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***JF-STOLL***

# Precision Chop Forage Harvester

FCT 900 | FCT 1100 MK II



## Instruction Manual

“Original instructions”

Edition 2 | April 2010

**EN EC-Declaration of Conformity**  
according to Directive 2006/42/EC

**DE EG-Konformitätserklärung**  
entsprechend der EG-Richtlinie 2006/42/EC

**IT Dichiarazione CE di Conformità**  
ai sensi della direttiva 2006/42/EC

**NL EG-Verklaring van conformiteit**  
overeenstemming met Machinerichtlijn 2006/42/EC

**FR Déclaration de conformité pour la CEE**  
conforme à la directive de la 2006/42/EC

**ES CEE Declaración de Conformidad**  
según la normativa de la 2006/42/EC

**PT Declaração de conformidade**  
conforme a norma da C.E.E. 2006/42/EC

**DA EF-overensstemmelseserklæring**  
i henhold til EF-direktiv 2006/42/EC

**PL Deklaracja Zgodności CE**  
według Dyrektywy Maszynowej 2006/42/EC

**FI EY : N Vaatimustenmukaisuusilmoitus**  
täyttää EY direktiivin 2006/42/EC

EN We,  
DE Wir,  
IT Noi,  
NL Wij,  
FR Nous,  
ES Vi,  
PT Me,  
DA Vi,  
PL Nosotros,  
FI Nöns,

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DE erklären in alleiniger Verantwortung, dass das Produkt:  
IT Dichiaro sotto la propria responsabilità che il prodotto:  
NL verklaren als enig verantwoordelijken, dat het product:  
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DA erklærer på eget ansvar, at produktet:  
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EN Model:  
DE Typ :  
IT Tipo :  
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FR Modèle :  
ES modelo :  
PT Marca :  
DA Typ :  
PL Model :  
FI Merkki :

**FCT 900**  
**FCT 1100 MK II**

**EN to which this declaration relates corresponds to the relevant basic safety and health requirements of the Directive:**

**2006/42/EC**

DE auf das sich diese Erklärung bezieht, den einschlägigen grundlegenden Sicherheits- und Gesundheitsanforderungen der EG 2006/42/EC

IT E' Conforme ai Requisiti Essenziali di Sicurezza a di tutela della Salute di cui alla Direttiva e sue successive modificazioni: 2006/42/EC

NL waarop deze verklaring betrekking heeft voldoet aan de van toepassing zijnde fundamentele eisen inzake veiligheid en gezondheid van de EG-machinerichtlijn no: 2006/42/EC

FR faisant l'objet de la déclaration est conforme aux prescriptions fondamentales en matière de sécurité et de santé stipulées dans la Directive de la: 2006/42/EC

ES al cual se refiere la presente declaración corresponde a las exigencias básicas de la normativa de la y referentes a la seguridad y a la sanidad:

2006/42/EC

PT a que se refere esta declaração corresponde às exigências fundamentais respectivas à segurança e à saúde de norma da 2006/42/EC

DA som er omfattet af denne erklæring, overholder de relevante grundlæggende sikkerheds- og sundhedskrav i EF-direktiv sam: 2006/42/EC

PL dla którego się ta deklaracja odnosi, odpowiada właściwym podstawowym wymogom bezpieczeństwa i ochrony zdrowia Dyrektywy Maszynowej: 2006/42/EC

FI johon tämä ilmoitus liittyy, vastaa EY direktiivissä mainittuja perusturvallisuus- ja terveysvaatimuksia (soveltuvien osien) sekä muita siihen kuuluvia EY direktiivejä: 2006/42/EC



Konstruktion (Design) + Produktion (Production)  
Sønderborg, 15.12.2009 Jørn Freudendahl

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# FOREWORD

## DEAR CUSTOMER!

We appreciate the confidence that you have shown our company by investing in a JF machine and congratulate you with your new machine. Of course, it is our wish that you will experience complete satisfaction with the investment.

This instruction manual contains important information about the correct and safe use of the machine.

Upon delivery of the machine you will also receive information from your dealer about use, adjustment, and maintenance.

However, **this initial introduction** cannot replace a more thorough knowledge of the different tasks, functions, and the technically correct use of the machine.

**Therefore you should read this instruction manual very carefully** before using the machine. Please pay special attention to the safety instructions.

The information in this instruction manual is mentioned in the order you will need it, i.e. from the necessary operational conditions to use and maintenance. In addition, the text of each chapter is supported by illustrations.

"Right" and "Left" are defined from a position behind the machine facing the direction of travel.

All information, illustrations and technical specifications in this instruction manual describe the latest version at the time of publication.

JF-Fabriken reserves the right to make changes or improvements in the design of any part without incurring the obligations to install such changes on any unit previously delivered.

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# 1. INTRODUCTION

## INTENDED USE

The precision chopper is solely intended for usual agricultural work. It is only intended for the cutting/picking up and chopping of green crops such as maize, grass or whole crop to be used for the making of silage as feed for cattle.

The machine is only to be mounted on legal tractors that suit the specifications of the product.

**Use beyond the above-mentioned does not make JF-Fabriken responsible for any possible secondary damage; the user bears the risk.**

It is assumed that the work is performed under reasonable conditions, i.e. the fields must be cultivated normally and there must not be any stones or the like.

It is also assumed that the instructions mentioned in this manual and in the spare parts catalogue are observed and that the user has the necessary agricultural knowledge to operate the machine skilfully.

**The precision chopper must only be used, maintained and repaired by persons who, after reading this instruction manual, are confident with the machine in question and informed about possible risks.**

It is **absolutely** necessary to observe the safety instructions.

If changes are made on the machine and its construction without permission from JF-Fabriken, JF-Fabriken cannot be held responsible for any injuries or damages.

## SAFETY

Generally, many damages occur as a consequence of misuse and insufficient instruction. The safety of persons and machines is therefore an integrated part of JF-Fabriken's development work. **We wish to secure you and your family in the best possible way**, but this also requires an effort on your part.

A precision chopper cannot be constructed so that it guarantees full safety of persons and at the same time works efficiently. This means that it is very important that you, as user of the machine, pay attention and use the machine correctly and thereby avoid exposing yourself or others to unnecessary danger.

The machine demands skilled operation which means that **you should read the instruction manual before connecting the machine to the tractor**. Even though you have been driving a similar machine before, you should read the manual - this is a matter of your own safety!

**Never** leave the machine to others before you have made sure that they have the necessary knowledge to operate the machine safely.

## DEFINITIONS

The safety decals and the instruction manual of the machine contain a number of safety instructions. The safety instructions mention certain measures, which we recommend you and your colleagues to follow in order to increase the personal safety as much as possible.

We recommend that you take the necessary time to read the safety instructions and inform your staff to do the same.



**In this instruction manual this symbol is used with reference to personal safety directly or indirectly through maintenance of the machine.**

**CAUTION:** The word CAUTION is used to ensure that the operator follows the general safety instructions or the measures mentioned in the instruction manual to protect himself and others against injuries.

**WARNING:** The word WARNING is used to warn against visible or hidden risks, which may lead to serious personal injuries.

**DANGER:** The word DANGER is used to indicate measures which, according to legislation, must be followed to protect oneself and others against serious injuries.

# 1. INTRODUCTION

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## GENERAL SAFETY INSTRUCTIONS

The following is a short list of measures, which should be a matter of common knowledge to the operator.

1. Always disengage the PTO drive shaft, activate the parking brake of the tractor and stop the tractor engine before you:
  - Lubricate the machine,
  - Clean the machine,
  - Disassemble any part of the machine,
  - Adjust the machine.
2. Always block the wheels before working under the machine.
3. Do not start the tractor until all persons are safely away from the machine.
4. Make sure that all tools have been removed from the machine before starting the tractor.
5. Make sure that all guards have been mounted correctly.
6. During work do not wear loose clothes which can be pulled in by moving parts of the machine.
7. Always make sure to wear suitable footwear to avoid stumbling in an unfortunate way.
8. Do not replace the guards or work with the machine if guards are missing.
9. Always drive with the statutory lights and safety markings during transport on public roads and when driving at night.
10. Limit the transport speed to max 30 km/h, unless the machine has been marked otherwise.
11. Never stay near the machine while it is working.
12. When mounting the PTO drive shaft check that the rpm of the tractor match those of the machine.
13. Always use hearing protectors if the noise from the machine is too loud, or if you are working with the machine for a considerable period of time in a tractor cabin which has not been silenced sufficiently.
14. Do not allow anybody to stay on the machine during work or transport.
15. Do not use the machine for other purposes than what it has been constructed for.
16. Do not allow any children to be near when you are working with the machine.

# 1. INTRODUCTION

17. Never stay between the tractor and the machine during engagement or disengagement.
18. Do not lead the crop into the chopper by the hands or the feet while the machine is working.
19. Do not try to remove crop from the chopper while it is working.
20. If crop is to be removed from the chopper, the PTO must first be completely disengaged. In case of doubt, stop the tractor engine before removing crop from the chopper.

## LOCKING OF GUARDS

All guards hinged to the machine have a lock that ensures that the guard cannot be opened without using tools. Two types of locks are available. Fig. 1.1 and 1.2 illustrate the two locking systems as well as the matching transfers indicating the locks on the machine.

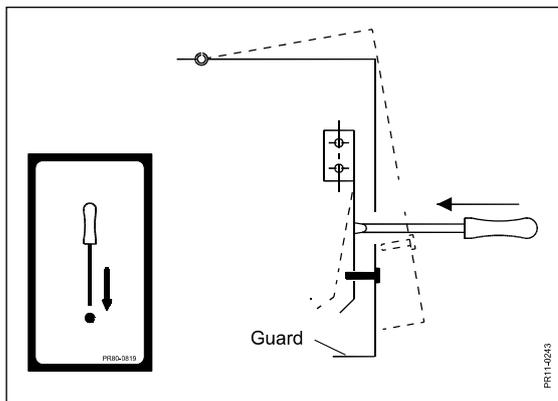


Fig. 1.1

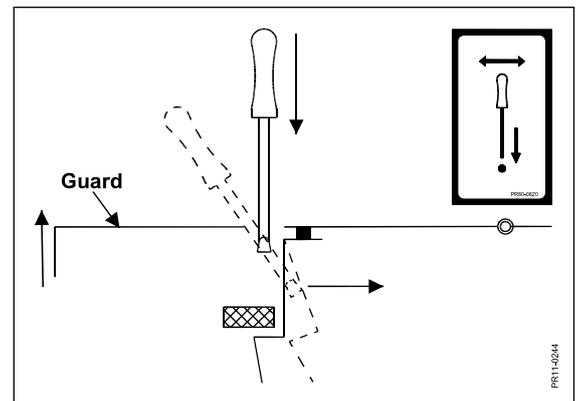


Fig. 2.1

## CHOICE OF TRACTOR

Always follow the recommendations specified in the instruction manual of the tractor. If this is not possible technical assistance must be sought.

Choose a tractor with corresponding power on the PTO drive shaft. If the power of the tractor is considerably larger than the normal demand of the machine, make sure that the machine is secured against overload with a suitable clutch on the PTO drive shaft.

A considerable or long lasting overload may damage the machine and at worst lead to parts being thrown out.

Choose a tractor with a suitable own weight and track width so that it is able to drive steadily regardless of the ground conditions. Also make sure that the towing hook is intended to carry machines with the weight in question.

Always choose a tractor with a closed cabin if you are going to work with a precision chopper.

# 1. INTRODUCTION

## CONNECTION AND DISCONNECTION

Always make sure that nobody is standing between the tractor and the machine during connection or disconnection. An unintentional manoeuvre with the tractor might jam persons (see Fig. 1.3). Likewise, it is important that the disconnection takes place on level and stable ground to avoid that the machine "runs off" and injures persons or damages equipment.



Fig. 1.3

The same precautions apply when connecting/disconnecting trailers by means of the hydraulic hitch which is placed at the back of the chopper.

Check that the machine is intended for the number of revolutions and direction of rotation of the tractor (see Fig. 1-4). A wrongly chosen rpm for a considerable period of time can damage the machine and at worst lead to parts being thrown out.

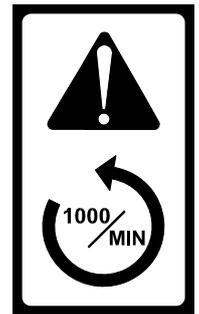


Fig. 1.4

Make sure that the PTO drive shaft has been mounted correctly, which means that the shear pin is engaged and that the support chain has been fastened in both ends.

The PTO drive shaft must be correctly protected. If the guard is defect it must be replaced immediately.

Before connecting a trailer with hydraulic hitch, always:

- Disengage the PTO.
- Wait until all moving parts have come to a complete stop.

Check that the lock is not rustbound. It is possible to connect the trailer without the latch being engaged, but the trailer may then jump off during transport. Check that the hydraulic clutches are tight and that all hoses and fittings are intact before activating the hydraulic system.

When parking the machine also make sure, after the tractor engine has stopped, that there is no pressure in the hydraulic hoses by activating the hydraulic tractor valves.

Hydraulic oil under pressure can penetrate the skin and cause serious infections. Always protect your skin and eyes against oil splashes. If hydraulic oil under pressure hits you consult a doctor immediately (see Fig. 1-5).



Fig. 1.5

# 1. INTRODUCTION

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## **ADJUSTMENT**

When adjusting the machine, always:

- Disengage the PTO drive shaft
- Stop the tractor engine
- Wait until all moving parts have come to a complete stop.

It is important not to remove the guards until all revolving parts have come to a complete stop. This especially applies to the delivery chute above the knife cylinder.

If the cutting tools of the knife cylinder are to be adjusted or replaced it is important to block the knife cylinder by a wooden wedge. Otherwise, the sharp knives can easily injure a couple of fingers; especially because it is difficult to stop the rotor if it has been started by accident.

Before you start to work check that the feed rollers and the knife cylinder can move freely. Check likewise that the knives are intact and without cracks. It is of course necessary to replace defect knives to avoid that they block or damage the machine later or lead to metal parts being thrown out of the delivery chute.

When lifting the delivery chute above the knife cylinder you must make sure that nobody is in danger of being hit by the guard. Likewise, you should hold on to the hoop attached to the intermediate guard by both hands when lifting the guard.

## **TRANSPORT**

Limit the transport speed to max 30 km/h, unless the machine has been marked otherwise.

It is important to block the hydraulically adjustable transport setting. Always check that the mechanical transport safety devices are engaged before transport. An unfortunate operation of the drawbar cylinder might result in the machine moving towards the opposite lane, the bicycle track or the sidewalk.

This might also happen if there is air in the hydraulic cylinders or if there is a sudden loss of oil from the hydraulic hoses.

To remove possible air in the oil, test all the hydraulic cylinders after engagement to the tractor. Especially before driving on public roads.

Check that the mechanical locking devices by the hydraulic hitch are engaged before you start to transport the machine. The hydraulic hitch has a latch that ensures that the hydraulic cylinder and the hoses are not under high pressure.

The pick-up unit of the chopper must also be secured mechanically before transport.

Of course, the statutory lights and the safety markings must also be positioned correctly, both on the chopper and on the trailer.

Clean regularly the reflector markings and the lights.

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## **WORKING**

Before you start working, make sure that there is nobody behind the chopper that can be hit by metal parts from damaged knives.

Also make sure that there is nobody in the trailer used to pick up the grass. The person might suffocate in the flow of grass or get hit by metal parts in the flow.

If the knife cylinder or the feed rollers are blocked, declutch and stop the tractor engine immediately, activate the parking break and wait until the revolving parts have stopped before trying to remove the grass or the object that blocks.

Unfortunately, this cannot be said too often: Never remove grass or objects while the machine is running and never put grass into the pick-up by your hands or feet. There is a considerable risk of being caught and taken into the chopper which would cause dismemberment or death.

Therefore, you must never allow anybody to stay near the chopper while it is working; especially not children who do not know the danger and might behave in an unexpected way.

## **PARKING**

Before the machine is parked, always lock the jack by the locking pin, otherwise the machine might tip over during the parking. Remember likewise to block the wheels of the machine if there is a risk that it might roll after the parking.

Remember to remove the hydraulic hoses before driving away with the tractor.

## **LUBRICATION**

When lubricating or maintaining the machine, never let more than one person work at the time. This reduces the risk of getting fingers caught because another person by accident turns the revolving parts while you are still working on them.

Never try to clean, lubricate or adjust the machine before the PTO drive shaft has been declutched, the tractor engine stopped, and the parking break activated.

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## **GRINDING**

Before you start grinding, follow this procedure:

- Stop the tractor engine
- Pull the parking break
- Wait until all revolving parts have come to a complete stop.

Unfortunately, it is necessary to remove some of the guards in order to change the direction of rotation of the rotor when grinding the knives. The chain or the belt transmissions might injure the hands if the revolving parts have not stopped before the guards are removed.

The grinding operation should be performed as follows:

1. Check that the grindstone is intact and that the device is able to slide back and forth.
2. Lower the guard behind the grinding device to give free access to the knife cylinder.
3. Adjust the stone and shield the grinding device by the guard again.
4. Remove the guard above the knife cylinder transmission and change the direction of rotation of the rotor.
5. Fix the guard again and check that nobody is near the machine.
6. Start the tractor again and keep the rpm close to idling.
7. Carefully carry out the grinding.

Always use safety glasses when grinding as small particles might spring from the grindstone.

When the grinding is finished, stop the tractor again, adjust the direction of rotation to cutting and fix all guards.

Only grind when all the guards are closed!

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## MAINTENANCE

Retighten all bolts after about 2 days of work, especially the knife bolts of the knife cylinder.

## REPLACEMENT OF WEARING PARTS

Knives, knife bolts and the shear bar are made of high-alloy, heat-treated materials. This heat treatment results in a particularly hard and ductile material able to withstand extreme stress. If these parts are damaged they must be replaced by original -JF- parts to ensure perfect work.

In the season, knives and knife bolts must be checked each day.

The special knife bolts must be tightened by a torque wrench to 40 kgm.

When the knives have been worn 8 mm down, max, or 12 mm above the straight piece, they must be replaced (see Fig. 1.6).

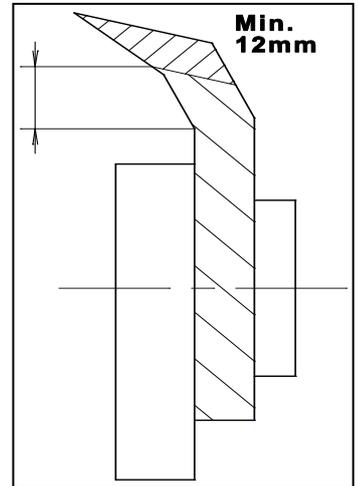


Fig. 1.6

After replacement of knives, knife bolts or the like, check that no tools are left in the machine.

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**FORSIGTIG**  
Sluk altid traktormotoren og fjern tændingssnøggen før De smører, indstiller eller reparerer maskinen.

**VORSICHT**  
Schleppemotor immer abschalten und Zündschlüssel abziehen bevor Sie Die Maschine schmieren, einstellen oder reparieren.

**ATTENTION**  
Always stop engine and remove ignition key before lubricating, maintaining or repairing the machine.

**ATTENTION**  
Toujour arrêter le moteur de tracteur et enlever la clé de contact avant de lubrifier, régler ou réparer la machine.

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**FORSIGTIG**  
Læs brugsanvisningen og sikkerhedsforskrifterne før maskinen lægges i brug. Er brugsanvisning ikke medleveret, skal du bede om efterlevering.

**CAUTION**  
Before starting the machine read operators manual and safety instructions. Request copy if not supplied.

**VORSICHT**  
Vor Inbetriebnahme Betriebsanleitung und Sicherheitshinweise lesen und beachten. Wenn nicht mitgeliefert bitte anfordern.

**ATTENTION**  
Avant la mise en route de la machine lire le manuel d'utilisation et les prescriptions de sécurité. Récupérer le manuel s'il manque.

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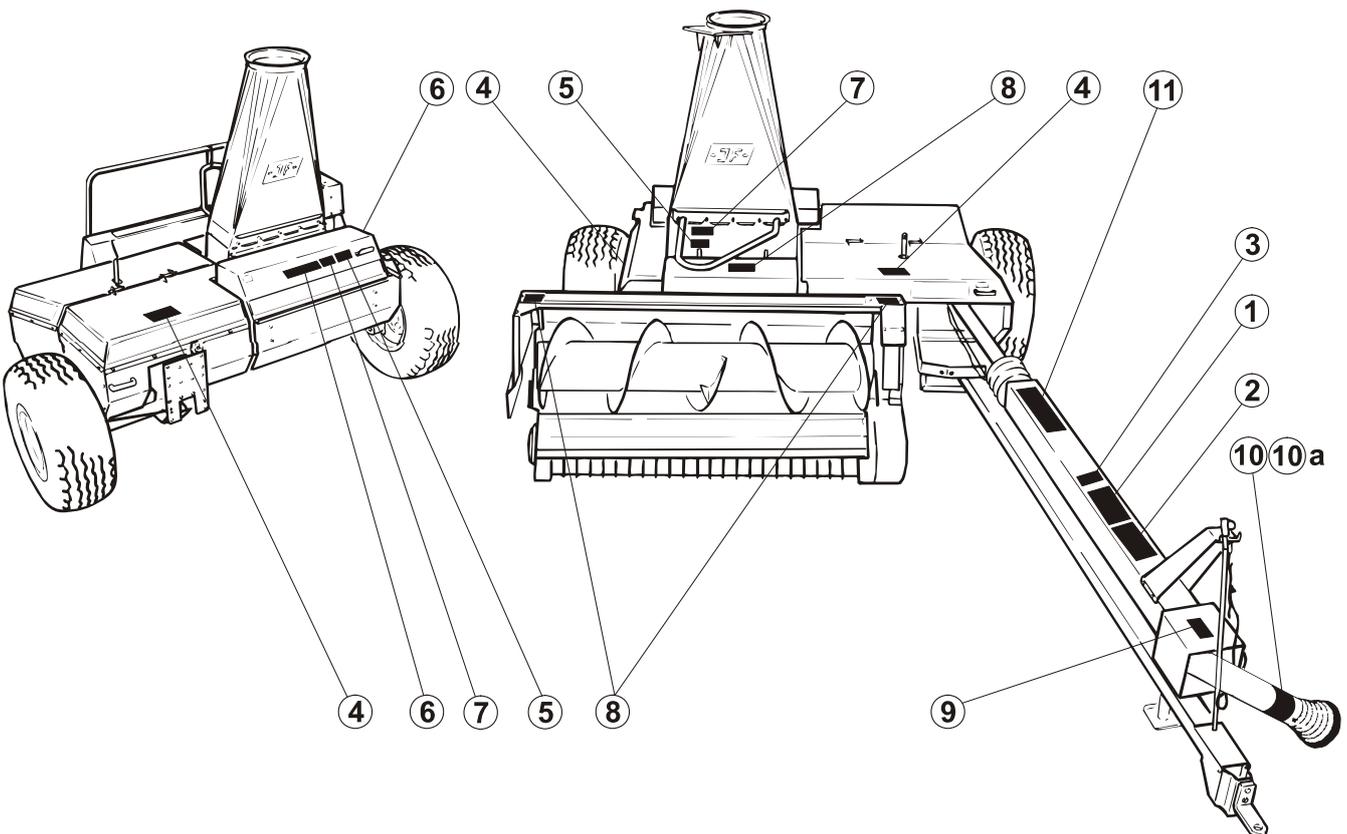
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## SAFETY DECALS

The warning decals shown on the previous page are positioned as shown on the drawing at the bottom of the page. Before using the machine check that all the decals are present, if not, order those missing. The decals have the following meaning:

Fejl! Ukendt argument for parameter.. **Stop the tractor engine and remove the ignition key before touching the machine**

Always remember to stop the tractor engine before lubricating, adjusting, maintaining or repairing. Also remove the ignition key to ensure that nobody starts the tractor before the work is completed.

Fejl! Ukendt argument for parameter.. **Read the instruction manual and the safety instructions**

This is to remind you to read the documents supplied with the machine to ensure that it is operated correctly and to avoid unnecessary accidents and machine damage.

Fejl! Ukendt argument for parameter.. **Children**  
Never let children stay near the machine during the operation. Especially not small children as they might do unexpected things.

Fejl! Ukendt argument for parameter.. **Chain drive**  
Under this guard is placed one or more chain drives. Make sure that the tractor engine has stopped before opening the guard.

5. **Risk of cutting**  
There is a risk of getting fingers, etc., caught several places on the machine. Be careful when the machine is connected to the tractor and ready to work. The machine can easily crush or cut off any part of the body that might get caught in the machine.
6. **Remember the guards when grinding**  
Remember to close ALL guards before the grinding is started.
7. **Revolving knives**  
When the PTO drive shaft of the tractor has stopped, the revolving knives of the machine will keep revolving for up to 2 minutes. Wait until the knives have come to a complete stop before removing guards for inspection or maintenance.
8. **Risk of getting pulled into the machine**  
Do not stay near the pick-up or the feed rollers while the machine is running. Make sure that the tractor engine has stopped first.
9. **Number and direction of rotations**  
Check that the PTO drive shaft runs with the right rpm and in the right direction. A wrong number of rotations and/or direction of rotation will damage the machine and increase the risk of personal injury.
10. **PTO drive shaft**  
This decal is a reminder of how dangerous the PTO drive shaft can be if it is not correctly mounted or protected.
- 10.a **PTO drive shaft (United States only)**  
If the guard of the PTO-shaft is missing or defect do not use the PTO-shaft before the guard has been replaced with a new one.
11. **Remember the transport lock**  
Always remember to check the transport lock before transport on public roads. Defects in the locking system or unintentional manoeuvres can make the machine swivel into working position during transport which might cause serious machine damage or personal injury.

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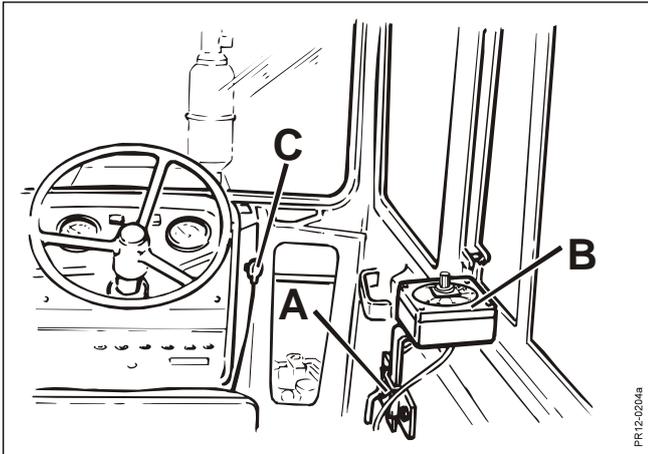


Fig. 2.1



Fig. 2.2

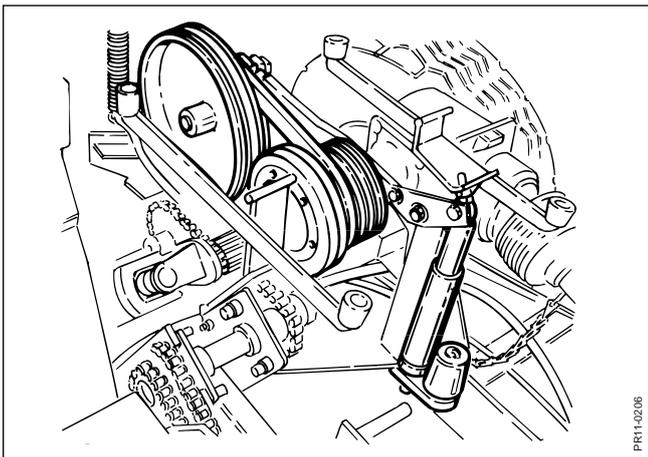


Fig. 2.3

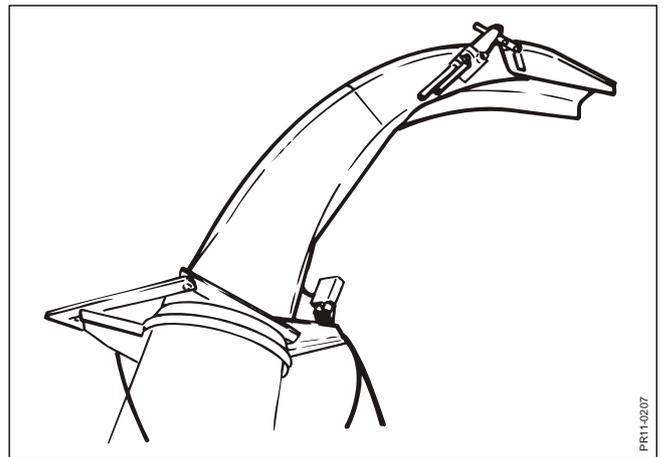


Fig. 2.4

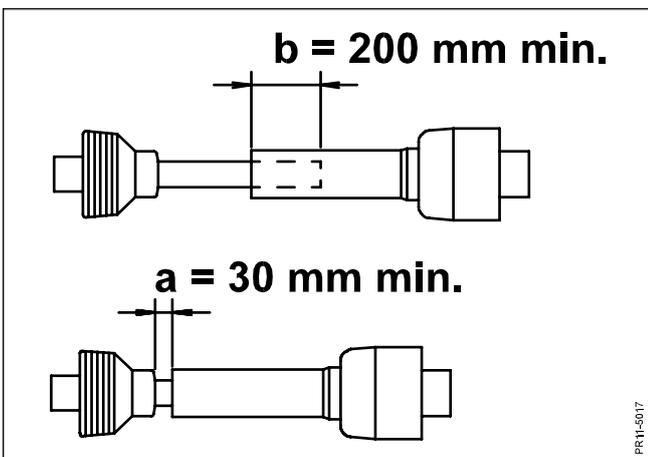


Fig. 2.5

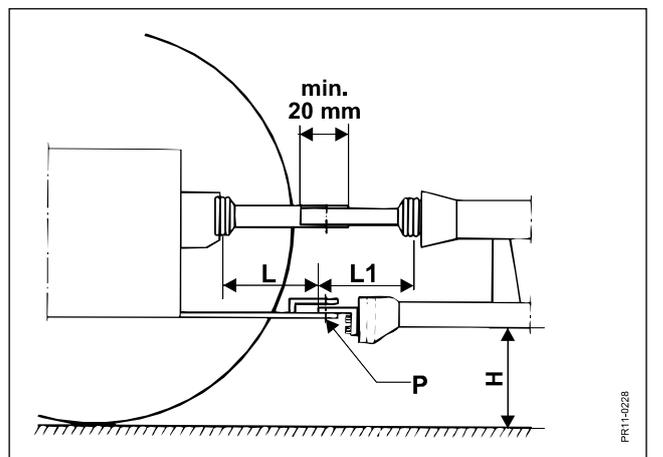


Fig. 2.6

# 2. CONNECTION TO TRACTOR

## THE HYDRAULIC SYSTEM

The machine has one single acting cylinder for the pick-up/cutting unit and one single acting cylinder for the hitch.

The tractor must have two single acting outlets.

## ELECTRIC CONTROL OF REVERSE AND DEFLECTOR

**Fig. 2.1** Mount the box holder **A** within the reach of the tractor driver and fix the control box **B** to it. Mount the 2-pole plug **C** to the instrument panel and connect it directly to the battery of the tractor.

**Fig. 2.2** Mount the 7-pole plug at the back of the tractor by means of the supplied wing nuts.

**Fig. 2.3** The reverse and the deflector are adjusted electrically and controlled by the control box mounted in the tractor cabin.  
**Fig. 2.4**

(We do not recommend you to connect to e.g. the wiring of the lights, as the wire thickness for these systems is normally not able to transfer the necessary amount of current).

It is easy to dismount the electric equipment if you are not going to use it for a considerable period of time.

The equipment must be stored in a dry place.

## DRAWBAR AND PTO DRIVE SHAFT

**Fig. 2.5** Adjust the length of the PTO drive shaft so that it has:

- more than 200 mm overlap in working position.
- a minimum distance of 30 mm in any position in order not to bottom the shaft.

An adjustment of the length can be made by pulling out / pushing in the drawbar of the tractor.

**Fig. 2.6** The height **H** of the drawbar must be adjusted so that the pick-up and the cutting unit have enough clearance to follow the ground.  
The height can be adjusted by displacing or turning the tongue.  
To ensure the PTO drive shaft the longest possible life, the length **L** must be minimized by adjusting the length of the drawbar of the tractor.  
(The point of rotation **P** for the drawbar must be positioned as close as possible to the wide-angle joint (when transmitting power without wide-angle, L and L1 must preferably be equal)).

### 3. MOUNTING OF EQUIPMENT AND ACCESSORIES

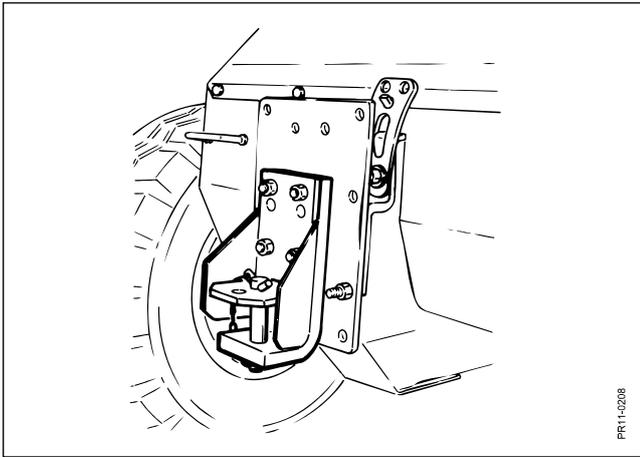


Fig. 3.1

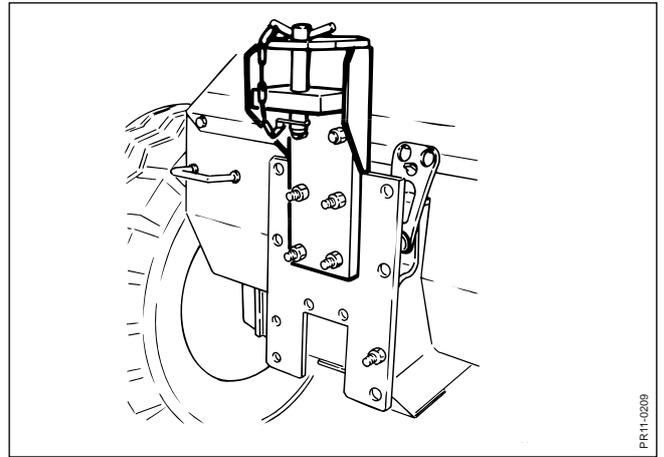


Fig. 3.2

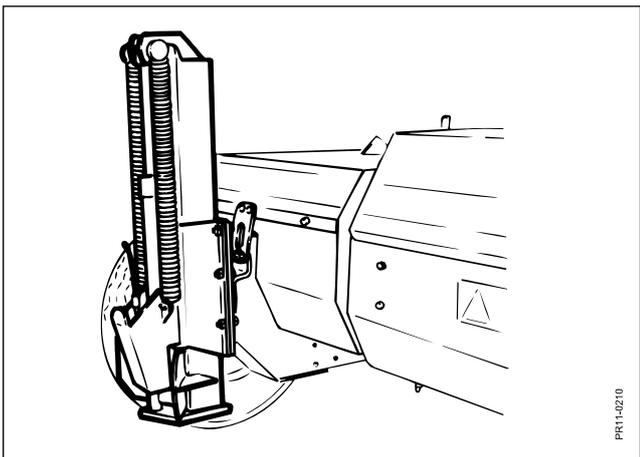


Fig. 3.3

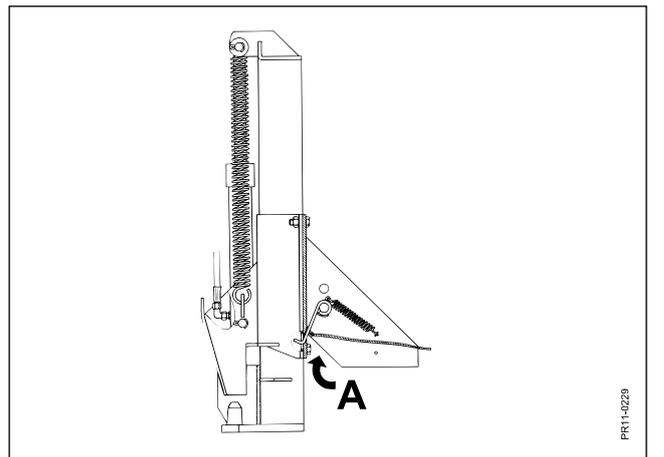


Fig. 3.4

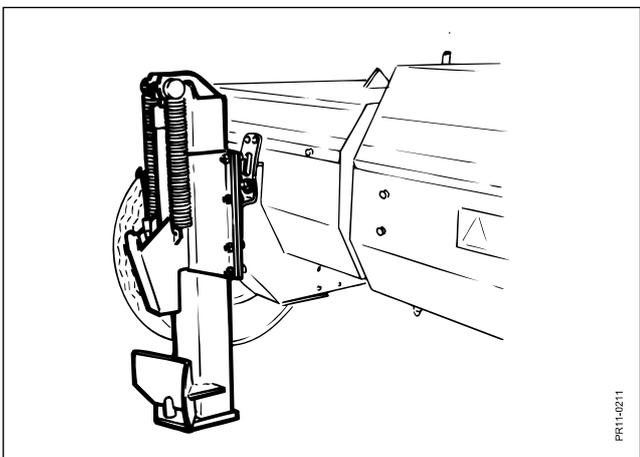


Fig. 3.5

## 3. EQUIPMENT AND ACCESSORIES

### HITCH FOR TRAILER

The machine is supplied with a combi-hitch or with a hydraulic hitch hook for the connection of a trailer.

### COMBI-HITCH

**Fig. 3.1** Combi-hitch mounted in lower position.

**Fig. 3.2** Combi-hitch mounted in upper position. This position is used for trailers with overrun brakes, e.g. in Germany.

### HYDRAULIC HITCH HOOK

**Fig. 3.3** For connection of a trailer, the machine must be reversed to the drawbar of the trailer and the hitch eye of the trailer must be caught by the hitch hook. Lift the trailer by the hydraulic system until the latch **A** is engaged and locks the hitch system. Take the

**Fig. 3.4** hydraulic control handle a little backwards so that the weight of the trailer rests on the latch and not on the hydraulic cylinder. Lead a string from the latch **A** to the tractor seat.

**Fig. 3.5** When disconnecting, lift the hitch hook hydraulically and disengage the latch. Then lower the hitch hook again by the hydraulic system.

### 3. MOUNTING OF EQUIPMENT AND ACCESSORIES

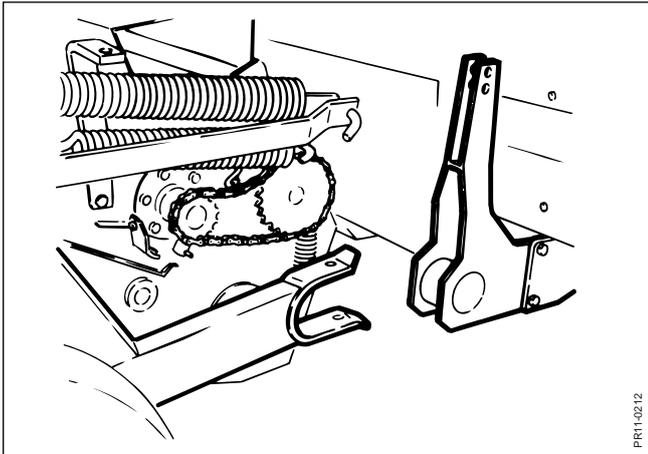


Fig. 3.6

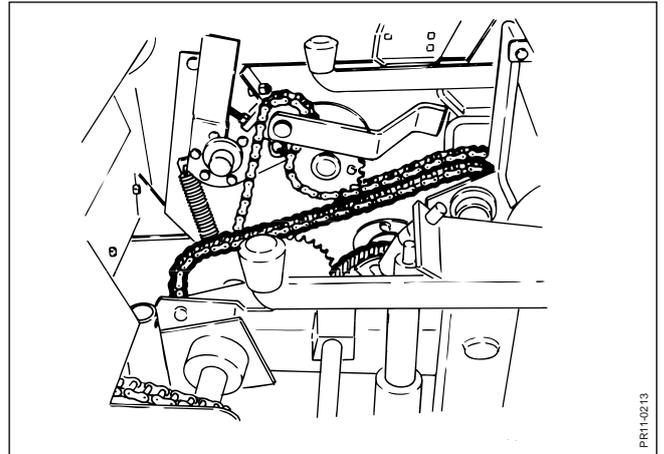


Fig. 3.7

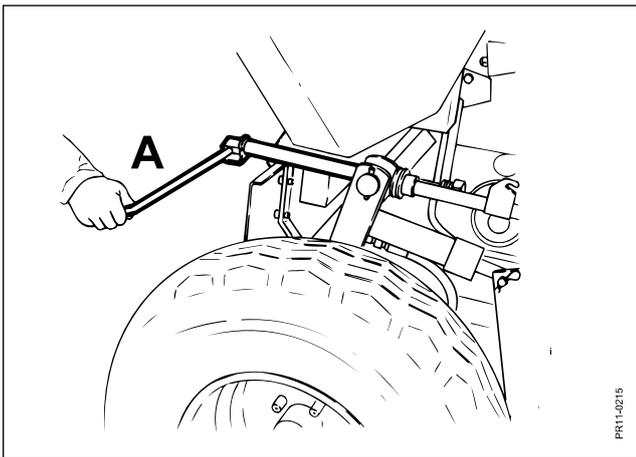


Fig. 3.8

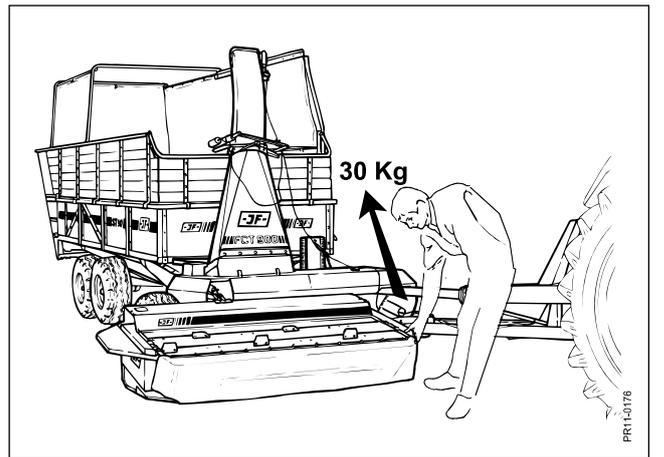


Fig. 3.9

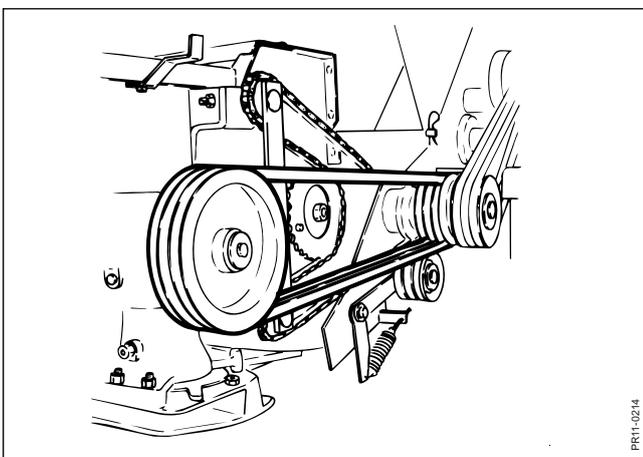


Fig. 3.10

## MOUNTING OF ACCESSORIES

The mounting must take place on level ground.

Mount the basic unit on the tractor in the correct position.

### PICK-UP

**Fig. 3.6** Wheel the pick-up to the machine and engage it. Fix it by means of the two pins.

Attach the relief device to the pick-up.

**Fig. 3.7** Mount the chain drive for the pick-up.

**Fig. 3.8** Tighten the relief springs by the spindle **A**, so that the pick-up presses with

**Fig. 3.9** a maximum of 30 kg on the ground.

### CUTTING UNIT

**Fig. 3.6** Let the cutting unit rest on the support and wheel the machine to the cutting unit. **Check that the catch and its counterpart are at the same height.** Fix by pins and locking pins.

**Fig. 3.10** Mount the belt drive of the cutter bar.

Mount the relief device.

**Fig. 3.8** Tighten the relief springs by the spindle **A**, so that the cutting unit presses with

**Fig. 3.9** a maximum of 30 kg on the ground.

### 3. MOUNTING OF EQUIPMENT AND ACCESSORIES

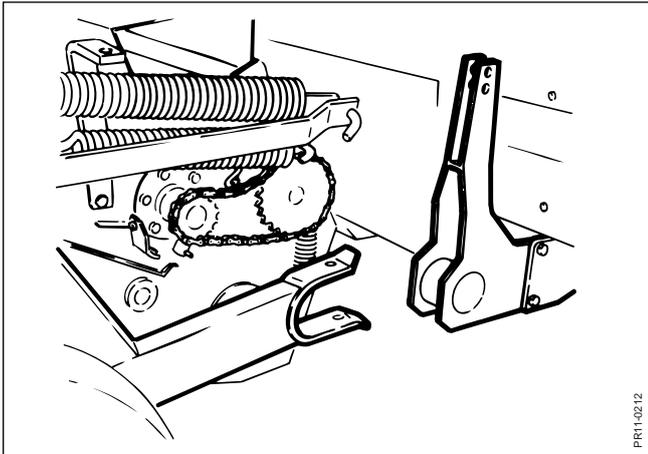


Fig. 3.11

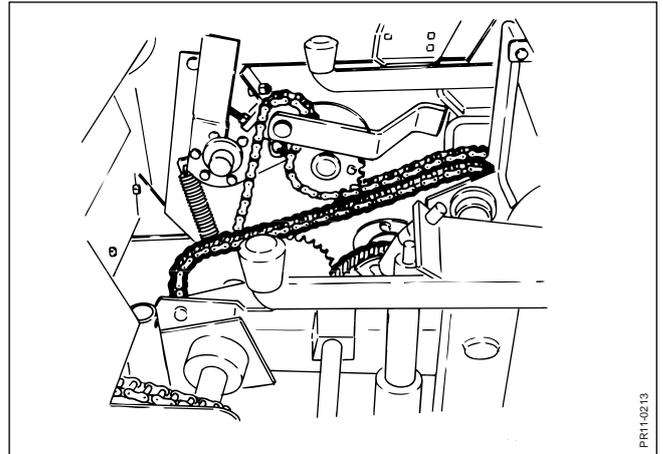


Fig. 3.12

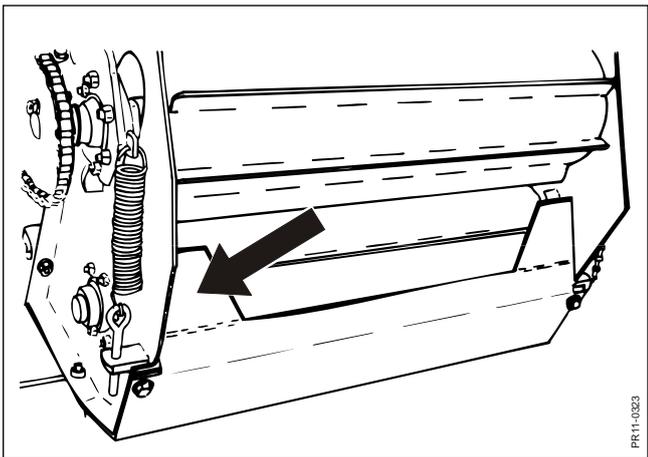


Fig. 3.13

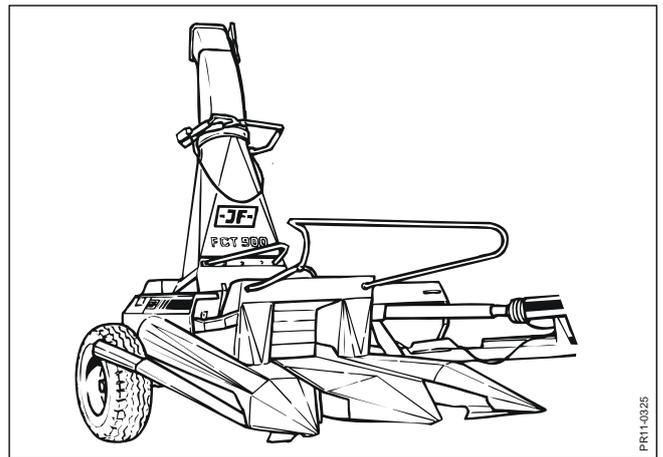


Fig. 3.14

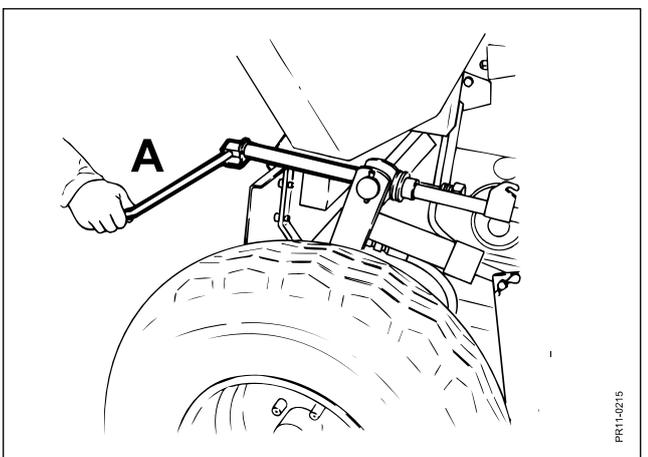


Fig. 3.15

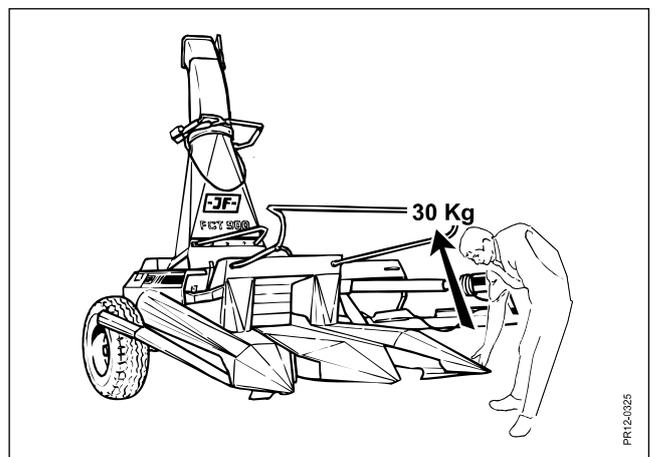


Fig. 3.16

### 3. MOUNTING OF EQUIPMENT AND ACCESSORIES

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#### MAIZE UNIT

- Fig. 3.11** Let the maize unit rest on the support, and wheel the machine to the maize unit.  
**Check that the catch and its counterpart are at the same height.** Fix by pins and locking pins.
- Fig. 3.12** Mount the chain drive for the maize unit.  
Mount the relief device.
- Fig. 3.13** Mount the maize plate as shown on the figure. The "flaps" must turn towards the roller.
- Fig. 3.14** Mount 2 straw dividers on the right side of the maize unit.
- Fig. 3.15** Tighten the relief springs by the spindle **A**, so that the maize unit presses with a maximum of 30 kg on the ground.
- Fig. 3.16**

Additional equipment for improved crushing of kernels:	Serrated shear bar
FCT 1100 MK II	2066-323X
FCT 900	2066-144X

### 3. MOUNTING OF EQUIPMENT AND ACCESSORIES

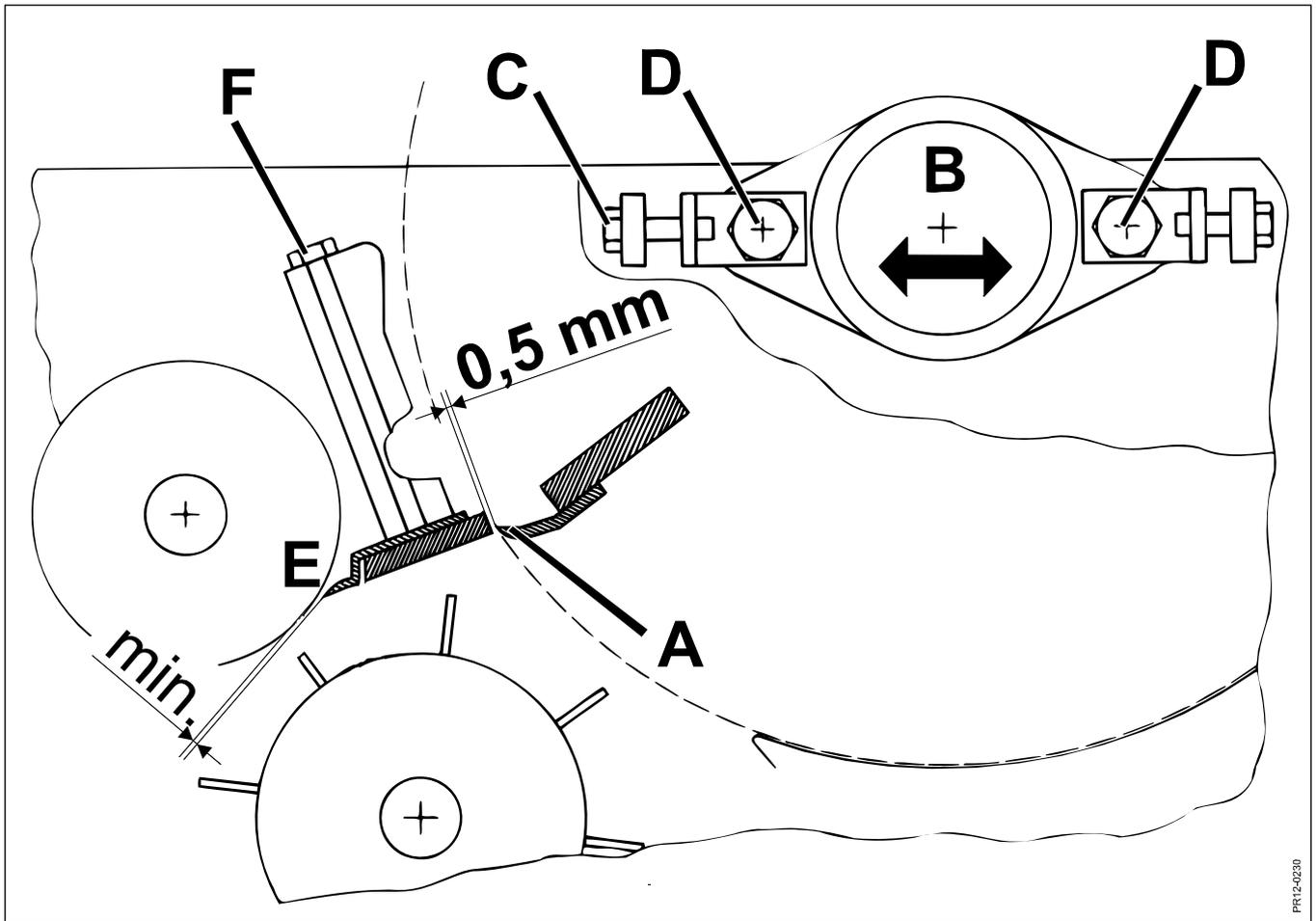


Fig. 4.1

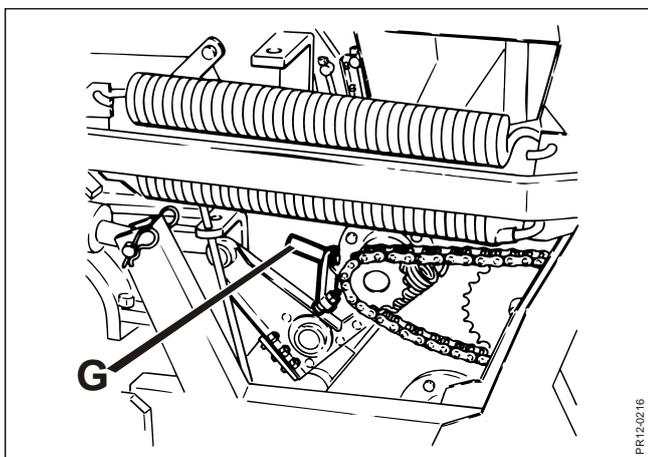


Fig. 4.2

## 4. ADJUSTMENTS

### ROLLER SECTION

**Fig. 4.1** Check regularly the distance between the knives of the rotor and the shear bar **A** by means of the gauge supplied with the machine. The distance is adjusted by loosening the bearing housing **B** of the rotor and it is regulated by the screws **C**. Tighten the bolts **D** of the bearing housings after the adjustment - 32 kgm.

The machine is equipped with a scraper for the upper roller and a reversible shear bar for wear of the two edges.

**Fig. 4.2** The scraper is dismantled by removing the screws that secure the shear bar **G** after which the scraper and the shear bar can be pulled out of the opening in the rotor housing.

It is possible to reverse the shear bar for grinding of a new edge.

**Fig. 4.1** When mounting the scraper, place it as close to the smooth roller **E** as possible and tighten the bolts **F** 10-12 kgm.

## 4. ADJUSTMENTS

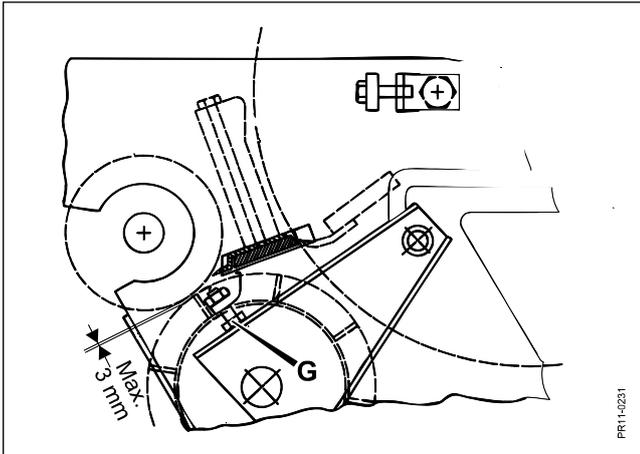


Fig. 4.3

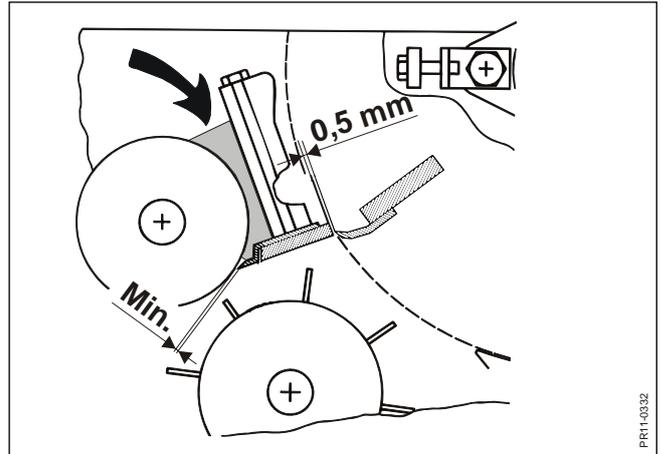


Fig. 4.4

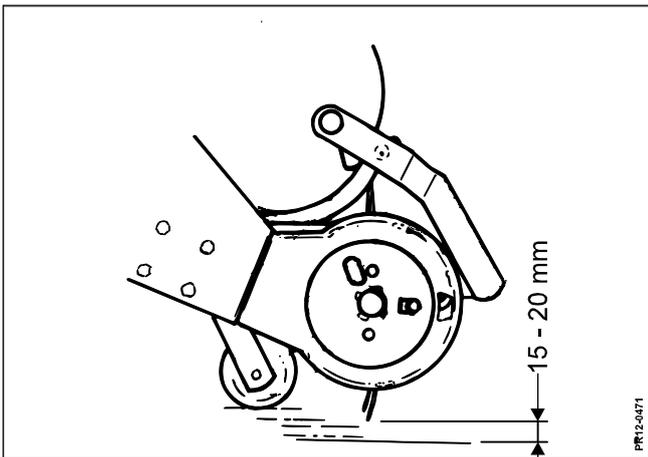


Fig. 4.5

## 4. ADJUSTMENTS

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**Fig.4.3** The distance between the upper smooth roller and the lower roller should be **3 mm, MAX**. This is adjusted by the bolt **G** in both sides.

**Fig. 4.4** Under certain conditions, the crop substance (small particles) can accumulate in the shaded area and this can result in an overloading of the transmission. Check this area after every 8 working hours and remove remaining crop. Check, and adjust if necessary, also the distance between the scraper and the smooth roller. The inspection frequency can be reduced when the machine has been run in under all crop conditions.

### PICK-UP

**Fig. 4.5** The pick-up is equipped with supporting rollers which are adjustable in the height. Always keep the largest possible distance so that the pick-up springs do not leave earth in the crop and so that they pick up the grass without waste.

The auger is equipped with a slip clutch. This slip clutch must release before the other friction clutches in the machine so that the driver can choose the right tractor gear and adjust the driving to the field conditions. This is the best way to avoid serious blocking that may result in a long-lasting operational stop.

The inexperienced driver should always have spare friction and spring discs in the tractor. If this clutch is in operation often, the covering wears off the friction discs and it can therefore not transfer sufficient moment. Therefore, it might be necessary to replace the friction discs, but remember that they must be of the same number and quality.

## 4. ADJUSTMENTS

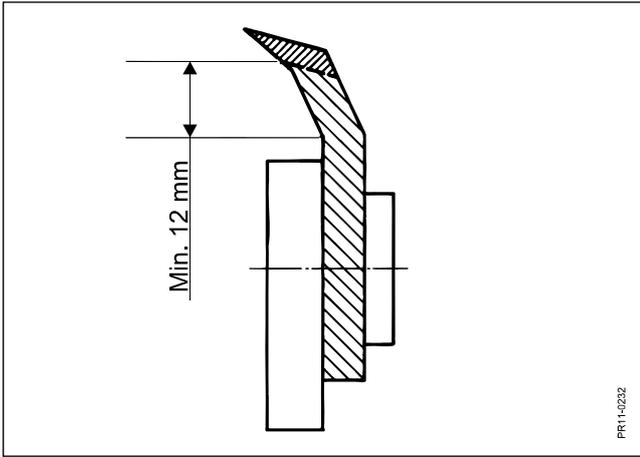


Fig. 4.6

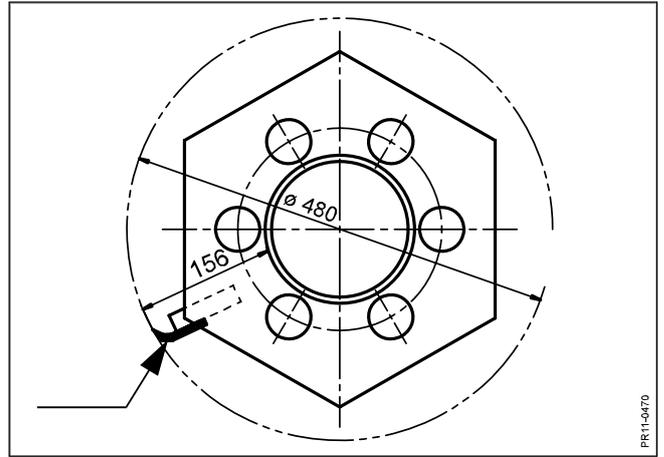


Fig. 4.7

## 4. ADJUSTMENTS

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### REPLACEMENT AND MECHANICAL WEAR OF KNIVES

When replacing individual knives, the knives must be placed with the same distance to the shear bar as the other knives. Even if there is no visible damage to the knife bolts, they should always be replaced together with the knives as they might have been overloaded.

Measure with the gauge before tightening the bolts.

**NOTICE:** Only use original, special knife bolts when replacing. Tighten the knife bolts with a torque wrench to 40 kgm or with the supplied spanner using approx. 40 kg leverage.

**Fig. 4.6** When the knives have been worn max 8 mm down or to the first bend - approx. 12 mm above the straight piece - they must be replaced.

When all rotor knives are worn and the rotor has been adjusted towards the shear bar, the rotor should be set back again before new knives are mounted.

**Fig. 4.7** When mounting new knives, these should be pulled out so that the outer diameter on the rotor is 480 mm. (From rotor tube to knife point = 156 mm.)

### REPLACEMENT OF SHEAR BOLTS

The feed rollers are protected against overloading by means of shear bolts. (1219-0808, see the spare parts list)

**NOTICE:** Only use one shear bolt for each clutch.

**NOTICE:** Only use 1219-0808 shear bolts as the quality of these bolts fits the allowable torque for the feed roller.

If the shear bolt is sheared this might result in a small deformation around the hole in the sprocket wheel and the hub, which means that the holes become oval. When mounting a new shear bolt oval holes must not be used. Instead one of the other holes (4 in total) will have to be used. When all holes are oval, sprocket wheel and hub must be replaced.

The shear bolt must not be tightened too much as this would result in torque being transferred via friction between sprocket wheel and hub. This is ensured by first tightening the nut 1220-2321 and then loosening it ½ turn.

## 4. ADJUSTMENTS

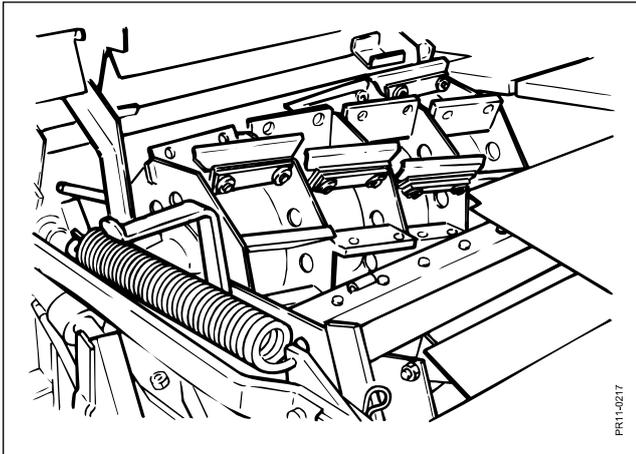


Fig. 4.8

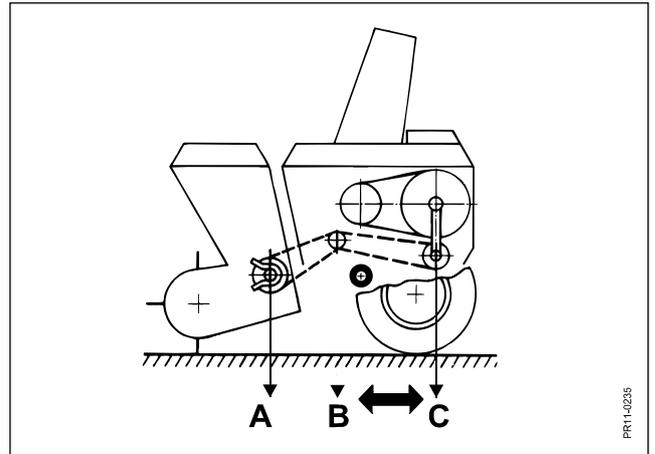


Fig. 4.9

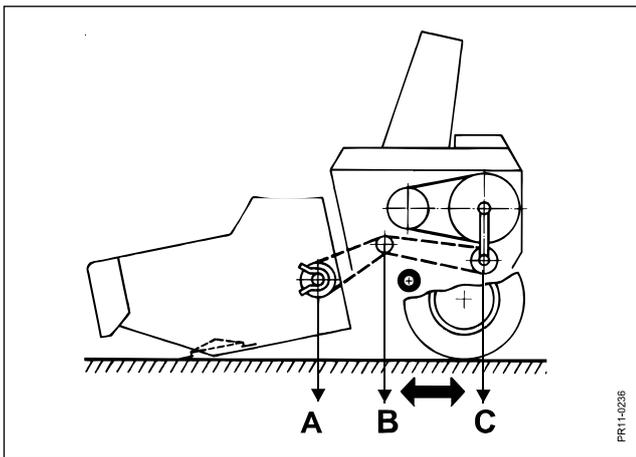


Fig. 4.10

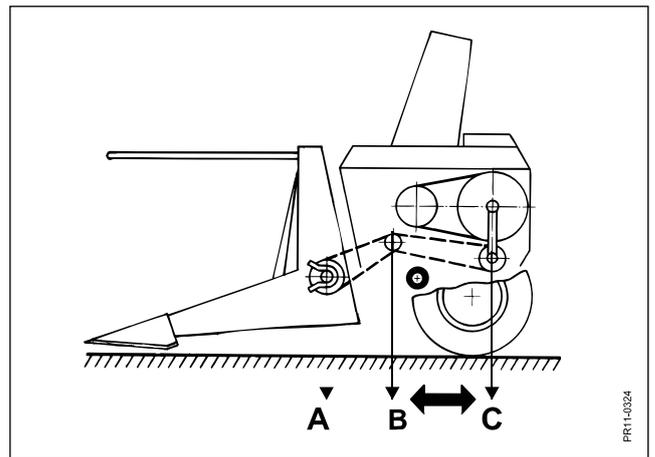


Fig. 4.11

## 4. ADJUSTMENTS

### CUTTING LENGTHS

The cutting length is determined by two conditions:

1. The number of knife rows

6 rows	24 knives	FCT 900
	30 knives	FCT 1100 MKII

8 rows	40 knives	Accessories for FCT 1100 MKII
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**Fig. 4.8** All cutting lengths can be doubled by removing every second knife row.

2. The feeding speed which can be changed by use of the following sprocket wheels:

z=14 = 2062-611x	z=25 = 2062-441x
z=18 = 2062-440x	z=30 = 2060-982x
z=21 = 2065-460x	z=36 = 2062-442x

The tables below indicate the cutting lengths (in mm) for the possible combinations of **A** and **B**.

**Fig. 4.9**

		PICK-UP		
		A	B	C
Cutting length	<b>30 knives</b>			
	7.5 mm	Z = 18	Z = 25	Z = 18
	9.0 mm	Z = 21*	Z = 25	Z = 21*
	12.0 mm	Z = 36	Z = 21*	Z = 25
Factory settings	15.0 mm	Z = 36	Z = 18	Z = 25

\* not standard

**Fig. 4.10**

		24 knives	CUTTING UNIT		
		30 knives	A	B	C
Cutting length	<b>40 knives</b>				
	4.0 mm	5.5 mm	Z = 14	Z = 25	Z = 14
	5.5 mm	7.5 mm	Z = 14	Z = 25	Z = 18
	7.0 mm	9.0 mm	Z = 14	Z = 25	Z = 21*
	9.0 mm	12.0 mm	Z = 18	Z = 21*	Z = 25
	11.0 mm	15.0 mm	Z = 18	Z = 18	Z = 25

\* not standard

**Fig. 4.11**

		24 knives	MAIZE UNIT		
		30 knives	A	B	C
Cutting length	<b>40 knives</b>				
	4.0 mm	5.5 mm	Z = 25**	Z = 25	Z = 14
	4.0 mm	5.5 mm	Z = 30*	Z = 25	Z = 14
	5.5 mm	7.5 mm	Z = 36	Z = 25	Z = 18

\*) for maize >3.0 m

\*\*\*) for maize <3.0 m

## 4. ADJUSTMENTS

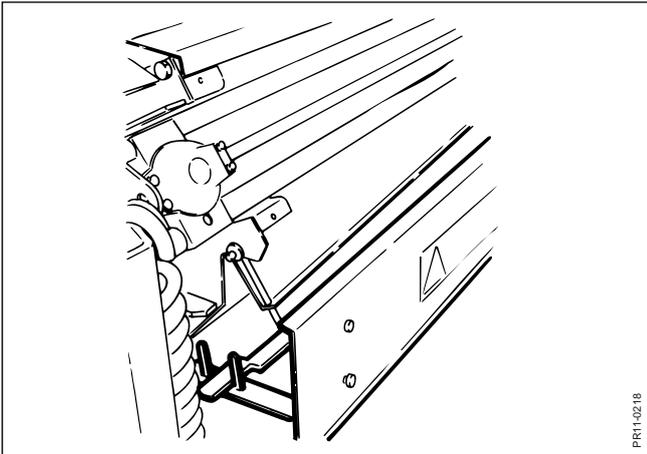


Fig. 4.12

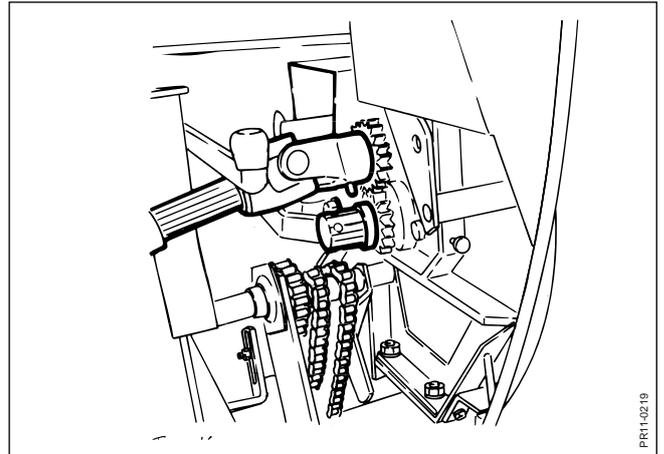


Fig. 4.13

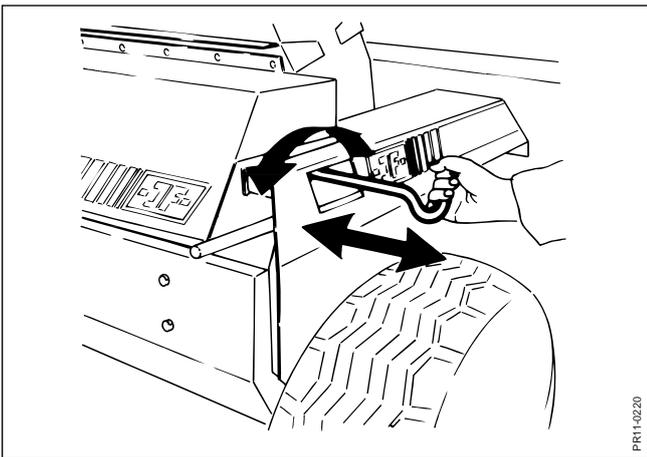


Fig. 4.14

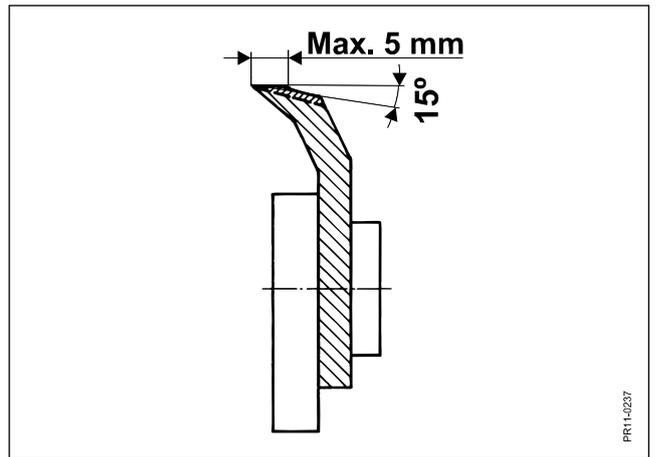


Fig. 4.15

## 4. ADJUSTMENTS

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### GRINDING

Changing to and from grinding must **only** take place **when the machine has been stopped**. The rotor must only rotate when the grinding device is ready to grind.

Check before grinding that:

- the grindstone is intact.
- the device is easily sliding back and forth.
- the device is parallel to the rotor.

The grinding device is correctly adjusted from the factory and therefore normally does not need adjustment. However, if the device has been dismantled, adjustment can be made at the oblong holes of the lateral guides. The bolts must be firmly retightened after the adjustment.

The stone is fed by turning the handle.

**Grind once a day** – but avoid too much grinding.

**Protect your eyes – always use safety glasses when grinding.**

### GRINDING OPERATION

- Fig. 4.12** 1. Lower the guard behind the grinding device.  
2. Adjust the stone so that it is 2 - 3 mm outside the knives.
- Fig. 4.13** 3. Attach the drive shaft of the rotor to the stub shaft for opposite direction of rotation.  
4. Close all guards.  
5. Start the tractor, run the PTO a little above idle speed.
- Fig. 4.14** 6. Take the handle and carefully give some feeding until the stone touches the knife. Run the grindstone over the whole knife and back again. Repeat the feeding and the movement over the width of the rotor.

Push the handle in after the grinding. Stop the tractor. Lift the guard to its right position. Move the drive shaft of the rotor from stub shaft to rotor shaft.

**If necessary, check the distance between the knives and the shear bar.**

**NB: Only grind with closed guards.**

Check the wear of the grindstone. If the stone is worn down to 10 mm it must be replaced.

- Fig. 4.15** To avoid unnecessary power consumption during cutting and excessive wear of the grindstone, a rough grinding or adjustment of the knives (grind the rear edge down to an angle of approx. 15°) is recommended when the cutting edge is 5 mm wide or more.

Rough grinding can be made by an angle grinder with rotor (knives) in the machine, but **be careful not to grind down the cutting edge (front edge)**.

## 4. ADJUSTMENTS

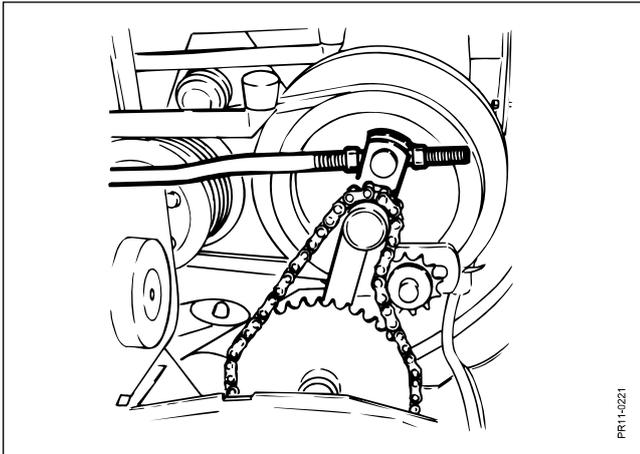


Fig. 4.16

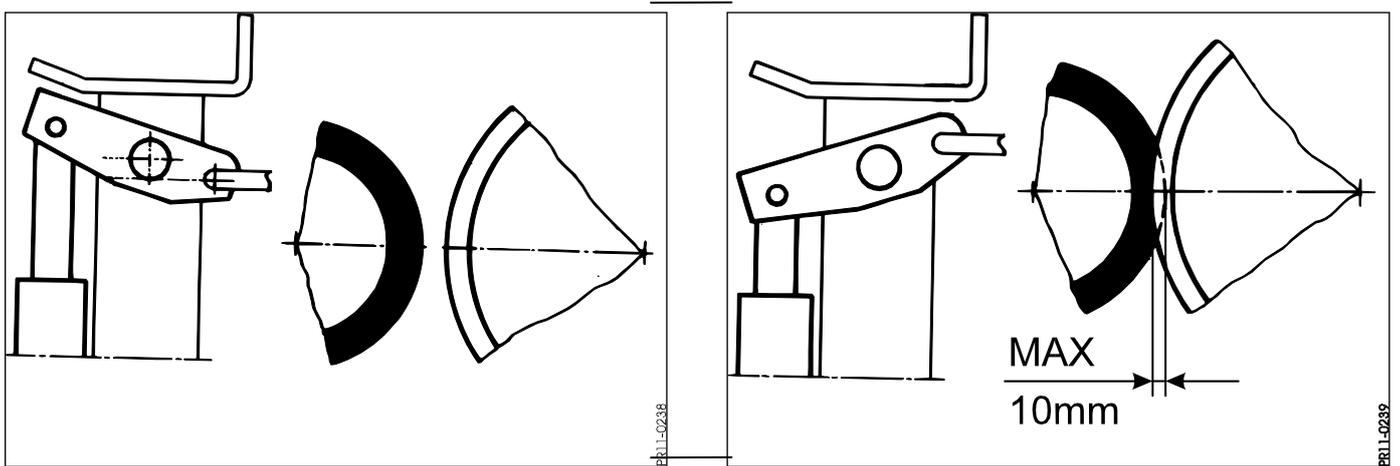


Fig. 4.17

## 4. ADJUSTMENTS

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### TRANSMISSION

**Fig. 4.16** The V-belt drive is tightened by clamping bolt and nut.

The roller chains must be kept sufficiently tight.

The oil level in the bevel gearbox must be checked regularly.

The oil must be filled up to the level screw at the side of the bevel gearbox.

The machine must be lubricated.

The chains must be lubricated with thin oil. Preferably a chain saw oil.

### REVERSE

**Fig. 4.17** Reverse can be used at full speed, but it is recommended to reduce the engine speed to relieve the machine as much as possible.

**Only use the reverse for few seconds at the time.**

The yellow indicator shows the direction of rotation of the feeding.

**F= Forward, R= Reverse**

## 5. DRIVING IN THE FIELD

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# 5. DRIVING IN THE FIELD

Always adjust the feed rollers to the highest acceptable speed and cutting length for the crop in question. That will reduce the stress in the feed rollers and the risk of blocking the machine.

Gradually increase to the correct number of revolutions - 540 or 1000 rpm on the PTO drive shaft. (Check before connection). Drive slowly into the crop and increase the speed until the desired capacity is obtained.

An inexperienced driver should always work with a capacity reserve and make sure that the tractor is able to maintain the correct number of rotations.

When driving with a pick-up it is important that:

- the crop flow is constant and that the driver, if possible, is driving in the opposite direction of the mower.
- the speed is adjusted to the crop quantity and does not provoke frequent blockings.
- the driver drives as straight as possible into the crop and that he is careful when turning in the field.

When using a maize unit it is important that:

- the lower part of the stalk goes into the feed rollers first, which is possible by changing the height of the stalk hoop. A low height setting is recommended if the crop is high and vice versa.

Under difficult conditions it is recommended to bring spare friction discs for the pick-up and the maize unit, as a clutch that has been released several times slowly will lose its ability to transfer the adjusted torque.

Always make sure to work with sharp knives and correctly adjusted shear bars. A short cutting length setting will not only increase the power requirement, but also the knife wear per ton.

A regular and even swathing facilitates the chopping a lot.

## 5. DRIVING IN THE FIELD

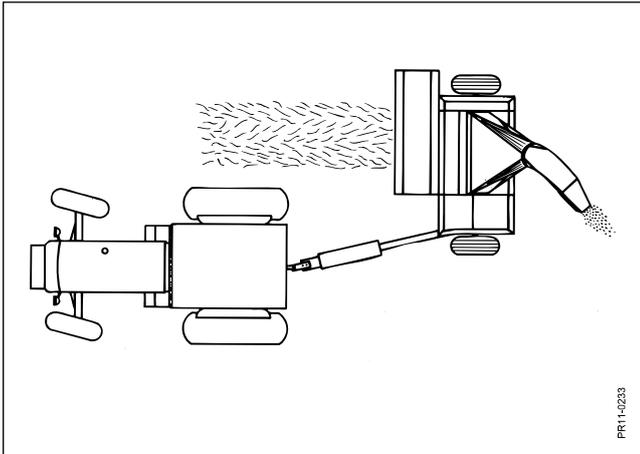


Fig. 5.1

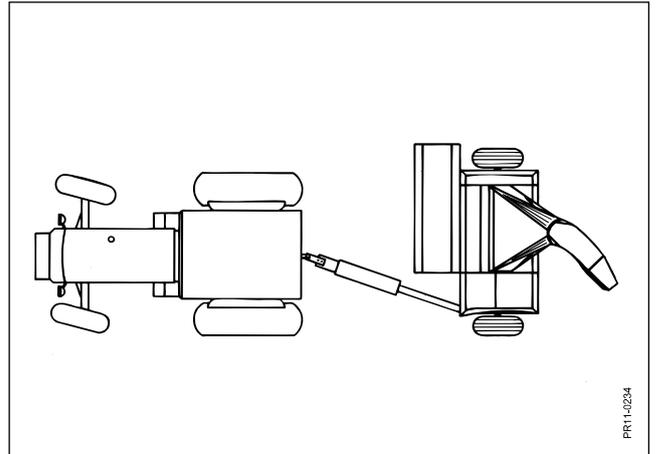


Fig. 5.2

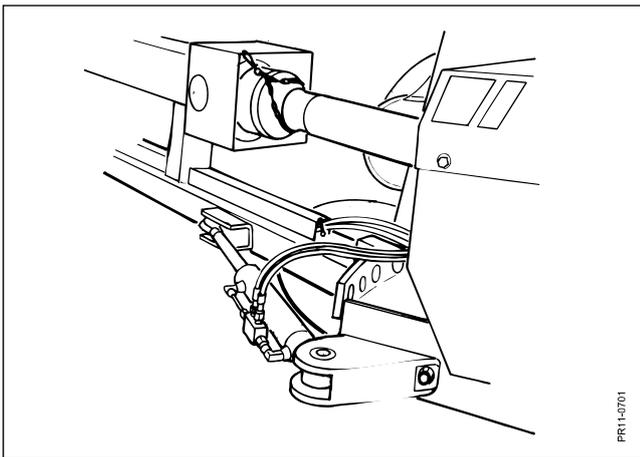


Fig. 5.3

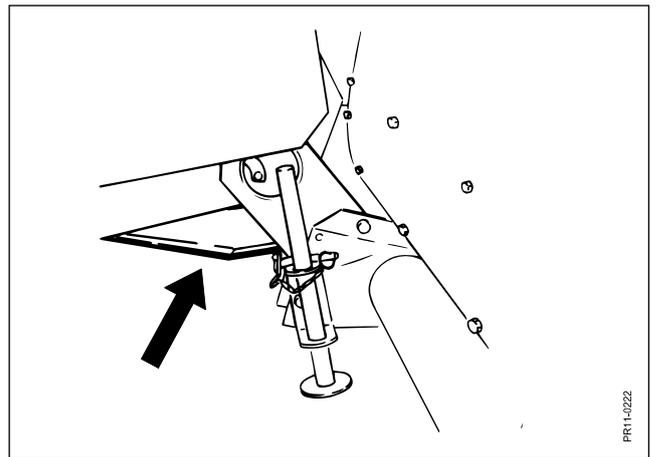


Fig. 5.4

### WORKING POSITION

**Fig. 5.1** Pull out the pin that locks the drawbar by means of the string connected to the tractor seat and swing the machine to the right to the position wanted.

**NOTICE:** **Make sure** that the pin is engaged before you start working.

If the accessories for hydraulic transport readjustment have been mounted on the machine, the drawbar can be adjusted continuously by the hydraulic cylinder and it is able to work in all positions. The drawbar can be adjusted when driving to avoid an obstacle or the like. To make a sharp turn to the right it is likewise recommended that the drawbar is placed in transport position.

**Fig. 5.2**

### TRANSPORT POSITION

**Fig. 5.2** In transport position the machine must be swung in so that it drives behind the tractor.

**NOTICE:** **Make sure** that the pin is completely engaged and that the traffic lights are connected.

**Fig. 5.3** If the accessories for hydraulic transport readjustment have been mounted on the machine, the drawbar can be placed in transport position by the hydraulic cylinder. A safety valve ensures that the machine stays in transport position if the hoses are damaged.

### HARVESTING MAIZE

**Fig. 5.4** A cover plate can be mounted under the feed rollers to reduce waste when harvesting maize, but it might be necessary to remove the plate if the crop is very wet.

## 6. MAINTENANCE

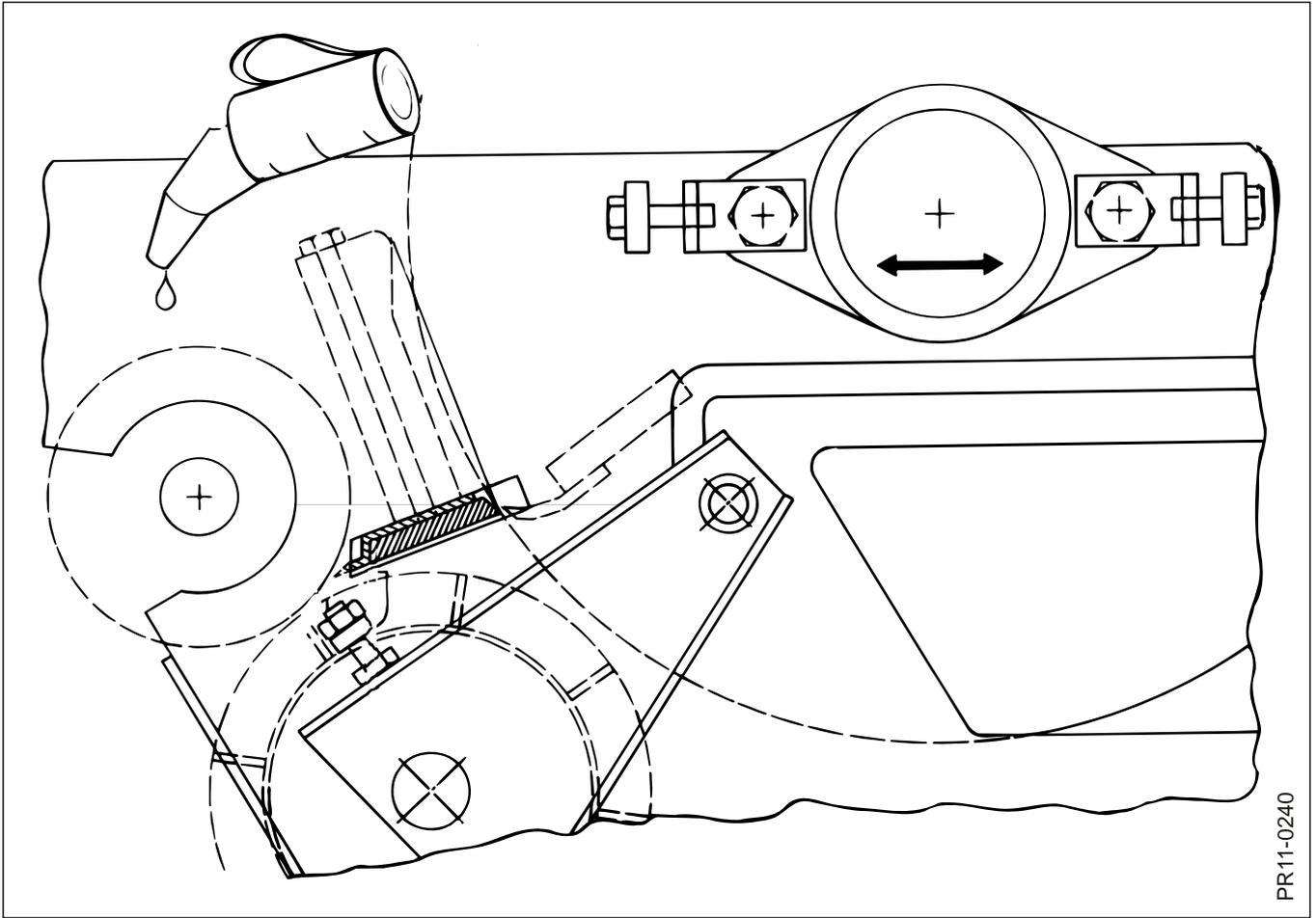


Fig. 6.1

## 6. MAINTENANCE

After a half day of work all the bolts must be retightened. Especially the steel bolts for the knives on the rotor must be tightened carefully.

A Ø	Class: 8.8 $M_A$ [Nm]	Class: 10.9 $M_A$ [Nm]	Class:12.9 $M_A$ [Nm]
<b>M 8</b>	25	33	40
<b>M 10</b>	48	65	80
<b>M 12</b>	80	120	135
<b>M 12x1,25</b>	90	125	146
<b>M 14</b>	135	180	215
<b>M 14x1,5</b>	145	190	230
<b>M 16</b>	200	280	325
<b>M 16x1,5</b>	215	295	350
<b>M 18</b>	270	380	440
<b>M 20</b>	400	550	650
<b>M 24</b>	640	900	1100
<b>M 24x1,5</b>	690	960	1175
<b>M 30</b>	1300	1800	2300

Torque moment  $M_A$  (unless otherwise stated)

**Fig. 6.1** Especially the upper smooth feed roller should be protected against rust. If the machine is out of work for more than one day, it should be lubricated with oil.

When storing the machine for a long time or during the winter, we recommended you to pull in the spindles of the two electrically controlled units to avoid rusting. Likewise, we recommend you to dismount the 7-pole socket and the control box which can be disengaged by the 2-pole plug at the instrument panel.

### TABLE FOR TYRE PRESSURE

		Tyre size	Tyre pressure [bar]
<b>FCT 900</b>	Machine	14.0/65-16/10	2.80
	Machine, accessories	19.0/45-17/10	2.25
	Wheel for pick-up, access.	3.50-6/4	3.00
<b>FCT 1100 MK II</b>	Machine	14.0/65-16/10	2.80
	Machine, accessories	19.0/45-17/10	2.25
	Wheel for pick-up, access.	3.50-6/4	3.00

## 6. MAINTENANCE

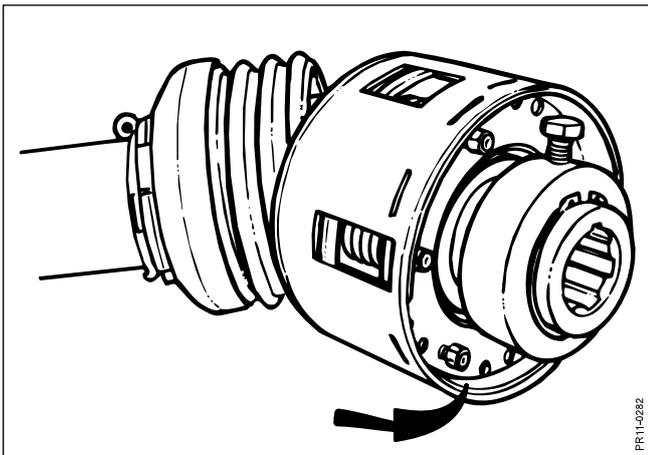


Fig. 6.2

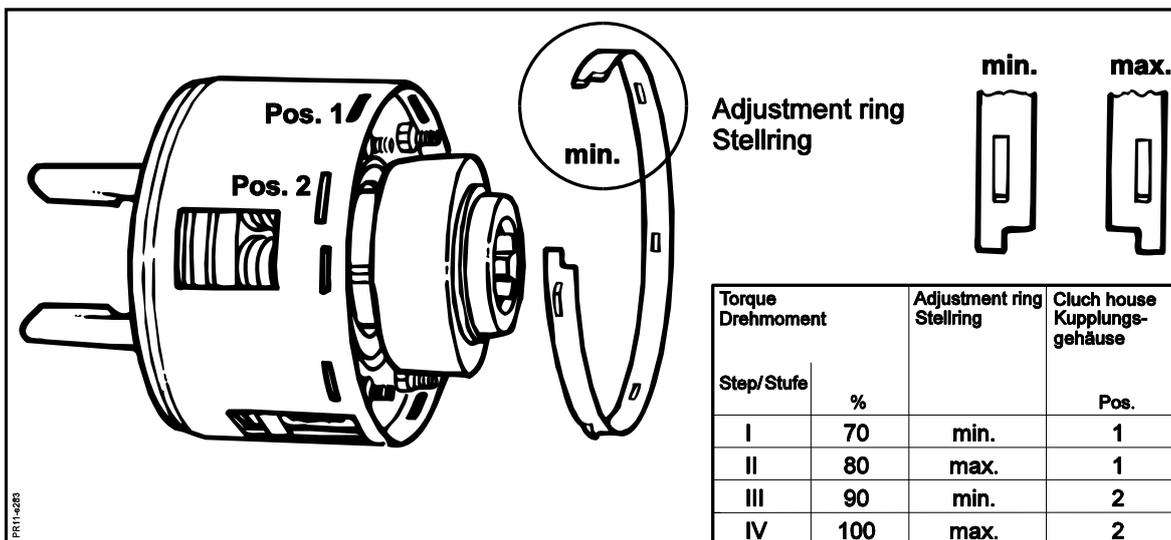


Fig. 6.3

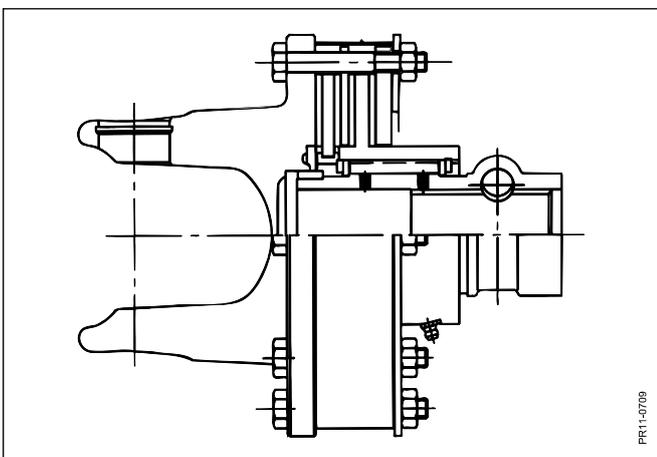


Fig. 6.4

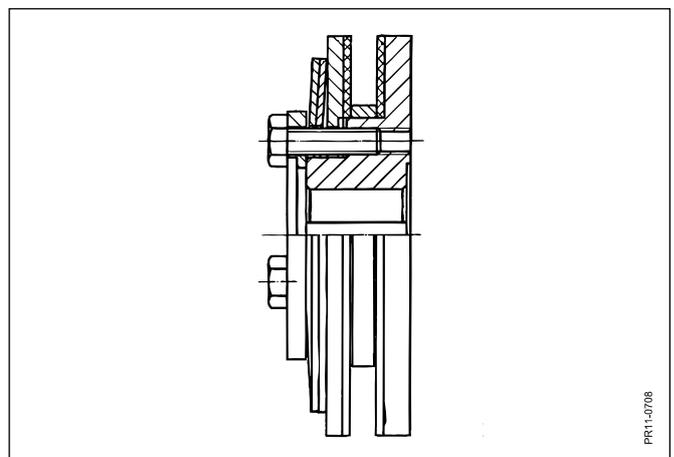


Fig. 6.5

### DISC CLUTCH

The frictional disc clutches of the machine must be activated regularly to ensure that they work as intended. This is especially important after winter storage, before you start working with the machine for the first time in the season.

#### WALTERSCHEID CLUTCH

**Fig. 6.2** Before working with a new machine or after a long time of non-activity, e.g. winter storage, the clutch is "**aired**" in the following way:

The six nuts on the collar must be tightened. This will press the springs together so that they do not press on the clutch discs and the clutch is able to rotate freely. **Let the clutch rotate half a minute.** Loosen the nuts again until they are level with the thread on the bolts and the springs can press on the clutch discs.

**Fig. 6.3** (Does not apply to the FCT 1100 MK II) The torque setting of the disc clutch can be adjusted in four steps by turning the adjustment ring and by the two different positions in the coupling housing.

1. The adjustment ring has a **minimum** and a **maximum position**.
2. The coupling house has two different positions in the height to the adjustment ring, **pos. 1 and 2**.

**Adjustment can only be made when the six nuts are tightened.** After the adjustment, loosen the nuts again to the end of the bolts.

#### BY-PY CLUTCH

**Fig. 6.4** Disassemble the principal friction clutch and clean the parts to avoid rusting. Check if the clutch discs are worn and replace them if necessary. Clean and grease the overrunning clutch, then assemble and mount the clutch again (see also the instructions supplied with the PTO drive shaft).

The outer metal band is a reference for the tightening of the springs. Tighten the screws until the discs do not touch the band.

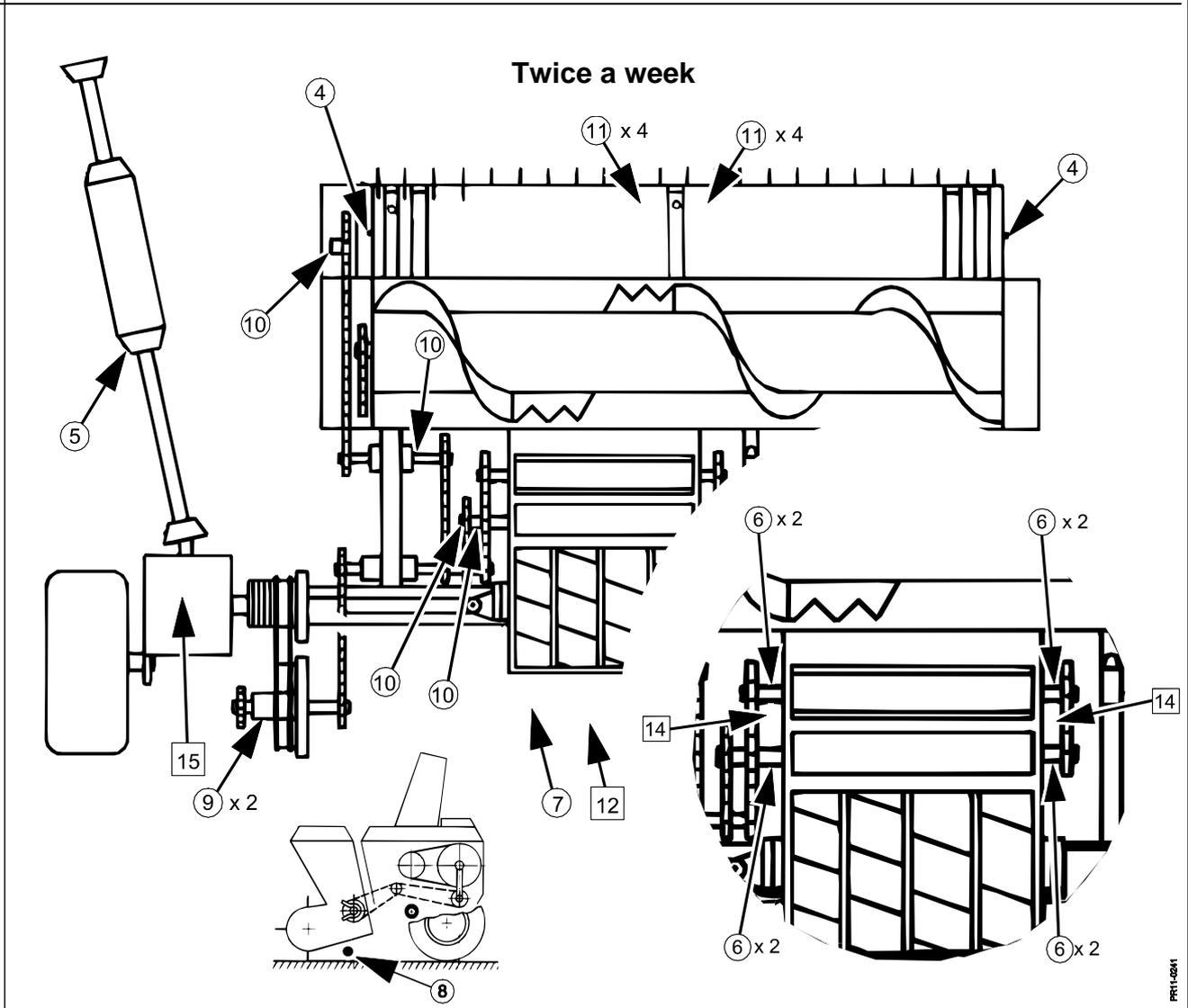
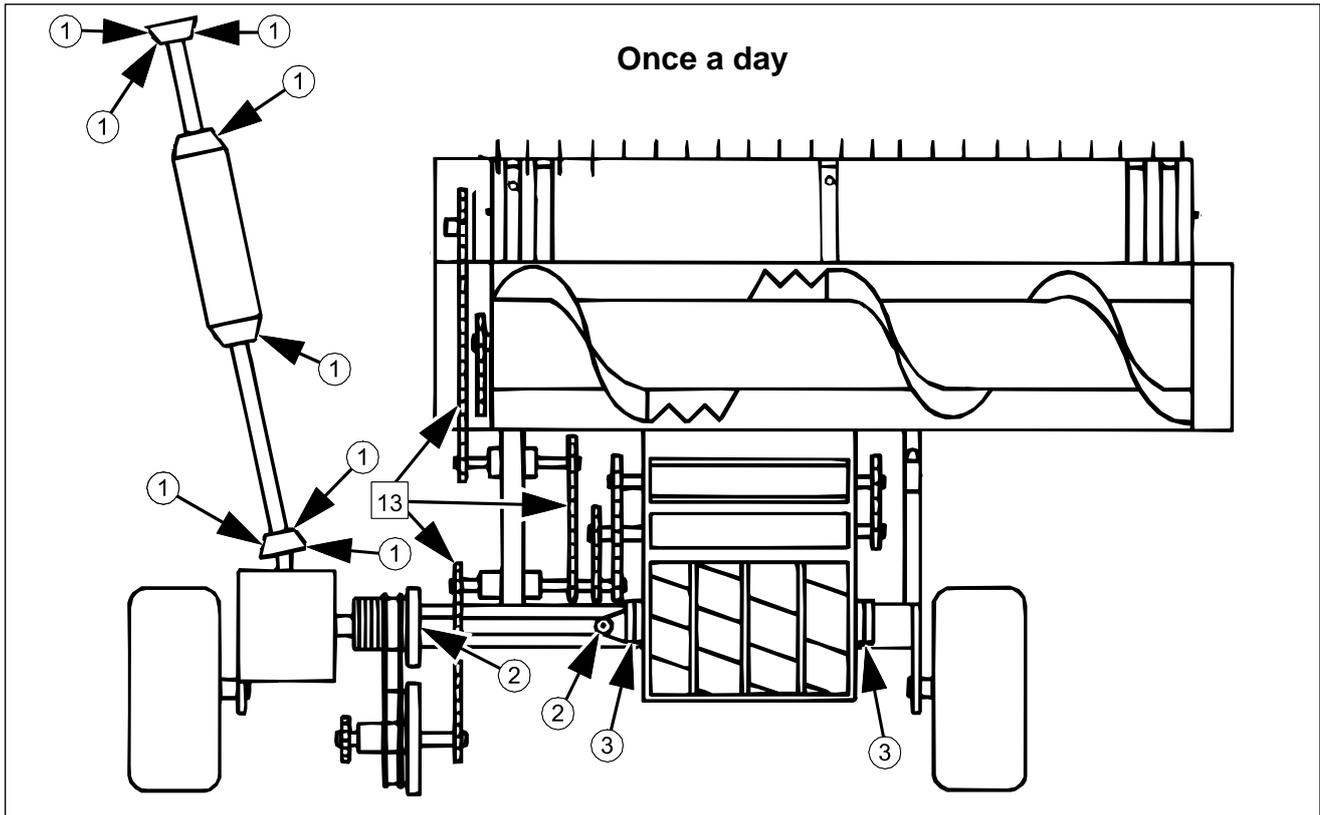
The torque setting is not correct if the band is immovable or if it has been deformed because the bolts are tightened too much.

Always mount the overload clutch on the side of the machine.

#### CLUTCH BY AUGER

**Fig. 6.5** Disassemble the disc clutch by the auger and clean it to avoid rusting. Check if the clutch discs are worn and replace them if necessary.

## 6. MAINTENANCE



PF11-0241

# 7. LUBRIFICATION AND CABLING

## LUBRIFICATION

### Once a day:

- ① PTO drive shafts 6 / 8 pcs.
- ② Drive shaft at rotor 2 pcs.
- ③ Rotor bearing 2 pcs.
- 13 **Chains** must be lubricated with thin oil or chain saw oil.

### Twice a week:

- ④ Bearings for main shaft pick-up 2 pcs.
- ⑤ Overrunning clutch 1 pc.
- ⑥ Feed rollers 8 pcs.
- ⑦ Grinding device 1 pc.
- ⑧ Supporting roller 2 / 3 pcs.
- ⑨ Bearing housing at reverse 2 pcs.
- ⑩ Clutches 4 pcs.
- ⑪ Supporting bearings for pick-up 8 pcs. (only 2.5 m pick-up)

12 Guide for grindstone must be lubricated with rust-preventing oil.

14 Pin for the upper roller must be lubricated with thin oil.

15 Oil in bevel gear (gear box) must be changed after the first 10 working hours and then once a year.

Oil quality EP SAE 90 GL4/GL5 must be used.

Oil quantity, see table 1.

	PTO 540	PTO 1000
<b>FCT 900</b>	2.5 l.	3.0 l.
<b>FCT 1100 MK II</b>	-	4.5 l.

Table 1: Oil quantity in bevel gear

## 7. LUBRICATION AND CABLING

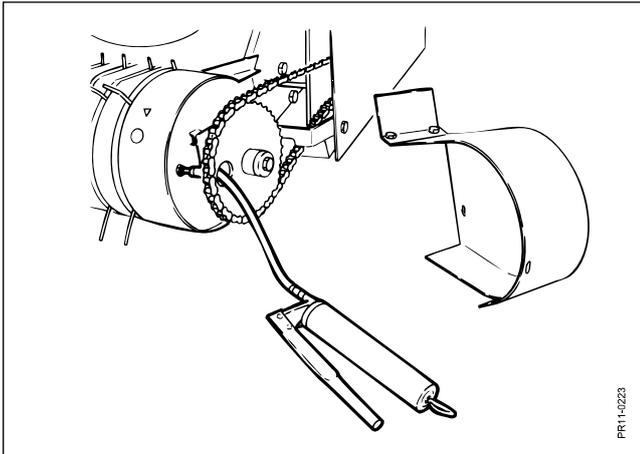


Fig. 7.1

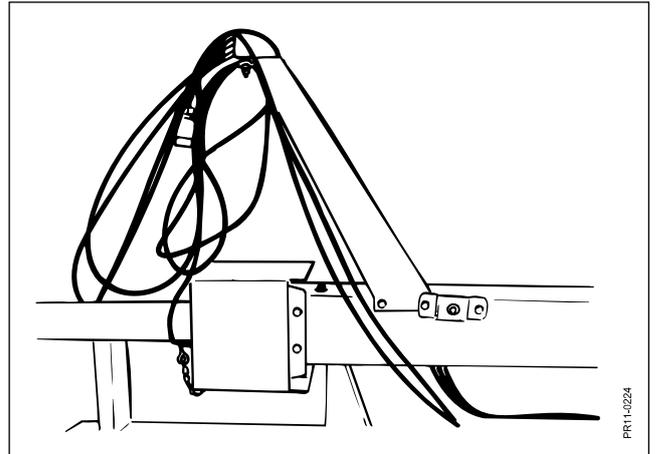


Fig. 7.2

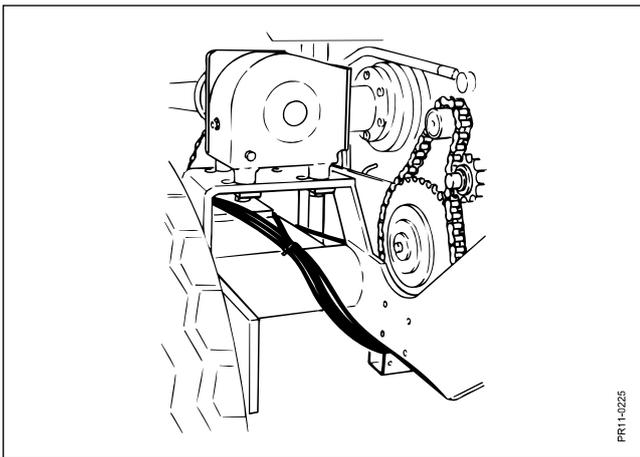


Fig. 7.3

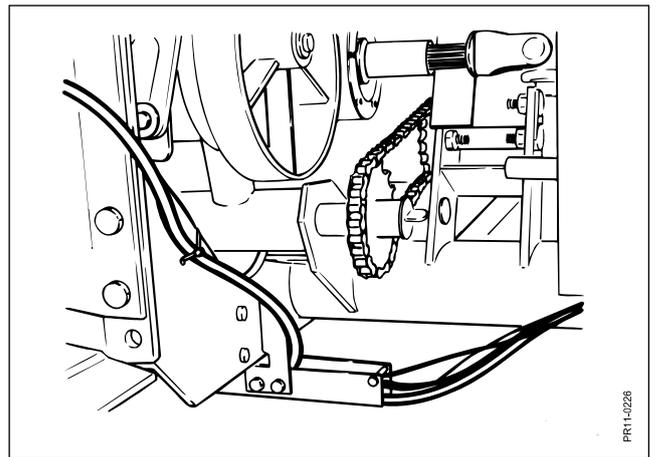


Fig. 7.4

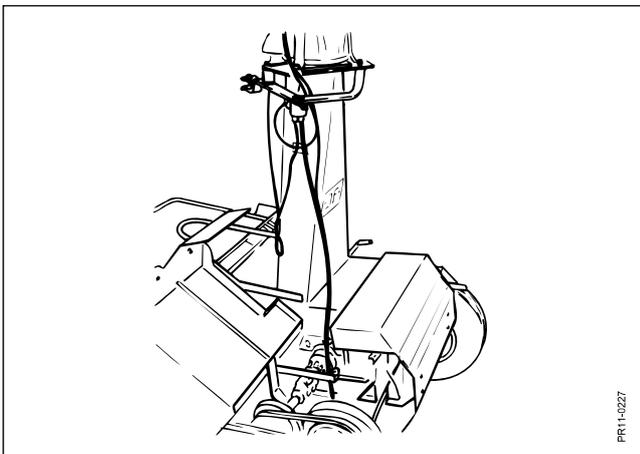


Fig. 7.5

### **GREASING OF PICK-UP**

**Fig. 7.1** Left side of the pick-up is greased through a hole in the sprocket wheel.

### **CABLING**

**Ref. Fig. 7.2 – 7.3 – 7.4 and 7.5.**

# 8. STORAGE (WINTER STORAGE)

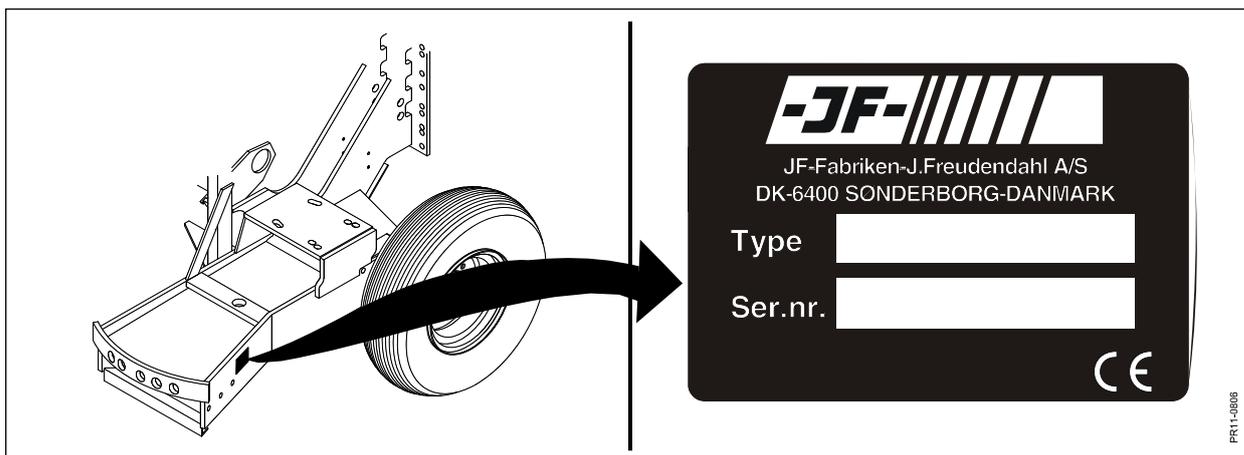
When the season is over, the machine should be made ready for winter storage right away. First clean the machine thoroughly. Dust and dirt absorb moisture, which in turn increases rusting. **Be alert when cleaning with a high pressure cleaner. Never** clean directly on the bearings and lubricate all greasing spots carefully after the cleaning as to squeeze any water out of the bearings.

The following points are guiding instructions as to how to perform the winter storage:

- Check the machine for wear and defects.  
Write down the parts needed before the next season and order the spare parts.
- Dismount the PTO drive shafts, lubricate them and the profile tubes and keep them in a dry place.
- Spray the machine with rust-preventing oil. This is especially important as regards all parts polished with use.
- Store the control box in a dry and temperate place.
- Change the oil in cutter bar and gear boxes.
- Store the machine in a ventilated shed. Relief the tyres by putting the machine on chocks.

## 9. ORDERING SPARE PARTS

When ordering spare parts please state the model, serial number and year of production. This information is printed on the machine I.D. plate. As soon as possible after delivery we request you to write this information down on the first page of the spare parts book supplied with the machine so that you have the information at hand when ordering spare parts.



# 10. MACHINE DISPOSAL

When the machine is worn out it must be disposed in a proper manner:

- The machine must **not** be placed somewhere outside - it must be emptied of oil (gears and hydraulic systems). These oils must be handed over to a recycling company.
- Disassemble the machine and separate the individual recycling parts, for instance tyres, hydraulic hoses, hydraulic valves, etc.
- Hand over the usable parts to an authorized recycling centre. Take large scrap parts to an authorized scrap metal merchant.

# 11. TECHNICAL DATA

Technical data		FCT 900	FCT 1100 MK II
Pick-up width, standard		1.8 m	2.1 m
Pick-up width, extra		-	2.5 m
Cutting unit width		2.4 m / 6 discs	2.4 m / 6 discs
Maize unit		2 rows	2 rows
Power requirement		50-90 kW (68-122 HP)	70-150 kW (95-200 HP)
Capacity		25-60 tons/hour	35-90 tons/hour
Knife rotor width		0.72 m	0.90 m
Number of knives		24	30
Tungsten-tipped knives		Extra	Standard
Grinding device		Grindstone with quick-adjustment	
Reverse grinding		Standard	
Theoretical cutting length, standard		7, 15, 30 mm	
Theoretical cutting length, extra		4, 9, 12 mm	
Rotor revolutions		1600 rpm	
Reversible shear bar, tungsten-tipped		Standard	
Number of feed rollers		4	
Reversible feeding, electric		Standard	
Tyre size, standard		14 x 16/10	
Electric remote control		Chute and reverse	
Hydraulic adjustment		Lifting of pick-up, hitch for trailer	
Weight incl. pick-up		1840 kg	2130 kg
Weight incl. cutting unit		2050 kg	-
Maximum length		3.7 m	
Maximum width incl. pick-up		2.8 m	3.27 m
Maximum height		3.8 m	
Gearbox for 1000 rpm		Standard	
Gearbox for 540 rpm		Extra	-
PTO shaft with wide-angle joint		Standard	
Swivel chute		Standard	
Steel wheels on pick-up		Standard	
Rubber wheels on pick-up		Extra	
Noise level in the tractor cabin	Machine connected	Window closed	74,7 dB(A)
		Window open	87,0 dB(A)
	Machine disconnected	Window closed	74,6 dB(A)
		Window open	81,1dB(A)

Accessories/options: Chute for side loading, ordinary trailer hitch, hydraulic trailer hitch, serrated shear bar (one-sided) for the crushing of maize kernels.

We reserve the right to change the construction and specification details.

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# NOTES

# Warranty

**JF-Fabriken - J. Freudendahl A/S**, 6400 Sønderborg, Denmark, hereafter called "**JF**", grants warranty to any buyer of new JF machines from authorized JF-dealers.

**The warranty covers remedy of material and production faults.  
This warranty is valid within a year after date of sale to end-user.**

The warranty is invalidated in the following cases:

- 1. The machine has been used for other purposes than those described in the instruction manual.**
- 2. Improper use.**
- 3. Damage caused by external sources, e.g. lightning or falling objects.**
- 4. Insufficient maintenance.**
- 5. Transport damage.**
- 6. The construction of the machine has been modified without JF's written permission.**
- 7. Unskilled repair of the machine.**
- 8. Unoriginal spare parts have been used.**

JF cannot be held responsible for loss of income or legal claim as a result of faults either of the owner or of a third party. JF is also not responsible for wages beyond current agreements in connection with replacement of warranty parts.

JF is not responsible for the following costs:

- 1. Normal maintenance such as expenses for oil, grease and minor adjustments.**
- 2. Transport of machine to and from workshop.**
- 3. The dealer's travelling expenses or freight charges to and from the user.**

Warranty is not granted on wearing parts unless it can clearly be proved that JF has committed a fault.

The following is regarded as wearing parts:

**Protective canvases, knives, knife suspensions, shearbars, guide shoes, stone protections, conditioner parts, tyres, tubes, PTO-shafts, clutches, V-belts, chains, rake- and pick-up tines and beater bars for farmyard manure spreaders.**

In addition, the user must note the following:

- 1. The warranty is only valid if the dealer has undertaken predelivery check and has given instruction to the end user in the use of the machine.**
- 2. The warranty cannot be transferred to others without JF's written permission. The warranty can be nullified if the repair is not undertaken immediately.**



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When it comes to green feed techniques, JF-STOLL has gained a reputation as one of the world's leading suppliers and specialists. As a specialist manufacturer for over 50 years, we have gained a vast amount of experience from right around the world and, more importantly, unique regional requirements.

We also receive important inspiration in our development work through a close and continuous dialogue with customers, dealers and agricultural researchers.

No matter which type of JF-STOLL-machine you chose, you can be sure to obtain the best result to obtain a top result - in the shape of high performance and operational reliability, minimum maintenance, flexible working possibilities and optimal operating economy.

Dealer

# JF-STOLL

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