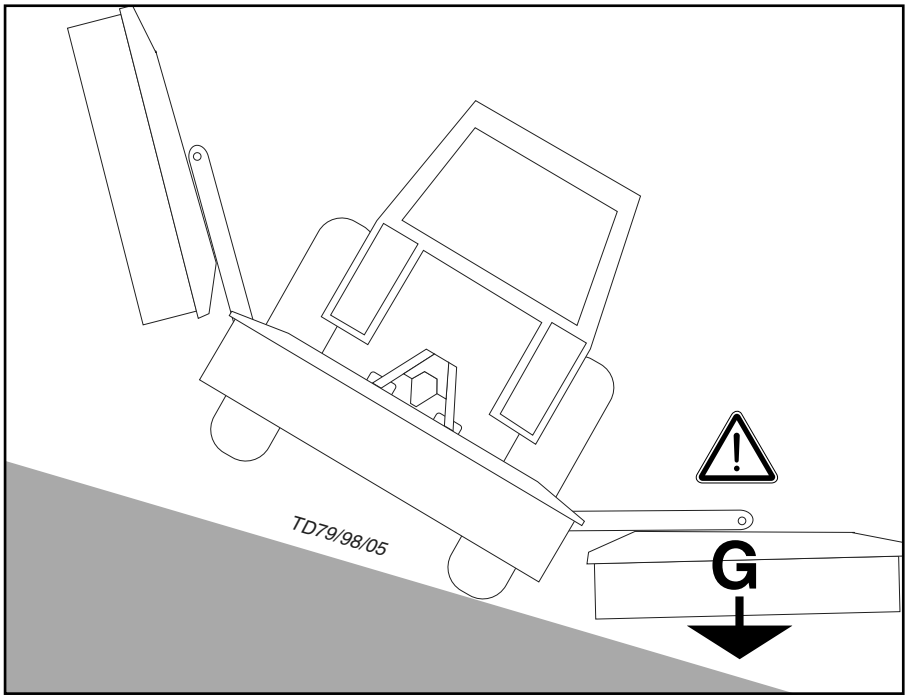
The tractor's travelling characteristics are influenced by the weight (G) of the mower unit. This can lead to dangerous situations, especially on slopes.

Danger of tipping occurs

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

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.



Important points before starting work

Safety hints:
see supplement-A1 points 1. - 7.)

After the first hours of operation

- Retighten all knife screw fittings.

Safety hints

1. Check

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

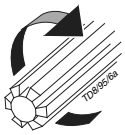
2. Switch-on the machine only in working position and do not exceed the prescribed power take-off speed (for example max. 540 rpm).

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

540 Upm	1000 Upm

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

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



4. Damage protection!

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

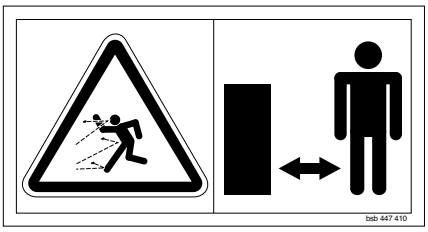
In the event of a collision

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

4. Stay clear while engine is running.



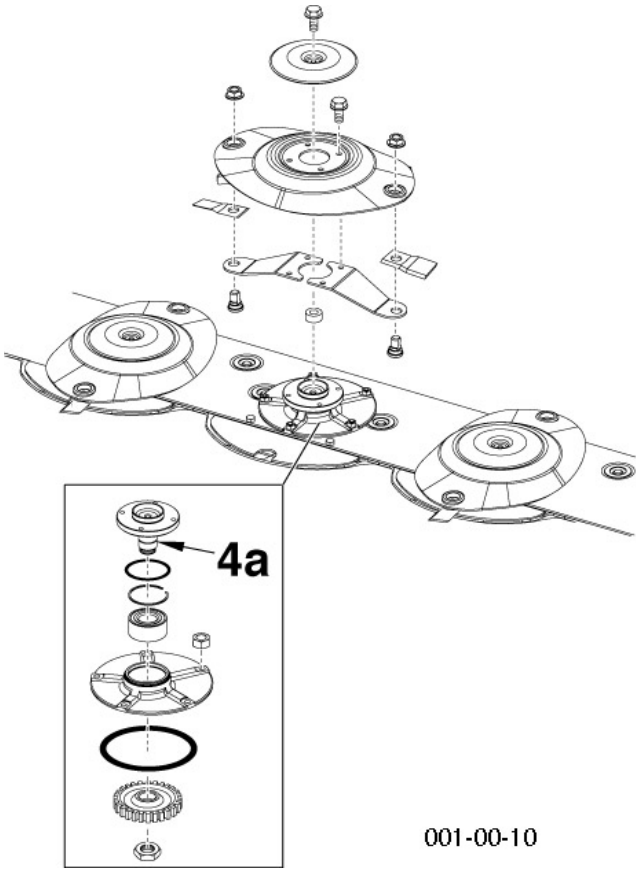
- Keep people out of the danger zone - foreign bodies which can be ejected by the mower could injure them.

  Special care is necessary on or near stony ground.

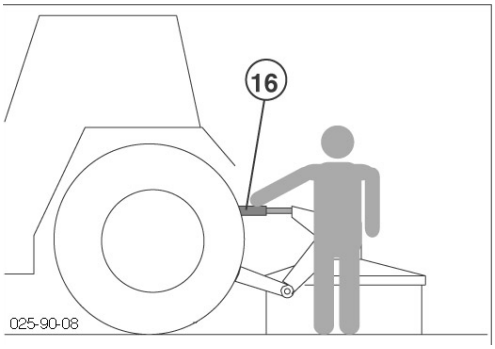
5. Wear hearing protection

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).



Operation



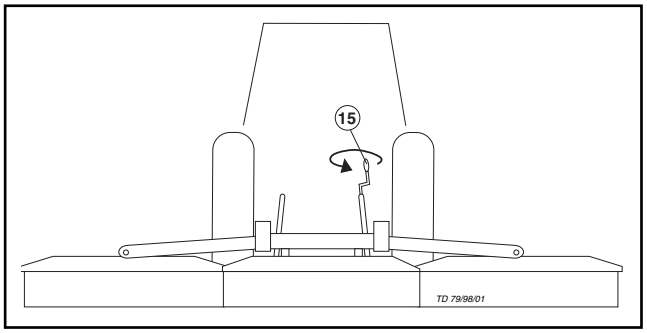
1. Adjust cutting height by turning upper link spindle (inclination of the cutting discs max. 5°).

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

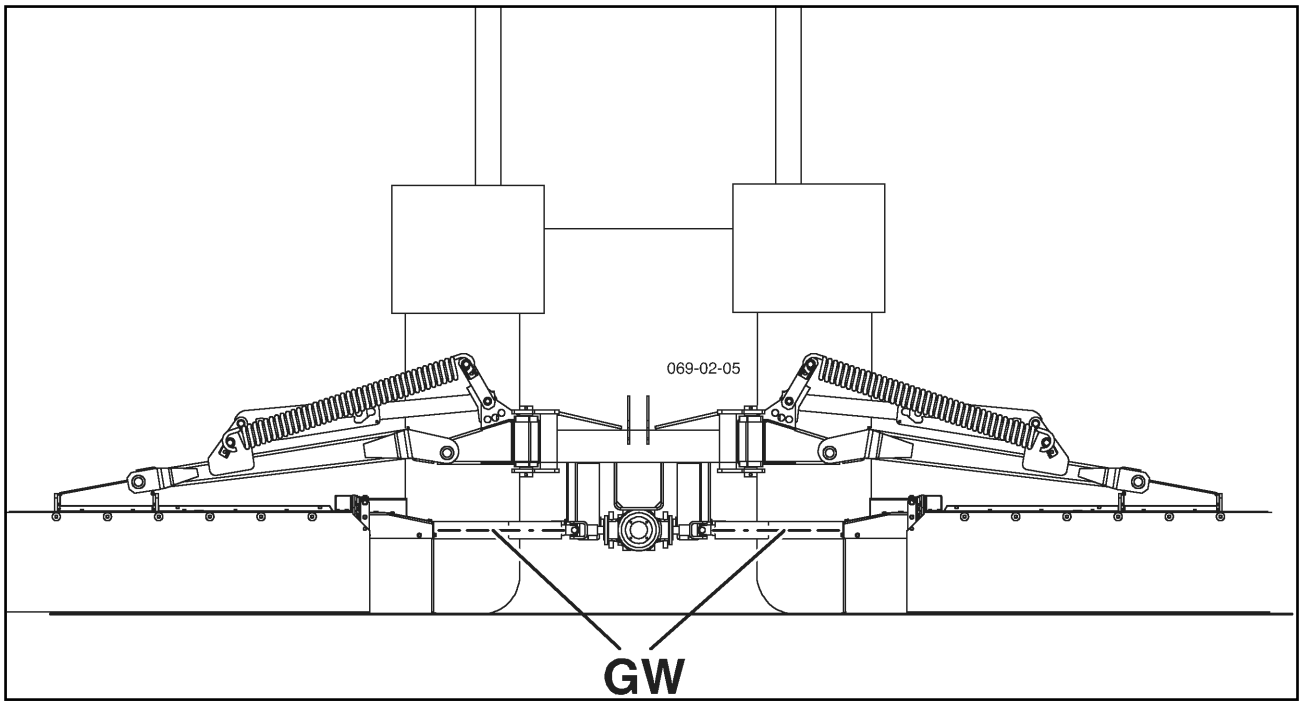
Smoothly increase the p.t.o. speed, in order to avoid noises in the free-wheel conditioned by the system.

- Adjust travel speed to terrain and crop.

Adjustment

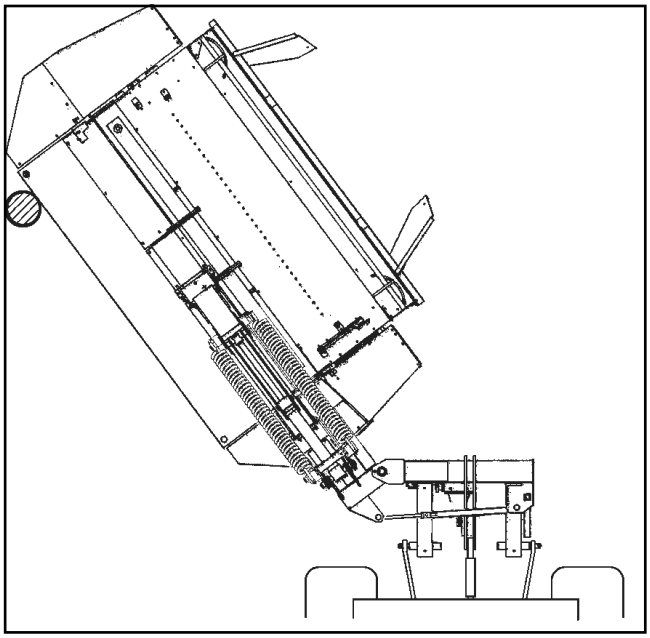


- The drive shaft (GW) position should be approximately horizontal when mowing.
- Frame horizontal.
- Fix hydraulic lower links in a way that the machine cannot swing out sideways.



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.

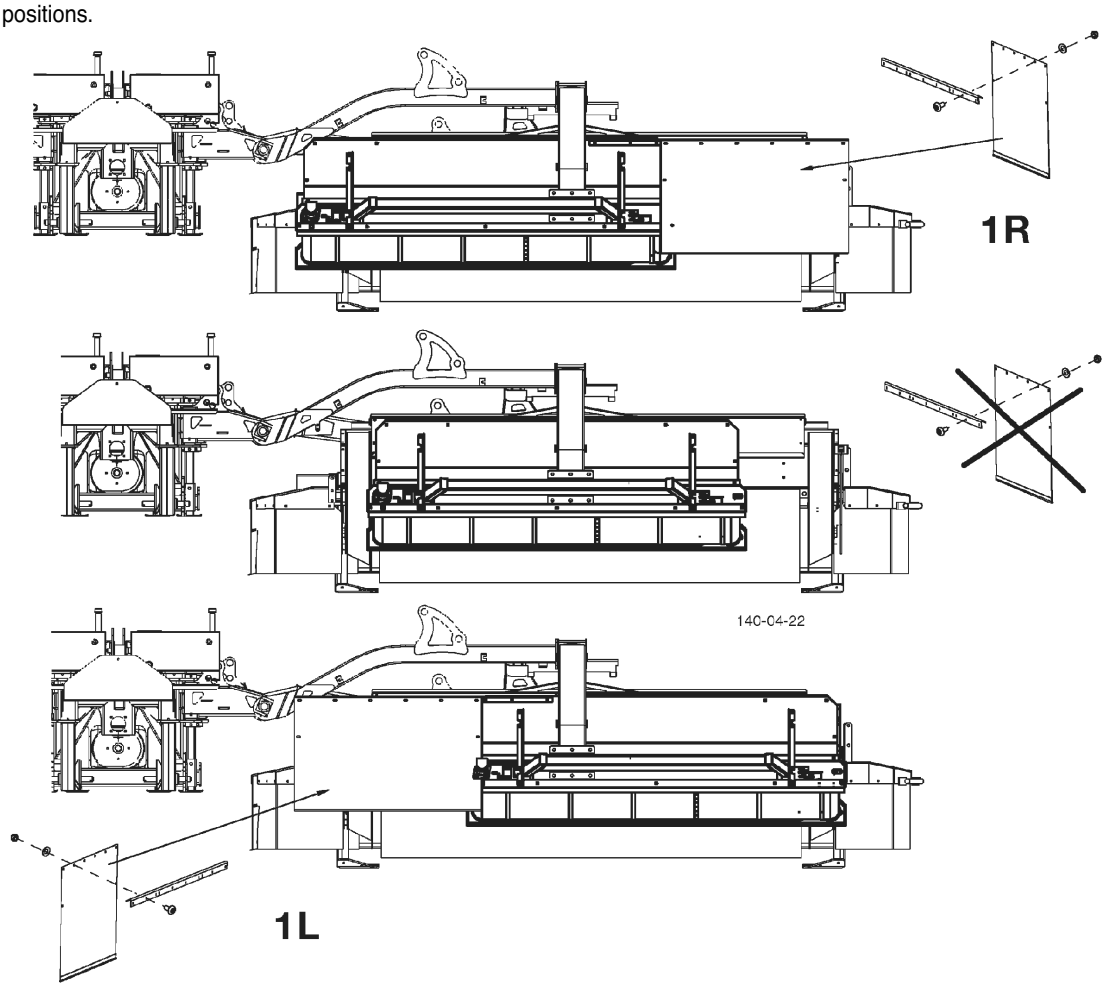
Then the cutter bar can be swivelled back hydraulically into the operating position.

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

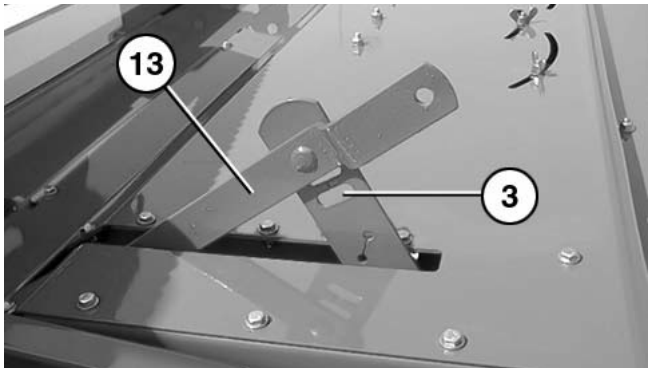
Safety hints

Check (1R, 1L)

- 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.



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).

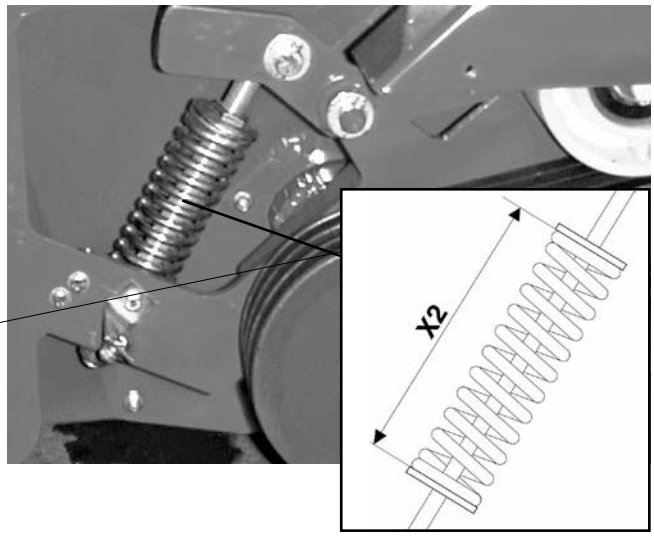
  However the crop should not be chopped.

Correct belt tension

Check X2 size

NOVACAT 7800: X2 = 164 mm(side mowers)

NOVACAT 8600: X2 = 164 mm (side mowers)



700 r.p.m. for rotor

- less damage to crop

Pulley, belt and belt guard must be replaced.

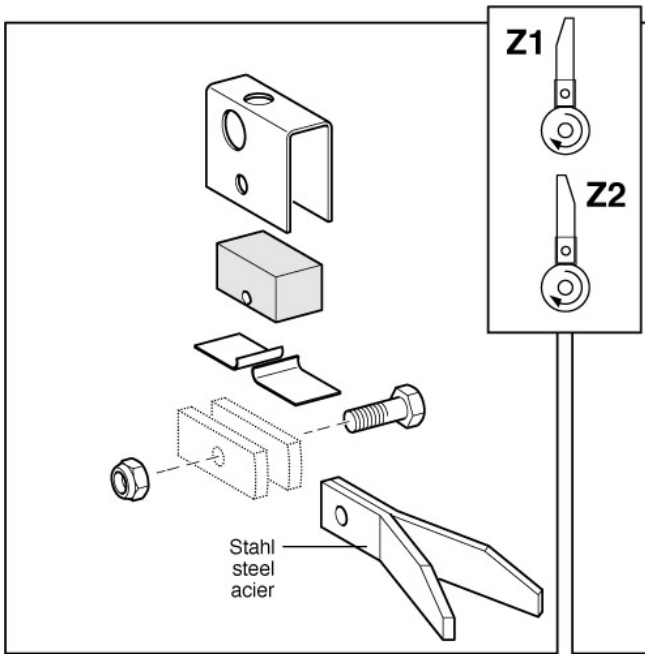
See replacement parts list for parts.

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

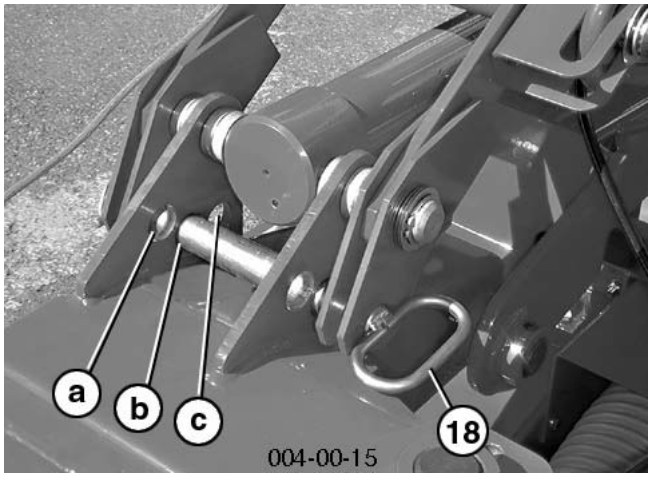
Side mowers

Reduce spring tension before dismounting the conditioner

Pin bolt (18) in the relative position (a)

- see chapter "MAINTENANCE"

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

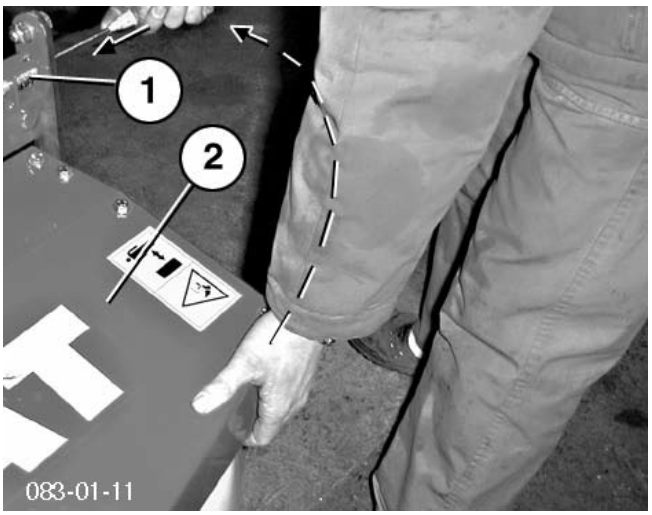


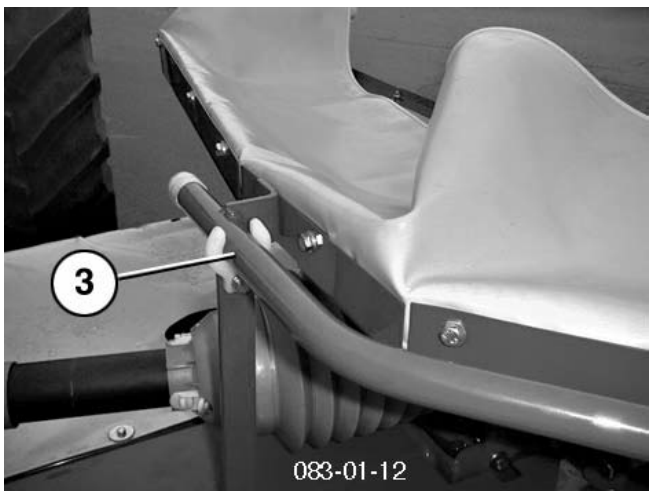
1. Dismounting cutter bar from tractor

(only in cutter bar Combination 3)

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

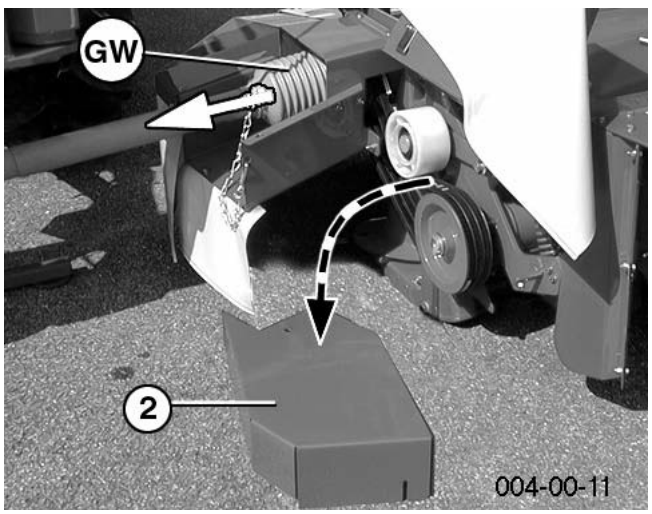
- engage protective frame in holder (3)
- left and right

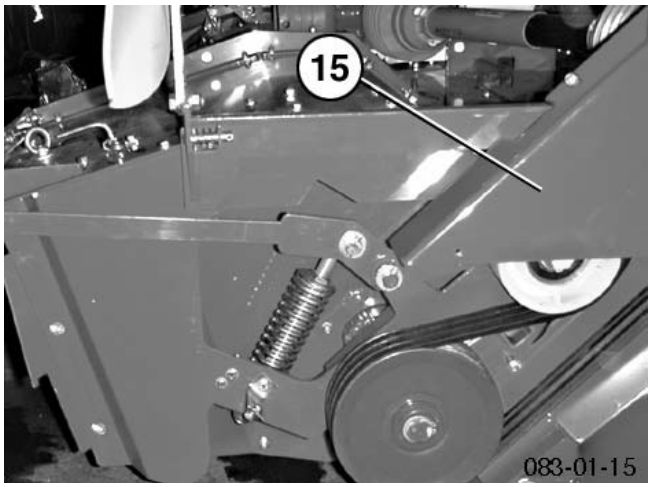




3. Remove the belt protection (15) (Front-Mower)

3a. Remove the belt protection (2) and withdraw the drive shaft (GW) from the gear (side mowers).

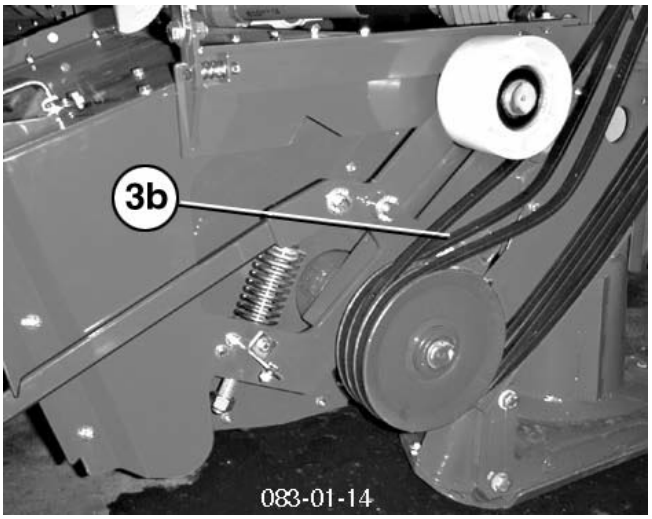


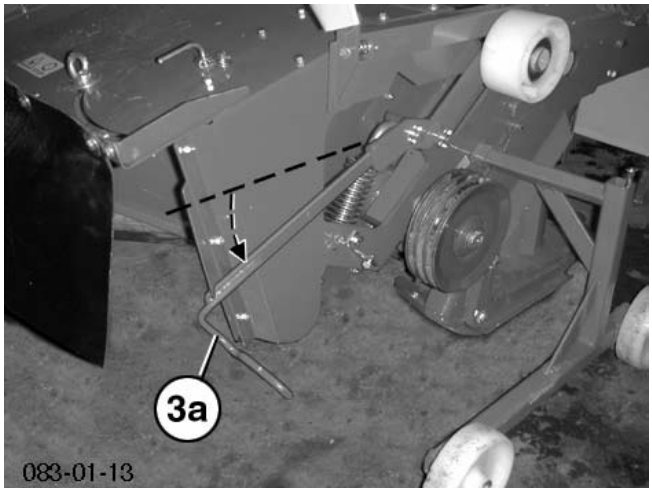


Front mower

3. Remove belts (3b)

- Release the tension using lever (3a) beforehand

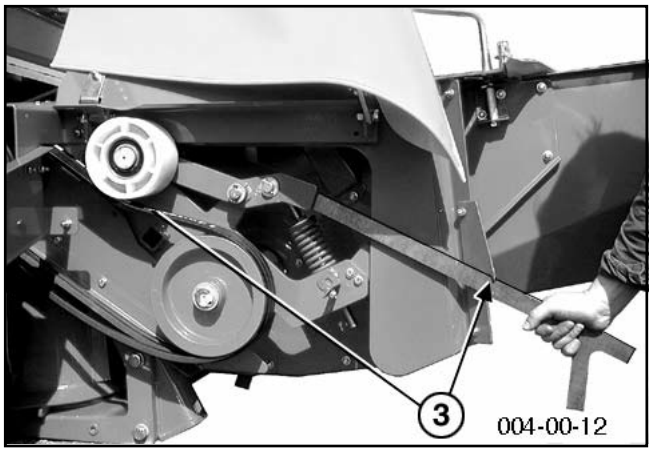




Side mowers

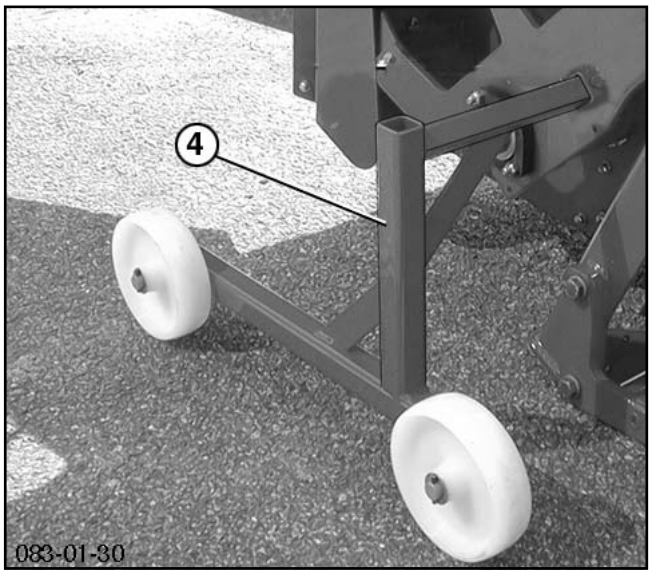
3a. Remove belts

- Release the tension using lever (3) beforehand



4. Fit transport wheels (4)

- left and right

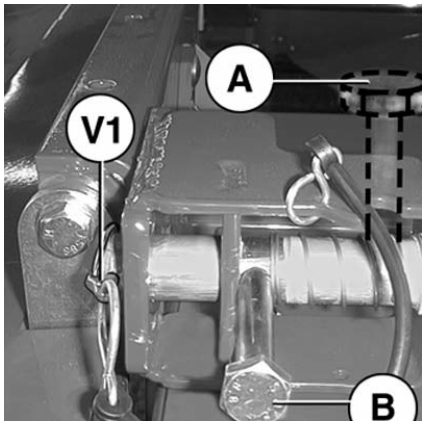


5. Release left and right locks

- **Spring loaded positioning bolt up to 2004 model**

  Remove linch pin (V1) and release bolts

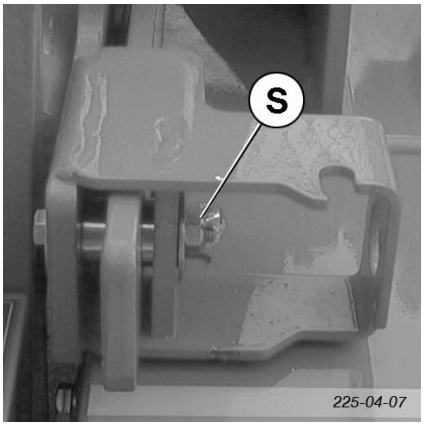
  • Pos. A = released • Pos. B = Locked



- **Screwed in from 2004 model**

  Remove screw (S)

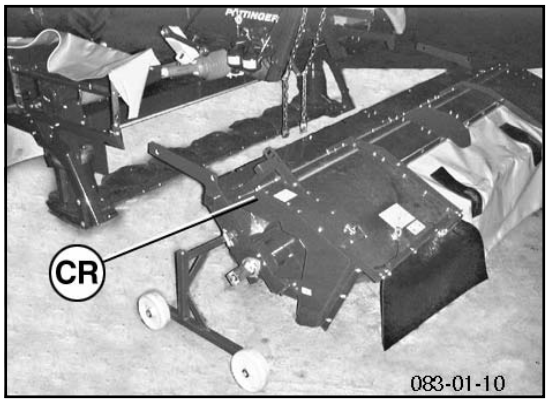
  (Spring loaded positioning bolt = optional)

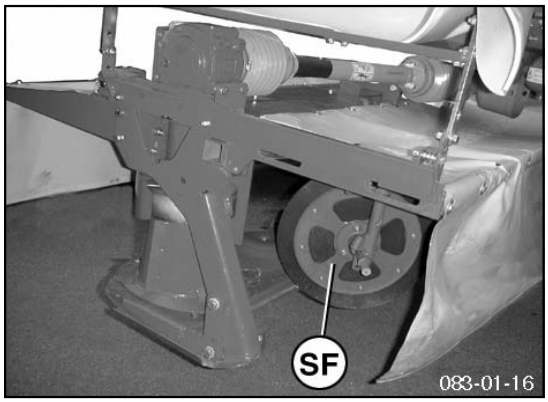


Important!

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.



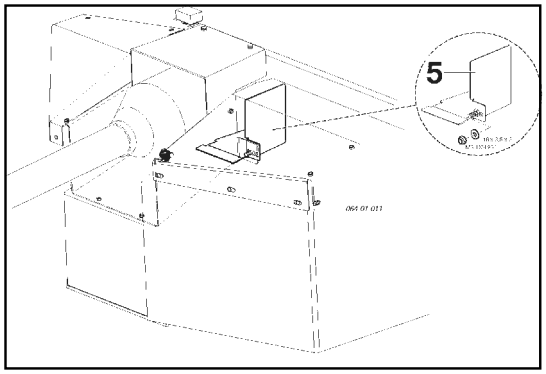


Installation of the conditioner (CR) or the swath formers (SF)

- is effected in the reverse sequence to dismounting.

7. Mount the guard (15) (Front-Mower)

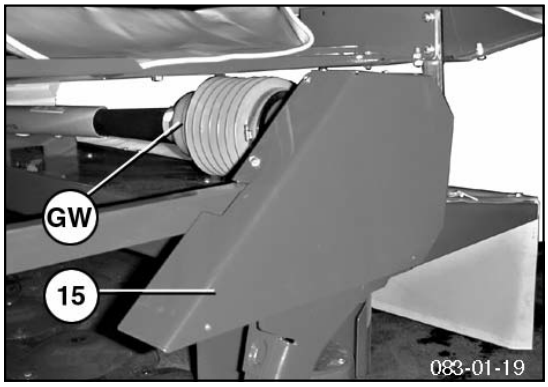
This guard (5) prevents the penetration of dirt into the gear area.



8. Mount the guard (5) (only applies to side mowers)

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

- connect drive shaft (GW)



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

Safety hint

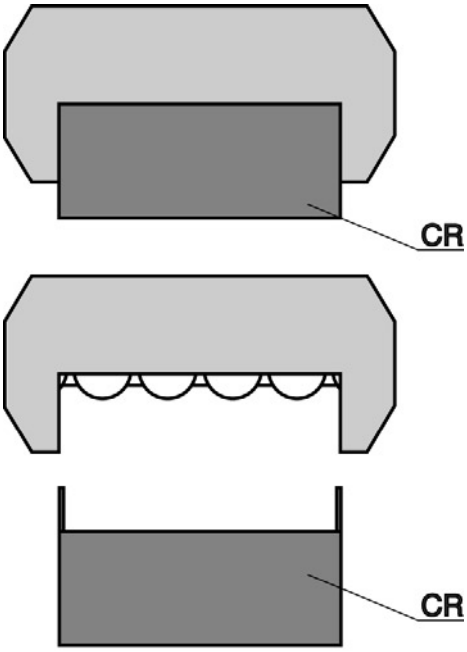
A machine with a conditioner (CR) as a complete unit is fitted with proper protection elements.

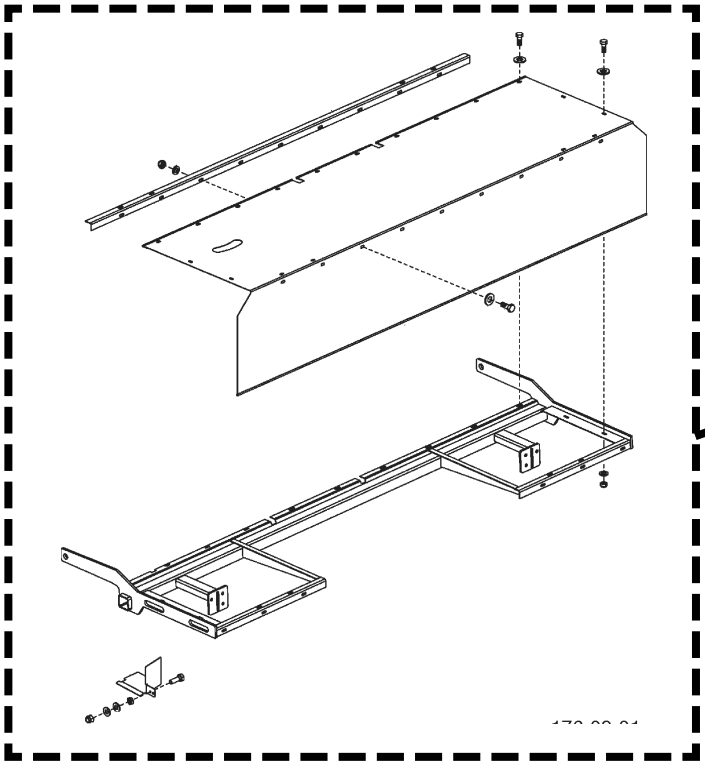
Should the conditioner be detached however, the mowing unit no longer has complete protection covering. In this situation mowing may not take place without additional protection elements!

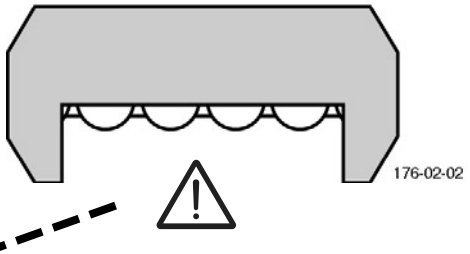
Beware!

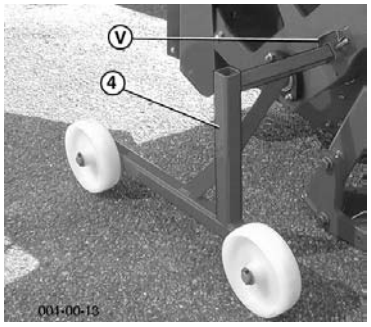
Protection elements, especially intended for this mode of mowing, must be fitted to the mowing unit.

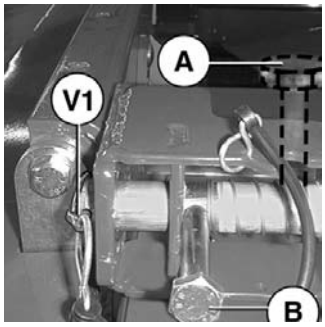
These protection elements are not included in the delivery of a new machine with a conditioner, the parts must be additionally ordered (see Spare Parts List, component group "REAR PROTECTION").









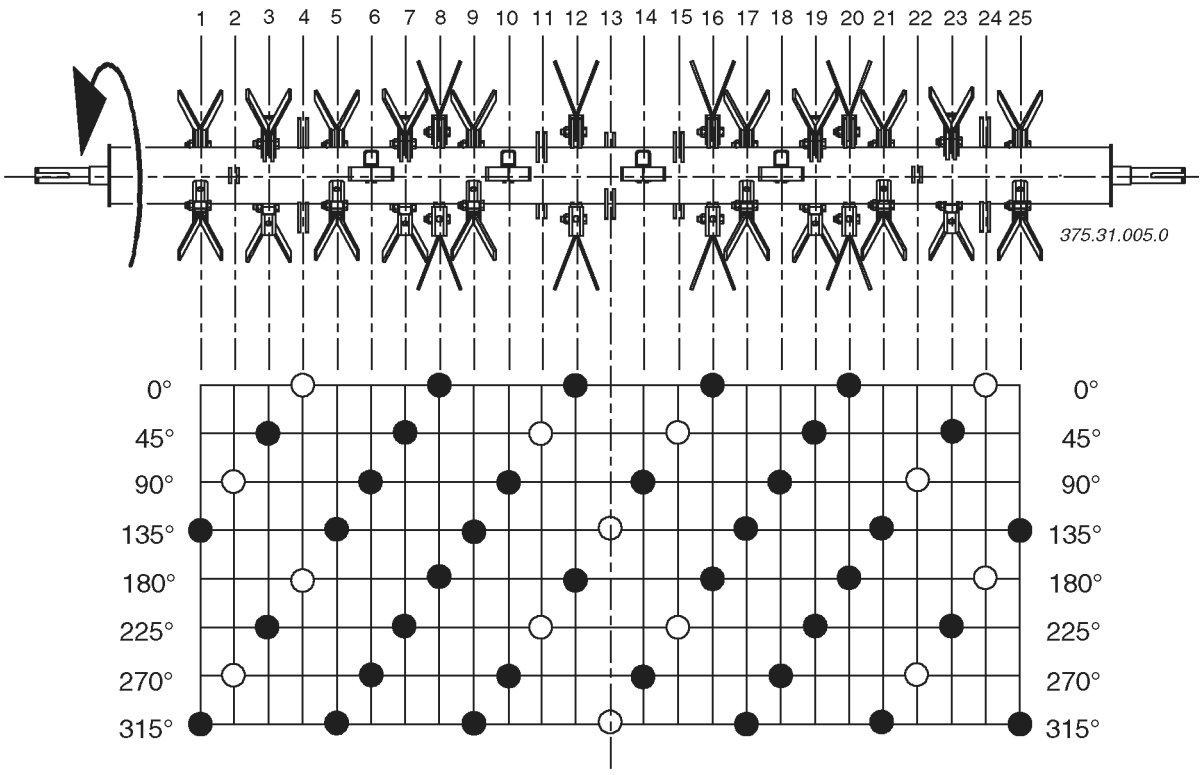


Optional extra

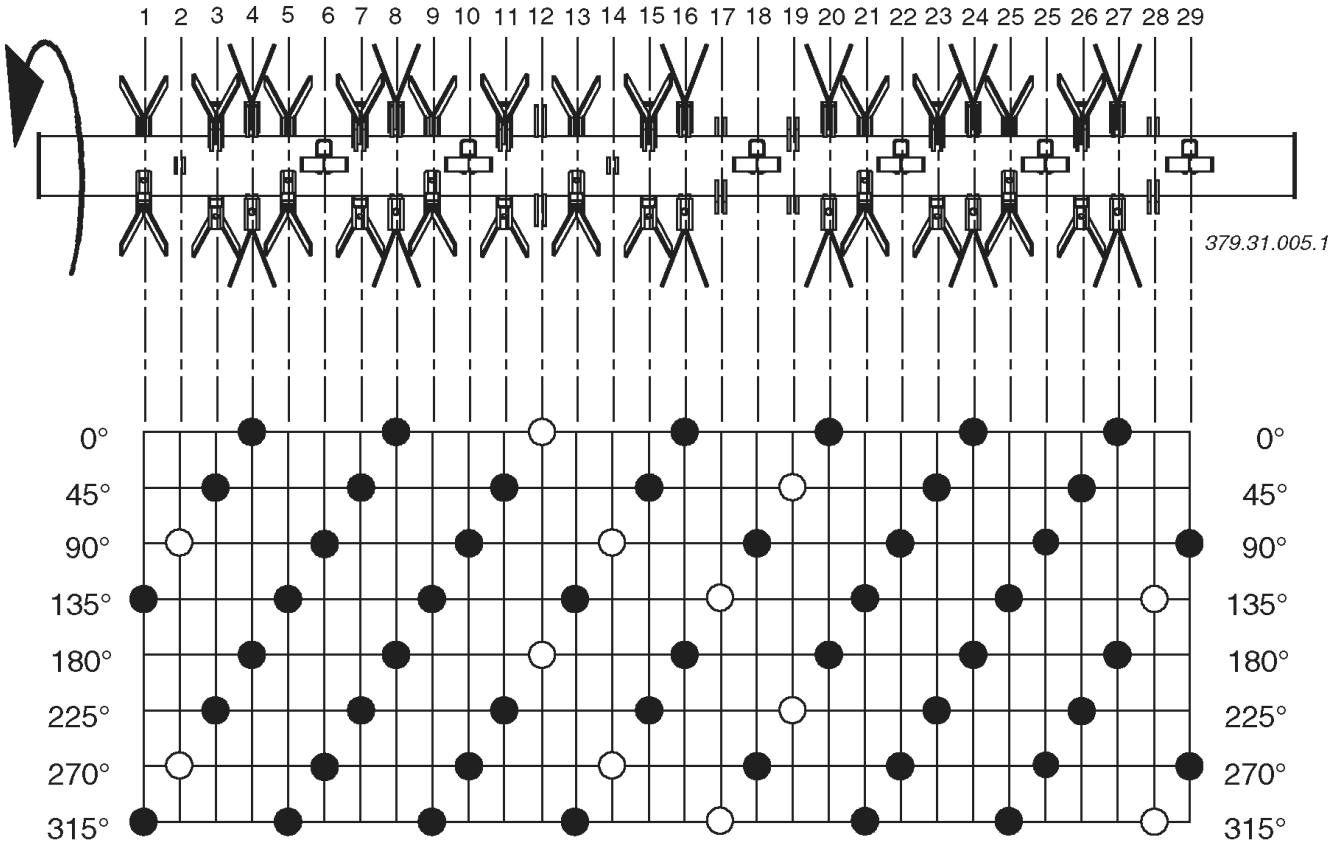
- Chassis (4)
- Spring-loaded fixing bolts (A-B)

For mowing without conditioner (CR)

- ***Observe safety hint (above) without reservation!***



NOVACAT 266 F (Type PSM 375)
NOVACAT 7800 (Type PSM 383)

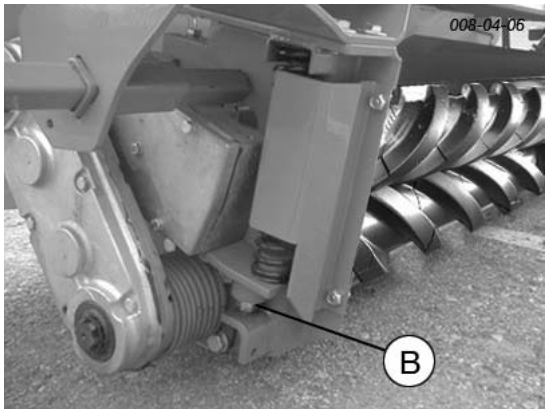


NOVACAT 305 H (Type PSM 379)
NOVACAT 306 F (Type PSM 376)
NOVACAT 8600 (Type PSM 384)

Settings

Side pressure springs

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



Note!

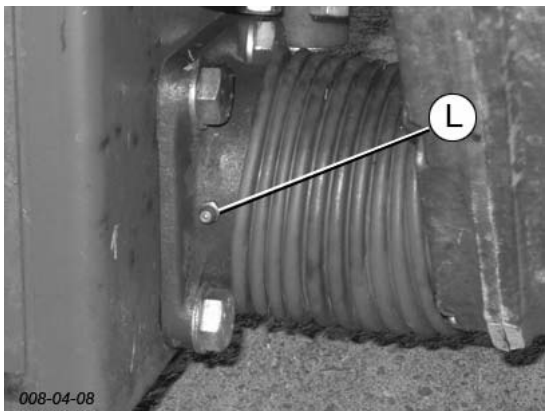
Dismounting and mounting the roller conditioner -see chapter „CONDITIONER“

Cleaning and maintenance

Clean with water after every operation

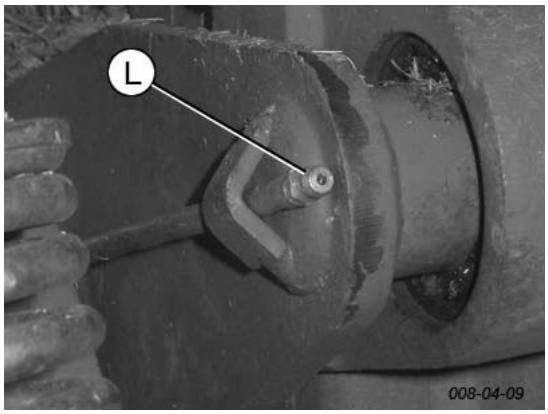
- the rubber cylinders
- the side bearing

(if using a high pressure cleaner see chapter „Maintenance and Service”)



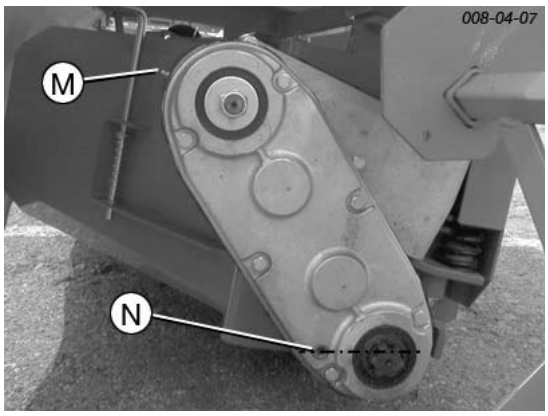
After ever operation, grease

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



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)

Variation

"Extra dry" system

Note

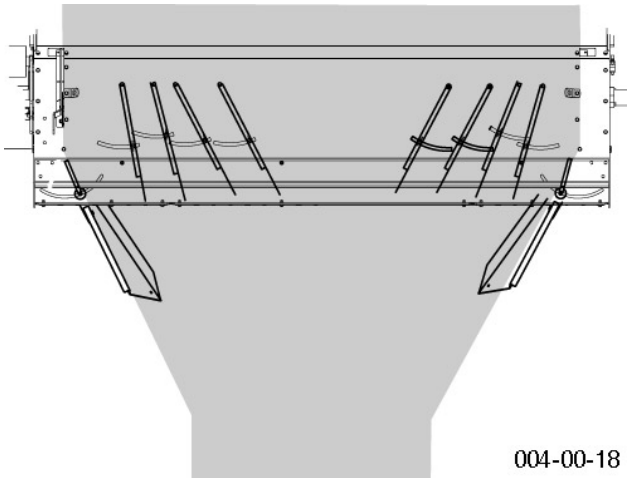
The settings listed below are to be understood as basic settings. Because of the various types of crops, an optimum setting of the guiding plates can possibly first be ascertained when the machine is in use.

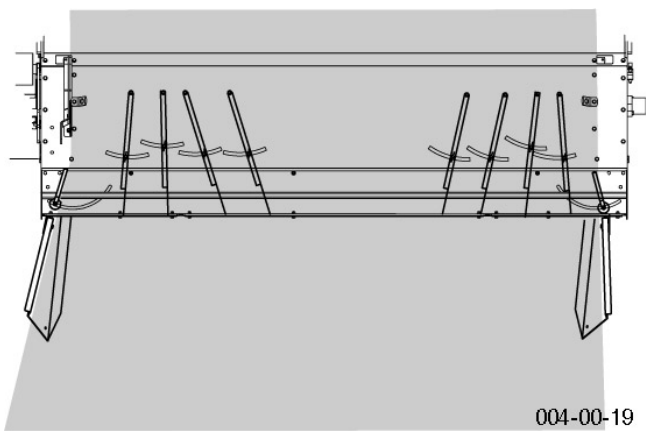
Swathes

Spread width

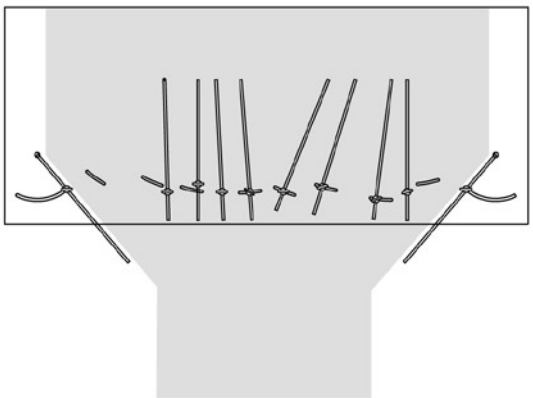
1. Set the positions of the guiding plates
   - see diagram

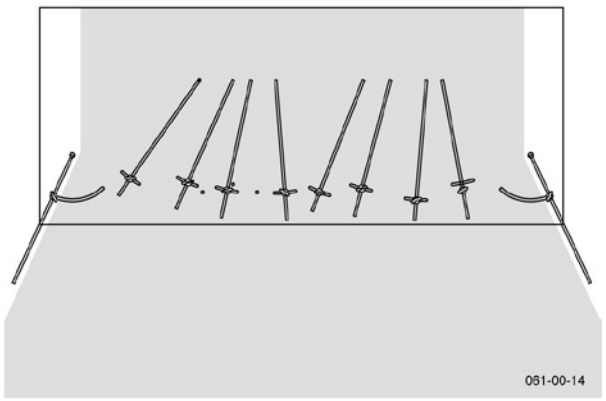
NOVACAT 8600 extra dry





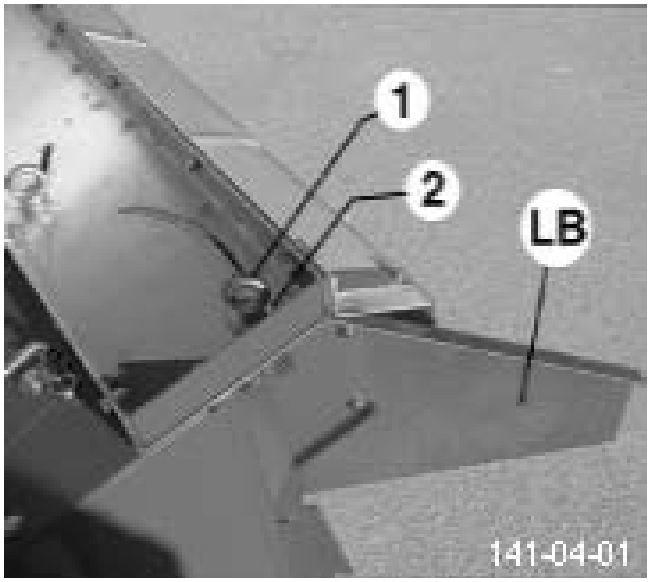
NOVACAT 7800 extra dry





Dismount guide plate

When spreading it could occur that the left mounted guide plate (LB) reduces the spread width.

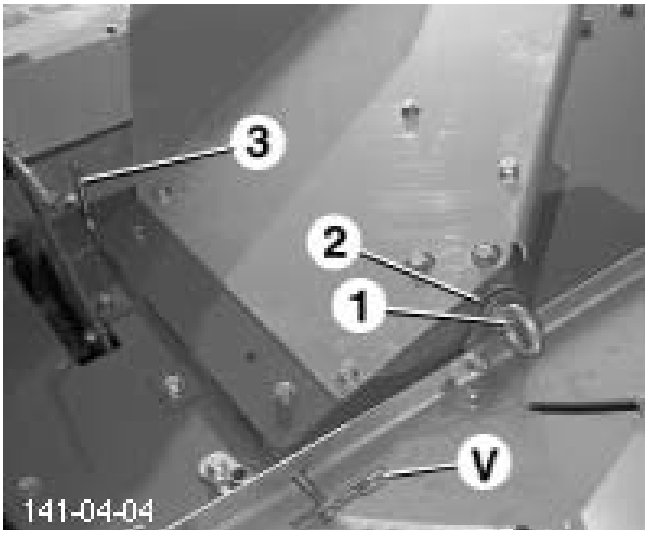


If a greater spread width is required, the guide plate can be removed.

- Remove ring bolt (1) and washer (2).

- Remove split pin (V) and pull bolt (3) out

- Mount guide plate (LB) onto the top side of the conditioner



- Bolt (3) and split pin (V)
- Ring screw (1) and washer (2)

Important: Washers in the order as shown in diagram

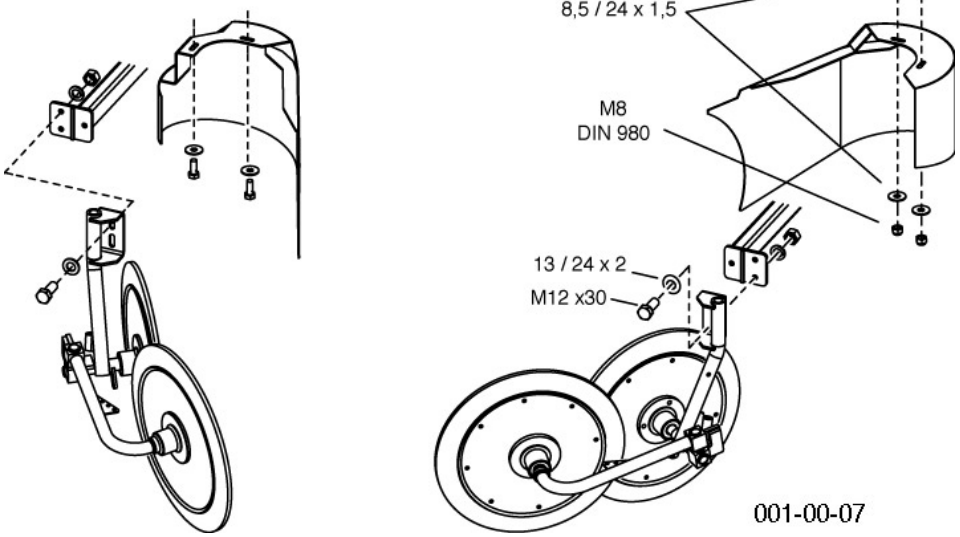
Mount guide plate

For swathing, the guide plate is to be mounted in the position provided.

- Mounting takes place in the reverse analogical order as by dismounting.

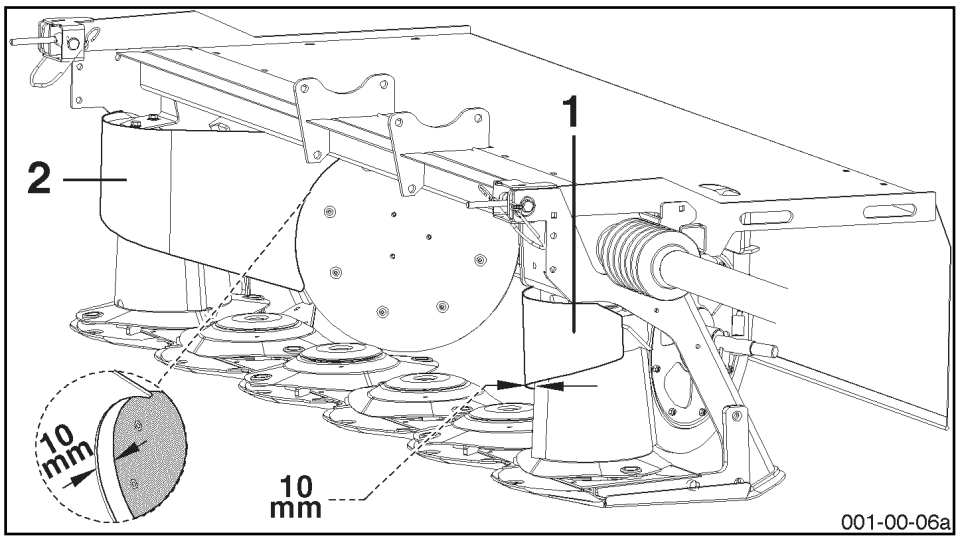
Swath Discs

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



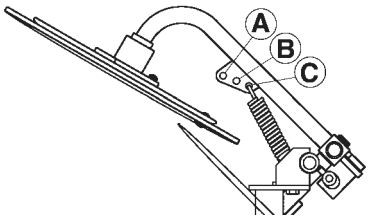
Mount guide plates

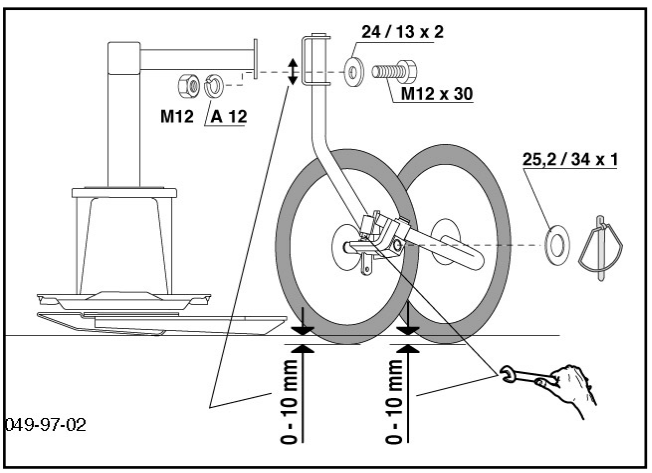
- left (1) and right (2)



Setting both tension springs

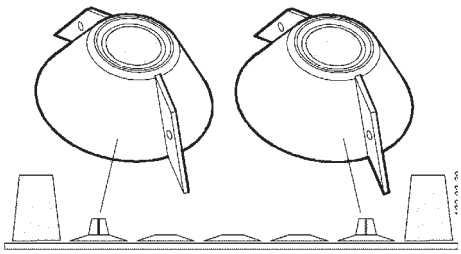
A = for high dense forage
B = basic setting
C = for short forage





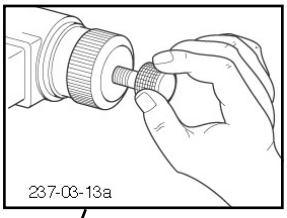
Flat cone conveyor (Optional extra)

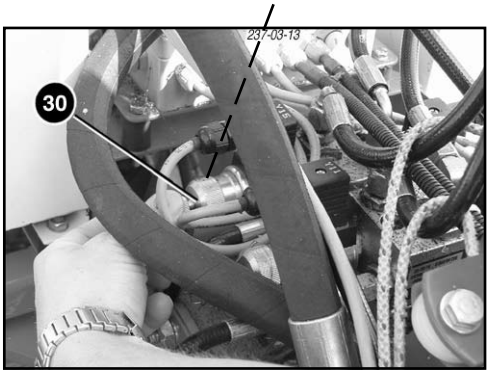
- Flat cone conveyor are recommended
  to improve the conveyance rate of swath deposits, particularly with heavy, thick fodder components
- For individual parts see Spare Parts List



Dismounting the Cross Conveyor Belt

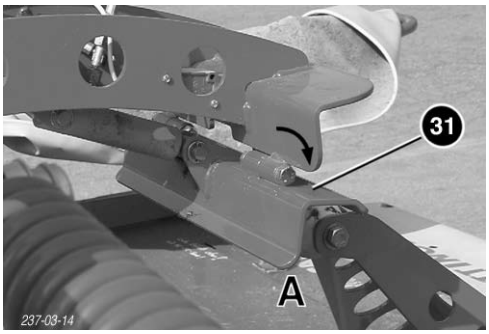
1. Lower mower unit.





3. Open locking flaps (31) by emergency operation

- Screw in the screw (30) on respective valve - flap (31) swivels into position “A”
- Then screw the screw out again.

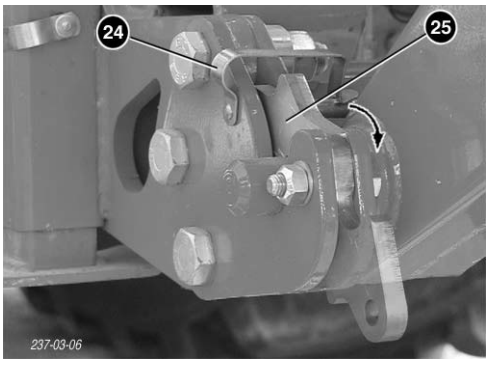


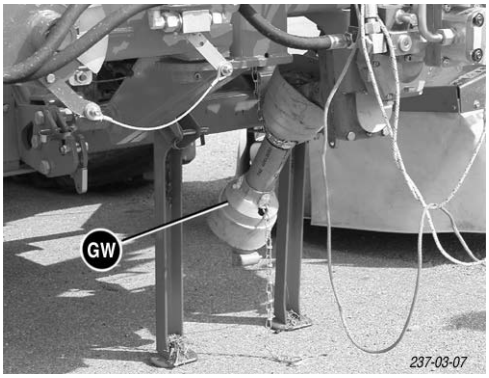
4. Move support stands to the support position and secure (5x)

Raise main frame and both mower units for this.

5. Separate cross conveyor belts from mower unit

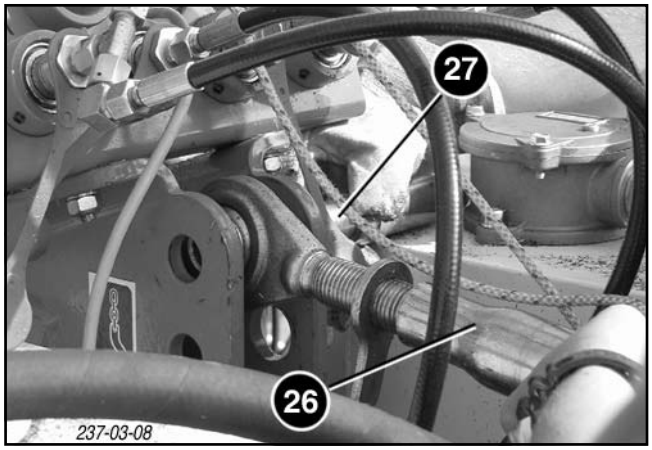
- Remove spring pin (24) and fold away lower linkage lock (25).
- Uncouple the cardan shaft (GW).





- Lower mainframe until conveyor belts rest on support stands
- Loosen upper linkage (26) by turning spindle
- Remove upper linkage pins (27)
- Disconnect hydraulic lines
- Separate electrical cable
- Lower mainframe until lower linkage pins (29) are free
- Drive mower unit slightly forward

  The cross conveyor belts are now separated from the mower unit



Mounting the Cross Conveyor Belt

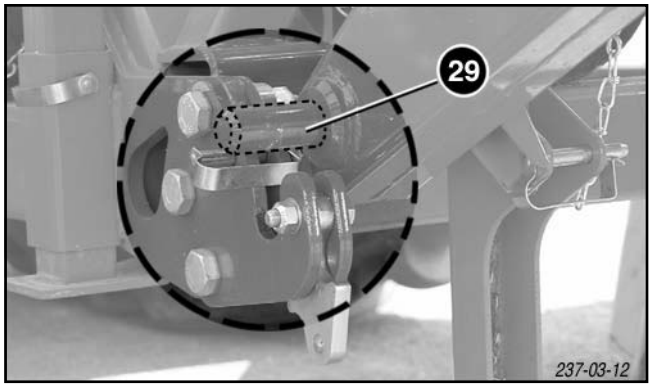
1. Move mower unit up to the cross conveyor belt

2. Connect lines

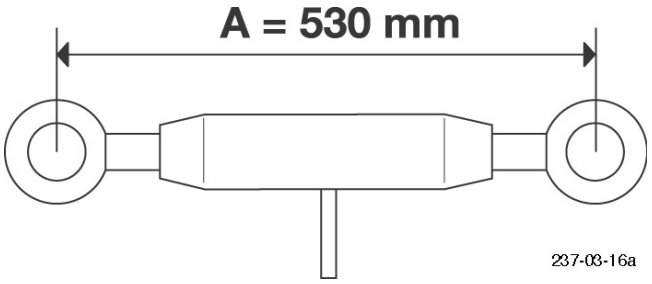
- Connect hydraulic hoses
- Connect electrical connections (28)

3. 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)

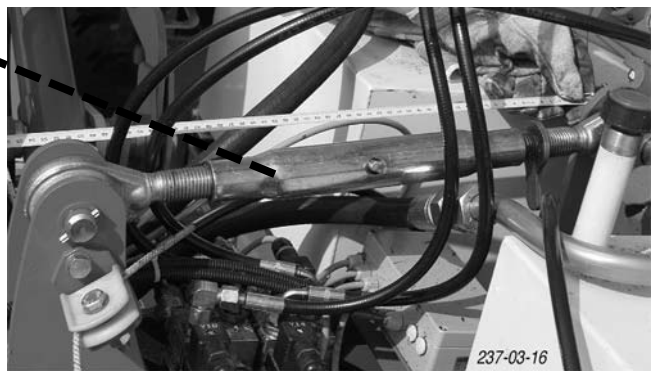


- Swing middle support stand and secure (3x)
- Lower mainframe until upper linkage pins can be inserted into holes.
- Secure upper linkage pins with linch pin
- Adjust upper linkage length (A = 530 mm) by turning spindle



5. Lift both mower units until support stands move freely

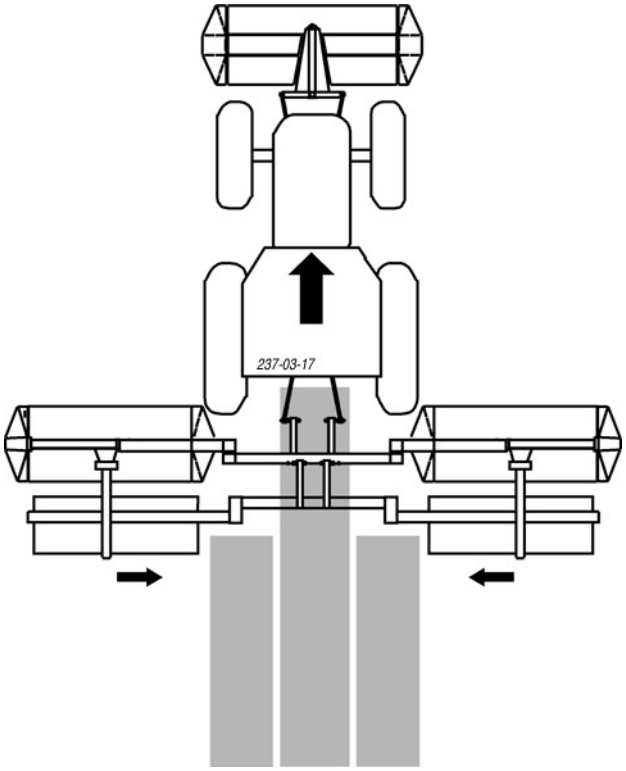
- Swing support stands up and secure (2x).



Swath courses

- **Standard setting**

  Left and right conveyor belts deposit the swath into the centre

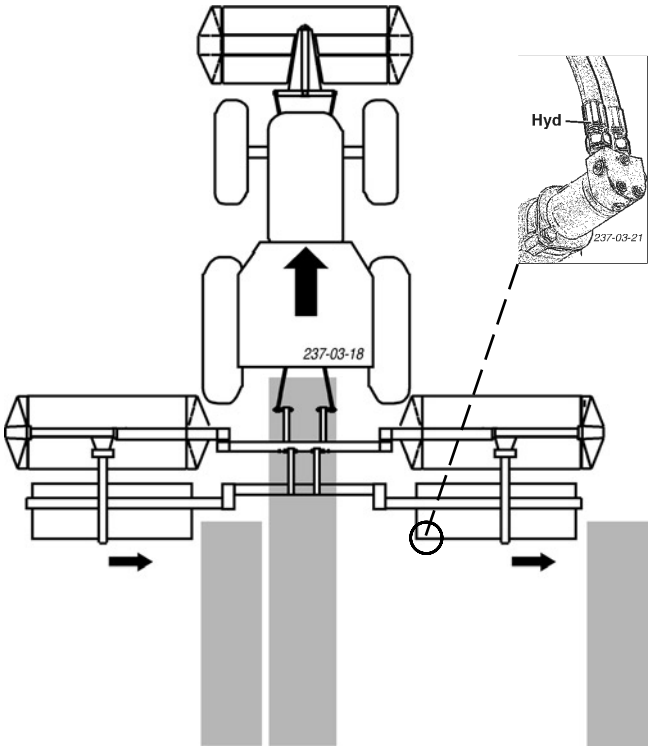


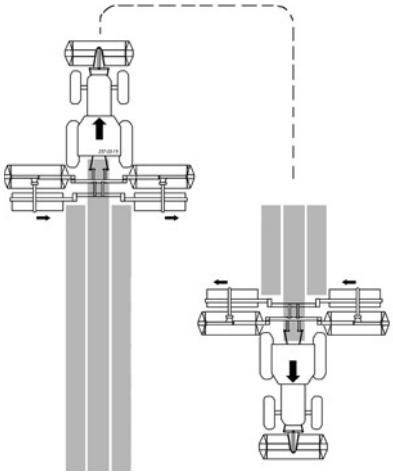
- **Special setting**

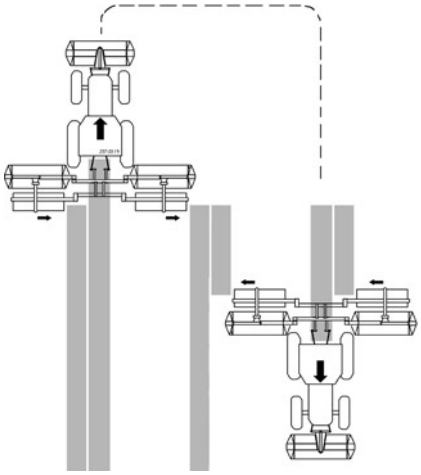
  The rotation direction of the motor can be altered.

- Swap the connections of both hydraulic lines (Hyd) (only on the right conveyor belt)

  The swath is then deposited to the outside.







Operating methods

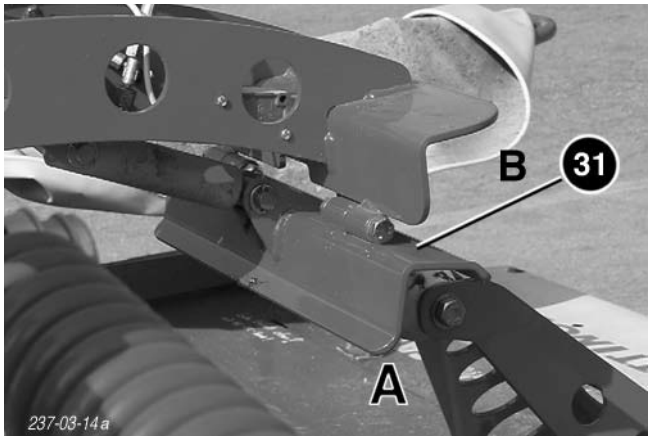
General

The mower unit can be used in three ways.

1. Both cutter bars with coupled cross conveyor belts

   The cutter bars and cross conveyor belts are swivelled simultaneously from the working position into the transport position and reversed.

- Both locking flaps (31) must therefore be in the locked position (B)

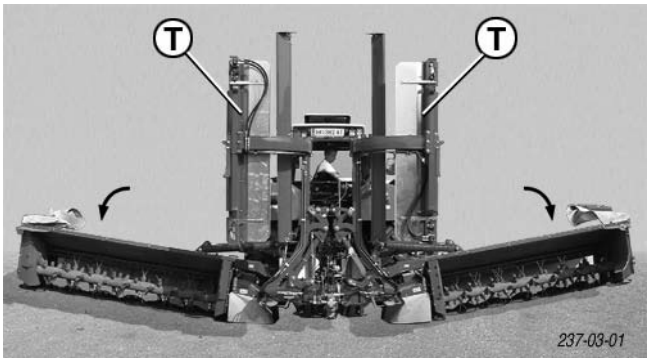


2. Both cutter bars with uncoupled cross conveyor belts

   The conveyor belts are not swivelled; they are fixed in the transport position (T)

   Only both cutter bars are swivelled from the working position to the transport position and reversed.

- Both locking flaps (31) must therefore be in the unlocked position (A)



3. Both cross conveyor belts dismounted

   Both cross conveyor belts can be dismounted from the cutter bar (see chapter " Dismounting the Cross Conveyor Belt")

Safety points!

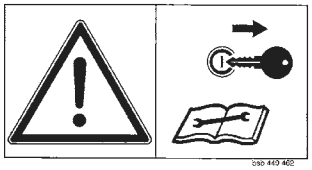
- **Turn engine off when adjustment, service and repair work is to be done.**
- **Do not work under the machine without safe support.**
- **Retighten all screws after the first hours of operation..**

Repair Instructions

Please refer to repair instructions in supplement (if available)

Safety points

- 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

a. The **original components and accessories** have been designed especially for these machines and appliances.

b. We want to make it quite clear that components and accesories that have not been supplied by us have not been tested by us.

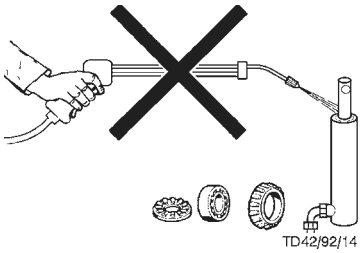
c. The installation and/or use of such products can, therefore, negatively change or influence the construction characteristics of the appliance. We are not liable for damages caused by the use of components and accessories that have not been supplied by us.

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

Cleaning of machine parts

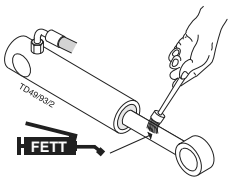
Attention! Do not use high-pressure washers for the cleaning of bearing- and hydraulic parts.

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



Parking in the open

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



Winter storage

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

Drive shafts

- see notes in the supplement

For maintenance please note!

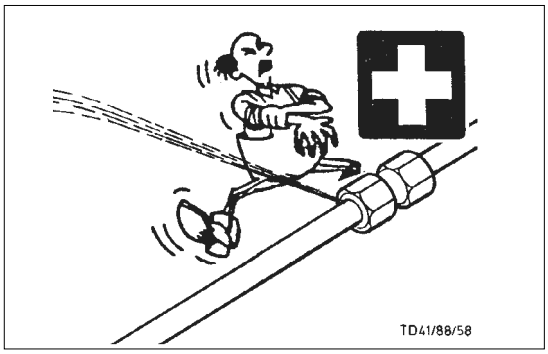
The instructions in this operating manual are always valid.

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

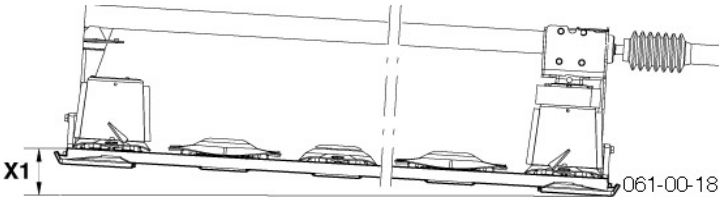
Cutter bar oil level check

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

N.B.:

- 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.



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

NOVACAT 266 F: X1 = 22,5 cm
NOVACAT 7800: X1 = 22,5 cm

NOVACAT 306 F: X1 = 38 cm
NOVACAT 8600: X1 = 38 cm

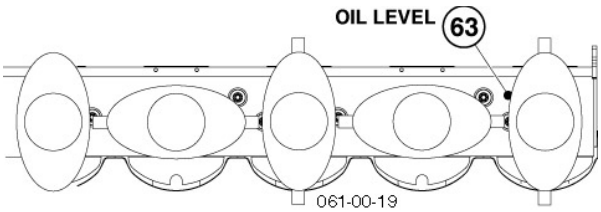
- The side where the oil refill screw is located remains on the ground.
- Lift the other side of the mower bar about **X1** and support with a suitable prop.

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.

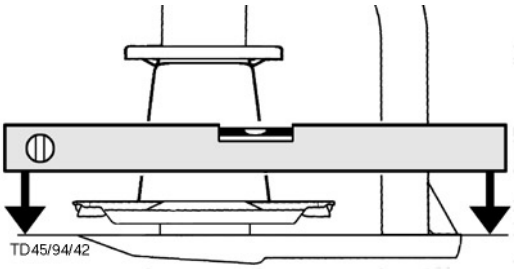
3. Remove oil refill screw (63).

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"

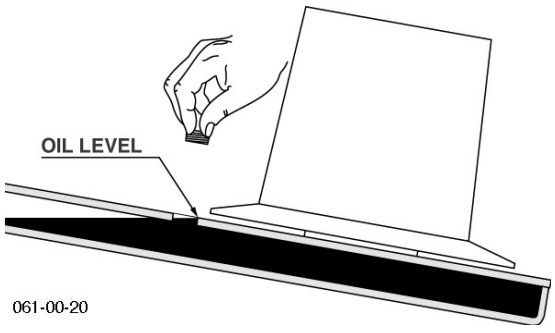
4. Oil level check

NOVACAT 266 F / 7800: The oil level is correct when the oil comes up to the level screw[1)] (OIL LEVEL).

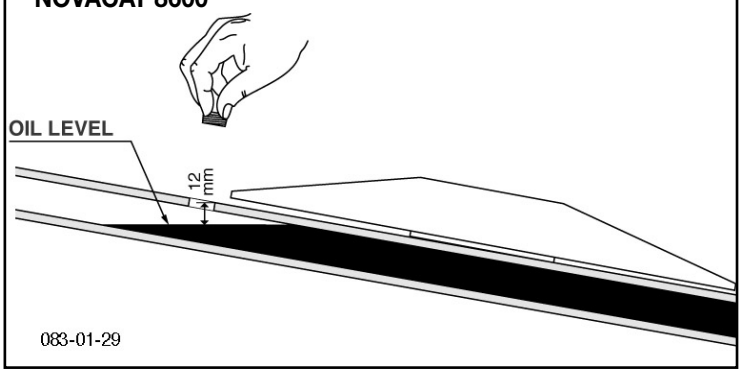
NOVACAT 306 F / 8600: Measure the distance up to the level of the oil. The oil level is correct when the measurement is **12mm.**

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

NOVACAT 266 F
NOVACAT 7800



NOVACAT 306 F
NOVACAT 8600



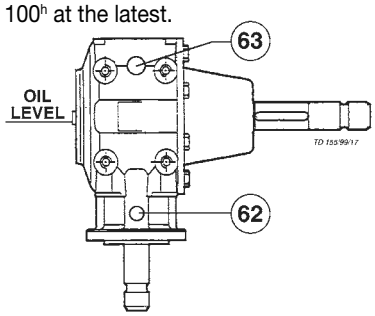
1) The oil filler plug (63) is also the level screw (OIL LEVEL)

Angular gear

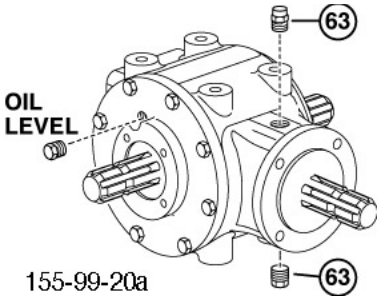
- Change oil after the first 50 operating hours.

  Under normal operating conditions, oil is to be replenished annually (OIL LEVEL).
- Change oil after 100^{h} at the latest.

Quantity:
0,8 Liter SAE 90



Quantity:
1,0 Liter SAE 90



Cutter bar

Changing oil

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

Note:

- Change oil when at operating temperature.

  The oil is too viscid 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.

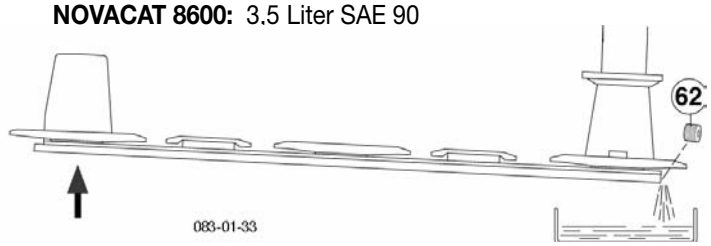
Quantity:

NOVACAT 266 F: 3 Liter SAE 90

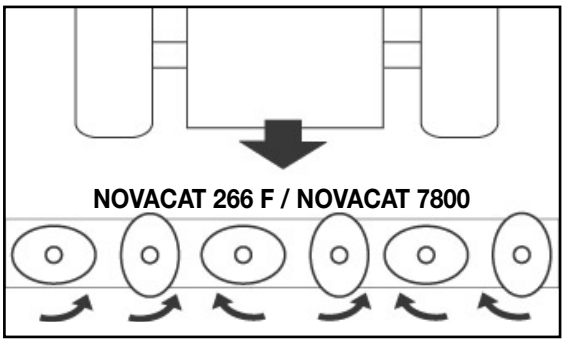
NOVACAT 7800: 3 Liter SAE 90

NOVACAT 306 F: 3,5 Liter SAE 90

NOVACAT 8600: 3.5 Liter SAE 90



- Put cutter bar in vertical position and wait approx. 5 minutes.
- Take out oil drain plug (62), let run out and duly dispose waste oil.

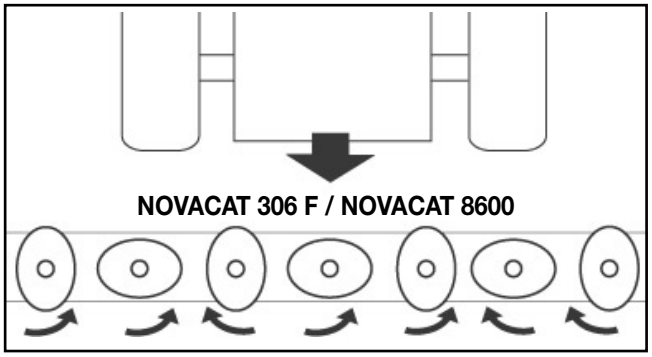


Installing cutter blades

Take note!

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

- ***To install, clean back plates from varnish.***

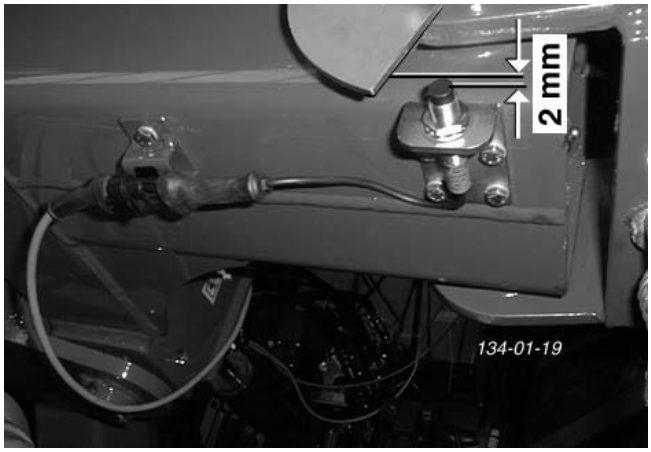


Adjustment of sensors

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.

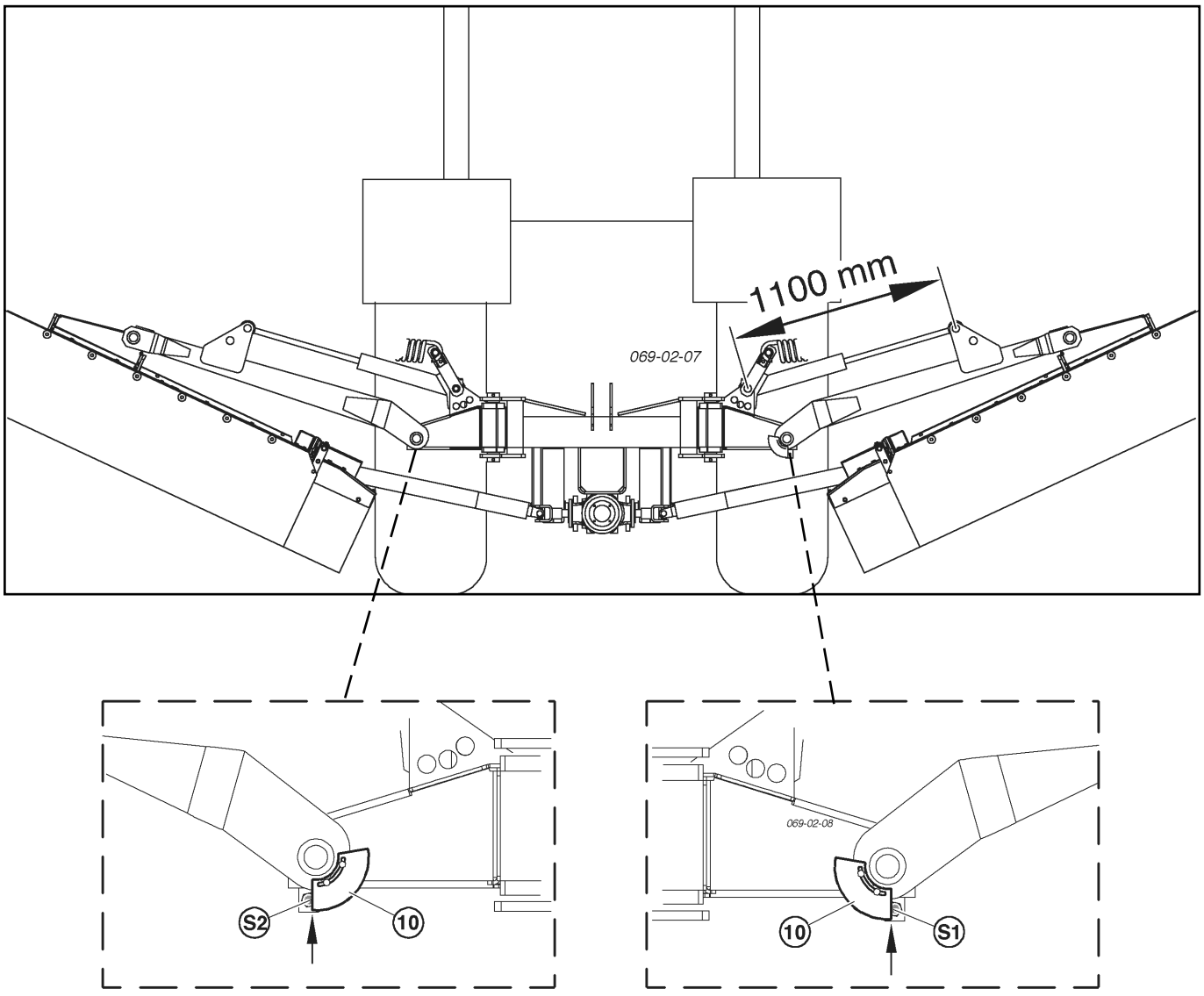
Distance 2 mm



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.



Gear (G2)

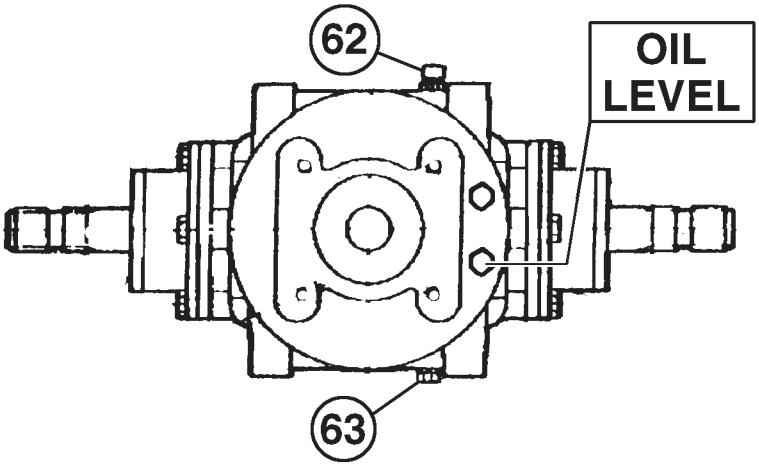
- see previous page

Gear (G1)

Quantity: 3,8 Liter SAE 90

Oil change: change oil after each operating year, see enclosed sheet on fuel instructions (III).

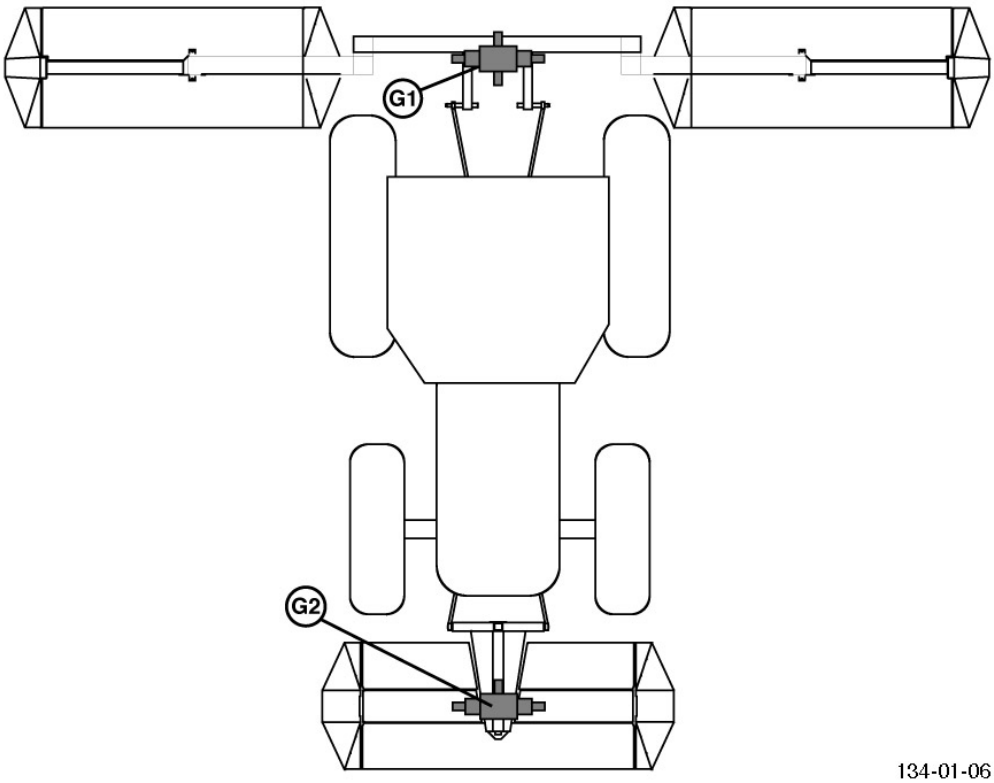
Conduct oil change at the latest after mowing 900 hectares



* Filler opening (62)

* Oil outlet (63)

* Oil level control (OIL LEVEL)



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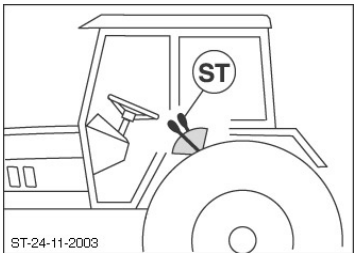
Disruptions and remedies to power failure

- ***When there is a disruption in the electrical unit, the required hydraulic function can be carried out by means of an emergency application.***
- ***This mode of operation is not suitable for use while working with the machine.***
  The function diagram´s analogue shows the respective outlet button to be used for the required function.
  Be alert to the dangers involved with all raising and lowering, and on and off switching activities!

Caution!
The emergency application must be carried out by 2 people.
Please carefully read through the following instructions before carrying out any of the hydraulic functions.
During such swinging operations, the hydraulic system is comparatively unsafe. Therefore proceed with special caution!



Raising a mower bar

1. Disconnect electrical connection (EL)
2. Screw in screw (7) all the way
3. Screw in the valve screw (8) all the way
4. Press the corresponding valve button on the hydraulic unit
5. In the case of tractors with a ”load-sensing” system: press the LS valve button on the hydraulic unit:
   the hydraulic function will be carried out
6. In the case of tractors without a ”load-sensing” system:

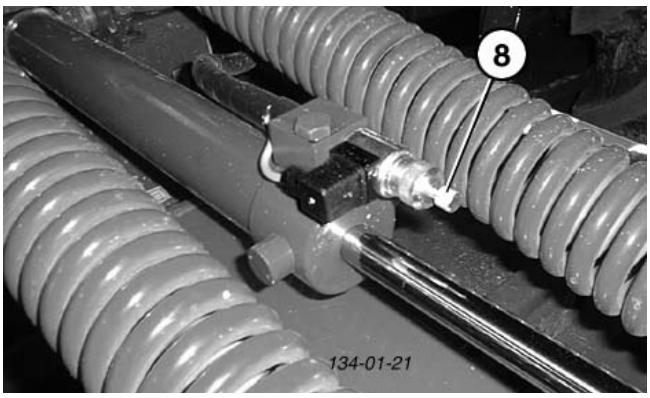
set control valve (ST) on the towing vehicle to ”lift”:

the hydraulic function will be carried out

Important! Hold the control valve (ST) in this position until the valve screw (8) has been unscrewed again. Only then switch control valve (ST) to 0 position.

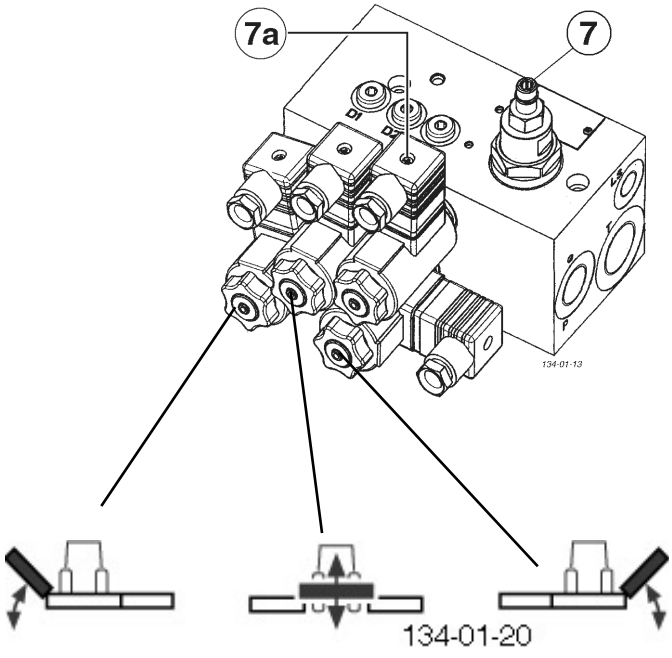
Unscrewing the valve screw (8) ensures that the raised mower bar is stabilised in this position.

Otherwise there is the risk of an accident, as the raised mower bar would immediately swing down again.

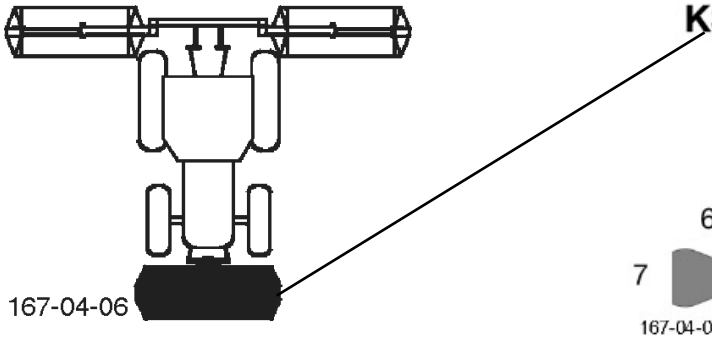


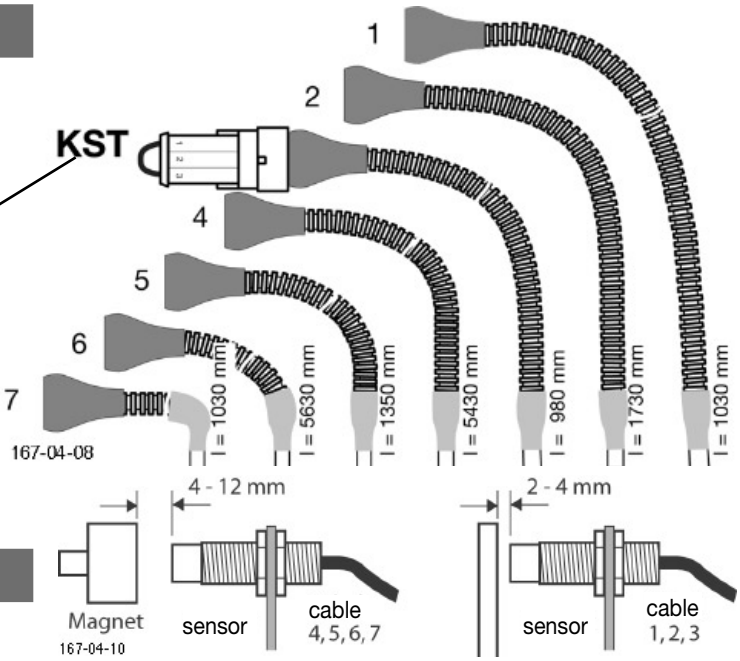
Lowering a mower bar

1. Disconnect electrical connection (EL)
2. Check tractors with electronic hydraulic valve: the hydraulic backflow must unrestricted.
3. Screw valve screw (8) slowly in.
   - the hydraulic function is activated, the mower bar swings down.

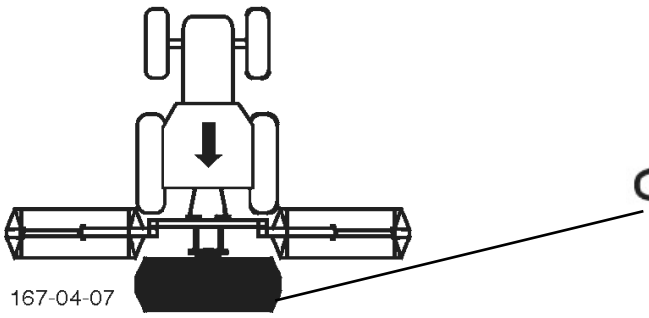


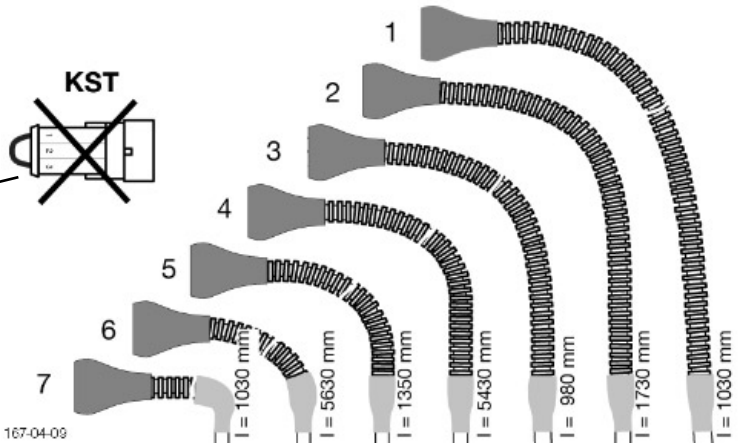
Combination 2





Combination 3





Legend

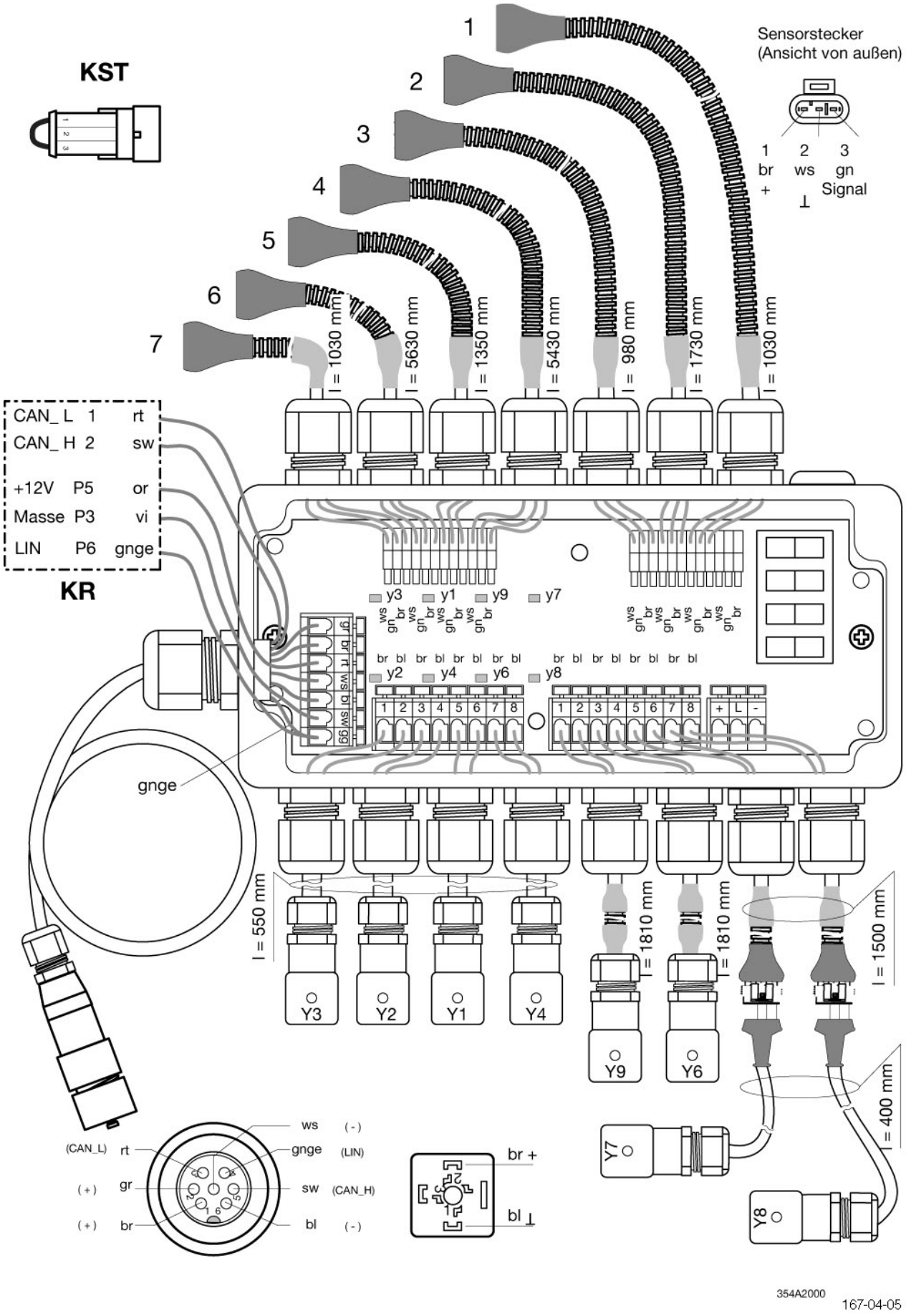
1 Sensor on the right cutter bar
2 Sensor on the left cutter bar
3 Sensor on the centre cutter bar
4 Sensor on the rotor of the right conditioner
5 Sensor on the rotor of the centre conditioner
6 Sensor on the rotor of the left conditioner
7 Sensor on the front-end drive (p.t.o driving motor speed)

KST (Short circuit plug)

- The short circuit plug is fitted to the sensor cable when the centre cutter bar is mounted onto the front lifting gear of the tractor (combination 2).
- The short circuit plug is removed when the centre cutter bar is mounted onto the lifting gear of the cutter combination (combination 3).

KR additional calculator for ISOBUS
Y1 Distributing valve on the right cutter bar
Y2 Distributing valve on the centre cutter bar
Y3 Distributing valve on the left cutter bar
Y4 Valve for the working mode “load sensing”
Y6 Seat valve on the right cutter bar
Y7 Seat valve on the centre cutter bar
Y9 Seat valve on the left cutter bar

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



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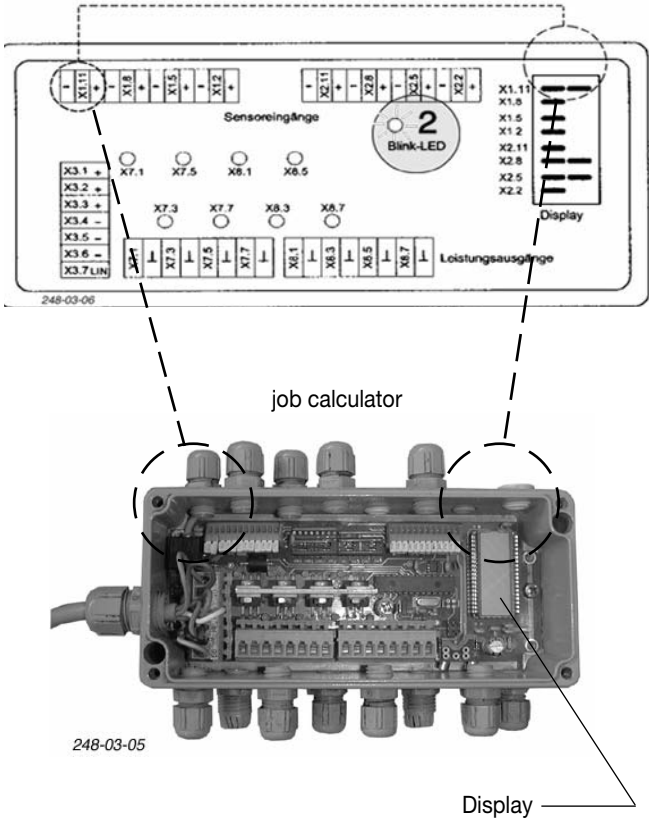
Sensor diagnostic function

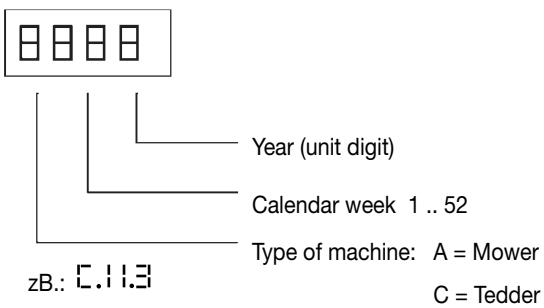
- For every sensor a vertical bar is shown on the display
  - long bar = active sensor (sensors recognizes metal)
  - short bar (sensor has no contact to metal)

Example: Sensor X1.11 is active = large bar (2 lines)



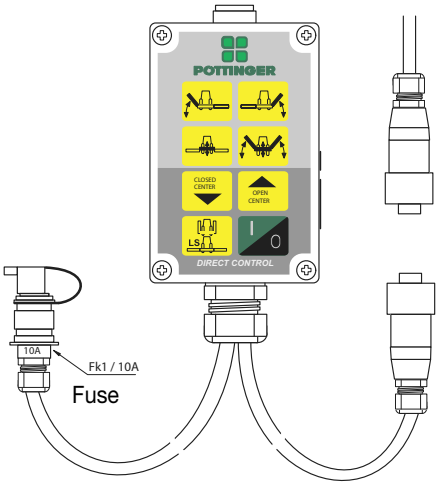
Display for Software version

- after power has been connected
- software version is displayed for 5 seconds (codification)



Function check for "Direct Control" operating unit and job calculator

Take care! When opening the casing do not damage the seal.

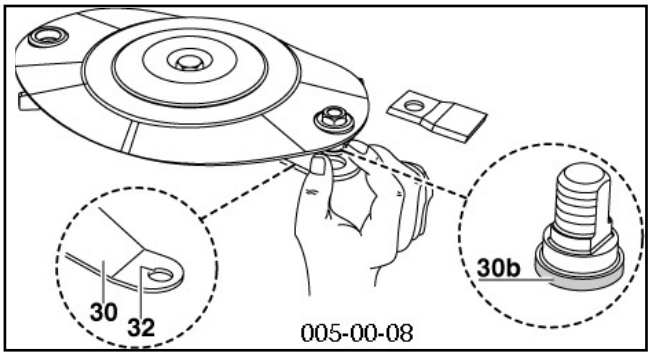


* **Checking the "Direct Control" operating unit!**

- Connect power supply with12V on-board voltage
- Turn operating unit on by pressing "I/O".
- LED (1) in I/O button lights up for 2 seconds.
- If properly linked to job calculator, LED (1) lights up in I/O button
- If improperly linked to job calculator, LED begins to blink after 2 seconds.
- If LED (!) does not light up
  - check voltage supply (cable)
  - operating unit is defective.

* **Checking the Job calculator**

- Connect power supply with 12V on-board voltage
- Blinking LED (2) on job calculator board lights up for 1 second
- Software version appears on display for 5 seconds
- After that there are alternate displays of the
  - operating hours (if sensors are provided) and
  - status of the sensors
- Activate job calculator by pressing I/O button on the operating unit
- Blinking LED (2) on job calculator board blinks in 2 second phases
- Press relative function button on job calculator board
- Function display through LEDs (X7.1 to X8.7) for each power outlet

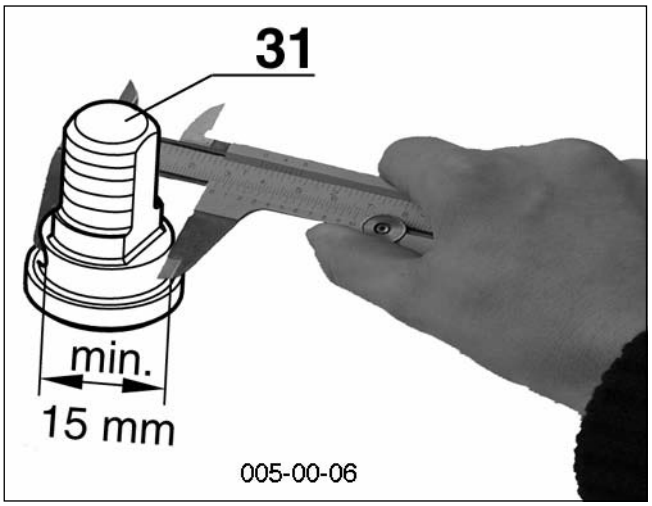


Attention! Danger of accident if wearing parts are worn

Wearing parts are:

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

If such wearing parts are worn out they must not be used any longer.
Otherwise accidents may be caused through parts that are flinged away (e.g. mowing blades, fragments...)

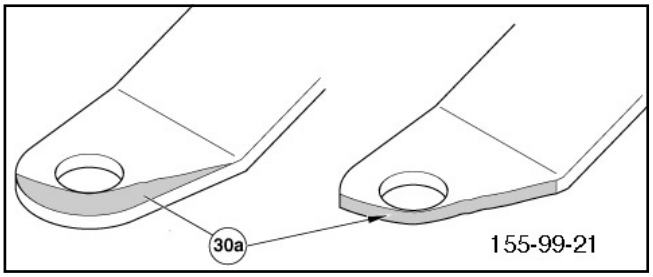


Check the suspension of mowing blades as to wear and other damage:

- 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,...)

Process of visual control:

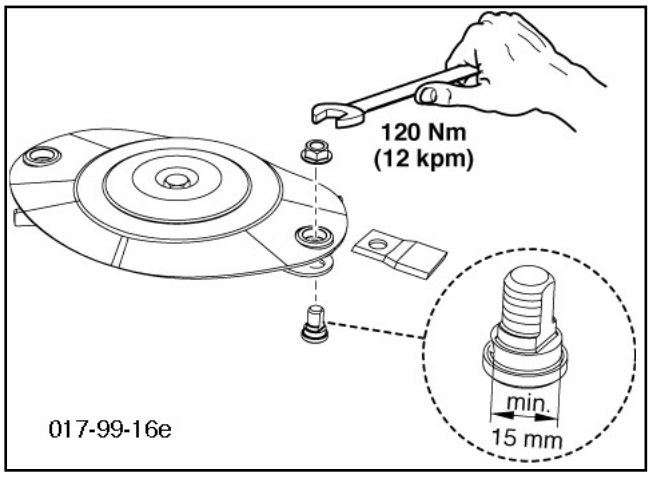
1. **remove mowing blades**
2. **remove grass and dirt**
   - around pin (31)



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



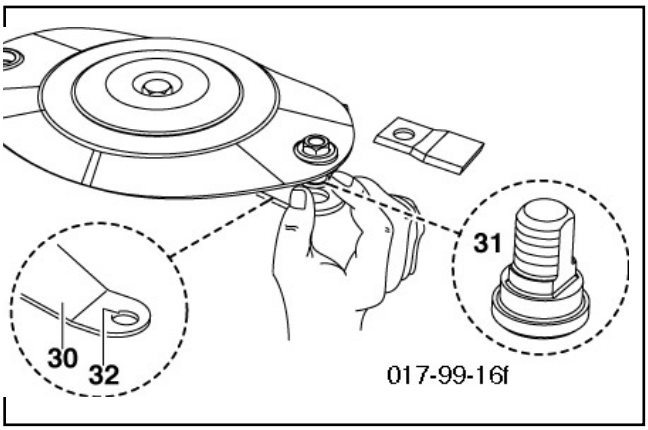
If you notice one or several of these characteristics of wear stop mowing at once!
Worn parts must be replaced by original parts made by Pöttinger immediately !
Screw down the pin of the blade with the nut with 120 Nm.

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.



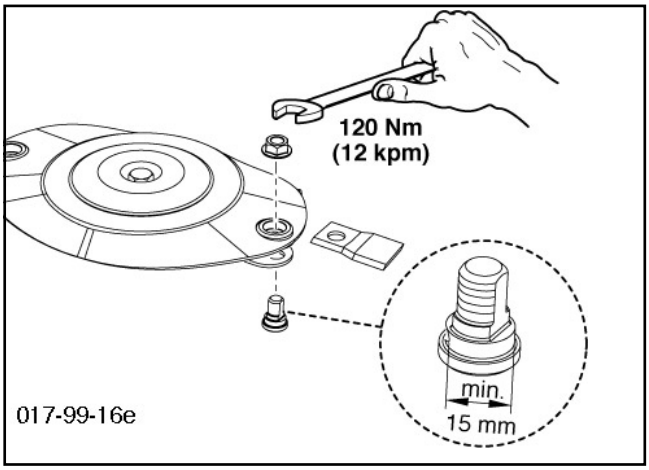
Checking the mowing blade suspension

- 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

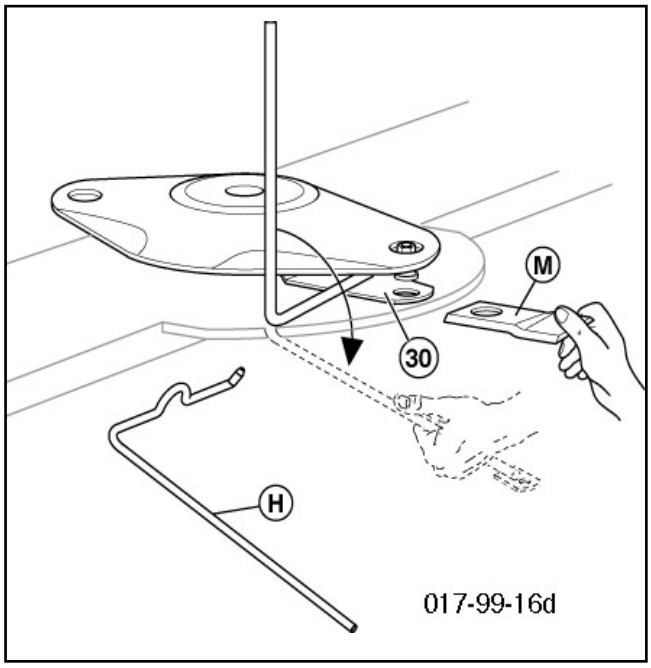
- as described in chapter „Changing the Cutter Blades“

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



Changing the Cutter Blades (up to 2003 model)

1. Insert lever (H) horizontally between cutter disc and holder (30)



2. Push movable holder (30) down using lever (H).

3. Remove cutter blade (M)

4. Clean forage remains and dirt away.

- around the bolts (31) and inside the borehole (32)

5. Check:

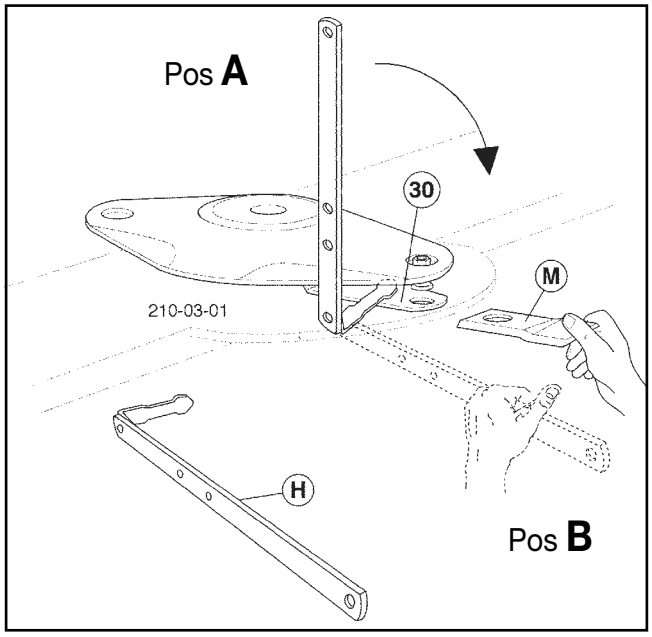
- blade bolts (31) for damage, wear and fitting
- holder (30) for damage, change in position and fitting
- borehole (32) for damage.
  - Side surfaces must not show signs of deformation

6. Fit cutter blades and remove lever (H)

- Insert the lever (H) into both of the U-clips.

Changing the Cutter Blades
(from 2004 model)

1. Insert lever from left or right side on the cutter disc "Pos A" until it stops.

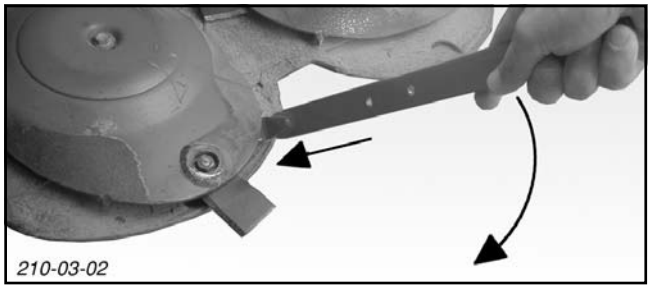


2. Swing lever from "pos. A" to "pos. B" and push the movable holder (30) down.

3. Remove cutter blade (M)

4. Clean forage remains and dirt away.

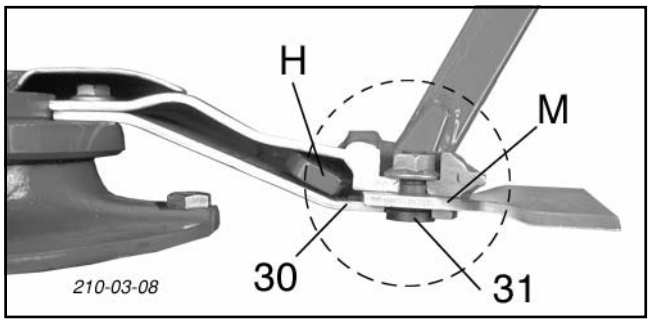
- around the bolts (31) and inside the borehole (32)



5. 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

6. Install cutter blades



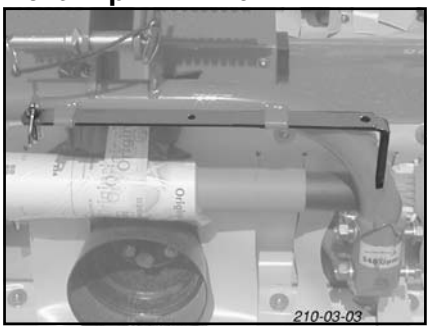
7. Visual check! Check that blade (M) is correctly positioned between blade bolts (31) and holder (30) (see diagram)**.**

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

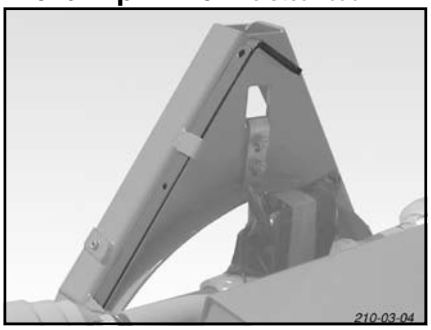
Storing the lever

- Place lever in the respective holding pouch and secure.
- See diagrams for storage places.

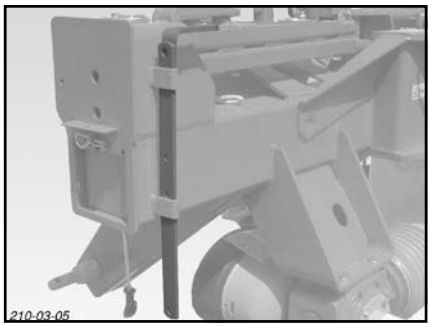
Nova Alpin 226



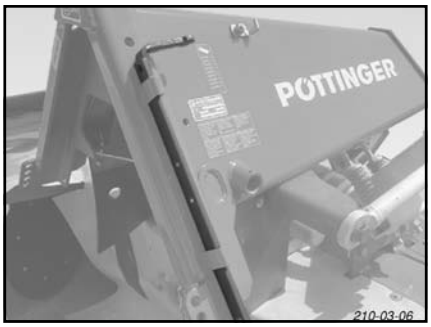
Nova Alpin 226 Weisteanbau



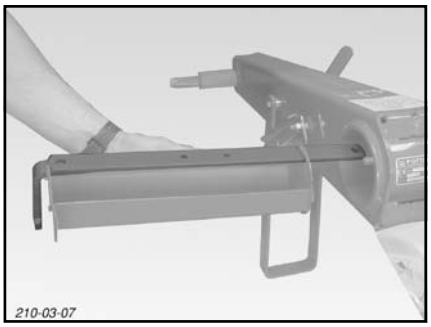
Nova Cat 225/ 265 / 305 / 350 / 400



Nova Cat 266F / 306F



Nova Disc 225



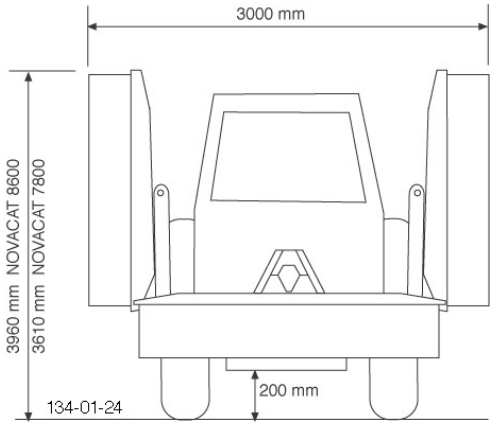
Technical data

NOVACAT 305 / NOVACAT 305 ED	**(Type PSM 383)**
Three-point linkage (front / stern)	Kat. II
No. of mowing discs	12 / 19
No. of knives per disc	2
Max. p.t.o. speed	1000 min^{-1}
Weight[1] (~) NOVACAT 7800 / 2	1640 kg
Weight[1] (~) NOVACAT 7800 Extra dry / 2	2000 kg
Weight[1] (~) NOVACAT 7800 / 3	2250 kg
Weight[1] (~) NOVACAT 7800 Extra dry / 3	2800 kg
Required power	80 kW / 120 kW
Torque limiter (3x)	1100 Nm
Permanent sound emmission level	93,4 dB(A)

All data subject to revision.

NOVACAT 8600	**(Type PSM 384)**
Three-point linkage (front / stern)	Kat. II
No. of mowing discs	14 7 21
No. of knives per disc	2
Max. p.t.o. speed	1000 min^{-1}
Weight[1] (~) NOVACAT 8600 /2	1800 kg
Weight[1] (~) NOVACAT 8600 Extra dry / 2	2490 kg
Weight[1] (~) NOVACAT 8600 /3	2220 kg
Weight[1] (~) NOVACAT 8600 Extra dry / 3	3115 kg
Required power	90 kW / 135 kW
Torque limiter (3x)	1100 Nm
Permanent sound emmission level	93,6 dB(A)

All data subject to revision.



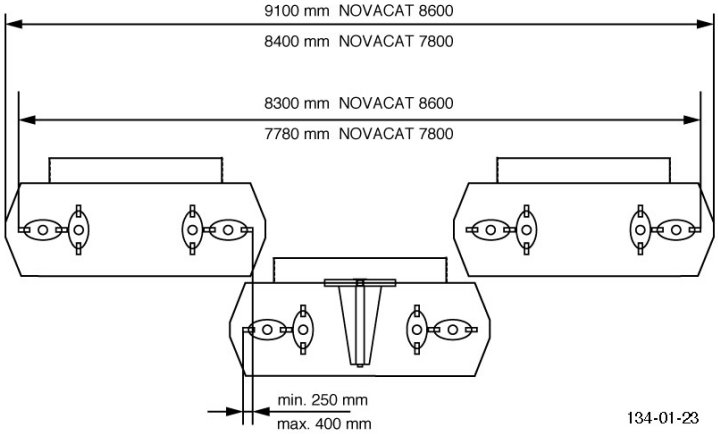
Necessary connections

- 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)



1) Weight: Variations possible depending on machine features.

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 7800 (Type PSM 383)**“ „**NOVACAT 8600 (Type PSM 384)**“ 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

The original cannot be copied

GB

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 refering to safety in this manual are indicated by this sign.

1.) Defined use

a. See "Technical Data".

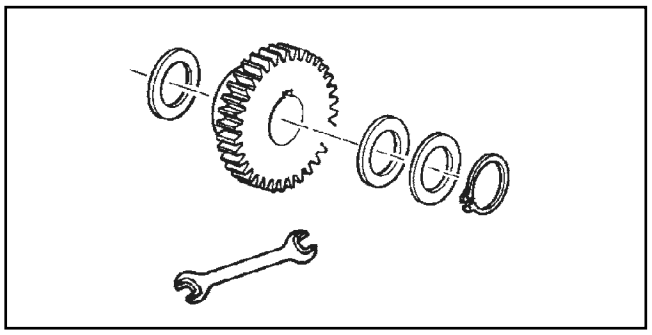
b. The keeping of operating, service and maintenance requirements layed down by the manufacturer also come under the heading of "defined use".

2.) Spare parts

a. The **original components and accessories** have been designed especially for these machines and appliances.

b. We want to make it quite clear that components and accesories that have not been supplied by us have not been tested by us.

c. 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.

d. 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.

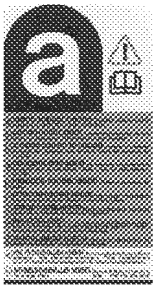
4.) Before starting work

a. 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!

b. 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

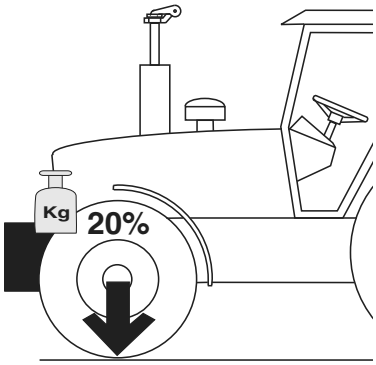
a. The transport of persons on the machine is not permitted.

b. The machine may only be driven on public roads when in the position stipulated for road transport.

7.) Driving ability with auxiliary equipment

a. The towing vehicle is to be sufficiently equiped 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).

b. 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.



c. When driving through curves with a connected appliance, observe the radius and swinging mass of the appliance.

d. When travelling in a curve with attached or semi-mounted implements, take into account the working range and swing mass of the implement!

8.) General

a. Before attaching implement to three-point linkage, move system lever into a position whereby unintentional raising or lowering is ruled out!

b. Danger of injury exists when coupling implement to tractor!

c. Danger of injury through crushing and cutting exists in the three-point linkage area!

d. Do not stand between tractor and implement when using three-point linkage external operation!

e. Attach and detach drive shaft only when motor has stopped.

f. When transporting with raised implement, secure operating lever against lowering!

g. Before leaving tractor, lower attached implement to the ground and remove ignition key!

h. Nobody is to stand between tractor and implement without tractor being secured against rolling using parking brake and/or wheel chocks!

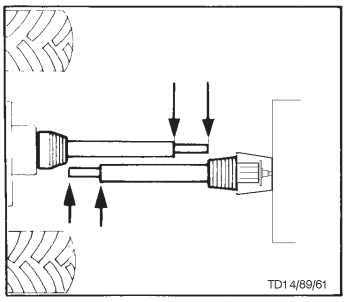
i. For all maintenance, service and modification work, turn driving motor off and remove universal drive.

9.) Cleaning the machine

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

DRIVESHAFT

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

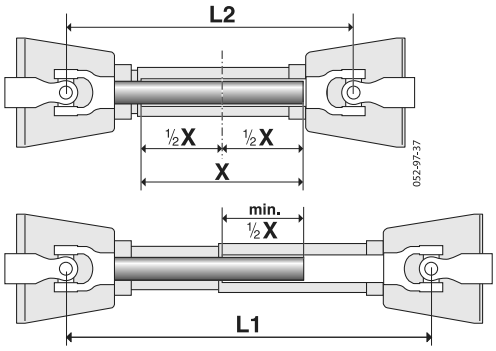


Matching driveshaft to tractor

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

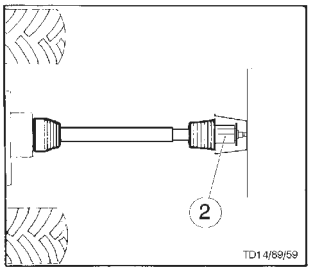
Procedure for cutting to length

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



Important!

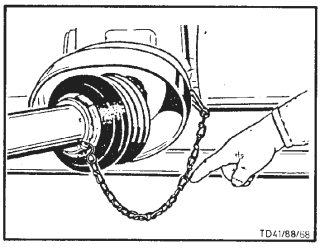
- Note the maximum operating length (L1)
  - Try to attain the greatest possible shaft overlap (min. $^1/_2$ X)!
- Shorten inside and outside tube guard by the same amount.
- Fit torque limiter (2) of drive shaft to implement end of driveshaft!
- Always check that drive shaft locks are securely engaged before starting work.



Retaining chain

- Use chain to prevent tube guard from rotating.

  Take care that chain does not impede driveshaft pivoting.

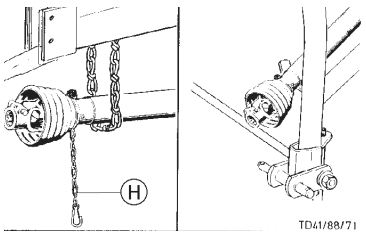


Rules for working

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.

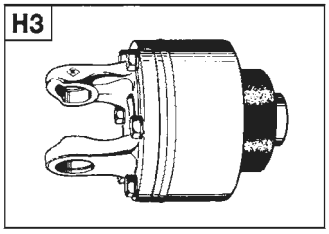
  Do not go close to the implement until all motion has stopped; only then may work be done on it.
- When the implement ist parked, either remove the driveshaft and store it, or secure it with a chain. (Do not use retaining chain (H) for this).



1) 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 !

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.

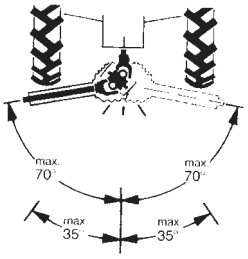
2) Wide-angle joint :

Maximum angle of deflection when working/stationary : 70°

3) Standard joint :

Maximum angle of deflection when stationary: 90°

Maximum angle of deflection when working: 35°

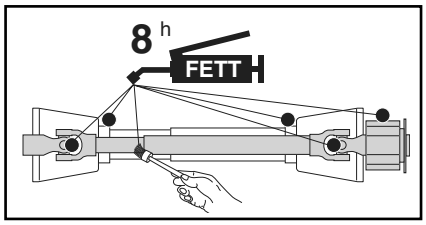


Maintenance

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 for driveshafts with friction clutch

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

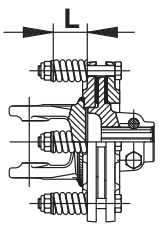
a.) Measure dimension „L“ at compression spring of K90, K90/4 and K94/1 or at set screw of K92Eand K92/4E.

b.) Loosen screws to release the pressure on the friction disk.

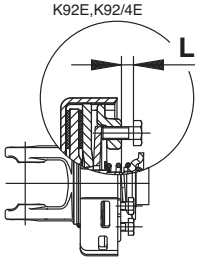
c.) Tighten set screws to dimension „L“.

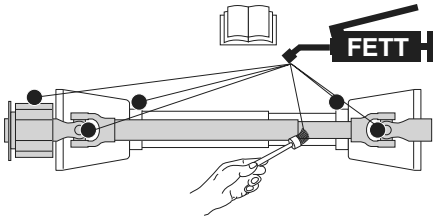
Clutch is ready for use.

K90,K90/4,K94/1



K92E,K92/4E





(D) Schmierplan

8h	alle 8 Betriebsstunden
20h	alle 20 Betriebsstunden
40 F	alle 40 Fuhren
80 F	alle 80 Fuhren
1 J	1 x jährlich
100 ha	alle 100 Hektar
FETT	FETT
▽1 =	Anzahl der Schmiernippel
(IV)	Siehe Anhang "Betriebsstoffe"
Liter	Liter
*	Variante
📖	Siehe Anleitung des Herstellers

(F) Plan de graissage

8h	Toutes les 8 heures de service
20h	Toutes les 20 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
▽1 =	Nombre de graisseurs
(IV)	Voir annexe "Lubrifiants"
Liter	Litre
*	Variante
📖	Voir le guide du constructeur

(GB) Lubrication chart

8h	after every 8 hours operation
20h	after every 20 hours operation
40 F	all 40 loads
80 F	all 80 loads
1 J	once a year
100 ha	every 100 hectares
FETT	GREASE
▽1 =	Number of grease nipples
(IV)	see supplement "Lubricants"
Liter	Litre
*	Variation
📖	See manufacturer's instructions

(NL) Smeerschema

8h	alle 8 bedrijfsuren
20h	alle 20 bedrijfsuren
40 F	alle 40 wagenladingen
80 F	alle 80 wagenladingen
1 J	1 x jaarlijks
100 ha	alle 100 hectaren
FETT	VET
▽1 =	Aantal smeernippels
(IV)	Zie aanhangsel "Smeermiddelen"
Liter	Liter
*	Varianten
📖	zie gebruiksaanwijzing van de fabrikant

(S) Smörjschema

8h	Varje 8:e driftstimme
20h	Varje 20:e driftstimme
40 F	Varje 40: e lass
80 F	Varje 80: e lass
1 J	1 x årligen
100 ha	Varje 100:e ha
FETT	FETT
▽1 =	Antal smörjnipplar
(IV)	Se avsnitt ”Drivmedel”
Liter	liter
*	Utrustningsvariant
📖	Se tillverkarens anvisningar

(N) Smøreplan

8h	Hver 8. arbeidstime
20h	Hver 20. arbeidstime
40 F	Hvert 40. lass
80 F	Hvert 80. lass
1 J	1 x årlig
100 ha	Totalt 100 Hektar
FETT	FETT
▽1 =	Antall smørenipler
(IV)	Se vedlegg "Betriebsstoffe"
Liter	Liter
*	Unntak
📖	Se instruksjon fra produsent

(I) Schema di lubrificazione

8h	ogni 8 ore di esercizio
20h	ogni 20 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
▽1 =	Numero degli ingrassatori
(IV)	vedi capitolo “materiali di esercizio”
Liter	litri
*	variante
📖	vedi istruzioni del fabbricante

(E) Esquema de lubricación

8h	Cada 8 horas de servicio
20h	Cada 20 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
▽1 =	Número de boquillas de engrase
(IV)	Véase anexo “Lubrificantes”
Liter	Litros
*	Variante
📖	Véanse instrucciones del fabricante

(P) Plano de lubrificação

8h	Em cada 8 horas de serviço
20h	Em cada 20 horas de serviço
40 F	Em cada 40 transportes
80 F	Em cada 80 transportes
1 J	1x por ano
100 ha	Em cada100 hectares
FETT	Lubrificante
▽1 =	Número dos bocais de lubrificação
(IV)	Ver anexo ”Lubrificantes"
Liter	Litro
*	Variante
📖	Ver instruções do fabricante

(CZ) Mazací plán

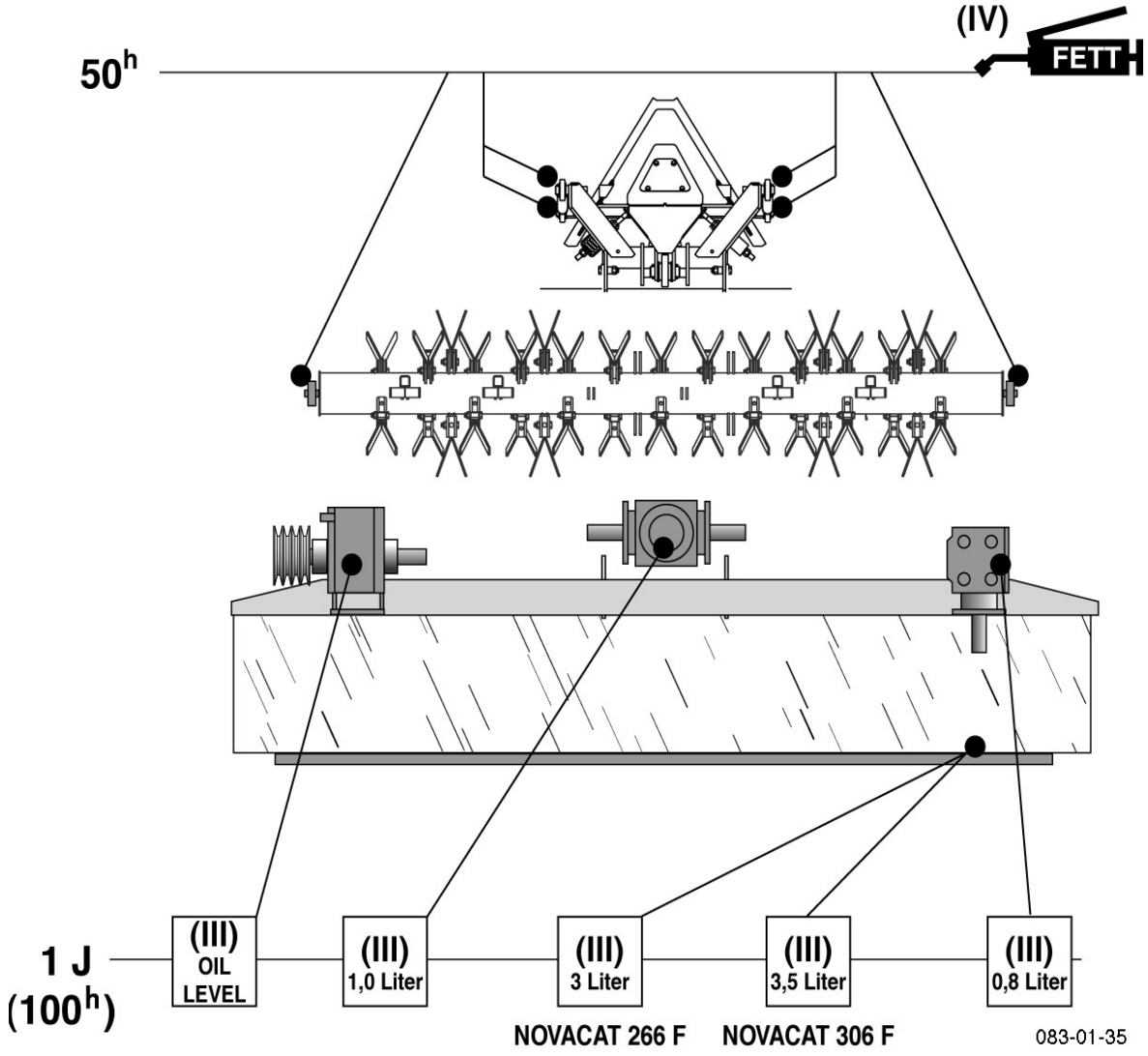
8h	každých 8 hodin
20h	každých 20 hodin
40 F	každých 40 vozů
80 F	každých 80 vozů
1 J	1 x ročně
100 ha	po 100 ha
FETT	TUK
▽1 =	Počet mazacích hlaviček
(IV)	Viz kapitola "Mazací prostředky vydání"
Liter	litru
*	Varianta
📖	viz. příručka výrobce

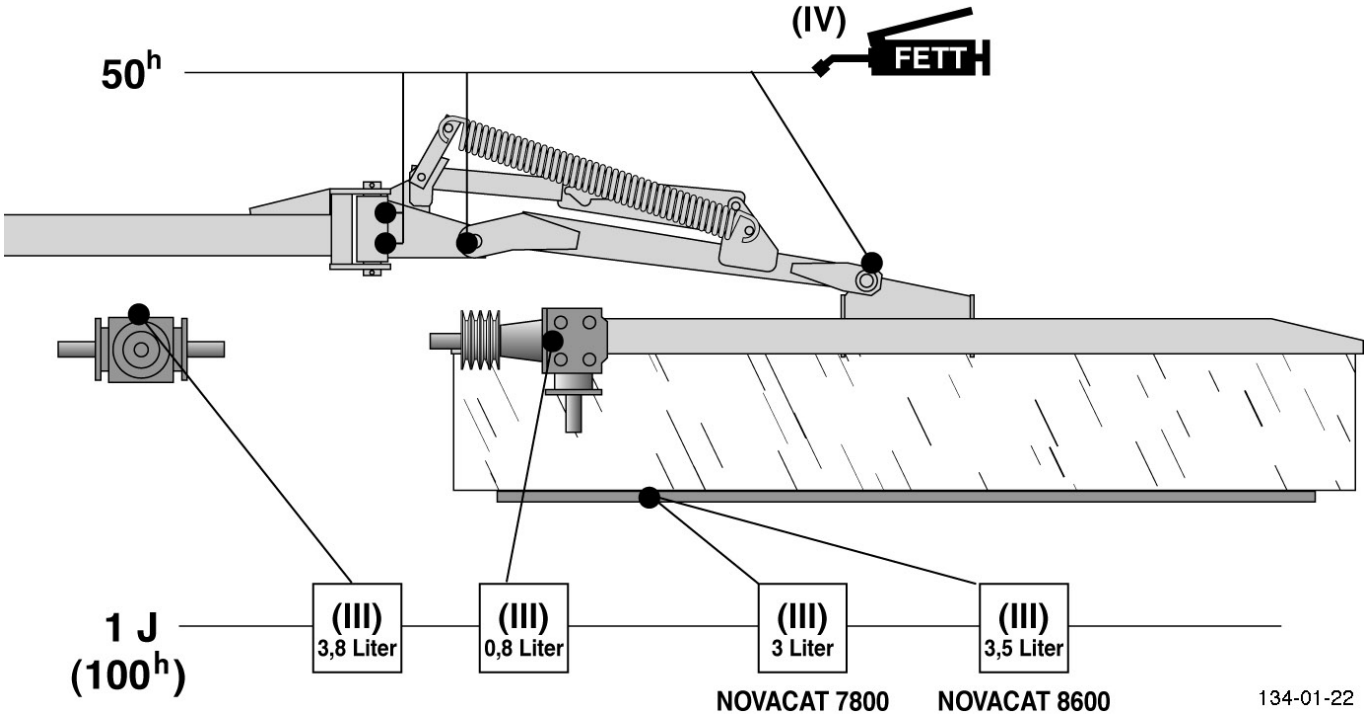
(H) Kenési terv

8h	Minden 8 üzemóra után
20h	Minden 20 üzemóra után
40 F	Minden 40 menet után
80 F	Minden 80 menet után
1 J	1 x évente
100 ha	Minden 100 hektár után
FETT	ZSÍR
▽1 =	A zsírzógombok száma
(IV)	Lásd az "üzemi anyagok" c. fejezetet
Liter	Liter
*	Változat
📖	Násd a gyártó leírását!

(RUS) Схема смазки

8h	через каждые 8 часов работы
20h	через каждые 20 часов работы
40 F	через каждые 40 подвод
80 F	через каждые 80 подвод
1 J	1 раз в год
100 ha	через каждые 100 га
FETT	СМАЗКА / OIL МАСЛО
▽1 =	количество смазочных ниппелей
(IV)	См. приложение «Эксплуатационные материалы»
Liter	литр (количествово масла, жидкость,...)
*	Вариант
📖	Смотри руководство изготовителя


50h
(IV)
FETT
1 J
(100h)
(III)
OIL
LEVEL
(III)
1,0 Liter
(III)
3 Liter
(III)
3,5 Liter
(III)
0,8 Liter
NOVACAT 266 F
NOVACAT 306 F
083-01-35


50h
(IV)
FETT
1 J
(100h)
(III)
3,8 Liter
(III)
0,8 Liter
(III)
3 Liter
(III)
3,5 Liter
NOVACAT 7800
NOVACAT 8600
134-01-22

(D) Betriebsstoffe
Ausgabe 1997

Leistung und Lebensdauer der Maschine sind von sorgfältiger Wartung und der Verwendung guter Betriebsstoffe abhängig. Unsere Betriebsstoffauflistung 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 Stillegung (Winterperiode) Ölwechsel durchführen und alle Fettschmierstellen abschmieren. Blanke Metallteile außen (Gelenke, usw.) mit einem Produkt gemäß “IV” in der umseitigen Tabelle vor Rost schützen.

(GB) Lubricants
Edition 1997

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

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

Gear oils according to operating instructions - however at least once a year.
- Take out oil drain plug, let run out and duly dispose waste oil.

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

(F) Lubrifiants
Édition 1997

Le bon fonctionnement et la longévité des machines dépendent d’un entretien soigneux 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 - au moins une fois par an.
- Retirer le bouchon de vidange, laisser l'huile s'écouler et l'éliminer correctement.

Avant l’arrêt et hiver: vidanger et graisser. Métaux nus à l' extérieur protéger avec un produit type “IV” contre la rouille (consulter tableau au verso).

(I) Lubrificanti
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.

(NL) Smeermiddelen
Uitgave 1997

Prestaties en levensduur van de machines zijn afhankelijk van een zorgvuldig onderhoud en het gebruik van goede smeermiddelen.

Dit schema vergemakkelijkt de goede keuze van de juiste smeermiddelen.

Olie in aandrijvingen volgens de gebruiksaanwijzing verwisselen - echter tenminste 1 x jaarlijks.
- Aftapplug er uit nemen, de olie aftappen en milieuvriendelijk verwerken.

Voor het buiten gebruik stellen (winterperiode) de olie-wisel uitvoeren en alle vetnippel 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**		**III**		**V**	**VI**	**VII**
gefordertes Qualitätsmerkmal	HYDRAULIKöL HLP DIN 51524 Teil 2	API CD/SF	SAE 85 W-140 gemäß API-GL 4 oder API-GL 5	Li-Fett (DIN 51 502, KP 2K)	Getriebefließfett (DIN 51 502:GOH	Komplexfett (DIN 51 502: KP 1R)	smeerolie SAE 90 of 85 W-140 volgens API-GL 5
required quality level niveau	Siehe Anmerkungen * ** ***	motor oil SAE 30 according to API CD/SF	gear oil, SAE 90 resp. SAE 85 W-140 according to API-GL 4 or API-GL 5	lithium grease	transmission grease	complex grease	gear oil SAE 90 resp. SAE 85 W-140 according to API-GL 5
de performance demandé		huile moteur SAE 30 niveau API CD/SF	huile transmission SAE 90 ou SAE 85 W-140, niveau API-GL 4 ou API-GL 5	graisse au lithium	graisse transmission	graisse complexe	huile transmission SA 90 ou SAE 85 W-140, niveau API GL 5
caratteristica richiesta di qualità	Motorenöl SAE 30 gemäß	oilo motore SAE 30 secondo specifiche API CD/SF Getriebeöl SAE 90 bzw.	olio per cambi e differenziali SAE 90 o SAE 85W-140 secondo specifiche API-GL 4 o API-GL 5	grasso al litio	grasso fluido per riduttori e motoroduttori	grasso a base di saponi complessi	oilio per cambi e differenziali SAE 90 o SAE 85 W-140 secondo specifiche API-GL 5
verlangte kwaliteitskenmerken							

Firma Company Société Società	I	(II)	III	(IV)	V	VI	VII	ANMERKUNGEN
AGIP	OSO 32/46/68 ARNICA 22/46	MOTOROIL HD 30 SIGMA MULTI 15W-40 SUPER TRACTOROIL 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 Naßbremsen-schlepp-pern ist die internatio-nale Spezifikation J 20 A erforderlich ** Hydrauliköle HLP-(D) + HV *** Hydrauliköle auf Pflan-zenölbasis HLP + HV Biologisch abbaubar, deshalb besonders umweltfreundlich
ARAL	VITAM GF 32/46/68 VITAM HF 32/46	SUPER KOWAL 30 MULTI TURBO-RAL SUPER TRAKTORAL 15W-30	GETRIEBEÖL EP 90 GETRIEBEÖL HYP 85W-90	ARALUB HL 2	ARALUB FDP 00	ARALUB FK 2	GETRIEBEÖL HYP 90	
AVIA	AVILUB RL 32/46 AVILUB VG 32/46	MOTOROIL HD 30 MULTIGRADE HDC 15W-40 TRAC-TAVIA HF SUPER 10 W-30	GETRIEBEÖL MZ 90 M MULTIHYP 85W-140	AVIA MEHRZWECKFETT AVIA ABSCHMIERFETT	AVIA GETRIEBEFLIESSFETT	AVIALUB SPEZIALFETT LD	GETRIEBEÖL HYP 90 EP MULTIHYP 85W-140 EP	
BAYWA	HYDRAULIKÖL HLP 32/46/68 SUPER 2000 CD-MC * HYDRA HYDR. FLUID * HYDRAU-LIKÖL MC 530 ** PLANTOHYD 40N ***	SUPER 2000 CD-MC SUPER 2000 CD HD SUPERIOR 20 W-30 HD SUPERIOR SAE 30	SUPER 8090 MC HYPOID 80W-90 HYPOID 85W-140	MULTI FETT 2 SPEZIALFETT FLM PLANTOGEL 2 N	GETRIEBEFLIESSFETT NLGI 0 RENOLIT DURAPLEX EP 00 PLANTOGEL 00N	RENOPLEX EP 1	HYPOID 85W-140	
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	CASTROLGREASE LM	IMPERVIA MMO	CASTROLGREASE 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 GETRIE-BEÖL B 85W-90 GETRIEBEÖL C 85W-90	LORENA 46 LITORA 27	RHENOX 34	-	GETRIEBEÖL B 85W-90 GETRIEBE-ÖL C 85W-140	
ELF	OLNA 32/46/68 HYDRELF 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 G O	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 UNIFARM 15W-30	GEAROIL GP 80W-90 GEAROIL 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 EVVAROL HD/B SAE 30 UNIVERSAL TRACTOROIL SUPER	HYPOID GA 90 HYPOID GB 90	HOCHDRUCKFETT LT/SC 280	GETRIEBEFETT MO 370	EVVA CA 300	HYPOID GB 90	
FINA	HYDRAN 32/46/68	DELTA PLUS SAE 30 SUPER UNIVERSAL OIL	PONTONIC N 85W-90 PONTONIC MP 85W-90 85W-140 SUPER UNIVERSAL OIL	MARSON EP L 2	NATRAN 00	MARSON AX 2	PONTONIC MP 85W-140	
FUCHS	RENOLIN 1025 MC *** TITAN HYDRAMOT 1030 MC ** RENOGEAR HYDRA * PLANTOHYD 40N ***	TITAN HYDRAMOT 1O3O MC TITAN UNIVERSAL HD	RENOGEAR SUPER 8090 MC RENOGEAR HYPOID 85 W-140 RENOGEAR HYPOID 90	RENOLIT MP RENOLIT FLM 2 RENOLIT ADHESIV 2 PLANTOGEL 2 N	RENOSOD GFO 35 DURAPLEX EP 00 PLANTOGEL 00N	RENOPLEX EP 1	RENOGEAR SUPER 8090 MC RENOGEAR HYPOID 85W-140 RENOGEAR HYPOID 90	* When working in conjunction with wet-brake tractors, the inter-national specification J 20 A is necessary. ** Hydraulic oil HLP-(D) + HV. *** Hydraulic oil with vege-table oil base HLP + HV is bio-degradable and is therefore especially safe for the enviroment.
GENOL	HYDRAULIKÖL HLP/32/46/68 HYDRAMOT 1030 MC * HYDRAU-LIKÖL 520 ** PLANTOHYD 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	GETRIEBEFLIESSFETT 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 HVI/46HVI	EXTRA HD 30 SUPER HD 20 W-30	MEHRZWECKGETRIEBEÖISAE90 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/T46	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 SIMMNIA GREASE O	AEROSHELL GREASE 22 DOLIUM GREASE R	SPIRAX HD 90 SPIRAX HD 85W-140	
TOTAL	AZOLLA ZS 32, 46, 68 EQUIVIS 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 HVLP 32 ** ULTRAPLANT 40 ***	SUPER HPO 30 STOU 15W-30 SUPER TRAC FE 10W-30 ALL FLEET PLUS 15W-40	HP GEAR OIL 90 oder 85W-140 TRANS GEAR OIL 80W-90	MULTILUBE EP 2 VAL-PLEX EP 2 PLANTOGEL 2 N	RENOLIT LZR 000 DEGRALUB ZSA 000	DURAPLEX EP 1	HP GEAR OIL 90 oder 85W-140	* Bij gebruik op trekkers met natte remmen moet de internaitionale spe-cificatie J 20 A worden toegepast ** Hydrauliekolie HLP-(D) + HV *** Hydrauliekolie op plante-noliebasis HLP + HV is biologisch afbreekbaar, daarom milieuvriendelijk
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 HVG 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	

Hydraulik system	Funktionen / functions		Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9
Load Sensing		⇧	X			X	↓				X
		⇩					↓				X
		⇧		X		X	↓				
		⇩					↓		X	X	
		⇧			X	X	↓	X			
		⇩					↓	X			
geschlos-senes System / Closed Center		⇧	X				↓				X
		⇩					↓				X
		⇧		X			↓		X	X	
		⇩					↓		X	X	
		⇧			X		↓	X			
		⇩					↓	X			
offenes System / Open Center		⇧	X				↑				X
		⇩					↑				X
		⇧		X			↑		X	X	
		⇩					↑		X	X	
		⇧			X		↑	X			
		⇩					↑	X			
	keine Funktion /	no function				X	↑				

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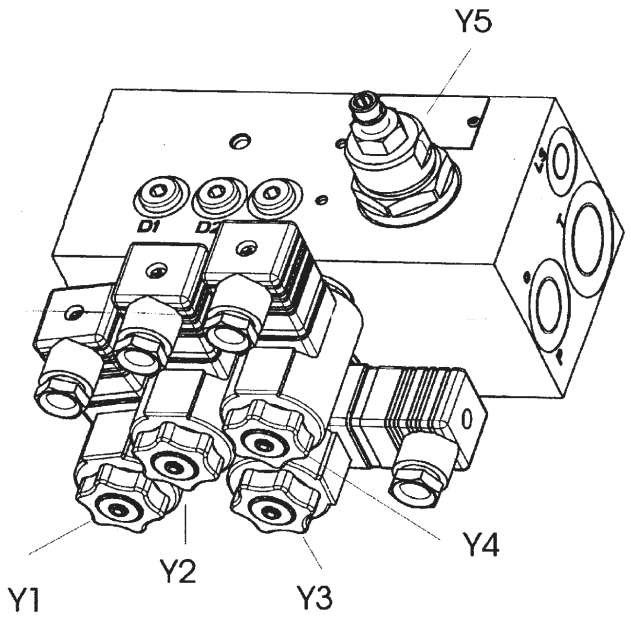
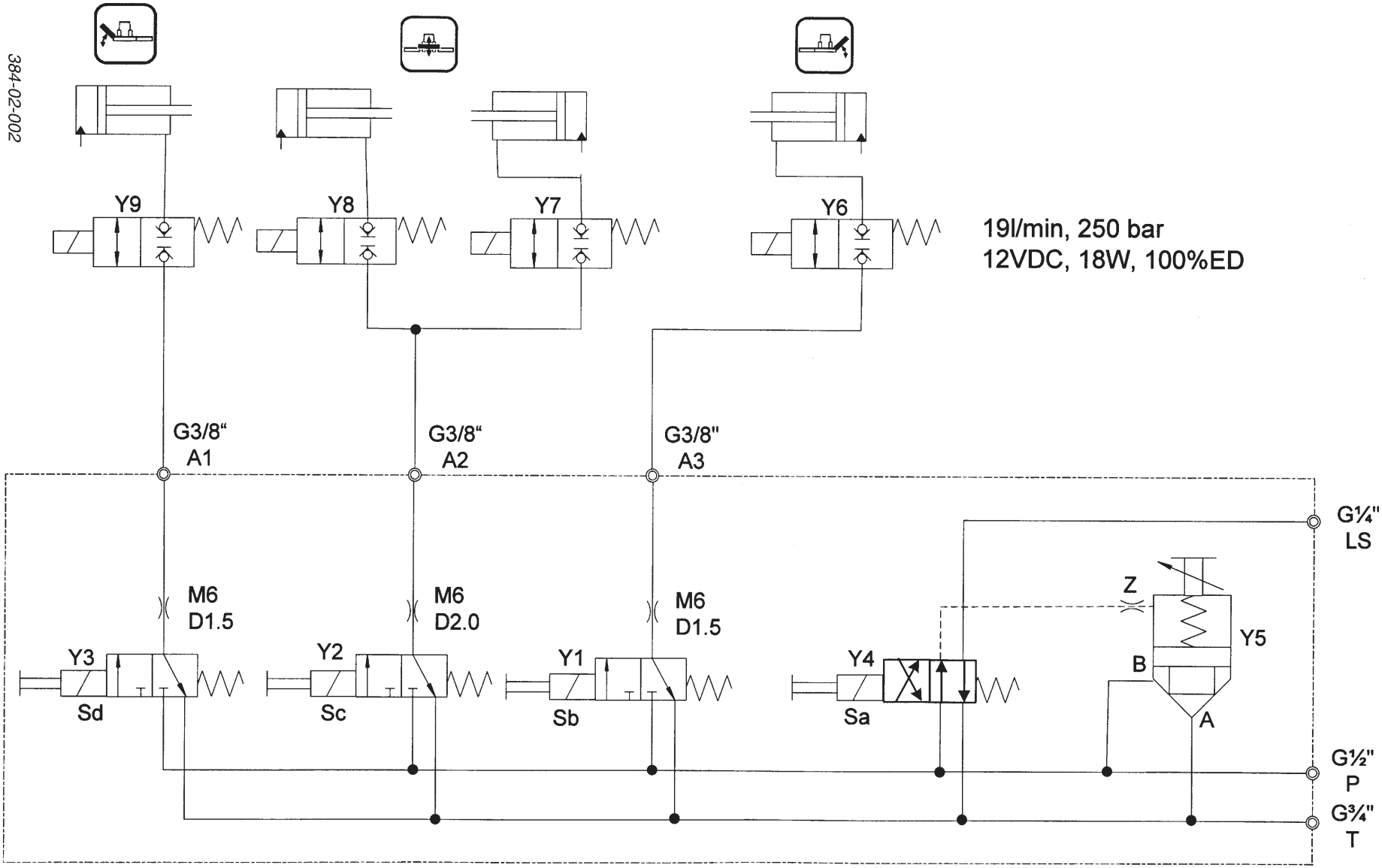
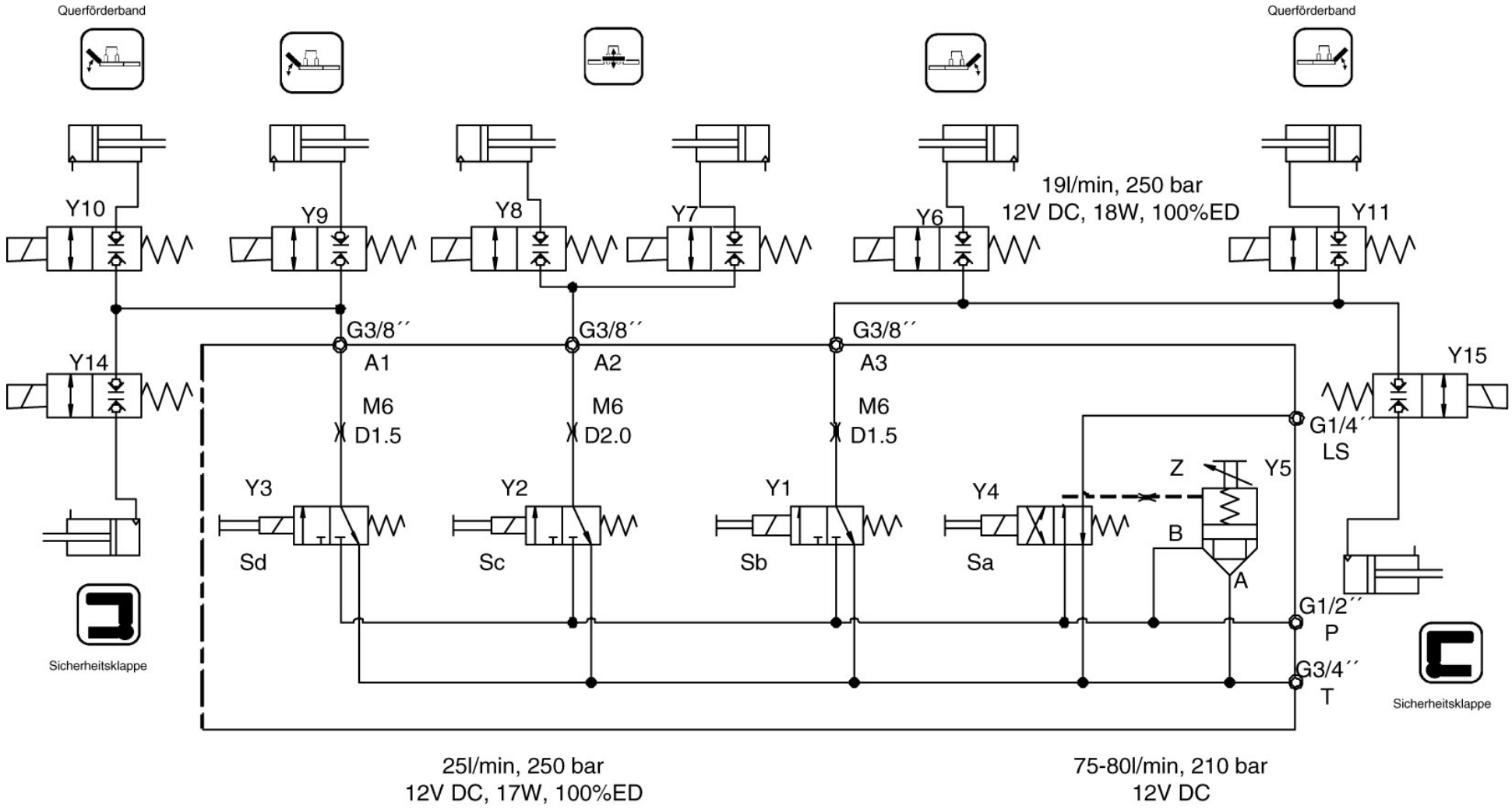


↑ Y5 **herausgedreht**
↓ Y5 **hineingeschraaubt**

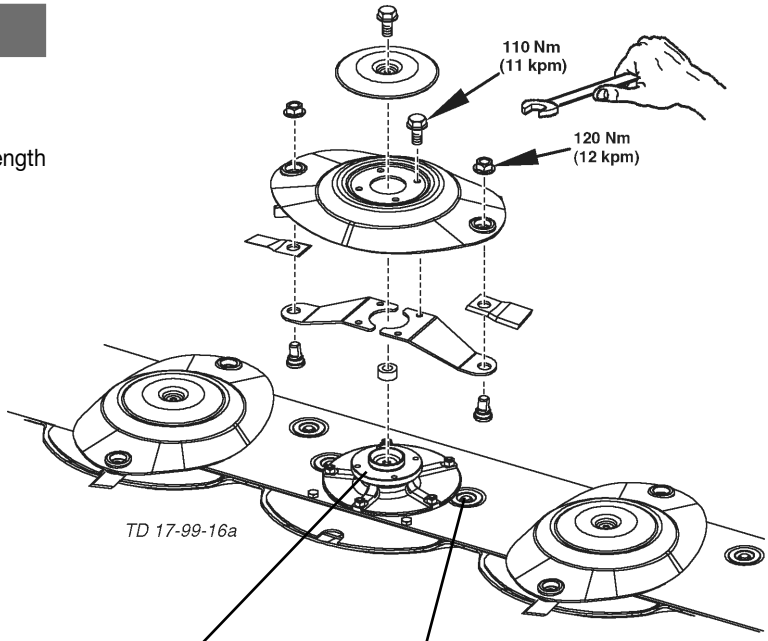
384-02-002

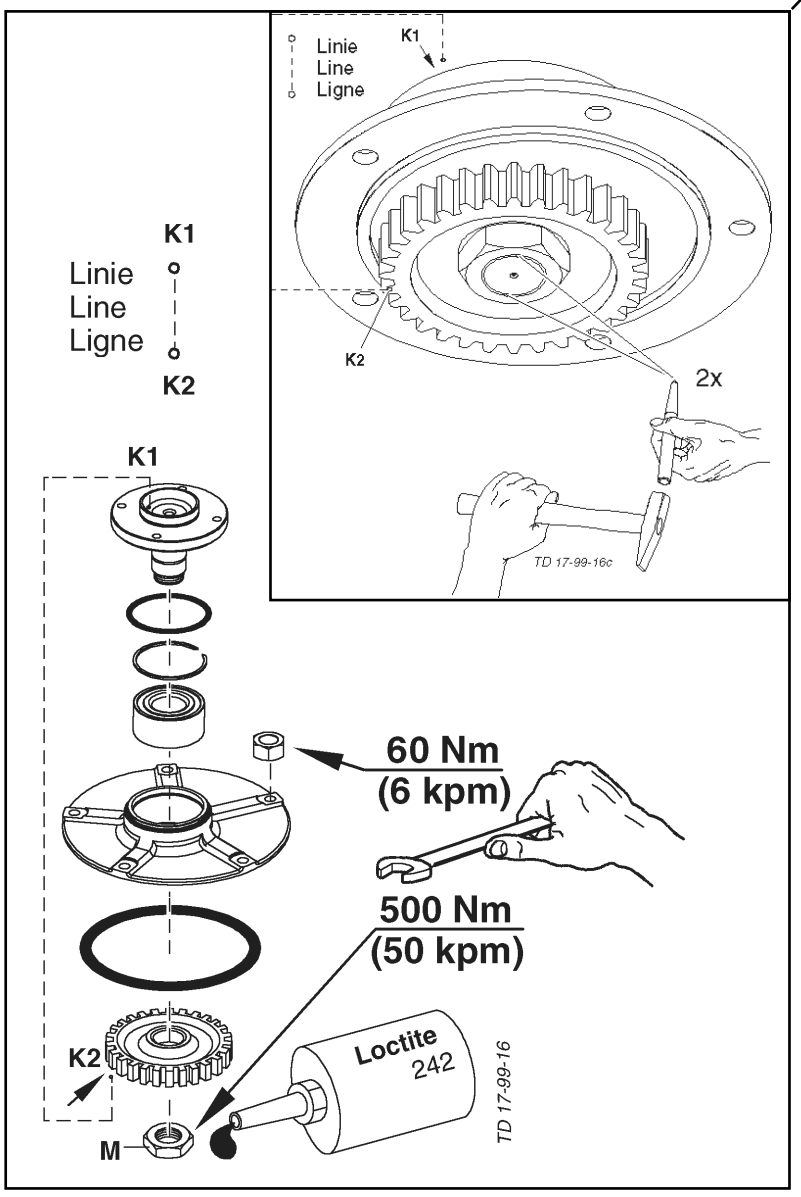

Y9
Y8
Y7
Y6
19l/min, 250 bar
12VDC, 18W, 100%ED
G3/8“
A1
G3/8“
A2
G3/8"
A3
G¼"
LS
M6
D1.5
M6
D2.0
M6
D1.5
Z
Y5
B
A
Y3
Sd
Y2
Sc
Y1
Sb
Y4
Sa
G½"
P
G¾"
T
25l/ min, 250 bar
12VDC, 17W, 100%ED
75- 80l/min, 210 bar
12VDC

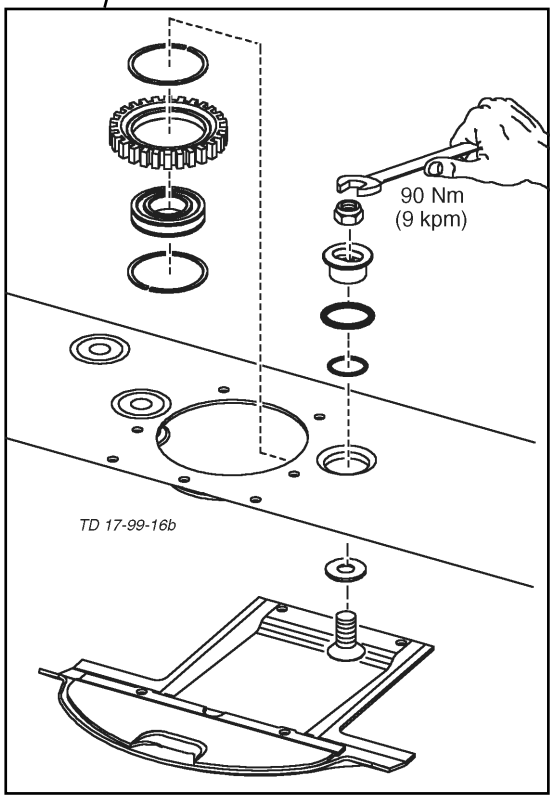

Querförderband
Querförderband
Y10
Y9
Y8
Y7
Y6
Y11
19l/min, 250 bar
12V DC, 18W, 100%ED
G3/8´´
A1
G3/8´´
A2
G3/8´´
A3
Y14
Y15
M6
D1.5
M6
D2.0
M6
D1.5
G1/4´´
LS
Z
Y5
Y3
Y2
Y1
Y4
B
Sd
Sc
Sb
Sa
A
G1/2´´
P
G3/4´´
T
Sicherheitsklappe
Sicherheitsklappe
25l/min, 250 bar
12V DC, 17W, 100%ED
75-80l/min, 210 bar
12V DC

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)





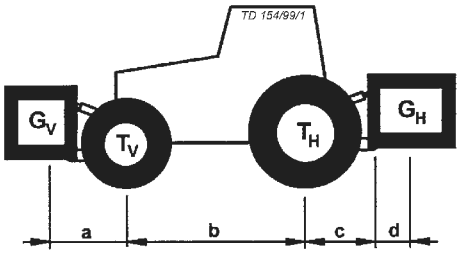


Combination of tractor and mounted implement

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 ot the tractor. The front axle of the tractor must always to 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.

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

Front mounted implement

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

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

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 $T_{V\ tat}$

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

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

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 ($G_{H\ min}$) 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!)

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

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 $T_{H\ tat}$

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

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

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 instruc- tion handbook		**Double** permissible tyre load carrying capacity (two tyres)
Minimum ballasting front/rear	/ kg		---		---
Total weight	kg	≤	kg		---
Front axle load	kg	≤	kg	≤	kg
Rear axle load	kg	≤	kg	≤	kg

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!

GB

PÖTTINGER
Landsberg

Appendix 1

EC Certificate of Conformity

conforming to EEC Directions 98/37/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 7800 Type PSM 383
NOVACAT 8600 Type PSM 384
(make, model)

to which this certificate applies, conforms to the basic safety and health requirements of EEC Directions 98/37/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, 24.02.2004
(Place and date of issue)

(Name and job function of authorized person)

9800 D/F/GB/NL/I/E/P/S/SF EG Konformitätserkl.

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