Operator‘s manual

Translation of the original Operating Manual

Nr. 99+3741.EN.80Z.0

Chassis Nr.

Disc mower

NOVADISC 222
(Type PSM 3741 : + . . 01001)

NOVADISC 262
(Type PSM 3742 : + . . 01001)

NOVADISC 302
(Type PSM 3743 : + . . 01001)

NOVADISC 352
(Type PSM 3744 : + . . 01001)

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.

Confirmation is required to prove that the machine and the operating instructions have been properly handed over. For this purpose you have received a confirmation e-mail from Pöttinger. If you have not received this mail, please contact your local dealer. Your dealer can fill in the handover declaration online.

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.

(EN) INSTRUCTIONS FOR PRODUCT HANDOVER

PÖTTINGER Landtechnik GmbH
Industriegelände 1
4710 Grieskirchen, Austria
Tel. 07248 / 600 -0
Telefax 07248 / 600-2511

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

Please place a cross where appropriate. [X]

- ❑ Machine checked according to delivery note. All attached parts removed. All safety equipment, drive shaft and operating devices at hand.
- ❑ Operation, commissioning and maintenance of the machine or device discussed and explained to the customer on the basis of the operating instructions.
- ❑ Check tyres for correct air pressure.
- ❑ Check wheel nuts for tight fit.
- ❑ Correct PTO shaft speed indicated.
- ❑ Adaptation to the tractor carried out: Three point adjustment
- ❑ Cardan shaft correctly cut to length.
- ❑ Test run carried out and no defects detected.
- ❑ Function explanation during test run.
- ❑ Swivel in transport and working position explained.
- ❑ Information about optional equipment is given.
- ❑ Indication of unconditional reading of the operating instructions.

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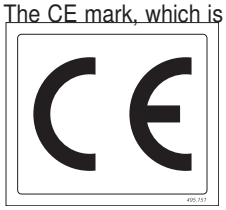
Table of contents

CE mark

The CE mark, 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 Attachment)

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

Safety hints:

These Operating Instructions contain the following Figures:

DANGER

If you do not follow the instructions in a text section with this marking, there is a risk of fatal or life-threatening injury.

- All instructions in such text sections must be followed!

WARNING

If you do not observe the instructions marked this way, there is the risk of a severe injury.

- All instructions in such text sections must be followed!

CAUTION

If you do not observe the instructions marked this way, there is the risk of an injury.

- All instructions in such text sections must be followed!

NOTE

If you do not observe the instructions marked this way, there is the risk of material damage.

- All instructions in such text sections must be followed!

TIP

The text sections marked in this way provide you with special recommendations and advise regarding the economical use of the implement.

ENVIRONMENT

The text sections marked in this way provide practices and advice on environmental protection.

The features marked as (optional) are only available as standard with specific implement versions or are only offered for specific versions as optional equipment or are only offered in certain countries.

Figures may deviate from your implement in detail and are to be taken as illustrations of operating principle.

Designations such as right and left always apply as the direction of travel unless the text or illustrations clearly show otherwise.

Introduction

Dear Customer

These Operating Instructions are intended to allow you to familiarise yourself with the implement and provide you with clear information on safe and correct handling, care and maintenance. Thus please take the time to read these Instructions.

These Operating Instructions comprise part of the implement. They are to be kept at a suitable location and accessible to staff over the entire service life of the implement. Instructions based on the national provisions regarding protection against accidents, road traffic and environmental protection are also to be applied additionally.

Any persons commissioned with the operation, maintenance or transport of the implement must read and understand these Instructions, in particular the safety information, prior to starting work. Any warranty claims lapse on non-observance of these Instructions.

In case you have questions related to this operation manual or further questions about this implement, please contact your dealer.

Care and maintenance performed in good time and scrupulously according to the maintenance intervals specified ensure operational and traffic safety as well as the reliability of the implement.

Use only the original spare parts and accessories from Pöttinger or accepted by Pöttinger. For those parts reliability, safety and suitability for Pöttinger machines can be assured. Warranty claims lapse if non-approved parts are used. The use of original parts is also recommended after the warranty period has expired to maintain the performance of the implement in the long term.

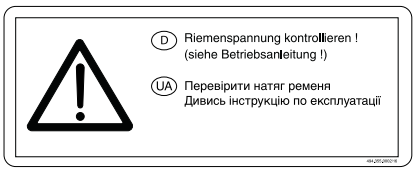
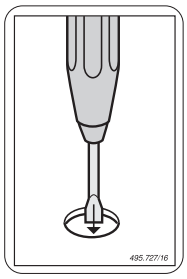
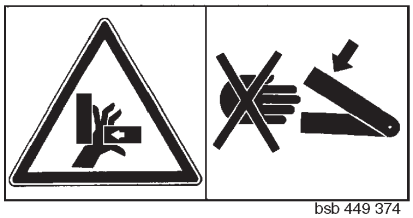
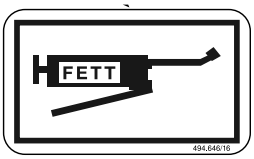
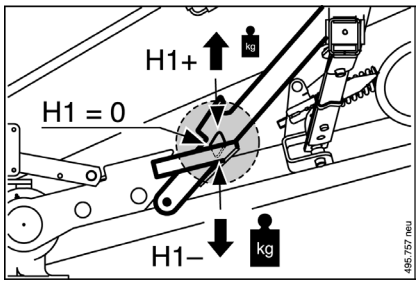
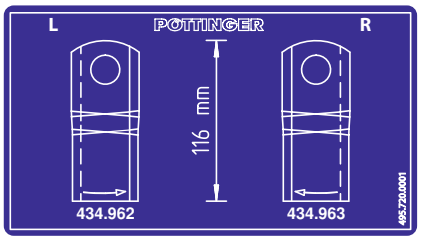
Product liability legislation obliges the manufacturer and the authorised dealer to issue Instructions when selling implements and to instruct customers in the use with reference to the safety, operating and maintenance regulations. Confirmation in the form of a declaration of transfer is required to verify that the implement and Instructions have been transferred correctly. The declaration of transfer was attached to the implement on delivery.

Every self-employed person and farmer is an entrepreneur within the meaning of the product liability legislation. In accordance with the laws of product liability, entrepreneurial property damages are excluded from the liability. All damage to property within the meaning of the product liability legislation is regarded as damage caused by the implement but not to the implement.

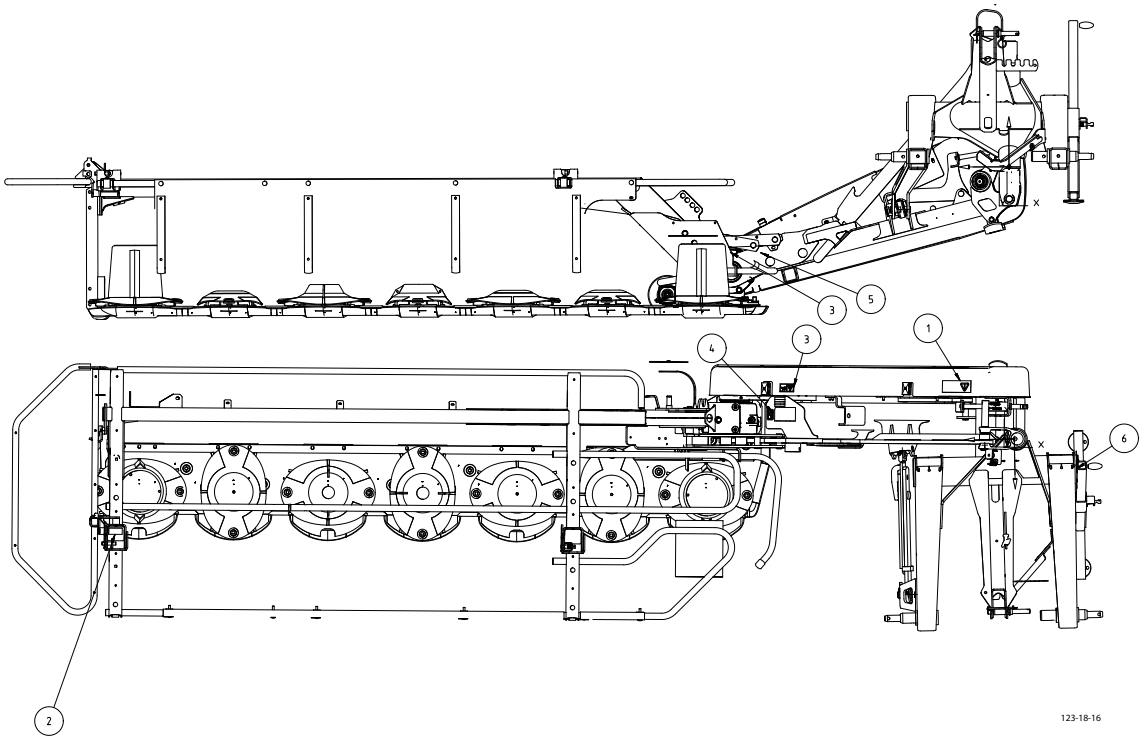
These Operating Instructions are integral part of the implement delivery scope. You should therefore hand them over to the new owner if ownership of the implement is transferred. Train and instruct the new owner in the regulations stated.

The Pöttinger Service-Team wishes you good luck.

Meaning of the transfers

1 (1x)		Check belt tension: 494,355
2 (1x)		Open protection 495,727
3 (2x)		Never reach into the crushing danger area as long as parts can move there. 495,171
4 (1x)		Position of a grease nipple 494,646
5 (1x)		Lifting gear height H1=0 495,757
6 (1x)		**B**lade equipment 495.720.0001

Transfer position



Tractor

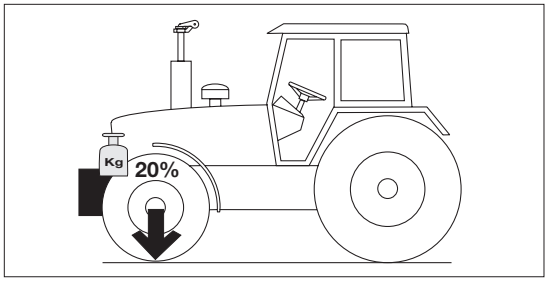
To operate this machine the following tractor requirements are necessary:

- Tractor power: NOVADISC 222 - from 103KW / 140PS
  NOVADISC 262 - from 103KW / 140PS
  NOVADISC 302 - from 103KW / 140PS
  NOVADISC 352 - from 103KW / 140PS
- Hitching: Lower link Cat. III / width 3
- Connections: see table “Necessary hydraulic and power connections”

Ballast weights

Ballast weights

The front of the tractor must have sufficient ballast weights to guarantee braking and steering capabilities.



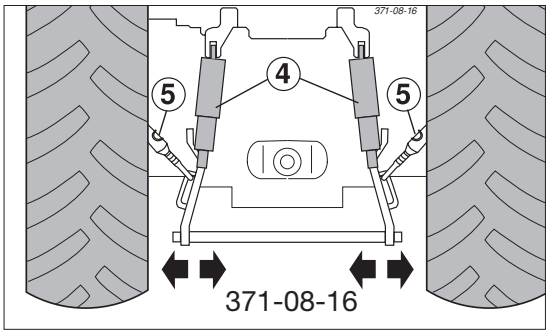
DANGER

Life hazard - Steering or brake system failure due to inadequate weight distribution between the tractor axles.

- Make sure that when the implement is hitched, at least 20% of the tractor weight is placed on the front axle.

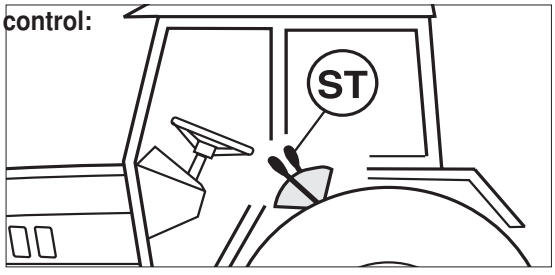
Lifting unit (three-point linkage)

- The tractor’s lifting unit (three-point linkage) must be designed for the applicable load. (See technical data)
- The lifting struts are to be set at the same length (4) using the appropriate adjusting device
  (See the tractor manufacturer’s operating manual)
- If the lifting struts on the lower links can be fixed in different positions, then the rear position must be selected. This relieves the pressure on the tractor’s hydraulic system.
- The limiting chain or lower link stabilisers (5) are to be set so that the attached machine CANNOT move sideways. (Safety measure for transportation)



Hydraulic control on the lifting gear

The lifting hydraulics must be switched to position control:



Necessary hydraulic connections

Design	Consumer	Dual action hydraulic connection with floating position	Single-acting hydraulic connection
Standard	Lifting cylinder, folding cylinder or hydraulic relief	X	
Variant	Lifting cylinder, folding cylinder or hydraulic relief		X
Option	hydraulic side protection flap	X	

Operating pressure	
Minimum operating pressure	170 bar
Maximum operating pressure	200 bar

NOTE

Material hazard - Friction wear on the piston of the control or hydraulic block due to incompatible hydraulic oils.

- Check the compatibility of the hydraulic oils before connecting the implement to the hydraulic system of your tractor.
- Do not mix mineral oils with bio oils!

Power connections required

Design	Consumer	Pin	Volt	Powerconnection
Standard	Lighting	7-pin	12 V DC	According to DIN-ISO 1724
Standard	Control unit	3-pin	12 V DC	According to DIN 9680

Safety advice

DANGER

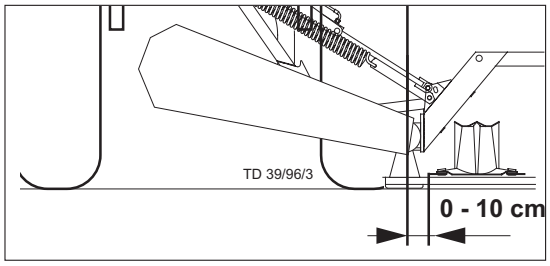
Life-threatening danger through operating a machine that is unroadworthy or damaged

- Check the vehicle for roadworthiness prior to every operation (lights, brakes, protective panels, etc.)!

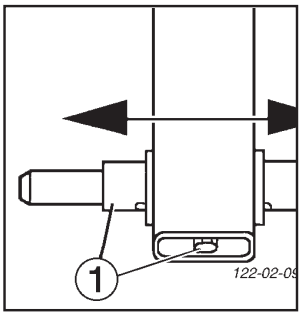
Attaching device to tractor

1. Remove the device from the three-point headstock

- Attach the mower so that the distance between the inner mower disc and the tractor tyres is **0 - 10 cm**. See chapter "Mounting variants"



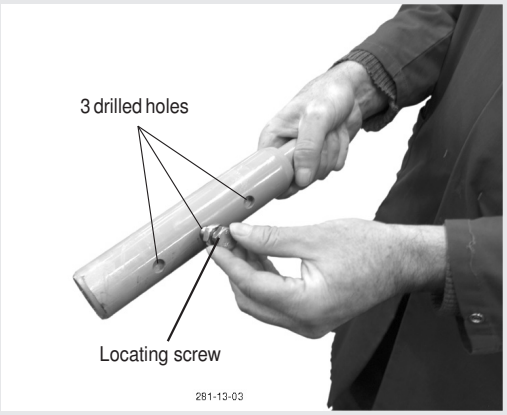
- Adjust the lower link bolts (1) on the bearing frame, according to the three-point category, and the track width using the fixing screw. The mower must not touch the rear tractor tyres.



NOTE

Risk of damage to property due to an implement coming loose from the tractor. If the screw is only fixed in the bracket and does not reach the hole in the bolt, the lateral movement of the bolt is still possible and the mower can come loose from the coupling.

- Check the tight connection between screw (1) and coupling pin.



- See information in the Attachment to these Operating Instructions for dual wheels or specially wide tyres

2. Connect hydraulic plug connections

For fold cylinders / relief to double-action hydraulic connection:

Connect both black plug connections (relief) to a double-action hydraulic connection on the tractor.

For fold cylinders / relief to single-action hydraulic connection (optional):

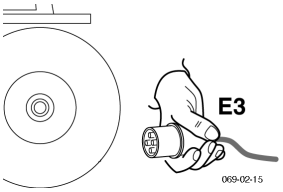
Connect black plug connection (relief) to a single-action hydraulic connection.

For hydraulic side protection flap (optional):

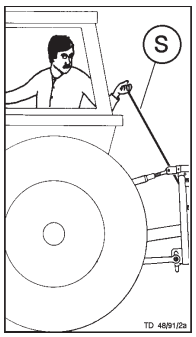
Connect both grey plug connections to a double-action control device.

3. Establish power supply

- Connect the supply cable to tractor (E3).

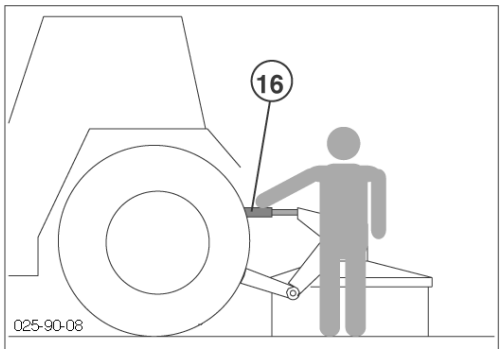


4. Position flap release rope (S) in the tractor cabin.

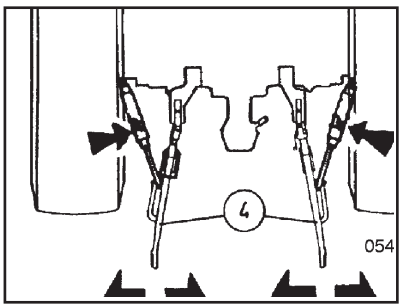


5. Adjust upper linkage spindle

- The mower is positioned horizontal or slightly forwards by turning the upper linkage spindle (16).



6. Secure lower linkage (4) against lateral movement.



7. Place support stands in parking position and secure

TIP

A horizontally parked mower requires one support stand and a vertically parked mower requires two.

1. Loosen support stand lock (spring bolts)
2. Put support stand (5) in park position:
3. Check support stand lock (spring bolts)

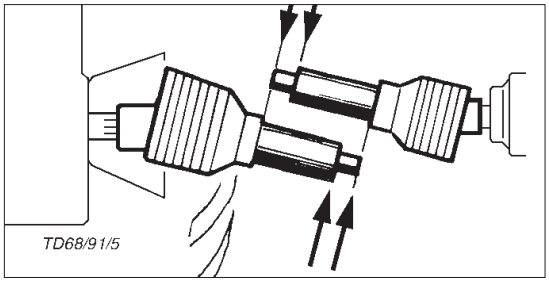
NOTE

Damage to property - if the unlocked support stand drops down while travelling. Secure parking on the damaged support stand can no longer be guaranteed.

- Check support stand lock after every position change.

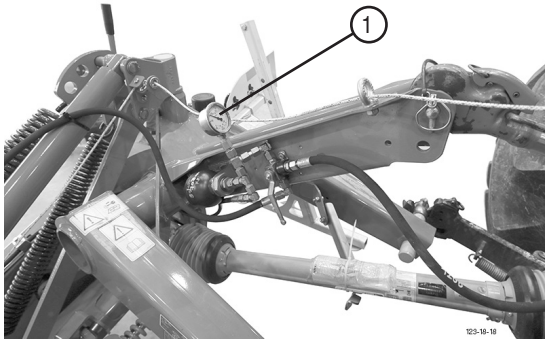
8. Attach the cardan shaft

- Before initial operation, check the cardan shaft length and adapt if necessary. See chapter "CARDAN SHAFT" in Annex B also.



9. Check the pretensioning pressure of the folding aid.

(single-action hydraulic connection for optional equipment)



1. Check the preload pressure on the pressure gauge

(1) mounted on the headstock.

2. Correct preload pressure if necessary. (See chapter Maintenance: “Setting the pre load of the folding aid”)

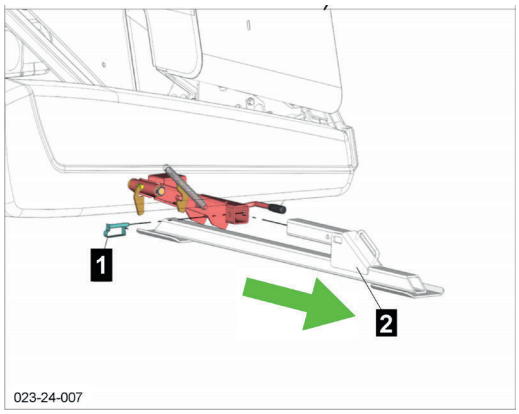
TIP

The pressure required to make the folding aid work is around 70 bar and varies from tractor to tractor.

10. Dismantle parking supports

If the devices are parked in the transport position, the parking supports must be removed and the bracket turned inwards.

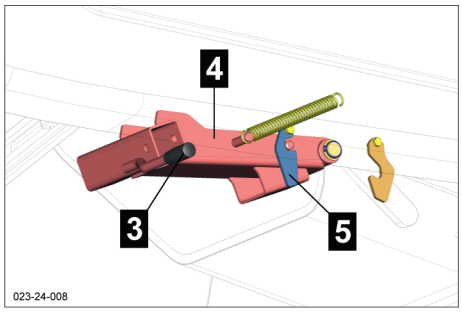
1. Raise mower unit with rear power lift.
2. Apply tractor brake and park. Remove the ignition key from the tractor before leaving the tractor cab.
3. Remove the linchpin (1) and dismantle the parking support (2)



4. Insert linchpin (1) in parking support
5. Move parking support bracket (4) to park position

   Take the parking support bracket by the handle (3) and turn it inwards. After the movement, the handle (3) is below the holder for the parking support.

   Secure with safety hook (5)



General tips

DANGER

Life-threatening danger through tipping.

- Make sure the machine is standing securely. Check the locking mechanism of the support feet.
- Park the implement only on flat, firm ground.

DANGER

Life-threatening danger exists if another person starts up the tractor and drives away or actuates the control lever of the hydraulic system while you are engaged in maintenance.

- Before dismantling, switch off the engine, remove the key and brake the tractor.

DANGER

Life-threatening danger should the tractor start moving on its own.

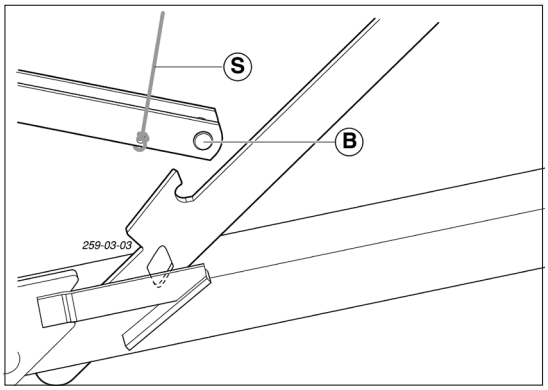
- Before dismantling, switch off the engine, remove the key and brake the tractor.
- Secure the machine with chocks if necessary.

The machine can be parked in the working position or the transport position.

Parking in the working position

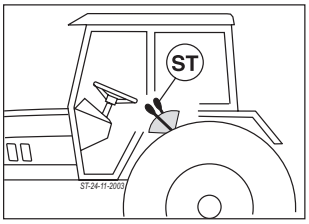
1. Swing flap up with rope (S)

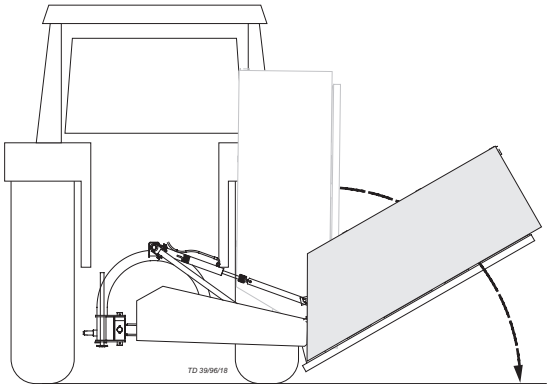
- Flap position "B"



2. Swivel the cutter bar hydraulically down to the ground.

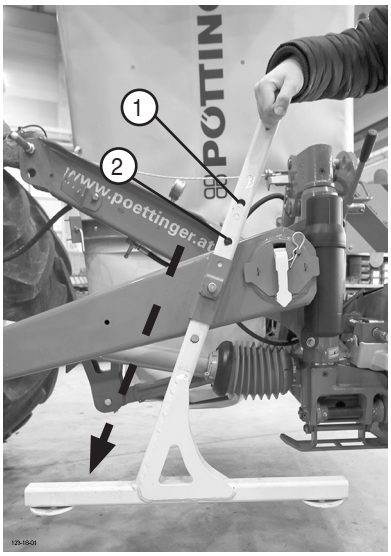
- Actuate control valve (ST)
- Release rope (S) during swivel movement





3. Move the support feet to the parking position and secure them

1. Loosen support stand lock (spring bolts)
2. Move the support leg to the correct parking position.
   Shutdown in working position: middle hole (2)
3. Check support stand lock (spring bolts)



NOTE

Property damage - if the locking device of the support feet does not engage. Safe parking on the unlocked support leg cannot be guaranteed.

- Check the support stand lock after every change of position.

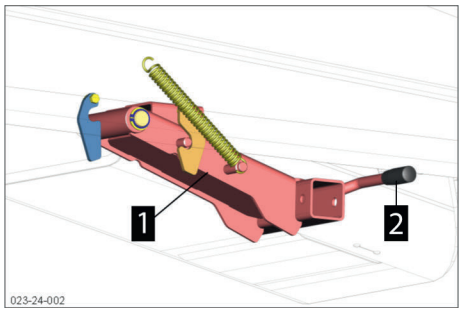
4. Lower the tractor with the lifting gear and park on the ground.

Parking in transport position (optional)

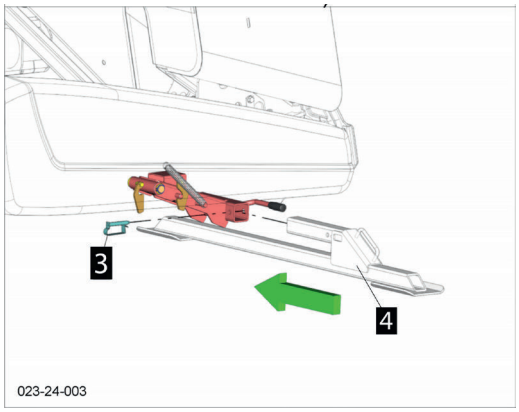
TIP

For parking in transport position you need a second support leg, which is included in the optional equipment "Parking in working position".

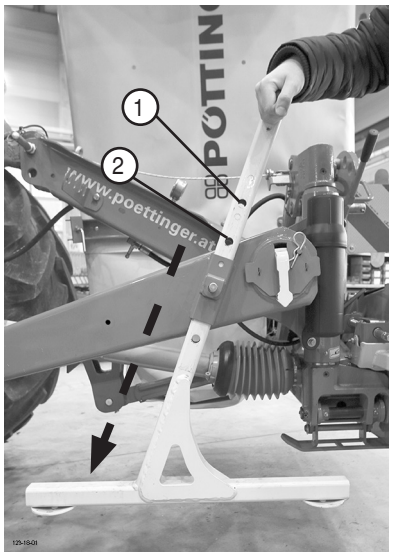
1. Fit support stands
   1. Move support bracket (1) to parking position:
      Take the parking support bracket by the handle (2) and turn it outwards.
      Secure bracket with safety hooks.



   2. Insert support stand (4) and secure with linchpin (3).



2. Move support stand to parking position and secure
   1. Loosen support stand lock (spring bolts)
   2. Move the support stand to the correct parking position.
      Shutdown in working position: middle hole (1)
   3. Check support stand lock (spring bolts)



NOTE

Property damage - if the locking device of the support feet does not engage. Safe parking on the unlocked support leg cannot be guaranteed.

- Check the support stand lock after every change of position.

2. Lower the tractor with the lifting gear and park on the ground.

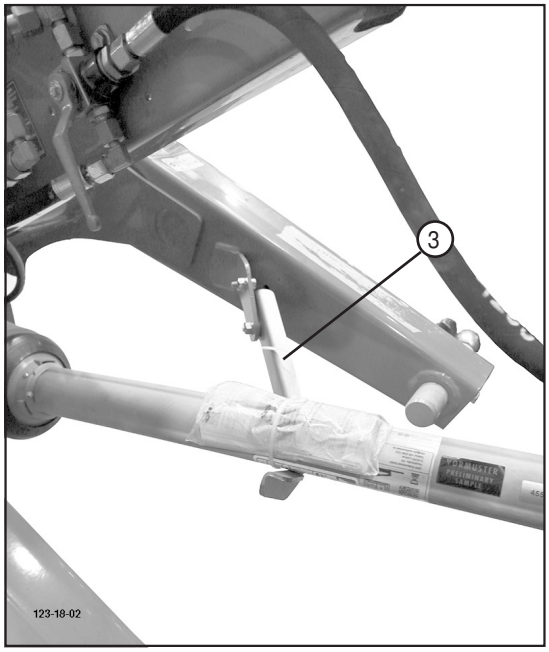
Unhitching implement from tractor

WARNING

Risk of injury resulting in death or other serious injury if the unit tilts.

- Before uncoupling, check again whether the stand is correctly locked.

- Disconnect hydraulic line.
- Detach upper link
- Remove rope from tractor cabin
- Uncouple lower link
- Pull off PTO shaft and lay it down (3)



Parking in the open

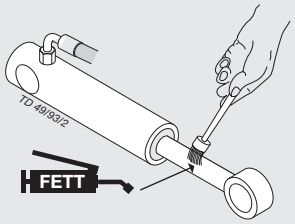
At the end of the season

- Clean the piston rod and all other bare parts and preserve with grease.
- Observe the notes in the "MAINTENANCE" chapter.

NOTE

Risk of material damage due to damage to the sealing elements of the cylinder.

- A rusty piston rod can damage the sealing elements of the cylinder. When parking in the open for longer periods, clean piston rods and then preserve with grease.



General safety information

DANGER

Danger to life - due to the mower tipping

- Change from the working to the transport position only on level, solid ground.

DANGER

Life-threatening danger through rotating or ejected components

- Switch off the cutter bar drive.
- Wait until the cutter bar has stopped moving before swivelling it up.
- Never let the mower run when raised.
- Lower the machine completely or switch it off when leaving the tractor cab.

DANGER

Danger to life - due to moving parts

- Make sure that the swivel range is clear and that no-one is standing in the danger area.

Transport position (T)

Starting situation

1. **Machine attached to the tractor**
   - see chapter "Attaching the implement to the tractor"
2. **Machine in working or headland position**
3. **Support stand folded up and secured**

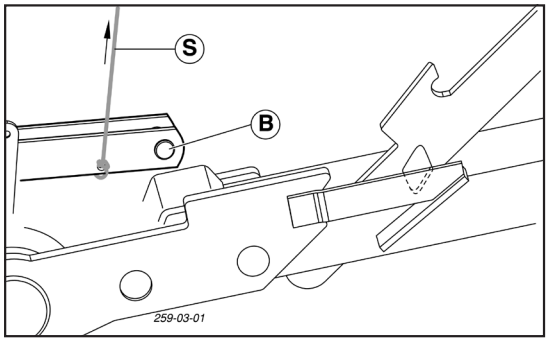
Switching to transport position

NOTE

Risk of material damage when changing to transport position due to braked cardan shafts.

- On tractors equipped with a cardan shaft brake, this must be switched off before switching to the transport position.

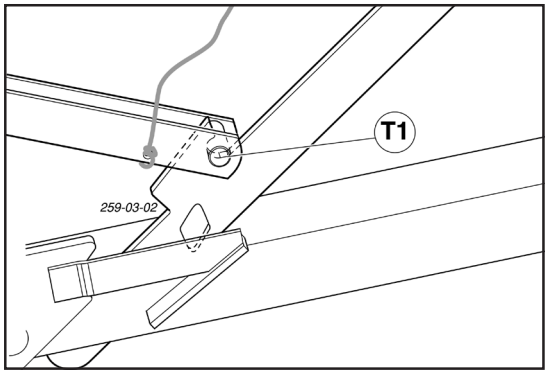
1. **Swivel the transport safeguard up using the rope (S)**



   - Transport safeguard position "B"

2. **Move cutter bar to transport position**
   - Actuate control valve (ST)
   - Release rope (S) when swivelling
   - Engage transport safeguard (T1)

3. **Locking the transport safeguard**
   - Set the control valve (ST) briefly to "lower" (S).



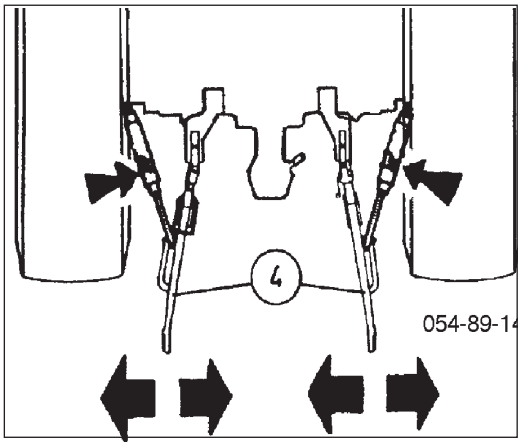
This ensures that the transport safeguard catch engages firmly in the hook (T1) and fixes the cutter bar in the transport position (T).

Road Transport

- Observe the statutory regulations for your country.

  Supplement C contains information on attaching a lighting system, valid for Germany.
- Driving on public roads may only be carried out as described in the Chapter "Transport position".

- Fasten the hydraulic lower link (4), so that the machine cannot swivel out to the side.

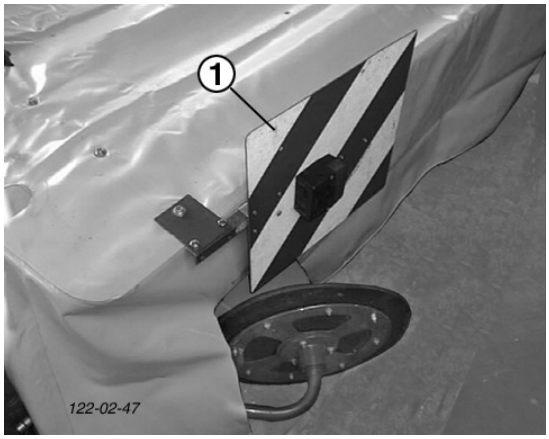


Lighting for road travel

A lighting unit can be supplied on request (1).

See list of individual spare parts.

- Connect the lighting and raise the unit for transport.



General safety information

DANGER

Life-threatening danger through the mower tipping over

- Change from the working to the transport position only on level, solid ground.

DANGER

Life-threatening danger through rotating or ejected components

- Switch off the cutter bar drive.
- Wait until the cutter bar has stopped moving before swivelling it up.
- Never let the mower run when raised.
- Lower the machine completely or switch it off when leaving the tractor cab.

DANGER

Life-threatening danger through moving parts

- Make sure that the swivel range is clear and that no-one is standing in the danger area.

Initial situation for lowering the cutter bar

1. Machine attached to the tractor

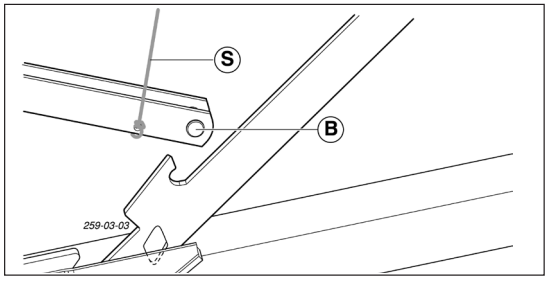
- see chapter "Attaching the implement to the tractor"

2. Cutter bar in transport position

3. The swivel fields are in transport position, raised and secured

Change to working position

1. Loosen the transport lock



- Before doing this, briefly set the hydraulic control unit (ST) to "LIFT" to release the transport lock in the hook.
- Use rope (S) to bring transport safety device into position "B"

2. Lower cutter bar

For dual-action hydraulics:

- Set the hydraulic control unit (ST) to "LOWER" and lower to the ground.
- Release rope (S) when swivelling

TIP

Lower the cutter bar to "pressure" if a dual-action control unit is connected. The movement is controlled and even and protects the machine.

Otherwise (when lowering to the float position) the downward movements will be in jerks and jolts. Increased stress will be placed on the joints.

For single-action hydraulics:

- Set the hydraulic control device (ST) to "FLOAT POSITION" and lower the cutter bar to the ground.

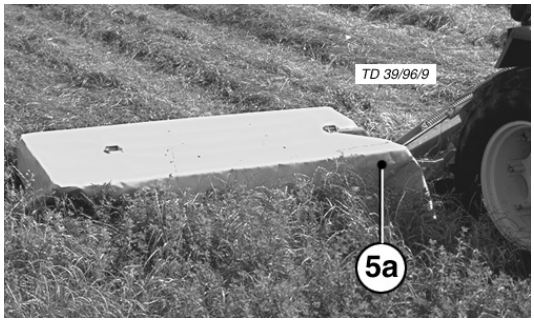
3. Close front protection cover (5a)

- **Use only with closed protective cladding.**

⚠ CAUTION

Risk of slight or moderate injury due to crushing on protective cover.

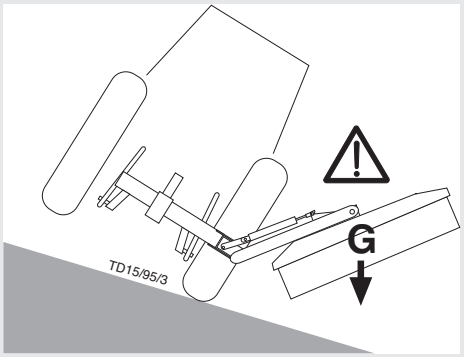
- Pay special attention when swivelling the protective cover.
- Do not reach into the danger area.
- Direct other persons away from the hazard area.



Working on slopes

DANGER

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



Tipping hazard on slopes is present

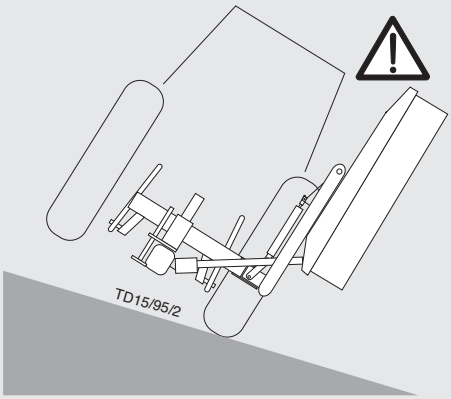
- when the mowing units are lifted hydraulically
- when bending with lifted mowing unit

Counter-measures:

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

NOTE

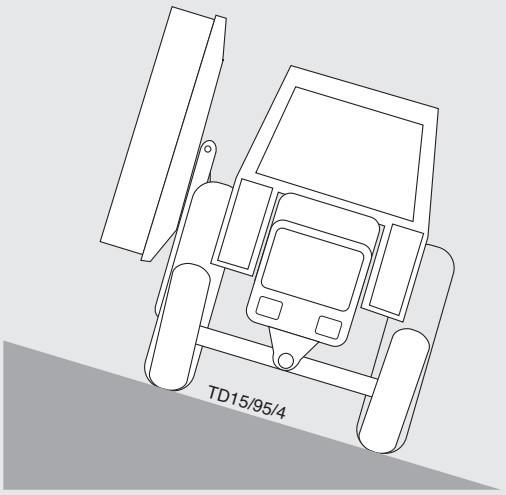
Material hazard - due to unnoticed obstacles



- Raise the mower when driving backwards and reversing!

DANGER

Life hazard - due to tandem tipping. There is a danger of tipping when swivelling the implement on headland.



- Swivel the cutter units successively to the "Field transport" position or the "Work" position using the individual lifting device.
- When swivelling in "field transport" or "working position": Always swing the uphill side mower first and then the downhill side mower!

Safety advice

DANGER

Life-threatening danger exists through blades being thrown out.

- After the first operating hours tighten all blade screwed connections
- Check all safety equipment before starting work. In particular, make sure that the side safeguards are folded down correctly in the field transport position.

DANGER

Life-threatening danger exists through ejected parts when removing clogging, changing blades or adjusting the machine.

- Stop tractor/trailer unit on level ground and apply tractor's brakes.
- Park the mower in working position.
- Before going back to the machine, make sure that the pto has stopped and the hydraulic hoses are depressurised.
- Remove the tractor key!

DANGER

Life-threatening danger exists through falling off the machine.

- Do not climb onto the machine, or play on or around it.
- Do not let anyone climb on or exercise on the device.
- Before starting, make sure that no one is standing on the machine or inits danger area!

TIP

Further safety instructions: see Supplement A, pt. 1. - 7.)

After the first hours of operation

- Retighten all blade screw fittings.

Starting work

1. Check

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

2. Only switch the machine on in working position and do not exceed the specified p.t.o. speed (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, and only, switch the p.t.o.drive on when all safety devices (covers, protective aprons, casings, etc.) are in proper condition and are attached to the machine in their safety positions.

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

4. Prevent any damage!

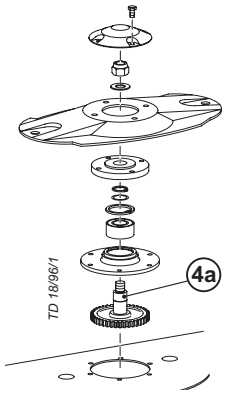
NOTE

Property damage caused through unnoticed obstacles. Obstacles (e.g. large stones, pieces of wood, boundary stones, etc.) can damage the mower unit

- Inspect the meadow before mowing.
- Remove or drive around the obstacles at a sufficient distance.

If a collision occurs anyway,

- 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).

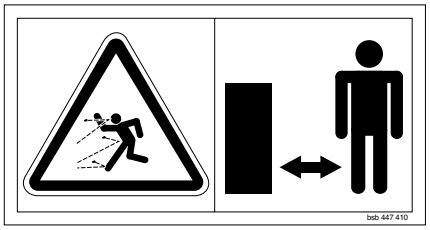


- If necessary have it checked over in a specialist work shop as well.

After contact with a foreign object

- Check condition of blades and blade holder (see chapter "Maintenance and Service").
- Retighten all blade screw fittings.

5. Keep away from the engine when it's running.



- Guide people out of the danger area as they may become injured by foreign objects being ejected by the mower.

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

6. Wear hearing protection

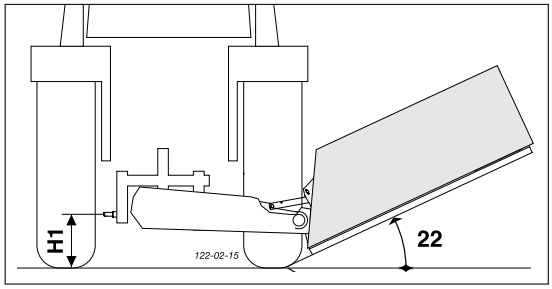
The noise level in the workplace can deviate from the measured value (see Technical Data) particularly through the differing types of tractor cabins.

- If a noise level of 85 dB (A) is reached or exceeded, then the contractor (farmer) must have suitable hearing protection readily available (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).

Turning when mowing

The cutter bar can be swivelled with the control unit to the headland position (22°).

- The mechanism does not have to be switched off for this purpose.
- The height of the lifting gear (H1) does not have to be changed for this purpose.



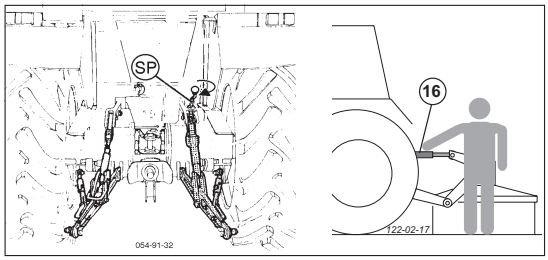
DANGER

Danger to life - due to parts being thrown off

- Do not step into the danger area of the mower while the motor is running.

Mowing

1. Set the lower link of the hoist horizontally (Sp)

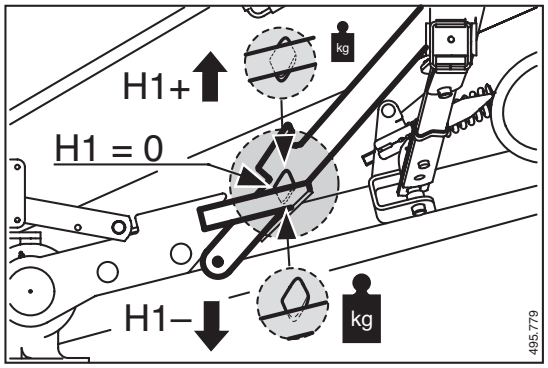


2. Set cutting height by turning the upper link spindle (16)

- max. 5° mower discs inclination

3. Adjust the height of the lifting gear:

Using the lower links of the tractor raise or lower the implement accordingly to a distance of H1= 0. This means that the lower link overlaps with the rhombus. see illustration



TIP

The relief pressure is influenced by the setting of the hoist height:

H1 = 0 basic position

H1 + Reduce relief pressure

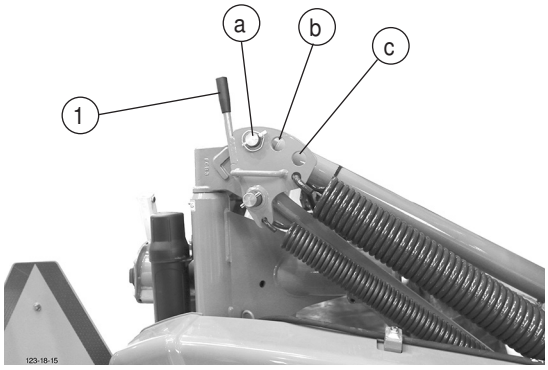
H1 - Increase relief pressure

4. Set relief pressure

Basic setting at position (a): approx. 70 kg

Reduce the default setting in wet weather or heavy, damp grass.

Reduce the basic setting with the lever (1). The following positions are available (a, b, c)



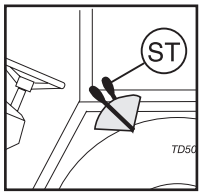
1. Unlock the bolt and remove it from the position hole.
2. Move lever (1) to new position.
3. Place the bolt in the alternative position hole and secure.

5. 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. freewheel.

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

6. Hydraulic servo-valve (ST



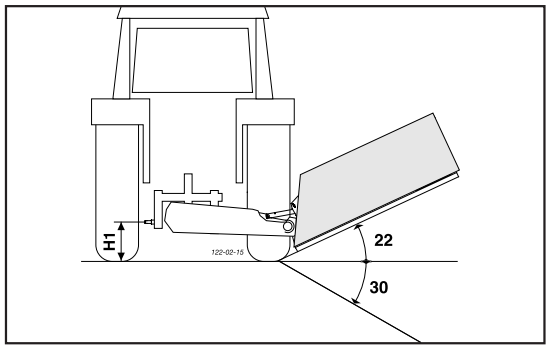
- Single-action hydraulic control valve (ST) on "LOWER"
- Double-action hydraulic control valve (ST) on "Floating position"

Reversing

Raise the mower when reversing!

General guidelines on working with the machine

- The mower unit is suitable for an upward inclination of 22° resp. downward 30° anlge of repose.



Collision Avoidance

NOTE

Risk of material damage if the device collides with obstacles.

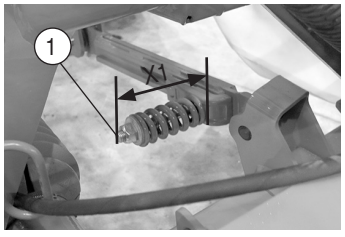
- It is not the purpose of the anti-collision safety to prevent damages on the implement at full speed. If you are not sure whether the cutting area is really free of obstacles, please work at an appropriate slow speed!

When mowing around trees, fences, boundary stones, etc., the cutter bar may collide with obstacles despite careful and slow driving. So in order to prevent such damage, an anti-collision device has been provided for the mower.

- The collision safety device (34) allows the cutter bar to avoid the direction of travel in the event of a collision with an obstacle.
- The collision protection engages again when the tractor is retracted.

Setting:

If the collision protection responds too easily, adjust the response behaviour on the hexagon nut (1).

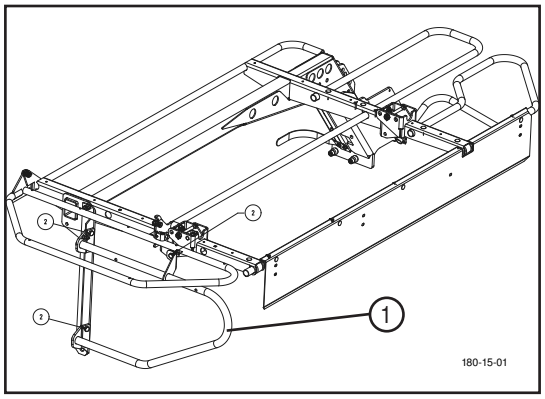


Basic setting X1:

NOVADISC 222	**=**	**127 mm**
NOVADISC 262	**=**	**120 mm**
NOVADISC 302	**=**	**116 mm**
NOVADISC 352	**=**	**112 mm**

Straw divider

In addition, when operating under difficult conditions, you can attach a crop divider (1) so as to turn away the grass that is drawing in.



Safety advice

DANGER

Life-threatening danger exists through moving or rotating parts

Carry out maintenance works on the machine only when

- It has been parked securely on level, firm ground.
- It has been secured against rolling with wheel chocks.
- The tractor engine is turned off and the pto shaft is stationary.
- all moving or rotating parts (especially the mowing discs) have come to a standstill. (Hearing test!)
- The tractor's ignition key has been removed.
- If necessary, remove the cardan shaft.

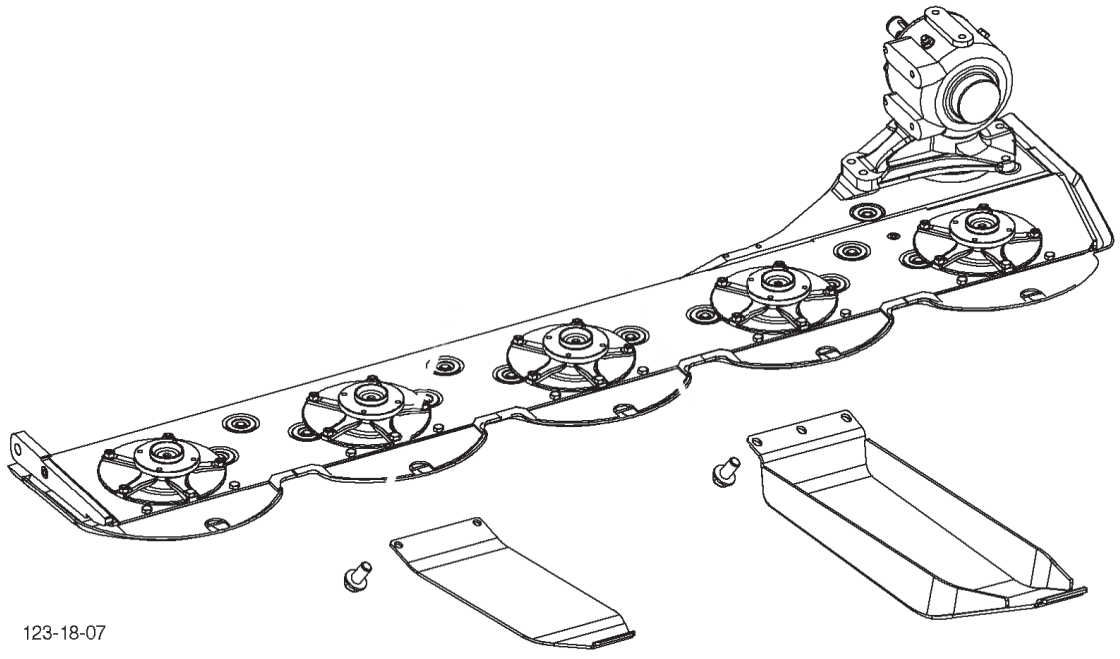
Life-threatening danger exists when under the machine

- Support the subsections you are under in an adequate way.

TIP

For more information on mounting an assembly, refer to the appropriate Mounting or Retrofit Guide.

1. Wear and high cut skids



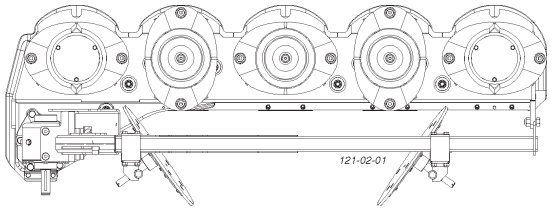
123-18-07

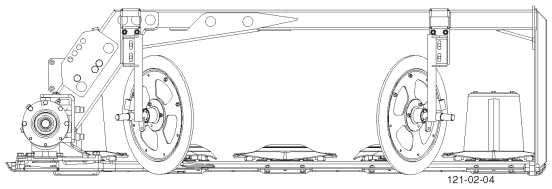
2. Swath former

A narrow swath is formed when using the swath plates while mowing. This avoids driving over the crop with wide tractor tyres.

Can be used with:

NOVADISC 222
NOVADISC 262
NOVADISC 302
NOVADISC 352

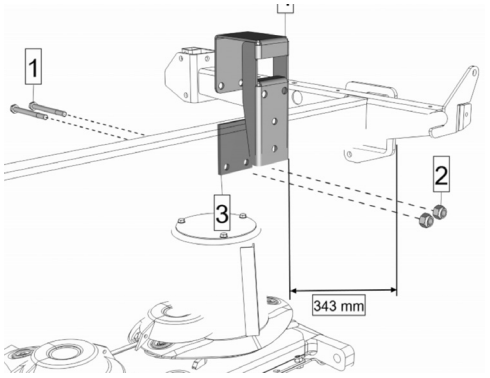




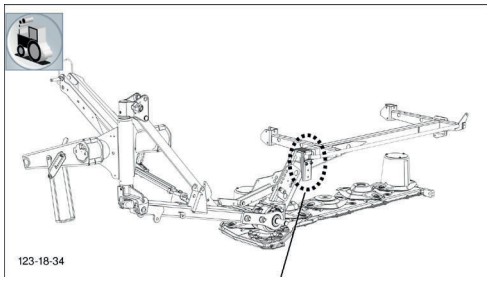
Assembly of the swath former:

1. Mount the swath former bracket inside the outer mower disc on the frame. Mount the console in such a way that all the mown material is later transported inwards by the swath formers.

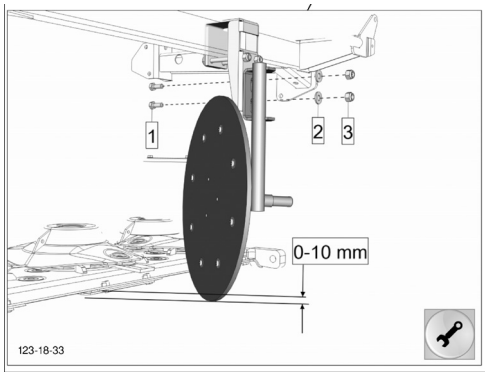
   On the right means a distance of 343 mm from the edge of the frame.



   To the left means no distance from the edge of the frame.



2. Mount the swath former on the swath former bracket. Mount the swath formers so that they fall below the lower edge of the cutter bar by up to 10 mm.



Protective cloth adjustment:

The protective cloth must be left free in the area of the swath former.

Cut a slit in the protective cloth on the right.

Open the buckle on the left.

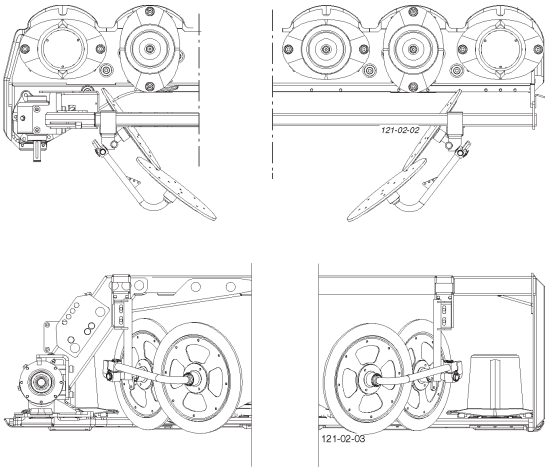
Buckle open

3. Additional swath former

A narrow swath is formed when using the swath plates while mowing. This avoids driving over the crop with wide tractor tyres.

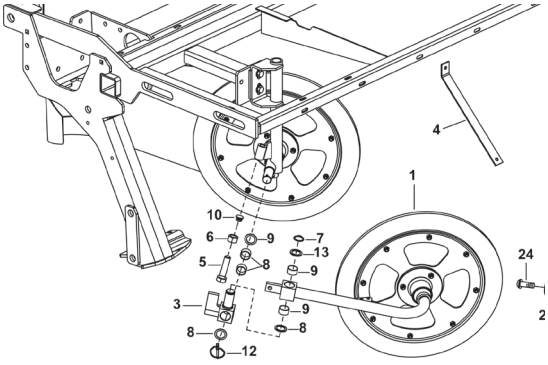
Can be used with:

NOVADISC 262
NOVADISC 302
NOVADISC 352



Assembly of the additional swath former:

The additional swath formers are mounted on the bearing of the swath former.

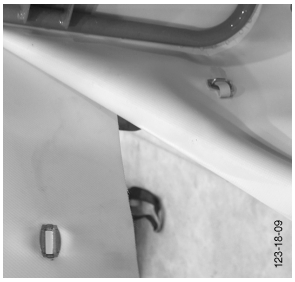


Protective cloth adjustment:

The protective cloth must be left free in the area of the swath former.

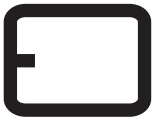
Cut a triangle on the right (from hole to hole)

Fold the protective cloth to the left so that a triangle is exposed and secure it by closing the buckle.



Cloth folded

Buckle closed



4. Protective apron

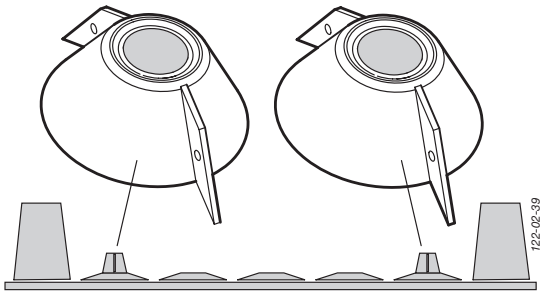
The protective cloth must be left free in the area of the swath former. Depending on the number of swath formers installed, different cutting patterns must be selected. See chapter 2 "Swath former" and chapter 3 "Additional swath former".

- Use a suitable tool for cutting!
- The cutting line is the connection between the holes as shown in the appendix to this instruction manual.

5. Conveying cones (optional)

Conveying cones are recommended:

- to improve the conveyance rate of swath deposits, particularly with heavy, dense forage.
- See spare parts list for individual parts



Safety advice

DANGER

Life-threatening danger exists through moving or rotating parts

Carry out maintenance works on the machine only when:

- It has been parked securely on level, firm ground.
- It has been secured against rolling with wheel chocks.
- The tractor engine is turned off and the pto shaft is stationary.
- All moving or rotating parts (especially the mowing disks) have come to a halt. (Hearing test!)
- The tractor's ignition key has been removed.
- If necessary, remove the cardan shaft.

Life-threatening danger exists when under the machine.

- Support the sub-areas you are under in an adequate way.

WARNING

Risk of serious injury through escaping oil.

- Pay attention to scuffed or clamped hose areas.
- Clean the couplings of the oil hoses and the oil sockets prior to each connection!
- Wear the relevant protective clothing.

NOTE

Material damage due to impurities that have penetrated into the hydraulic system

- Clean the couplings of the oil hoses and the oil sockets prior to each connection!

General maintenance information

Please observe the information below to maintain the machine in good condition even after a long period in operation:

- Re-tighten all bolts after the first hours in operation.

The following should be checked in particular:

Blade bolt connections on the mowers

Tine bolt connections on the rake and tedder

Spare parts

a. Genuine parts and accessories are specially designed for the machines.

b. We expressly draw your attention to the fact that genuine parts and accessories not supplied by us, have not been tested and approved by us.

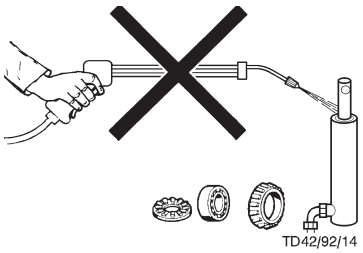
c. Under certain circumstances, the installation and/or use of such products may negatively modify or impair the specified structural properties of the machine. The manufacturer accepts no liability for any damage caused through the use of non-genuine parts and accessories.

d. Any unauthorised modifications and/or fitting of components and attachments to the machine negates any liability on the part of the manufacturer.

Cleaning of machine parts

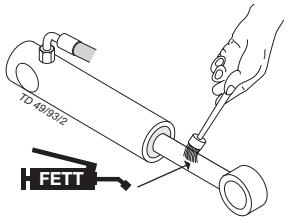
Be advised! Do not use high-pressure cleaners for the cleaning of bearing and hydraulic parts.

- Danger of rust!
- After cleaning, lubricate the machine according to the lubrication plan and carry out a brief test run.
- Cleaning pressure being too high may damage the paint.



Parking in the open

Clean and protect the piston rods with grease prior to longer periods parked out in the open



Winter storage

- Clean machine thoroughly prior to winter storage.
- Park protected against the weather.
- Change or top up gear oil.
- Protect exposed parts from rust.
- Lubricate all greasing points.
- Disconnect terminal, store dry and protected from frost.

Articulated shafts

- See information in the supplement

Please observe the following for maintenance!

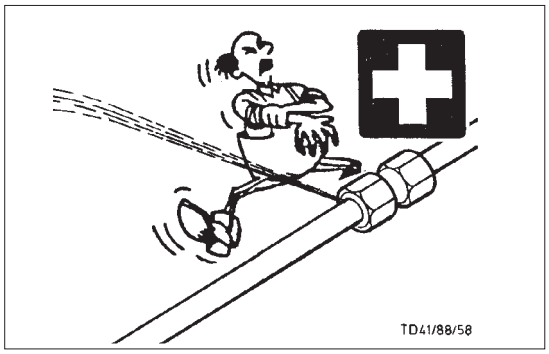
The directions in these Operating Instructions apply.

If no particular instructions are available here, then the information in the instructions supplied by the respective cardan shaft manufacturer apply.

Hydraulic unit

Caution: injury and infection hazard!

Liquids escaping at high pressure may penetrate the skin. Therefore seek immediate medical help!



Make sure that the hydraulic system is suited to the tractor before connecting the hydraulic lines.

After the first 10 hours of operation and every 50 hours in operation thereafter

- Check hydraulic unit and piping for leaks and if necessary re-tighten bolt connections.

Prior to every startup

- Check hydraulic hoses for wear.

  Replace any 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.

General safety information

DANGER

Life-threatening danger exists through another person starting the tractor and driving off, or switching on the cardan shaft while maintenance work is being carried out.

- Lower mower unit
- Turn engine off and remove key before carrying out maintenance or repair work.

DANGER

Life-threatening danger exists if the machine starts to roll or tilt.

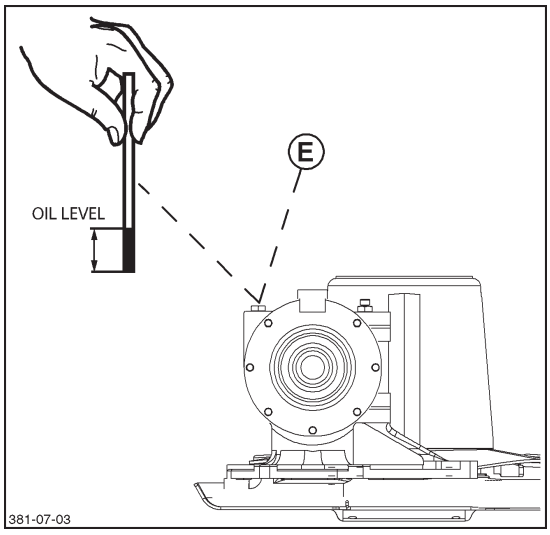
- Before any maintenance and repair work, park the machine on even, firm ground.
- Braking the machine

Oil level check, angular gear

- Change oil after the first 50 operating hours.
  Under normal operating conditions, oil is to be topped up annually (OIL LEVEL).
- Change oil after 300 ha at the latest.

Oil quantity:

0.80 litre SAE 90



Angular gear oil change

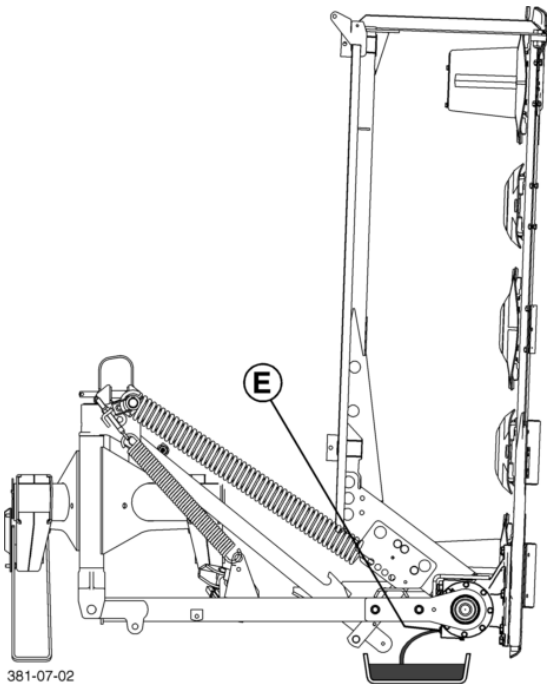
1. Raise cutter bar and bring into vertical position.

- See transport position.

2. Place suitable container underneath.

3. Remove hex head bolt (E) completely and allow old oil to run out.

- Dispose of old oil properly.



4. Lower cutter bar and bring into horizontal position.

- See working position.

5. Close discharge opening again with hex head bolt (E).

6. Fill oil (E).

NOTE

Property damage through too much or too little oil.

Too much oil can cause the cutter bar to overheat during operation.

Too little oil does not guarantee the necessary lubrication.

- Be precise when adding oil!

Cutter bar oil level check

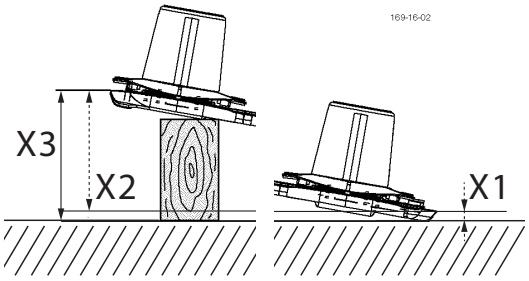
- Under normal operating conditions, oil is to be replenished annually.

1. Lift one side of the mower bar X3 and support it.

X3 = X2 + X1

X1 = Distance from ground to upper skid edge.

X2 = Distance from the left upper skid edge to the right upper skid edge.



NOVADISC 222: X2 = 180 mm
NOVADISC 262: X2 = set vertically
NOVADISC 302: X2 = 600 mm
NOVADISC 352: X2 = 240 mm

- The side where the oil refill screw is located remains on the ground.
- Lift the mower bar on the other side (X1) and support it with suitable means.

2. Leave mower bar in this position for about 15 minutes.

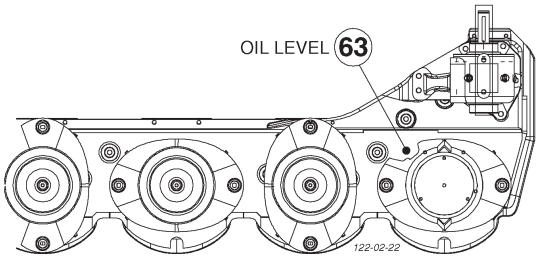
- This time is necessary to allow the oil to collect in the lower area of the mower bar.

3. Remove oil fill screw (63).

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

3. Remove oil fill screw (63).

Measure oil level through the opening (63).

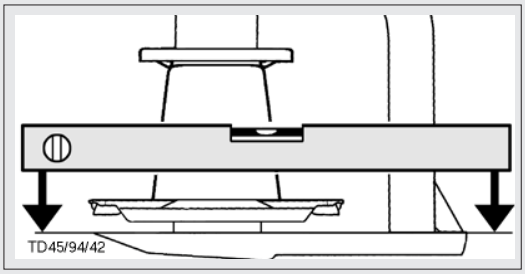


4. Oil level check

NOTE

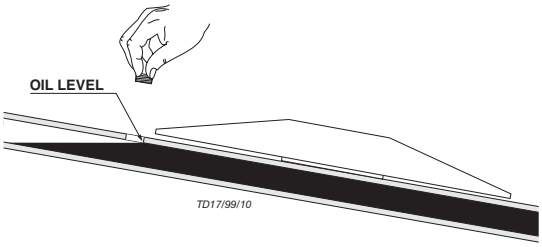
Property damage through too much or too little oil.

- The full length of the cutter bar is propped up. The full width of the cutter bar must be positioned precisely horizontal (see image).



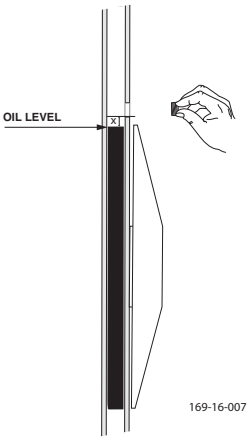
4.1 Oil level for NOVADISC 302 and NOVADISC 352:

The oil level is correct when the gear oil comes up to lower edge of the level screw (63) (OIL LEVEL).



4.2 Oil level for NOVADISC 265:

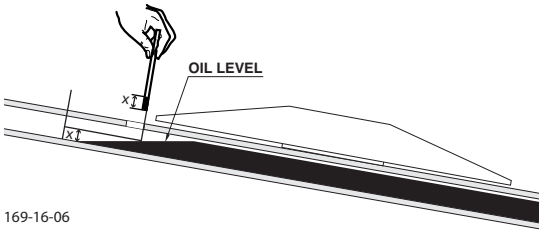
The oil level is correct when the oil level reaches 5 mm below the level screw.



4.3 Oil level for NOVADISC 222:

The oil level is correct if x= 10 mm.

X is the oil depth at the lower edge of the level opening (63)



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5. Topping up oil

Add the amount of oil lacking.

NOTE

Property damage through too much or too little oil.

Too much oil can cause the cutter bar to overheat during operation.

Too little oil does not guarantee the necessary lubrication.

- Be precise when adding oil!

Cutter bar oil change

- Change oil after the first 50 operating hours or after 100 ha at the latest.

TIP

- Carry out oil change at operating temperature
- The oil is thick when cold. Too much waste oil sticks to the gears and as a result any suspended particles are not removed from the gearbox.
- It can take some time until the old oil has completely drained.

Oil quantity:

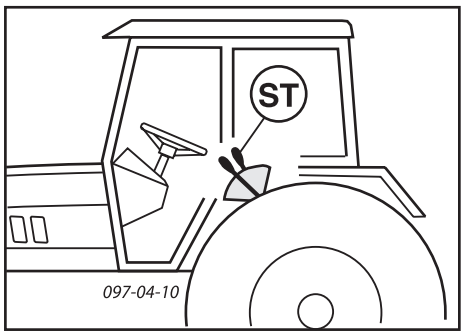
NOVADISC 222: 2.6 litre SAE 90

NOVADISC 262: 3.1 litre SAE 90

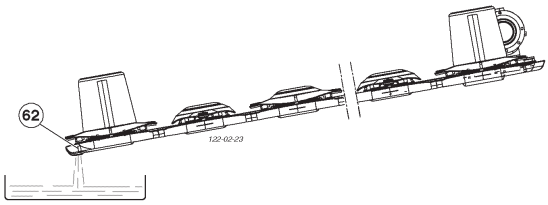
NOVADISC 302: 3.5 litre SAE 90

NOVADISC 352: 4.0 litre SAE 90

- Raise the lifting mechanism of the tractor completely.
- Hydraulic control unit (ST) to "LOWER".

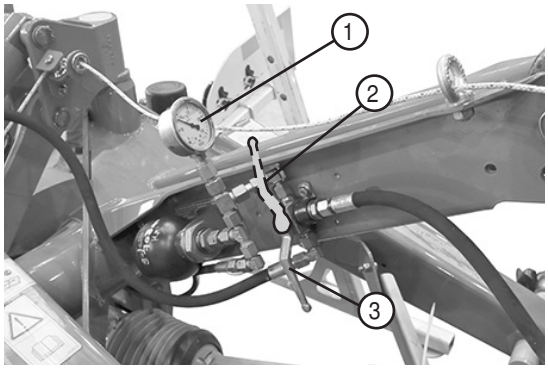


- The cutter bar must hang down at the edge.
- Take out oil drain plug (62), let oil run out and dispose of waste oil correctly.



Setting the pre load of the folding aid

(only with optional equipment "single-acting hydraulics")



1. Check the pressure on the pressure gauge (1) mounted on the shut off valve.
2. Set the lever of the 3-way valve to filling mode (2).
3. Set the desired pressure with the tractor control unit.

TIP

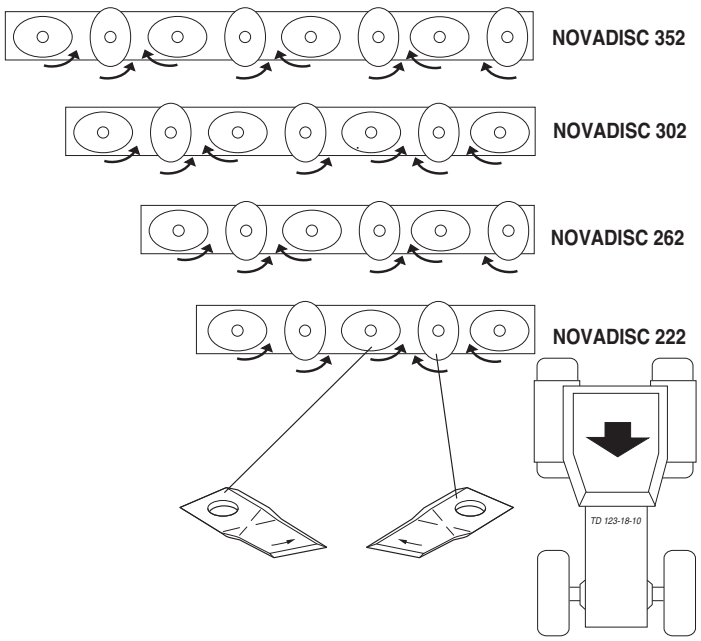
The pressure required to make the folding aid work is around 70 bar and varies from tractor to tractor.

4. Set the lever of the 3-way tap to working operation (3).

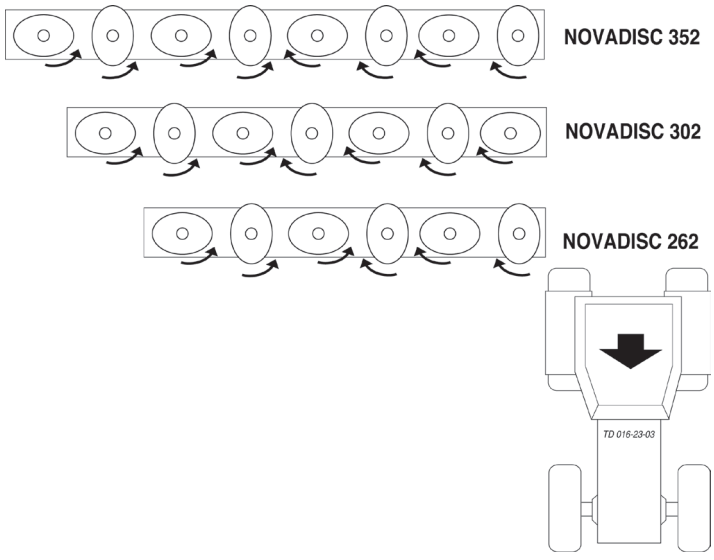
Installing cutter blades

TIP

- The arrow on the cutter blade shows the cutter disc's direction of turn.
- Before assembly, the screw-on surfaces must be free of paint.

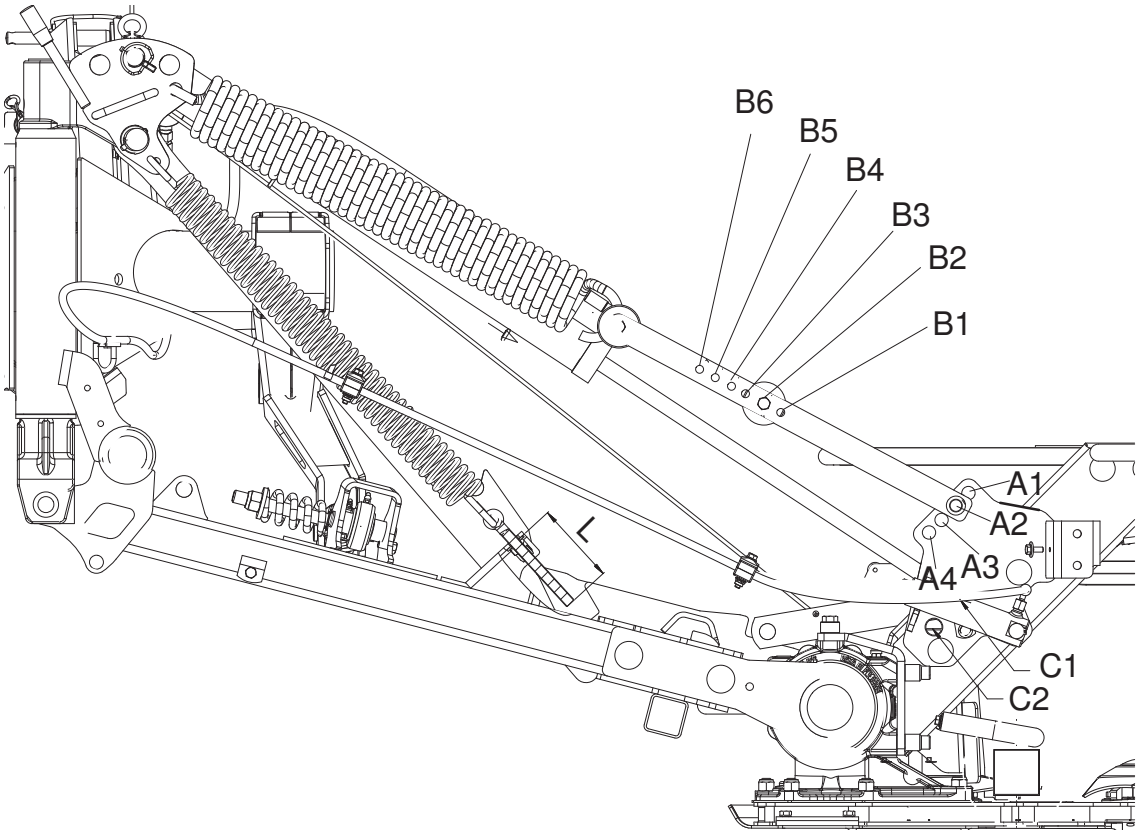


Mountain drive version for ND



Factory setting of the relief springs

Type	Setting dimension L (mm) small spring	Position A Guard support	Position B Flat bar	Position C: Cylinder attack point
NOVADISC 222	90 mm	A4	B5	C2
NOVADISC 262	70 mm	A2	B4	C1
NOVADISC 302	70 mm	A2	B4	C1
NOVADISC 352	120 mm	A1	B1	C1



V-belt drive

- Check V-belt tension:

After 1 hour, after 5 hours, after 20 hours then occasionally.

Setting values: 0.5 - 3 mm Distance of the washer (2) to the bracket (1) in the line corresponding to its cardan shaft speed.

. -Re-tensioning is necessary if the distance between the washer (2) and the bracket (1) is more than 3 mm.

NOTE

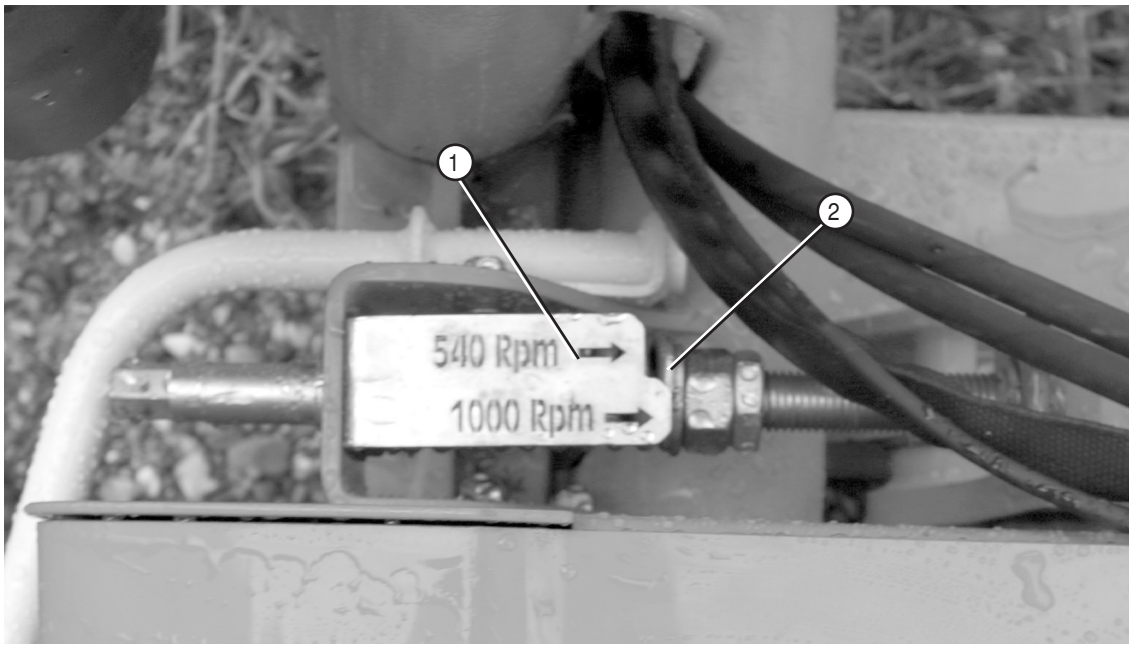
Risk of material damage to ball bearings and shafts due to excessive tensioning of the V-belts.

- Make sure that the setting dimension has been set correctly.
- Make sure that the he adjustment dimension to the correct cardan shaft speed was measured.

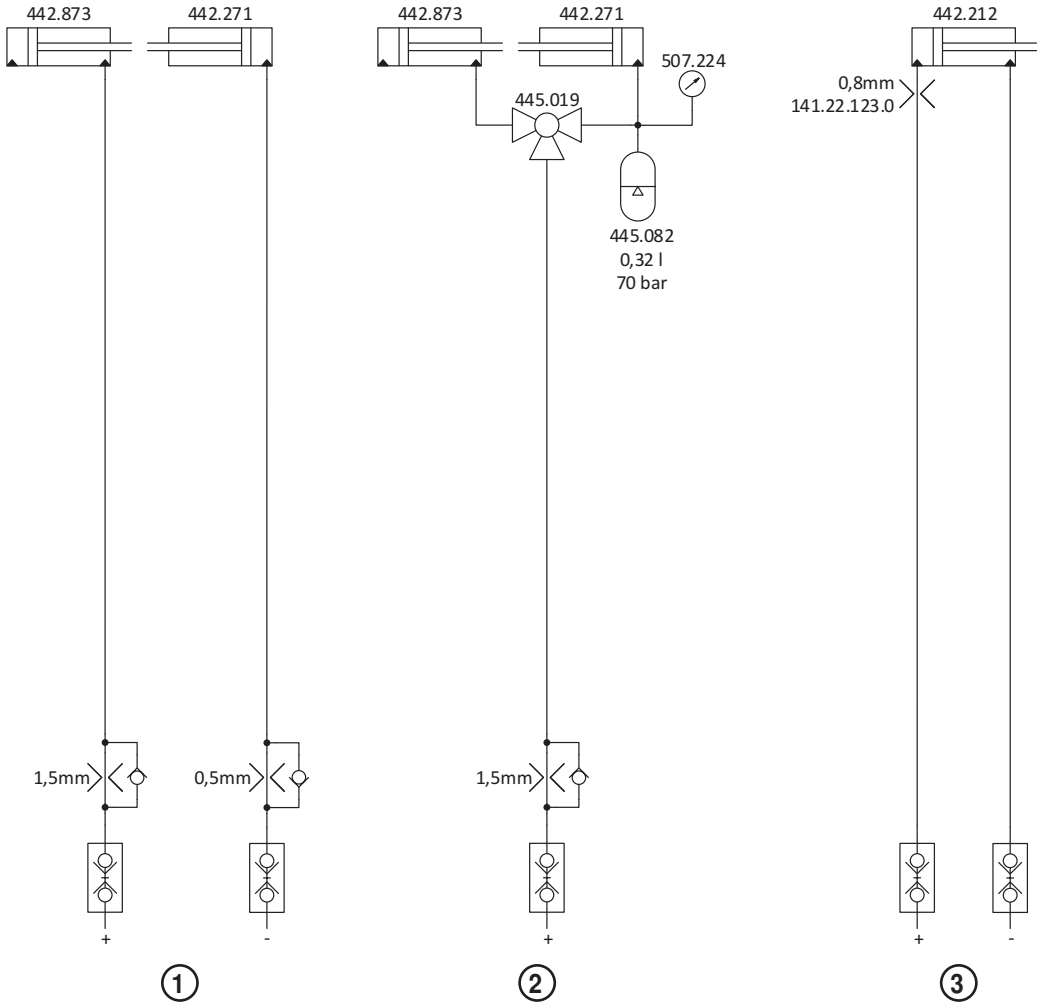
Visual inspection of the V-belts for damage:

Simultaneous with the voltage test and in case of justified suspicion

- If a V-belt is damaged or stretched, all 4 V-belts must be replaced.



Hydraulic plan



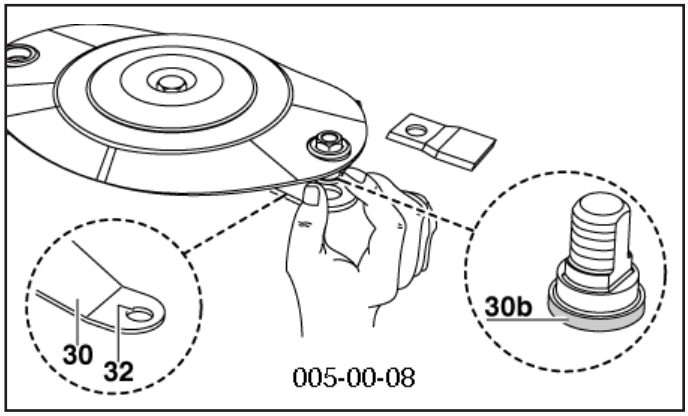
Explanation:

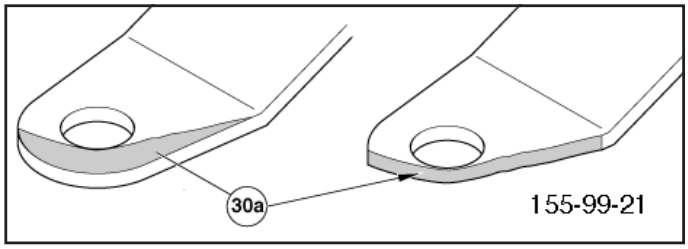
1… Relief, double-acting

2… Single-action unloading (optional)

3... dual-action hydraulic side protection flaps (optional)

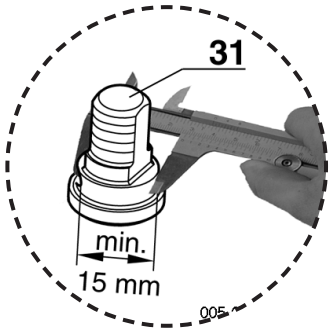
Wear control cutting blades bracket





The following parts are subject to wear:

- Cutting blade brackets (30)
- Cutting blades pins (31)



Procedure - Visual control

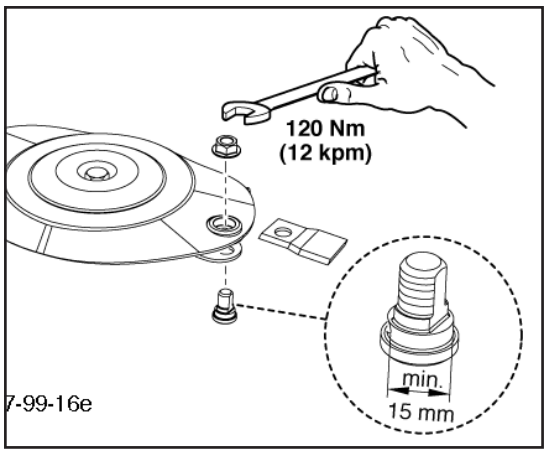
1. **Remove the cutting blades.**
2. **Remove grass residues and dirt**
   - around the pin (31).

DANGER

Life hazard - due to projected parts when

- **the blade pin in the middle is worn off up to 15 mm**
- **the wear area (30a) has reached the edge of the hole.**
- **the lower blade pin (30b) is worn off**
- **the blade pin is no longer stable in position**

- Check the cutter blade holders before any putting into operation, and frequently during operation, immediately after driving over a solid obstacle (e.g. stone, wood piece, metal …). If you find one or several wear signs, do not continue mowing.
- Worn parts must be immediately replaced with Pöttinger original parts.
- Blade pins and nuts shall be fastened with 120 Nm.



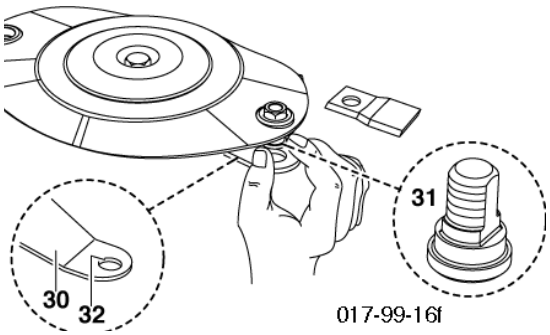
Holder for the rapid change of mowing blades

DANGER

Life hazard - due to projected parts when

- **the mowing blades on a mowing disc are worn unequally (imbalance hazard). Replace both mower blades of this disc with original Pöttinger parts!**
- **the mowing blades are bent, damaged and worn. Replace the affected mower blades!**
- **the blade holders (30) are bent, damaged and worn. Replace the affected blade holders!**

- Check mower blades and blade holders regularly.

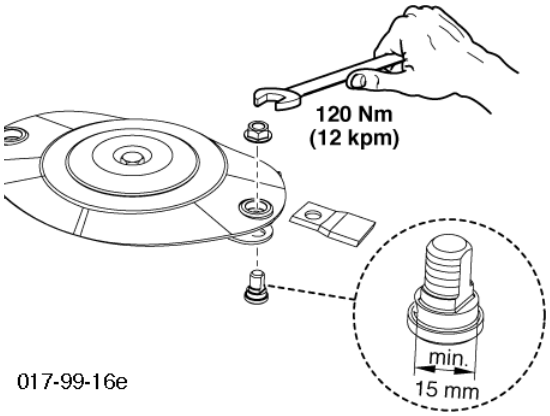


Mowing blades suspension checks

- Normal check every 50 hours.
- Check more often when mowing on stony terrain or in any other difficult operating conditions.
- Immediately check after driving over a solid obstacle (e.g. stone, wood piece, …).

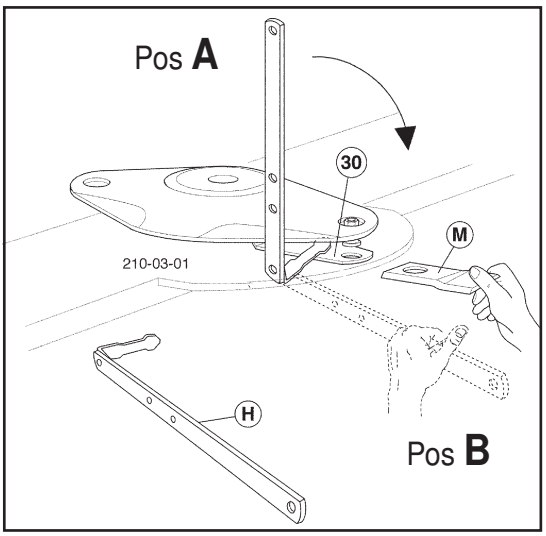
Checking procedure

- as described under chapter "Changing the Mowing blades"

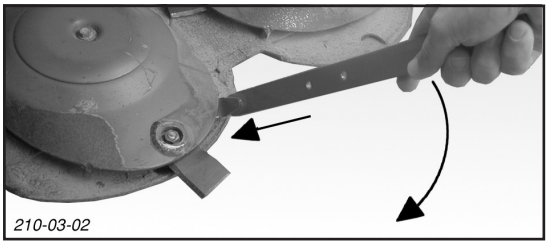


Changing the cutting blades (from year of construction 2004)

1. **Insert lever (H) from left or right side on the cutter disc "Pos A" until it stops.**
2. **Swivel the lever from "Pos. A" to "Pos. B" and push the movable holder (30) downwards.**
3. **Remove the cutter blade (M).**



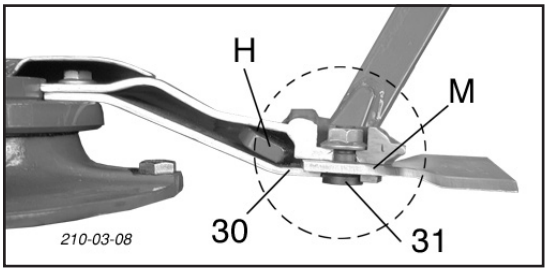
4. **Remove fodder residue and dirt**
   - around the bolts (31) and inside the borehole (32).



5. **Check**

- The blade bolt (31) for damage, wear and tight fitting.
- Holder (30) for damage, change in position and fitting
- Borehole (32) for damage.
  - Side surfaces must not show any signs of deformation.

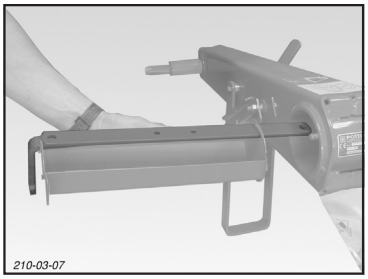
6. **Install the cutter blade**



7. **Visual control! Check that the blade (M) is correctly positioned between blade bolts (31) and holder (30)** (see image)**.**
8. **Swivel lever (H) to "A" again and remove.**

Storing of the lever

- After use, insert the lever into the holder and secure it.



Technical data

	NOVADISC 222 (Type PSM 3741)	NOVADISC 262 (Type PSM 3742)	NOVADISC 302 (Type PSM 3743)	NOVADISC 352 (Type PSM 3744)
Three-point hitching (adjustable laterally)	Cat. II	Cat. II	Cat. II	Cat. II
Working width	2.25 m	2.62 m	3.04 m	3.46 m
No. of mowing discs	5	6	7	8
Number of blades per disc	2	2	2	2
Lifting hydraulic (single-action)				
Hectares per hour	2.2 ha/h	2.6 ha/hr	3.0 ha/hr	3.4 ha/hr
p.t.o. speed	540 / 1000 min-1	540 / 1000 min-1	540 / 1000 min-1	540 / 1000 min-1
Weight[1)] (with cardan shaft)	650 kg	690 kg	730 kg	790 kg
Power requirements	from 30 kW (40 PS)	from 37 kW (50 PS)	from 44KW (60 PS)	from 52 kW (70 PS)
Free-run cardan shaft				
Permanent sound emission level	76,2 dB(A)	76,5 dB(A)	80,1 dB(A)	77,8 dB(A)

[1)] Weight: Variations are possible depending on machine features.

All data subject to alteration without notice

The designated use of the mower unit

Mower unit

NOVADISC 222 (Type PSM 3741)

NOVADISC 262 (Type PSM 3742)

NOVADISC 302 (Type PSM 3743)

NOVADISC 352 (Type PSM 3744)

is intended solely for normal use in agricultural work.

- For the mowing of grassland and short stemmed fodder

  Any other use outside of this is regarded as not in accordance with the designated use.

  The manufacturer accepts no liability for any damage arising as a result thereof. The user accepts sole responsibility.
- Use as designated also includes observance of the manufacturer's stipulated maintenance and repair conditions.

Optional equipment:

Warning signs with lighting

- Swath discs
- Conveying cone
- Wear skids
- High cut skids
- Hydraulic side protection
- Second support leg for parking in working position
- Folding via single-acting hydraulics
- Rotation direction of the mower bar "mountain drive" for NOVADISC 262

Necessary connections

- 1 double-acting hydraulic connection
  Min. operating pressure: 150 bar
  Max. operating pressure: 200 bar
- 1 single acting hydraulic connection (optional)
  Min. operating pressure: 80 bar
  Max. operating pressure: 180 bar

Type plate position

The chassis number is engraved on the type plate shown adjacent. Guarantee claims, enquiries and spare part orders cannot be processed without the chassis number.

Please enter the chassis number on the operating instructions' title page immediately upon taking delivery of the vehicle / machine.

Type plate position

On the tractor side of the headstock, near the operating instructions container.

SUPPLEMENT

Things will run better with genuine Pöttinger parts

Original inside

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

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

Be sure you purchase the ”Original” with the cloverleaf symbol!

PÖTTINGER

TIP

This operating manual contains this symbol at all points relating to the safety of persons.

1.) Operating instructions

a. The operating instructions are an important part 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 possession.

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

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 who are mentally and physically able and have been trained or familiarized accordingly is allowed to operate this machine.

b. Persons not yet trained, familiarized or under training or in a general education 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.) Performing maintenance 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.) After maintenance work on brakes

a. After each repair of the brakes, a functional check or a test drive must be carried out to ensure that the brakes function properly. New drums or brake linings only have optimum braking effect after a few braking operations. Violent braking should be avoided.

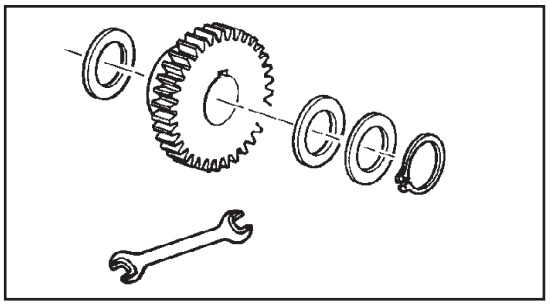
5.) Modification work

a. Do not undertake any unauthorised additions, modifications or alterations to the machine. This also applies to the installation and setting of safety devices as well as welding or drilling in stress-bearing parts.

6.) Appropriate use

a. see technical data

b. Intended use also includes compliance with the manufacturer's stipulated operating, maintenance and service conditions.



7.) Spare parts

a. **Original parts and accessories** are specially designed for the machines and their equipment.

b. We expressly draw your attention to the fact that genuine parts and accessories not supplied by us, have not been tested and approved by us.

c. Under certain circumstances, the installation and/or use of such products may negatively modify or impair the specified structural properties of the machine. The manufacturer accepts no liability for any damage caused through the use of non-genuine parts and accessories.

d. Unauthorised changes as well as the use of components or attachments on the machine lead to the exclusion of manufacturer's liability.

8.) Safety devices

a. All protection devices must remain on the machine and be maintained in proper condition. Replacement of worn or damaged covers or guards is required in good time.

9.) Before starting work

a. Before commencing work, the operator must familiarise with all of the operating devices and functions. The learning of these is too late after having already commenced operation!

b. Before every putting into operation check the vehicle or the implement for traffic and operating safety.

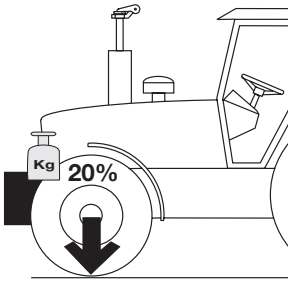
10.) Transport of people prohibited

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

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

11.) Driving ability with auxiliary equipment

a. The towing vehicle is to be sufficiently equipped with weights at the front or at the rear in order to guarantee the steering and braking capacity (a minimum of 20% of the vehicle's tare weight on the front axle).



b. The driving ability is influenced by the road and auxiliary equipment. The driving must be adapted to the corresponding terrain and ground conditions.

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

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

12.) General

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

b. Danger of injury exists when coupling implements to the tractor!

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

d. Do not stand between the tractor and the 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 allowed to stand between tractor and implement without the 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 the universal drive.

13.) Cleaning the implement

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

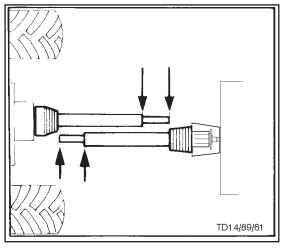
Adapting cardan shaft to tractor

NOTE

Material damage - due to inferior spare parts

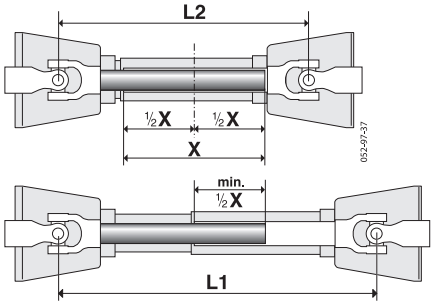
- Only use the cardan shaft supplied or stated; otherwise the warranty claims for any damage are not valid.

The correct length is determined by comparing both cardan shaft halves.



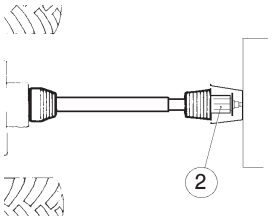
Cutting to length procedure

- To adapt the length, hold cardan shaft halves side by side in the shortest operating position (L2) and mark.



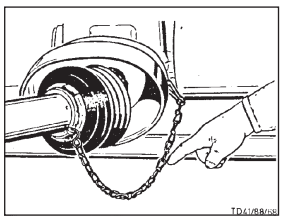
Caution!

- Note the maximum operating length (L1)
  - Try for the greatest possible tube overlap (min. 1/2 X)
- Trim the inner and outer protective tube equally
- Attach overload protection (2) to the machine!
- Always check that drive shaft locks are securely engaged before starting work.



Safety chain

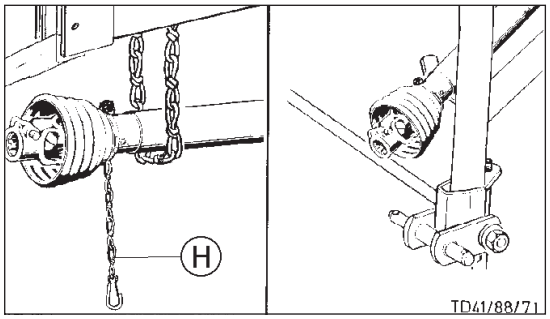
- Use chain to prevent tube guard from rotating.
  Ensure sufficient swivel space for the cardan shaft!
- Trim the safety chain so that it cannot wind around the cardan shaft.



Instructions for working

Do not exceed the permissible pto speed when using the machine.

- The attached machine may run-on after the pto is switched off. Work must only be performed on it once it has completely stopped.
- When parking the machine, the cardan shaft must be taken off or secured using a chain, as instructed. Do not use safety chain (H) to suspend the cardan shaft.



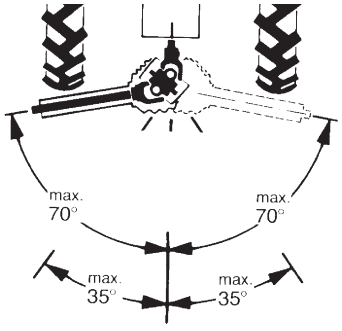
Wide-angle joint:

Maximum angle for operation and at standstill 70°.

Standard joint :

Maximum angle at standstill 90°.

Maximum angle for operation 35°.



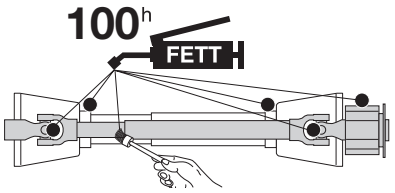
DANGER

Mortal danger - due to worn covers

- Replace the worn covers immediately

- Lubricate with a brand-name grease before starting work and every 100 hours worked.
- Before any extended period of non-use, clean and lubricate driveshaft.

  For winter working, grease the tube guards to prevent freezing.



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.

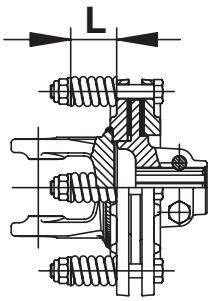
b.) Loosen screws to release the pressure on the friction disk.

Slip the clutch.

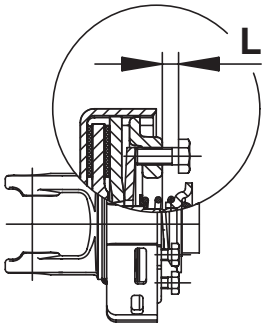
c.) Tighten set screws to dimension "L".

Clutch is ready for use.

K90,K90/4,K94/1



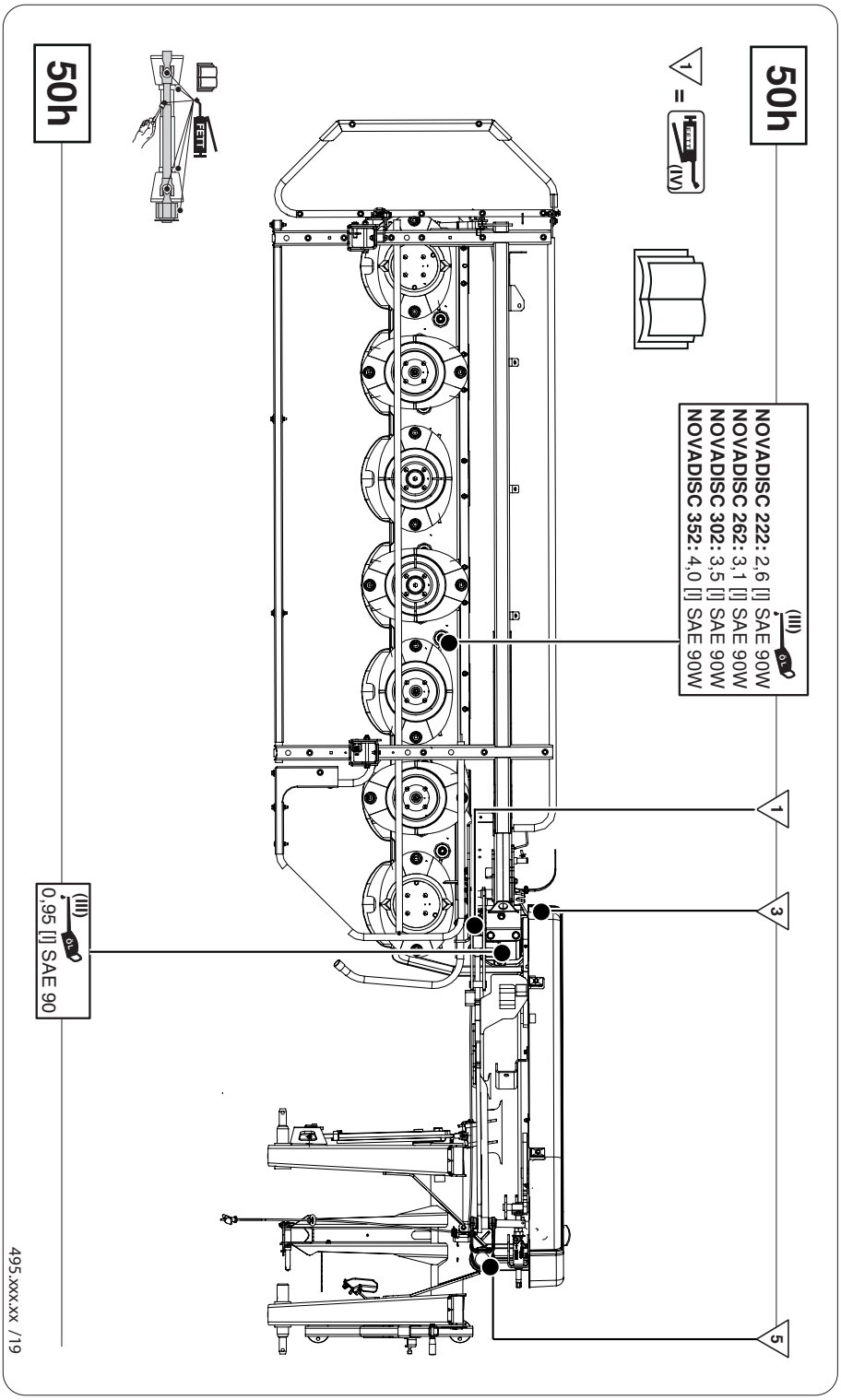
K92E,K92/4E



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.

NOVACAT 222
NOVACAT 262
NOVACAT 302
NOVACAT 352



EN

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

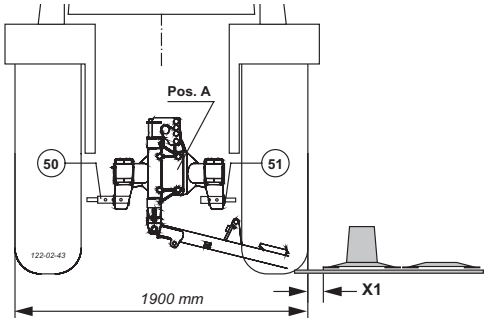
Lubricant indicator	**I**		**III**		**V**	**VI**	**VII**
required quality level niveau	HYDRAULIKöL HLP DIN 51524 Teil 2 See notes: * ** ***	motor oil SAE 30 according to API CD/SF	gear oil, SAE 90 resp. SAE 85 W-140 according to API-GL 4 or API-GL 5	lithium grease	transmission grease	complex grease	gear 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	AVIAMEHRZWECKFETT 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)	III	(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	

Mounting options

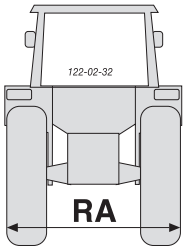
The distance between the mowing disc and the tractor tyres should be as short as possible (X1).



Install the console and the lower link pins according to the tractor being used.

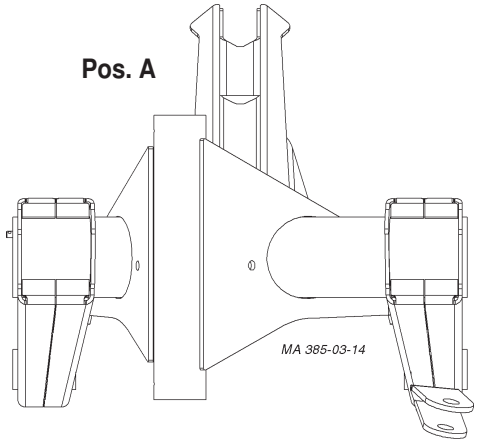
Attaching to tractor

1. Measure the outer dimensions of the tractor tyres (RA).

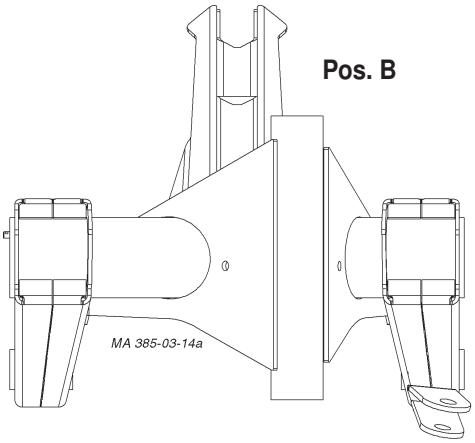


2. Install the console appropriately (RL)

Pos. A (RA = 1800 to 2300 mm).



Pos. B (RA = 2000 to 2600 mm).



3. Install the lower link pins (50, 51) appropriately.

Example 1:

Tractor with a width of RA = 1900 mm.

- Console in Pos. A
- Distance X1 = +100 mm / +50 mm / 0 mm
  - Mount the lower link pins appropriately (50, 51).

Example 2:

Tractor with a width of RA = 2400 mm.

- Console in Pos. B
- Distance X1 = +40 mm / -10 mm / -60 mm
  - Mount the lower link pins appropriately (50, 51).

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

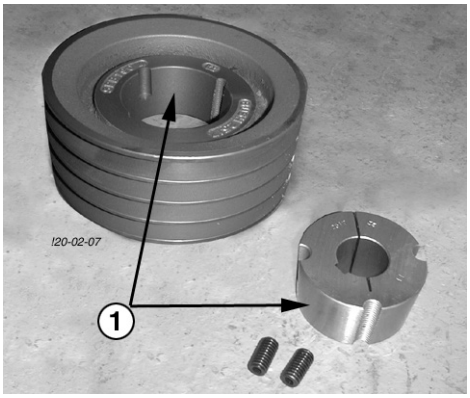
Bush identifier	Torque [Nm]
2017	30
2517	49

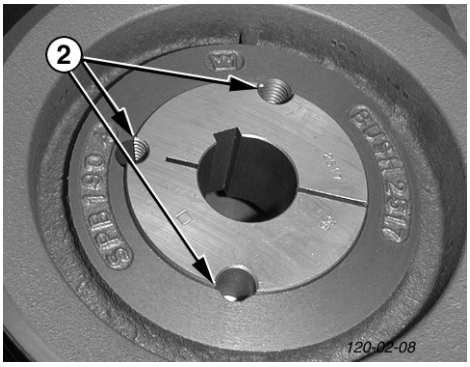
   - When the drive has been operating under load for a short period (half to on hour) check and ensure that the screws remain at the appropriate tightening torque.
   - In order to eliminate the ingress of dirt fill all empty holes with grease.

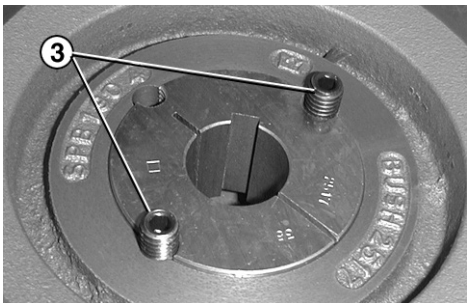
Removal

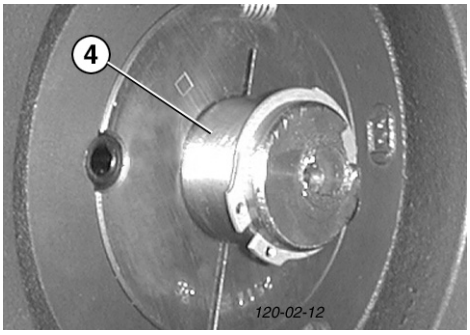
1. Slacken all screws. Depending on the size of the bush remove one or two.

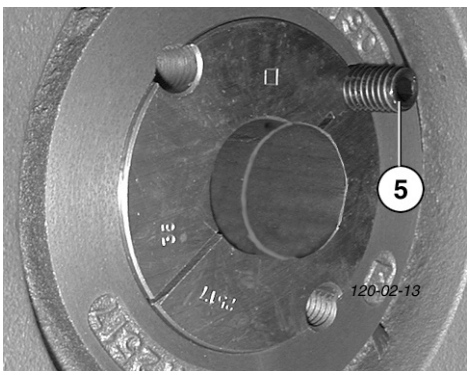
   After oiling point and thread of grub screws or under head and thread of cap screws insert them into the jacking off holie(s) in bush (Pos. 5).
2. Tighten screw(s) unitormly and alternately until the bush is loose in the hub and pulley is free on the shaft.
3. Remove pulley bush assembly from shaft.











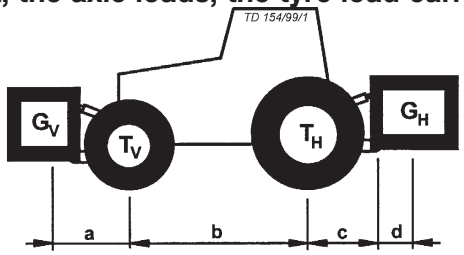
Combination of tractor and mounted implement

DANGER

Life hazard or material hazard - due to overload on tractor or wrong tractor ballast distribution.

- Make sure that hitching the implement (in the front and rear three-point linkage) does not lead to exceeding the maximum total admissible weight of the tractor, the axle loads or the load capacity of the tyres. 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

Rear hitched implement resp. front-rear combinations

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

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

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

Front mounted implement

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

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

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

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

(If the front hitched implement (G_V) does not reach the minimum required ballasting Front ($G_{V\ min}$), the weight of the front hitched implement must be increased to the minimum ballasting 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 the rear hitched implement (G_H) does not reach the minimum required ballasting Rear ($G_{H\ min}$), the weight of the rear hitched implement must be increased to the minimum ballasting 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.

6. TYRE LOAD CAPACITY

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

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 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	Novadisc 222	262	302	352
Type	3741	3742	3743	3744
Serial no.				

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

machinery 2006/42/EG

In addition to this, the manufacturer also declares adherence to the other following 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:
Martin Baumgartner
Industriegelände 1
A-4710 Grieskirchen

Markus Baldinger,
CTO R&D

Jörg Lechner,
CTO Production

Grieskirchen,
02.04.2020

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