Original inside

GB Operator‘s manual

+ INSTRUCTIONS FOR PRODUCT DELIVERY . . . Page 3

"Translation of the original Operating Manual"

Nr. 99 377.GB.80Q.0

NOVACAT 225 H / HED / HCRW

(mudel PSM 377 : + . . 01001**)**

NOVACAT 265 H / HED / HCRW

(mudel PSM 378 : + . . 01001**)**

• **Disc mower**

Chassis Nr.

Pöttinger - Trust creates Affinity - since 1871

"Quality pays for itself." Therefore we apply the highest quality standards to our products which are constantly monitored by our in-house quality management and our management board. Because the safety, perfect function, highest quality and absolute reliability of our machines in operation are the core competencies for which we stand.

There may be deviations between these instructions and the product as we are constantly developing our products. Therefore no claims may be derived from the data, illustrations and descriptions. Please contact your Specialist Service Centre for any binding information about specific features of your machine.

We would ask you to please understand that changes to the scope of supply with regard to form, equipment and technical specifications are possible at any time.

Product liability, information obligation

Product liability obliges manufacturers and dealers to issue operating instructions for the machine at the point of sale and to instruct the customer on the operation, safety and maintenance regulations governing the machine.

A confirmation is required to verify that the machine and operating instructions have been handed over correctly.

For this purpose

- **Document A** is to be signed and returned to Pöttinger or via the internet to www.poettinger.at
- **Document B** remains with the specialist dealer handing over the machine.
- **The customer receives document C**.

For the purposes of product liability law, every farmer is an entrepreneur.

In the terms of product liability law, damage to property is any damage arising due to the machine, but not to the machine, and an excess (500 euros) exists for this liability.

Corporate damage to property within the terms of the product liability law is excluded from this liability.

Be advised! The operating instructions must also be handed over with any subsequent machine sale or transfer and the transferee must be instructed in the regulations stated.

Refer to PÖTPRO for additional information about your machine:

Are you looking for suitable accessories for your machine? No problem! All the information you require is here at your disposal. Scan the QR code on the machine's type plate or look under www.poettinger.at/poetpro

And if we don't have what your looking for, then your Specialist Service Centre is there for you with help and advice.

(GB) INSTRUCTIONS FOR PRODUCT DELIVERY

Dokument D

ALOIS PÖTTINGER Maschinenfabrik GmbH
A-4710 Grieskirchen
Tel. (07248) 600 -0
Telefax (07248) 600-2511

GEBR. PÖTTINGER GMBH
D-86899 Landsberg/Lech, Spöttinger-Straße 24
Telefon (0 81 91) 92 99-111 / 112
Telefax (0 81 91) 92 99-188

GEBR. PÖTTINGER GMBH
Servicezentrum
D-86899 Landsberg/Lech, Spöttinger-Straße 24
Telefon (0 81 91) 92 99-130 / 231
Telefax (0 81 91) 59 656

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.

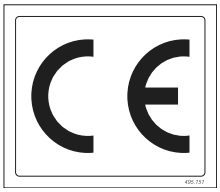
In order to prove that the machine and the operating manual have been properly delivered, a confirmation is necessary.
For this purpose please do the following:

- 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!

Table of contents

CE sign



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

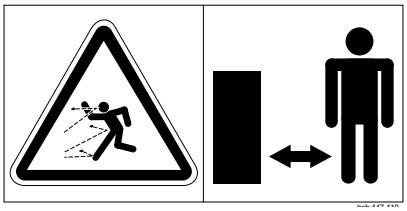
EU Declaration of Conformity (see supplement)

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

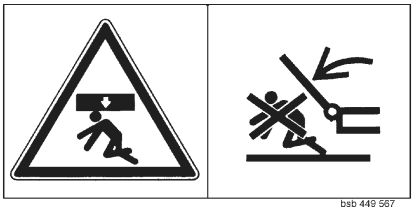
Recommendations for work safety

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

Meaning of warning signs

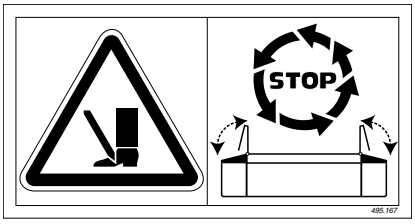


Danger - flying objects; keep safe distance from the machine as long as the engine is running.

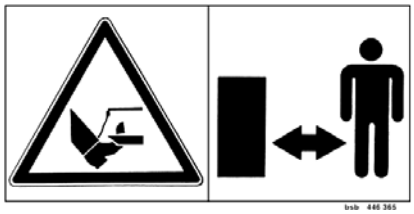


Stay clear of swinging area of implements

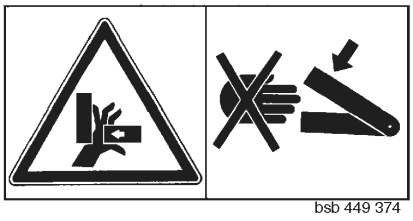
Wait until all machine components have stopped completely before touching them.



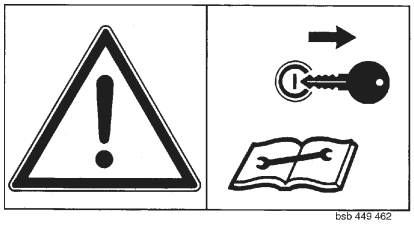
Close both side protective coverings before engaging p.t.o..



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



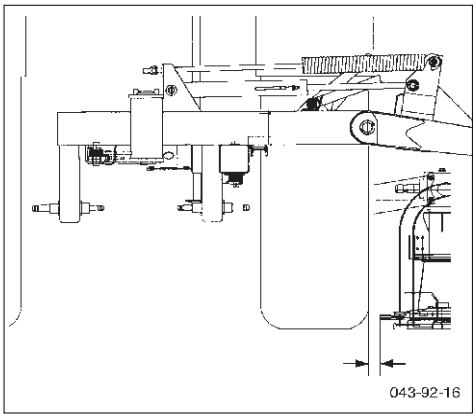
Never reach into the crushing danger area as long as parts may move.



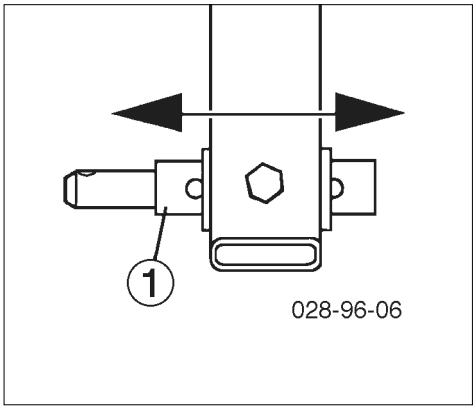
Shut off engine and remove key before performing maintenance or repair work.

Attaching implement to tractor

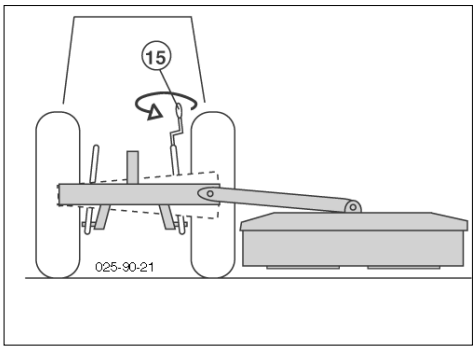
Safety hints:
see supplement-A1 points 7.), 8a. - 8h.)



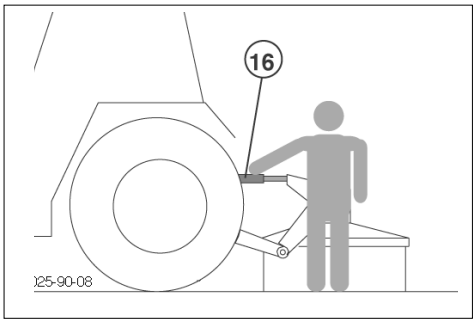
- Attach mower so that the edge of the tractor-side drum is just outside the right-hand tractor tyre!
  - See also chapter "Side-located attachment", supplement-D



- Adjust lower link bolt (1) on frame accordingly.

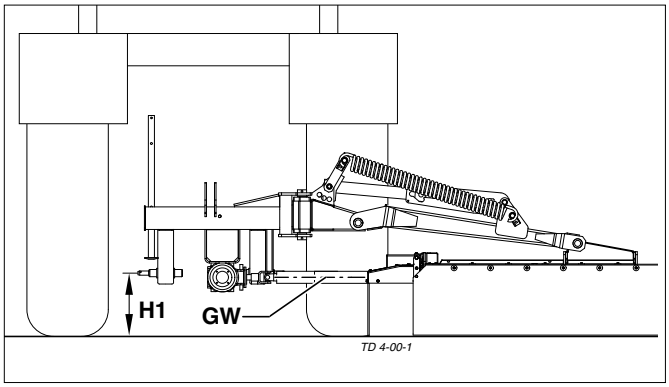


- Bring frame into horizontal position by adjusting linkage arm spindle (15).



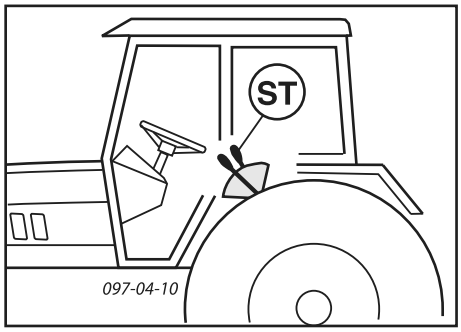
- By turning upper link spindle (16) the cutting height is adjusted .

Adjusting lower links



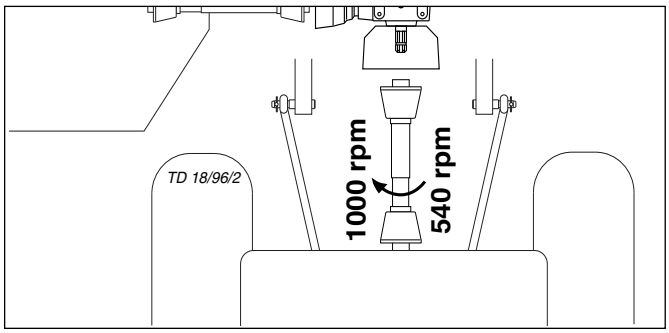
- The drive shaft (GW) position should be approximately horizontal when mowing.
  - Set the tractor's lifting gear accordingly (H1)
  - Set the tractor hydraulics (ST) using the bit stop.

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



- Connect hydraulic snap coupling for swivel cylinder.

Important recommendation!



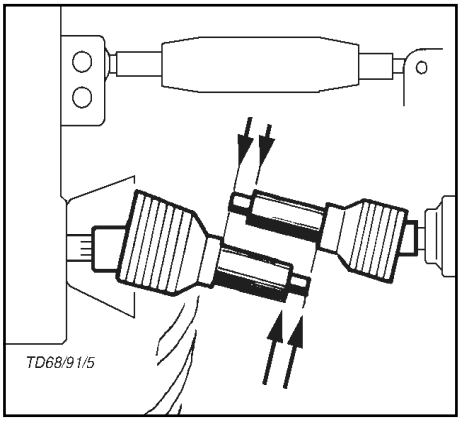
A transfer, which is located near the gear, advises which p.t.o. speed your mower unit is equipped for.

Standard: Gear for power take-off **1000 rpm.**

Optional exra: Gear for power take-off **500 rpm.**

Order number: spare part book

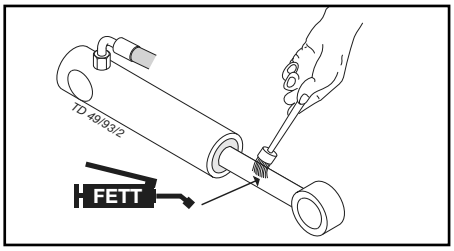
Fitting drive shaft



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

Parking in the open

When parking for longer periods in the open, clean plunger rods and then coat with grease.



Conversion from working to transport position

NOTE:

The implement has been so designed that the mower unit is positioned as close as possible to the tractor. This has important advantages for both mowing and transporting operations.

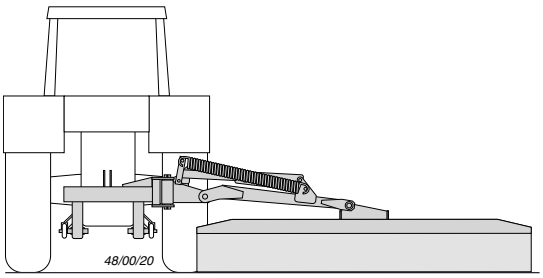
- The implements´s centre of gravity lies close to the tractor and through this
  - less supporting structure load
  - less load alleviation of the steering axle when transporting
  - better cutter bar ground adaption when mowing

- The mower bar can be swivelled into 3 different positions for transportation.

Attention!

Take care with transport positions 1, 2, 3.

Before swivelling the cutter bar up, turn off the drive and wait for the mower discs to come to a complete standstill.



Safety Precaution!

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

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

Never let mowing mechanism run with the mower raised.

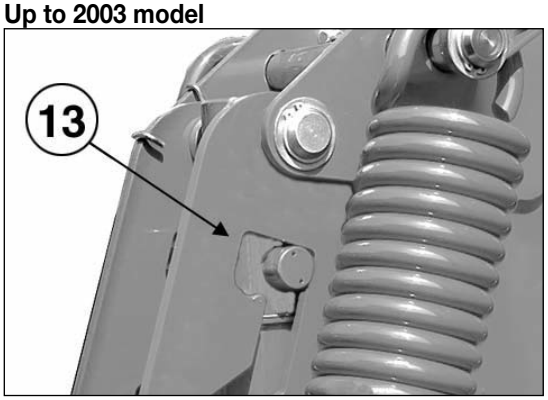
Conversion from transport to working position

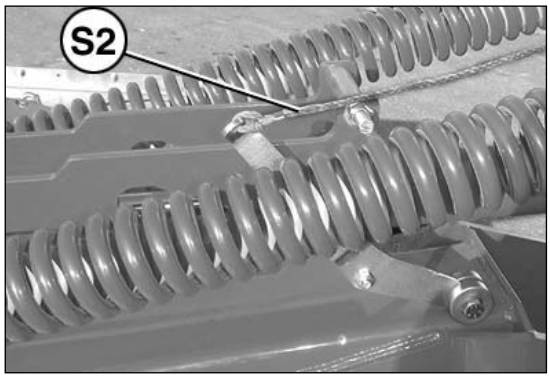
Swinging cutter bar down

- Make sure that swivel area is free and that nobody is standing in the danger area.

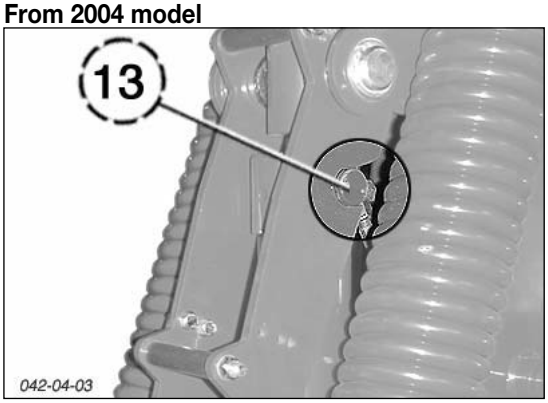
- Gently raise cutter bar with swivel cylinder so that hook (13) can be released.
- Release hook (13) by pulling on the rope (S2).
- Lower cutter bar hydraulically.

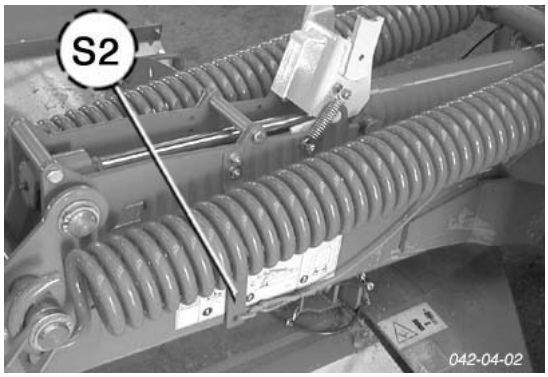
Up to 2003 model





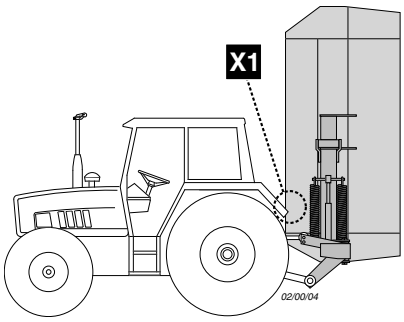
From 2004 model



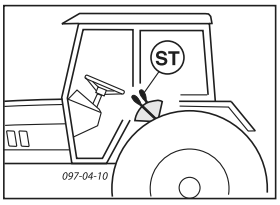


Transport position - 1

Mower bar only swivelled up at the side.



- Pull on rope (S2) and simultaneously actuate servo-valve (ST).
- Gradually move cutter bar into vertical position and release rope (S2).
- Secure cutter bar with hook (13).
- Servo-valve (ST) to O position



Tips for transportation:

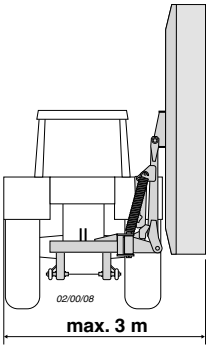
Do not move the servo-valve (ST) to the ”float” position. The hook (13) will become very worn.

- Before driving on roads always check correct locking!
- Connect lighting and raise implement for transport.
- Before leaving the tractor lower cutter bar to ground!

Ensure a sufficient gap (X1) !

Incombination with larger tractor types, it couldhappen that there is insufficient gap to the mud guard or tyre **(X1)** which could then cause a cxollision with the cutter bar.

If this is the case, this transport position must not be used.



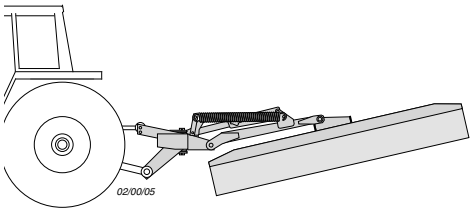
It is possible to try to move the cutter bar further to the right.

- Insert lower linkage bolts accordingly (see instructions in the supplement to this manual)
- However the total sidth must not exeed a **maximum of 3 m**.

Transport position - 2

Mower bar swivelled back.

Cutter bar o the rear and swivelled up until it stops (approx. 20°)



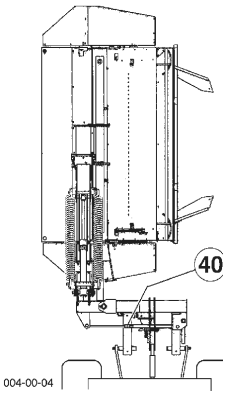
Note: Only short trips at low speed may be carried out in this position

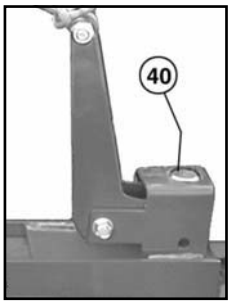
Variant 1:

Without hydraulic slewing mechanism

- Lower cutter bar to ground.
- Release bolt (40) by pulling on the rope (S1) and move forwards with the tractor.

  In doing so, the cutter bar swivels back so far until the bolt (40) is locked into position.
- Raise the implement using the tractor's lifting gear.





Variant 2:

With hydraulic slewing mechanism

An additional double-action hydraulic connection is necessary on the tractor.

A hydraulic unit is installed instead of a mechanical slewing unit (with bolts 40). See chapter “Collision Safety”.

- Raise cutter baractuate

  single-action control valve (ST)
- Swivel cutter bar to the rearactuate

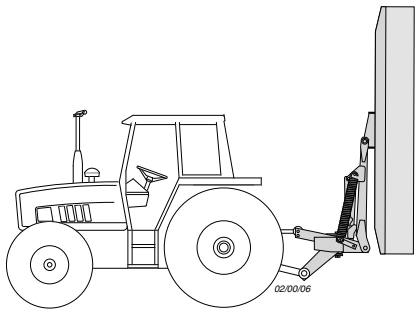
  double-action control valve (ST)

Attention!

Important instructions in the chapter entitled ”Parking the implement”

Transport position - 3

Cutter bar to the rear and swivelled up (approx. 90°).



1. Swivel mower bar back as described in **"Transport Position - 2"**.
2. Move mower bar into vertical position as described in **"Transport Position - 1"**.

- Secure cutter bar with hook (13).

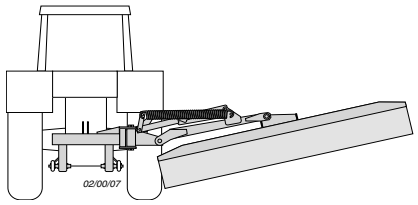
3. Before driving on roads always check correct locking!

- Connect lighting and raise implement for transport.
- Before leaving the tractor lower cutter bar to ground!

Transport position - 4

Cutter bar laterally swivelled up (approx. 20°)

- this position upwards is limited by a stop buffer.

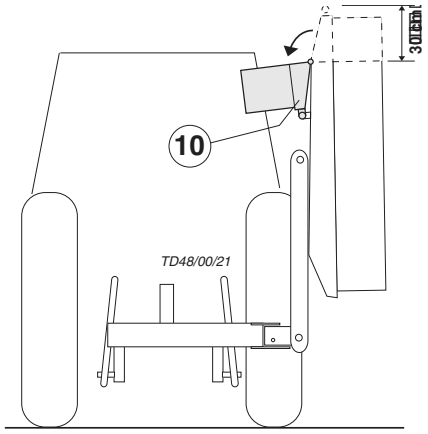


- only for turning manoeuvres in the field.
- do not use on roads or public thoroughfares!

Reducing the Total Height

Before converting to transport position

- The external guard plate (10) can be swivelled in to reduce the total height (- 30 cm) when in the transport position.



Note:

For safety reasons the mower disks must be at a complete standstill before swivelling the guard plate.

Dismount implement from tractor

Important!
Keep to the order of operation

1. Shift servo to floating position so that no residual air pressure remains in hydraulic lines.
2. Let bolt (13a) rest in the hook.
   - Pull the rope (S2)
   - Lower mounting frame with lifting gear until the bolt (13a) rests in the hook.
3. Move the lever (13b) to the locking position

   Doing this secures the bolt (13a) in the hook

   This safeguard is important!

   Otherwise the danger exists that the mounting frame of the cutter bar could swivel up in jerks and jolts when uncoupling the lower link
4. Bring support stand (14) into support position and secure with linch pin
5. Lower lifting gear far enough so that implement stands on support stand on the ground
6. Dismount implement from tractor (15)
   - Uncouple drive shaft.
   - Uncouple hydraulic lines.
   - Remove rope from tractor cabin.

Instructions

The lever **13b** is a safety device. It should not be changed in its form and functions.

The lever is so constructed that it will not spring out from the bolt position (**13b, 13a**) during hydraulically slewing of the mowing bar. The lever is thus only damaged (deformed) but remains in the bolt position.

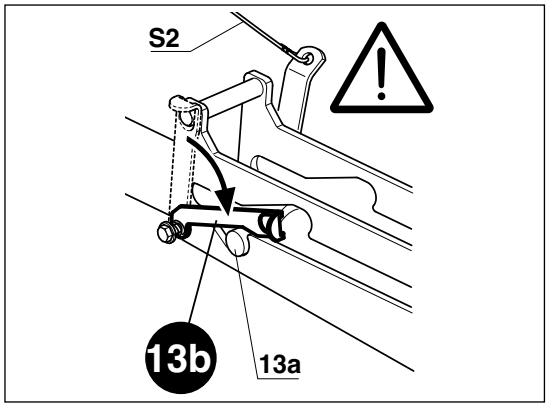
This has been arranged by the manufacturer – for safety reasons.

- **Do not operate the hydraulic cylinder to slew across the mowing bar when the lever is in the bolt position**
- **Exchange damaged levers immediately for new ones.**

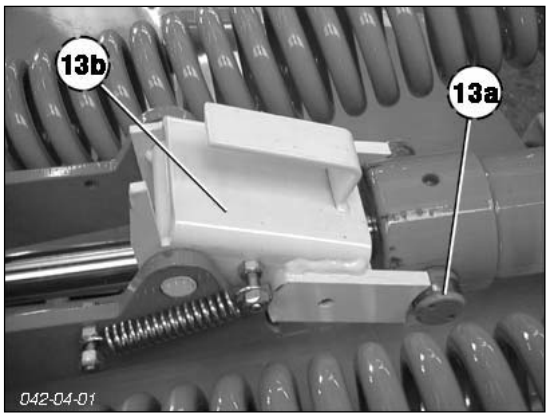
Attention!

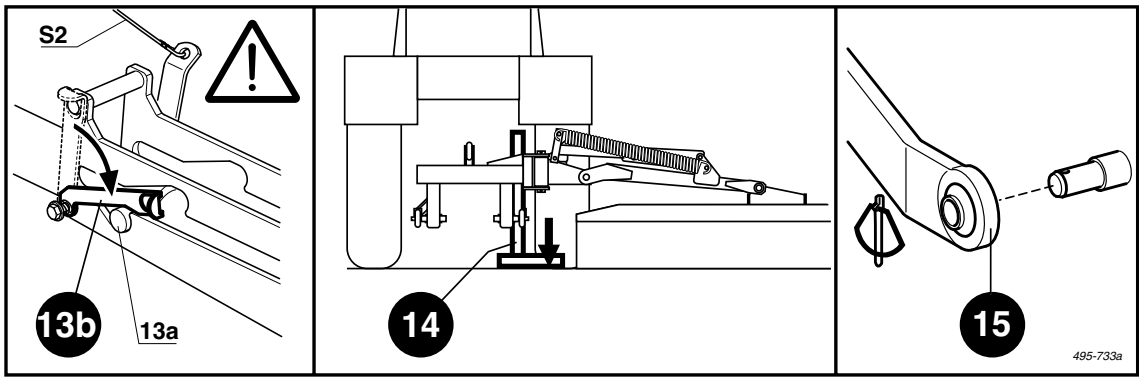
- **Always park implement steadfast**
- **Use support stand - otherwise danger of tipping**
- **Danger of injury from crushing and shearing sections in the area of the support stand**
- **Follow the instructions on the following page also.**

Up to 2003 model



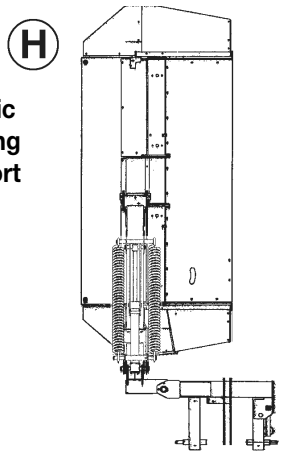
From 2004 model



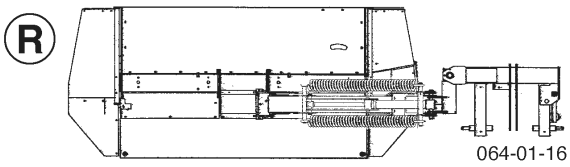


Parking the implement

The implement can be parked in two positions (R and H).



- **Do not set the hydraulic control valve to floating position if the support stand is raised.**

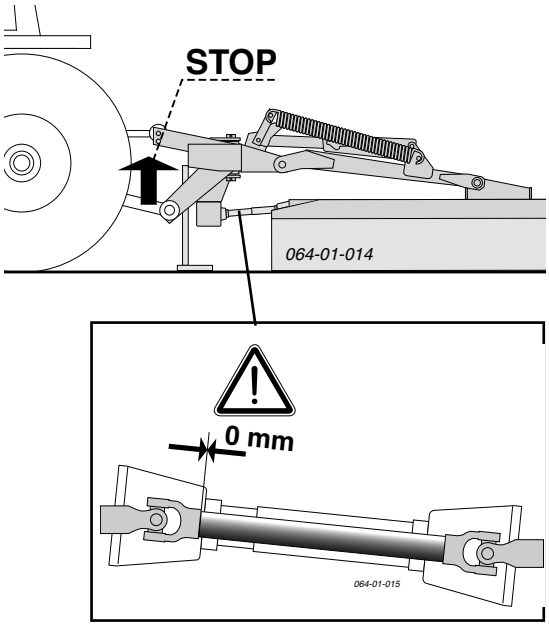


Attention! (STOP)

The support stand should not be raised too high

- if the implement is parked in "**H**" position and the hydraulic control valve is set to floating position.

The drive shaft could thus be damaged as it is telescoped on to the bar (0mm).



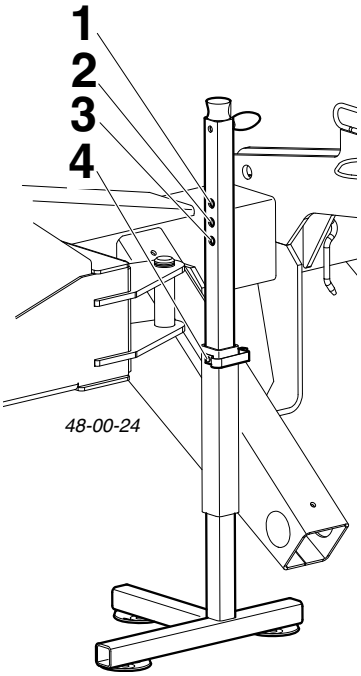
Support Stand

The support stand can be pinned in 4 positions

Positions 1, 2, 3: when parking the implement

Position 4: For transport and operating positions

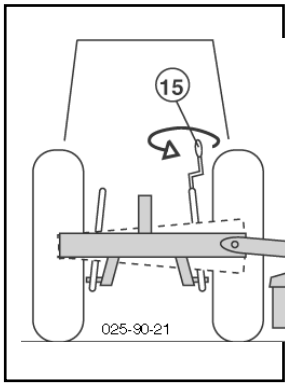
Parking the implement on the support stand



Any position (1, 2, 3) can be chosen which enables lifting gear to be uncoupled without problems.

Nevertheless, should a problem arise when uncoupling the lifting gear

- park the implement on flat, firm ground
- turn the lower link adjusting spindle (15) far enough so that the lower link can be pulled from the bolt.



Caution!

Crushing and shearing sections in the lifting gear area.

Beware!

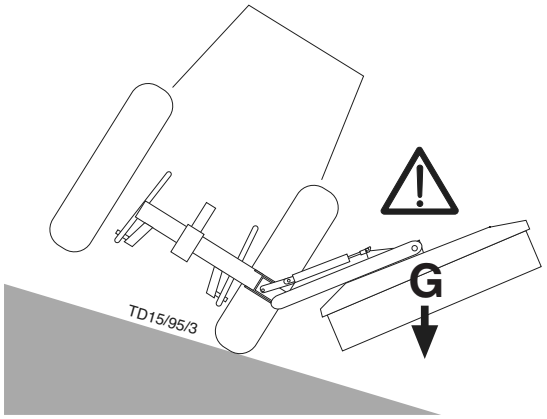
Before uncoupling the lower link, always secure the bolt 13a with the lever 13b.

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 unit is facing downhill and in a raised position,
- when travelling in a left-hand curve with the mower unit raised,
- when travelling in a left-hand curve in the transport position (mower unit completely raised).

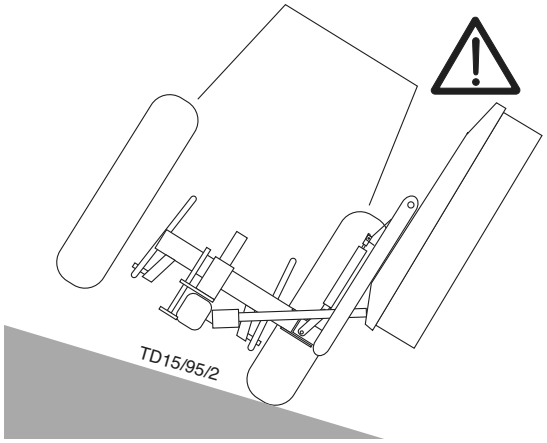


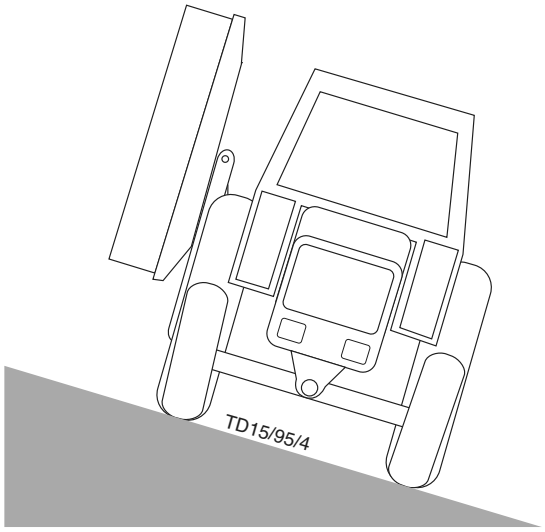
Note:

Raise the mower when reversing!

Safety information

- Reduce speed in left-hand curves accordingly.
- Travel so that the raised mower unit is facing uphill.
- It is better to travel in reverse on a slope than to carry out a risky turning manoeuvre.





Important notes prior to starting work

Safety hints:

See Supplement A, pt. 1. - 7.)

After the first hours of operation

- Retighten screw fittings for all blades.

Safety advice

1. Check

- Check the condition of blades and the blade holder.
- Check mower discs for damage (see chapter "Maintenance and Service")

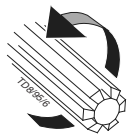
2. Switch machine on only when in working position and do not exceed the specified p.t.o. speed (e.g. max. 540 rpm)!

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

540 Upm | 1000 Upm

- Always switch the p.t.o. drive on only when all safety devices (covers, protective aprons, casings, etc.) are in proper condition and are attached to the implement in their safety positions.

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



4. Prevent any damage!

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

If, nevertheless, a collision occurs,

- Stop immediately and switch off the drive.
- Check the implement carefully for any damage In particular check the mowing discs and their drive shafts (4a).
- If necessary have it checked over in the work shop as well.

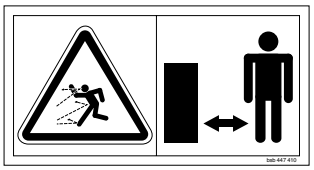
After contact with a foreign object

- Check the condition of blades and the blade holder (see chapter "Maintenance and service").
- Retighten all blade screw connections.

5. Remain at a distance when the engine is running.

- Keep people out of the danger zone as any foreign bodies ejected by the mower could injure them.

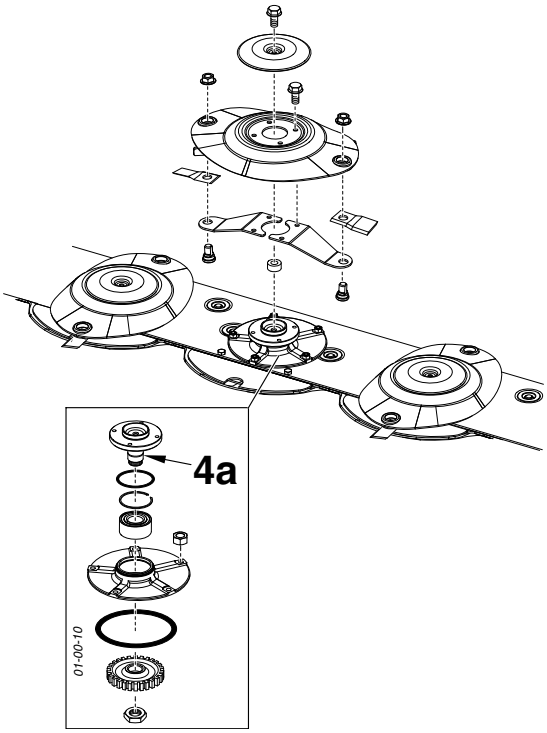
Special care is necessary on stony ground and near roads and paths.



6. Wear hearing protection

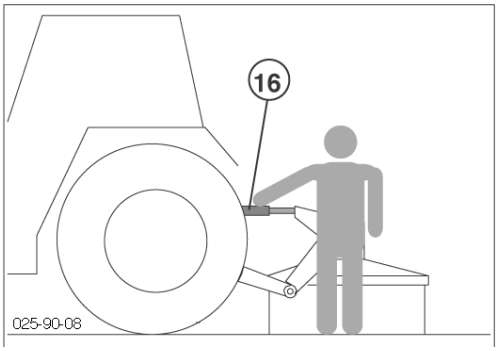
The noise level in the workplace can deviate from the measured value (see Technical Data) particularly through the differing types of tractor cabins.

- If an 85 dB(A) noise level is reached or exceeded, then the farmer (or contractor) must provide appropriate hearing protection (UVV 1.1 § 2).
- If a noise level of 90 dB (A) is reached or exceeded, then hearing protection must be worn (UVV 1.1 § 16).



Mowing

1. Set cutting height by turning upper link spindle (max. 5° incline for mower discs)



2. For mowing, slowly engage the p.t.o. shaft away from the crop and bring the mower rotor up to full speed.

Smoothly increasing the p.t.o. speed will avoid system-related noises from the p.t.o. shaft free-running.

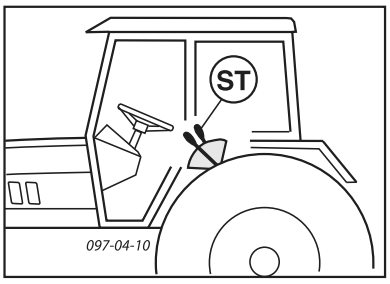
- The driving speed depends on the ground conditions and the crop to be mown.

Reversing

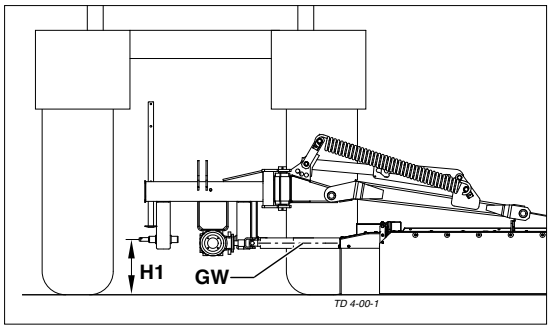
Raise the mower when reversing!

Adjustment

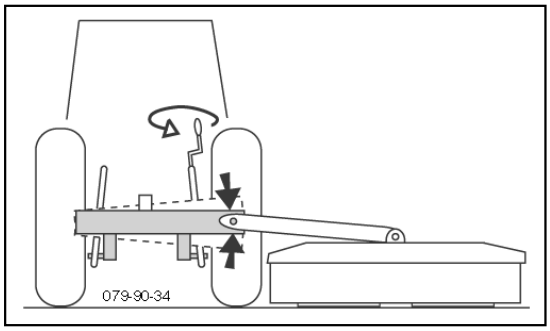
- The tractor's hydraulics must be set so the machine can follow the ground contours.
  - Hydraulic control valve (ST) on Floating position



  - The cardan shaft (GW) position should be roughly horizontal when mowing.



  - Mounting frame horizontal



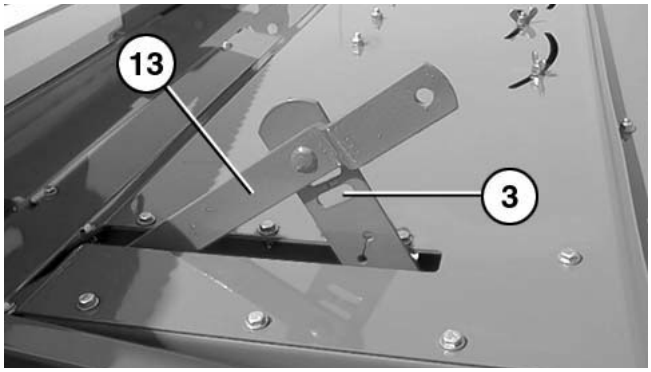
  - Secure the lower link so that the implement cannot swing out sideways.

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.

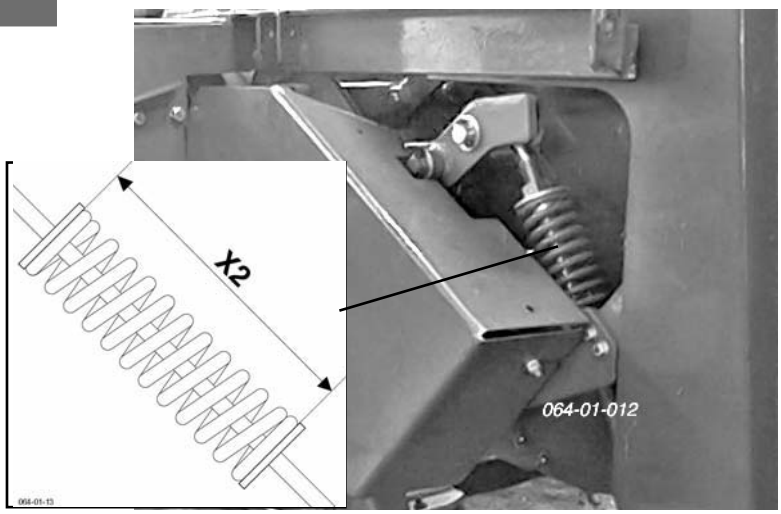


Correct belt tension

Check X2 size

NOVACAT 225: X2 = 164 mm
NOVACAT 265: X2 = 164 mm
NOVACAT 305: X2 = 164 mm

EUROCAT 275: X2 = 178 mm

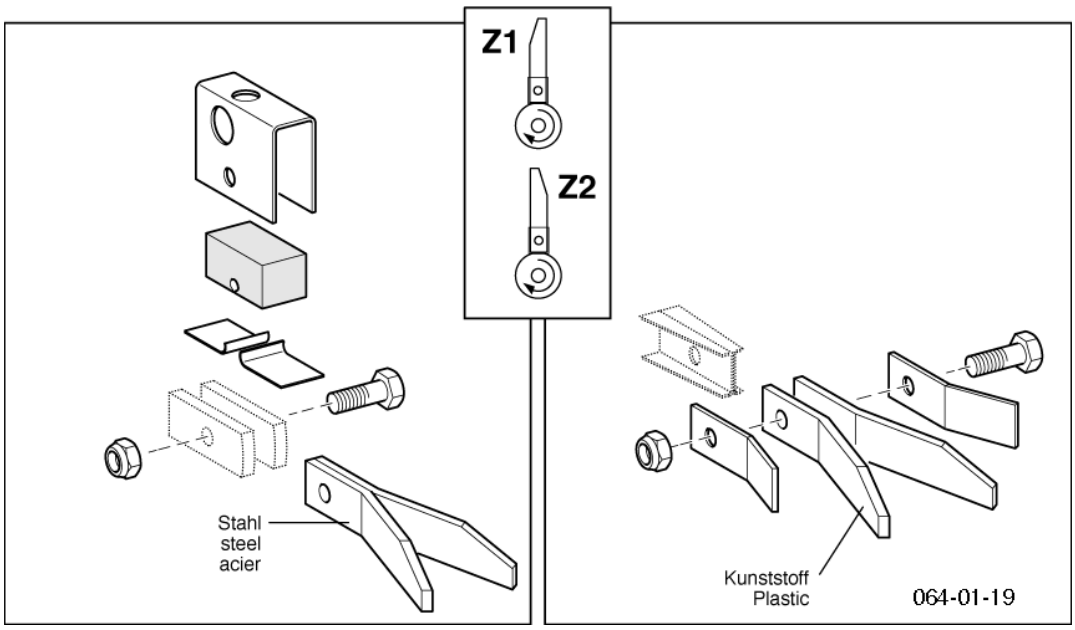


Position of the rotor prongs

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.



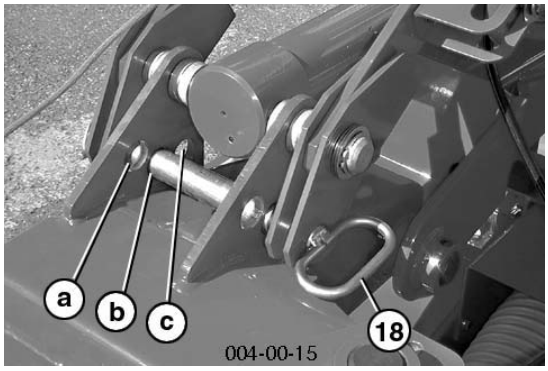
Dismounting and mounting the conditioner

Reduce spring tension before dismounting the conditioner

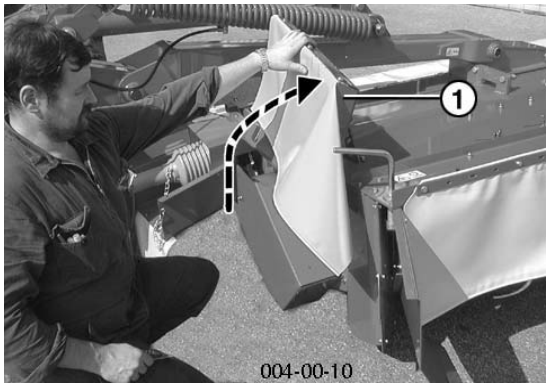
Pin bolt (18) in the relative position (a, b, c)

- see chapter "MAINTENANCE"

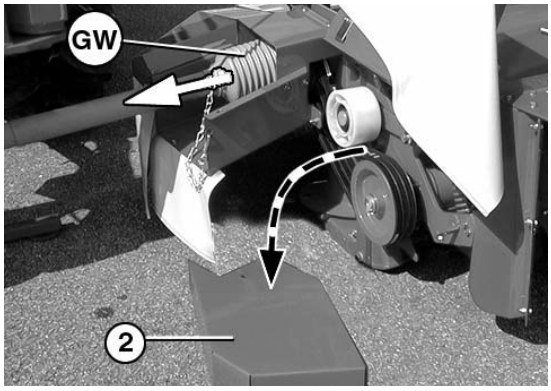
Otherwise the danger exists that the mounting frame of the cutter bar could swivel up in jerks and jolts when uncoupling the lower link



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

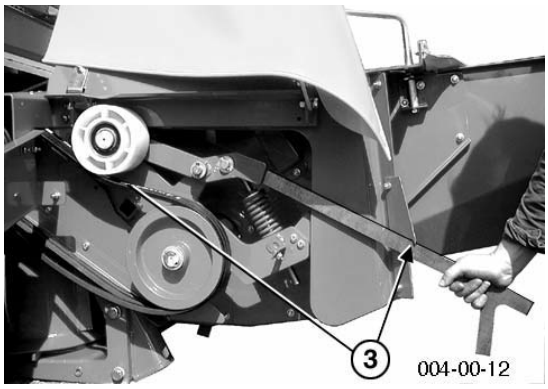


2. Remove the belt protection (2) and withdraw the drive shaft (GW) from the gear.



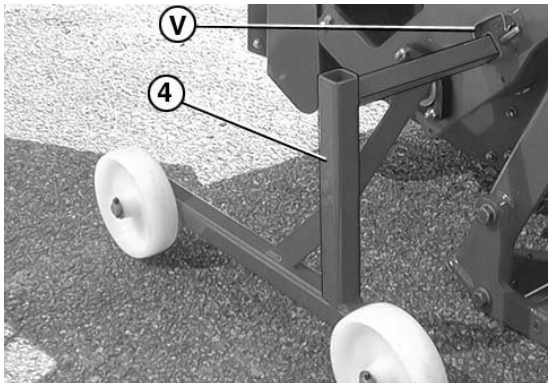
3. Remove belts

- Release the tension using lever (3) beforehand



4. Fit transport wheels (4)

- left and right
- secure with linch pin



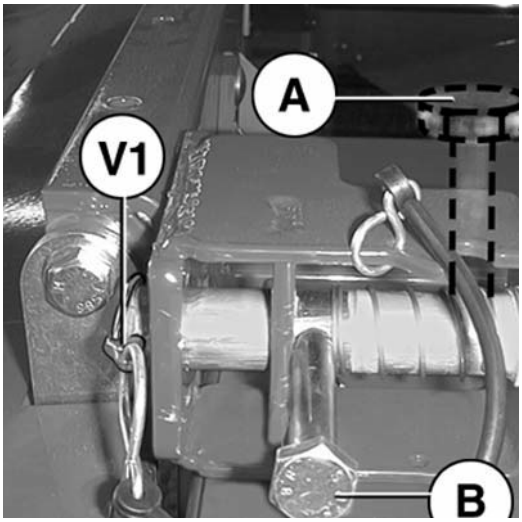
5. Release left and right locks

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

  Remove linch pin (V1) and release bolts

  • Pos. A = released

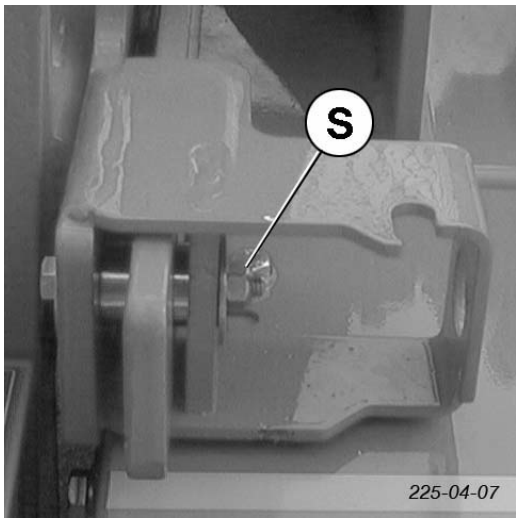
  • Pos. B = Locked



- **Screwed in from 2004 model**

  Remove screw (S)

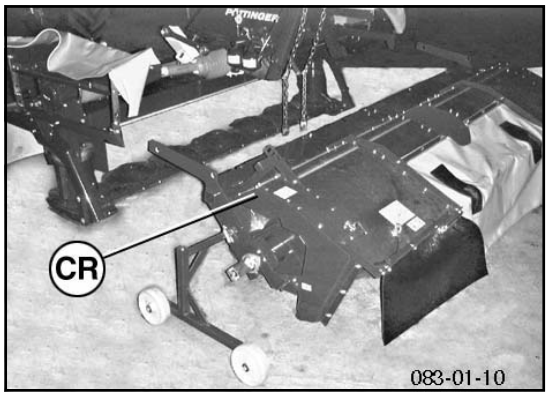
  (Spring loaded positioning bolt = optional)



Important!

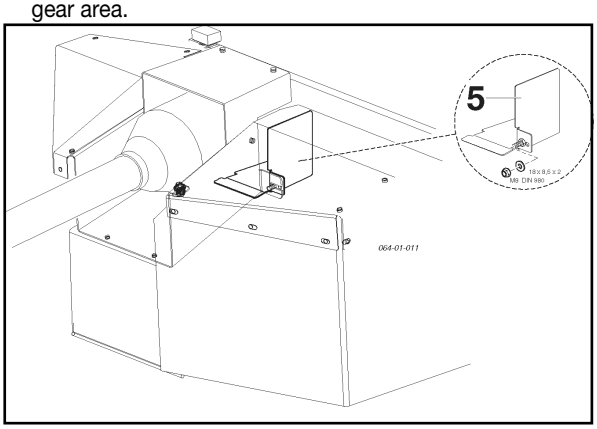
When mowing without conditioner, protective elements and the both swath formers (SB) must be mounted additionally on the cutter bar. Parts see spare parts list.

6. Always park conditioner steadfast.



7. Mount the guard (5)

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

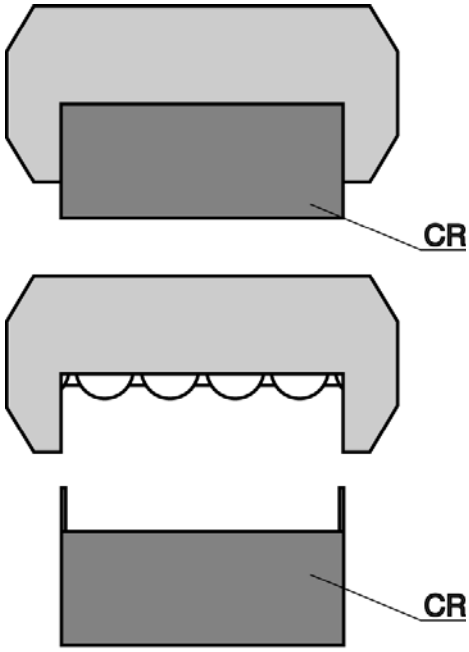


Mounting the conditioner

- is effected in the reverse sequence to dismounting.

Mowing without Conditioner

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



Safety hint

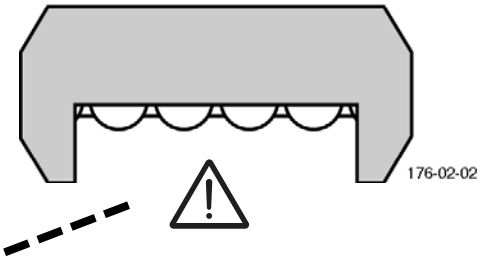
A machine with a conditioner (CR) as a complete unit is fitted with proper protection elements.

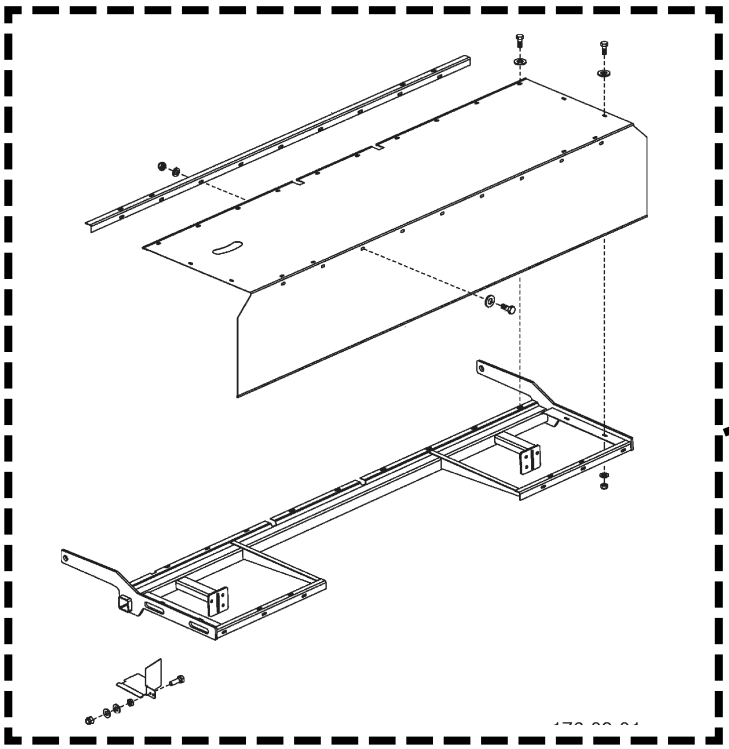
Should the conditioner be detached however, the mowing unit no longer has complete protection covering. In this situation mowing may not take place without additional protection elements!

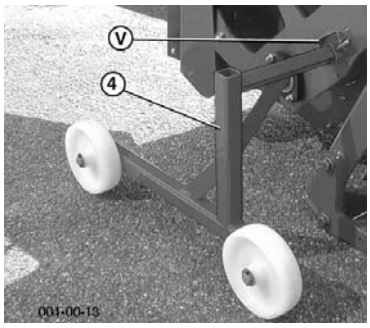
Beware!

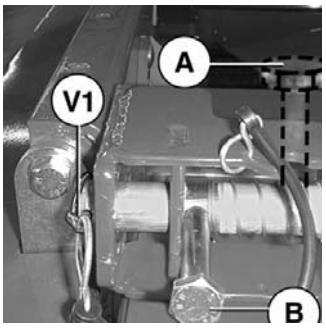
Protection elements, especially intended for this mode of mowing, must be fitted to the mowing unit.

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").







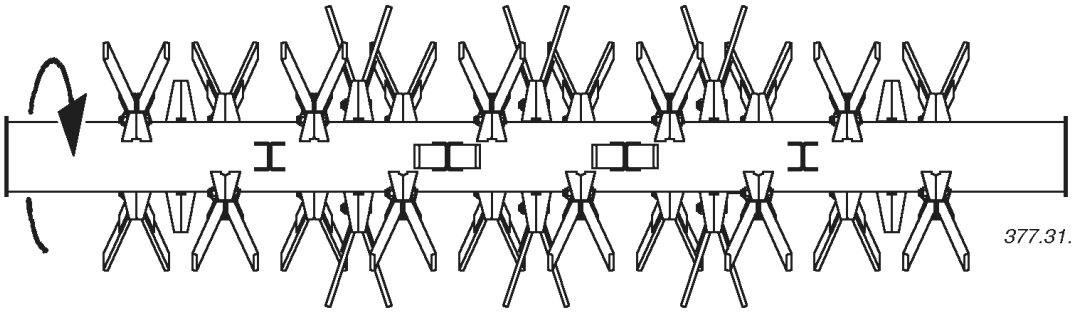


Optional extra

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

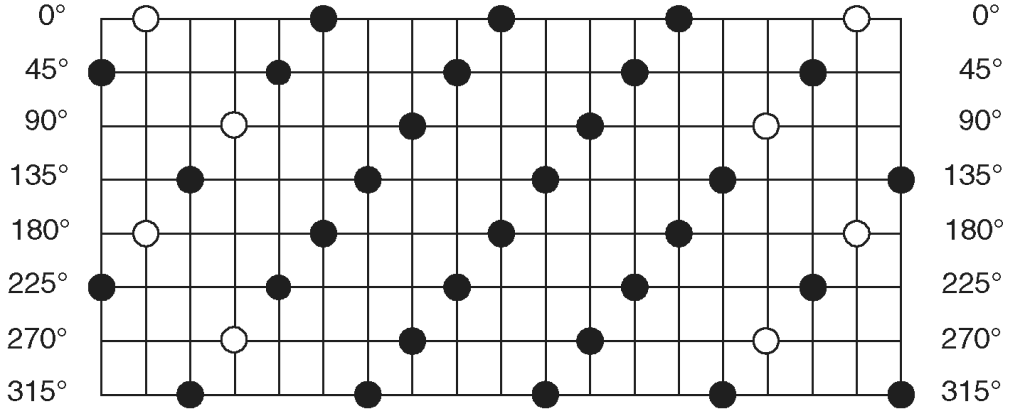
For mowing without conditioner (CR)

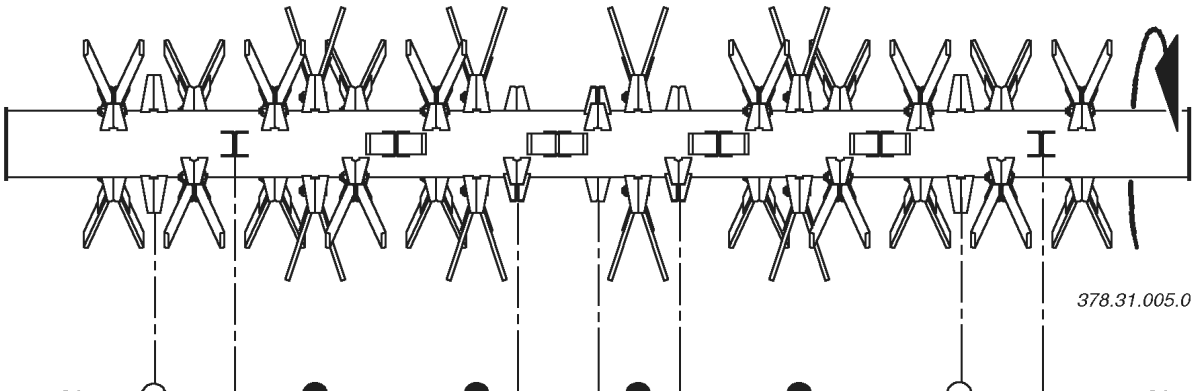
- Observe safety hint (above) without reservation!



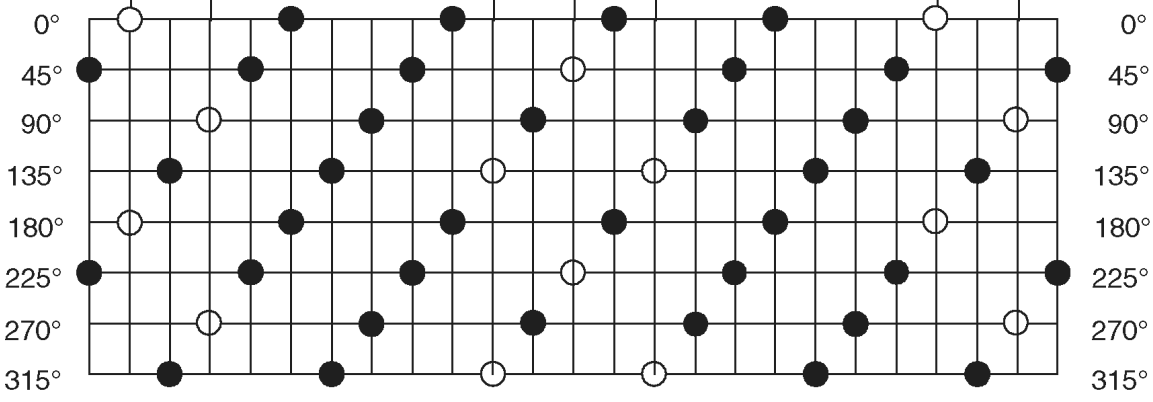
377.31.005.1

NOVACAT 225 H (Type PSM 377)





378.31.005.0

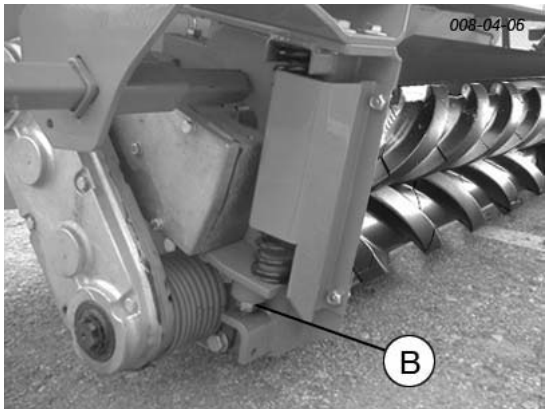


NOVACAT 265 H (Type PSM 378)

Settings

Side pressure springs

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



Note!

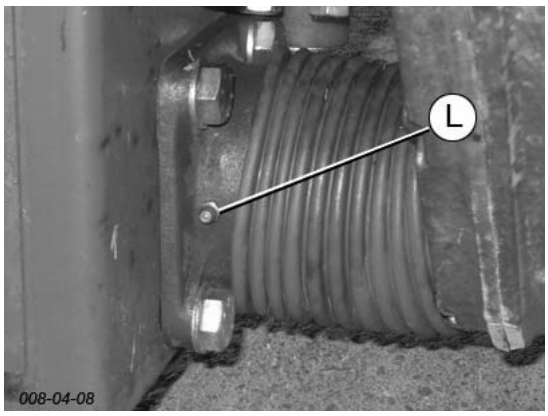
Dismounting and mounting the roller conditioner -see chapter „CONDITIONER“

Cleaning and maintenance

Clean with water after every operation

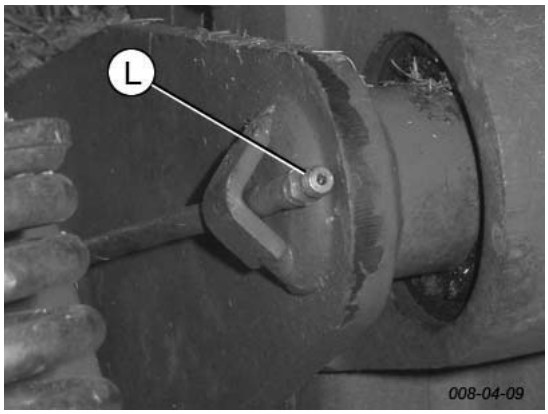
- the rubber cylinders
- the side bearing

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



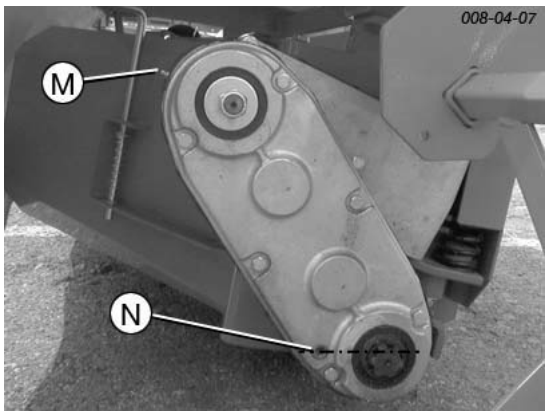
After ever operation, grease

- 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

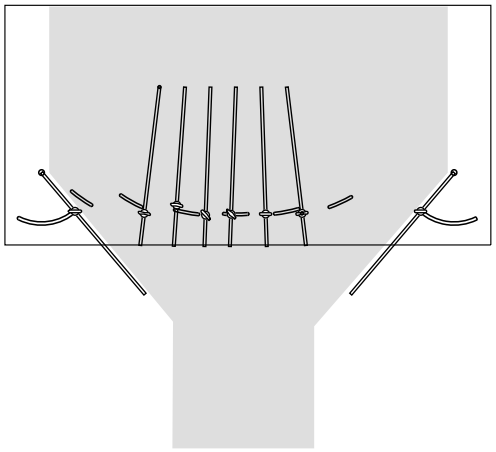
The settings listed below are to be understood as basic settings. Because of the various types of crops, an optimum setting of the guiding plates can possibly first be ascertained when the machine is in use.

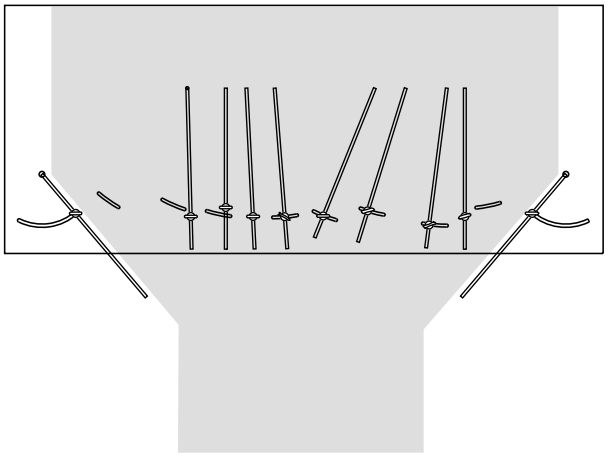
NOVACAT 225 extra dry

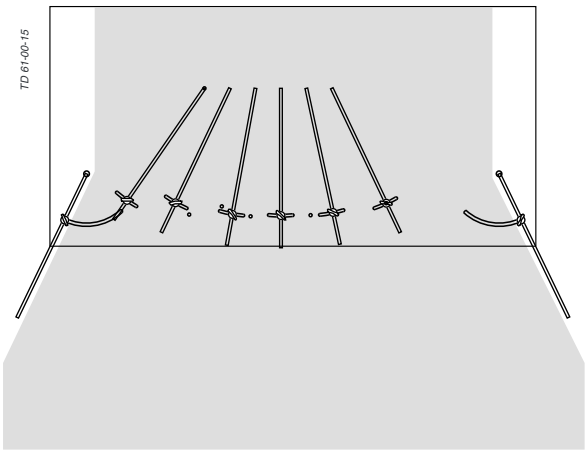
NOVACAT 265 extra dry

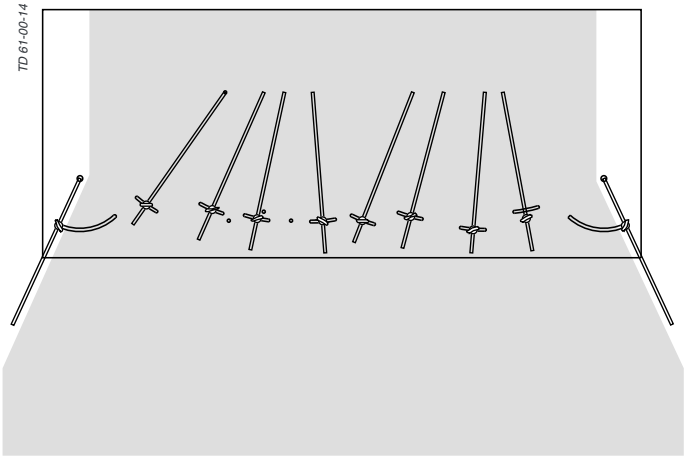
Swathes

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









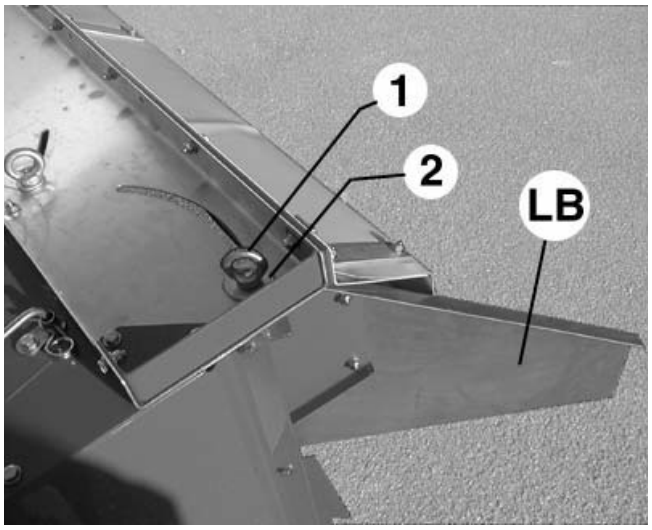
Spread width

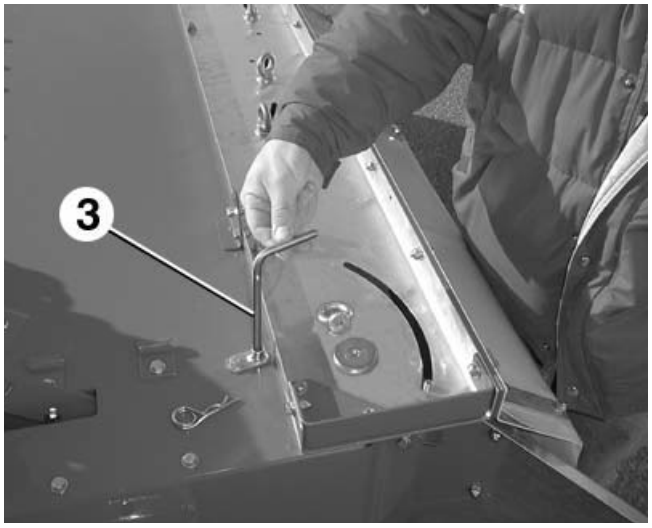
2. Set the positions of the guiding plates
   - see diagram

Dismount guide plate

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

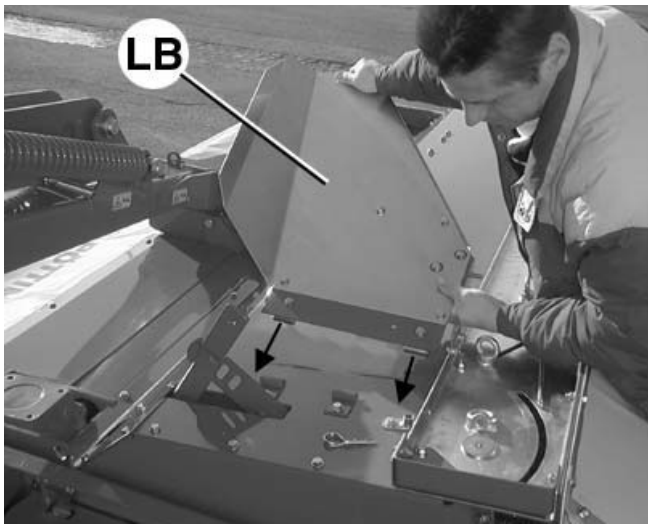
If a greater spread width is required, the guide plate can be removed.

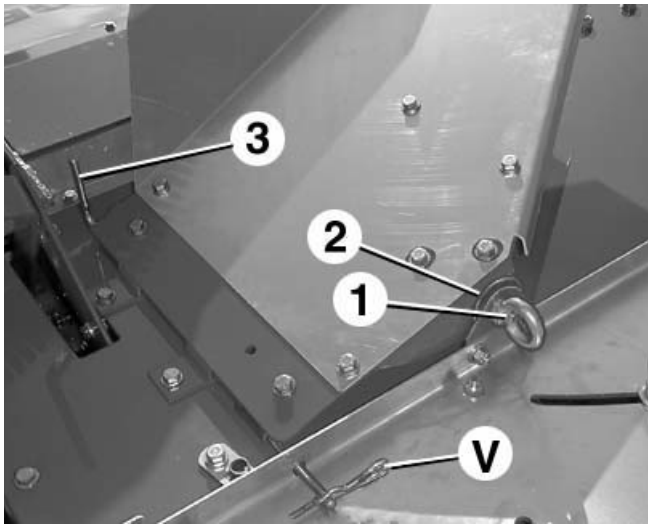




- Remove ring bolt (1) and washer (2).
- Remove split pin (V) and pull bolt (3) out

- 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

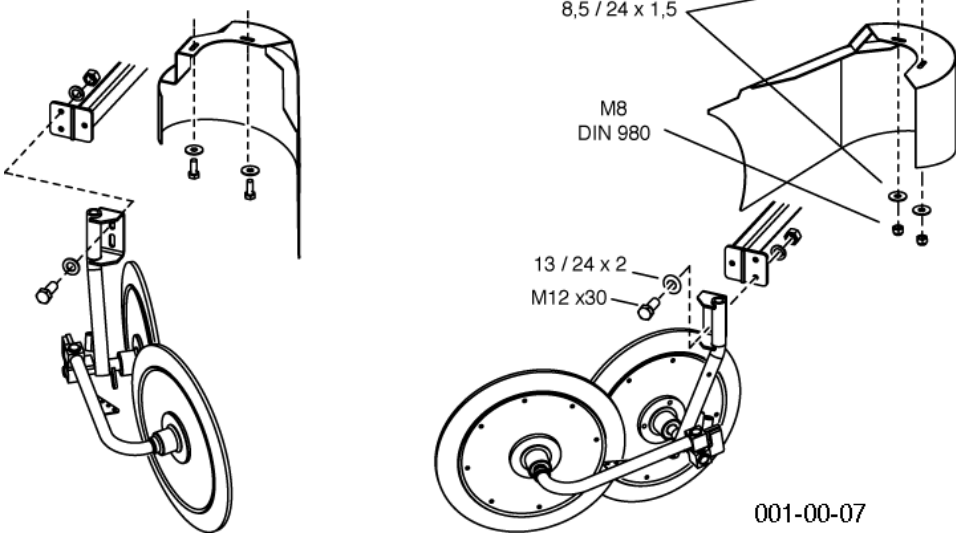
Mount guide plate

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

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

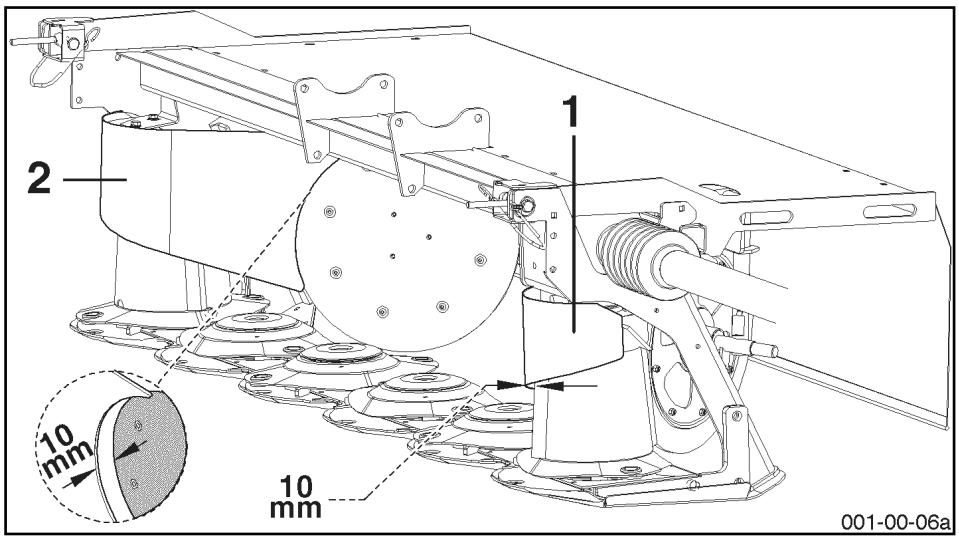
Swath Discs

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)

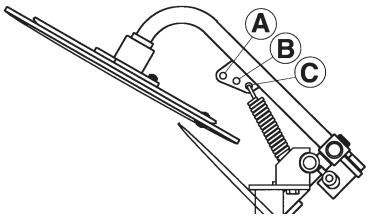


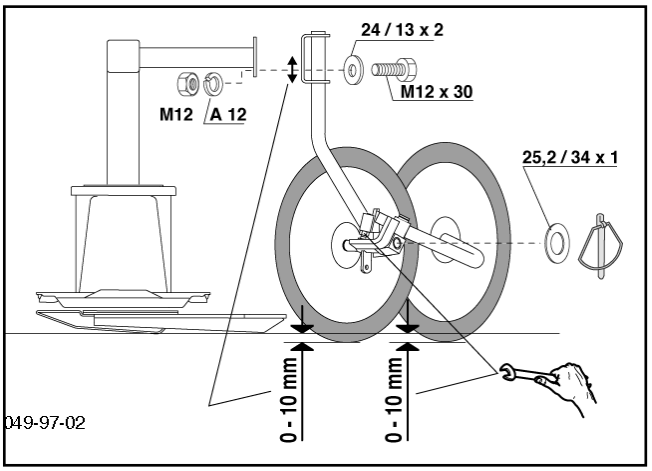
Setting both tension springs

A = for high dense forage

B = basic setting

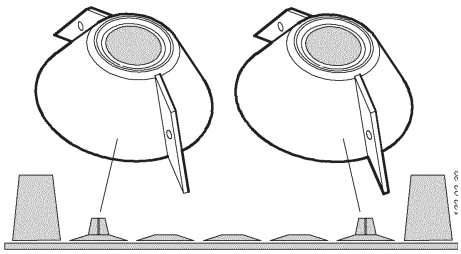
C = for short forage





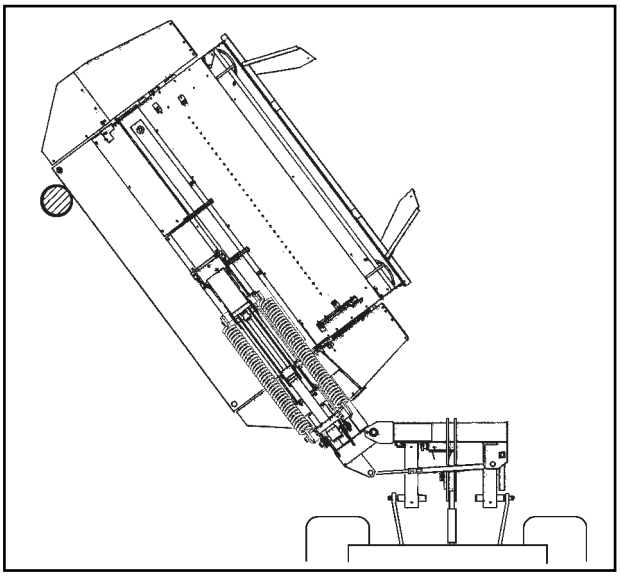
Flat cone conveyor (Optional extra)

- 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



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.

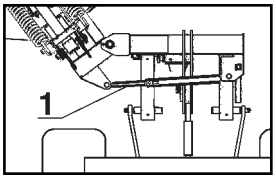


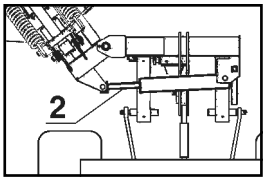
Attention!

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

Variant-1: Mechanical collision safety device, with spring loaded hook (1)

Variant-2: Hydraulic collision safety device (2), with hydraulic slewing unit





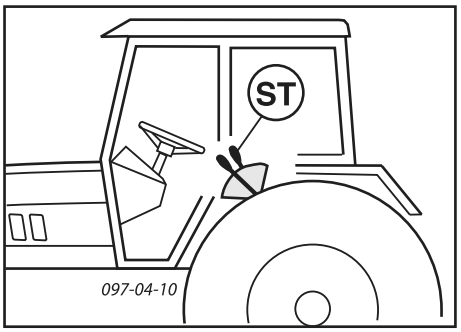
How the hydraulic collision safety device functions

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.

Instruction: switching from working to transport position (and vice versa) can be carried out even by this swivel device. See also chapter entitled "Transport and working position"



Function of collision safety device

If the mower encounters an obstacle, the springloaded hook (1) is released and the cutter bar can swing back.

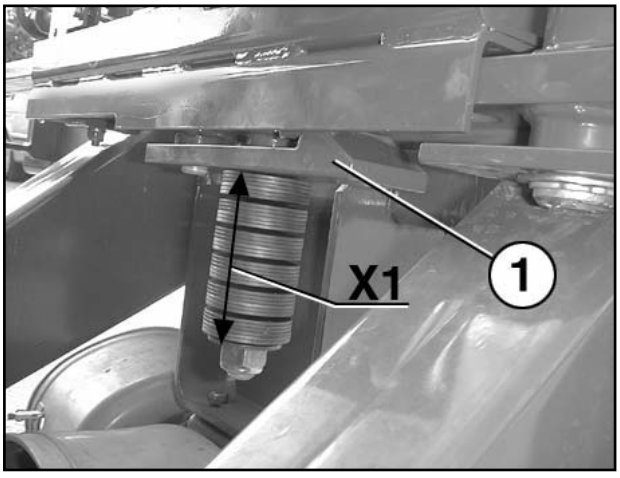
If you reverse a short distance then, the hook is relocked into position.

Adjustment:

In case the safety device trips to easy adjust hexagonal nut (Attention! Adjusting measurement: min. 100 mm).

Instruction: adjusting measurement (X1) is the same for all types (110 mm)

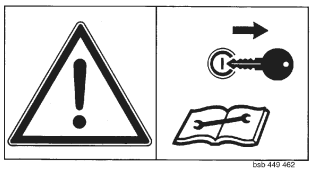
EUROCAT 275 H, 275 H-ED:	X1 = 110 mm	(min. 100 mm)
NOVACAT 225 H, 225 H-ED	X1 = 110 mm	(min. 100 mm)
NOVACAT 265 H, 265 H-ED:	X1 = 110 mm	(min. 100 mm)
NOVACAT 305 H, 305 H-ED	X1 = 110 mm	(min. 100 mm)
NOVACAT 350 H:	X1 = 110 mm	(min. 100 mm)



IF YOU ARE NOT SURE WHETHER THE CUTTING AREA IS REALLY FREE OF OBSTACLES, PLEASE WORK AT AN APPROPRIATE SLOW SPEED!

Safety point

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



General maintenance hints

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

- Tighten all screws after the first hours of operation.

In particular check:

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

Spare part

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.

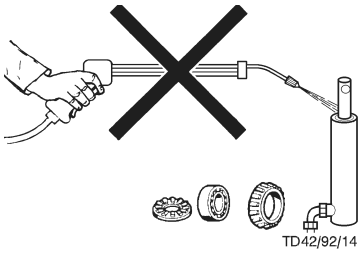
c. The installation and/or use of such products can, therefore, negatively change or influence the construction characteristics of the appliance. We are not liable for damages caused by the use of components and accessories that have not been supplied by us.

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

Cleaning of machine parts

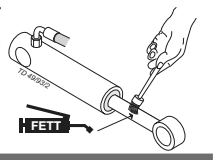
Attention! Do not use high-pressure washers for the cleaning of bearing- and hydraulic parts.

- 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!

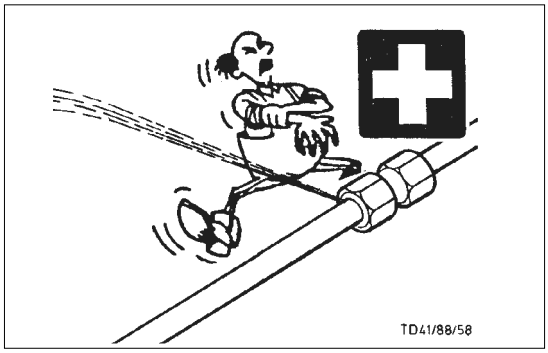
The instructions in this operating manual are always valid.

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!



Make sure that the hydraulic system is suitable for the tractor before connecting the hydraulic lines.

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

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

Before operation

- Check hydraulic hoses for wear.

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

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

Safety points!

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

• Do not work under the machine without safe support.

• Retighten all screws after the first hours of operation.

• Only place the machine on an even, firm ground.

Repair Instructions

Please refer to repair instructions in supplement (if available)

Safety points!

Clean the hydraulic line couplings and the oil connections each time before coupling.

Check for chafing and jamming points.

Cutter bar oil level check

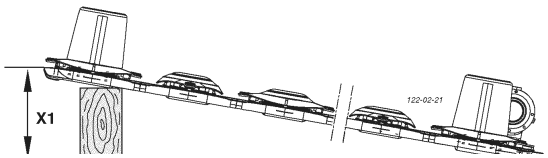
- Under normal operating conditions, oil is to be replenished annually.

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

X1 = Distance from ground to upper edge of cutter bar.

NOVACAT 225: X1 = 180 mm

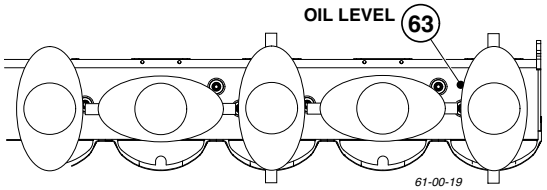
NOVACAT 265: X1 = 160 mm



- 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.

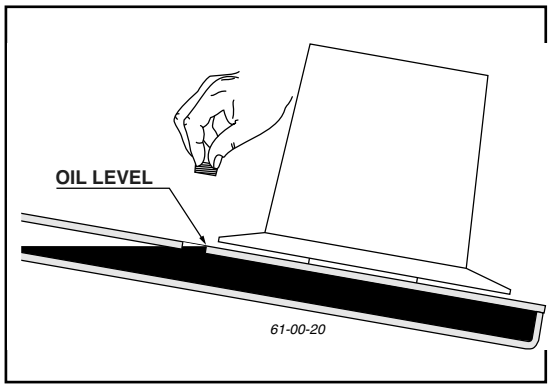
2. Let mower bar stand in this position for some 15 minutes.

- 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.

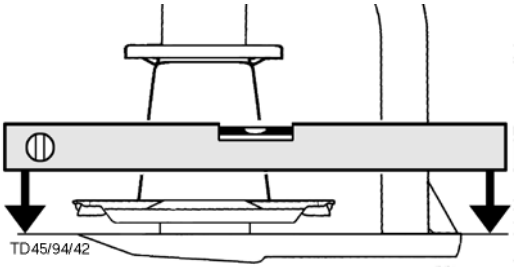


Important!

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

- Take out oil filler plug (63) and top up oil "SAE 90" up to the level screw[1].

4. Oil level check



The oil level is correct when the oil comes up to the level screw[1] (OIL LEVEL).

Note!

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

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

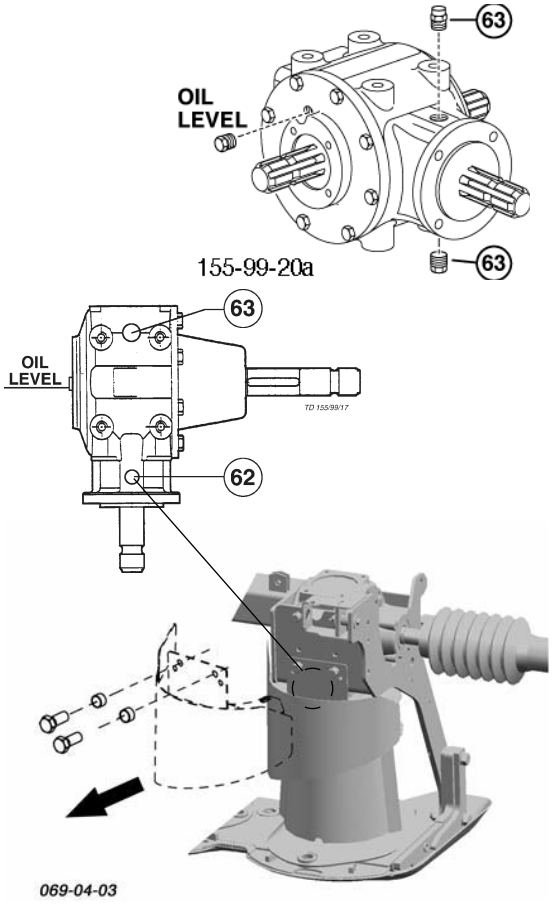
Changing oil - Angular gear

- Change oil after the first 50 operating hours.

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

- Change oil after 100 ha at the latest.

Quantity: 0,7 Liter SAE 90



Changing oil - Cutter bar

- Change oil after the first 50 operating hours or after 100 ha 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:

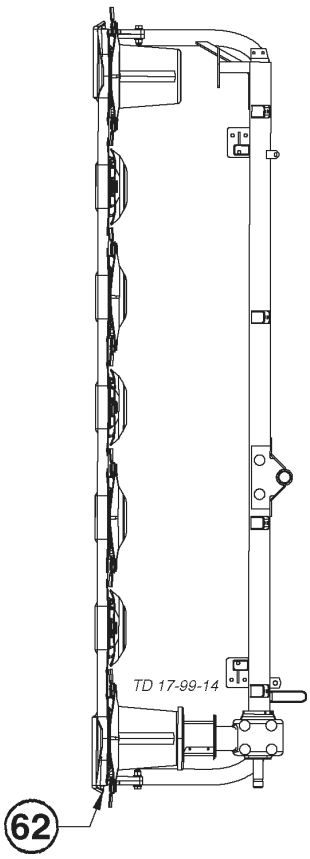
NOVACAT 225:

2,1 Liter SAE 90

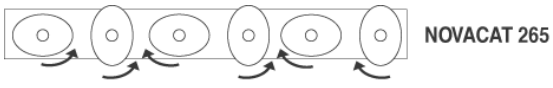
NOVACAT 265:

2,6 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.



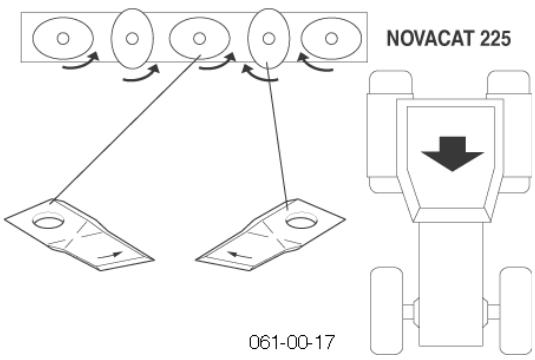
Installing cutter blades



Take note!

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

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



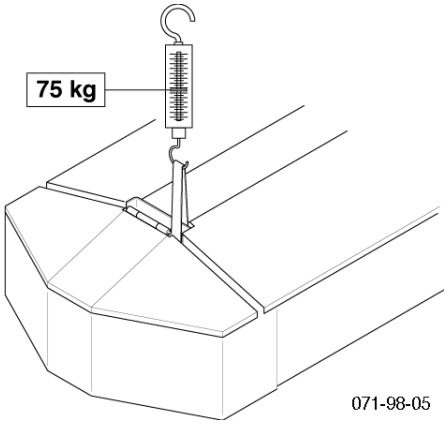
Check initial spring tension.

1. Mount the implement onto the tractor

- see chapter “Mounting onto Tractor”

2. Lower cutter bar to the ground

- the ground bearing load of the cutter bar outside right should be about **75 kg.**



Alter spring tension

1. Swivel cutter bar up into the vertical position

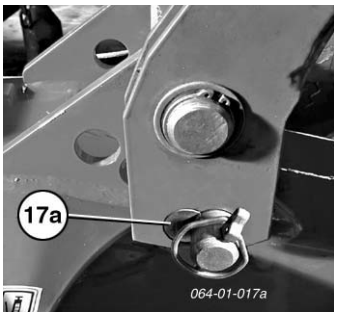
2. Make sure the safety hook has engaged!

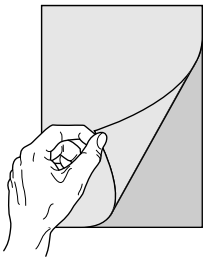
- see also chapter “Transport position - 2”

3. Pin bolt (18) in the relative position (a, b, c), see also Table.

Normal position of the pin bolt (18) is if the half-bolt is in the bore (17a).

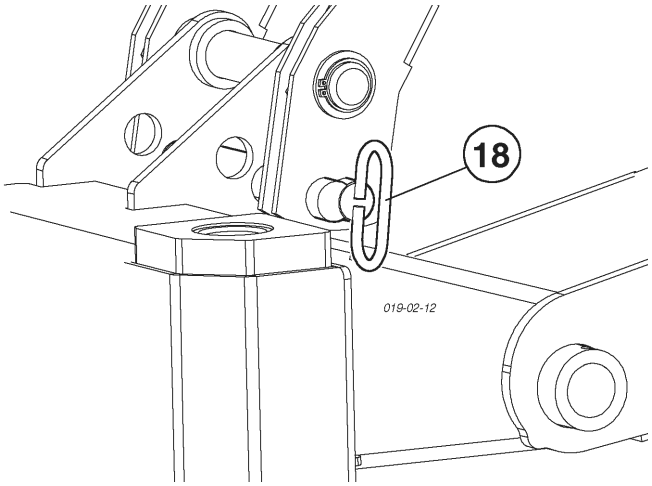
The pin bolt (18) can additionally be set up in intermediate positions. These intermediate positions can then be selected if by setting out in positions a, b, c no satisfactory bearing pressure can be achieved for the mowing bar.



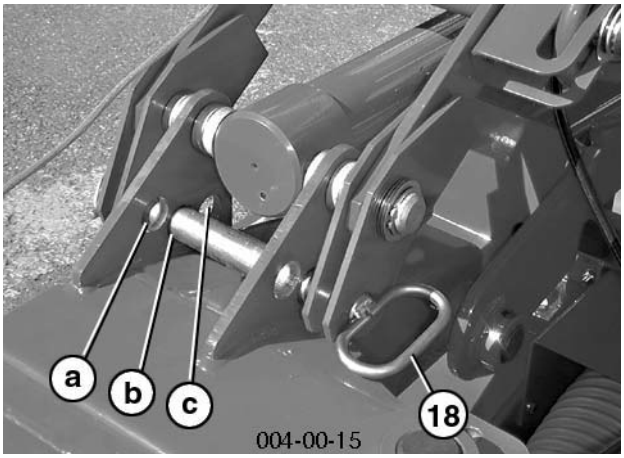


- Bj. 2001: At the same time turn the half-bolt 180° and take it out of the bore (17a). Afterwards put in the half-bolt (17) and turn as far as possible so that the pin bolt can be again inserted.

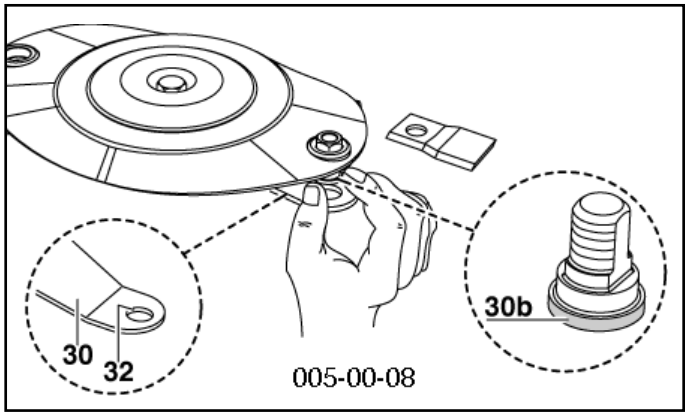
+ Bj. 2002: Pin bolt (18) in the relative position (a, b, c), see also Table.

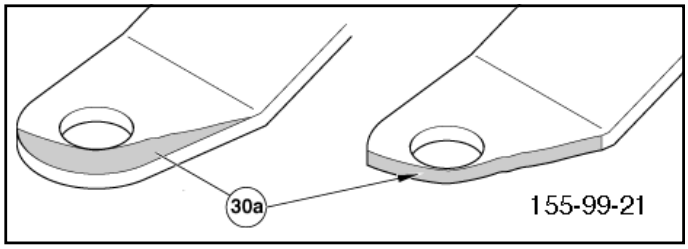


Tabel:	
NOVACAT 225	Pos. a
NOVACAT 225 extra dry	Pos. b
NOVACAT 265	Pos. b
NOVACAT 265 extra dry	Pos. c
NOVACAT 7800	Pos. b
NOVACAT 7800 extra dry	Pos. c
EUROCAT 275	Pos. a
EUROCAT 275 extra dry	Pos. b
NOVACAT 305	Pos. b
NOVACAT 305 extra dry	Pos. c
NOVACAT 8600	Pos. b
NOVACAT 8600 extra dry	Pos. c
EUROCAT 315	Pos. b
EUROCAT 315 extra dry	Pos. c
NOVACAT 350	Pos. c



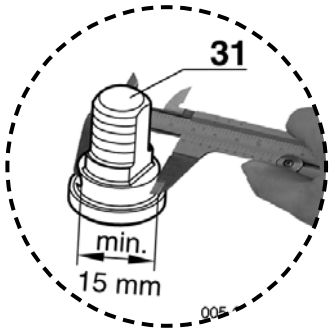
Checking wear on mowing blade holders





Wearing parts are:

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



Attention!

Danger of accident if wearing parts are worn

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

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

Process of visual control:

1. remove mowing blades

2. remove grass and dirt

- around pin (31)

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

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

Attention !

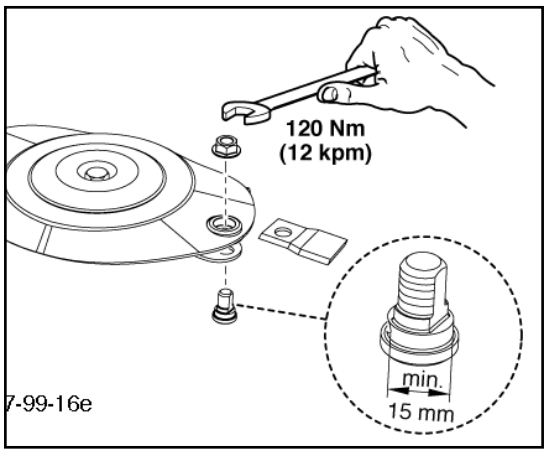
Danger of accident if:

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

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

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

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



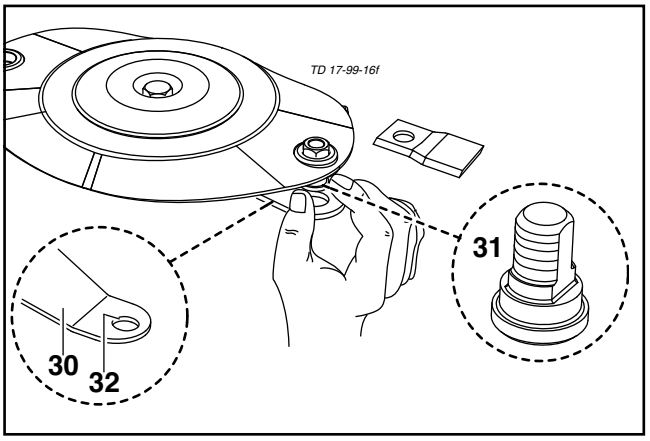
Holder for a quick change of cutter blades

Attention!

For Your Safety

- Regularly check that cutter blades are tightened firmly!
  - Cutter blades on a cutter disc should wear out simultaneously (danger of imbalance).

    Otherwise they are to be replaced with new ones (replace in pairs).
  - Buckled or damaged cutter blades must not be used further.
- Buckled, damaged and/or worn cutter blade holders (30) should not be used further.



Checking the mowing blade suspension

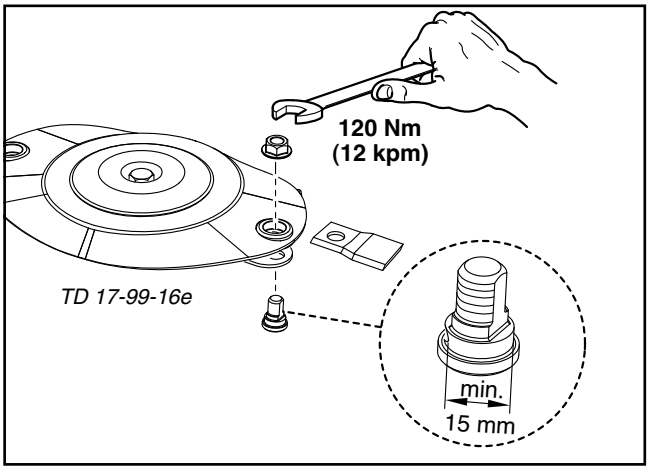
- Normal check every 50 hours.
- Check more often when mowing on stony terrain or in other difficult operating conditions.
- Check immediately after driving over a hard obstacle (e.g. stones pieces of wood, ect).

Carry out a check

- as described in chapter „Changing the Cutter Blades“

Take note!

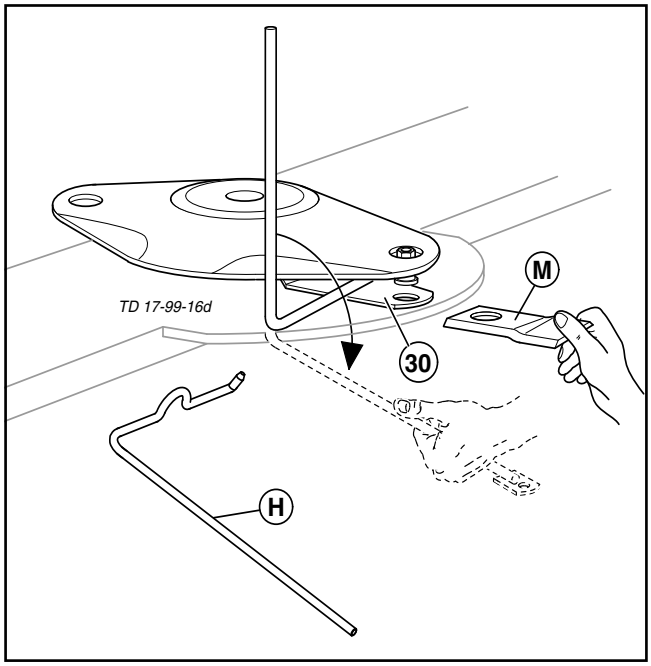
Damaged, buckled and worn out parts must not be used further (danger of accident).



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.

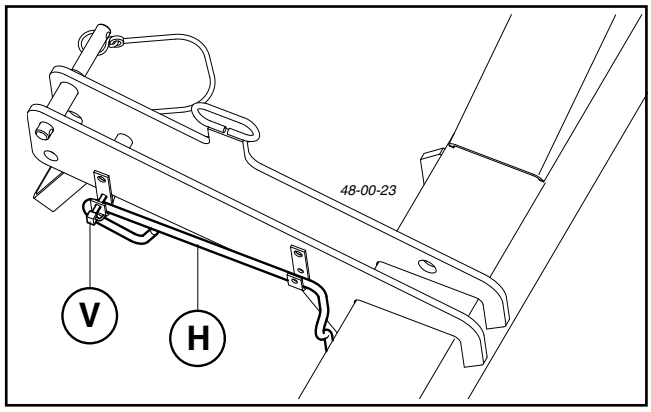
- around the bolts (31) and inside the borehole (32)

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

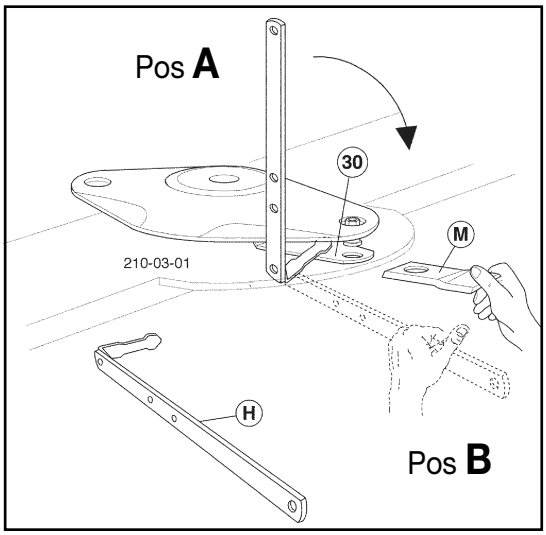
6. Fit cutter blades and remove lever (H)

- Place lever (H) into the 2 U – bolts and secure with spring cutter (V)

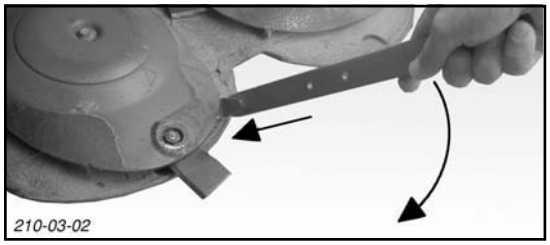


Changing the Cutter Blades (from 2004 model)

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)**

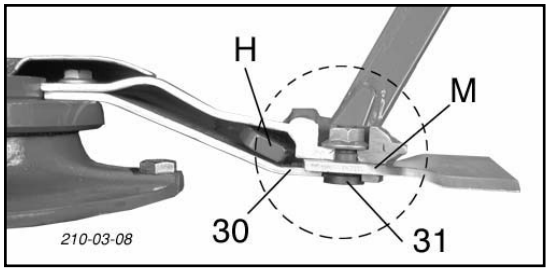


4. **Clean forage remains and dirt away.**
   - around the bolts (31) and inside the borehole (32)
5. **Check:**



- 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**



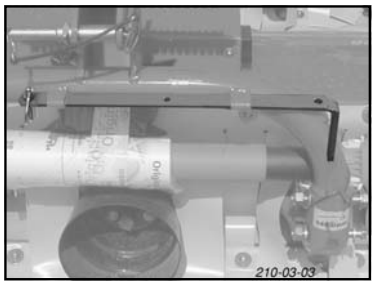
positioned between blade bolts (31) and holder (30) (see diagram)**.**

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

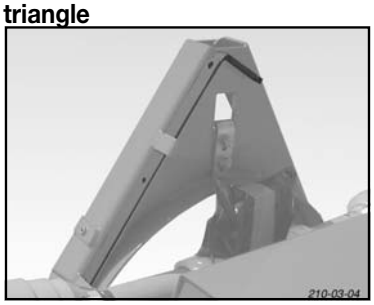
Storing the lever

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

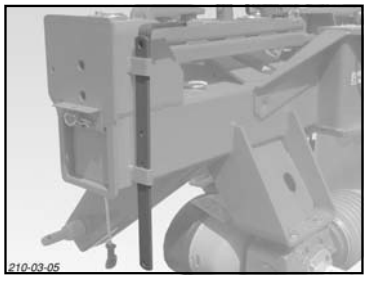
Nova Alpin 226/266



Nova Alpin 226/266 Weiste triangle

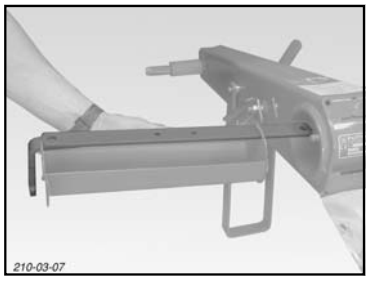


Nova Cat 225/ 265 / 305 / 350 / 400



Nova Cat 266F / 306F

Nova Disc 225



Technical data

NOVACAT 225 / NOVACAT 225 ED	**(Type PSM 377)**
Three-point linkage (adjustable)	Kat. II
Working width	2,30 m
No. of mowing discs	5
No. of knives per disc	2
Hydraulic lift (single-acting)	
Coverage up to	2,3 ha/h
Max. p.t.o. speed	540 / 1000 min^{-1}
Weight[1)]	680 kg / 840 kg
Required power	37 kW (50 PS) / 44 kW (60 PS)
Torque limiter	1500 Nm
Permanent sound emmission level	91,4 dB(A)

All data subject to revision.

NOVACAT 265 / NOVACAT 265 ED	**(Type PSM 378)**
Three-point linkage (adjustable)	Kat. II
Working width	2,62 m
No. of mowing discs	6
No. of knives per disc	2
Hydraulic lift (single-acting)	
Coverage up to	2,8 ha/h
Max. p.t.o. speed	540 / 1000 min^{-1}
Weight[1)]	725 / 900 kg
Required power	44 kW (60 PS) / 51 kW (70)
Torque limiter	1500 Nm
Permanent sound emmission level	91,6 dB(A)

Optional equipment:

Conditioner

Lighting

Warning table

All data subject to revision.

Optional equipment:

Conditioner
Lighting
Warning table
Hydraulic slewing unit

Necessary connections

- 1 single-action hydraulic connection
  (necessary minimum tractor fitting)
  pressure min.: 80 bar
  pressure max.: 180 bar

- 1 double-action hyfraulic connection
  (only for machines with hydraulic slewing equipment)
  pressure min.: 140 bar
  pressure max.: 180 bar

- 7-pole electric connection for lighting (12 Volt)

1) Weight: Variations possible depending on machine features.

Position of Vehicle Identification Plate

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

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

The defined use of the mower unit

The „**NOVACAT 225 (Type PSM 377)“ „NOVACAT 265 (Type PSM 378)**“ 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. Operating instructions

a. The operating instructions are important for the correct operation of the machine. Make sure that the operating instructions are always on hand when operating the machine.

b. Keep the operating instructions as long as the machine is in your hands.

c. Pass the operating instructions on to the buyer when selling the machine.

d. Make sure that all safety and warning symbols remain attached on the machine and keep them readable. The hazard warnings provide important information for a safe operation and, thus, your safety.

2. Qualified personnel

a. Only persons of legal age, mentally and physically able and having been trained or familiarized accordingly must operate this machine.

b. Persons not yet trained or familiarized or under training must only operate this machine under the supervision of an experienced person.

c. Inspection, setting and repair work must only be performed by authorized persons.

3. Repair work

a. These instructions only refer to service, maintenance and repair operations the user is able to carry out without assistance. Any work beyond this scope has to be carried out at authorized workshops only.

b. Repairs on the electrical and hydraulic system, preloaded springs, pressure accumulators, etc. require sufficient knowledge, correct tools and protective clothing and, thus, must only be performed at authorized workshops.

4.) Defined use

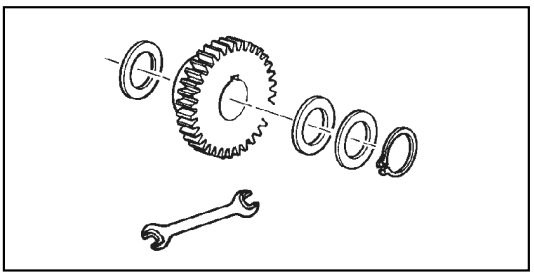
a. See "Technical Data".

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

5.) 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.

6.) Protection devices

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

7.) 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.

8.) Asbestos

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

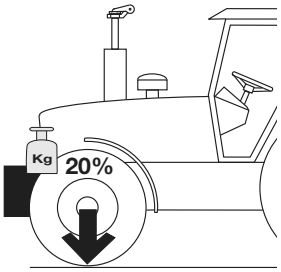
9.) Transport of persons prohibited

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.

10.) 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 semimounted implements, take into account the working range and swing mass of the implement!

11.) 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!

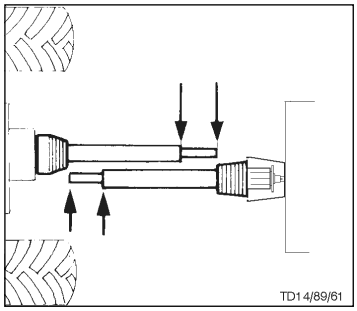
i. For all maintenance, service and modification work, turn driving motor off and remove universal drive.

12.) Cleaning the machine

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

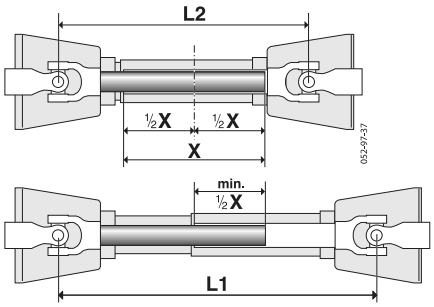
Matching driveshaft to tractor

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



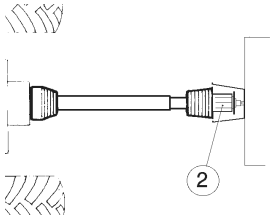
T rimming procedure

- To adjust the length, place the pto halves in the shortest operating position (L2) next to one another and mark.



Caution!

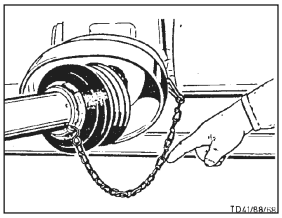
- Note the maximum operating length (L1)
  - Aim at the maximum possible tube superimposition (min. 1/2 X)
- Trim the inner and outer protective tube equally
- Attach overload fuse (2) at the implement!
- Always check that drive shaft locks are securely engaged before starting work.



Safety chain

- Use chain to prevent tube guard from rotating.

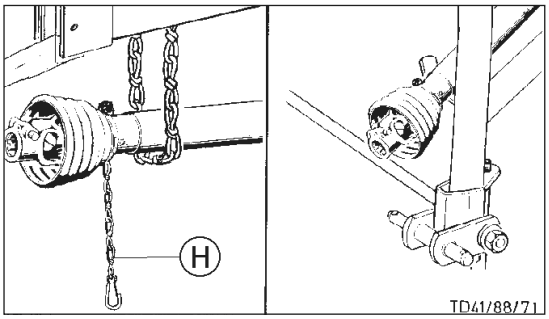
  Ensure sufficient swivel space for the cardan shaft!
- Trim the safety chain so that it cannot wind around the cardan shaft.



Instructions for working

The permissible pto speed may not be exceeded when using the implement.

- The hitched implement may continue to run after the pto is switched off. Work may only be performed once it has reached complete standstill.
- The cardan shaft must be put down or secured using a chain when the implment is parked. Do not use safety chain (H) to suspend the cardan shaft.



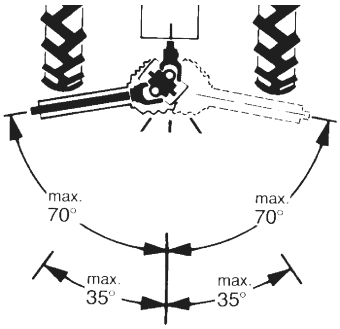
Wide-angle joint:

Maximum angle in operation and at standstill 70°.

Standard joint :

Maximum angle at standstill 90°.

Maximum angle in operation 35°.

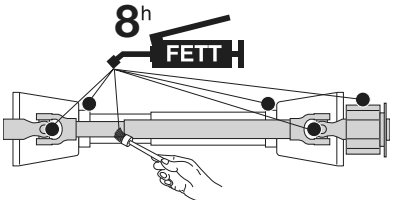


Maintenance

Replace work covers immediately.

- 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.



Be advised!

Only use the cardan shaft supplied or stated; otherwise the warranty claims for any damage are not valid.

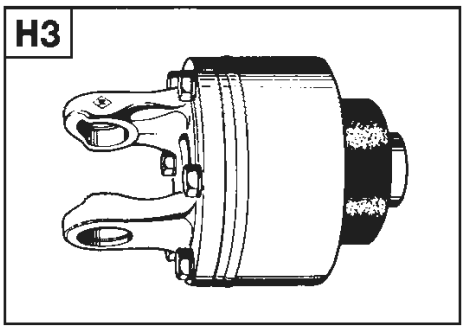
Information on function when using a cam shifting clutch.

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.

Be advised!

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



TAKE NOTE!

The overload clutch on the driveshaft is not a “Full up” indicator. It is purely an overload protection device designed to protect your vehicle against damage.

Sensible driving avoids frequent engaging of the clutch and prevents unnecessary wear to the clutch and the implement.

Greasing interval: 500 hrs (Special lubricant)

Important for driveshafts with friction clutch

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

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

a) Measure dimension „L“ at compression spring of K90, K90/4 and K94/1 or at set screw of K92E and K92/4E.

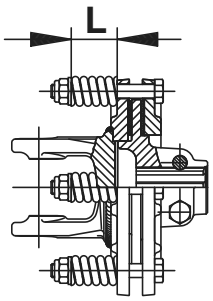
b.) Loosen screws to release the pressure on the friction disk.

Slip the clutch.

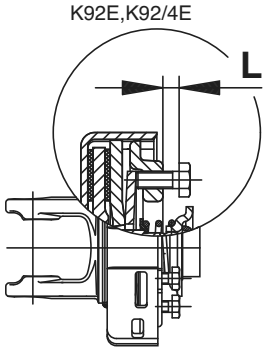
c.) Tighten set screws to dimension "L".

Clutch is ready for use.

K90,K90/4,K94/1

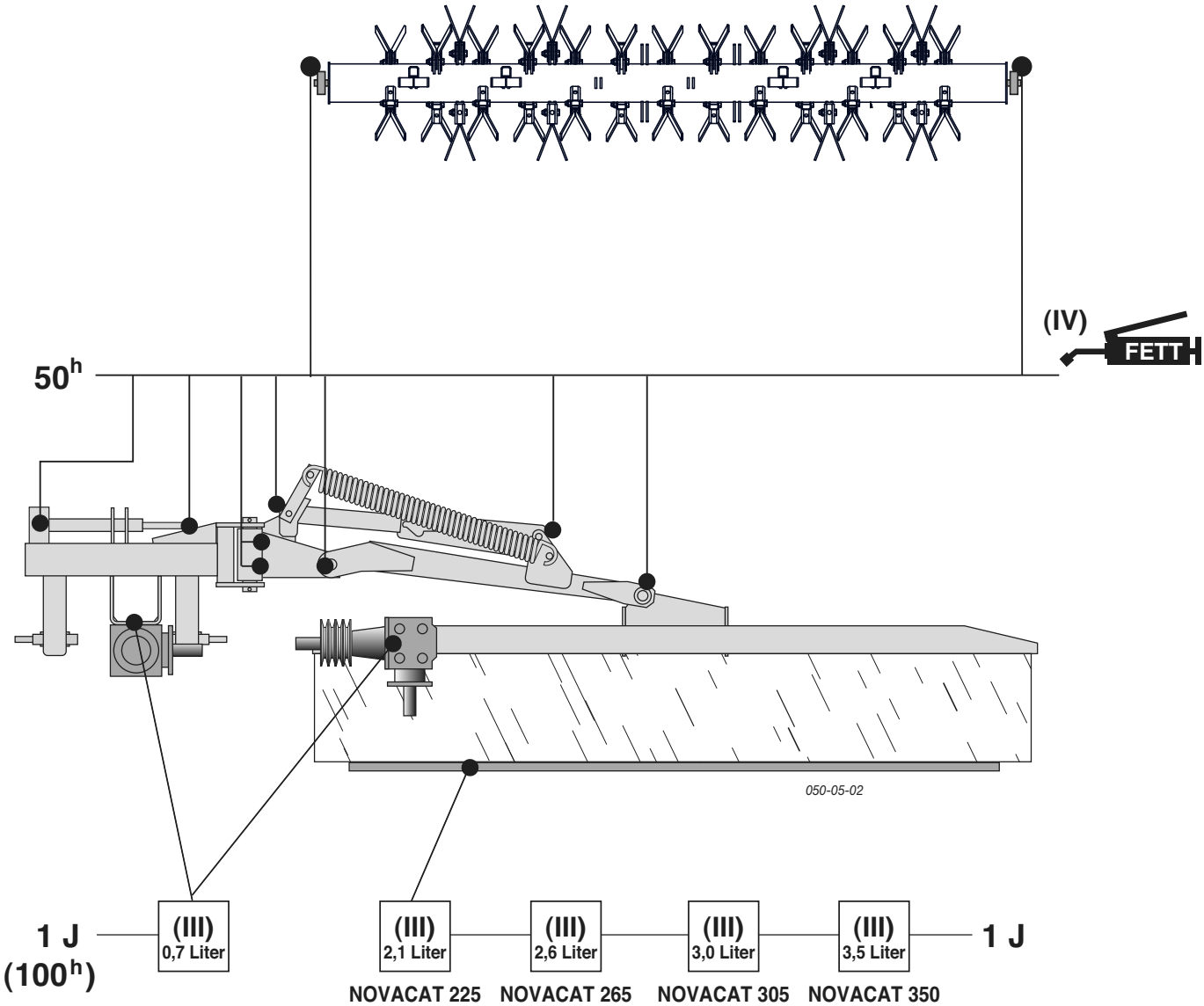


K92E,K92/4E



Lubrication chart

X^{h}	after every X hours operation
40 F	all 40 loads
80 F	all 80 loads
1 J	once a year
100 ha	every 100 hectares
BB	if necessary
	GREASE
	Oil
 =	Number of grease nipples
 =	Number of grease nipples
(III), (IV)	see supplement „Lubrificants“
[l]	Litre
– – – –	Variation
	See manufacturer’s instructions
↺	Rotations per minute
	Always screw in measuring stick up to stop.


(IV)
FETT
50h
050-05-02
1 J
(100h)
(III)
0,7 Liter
(III)
2,1 Liter
(III)
2,6 Liter
(III)
3,0 Liter
(III)
3,5 Liter
1 J
NOVACAT 225
NOVACAT 265
NOVACAT 305
NOVACAT 350

GB

Lubricants

Edition 2013

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.

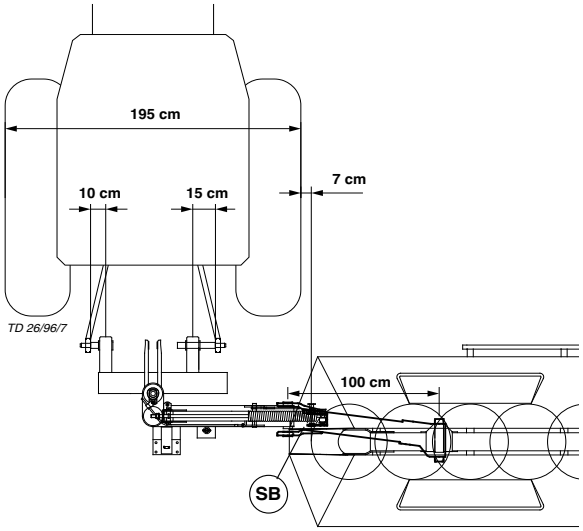
Before garaging (winter season) an oil change and greasing of all lubricating points has to be done. Unprotected, blanc metal parts outside (joints, etc.) have to be protected against corrosion with a group "Iv" product as indicated on the reverse of this page.

Corrosion protection: Fluid 466

Lubricant indicator	**I**		**III**		**V**	**VI**	**VII**
required quality level niveau	HYDRAULIKöL HLP DIN 51524 Teil 2 See notes: * ** ***	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

Company	I	(II)	III	(IV)	V	VI	VIII	NOTATIONS
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	* The international specification J 20 A is necessary for compound operation with wet brake tractors. ** HLP-(D) + HV hydraulic oils *** HLP + HV hydraulic oils with a vegetable oil basis, biodegradable and therefore environmentally friendly.
ARAL	VITAM GF 32/46/68 VITAM HF 32/46	SUPER KOWAL 30 MULTI TURBORAL SUPER TRAKTORAL 15W-30	GETRIEBEÖL EP 90 GETRIEBEÖL HYP 85W-90	ARALUB HL 2	ARALUB FDP 00	ARALUB FK 2	GETRIEBEÖL HYP 90	
AVIA	AVILUB RL 32/46 AVILUB VG 32/46	MOTOROIL HD 30 MULTIGRADE HDC 15W-40 TRACTAVIA HF SUPER 10 W-30	GETRIEBEÖL MZ 90 M 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 * HYDRAULIKÖL 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 AUSTROTRAC 15W-30	GETRIEBEÖL MP 85W-90 GETRIEBEÖL B 85W-90 GETRIEBEÖL C 85W-90	LORENA 46 LITORA 27	RHENOX 34	-	GETRIEBEÖL B 85W-90 GETRIEBEÖL C 85W-140	
ELF	OLNA 32/46/68 HYDRELF 46/68	PERFORMANCE 2 B SAE 30 8000 TOURS 20W-30 TRACTORELF ST 15W-30	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	• TITAN HYD 1030 • AGRIFARM STOU MC 10W-30 • AGRIFARM UTTO MP • PLANTOHYD 40N ***	• AGRIFARM STOU MC 10W-30 • TITAN UNIVERSAL HD	• AGRIFARM GEAR 80W90 • AGRIAFRM GEAR 85W-140 • AGRIFARM GEAR LS 90	• AGRIFARM HITEC 2 • AGRIFARM PROTEC 2 • RENOLIT MP • RENOLIT FLM 2 • PLANTOGEL 2-N	• AGRIFARM FLOWTEC 000 • RENOLIT SO-GFO 35 • RENOLIT DURAPLEX EP 00 • PLANTOGEL 00N	• RENOLIT DURAPLEX EP 1	• AGRIFARM GEAR 8090 • AGRIFARM GEAR 85W-140 • AGRIFARM GEAR LS90	
GENOL	HYDRAULIKÖL HLP/32/46/68 HYDRAMOT 1030 MC * HYDRAULIKÖL 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	

Company	I	(II) OIL	III	FETT (IV)	V	VI	VIII	NOTATIONS
SHELL	TELLUS S32/S46/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	* The international specification J 20 A is necessary for compound operation with wet brake tractors. ** HLP-(D) + HV hydraulic oils *** HLP + HV hydraulic oils with a vegetable oil basis, biodegradable and therefore environmentally friendly.
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	
VEEDOL	ANDARIN 32/46/68	HD PLUS SAE 30	MULTIGRADE SAE 80/90 MULTIGEAR B 90 MULTIGEAR C SAE 85W-140	MULTIPURPOSE	-	-	MULTIGEAR B 90 MULTI C SAE 85W-140	
WINTERSHALL	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	
MOTOREX	COREX HLP 32 46 68** COREX HLPD 32 46 68** COREX HV 32 46 68** OEKOSYNT 32 46 68***	EXTRA SAE 30 FARMER TRAC 10W/30	GEAR OIL UNIVERSAL 80W/90 GEAR OIL UNIVERSAL 85W/140	FETT 176 GP FETT 190 EP FETT 3000	FETT 174	FETT 189 EP FETT 190 EP FETT 3000	GEAR OIL UNIVERSAL 80W/90 GEAR OIL UNIVERSAL 85W/140	

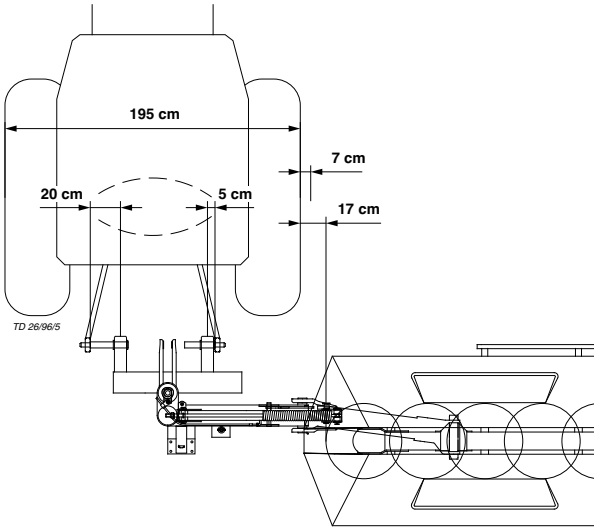


Attachment variations

Example: Tractor with a width of **195 cm**.

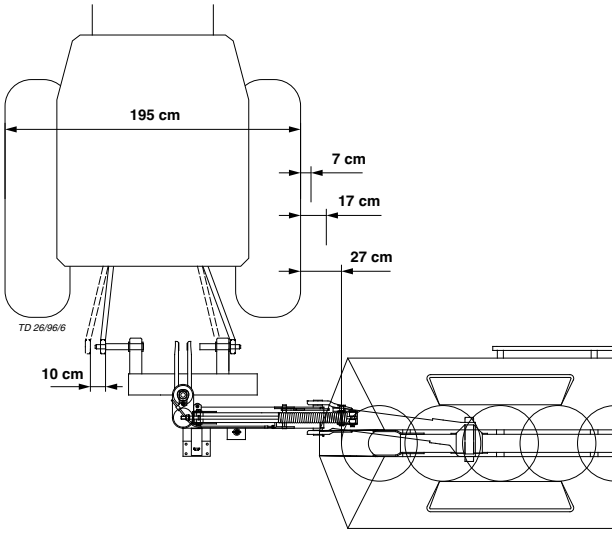
1. Attachment variation (7 cm)

- Install lower link bolts according to sketch
  - left **10 cm**
  - right **15 cm**



2. Attachment variation (17 cm)

- interchange left and right lower link bolts and install according to sketch
  - left **20 cm**
  - right **5 cm**

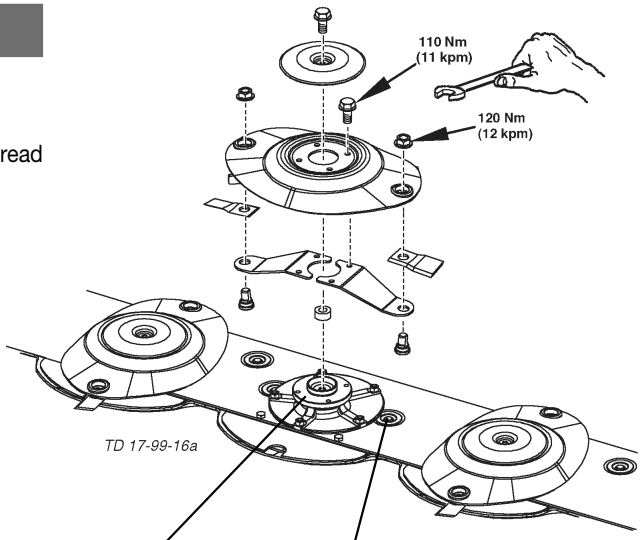


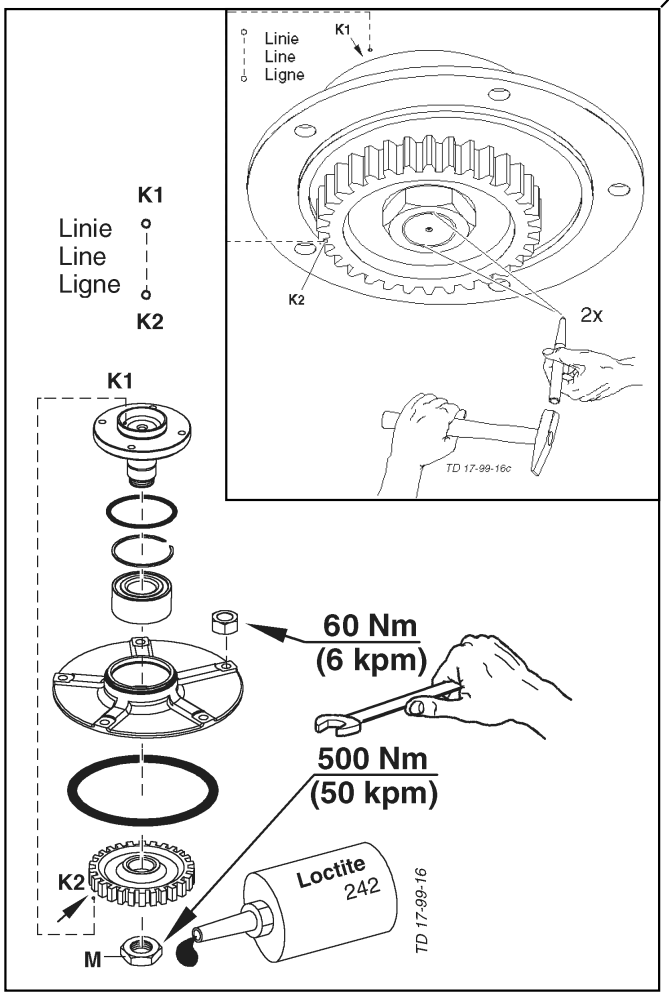
3. Attachment variation (27 cm)

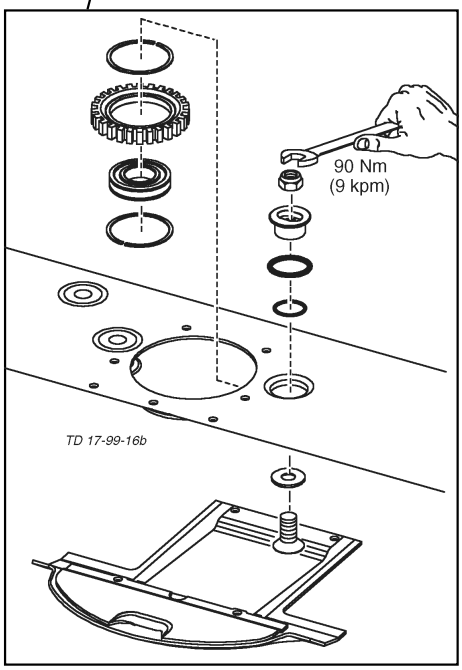
- As in point 2, but in addition
  - relocate lower links about **10 cm** to the right

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)







Taper bushes installation instructions

To assemble

1. Clean and degrease the bore and taper surfaces of the bush and the tapered bore of the pulley.
2. Insert the bush in the pulley hub and line up the holes (half thread holes must line up with half straight holes).
3. Lightly oil the grub screws (bush size 1008 to 3030) or the cap screws (bush size 3535 to 5050) and screw them in, do not tighten yet.
4. Clean and degrease the shaft. Fit pulley with taper bush on shaft and locate in desired position.
   - When using a key it should first be fitted in the shaft Keyway. There should be a top clearance between the key and the keyway in the bore.
   - Using a hexagon socket wrench (DIN 911) gradually tighten the grub/cap screws in accordance with the torques as listed in the schedule of screw tightening torques

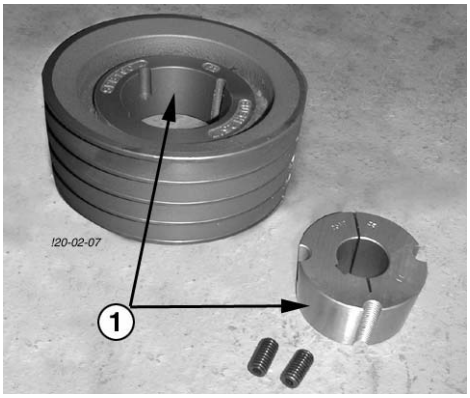
Bush identifier	Torque [Nm]
2017	30
2517	49

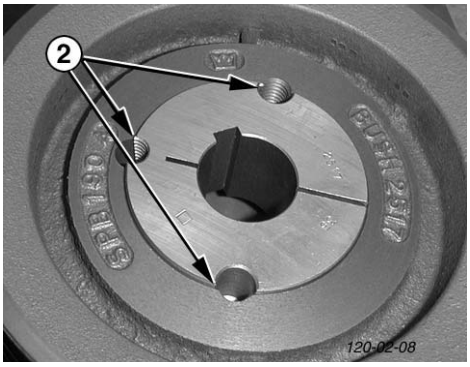
   - When the drive has been operating under load for a short period (half to on hour) check and ensure that the screws remain at the appropriate tightening torque.
   - In order to eliminate the ingress of dirt fill all empty holes with grease.

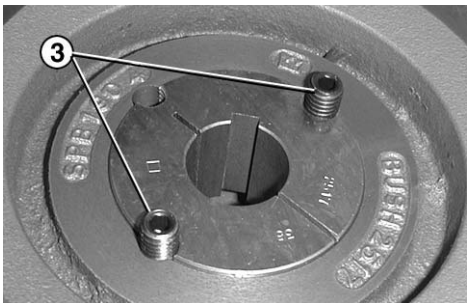
Removal

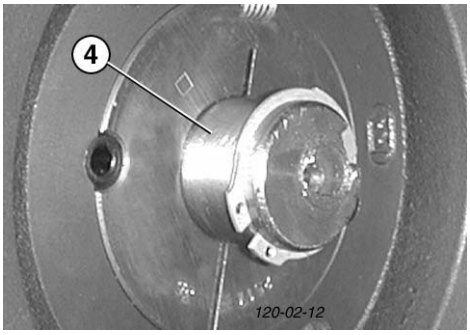
1. Slacken all screws. Depending on the size of the bush remove one or two.

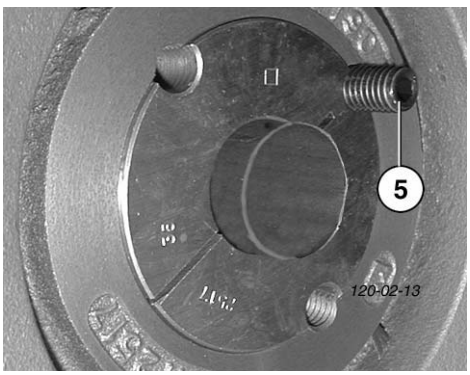
   After oiling point and thread of grub screws or under head and thread of cap screws insert them into the jacking off holie(s) in bush (Pos. 5).
2. Tighten screw(s) unitormly and alternately until the bush is loose in the hub and pulley is free on the shaft.
3. Remove pulley bush assembly from shaft.









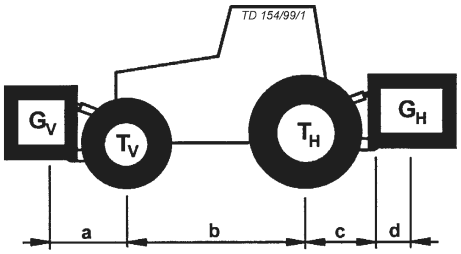


Combination of tractor and mounted implement

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 instruction 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!

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

EC Conformity Declaration

Original Conformity Declaration

Name and address of the manufacturer:

Pöttinger Landtechnik GmbH
Industriegelände 1
AT - 4710 Grieskirchen

Machine (interchangeable equipment):

mower	NOVACAT	225 / 225 ED	265 / 265 ED
Type		377	378
Serial no.			

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

machinery 2006/42/EG

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

Source of applied, harmonised norms:

EN ISO 12100 EN ISO 4254-1 EN ISO 4254-12

Source of applied miscellaneous technical norms and / or specifications:

Person responsible for documentation:
Andreas Gadermayr
Industriegelände 1
A-4710 Grieskirchen

Klaus Pöttinger,
Corporate management

Grieskirchen, 22.02.2016

(D) Im Zuge der technischen Weiterentwicklung arbeitet die PÖTTINGER Landtechnik GmbH ständig an der Verbesserung ihrer Produkte.

Änderungen gegenüber den Abbildungen und Beschreibungen dieser Betriebsanleitung müssen wir uns darum vorbehalten, ein Anspruch auf Änderungen an bereits ausgelieferten Maschinen kann daraus nicht abgeleitet werden.

Technische Angaben, Maße und Gewichte sind unverbindlich. Irrtümer vorbehalten.

(NL) PÖTTINGER Landtechnik GmbH werkt permanent aan de verbetering van hun producten in het kader van hun technische ontwikkelingen. Daarom moeten wij ons veranderingen van de afbeeldingen en beschrijvingen van deze gebruiksaanwijzing voorbehouden, zonder dat daaruit een aanspraak op veranderingen van reeds geieverde machines kan worden afgeleid.

Technische gegevens, maten en gewichten zijn niet bindend. Vergissingen voorbehouden.

(P) A empresa PÖTTINGER Landtechnik GmbH esforçase continuamente por melhorar os seus produtos, adaptando-os à evolução técnica.

Por este motivo, reservamonos o direito de modificar as figuras e as descrições constantes no presente manual, sem incorrer na obrigação de modificar máquinas já fornecidas.

As características técnicas, as dimensões e os pesos não são vinculativos.

(F) La société PÖTTINGER Landtechnik GmbH améliore constamment ses produits grâce au progrès technique.

C'est pourquoi nous nous réser-vons le droit de modifier descriptions et illustrations de cette notice d'utilisation, sans qu'on en puisse faire découler un droit à modifications sur des machines déjà livrées.

Caractéristiques techniques, dimensions et poids sont sans engagement. Des erreurs sont possibles.

(E) La empresa PÖTTINGER Landtechnik GmbH se esfuerza contínuamente en la mejora constante de sus productos, adaptándolos a la evolución técnica. Por ello nos vemos obligados a reservarnos todos los derechos de cualquier modificación de los productos con relación a las ilustraciones y a los textos del presente manual, sin que por ello pueda ser deducido derecho alguno a la modificación de máquinas ya suministradas.

Los datos técnicos, las medidas y los pesos se entienden sin compromiso alguno.

(GB) Following the policy of the PÖTTINGER Landtechnik GmbH to improve their products as technical developments continue, PÖTTINGER reserve the right to make alterations which must not necessarily correspond to text and illustrations contai-ned in this publication, and without incurring obligation to alter any machines previously delivered.

Technical data, dimensions and weights are given as an indication only. Responsibility for errors or omissions not accepted.

(I) La PÖTTINGER Landtechnik GmbH è costantemente al lavoro per migliorare i suoi prodotti mantenendoli aggiornati rispetto allo sviluppo della tecnica.

Per questo motivo siamo costretti a riservarci la facoltà di apportare eventuali modifiche alle illustrazioni e alle descrizioni di queste istruzioni per l'uso. Allo stesso tempo ciò non comporta il diritto di fare apportare modifiche a macchine già fornite.

I dati tecnici, le misure e i pesi non sono impegnativi. Non rispondiamo di eventuali errori. Ristampa o traduzione, anche solo parziale, solo dietro consenso scritto della

PÖTTINGER
Landtechnik GmbH
A-4710 Grieskirchen
Telefon: 0043 (0) 72 48 600-0
Telefax: 0043 (0) 72 48 600-2511
e-Mail: info@poettinger.at
Internet: http://www.poettinger.at

GEBR. PÖTTINGER GMBH
Stützpunkt Nord
Steinbecker Strasse 15
D-49509 Recke
Telefon: (0 54 53) 91 14 - 0
Telefax: (0 54 53) 91 14 - 14

PÖTTINGER France
129 b, la Chapelle
F-68650 Le Bonhomme
Tél.: 03.89.47.28.30
Fax: 03.89.47.28.39

GEBR. PÖTTINGER GMBH
Servicezentrum
Spöttinger-Straße 24
Postfach 1561
D-86 899 LANDSBERG / LECH
Telefon:
Ersatzteildienst: 0 81 91 / 92 99 - 166 od. 169
Kundendienst: 0 81 91 / 92 99 - 130 od. 231
Telefax: 0 81 91 / 59 656