Original inside

GB Operator‘s manual

"Translation of the original Operating Manual"

Nr. 99 331.GB.809.1

CAT 230 plus

(Type PTM 331 : + . . 01001**)**

CAT 230 plus Conditioner

(Type PTM 331 : + . . 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.

(GB) INSTRUCTIONS FOR PRODUCT DELIVERY

Dokument D

ALOIS PÖTTINGER Maschinenfabrik GmbH
A-4710 Grieskirchen
Tel. (07248) 600 -0
Telefax (07248) 600-511

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

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

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

Please check. [X]

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

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

- sign the **document A** and send it to the company Pöttinger
  (in case of Landsberg equipment: to the company Landsberg)
- **document B** stays with the specialist factory delivering the machine.
- **document C** stays with the customer.

Attention!

Observe Safety Hints in the supplement-A!

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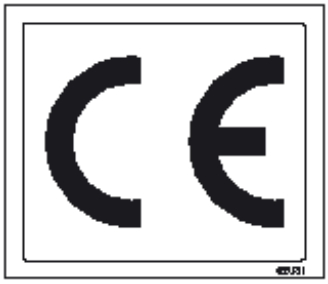


CE sign

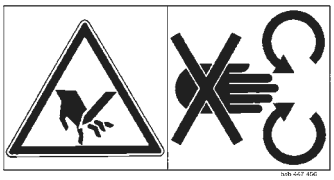
The CE sign, which is affixed by the manufacturer, indicates outwardly that this machine conforms to the engineering guideline regulations and the other relevant EU guidelines.

EU Declaration of Conformity (see supplement)

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

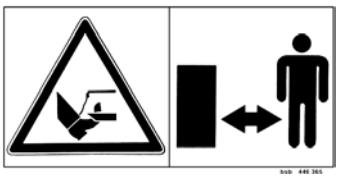
Meaning of warning signs

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

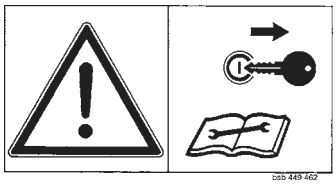


Do not open or remove safety shields while engine is running

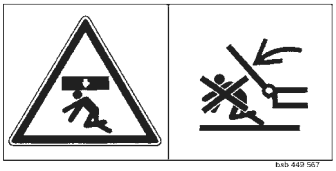
Wait until all machine components have completely stopped before touching them.



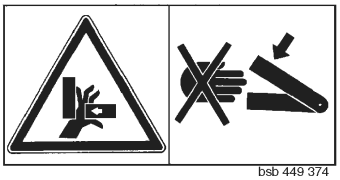
Stay clear of mower knife area as long as tractor engine is running with PTO connected.



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



Stay clear of swinging area of implements



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

Technical data

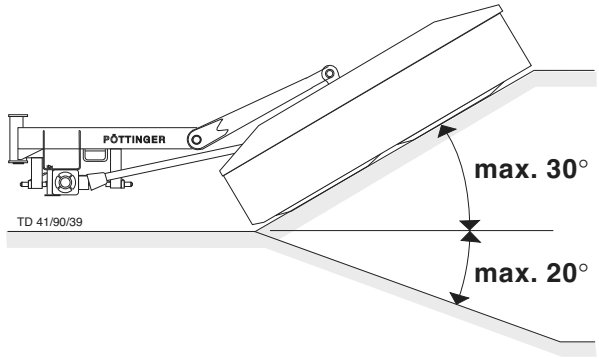
CAT 230 (Type PTM 331)

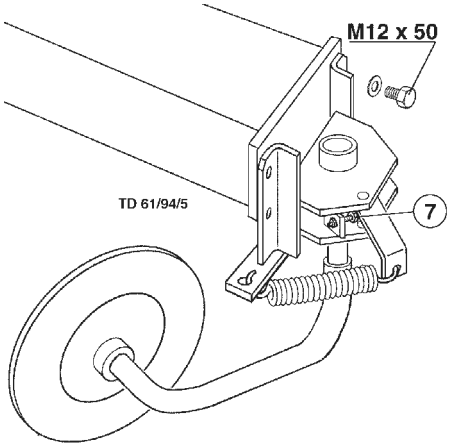
Working width	2,25 m
Coverage up to	2,5 ha/h
nu.of drums	2
no.of blades per drum	4
maximum power take-up at p.t.o.	44 KW(60 HP)
maximum power take-up with conditioner	59 KW(80 HP)
maximum p.t.o speed	540 rpm
transport width	1850 mm
transport heigth	2650 mm
weight	650 kg
weight with conditioner	820 kg
stope angle: - uphill approx.	30°
stope angle:-downhill aprox.	20°
Permanent sound emmission level	92,5 dB(A)

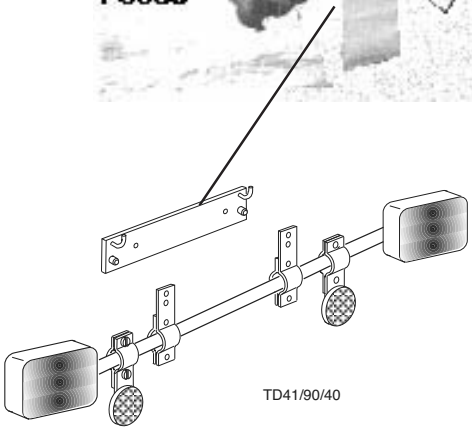
On data subject to revision.

Optional extra:

- Conditioner with driveshaft
- Swath disc
- Lamp carrier cpl.



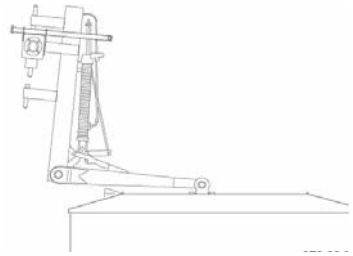




Attachement

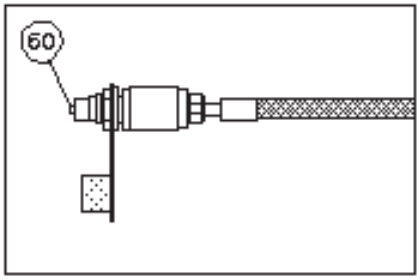
Safety hints:

see supplement-A1 points 8a. - h.)

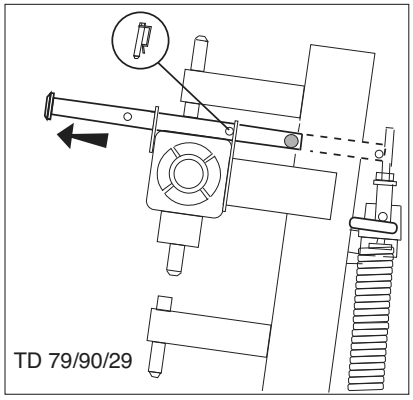


To swing mounting frame up

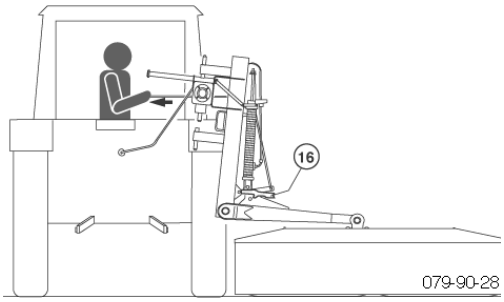
- Connect the Hydraulic socket gear (60) to the swivel cylinder.



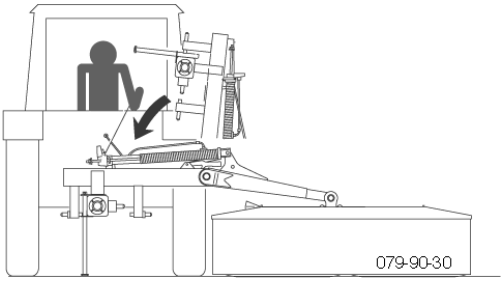
- Pull out the supporting feet and secure them with the cotter pin.



- Release hook (16) by means of the cord .



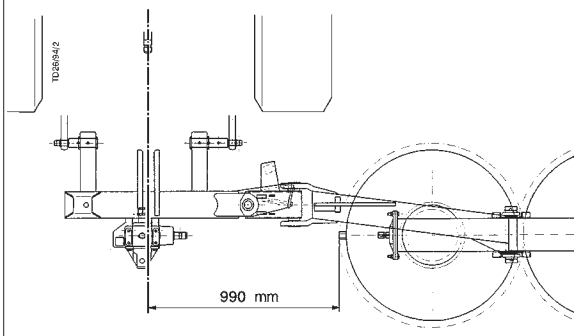
- By controlling the tractor servo-valve, lower the frame slowly.

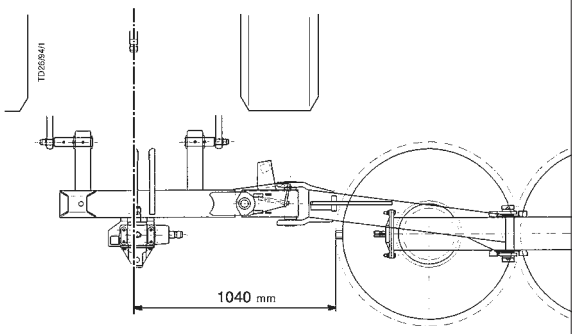


Set lower link pin on mounting frame accordingly.

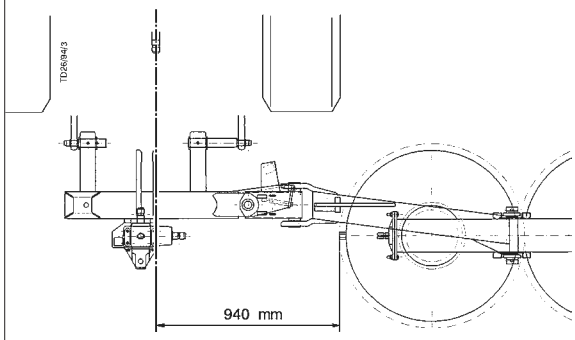
Important: The mower must be aligned so that the edge of the tractor-side drum is just outside the right-hand tractor tyre.

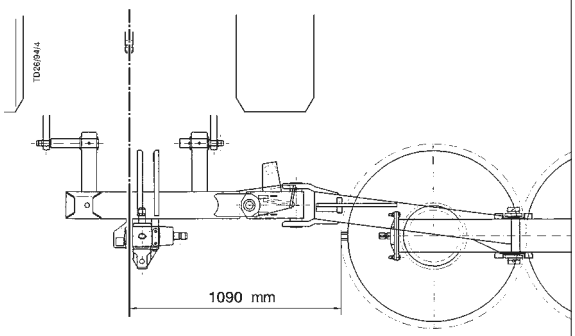
Lower link pin (990mm - 1040mm) standard





Lower link pin (940mm - 1090mm) optional

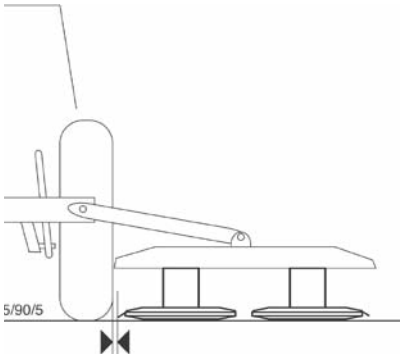




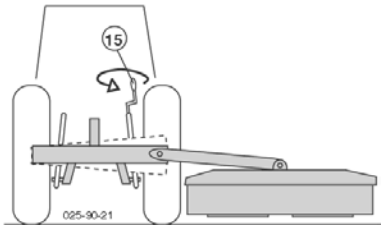
Hitch mower up to tractor

Important: The mower must be aligred so that the edge of the tractor-side drum is just outside the right-hand tractor tyre.

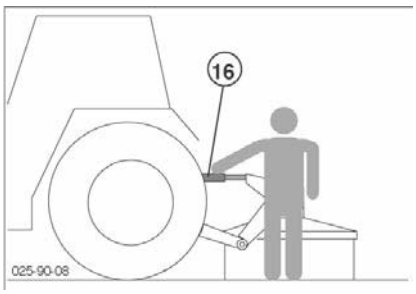
- Unterlenkerbolzen am Anbaurahmen entsprechend verstellen.

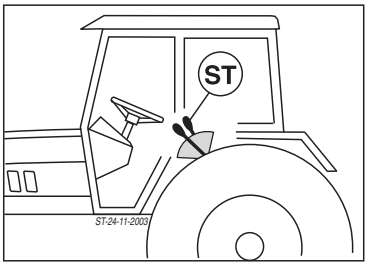


- After hitching the mower at the tractor's 3 point linkage, set it horizontal (as seen from behind) by adjusting spindles (15) of the linkage arms.



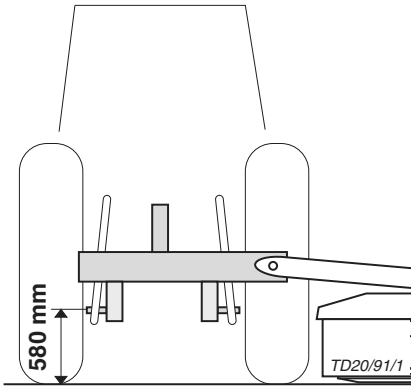
- By twisting upper link spindle (16), cutting drums are brought into a horizontal position or inclined slightly forward.



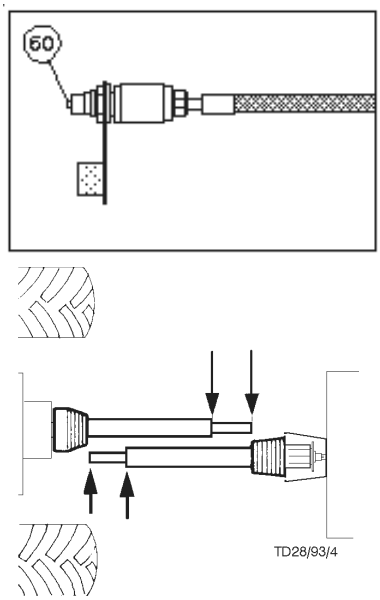


- Set 3 point linkage with bottom stop (ST) so that the lower links are approx. 580 mm high.

  With this setting the mower can adjust perfectly to uneven ground; it need not be changed for swinging the cutter bar up.



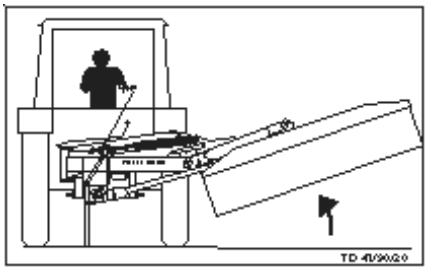
- Make hydraulic plug connection for pivoting cylinder.



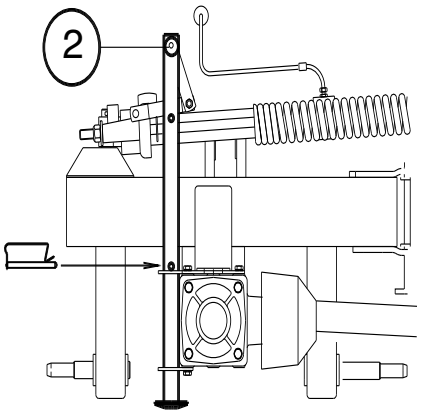
- Before using for the first time, the length of the drive shaft must be checked and adjusted if necessary (see also supplement B „Drive shaft adaption“).

How to use the jack stand

- Lift cutter bar with the tractor hydraulics.



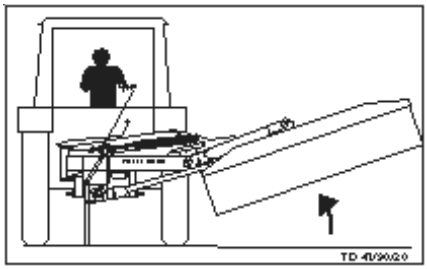
- Raise jack stand with lever (2) and secure it with linch pin.



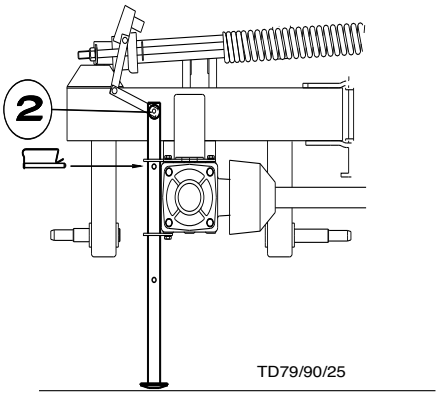
TD79/90/24

How to use the jack stand for parking the implement.

- Lift cutter bar with the tractor hydraulics



- Pull out jack stand with lever (2) and secure it with linch pin.

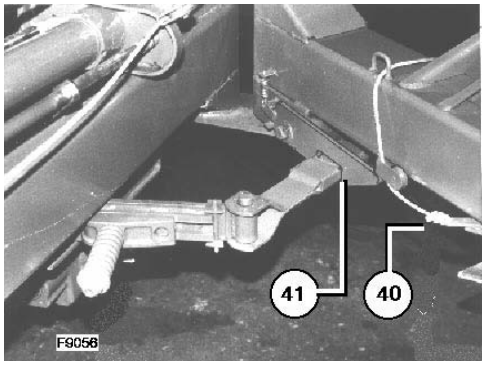


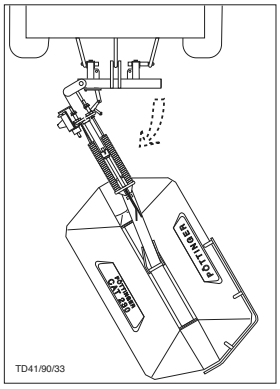
TD79/90/25

Converting from operating to transport position

- Lower the cutter bar on to ground.
- To release the hooks (40), pull on the cable and then move forwards with the tractor. At the same time, the cutter bar swivels back as far as possible until the hooks (41) are locked into position.
- Gradually move cutter bar into vertical position.
- Secure cutter bar with lock (13).
- Always check lock is engaged correctly before every road trip!

Important! never let the mowing mechanism run with the mower raised





Safety Precaution!

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

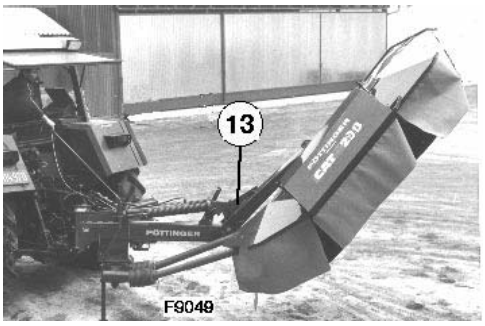
Lighting during use on roads

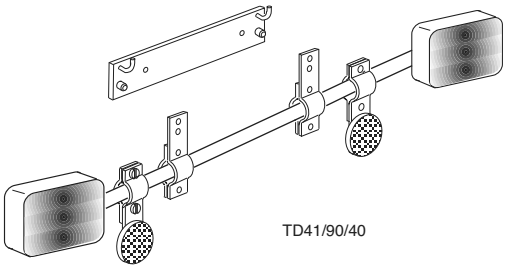
If desired, a lighting unit can be supplied.

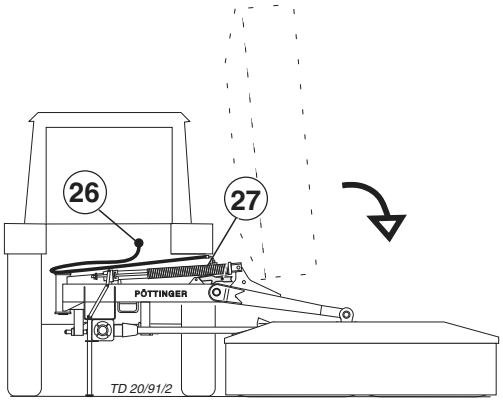
For single parts see spare parts list.

- Connect lighting and raise appliance for transport.

- Before you leave the tractor, lower the cutter bar on to ground.





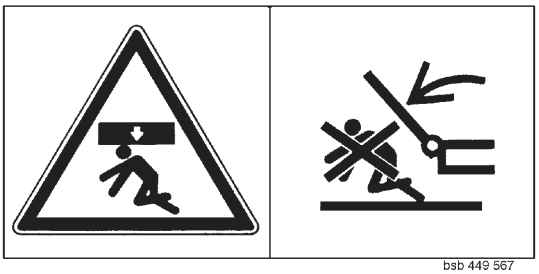


Changing from transport- to working position

Swinging the cutter bar down.

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

2. First raise the mower slightly the hydraulic cylinder, so that you can release the lock.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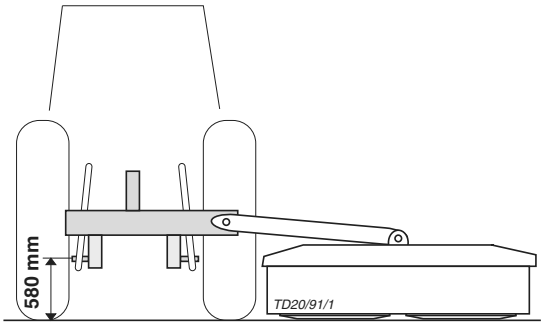
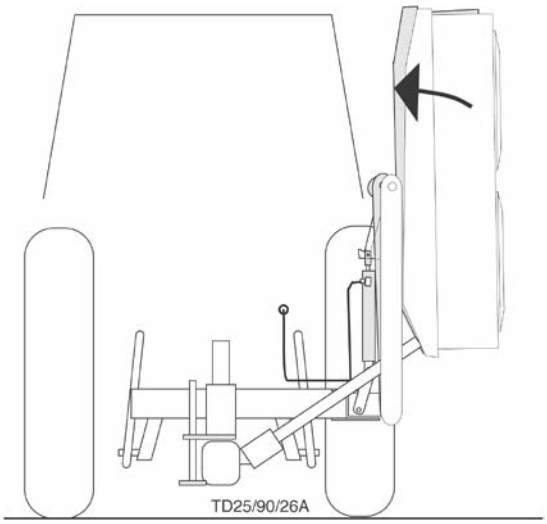
3. Swing the cutter bar down.





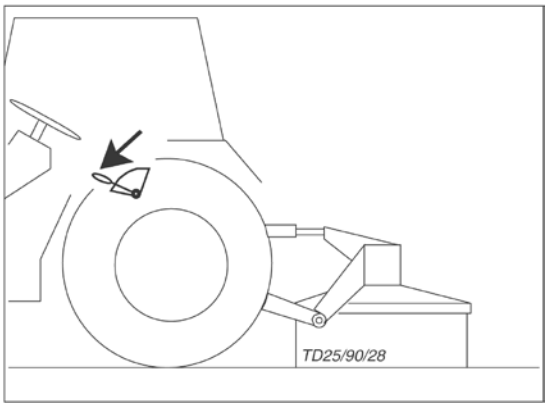
Safety Precaution!

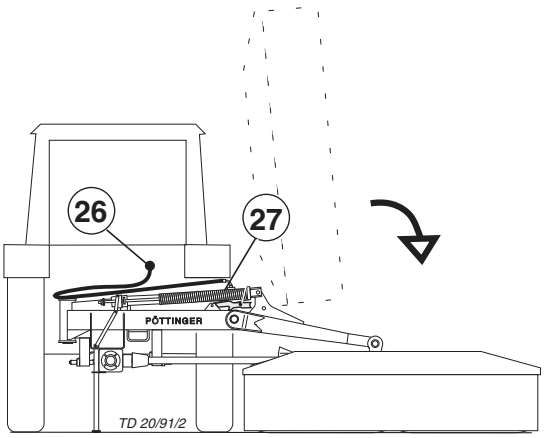
Changing from transport position to working position is only to be carried out on even, firm ground.

Parking the mower

- Before you leave the tractor, lower the machine on to ground!

- Before disconnecting hose (26) extend cylinder (27) fully, so that no residuel pressure interferes with connecting up later.





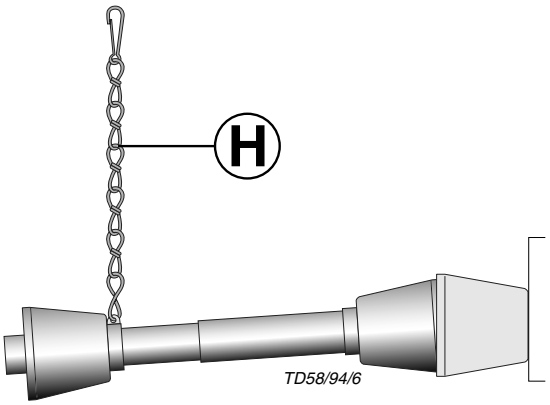
Road Transport

- 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.

Parking the machine

- 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.

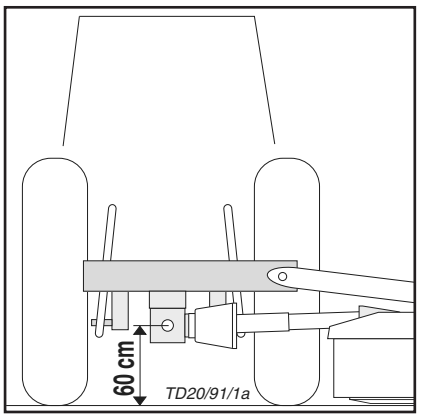


Important points befor starting work

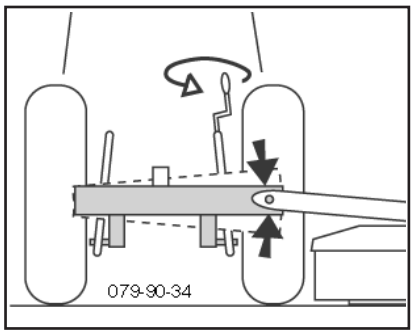
(see supplement-A1 points 1, 3 and 4)

Positioning (60 cm):

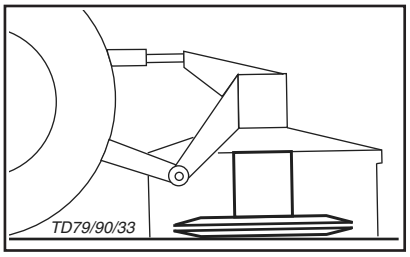
- The tractor hydraulics must be set to enable the mower to adapt to uneven ground surfaces. This means that the lowest hydraulic position (60 cm) must be limited.



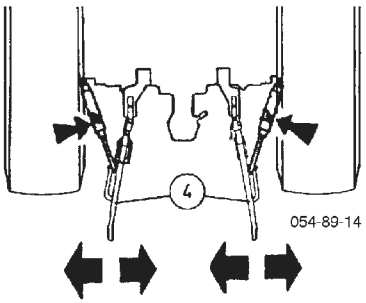
- Mounting frame horizontal.



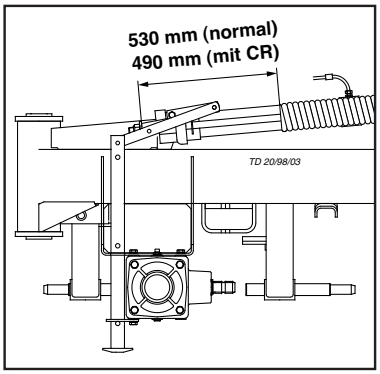
- Cutting drums horizontal or inclined slightly forward.



- Fix the hydraulic lower link in a way that the machine can not swing out sideways.



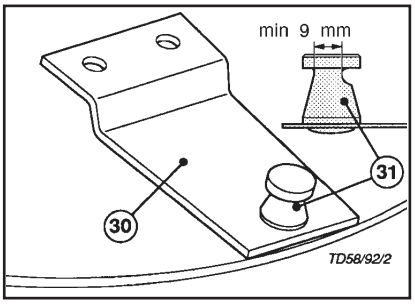
- Check initial spring tension.
  Adjustment settings:
  530 mm without conditioner
  490 mm with conditioner



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.

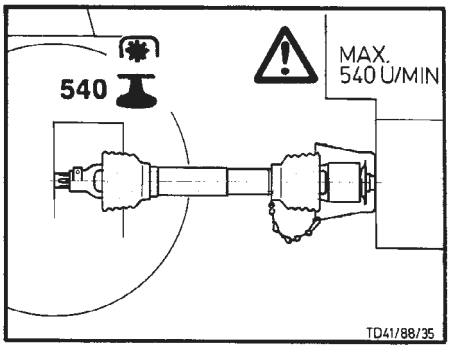
- In case of grinding noises check whether the blade holder (30) is buckled and therefore the blade does not lie correctly any more.

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).

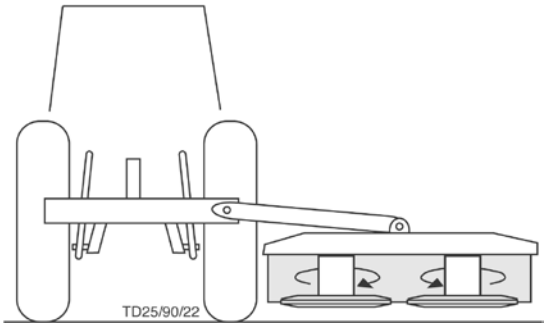
A transfer, which is located near the gear, advises which p.t.o. speed your mower unit is equipped for.



540 Upm **1000 Upm**

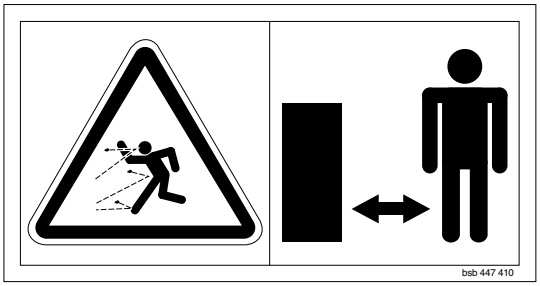
4. Pay attention to correct p.t.o. direction of rotation!

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!

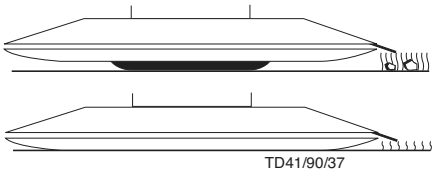
- **The surface to be mowed must be free of obstructions or foreign objects. Such objects (e.g. large stones, pieces of wood, boundary stones, etc.) can damage the mower unit.**

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.

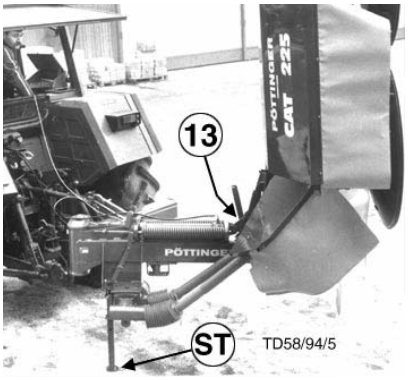
8. Safety hints (pt. 1, 2, 3, 4,) to observe in supplement A1!

Cutting height adjustment


TD41/90/37

By adjusting the center disc (M), the cutting height can be adjusted to any interval between 30 mm and 65 mm.

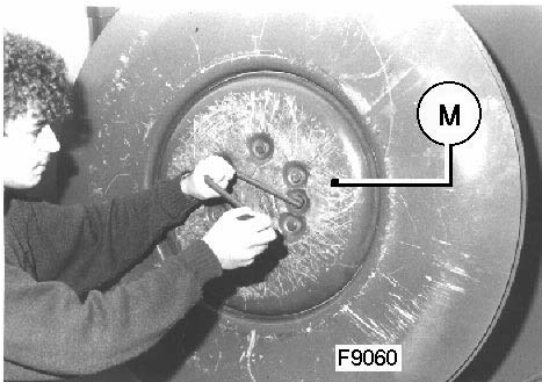
- Bring the pitch cutter bar into the vertical position and lock (13).



For Your Safety:

Der Stützfuß (ST) soll am Boden aufstehen.

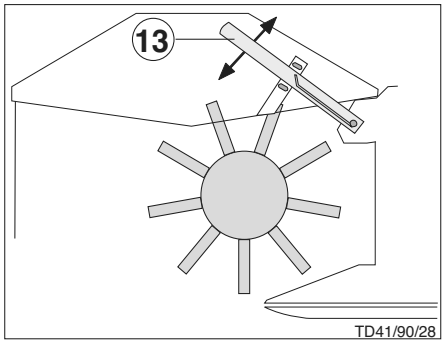
- Attach the accompanying key onto the square and turn until the required cutting height is reset.



Mowing with the conditioner

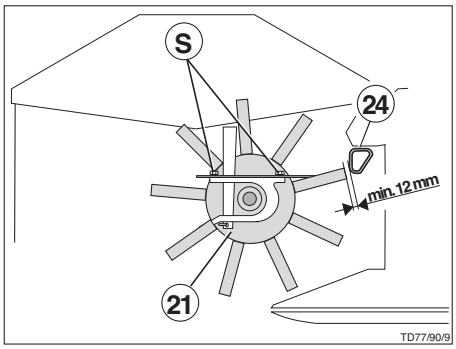
- You can modify the conditioning effect with lever (13), which adjusts the gap between adjustable plate and rotor.

  The conditioning effect is most inlense with the lever at the buttom of its travel. However the crop should not be chopped.



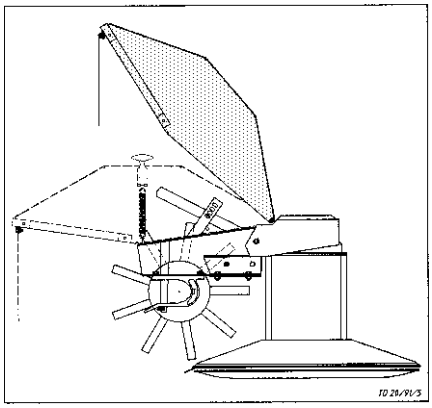
- With dense crops it may be advisable to shift the rotor backwards, increasing the gap between rotor (21) and intake ledge (24). To do this, undo bolts (S) on the left and right of the mower.

Dinstance min.: 12 mm



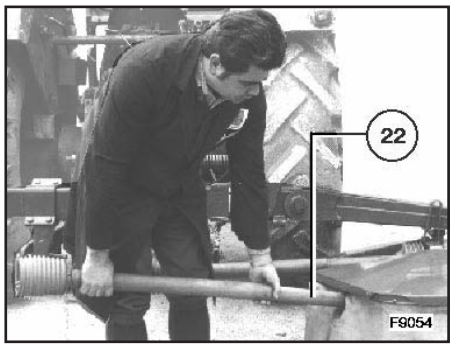
Dismounting/mounting the rotor

Do not open cover while engine is running.



- Release clamp and hinge up cover.

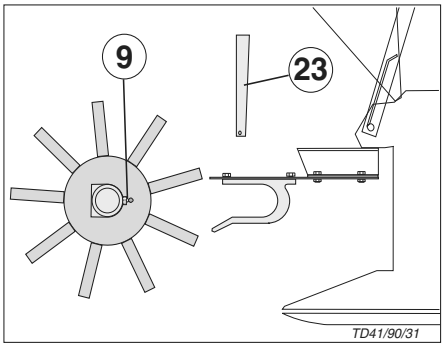
- Disconnect rotor driveshaft (22) and withdraw through opening in canvas.



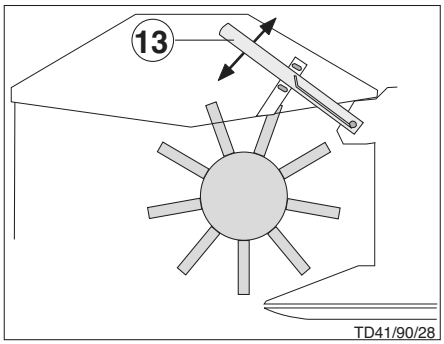
- Strike wedges (23) out apwards and pull rotor out to the rear.

- Close discharge hood.

- **Important:** when mounting the rotors, position the two grease nipples (9) on right and left into the recesses in the aligning forkes, without damaging them. Secure wedges (23) with leight blows of a hammer.



Mowing with the conditioner



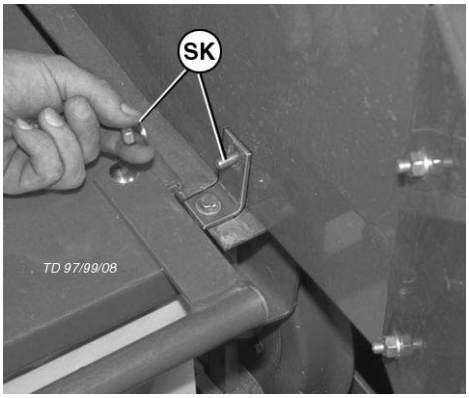
- You can modify the conditioning effect with lever (13), which adjusts the gap between adjustable plate and rotor.

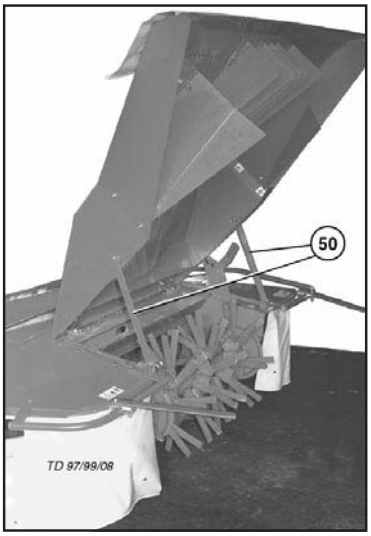
  The conditioning effect is most inlense with the lever at the buttom of its travel. However the crop should

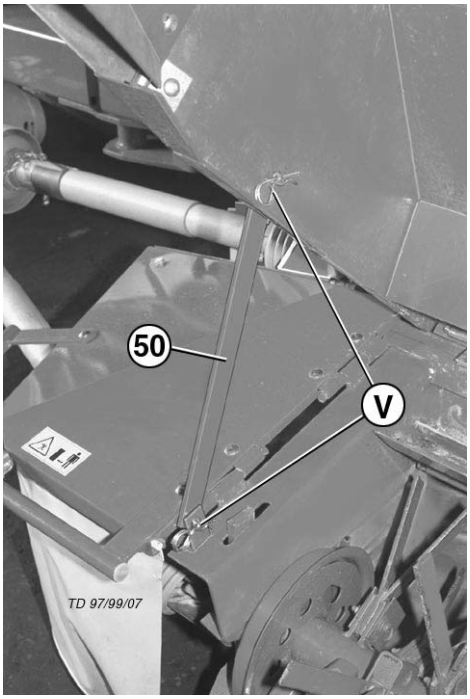
Dismounting/mounting the rotor

Do not open cover while engine is running.

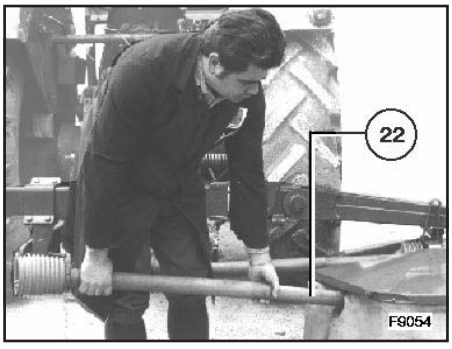
- Release clamp and hinge up cover.



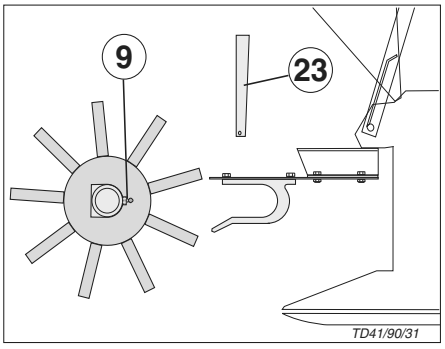




- Disconnect rotor driveshaft (22) and withdraw through opening in canvas.
- Strike wedges (23) out apwards and pull rotor out to the rear.
- Close discharge hood.



- **Important:** when mounting the rotors, position the two grease nipples (9) on right and left into the recesses in the aligning forkes, without damaging them. Secure wedges (23) with leight blows of a hammer.



Variation

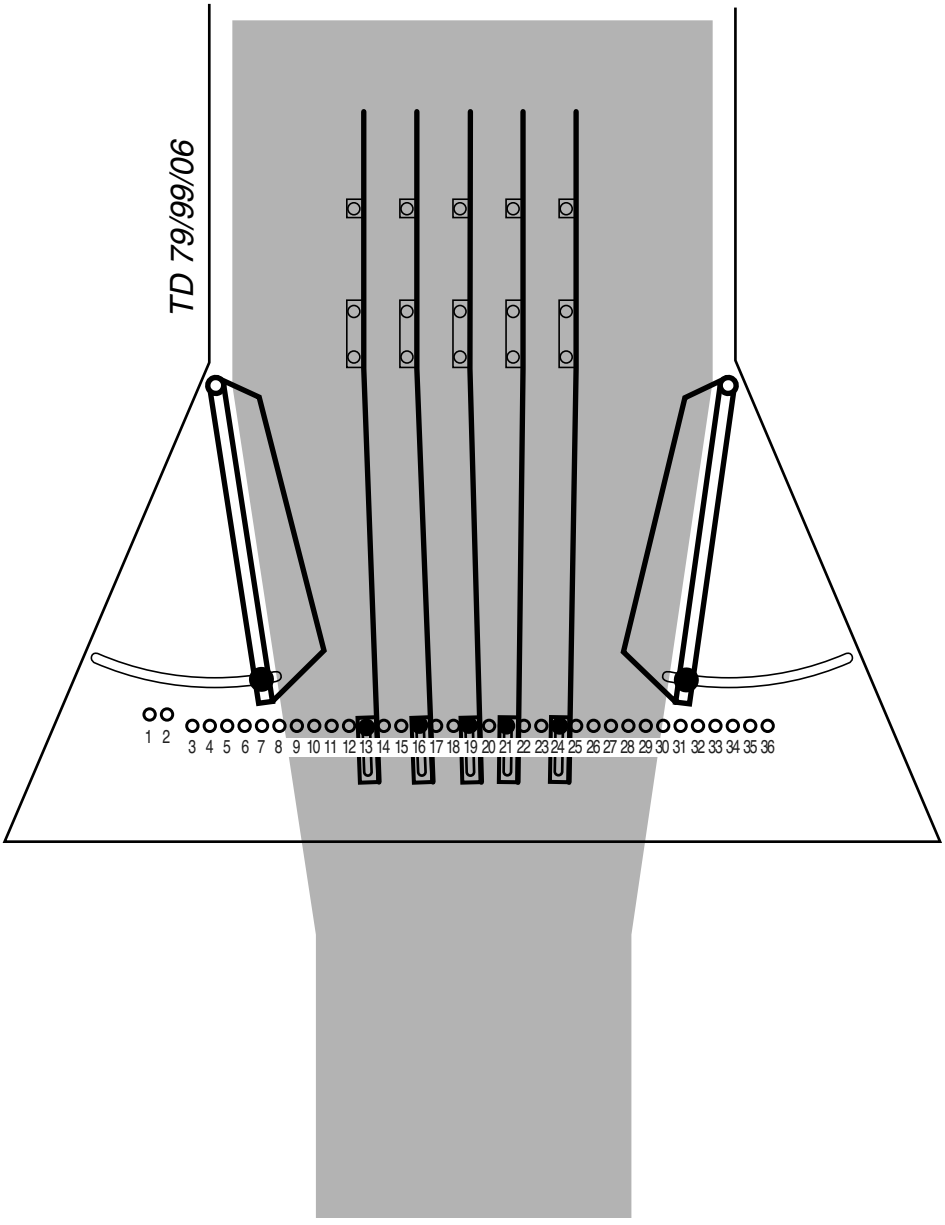
"Extra dry" system

Note

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

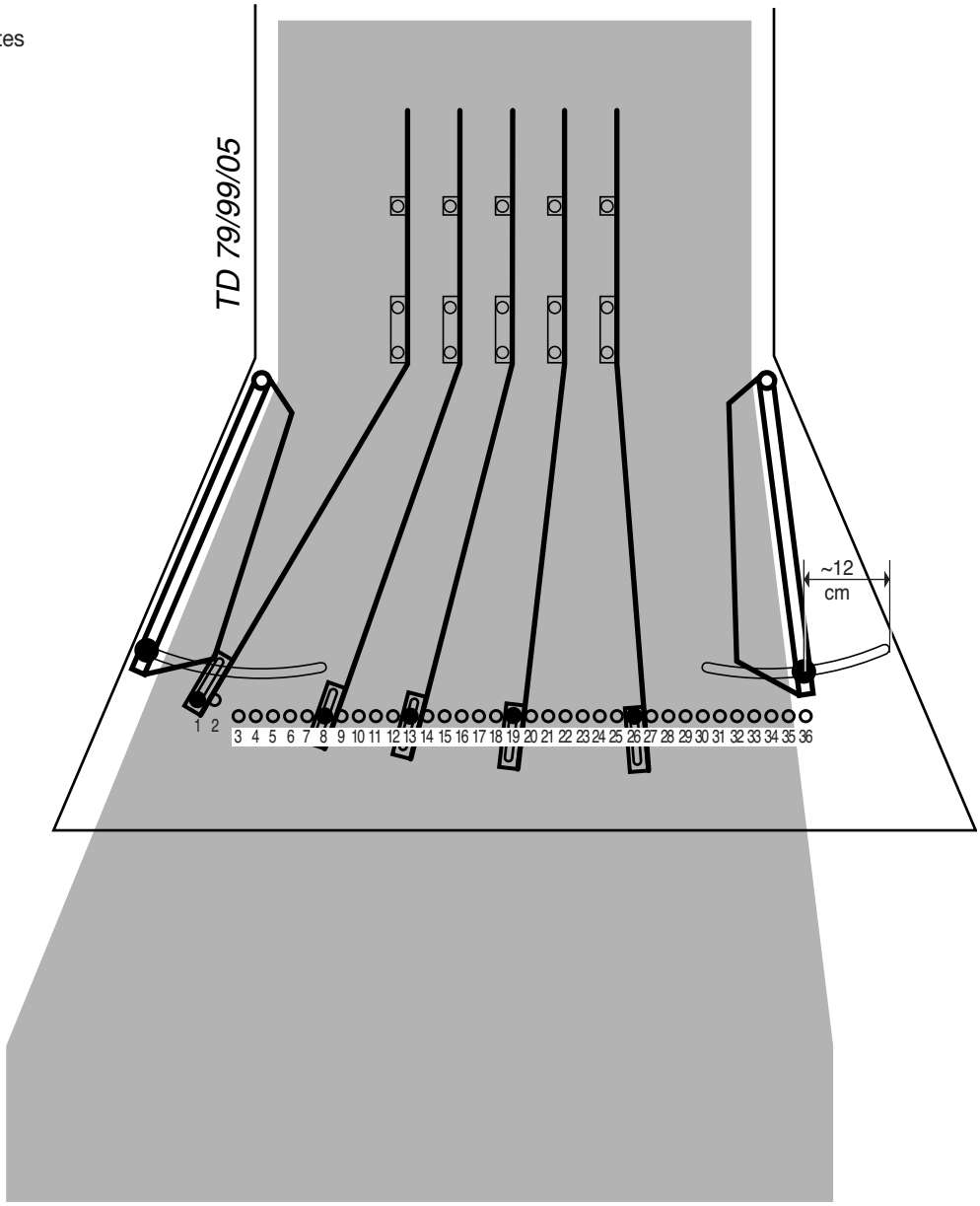
Swathes

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



Spread width

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



Anti-hindrance safety device:

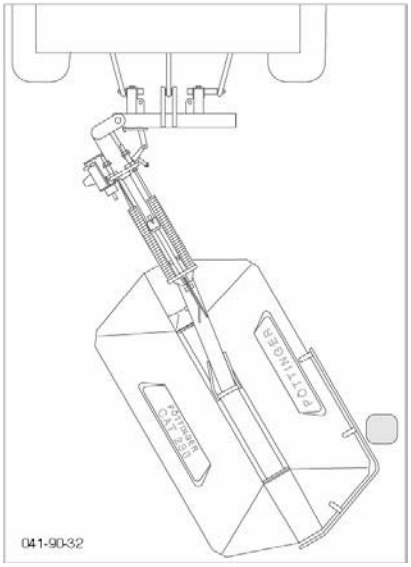
When moving around trees, fences, boundary stones etc., collisions between the cutter bar and obstacles can occur despite careful and slow driving techniques. Therefore,in order to prevent such damage, collision protection has been planned for the cutting device.

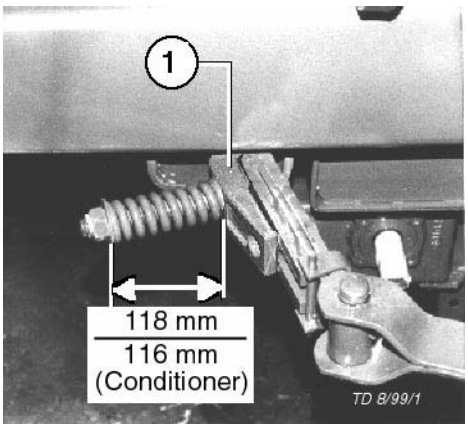
Attention!

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

Anti-hindrance safety device:

If the mower encounters an obstacle the springloaded safety device (pos.1) is tripped and the cutter bar can swing back. In this case stop immediately and reverse a short distance it returns to working positions.





Positioning:

In case the safety device trips to easy adjust hex. hd.nut.

Initial spring tension should be approx.:

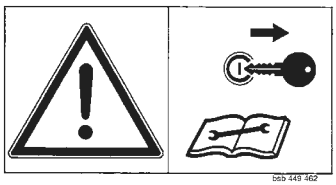
- 118 mm (without Conditioner)
- 116 mm (with Conditioner)

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

Wartung und Pflege

Sicherheitshinweise:

siehe Anhang-A1 Pkt. 1b.), 2.), 8i.), 9.)



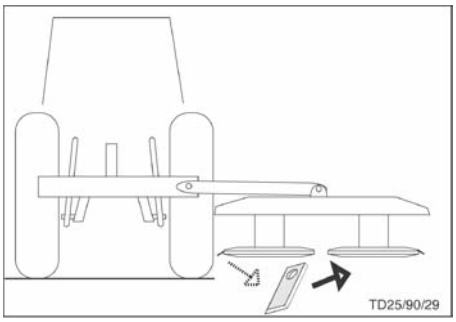
- Vor Einstell- Wartungs- und Reparaturarbeiten Motor abstellen.
- Arbeiten unter der Maschine nicht ohne sichere Abstützung durchführen.
- Nach den ersten Betriebsstunden sämtliche Schrauben nachziehen.

Messer

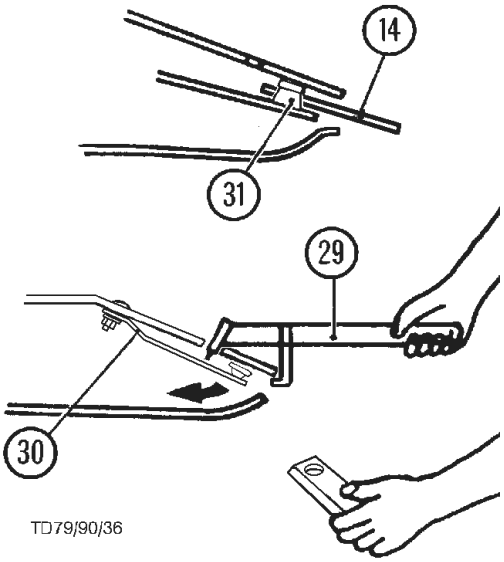
- Die Messer haben an beiden Seiten Schneidkanten. Deshalb ist es möglich, stumpfe Messer zu demontieren und an der anderen Schneidtrommel wieder zu befestigen.

- Die Messer an einer Schneidtrommel müssen gleichmäßig abgenützt sein, (Unwuchtgefahr) ansonsten sind sie durch neue zu ersetzen.

Wechseln der Messer



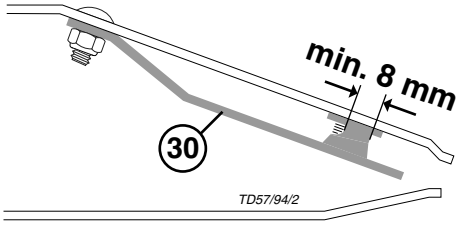
- Stützen Sie den Hebel (29) an der unteren Kante der Trommel ab und drücken Sie den beweglichen Halter (30) nach unten.
- Das Messer (14) ist am Bolzen (31) eingehängt.
- Tauschen Sie das Messer und entfernen Sie alle Futterreste um den Bolzen, der das Messer hält. Eventuell auch von der inneren Seite der Trommel.
- Entfernen Sie den Hebel (29) und prüfen Sie ob der Bolzen (31) der Messerhalterung in seine ursprüngliche Position zurückgegangen ist und ob das Messer sich frei am Bolzen bewegen läßt.



Attention! (min. 8 mm)

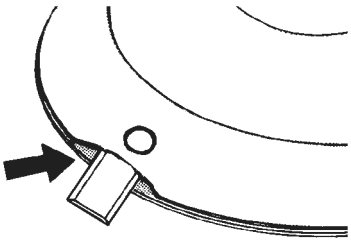
Replace flexible holder (30) at the latest:

- when pin diameter is worn off to 8 mm.
- when flexible holder (30) has been deformed.



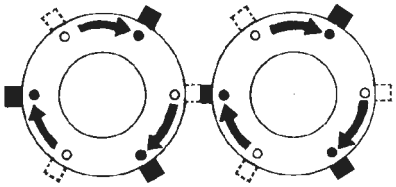
Checking the mowing blade mountings

- Check immediately after running into a solid obstacle.
- Check normally every 100 hours.
- Check more frequently when mowing on stony ground.



Mowing discs

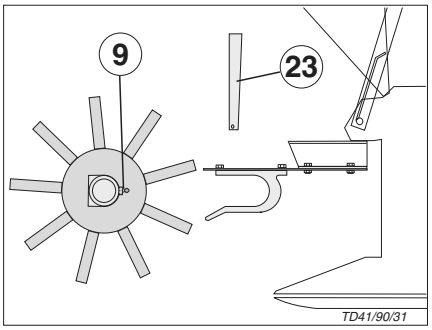
- **If a mowing disc is worn through close to the mowing knives, proceed as follows:**



- Remove bottom support disc
- Undo nuts on knife mountings
- Reset knife mountings one hole (60°)
- Tighten bolts up firmly (120 Nm torgue), and check after some hours' operation.

Conditioner

- Dismantle rotor once a year and lubricate the bearings at each end.



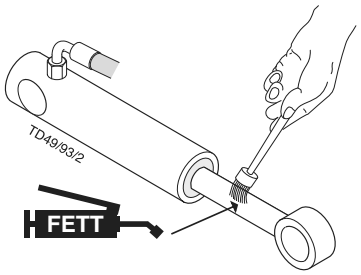
Putting away for the winter

- dismantle the pads in order to clean and conserve the underside of the mowing discs
- lubricate the mower as per schedule.

A rusty plunger rod can damage cylinder's sealing elements.

At season's end

- clean plunger rod and all other shiny parts, then grease them
- park implement with attachment frame (H) raised, which will protect plunger rod from rust

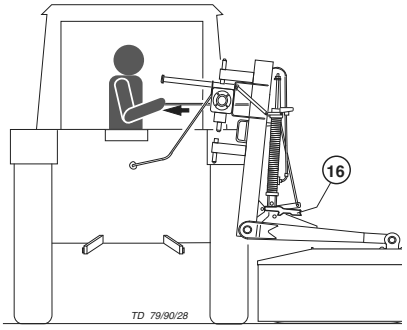


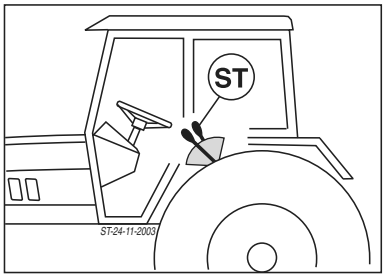
Raising the frame

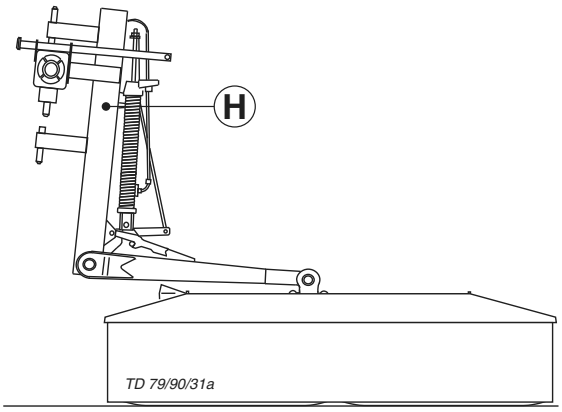
Safety hints:

see supplement-A1 Pkt. 8a. - 8h.)

- Do not attach implement to tractor's lifting gear.
- Connect hydraulic snap coupling for swivel cylinder.
- Release hook (16) by means of rope.
- Control the tractor servo-valve (ST), raise the frame slowly.



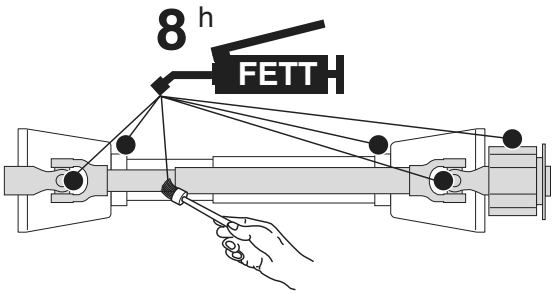


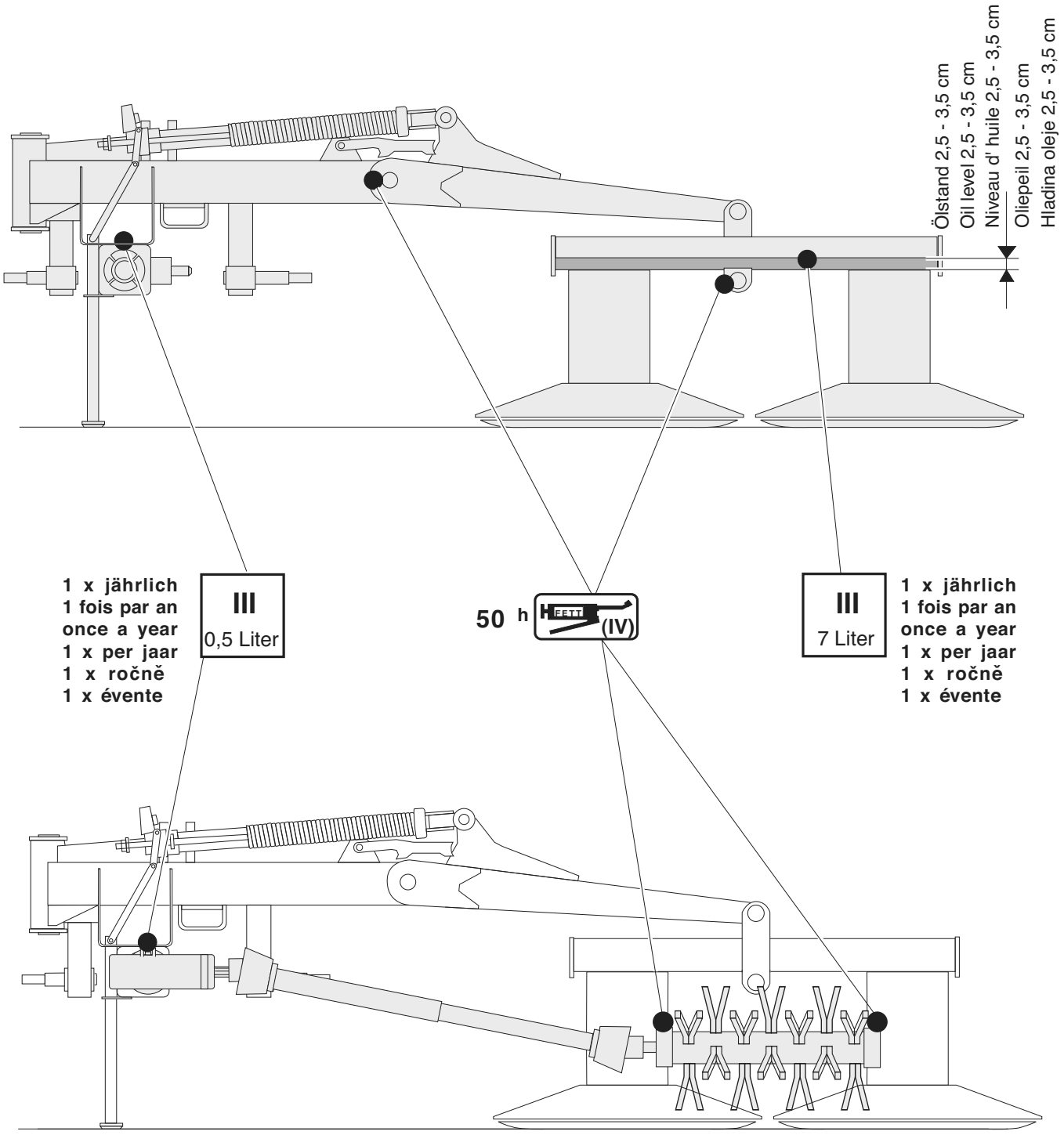


(D) **Schmierplan** (GB) **Lubrication chart** (CZ) **Mazací plán**

(F) **Plan de graissage** (NL) **Smeerschema** (H) **Kenési terv**

(I) **Schema di lubrificazione**





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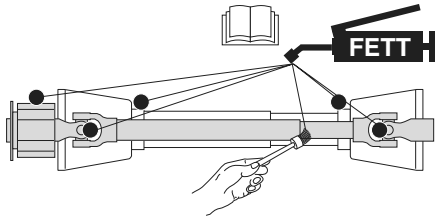


(D) Schmierplan

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

(F) Plan de graissage

8^h	Toutes les 8 heures de service
20^h	Toutes les 20 heures de service
40 F	Tous les 40 voyages
80 F	Tous les 80 voyages
1 J	1 fois par an
100 ha	tous les 100 hectares
FETT	GRAISSE
▽1 =	Nombre de graisseurs
(IV)	Voir annexe "Lubrifiants"
Liter	Litre
*	Variante
📖	Voir le guide du constructeur

(GB) Lubrication chart

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

(NL) Smeerschema

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

(S) Smörjschema

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

(N) Smøreplan

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

(I) Schema di lubrificazione

8^h	ogni 8 ore di esercizio
20^h	ogni 20 ore di esercizio
40 F	ogni 40 viaggi
80 F	ogni 80 viaggi
1 J	volta all'anno
100 ha	ogni 100 ettari
FETT	GRASSO
▽1 =	Numero degli ingrassatori
(IV)	vedi capitolo "materiali di esercizio"
Liter	litri
*	variante
📖	vedi istruzioni del fabbricante

(E) Esquema de lubricación

8^h	Cada 8 horas de servicio
20^h	Cada 20 horas de servicio
40 F	Cada 40 viajes
80 F	Cada 80 viajes
1 J	1 vez al año
100 ha	Cada 100 hectáreas
FETT	LUBRICANTE
▽1 =	Número de boquillas de engrase
(IV)	Véase anexo "Lubrificantes"
Liter	Litros
*	Variante
📖	Véanse instrucciones del fabricante

(P) Plano de lubrificação

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

(FIN) Voitelukaavio

8^h	8 käyttötunnin välein
20^h	20 käyttötunnin välein
40 F	40 kuorman välein
80 F	80 kuorman välein
1 J	kerran vuodessa
100 ha	100 ha:n välein
FETT	RASVA
▽1 =	Voitelunippojen lukumäärä
(IV)	Katso liite "Polttoaineet"
Liter	Litraa
*	Versio
📖	Katso valmistajan ohjeet

(DK) Smøreplan

8^h	Hver 8. driftstime
20^h	Hver 20. driftstime
40 F	Hvert 40. læs
80 F	Hvert 80. læs
1 J	1 gang årligt
100 ha	For hver 100 hektar
FETT	Fedt
▽1 =	Antal smørenipler
(IV)	Se smørediagrammet
Liter	Liter
*	Udstyrsvariant
📖	Se producentens anvisninger

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".

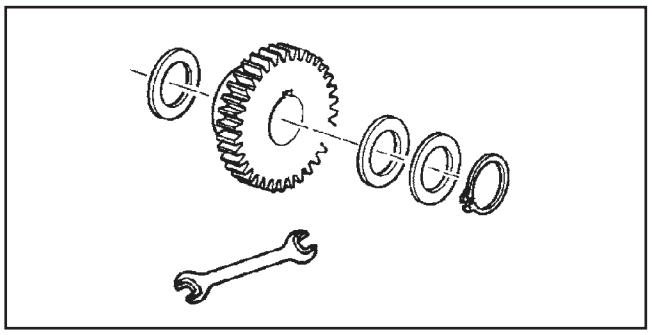
b. The keeping of operating, service and maintenance requirements layed down by the manufacturer also come under the heading of "defined use".

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.

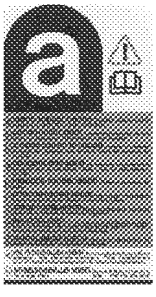
4.) Before starting work

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.



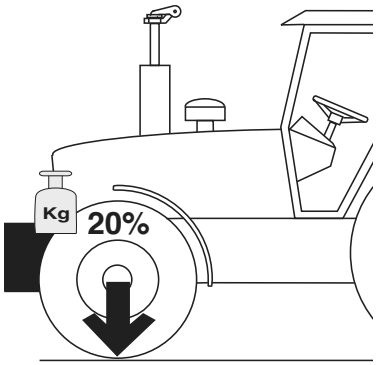
6.) Transport of persons prohibited

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!

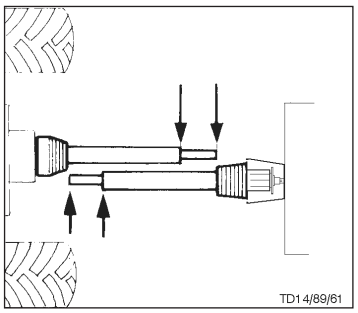
i. For all maintenance, service and modification work, turn driving motor off and remove universal drive.

9.) Cleaning the machine

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

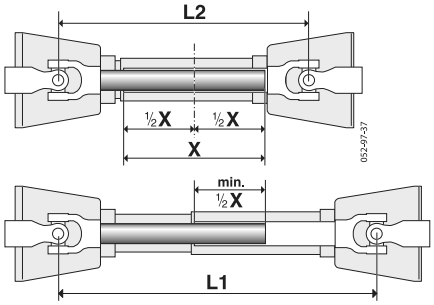
Matching driveshaft to tractor

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



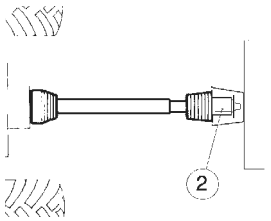
Procedure for cutting to length

- 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!

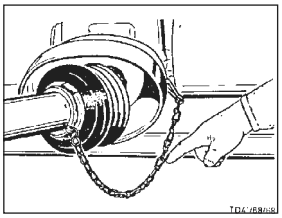


- Always check that drive shaft locks are securely engaged before starting work.

Retaining chain

- Use chain to prevent tube guard from rotating.

  Take care that chain does not impede driveshaft pivoting.

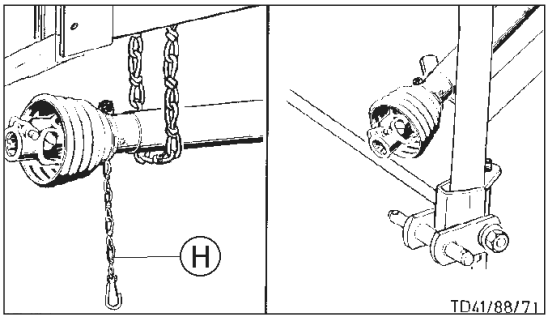


Rules for working

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.



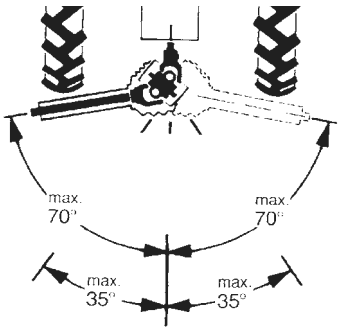
Wide-angle joint:

Maximum angle of deflection when working/stationary: 70°

Standard joint :

Maximum angle of deflection when stationary: 90°

Maximum angle of deflection when working: 35°

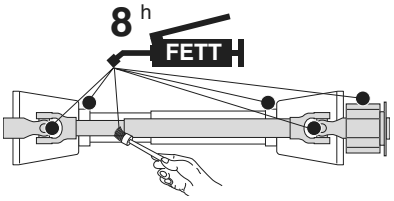


Maintenance

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.



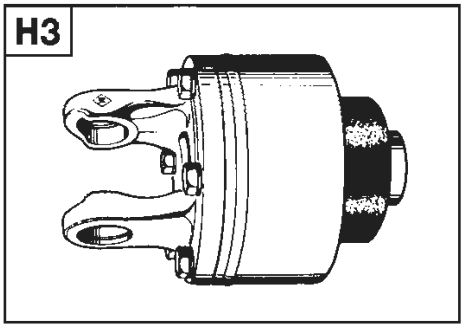
Important!

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!

Wiedereinschalten auch bei Absenken der Zapfwellen-Drehzahl möglich.

HINWEIS!

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.

Schmierintervall: 500 h (Spezialfett)

Important for driveshafts with friction clutch

Bei Überlastung und kurzzeitigen Drehmomentspitzen wird das Drehmoment begrenzt und während der Schlupfzeit gleichmäßig übertragen.

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.

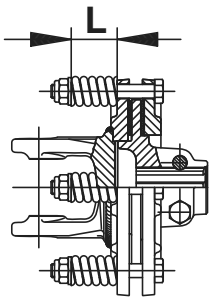
b.) Loosen screws to release the pressure on the friction disk.

Slip the clutch.

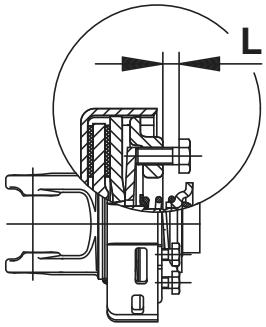
c.) Tighten set screws to dimension „L“.

Clutch is ready for use.

K90,K90/4,K94/1



K92E,K92/4E



D Betriebsstoffe
Ausgabe 1997

Leistung und Lebensdauer der Maschine sind von sorgfältiger Wartung und der Verwendung guter Betriebsstoffe abhängig. Unsere Betriebsstoffauflistung erleichtert die richtige Auswahl geeigneter Betriebsstoffe.
Im Schmierplan ist der jeweils einzusetzende Betriebsstoff durch die Betriebsstoffkennzahl (z.B. “III”) symbolisiert. Anhand von “Betriebsstoffkennzahl” kann das geforderte Qualitätsmerkmal und das entsprechende Produkt der Mineralölfirmen festgestellt werden. Die Liste der Mineralölfirmen erhebt keinen Anspruch auf Vollständigkeit.

Getriebeöl gemäß Betriebsanleitung - jedoch mindestens 1 x jährlich wechseln.
- Ölablaßschraube herausnehmen, das Altöl auslaufen lassen und ordnungsgemäß entsorgen.

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

GB Lubricants
Edition 1997

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

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

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

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

F Lubrifiants
Édition 1997

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

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

Pour l’huile transmission consulter le cahier d’entretien - au moins une fois par an.
- Retirer le bouchon de vidange, laisser l'huile s'écouler et l'éliminer correctement.

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

I Lubrificanti
Edizione 1997

L'efficienza e la durata della macchina dipendono dall'accuratezza della sua manutenzione e dall'impiego dei lubrificanti adatti. Il nostro elenco dei lubrificanti Vi agevola nella scelta del lubrificante giusto.

Il lubrificante da utilizzarsi di volta in volta è simbolizzato nello schema di lubrificazione da un numero caratteristico (per es. "III"). In base al "numero caratteristico del lubrificante" si possono stabilire sia la caratteristica di qualità che il progetto corrispondente delle compagnie petrolifere. L'elenco delle compagnie petrolifere non ha pretese di completezza.

Motori a quattro tempi: bisogna effettuare il cambio dell'olio ogni 100 ore di funzionamento e quello dell'olio per cambi come stabilito nel manuale delle istruzioni per l'uso (tuttavia, almeno 1 volta all'anno).
- Togliere il tappo di scarico a vite dell’olio; far scolare l’olio e eliminare l’olio come previsto dalla legge anti-inquinamento ambientale.

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

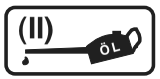
NL Smeermiddelen
Uitgave 1997

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

Dit schema vergemakkelijkt de goede keuze van de juiste smeermiddelen.

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

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

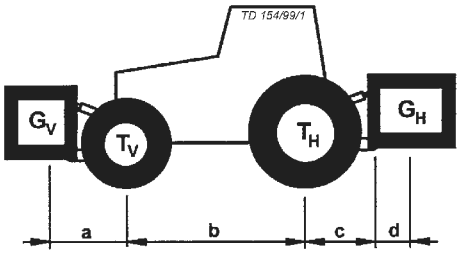
Firma Company Société Società	I	(II)	III	(IV)	V	VI	VII	ANMERKUNGEN
AGIP	OSO 32/46/68 ARNICA 22/46	MOTOROIL HD 30 SIGMA MULTI 15W-40 SUPER TRACTOROIL UNIVERS. 15W-30	ROTRA HY 80W-90/85W-140 ROTRA MP 80W-90/85W-140	GR MU 2	GR SLL GR LFO	-	ROTRA MP 80W-90 ROTRA MP 85W-140	* Bei Verbundarbeit mit Naßbremsen-schlepp-pern ist die internatio-nale Spezifikation J 20 A erforderlich ** Hydrauliköle HLP-(D) + HV *** Hydrauliköle auf Pflan-zenölbasis HLP + HV Biologisch abbaubar, deshalb besonders umweltfreundlich
ARAL	VITAM GF 32/46/68 VITAM HF 32/46	SUPER KOWAL 30 MULTI TURBO-RAL SUPER TRAKTORAL 15W-30	GETRIEBEÖL EP 90 GETRIEBEÖL HYP 85W-90	ARALUB HL 2	ARALUB FDP 00	ARALUB FK 2	GETRIEBEÖL HYP 90	
AVIA	AVILUB RL 32/46 AVILUB VG 32/46	MOTOROIL HD 30 MULTIGRADE HDC 15W-40 TRAC-TAVIA HF SUPER 10 W-30	GETRIEBEÖL MZ 90 M MULTIHYP 85W-140	AVIA MEHRZWECKFETT AVIA ABSCHMIERFETT	AVIA GETRIEBEFLIESSFETT	AVIALUB SPEZIALFETT LD	GETRIEBEÖL HYP 90 EP MULTIHYP 85W-140 EP	
BAYWA	HYDRAULIKÖL HLP 32/46/68 SUPER 2000 CD-MC * HYDRA HYDR. FLUID * HYDRAU-LIKÖL MC 530 ** PLANTOHYD 40N ***	SUPER 2000 CD-MC SUPER 2000 CD HD SUPERIOR 20 W-30 HD SUPERIOR SAE 30	SUPER 8090 MC HYPOID 80W-90 HYPOID 85W-140	MULTI FETT 2 SPEZIALFETT FLM PLANTOGEL 2 N	GETRIEBEFLIESSFETT NLGI 0 RENOLIT DURAPLEX EP 00 PLANTOGEL 00N	RENOPLEX EP 1	HYPOID 85W-140	
BP	ENERGOL SHF 32/46/68	VISCO 2000 ENERGOL HD 30 VANELLUS M 30	GEAR OIL 90 EP HYPOGEAR 90 EP	ENERGREASE LS-EP 2	FLIESSFETT NO ENERGREASE HTO	OLEX PR 9142	HYPOGEAR 90 EP HYPOGEAR 85W-140 EP	
CASTROL	HYSPIN AWS 32/46/68 HYSPIN AWH 32/46	RX SUPER DIESEL 15W-40 POWERTRANS	EPX 80W-90 HYPOY C 80W-140	CASTROLGREASE LM	IMPERVIA MMO	CASTROLGREASE LMX	EPX 80W-90 HYPOY C 80W-140	
ELAN	HLP 32/46/68 HLP-M M32/M46	MOTORÖL 100 MS SAE 30 MOTORÖL 104 CM 15W-40 AUSTROTRAC 15W-30	GETRIEBEÖL MP 85W-90 GETRIEBEÖL B 85W-90 GETRIEBEÖL C 85W-90	LORENA 46 LITORA 27	RHENOX 34	-	GETRIEBEÖL B 85W-90 GETRIEBEÖL C 85W-140	
ELF	OLNA 32/46/68 HYDRELF 46/68	PERFORMANCE 2 B SAE 30 8000 TOURS 20W-30 TRACTORELF ST 15W-30	TRANSELF TYP B 90 85W-140 TRANSELF EP 90 85W-140	EPEXA 2 ROLEXA 2 MULTI 2	GA O EP POLY G O	MULTIMOTIVE 1	TRANSELF TYP B 90 85W-140 TRANSELF TYP BLS 80 W-90	
ESSO	NUTO H 32/46/68 NUTO HP 32/46/68	PLUS MOTORÖL 20W-30 UNIFARM 15W-30	GEAROIL GP 80W-90 GEAROIL GP 85W-140	MULTI PURPOSE GREASE H	FIBRAX EP 370	NEBULA EP 1 GP GREASE	GEAR OIL GX 80W-90 GEAR OIL GX 85W-140	
EVVA	ENAK HLP 32/46/68 ENAK MULTI 46/68	SUPER EVVAROL HD/B SAE 30 UNIVERSAL TRACTOROIL SUPER	HYPOID GA 90 HYPOID GB 90	HOCHDRUCKFETT LT/SC 280	GETRIEBEFETT MO 370	EVVA CA 300	HYPOID GB 90	
FINA	HYDRAN 32/46/68	DELTA PLUS SAE 30 SUPER UNIVERSAL OIL	PONTONIC N 85W-90 PONTONIC MP 85W-90 85W-140 SUPER UNIVERSAL OIL	MARSON EP L 2	NATRAN 00	MARSON AX 2	PONTONIC MP 85W-140	
FUCHS	RENOLIN 1025 MC *** TITAN HYDRAMOT 1030 MC ** RENOGEAR HYDRA * PLANTOHYD 40N ***	TITAN HYDRAMOT 1O3O MC TITAN UNIVERSAL HD	RENOGEAR SUPER 8090 M RENOGEAR HYPOID 85 W-14 RENOGEAR HYPOID 90	RENOLIT MP RENOLIT FLM 2 RENOLIT ADHESIV 2 PLANTOGEL 2 N	RENOSOD GFO 35 DURAPLEX EP 00 PLANTOGEL 00N	RENOPLEX EP 1	RENOGEAR SUPER 8090 MC RENOGEAR HYPOID 85W-140 RENOGEAR HYPOID 90	* When working in conjunction with wet-brake tractors, the inter-national specification J 20 A is necessary. ** Hydraulic oil HLP-(D) + HV. *** Hydraulic oil with vege-table oil base HLP + HV is bio-degradable and is therefore especially safe for the enviroment.
GENOL	HYDRAULIKÖL HLP/32/46/68 HYDRAMOT 1030 MC * HYDRAULIKÖL 520 ** PLANTOHYD 40N ***	MULTI 2030 2000 TC HYDRAMOT 15W-30 HYDRAMOT 1030 MC	GETRIEBEÖL MP 90 HYPOID EW 90 HYPOID 85W-140	MEHRZWECKFETT SPEZIALFETT GLM PLANTOGEL 2 N	GETRIEBEFLIESSFETT PLANTOGEL 00N	RENOPLEX EP 1	HYPOID EW 90 HYPOID 85W-140	
MOBIL	DTE 22/24/25 DTE 13/15	HD 20W-20 DELVAC 1230 SUPER UNIVERSAL 15W-30	MOBILUBE GX 90 MOBILUBE HD 90 MOBILUBE HD 85W-140	MOBILGREASE MP	MOBILUX EP 004	MOBILPLEX 47	MOBILUBE HD 90 MOBILUBE HD 85W-140	
RHG	RENOLIN B 10/15/20 RENOLIN B 32 HVI/46HVI	EXTRA HD 30 SUPER HD 20 W-30	MEHRZWECKGETRIEBEÖI SAE90 HYPOID EW 90	MEHRZWECKFETT RENOLIT MP DURAPLEX EP	RENOSOD GFO 35	RENOPLEX EP 1	HYPOID EW 90	
SHELL	TELLUS S32/S 46/S68 TELLUS T 32/T46	AGROMA 15W-30 ROTELLA X 30 RIMULA X 15W-40	SPIRAX 90 EP SPIRAX HD 90 SPIRAX HD 85/140	RETINAX A ALVANIA EP 2	SPEZ. GETRIEBEFETT H SIMMNIA GREASE O	AEROSHELL GREASE 22 DOLIUM GREASE R	SPIRAX HD 90 SPIRAX HD 85W-140	
TOTAL	AZOLLA ZS 32, 46, 68 EQUIVIS ZS 32, 46, 68	RUBIA H 30 MULTAGRI TM 15W-20	TOTAL EP 85W-90 TOTAL EP B 85W-90	MULTIS EP 2	MULTIS EP 200	MULTIS HT 1	TOTAL EP B 85W-90	
VALVOLINE	ULTRAMAX HLP 32/46/68 SUPER TRAC FE 10W-30* ULTRAMAX HVLP 32 ** ULTRAPLANT 40 ***	SUPER HPO 30 STOU 15W-30 SUPER TRAC FE 10W-30 ALL FLEET PLUS 15W-40	HP GEAR OIL 90 oder 85W-140 TRANS GEAR OIL 80W-90	MULTILUBE EP 2 VAL-PLEX EP 2 PLANTOGEL 2 N	RENOLIT LZR 000 DEGRALUB ZSA 000	DURAPLEX EP 1	HP GEAR OIL 90 oder 85W-140	* Bij gebruik op trekkers met natte remmen moet de internationale spe-cificatie J 20 A worden toegepast ** Hydrauliekolie HLP-(D) + HV *** Hydrauliekolie op plan-tenoliebasis HLP + HV is biologisch afbreekbaar, daarom milieuvriendelijk
VEEDOL	ANDARIN 32/46/68	HD PLUS SAE 30	MULTIGRADE SAE 80/90 MULTIGEAR B 90 MULTIGEAR C SAE 85W-140	MULTIPURPOSE	-	-	MULTIGEAR B 90 MULTI C SAE 85W-140	
WINTERSHALL	WIOLAN HS (HG) 32/46/68 WIOLAN HVG 46 ** WIOLAN HR 32/46 *** HYDROLFLUID *	MULTI-REKORD 15W-40 PRIMANOL REKORD 30	HYPOID-GETRIEBEÖL 80W-90, 85W-140 MEHRZWECKGETRIEBEÖL 80W-90	WIOLUB LFP 2	WIOLUB GFW	WIOLUB AFK 2	HYPOID-GETRIEBEÖL 80W-90, 85W-140	

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!

GB

PÖTTINGER

Appendix 1

EC Certificate of Conformity

conforming to EEC Directions 98/37/EG

We ALOIS PÖTTINGER Maschinenfabrik Gesellschaft m.b.H.

(name of supplier)

A-4710 Grieskirchen; Industriegelände 1

(full address of company - where this concerns authorized agents within the Common Market, also state the company name and manufacturer)

declare in sole responsibility, that the product

Trommelmäher CAT 230 plus, CAT 230 plus Conditioner Type PTM 331

(make, model)

to which this certificate applies, conforms to the basic safety and health requirements of EEC Directions 98/37,

(if applicable)

and to the other relevant EEC Directions.

(title and/or number and date of issue of the other EEC Directions)

(if applicable)

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

EN ISO 12100-1 EN ISO 12100-2

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

pa. Ing. W. Schremmer
Entwicklungsleitung

Grieskirchen, 20.02.2007

(Place and date of issue)

(Name and job function of authorized person)

D

Im Zuge der technischen Weiterentwicklung arbeitet die PÖTTINGER Ges.m.b.H ständig an der Verbesserung ihrer Produkte.

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

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

NL

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

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

E

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

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

FIN

Beroende på den tekniska utvecklingen arbetar PÖTTINGER Ges.m.b.H. på att förbättra sina produkter.

Vi måste därför förbehålla oss förändringar gentemot avbildningarna och beskrivningarna i denna bruksanvisning.

Däremot består det inget anspråk på förändringar av produkter beroende av denna bruksanvisning. Tekniska uppgifter, mått och vikter är oförbindliga.

Fel förbehållna. Ett eftertryck och översättningar, även utdrag, får endast genomföras med skriftlig tillåtelse av

ALoIS PÖTTINGER

Maschinenfabrik Gesellschaft m.b.H.

A – 4710 Grieskirchen

Alla rättigheter enligt lagen om upphovsmannarätten förbehålls.

F

La société PÖTTINGER Ges.m.b.H améliore constamment ses produits grâce au progrès technique.

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

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

S

Beroende på den tekniska utvecklingen arbe-tar PÖTTINGER Ges.m.b.H. på att förbättra sina produkter. Vi måste därför förbehålla oss förändringar gentemot avbildningarna och beskrivningarna i denna bruksanvis-ning. Däremot består det inget anspråk på förändringar av produkter beroende av denna bruksanvisning.

Tekniska uppgifter, mått och vikter är oförbindliga. Fel förbehållna.

I

La PÖTTINGER Ges.m.b.H è costantemente al lavoro per migliorare i suoi prodotti mantenendoli aggiornati rispetto allo sviluppo della tecnica.

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

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

N

Som et ledd i den tekniske videreutviklingen arbeider PÖTTINGER Ges.m.b.H. stadig med forbedring av firmaets produkter.

Derfor tar vi forbehold om endringer i forhold til bildene og beskrivelsene i denne bruksanvisningen, krav om endringer på allerede leverte maskiner kan ikke utledes fra dette.

Tekniske angivelser, mål og vekt er veiledende. Med forbehold om feil.

GB

Following the policy of the PÖTTINGER Ges. m.b.H to improve their products as technical developments continue, PÖTTINGER reserve the right to make alterations which must not necessarily correspond to text and illustrations contained in this publication, and without incurring obligation to alter any machines previously delivered.

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

P

A empresa PÖTTINGER Ges.m.b.H esforçase continuamente por melhorar os seus produtos, adaptando-os à evolução técnica.

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

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

DK

Som led i den tekniske videreudvikling arbejder PÖTTINGER Ges.m.b.H hele tiden på at forbedre firmaets produkter.

Ret til ændringer i forhold til figurerne og beskrivelserne i denne driftsvejledning forbeholdes, krav om ændringer på allerede leverede maskinen kan ikke udledes deraf.

Tekniske angivelser, mål og vægtangivelser er uforpligtende.

Der tages forbehold for fejl.

ALOIS PÖTTINGER
Maschinenfabrik Gesellschaft m.b.H
A-4710 Grieskirchen
Telefon: 0043 (0) 72 48 600-0
Telefax: 0043 (0) 72 48 600-511
e-Mail: landtechnik@poettinger.co.at
Internet: http://www.poettinger.co.at

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

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

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