

## Operating manual

Translated from the original instruction manual

Revision	02
Date printed	11.2014
Language	EN-EU
Machine number	KT449178
Document number	A132575940
Index	2014-11

# Machine identification

In order for your dealer to assist you as efficiently as possible, you will need to provide some information about your machine. Please enter the details here.

Designation	2624M - 2628M - 2632M
Operating width	2624: 2.4 m (7' 10") // 2628: 2.8 m (9' 2 <sup>1</sup> / <sub>4</sub> ") 2632: 3.2 m (10' 6")
Weight	2624: 583 kg (1285 lb) // 2628: 609 kg (1343 lb) 2632: 684 kg (1508 lb)
Machine number	
Accessories	
Address of supplier	
Address of manufacturer	Kverneland Group Kerteminde AS Taarupstrandvej 25 DK -5300 Kerteminde - Denmark Tel./fax: +45 65 19 19 00 / +45 65 19 19 99 web: <a href="http://www.kvernelandgroup.com">www.kvernelandgroup.com</a>

<b>Contents</b> .....	<b>4</b>	General instructions	70
Instruction manual target group	4	PTO shaft check	72
The meaning of the symbols	5	Lubrication	73
<b>Blank page</b> .....	<b>6</b>	Service - check	75
<b>Safety</b> .....	<b>7</b>	Replacement	93
For your safety	7	<b>Extra equipment</b> .....	<b>112</b>
Lights and reflective equipment	11	High skids	112
Who can operate the machine?	12	Knife quick release [PROFIT]	112
Connecting	12	Straw divider	113
Load capacity	13	Swath roller	113
Transport on public roads	14	Swathboard	113
Use	15	Universal joint for the PTO shaft	114
Disconnection	17	Chain for locking the lift arms	114
Maintenance	18	Spring catch for hilly ground	114
Further safety instructions	20	Light equipment	115
<b>About the machine</b> .....	<b>21</b>	<b>Troubleshooting</b> .....	<b>116</b>
The machine's field of application	21	Cutterbar	116
Machine characteristics	22	PTO shaft	117
Synopsis	23	<b>Warranty</b> .....	<b>118</b>
Technical data	24	Guidelines for warranty	118
Tractor requirements	26	<b>Disposal</b> .....	<b>119</b>
Permissible total weight of the tractor	27	Metal parts	119
<b>Preparation</b> .....	<b>32</b>	Rubber parts	119
Preparing the machine	32	Plastic	119
PTO shaft length	33	Hydraulic oil and lubricants	119
<b>Assembly - attachment</b> .....	<b>38</b>	<b>EU declaration of conformity</b> .....	<b>120</b>
Coupling the tractor	39	EU Directive 2006/42/EC	120
PTO shaft	46	<b>Notes</b> .....	<b>121</b>
Hydraulics	47	<b>Technical information</b> .....	<b>122</b>
First start-up of machine	49	Conversion table	122
Machine in the transport position	50	Lubricants	122
<b>Transport on public roads</b> .....	<b>52</b>	Torque moment	123
Safety	52	<b>Index</b> .....	<b>124</b>
Before travelling on public roads	52		
Checking the machine	53		
Travelling on public roads	53		
<b>Operation</b> .....	<b>54</b>		
Safety	54		
Before operating	55		
<b>Cleaning</b> .....	<b>62</b>		
Before cleaning	62		
Cleaning	63		
After cleaning	63		
<b>Parking and Storage</b> .....	<b>64</b>		
Before storage	64		
Parking / disconnection of the machine	64		
Storage	68		
<b>Maintenance</b> .....	<b>69</b>		
For your safety	69		

# Contents

---

Instruction manual target group



**Simplified illustrations to improve understanding**

Illustrations of the machine in this instruction manual may in some cases not show guards or protective equipment open to aid understanding.

Ensure that the safety instructions are complied with and the instructions in the instruction manual are followed.

Failure to do so can endanger lives.

This instruction manual is intended for trained farmers and others who are qualified to work in agriculture and who are familiar with assembling equipment.

Minimum age

Children under the age of 16 are not permitted to operate the machine.

For your safety

Read this instruction manual thoroughly before use and assembly. This will enable you to have optimal working conditions and to work in safety.

For the employer

Every employee must be trained how to use this machinery at regular intervals (at least once a year) in accordance with the employer's insurance guidelines. Untrained or unauthorised persons must not use this machine.

Instructions

Your dealer will assist with the instructions on how to use and maintain this machinery.

## The meaning of the symbols

We have used different symbols to make the text clear. An explanation follows:

- A dot symbol marks a list of instructions or information.
- ▶ A triangle marks an action you must carry out.
- An arrow refers you to other parts of the text.

We have also used pictograms to help you find relevant places in the text.



Denotes tips or instructions on use.



Denotes information that requires particular attention.



A spanner indicates tips for assembling and settings.



### **Warning**

A warning triangle indicates important safety instructions. If these are not adhered to, it may result in:

- Serious errors in the machine function.
- Damage to the machine.
- Injury or accident.



This pictogram indicates that the tractor can be started.



- This pictogram indicates that the tractor engine must be stopped, the handbrake applied and the ignition key removed.

Blank page

---



## For your safety

**Know your equipment and its limits. Read the manual through before attempting to start up and operate the unit.**

This chapter includes general safety instructions. Furthermore, each chapter in the instruction manual includes specific safety instructions that are not described here. The safety instructions must be complied with

- For your own safety.
- For the safety of others.
- To ensure the safety of the machine.

When working with agricultural machines wrong handling can result in various dangers. Therefore, you should always be very thorough and never work under pressure.

### **The operator must be receive regular training**

Persons working with the machine must receive regular training on these safety instructions.

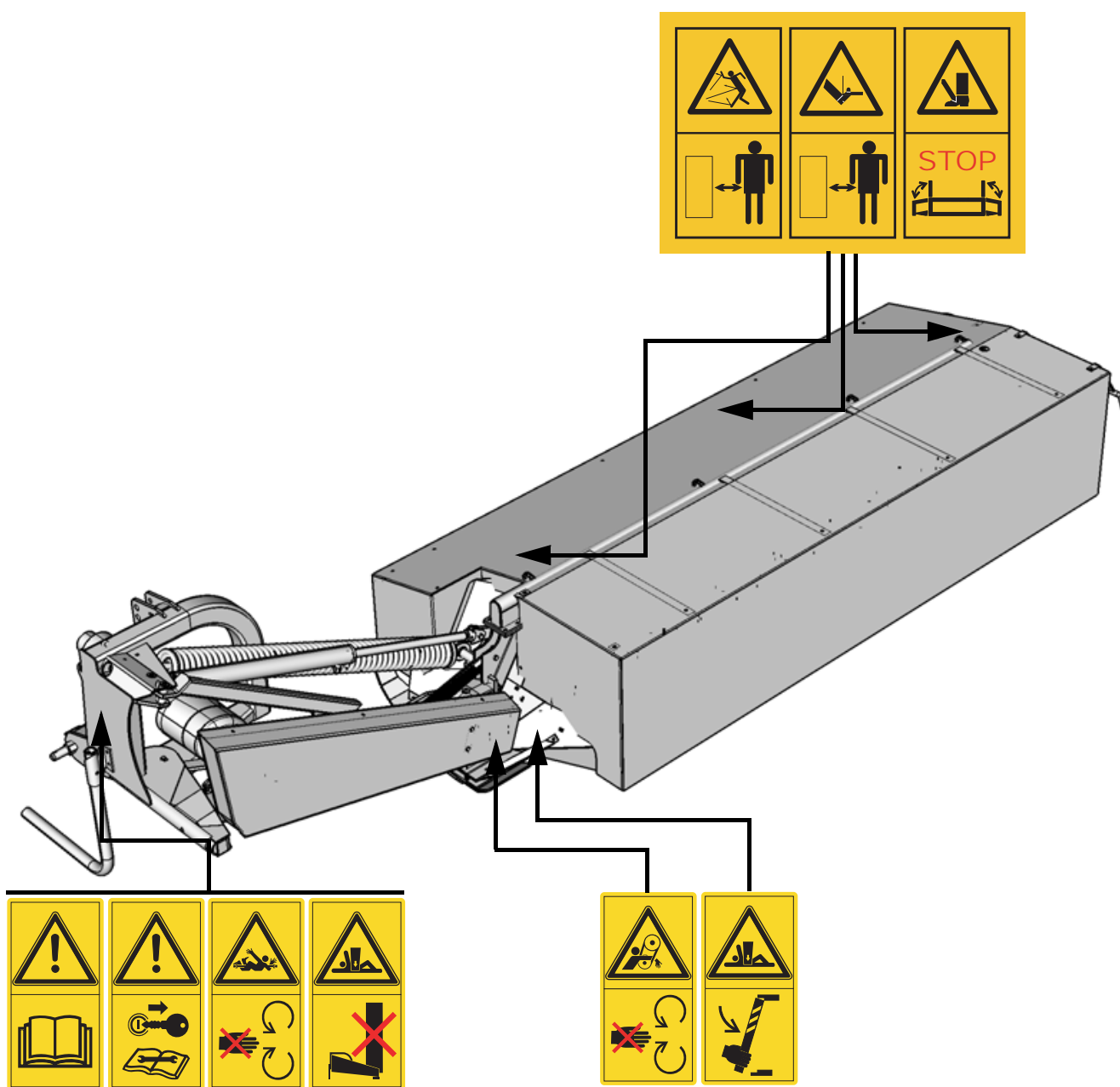
The safety instructions should be complied with according to local law for agricultural machines.

# Safety



## Safety labels

On the machine you will find labels relating to your safety. These labels must not be removed. If the labels become illegible or detached, new labels can be ordered and affixed to the relevant areas.





**Risk from loose chippings**

Keep a safe distance from the machine. Do not allow any persons near the machine when it is working. If the guard is damaged, it must be replaced.

**Risk of injury to feet**

Keep away from the machine. The protection must always be in place when the machine is working.

**Risk of injury to feet**

The safety guard must always be in place when the machine is working.



**Stop the tractor before working on the machine**

Be careful! Always let the tractor come to a stop and remove the ignition key before you repair, rinse, lubricate or carry out any maintenance work on the machine.



**Read and observe the instruction manual**

Be careful! Read and ensure you understand the instruction manual before the machine is used.



**Ensure no body parts get caught in the PTO shaft**

Guards may not be removed or opened until the machine has stopped rotating. The tractor engine must be stopped, the ignition key removed and the handbrake applied.



**Ensure no clothing/body parts get caught in the V belt transmission**

Guards may not be removed or opened until the machine has stopped rotating. The tractor engine must be stopped, the ignition key removed and the handbrake applied.



### **Use the correct support for the machine**

Danger of crushing!

Never work under the machine without using the correct support. The tractor engine must be stopped, the ignition key removed and the handbrake applied.



### **Always park the machine in the working position**

Danger of crushing!

The machine must never be uncoupled in the transport position. The machine will become unstable and may overturn.



## Lights and reflective equipment

Only available as extra equipment

Electrical connections



### Checking the electric cable

Check the electric cable. The insulation of the electric leads must not be unduly worn, and the cables must not be hanging loose. Electric cables with cable insulation that is missing or worn through must be replaced. Otherwise, this will damage the machine.

- ▶ Connect the cable provided to the tractor:
- ▶ Connect the 12 V power supply plug to the tractor's 7-pin connector.

Connection



7-pin connector



Observe the local regulations concerning lights and markings for road transport. Contact your dealer if the lights do not work as stated.



Observe the local laws and regulations concerning lighting equipment when travelling on public roads. Contact your dealer if the lighting equipment does not work as stated.



### Reflective equipment for slow-moving vehicles – SMV

This triangular sign must be placed centrally on the rear of the tractor or machine so that it is clearly visible at all times when the machine is in transport position. This sign is compulsory for machines that are being transported at speeds of below 40 km/h (25 mph) on public roads.

Transport on public roads



This machine must be transported on public roads **at speeds of less than 40 km/h (25 mph) only.**

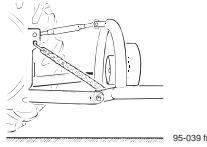
→ »Speed when driving on public roads« page 53



## Who can operate the machine?

Operators of this machine should only be trained farmers and others who are qualified to work in agriculture and who are familiar with assembling equipment. Untrained or unauthorised members of staff may not use this machine.

## Connecting



### Correct attachment of the machine

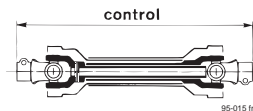
The machine must be correctly connected, following the instructions. The machine can be detached from the tractor if the connection is not carried out properly. Incorrect attachment can lead to accidents.

When attaching the machine to the tractor you must therefore:

- Make sure that the tractor cannot roll.
- Make sure that the tractor and the machine belong to the same category.
- Never stand between the tractor and the machine during attachment.
- Use the hydraulic three point suspension slowly and carefully.

Following the above instructions will protect you and others from injury.

Failure to pay attention to the above instructions can result in serious injury.



### PTO shaft check

Refer to the manufacturer's safety instructions delivered with the PTO shaft.

### Make electrical connection after attachment

When fitting the lighting device, the power supply to the tractor must be turned off.

This will prevent short circuits and damage to the electric circuit.

There is a risk of burns and other serious injuries if the electrical systems short circuit.



## Only connect the hydraulics when the system is depressurised

You should only connect the hydraulic hoses to the tractor's hydraulics when the hydraulic system on both the tractor and the machine is depressurised.

There is a risk that the machine will move accidentally.

Accidental movement of the machine can result in serious injury.



## The hydraulic system should be checked regularly

All hoses and fittings should be checked regularly for visible damage. Hydraulic hoses also wear without any visible damage.

Defective hydraulic hoses can cause injury or fire.

Never check the hydraulic hoses using your hands. Use suitable equipment.

## Colour marking of hydraulic connections

The hydraulic connections between the tractor and the machine must be colour marked.

By colour marking the hydraulic connections you avoid wrong operation of the machine.

Incorrect operation or unintentional movement of the machine may result in serious injuries.

## Load capacity

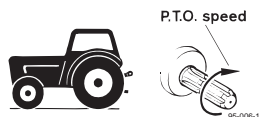


## Compliance with total weight, axle pressure, carrying capacity of the tyres, and minimum weight

Neither the tractor's total weight, axle pressure nor the carrying capacity of the tyres may be exceeded with front mounted and rear mounted machines.

To ensure the manoeuvrability of the tractor, the load on the front axle must be at least 20% of the tractor's weight.

Transgression can result in uncontrolled driving and accidents.



## Be careful when working around the PTO shaft

When working on the PTO shaft, the tractor PTO outlet must be disconnected, the tractor must be stopped and the ignition key removed.

This prevents the PTO shaft from suddenly starting to rotate.

Failure to follow the safety instructions may result in serious injuries.



## Weight/power ratio between machine and tractor

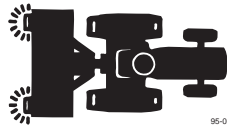
The machine may only be connected to a tractor with a proper size and performance.

The tractor's size and P.T.O outlet must correspond to the power consumption of the machine and its weight.

Wrong weight/power ratio can result in damage to both machine and tractor.



## Transport on public roads



**Check that the machine complies with all local laws on road use**  
When driving on public roads, the machine must comply with all local laws.

This ensures your safety and that of other road users.  
Failure to meet the requirements can result in accidents.

Compliance with the current requirements of local laws includes, for example:

- Mounting of lights, warning and safety equipment.
- Compliance with permitted transport width, weight, axle pressure, tyre carrying capacity and total weight.

### **Carrying passengers on the machine is prohibited**

It is dangerous and illegal to carry passengers on the machine.

The machine is not approved for personal transportation.

Transporting persons on the machine may result in serious injuries and death.



### **Mounted machines will change the driving and braking abilities of the tractor**

Be aware of changed driving and braking abilities when driving with mounted machines.

Especially when driving in curves and turns you should be aware of the machine's width and swing length.

If no attention is paid it will result in uncontrolled driving and serious accidents.



### **Pay due attention to the tractor's braking ability**

The braking ability must not be exceeded for either front mounted or rear mounted machines.

At least 50% of the vehicle's total weight must rest on the braked wheel to ensure the tractor's braking ability.

Transgression can result in uncontrolled driving and accidents.



### **Adjust the speed according to the road conditions**

Adjust driving speed according to the conditions on the road.

Bad road conditions and high speeds can lead to an overloading of the tractor and machine parts.

Driving with high speed can result in accidents and damages on both machine and tractor.



## Use



95-002-1 fr

### **The operator should be instructed carefully before the machine is put into use**

The machine should only be used if the operator has been given thorough instructions; this instruction manual must be read and understood.

Thorough machine instruction allows safe usage.

Insufficient instructions can result in wrong usage of the machine and accidents.



95-008 fr

### **Check that the machine has no technical faults**

Only use the machine if it has no technical faults.

This ensures that the machine is operating correctly and safely.

A machine with technical faults and defects can be dangerous.



95-093 fr

### **Do not remove the protective guards**

Check that all protective guards are in place before use.

This ensures that the machine will give maximum protection to the operator.

If the safety guards are removed or not used, it may result in serious injuries and accidents.



95-011 fr

### **Check the tyre pressure of the tractor regularly**

Carry out regular checks of the tractor's tyre pressure.

This ensures the road holding ability and prevents careening on road bends and turns.

Careening on bends and turns can lead to accidents.

### **Carrying passengers on the machine is prohibited**

It is dangerous and illegal to carry passengers on the machine.

The machine is not approved for personal transportation.

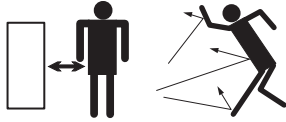
Transporting persons on the machine may result in serious injuries and death.



## Check the surrounding area before starting to use the machine

Before driving and using the machine the surrounding area should be checked.

This prevents persons and animals in the vicinity from being harmed. If the surrounding area is not checked, it may result in serious injuries to persons or animals.



## Keep away from the machine

No unauthorised persons should be close to the machine when active. This will ensure that no dangerous situations can arise.

Persons close to the machine during operation are at risk of being severely injured.

## Child safety

Never assume that children are still where you last saw them.

Take care to ensure your machine is secured if children are in the working area.

Never allow children to play on or operate the machine.

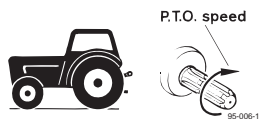


## Checking bolts on moving parts

Check that all bolts on moving parts are correctly tightened.

Tightening parts prevents moving parts jarring.

Parts which are not correctly tightened can work loose and damage the machine.

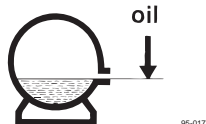


## Maintain the rotational speed on the tractor PTO outlet

It is dangerous to connect a tractor with PTO = 1000 rpm to a machine intended for PTO = 540 rpm.

The machine is not designed for this speed.

It can result in damage on the machine and be a danger for persons nearby.



## Check the transmission oil level regularly

Check that the transmission is filled with oil and that the oil level is correct.

A correct oil level ensures the transmission a long and trouble free service life.

An incorrect oil level will damage the transmission.



## Stop the machine immediately in case of malfunction

In case of malfunction, the machine should be stopped immediately.

Malfunction on the machine can bring surrounding persons and animals in danger.

Malfunctioning machines can cause dangerous situations to arise.



## Disconnection



### **Heightened risk of personal injury when disengaging**

When disconnecting the machine from the tractor there is an enhanced risk of personal injury.

Following the above instructions will protect you and others from injury.

Failure to pay attention to the above instructions can result in serious injury.

Therefore, when disconnecting:

- Make sure that the tractor cannot roll.
- Never stand between the tractor and the machine during disconnection.
- Use the hydraulic three point suspension slowly and carefully.
- Make sure that the machine is standing on a safe, level surface.
- Only disconnect the hydraulic hoses, when the hydraulic system is without pressure on both the tractor and the machine.



## Maintenance

### **Comply with the service and maintenance intervals given in the instructions**

Comply with the intervals for service and maintenance as given in the instructions.

By complying with the maintenance intervals you assure that the machine will operate without malfunctions and give maximum protection to the surroundings.

An incorrectly maintained machine is a danger to the environment.

### **Always use original spare parts on the machine**

Always use original spare parts.

Original spare parts should be used for safety reasons

The manufacture warranty becomes void if non-original spare parts are being used.



### **High risk when performing service and maintenance work**

When performing service or maintenance work there is a higher risk of injury.

Following the above instructions will protect you and others from injury.

Failure to pay attention to the above instructions can result in serious injury.

Therefore, when you perform maintenance work:

- Disconnect the P.T.O shaft.
- Depressurise the hydraulic system.
- Stop or disconnect the tractor.
- Check that the machine is parked safely, support it if necessary.
- Do not use parts on the machine to climb the machine, but employ the proper units for climbing.

### **Disconnect the power source when working on the electrical systems**

Always disconnect the power source before you start working on the electrical system.

This will prevent short circuits and damage to the electric circuit.

There is a risk of burns and other serious injuries if the electrical systems short circuit.



### **Replacing the hydraulic hoses**

Replace the hydraulic hoses at least once every 6 years.

Hydraulic hoses also wear without any visible damage.

Defective hydraulic hoses may cause serious injury.

**Be careful when cleaning with high pressure cleaning equipment**

Only clean bearings, hydraulic hoses, plastic components, electrical control boxes and electrical equipment with low water pressure.

By cleaning with low water pressure you will protect sensitive equipment on the machine.

Using high water pressure to clean could damage vital parts of the machine.

**Disconnect the battery, engine control unit and alternator before welding**

The tractor battery and alternator should be disconnected before performing welding work on the machine.

This will protect the tractor alternator during welding work.

The tractor alternator could be damaged or destroyed if the electric connections are not disconnected before performing welding work.



95-018

**Tighten all fittings on moving parts**

Check that bolts on moving parts are tightened after performing maintenance work.

Tightening parts prevents moving parts jarring.

Parts which are not correctly tightened can work loose and damage the machine.



95-014

**Do not alter the machine construction**

The technical construction of the machine should not be altered and machine maintenance should be performed.

A well maintained machine will offer maximum protection.

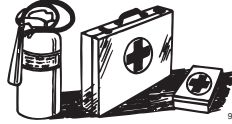
A poorly maintained machine will not offer proper protection and could be dangerous.



## Further safety instructions



95-005 fr



95-013 fr

### **Follow the instructions when working on the machine**

The machine safety instructions should always be complied with.

This will protect you and others from injury.

Failure to follow the safety instructions may result in serious injuries.

Apart from the safety instructions the following should be complied with:

- Environmental legislation.
- The general technical, medical and road traffic regulations.
- Instructions in this instruction manual.
- Instructions for use, maintenance and service.

This chapter includes general information about your machine. Furthermore, following information are included:

- The machine's field of application.
- The machine characteristics.
- View of the machine.
- Technical data.

## The machine's field of application

2624M - 2628M - 2632M is a mower intended to swathe grass and mow common grass and cereal crops. The instructions for use are given in the following chapters.

## Correct usage of the machine

The machine can be used in fields for mowing the following crops:

- All types of grass
- All types of clover
- Whole crop
- Alfalfa

## Incorrect use of the machine

The machine must not, under any circumstances, be used for the following:

- Cutting grass in park facilities and lawns
- Cutting grass on the verges of public roads
- Harvesting corn
- Harvesting sorghum
- Clearing forest floors or other densely wooded areas
- Clipping or pruning bushes or hedgerows

Similar use is outside the intended applications of the machine.

The manufacturer does not stand responsible for any damages caused by improper application of the machine. The user is fully responsible for the machine.

## Machine characteristics

### **Description of the machine**

2624M - 2628M - 2632M is a mower which operates on the tractor's right-hand side and is connected to the tractor's lift arms.

The machine's cutting unit is connected to the hitch which is fitted to the tractor's lift arms. The cutting unit is balanced using a strong spring which secures the machine's cutterbar, following the ground precisely and cutting the crop uniformly.

The machine's cutting discs are equipped with durable, reversible knives, which have a high capacity when used at a high speed of rotation, even for difficult crops.

Even at high mowing speeds, the machine is able to mow the crop cleanly and uniformly. For safety reasons, it is recommended that the speed does not exceed 15 km/h (9 mph).

The cutterbar is fitted with a guard, which protects it against moving objects. The guard must never be removed from the machine and must always be kept in good condition.

### **Solid construction**

Thanks to a solid construction and a flexible build up the machine is both strong and reliable.

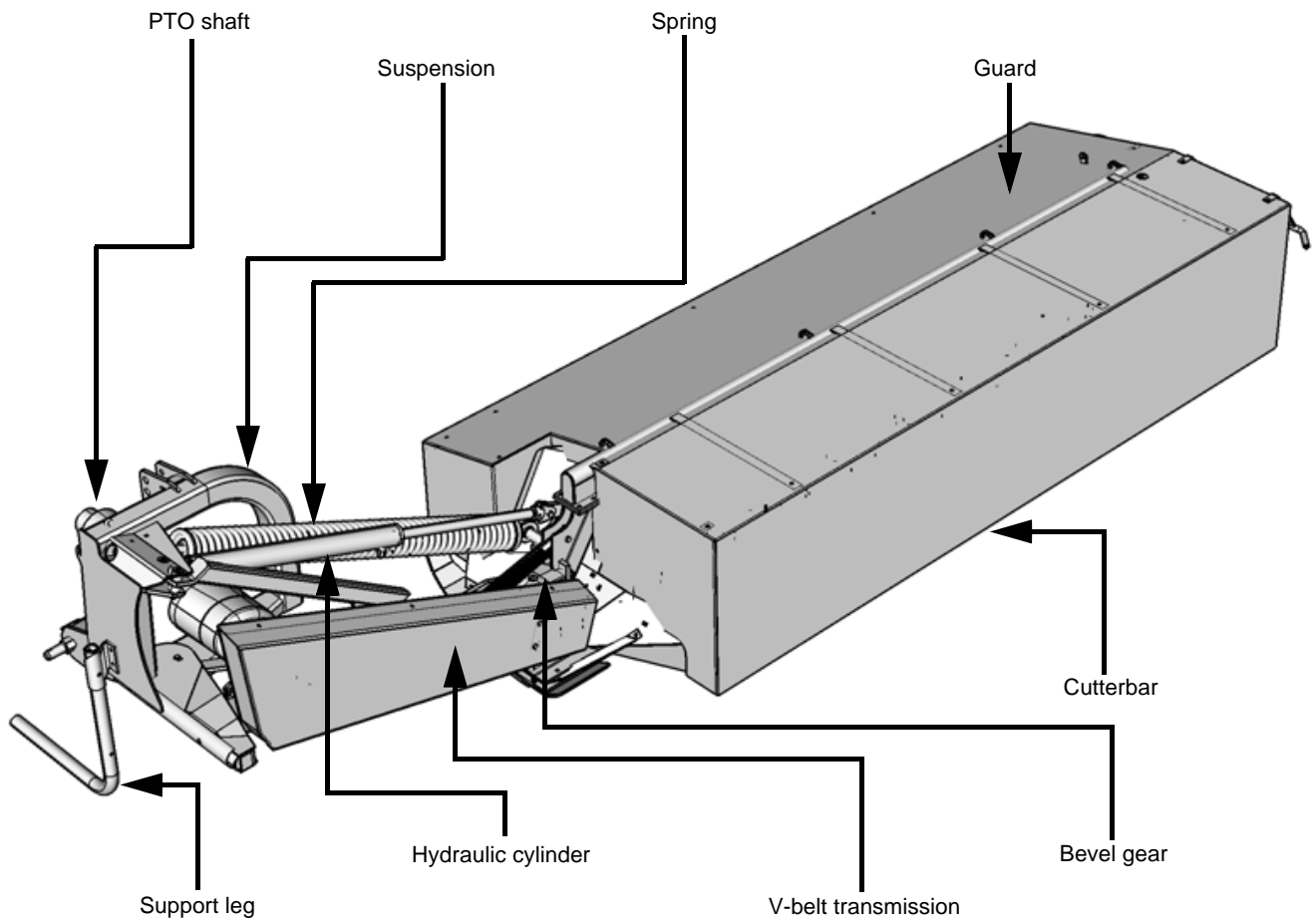
### **Quick and easy lifting of the cutterbar when turning on the headland**

The machine's cutterbar is raised hydraulically without the use of tools on the headland.

### **Your safety when using the machine**

To make working with the machine as safe as possible the machine complies with EC regulations. The machine is CE marked.

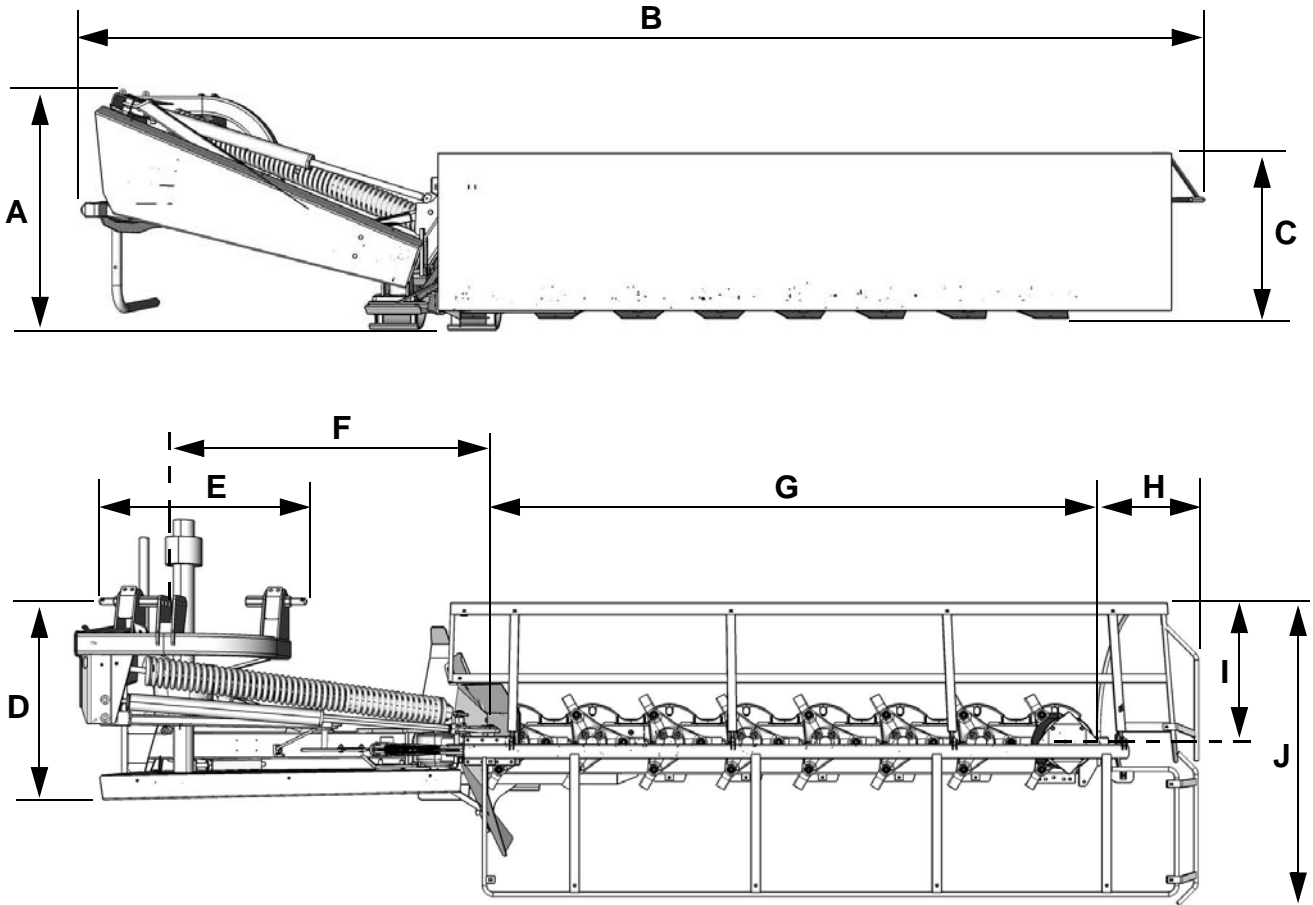
## Synopsis



# About the machine

## Technical data

### Machine dimensions



Dim.	Unit	2624M	2628M	2632M
A	mm / ft in	1070 / 3' 6"		
B	mm / ft in	3950 / 12' 11½"	4330 / 14' 2½"	5150 / 16' 11"
C	mm / ft in	750 / 2' 5½"		
D	mm / ft in	910 / 2' 12"		
E	mm / ft in	900 - 1140 / 2' 11½" - 3' 8⅞"		
F	mm / ft in	1400 / 4' 7"		
G	mm / ft in	2400 / 7' 10½"	2800 / 9' 2¼"	3200 / 10' 6"
H	mm / ft in	160 / 6¼"		
I	mm / ft in	700 / 2' 3½"		
J	mm / ft in	1350 / 4' 4½"		

## Machine specifications

	Unit	2624M	2628M	2632M
Net weight	kg	583	609	684
	lb	1285	1343	1508
PTO (power take off)	rpm	540		
Power requirement, minimum	kW	33	37	40
	HP	45	50	55
PTO shaft with freewheel		Standard		
Number of cutting discs	parts	6	7	8
Number of knives	parts	12	14	16
RPM, cutting discs	rpm	3000		
Stubble height	mm	20-100*		
	in	3/4"-4"*		
Cutting width	m	2.4	2.8	3.2
	ft in	7' 10 1/2"	9' 2 1/4"	10' 6"
Hydraulic pressure	bar	180		
	Psi	2610		
Noise level	dB(A)	85		
Cutting speed	kph	6 - 15		
	mph	3.7 - 9.3		
Transport width	mm	1400		
	ft in	4' 7"		

\* High skirts are available as extra equipment.

→ »Stubble height« page 57

→ »Extra equipment« page 112

# About the machine

---

## Tractor requirements



### **Tractor weight and size**

The tractor must be of the appropriate size for its weight. Local legislation governing this ratio must be observed.

The correct ratio between tractor and machine ensures correct braking functions and manoeuvrability.

An incorrect ratio between tractor and machine can be dangerous.

## Permissible total weight of the tractor



### **Compliance with total weight, axle pressure, carrying capacity of the tyres, and minimum weight**

Neither the tractor's total weight, axle pressure or the carrying capacity of the tyres may be exceeded with front mounted and rear mounted machines.

To ensure the manoeuvrability of the tractor, the load on the front axle must be at least 20% of the tractor's weight.

Transgression can result in uncontrolled driving and accidents.

The maximum permissible unladen weight of the tractor including static axle and tyre pressures must be checked before the machine is used.

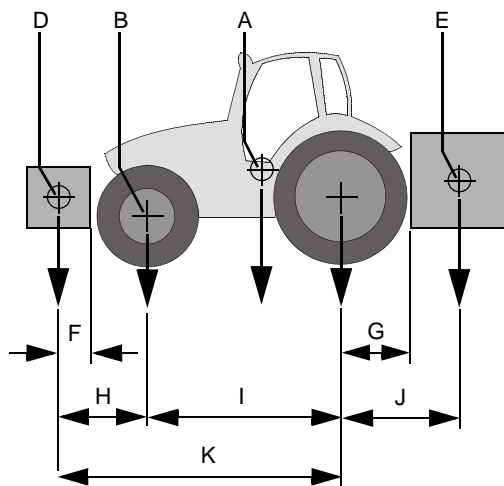
When connecting machines to the tractor's lift, ensure that:

- The tractor's permitted total weight is not exceeded.
- The permitted loads for the front or back axle are not exceeded.
- The permitted tyre pressures are not exceeded.
- The permitted carrying capacity of the tyres is not exceeded.
- The minimum load on the tractor's front axle is not less than that specified by the tractor manufacturer.
- The minimum load on the tractor's rear axle is not less than that specified by the tractor manufacturer.



Also take into account the weight of water in tyres, extra equipment, etc.

# About the machine



Before starting to use the machine, the tractor must be checked for compliance with the above conditions.

Most of the measurements and weight specifications in the diagram can be found in the tractor's instruction manual. If, however, this is not the case, you should contact the relevant tractor dealer to obtain the missing information.

	Specification	Unit
<b>A</b>	Tractor unladen weight (see instruction manual for the tractor)	kg (lb)
<b>B</b>	Weight, front axle (see instruction manual for the tractor)	kg (lb)
<b>C</b>	Weight, rear axle (see instruction manual for the tractor)	kg (lb)
<b>D</b>	Unladen weight on front-mounted machine (see "Machine specifications")	kg (lb)
<b>E</b>	Unladen weight on rear-mounted machine (see "Machine specifications")	kg (lb)
<b>F</b>	Distance from lifting eyes to the centre of the front-mounted machine	cm (inch)
<b>G</b>	Distance from centre of the rear axle to lifting eyes/hitch on tractor	cm (inch)
<b>H</b>	Distance from centre of the front axle to centre of the front-mounted machine	cm (inch)
<b>I</b>	Distance between front and rear axles	cm (inch)
<b>J</b>	Distance from centre of the rear axle to centre of the rear-mounted machine	cm (inch)
<b>K</b>	Distance from centre of the rear axle to centre of the front-mounted machine	cm (inch)

## Calculation

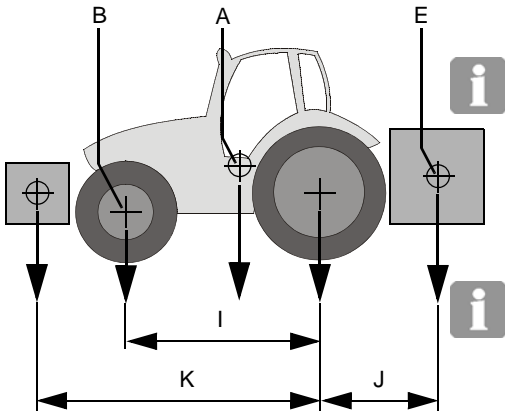
The values "A" to "K" can be inserted in formulae.

### Front ballast for rear-mounted machine

Calculation of the front ballast for rear-mounted machine.

Front ballast [kg/lb]:

$$\frac{(E \times J) - (B \times I) + ((A \times 0,2) \times I)}{K}$$



It is recommended that the smallest permissible load [kg/lb] on the tractor's front axle is at least 20% of the tractor's unladen weight [A]. Information can be found in the instruction manual for the tractor.

→ »Estimation« page 31

→ »Carrying capacity of the tyres« page 31



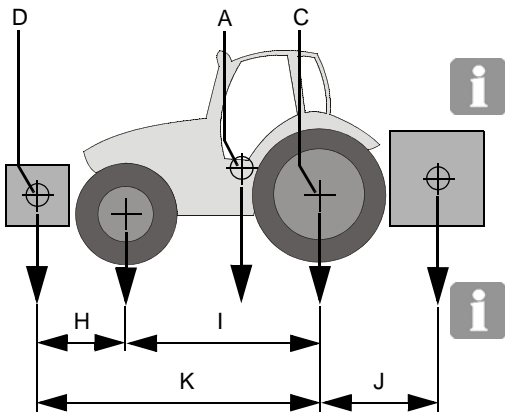
The calculation is only intended as a guide.

### Rear ballast for front-mounted machine

Calculation of the rear ballast for front-mounted machine.

Rear ballast [kg/lb]:

$$\frac{(D \times H) - (C \times I) + ((A \times 0,45) \times I)}{I + J}$$



It is recommended that the smallest permissible load [kg/lb] on the tractor's rear axle is at least 45% of the tractor's unladen weight [A]. Information can be found in the instruction manual for the tractor.

→ »Estimation« page 31

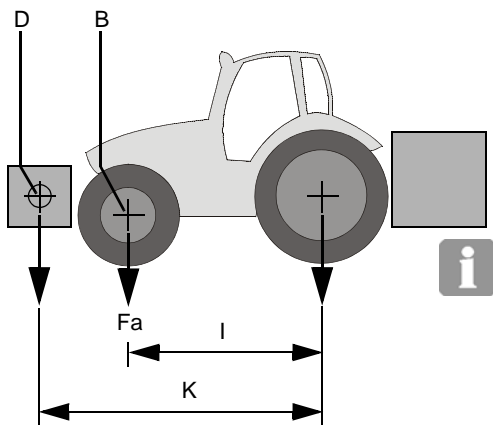
→ »Carrying capacity of the tyres« page 31



The calculation is only intended as a guide.

# About the machine

## Front axle load



Calculation of the actual load on the front axle (Fa).

Actual load on the front axle (Fa) [kg/lb]:

$$F_a = \frac{B + D \times K}{I} - \frac{D \times K}{I}$$

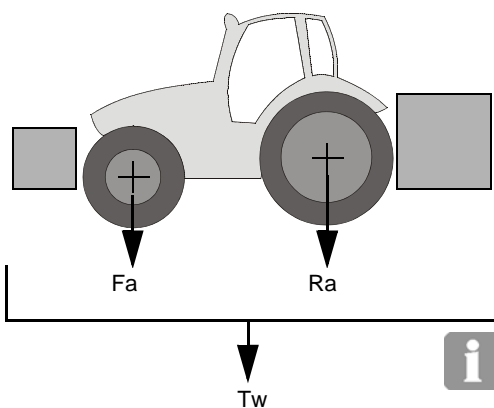
→ »Estimation« page 31

→ »Carrying capacity of the tyres« page 31



The calculation is only intended as a guide.

## Rear axle load



Calculation of the actual load on the rear axle (Ra).

Actual load on the rear axle (Rwra) [kg/lb]:

$$R_a = T_w - F_a$$

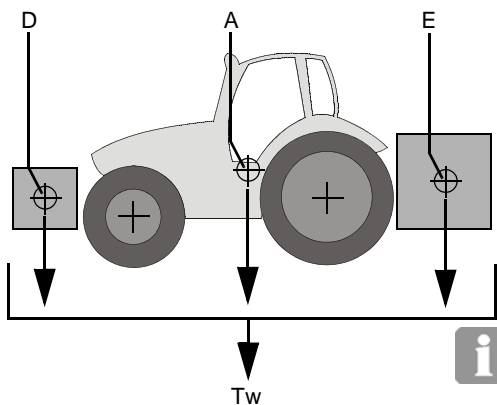
→ »Estimation« page 31

→ »Carrying capacity of the tyres« page 31



The calculation is only intended as a guide.

## Total weight



Calculation of the vehicle total all-up weight (Tw).

Total all-up weight (Tw) [kg/lb]:

$$T_w = D + A + E$$

→ »Estimation« page 31

→ »Carrying capacity of the tyres« page 31



The calculation is only intended as a guide.

## Carrying capacity of the tyres

Information on the carrying capacity for front and rear tyres respectively can be found in the tyre manufacturer documentation.



- The carrying capacity for front tyres gives the maximum permissible load for one front tyre.
  - With a normal wheel configuration on the tractor's front axle (2 wheels in total), the maximum permissible carrying capacity of the tyre is multiplied by 2.
  - If dual wheels are fitted on the tractor's front axle (4 wheels in total), the maximum permissible carrying capacity of the tyre is multiplied by 4.



- The carrying capacity for rear tyres gives the maximum permissible load for one rear tyre.
  - With a normal wheel configuration on the tractor's rear axle (2 wheels in total), the maximum permissible carrying capacity of the tyre is multiplied by 2.
  - If dual wheels are fitted on the tractor's rear axle (4 wheels in total), the maximum permissible carrying capacity of the tyre is multiplied by 4.

## Estimation

- The actual load [kg/lb] on both front and rear axle must not exceed the maximum permissible loads given in the instruction manual for the tractor.
- The tyre carrying capacity [kg/lb] (front and rear) must be higher than the maximum permissible loads on the front and rear axle given in the instruction manual for the tractor.
- The actual total weight [kg/lb] must not exceed the maximum permissible total weight given in the instruction manual for the tractor.



If this requirement is not observed, machines must not be fitted to this tractor.

# Preparation

## Preparing the machine

The machine is divided into its main components for transport to the user. The machine must be assembled in accordance with the specific assembly instructions delivered with each machine.



### **Do not try to assemble the machine yourself**

Trained staff are required to assemble the machine. Do not carry out assembly work yourself. The following must be observed to ensure that the machine is in good working order:

- Adhering to the sequence of the work steps.
- Adhering to the tolerances and tightening torques of bolts, screws and component parts of the machine.
- Knowledge of occupational safety when assembling the machine.

**Incorrect assembly can cause accidents or damage to the machine.**



If parts are missing and/or are damaged during transport, please inform the dealer, importer or manufacturer immediately.

<b>Check list of component parts</b>	<b>Quantity</b>
PTO shaft	1
Instruction manual	1
Spare parts manual	1
Additional parts	See delivery note

## Instruction manual

The instruction manual belongs with the machine and must always be kept on or by the machine.

## PTO shaft length

The length of the PTO shaft is factory-set, and is suitable for virtually all types of tractor. The PTO will only need to be corrected in a few exceptional cases, to achieve the correct length for certain tractors. Check the length of the PTO shaft on every tractor before using for the first time.

A user manual is supplied with the PTO shaft. The user manual contains information on the version of the PTO shaft in question and details the correct PTO shaft length for the tractor. The description and information in the user manual must be observed.

## Safety



### **Stop the tractor and secure it**

Before uncoupling:

- ▶ Disconnect the tractor's PTO outlet.
- ▶ Lower the tool to the ground.
- ▶ Neutralise all hydraulics.
- ▶ Stop the tractor.
- ▶ Remove the ignition key.
- ▶ Apply the handbrake.
- ▶ Secure the tractor to prevent it from rolling.

**Failure to secure the tractor to prevent it from rolling could endanger lives.**

### **Checking the angle of the lock**

The PTO shaft has a wide hinged joint which gives the tractor a steering angle of up to 80°. Ensure that the PTO shaft is not damaged when performing sharp turns. This can result in damage to the machine.

### **Correct length**

If the PTO shaft is too long, it must not be used. It will damage the tractor and the machine.

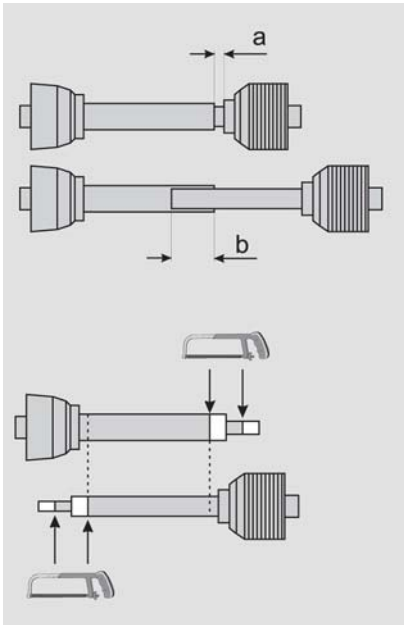
# Preparation

## Checking the PTO shaft length



- ▶ Couple the machine to the tractor with the PTO shaft.
- ▶ Stop the tractor, remove the ignition key and secure the tractor to prevent it from rolling.

## Shortening the PTO shaft



- ▶ Pull the PTO shaft apart.
- ▶ Fit one half on the tractor's PTO outlet.
- ▶ Fit the other half on the machine's PTO input shaft.
- ▶ Position the two halves of the shaft side by side and:
  - Check that the halves of the shaft have a minimum overlap of 200 mm (8") [b].
  - Check that the PTO shaft has a minimum clearance of 20 mm (7/8") [a].
- ▶ Shorten both profile tubes and the protective tube by the same amount.
- ▶ Deburr the ends of both profile tubes.
- ▶ Clean any metal shavings or similar from the profile tubes.
- ▶ Grease the sliding surfaces of the profile tubes thoroughly.
- ▶ Fit and connect the two halves of the shaft.

## Fitting the PTO shaft



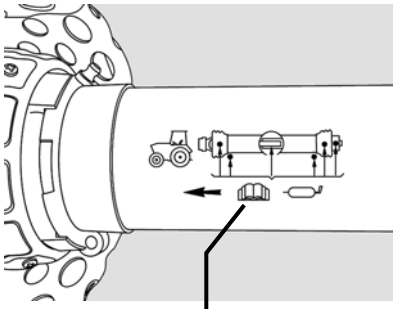
### Initial connection of the machine

Exercise caution when a new machine is connected for the first time. Make sure that all safety instructions are complied with. Following the safety instructions will increase your personal safety.

Failure to follow the safety instructions may result in serious injuries and accidents.

Ensure that the PTO shaft is fitted in the correct position. This is indicated by a marking on the PTO shaft's protective tube.

- ▶ Fit the PTO shaft on the machine's PTO input shaft.
- ▶ Fit the PTO shaft on the tractor's PTO outlet.
- ▶ Secure the PTO shaft with a locking pin and safety chain.



Marking on protective tube

# Preparation

## Crane lifting safety



### **Only use approved lifting equipment**

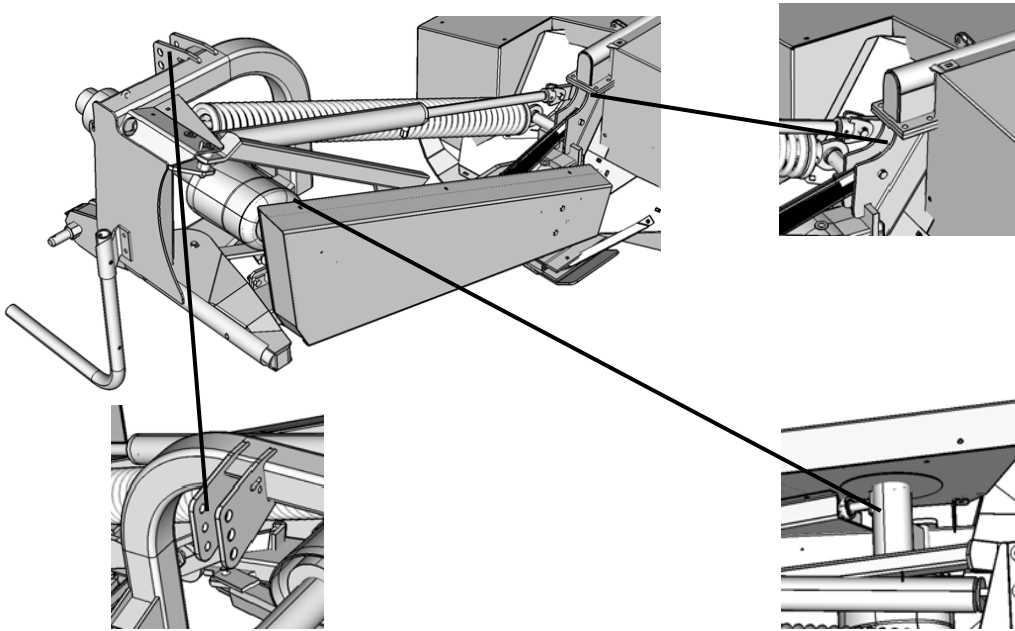
Only use approved lifting equipment which is correctly fastened to the machine.

This will increase your personal safety.

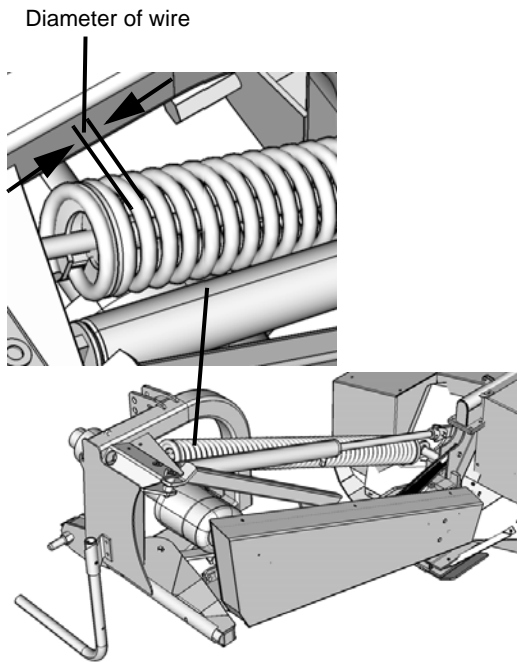
Failure to follow the safety instructions may result in serious injuries or accidents.

Unladen weight of the machine:

→ »Machine specifications« page 25



## Checking the springs

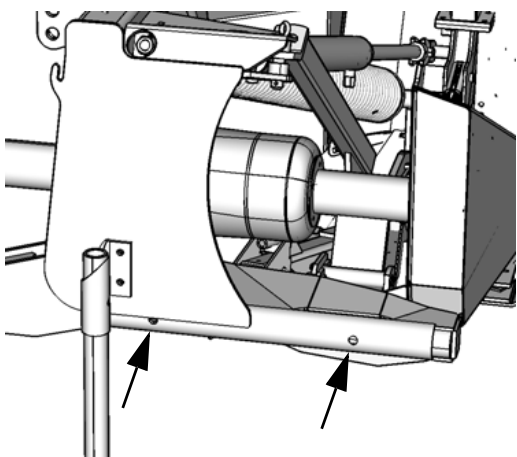


- ▶ The following must be done before the machine is connected to the tractor:
- ▶ Pull the piston in the hydraulic cylinder out completely.
- ▶ Check that the machine is fitted with the correct springs:

Model	Diameter of wire (mm / ")
<b>2624M</b>	$\phi 17 / \phi^{21/32}$ "
<b>2628M</b>	$\phi 18 / \phi^{11/16}$ "
<b>2632M</b>	$\phi 18 / \phi^{11/16}$ "

If the above conditions are not met, the machine will not be able to work satisfactorily.

## Lubricating the swinging bar



- ▶ Use a grease gun and pump a suitable quantity of grease into the holes shown.

→ »Lubricants« page 122

This lubrication should be carried out the first time the machine is put into use.

The following chapter is for initial assembly and shortening of the PTO shaft, etc. When assembling after, only certain attachment points should be carried out.



## **Coupling a tractor and a machine together**

When connecting the machine and the tractor there is an increased risk of personal injury.

Attention to the safety instructions assures your and others personal safety.

Failure to follow the safety instructions may result in serious injuries.

Therefore, when connecting the machine and the tractor you should:

- Make sure that the tractor cannot roll.
- Make sure that the tractor and the machine belong to the same category.
- Never stand between the tractor and the machine during attachment.
- Use the hydraulic three point suspension slowly and carefully.

## **Attachment of the machine**

When connecting the machine on the tractor there is an increased risk of personal injuries.

Attention to the task will ensure your safety and that of others.

Failure to follow the safety instructions may result in serious injuries.

When carrying out an attachment you must make sure that:

- The machine is placed on an even surface.
- The machine is secured with a sturdy support.

## Coupling the tractor



### Attaching the machine

When attaching the machine there is an increased risk of personal injury.

Attention to the safety instructions assures your and others personal safety.

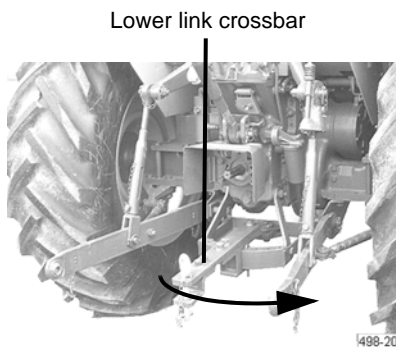
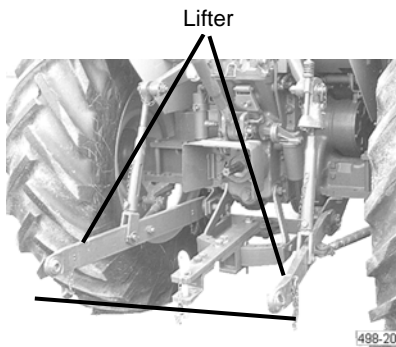
Failure to follow the safety instructions may result in serious injuries.

### Lock the tractor's lift arms

Lock the tractor's lift arms at the correct height.

If the lift arms are at the correct height, it will prevent damage to the PTO shaft and injury to persons in the vicinity.

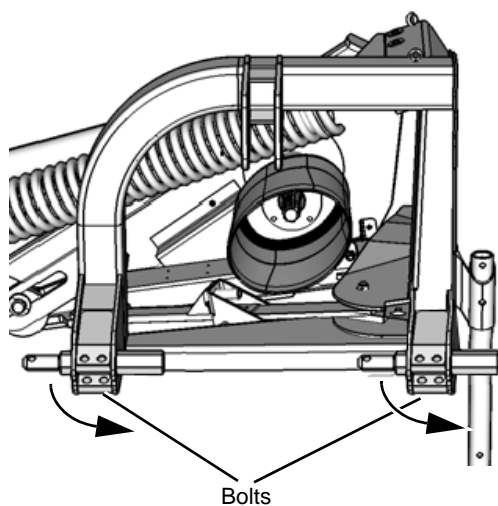
Lowering or raising the lift arms can lead to injury and can damage the PTO shaft.



Therefore, when attaching the machine, you must ensure that the machine cannot become detached from the tractor.

- ▶ Adjust the right and left lift arm so they are at the same height.

- ▶ Swing the lower link crossbar to the side or remove the lower link crossbar.
- ▶ Raise or lower the tractor's lift arms until the machine's linkage pin can be mounted on the tractor's lift arms.



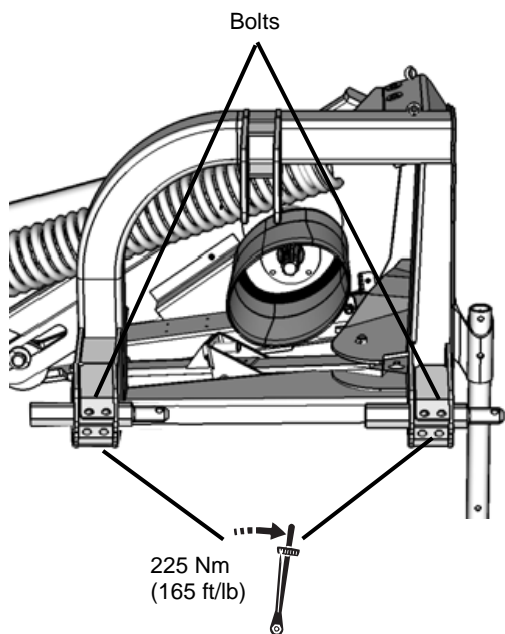
The machine is fitted with linkage pins which can be changed.

The linkage pins are changed in the following way:

- ▶ Loosen the bolts on the linkage pins.
- ▶ Remove the linkage pins and change them.
- ▶ Fit the linkage pins.

# Assembly - attachment

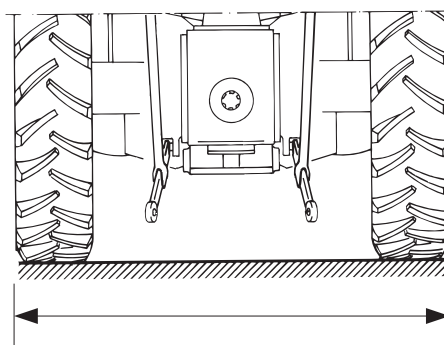
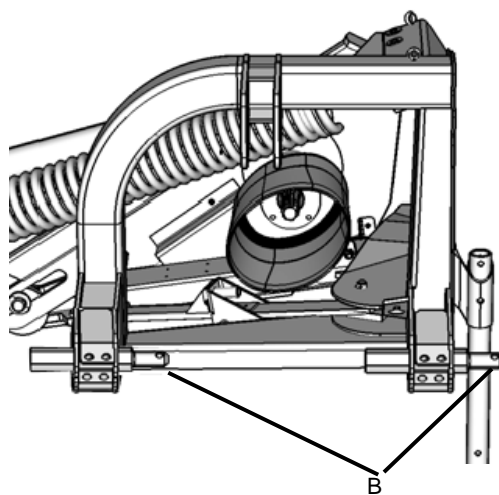
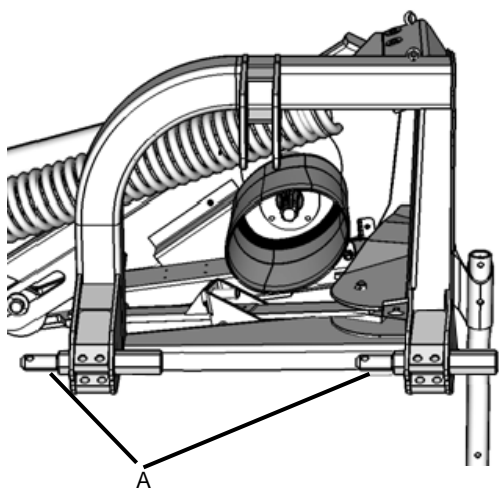
► Fit the bolts and tighten to the torque shown.



The following position of the linkage pins must be used for attachment:

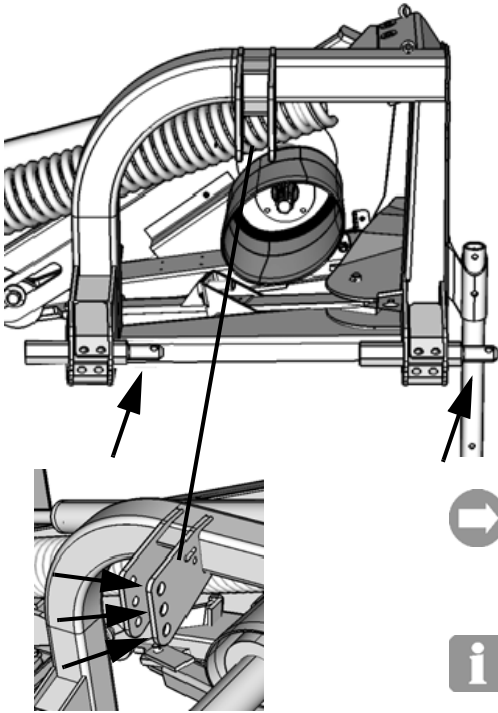
Width of the tractor	Pos.
Less than 2200 mm / 7' 2½"	A
More than 2200 mm / 7' 2½"	B

The width of the tractor is measured from the outside edge of the tyres as shown.



# Assembly - attachment

- ▶ Mount the machine onto the tractor's lift arms.



Selecting the position of the top link:

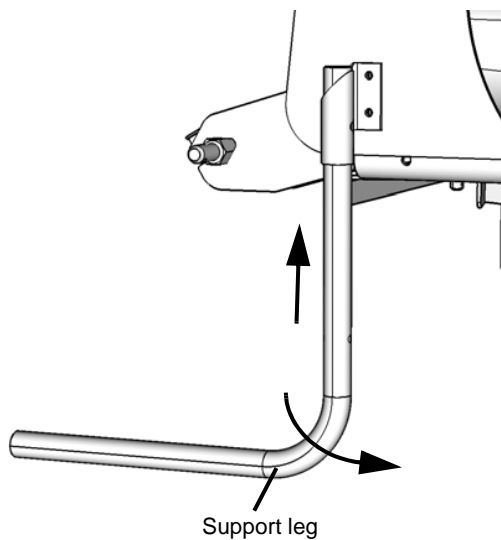


It is recommended that the top link is parallel to the tractor's lift arms.

- ▶ Connect the hydraulic hoses to the tractor's hydraulic outlet.

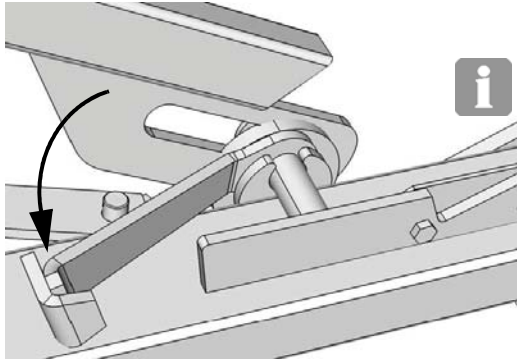


It is recommended that the hydraulic outlet on the tractor is in the floating position.



- ▶ Activate the tractor's lift arms and lift the hitch up completely.
- ▶ Turn the support leg around and raise it up as shown.

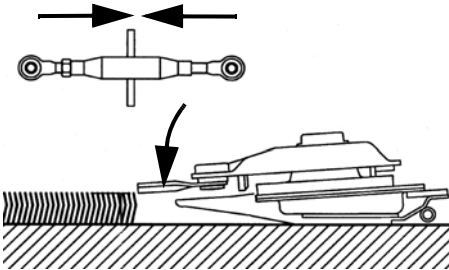
# Assembly - attachment



▶ Turn the catch to the position shown.



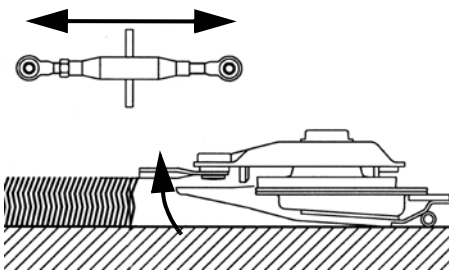
The catch must be able to be turned to the position shown when the machine is attached and is lifted free of the ground with the tractor's three-point hitch.



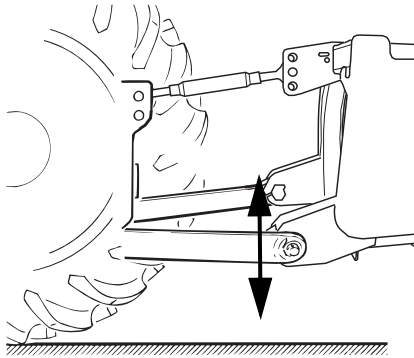
▶ Adjust the top link to the desired stubble height.



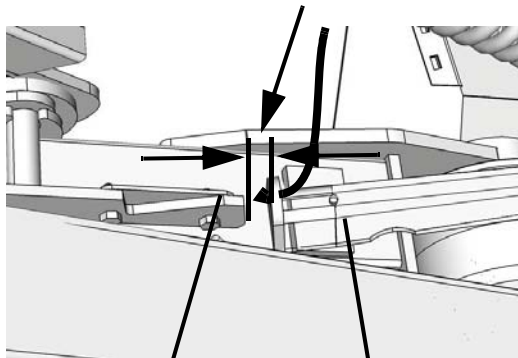
- Making the top link shorter reduces the stubble height
  - Making the top link longer increases the stubble height.
- »Stubble height« page 57



## Adjusting the working height



15–30 mm ( $\frac{5}{8}$ – $1 \frac{3}{16}$ " )



Stop

Lock catch

Stabiliser chains



The suspension is adjusted in the following way:

- ▶ Raise/lower the lift arms until there is approx. 15–30 mm ( $\frac{5}{8}$ – $1 \frac{3}{16}$ " ) clearance between the lock catch and the stop.

- ▶ Tighten the tractor's stabiliser chains.

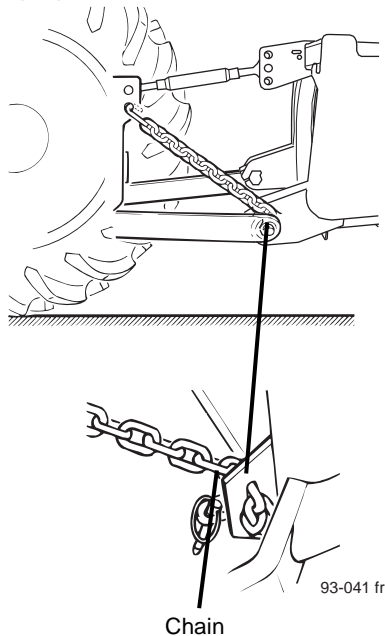
Because of the increase in weight, it is recommended that the tractor's left-hand stabiliser chain be tightened more than usual, so that the machine is pulled as far to the left as possible.

# Assembly - attachment

## Chain for locking the lift arms

Available as extra equipment

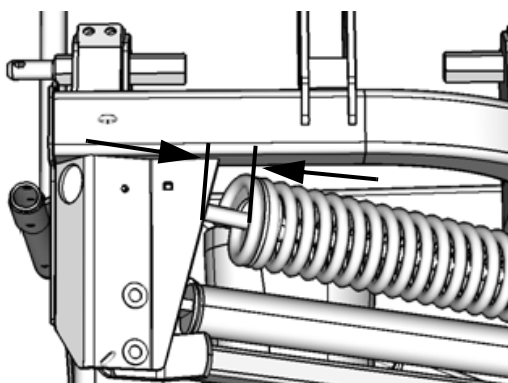
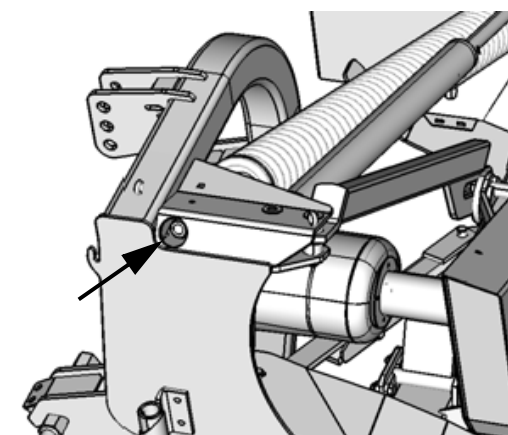
The machine can be equipped with a chain to prevent the tractor's lift arms from lowering. The chain is fitted between the highest point on the tractor and one of the lift arms.



## Adjusting the springs

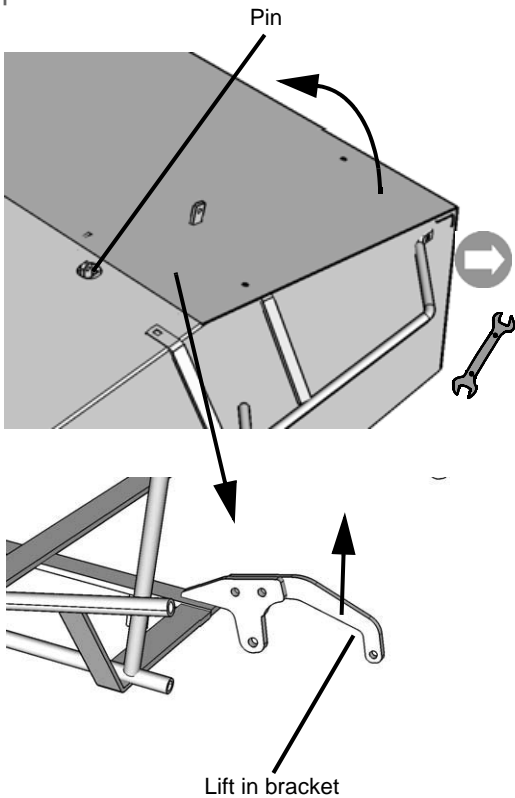
To ensure that the cutting unit is correctly balanced, the springs should be pre-tensioned in the following way:

- ▶ Set the spring to the following measurements:



Model	Measurement (mm - ")
2624M	80 (3")
2628M	150 / 6"
2632M	120 / 4 3/4"

## Adjusting the ground pressure



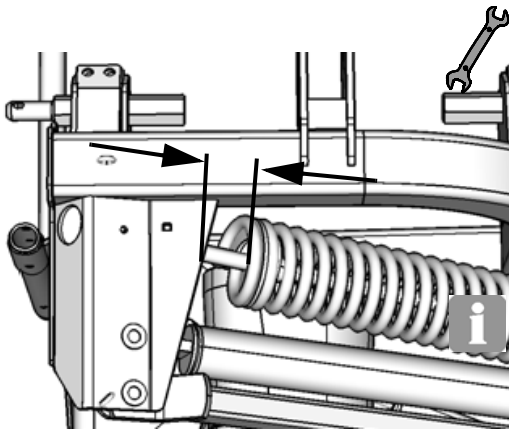
The machine's ground pressure is checked in the following way:

- ▶ Remove the pin.
- ▶ Open the guards around the machine's cutterbar.
- ▶ Lift the machine's cutting unit in the bracket as shown.



The recommended weight should be approx. 50–60 kg (110–130 lb).

- If the machine is not stable when running, the ground pressure is too low.
- If the machine drags and hangs behind at an angle when running, the ground pressure is too high.



- If lower ground pressure is required, the distance shown must be reduced.
- If higher ground pressure is required, the distance shown must be increased.

- ▶ Close the guards around the machine's cutterbar.
- ▶ Fit the pin.

Under no circumstances should any attempt be made to detach the machine's spring.

If an attempt is made to detach it, large amounts of energy which are stored in the spring will be suddenly released and can cause serious injuries or death.



Only authorised persons may detach this component.

# Assembly - attachment

## PTO shaft

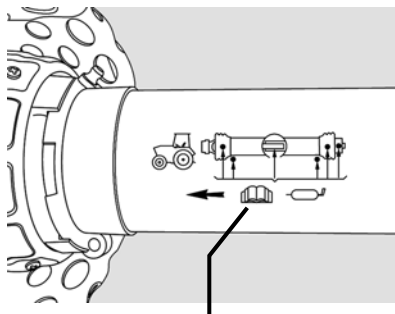


### Initial connection of the machine

Exercise caution when a new machine is connected for the first time. Make sure that all safety instructions are complied with. Following the safety instructions will increase your personal safety.

Failure to follow the safety instructions may result in serious injuries and accidents.

## Fitting the PTO shaft



Marking on protective tube

Ensure that the PTO shaft is fitted in the correct position.

- ▶ Check whether the PTO shaft needs to be shortened before it is fitted.
- ▶ Shorten the PTO shaft, if necessary.  
→ »PTO shaft length«, page 33
- ▶ Check that the tractor PTO outlet is clean and greased.
- ▶ Fit the PTO shaft between the tractor and machine.
  - The wide-angle joint on the PTO shaft (if this is present) must be fitted by the tractor's PTO outlet.
- ▶ Check that the PTO shaft is secured to both the tractor and machine.

Check that the protective tubes are secured with chains so that they cannot rotate with the shaft.

## Hydraulics

### Safety



#### **Only connect the hydraulics when the system is depressurised**

You should only connect the hydraulic hoses to the tractor's hydraulics when the hydraulic system on both the tractor and the machine is depressurised.

There is a risk that the machine will move accidentally.

Accidental movement of the machine can result in serious injury.

#### **Avoid mixing oil**

Avoid using different tractors for the same machine.

It can lead to various oil types being illegally mixed.

Illegal mixing of various oil types can damage the hydraulic system of the tractor.

#### **The hydraulic system should be checked regularly**

All hoses and fittings should be checked regularly for visible damage.

Hydraulic hoses also wear without any visible damage.

Defective hydraulic hoses can cause injury or fire.

#### **Colour marking of hydraulic connections**

The hydraulic connections between the tractor and the machine must be colour marked.

By colour marking the hydraulic connections you avoid wrong operation of the machine.

Incorrect operation or unintentional movement of the machine may result in serious injuries.

#### **Connecting hydraulics**

When connecting the hydraulics there is an increased risk of personal injuries. Adherence to the above instructions will ensure your own safety and that of others.

Failure to follow the above instructions may result in serious injuries.

#### **Securing the hydraulics in transport position**

The tractor hydraulic system must not be activated unintentionally in transport position.

Accidental activation of the tractor hydraulic system can result in unexpected movement.

Unexpected movement can cause injuries.

# Assembly - attachment

## Connecting hydraulics



### **Checking that the hydraulic system is correctly connected**

Ensure that the hydraulic system is correctly connected. Otherwise, this can cause injuries, as well as damage to the machine.

- ▶ Stop the tractor and remove the ignition key.

## Hydraulic connection

The tractor must be fitted with 1 set of single acting hydraulic outlets, which are connected as follows:

Hydraulic outlets on the tractor	Function
Single acting hydraulic outlet	Cutting unit working position / transport position

- ▶ Connect the machine's hydraulic system to the tractor.

## Hydraulic cylinder

All excess air in the machine's hydraulic system must be removed when assembling and preparing the machine.

Before attempting to bleed the hydraulic system, always ensure that you are wearing the correct hand, body and face protection.

→ »For your safety« page 69

## First start-up of machine



### **The initial test drive of the machine is important**

When the machine is connected to the tractor for the first time it must be test driven.

Attention to the safety instructions assures your and others personal safety.

Failure to follow the safety instructions may result in serious injuries.

### **Do not remove the protective guards**

Check that all protective guards are in place before use.

This ensures that the machine will offer maximum protection to the operator.

If the safety guards are removed or not used, it may result in serious injuries and accidents.

### **The guard for the cutting unit must be correctly positioned before start-up**

The guard for the cutting unit must be folded down and correctly positioned before the machine is started.

This ensures that the machine offers the operator maximum protection against projected objects.

Projected objects may cause serious injuries and accidents.



- ▶ Start the tractor.
  - ▶ Activate the tractor's lift arms and lift the machine up.
  - ▶ Activate the tractor's hydraulic system and lower the machine down to the working position.
  - ▶ Carefully connect the tractor's PTO shaft.
  - ▶ Carefully increase the speed of the PTO shaft to 540 rpm.
- »Machine specifications« page 25
- ▶ Check that the machine runs smoothly without any vibrations.
  - ▶ Return the PTO shaft to idle speed.
  - ▶ Disconnect the tractor's PTO shaft.
  - ▶ Activate the tractor's hydraulic system and lift the machine up to the transport position.

# Assembly - attachment

## Machine in the transport position

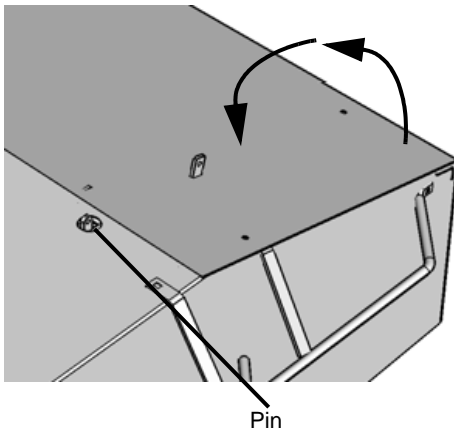


### **Check and clear the surrounding area before starting to use machine**

The surrounding area should be checked and cleared before driving and using the machine.

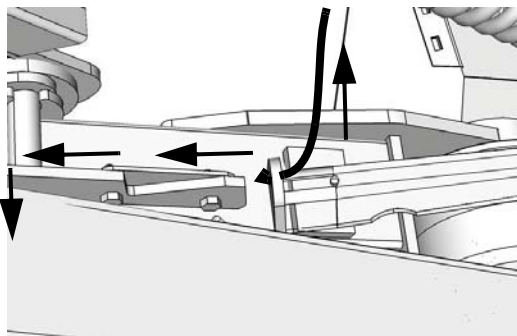
This prevents persons and animals in the vicinity from being harmed.

If the surrounding area is not checked, it may result in serious injuries to persons or animals.

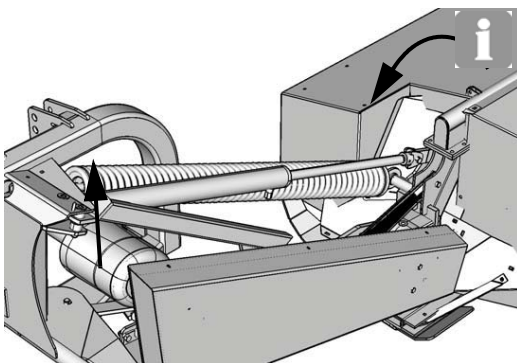


The machine is set to the transport position in the following way:

- ▶ Remove the pin.
- ▶ Open the guards around the machine's cutterbar.
- ▶ Activate the tractor's lift arms and raise the machine completely free of the ground.



- ▶ Pull in the cord and release the lock catch.
- ▶ Hold in the string and activate the tractor's hydraulics and the machine will be raised up to the transport position.
- ▶ Release the string once the cutting unit is raised approximately halfway up.
- ▶ Check that the lock is locked when the cutting unit is in the transport position.
- ▶ Release the hydraulic pressure in the machine.



When the machine is in the transport position, the hydraulic system must be depressurised.

## Assembly - attachment



- ▶ Activate and lower the tractor's lift arms down to the fixed working height.

# Transport on public roads

## Safety



### **Read the safety instructions carefully before driving on public road**

Before driving on public road, you must read the safety instructions carefully.

This will ensure that dangerous situations and accidents are avoided.

Lack of information can cause accidents.

## General

- Comply with the local law concerning lights, warning and safety units.
- The driver and/or owner of the machine is responsible for ensuring local requirements are observed when driving on public roads.
- The tractor's manoeuvrability should not be adversely affected. The tractor's steering shaft should bear at least 20% of the tractor's net weight.
- The tractor's braking distance should not be reduced. At least 50% of the vehicle's total weight must rest on the braked wheel.
- Carrying passengers on the machine is strictly prohibited.

## Before travelling on public roads

- All of the hydraulic functions of the machine should be placed in neutral and in locked position.
- Make sure there are no children or unauthorised persons in the machine's hazard area.
- Check the surrounding area before starting the machine.

## Checking the machine

Before travelling on the road the machine should be checked according to this check list:

- Is the machine in the transport position?
- Are all hydraulic functions in neutral?
- Are the machine attachment points secured by a pin?

## Travelling on public roads

- Check the area around the machine before you start. Make sure there are no children or unauthorised persons in the machine's hazard area.
- Do not exceed the maximum permitted speed.
- Adjust the speed according to the road conditions.
- Avoid sudden sideways movement with the machine.
- Make sure that steering and braking ability is sufficient.

## Speed when driving on public roads



**When driving on public roads with this machine, the speed must be less than 40 km/h (25 mph).**

## Safety



### **The operator should be instructed carefully before the machine is put into use**

The machine should only be used if the operator has been given thorough instructions; this instruction manual must be read and understood.

Thorough machine instruction allows safe usage.

Insufficient instructions can result in wrong usage of the machine and accidents.

### **Read the safety instructions before using the machine**

Before using and loading the machine the operator should read the safety instructions carefully.

→ »Safety« page 7

Attention to the safety instructions assures your and others personal safety.

Failure to follow the instructions may result in serious injuries.

### **Work on the machine should only be carried out by persons who have been thoroughly instructed**

The machine should only be operated when the operator has been given thorough instructions.

Thorough machine instruction allows safe usage.

Insufficient instructions can result in wrong usage of the machine and accidents.

### **Do not remove the protective guards**

Check that all protective guards are in place before use.

This ensures that the machine will offer maximum protection to the operator.

If the safety guards are removed or not used, it may result in serious injuries and accidents.

### **The guard for the cutting unit must be correctly positioned before start-up**

The guard for the cutting unit must be folded down and correctly positioned before the machine is started.

This ensures that the machine offers the operator maximum protection against projected objects.

Projected objects may cause serious injuries and accidents.

## Before operating



**Make sure that the initial start of the machine is unhindered**  
Make sure the area around the machine is checked and cleared before start-up.  
Paying attention to the area around the machine will prevent injury to persons or animals.  
Insufficient attention to the area around the machine can result in serious injuries.

**Child safety**

Never assume that children are still where you last saw them.  
Take care to ensure your machine is secured if children are in the working area.  
Never allow children to play on or operate the machine.



The following instructions should be complied with:

- Check all points mentioned in the “maintenance” section.
  - »Specific safety information« page 69
  - »Lubrication safety and use of oil« page 69
- Check knives are not worn down. The knives can be turned so they rotate in the opposite direction.
  - »Knives« page 79

## Operation



The machine is operated in the following way:

- ▶ Make sure that there are no persons in the surrounding area.
  - ▶ Check that the machine is in the working position.
  - ▶ Fasten all the guards on the machine.
  - ▶ Carefully connect the tractor's PTO shaft.
  - ▶ Carefully increase the speed of the PTO shaft to 540 rpm.
- »Machine specifications« page 25
- ▶ Start the tractor's forward drive



If none of the machine's functions are working:



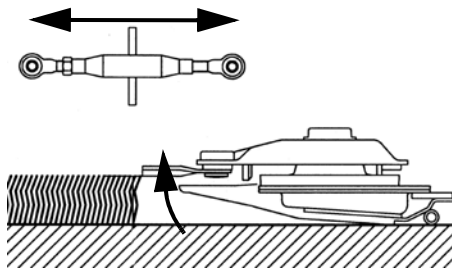
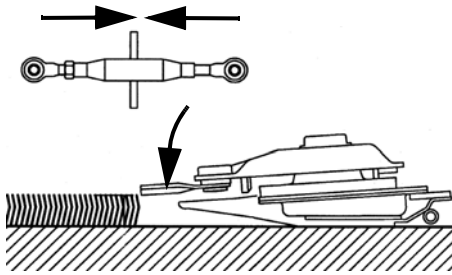
- ▶ Stop the tractor's forward drive.
- ▶ Stop the tractor.
- ▶ Disconnect the PTO shaft immediately.
- ▶ Disconnect the tractor's hydraulic system immediately.



If the machine is too noisy or vibrates too much, stop the machine immediately.

→ »Troubleshooting« Page 116.

## Stubble height



The stubble height is adjusted in the following way:

- ▶ Lower the cutting unit to the ground.
- ▶ Set the stubble height by adjusting the top link.

- Making the top link shorter reduces the stubble height
- Making the top link longer increases the stubble height.

The stubble height can vary between 25 mm (1") and 70 mm (2 3/4").

The stubble height can be combined with fitting high skids\* which can be used to set the stubble height as follows:

Stubble height	Note
50 → 100 mm	40 mm skids* fitted
2" → 4"	1 9/16" skids* fitted
100 mm →	80 mm skids* fitted
4" →	3 1/8" skids* fitted

\* Extra equipment

→ »Extra equipment« page 112

## Ground pressure

Checking the ground pressure of the machine:

→ »Adjusting the ground pressure« page 45



The recommended weight should be approx. 50–60 kg (110–130 lb).

# Operation

## Working in the field



### **Check and clear the surrounding area before starting to use machine**

The surrounding area should be checked and cleared before driving and using the machine.

This prevents persons and animals in the vicinity from being harmed.

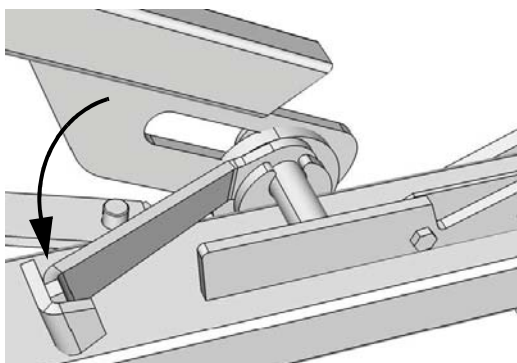
If the surrounding area is not checked, it may result in serious injuries to persons or animals.

### **Keep away from the machine**

No unauthorised persons should be close to the machine when active.

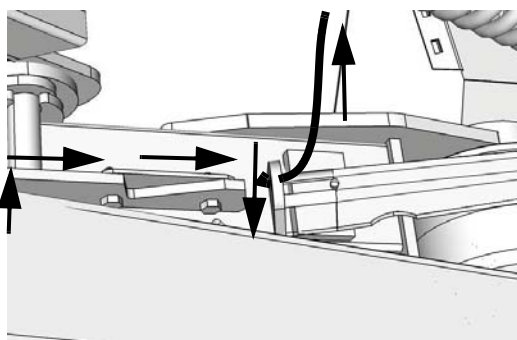
This will ensure that no dangerous situations can arise.

Persons close to the machine during operation are at risk of being severely injured.

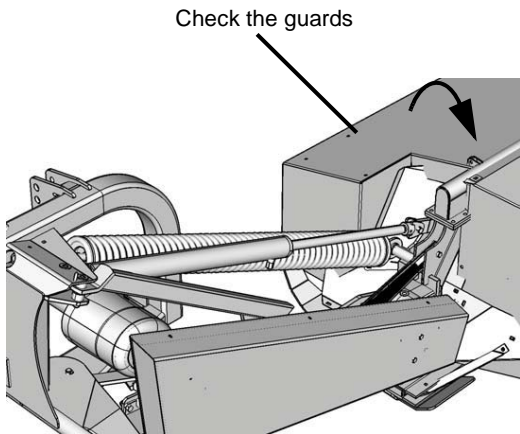


The machine is operated in the following way:

- ▶ Check that the lock catch is in the position shown.



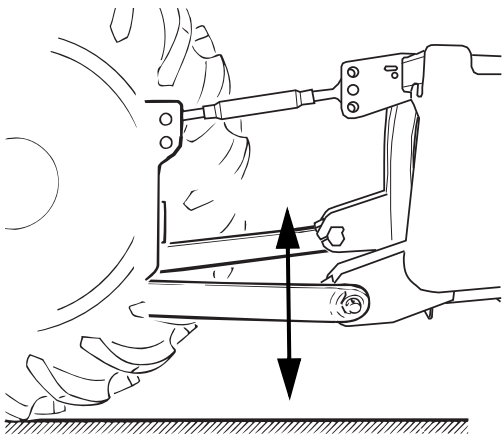
- ▶ Activate the tractor's hydraulic system and allow the hydraulic cylinder to release the machine's cutting lock.
- ▶ Pull in the cord and release the lock catch.
- ▶ Hold in the string and activate the tractor's hydraulics and lower the machine down to the transport position.



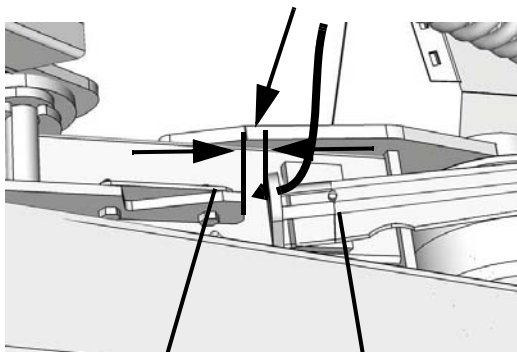
- ▶ Check that all guards on the machine are correctly positioned.
- ▶ Connect the tractor's PTO outlet.
- ▶ Carefully increase the speed of the tractor's PTO outlet to 540 rpm.
- »Machine specifications« page 25
- ▶ Activate the tractor's lift arms and lower the machine down to the fixed working height.
- »Adjusting the working height« page 43
- ▶ Find a suitable speed on the tractor and start to mow.
- ▶ Activate the tractor's hydraulics, raise the cutting unit up and turn at the headland.
- ▶ Activate the tractor's lift arms and lower the machine.

In the working position in the field, there must be 15–30 mm ( $\frac{5}{8}$ – $1 \frac{3}{16}$ ") clearance between the lock catch and the stop so that the cutterbar can "float" and follow the ground.

→ »Adjusting the working height« page 43



15–30 mm ( $\frac{5}{8}$ – $1 \frac{3}{16}$ ")

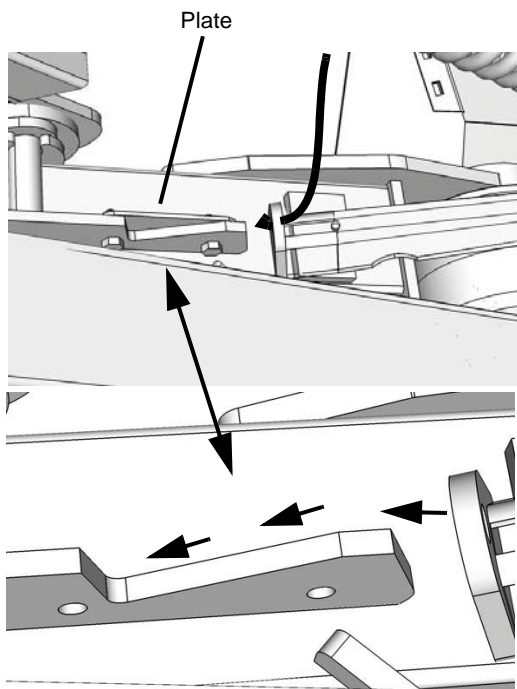


Stop

Lock catch

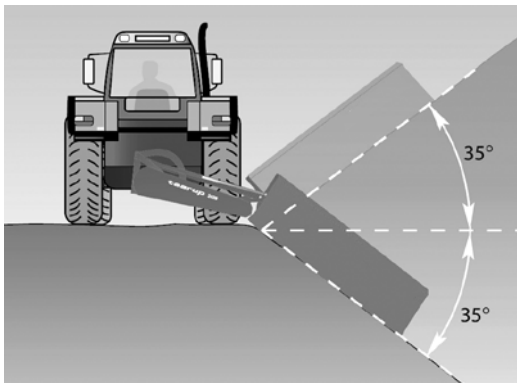
# Operation

## Mowing upwards on sloping ground



Grass can be mown upwards on a slope, where the tractor is running on a horizontal plane and the cutterbar is running upwards on a slope, in the following way:

- ▶ Remove the indicated plate.
- ▶ Pull in the nylon string and release the lock catch.
- ▶ Activate the tractor's hydraulic system and tilt the cutterbar up with the hydraulic cylinder.
- ▶ Release the nylon string.
- ▶ Raise the cutterbar and let the lock slide down to the notch.

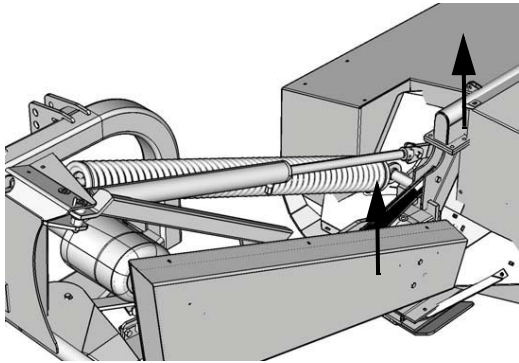


Grass can be mown downwards on a slope in the following way:

- ▶ Activate the tractor's hydraulic system and tilt the cutterbar down with the hydraulic cylinder.

The cutterbar can be tilted up to 35° from horizontal.

## Turning at headlands



Turning at the headland is performed in the following way:

- ▶ Activate the tractor's hydraulic system and raise the cutting unit.



- ▶ Turning at the headlands.
- ▶ Activate the tractor's hydraulic system and lower the cutting unit down.

Ensure that the moving parts are lubricated. Otherwise, the lift function will not function correctly.

→ »Lubrication« page 73

## Before cleaning



### **Higher risk when cleaning the equipment**

When cleaning, there is an increased risk of injury.

Attention when carrying out cleaning work protects your own and others safety.

Failure to follow the safety instructions may result in serious injuries.

Therefore, do the following before cleaning:

- ▶ Disconnect the tractor's PTO outlet.
- ▶ Lower the tool to the ground.
- ▶ Neutralise all hydraulics.
- ▶ Stop the tractor.
- ▶ Remove the ignition key.
- ▶ Apply the handbrake.
- ▶ Secure the tractor to prevent it from rolling.



**Failure to secure the tractor to prevent it from rolling could endanger lives.**

### **Disconnect the power when cleaning the machine**

Always disconnect the power before you start cleaning the machine.

This will prevent short circuits and damage to the electric circuit.

There is a risk of burns and other serious injuries if the electrical systems short circuit.

### **Protect your body and face when cleaning the machine**

Wear the correct protective gear for body and face when cleaning the machine.

This will protect your body and face from dirt and oil splashes.

Insufficient protection of body and face can lead to severe skin and eye injuries.

Before starting to clean the machine do the following:

- Open the guard around the cutting unit.
- Remove all loose material from the machine.

## Cleaning



### **Use the correct cleaning agents**

Use only PH neutral cleaning agents when cleaning the machine. PH neutral cleaning agents give your machine maximum protection.

Cleaning agents with either high or low PH value can corrode plastic, rubber and varnished surfaces.

- High pressure cleaning equipment may be used when cleaning, but the area around the bearings should be cleaned with a gentle stream.
- To protect the gaskets, hydraulic components should only be cleaned with a gentle stream of water.

## After cleaning

- Let the remaining water run off for about 1 hour.
- Remove the collected water behind all guards.

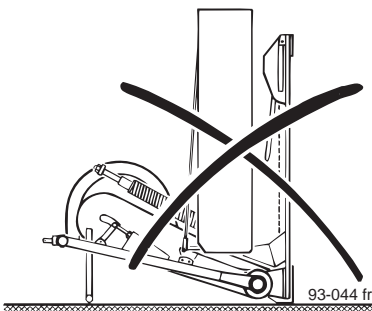
# Parking and Storage

## Before storage

At the end of the season, the machine should be prepared for storage:

- ▶ Check and tighten all bolts.
- »Torque moment« page 123
- ▶ Repair any damaged components.
- ▶ Replace any defective components.
- ▶ Repair paint damages.
- ▶ Lubricate the machine following the program.
- »Maintenance intervals« page 71

## Parking / disconnection of the machine



### **Disconnection between the machine and the tractor**

There is an increased risk of injury (crushing) when disconnecting the machine from the tractor.

Paying full attention when disconnecting ensures your safety and that of others.

Failure to follow the safety instructions may result in serious injuries.

### **Park the machine in the working position**

The machine should always be parked in the working position.

This prevents the machine from tipping over and causing serious accidents.

If the machine tips over, it can result in serious injury or death.

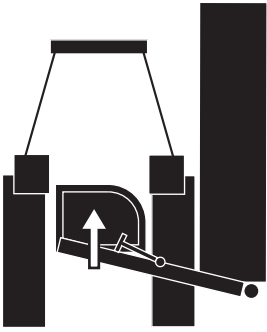
Therefore, when disconnecting make sure that:

- The machine is placed upon a horizontal and level surface.
- The tractor's PTO outlet is disconnected.
- The tool is lowered to the ground.
- All hydraulics are neutralised.
- The tractor is stopped.
- The ignition key is removed.
- The handbrake is activated.
- The tractor is prevented from rolling.
- Children and unauthorised persons must never be allowed near the machine.

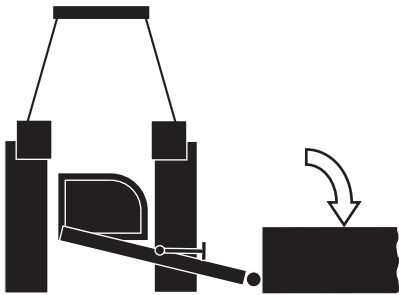
**Failure to secure the tractor to prevent it from rolling could endanger lives.**

The machine is disconnected in the following way:

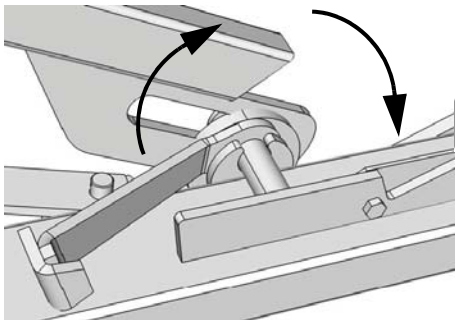
- ▶ Activate the tractor's hydraulics and lift the machine up.



- ▶ Lower the machine's cutting unit back down to the working position.



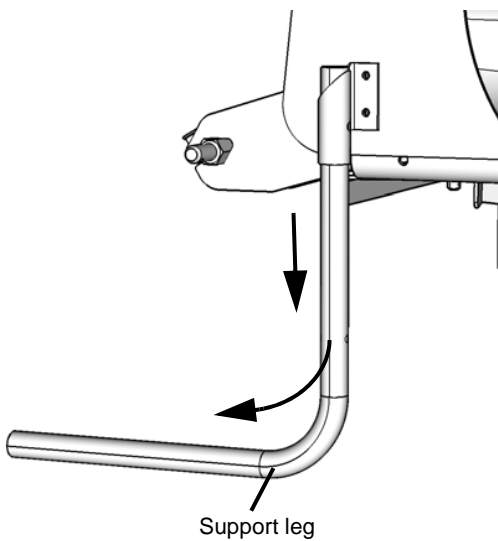
It is recommended that the hydraulic outlet on the tractor is in the floating position.



- ▶ Turn the catch to the position shown.

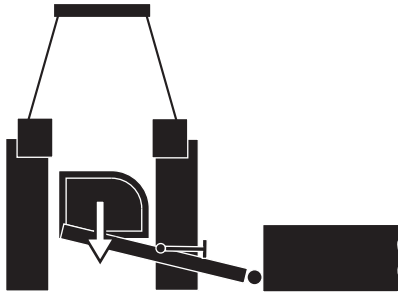


The catch must be able to be turned to the position shown when the machine is attached and is lifted free of the ground with the tractor's three-point hitch.



- ▶ Turn the support leg around and lower it down as shown.
- ▶ Remove the chain.

# Parking and Storage



- ▶ Disconnect the PTO shaft from the tractor.
- ▶ Check that the machine's hydraulic system is not under pressure.
- ▶ Disconnect the machine's hydraulic connections.
- ▶ Activate the tractor's lift arms and lower the machine down to the ground.
- ▶ Disconnect the machine from the tractor.

## Hydraulics



### **Only disconnect the hydraulics when system is depressurised**

The hydraulic hoses must only be disconnected from the tractor's hydraulics when the hydraulic system on both the tractor and the machine is depressurised.

There is a risk that the machine will move accidentally.

Accidental movement of the machine can result in serious injury.

### **Avoid physical contact with hydraulic oil**

Hydraulic oil contains additives that under certain circumstances can have serious consequences for your health. Therefore, when handling hydraulic oil be aware of the following:

- Avoid direct contact with hydraulic oil. They can damage the skin.
- Protect your skin with barrier cream or protective gloves.
- Never use oil or lubricants to clean your hands.
- Clothes contaminated with oil should be changed immediately.
- Oily cloths should not be kept in your pockets.
- Seek medical attention for skin injuries after contact with pressurised hydraulic oil, as this can cause cold burns.

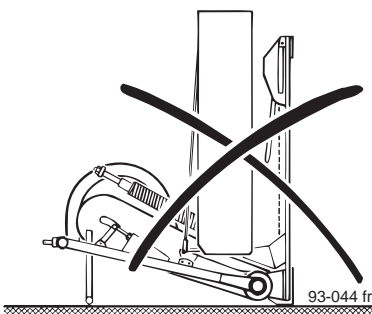
# Parking and Storage

## Storage

When the season is over, the machine should be readied for winter storage. Carry out the following:

- Clean the machine thoroughly.  
→ »Cleaning« page 62
- Change the oil in both of the machine's transmissions.  
→ »Lubricants« page 122
- The hydraulic quick coupling should be fitted with dust caps or be placed in a small plastic bag.
- The PTO shaft should be cleaned, oiled and stored somewhere dry so as to avoid damage or corrosion.
- Always check that the machine's safety equipment is not worn or damaged.
- Bleed as much excess hydraulic pressure from the cylinders and hoses as possible.
- Place the machine in a ventilated machine room.

## Safety



### **The machine shall be secured when parked**

The machine must be correctly secured when parked in storage. If correctly secured, there is no risk of the machine running anyone over, or causing other serious injuries.

If the machine is not properly secured when parked it can result in serious injuries and death.

### **Park the machine in the working position**

The machine should always be parked in the working position. This prevents the machine from tipping over and causing serious accidents.

If the machine tips over, it can result in serious injury or death.

Therefore, when disconnecting make sure that:

- The machine is in the work position.
- The machine is placed upon a horizontal and level surface.
- The tractor's PTO outlet is disconnected.
- The tool is lowered to the ground.
- All hydraulics are neutralised.
- The tractor is stopped.
- The ignition key is removed.
- The handbrake is activated.
- The tractor is prevented from rolling.
- Children and unauthorised persons must never be allowed near the machine.

**Failure to secure the tractor to prevent it from rolling could endanger lives.**

## For your safety



### **Comply with the service and maintenance intervals given in the instructions**

Comply with the intervals for service and maintenance as given in the instructions.

Complying with the maintenance intervals will ensure that the machine operates without malfunctions, preventing injury and offering maximum protection of the surroundings.

An incorrectly maintained machine is a danger to people and to the environment.

## Specific safety information



- Repair and maintenance work should only be performed if you have the necessary professional knowledge and the proper tools.
- The PTO on the tractor should be disconnected, and the motor should be stopped.
- Make sure that the handbrake is applied and the ignition key has been removed from the tractor.
- Make sure the machine is secured with the correct support before starting work.
- No one should be in between the tractor and the machine if the machine has not been secured.
- Always use original spare parts on the machine.
- Never use an air pressure lubrication spray to lubricate the machine bearings.

## Lubrication safety and use of oil



Oils and lubricants contain additives that under certain circumstances can have serious consequences for your health. Therefore, when using oil and lubricants, be aware of the following:

- Avoid direct contact with these agents. They can damage the skin.
- Protect your skin with barrier cream or protective gloves.
- Never use oil or lubricants to clean your hands.
- Clothes contaminated with oil should be changed immediately.
- Oily cloths should not be kept in your pockets.
- Used oil must be collected and be delivered to a disposal company, where the oil will be processed according to the governing regulations.
- Seek medical help if skin is injured by oil or lubricants.



# Maintenance

## General instructions

These instructions concern general maintenance work. Specific maintenance work procedures for each machine will be described later. When performing all maintenance work the machine must be secured in the transport position. If the working position is necessary for performing maintenance work, you will find appropriate instructions concerning this work.



**Working with grease gun**  
Lubrication is performed by one or two pumps with the grease gun. If you feel resistance after just one pump with the grease gun do not apply more grease to the bearings. Too much grease bearings drift apart. In this case dust and dirt can enter the bearings and cause an early wear and tear.

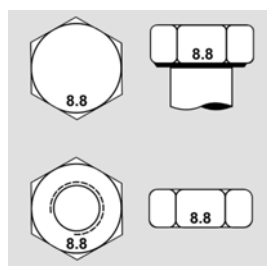
## Basic

This table contains explanations of the most important terms related to maintenance.

Work	Performance
Lubricating with oil can	Add oil from the can to the moving parts. Use only authorised products. → »Technical information« page 122
Lubricating with grease gun	1–2 pumps with the grease gun is sufficient unless otherwise stated. Use only authorised products. → »Technical information« page 122
Oil change	Use only authorised oil products. Using used oil is dangerous for your health and is strictly prohibited. → »Technical information« page 122
Replace	Replace the appropriate part following the instructions given in the "Replacement" chapter → »Replacement« page 93
Check	Check the appropriate part following the instructions given in the "Service - check" chapter The check is sometimes related to the replacement of the part in question → »Service - check« page 75
Complying with the maintenance intervals	All specifications are based on an average usage of the machine. If heavily loaded, e.g. contractor, the maintenance intervals should be performed on a more regular basis. In work conditions producing high levels of dust, maintenance should also be carried out on a more regular basis

## Tightening torque for screw connections

→ »Torque moment« page 123



## Maintenance intervals

		After 10 working hours	Every day	Every 40 hours of use	Every 80 hours of use	Every 200 hours of use Or once a year	Every month	Every season	As required	Oil change	Lubricating with grease gun	Check	Replacement	Page
<b>General</b>	Hydraulic hoses every 6 years												•	18
	Cutting disc after 1 hour of use											•		82
	Cutting disc		•									•		82
												•		82
										•			•	102
	Knife after 1 hour of use											•		79
	Knives											•		79
			•									•		79
										•			•	99
	Cones		•									•		84
									•			•		85
	Stone guard and counter knife			•								•		87
									•			•	105	
PTO shaft		•									•			73
Tarpaulin						•						•		92
									•			•		111
<b>Transmission</b>	Bevel gear	•								•				98
					•							•		78
						•				•				98
			•								•			73
	Cutterbar	•								•				94
			•									•		76
						•				•				94
V-belt transmission	•										•		90	
									•			•	108	
					•						•		90	
<b>Other</b>	Springs:													
	Bushing			•							•			74
	Spindle							•			•			74



## **Safety in connection with maintenance work on the machine**

When working on the machine the tractor must be stopped and secured.

This prevents the PTO shaft from suddenly starting to rotate.

Failure to follow the safety instructions may result in serious injuries.

When working on the machine:

- The tractor's PTO outlet must be disconnected.
- The tool must be lowered to the ground.
- All hydraulics must be neutralised.
- The tractor engine must be stopped.
- The ignition key must be removed.
- The hand brake must be activated.
- The tractor must be prevented from rolling.



**Failure to secure the tractor to prevent it from rolling could endanger lives.**

## **Always use original spare parts on the machine**

Always use original spare parts.

Original spare parts should be used for safety reasons.

The manufacture warranty becomes void if non-original spare parts are being used.

## **Make sure that all protective guards are in place**

Check that all protection guards are in place.

This ensures that the machine will offer maximum protection to the operator.

If the safety guards are removed or not used it may result in serious injuries and accidents.

## PTO shaft check



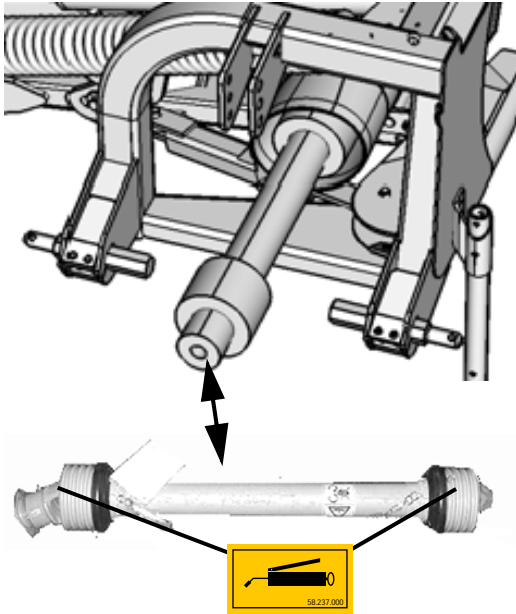
Refer to the manufacturer's maintenance and safety instructions delivered with the PTO shaft.

→ »PTO shaft length« page 33

## Lubrication

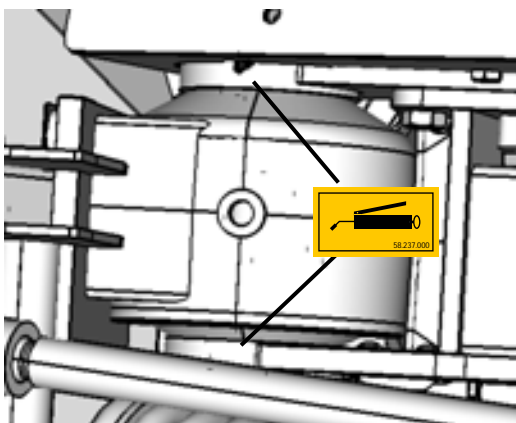
### Every day

#### PTO shaft



- ▶ Press the nozzle of the grease gun onto the grease nipple.
- ▶ Pump 1, max. 2 times with the grease gun.
- »Maintenance intervals« page 71
- »Lubricants« page 122

#### Bevel gear

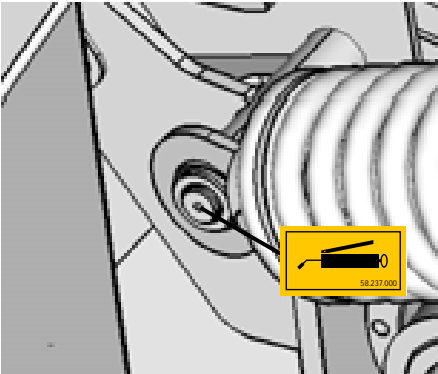


- ▶ Press the nozzle of the grease gun onto the grease nipple.
- ▶ Pump 1, max. 2 times with the grease gun.
- »Maintenance intervals« page 71
- »Lubricants« page 122

# Maintenance

Every 40 hours

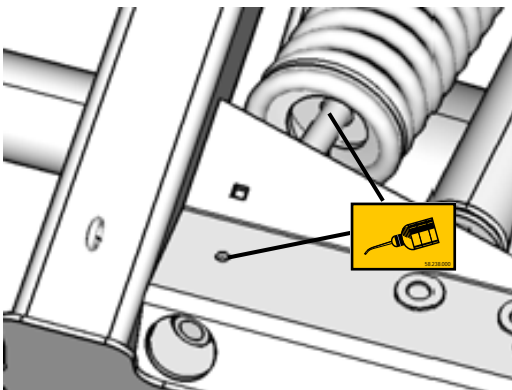
Bushing



- ▶ Press the nozzle on the grease gun over the grease nipple.
- ▶ Pump 1, max. 2 times with the grease gun.
- »Maintenance intervals« page 71
- »Lubricants« page 122

Every season

Spindle



- ▶ Position the nozzle of the oil can as shown.
- ▶ Pump the oil can once or twice, but no more than three times.
- »Maintenance intervals« page 71
- »Lubricants« page 122

## Service - check

### Cutterbar



#### **Safety in connection with maintenance work on the cutterbar**

When working on the cutterbar the tractor must be stopped and secured.

This prevents the machine from suddenly starting to rotate.

Failure to follow the safety instructions may result in serious injuries.

When working on the cutterbar:

- The tractor's PTO outlet must be disconnected.
- The tool must be lowered to the ground.
- All hydraulics must be neutralised.
- The tractor engine must be stopped.
- The ignition key must be removed.
- The hand brake must be activated.
- The tractor must be prevented from rolling.



**Failure to secure the tractor to prevent it from rolling could endanger lives.**

#### **Be careful when using oil**

Use barrier cream or protective gloves when handling oil.

It will protect your hands against skin injuries.

Direct contact with the oil could lead to serious skin injuries.

#### **Use the correct oil type**

Always use the correct oil type for the transmission.

This will ensure the transmission has a long service life.

Using the incorrect oil type may damage the transmission.

#### **Maintain correct oil level**

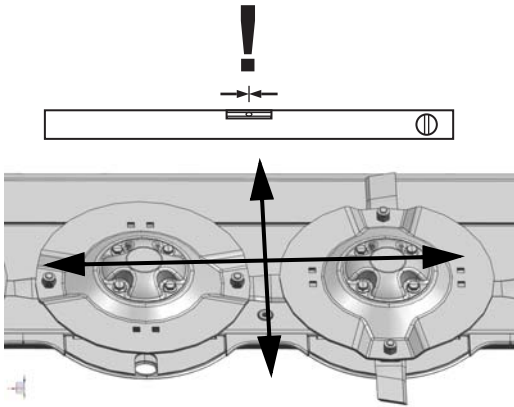
The maximum and minimum oil level indicators on the transmission must not be exceeded.

Correct transmission oil level will ensure a long service life.

Incorrect oil levels can cause the transmission to overheat, resulting in serious damage.

# Maintenance

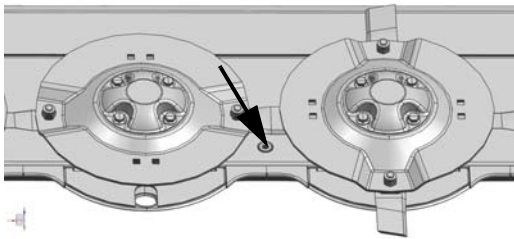
Inspection - oil service  
Every day



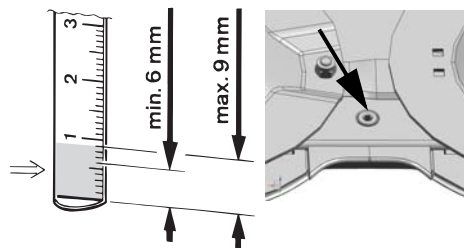
→ »Maintenance intervals« page 71

The oil level for the cutterbar is checked as follows:

- ▶ Place the machine on a level surface.
- ▶ Lower the cutterbar to the ground.
- ▶ Check the position of the cutterbar with a spirit level and, if needed, adjust its position with a wooden block.
- ▶ Check that the cutterbar is also roughly horizontal in the direction of travel. Correct the setting of the cutterbar by adjusting the length of the top link.



- ▶ Locate the oilplug on the left side of the cutterbar and remove it.
- With warm oil: Wait approximately 3 minutes
- With cold oil: Wait approximately 15 minutes.



- ▶ Check the oil level using a measuring instrument and refill if necessary.

Min. 6 mm (1/4") - max 9 mm (3/8")

→ »Lubricants« page 122

- ▶ Fit the oilplug and tighten it fully.

## Transmission



### **Safety concerning maintenance work on the transmission**

When working on the transmission the tractor must be stopped and secured.

This prevents the machine from suddenly starting to rotate.

Failure to follow the safety instructions may result in serious injuries.

When working on the machine:

- The tractor's PTO outlet must be disconnected.
- The tool must be lowered to the ground.
- All hydraulics must be neutralised.
- The tractor engine must be stopped.
- The ignition key must be removed.
- The hand brake must be activated.
- The tractor must be prevented from rolling.



**Failure to secure the tractor to prevent it from rolling could endanger lives.**

### **Pay attention when performing oil change**

Use barrier cream or protective gloves when changing oil.

It will protect your hands against skin injuries.

Direct contact with the oil could lead to serious skin injuries.

### **Use the correct oil type**

Always use the correct oil type for the transmission.

This will ensure the transmission has a long service life.

Using the incorrect oil type may damage the transmission.

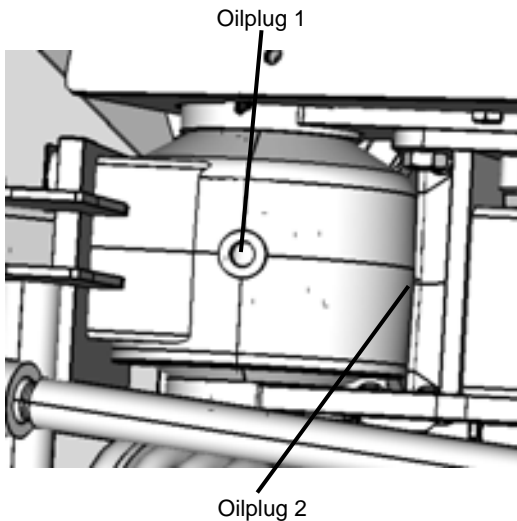
### **Maintain correct oil level**

The max. and min. oil level indicators on the transmission must not be exceeded.

Correct transmission oil level will ensure a long service life.

Incorrect oil levels can cause the transmission to overheat, resulting in serious damage.

## Bevel gear Checking the oil level



### Every 80 hours of use

→ »Maintenance intervals« page 71

The oil level is checked as follows:

- ▶ Remove oilplug 2.
- ▶ Check that the oil is filled all the way up to the hole.
- ▶ If necessary, remove oilplug 1.
- ▶ Fill the oil to the correct level.
- ▶ Fit oilplug 1 and 2 to the transmission.

→ »Lubricants« page 122

## Knives



### **Safety in connection with maintenance work on the cutterbar**

When working on the cutterbar the tractor must be stopped and secured.

This prevents the machine from suddenly starting to rotate.

Failure to follow the safety instructions may result in serious injuries.

When working on the machine:

- The tractor's PTO outlet must be disconnected.
- The tool must be lowered to the ground.
- All hydraulics must be neutralised.
- The tractor engine must be stopped.
- The ignition key must be removed.
- The hand brake must be activated.
- The tractor must be prevented from rolling.

**Failure to secure the tractor to prevent it from rolling could endanger lives.**

### **Check the machine knives on a regular basis**

The machine's knives must be regularly inspected.

Worn or damaged knives can unbalance the rotating parts.

Vibrations can cause damage to the machine.



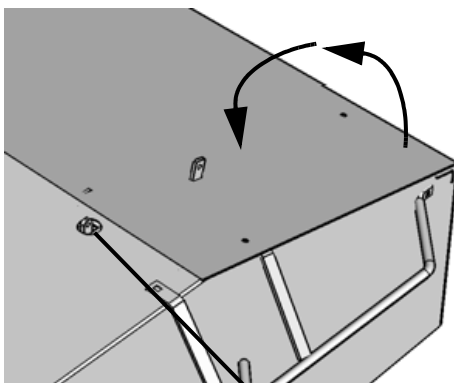
After 1 hour of use

Thereafter, every day

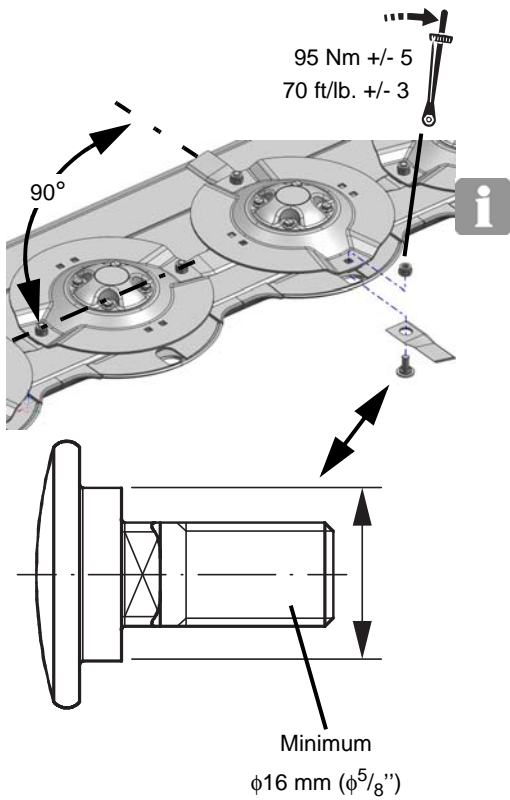
→ »Maintenance intervals« page 71

The knives are checked in the following way:

- ▶ Remove the pin.
- ▶ Open the guards around the machine's cutterbar.



Pin



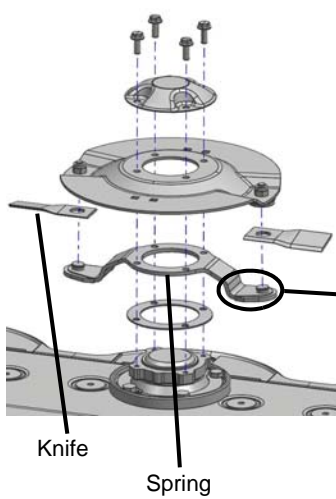
- ▶ Turn the cutting discs by hand until the damaged knife is in the position shown.
- ▶ Inspect the condition of the knives for wear.
- ▶ Inspect the bolt for damage or wear.
- ▶ If the bolts are damaged or worn, they must be changed.



The minimum diameter of the bolt must not be less than  $\phi 16 \text{ mm } (\phi 5/8'')$ .

→ »Knives« page 99

- ▶ Check that the bolt is fully tightened.
- ▶ If not, tighten the bolt to a torque of 95 Nm (70 ft/lb).

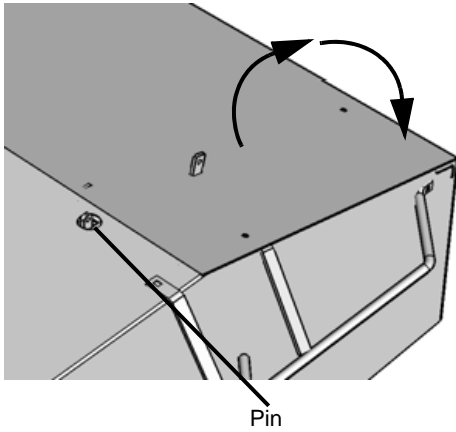


If the machine is fitted with knife quick release [PROFIT]\*, the same requirement applies for bolt wear.

→ »Knives« page 99

\* Extra equipment

→ »Knife quick release [PROFIT]« page 112



- ▶ Close the guards around the machine's cutterbar.
- ▶ Fit the pin.

## Cutting disc



### **Safety in connection with maintenance work on the cutterbar**

When working on the cutterbar the tractor must be stopped and secured.

This prevents the machine from suddenly starting to rotate.

Failure to follow the safety instructions may result in serious injuries.

When working on the machine:

- The tractor's PTO outlet must be disconnected.
- The tool must be lowered to the ground.
- All hydraulics must be neutralised.
- The tractor engine must be stopped.
- The ignition key must be removed.
- The hand brake must be activated.
- The tractor must be prevented from rolling.

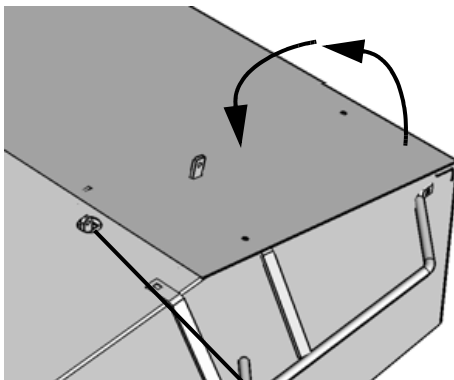
**Failure to secure the tractor to prevent it from rolling could endanger lives.**



After 1 hour of use

Thereafter, every day

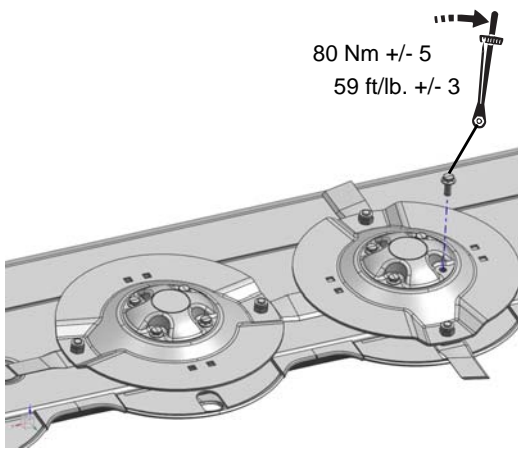
→ »Maintenance intervals« page 71



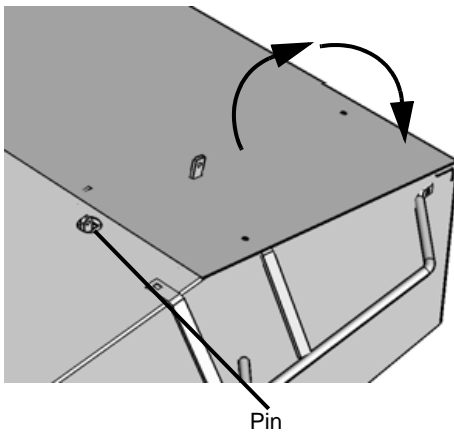
Pin

The cutting discs are checked as follows:

- ▶ Remove the pin.
- ▶ Open the guards around the machine's cutterbar.
- ▶ Inspect the condition of the cutting discs for deformities and cracks.



- ▶ Tighten the cutting disc to a torque of 80 Nm (59 ft/lb.).



- ▶ Close the guards around the machine's cutterbar.
- ▶ Fit the pin.

## Cone



### **Safety in connection with maintenance work on the cutterbar**

When working on the cutterbar the tractor must be stopped and secured.

This prevents the machine from suddenly starting to rotate.

Failure to follow the safety instructions may result in serious injuries.

When working on the cutterbar:

- The tractor's PTO outlet must be disconnected.
- The tool must be lowered to the ground.
- All hydraulics must be neutralised.
- The tractor engine must be stopped.
- The ignition key must be removed.
- The hand brake must be activated.
- The tractor must be prevented from rolling.

**Failure to secure the tractor to prevent it from rolling could endanger lives.**



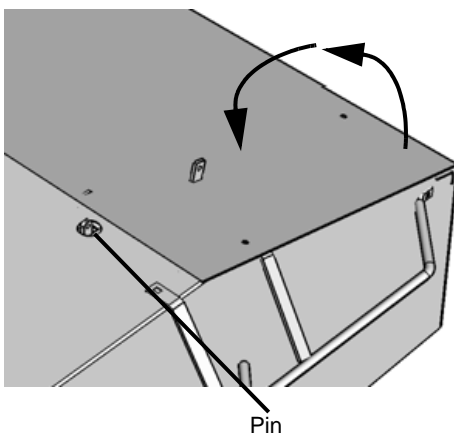
## External inspection

Every day

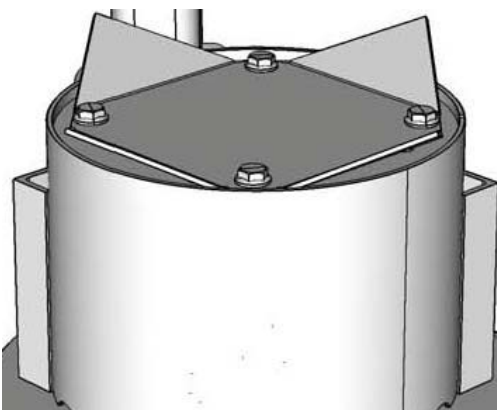
→ »Maintenance intervals« page 71

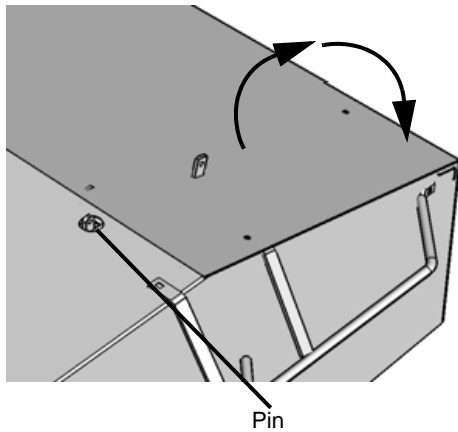
An external check of the cone is carried out in the following way:

- ▶ Remove the pin.
- ▶ Open the guards around the machine's cutterbar.



- ▶ Carry out an external inspection of the cone on the right side of the cutterbar for dirt.
- ▶ Clean the cone, if necessary.

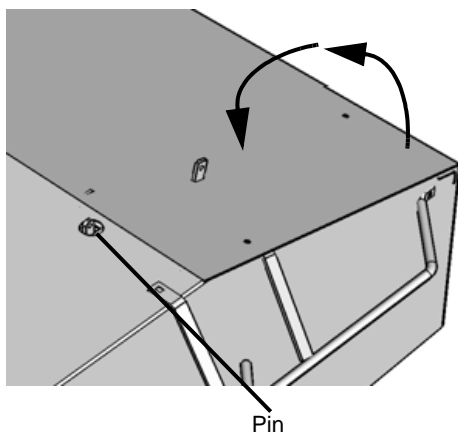




- ▶ Close the guards around the machine's cutterbar.
- ▶ Fit the pin.

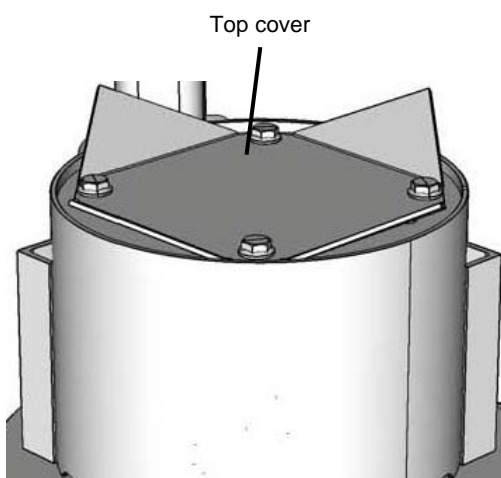
## Internal inspection Every season

→ »Maintenance intervals« page 71



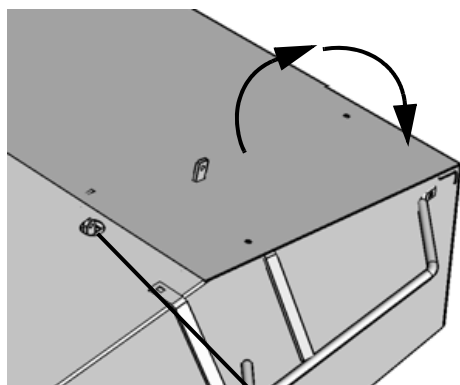
An internal check of the cone is carried out in the following way:

- ▶ Remove the pin.
- ▶ Open the guards around the machine's cutterbar.



- ▶ Remove the top cover on the cone on the right-hand side of the cutterbar.
- ▶ Carry out an internal inspection of the cone for dirt.
- ▶ Clean the cone, if necessary.
- ▶ Fit the top cover on the cone.

# Maintenance



Pin

- ▶ Close the guards around the machine's cutterbar.
- ▶ Fit the pin.

## Stone guard and counter knife



### **Safety in connection with maintenance work on the cutterbar**

When working on the cutterbar the tractor must be stopped and secured.

This prevents the machine from suddenly starting to rotate.

Failure to follow the safety instructions may result in serious injuries.

When working on the cutterbar:

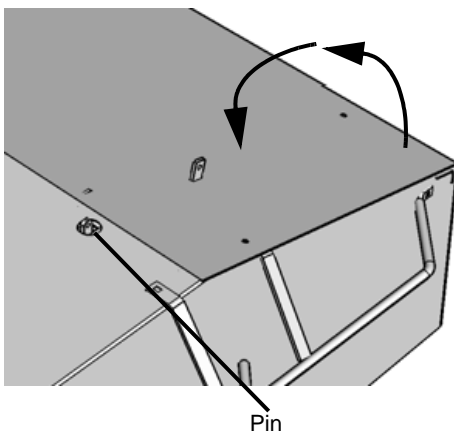
- The tractor's PTO outlet must be disconnected.
- All hydraulics must be neutralised.
- The tractor engine must be stopped.
- The ignition key must be removed.
- The hand brake must be activated.
- The tractor must be prevented from rolling.

**Failure to secure the tractor to prevent it from rolling could endanger lives.**



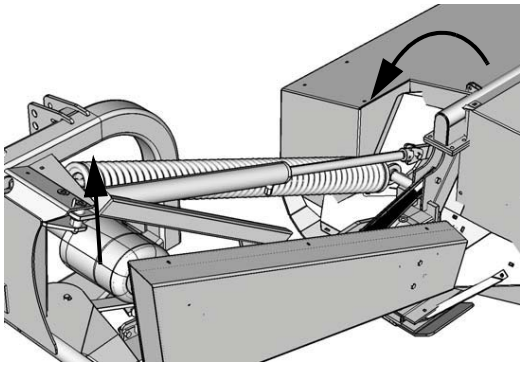
Every 40 hours of use

→ »Maintenance intervals« page 71

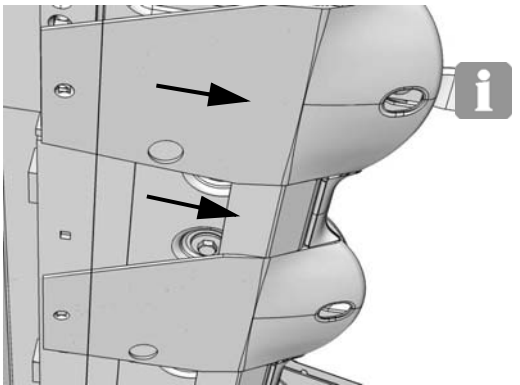
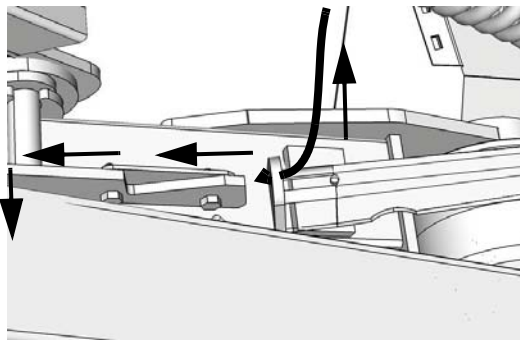


The stone guard and counter knife are inspected as follows:

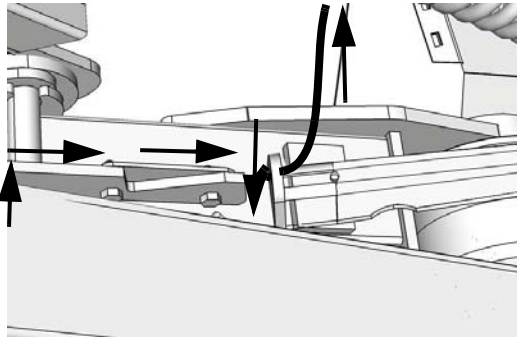
- ▶ Remove the pin.
- ▶ Open the guards around the machine's cutterbar.



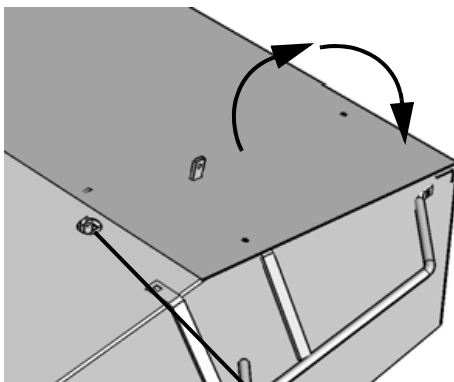
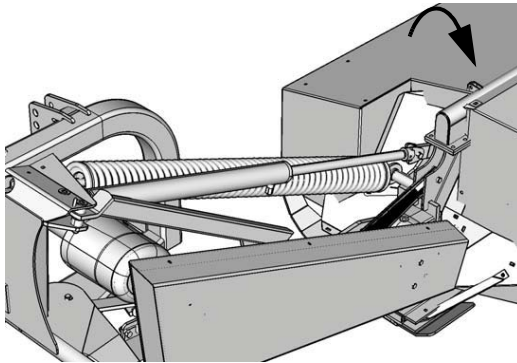
- ▶ Activate the tractor's lift arms and raise the machine completely free of the ground.
- ▶ Pull in the cord and release the lock catch.
- ▶ Hold in the string and activate the tractor's hydraulics and the machine will be raised up to the transport position.
- ▶ Release the string once the cutting unit is raised approximately halfway up.
- ▶ Check that the lock is locked when the cutting unit is in the transport position.
- ▶ Release the pressure in the hydraulic system.



- ▶ Carry out a visual inspection of the machine's stone guard and counter knife for wear.
- i** Stone guards and counter knives with visible holes caused by heavy wear must be replaced immediately.  
→ »Stone guard and counter knife« page 105



- ▶ Activate the tractor's hydraulic system and allow the hydraulic cylinder to release the machine's cutting lock.
- ▶ Pull in the cord and release the lock catch.
- ▶ Hold in the string and activate the tractor's hydraulics and lower the machine down to the transport position.



Pin

- ▶ Close the guards around the machine's cutterbar.
- ▶ Fit the pin.

# Maintenance

## V-belt



### **Safety concerning maintenance work on the transmission**

When working on the transmission the tractor must be stopped and secured.

This prevents the machine from suddenly starting to rotate.

Failure to follow the safety instructions may result in serious injuries.

When working on the transmission:

- The tractor's PTO outlet must be disconnected.
- The tool must be lowered to the ground.
- All hydraulics must be neutralised.
- The tractor engine must be stopped.
- The ignition key must be removed.
- The hand brake must be activated.
- The tractor must be prevented from rolling.

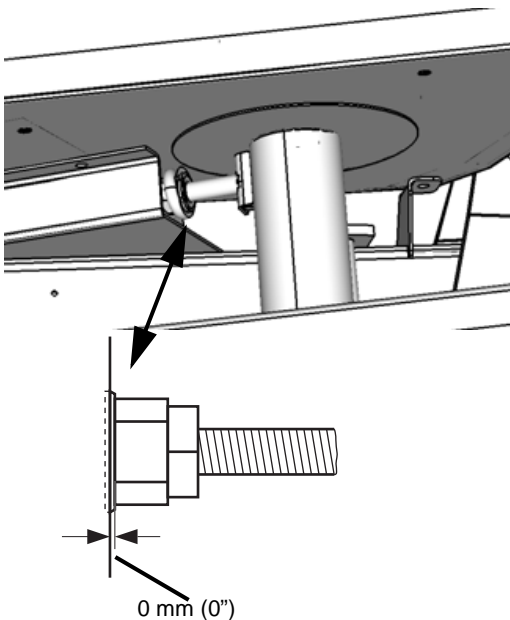
**Failure to secure the tractor to prevent it from rolling could endanger lives.**



After 10 working hours

Thereafter, every 40 hours of use

→ »Maintenance intervals« page 71



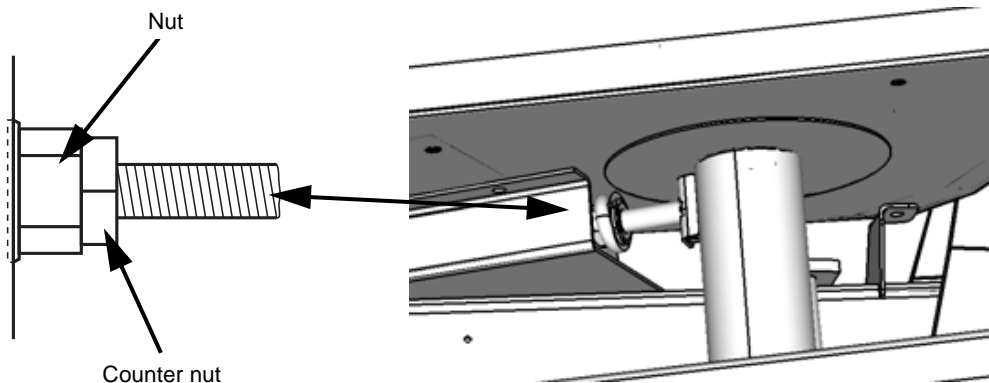
The V belt transmission must be regularly checked.

The v-belt transmission is checked in the following way:

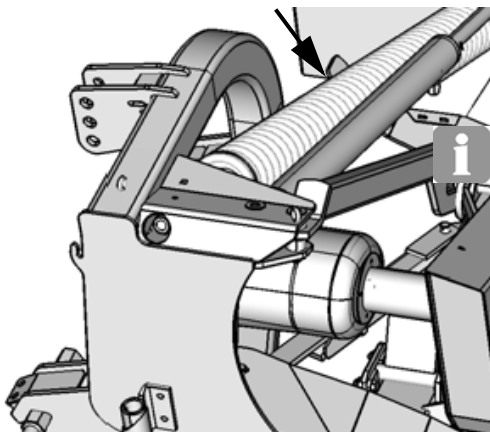
- ▶ Check that the distance between the nut and the edge of the guard is as shown.

The following must be done if the distance between the nut and the edge of the guard is not as shown:

- ▶ Loosen the counter nut.
- ▶ Turn the nut so the distance is as shown above.
- ▶ Fasten counter-nut.



## Spring for balancing the cutting unit



The machine's spring does not require any further maintenance.



Under no circumstances should any attempt be made to detach the machine's spring.

If an attempt is made to detach it, large amounts of energy which are stored in the spring will be suddenly released and can cause serious injuries or death.



Only authorised persons may detach this component.

## Tarpaulin



### **Safety in connection with maintenance work on the cutterbar**

When working on the cutterbar the tractor must be stopped and secured.

This prevents the machine from suddenly starting to rotate.

Failure to follow the safety instructions may result in serious injuries.

When working on the cutterbar:

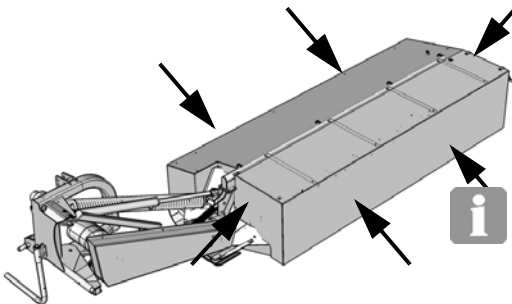
- The tractor's PTO outlet must be disconnected.
- The tool must be lowered to the ground.
- All hydraulics must be neutralised.
- The tractor engine must be stopped.
- The ignition key must be removed.
- The hand brake must be activated.
- The tractor must be prevented from rolling.

**Failure to secure the tractor to prevent it from rolling could endanger lives.**



## Every month

The tarpaulin and other guards around the cutting unit must be checked regularly.



The tarpaulin and other guard are checked as follows:

- ▶ Visually inspect the machine's guards for holes and other damage.



Any guards with visible holes or other damage must be replaced immediately.

→ »Tarpaulin« page 111

## Replacement



### **Safety concerning maintenance work on the transmission**

When working on the transmission the tractor must be stopped and secured.

This prevents the machine from suddenly starting to rotate.

Failure to follow the safety instructions may result in serious injuries.

When working on the transmission:

- The tractor's PTO outlet must be disconnected.
- The tool must be lowered to the ground.
- All hydraulics must be neutralised.
- The tractor engine must be stopped.
- The ignition key must be removed.
- The hand brake must be activated.
- The tractor must be prevented from rolling.



**Failure to secure the tractor to prevent it from rolling could endanger lives.**

## Cutterbar



### **Pay attention when performing oil change**

Use barrier cream or protective gloves when changing oil.

It will protect your hands against skin injuries.

Direct contact with the oil could lead to serious skin injuries.

### **Use the correct oil type**

Always use the correct oil type for the transmission.

This will ensure the transmission has a long service life.

Using the incorrect oil type may damage the transmission.

### **Maintain correct oil level**

The maximum and minimum oil level indicators on the transmission must not be exceeded.

Correct transmission oil level will ensure a long service life.

Incorrect oil levels can cause the transmission to overheat, resulting in serious damage.

# Maintenance

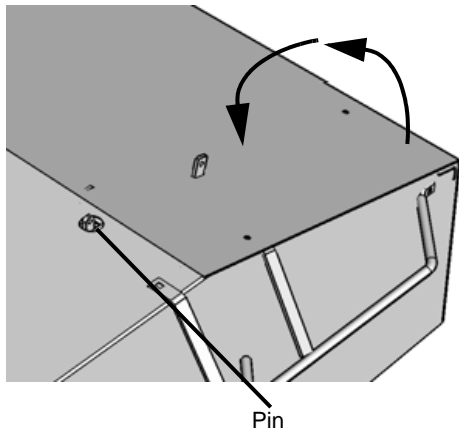
## Changing the oil

After 10 working hours

Thereafter, every 200 hours  
of use

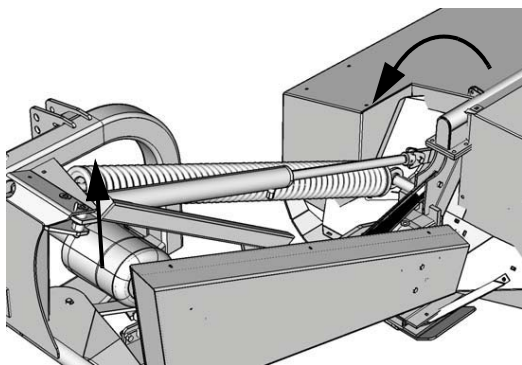
Or once a year

→ »Maintenance intervals« page 71

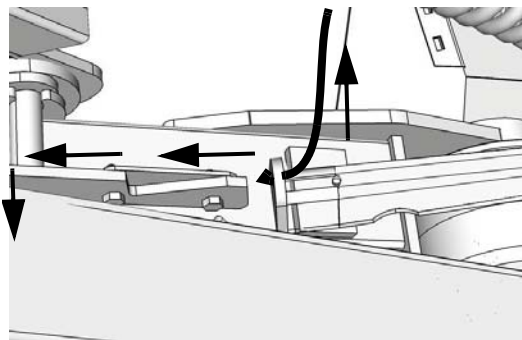


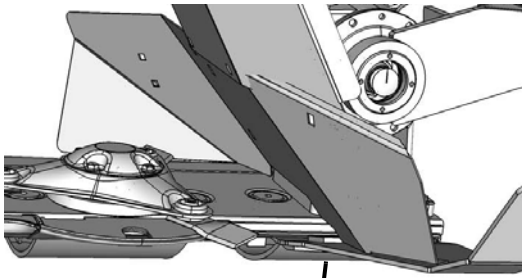
The oil in the cutterbar is changed as follows:

- ▶ Remove the pin.
- ▶ Open the guards around the machine's cutterbar.

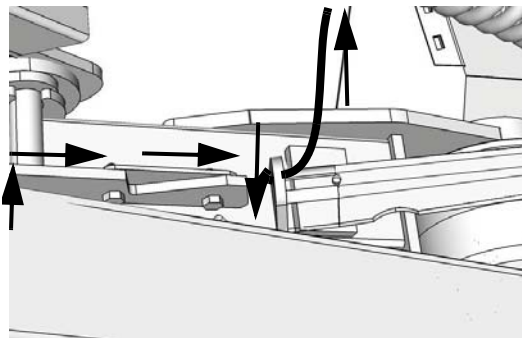
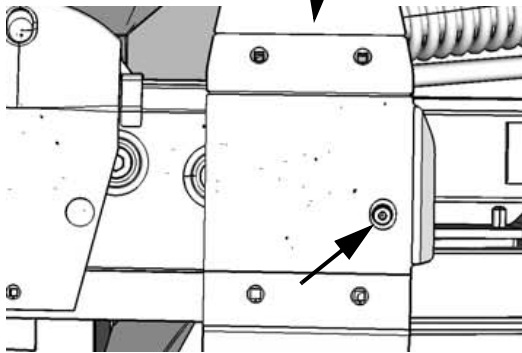


- ▶ Activate the tractor's lift arms and raise the machine completely free of the ground.
- ▶ Pull in the cord and release the lock catch.
- ▶ Hold in the string and activate the tractor's hydraulics and the machine will be raised up to the transport position.
- ▶ Release the string once the cutting unit is raised approximately halfway up.
- ▶ Check that the lock is locked when the cutting unit is in the transport position.
- ▶ Release the pressure in the hydraulic system.

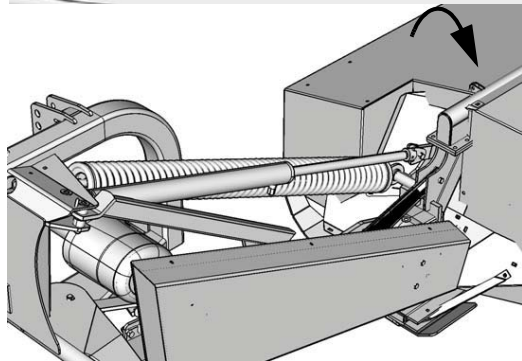




- ▶ Locate the oilplug on the left side of the cutterbar and remove it.
- ▶ Let the oil flow into a suitable container.
- ▶ Allow the last of the oil to drip out of the cutterbar for approx. 10–15 minutes.
- ▶ Fit the drain plug into the cutterbar and tighten it fully.
- ▶ Activate the tractor's hydraulic system and allow the hydraulic cylinder to release the machine's cutting lock.

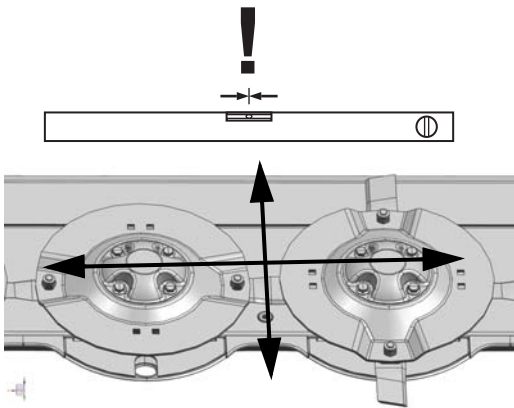


- ▶ Pull in the cord and release the lock catch.
- ▶ Hold in the string and activate the tractor's hydraulics and lower the machine down to the transport position.

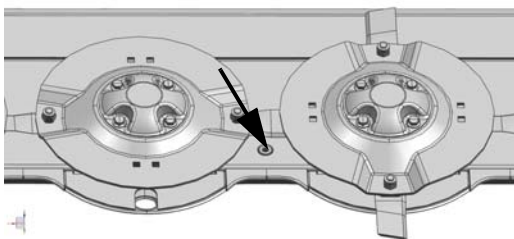


# Maintenance

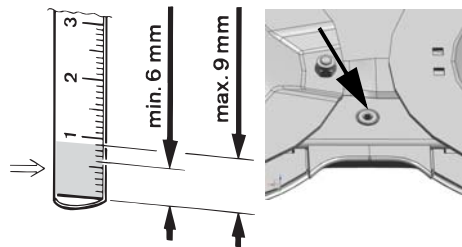
- ▶ Place the machine on a level surface.
- ▶ Check the position of the cutterbar.



- ▶ Remove the oilplug.



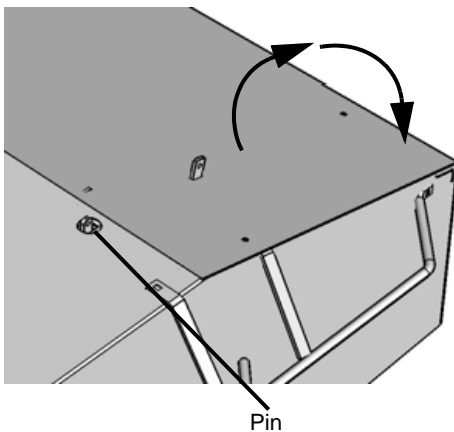
- ▶ Fill up with the new oil until the oil level is as shown.
- ▶ Check the oil level using a measuring instrument.



Model	Litres (approx.)	Pints (US) (approx.)	Pints (Imp.) (approx.)
<b>2624M</b>	3.1	6.5	5.4
<b>2628M</b>	3.6	7.6	6.3
<b>2632M</b>	4.1	8.6	7.2

- Min. 6 mm ( $\frac{1}{4}$ " )
  - max. 9 mm ( $\frac{3}{8}$ " )
- »Lubricants« page 122
- ▶ Fit the oilplug and tighten it fully.

- ▶ Close the guards around the machine's cutterbar.
- ▶ Fit the pin.



## Transmission



### **Safety concerning maintenance work on the transmission**

When working on the transmission the tractor must be stopped and secured.

This prevents the machine from suddenly starting to rotate.

Failure to follow the safety instructions may result in serious injuries.

When working on the transmission:

- The tractor's PTO outlet must be disconnected.
- The tool must be lowered to the ground.
- All hydraulics must be neutralised.
- The tractor engine must be stopped.
- The ignition key must be removed.
- The hand brake must be activated.
- The tractor must be prevented from rolling.



**Failure to secure the tractor to prevent it from rolling could endanger lives.**

### **Pay attention when performing oil change**

Use barrier cream or protective gloves when changing oil.

It will protect your hands against skin injuries.

Direct contact with the oil could lead to serious skin injuries.

### **Use the correct oil type**

Always use the correct oil type for the transmission.

This will ensure the transmission has a long service life.

Using the incorrect oil type may damage the transmission.

### **Maintain correct oil level**

The maximum and minimum oil level indicators on the transmission must not be exceeded.

Correct transmission oil level will ensure a long service life.

Incorrect oil levels can cause the transmission to overheat, resulting in serious damage.

## Bevel gear Changing oil

### Every season

Oil amount when changing oil:

Litres (approx.)	Pints (US) (approx.)	Pints (Imp.) (approx.)
0.6	1.3	1.0

→ »Maintenance intervals« page 71

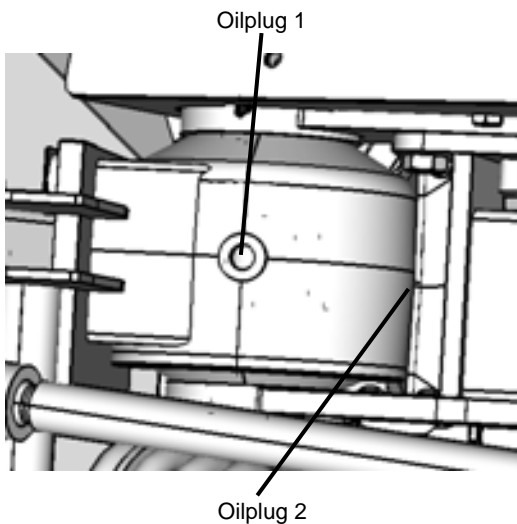


It is recommended that when changing the oil, the machine is fitted to the tractor and the hydraulic system is connected to the machine.

→ »Coupling the tractor« page 39

The oil is changed as follows:

- ▶ Raise the machine to the transport position.  
→ »Machine in the transport position« page 50
- ▶ Remove oilplug 2.
- ▶ Let the oil run into a suitable receptacle.
- ▶ Allow the last of the oil to drip out of the transmission for approx. 10–15 minutes.
- ▶ Lower the machine back down to the working position.
- ▶ Remove oilplug 1.
- ▶ Fill up with new oil until it oil level reaches the hole for oilplug 2.
- ▶ Fit oilplug 1 and 2.



## Knives



### **Safety in connection with maintenance work on the cutterbar**

When working on the cutterbar the tractor must be stopped and secured.

This prevents the machine from suddenly starting to rotate.

Failure to follow the safety instructions may result in serious injuries.

When working on the cutterbar:

- The tractor's PTO outlet must be disconnected.
- The tool must be lowered to the ground.
- All hydraulics must be neutralised.
- The tractor engine must be stopped.
- The ignition key must be removed.
- The hand brake must be activated.
- The tractor must be prevented from rolling.

**Failure to secure the tractor to prevent it from rolling could endanger lives.**

### **Check the machine knives on a regular basis**

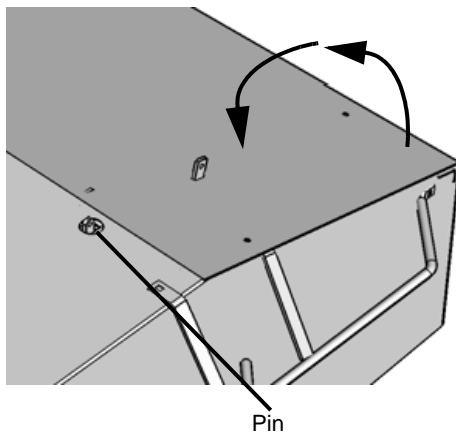
The machine's knives must be regularly inspected.

Worn or damaged knives can unbalance the rotating parts.

Vibrations can cause damage to the machine.



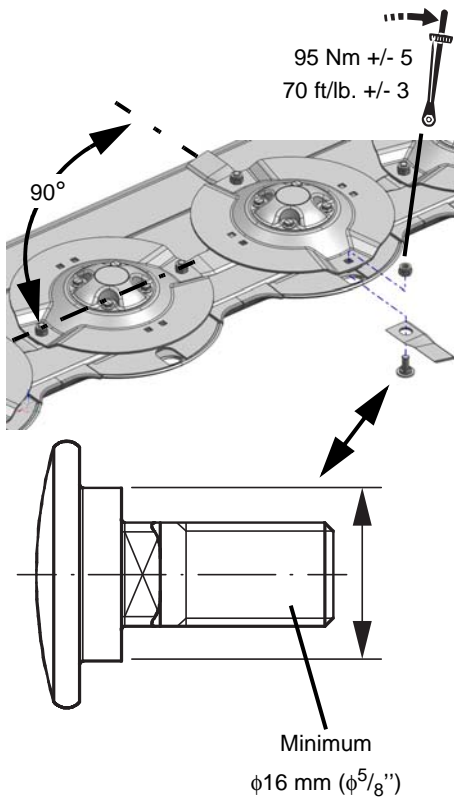
As required



→ »Maintenance intervals« page 71

Replace the knives as follows:

- ▶ Remove the pin.
- ▶ Open the guards around the machine's cutterbar.

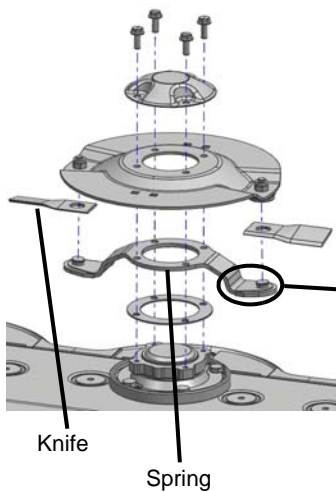


- ▶ Turn the cutting discs by hand until the damaged knife is in the position shown.
- ▶ Remove the bolt.
- ▶ Replace the knife.
- ▶ Inspect the bolt for wear.
- If the bolts are damaged or worn, they must be changed.



The minimum diameter of the bolt must not be less than 16 mm (5/8").

- ▶ Mount the knife and bolt.
- ▶ Tighten the bolt with a torque wrench to a torque of 95 Nm (70 ft lbs).

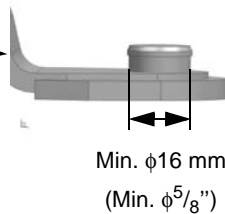


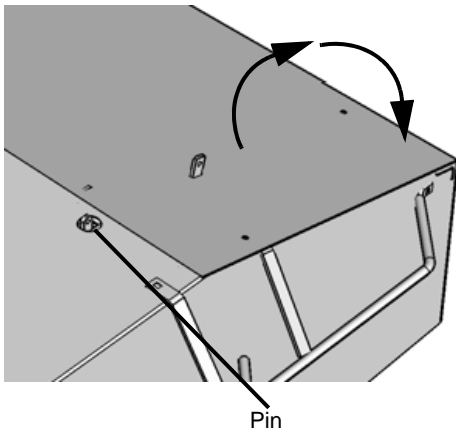
If the machine is fitted with knife quick release [PROFIT]\*, the same requirement applies for bolt wear.

→ »Knives« page 99

\* Extra equipment

→ »Knife quick release [PROFIT]« page 112





- ▶ Close the guards around the machine's cutterbar.
- ▶ Fit the pin.

## Cutting disc



### **Safety in connection with maintenance work on the cutterbar**

When working on the cutterbar the tractor must be stopped and secured.

This prevents the machine from suddenly starting to rotate.

Failure to follow the safety instructions may result in serious injuries.

When working on the cutterbar:

- The tractor's PTO outlet must be disconnected.
- The tool must be lowered to the ground.
- All hydraulics must be neutralised.
- The tractor engine must be stopped.
- The ignition key must be removed.
- The hand brake must be activated.
- The tractor must be prevented from rolling.

**Failure to secure the tractor to prevent it from rolling could endanger lives.**

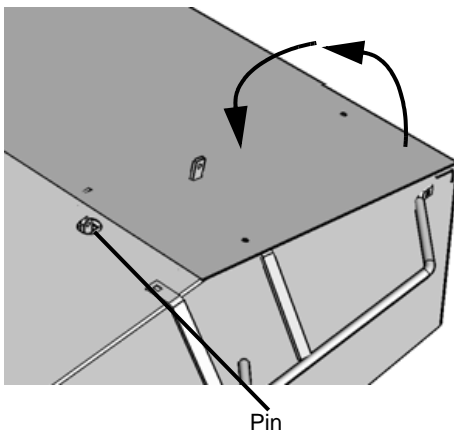


As required

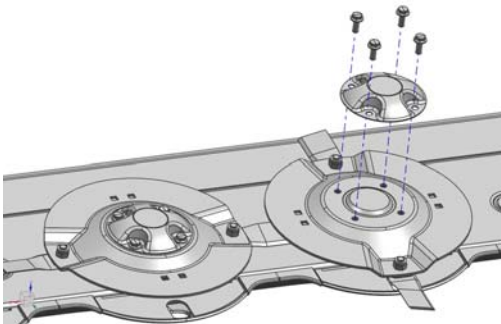
→ »Maintenance intervals« page 71

The cutting discs are replaced in the following way:

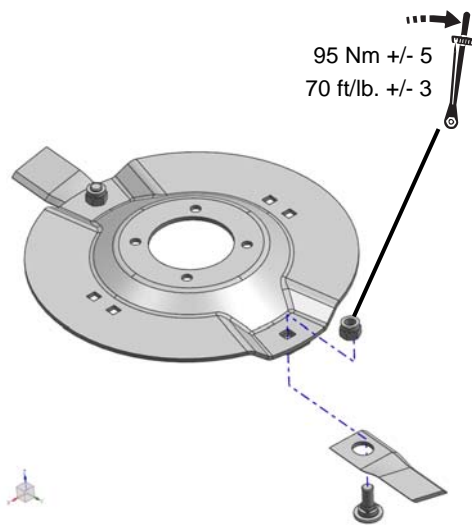
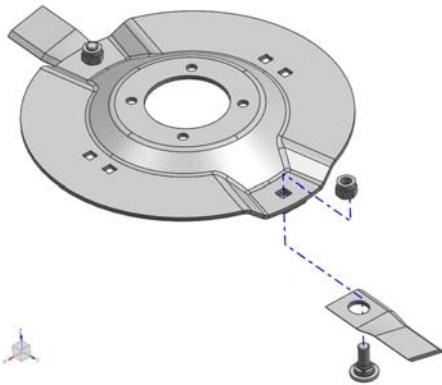
- ▶ Remove the pin.
- ▶ Open the guards around the machine's cutterbar.



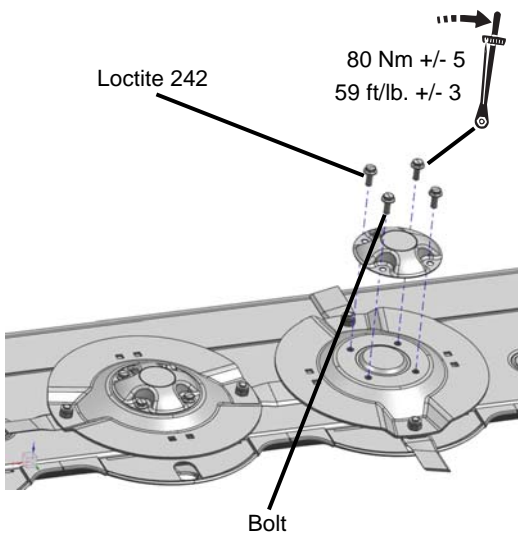
- ▶ Remove the cutting disc.



- ▶ Remove the bolt and knife from the cutting disc.

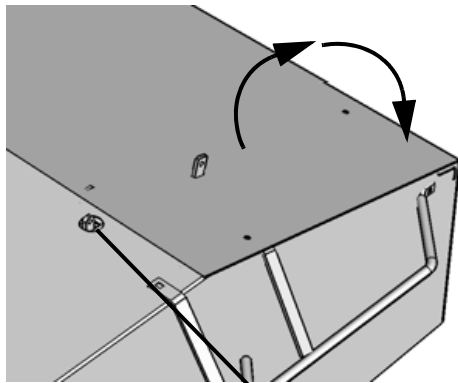


- ▶ Fit the knife and bolt on the new cutting disc.
- ▶ Tighten the bolt to the given torque.



- ▶ Apply Loctite 242 or a similar product to all bolts.
- ▶ Fit the cutting disc on the cutterbar.
- ▶ Tighten the bolts to the given torque.

# Maintenance



Pin

- ▶ Close the guards around the machine's cutterbar.
- ▶ Fit the pin.

## Stone guard and counter knife



### **Safety in connection with maintenance work on the cutterbar**

When working on the cutterbar the tractor must be stopped and secured.

This prevents the machine from suddenly starting to rotate.

Failure to follow the safety instructions may result in serious injuries.

When working on the cutterbar:

- The tractor's PTO outlet must be disconnected.
- All hydraulics must be neutralised.
- The tractor engine must be stopped.
- The ignition key must be removed.
- The hand brake must be activated.
- The tractor must be prevented from rolling.

**Failure to secure the tractor to prevent it from rolling could endanger lives.**

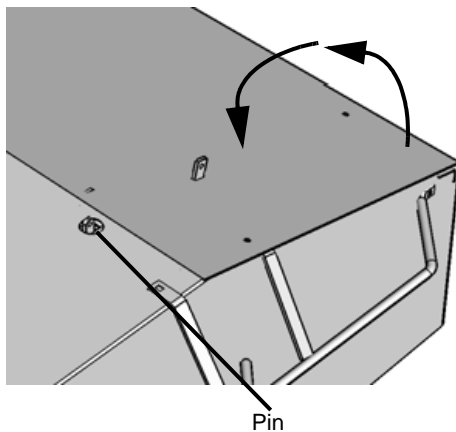


As required

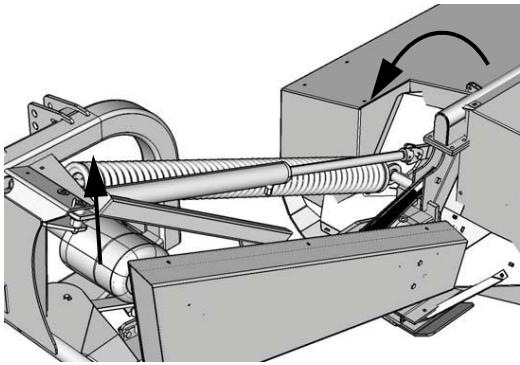
→ »Maintenance intervals« page 71

The stone guard and counter knife are changed as follows:

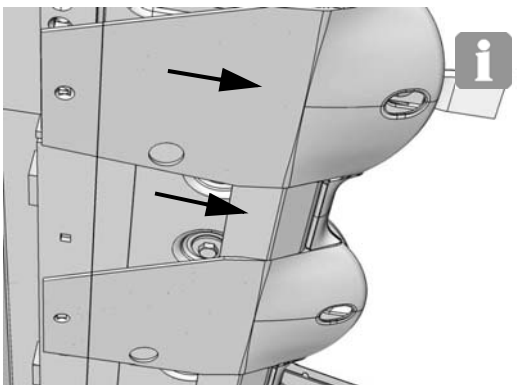
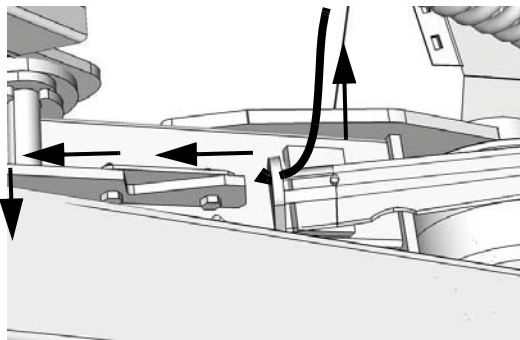
- ▶ Remove the pin.
- ▶ Open the guards around the machine's cutterbar.



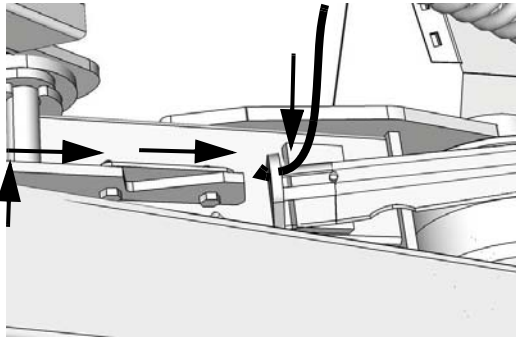
# Maintenance



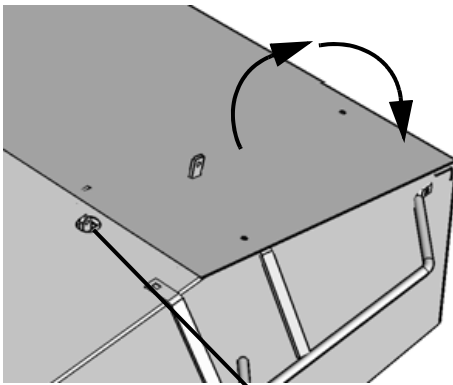
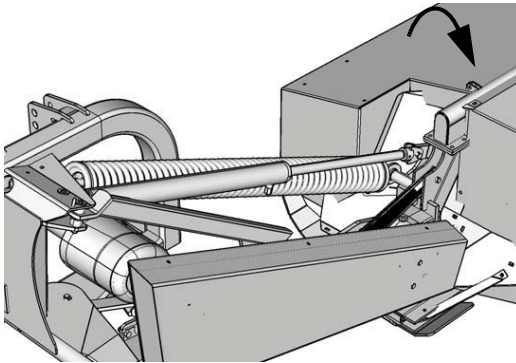
- ▶ Activate the tractor's lift arms and raise the machine completely free of the ground.
- ▶ Pull in the cord and release the lock catch.
- ▶ Hold in the string and activate the tractor's hydraulics and the machine will be raised up to the transport position.
- ▶ Release the string once the cutting unit is raised approximately halfway up.
- ▶ Check that the lock is locked when the cutting unit is in the transport position.
- ▶ Release the pressure in the hydraulic system.
- ▶ Remove the worn stone guard and counter knife.



- ▶ Fit the new stone guard and counter knife.
- Stone guards and counter knives with visible holes caused by heavy wear must be replaced immediately.



- ▶ Activate the tractor's hydraulic system and allow the hydraulic cylinder to release the machine's cutting lock.
- ▶ Pull in the cord and release the lock catch.
- ▶ Hold in the string and activate the tractor's hydraulics and lower the machine down to the transport position.



- ▶ Close the guards around the machine's cutterbar.
- ▶ Fit the pin.

Pin

# Maintenance

## V-belt



### Safety concerning maintenance work on the transmission

When working on the transmission the tractor must be stopped and secured.

This prevents the machine from suddenly starting to rotate.

Failure to follow the safety instructions may result in serious injuries.

When working on the transmission:

- The tractor's PTO outlet must be disconnected.
- The tool must be lowered to the ground.
- All hydraulics must be neutralised.
- The tractor engine must be stopped.
- The ignition key must be removed.
- The hand brake must be activated.
- The tractor must be prevented from rolling.

**Failure to secure the tractor to prevent it from rolling could endanger lives.**



As required

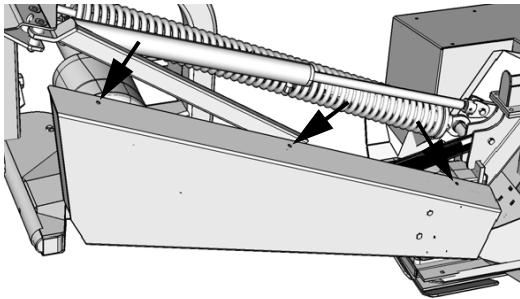
The V belt transmission must be regularly checked.

Once the V-belt transmission starts having problems transmitting power to the cutterbar, it must be changed.

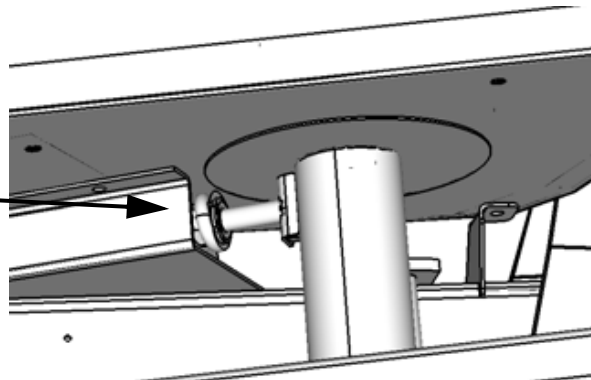
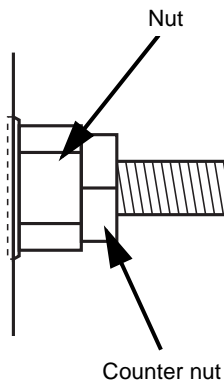
→ »Maintenance intervals« page 71

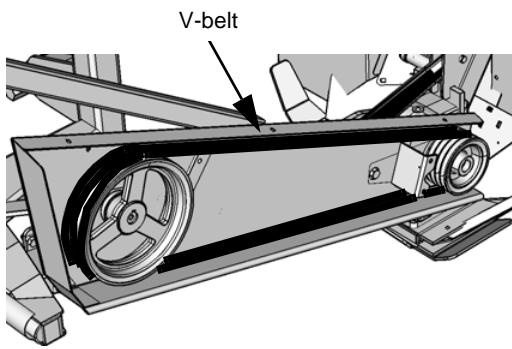
The V-belts are replaced in the following way:

- ▶ Remove the guard.

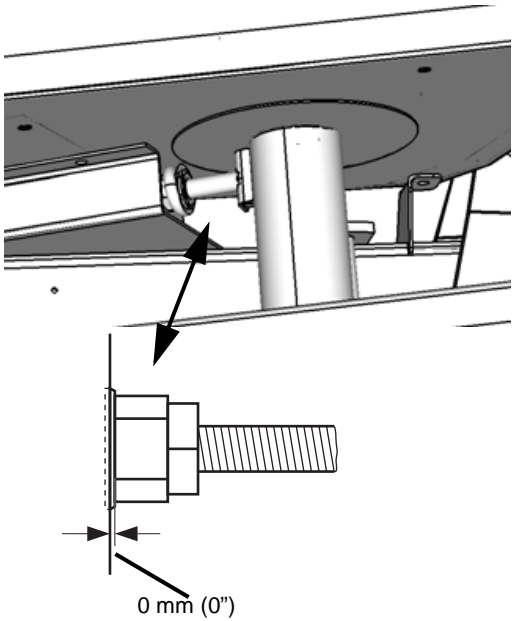


- ▶ Loosen the counter nut.
- ▶ Loosen the counter nut.

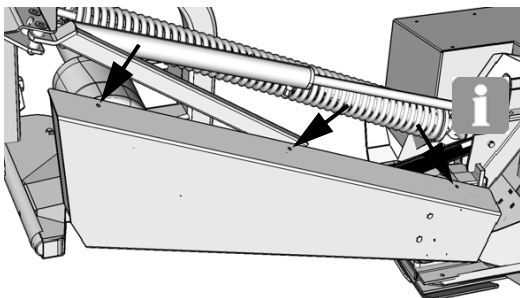




- ▶ Remove the old V-belts.
- ▶ Fit the new V-belts.



- ▶ Tighten the nut until the distance between the nut and the edge of the guard is as shown.
- ▶ Fasten counter-nut.

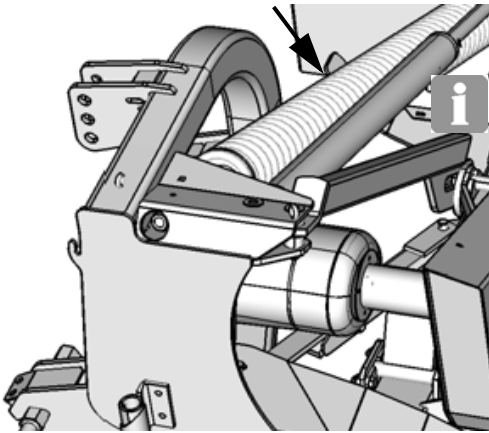


- ▶ Fit the guard.

The V-belts should be checked after the first 10 working hours.  
→ »V-belt« page 90

# Maintenance

Spring for balancing the cutting unit



.Under no circumstances should any attempt be made to detach the machine's spring.

If an attempt to detach or replace it is made, large amounts of energy which are stored in the spring will be suddenly released and can cause serious injuries or death.



Only authorised persons may replace this component.

## Tarpaulin



### **Safety concerning maintenance work on the cutting unit**

When working on the cutting unit, the tractor must be stopped and secured.

This prevents the machine from suddenly starting to rotate.

Failure to follow the safety instructions may result in serious injuries.

When working on the cutterbar:

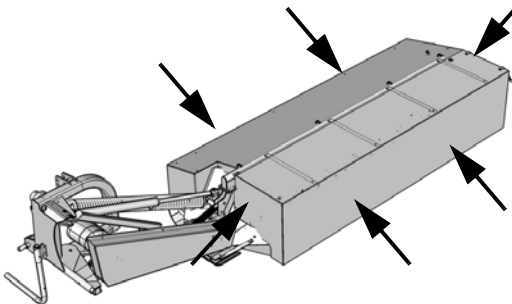
- The tractor's PTO outlet must be disconnected.
- The tool must be lowered to the ground.
- All hydraulics must be neutralised.
- The tractor engine must be stopped.
- The ignition key must be removed.
- The hand brake must be activated.
- The tractor must be prevented from rolling.



**Failure to secure the tractor to prevent it from rolling could endanger lives.**

As required

The tarpaulin and other guards around the cutting unit must be replaced if any type of damage occurs.

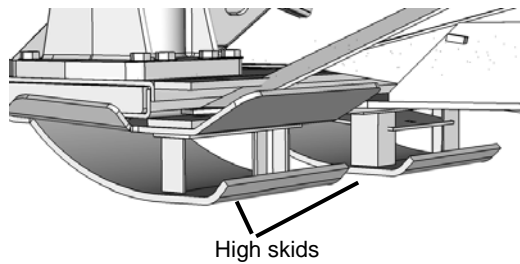


Any damaged tarpaulins and other guards are replaced as follows:

- ▶ Remove the machine's guard.
- ▶ Replace the damaged parts.
- ▶ Fit the machine's guard.
- ▶ Check that the machine's guards are fitted correctly.

# Extra equipment

## High skids



The machine can be fitted with high skids if a higher stubble height is required.

The skids are available in the following heights:

- 20 mm ( $\frac{3}{4}$ " )
- 40 mm ( $1 \frac{9}{16}$ " )
- 80 mm (3" )

High skids are recommended for uneven fields with lots of stones or molehills.

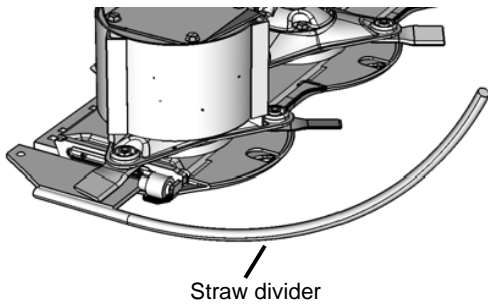
Stubble height	Note
50 → 100 mm	40 mm skids fitted
2" → 4"	1 $\frac{9}{16}$ " skids fitted
100 mm →	80 mm skids fitted
4" →	3 $\frac{1}{8}$ " skids fitted

## Knife quick release [PROFIT]

The machine can be fitted with knife quick release [PROFIT], so the knives can easily be changed or turned in just a few seconds with the help of a simple tool.

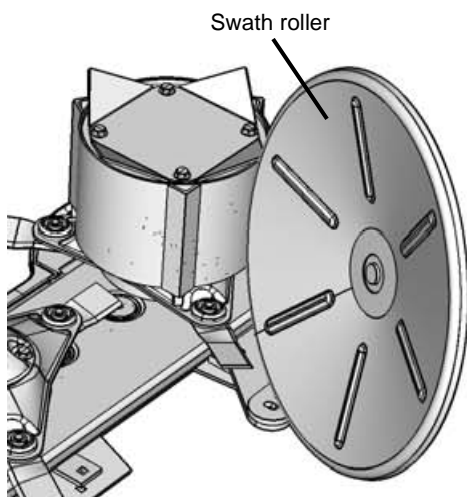


## Straw divider



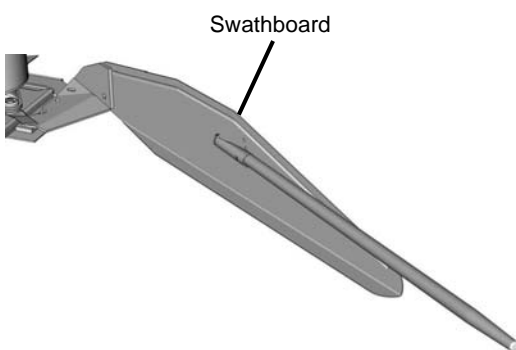
The machine can be fitted with a straw divider on right-hand side of the cutterbar. The straw divider is to be used for mowing grass seed crop as well as long matted grass.

## Swath roller



The machine can be fitted with a swath roller on the right-hand side of the cutterbar, which guides the crop in towards the centre of the cutting width.

## Swathboard

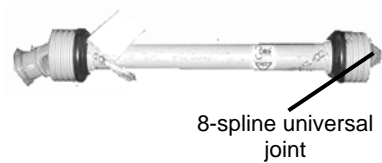


The machine can be fitted with 3 different swathboards on the left and right-hand side\* of the cutterbar.

\* Only if the swath roller is not fitted.  
→ »Swath roller«

# Extra equipment

## Universal joint for the PTO shaft

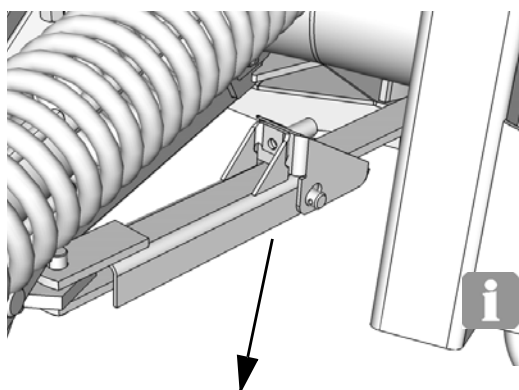


The PTO shaft on the machine can be fitted with an 8-spline universal joint.

## Chain for locking the lift arms

The machine can be equipped with a chain to prevent the tractor's lift arms from lowering. The chain is fitted between the highest point on the tractor and one of the lift arms.

## Spring catch for hilly ground

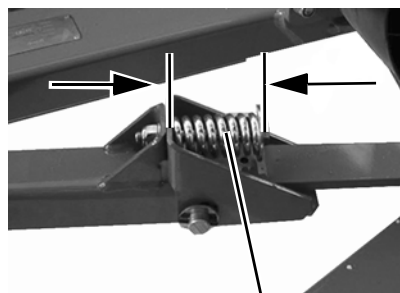


The spring catch keeps the machine in position in relation to the tractor. If the machine meets an obstacle, release the catch, and the machine will swing behind. After the obstacle has been passed, swing the machine back and the catch will automatically lock again.

The spring catch is factory fitted as shown.



The spring catch must be tightened to a maximum of 62 mm (2 7/16"), otherwise the catch may lock.



75 mm (3")

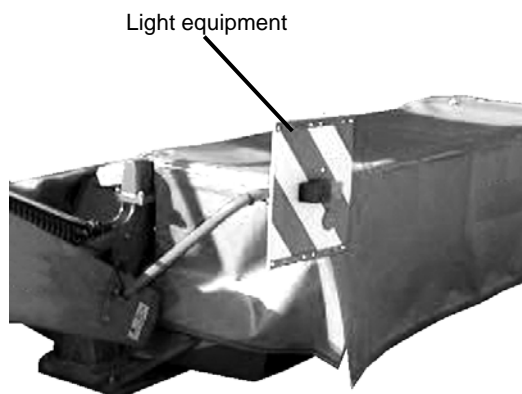


On hilly ground, it is possible that the spring catch may be tightened further during use.

It is recommended that the screw be tightened by one turn and then the setting checked.

### Light equipment

The machine can be fitted with light equipment and a reflector set which ensures that the machine is correctly marked for transport on public roads.



# Troubleshooting

## Cutterbar

Fault	Possible cause	Remedy	Page
The cutterbar swings behind or cannot follow the ground	Springs incorrectly fitted	Check the diameter of the spring wire	37
	Very sloping ground	Check the spring catch	114
The machine's setting has changed	The tractor's lift arms cannot hold themselves steady in a fixed position	Fit a chain to maintain the machine's suspension in position	43
The machine is hanging too low when lifting with the tractor's lift arms	The working height of the suspension is not correct	Check the working height of the suspension	43
Uneven stubble	Driving too slowly	Increase speed	25
	The tractor's rpm for the PTO outlet is too low	Check the rotational speed - not over 575 rpm.	25
	The knives are blunt or individual knives are missing	Turn or replace the knives	79
	The machine is not correctly balanced	Adjust the floating position	57
	The V-belts are not correctly tightened	Check the V-belts	90
	The V-belts are worn	Replace the V-belts	108
Stripes in the stubble <sup>1</sup>	The cutterbar does not have the correct angle for the crop in question	Adjust the angle of the cutterbar	57
	The cutterbar is fitted with high skids <sup>2</sup>	Remove the high skids <sup>2</sup> Note! The field must be free of stones	112
	Build up of crop on the cutting discs	Increase speed	
Waste when mowing seed grass crop	The cones are too heavily loaded	Remove the cones, and fit the straw divider <sup>2</sup>	113
Build up of crop on the right-hand side	Long matted grass, which is lying flat	Fit the straw divider <sup>2</sup>	113
Stubble too high	Cutterbar angle is too small	Adjust stubble height	57
The cutterbar gets abnormally warm	Too much oil in the cutterbar	Inspect the oil level in the cutterbar	76
	Wrong oil type used	Change to the correct oil type	122

## PTO shaft

Fault	Possible cause	Remedy	Page
The PTO shaft is knocking	The top link between the tractor and the machine is too short (low stubble height)	Increase the length of the top link	57

- <sup>1</sup> Problems with stripes are more likely to occur when mowing short, strong, spring crops in less than ideal weather conditions. Always check that the knives on the cutting discs are sharp. The angle of the machine can be changed a little to experiment (forwards or backwards). Ensure that the PTO shaft does not drop downwards when the length of the top link is changed.
- <sup>2</sup> Extra equipment - Page 112

# Warranty

---

## Guidelines for warranty

The warranty period for our product is 12 months from the date of purchase. The warranty does not include the parts subject to wear.

Warranty claims can be made with Kverneland warranty application which must be filled out by your local Kverneland dealer where your machine/equipment was purchased.

## No liability is accepted for any damage arising

We are not liable for compensation for any damage not arising from the actual machine/equipment. This also includes damage arising from incorrect usage of the machine/equipment.

Therefore, read this instruction manual before taking the machine/equipment into use. Furthermore, do always check that the machine/equipment works properly before and during use.

When the machine is reached the end of its service life, it must be disposed of in the correct way. Observe the following:

## Metal parts

Send usable parts to an authorised recycling station. Larger scrap parts must be taken to an authorised breaker's yard where they can be processed in accordance with current regulations.

## Rubber parts

Send usable parts to an authorised recycling plant where they can be processed in accordance with current regulations.

## Plastic

Send usable parts to an authorised recycling plant where they can be processed in accordance with current regulations.

## Hydraulic oil and lubricants

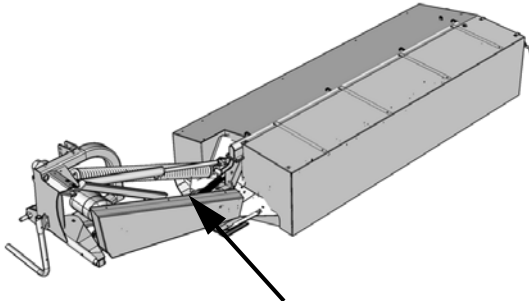
The machine must be emptied of all oil and lubricants. The used oil and lubricants must be sent to a breaker's yard where it can be processed in accordance with current regulations.

# EU declaration of conformity

EU Directive 2006/  
42/EC

We:

**Kverneland Group Kerteminde AS**  
**Taarupstrandvej 25**  
**DK - 5300 Kerteminde**  
**Denmark**



CE plate and type plate

declare that we alone are responsible for the product:

**2624M - 2628M - 2632M**  
**and ancillary equipment**

**Valid as from serial no.:**  
**KT449178**

to which the declaration refers being in compliance with the basic safety requirements of EU Directive 2006/42/EC.

To fulfil the appropriate safety requirements under the terms of the EU Directive, the following standards have been applied:

- DIN EN ISO 12 100-1:2003
- DIN EN ISO 12 100-2:2003
- DIN EN ISO 4254-12:2012
- DIN 11001-3:1998

Claus Udengaard Thomsen  
Kverneland Group Kerteminde AS  
Kerteminde - Denmark 01.11.2014

Claus Udengaard Thomsen

EU authorised representative



# Technical information

## Conversion table

Basic unit:	SI - unit	Conversion figures:
Length	1 m	39.4 in = 3.3 ft = 1.1 yrd = 0.00062 miles (US)
Area	1 m <sup>2</sup>	1.2 yd <sup>2</sup> = 10.8 ft <sup>2</sup> = 0.00025 acre = 0.0001 ha
Volume	1 dm <sup>3</sup> (1 l)	61 in <sup>3</sup> = 0.035 ft <sup>3</sup> = 0.22 gallons (Imp) = 0.26 gallons (US)
Speed	1 m/sec	3.6 km/h = 2.24 mph = 3.28 ft/sec
Power	1 N	0.10 kp = 0.22 lbf
Effect	1 kW	1.36 hp = 102 kpm/sec
Mass	1 kg	2.2 lb = 0.0197 cwt = 35 oz
Torque moment	1 Nm	0.102 kpm = 8.8 lb-in = 0.74 ft/lb.
Pressure	1 bar	0.01 atm. (kp/cm <sup>2</sup> ) = 0.14 psi
RPM	min <sup>-1</sup> = revolutions / min = rpm	

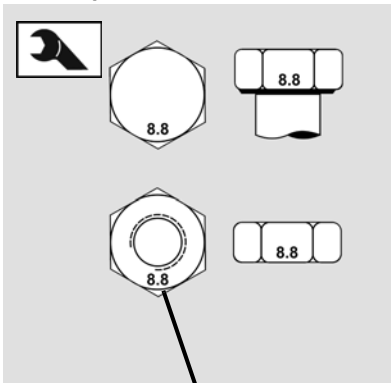
## Lubricants

Only check the oil level when there is visible oil loss, while the machine is horizontal.

The transmission oil and grease must meet the following requirements:

Specifications			
Transmission oil		Grease	
<b>SAE J-2360</b>	80W-90	<b>NLGI GC/LB</b>	2
<b>API</b>	GL-4		

## Torque moment



Grade class specification



### Use the correct tightening torque

Tighten screws, nuts and bolts to the given torque.  
Failure to do so can cause damage to the machine or serious or fatal injuries.

Note the grade class for screws, nuts and bolts.

Note the size of the screw, nut or bolt and find the correct tightening torque in the table.

Tighten the screws, nuts and bolts to the given values, provided that no other value is given.

Torque moment for bolts of quality 8.8 black and/or galvanised and not greased when tightened on a smooth surface or a plain washer									
Thread dia. mm	5	6	8	10	12	14	16	20	22
Nm	5.5	10	24	47	81	128	197	385	518
ft/lb	4	7.5	18	35	60	94.5	145.5	284	382.5

The above tables are valid unless otherwise indicated in the instruction manual for this machine.

# Index

<b>A</b>			
Assembly - attachment			
Adjusting the ground pressure	45		
Adjusting the springs	44		
Adjusting the working height	43		
Attachment of the tractor	39		
Machine in the transport position	50		
PTO shaft	46		
<b>B</b>			
Before the machine is connected	37		
<b>C</b>			
Cleaning	62		
Conversion table	122		
<b>D</b>			
Disposal			
Hydraulic oil and lubricants	119		
Metal parts	119		
Plastic	119		
Rubber parts	119		
<b>E</b>			
EU Directive. 98/37/EC	120		
Extra equipment			
Quick release of knives	112		
Chain for locking the lift arms	114		
High skids	112		
Light equipment	115		
Quick release of knives	112		
Spring catch for hilly ground	114		
Straw divider	113		
Swath roller	113		
Swathboard	113		
Universal joint for the PTO shaft	114		
<b>F</b>			
First start-up of machine	49		
<b>H</b>			
Hydraulic connection	48		
Hydraulics	18		
<b>I</b>			
Instruction manual target group	4		
<b>L</b>			
Lubricants		122	
<b>M</b>			
Maintenance			
Adjustment		75	
Lubrication		73	
Maintenance intervals		71	
Replacement		93	
<b>N</b>			
Notes		121	
<b>P</b>			
Parking			
Disconnection of the machine		64	
Storage		68	
Preparing the machine		32	
PTO		13	
PTO shaft			46
Fitting			
<b>R</b>			
Replacement			
Cutting disc		102	
Knives		99	
Oil, bevel gear		98	
Oil, cutterbar		94	
Spring		110	
Stone guard and counter knife		105	
Tarpaulin		111	
V-belt		108	
<b>S</b>			
Safety			
Safety symbols		8	
Service - check			
Cones		84	
Cutting disc		82	
Knives		79	
Oil, bevel gear		78	
Oil, cutterbar		76	
Spring		91	
Stone guard and counter knife		87	
Tarpaulin		92	
V-belt		90	
Spare parts		18	
Storage		68	
Stubble height		57	

Synopsis 23

## T

Technical data  
    Machine dimensions 24  
    Machine specification 25  
Technical information 122  
Torque moment 123  
Tractor requirements 26  
Transport on public roads  
    Checking the machine 53  
    Travelling on public roads 53  
Travelling on public roads 52  
Troubleshooting 116

## W

Warranty 118