Original inside

(GB) Operator‘s manual

+ INSTRUCTIONS FOR PRODUCT DELIVERY . . . Page 3

"Translation of the original Operating Manual"

Nr. 99 344.GB.80K.0

EUROCAT 276 F

(Type PTM 344 : + . . 01001**)**

EUROCAT 316 F

(Type PTM 345 : + . . 01001**)**

• **Drum mower**

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

(GB) Dear Farmer

You have just made an excellent choice. Naturally we are very happy and wish to congratulate you for having chosen Pöttinger. As your agricultural partner, we offer you quality and efficiency combined with reliable servicing.

In order to assess the spare-parts demand for our agricultural machines and to take these demands into consideration when developing new machines, we would ask you to provide us with some details.

Furthermore, we will also be able to inform you of new developments.

Important information concerning Product Liability.

According to the laws governing product liability, the manufacturer and dealer are obliged to hand the operating manual to the customer at the time of sale, and to instruct them in the recommended operating, safety, and maintenance regulations. Confirmation is necessary to prove that the machine and operating manual have been handed over accordingly.

For this purpose,

- **document A** is to be signed and sent to Pöttinger,
- **document B** remains with the dealer supplying the machine,
- and the customer receives **document C**.

In accordance with the laws of product liability, every farmer is an entrepreneur.

According to the laws of product liability, property damage is damage caused by a machine and not to it. An excess of Euro 500 is provided for such a liabilioty.

In accordance with the laws of product liability, entrepreneurial property damages are excluded from the liability.

Attention! Should the customer resell the machine at a later date, the operating manual must be given to the new owner who must then be instructed in the recommended regulations referred to herein.

Pöttinger Newsletter

www.poettinger.at/landtechnik/index_news.htm

The latest expert information, useful links and entertainment

(GB) INSTRUCTIONS FOR PRODUCT DELIVERY

Dokument D

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

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

Please check. [X]

- ❑ Machine checked according to delivery note. All attached parts removed. All safety equipment, drive shaft and operating devices at hand.
- ❑ Operation and maintenance of machine and/or implement according to operating instructions explained to the customer.
- ❑ Tyres checked re. correct pressure.
- ❑ Wheel nuts checked re. tightness.
- ❑ Drive shaft cut to correct lenght.
- ❑ Correct power-take-off speed indicated.
- ❑ Fitting to tractor carried out: to three-point linkage
- ❑ Trial run carried out and no defects found.
- ❑ Functions explained during trial run.
- ❑ Pivoting in transporting and operating position explained.
- ❑ Information given re. optional extras.
- ❑ Absolute need to read the operating manual indicated.

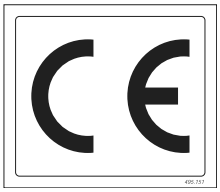
In order to prove that the machine and the operating manual have been properly delivered, a confirmation is necessary.
For this purpose please do the following:

- sign the **document A** and send it to the company Pöttinger or via the internet to www.poettinger.at
- **document B** stays with the specialist factory delivering the machine.
- **document C** stays with the customer.

Table of contents

Observe Safety Hints in the supplement!

CE sign



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

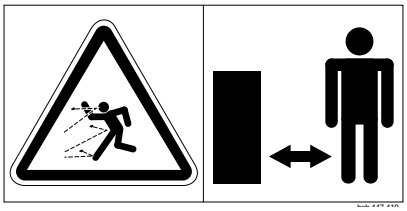
EU Declaration of Conformity (see supplement)

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

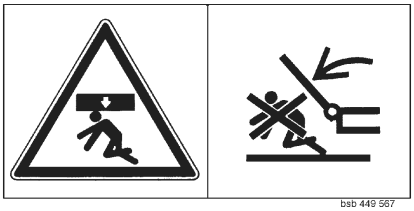
Recommendations for work safety

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

Meaning of warning signs

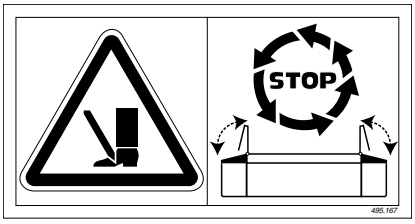


Danger - flying objects; keep safe distance from the machine as long as the engine is running.

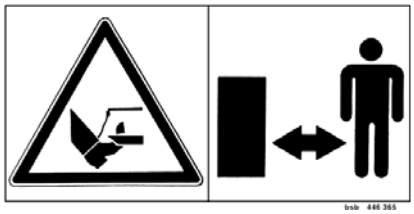


Stay clear of swinging area of implements

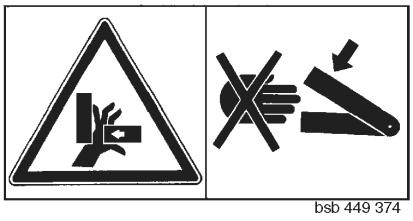
Wait until all machine components have stopped completely before touching them.



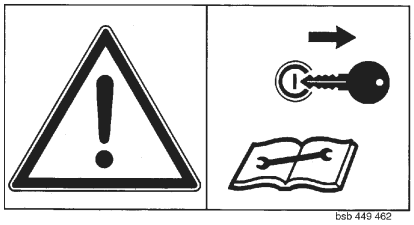
Close both side protective coverings before engaging p.t.o..



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



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



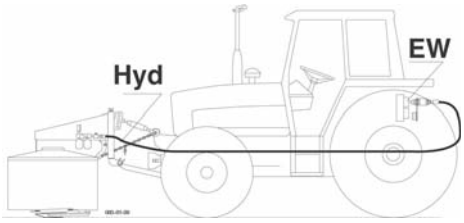
Shut off engine and remove key before performing maintenance or repair work.

Attaching in general

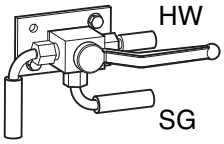
1. Observe safety tips in supplement A.
2. Mark off the implement at the tractor's front lifting gear.
   - Secure locking bolts with linch pins.

Solving problems with hydraulic connection

If the tractor has no hydraulic connection at the front, then a hydraulic hose must be run from the rear to the front.



A switch between the front lifting gear (HW) and front control device (SG) via a three-way tap may be necessary with some tractors.



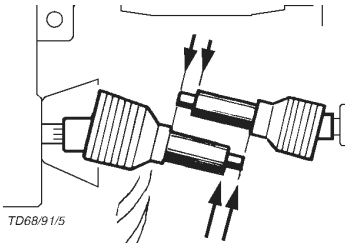
Achtung!

Bei doppelt wirkenden Schlepper-Front-Hubwerken besteht folgende Gefahrenquelle: Die maximale Mähwerk-Absenktiefe ist mit Begrenzungs-ketten eingestellt. Wird mit dem Hubwerk die maximal eingestellte Absenktiefe überschritten, entsteht Zugkraft auf die Begrenzungs-ketten.

Dies kann bis zum Bruch der Kette oder des KlappsteckersführenundesbestehtVerletzungsgefahr für Personen im Gefahrenbereich!

Drive shaft

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



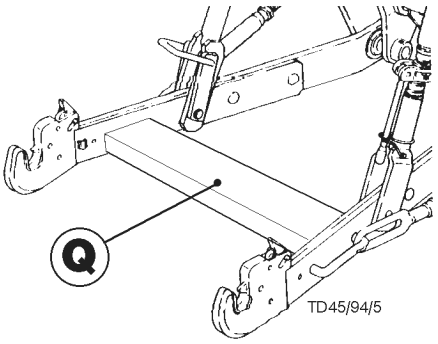
Parking the Unit

Always park the mowing unit on the supporting legs (30) with the adapter (conditioner), otherwise there is a danger of the unit tipping over.

- fix the supporting leg by means of a sprung forelock.

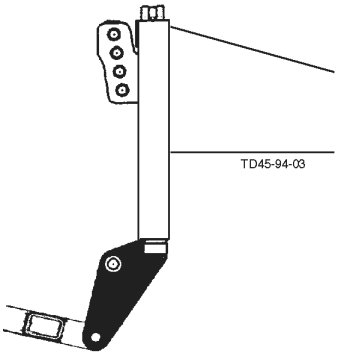
Attaching problems

On lifting gear with a crosspiece (Q) between the lower links, damage could occur to the drive shaft when lowering the attached implement.

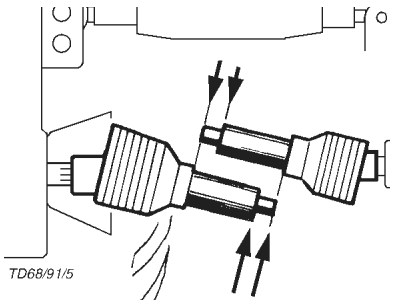


In order to prevent damage an extra elevator unit is to be installed between the Weiste-triangle and the lifting gear.

In a case such as this please contact our Customer Service Dept.



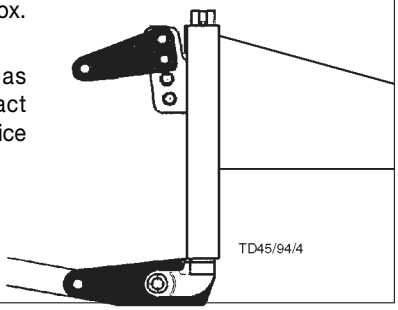
When towing implements whose p.t.o stub is positioned a long way forward, the drive shaft must be shortened quite a bit.



- When the implement is engaged then there is insufficient casing to over the drive shaft.
- The maximum angle of deviation of the universal-joint will possibly be exceeded (see Supplement B also).

In this case an accessory kit is necessary which positions the implement approx. 200 mm forwards.

In a case such as this please contact our Customer Service Dept.



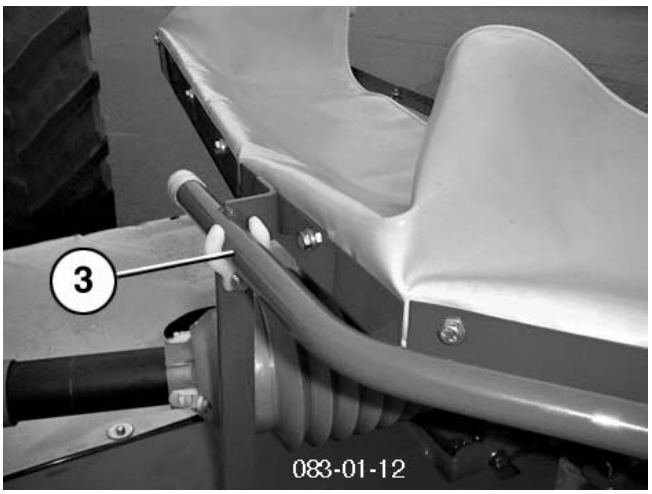
Guard plates and protective aprons

Guard plates and protective aprons can be raised when maintenance work is to be done.

For safety reasons it is necessary to wait for mowing disks to stop completely before raising and securing guard plates.

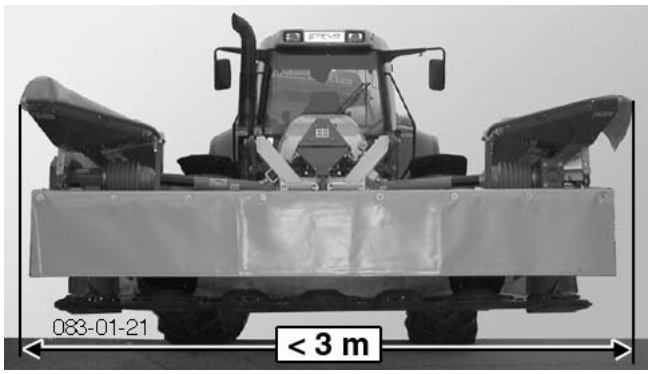
1. Loosen locking mechanism (1) and swing protection (2) up.

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



Transport position (< 3 m)

When both protective elements have been raised and are engaged in the holder (3), the total width of the unit is less than 3m.



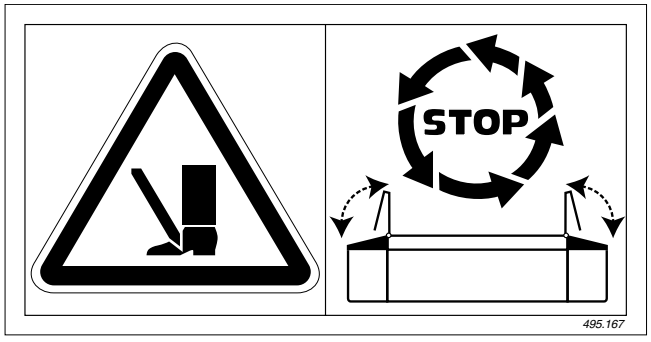
Road Transport

- Observe the regulations issued by your country's legislative body.
- Travelling on public roads may only be undertaken as is described in the chapter "Transporting Position".
- Fasten lower hydraulic link so that implement cannot swing out sideways.

Work position

Before commencing work

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



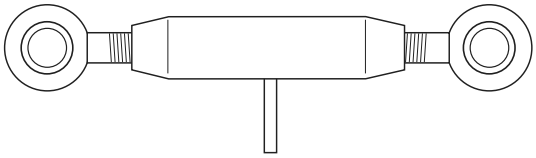
For safety reasons mowing may only be conducted in this position.

Rigid steering mechanism

Use a rigid steering mechanism

* with disc mower units
  NOVACAT 266 F
  NOVACAT 306 F
  NOVACAT 306 F - with “Alpha Motion” mounted device

- with drum mower units
  EUROCAT 276 F - equipped with hydraulic relief units (20)
  EUROCAT 316 F - equipped with hydraulic relief units (20)
  EUROCAT 316 F - with “Alpha Motion” mounted device



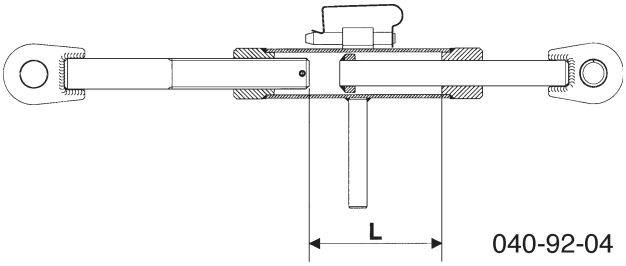
Telescopic steering mechanism

Use a telescopic steering mechanism

* with drum mower units (EUROCAT) in combination with towing vehicles equipped with an electronic lifting system.

The telescopic steering mechanism enables the mower drums to adapt well to uneven patches of ground which run at right angles to the direction of motion.

- The length of swing (L) can be adjusted by rotating the spindle.
- To shorten the steering mechanism, see Annex - D



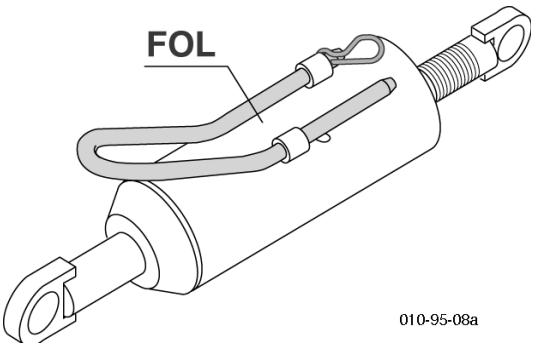
The telescopic upper link must not be used on mowing bars with hydraulic relief unit (20) and with the “alpha Motion” version.

Damped steering mechanism

Use a damped steering mechanism (DSM)

* with drum mower units (EUROCAT) in combination with towing vehicles which are equipped with an electronic lifting system.

- See also chapter on ”DAMPED STEERING MECHANISM”



The spring-loaded upper link must not be used on mowing bars with hydraulic relief unit (20) and with the “alpha Motion” version.

Pay particul arattention before initial attachment to Tractor!

Note!

For front lifting gear with double-action hydraulic cycle (danger of damage)!

Remedy:

- Switch control valve to single-action
- Convert front lifting gear to single-action function (bypass line) through a specialist work shop

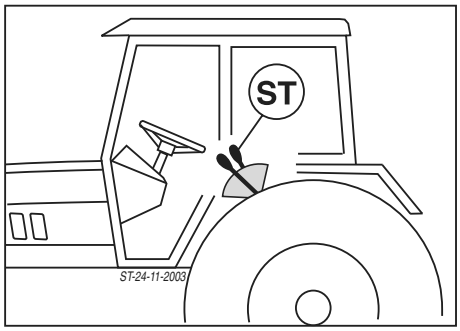
- **When the mower is attached to the tractor, the the hydraulic control (ST) must not be set at „Lower“.**
- **Immediately after such an operating error, reset the adjustable plate (P1). Replace damaged parts beforehand.**

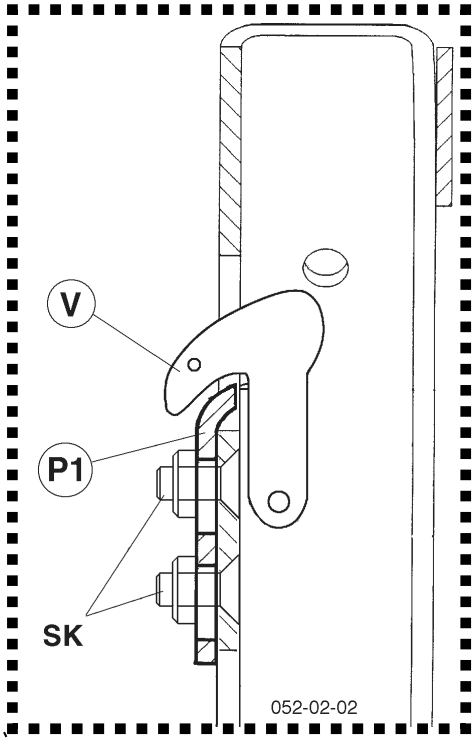
The following could happen after an operating error:

- the position of the plate (P1) has changed in the slot; the gap to the locking hook (V) is therefore too great,
- the locking hook (V) breaks,
- both levers on the load relieving unit become damaged.
- Die Begrenzungsketten können reißen

Reset the adjustable plate (P1)

1. Loosen screws (SK) slightly
   - do not loosen too much; the plate (P1) should be able to move in the slot when tapped lightly with a hammer.
2. Couple the mower to the tractor´s lifting gear
3. Position the adjustable plate (P1) so that the locking hook (V) can still be unlatched.The gap to the hook should be as narrow as possible.
4. Uncouple the mower from the tractor´s lifting gear.
5. Tighten screws (SK) to **65 Nm**.





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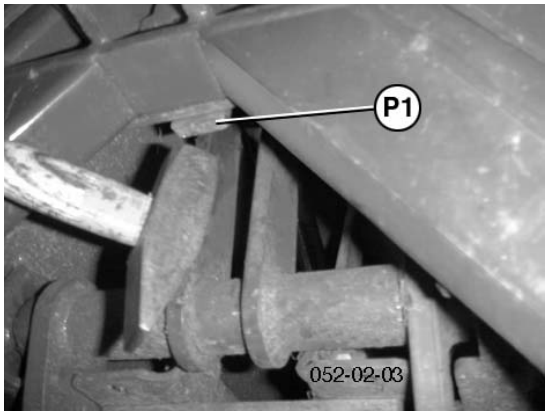
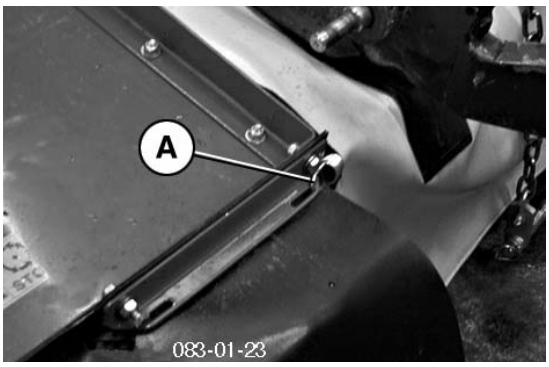
Dies kann bis zum Bruch der Kette oder des Klappsteckers führen und es besteht Verletzungsgefahr für Personen im Gefahrenbereich!



Snap Connector (1)

1. Secure Expander (EX) in the correct position

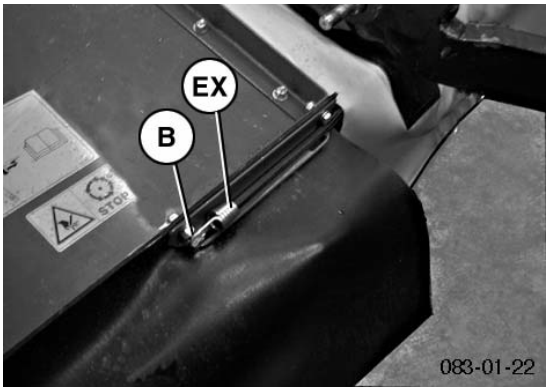


Position A

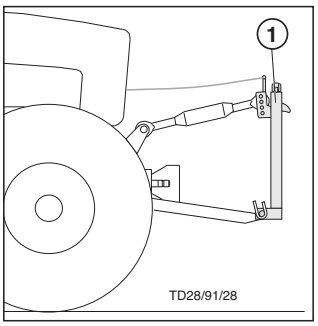
- before hooking up to the tractor

Position B

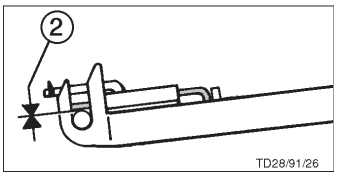
- after hooking up to the tractor and during mowing



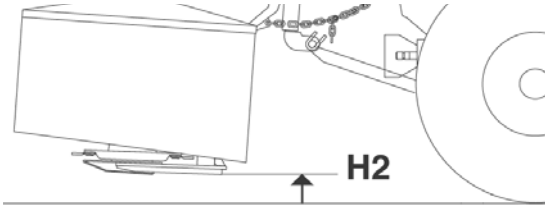
2. Mount snap connector (Weiste triangle) onto the front lifting gear in a vertical position or inclined slightly forward.



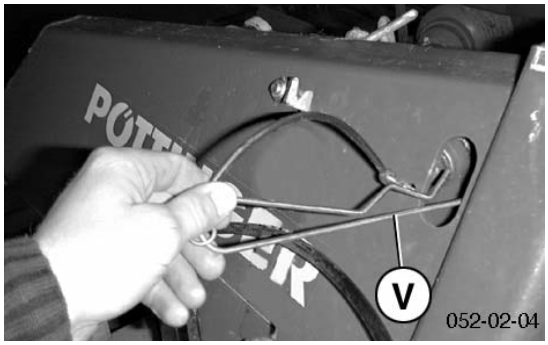
3. Lock lower link bolts (2) so that they are free from play.



4. Connect and lift mower unit (H2).



5. Secure locking clamp (V) with cotter pin.



- Check the position of the adjustable plate Platte (P1).

  The gap to the hook should be as narrow as possible.

6. Fit drive shaft.

Function of the damped steering mechanism

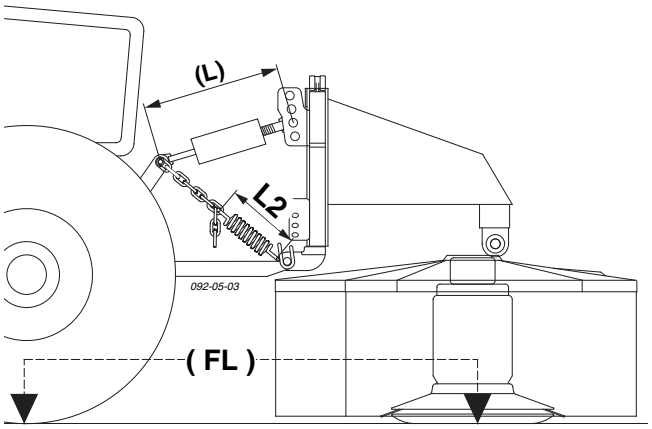
- The damped steering should be used when operating on uneven terrain.

The advantages:

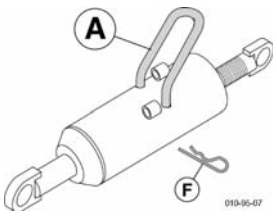
- the mower unit adapts especially well to suit the terrain
- better mowing performance
- less loading and wear and tear on moving parts

Adjustment of the damped steering mechanism (DSM)

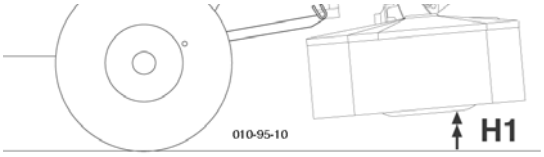
1. Fit the mechanism to the towing vehicle.
   - Do not fit the 2 relieving springs yet.
2. Carry out adjustment of the damped steering mechanism on an a level, horizontal surface (FL).



   - The bracket must be set in position "A".
   - Adjust length (L) by rotating the spindle.
   - Set the damped steering mechanism at the towing vehicle and the quick-release coupling (Weiste triangle).



3. Raise the mechanism hydraulically (H1).
   - Fit relieving springs.
4. Lower hydraulically (FL).



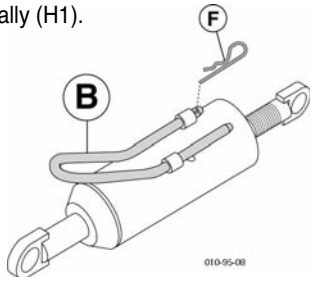
EUROCAT 276 front

- The set distance should be **42 - 44 cm** (L2).

EUROCAT 316 front

- The set distance should be **45 cm** (L2).

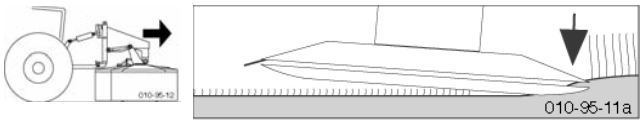
5. Raise the mechanism hydraulically (H1).
6. Remove mounting bracket and fit in position **"B"**.
   - Secure mounting bracket with spring clip (F).
7. Lower hydraulically (FL).



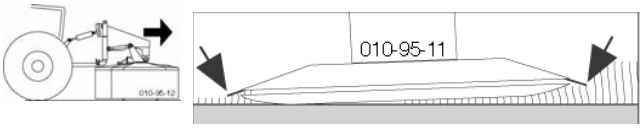
8. Check
   - Raise mechanism laterally, approx. **75 kg**
   - Raise mechanism at front, tipping towards the rear must be easily possible.

Problems which may arise during operation and their correction

Problem	*Remedy*
• The mower unit digs into the ground, the spring tensioning on the DSM is too weak.	- Attach to hole higher up the Weiste triangle. - Readjust the length (L) (see Points 2 - 8).

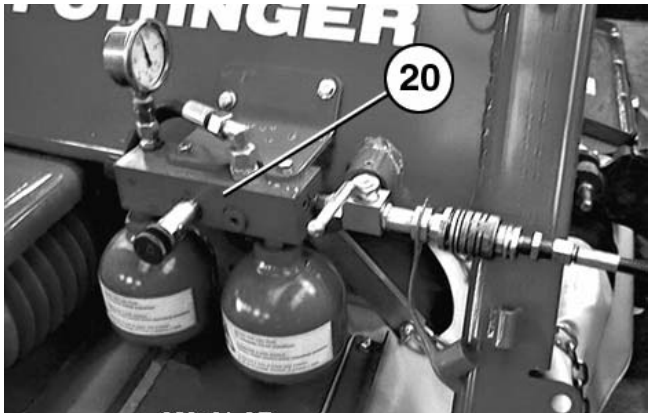


• Double cut, the spring tensioning on the DSM is too strong.	- Attach DSM to a hole down the Weiste triangle. - Readjust the length (L) (see Points 2 - 8).



Do <u>not</u> use the damped steering mechanism (DSM)

- with mower units which are equipped with a hydraulic relief unit (20).
- with “Alpha Motion” mounted device



Mower with swath discs

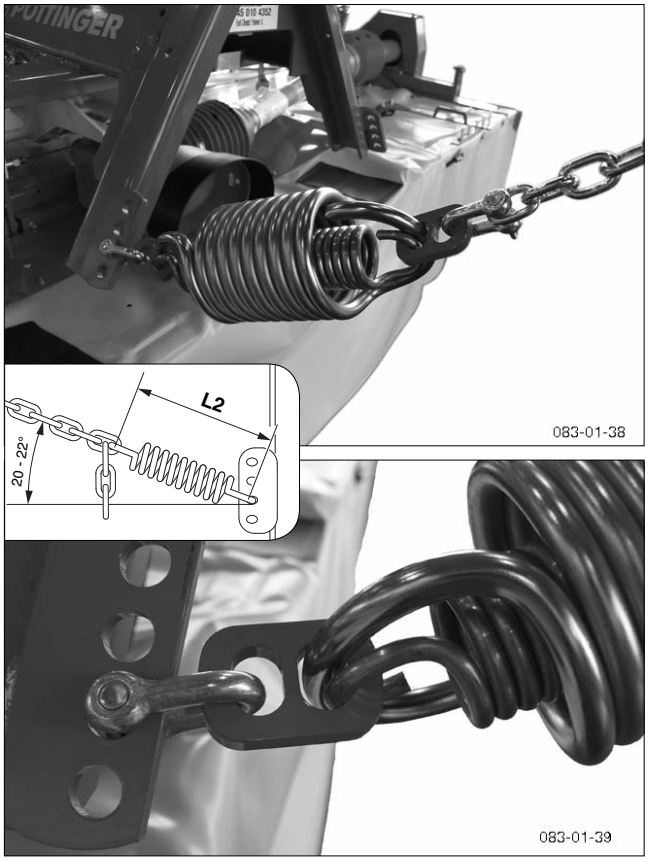
Adjusting the floor bearing load of the mowing bar

Adjusting hints

- The mowing bar should weigh 150kg resting on the ground (75kg left and right).

  As the total weight of the mowing unit is higher, a corresponding weight relief must be set.

  For this purpose, a mowing unit with swath discs is equipped with two tension springs, which must be pre-tensioned accordingly.



Setting of spring tension

1. **Lift implement hydraulically**
2. **Secure both chains**
3. **Lower implement to the ground.**

   NOVACAT 266 F: L2 = 420 mm

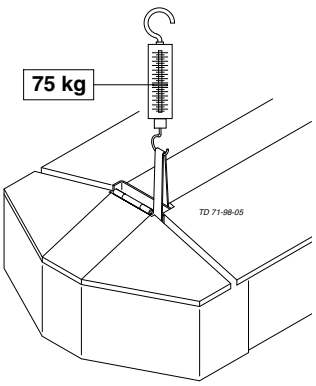
   NOVACAT 306 F: L2 = 440 mm

   EUROCAT 276 F: L2 = 440 mm

   EUROCAT 316 F: L2 = 450 mm

   This mesaurement should be taken as an approx. value.

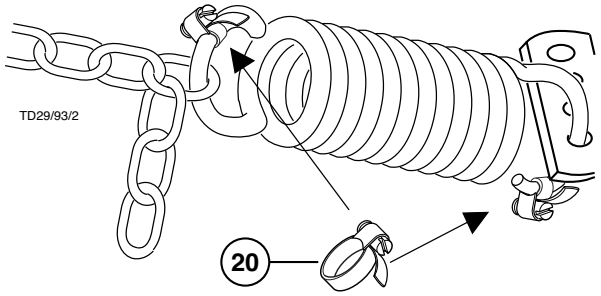
- More important is that the ground - bearing load of the cutter bar should be approx. **150 kg** (left and right 75 kg)
  - Set spring tension accordingly.



4. **The optimum angle of 20° - 22° should be maintained as well.**

- Various attachments for the different tractor types are shown on chapter "SPECIAL ATTACHING KITS". These atachments are manufactured for relatively simple self-assembly.

- Slip the hose clamp (20) onto the tension spring.

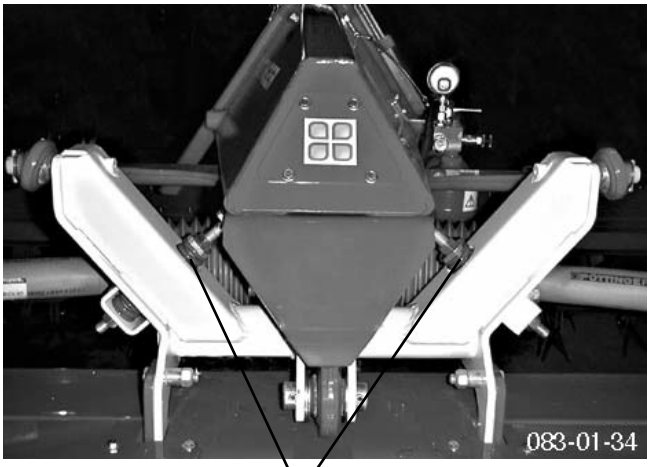


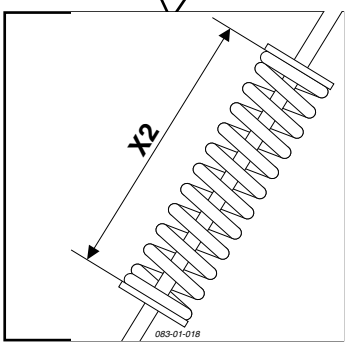
Doing this means that spring tension does not have to be checked every time unit is attached to tractor.

The set measurement of **"L2"** need only be checked and, if necessary, adjusted when tractors are changed.

Setting of spring tension

X2 = 152 mm





Instruction to the cultivation and the attitude of the hydraulic mower support for Pöttinger Front-Mower Nova CAT 266/306 and Euro CAT 276/316

Note!

For front lifting gear with double-action hydraulic cycle (danger of damage)!

Remedy:

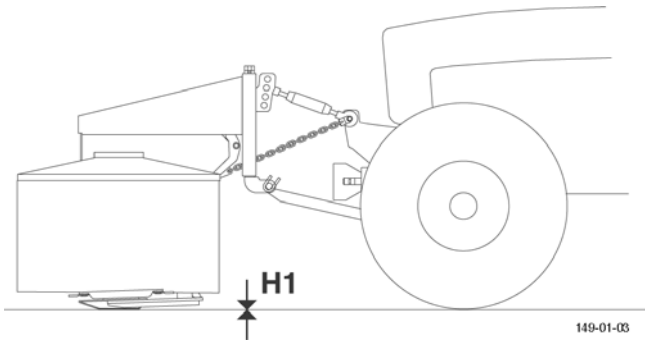
- Switch control valve to single-action
- Convert front lifting gear to single-action function (bypass line) through a specialist work shop

Grow the Mower at the tractor and put in the hydraulic relief

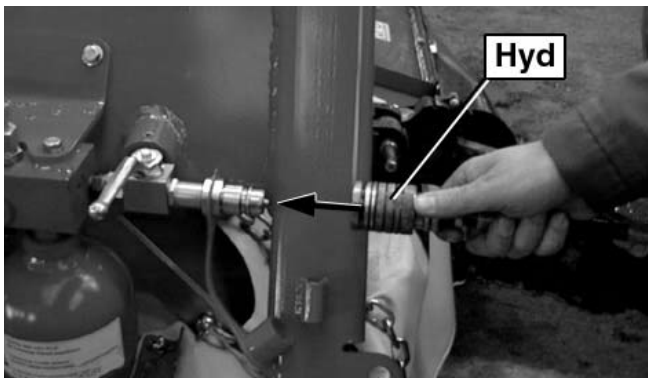
Note!

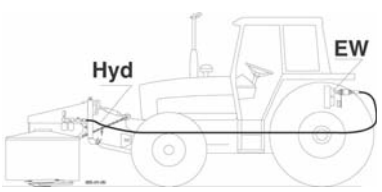
When setting up or during operation the hydraulic control valve for the front lifting gear must be in the floating position.

1. On even surface appliance grows and up to the ground sinks (H1).



2. Connecting the hydraulic lead to the mowing unit and to the tractor's straightforward hydraulic circuit (EW)

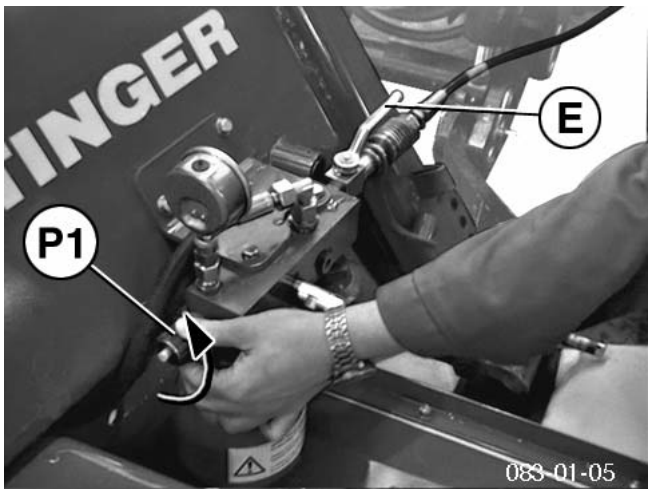




3. Open stopcock (E)

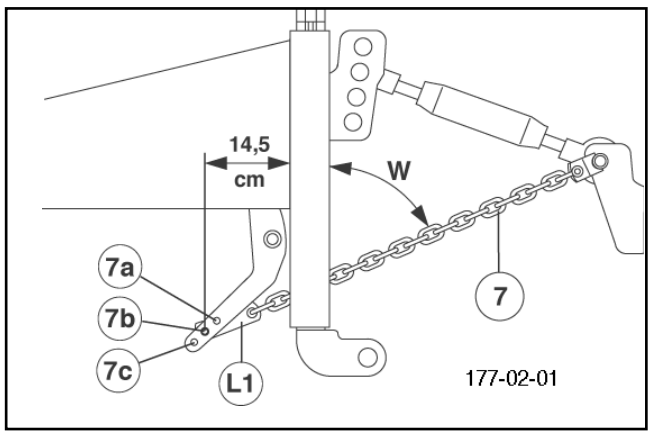
4. Delivery valve completely opens

Direction of rotation to the left



5. The two chains (7) so it installs, that the distance amounts between cultivation-frameworks and cylinder bore (7b) to 14,5 cm.

- Link plate L1 inserted in hole 7b is the basic setting
- The angle (W) is of importance and should amount to 60° - 70°.

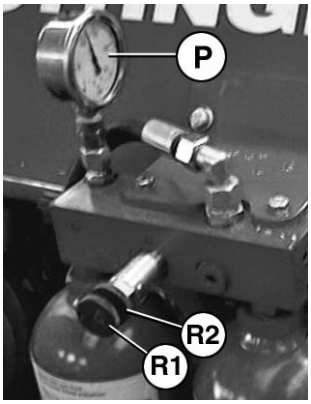


On the basis of the different designs of the different manufacturers, no unambiguous chain-inclination can be rixed (see chapter "SPECIAL ATTACHING KITS")

6. Close pressure valve (P1) completely (clockwise)

Bild 6

7. Activate hydraulic control valve (ST) until a pressure of 150 bar registers on the pressure gauge.



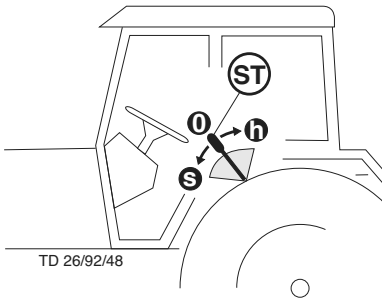


Bild 7

8. Move the hydraulic control valve to floating position (S)

9. Pressure shown on valve should reduce to approximately 120 bar

If valve shows less than 120 bar

- screw knurled bolt (R1) in completely
- activate hydraulic control valve (ST) until valve indicates a pressure of 150 bar
- move the hydraulic control valve (ST) to the floating position
- Unscrew knurled bolt (R1) to the point where up to 120 bar is indicated (minimum 85 bar, maximum 150 bar)
- Lock knurled bolt (R2)

If more than 120 bar pressure is indicated

- unscrew knurled bolt (R1) until 120 bar is indicated (minimum 85 bar, maximum 150 bar)
- Lock knurled bolt (R2)

10. Control the distance (14,5 cm) between cultivation-frameworks and cylinder bore (7b) - see picture 5

If corrections are necessary - see point 14

11. Check the floor bearing load of the mowing bar (150 kg) (75 kg left and right).

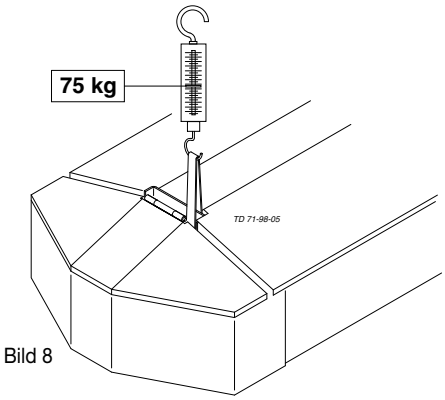
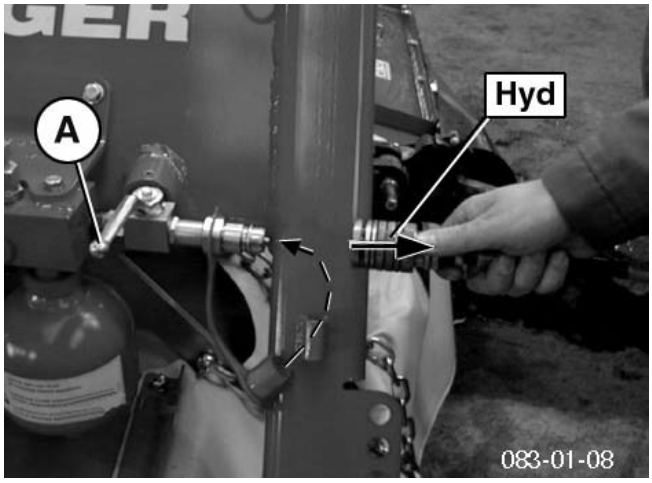


Bild 8

If corrections are necessary - see point 14

12. Close stopcock (A)

13. The hydraulics-management (Hyd) can now become closed.



14. Corrections:

14.1 Dimension 14,5 cm between cultivation-fremeworks and cylinder bore (7b) is not yet reached.

- Raise unit hydraulically (H2)
- Length of the chains (7) by means of hook accordingly changes
- Lower the unit to the ground (H1)
- Dimension again controls

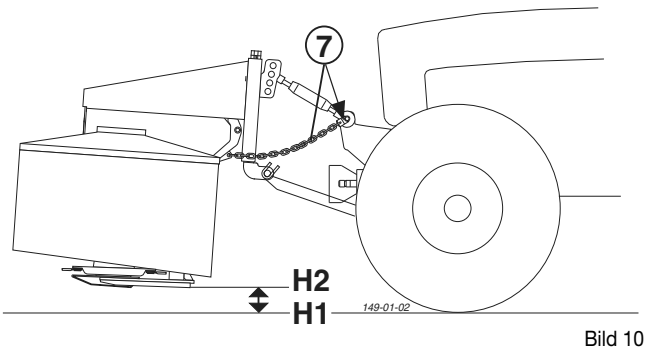


Bild 10

14.2 If the mowing bar rests too lightly on the ground

- reduce the pressure shown (on the valve) by approx. 5 –10 bar by means of the knurled bolt (R1)

Take care that pressure is not reduced below 85 bar

If 85 bar is set and the mowing bar still rests too lightly on the ground

- move the link plate (L1) to the under hole (7c)

14.3 If the mowing bar rests too heavily on the ground

- Screw in knurled bolt (R1) completely
- Repeat points 7 and 8 and increase the pressure (normal setting 120 bar) by 10 bar, by means of the knurled bolt

Take care. Do not exceed maximum pressure of 150 bar

If 150 bar is set and the mowing bar still rests too heavily on the ground

- Raise the unit hydraulically (H2)
- move the link plate (L1) to the upper hole (7a)

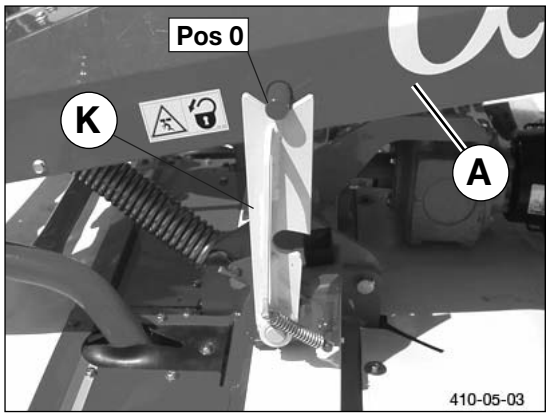
15. General conditions hints

Making corresponding adjustments or corrections:

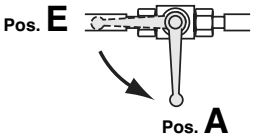
- When the unit is hooked onto various tractors alternately
- instead of the conditionierer place swath disc or otherwise (weight-difference)
- through strong filth-construction the ground-contact pressure clearly ascends

Parking position

- For parking the implement, swivel the bracket (K) up (pos. 0)



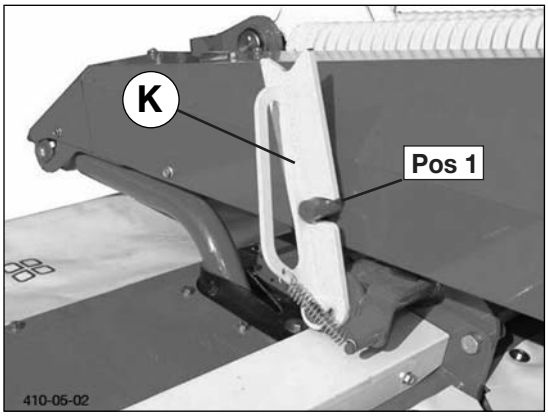
- Close stop cock (pos. A)



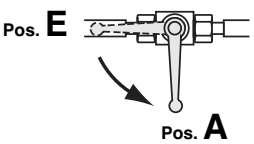
Note!
The conditioner (CR) can be removed only in this position (pos. 0)

Transport position

- Always lock the cutter unit when transporting
  - Swivel the bracket (K) to pos. 1

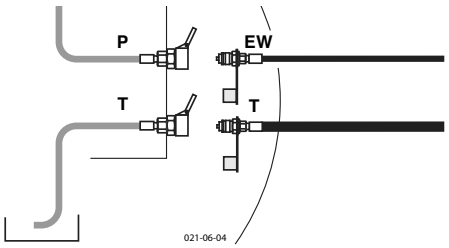


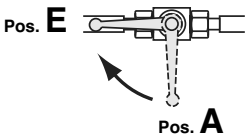
- Close stop cock (pos. A)



Mounting

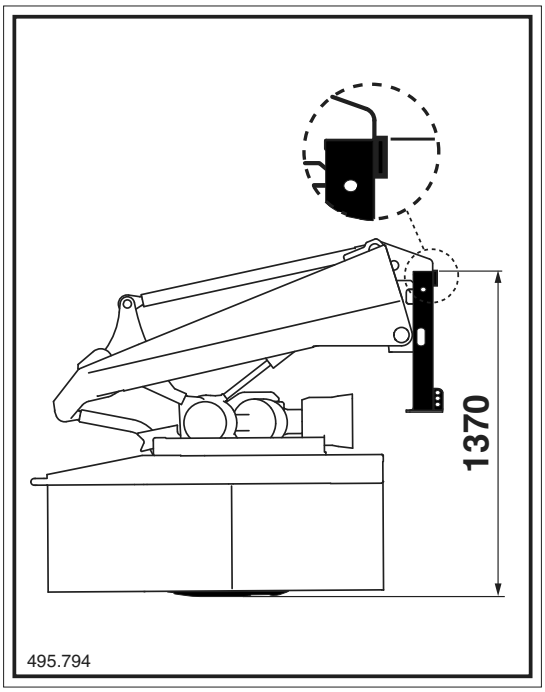
- See chapter "Attaching with the Snap Connector"
- Connect lifting cylinder hydraulic lines to the tractor's single-action (EW) hydraulic circuit

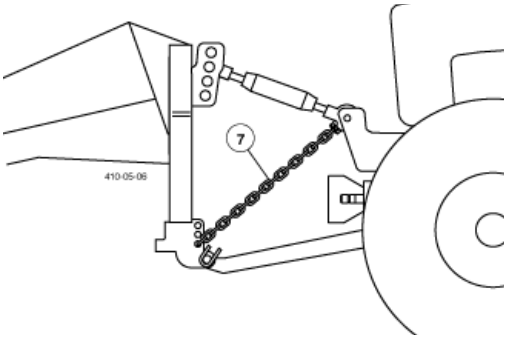




- Open stop cock (pos. E)
- Lift the mounting frame (A) over the tractor's lifting gear
- Swivel the bracket (K) forward
- Set working height at 1370 mm and secure with chain (7)

(Die Begrenzungsketten dienen als Einstellhilfe!)





Variant with NOVOCAT 306F and 316F

Attention!

The cutter bar must always be secured during transportation.

Attention!

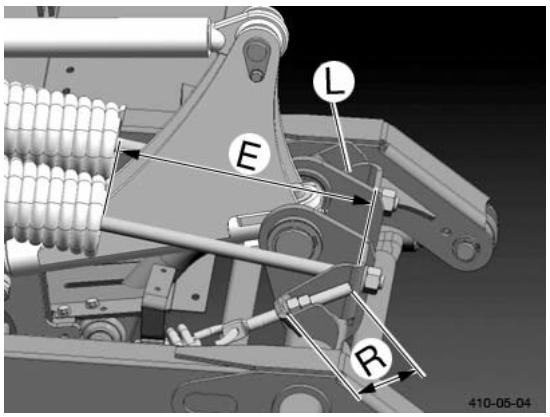
Park the implement on flat, firm ground

Achtung!

Bei doppelt wirkenden Schlepper-Front-Hubwerken besteht folgende Gefahrenquelle: Die maximale Mähwerk-Absenktiefe ist mit Begrenzungsketten eingestellt. Wird mit dem Hubwerk die maximal eingestellte Absenktiefe überschritten, entsteht Zugkraft auf die Begrenzungsketten.

Dies kann bis zum Bruch der Kette oder des Klappsteckers führen und es besteht Verletzungsgefahr für Personen im Gefahrenbereich!

Set spring tension



E = Relieving springs

R = Weight counterbalance: right

L = Weight counterbalance: left

Cutter unit with Swath Maker

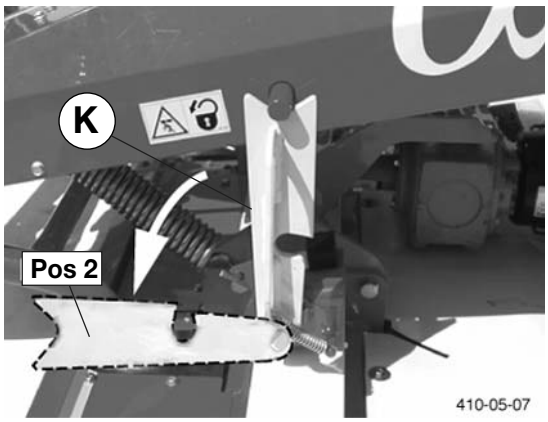
Type	E (mm)	R (mm)	L (mm)
EUROCAT 316 F	**245**	**55**	**-**
NOVACAT 306 F	**270**	**-**	**60**
NOVACAT 356 F	**250**	**-**	**90**

Cutter unit with Conditioner ED

Type	E (mm)	R (mm)	L (mm)
EUROCAT 316 F	**180**	**30**	**-**
NOVACAT 306 F	**205**	**-**	**30**
NOVACAT 356 F	**185**	**-**	**25**

Operation

- Swivel the bracket (K) to pos. 2

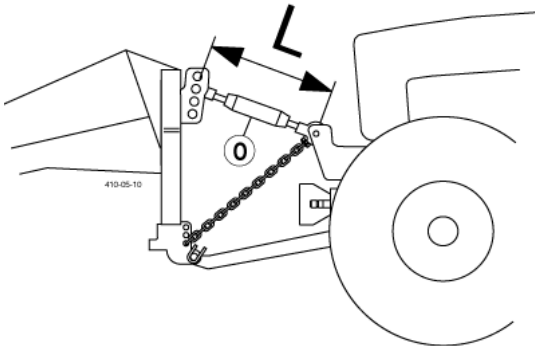


Hinweis!

Bei der Einstellung und während der Arbeit, muß das Hydraulik-Steuerventil für das Fronthubwerk für die eingestellte Position gesperrt werden.

Set cutting height [1)]

With upper link (O):

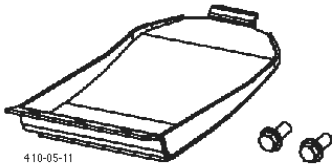


Altering the upper link length (L +/-) enables a cutting height difference of between 3 to 6 cm.

Note!

When stopping the mower bring the triangular headstock into the vertical position.

With high cut skids:



Use when cutting height exceeds 6 cm

[1)]Only with disc mowing

Important points before starting work

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

After the first hours of operation

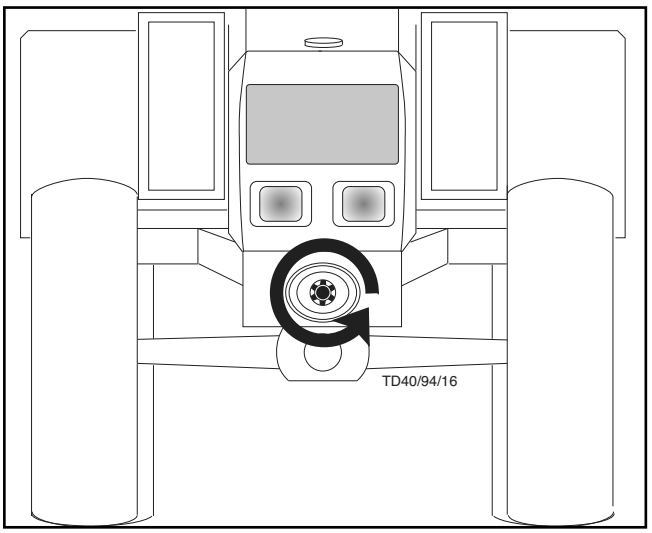
- Retighten all knife screw fittings.

Watch for the direction of rotation of the mowing discs

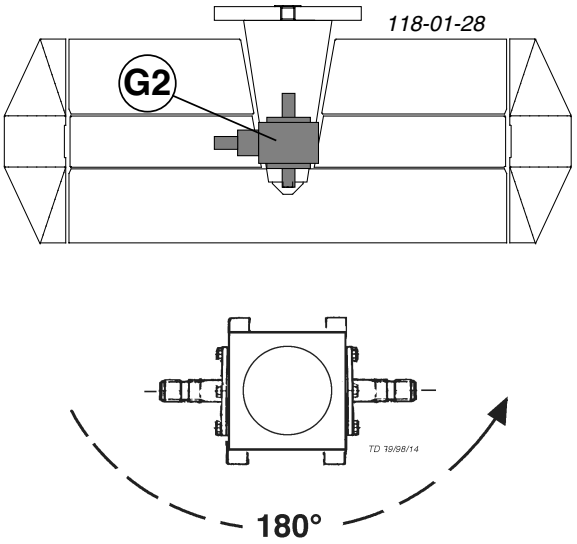
General

For mowing, the power take-off shaft drive should be switched to turn to the left.

Remedy, if the tractor's power take-off shaft drive cannot be switched to turn to the left:

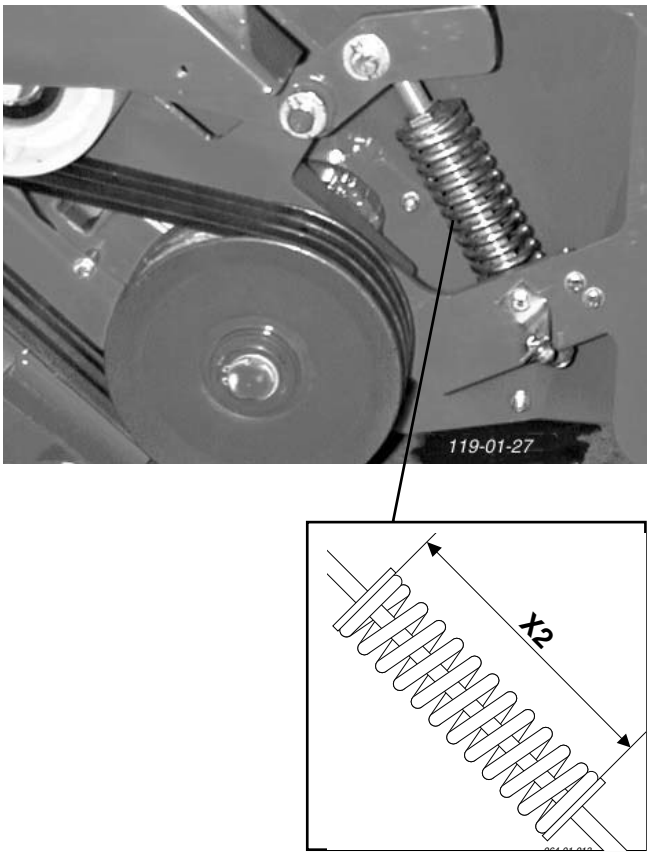


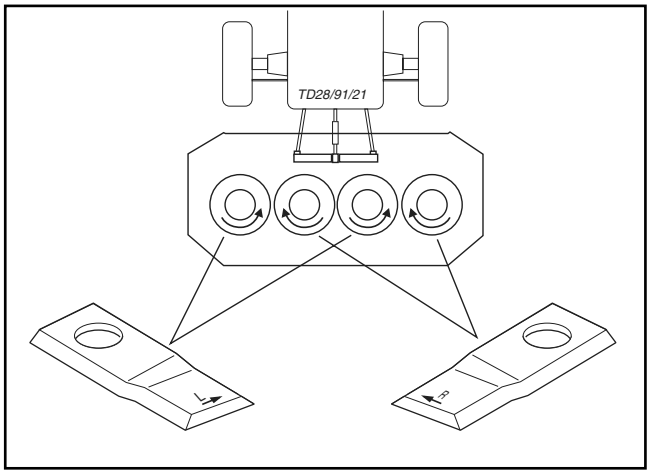
- dismantle the transmission (G2), rotate by 180 degrees and re-install



Mower unit with Conditioner 1)

1. **Check condition of V-belts.**
   Replace worn out and damaged V-belts!
2. **Check V-belt tension!**
   - see chapter "CONDITIONER".





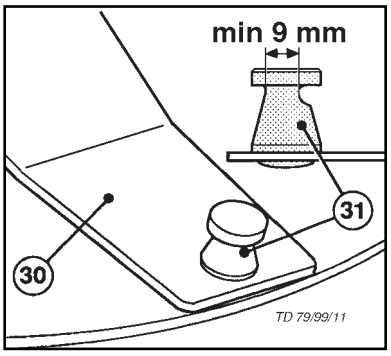
1) Option

Safety hints

1. Check:

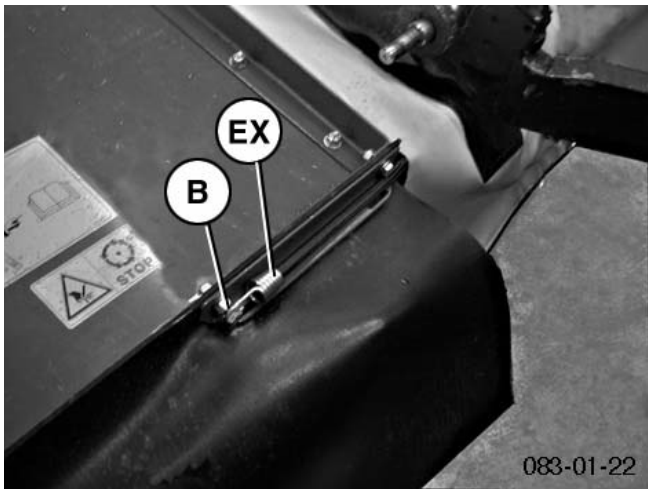
- Check wear of blade bolt (31).

  Replace blade holder when bolt diameter is less than 9 mm.



- Check blade holder (30) on damage.
- In case of grinding noises check whether the blade holder (30) is buckled and therefore the blade does not lie correctly any more.

- Fit expander (EX)



2. Turn p.t.o. on.

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

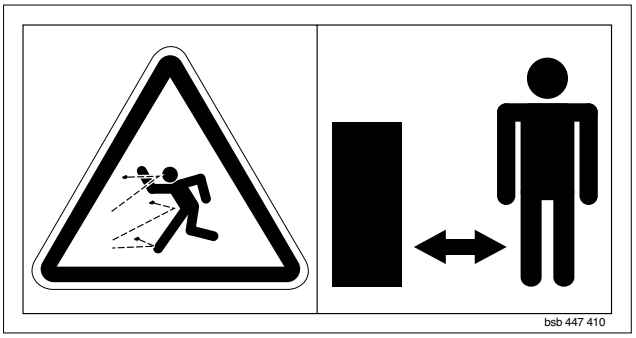
3. Switch-on the machine only in working position and do not exceed the prescribed power take-off speed (for example max. 540 rpm).

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

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

To mow, slowly throw in the p.t.o. away from the mowing area and bring the mowing rotor up to full speed. The travelling speed depends on ground contours and type of forage.

5. Stay clear while engine is running



Refer people to the danger area, the danger coming from stones which are flung away. Particular care is advisable on stoney 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 a noise level of 85 dB (A) is reached or exceeded, the farmer must have suitable hearing protection in readiness (UVV 1.1 §2).
- If a noise level of 90 dB (A) is reached or exceeded, the hearing protection must be worn (UVV 1.1 § 16).

7. Damage protection!

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

In the event of a collision

- Stop immediately and switch off the drive.
- Carefully check the implement for damage.
- Have the implement checked also by a specialist workshop if necessary.

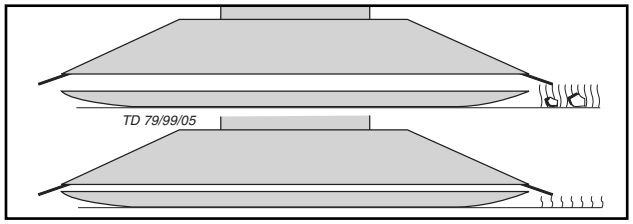
8. Safety hints (pt. 1, 2, 3, 4,) to observe in supplement A1!

Operation

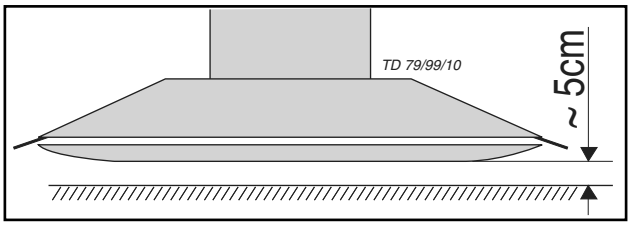
1. Adjust cutting height by turning upper link spindle (inclination of the cutting discs max. 5°).

Cutting height adjustment

The cutting height can be set anywhere from 35 to 65 mm by adjusting the centre disc.

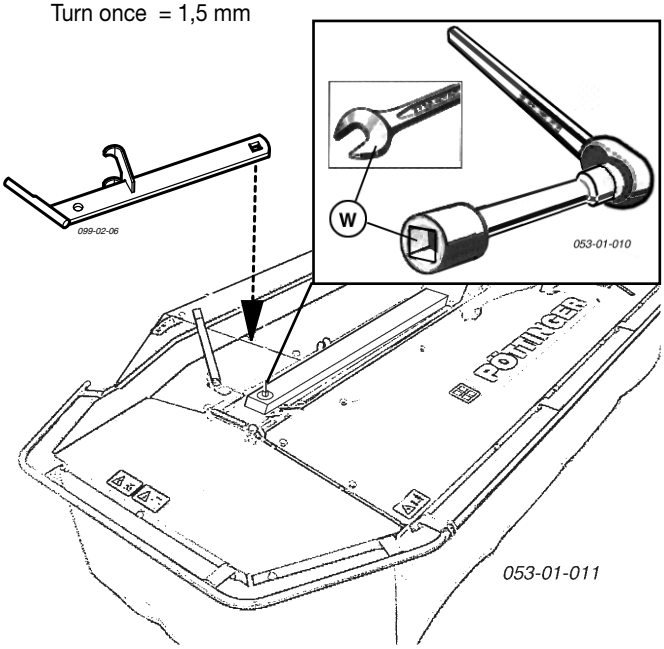


1. Lift unit with loader (~5 cm).



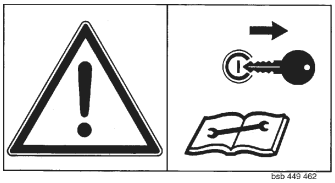
2. The key (W) is put on the square or hexagon and turned until the required cutting height is set.

   Turn once = 1,5 mm



Cutting height adjustment

Safety points



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

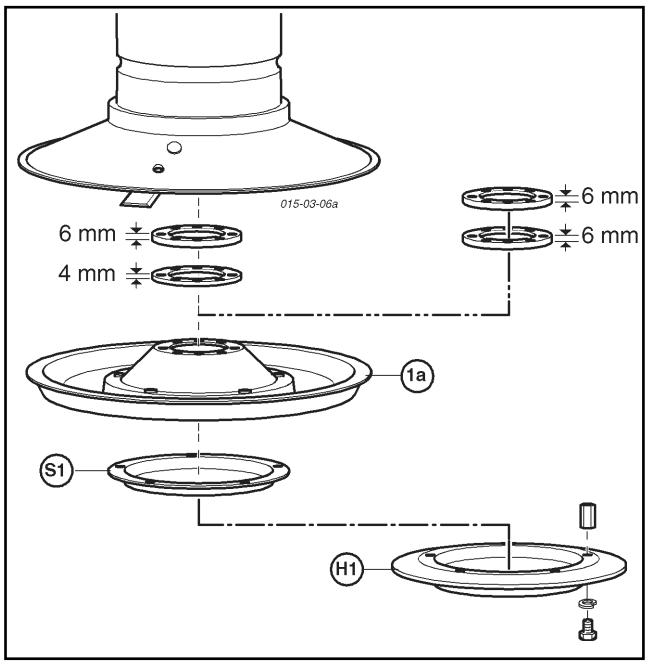
Distance plates

- The cutting height is set by inserting distance plates (4mm, 6mm).

  2 of which have already been inserted (4mm, 6mm) in the factory.

Optional equipment: 8 distance plates (6mm)

Optional equipment: high-cut mowing plate (H1)



- Each mowing drum must have an equal number of plates inserted.

Inserting distance plates

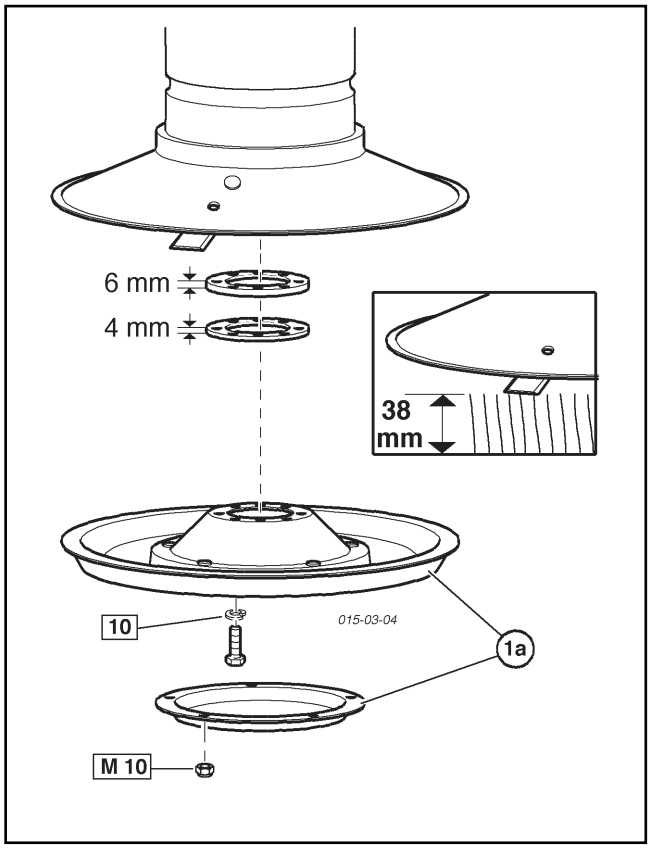
1. Remove both skide plates (S1, 1a).
2. Insert distance plates (6mm).
3. Refit both skid plates.

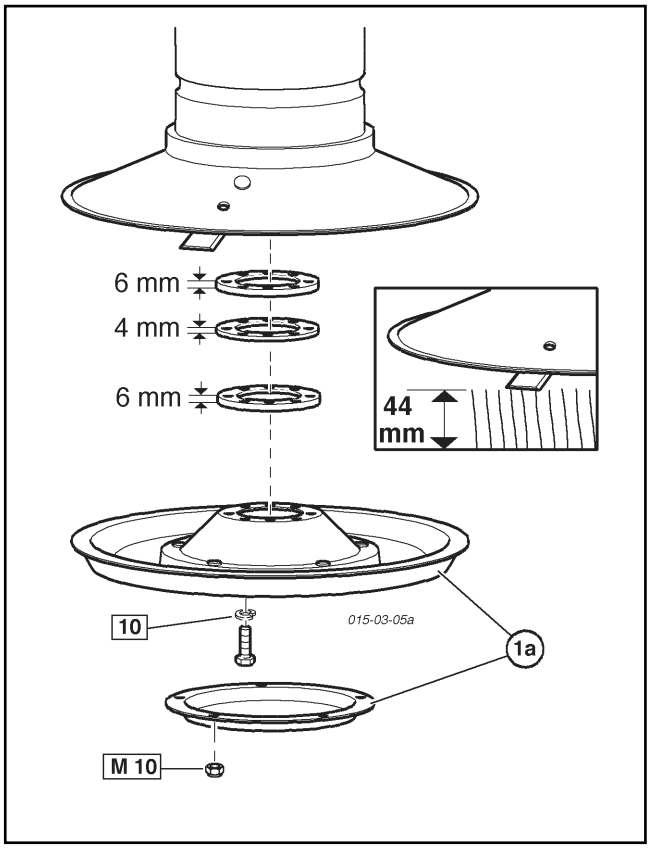
   Replace worn or damaged spring lock washers with new ones.

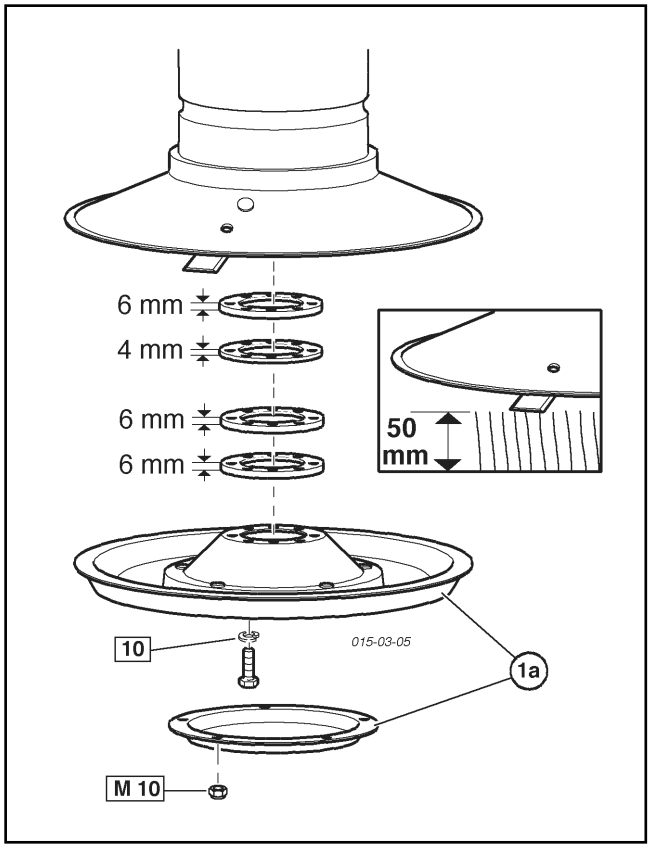
   Similarly with worn screws and nuts.

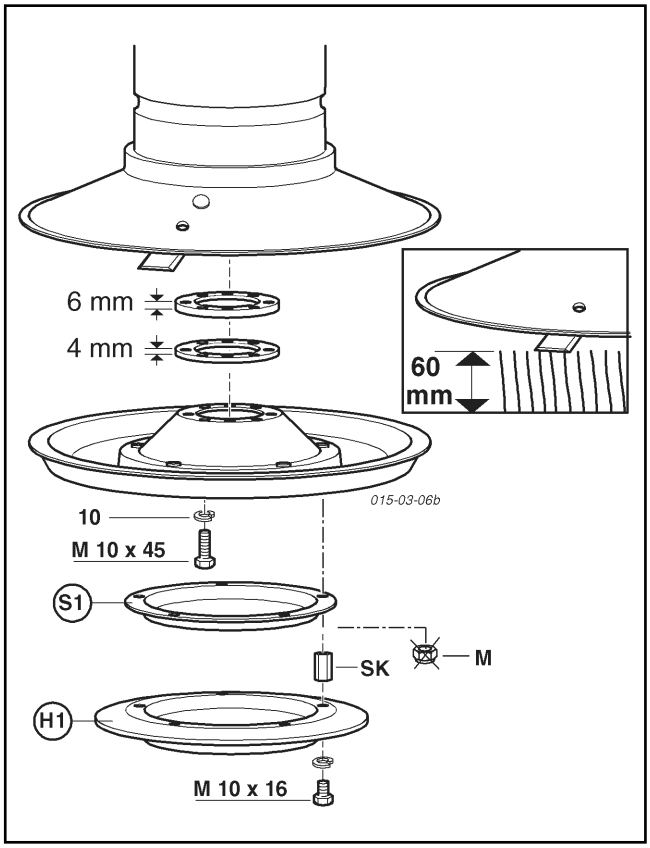
   Tighten all screws firmly!
4. Check after the first hour of operation

   Check all screws for tightness.

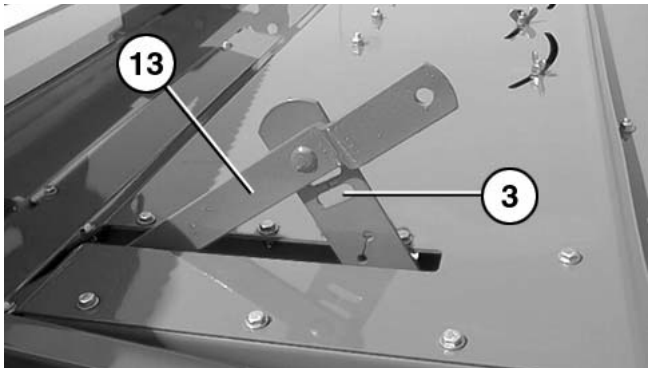

6 mm
4 mm
38 mm
10
015-03-04
1a
M 10


6 mm
4 mm
6 mm
44 mm
10
015-03-05a
1a
M 10


6 mm
4 mm
6 mm
6 mm
50 mm
10
015-03-05
1a
M 10


6 mm
4 mm
60 mm
015-03-06b
10
M 10 x 45
S1
SK
M
H1
M 10 x 16

Mowing with the conditioner

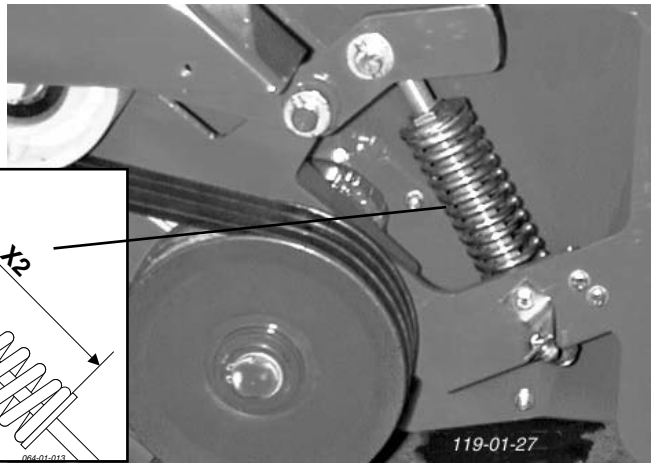


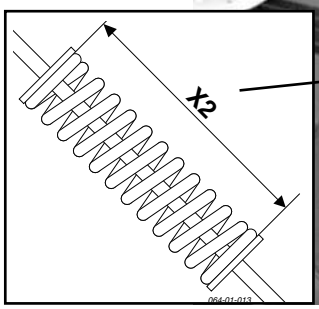
The conditioning effect can be modified:

- with lever (13), which adjusts the gap between adjustable plate and rotor. The conditioning effect is most intense with the lever at the bottom of its travel (Pos. 3).

  However the crop should not be chopped.

Correct belt tension





Check X2 size

NOVACAT 266 F: X2 = 189 mm
NOVACAT 306 F: X2 = 189 mm

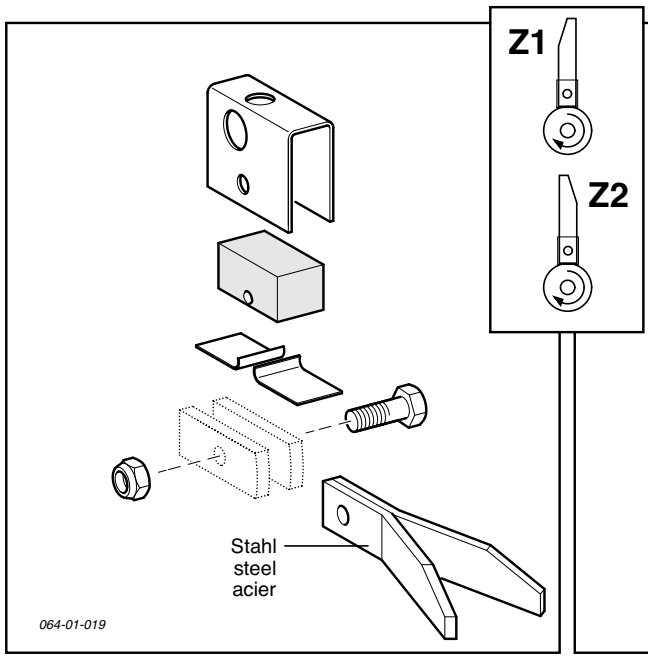
EUROCAT 276 F: X2 = 193 mm
EUROCAT 316 F: X2 = 193 mm

Position of the rotor prongs

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

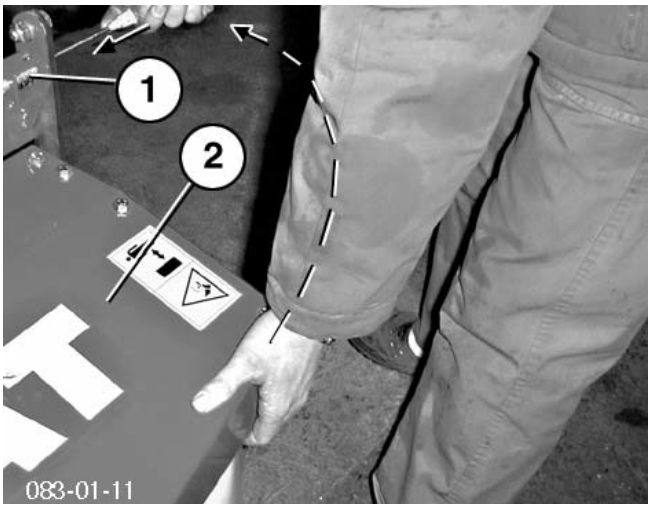
Pos. Z2: for difficult operating conditions if for example the chuck wraps around the rotor

The rotor prongs turn 180° (pos.Z2). This prong position removes the problem in most cases. The preparation effect is thereby somewhat reduced.



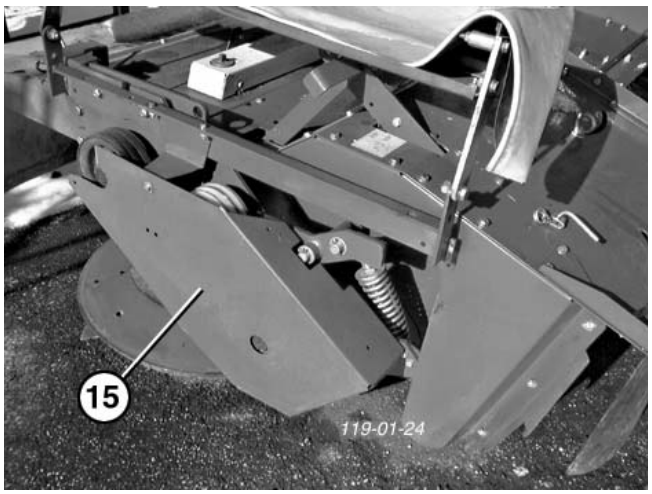
Dismounting and mounting the conditioner

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

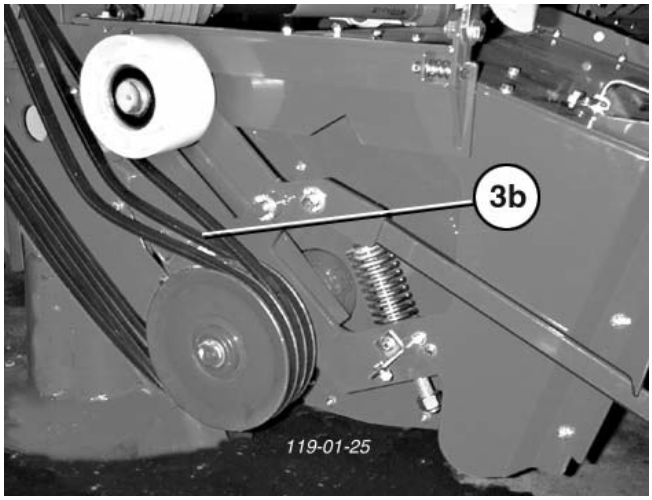


- engage protective frame in holder (3)
- left and right

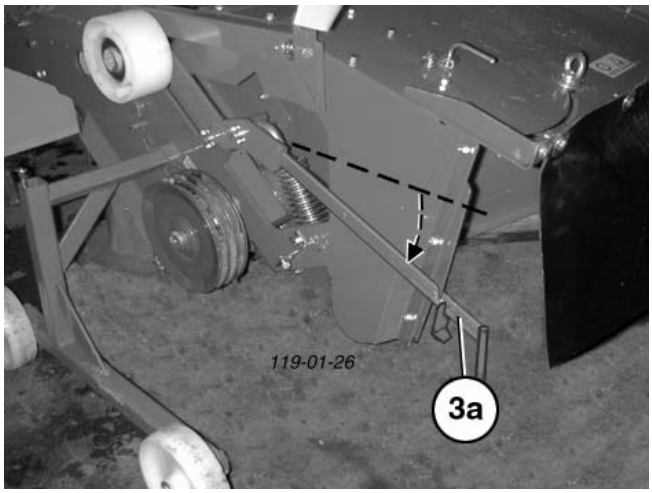
2. Remove the belt protection (15)



3. Remove belts (3b)

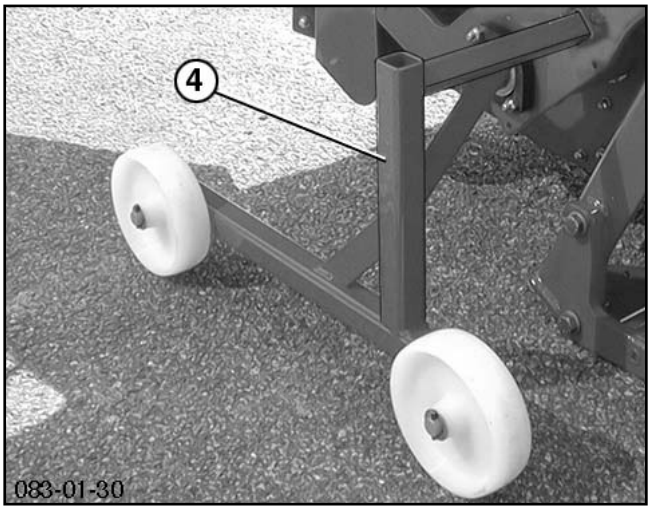


- Release the tension using lever (3a) beforehand



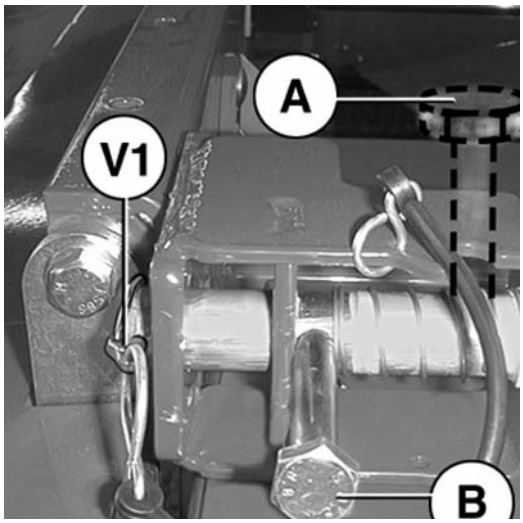
4. Fit transport wheels (4)

- left and right

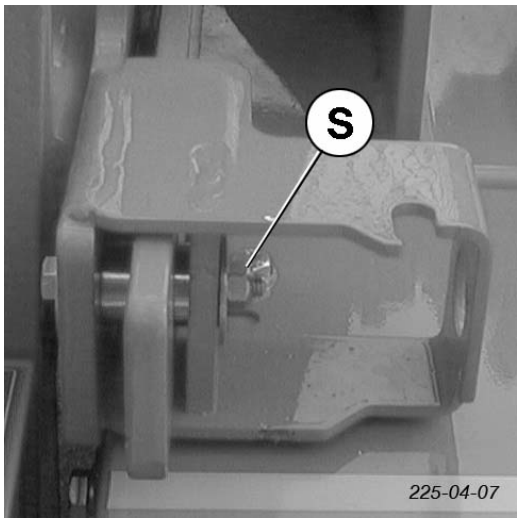


5. Release left and right locks

- **Spring loaded positioning bolt up to 2004 model**
  Remove linch pin (V1) and release bolts
  • Pos. A = released • Pos. B = Locked



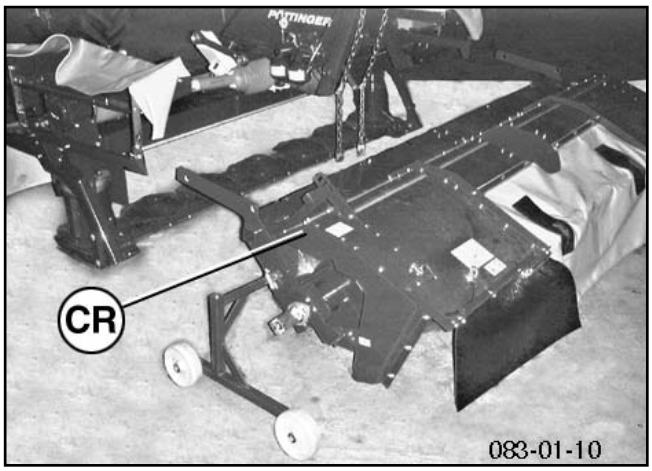
- **Screwed in from 2004 model**
  Remove screw (S)
  (Spring loaded positioning bolt = optional)



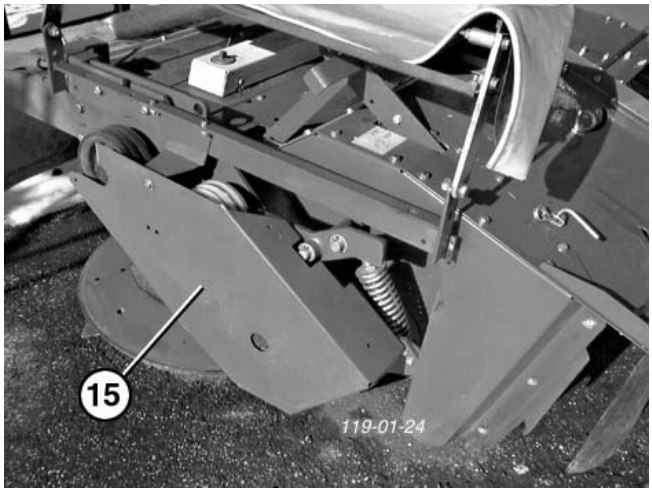
Important!

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

6. Always park conditioner (CR) steadfast.

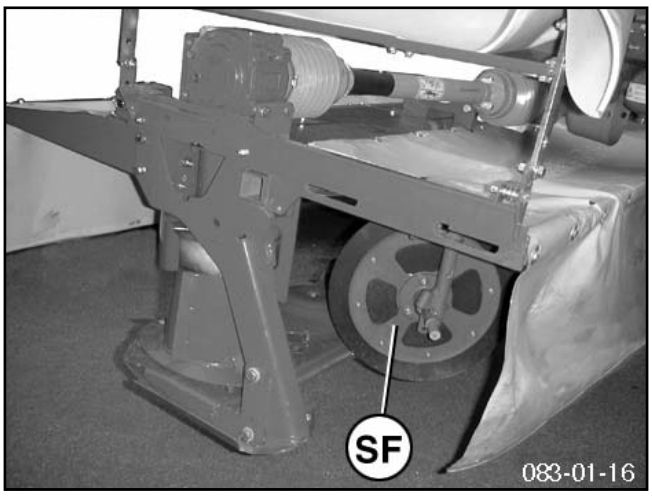


7. Mount the guard (15)



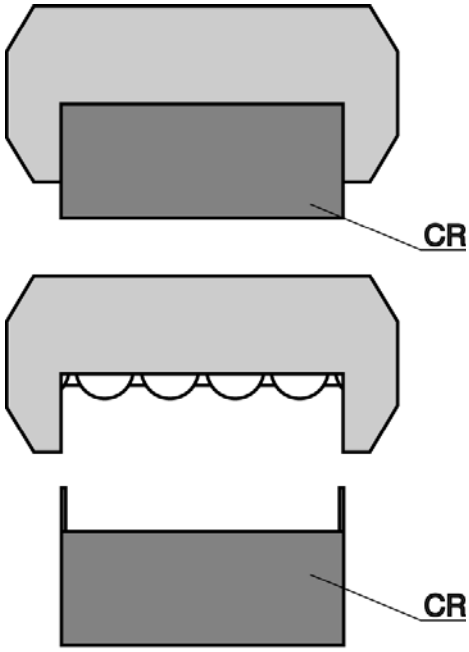
Installation of the conditioner (CR) or the swath formers (SF)

- is effected in the reverse sequence to dismounting.



Mowing without Conditioner

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



Safety hint

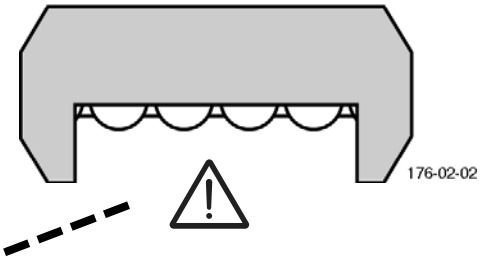
A machine with a conditioner (CR) as a complete unit is fitted with proper protection elements.

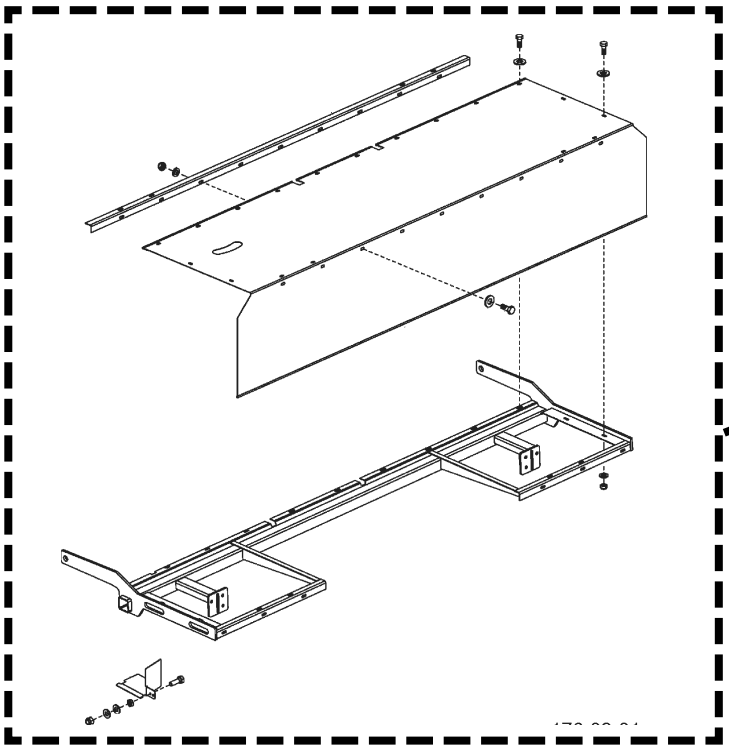
Should the conditioner be detached however, the mowing unit no longer has complete protection covering. In this situation mowing may not take place without additional protection elements!

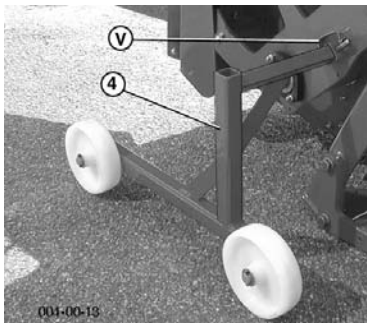
Beware!

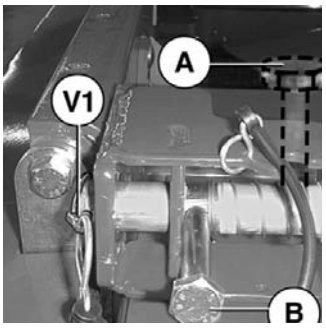
Protection elements, especially intended for this mode of mowing, must be fitted to the mowing unit.

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







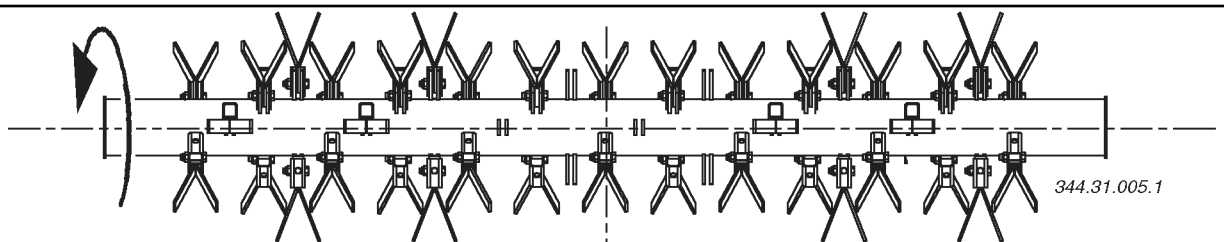


Optional extra

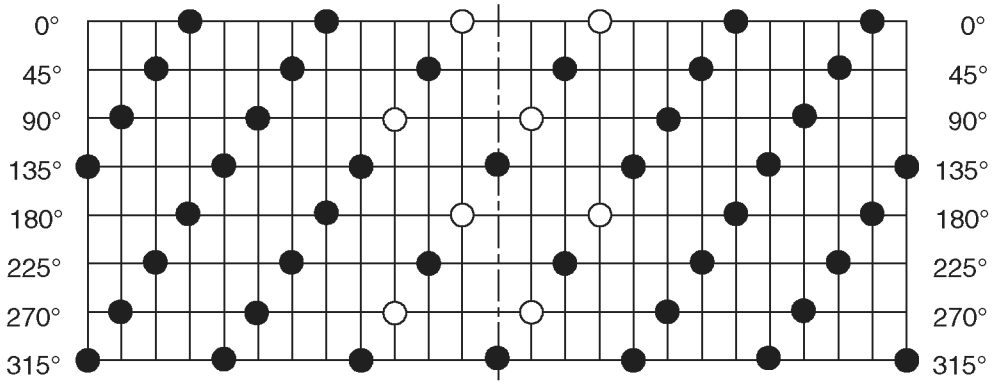
- Chassis (4)
- Spring-loaded fixing bolts (A-B)

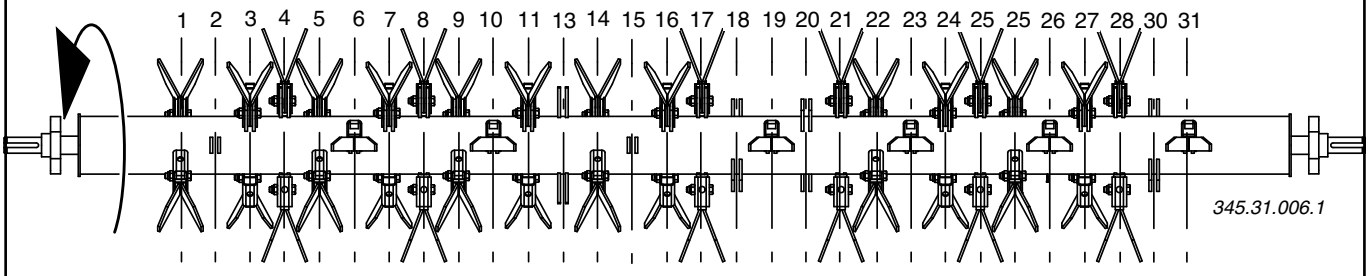
For mowing without conditioner (CR)

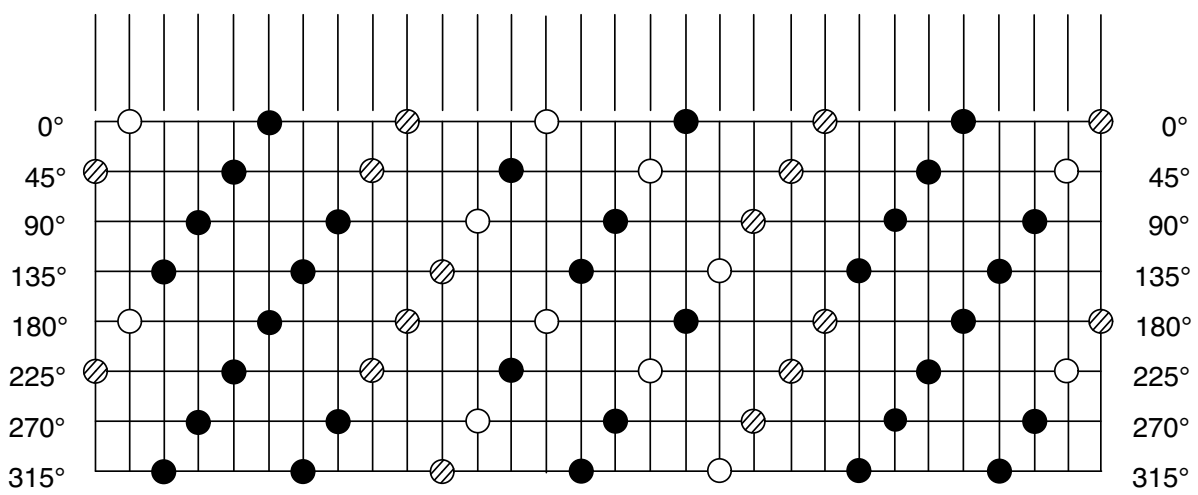
- Observe safety hint (above) without reservation!



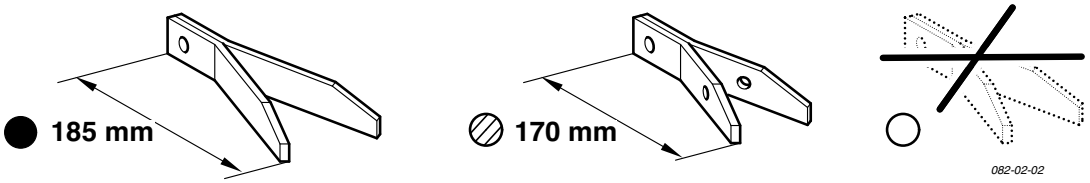
EUROCAT 276 F (Type PTM 344)
EUROCAT 275 H (Type PTM 348)







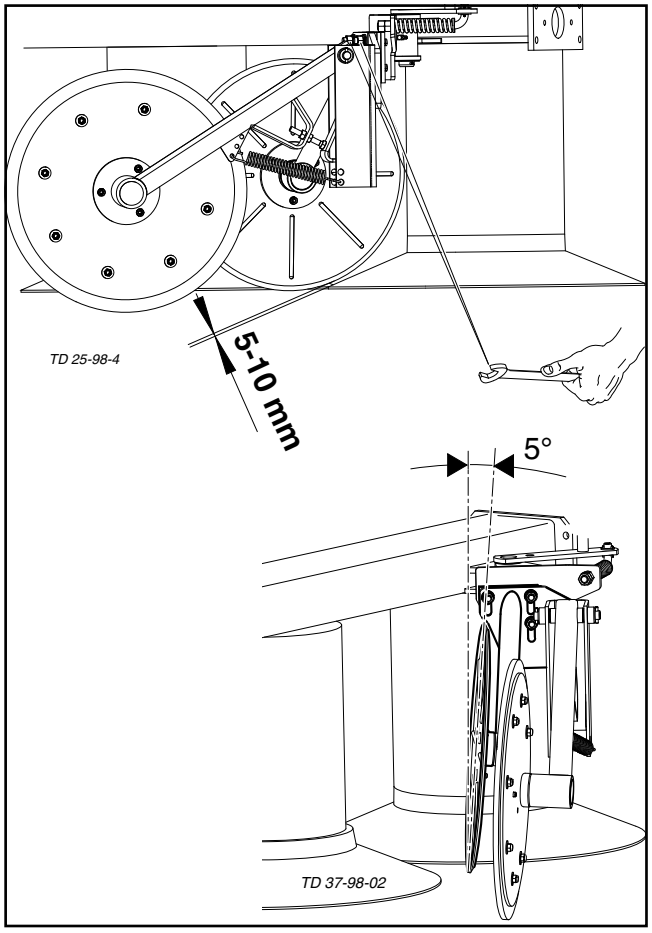
EUROCAT 316 F (Type PTM 345)



Adjustment of both swath makers (8i

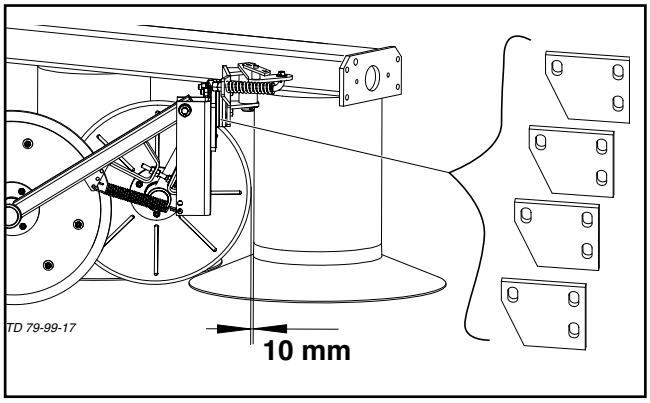
Leading swath disc

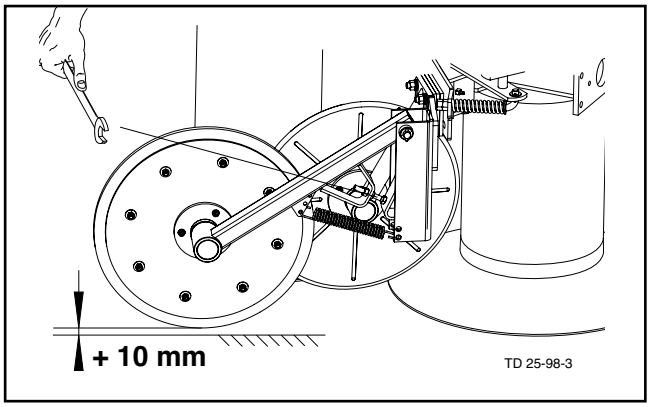
- Distance between mowing plate and swath disc "**5-10 mm** ".
- inclination 5°



Rear swath disc

Adjustment "**+10 mm**".

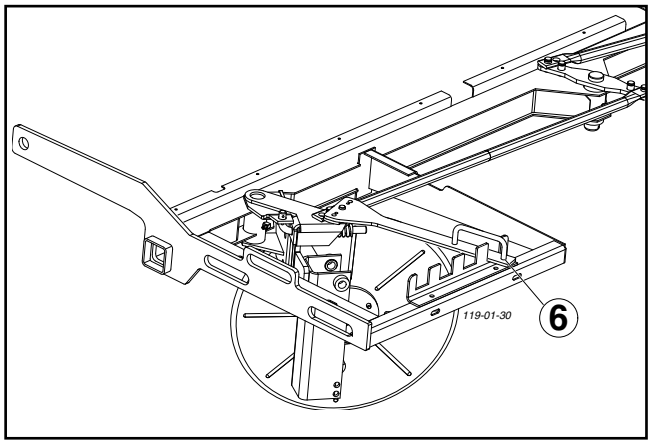




Adjustment of swath width (8i

The swath width can be altered by changing the position of the levers (6).

If an obstruction appears then the swath width is to be increased.



(8i see Supplement-A

Montage of the transport-rings.

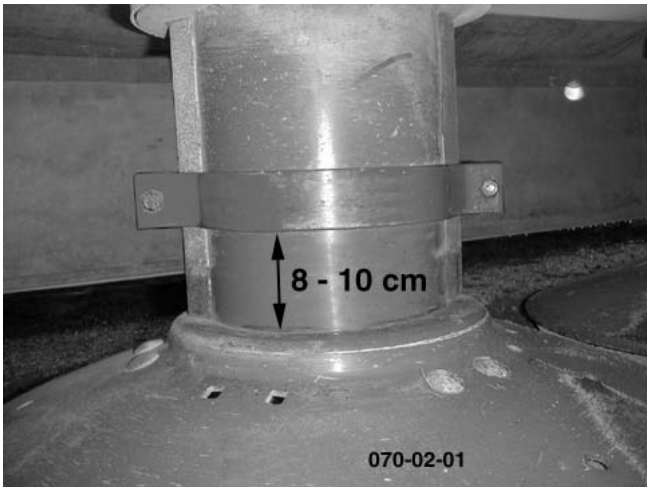
Additional transport-rings can be fitted to the inner mowing drums to prevent clogging when working with dense fodder.

Adjustment **"8 - 10 cm"**

Attention!

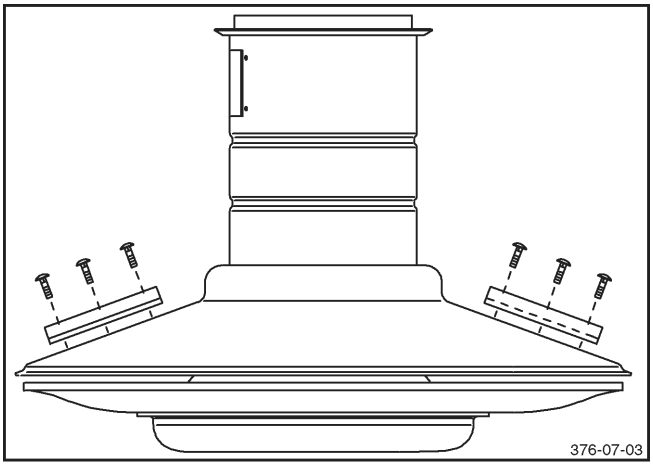
Remove conveying clamp when mowing with the conditioner (CR)

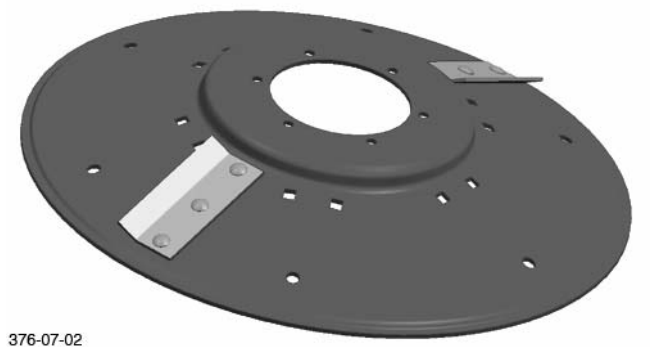
- Danger of collision if the ring is fitted to high.



Fitting inner conveying guides

For dense fodder additional conveying guides can be fitted to prevent clogging

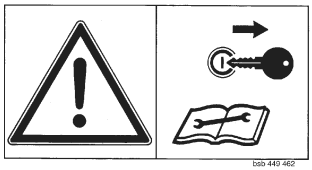




(8i see Supplement-A

Safety point

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



General maintenance hints

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

- Tighten all screws after the first hours of operation.

In particular check:

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

Spare part

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

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

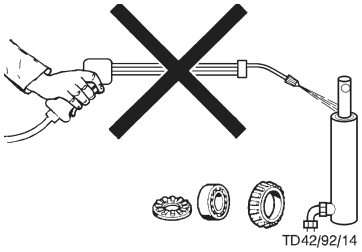
c. The installation and/or use of such products can, therefore, negatively change or influence the construction characteristics of the appliance. We are not liable for damages caused by the use of components and accessories that have not been supplied by us.

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

Cleaning of machine parts

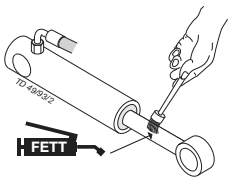
Attention! Do not use high-pressure washers for the cleaning of bearing- and hydraulic parts.

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



Parking in the ope

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



Winter storage

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

Drive shafts

- see notes in the supplement

For maintenance please note!

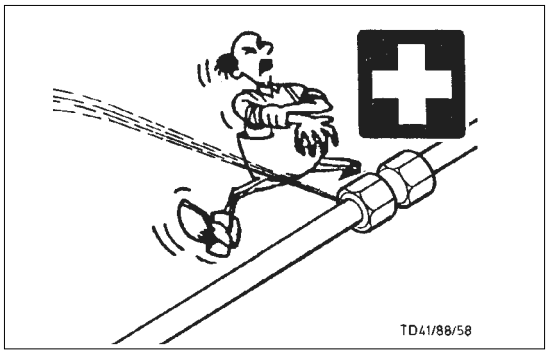
The instructions in this operating manual are always valid.

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

Hydraulic unit

Caution! Danger of injury or infection!

Under high pressure, escaping fluids can penetrate the skin. Therefore seek immediate medical help!



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

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

Before operation

- Check hydraulic hoses for wear.

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

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

Safety points!

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

• Do not work under the machine without safe support.

• Retighten all screws after the first hours of operation..

Repair Instructions

Please refer to repair instructions in supplement (if available)

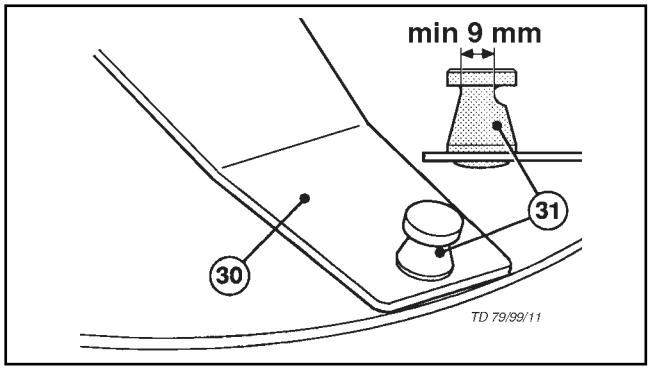
Holder for a quick change of cutter blades

Attention!

For Your Safety

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

  Otherwise they are to be replaced with new ones (replace in pairs).
  - Buckled or damaged cutter blades must not be used further.



- Buckled, damaged and/or worn cutter blade holders (30) must not be used further.

Checking the mowing blade suspension

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

Carry out a check

- as described in chapter „Changing the Cutter Blades“

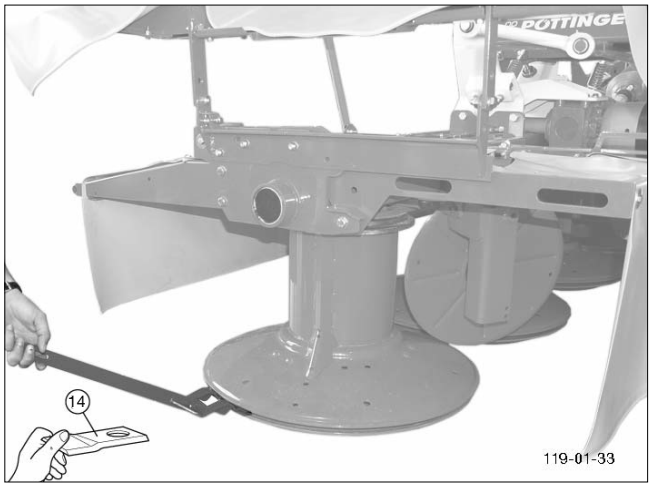
Take note!

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

Changing the Cutter Blades

1. Prop up the lever (29) on the lower edge of the drum and push the moveable holder (30) downwards.

- The cutter (14) is hung on the bolt (31).



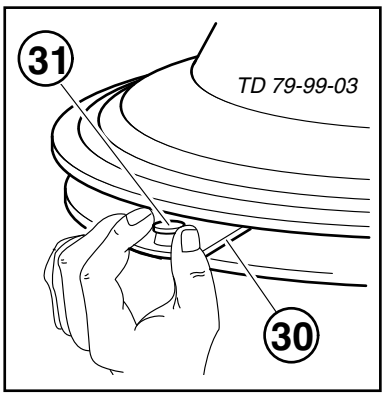
2. Remove cutter blade (14)

3. Clean forage remains and dirt away.

- around the bolts (31)

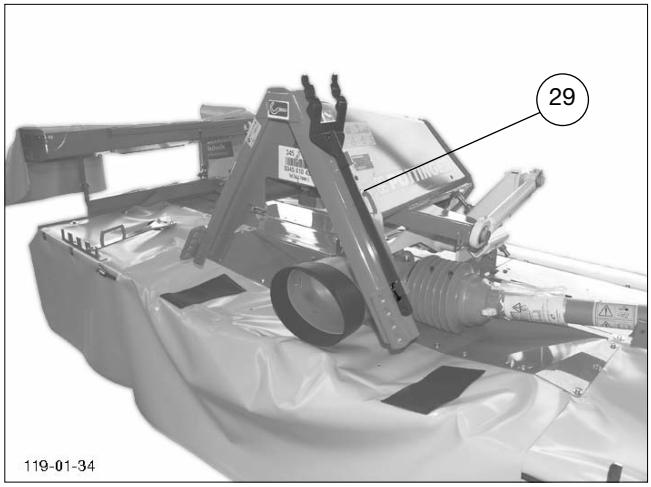
4. Check:

- blade bolts (31) for damage, wear and fitting
- holder (30) for damage, change in position and fitting



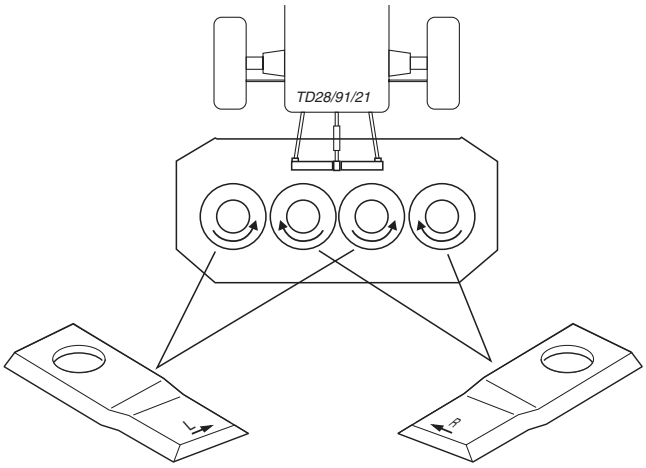
5. Fit cutter blades and remove lever (29)

- Place lever (29) into the 2 U – holder.



Cutters

The cutters on a cutting drum should be evenly worn out, (danger of imbalance) otherwise they are to be replaced by new ones.



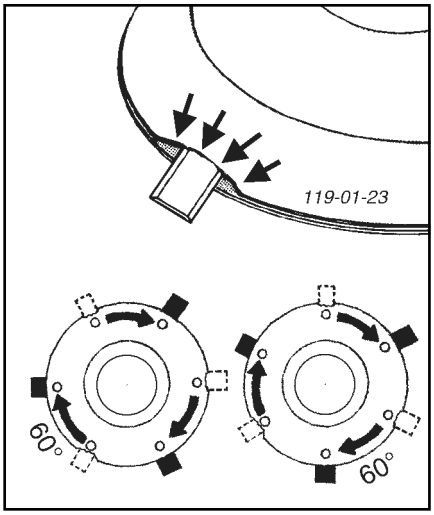
Pay attention to correct assembly!

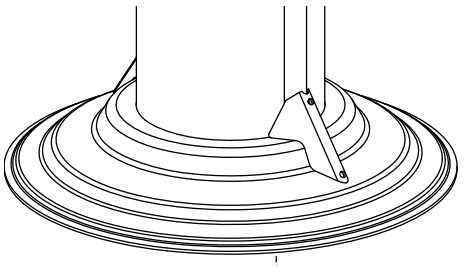
- Cutters with the notation "L" are only to be mounted on the left rotating mowing drum.
- Cutters with the notation "R" are only to be mounted on the right rotating mowing drum.

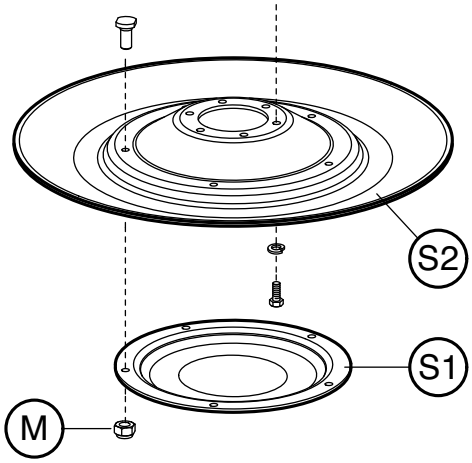
Mower disc

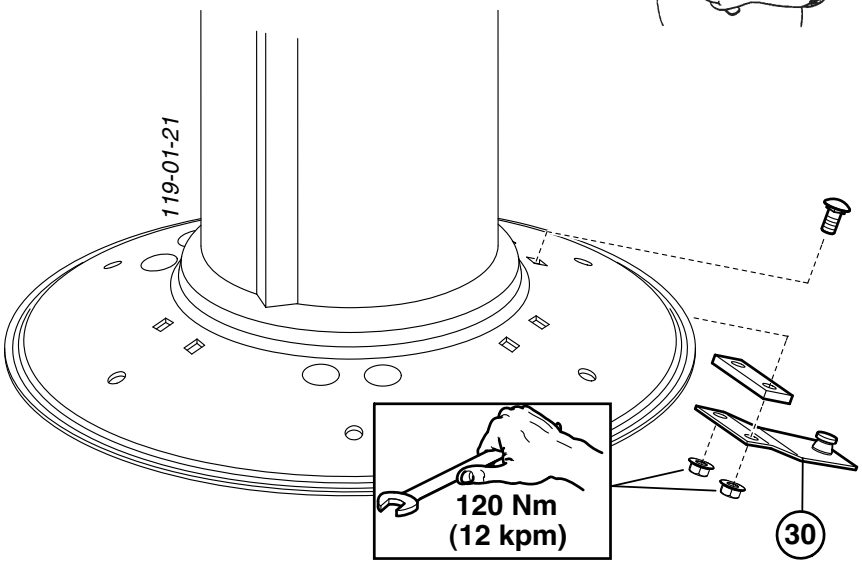
With mower discs that are worn in the mowing blade area, you must proceed as follows:

- Remove both bottom skid plates (S1, S2).
- Remove screws from knife guide (30).
- Move knife guide approx. 60°.
- Tighten screws firmly (120Nm).
  - check for tightness after several hours of operation.
- Refit both bottom skid plates properly.









Increased cutting height with high – cut mowing plates

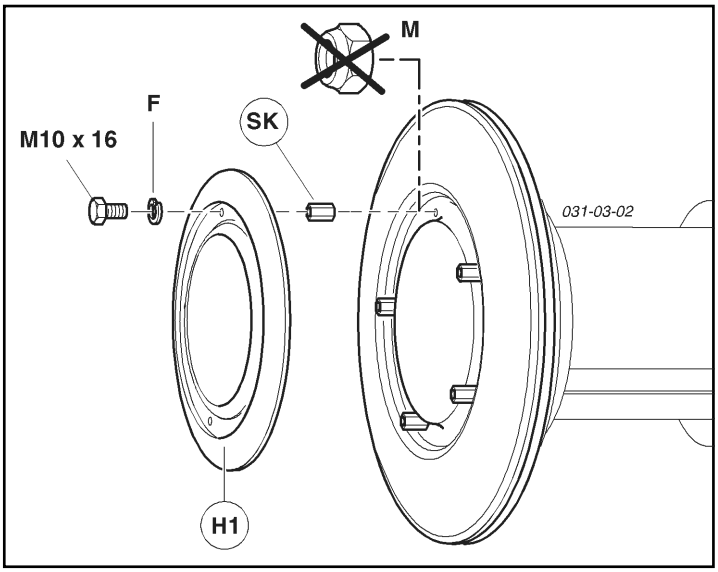
Distance disc (basic equipment)

- In the basic equipment of the machine the cutting height can be adjusted by adding distance discs
  - See chapter « Bringing into operation »

High - cut mower disc (optional equipment)

By doing so the cutting height is increased by 23 mm.

By removing individual distance discs the cutting height can be reduced.



Conversion to high – cut mowing plates

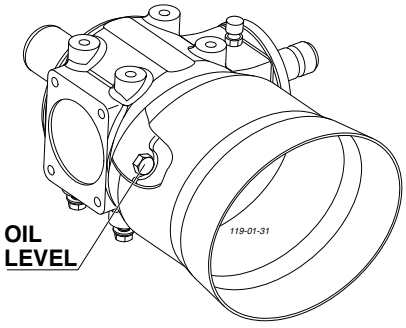
1. Remove nuts (M)
2. Mount high – cut mowing plate (H1)
   - First of all screw hexagon distance piece (SK) onto threaded bolts, then screw tight
   - Mount high – cut mowing plate (H1) by means of hexagon screws M10x16 and circlip (F)
3. After several hours of operation check if all screws are tight.

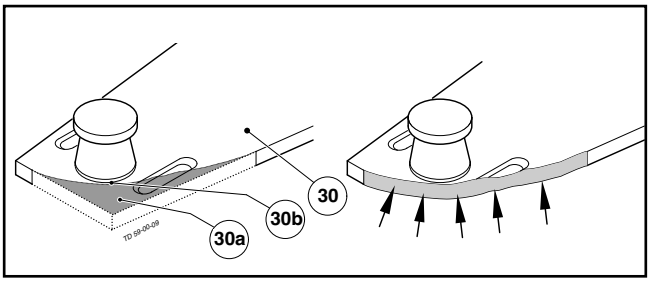
The conversion of high – cut mowing plates (H1) to standard skid discs (S1) is done in the reverse order.

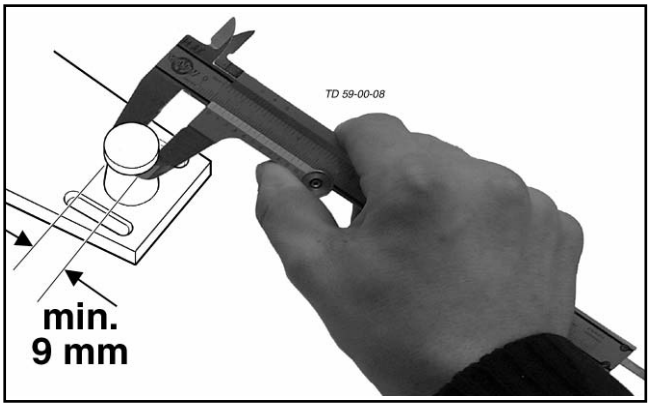
Angular gear

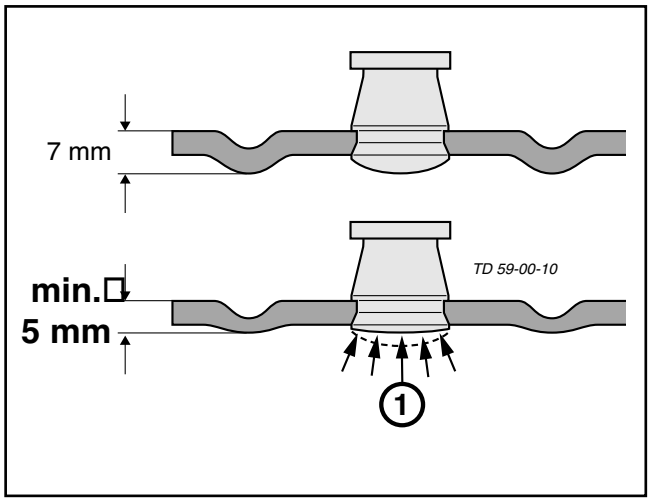
- Change oil after the first 50 operating hours.
  Under normal operating conditions, oil is to be replenished annually (OIL LEVEL).
- Change oil after 100 ha at the latest.

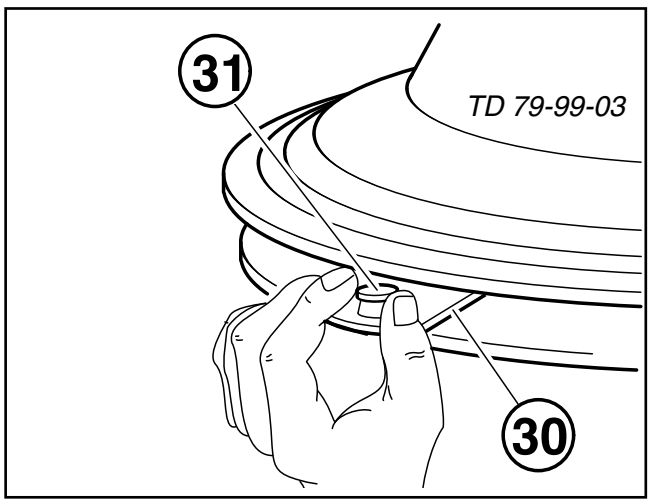
Quantity:
0,7 Liter SAE 90











Attention !

Danger of accident if wearing parts are worn

Wearing parts are:

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

If such wearing parts are worn out they must not be used any longer , otherwise it can no longer be guaranteed that the pin of the mowing blade is firmly adjusted and accidents may be caused through parts that are flinged away (e.g. mowing blades, fragments...)

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

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

Process of visual control:

1. **remove mowing blades**
2. **remove grass and dirt**

- around pin (31)

Attention !

Danger of accident if:

- the wearing area (30a) is worn up to the pin of the mowing blade (30b)
- the pin diameter is **9 mm** or less
- the profile is only 5 mm or less (original measure = 7 mm)
- the riveted joint (1) of the pin is worn
- the pin (31) of the blade is no longer firmly seated

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

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

Technical data

Description	EUROCAT 276 F Type 344	EUROCAT 316 F Type 345
Attachment	Three-point linkage (Weiste Front Kat. II)	Three-point linkage (Weiste Front Kat. II)
Working width	2,70 m	3,05 m
Transport width	2,65 m	3,00 m
No. of mowing drums	4	4
No. of knives per drum	3	3
Coverage up to	2,7 ha/h	3,2 ha/h
Max. p.t.o. speed (r.p.m.)	540 / 1000	540 / 1000
Torque limiter	1500 Nm	1500 Nm
Required power without conditioner with conditioner	41 kW (55 PS) --	45 kW (60 PS) 52 kW (70 PS)
Weight CLASSIC CLASSIC - PLUS ALPHAMOTION ALPHAMOTION - PLUS ALPHAMOTION - PLUS ED	650 kg 660 kg -- -- --	720 kg 730 kg 870 kg 895 kg 1070 kg
Permanent sound emmission level	90,4 dB (A)	91,1 dB (A)

All data subject to revision

Optional equipment

Conditioner
Lighting
Warning table
8 distance plates

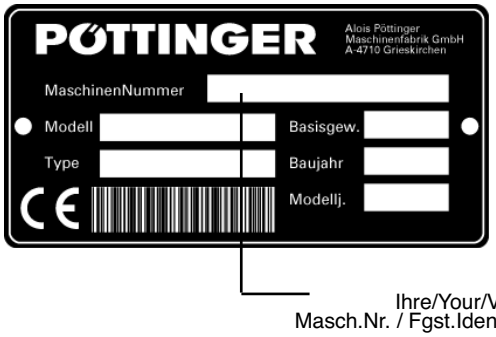
Necessary connections

- 1 double-action hydraulic connection
  (necessary minimum tractor fitting for mower unit with conditioner)

  pressure min.: 80 bar
  pressure max.: 180 bar

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

1) Weight: Variations possible depending on machine features.



Position of Vehicle Identification Plate

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

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

The defined use of the mower unit

The "**EUROCAT 276 F (Type PTM 344)**“ „**EUROCAT 316 F (Type PTM 345)**" mower is intended solely for normal use in agricultural work.

- The mowing of grassland and short stemmed fodder.

  Any other uses outside of these are regarded as undefined.

  The manufacturer takes no responsibility for any resulting damage which occurs henceforth. The risk is carried by the user alone.
- The keeping of operating, service and maintenance requirements layed down by the manufacturer also come under the heading of "defined use".

SUPPLEMENT

Things will run better with genuine Pöttinger parts

Original inside

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

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

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

PÖTTINGER

Recommendations for work safety

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

1.) Defined use

a. See "Technical Data".

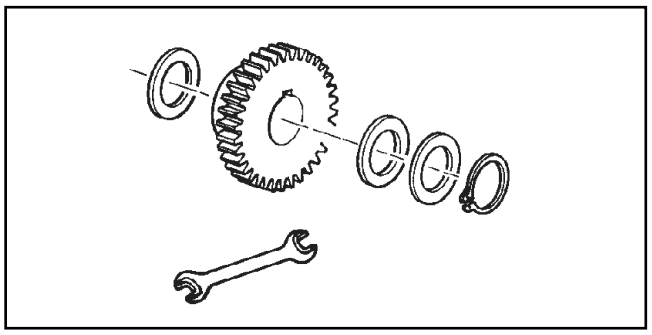
b. The keeping of operating, service and maintenance requirements layed down by the manufacturer also come under the heading of "defined use".

2.) Spare parts

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

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

c. The installation and/or use of such products can, therefore,



negatively change or influence the construction characteristics of the appliance. We are not liable for damages caused by the use of components and accessories that have not been supplied by us.

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

3.) Protection devices

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

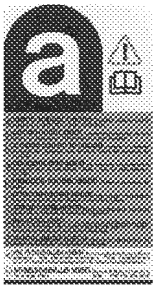
4.) Before starting work

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

b. The vehicle is to be tested for traffic and operating safety before each operation.

5.) Asbestos

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



6.) Transport of persons prohibited

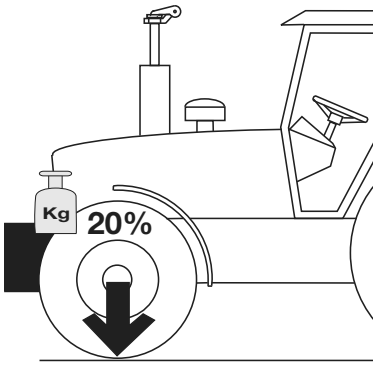
a. The transport of persons on the machine is not permitted.

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

7.) Driving ability with auxiliary equipment

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

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



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

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

8.) General

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

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

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

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

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

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

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

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

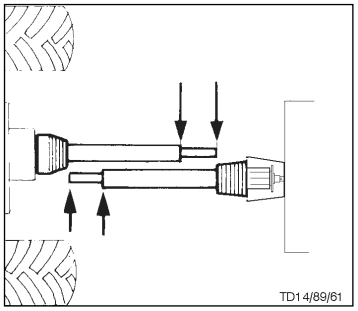
i. For all maintenance, service and modification work, turn driving motor off and remove universal drive.

9.) Cleaning the machine

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

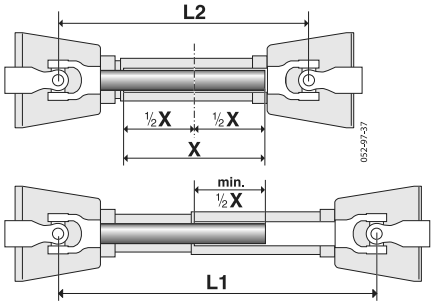
Matching driveshaft to tractor

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



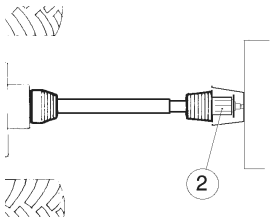
Procedure for cutting to length

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



Important!

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

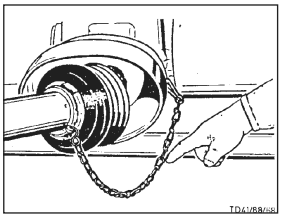


- Always check that drive shaft locks are securely engaged before starting work.

Retaining chain

- Use chain to prevent tube guard from rotating.

  Take care that chain does not impede driveshaft pivoting.

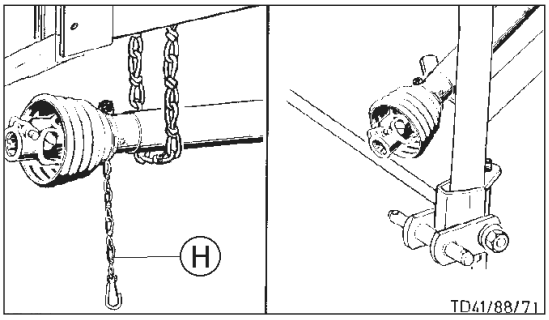


Rules for working

Never exceed the maximum p. t. o. speed when using the implement.

- When the p.t.o. is switched off, the implement hitched up may not stop at once.

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



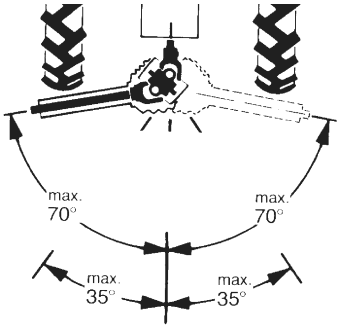
Wide-angle joint:

Maximum angle of deflection when working/stationary: 70°

Standard joint :

Maximum angle of deflection when stationary: 90°

Maximum angle of deflection when working: 35°

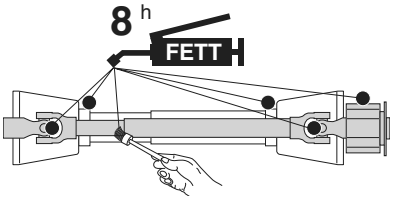


Maintenance

Replace worn-out covers/guards at once.

- Lubricate with a brand-name grease before starting work and every 8 hours worked.
- Before any extended period of non-use, clean and lubricate driveshaft.

  For winter working, grease the tube guards, to avoid them freezing together.



Important!

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

How a cam type cut out safety clutch works

This overload clutch switches the torque transmitted to zero if overloaded. To revert to normal operation, stop the p.t.o. drive briefly.

The clutch reengages at a speed below 200 rpm.

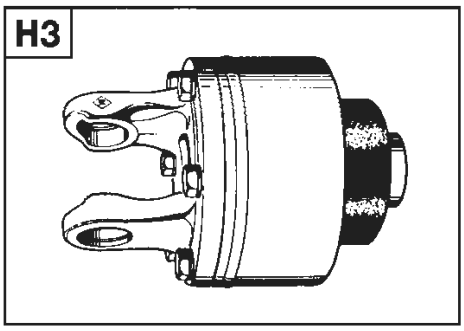
IMPORTANT!

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

TAKE NOTE!

The overload clutch on the driveshaft is not a “Full up” indicator. It is purely a torque limiter designed to protect the implement against damage.

Driving the right way will avoid triggering the clutch too often, and thus causing unnecessary wear on it and the implement.



Lubricating interval: 500 hrs (Special lubricant)

Important for driveshafts with friction clutch

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

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

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

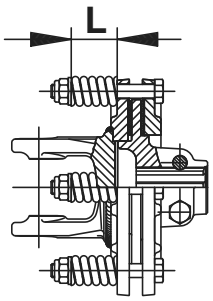
b.) Loosen screws to release the pressure on the friction disk.

Slip the clutch.

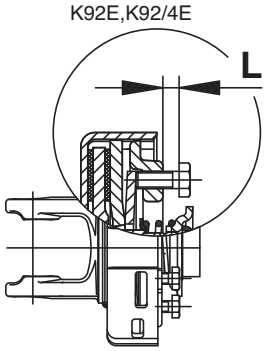
c.) Tighten set screws to dimension „L“.

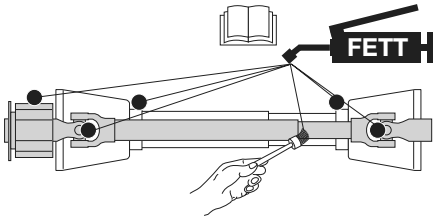
Clutch is ready for use.

K90,K90/4,K94/1



K92E,K92/4E





D Schmierplan

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

F Plan de graissage

X[h]	Toutes les X heures de service
40 F	Tous les 40 voyages
80 F	Tous les 80 voyages
1 J	1 fois par an
100 ha	tous les 100 hectares
FETT	GRAISSE
▽1 =	Nombre de graisseurs
△1 =	Nombre de graisseurs
(IV)	Voir annexe "Lubrifiants"
Liter	Litre
*	Variante
📖	Voir le guide du constructeur

GB Lubrication chart

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

NL Smeerschema

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

E Esquema de lubricación

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

I Schema di lubrificazione

X[h]	ogni X ore di esercizio
40 F	ogni 40 viaggi
80 F	ogni 80 viaggi
1 J	volta all'anno
100 ha	ogni 100 ettari
FETT	GRASSO
▽1 =	Numero degli ingrassatori
△1 =	Numero degli ingrassatori
(IV)	vedi capitolo “materiali di esercizio”
Liter	litri
*	variante
📖	vedi istruzioni del fabbricante

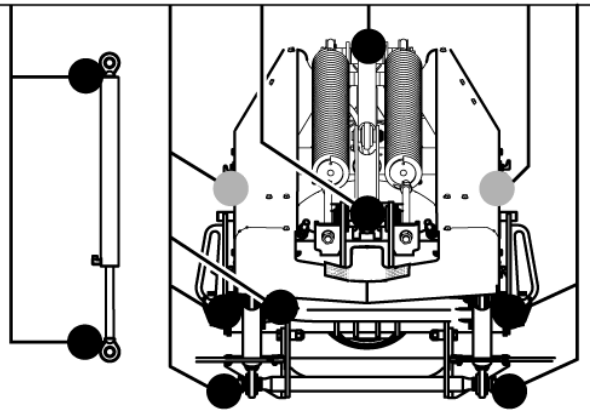
P Plano de lubrificação

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

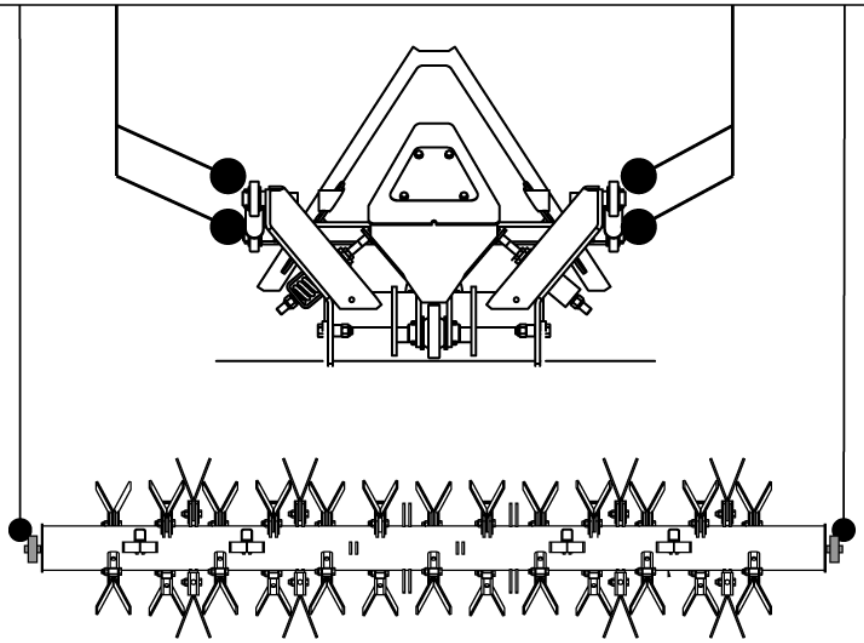
50^{h}

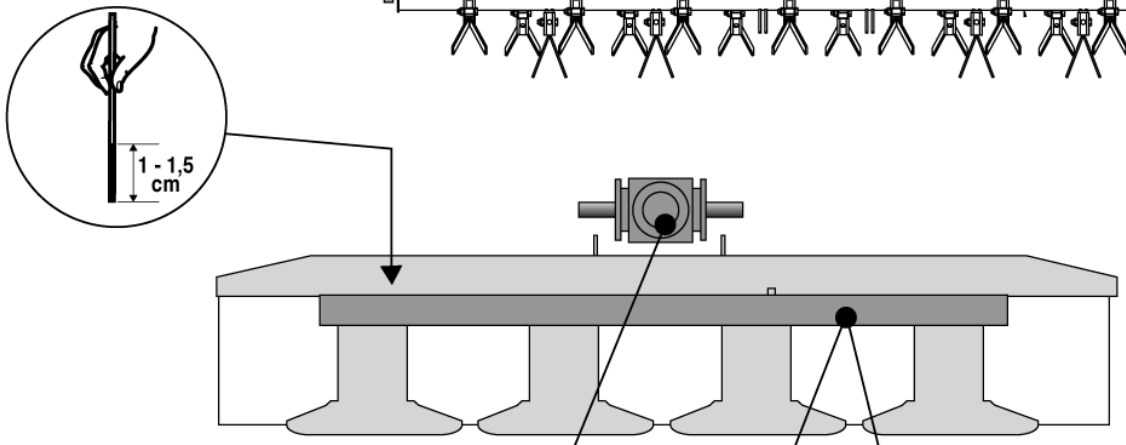
FETT

(IV)



Variante
NOVACAT 306 F





410-05-12

1 J
(100^{h})

(III)
0,7 Liter

(III)
11 Liter

(III)
13 Liter

EUROCAT 276 F EUROCAT 316 F

FETT

D Betriebsstoffe

Ausgabe 1997

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

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

Getriebeöl gemäß Betriebsanleitung - jedoch mindestens 1 x jährlich wechseln.

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

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

GB Lubricants

Edition 1997

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

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

Gear oils according to operating instructions - however at least once a year.

- Take out oil drain plug, let run out and duly dispose waste oil.

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

F Lubrifiants

Édition 1997

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

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

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

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

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

I Lubrificanti

Edizione 1997

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

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

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

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

NL Smeermiddelen

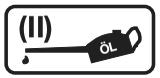
Uitgave 1997

prestaties en levensduur van de machines zijn afhankelijk van een zorgvuldig onderhoud en het gebruik van goede smeermiddelen. Dit schema vergemakkelijkt de goede keuze van de juiste smeermiddelen.

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

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

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

Betriebsstoff-Kennzahl Lubricant indicator Code du lubrifiant Numero caratteristico del lubrificante Smeermiddelen code	**I**		**III**		**V**	**VI**	**VII**
gefordertes Qualitätsmerkmal	HYDRAULIKöL HLP DIN 51524 Teil 2	Motorenöl SAE 30 gemäß API CD/SF	Getriebeöl SAE 90 bzw. SAE 85 W-140 gemäß API-GL 4 oder API-GL 5	Li-Fett (DIN 51 502, KP 2K)	Getriebefließfett (DIN 51 502:GOH	Komplexfett (DIN 51 502: KP 1R)	Getriebeöl SAE 90 bzw. 85 W-140 gemäß API-GL 5
required quality level niveau	Siehe Anmerkungen * **	motor oil SAE 30 according to API CD/SF	gear oil, SAE 90 resp. SAE 85 W-140 according to API-GL 4 or API-GL 5	lithium grease	transmission grease	complex grease	gear oil SAE 90 resp. SAE 85 W-140 according to API-GL 5
de performance demandé	***	huile moteur SAE 30 niveau API CD/SF	huile transmission SAE 90 ou SAE 85 W-140, niveau API-GL 4 ou API-GL 5	graisse au lithium	graisse transmission	graisse complexe	huile transmission SA 90 ou SAE 85 W-140, niveau API GL 5
caratteristica richiesta di qualità		oilo motore SAE 30 secondo specifiche API CD/SF	olio per cambi e differenziali SAE 90 o SAE 85W-140 secondo specifiche API-GL 4 o API-GL 5	grasso al litio	grasso fluido per riduttori e motoroduttori	grasso a base di saponi complessi	oilio per cambi e differenziali SAE 90 o SAE 85 W-140 secondo specifiche API-GL 5
verlangte kwaliteitskenmerken							

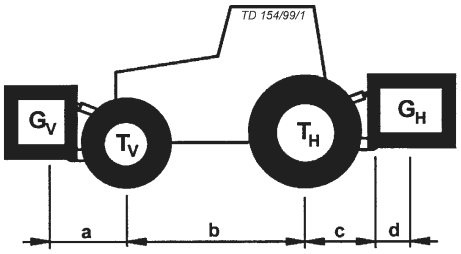
Firma	I	(II) OIL	III	HFETT (IV)	V	VI	VII	ANMERKUNGEN
AGIP	OSO 32/46/68 ARNICA 22/46	MOTOROIL HD 30 SIGMA MULTI 15W-40 SUPER TRACTOROIL UNIVERS. 15W-30	ROTRA HY 80W-90/85W-140 ROTRA MP 80W-90/85W-140	GR MU 2	GR SLL GR LFO	-	ROTRA MP 80W-90 ROTRA MP 85W-140	* Bei Verbundarbeit mit Naßbremsen-schlepp-pern ist die internatio-nale Spezifikation J 20 A erforderlich ** Hydrauliköle HLP-(D) + HV *** Hydrauliköle auf Pflan-zenölbasis HLP + HV Biologisch abbaubar, deshalb besonders umweltfreundlich
ARAL	VITAM GF 32/46/68 VITAM HF 32/46	SUPER KOWAL 30 MULTI TURBO-RAL SUPER TRAKTORAL 15W-30	GETRIEBEÖL EP 90 GETRIEBEÖL HYP 85W-90	ARALUB HL 2	ARALUB FDP 00	ARALUB FK 2	GETRIEBEÖL HYP 90	
AVIA	AVILUB RL 32/46 AVILUB VG 32/46	MOTOROIL HD 30 MULTIGRADE HDC 15W-40 TRAC-TAVIA HF SUPER 10 W-30	GETRIEBEÖL MZ 90 M MULTIHYP 85W-140	AVIA MEHRZWECKFETT AVIA ABSCHMIERFETT	AVIA GETRIEBEFLIESSFETT	AVIALUB SPEZIALFETT LD	GETRIEBEÖL HYP 90 EP MULTIHYP 85W-140 EP	
BAYWA	HYDRAULIKÖL HLP 32/46/68 SUPER 2000 CD-MC * HYDRA HYDR. FLUID * HYDRAU-LIKÖL MC 530 ** PLANTOHYD 40N ***	SUPER 2000 CD-MC SUPER 2000 CD HD SUPERIOR 20 W-30 HD SUPERIOR SAE 30	SUPER 8090 MC HYPOID 80W-90 HYPOID 85W-140	MULTI FETT 2 SPEZIALFETT FLM PLANTOGEL 2 N	GETRIEBEFLIESSFETT NLGI 0 RENOLIT DURAPLEX EP 00 PLANTOGEL 00N	RENOPLEX EP 1	HYPOID 85W-140	
BP	ENERGOL SHF 32/46/68	VISCO 2000 ENERGOL HD 30 VANELLUS M 30	GEAR OIL 90 EP HYPOGEAR 90 EP	ENERGREASE LS-EP 2	FLIESSFETT NO ENERGREASE HTO	OLEX PR 9142	HYPOGEAR 90 EP HYPOGEAR 85W-140 EP	
CASTROL	HYSPIN AWS 32/46/68 HYSPIN AWH 32/46	RX SUPER DIESEL 15W-40 POWERTRANS	EPX 80W-90 HYPOY C 80W-140	CASTROLGREASE LM	IMPERVIA MMO	CASTROLGREASE LMX	EPX 80W-90 HYPOY C 80W-140	
ELAN	HLP 32/46/68 HLP-M M32/M46	MOTORÖL 100 MS SAE 30 MOTORÖL 104 CM 15W-40 AUS-TROTRAC 15W-30	GETRIEBEÖL MP 85W-90 GETRIE-BEÖL B 85W-90 GETRIEBEÖL C 85W-90	LORENA 46 LITORA 27	RHENOX 34	-	GETRIEBEÖL B 85W-90 GETRIEBE-ÖL C 85W-140	
ELF	OLNA 32/46/68 HYDRELF 46/68	PERFORMANCE 2 B SAE 30 8000 TOURS 20W-30 TRACTORELF ST 15W-30	TRANSELF TYP B 90 85W-140 TRANSELF EP 90 85W-140	EPEXA 2 ROLEXA 2 MULTI 2	GA O EP POLY G O	MULTIMOTIVE 1	TRANSELF TYP B 90 85W-140 TRANSELF TYP BLS 80 W-90	
ESSO	NUTO H 32/46/68 NUTO HP 32/46/68	PLUS MOTORÖL 20W-30 UNIFARM 15W-30	GEAROIL GP 80W-90 GEAROIL GP 85W-140	MULTI PURPOSE GREASE H	FIBRAX EP 370	NEBULA EP 1 GP GREASE	GEAR OIL GX 80W-90 GEAR OIL GX 85W-140	
EVVA	ENAK HLP 32/46/68 ENAK MULTI 46/68	SUPER EVVAROL HD/B SAE 30 UNIVERSAL TRACTOROIL SUPER	HYPOID GA 90 HYPOID GB 90	HOCHDRUCKFETT LT/SC 280	GETRIEBEFETT MO 370	EVVA CA 300	HYPOID GB 90	
FINA	HYDRAN 32/46/68	DELTA PLUS SAE 30 SUPER UNIVERSAL OIL	PONTONIC N 85W-90 PONTONIC MP 85W-90 85W-140 SUPER UNIVERSAL OIL	MARSON EP L 2	NATRAN 00	MARSON AX 2	PONTONIC MP 85W-140	
FUCHS	RENOLIN 1025 MC *** TITAN HYDRAMOT 1030 MC ** RENOGEAR HYDRA * PLANTOHYD 40N ***	TITAN HYDRAMOT 1O3O MC TITAN UNIVERSAL HD	RENOGEAR SUPER 8090 MC RENOGEAR HYPOID 85 W-140 RENOGEAR HYPOID 90	RENOLIT MP RENOLIT FLM 2 RENOLIT ADHESIV 2 PLANTOGEL 2 N	RENOSOD GFO 35 DURAPLEX EP 00 PLANTOGEL 00N	RENOPLEX EP 1	RENOGEAR SUPER 8090 MC RENOGEAR HYPOID 85W-140 RENOGEAR HYPOID 90	
GENOL	HYDRAULIKÖL HLP/32/46/68 HYDRAMOT 1030 MC * HYDRAU-LIKÖL 520 ** PLANTOHYD 40N ***	MULTI 2030 2000 TC HYDRAMOT 15W-30 HYDRAMOT 1030 MC	GETRIEBEÖL MP 90 HYPOID EW 90 HYPOID 85W-140	MEHRZWECKFETT SPEZIALFETT GLM PLANTOGEL 2 N	GETRIEBEFLIESSFETT PLANTOGEL 00N	RENOPLEX EP 1	HYPOID EW 90 HYPOID 85W-140	
MOBIL	DTE 22/24/25 DTE 13/15	HD 20W-20 DELVAC 1230 SUPER UNIVERSAL 15W-30	MOBILUBE GX 90 MOBILUBE HD 90 MOBILUBE HD 85W-140	MOBILGREASE MP	MOBILUX EP 004	MOBILPLEX 47	MOBILUBE HD 90 MOBILUBE HD 85W-140	
RHG	RENOLIN B 10/15/20 RENOLIN B 32 HVI/46HVI	EXTRA HD 30 SUPER HD 20 W-30	MEHRZWECKGETRIEBEÖISAE90 HYPOID EW 90	MEHRZWECKFETT RENOLIT MP DURAPLEX EP	RENOSOD GFO 35	RENOPLEX EP 1	HYPOID EW 90	
SHELL	TELLUS S32/S 46/S68 TELLUS T 32/T46	AGROMA 15W-30 ROTELLA X 30 RIMULA X 15W-40	SPIRAX 90 EP SPIRAX HD 90 SPIRAX HD 85/140	RETINAX A ALVANIA EP 2	SPEZ. GETRIEBEFETT H SIMMNIA GREASE O	AEROSHELL GREASE 22 DOLIUM GREASE R	SPIRAX HD 90 SPIRAX HD 85W-140	
TOTAL	AZOLLA ZS 32, 46, 68 EQUIVIS ZS 32, 46, 68	RUBIA H 30 MULTAGRI TM 15W-20	TOTAL EP 85W-90 TOTAL EP B 85W-90	MULTIS EP 2	MULTIS EP 200	MULTIS HT 1	TOTAL EP B 85W-90	
VALVOLINE	ULTRAMAX HLP 32/46/68 SUPER TRAC FE 10W-30* ULTRAMAX HVLP 32 ** ULTRAPLANT 40 ***	SUPER HPO 30 STOU 15W-30 SUPER TRAC FE 10W-30 ALL FLEET PLUS 15W-40	HP GEAR OIL 90 oder 85W-140 TRANS GEAR OIL 80W-90	MULTILUBE EP 2 VAL-PLEX EP 2 PLANTOGEL 2 N	RENOLIT LZR 000 DEGRALUB ZSA 000	DURAPLEX EP 1	HP GEAR OIL 90 oder 85W-140	
VEEDOL	ANDARIN 32/46/68	HD PLUS SAE 30	MULTIGRADE SAE 80/90 MULTI-GEAR B 90 MULTIGEAR C SAE 85W-140	MULTIPURPOSE	-	-	MULTIGEAR B 90 MULTI C SAE 85W-140	
WINTERSHALL	WIOLAN HS (HG) 32/46/68 WIOLAN HVG 46 ** WIOLAN HR 32/46 *** HYDROLFLUID *	MULTI-REKORD 15W-40 PRIMANOL REKORD 30	HYPOID-GETRIEBEÖL 80W-90, 85W-140 MEHRZWECKGETRIEBEÖL 80W-90	WIOLUB LFP 2	WIOLUB GFW	WIOLUB AFK 2	HYPOID-GETRIEBEÖL 80W-90, 85W-140	

Combination of tractor and mounted implement

The mounting of implements on the front or rear three point linkage shall not result in exceeding the maximum permissible weight, the permissible axle loads and the tyre load carrying capacities ot the tractor. The front axle of the tractor must always to be loaded with at least 20 % of the unladen weight of the tractor.

Make sure before buying an implement that these conditions are fulfilled by carrying out the following calculations or by weighing the tractor/implement combination.

Determination of the total weight, the axle loads, the tyre load carrying capacity and the necessary minimum ballasting



For the calculation you need the following data:

T_L [kg]	unladen weight of tractor	1	**a** [m]	distance from centre of gravity for combined front mounted implement/front ballast to front axle centre	2 3
T_V [kg]	front axle load of unladen tractor	1			
T_H [kg]	rear axle load of unladen tractor	1	**b** [m]	Tractor wheelbase	1 3
G_H [kg]	combined weight of rear mounted implement/rear ballast	2	**c** [m]	distance from rear axle centre to centre of lower link balls	1 3
G_V [kg]	combined weight of front mounted implement/front ballast	2	**d** [m]	distance from centre of lower link balls to centre of gravity for combined rear mounted implement/rear ballast	2

1 see instruction handbook of the tractor
2 see price list and/or instruction handbook of the implement
3 to be measured

Consideration of rear mounted implement and front/rear combinations

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

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

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

Front mounted implement

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

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

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

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

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

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

Record the calculated real front axle load and the permissible front axle load of the tractor into the table.

4. CALCULATION OF THE REAL TOTAL WEIGHT G_{tat}

(If with the rear mounted implement (G_H) the required minimum rear ballasting ($G_{H\ min}$) cannot be reached, the weight of the rear mounted implements has to be increased to at least the weight of the minimum ballasting at the rear!)

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

Record the calculated real and the permissible total weight given in the instruction handbook for the tractor into the table.

5. CALCULATION OF THE REAL REAR AXLE LOAD $T_{H\ tat}$

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

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

6. TYRE LOAD CARRYING CAPACITY

Record double the value (two tyres) of the permissible load carrying capacity into the table (see for instance documentation provided by the tyre manufacturer).

Table

	Real value according to calculation		Permissible value according to instruction handbook		**Double** permissible tyre load carrying capacity (two tyres)
Minimum ballasting front/rear	/ kg		---		---
Total weight	kg	≤	kg		---
Front axle load	kg	≤	kg	≤	kg
Rear axle load	kg	≤	kg	≤	kg

The minimum ballasting has to be attached to the tractor either in form of a mounted implement or ballasting weight!

The calculated values must be less or equal (<) the permissible values!

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

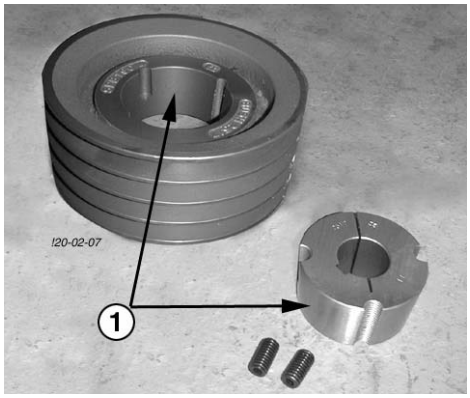
Bush identifier	Torque [Nm]
2017	30
2517	49

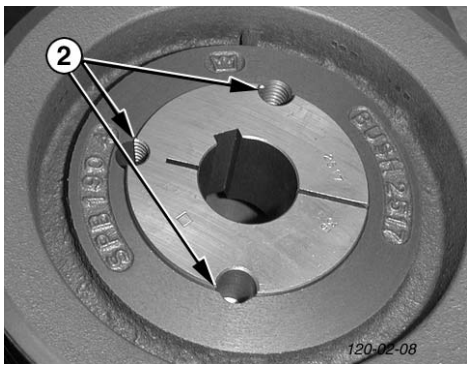
   - When the drive has been operating under load for a short period (half to on hour) check and ensure that the screws remain at the appropriate tightening torque.
   - In order to eliminate the ingress of dirt fill all empty holes with grease.

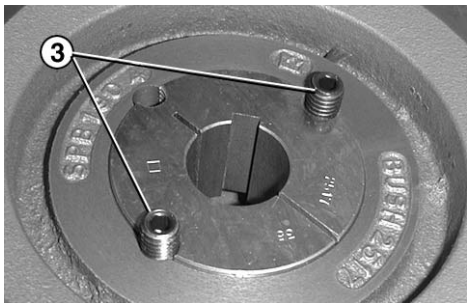
Removal

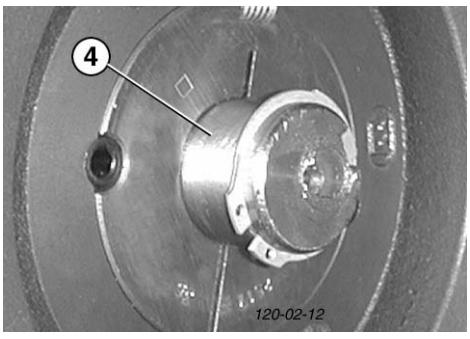
1. Slacken all screws. Depending on the size of the bush remove one or two.

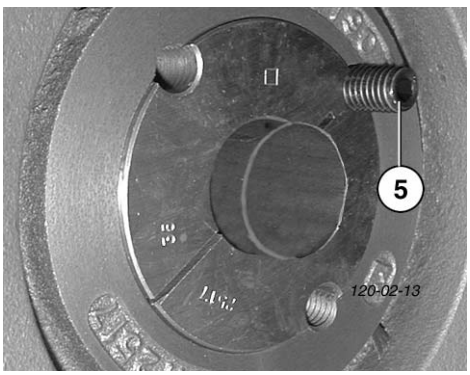
   After oiling point and thread of grub screws or under head and thread of cap screws insert them into the jacking off holie(s) in bush (Pos. 5).
2. Tighten screw(s) unitormly and alternately until the bush is loose in the hub and pulley is free on the shaft.
3. Remove pulley bush assembly from shaft.











(D)

Oberlenker kürzen

1. Gerät an die Unterlenker des Hubwerks ankuppeln.
2. Anbaubock senkrecht ausrichten (90°).
3. Gewindespindel ausbauen
   - Spannhülse enfernen
   - Gewindespindel herausdrehen
4. Abstand **"A1"** abmessen
5. Gewindespindel kürzen (Maß **"A2"** der Tabelle entnehmen)
6. Gewindespindel einbauen
   - Mit Spannhülse sichern

(F)

Raccourcir le 3 ème point

1. Atteler la machine aux bras inférieurs du relevage.
2. Positionner le bâti d'attelage à la verticale.
3. Démonter l'embout fileté.
   - Enlever la goupille mécanindus.
   - Dévisser l'embout fileté.
4. Mesurer la cote "A1"
5. Raccourcir l'embout fileté. (Prendre la mesure "A2" dans le tableau).
6. Remonter l'embout fileté.
   - Le fixer avec la goupille mécanindus.

(GB)

Shorten upper link

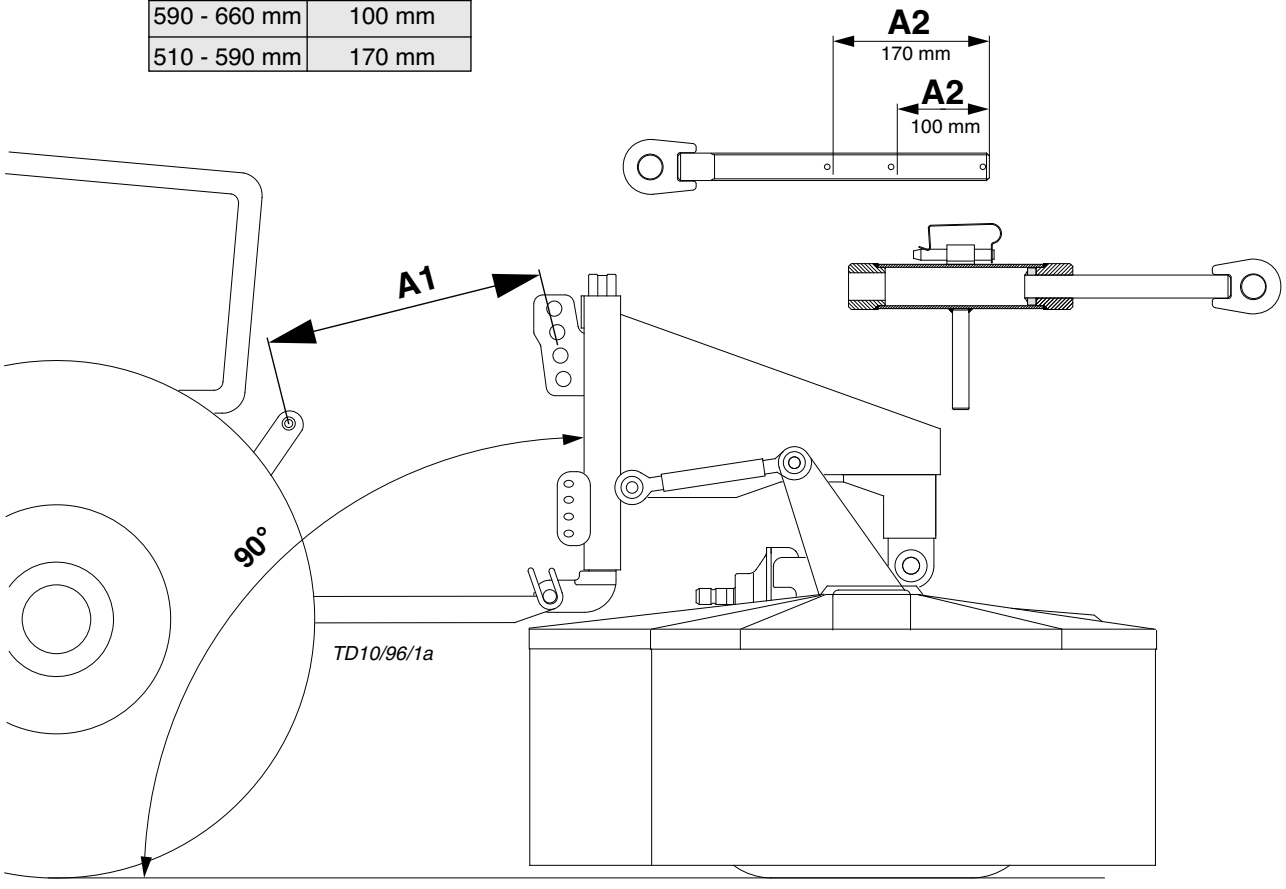
1. Connect the unit to the lower link of the lifting gear.
2. Vertically allign attachment frame (90°).
3. Remove threaded spindle
   - remove clamping sleeve
   - unscrew threaded spindle
4. Measure gap **"A1"**
5. Shorten threaded spindle (take measurement **"A2"** from table)
6. Screw in threaded spindle
   - secure with clamping sleeve.

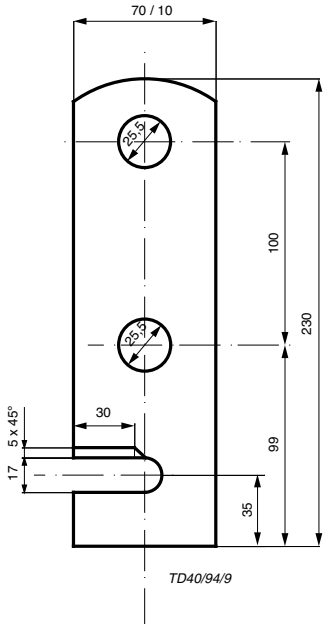
(NL)

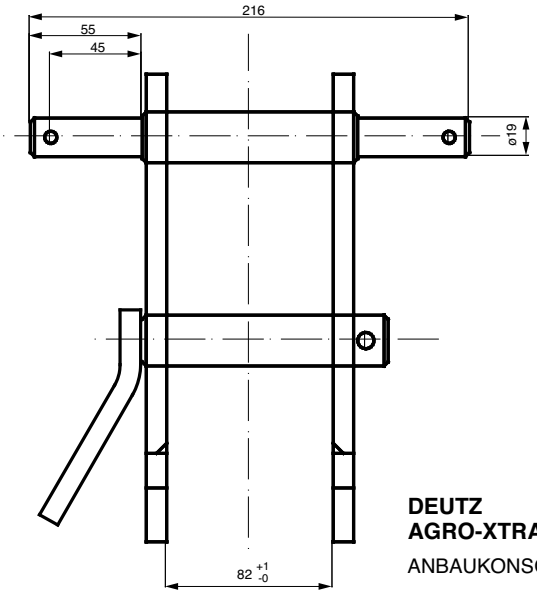
Topstang korter afstellen

1. Machine aan de hefarmen van de hefinrichting koppelen.
2. Aanbouwbok loodrecht instellen (90°).
3. Draadstang demonteren
   - spanhuls verwijderen
   - draadstang uitdraaien
4. Afstand **"A1"** opmeten
5. Draadstang op lengte maken (maat **"A2"** van de tabel aanhouden)
6. Draadstang weer monteren
   - met spanhuls borgen.

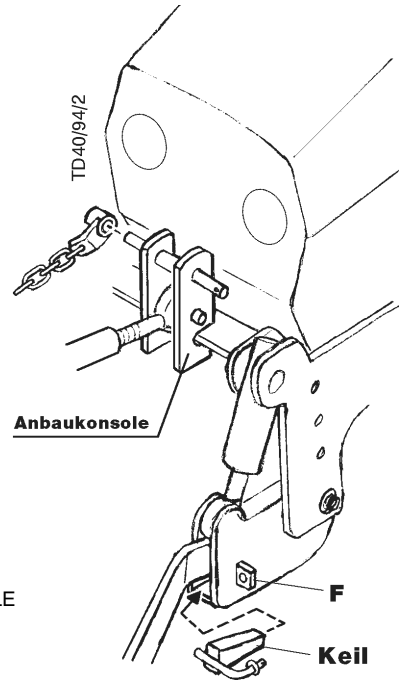
A1	A2
660 - 760 mm	0 mm
590 - 660 mm	100 mm
510 - 590 mm	170 mm



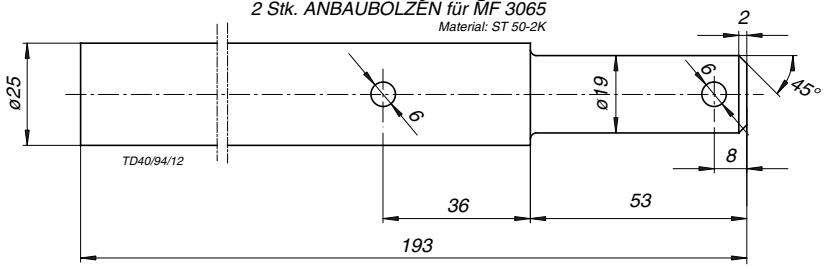


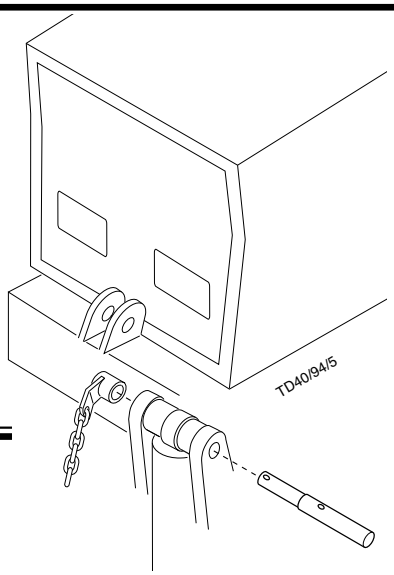


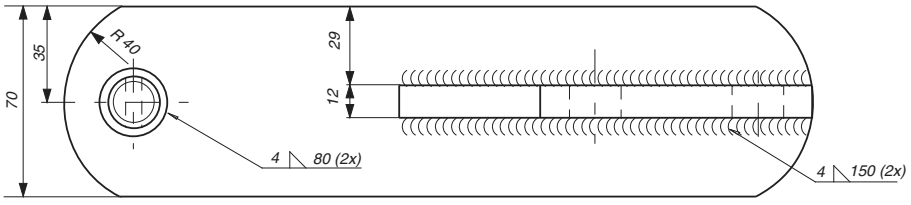
DEUTZ
AGRO-XTRA
ANBAUKONSOLE

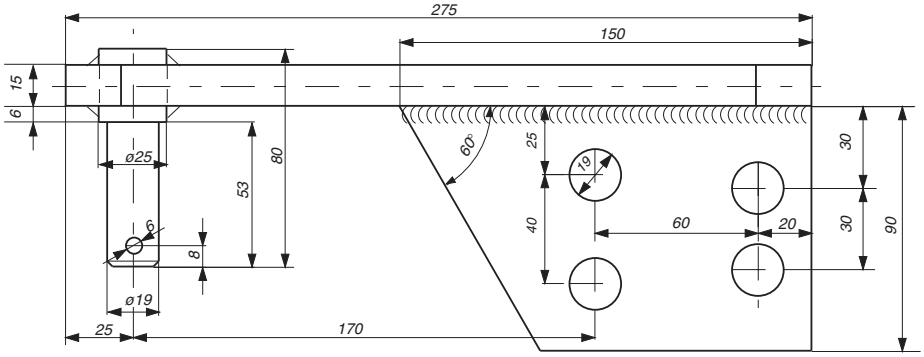


Massey Ferguson
2 Stk. ANBAUBOLZEN für MF 3065
Material: ST 50-2K

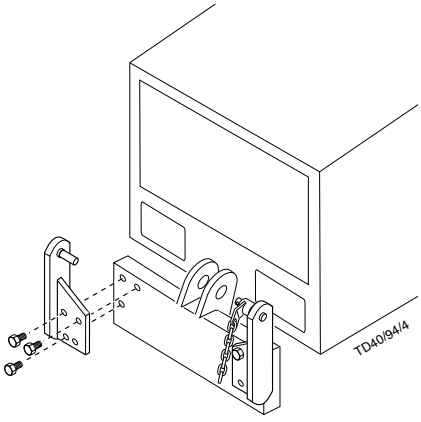








FENDT 304
ANBAUKONSOLE
Variante - 2



PÖTTINGER

GB

Appendix 1

EC Certificate of Conformity

conforming to EEC Directions 98/37/EG

We **ALOIS PÖTTINGER Maschinenfabrik Gesellschaft m.b.H.**

A-4710 Grieskirchen, Industriegelände 1

declare in sole responsibility, that the product

(make)

Drum mower

(description, model)

EUROCAT 276 F		344
EUROCAT 276 F - PLUS		344
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to which this certificate applies, conforms to the basic safety and health requirements of EEC Directions 98/37, and to the other relevant EEC Directions.

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

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

pa. Ing. W. Schremmer
Entwicklungsleitung

Grieskirchen, 12.09.2007

(Place and date of issue)

(Name and job function of authorized person)

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