Operator‘s manual

Translation of the original Operating Manual

Nr. **99+3783.EN.80V.0**

Chassis Nr.

Disc mower

NOVACAT 262
(Type PSM 3772 : + . . 00001**)**

NOVACAT 262 ED/RCB
(Type PSM 3782 : + . . 00001**)**

NOVACAT 302
(Type PSM 3773 : + . . 00001**)**

NOVACAT 302 ED/RCB
(Type PSM 3783 : + . . 00001**)**

NOVACAT 352 V
(Type PSM 3794 : + . . 00001**)**

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.

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 hand-over declaration online.

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.

Table of contents

Introduction 4

SYMBOLS USED
CE mark 6
Safety hints: 6

WARNING SIGNS
Meaning of warning signs 7

OVERVIEW
Variations 8
Overview NOVACAT 262 and 302 8
Overview NOVACAT 262 ED / RC // 302 ED / RC // 352 V 9

TRACTOR REQUIREMENTS
Tractor 10
Ballast weights 10
Lifting unit (three-point linkage) 10
Hydraulic control on the lifting gear 10
Necessary hydraulic connections 11
Power connections required 11

ATTACHING TO TRACTOR
Safety advice 12
Hitching implement to tractor 12
Hydraulic relief 14
Carry out trial run 15
Checking the lighting 15

TRANSPORT AND WORKING POSITION
Safety advice 16
Changing from working position to field transport position 16
Changing from field transport to transport position 16
Changing from transport to working position 17

OPERATION
Safety advice 18
Important notes prior to starting work 18
Settings for operation 19
Reversing 19
Protective covers 20
Starting up 21
Function of the anti-collision safety 21
Setting the mechanical anti-collision safety (1) 22
Setting the hydraulic anti-collision safety 22

UNHITCHING AND PARKING
Safety advice 23
Unhitching implement from tractor 23

WORKING ON SLOPES
Working on slopes 26

ED TINE CONDITIONER
Operation mode 27
Possible settings 27
Mowing with the conditioner 28
Correct V-belt tension 28
Rotor tines position 28
Maintenance of the rotor tines: 28
Swath width when mowing with conditioner 28
Uncoupling and coupling the conditioner 29
Maintenance 31
Position of the rotor tines on the conditioner 32

MOWING WITHOUT A CONDITIONER
Mowing without a conditioner 33
Optional equipment: 33
Swath width when mowing without a conditioner 34
Conveying cones (optional) 34
Reverse the three screws in the centre bearing 34

RC = ROLLER CONDITIONER
Safety advice 35
Operation mode 35
Overview 35
Possible settings 36
Operation 37
Maintenance 38

GENERAL MAINTENANCE
Safety advice 41
General maintenance information 41
Cleaning of machine parts 41
Parking in the open 41
Winter storage 41
Articulated shafts 42
Hydraulic unit 42
Cutter bar oil level check 43
Cutter bar oil change 44
Position of the gears 44
Oil change angular gear 1 44
Oil change angular gear 2 45
Installing cutter blades 45
Bracket at lifting arm of cutter bar 45
Hydraulic relief 45

MAINTENANCE
Wear control of mowing blades and holder 46
Storing of the lever 47

TECHNICAL DATA
Technical data 48
Connections required 48
Equipment on request: 48
The defined use of the mower unit 49
Position of identification plate 49

SUPPLEMENT

SAFETY ADVICE
Important for driveshafts with friction clutch 55
Lubrication chart 56
NOVACAT 262 ED / RC 57
NOVACAT 302 ED / RC 57
NOVACAT 352 V 57
Lubricants 58
Conical disc 61

TAPER BUSHES
Taper bushes installation instructions 63

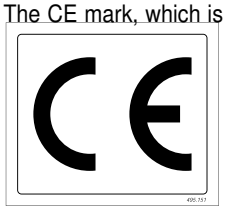
SERVICE
Hydraulic plan NOVACAT 262 and 302 64
Hydraulic plan NOVACAT262 ED / RC and 302 ED / RC 65
Combination of tractor and mounted implement 66

Attention!

Safety hints to observe in supplement!

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 <u>of fatal or life-threatening injury.</u>

- 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

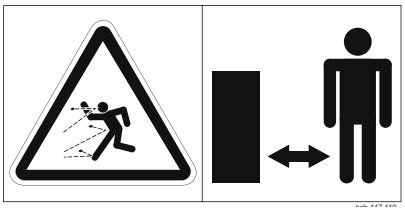
The text sections marked in this way provide practices and advice on environmental protection.

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.

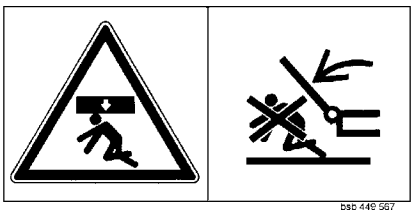
Figures may deviate from your implement in detail and are to be taken as illustrations of operating principle.

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

Meaning of warning signs

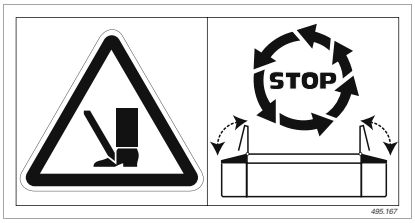


Danger - flying objects; keep safe distance from the machine as long as the engine is running.



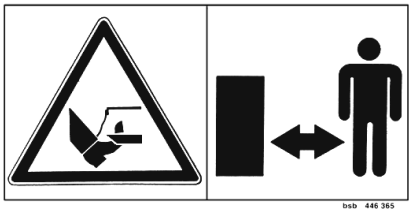
Do not stand in the implement's swivel range.

Do not touch rotating machine components.
Wait until they have stopped completely.

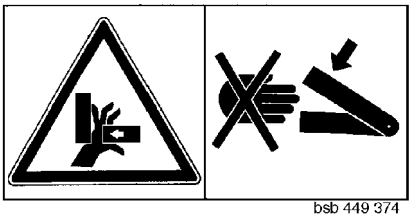


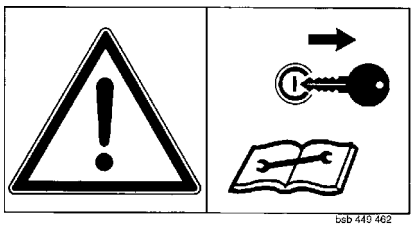
Close both side protective coverings before engaging p.t.o..

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



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



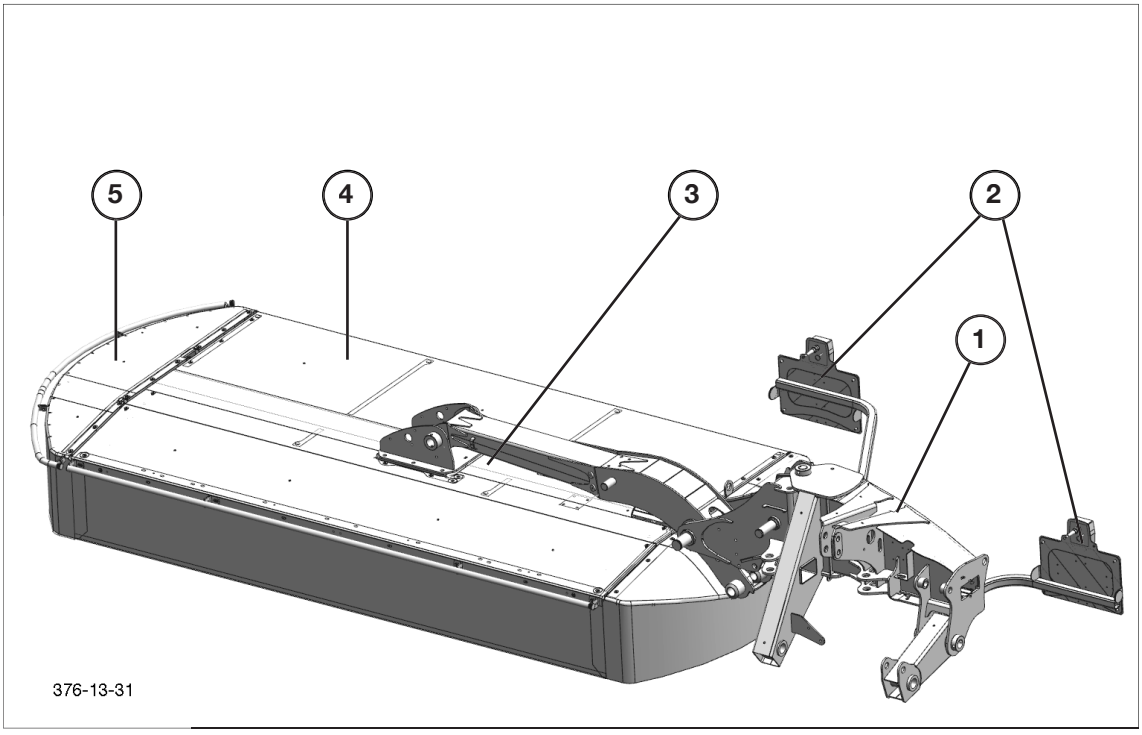


Shut off engine and remove key before performing maintenance or repair work.

Variations

Description	Description
NOVACAT 262	Working width: 2,62 m
NOVACAT 262 ED / RC	Working width: 2,62 m
NOVACAT 302	Working width: 3,04 m
NOVACAT 302 ED / RC	Working width: 3,04 m
NOVACAT 352 V	Working width: 3.46 m

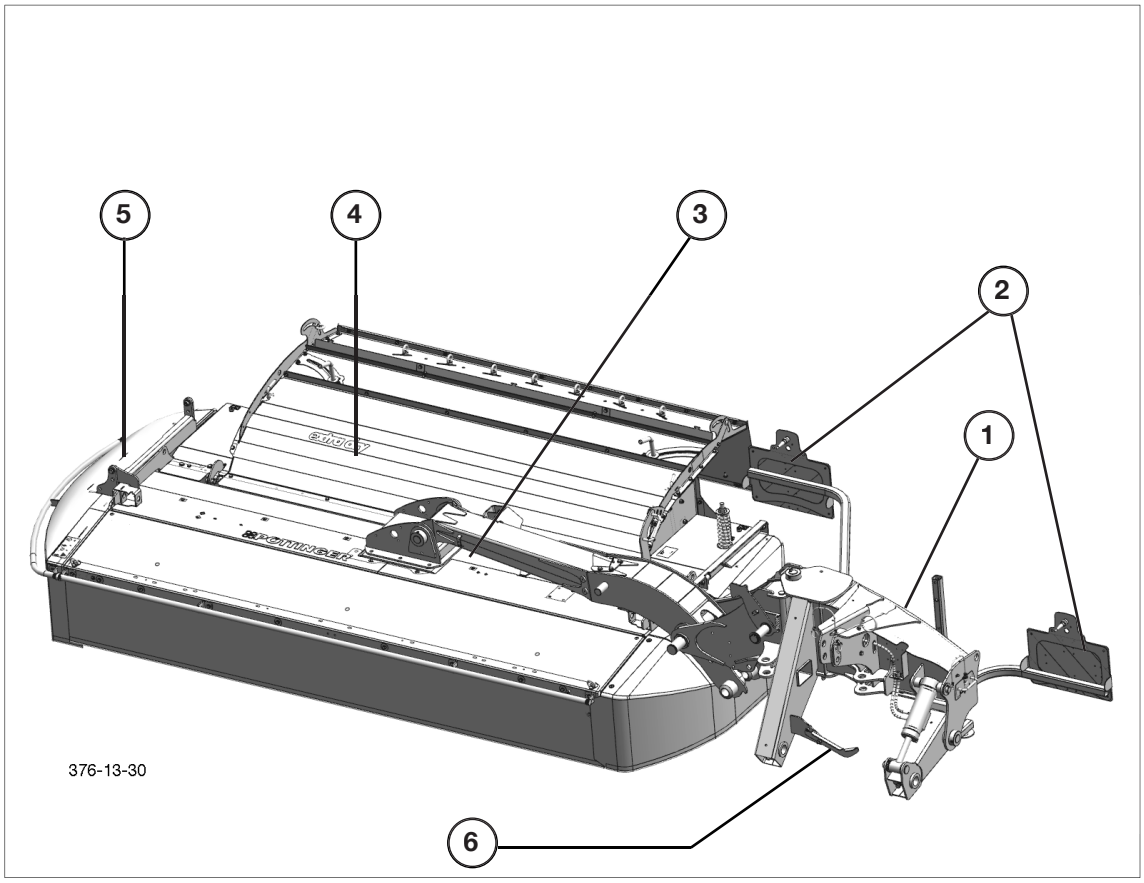
Overview NOVACAT 262 and 302



Designations:

(1) Headstock
(2) Lighting
(3) Cutter bar
(4) Swath former / hind protection
(5) Folding lateral protection

Overview NOVACAT 262 ED / RC // 302 ED / RC // 352 V



Designations:

(1)Headstock
(2)Lighting
(3)Cutter bar
(4)Tine conditioner / roller conditioner / guard
(5)Folding lateral protection
(6) Cardan shaft retainer

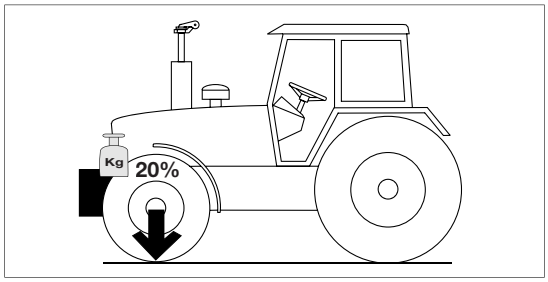
Tractor

To operate this machine the following tractor requirements are necessary:

- Tractor power:
  NOVACAT 262 - from 33 kW / 45 PS
  NOVACAT 262 ED / RC - from 40 kW / 55 PS
  NOVACAT 302 - from 37 kW / 50 PS
  NOVACAT 302 ED / RC - from 44 kW / 60 PS
  NOVACAT 352 V - from 96 kW / 130 PS
- Attaching:
  NOVACAT 262 // 302 -
  Lower link cat. II / III / width: 2 / 3
  NOVACAT 262 ED / RC // 302 ED / RC // 352 V - lower link cat. II / III / width: 2 / 3
- Connections:
  See table "Necessary hydraulic and power connections"

Ballast weights

Ballast weights



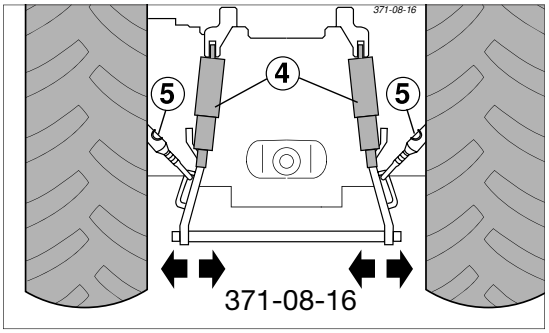
The front of the tractor must have sufficient ballast weights to guarantee braking and steering capabilities.

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.

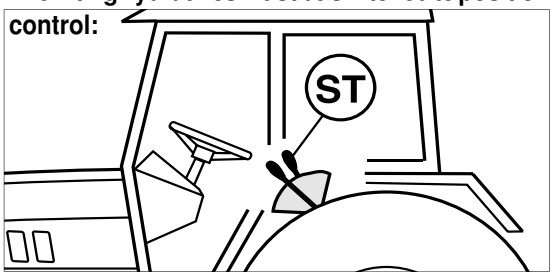
Lifting unit (three-point linkage)



- 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 chains and stabilisers of the lower linkage (5) are to be adjusted so that lateral movement of the hitched implements is not possible. (Safety measure for transportation)

Hydraulic control on the lifting gear

The lifting hydraulics must be switched to position control:



Necessary hydraulic connections

The implement requires a single-action and a dual-action hydraulic connection. See the following table for the elements to be controlled:

NOVACAT 262 **NOVACAT 302**	**Consumer**	**Hydraulic connection**
Standard	Lifting cylinder - between working and headland position	Single-action
Standard	Lifting cylinder - transport position (with pulled control line)	Dual-action
	Setting the relief (3-way cock at top)	
Optional	Hydraulic lower linkage rocker (3-way cock at bottom)	

NOVACAT 262 ED / RC **NOVACAT 302 ED / RC** **NOVACAT 352 V**	**Consumer**	**Hydraulic connection**
Standard	Lifting cylinder - between working and headland position	Single-action
Standard	Lifting cylinder - transport position (with pulled control line)	Dual-action
	Setting for relief (3-way cock at top)	
	Hydraulic lower linkage rocker (3-way cock at bottom)	

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

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 …)!

DANGER

Life-threatening danger through implement operation with self-driven machines. The field of vision during a transport journey is restricted when the device is attached.

- Operate the machine only with tractors whose field of vision remains unaffected by the unit during transport.

CAUTION

Risk of crushing injury caused by machines being parked on feet.

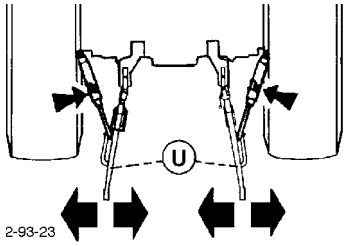
- Use tractor's hydraulic lift only when no one is standing in the danger area.

For further safety instructions **see Supplement A1, pt. 7), 8a. - 8h.)**

Hitching implement to tractor

1. Set lower link on tractor

- Fix the lower linkage so that the implement cannot swivel out to the side and the headstock is centrally positioned.



2. Attaching implement to tractor

WARNING

Risk of injury resulting in death or other serious injury from driving over or rolling over a person located between the implement and the tractor.

- Only connect on fixed, even ground.
- Secure the tractor against rolling before anyone is allowed to enter the space between the implement and the tractor.

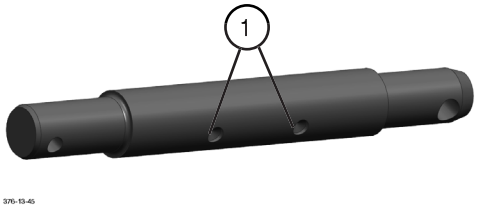
CAUTION

Risk of crushing when bringing the tractor up to the implement.

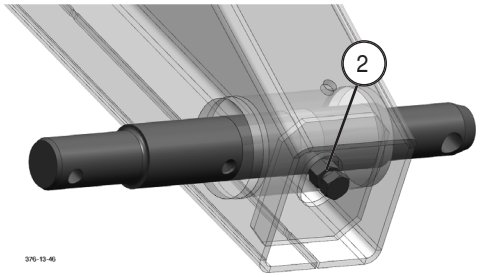
- Direct everyone out of the danger area between the tractor and the machine.

- Adjust the width of the lower link.

  Push the lower link pin into the holder at the lower link and align to the required width (= hole) (1).



- Fix the lower link pin in the holder with a screw. The screw (2) must bite into the selected drilled hole (1) of the lower link pin.



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 (2) and coupling pin.

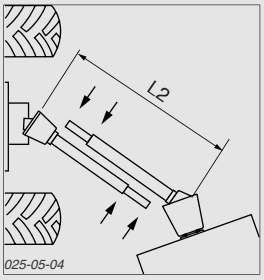
- The hydraulic lower linkage compensator fits into the left lower linkage arrester hook by activating the dual-acting control unit.

- The mechanical lower link arm is adapted via the spindle.
- Connect upper link and secure.

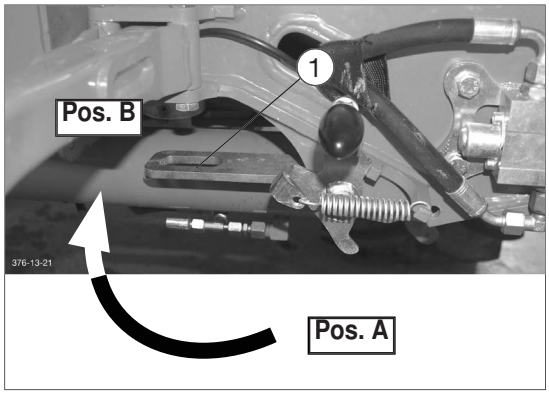
DANGER

Life-threatening danger exists when cardan shaft length is unadapted

- Before initial operation, check the length of the cardan shaft and adapt if necessary.
- A tractor change is considered to be an initial operation.
- See chapter "Adapting the Cardan shaft" in Appendix B.

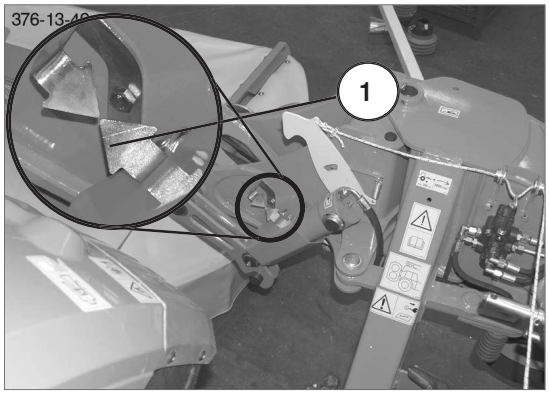


- Connect hydraulic hoses depending on equipment.
- Connect the 7-pin plug for the lighting (optional) in the tractor.
- Lay control line in tractor cabin.
- Fold up support stands and secure!
- Swivel safety flap
  a. Set single-acting hydraulic control system to "floating" position!
  b. Raise the tractor's lifting gear until the safety flaps can be moved easily.
  c. Move safety flap (1) position B before lifting to field transport position.



- Set the right lower link.
  1. Set the mowing unit in "floating" position using the single-acting servo
  2. Move the lifting gear in the appropriate direction until the indicator arrow points (1) on the relief cylinder point directly at each other.

     This setting means that for NOVACAT 302 and NOVACAT 352 V, the ground clearance to the right lower link pin is approx. 700 mm and for the NOVACAT 262 approx. 650 mm.



3. Set the mounting frame horizontally:

Bring mounting frame into horizontal position by adjusting hydraulic lower link rocker

Mechanical (standard):

TIP

The mower is to be placed on the ground!

- Adjust the spindles until the mounting frame is horizontal.

Hydraulic (optional):

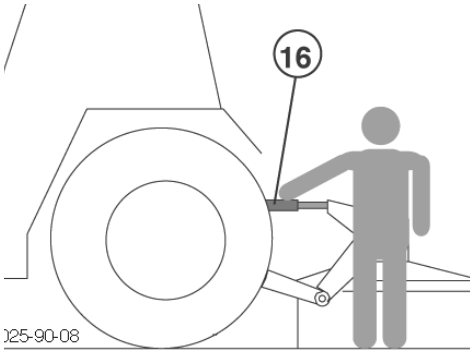
TIP

The mower is to be swivelled into field transport position!

- Activate dual-acting control unit at tractor until the mounting frame is horizontal.

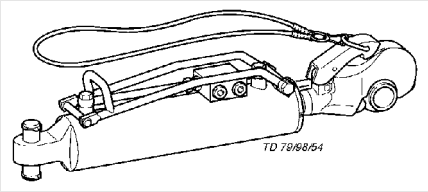
4. Adjust upper link

- The cutting height is adjusted by turning the upper linkage spindle (16).



TIP

A hydraulic upper link is recommended (A double acting control unit is required for this purpose)



Hydraulic relief

1. Setting the relief system

CAUTION

Risk of crushing injury. The mowing unit may tip forwards during the adjustment procedure.

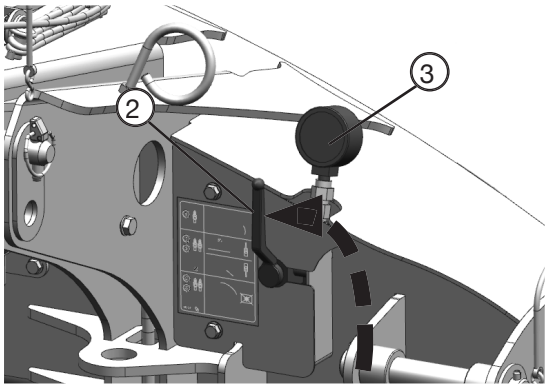
- Remove anyone who is not involved from the danger area.

1. Set the right lower link pin at the correct ground clearance. The arrows (1) point to each other. (see "Attaching implement to tractor")

TIP

The hydraulic connection for the hydraulic relief on the mower is fitted with a stop valve. Open this tap prior to changing the preload pressure and close it again after changing the pressure.

2. Move the 3-way valve (2) lever up to unlock the relief system.



3. Set the hydraulic preload pressure using the dual-acting control unit. The preload pressure can be read on the pressure gauge (3).

   Reference values for the hydraulic preload pressure ex works:

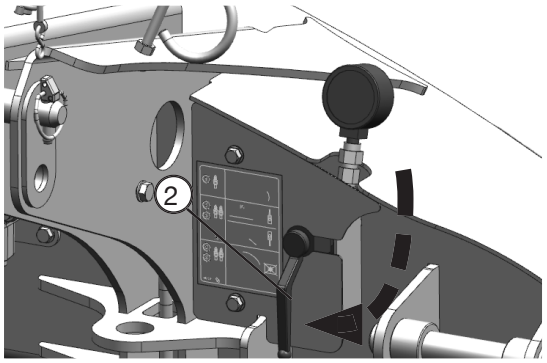
   Display value on pressure gauge

   for implement without a conditioner: 90 bar

   for implement with conditioner: 115 bar

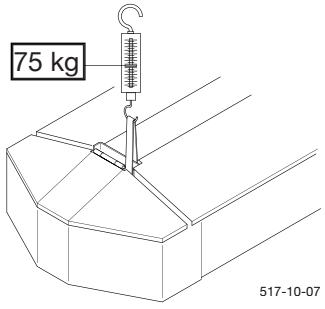
2. Relief system control

1. Move the 3-way valve (2) lever down to lock the relief system.



2. Check resting pressure

   by lifting the cutter bar on one side. The weight outside and inside the mower unit should be 75kg .



TIP

Be careful that the degree of soiling does not influence ground pressure of the device.

TIP

The hydraulic connection for the hydraulic relief on the mower is fitted with a stop valve. Open this tap prior to changing the preload pressure and close it again after changing the pressure.

Carry out trial run

1. Set right lower link ground clearance

- Set the right lower link.
  1. Set the mowing unit in "floating" position using the single-acting servo
  2. Move the lifting gear in the appropriate direction, until the indicator arrowheads on the relief cylinder point directly to each other.

     This setting means that the ground clearance for the NOVACAT 302 is approx. 700 mm to the right lower link pin, and 650 mm for the NOVACAT 262

2. Set power take-off r.p.m.

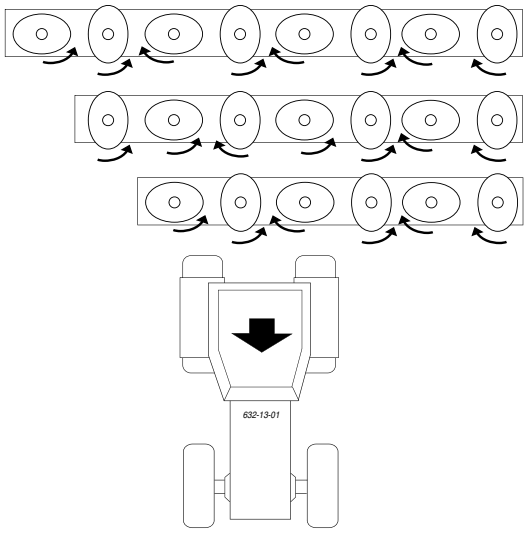
- Set appropriate power take-off r.p.m. on tractor

TIP

A transfer placed near the transmission gives information about the rpm for which the disc mower is designed.

3. Check rotation direction

- The power take-off rotation direction is suitable when, looking from the front, the outer cutting discs rotate inward.

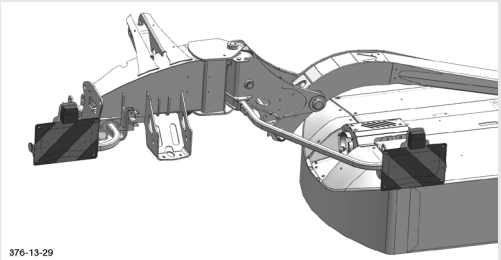


Checking the lighting

DANGER

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

- The lights and corresponding reflector plates are to be checked for functioning, completeness and cleanness before any driving on public roads.



Safety advice

WARNING

Risk of injury resulting in death or other serious injury from tilting the unit.

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

WARNING

Risk of injury resulting in death or other serious injury through ejected parts.

- Switch off the cutter bar drive and wait until the cutter bar is at a standstill before swiveling it upwards.

Changing from working position to field transport position

Procedure:

WARNING

Risk of injury resulting in death or other serious injury due to standing in the swivel range.

- Ensure that no one is standing in the mower's swivel range!

1) Raise the mower into field transport position using the single-action control unit

Changing from field transport to transport position

NOTE

Risk of damage to cardan joint or cardan shaft stub at the angular gear input point!

The cardan shaft may break if under brakes when changing to the transport position.

- Disengage the cardan shaft brake before changing the transport position.

Procedure:

1)Turn drive off and wait for mower discs to come to a standstill

WARNING

Risk of injury resulting in death or other serious injury due to standing in the swivel range.

- Ensure that no one is standing in the mower's swivel range!

2) Fold up side protection

   for mechanical side protection:

   1) Release locking device with screwdriver
   2) Fold side protection up manually

   With hydraulic side protection (optional), the side protection folds up automatically on performance of points 3 and 4.

3) Pull control line
4) At the same time swivel the mower into transport position using the dual-action control unit.

TIP

Only for devices with hydraulic lower link arms.

If the dual-action control unit is activated without having pulled the control line at the same time, then the horizontal position of the headstock changes.

Changing from transport to working position

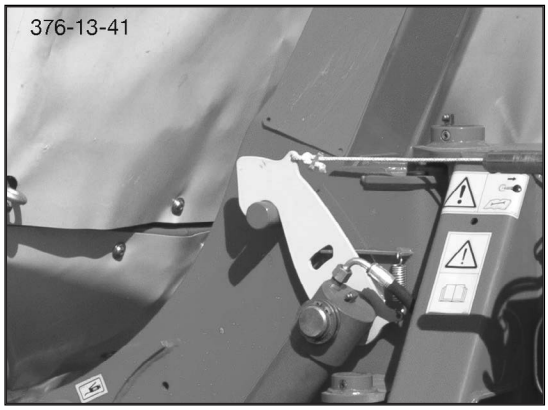
Procedure:

WARNING

Risk of injury resulting in death or other serious injury due to standing in the swivel range.

- Ensure that no one is standing in the mower's swivel range!

1) Pull control line to open the transport locking device.



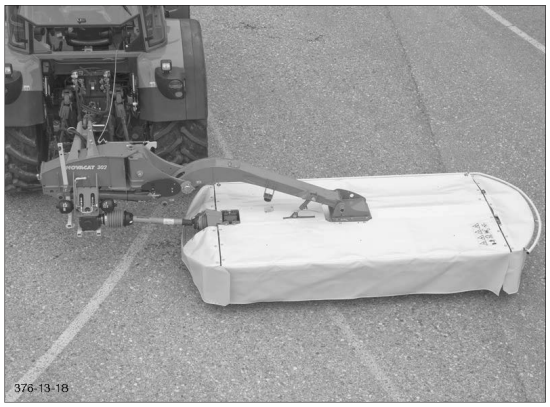
2) At the same time swivel the mower into transport position using the dual-action control unit.

TIP

Only for devices with hydraulic lower link arms.

If the dual-action control unit is activated without having pulled the control line at the same time, then the horizontal position of the headstock changes.

3) Set the single-action control unit to floating position and thus lower the mower into working position.
4) Fold off side protection
   - with mechanical side protection: Push side protection down manually. The locking device catches automatically.
   - with hydraulic side protection: Side protection is automatically folded down and locked.



Safety advice

DANGER

Life-threatening danger exists through blades being ejected.

- 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 a blockage, when changing blades or when adjusting the machine during operation.

- Stop tractor/trailer unit on level ground and apply tractor's brakes.
- Park the mower in the working position.
- Before going to the rear of the machine, make sure that the PTO shaft is stationery and that the hydraulic connections are depressurised.
- Remove the tractor key!

DANGER

Life-threatening danger exists through falling off the machine.

- Do not climb onto, play on or around the machine.
- Do not let anyone climb on or clamber about on the machine.
- Before starting, make sure that no one is standing on the machine or in its danger area!

TIP

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

Important notes prior to starting work

1. Check

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

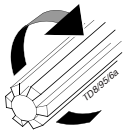
2. Only switch the machine on when in the working position and do not exceed the stipulated p.t.o. speed!

540 Upm **1000 Upm**

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

- 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!

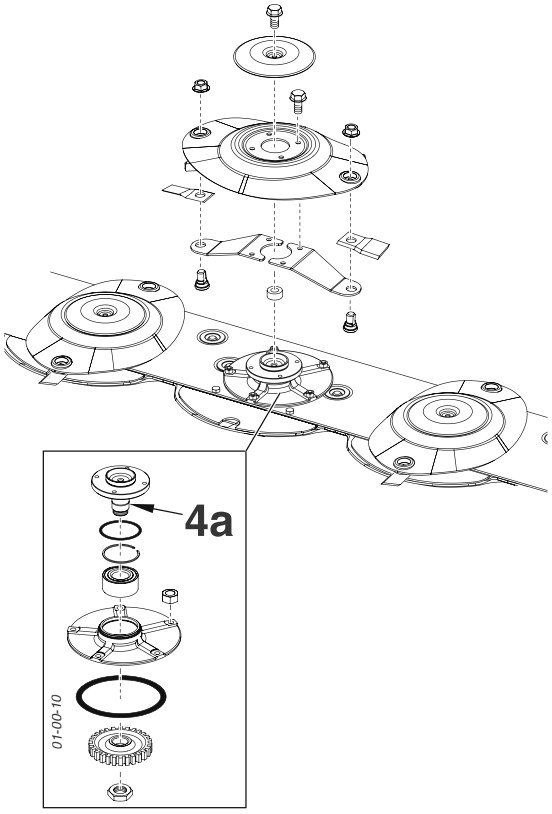
NOTE

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

- Inspect the field before mowing and remove the obstacles.
- Alternatively: Drive round obstacles at a sufficient distance.

If a collision occurs anyway,

- Stop immediately and switch off the drive.
- Check the machine carefully for any damage In particular, check the mowing discs and their drive shafts (4a).

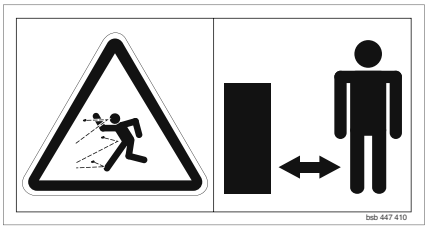


- If necessary have it checked over in a specialist work shop also.

After contact with a foreign object

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

5. Keep a safe distance while engine is running.



- Direct people out of the danger area as they may become injured by foreign objects 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) partly because of the differing cabin types of various tractors.

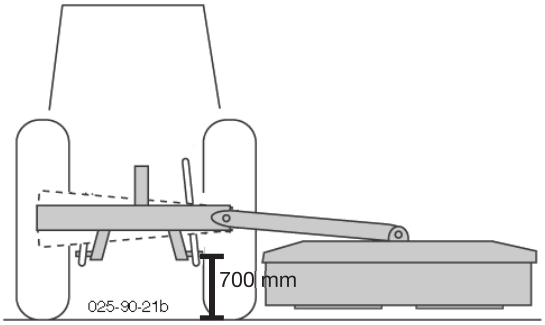
- If an 85 dB(A) noise level is reached or exceeded, then the farmer (or contractor) must provide appropriate hearing protection (UVV 1.1 § 2).
- If a noise level of 90 dB (A) is reached or exceeded, then hearing protection must be worn (UVV 1.1 § 16).

Settings for operation

Tractor hydraulic system

- The right lower linkage is to be adjusted to H1 ≈ 700 mm distance to ground.

  Fix the tractor hydraulic system in this position



Headstock

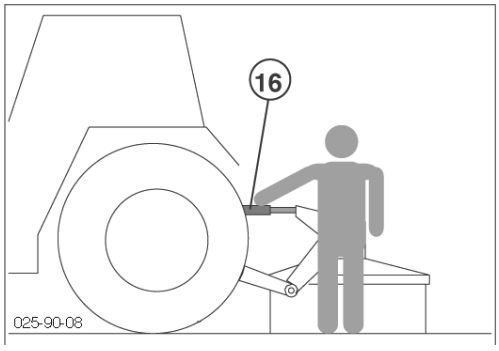
- Set the headstock horizontally. Changes can be made with the mechanical or hydraulic lower link arm.

Lift-out cylinder

-The lift-out cylinder control unit is to be switched to floating position during use to achieve correct adjustment to soil

Cutting height

- Set the cutting height by turning the uper linkage spindle (16) or with the hydraulic upper linkage. The maximum slope of the mowing discs is 5°.



Protective covers

- All protective covers are to be kept closed and in good condition

Reversing

Raise the machine when reversing!

Protective covers

DANGER

Danger to life due to parts being thrown off.

- Move all the protective devices to their intended positions before use.
- Check whether the protective devices have defects which impair their function. Replace damaged covers before use.
- Stones and other objects can be picked up and ejected when mowing. Direct all persons out of the danger area.

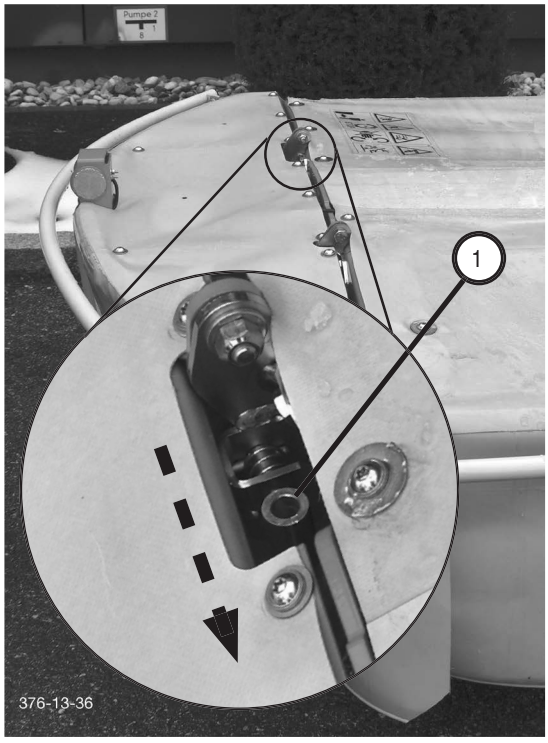
The side guard and front guard can be folded up for cleaning and maintenance work.

You need a tool (e.g. screw driver) to open the locking device of the foldable protection devices.

NOVACAT 262 // 302

Opening side protection:

1. Open the lock using a screw driver. Insert screwdriver in the eyelet (1) and pull in the direction shown.

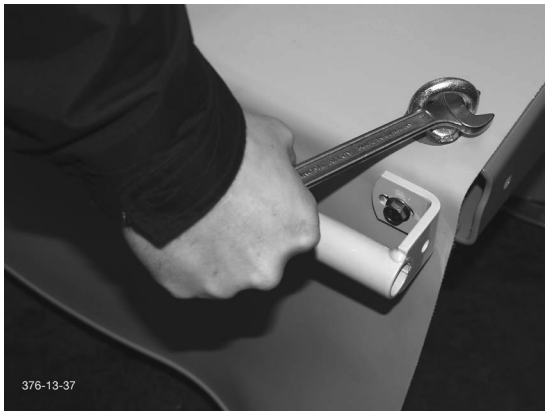


2. Swivel the side protection up manually.

Closing side protection: Fold down side protection. The bolt locks automatically.

Opening front protection:

1. Loosen the locking device in the form of the eyebolts left and right using a tool (knife wrench).



2. Swivel up front protection manually. The protection locks in this position.

Closing front protection:

1. Release locking device by hand by pulling the knob (2) inwards.

2. Fold down front protection.
3. Screw in the eyebolts again left and right thus securing the protective cover in this position.

NOVACAT 262 ED / RC // 302 ED / RC // 352V

Opening side protection:

1. Open the locking device using a screwdriver. Insert screwdriver in the eyelet (1) and press bolt away.

2. Swivel up side protection.

Close side protection

1. Fold down guard manually
2. The bolt locks automatically

Opening front protection:

1. Loosen the locking device in the form of the eyebolts left and right using a tool (knife wrench).

2. Swivel up front protection manually. The protection locks in this position.

Closing front protection:

1. Release locking device by hand by pulling the knob (2) inwards.

2. Fold down front protection.
3. Screw in the eyebolts again left and right thus securing the protective cover in this position.

Starting up

- For mowing, slowly engage the clutch of the pto outside the area to be mown (in field transport position) and take the mowing rotors to full speed.

  Smoothly increase the p.t.o. speed, in order to avoid noises in the free-wheel conditioned by the system.
- The driving speed depends on the ground conditions and the crop to be mown.

Function of the anti-collision safety

When harvesting around trees, fences, boundary stones etc., despite cautious and slow driving, there might occur collisions with the cutter bar. To avoid damages, the cutter unit is equipped with an anti-collision safety.

NOTE

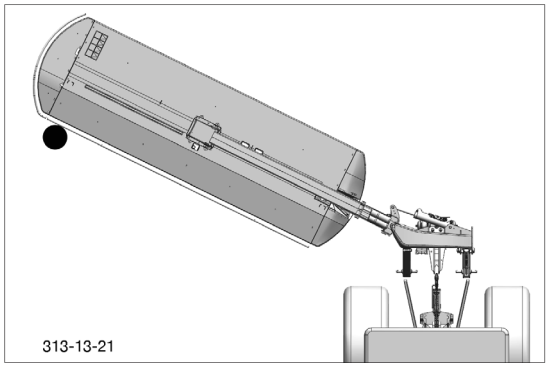
Material damage - It is not the purpose of collision avoidance to avoid damage to the machine when driving at full speed.

- Drive at an appropriate speed.
- Drive within the line of vision.

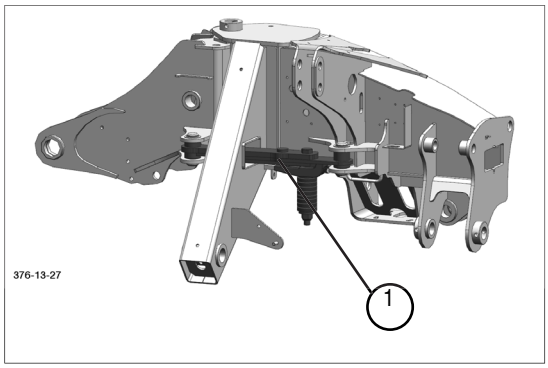
If, in the event of a collision with an obstacle, the tensioning pressure of the collision safety device is exceeded, the cutter bar swivels backwards by the deflection angle (approx. 15°).

To continue working, release the cutter unit from the obstacle by driving backwards until the cutter bar swivels back to working position.

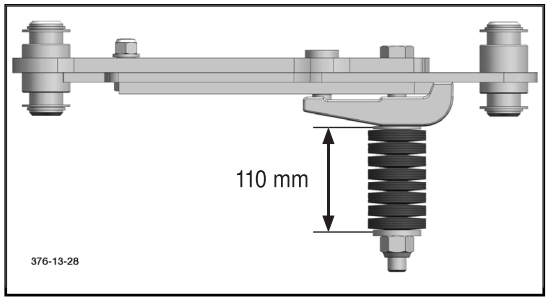
The accumulator pressure then swings the cutter bar automatically back to the starting position.



Setting the mechanical anti-collision safety (1)

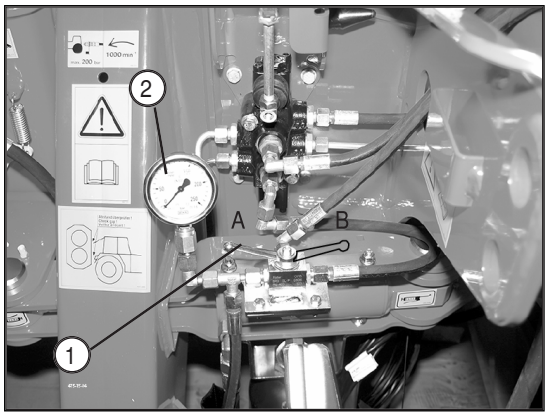


Set disc spring (see below) to the distance 110 mm to ensure optimum function.



Setting the hydraulic anti-collision safety

(Optional)



1. Bring the lever (1) in accumulator charging position (A) so as to be able to set the pressure in the hydraulic accumulator.
2. Set the pressure at 120 bar by means of the double-acting control unit (= setting ex-works). Can be read on the manometer (2).
3. Bring the lever (1) in working position (B).

Safety advice

WARNING

Risk of serious injury or injury resulting in death due to the machine tipping over.

- Only park the machine on flat, firm ground.
- Use the support stand for this purpose.

CAUTION

Risk of crushing injury or abrasion in the area of the hitching frame.

- Only enter the hitching frame area if it is absolutely necessary.
- Check that the tractor has been switched off and secured against rolling.
- Make sure that the device is secured against tipping.

Unhitching implement from tractor

Depending on parking situation, mower can be detached in the transport position or working position.

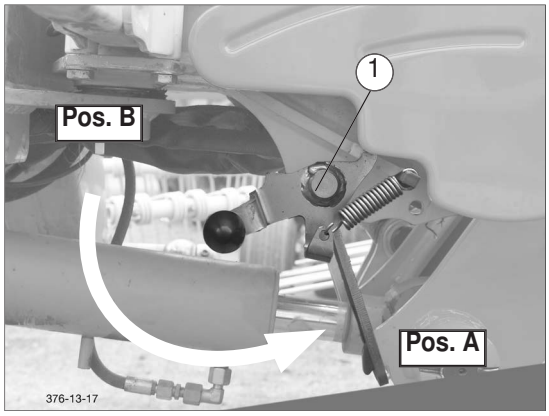
Parking in working position:

WARNING

Risk of injury resulting in death or other serious injury due to the tractor rolling away.

- Park the tractor and the machine on flat, firm ground.
- Turn the tractor motor off and remove the key.
- Secure the tractor against rolling.
- You can now leave the tractor safely.

1. Reset single-action control unit to floating position.
2. Swivel safety flap (1) into (item A).

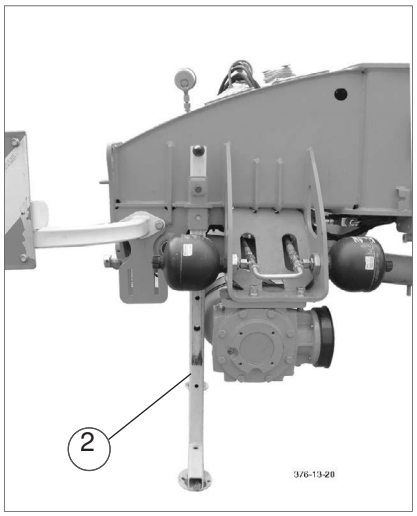


WARNING

Risk of an injury resulting in death or other serious injury due to the failure of the safety flap (1).

- The safety lever (1) is a safety fixture. It should not be changed in its form and functions.
- The safety flap is designed in such a way that it does not jump out of the locking position when the cutter bar is folded up hydraulically, therefore do not actuate the hydraulic cylinder for folding up when the safety flap is in the locking position. (Pos. A)
- Damaged safety flaps must be replaced immediately with new ones.

3. Extend and secure support stand (2).



4. Lower machine onto support stand.

CAUTION

Risk of slight or moderate injury due to jerky lifting of the mower attachment frame when uncoupling from the lower links.

- Check that the safety flap (1) is swivelled to position A before uncoupling the device.

5.Relieve the safety flaps (1) by adjusting the lower link arm.

CAUTION

Risk of minor or moderate injury due to the use of force on the lower link hook.

- Relieve the load on the lower link hooks using the hydraulics of the lower link rocker.
- Observe any tensions on the device.
- Never use a hammer to release the lower link hooks.

6. Uncoupling the upper link
7. Remove the control line from the tractor cabin and place it rolled up on the mower unit shelf
8. Untension and cap off the hydraulic hoses and place them on the hose rest of the mower
9. Disconnect the 7-pin plug of the lighting at the tractor.
10. Uncouple the PTO shaft and place it on the PTO shaft mounting.
11. Separate the tractor lower link from the lower link pins of the implement.
12. Carefully drive safely with the tractor.

NOTE

Danger of damage to property if you raise the cutter bar whilst the safety flap (1) is locking this movement.

- Do not activate the hydraulic cylinder to move the cutter bar up if the safety flap (1) is in locked position.

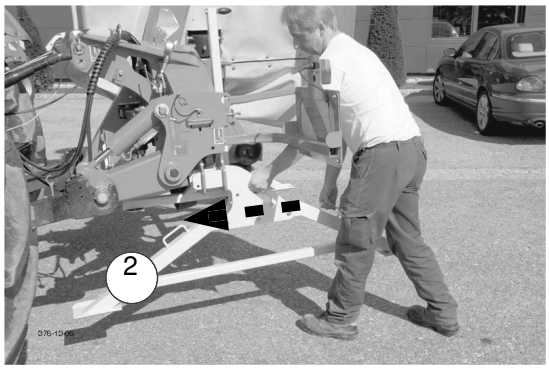
Parking in transport position: (equipment on request)

WARNING

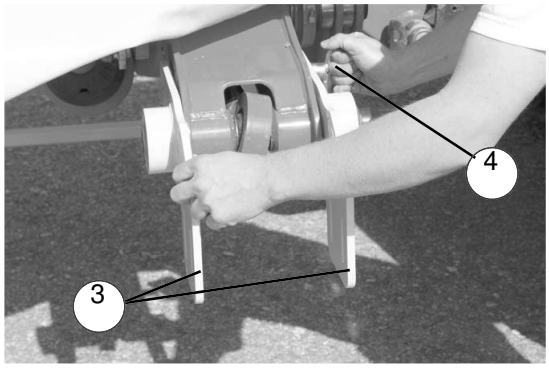
Risk of injury resulting in death or other serious injury due to the tractor rolling away.

- Park the tractor and the machine on flat, firm ground.
- Turn the tractor motor off and remove the key.
- Secure the tractor against rolling
- You can now leave the tractor safely.

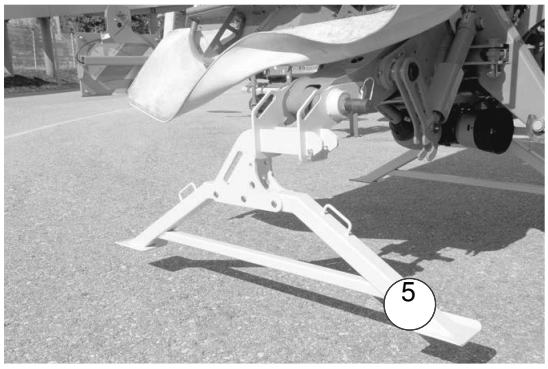
1. Push support stand (2) left (in driving direction) in the opening provided at the headstock and secure with linchpin.



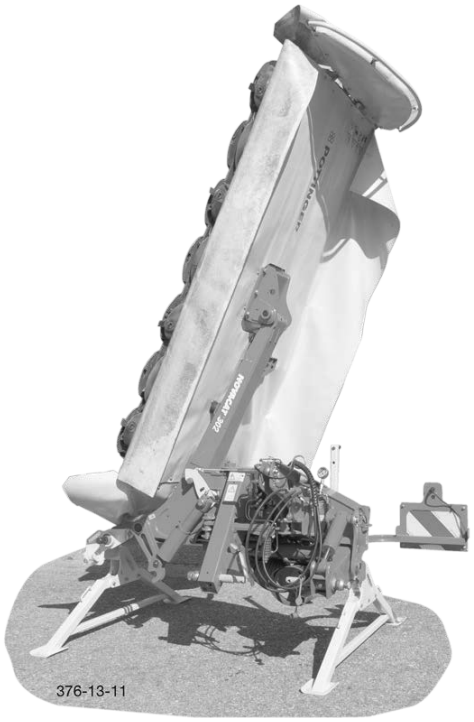
2. Support stand right (in driving direction): Attach retaining bracket (3) at headstock left and right and fix with bolt (4). Secure bolt with linchpin.



3. Push support stand (5) right (in driving direction) through the openings of the retaining bracket and secure with linchpin.



4. Lower implement onto support stands.
5. Uncoupling the upper link
6. Remove the steering line from the tractor cab and place it rolled up on the mower's hose deposit.
7. Untension and cap off the hydraulic hoses and place them on the hose rest of the mower
8. Disconnect the 7-pin plug of the lighting at the tractor.
9. Uncouple the PTO shaft and place it on the PTO shaft mounting.
10. Separate the tractor lower link from the lower link pins of the implement.
11. Carefully drive safely with the tractor.



NOTE

Danger of damage to property due to collision with components not intended for use during operation or transport.

- The brackets (3) and support stands (2, 5) must always be dismantled during operations or transport runs.

Working on slopes

DANGER

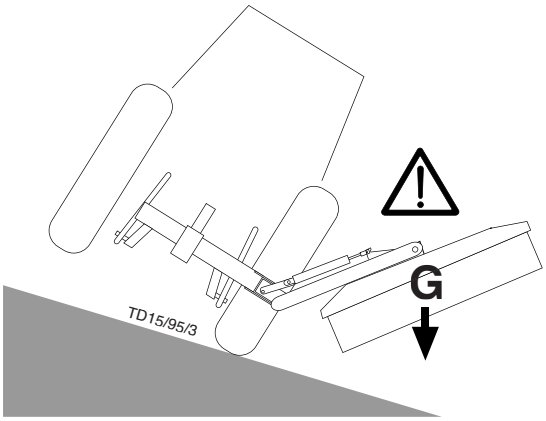
Life hazard - due to tandem tipping. The tractor's travelling characteristics are influenced by the weight (G) of the mower unit. This can lead to dangerous situations, especially on slopes.

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.



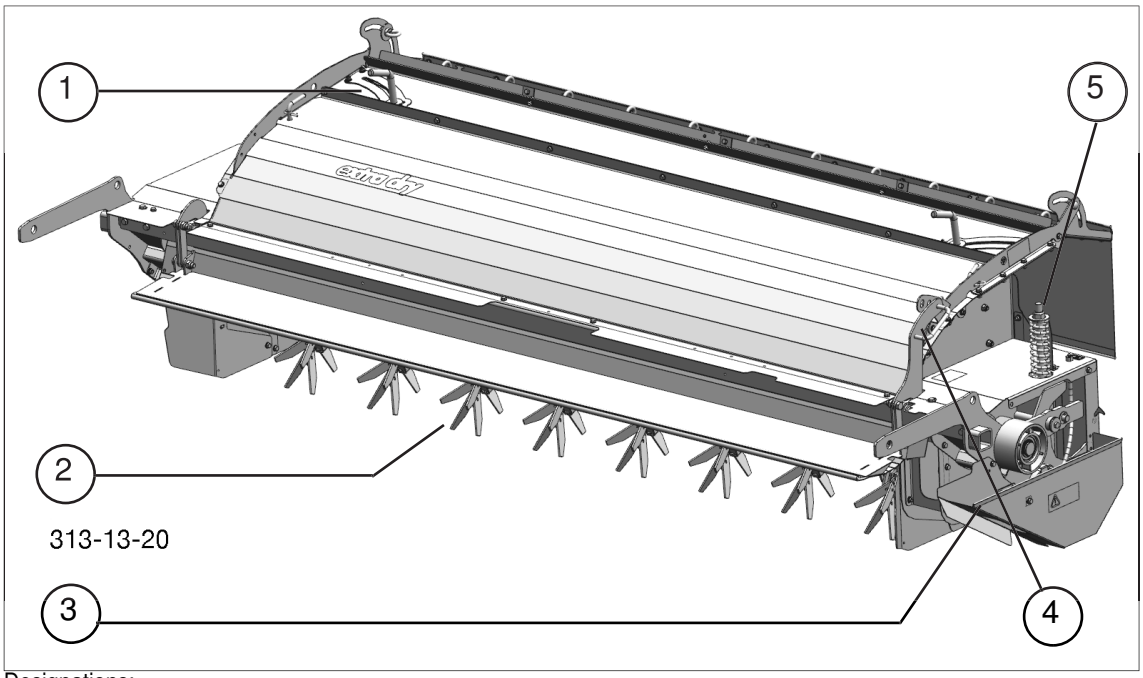
NOTE

Material hazard - due to unnoticed obstacles

- Raise the mower when driving backwards and reversing!

Operation mode

The aim of conditioning is to ream the wax layer (protection layer) from the blade of grass. Consequently, the fodder looses moisture more easily and dries more quickly. Conditioning is carried out using V-shaped tines, placed in a spiral on the conditioner shaft. The intensity is adjusted via an impact plate with conditioner rails.



Designations:

(1) Adjustable swath board
(2) Tine rotor
(3) Drive unit
(4) Intensity adjustment unit
(5) V-belt tensioner

Possible settings

DANGER

Life-threatening danger exists through being drawn in by rotating parts.

- Never open or remove the safety devices as long as the engine is running or parts are moving.

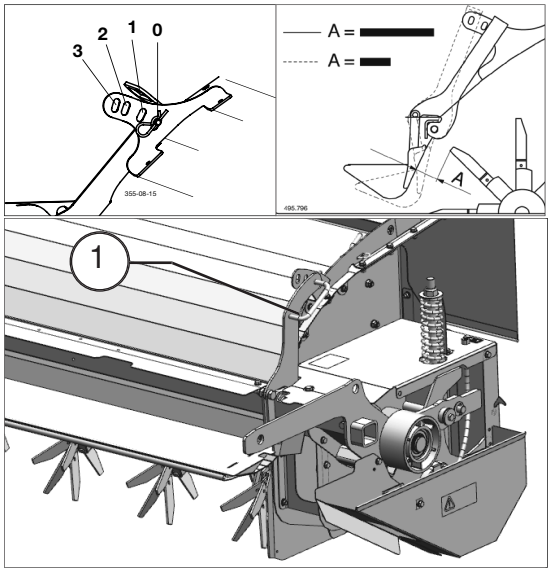
For optimal adaptation to the surrounding conditions, make the following adjustments to the tine conditioner:

Set the conditioning effect:

The distance between the adjusting strip and the rotor is set using lever (1).

- Position (3): the most effective conditioning. The fodder surface is strongly reamed. However, the fodder must not be beaten.
- Position (0): the fodder surface is only lightly reamed.

Among other things, the right setting depends on the quantity of cut material, driving speed and tractor capacity. Therefore, we cannot provide a binding recommendation regarding the correct lever setting.



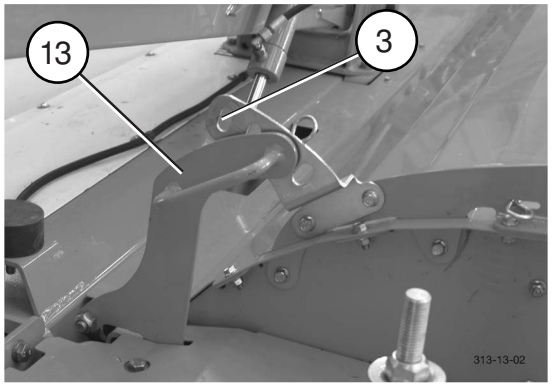
Mowing with the conditioner

The conditioning effect can be modified.

- Using the hand lever (13), adjust the distance between the conditioner flap and the rotor.

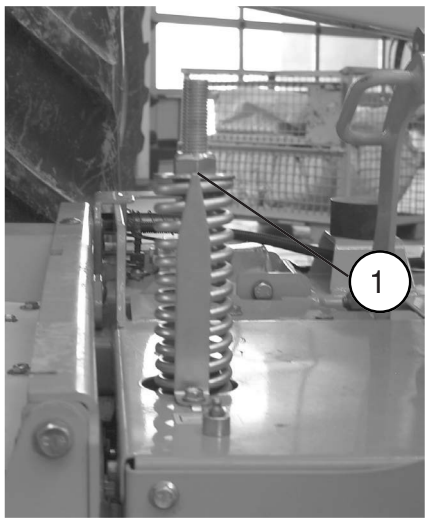
  Conditioning is strongest in the top position (pos. 3)

  However, the fodder must not be beaten.



Correct V-belt tension

The marker point (1) must be flush with the shim, then the belt tension is correct.



Rotor tines position

Pos. Z1: Rotor tines position for normal operating conditions.

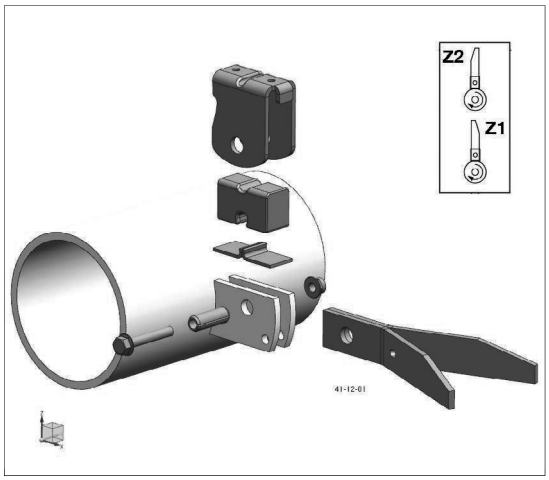
Pos. Z2: For difficult conditions of use, if e.g. the fodder wraps around the rotor.

Turn the rotor prongs 180° (pos.Z2). This tine position solves the problem in most cases. However, the conditioning effect is thereby somewhat reduced.

Maintenance of the rotor tines:

1. Replacing tine fixings

If signs of wear are found on the tine fixings, then the affected component(s) must be replaced. (tines, bolt, slotted spring pin ...)



Swath width when mowing with conditioner

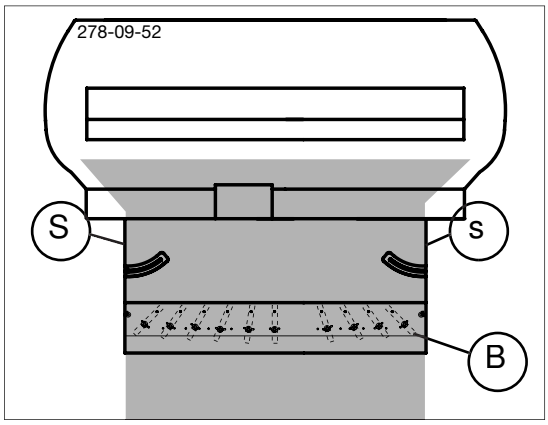
The swath width when mowing with conditioner is set using the guide plates.

Note:

The settings described below are to be regarded as basic settings. The optimum swath width can be determined perhaps only in practical use due to the various types of fodder.

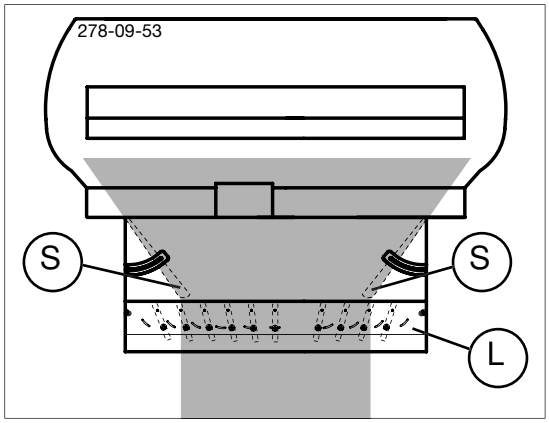
Wide spreading

- Swivel the swath plates (S) completely out
- Set the position of the baffles (see image (B)



Swathes

- Swivel the swath plates (S) in
- Set the position of the guide plates (see illustration (L))



Uncoupling and coupling the conditioner

DANGER

Life-threatening danger exists when detaching the conditioner. If the conditioner is detached, the cutting blades are freely accessible.

- For mowing without a conditioner, specially designed safeguards for this type of operation must be fitted to the mower bar.

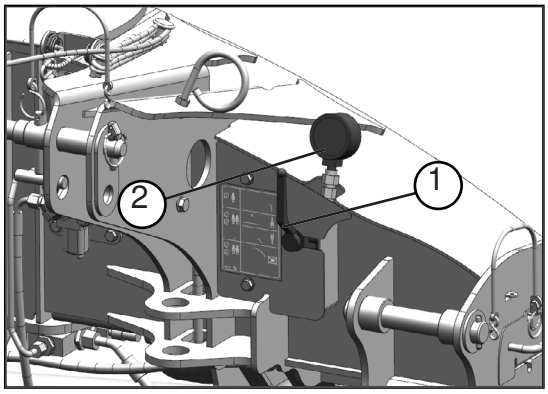
  These safeguards are not included in the scope of delivery for a new machine with conditioner. The parts must be ordered additionally (see spare parts list, component: "REAR PROTECTION“).

CAUTION

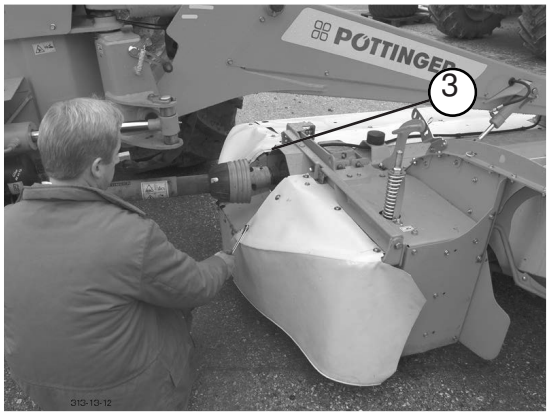
Risk of slight or moderate injury when uncoupling the conditioner due to jerky lifting of the cutter bar as a result of excessive pressure in the hydraulic line.

- Before dismantling the conditioner, set the pressure of the hydraulic relief to 0.

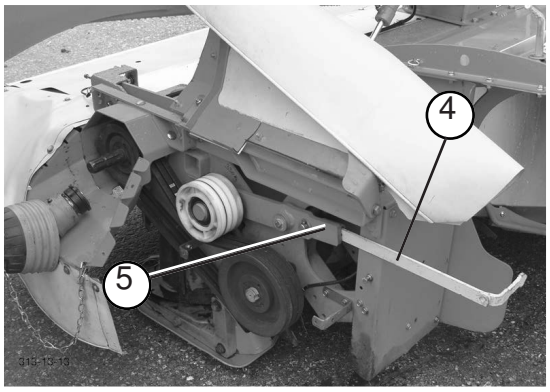
1. Set oil pressure in the hydraulic relief to 0 by opening the stopcock (1) on the headstock and lower it to 0 with the dual-acting control unit.
2. Read the reduced oil pressure on pressure gauge (2).



3. Release locking screw (3).



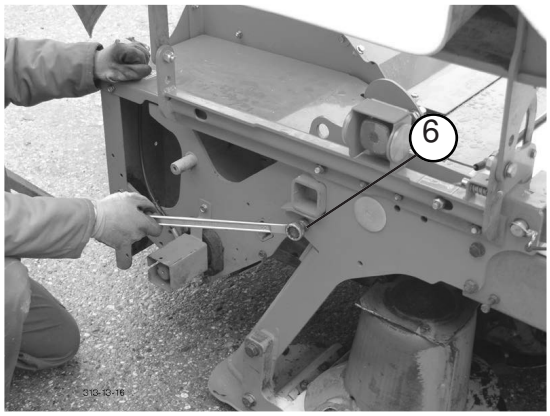
4. Swivel rear side protection up
5. Remove V-belt cover (2 bolts)
6. Pull cardan shaft off
7. Insert V-belt tension lever (4) in the guide provided (5).



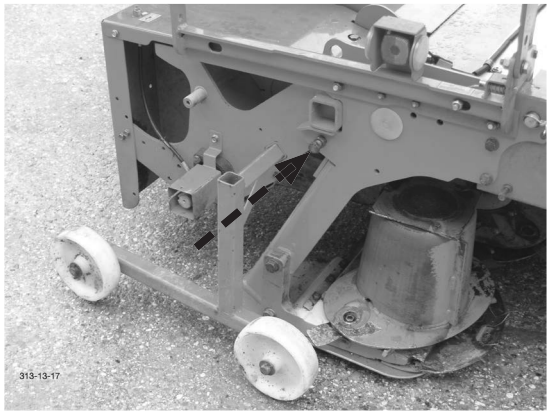
8. Press V-belt tension lever down to relieve the V-belt.

9. Disengage V-belt
10. Fit cardan shaft
11. Push conditioner chassis, on the left, as far as possible into the opening provided .

12. Remove tension lever (4)
13. Change to outer side of mower and swivel up outer side protection
14. Loosen fixing bolt (6)

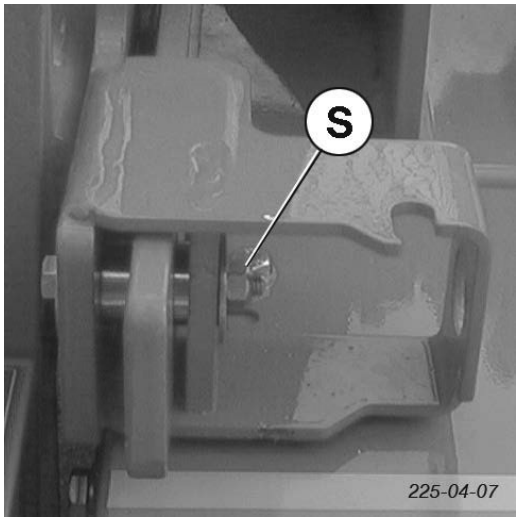


15. Fit conditioner chassis on this side.



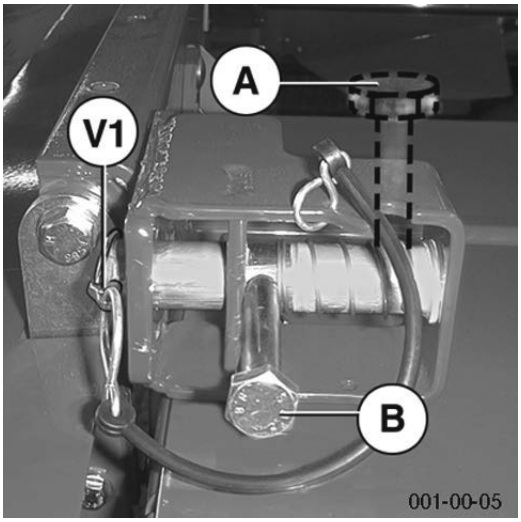
16. Loosenfastenings, left and right
- Variant "Screwed" (standard)

  Remove screw (S)



- Variant "Spring-loadedfastening bolt" (for the chassis option)

  Remove the linchpin (V1) and unlock the bolt
  - Pos A = unlocked
  - Pos B = locked



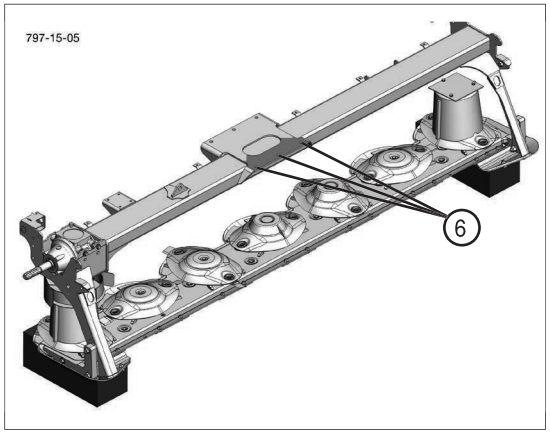
17. Always park the conditioner in a stable position

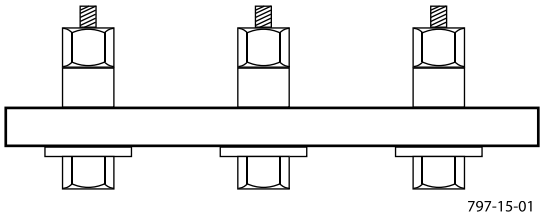
Fitting the conditioner, swath former or "rear protection" assembly is to be carried out in the reverse order to removing.

Before installing the rear protection elements, the three screws in the rear centre bearing must be turned upside down (head facing down). These three screws can then be left in this position. Returning to the starting position (screw head facing up) can be omitted when reinstalling a conditioner.

Reverse the three screws in the centre bearing.

- Reinsert the three screws (6) in the rear area of the centre bearing. These must be inserted with the screw head facing down. The nut and the bushing can be seen from the top. Shim and screw head underneath the console (See illustration)





Maintenance

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.

- Shut engine off and remove key before carrying out maintenance or repair work.

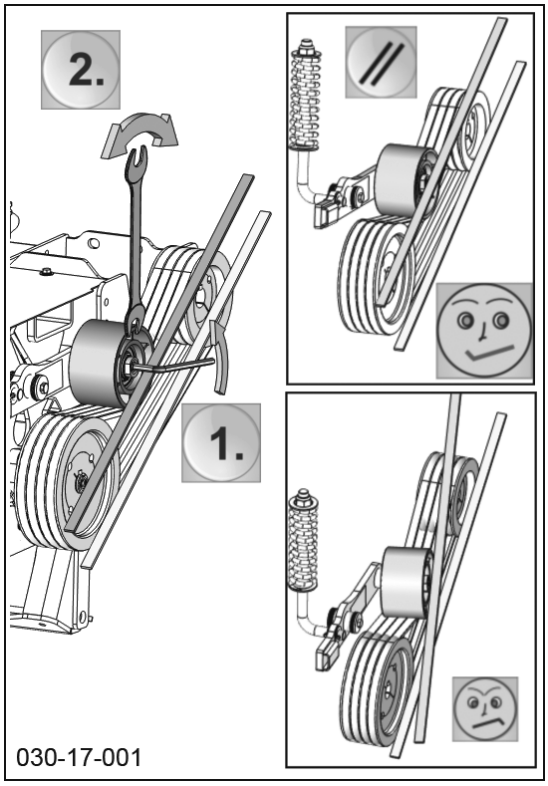
DANGER

Life-threatening danger exists through being drawn in by rotating parts.

- Never open or remove the safety devices as long as the engine is running or parts are moving.
- Wait until the rotating machine parts are at a complete standstill before starting any repair work.
- Wear close-fitting clothes and tie back long hair when carrying out repairs.

Check tensioner pulley run

Check the tensioner pulley running after the initial operation and after every change to the drive. The tensioner pulley must run parallel to the drive belt (see illustration).



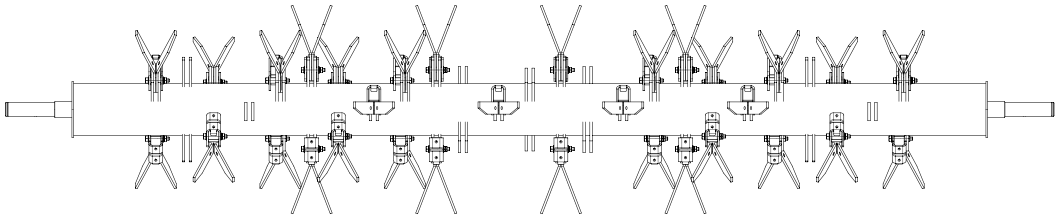
Position of the rotor tines on the conditioner

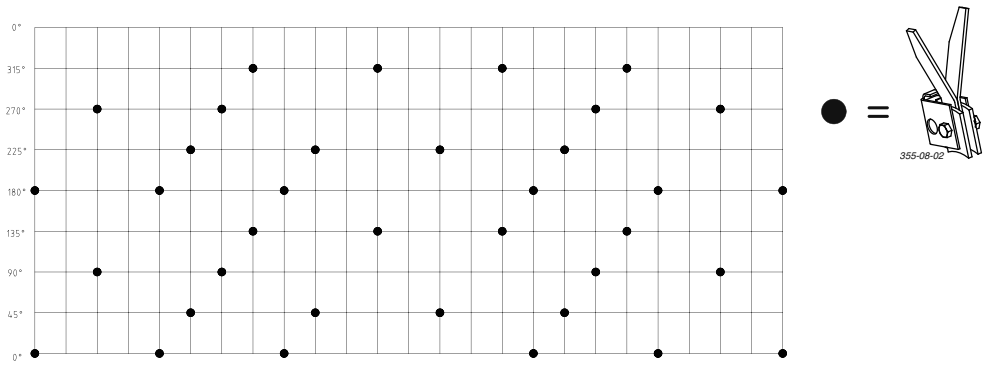
NOTE

Risk of material damage during operation with unbalance.

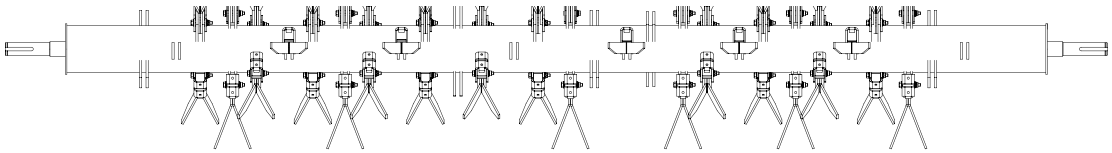
- Always remove both opposite tine holders and install them if you want to remove damaged tines.
- In case of noticeable vibrations, stop immediately and check the tine conditioner for lost tines. If necessary, remove the tine and the opposite bracket.

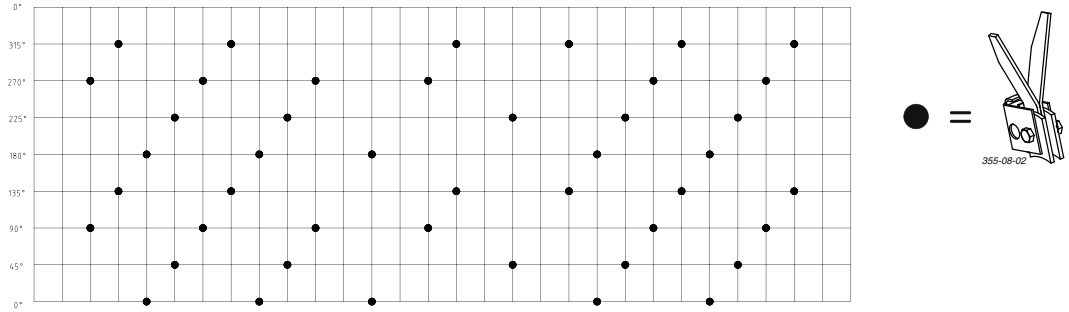
NOVACAT 262 H





NOAVCAT 302 H





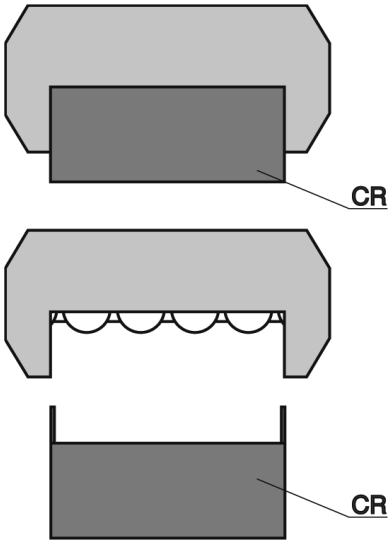
Mowing without a conditioner

Pay particular attention if the conditioner has been removed from the cutter bar!

Note

A machine with a conditioner (CR) as a complete unit is fitted with proper protection elements. However, if the conditioner has been removed then the mower unit is no longer completely covered. In this case mowing must not take place without fitting additional protective elements!

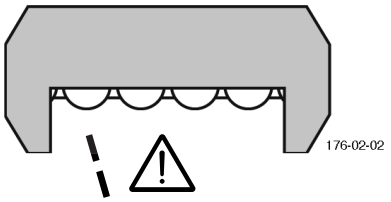
These protective elements are not available for NOVACAT 402 ED. The conditioner must therefore not be removed from this machine.



DANGER

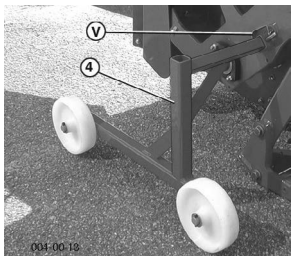
Life-threatening danger exists when detaching the conditioner. If the conditioner is detached, the cutting blades are freely accessible. There is danger to life!

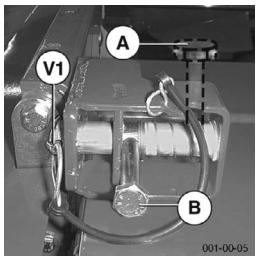
- For mowing without a conditioner, specially designed safeguards for this type of operation must be fitted to the mower bar. Mowing must not be carried out without these protective elements! These protective elements are not available for NOVACAT 402 ED.
- These safeguards are not included in the scope of delivery for a new machine with conditioner. The parts must be ordered additionally (see spare parts list, component: "REAR PROTECTION“).

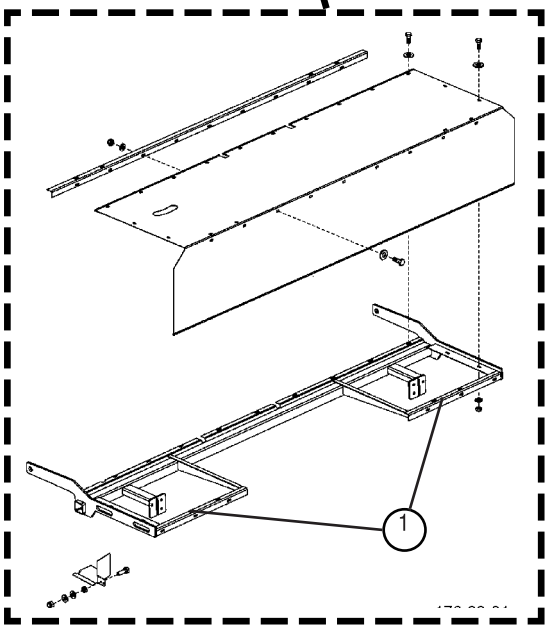


Optional equipment:

- Conditioner chassis (4)
- Spring-loaded fixing bolts (A-B)
- Swath discs





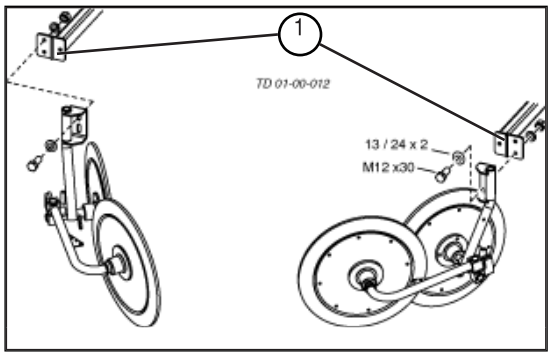


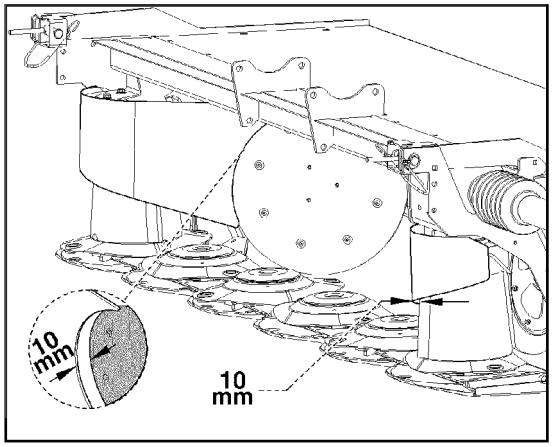
Swath width when mowing without a conditioner

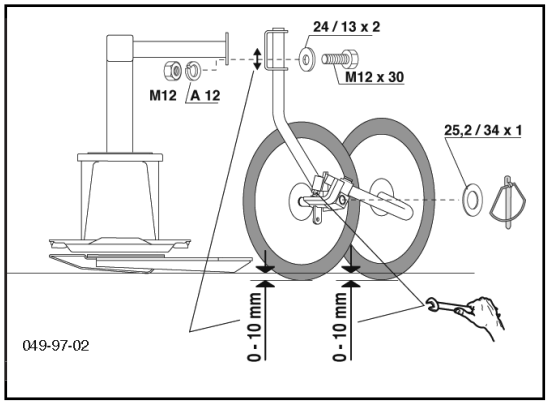
When mowing without a conditioner, the swath width is determined by the swath discs. This avoids driving over the crop with wide tractor tyres.

Fitting swath discs

- Fit the swath discs in Position 1, left and right (see also previous page: frame "Rear Protection")





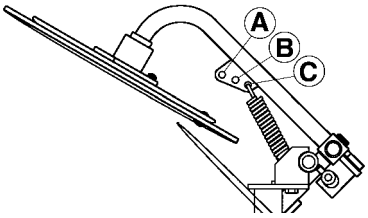


Setting both tension springs

A = for high, dense forage.

B = basic setting.

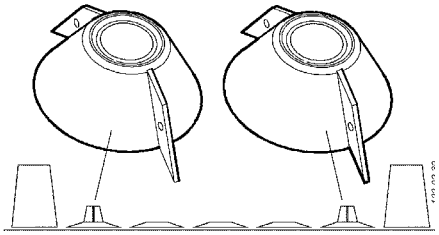
C = for short forage.



Conveying cones (optional)

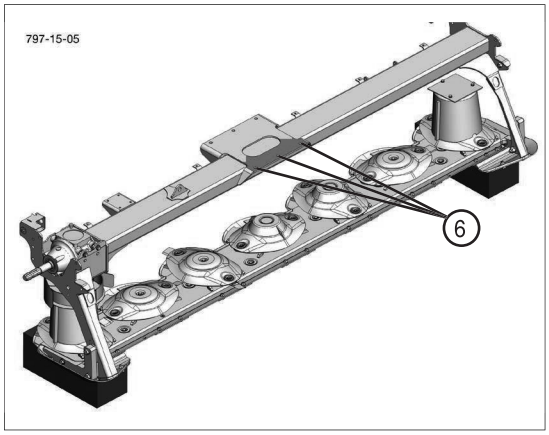
Conveying cones are recommended:

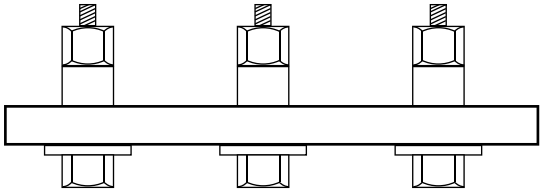
- to improve the conveyance rate of swath deposits, particularly with heavy, dense forage.
- See spare parts list for individual parts



Reverse the three screws in the centre bearing.

- Insert the three screws (6) in the rear area of the centre bearing. This are to be inserted with the screw head facing down. The nut and the bushing can be seen from above. Shim and screw head underneath the console. (See illustration)





Safety advice

DANGER

Life-threatening danger exists through being drawn in by rotating parts.

- Never open or remove the safety devices as long as the engine is running or parts are moving.

CAUTION

Risk of injury through ejected parts

- Maintain a sufficiently safe distance to people when mowing.
- Stop work if you cannot maintain a safe distance.

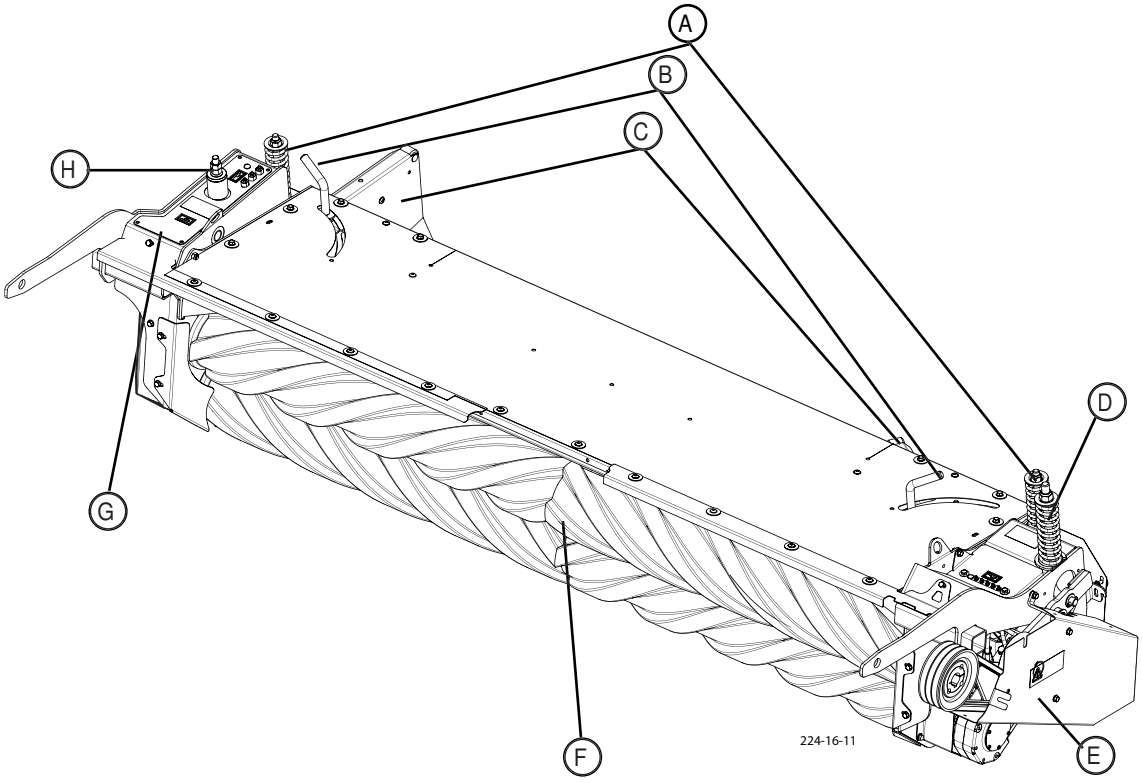
TIP

Before initial operation, read and observe the operating instructions, particularly the safety information.

Operation mode

The roller conditioner is suitable for lucerne and clover types. Two power-driven interlocking rollers crush the fodder. In so doing, the plant's natural wax coating is damaged and the drying time is accelerated.

Overview



Designations:

(A) Adjusting screw for conditioning intensity
B Swath width adjusting lever
(C) Swath plate
(D) Main drive adjusting screw
(E) Main drive unit
(F) Rubber rollers
(G) Auxiliary drive unit (top roller)
(H) Auxiliary drive (top roller) adjusting screw

Possible settings

DANGER

Life-threatening danger exists through being drawn in by rotating parts.

- Never open or remove the safety devices as long as the engine is running or parts are moving.

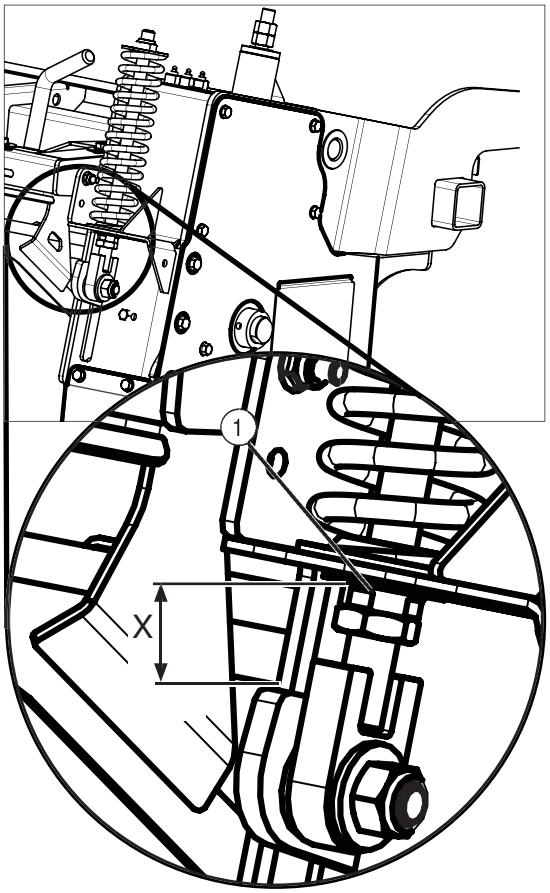
TIP

Before initial operation, read and observe the operating instructions, particularly the safety information.

When delivered, the roller conditioner is preset for medium intensity. Make the following adjustments for optimum adaptation to the surrounding conditions:

Distance between rollers:

The distance between the rollers is equally set, left and right, using the adjustment screw (1). Basic setting: (X) = 45 mm (Valid for RCB and RC)



TIP

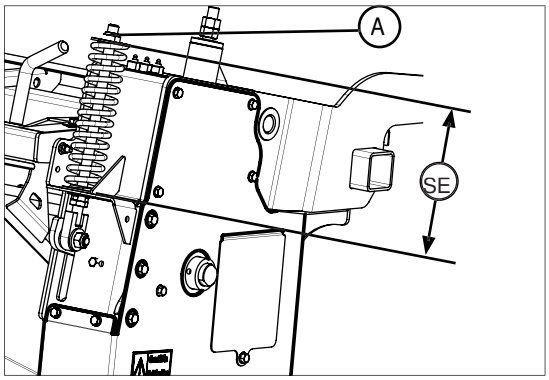
Because of component tolerances, an uneven roller gap can occur despite basic setting. Check the gap on both sides and readjust the adjusting screw (1) on one side if necessary.

Conditioning intensity:

See overview (A):

The upper roller is moveable and is tensioned left and right with a spring. The spring tension intensity is always adjusted using nut (A).

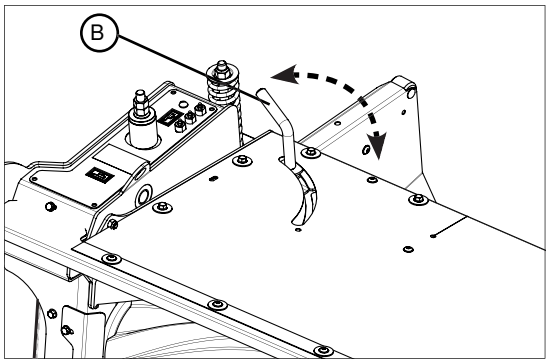
Standard setting (SE): 210 mm



Set swath width:

See overview (B):

The swath boards form the cut and conditioned fodder into the desired swath width. Adjusting the swath board is carried out identically, left and right, by unscrewing and adjusting the adjusting screw (B)



Operation

DANGER

Life-threatening danger exists through parts being thrown out.

- Make sure that third parties also keep a sufficient safe distance from the running engine.

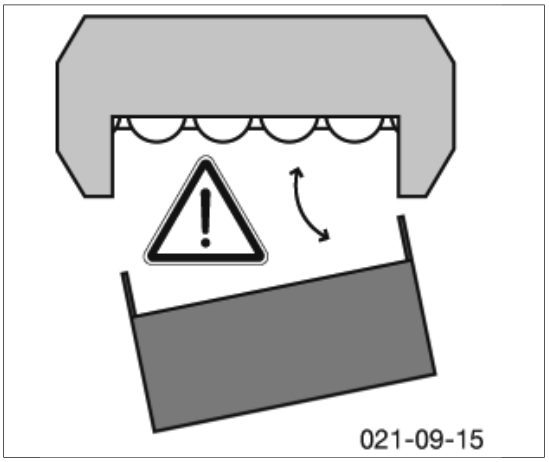
Driving speed:

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

Working without roller conditioner:

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

A machine with a conditioner as a complete unit is fitted with the proper safeguards. Should the conditioner be removed then the mower unit is no longer a completely safeguarded. In this case, mowing must not take place without fitting additional safeguards!



DANGER

Life-threatening danger exists when detaching the conditioner. If the conditioner is detached, the cutting blades are freely accessible.

- For mowing without a conditioner, specially designed protective devices for this type of operation must be fitted to the mower bar.

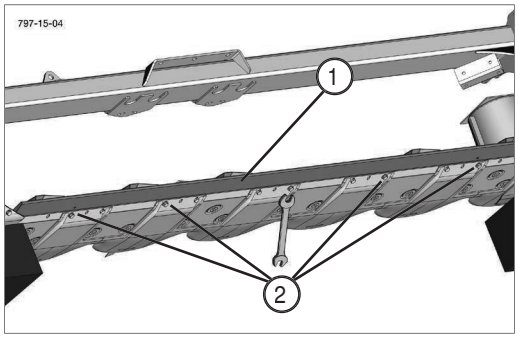
  These safety elements are not included in the scope of delivery for a new machine with conditioner. The parts must be ordered additionally (see spare parts list, component: "REAR PROTECTION“).

If the rear safeguards and swath discs are to be mounted, remove the cutter bar reinforcement (1).

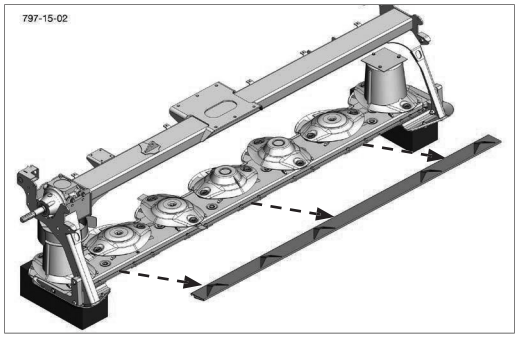
If the swath discs are not to be mounted, the cutter bar reinforcement does not have to be removed.

Removing the cutter bar reinforcement.

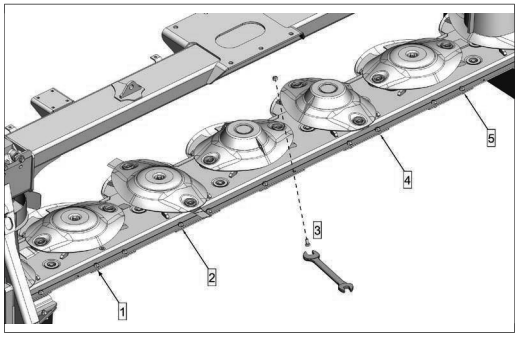
1. Remove screws (2). The number of screws varies according to cutter bar length.



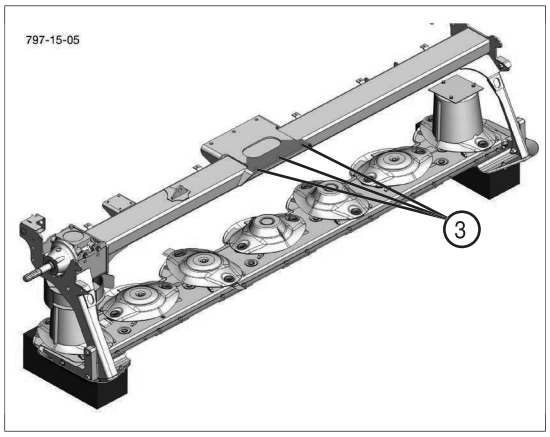
2. Remove the cutter bar reinforcement.



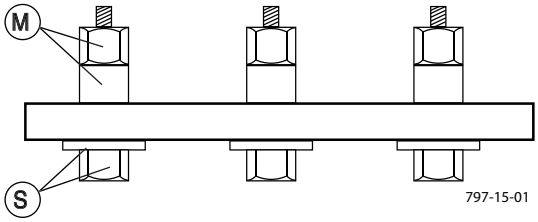
3. Replace the screws removed in step 1 with shorter ones. Re-use the screws that were used on the mower before the conditioner was fitted.



Reverse the three screws in the centre bearing.



- Insert the three screws (3) in the rear area of the centre bearing. These must be inserted with the screw head facing down. The nut and the bushing (M) can be seen from the top. Shim and screw head underneath the console (S). (See illustration)



Maintenance

DANGER

Life-threatening danger exists through another person putting the tractor into operation and driving off, or switching on the cardan shaft while you are busy with maintenance work.

- Shut engine off and remove key before carrying out maintenance or repair work.

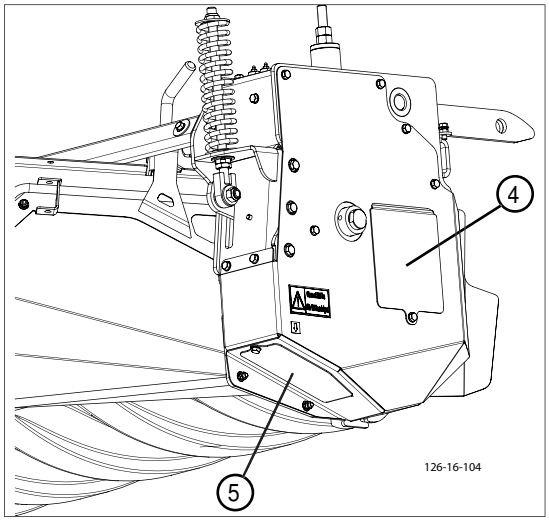
DANGER

Life-threatening danger exists through being drawn in by rotating parts.

- Never open or remove the safety devices as long as the engine is running or parts are moving.
- Wait until the rotating machine parts are at a complete standstill before starting any repair work.
- Wear close-fitting clothes and tie back long hair when carrying out repairs.

Cleaning the auxiliary drive: after 50 hours of operation

See overview (G)



- Unscrew the coverings (4,5) on the auxiliary drive maintenance accesses.
- Remove dirt deposits
- Clean rubber rollers

NOTE

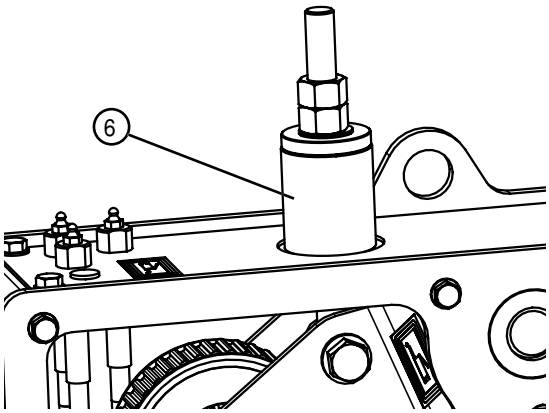
Property damage through dirty toothed belts. A dirty and thus impaired toothed belt can lead to property damage.

- Check and clean the toothed belt.

Check belt tension on the longer belts:

See overview (H)

- Basic setting: The sleeve (6) is easily turned and has no free-play.



Main drive belt tension:

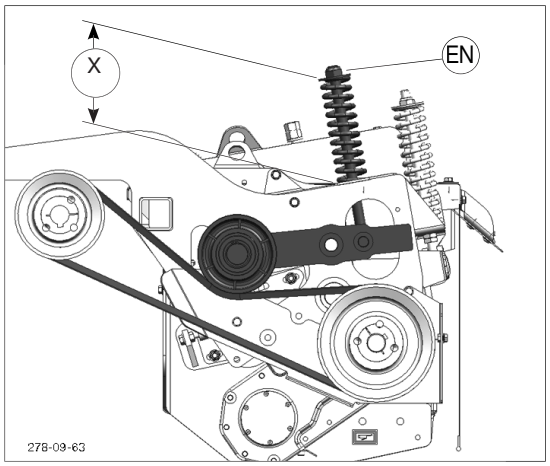
See overview (D, E)

Check belt tension:

- Basic setting (X): 180 mm

Changing belt tension:

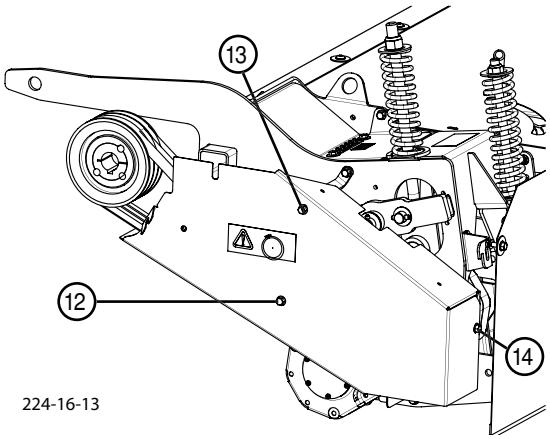
- Adjust screw (D)



Replacing belts:

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

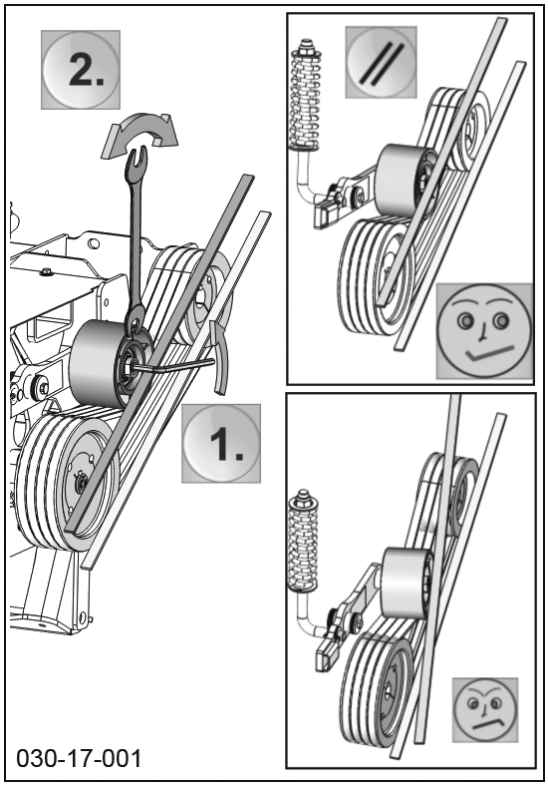
- Remove the covering. To do this, remove the screws (12-14), see illustration.



- Loosen belt tension. To assist in this, the belt tensioner can be deactivated using the blade quick-change wrench
- Replace belt
- Restore belt tension
- Re-tighten covering (screws 12-14, see illustration above)

Check tensioner pulley running

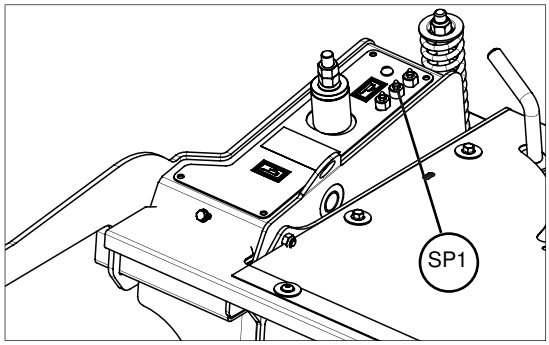
Check the tensioner pulley running after the initial operation and after every change to the drive. The tensioner pulley must run parallel to the drive belt (see illustration)

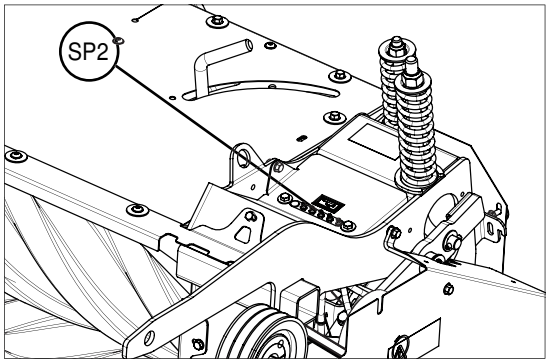


Lubricating the drive:

(After every 50 operating hours) with grease

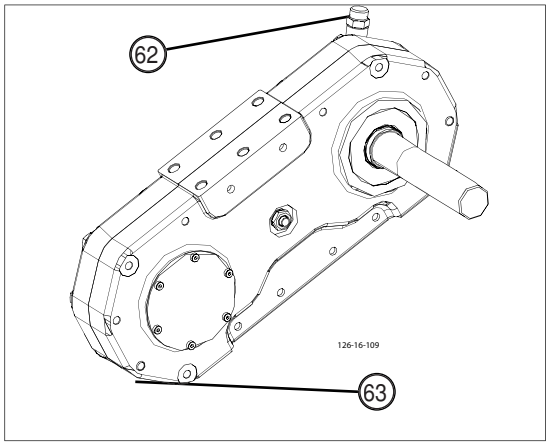
- SP1
- SP 2





Gear oil:

(After every 100 operating hours)



The gearing is located on the innerside of the conditioner.

- • Open drain plug (63) and drain oil.
- Fill with gear oil (700 ml) through the refill screw (62)

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

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.

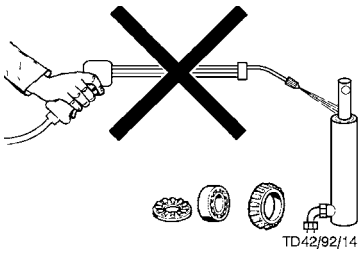
c. Under certain circumstances, the installation and/or use of such products may negatively modify or impair the specified structural properties of the machine. The manufacturer accepts no liability for any damage caused through the use of non-genuine parts and accessories.

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

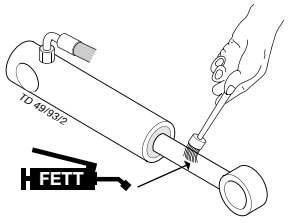
Be advised! Do not use high-pressure cleaners for the cleaning of bearing and hydraulic parts.

- 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!

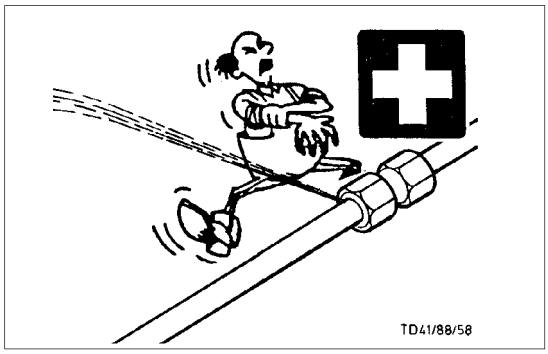
The directions in these Operating Instructions apply.

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.

Cutter bar oil level check

- Top up or change the oil annually under normal operating conditions.

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.

- Shut engine off and remove key before carrying out maintenance or repair work.
- Wait for the mower discs to come to a standstill

DANGER

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

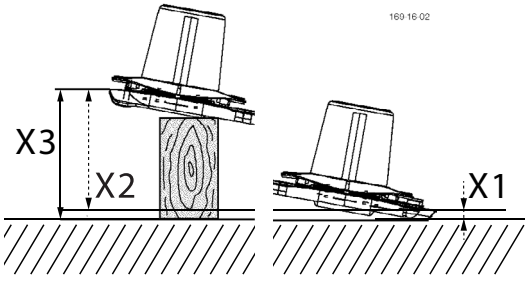
- Before any maintenance and repair work, park the machine on even, firm ground.
- Braking the machine

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

X3 = X2 + X1

X1 = Distance from ground to upper skid edge.

X2 = Vertical measurement from the upper left skid edge to the upper right skid edge



NOVACAT 262 ED / RC: X2 = 175 mm
NOVACAT 302 ED / RC: X2= 300 mm
NOVACAT 352 V: X2 = 300 mm

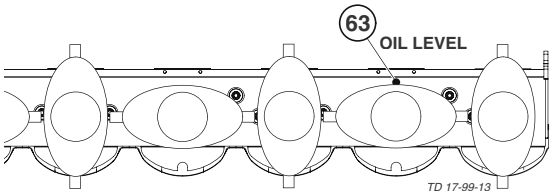
- The side where the oil refill screw is located remains on the ground.
- Lift the other side of the mower bar by X3 and support with a suitable prop.
- The full width of the cutter bar must be positioned horizontally.

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).

Measure oil level through the opening (63).

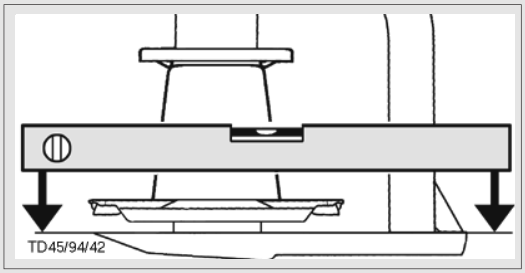


4. Oil level check

NOTE

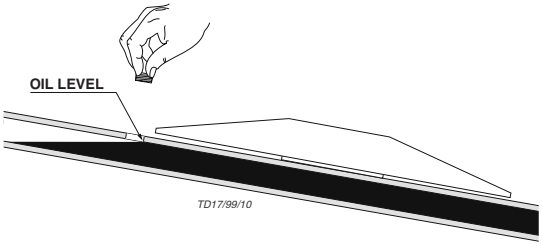
Property damage through too much or too little oil.

- The full length of the cutter bar is propped up. The width of the cutter bar must be exactly horizontal (see illustration).



4.1 Oil level check for NOVACAT 262 ED / RC and NOVACAT 351 V

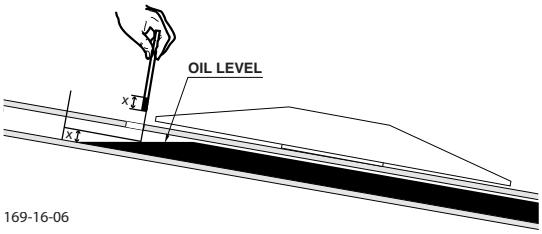
The oil level is correct if the gear oil reaches the lower edge of the level opening (63).



4.2. Oil level check for NOVACAT 302 ED /RC

The oil level is correct if x= 16 mm.

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



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.

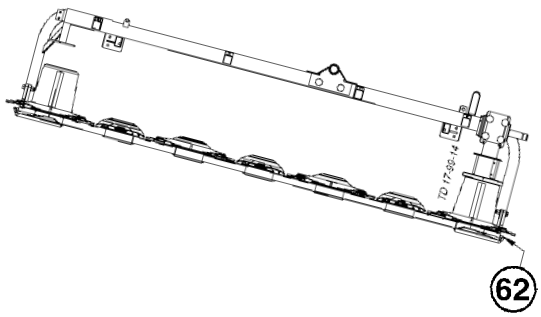
TIP

- 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.

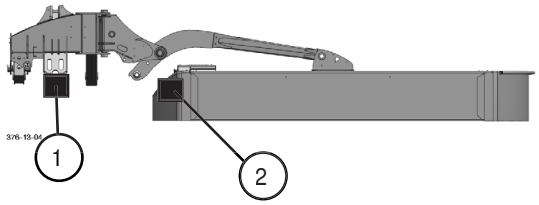
Oil quantity:

NOVACAT 262 ED / RC: 2.6 litre SAE 90
NOVACAT 302 ED / RC: 3.0 litre SAE 90
NOVACAT 352 V: 3.5 litre SAE 90

- Bring mower bar to max. tilt.
- Take out oil drain plug (62), let oil run out and dispose of waste oil correctly.



Position of the gears



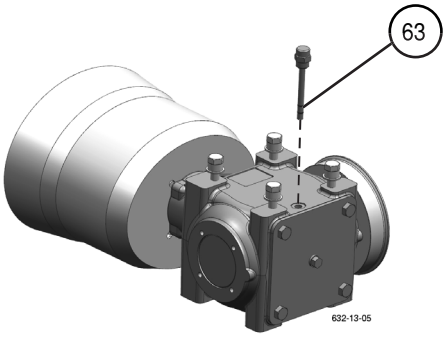
Angular gear 1 ...(1)
Angular gear 2 ...(2)

Oil change angular gear 1

- Change oil after the first 50 operating hours.
  The oil amount is to be topped up annually under normal operating conditions (level at dip stick (63)).
- Change oil after 100 ha at the latest.

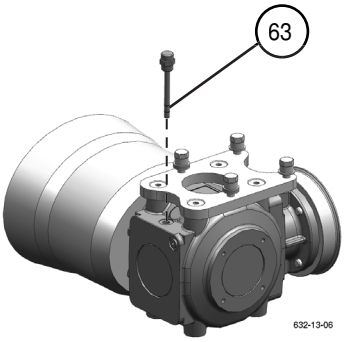
Version gear 1,000 rpm

Oil quantity: 0.7 litre SAE 90



Version gear 540 rpm

Oil quantity: 1.0 litre SAE 90



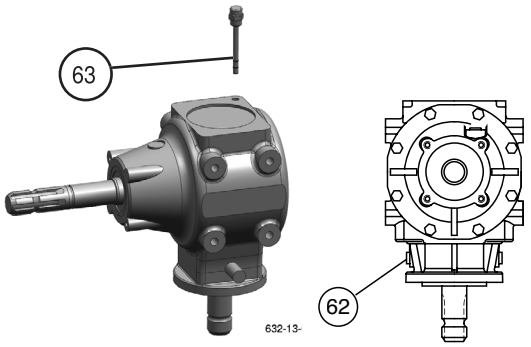
Oil change angular gear 2

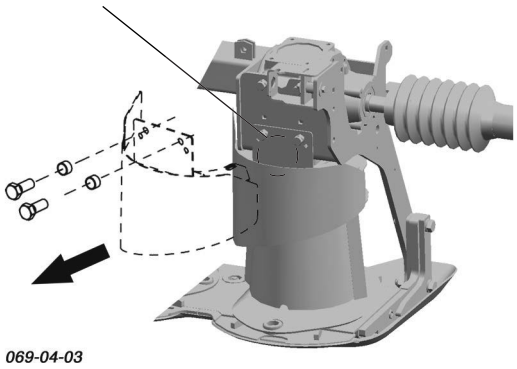
- Change oil after the first 50 operating hours.

  The oil amount is to be supplemented annually under normal operating conditions (level at dip stick (63)).

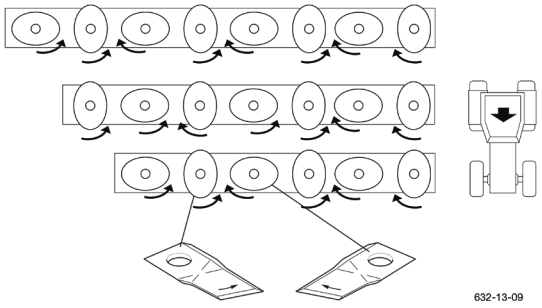
  Oil discharge screw (62)
- Change oil after 100 ha at the latest.

Oil quantity: 0.8 litre SAE 90





Installing cutter blades

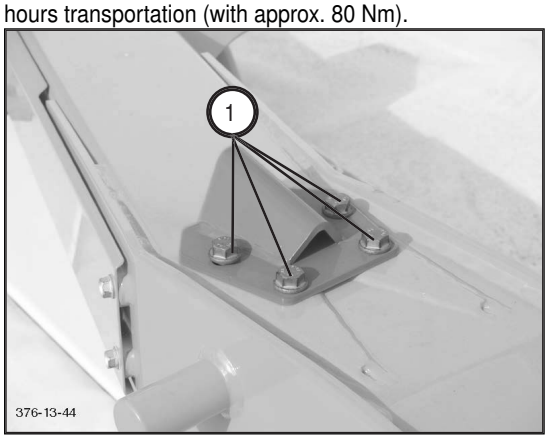


TIP

- The arrow on the cutter blade shows the cutter disc's direction of turn.
- The mounting surfaces must be free of paint before fitting.

Bracket at lifting arm of cutter bar

Retighten retaining bolts (1) of bracket after a total of 3 hours transportation (with approx. 80 Nm).



Hydraulic relief

1. Reduce the relief pressure to 0.
2. Lubricate the lubricating nipple on the cylinder suspension.
3. Restore the correct relief pressure.

Wear control of mowing blades and holder

WARNING

Risk of injury resulting in death or other serious injury.

- Worn-out blade bolt
- Loose fit of the blade pin
- Worn blade holder
- Uneven wear of the pair of blades, which could cause unbalance

Check the blade holder, blade bolts and mowing blades regularly. Replace the worn parts!

TIP

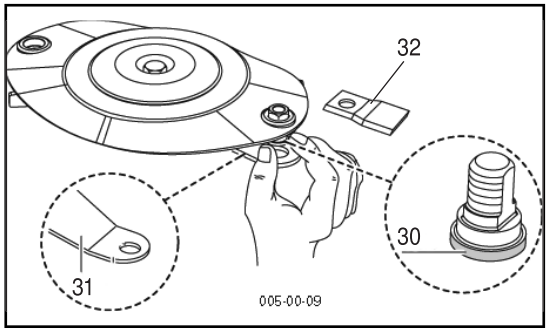
Use original Pöttinger spare parts! As these are optimally matched to the forces to be expected.

Parts to be checked:

Blade bolt (30)

Blade holder (31)

Mowing blades (32)



Control intervals:

Before each start-up

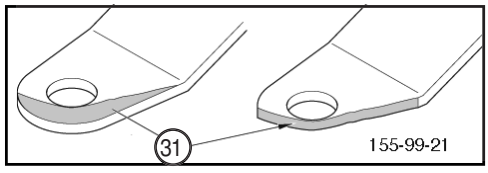
When mowing on stony terrain, carry out further checks during work.

Immediately after hitting an obstacle

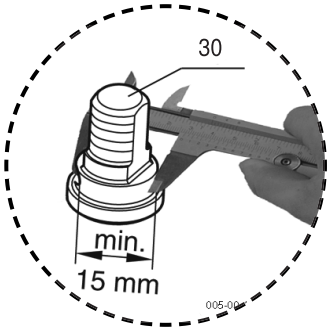
Immediately in case of abrasive noises in the area of the cutter bar

Control criteria:

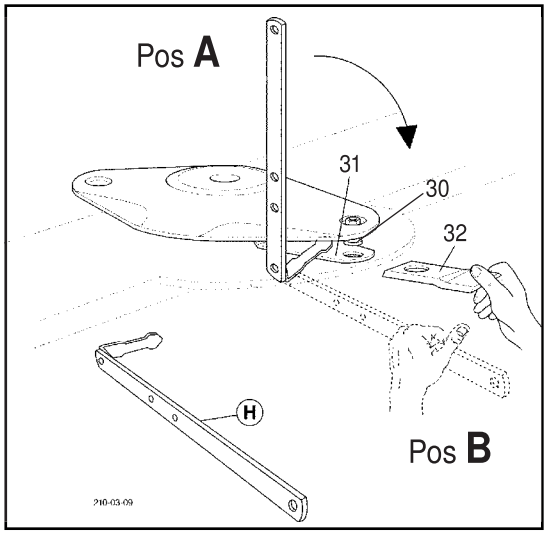
- Uneven wear of mowing blades (32) (danger of unbalance)
- Bent or damaged mowing blades (32)
- Bent, damaged or worn blade holder (the wear area of the blade holder has reached the edge of the hole) (31)



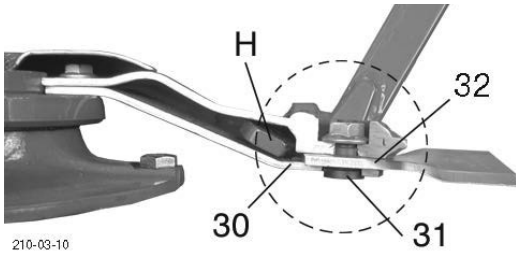
- Bent, damaged or worn blade bolts (middle area of the bolt: Diameter < 15 mm>; wear in the lower area of the bolt) (30)



Carrying out the check (with blade change):



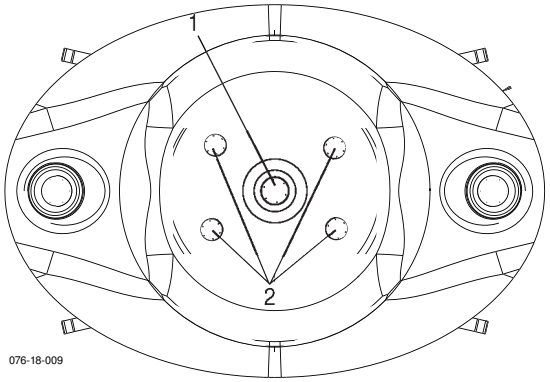
1. Insert lever (H) at a right angle to the ground (Pos A) between mower disc and blade holder.
2. Turn the lever (H) until it appears in line with the mower disc (Pos B). This will push the blade holder (31) downwards.
3. Remove the mowing blade (32).
4. Cleaning: Remove chuck residues and dirt from the blade bolt (30) and on the inside of the hole on the blade holder (31).
5. Check wear parts for the control criteria listed above.
6. Insert mower blade:
   a. If you have to change the mower blade (32), always change both blades of the respective mower disc.
   b. When inserting a mowing blade (32), pay attention to the running direction of the mowing disc. The mowing blades are labeled accordingly. Insert a mowing blade with the same direction of rotation (R,L) as the old mowing blade.
7. Visual inspection of the assembly: Ensure that the mowing blade (32) is placed between blade bolt (31) and blade holder (30) as shown.



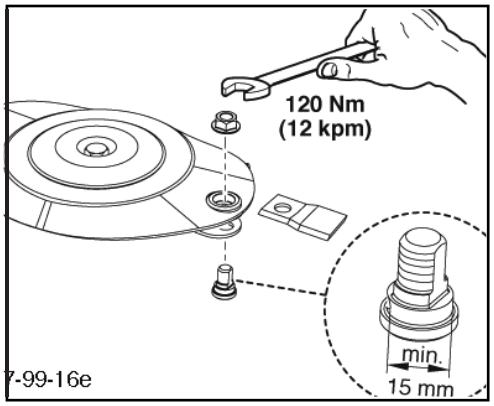
8. Raise lever H 90° to floor again (Pos A) and pull out sideways.

Bolt exchange passage:

1. Removing the mower disc



   a. Loosen the retaining screw (1) of the mower disc cover.
   b. Removing the mower disc cover
   c. Loosen 4x the retaining screw (2) of the mower disc.
   b. Remove mower disc
2. Loosen the nut of the locking bolt.
3. Changing the blade bolt
4. Tighten the blade bolt to 120 Nm.



5. Replace mowing blade
6. Mounting the mower disc
   a. Reassemble the mower disc in the reverse order.

Storing of the lever

- Place lever in the respective retaining tab after use.

Technical data

Description	NOVACAT 262 Model 3772	NOVACAT 262 **ED / RC** Model 3782	NOVACAT 302 Model 3773	NOVACAT 302 **ED / RC** Model 3783	NOVACAT 352 V Model 3794
Hitching	3-point hitching Cat.II / III - width 2 / 3	3-point hitching Cat. III - width 2 / 3	3-point hitching Cat.II / III - width 2 / 3	3-point hitching Cat. III - width 2 / 3	3-point hitching Cat. III - width 2 / 3
Working width	2.62 m	2.62 m	3.04 m	3.04 m	3,46 m
Transport width	< 3.00 m	< 3.00 m	< 3.00 m	< 3.00 m	< 3,00 m
No. of mowing discs	6	6	7	7	8
No. of cutter blades	12	12	14	14	16
Coverage capacity	2.6 ha/h	2.6 ha/h	3.0 ha/h	3.0 ha/h	3,7 ha/h
Drive speed (r.p.m.)	1000 / 540	1000 / 540	1000 / 540	1000 / 540	1000 / 540
Torque limiter	1500 Nm	1500 Nm	1500 Nm	1500 Nm	1500 Nm
Power requirements	33 kW (45 PS)	40 kW (55 HP)	37 kW (50 PS)	44 kW (60 HP)	96 kW (130HP)
Weight [1)]	850 kg	1130 kg / 1210 kg	920 kg	1210 kg / 1340 kg	1015 kg
Permanent sound emmission level	77,8 dB (A)	77,8 dB (A)	77,8 dB (A)	77,8 dB (A)	77,8 dB (A)

All data subject to alteration without notice

Connections required

- 1 single-action control unit with floating position
  (minimum equipment required for tractor)
  pressure min.: 170 bar
  Operating pressure max.: 200 bar

- 1 dual-action control unit
  (minimum equipment required for tractor)
  pressure min.: 170 bar
  Operating pressure max.: 200 bar

- 7-pin connection for the lighting (12 volt)

Equipment on request:

- Lighting unit with warning sign
- Hydraulic lower linkage compensator (Series at ED / RC)
- Rear protection (only ED / RC)
- Polded up parking position
- High cut skids
- Wear skids

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

Position of identification plate

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

Please enter the name on the title page of the Operator's Instructions immediately upon taking delivery of the vehicle / implement.

The defined use of the mower unit

The mower **„NOVACAT 262 (Type PSM 3772), NOVACAT 262 ED / RC (Type PSM 3782)“, „NOVACAT 302 (Type PSM 3773), NOVACAT 302 ED / RC (Type PSM 3783), NOVACAT 352 V (Type PSM 3794)“-** is only intended for customary use in agricultural work.

• The mowing of grassland and short stemmed fodder.

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

The manufacturer accepts no liability for any damage arising as a result thereof; the user accepts sole responsibility.

•The observance of operating, service and maintenance requirements laid down by the manufacturer is also included in "defined use“.

SUPPLEMENT

The original cannot be copied ...

EN

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.

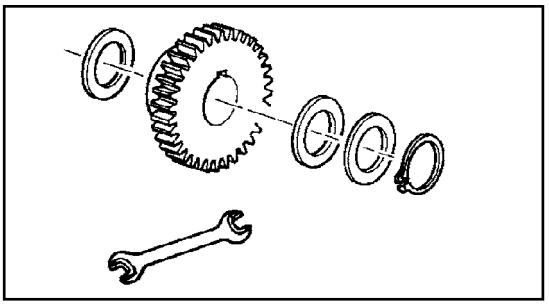
5.) Modification work

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.

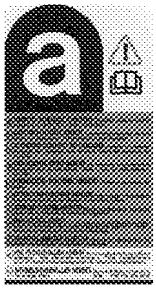
9.) Before starting work

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.) Asbestos

a. Certain sub-supplied components of the vehicle may contain asbestos due to technical reasons. Please observe the marking of spare parts.



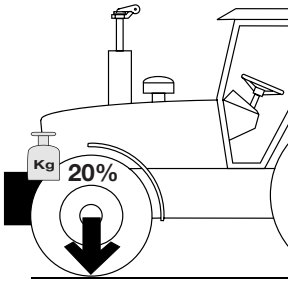
11.) Transport of people prohibited

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.

12.) 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!

13.) 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.

14.) Cleaning the implement

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

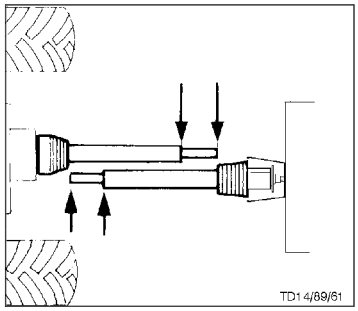
Adapting cardan shaft

NOTE

Material damage - due to inferior spare parts

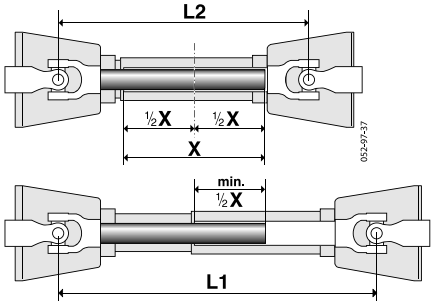
- Only use the cardan shaft supplied or stated; otherwise the warranty claims for any damage are not valid.

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



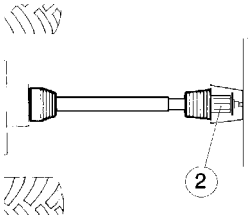
Cutting to length procedure

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



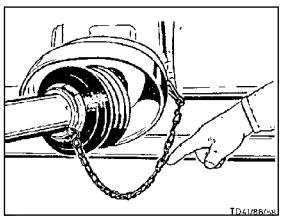
Caution!

- Note the maximum operating length (L1)
  - Aim at the maximum possible tube superimposition (min. $^1/_2$ X)
- Shorten the inner and outer safety tube equally
- Attach overload protection (2) to the machine!
- Always check that cardan shaft locks are securely engaged before starting work.



Safety chain

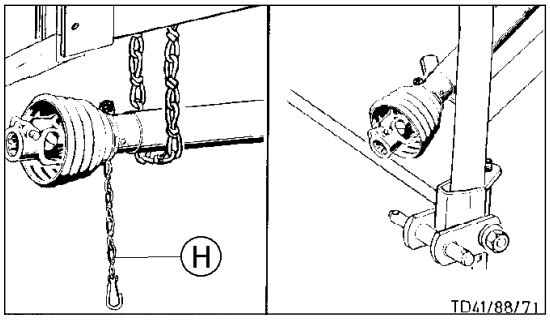
- Use chain to prevent tube guard from rotating.
- Ensure sufficient swivel space for the cardan shaft!
- Trim the safety chain so that it cannot wind around the cardan shaft.



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.



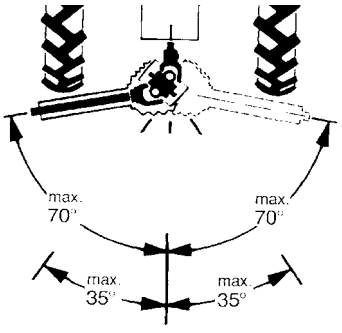
Wide-angle joint:

Maximum angle for operation and at standstill 70˚.

Normal link:

Maximum angle opening in standstill 90˚.

Maximum angle opening in operation 35˚.



Maintenance

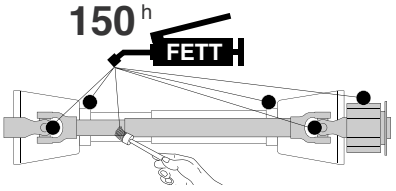
DANGER

Mortal danger - due to worn covers

- Replace the worn covers immediately

- Lubricate with a brand-name grease before starting work and every 150 operating hours.
- Before any extended period of non-use, clean and lubricate cardan shaft.

  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 of non-use, check friction clutch for proper function.

a) Determine measurement „L“ on compression spring at K90, K90/4 and K94/1, or set screw at K92E and K92/4E.

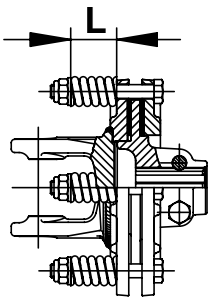
b.) Loosen screws to release the pressure on the friction disc.

Slip the clutch.

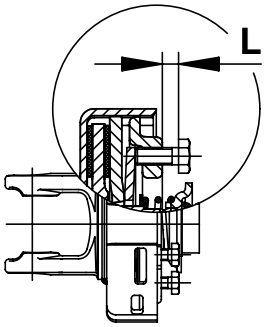
c.) Set screws to dimension "L".

Clutch is ready for use again.

K90,K90/4,K94/1



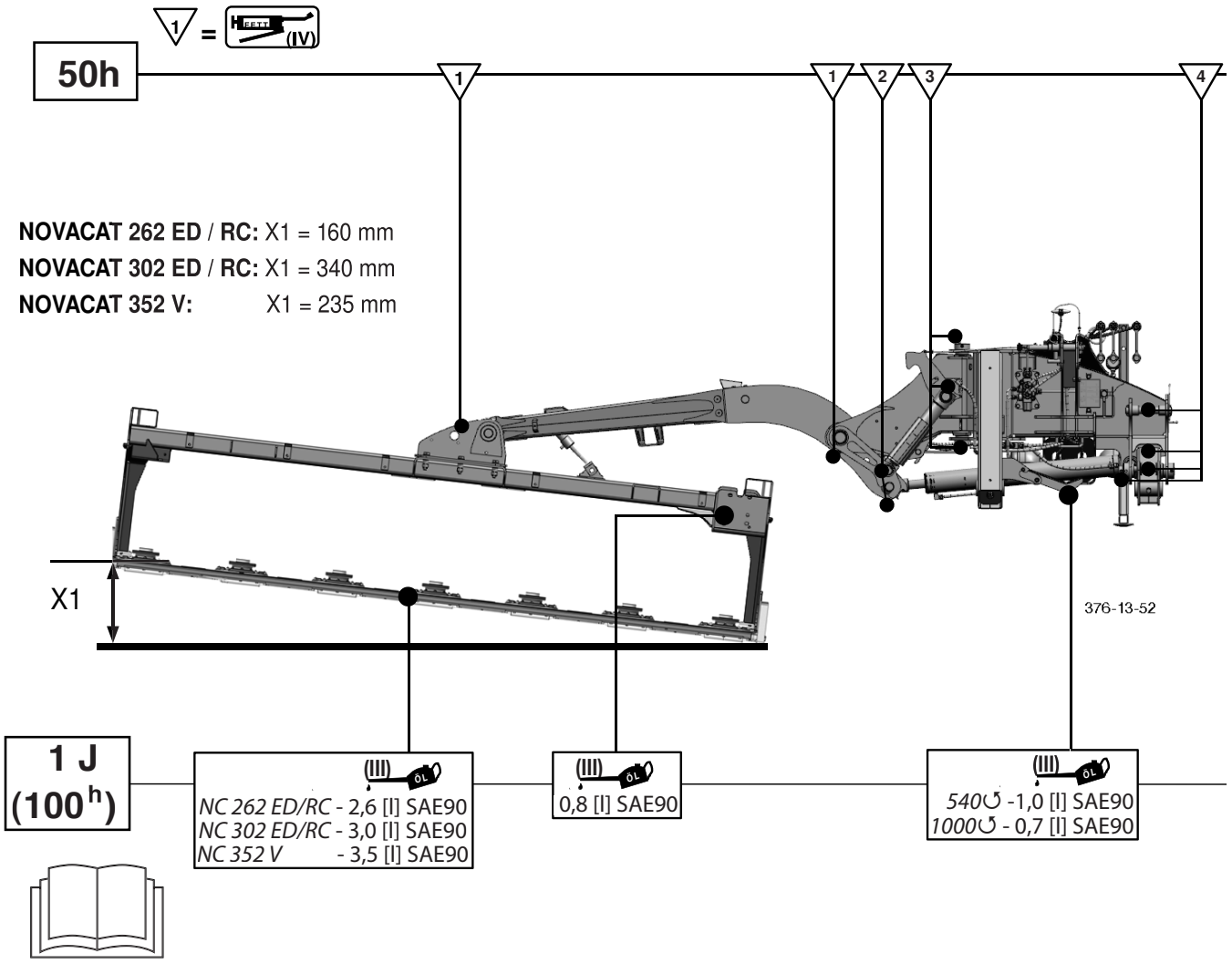
K92E,K92/4E

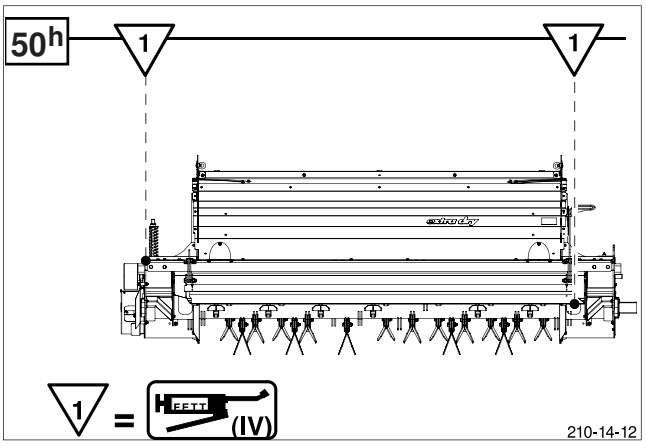


Lubrication chart

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 262 ED / RC
NOVACAT 302 ED / RC
NOVACAT 352 V





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.

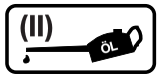
The applicable lubricants are symbolized (eg. “III”). According to this lubricant product code number the specification, quality and brandname of oil companies may easily be determined. The listing of the oil companies is not said to be complete.

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

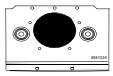
Lubricant indicator	**I**		**III**		**V**	**VI**	**VII**
required quality level niveau	HYDRAULIKöL HLP DIN 51524 Teil 2 See notes: * ** ***	motor oil SAE 30 according to API CD/SF	gear oil, SAE 90 resp. SAE 85 W-140 according to API-GL 4 or API-GL 5	lithium grease	transmission grease	complex grease	gear 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	AVIA MEHRZWECKFETT AVIA ABSCHMIERFETT	AVIA GETRIEBEFLIESSFETT	AVIALUB SPEZIALFETT LD	GETRIEBEÖL HYP 90 EP MULTIHYP 85W-140 EP	
BAYWA	HYDRAULIKÖL HLP 32/46/68 SUPER 2000 CD-MC * HYDRA HYDR. FLUID * HYDRAULIKÖL MC 530 ** PLANTOHYD 40N ***	SUPER 2000 CD-MC SUPER 2000 CD HD SUPERIOR 20 W-30 HD SUPERIOR SAE 30	SUPER 8090 MC HYPOID 80W-90 HYPOID 85W-140	MULTI FETT 2 SPEZIALFETT FLM PLANTOGEL 2 N	GETRIEBEFLIESSFETT NLGI 0 RENOLIT DURAPLEX EP 00 PLANTOGEL 00N	RENOPLEX EP 1	HYPOID 85W-140	
BP	ENERGOL SHF 32/46/68	VISCO 2000 ENERGOL HD 30 VANELLUS M 30	GEAR OIL 90 EP HYPOGEAR 90 EP	ENERGREASE LS-EP 2	FLIESSFETT NO ENERGREASE HTO	OLEX PR 9142	HYPOGEAR 90 EP HYPOGEAR 85W-140 EP	
CASTROL	HYSPIN AWS 32/46/68 HYSPIN AWH 32/46	RX SUPER DIESEL 15W-40 POWERTRANS	EPX 80W-90 HYPOY C 80W-140	CASTROLGREASE LM	IMPERVIA MMO	CASTROLGREASE LMX	EPX 80W-90 HYPOY C 80W-140	
ELAN	HLP 32/46/68 HLP-M M32/M46	MOTORÖL 100 MS SAE 30 MOTORÖL 104 CM 15W-40 AUSTROTRAC 15W-30	GETRIEBEÖL MP 85W-90 GETRIEBEÖL B 85W-90 GETRIEBEÖL C 85W-90	LORENA 46 LITORA 27	RHENOX 34	-	GETRIEBEÖL B 85W-90 GETRIEBEÖL C 85W-140	
ELF	OLNA 32/46/68 HYDRELF 46/68	PERFORMANCE 2 B SAE 30 8000 TOURS 20W-30 TRACTORELF ST 15W-30	TRANSELF TYP B 90 85W-140 TRANSELF EP 90 85W-140	EPEXA 2 ROLEXA 2 MULTI 2	GA O EP POLY G O	MULTIMOTIVE 1	TRANSELF TYP B 90 85W-140 TRANSELF TYP BLS 80 W-90	
ESSO	NUTO H 32/46/68 NUTO HP 32/46/68	PLUS MOTORÖL 20W-30 UNIFARM 15W-30	GEAROIL GP 80W-90 GEAROIL GP 85W-140	MULTI PURPOSE GREASE H	FIBRAX EP 370	NEBULA EP 1 GP GREASE	GEAR OIL GX 80W-90 GEAROIL 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	MEHRZWECKGETRIEBEÖI SAE 90 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	

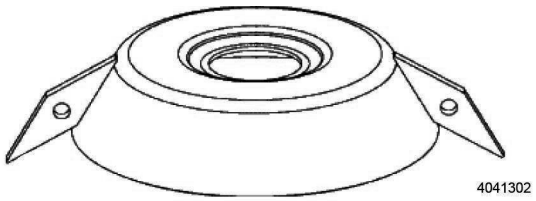
Conical disc

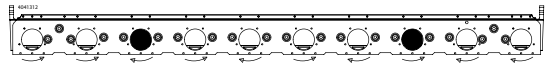
Recommendation for fitting the conical discs at the Novocat.



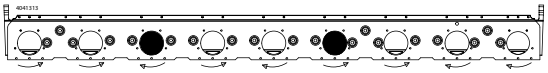
Marked areas show the position of the conical discs

Direction of rotation

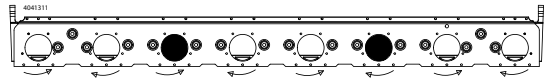




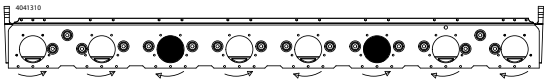
NOVACAT 442



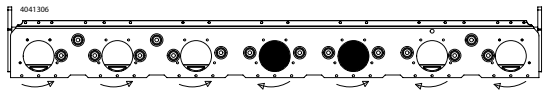
NOVACAT 402



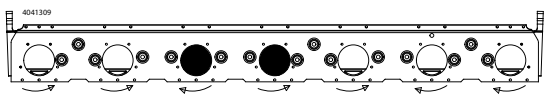
NOVACAT V10
(Version))



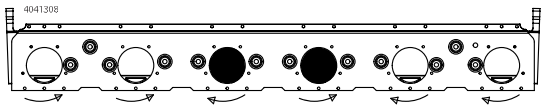
NOVACAT 350
NOVACAT 351 alpha
NOVACAT 352
NOVACAT V10
NOVACAT 3507 T



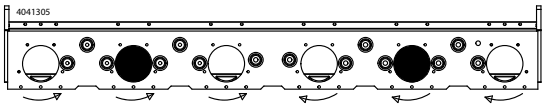
NOVAALPIN 301



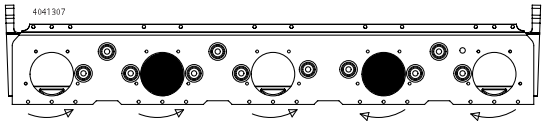
NOVACAT 301 alpha
NOVACAT 301 classic
NOVACAT 302
NOVACAT 305
NOVACAT 307 T
NOVACAT 3007 T
NOVACAT X8



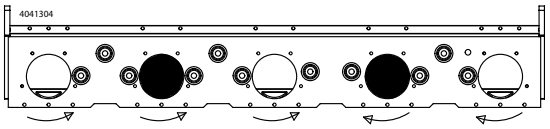
NOVACAT 261 alpha
NOVACAT 261 classic
NOVACAT 262
NOVACAT 265



NOVAALPIN 261



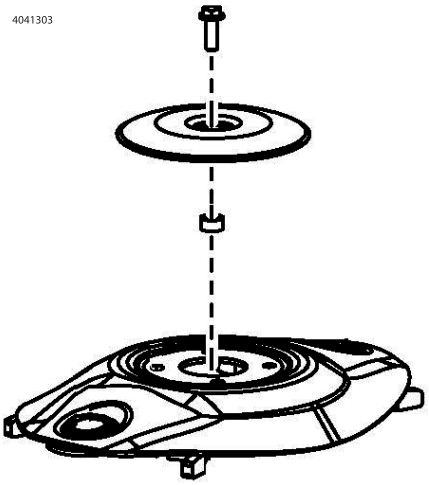
NOVACAT 225



NOVAALPIN 221

These are already fitted in the positions stated in the factory in the case of some cutter bars.

Other positions are possible and may be disassembled depending on fodder availability / composition. (The cover disc must always be re-fitted).



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

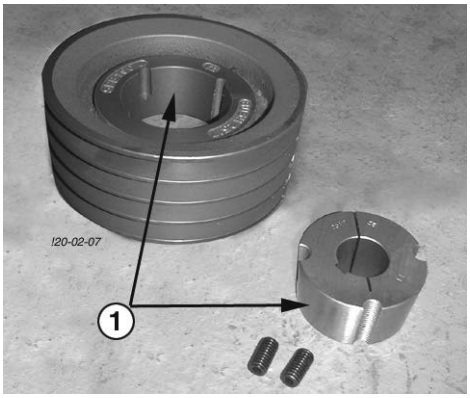
Bush identifier	Torque [Nm]
2017	30
2517	49

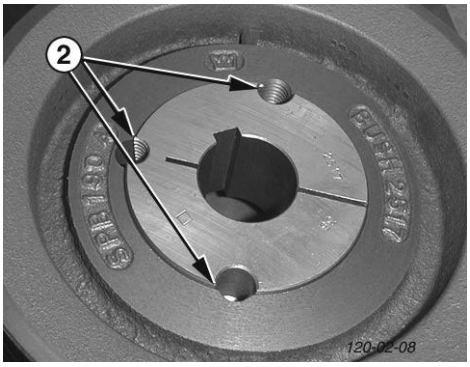
   - When the drive has been operating under load for a short period (half to on hour) check and ensure that the screws remain at the appropriate tightening torque.
   - In order to eliminate the ingress of dirt fill all empty holes with grease.

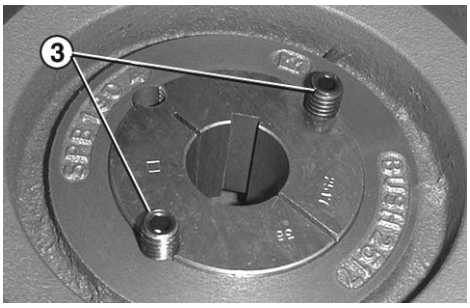
Removal

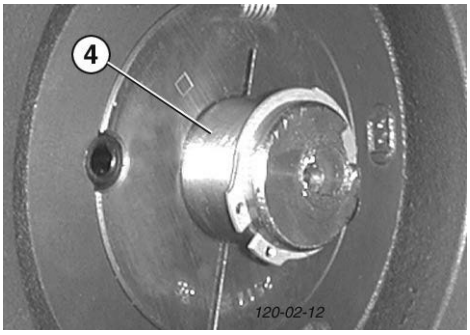
1. Slacken all screws. Depending on the size of the bush remove one or two.

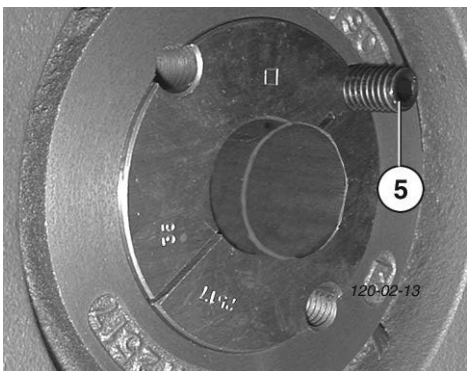
   After oiling point and thread of grub screws or under head and thread of cap screws insert them into the jacking off holie(s) in bush (Pos. 5).
2. Tighten screw(s) unitormly and alternately until the bush is loose in the hub and pulley is free on the shaft.
3. Remove pulley bush assembly from shaft.



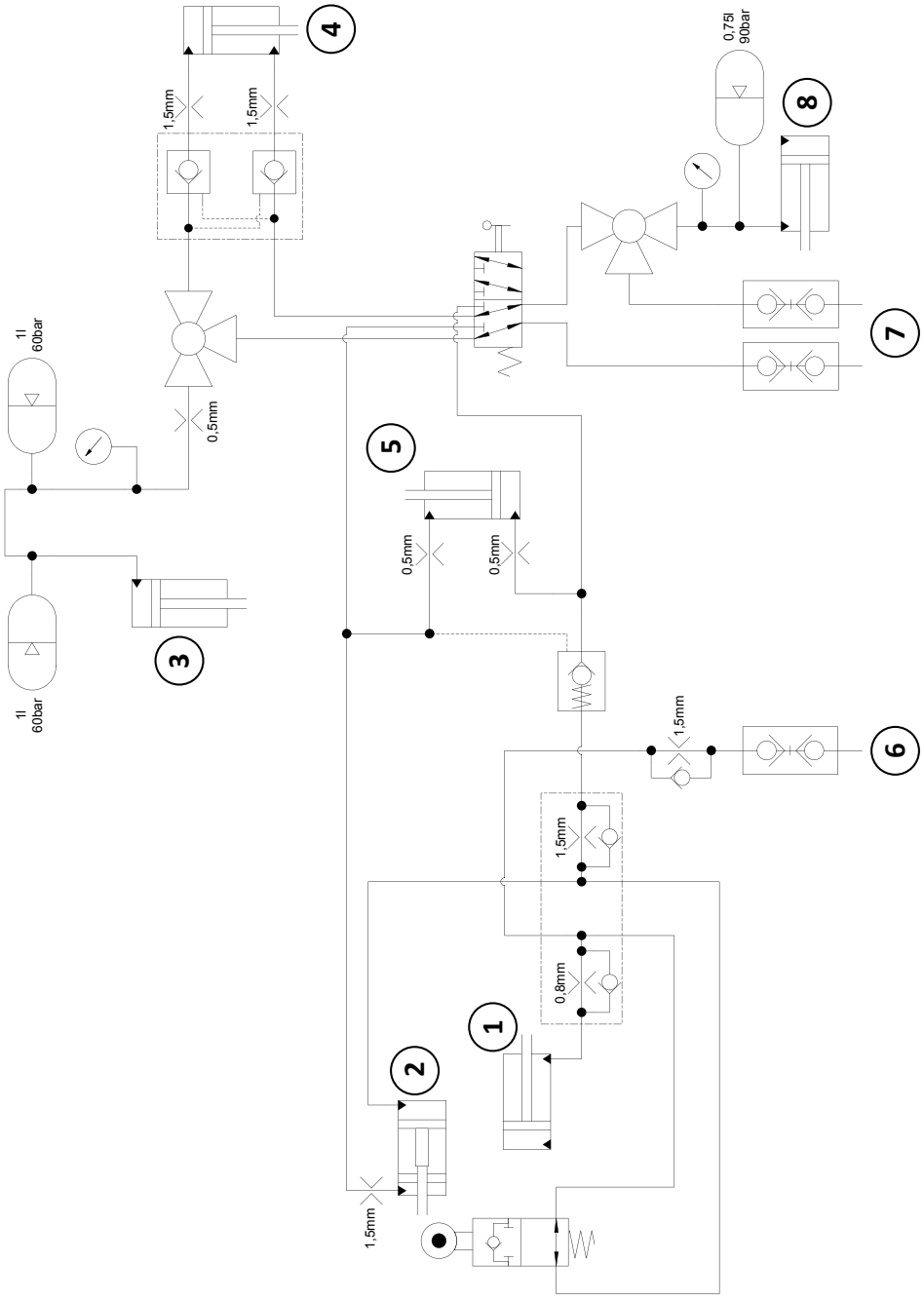






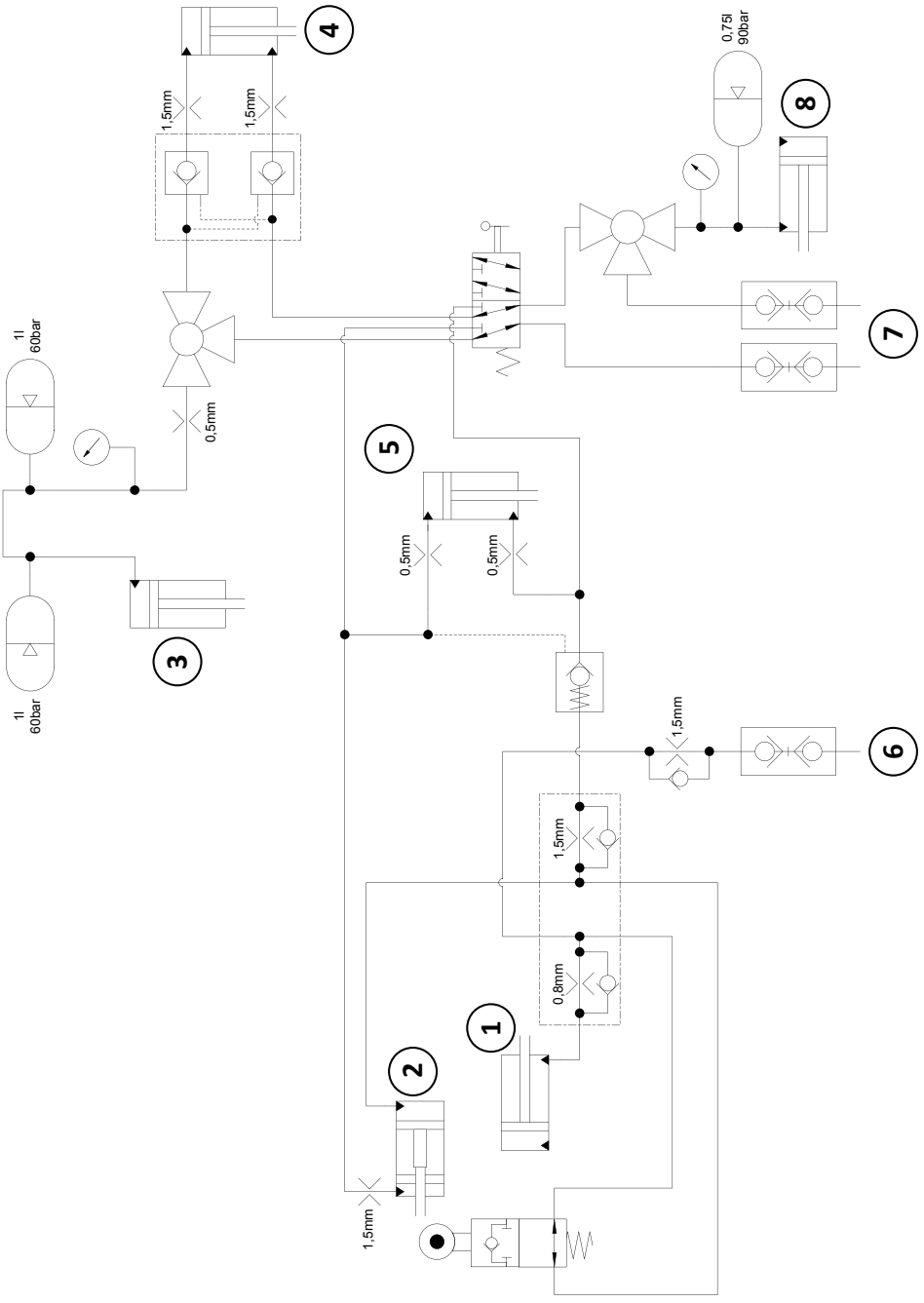


Hydraulic plan NOVACAT 262 and 302



1. Swing limiter
2. Lifting
3. Unloading
4. Lower link arm
5. Side protection cover
6. Tractor control unit, single-acting
7. Tractor control unit, double-acting
8. Hydraulic collision protection system

Hydraulic plan NOVACAT262 ED / RC and 302 ED / RC



1. Swing limiter
2. Lifting
3. Unloading
4. Lower link arm
5. Side protection cover
6. Tractor control unit, single-acting
7. Tractor control unit, double-acting
8. Hydraulic collision protection system

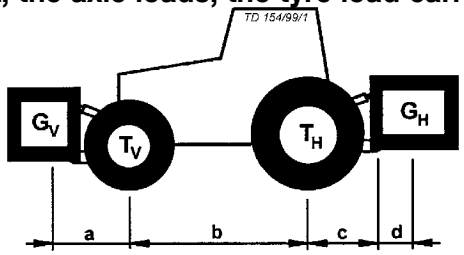
Combination of tractor and mounted implement

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.

PÖTTINGER

EC Conformity Declaration

Original Conformity Declaration

Name and address of the manufacturer:

PÖTTINGER Landtechnik GmbH
Industriegelände 1
AT - 4710 Grieskirchen

Machine (interchangeable equipment):

mower	NOVACAT	262 H	262 ED / RC	302 H	302 ED / RC	352 V
Type		3772	3782	3773	3783	3794
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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