JF-STOLL

Disc Mower

GX 7005 I GX 9005 I GX 9005 SM

Instruction Manual

“Original instructions”

Edition 4 I April 2010

JF-STOLL

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
wedlug 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 Nós,

JF-Fabriken - J. Freudendahl A/S
Linde Allé 7
DK 6400 Sønderborg
Dänemark / Denmark
Tel. +45-74125252

EN **declare under our sole responsibility, that the product:**
DE erklären in alleiniger Verantwortung, dass das Produkt:
IT Dichiara sotto la propria responsabilità che il prodotto:
NL verklaren als enig verantwoordelijken,dat het product:
FR déclarons sous notre seule responsabilité que le produit:
ES declaramos bajo resposibilidad propia que el producto:
PT declaramos com responsabilidade próqria que o produto:
DA erklærer på eget ansvar, at produktet:
PL deklarujemy z pełną odpowiedzialnością, iż produkt:
FI ilmoitamme yksin vastaavamme, että tuote:

EN **Model:**
DE Typ :
IT Tipo :
NL Type :
FR Modèle :
ES modelo :
PT Marca :
DA Typ :
PL Model :
FI Merkki :

GX 7005
GX 9005
GX 9005 SM

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 exigencias 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 mainituja perusturvallisuus- ja terveysvaatimuksia (soveltuvin osin) sekä muita siihen kuuluvia EY direktiivejä:
2006/42/EC

CE

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

FOREWORD

DEAR CUSTOMER!

We appreciate the confidence you have shown our company by investing in a JF-STOLL product 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 information about correct and safe use of the machine.

When buying the machine you will receive information about use, adjustment and maintenance.

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

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

This instruction manual is made so that the information is mentioned in the order you will need it, i.e. from the necessary operation conditions to use and maintenance. Besides this there are illustrations with text.

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

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

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

CONTENTS

1. INTRODUCTION

This instruction manual deals with GX 7005, GX 9005 and GX 9005 SM.
The front machine has its own instruction manual.

INTENDED USE

The disc mowers are **solely constructed for** usual work in agriculture. They are solely intended for cutting growing grass and straw crops on the ground. They should only be connected to tractors and driven by the PTO of the tractor.

Any use beyond this is outside the intended use. JF-Fabriken A/S is not responsible for any damage resulting from such use, the user bears that risk.

It is assumed that the work is performed under reasonable conditions, i.e. that the fields are cultivated normally and to a reasonable extent kept clear of stones and similar foreign matter.

Intended use, of course, implies that the prescriptions concerning adjustment, operation and maintenance in the instruction manual and the spare parts book are observed.

The disc mowers should only be used, maintained and repaired by persons who, through relevant instructions and after reading the instruction manual, are familiar with the machine in question and, in particular, are informed of possible dangers.

The following safety instructions as well as common rules concerning technical safety, working practices and road safety **must** be observed altogether.

If changes are made on the machine and its construction without permission from JF-Fabriken A/S, JF-Fabriken A/S cannot be held responsible for any damage resulting from this.

SAFETY

The safety of persons and machines is an integral part of JF-STOLL's development work. However, damage can occur as a consequence of misuse and insufficient instruction. **We wish to ensure the safety of you and your family in the best possible way**, but this also requires an effort on your part.

A mower cannot be constructed in such a way that it guarantees the full safety of persons and at the same time performs an efficient piece of work. 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 and others to unnecessary danger.

The machine demands a skilled operation, which means that ***you should read the instruction manual before you connect 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!

You should **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 line of safety notes. The safety notes mention certain measures, which we recommend you and your colleagues to follow as 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 the operator and others against injuries.

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

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

GENERAL SAFETY INSTRUCTIONS

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

1. Always disengage the PTO drive shaft, activate the parking brake and stop the tractor engine before you
   - lubricate the machine,
   - clean the machine,
   - disassemble any part of the machine,
   - adjust the machine.

2. Always lower the cutting unit to the ground or activate the transport safety device when parking the machine.

3. Always use the transport safety device of the cutting unit and the stop valves of the hydraulic cylinders during transport.

4. Never work under a raised cutting unit unless it is secured by means of stop blocks or other mechanical securing device.

5. Never try to dismount springs if these are not completely relieved.

6. Always block the wheels before working under the machine.

7. Never start the tractor until all persons are safely away from the machine.

8. Make sure that all tools have been removed from the machine before starting the tractor.

9. Make sure that all guards have been mounted correctly.

10. During work never wear loose clothes which can be pulled in by the moving parts of the machine.

11. Do not change the guards or work with the machine when a guard is missing or defective.

12. Always drive with the statutory lights and safety marking during transport on public road and at night.

13. Limit the transport speed to maximum 30 km/h if the machine has not been marked with another maximum speed limit.

14. Do not stand near the machine while it is working.

15. When mounting the PTO drive shaft observe that the number of RPM of the tractor matches those of the machine.

16. Always use hearing protectors if the noise from the machine is annoying or if you are working with the machine for a considerable period in a tractor cabin, which has not been silenced sufficiently.

17. Before raising or lowering the cutting unit, check that no persons are near the machine or touching it.

18. Do not stand near the guards of the cutting unit and do not lift the guards before all revolving parts have stopped moving.

19. Never use the machine for other purposes than what it has been constructed for.

20. Do not allow any children to be near when you are working with the machine.

21. Never stand between the tractor and the mower during connection and disconnection.

SPECIAL SAFETY INSTRUCTIONS

When working with mowers the following special measures should be observed.

1. Use a tractor with a cabin provided with safety glass. Furthermore it is advisable to protect the glass of the cabin with polycarbonate plates or with a close-meshed net outside. The cabin should be closed when working in the field.

2. Always keep away from the cutting unit when the parts of the machine rotate.

3. When replacing blades it is important to observe the rules in the instruction manual to fulfil the safety requirements. Always use original spare parts.

4. Before use, check the revolving parts (blades, blade bolts, discs and flow caps). If parts are damaged (bent or cracked), worn or missing, they should be replaced immediately.

5. Damaged, worn or missing blades should be replaced in sets in order not to create an unbalance in the machine.

6. Check canvases and guards regularly. Replace worn or damaged canvases.

7. Canvases and guards secure against ejection of stones and foreign matter. Before use canvases and guards must be placed correctly.

8. Lower the cutting unit to working position before starting the power transmission.

9. The field should be kept clear of stones and foreign matter, if possible.

10. Even if the machine is adjusted and operated correctly, stones and foreign matter in the field can be ejected from the cutting unit. Therefore no persons should stand near the cutting unit where the conditions are unknown. Be particularly careful when working along public roads or facilities (schools, parks etc.)

11. Though it is possible, never back with the cutting unit in working position. The correct movement for the cutting unit only works when driving forwards, and there is a risk of damage if driving backwards with the machine in working position.

12. Even though the power transmission has stopped, the revolving parts have a momentum. Therefore, always wait until the revolving parts have come to a complete stop before getting near the cutting unit.

If in doubt, always contact the nearest dealer.

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 a suitable power on the PTO. If the power of the tractor is considerably larger than the usual requirement of the machine, the machine should be secured against overload with a suitable clutch on the PTO.

Long-term overload may damage the machine and at worst result in ejection of parts.

Choose a tractor with a suitable own weight and track width so that it can drive steadily on the ground. Also make sure that the link arms of the tractor are intended to carry machines with the weight in question.

Always choose a tractor with a closed cabin when working with a disc mower.

CONNECTION AND DISCONNECTION

Always make sure that nobody is standing between the tractor and the machine during connection and disconnection. An unintentional manoeuvre with the tractor may cause serious injury. (See figure 1-1)

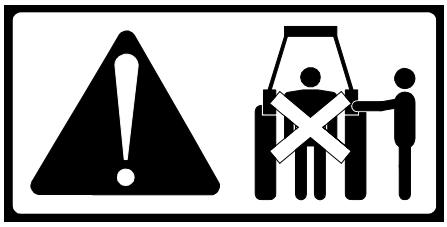


Fig. 1-1

Check that the machine is intended for the number and the direction of rotation of the tractor PTO. The number and direction of rotation of the tractor must be as in figure 1-2, seen from a position standing behind the tractor facing the direction of travel. A wrong number of rotations may result in reduced cutting and over a long period may damage the machine and at worst result in ejection of parts.

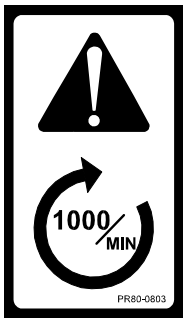


Fig. 1-2

Make sure that the PTO drive shaft has been mounted correctly. The lock pin must be in mesh and the support chain must be fastened.

Read the instruction manual for the PTO drive shaft and observe the safety instructions mentioned in that manual.

The PTO drive shaft must be correctly protected. If a guard is defective, it must be replaced immediately.

Check that all hydraulic couplings are correctly mounted and tight and that all hoses and fittings are undamaged before activating the hydraulic system.
Before the tractor engine has stopped, make sure that there is *no* pressure in the hydraulic hoses by activating the tractor hydraulic spool valves to floating position.
Hydraulic oil under pressure can penetrate the skin and cause serious infections. You should always protect the skin and the eyes against oil splashes. If, by accident, hydraulic oil under pressure hits you, consult a doctor immediately.

Fig. 1-3

Check that the cutting unit can move freely before you activate the hydraulic cylinders. Make sure that no persons are near the machine when starting as there might be air in the hydraulic system which might lead to sudden movements.

ADJUSTMENT

Never adjust the mower while the PTO drive shaft is engaged. Disengage the PTO drive shaft and stop the tractor engine before you adjust the machine. It is important not to remove the guards until all revolving parts have stopped. Since the machine has freewheel this may take some time.

Before working check blades and discs for cracks and other damage. Replace damaged blades and discs (see section on maintenance).

Check periodically if blades and blade bolts are worn according to the rules in the instruction manual. Likewise, check that the blade holders are not loose or defective (see section on maintenance).

TRANSPORT

Never drive faster than the conditions allow, and maximum 30 km/h if the machine has not been marked with another maximum speed limit.

Note that the machine's high centre of gravity affects the road-holding qualities of the tractor, especially around corners.

IMPORTANT: For the machine's transport height to be less than 4 m the link arms must be lowered so that the hitch pins are maximum 25 cm above the ground.

Always check that mechanical transport safety devices are activated before transport. If the transport safety devices are not activated an unintentional operation of the cylinder for conversion between work and transport may cause the machine to move to the opposite lane, the bicycle track or the sidewalk.

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

To ensure all the air has been expelled from the oil in the hydraulic cylinders, test all the functions after the hydraulic connections are connected to the tractor. Especially before driving on the public road.

WORKING

During the daily work it should be considered that loose stones and foreign matter on the ground might get in contact with the revolving parts and get thrown out again at a very high speed.

Therefore, all guards must always be correctly mounted and intact when you are working with the machine.

Worn and damaged canvases should be replaced.

In stony fields, the stubble height should be adjusted to maximum and the cutting angle to minimum.

Through a stone release mechanism the machine is secured against shocks in the direction of travel. However, there is **no** securing against shocks if backing with a lowered cutting unit and you **risk damaging the machine.**

If the cutting unit or the conditioner is blocked, stop the tractor engine, activate the parking brake and wait until the revolving parts have stopped before removing the foreign matter.

Never allow anybody to stand near the mower during work, especially not children.

Drive in a low tractor gear if working on hillsides.

When working with a mower keep a safe distance from steep slopes and similar ground conditions. The ground may be slippery and pull the mower and the tractor sideways. Also remember to adjust the speed for sharp turns when driving up/down hillsides (see section on driving on hilly ground).

PARKING

Park the machine in working position with lowered cutting units.
Never leave the tractor before the cutting unit is resting on the ground, the engine of the tractor has stopped, and the parking brake has been activated. This is the only way to perform a safe operation.
See section on parking.
Make sure that the jacks are correctly fastened and locked when parking the machine.

GREASING

When lubricating or maintaining the machine, make sure that the tractor link arms are secured mechanically and that the cutting unit is resting on the ground, locked in transport position or that the lifting cylinders are blocked by means of stop valves.

Never try to clean, grease or adjust the machine before the PTO has been disengaged, the tractor engine has stopped and the parking brake been activated.

MAINTENANCE

It is important that the cutting unit is correctly relieved to ensure perfect operation in the field and to reduce the risk of damaging the cutter bar.

Always make sure that the used spare parts are tightened to the correct torque (see section on maintenance).

When replacing parts in the hydraulic system always make sure that the cutting unit rests on the ground, locked in transport position or the lifting cylinders are blocked mechanically. Remember to relieve the oil pressure before working with the hydraulic system.

MACHINE SAFETY

All revolving parts are balanced by JF-STOLL by means of a special machine with electronic sensors. If it turns out that a part still has an unbalance, small counterweights should be fastened.

As the discs run at up to 3000 RPM, even the slightest unbalance will cause vibrations which may lead to fatigue fractures.

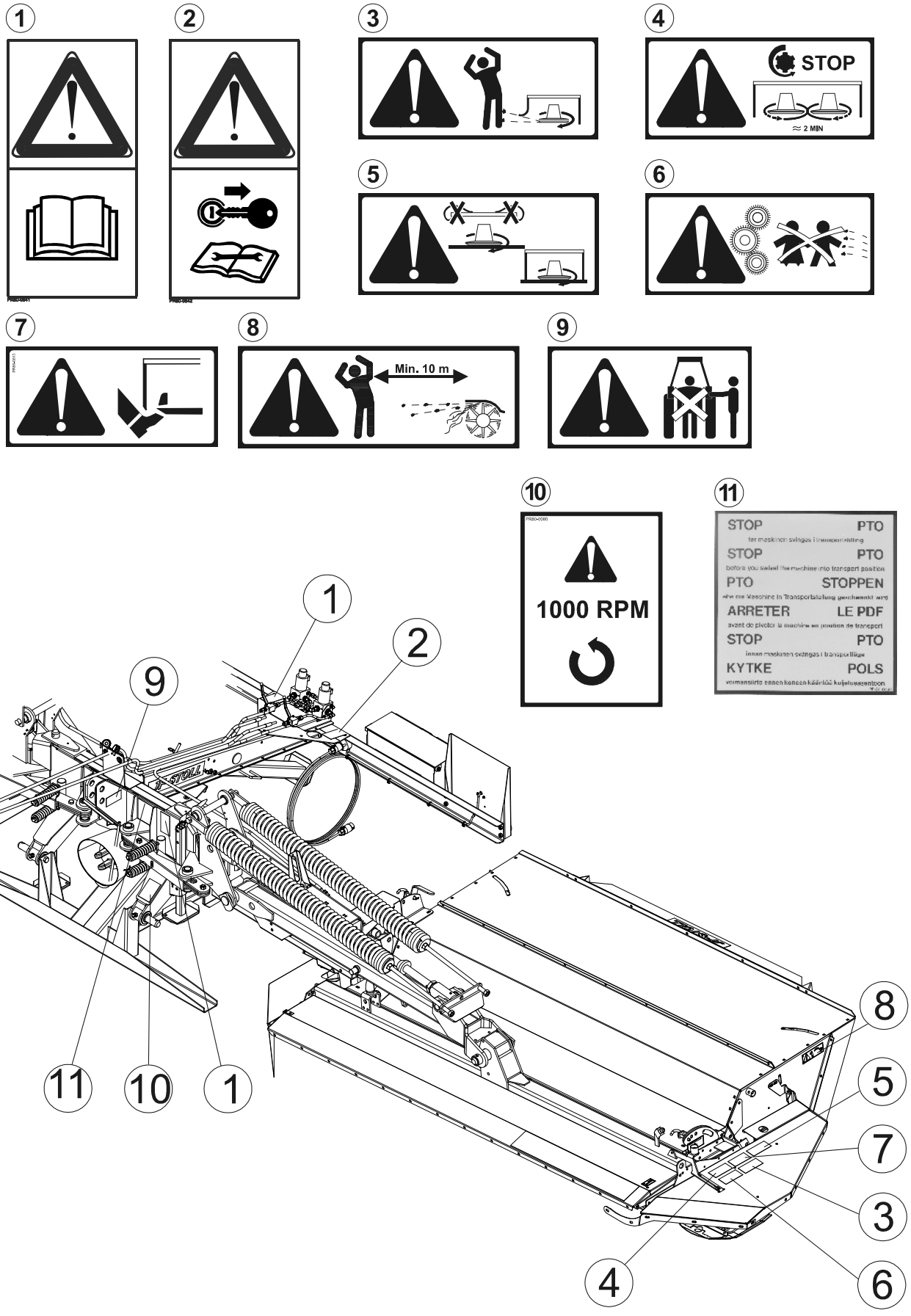
If the vibrations and/or the noise of the machine increase considerably during the operation, stop working immediately. Do not continue the work until the fault has been corrected.

When replacing blades, both blades on the disc in question must be replaced as not to create an unbalance.

During the season check daily that no blades, carriers or bolts are missing. If any of these are missing, mount new parts immediately.

Clean caps of earth and grass regularly.

You should also check and “air” the friction clutch regularly to ensure it does not rust.


1
2
3
4
STOP
≈ 2 MIN
5
6
7
8
Min. 10 m
9
10
1000 RPM
11
STOP PTO
STOP PTO
PTO STOPPEN
ARRETER LE PDF
STOP PTO
KYTKE POLS
STOLL
1
2
9
11
10
1
8
5
7
3
4
6

SAFETY DECALS

The safety decals shown here are positioned on the machine as shown. Before using the machine, check that all decals are present: if not, require those missing.

1. Read the instruction manual and the safety instructions.
This is to remind you to read the delivered documents to ensure the machine is operated correctly and to avoid unnecessary accidents and machine damage.

2. 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 remember to remove the ignition key to ensure that nobody starts the engine, until you have finished.

3. Risk of stones being thrown.
Similar meaning to decal No. 6. Even though all canvases and guards are in the right place, there is still a risk of stones etc. being thrown out. Therefore, nobody should be allowed to stand near the machine during operation.

4. Rotating parts.
After the PTO drive shaft has stopped, the blades will have a momentum where they keep rotating for up to 2 minutes. Wait until the blades have come to a complete stop before you remove the canvas and the guards for inspection and maintenance.

5. Operation without canvas.
Do not start the machine unless canvases and guards are intact and in their right place. The machine can throw out stones and other foreign matter during operation. The purpose of the canvases and the guards is to reduce such danger.

6. Children.
Never let children stand near the machine during operation. Especially not small children as they have a tendency to do unforeseen things.

7. Rotating blades.
Do not under any circumstances let anyone get near or stand near the machine during operation. The rotating blades of the machine can cause serious injury to any part of the body if hit by such a blade.

8. Stones being thrown from the conditioner.
The conditioner rotor runs with a high number of RPM and stones on the ground can be thrown up to 10 m backwards at a very high speed. Therefore, always make sure that nobody is standing near the machine when it is working.

9. Risk of injury during the connection.
Never let anybody stand between the tractor and the machine during connection to the tractor. An unintentional manoeuvre may cause serious injury.

10. The number and the direction of rotations.
Check that the PTO has the right number of rotations. A wrong number of rotations can in time damage the machine with the risk of personal injury as a result.

11. Stop PTO
PTO must be stopped before the machine is swivelled into transport position.

TECHNICAL DATA

Type			GX 7005	GX 9005	GX 9005 SM
Conditioner system			-	-	PE-fingers
Working width			6.60 m	8.60 m	8.60 m
Transport width			2.97 m	2.97 m	2.97 m
Power requirement, minimum on PTO			88 KW/120 HP	103 KW/140 HP	129 KW/175 HP
Capacity			3 – 13 Ha/h	4 – 17 Ha/h	4 – 17 Ha/h
Link arms required			Cat. III		
PTO-type, RPM			1 3/8", 6 splines/1000 rpm		
Friction clutch and freewheeling			Standard		
Oil outlets			1 SA or 2 SA (depending on setting)		
Transport conversion			Hydraulic		
Lighting kit			Standard		
Number of discs			12	16	16
Number of blades			24	32	32
Number of swath rollers, standard			2	2	-
Maximum number of swath rollers			4	4	-
Conditioner width, approx.			-	-	2 x 2.48 m
Conditioner elements			-	-	2 x 136 PE-finger
Safety system			Mechanical		
Weight, approx.			1610 kg	1720 kg	2170 kg
Noise level in the tractor cabin	Machine connected	Window closed	78.5 dB	78.5 dB	78.5 dB
		Window open	84.5 dB	84.5 dB	84.5 dB
	Machine disconnected	Window closed	76.5 dB	76.5 dB	76.5 dB
		Window open	78.0 dB	78.0 dB	78.0 dB

2. CONNECTION AND TEST DRIVING

CONNECTION TO THE TRACTOR

Fig. 2-1

Fig. 2-1 GX 7005 and GX 9005 are connected to the link arms and top link of the tractor. The hitch pins are intended for category III.
Adjust the link arms to the same height and connect to the machine. Adjust and **lock** sideways so that the machine is suspended centred behind the tractor and there is no play sideways.
Mount the top link so that it is approximately parallel with the link arms. Hereby you obtain the smallest change in the machine's inclination when raised and lowered, so that it does not incline away from or towards the tractor.

Adjust the link arms so that all 3 PTO shafts have minimum deviation from horizontal when the machine is in working position. In transport position the link arms are lowered to avoid excess height on GX 9005 (SM).

WARNING: **If the link arms are not locked sideways the machine may influence the tractor with bumps, which may change the driving direction of the tractor during transport.**

ADJUSTMENT OF PTO DRIVE SHAFT

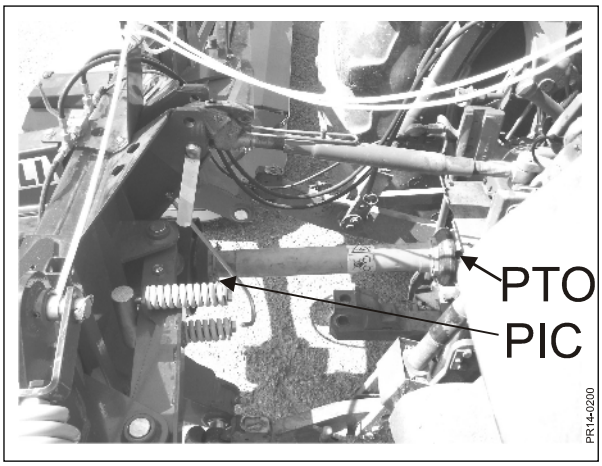


Fig. 2-2

Fig. 2-2 **IMPORTANT:** Do not shorten your new PTO shaft until you are certain that it is necessary. From the factory the PTO shaft is adjusted to the distance from PTO to PIC which is standard on most tractor brands.

If it is still necessary to shorten the PTO shaft, please note the following:

IMPORTANT: The profile tubes of the PTO shaft must fully comply with the overlapping measures shown in Fig. 2-3.

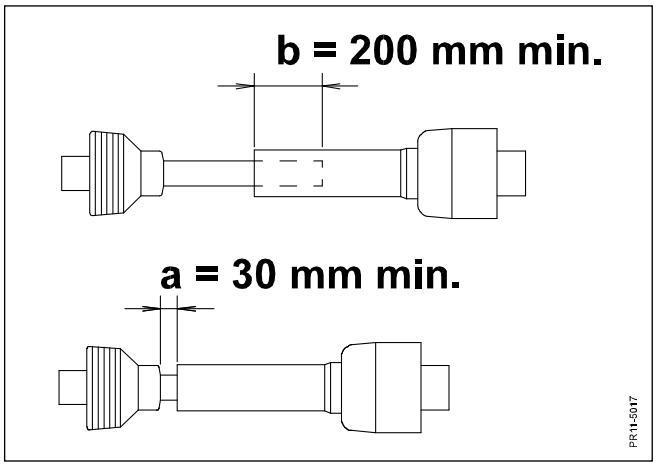


Fig. 2-3

IN CASE OF SHORTENING:

Fig. 2-3 Adjust the PTO shaft so that it has the biggest possible overlapping

- in no position has less overlapping than 200 mm
- is not compressed more than the prescribed 30 mm in order not to bottom the shaft.

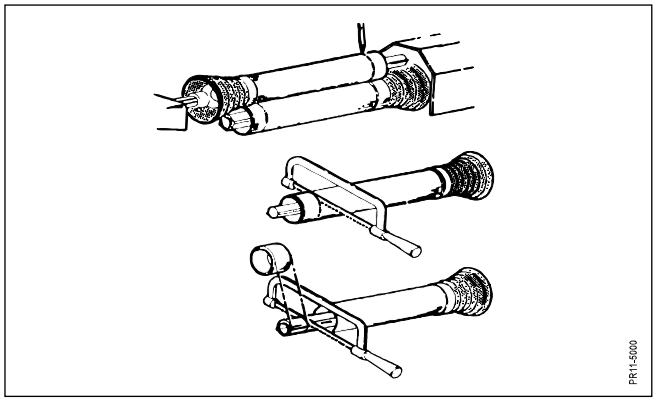


Fig. 2-4

Fig. 2-4 Fasten the PTO drive shaft half parts to PTO and PIC, respectively, when these are at the same horizontal level and opposite each other. (The shortest distance from the machine).
Keep the shaft ends parallel to each other and mark the 30 mm (minimum).
Shorten all 4 tubes equally. The ends of the profile tubes must be rounded off and burrs must be removed carefully.

WARNING: **Grease the tube carefully before it is reassembled as it will otherwise be exposed to big friction forces.**

PARKING STANDS

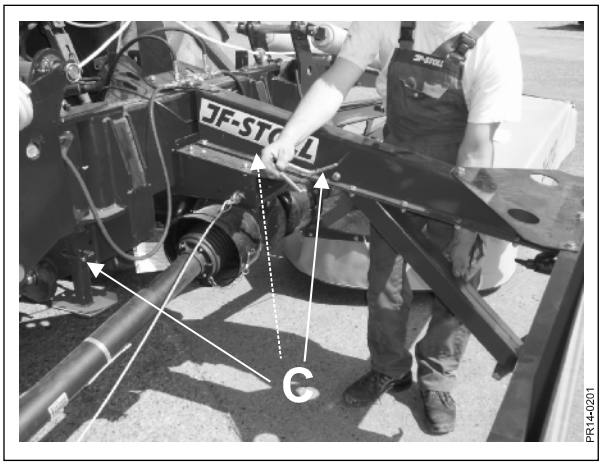


Fig. 2-5

Fig. 2-5 The two front parking stands and the rear parking stand are lifted up and locked with the pin and spring pins **C**.

THE PTO SPEED OF THE MACHINE

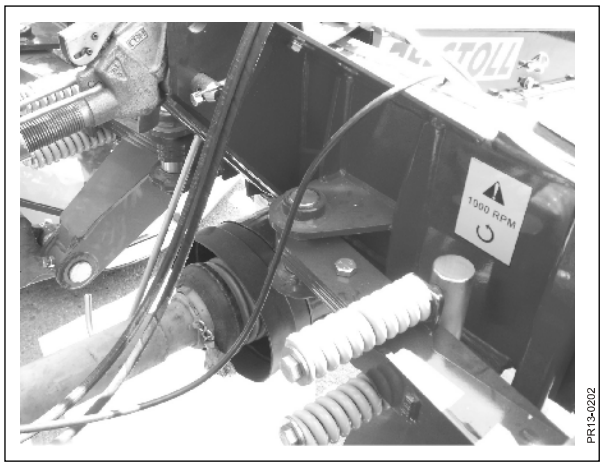


Fig. 2-6

Fig. 2-6 The machine is built for 1000 rpm. Therefore, before starting the machine, please check that the PTO shaft runs with 1000 rpm.

FRICTION CLUTCH AND FREEWHEELING

A friction clutch with freewheel is mounted on the PTO drive shaft from the tractor. See section **5. MAINTENANCE – friction clutch** before you start up.

HYDRAULIC CONNECTION

The hydraulic system on GX 7005 and GX 9005 (SM) can be used with either two or just one single-acting outlet.
If only one outlet is used the cutting units are lifted at the same time and they cannot be lifted individually. If two outlets are used the cutting units can be lifted individually, while both outlets must be activated to lift the cutting units at the same time.

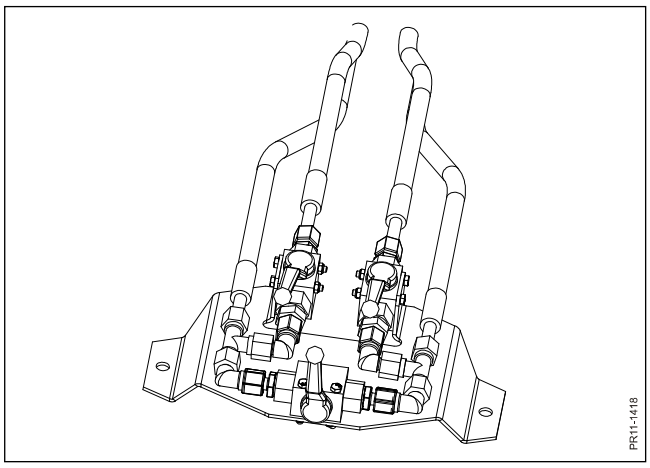


Fig. 2-7

Fig. 2-7 Two outlets.
Recommended. If you want to use two outlets you should close the ball valve on the middle so that the hydraulics functions separately for the two sides. Both hoses are connected to outlets on the tractor and ball valves for both are opened.

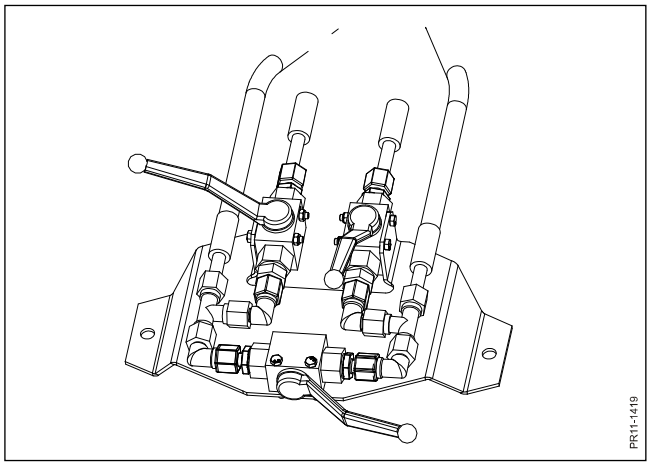


Fig. 2-8

Fig. 2-8 One outlet.
If you only want to use one outlet you should open the ball valve on the middle so that the hydraulics functions for both sides. One of the hoses is connected to the outlet on the tractor. The other hose must not be used and the ball valve for this other hose is to be closed.

IMPORTANT: All ball valves must always be closed in case of transport. They are closed when the lever is transverse to the flow direction. See figure 2.9

IMPORTANT: When the cutting unit is raised to vertical for transport position it must be done smoothly in order not to damage the machine.

If the tractor is equipped with automatic headland equipment the system may have the feature that it can be adjusted to use both outlets at the same time, when the cutting units are to be lifted or lowered. For individual lifting of the cutting units, for example in case of short work mowing, the outlets can be operated manually instead. In that way a simplified operation can be obtained where the cutting units can both be lifted at the same time and individually. If the system is also adjusted to lift the front mower the operation is simplified even more.

DANGER: **The hydraulic components must not be exposed to a higher pressure than 210 bar as a higher pressure may cause parts to be damaged. Hereby a serious risk of personal injury occurs.**

DRIVING ON PUBLIC ROAD!

The machine is only built to be transported behind a tractor hanging in the tractor link arms, see section **CONNECTION TO THE TRACTOR**.
Before you drive on public roads you must convert the machine from transport to working position and back to ensure that there is no air in the hydraulic system. **See section on conversion.**

The transport speed **should not exceed 30 km/h**.

DANGER - ALWAYS REMEMBER: BEFORE TRANSPORT THE GX 9005 (SM) MUST BE LOWERED, so that the hitch pins are maximum 25 cm above the ground and **outer** guards are folded in. Otherwise the height of the machine exceeds 4 m!

WHEN DRIVING ON SLOPING GROUND, you must be aware that the machine's high centre of gravity in transport position will increase the risk of overturning the machine, and also affects the road-holding qualities around corners etc.

DANGER – TRAFFIC MARKING:

The owner is always obliged to ensure that the machine is equipped with correct lighting system and other traffic marking in accordance with the country's current rules.

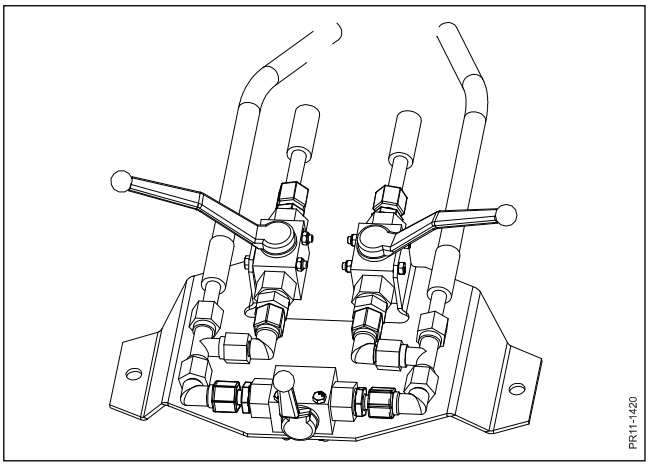


Fig. 2-9

Fig. 2-9 **PRIOR TO TRANSPORT CLOSE THE BALL VALVES**. The ball valves are closed when they are placed in the shown position transverse to the flow direction. This must be done in case of unintended use of the hydraulic outlets during transport.

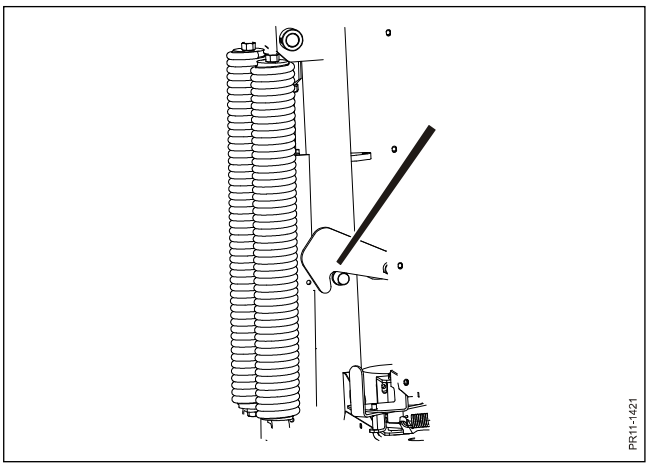


Fig. 2-10

Fig. 2-10 Check that the transport hook is in mesh before road transport.

CHECK BEFORE USE

Before you use your new disc mower, please do as follows:

1. Read this instruction manual carefully!

2. Check that the machine has been assembled correctly and is undamaged.

3. Check that the PTO speed of the machine (and of the tractor) is correct. Too high PTO speed can be dangerous. Too low PTO speed causes bad cutting, blocking of the disc mower and high torque on the drive shafts.

4. Check the movements of the PTO drive shaft. If the PTO shafts are too short or too long it may damage the tractor as well as the machine considerably.
   Check that the protection tubes do not get jammed or damaged in any position.
   Check that the safety chains of the protection tubes have been secured properly and that they do not in any position get too tight or damaged.

5. Make sure that the hydraulic hoses have been connected in such a way that they are long enough for the movements of the machine in relation to the tractor.

6. Check that the machine has been greased sufficiently and check that the oil level in the gearbox and the cutter bar is correct. See section **”4. GREASING”.**

7. Air the friction clutch as described in chapter **5 "MAINTENANCE".**

From the factory the revolving parts of the machine have been tested and declared error-free. However, you should do as follows before using the machine:

8. Start the machine at a low number of RPM. With open rear window and without hearing protector you should check that there are no unusual scratching or knocking sounds. Then the number of RPM can be increased. At the correct number of RPM, check if there are any noticeable vibrations. (Check the guards for unusual vibrations).

If there is any doubt, stop the tractor and the machine according to the procedure described in the section ”**SAFETY”.**
Turn the revolving parts with manual power to check if the machine can turn freely.
Check the machine visually to find possible errors. (Such as burnt or scraped paint).
Then seek authorised assistance.

NB: Note that because of the smaller centrifugal force at a low number of RPM, the blades can touch the guard plates on the cutterbar. This sound must disappear at the normal number of RPM during work.

Also note that the cutter bar under the discs will get very warm. The colour of the cutterbar gets darker after some hours of operation.

CAUTION: If you wish to test the machine for a long time, close the rear window or wear hearing protector!

3. ADJUSTMENTS AND DRIVING

CONSTRUCTION AND FUNCTION

GX 7005 and GX 9005 (SM) are suspended triple-mower combinations for mounting behind the tractor. In order to use the machine a front mower must be mounted. For GX 9005 (SM) the working width of the front mower must be minimum 3 m, for GX 7005 it must be minimum 2.50 m.

GX 9005 is without conditioner and GX 9005 SM is with conditioner with PE fingers. That is the main difference between the two models.

Fig. 3-1

Fig. 3-1 The cutting units of the machine are pendulum suspended in boom arms in order to ensure optimum adaptability to the ground.

CONVERSION BETWEEN WORK AND TRANSPORT POSITION

Please note that this description only deals with GX 7005, GX 9005 and GX 9005 SM. Conversion of the front machine is described in a separate instruction manual.

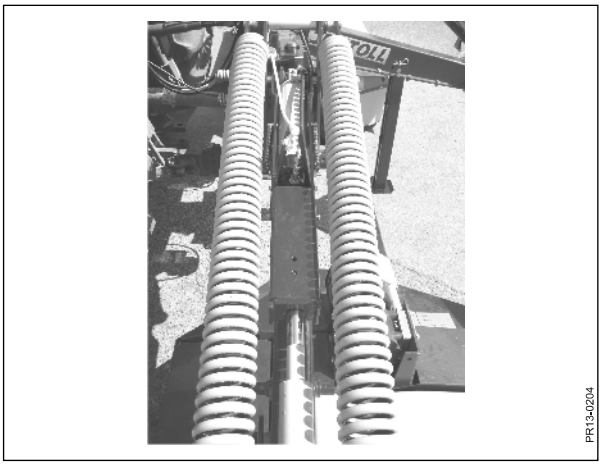


Fig 3-2

Fig. 3-2 The mechanical transport lock next to each lifting cylinder is released by pulling the cords. In transport position the locks prevent the cutting units from being lowered unintentionally. On the other hand, in working position the locks allow the cutting units to be raised just enough for swaths and unevenness in the ground to pass under the cutting units without problems.

CAUTION: Note that the machine pulls the cords approximately 10 cm towards itself when the cutting units are lowered from transport position and until they rest on the ground.

Conversion from work to transport position

1) Stop PTO. If the machine is placed in transport position with PTO running, it will destroy the PTO shafts.
2) The outer guards are folded in *(only GX 9005 (SM)).*
3) Release the transport locks and keep them released by pulling the cords.
4) The cutting units are lifted in a smooth movement to maximum by activating the lifting cylinders.
5) Let go of the cords so that the transport locks fall into place.
6) Lower the link arms so that the hitch pins are approx. 25 cm above the ground *(only GX 9005 (SM)).*
7) Close all ball valves.

IMPORTANT: The lifting cylinders are activated to stop, so that the cutting units are hydraulically locked when in the upper position. The mechanical transport locks are only a securing device. The cutting units are not intended to rest in the transport locks during transport.

Fig. 3-3

Fig. 3-3 **IMPORTANT:** GX 9005 (SM) must be lowered until the hitch pins are approx. 25 cm above the ground and the outer guards must be folded in, otherwise the machine exceeds a height of 4 meter.

CONVERSION FROM TRANSPORT TO WORK POSITION

1) Open the relevant ball valves. (See figure 2.7 and 2.8)
2) Release the transport locks and keep them released by pulling the cords.
3) The cutting units are lowered with the hydraulics in working position. Note that the hydraulics during work must be in floating position.
4) Let go of the cords so that the transport lock falls into place.
5) Adjust the link arms so that all 3 PTO shafts have minimum deviation from horizontal when the machine is in working position.
6) The outer guards are folded out *(only GX 9005 (SM)).* (See figure 3.3).

PARKING

The machine can be parked in working position. The jacks are not dimensioned to park the machine in transport position.
Never leave the tractor before the cutting unit is resting on the ground, the engine of the tractor has stopped, and the parking brake has been activated. This is the only way to perform a safe operation.

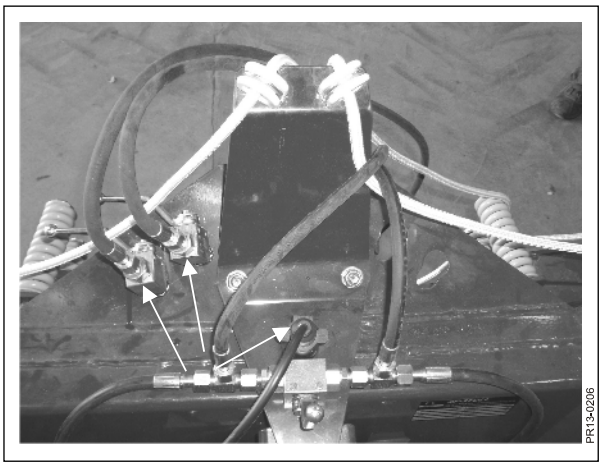


Fig. 3-4

Fig. 3-4
1) Lower the three jacks and fix again with pin C and spring pins. (See fig. 2-5).
2) Hoses, electric plugs and PTO are disconnected from the tractor and placed in their respective holders.
3) Disconnect the machine.

RELIEF OF CUTTER BAR

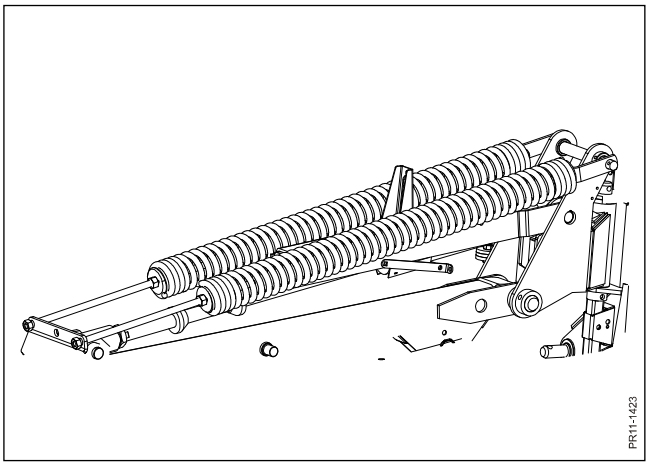


Fig. 3-5

Fig. 3-5 The relief springs are tightened from the factory. On machines without conditioner these normally do not need to be adjusted. On machines with conditioner a lighter cutterbar can be obtained by tightening the springs.

STONE RELEASE

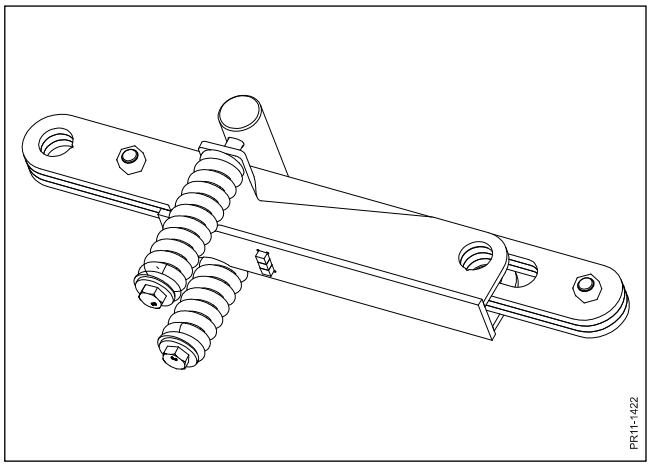


Fig. 3-6

Fig. 3-6 The cutting units of the machine are suspended in boom arms which are secured against overload by means of a stone release. In case of collision with stones etc. the cutting units can swing backwards in order to prevent severe collision. The double springs of the stone release system can be adjusted, so that the system releases at a suitable power.
JF-STOLL recommends that you tighten the bolt until the springs are loaded, and then tighten further 2 mm, corresponding to 1 turn of the screw.

The stone release only works when driving forwards.

If the stone release is activated too often, it is of course possible to increase the initial tension of the spring. Never tighten the spring so much that it blocks the release due to insufficient spring travel.

SECURING AGAINST OVERLOAD

IMPORTANT: The tractor driver can secure the transmission against overload!

When using the machine, the following should be considered:

1) Always start the machine with the engine running at low speed. This especially applies to tractors with electro-hydraulic connection of the PTO.

2) Only start the machine with the cutting units lowered to working position.

3) A sudden increase in the number of RPM of the machine, e.g. when driving into the field or after turning in the field should also happen with the machine lowered to working position.

4) Listen to the RPM of the tractor when working in the field. If the RPM falls slowly or is suddenly reduced it may be a sign of overload of the transmission due to too high driving speed or foreign matter in the cutting unit. In this case, the friction clutch will slip and you should disconnect the PTO immediately and let the machine “rest”.

WORKING IN THE FIELD

Before you start working the field make sure that GX 7005 / GX 9005 (SM) and the front machine both are in correct working position. See the section “Conversion between work and transport position”.
Connect the power take-off carefully and increase to the correct number of rpm, **1000 rpm**, before working in the crop.
When mowing, the single-acting hydraulic outlet(s) for raising/lowering the cutting units must be in floating position.
The speed varies from 6-20 km/h depending on the crop and the working conditions.

IMPORTANT: The hydraulic outlets or the outlet to the machine must be in floating position. If the hydraulic outlets are not in floating position it will limit the ability of the cutting units to follow the ground.

TURNING

When turning on headlands or driving with lifted cutting units always make sure that the cutting units are lifted all the way up because otherwise they will not be locked.

WARNING: **If the cutting units are not lifted all the way up they may turn in the pendulum suspension and hit the ground.**

STUBBLE HEIGHT

Adjust the cutting height of the machine by changing the length of the top link.
If you want an extra high stubble, e.g. when topping fallow fields, high guide shoes can be mounted. See spare parts book.

CONDITIONER

GX 9005 SM has a conditioner rotor with PE-fingers. The conditioner rotor rotates with 860 rpm.

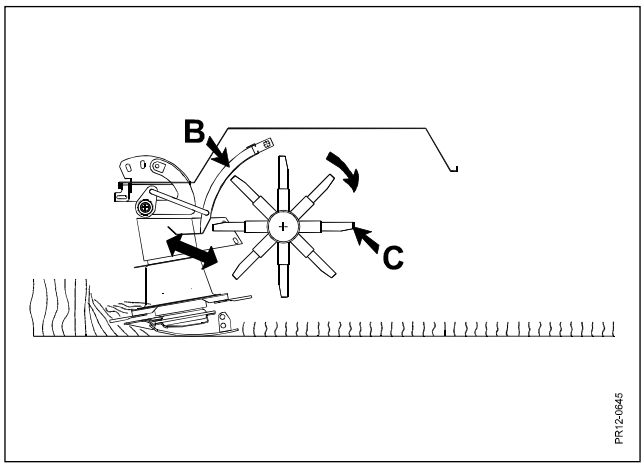


Fig. 3-7

Fig. 3-7 The degree of conditioning can be varied by changing the distance between the conditioner plate **B** and the conditioner rotor **C**.

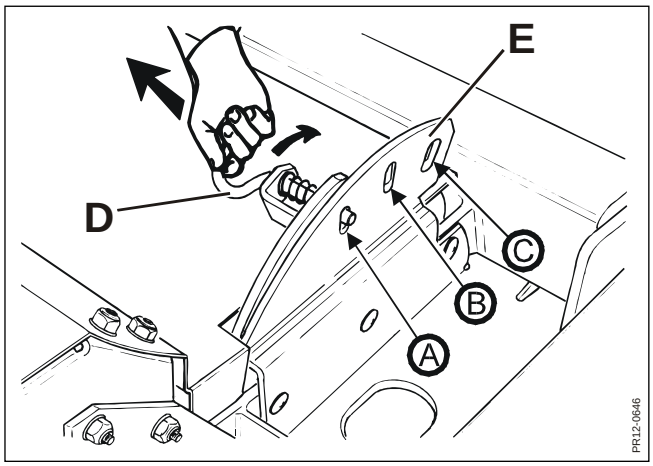


Fig. 3-8

Fig. 3-8 The conditioning is adjusted with the handle **D** which can be placed in 3 positions on the bracket **E**. If the handle is placed in pos. **A**, the distance between the conditioner plate and the conditioner rotor is short, in pos. **B**, the distance is medium and in position **C** the distance is long.

In general: **Short distance - Strong conditioning**

Large distance – weak conditioning

The adjustment should be adapted to the forward speed and the state of the crop. As basis setting it can be recommended to start in the middle position.

EQUIPMENT FOR WIDE SPREADING (TOP DRY)

GX 9005 is mounted with equipment for wide spreading which makes it possible to spread the crop instead of laying a swath in order to optimise the drying of the crop.

Fig. 3-9 The equipment consists of a plate which is mounted behind the conditioner rotor.

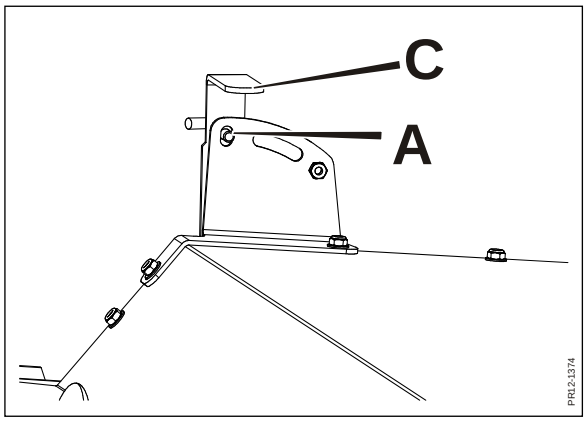


Fig. 3-9

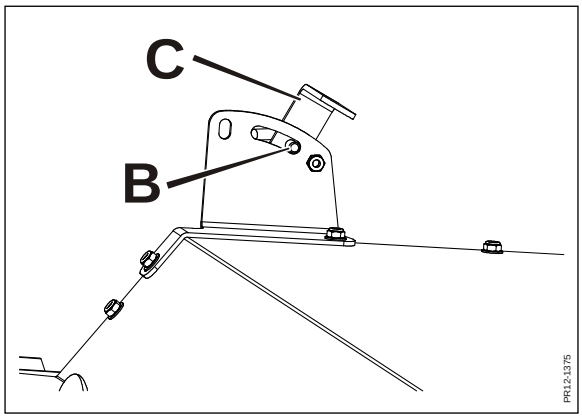


Fig. 3-10

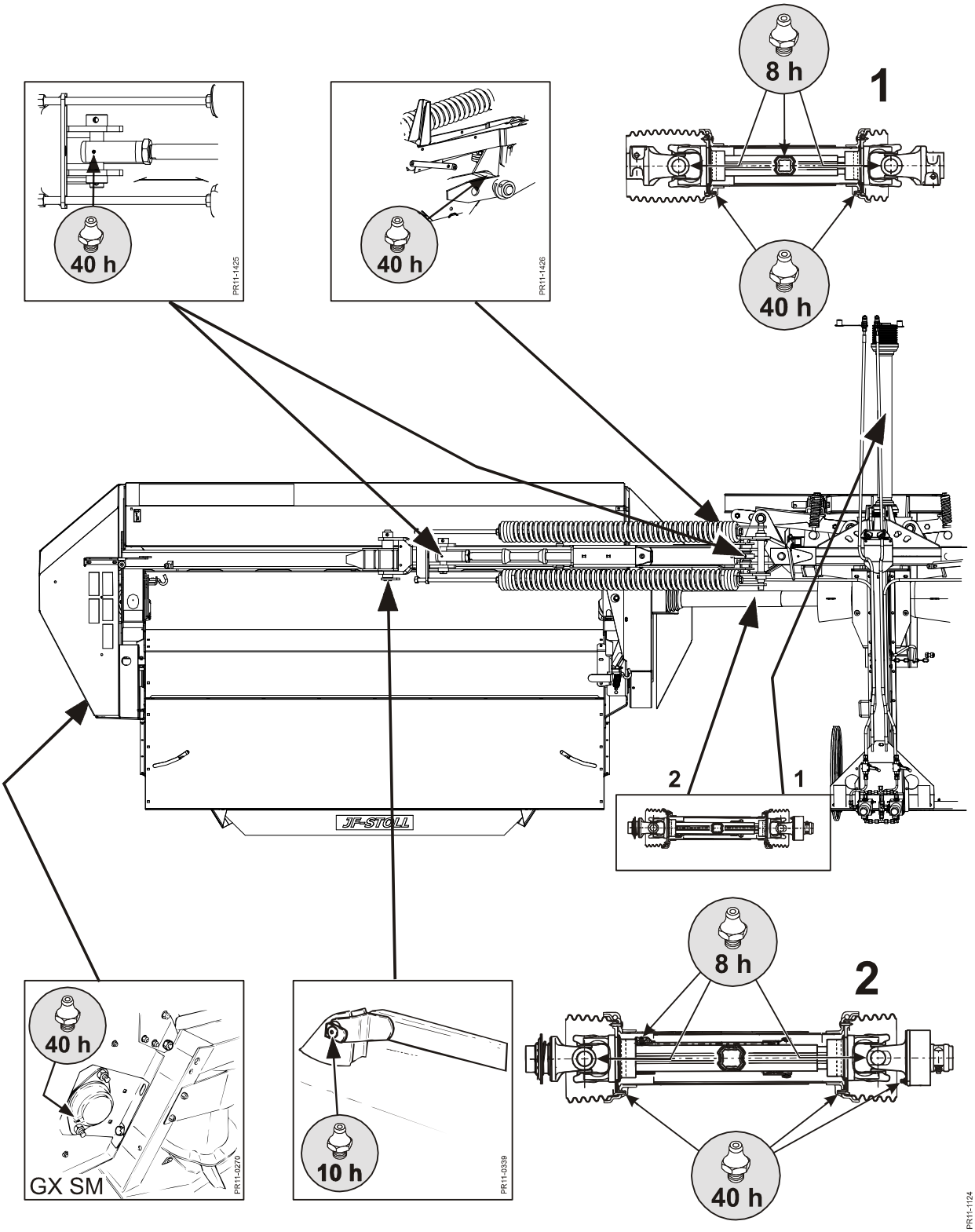
When normal swathing is wanted, the plate is folded up under the top plate and is inactive in position **A**.

Fig. 3-10 For wide spreading the plate is folded down with the handle **C** in an active position **B** behind the conditioner rotor.

During wide spreading the crop is thrown from the conditioner rotor against the plate which leads the crop towards the ground. Thereby the crop is laid in an airy swath in the full width of the conditioner.

4. GREASING

Greasing chart for GX 7005 and GX 9005 (SM).
Below grease spots must be greased according to the operation time intervals indicated.



GREASE

Always ensure that the machine has been properly greased before it starts operating. Go through the greasing chart.

TYPE OF GREASE: Universal grease of good quality.
Rotating mechanical connections are greased with grease or oil as required.

CAREFUL - REMEMBER: Pay special attention to the sliding PROFILE TUBES of the PTO shaft. They must be able to slide back and forth when the torque is heavy.
If you neglect to lubricate the profile tubes sufficiently, it will result in high frictional forces (seizing) which will damage the profile tubes and in time also connecting shafts and gearboxes.
Lubricate via external lubricating nipple in the protective tube.

OIL CHANGE:

CUTTER BARS

Oil content per bar: **GX 7005 1.70 l**
GX 9005 (SM) 2.25 l

2 filling plugs are placed on top of the cutter bar between 1st and 2nd disc in the right **and** left-hand side.

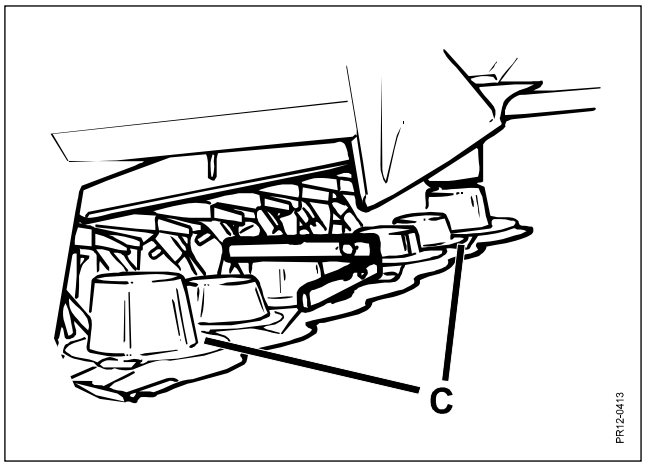


Fig. 4-1

Fig. 4-1 The oil level must be checked every day during the harvesting season at one of the plugs C.

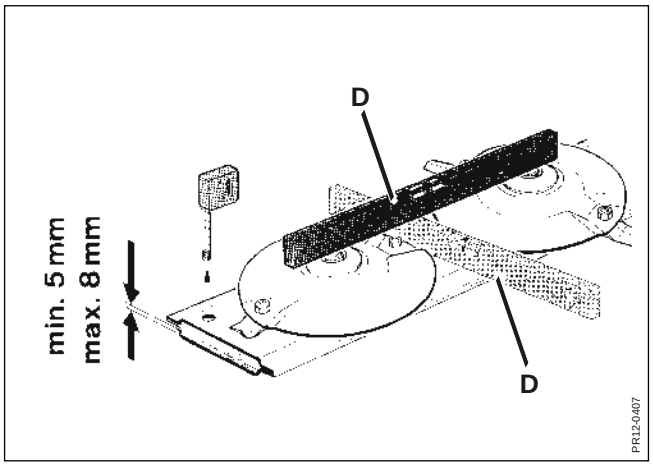


Fig. 4-2

Fig. 4-2 To check the oil level, place the cutter bar horizontal, which should be checked by means of a level tube **D**, or two, both lengthwise and crosswise.
In order to facilitate the daily oil check we recommend you to have a permanent "oil measuring platform" on which the cutter bar can be placed when checking the oil level.
This means that the check for horizontal cutter bar with level tube as shown in Fig. 4-4, need not be repeated every time the oil level is checked.

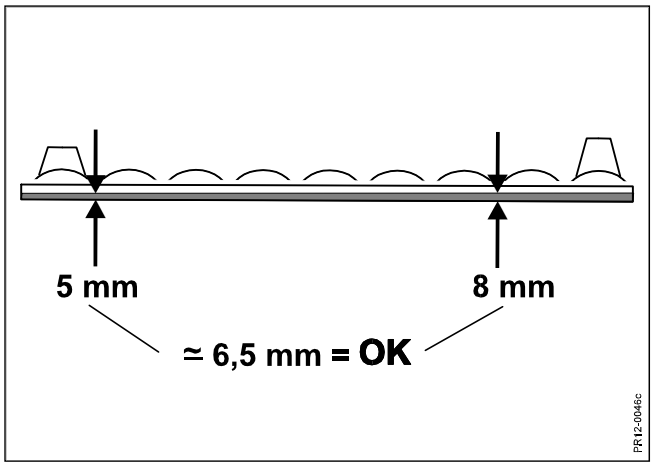


Fig. 4-3

Fig. 4-3 Correct oil level: n **5 - 8 mm.** (Average value).
This oil level must be an average of the level measured at both filling holes.
When the oil level has been checked wait 3 minutes, if the oil is warm, and check again.
If the oil is cold wait 15 minutes before checking the oil level again.

Oil change: a The first change of oil in the cutter bar must be made after 10 working hours and then after every 200 working hours or at least once every season.

The easiest way to change the oil is to let the machine run a couple of minutes until the oil is hot. At the same time this will ensure that impurities are mixed with the oil and are removed when changing the oil.

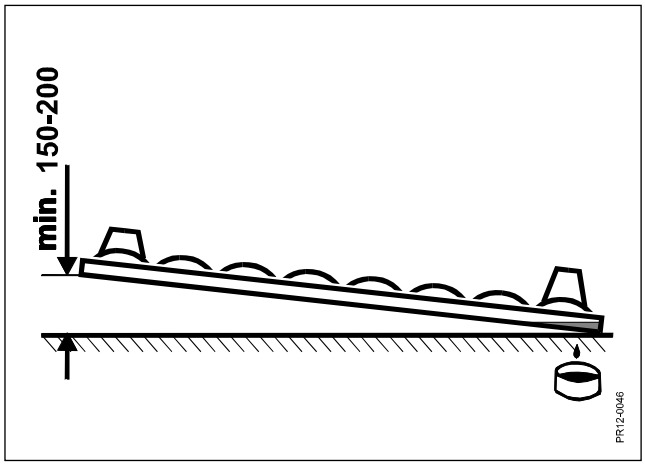


Fig. 4-4

Fig. 4-4 For oil change the cutter bar is raised minimum 150-200 mm from horizontal in the right-hand side to ensure optimum emptying.

REMEMBER: To mount the plug again after draining. The drain plug has a magnet to collect metallic impurities. Therefore, always clean the plug before remounting it.

Lower the cutter bar again before adding new oil.

When changing the oil, be sure to use a correct oil type.
Only use oil of the quality API GL-4 SAE 80W.

In some countries, this oil is not available. In these cases API GL-4 or API GL-5 SAE 80W-90 multi grade oil can be used as an acceptable alternative. Never use pure SAE 90W oil in the cutter bar.

WARNING: **Never fill with more or less oil than prescribed.**
Too much oil as well as too little oil in the cutter bar may cause unintentional overheating which in the long term will damage the bearings.

BEVEL GEARBOX ABOVE THE CUTTER BAR

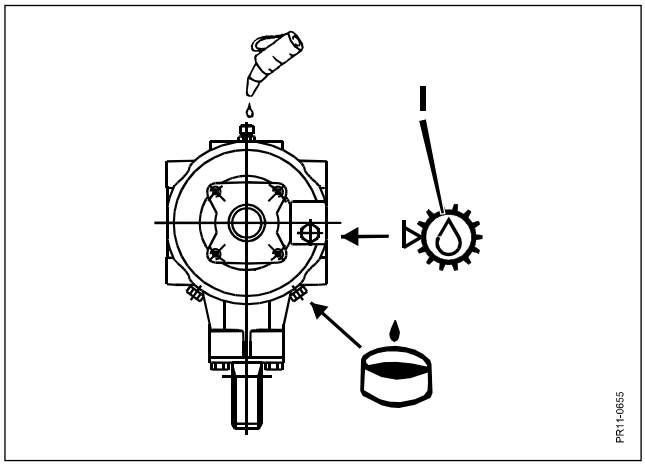


Fig. 4-5

Fig. 4-5 **Oil content:** **0.9 l**

Oil type: API GL4 or GL5 SAE 80W-90

Oil level: **Check the oil level after every 80 hours of operation.**

Oil change: First oil change after 50 working hours and then after every 500 working hours or at least once a year.

BEVEL GEARBOX ON THE HEADSTOCK

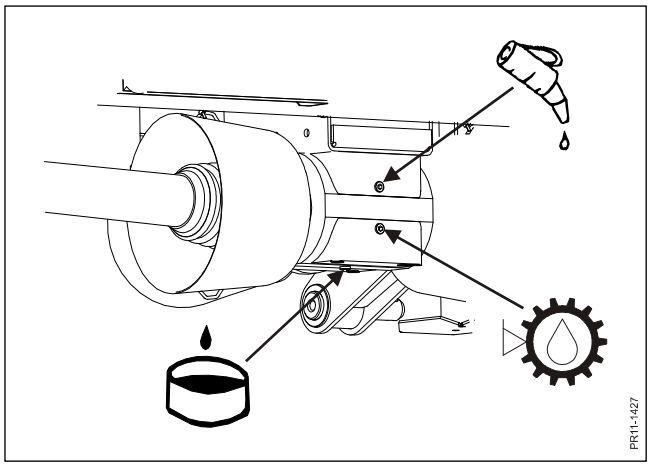


Fig. 4-6

Fig. 4-6 **Oil content:** **1000 rpm = 1.2 l**

Oil type: API GL4 or GL5 SAE 80W-90

Oil level: n **Check the oil level after every 80 hours of operation.**

Oil change: a First oil change after 50 working hours and then after every 500 working hours or at least once a year.

5. MAINTENANCE

WARNING: **When repairing or maintaining the machine it is especially important to ensure correct personal safety. Therefore, always park the tractor (if mounted) and the machine according to the GENERAL SAFETY INSTRUCTIONS items 1-20 in the beginning of this instruction manual.**

IMPORTANT: Screws and bolts on your new machine must be retightened after some hours of operation. This also applies if repairs have been made.

Fig. 5-1 Torque moment $\mathbf{M_A}$ (if nothing else has been stated).

Ma **Ø**	**Class:** 8.8 M_A **[Nm]**	**Class:** 10.9 M_A **[Nm]**	**Class:**12.9 M_A **[Nm]**
M 8	**25**	**33**	**40**
M 10	**48**	**65**	**80**
M 12	**80**	**120**	**135**
M 12x1,25	**90**	**125**	**146**
M 14	**135**	**180**	**215**
M 14x1,5	**145**	**190**	**230**
M 16	**200**	**280**	**325**
M 16x1,5	**215**	**295**	**350**
M 18	**270**	**380**	**440**
M 20	**400**	**550**	**650**
M 20x1,5	**430**	**615**	**720**
M 24	**640**	**900**	**1100**
M 24x1,5	**690**	**960**	**1175**
M 30	**1300**	**1800**	**2300**

Fig.5-1

FRICTION CLUTCH

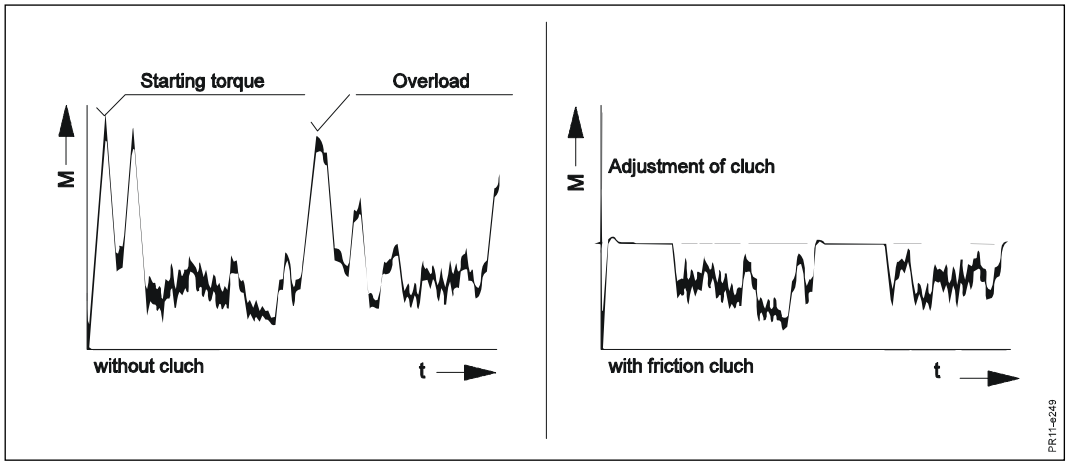


Fig. 5-2

The front PTO drive shaft has a friction clutch.

Fig. 5-2 The figure illustrates how the clutch protects the transmission against high torque peaks and at the same time is capable of transmitting the torque while it is in function (slips).

The friction clutch must be maintained at regular intervals. At the same time the clutch must be checked after any long period of standstill. This especially applies after winter storage before the machine is used for the first time in the season.

Maintaining the friction clutch:

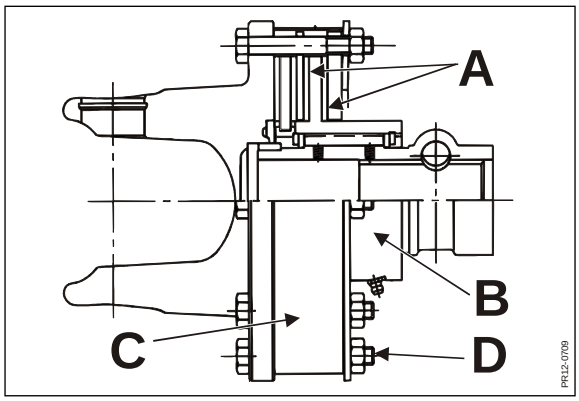


Fig. 5-3

Fig. 5-3
1) Disassemble the clutch and clean all parts of possible rust.
2) Check the clutch discs **A** for wear and replace if required.
3) Clean and grease the freewheel clutch **B**.
4) Assemble and mount the clutch again. See also the instruction manual for the PTO drive shaft delivered by the supplier.

IMPORTANT: **The outer metal band C indicates whether the tightening of the springs is correct. Tighten the bolts D just so much that the metal band C can be turned (max. 0.5 mm play).**
The torque setting is not correct if the metal band is too tight or deformed due to excessive tightening of the bolts.

WARNING: **If the clutch is overloaded it will slip and get heated, and hence be worn quickly. Overheating will damage the friction plates. If the clutch is blocked or partly put out of function in other ways, the factory guarantee will be discontinued.**

CONTROL OF BALANCE

WARNING: **When driving in the field you must always pay attention if the machine starts vibrating more than usually or if it has jarring sounds. The discs run at up to 3000 RPM and one broken blade may cause serious injury to persons or material damage resulting from unbalance.**

If working with a modern closed cabin the symptoms may be difficult to discover, and once in a while you have to get out and check if all blades and rotor fingers are intact. In the long run unbalance will cause fatigue fractures and serious damage.

All machines manufactured by JF-STOLL are tested and checked for vibrations with special tools.

The first time you start the machine pay attention to vibrations and noise to have a standard of comparison later.

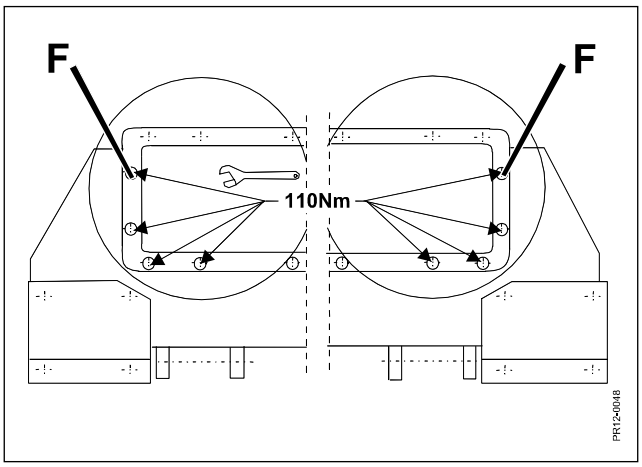


Fig. 5-4

Fig. 5-4 To avoid damage caused by vibrations in the cutting unit, the cutter bar must be fastened correctly. The 4 bolts **F** in each side must be tightened to 110 Nm (11 Kpm).

DISCS AND BLADES - QS

Your machine is fitted with a disc/blade system for quick replacement of blades which has been developed to facilitate maintenance of the machine.

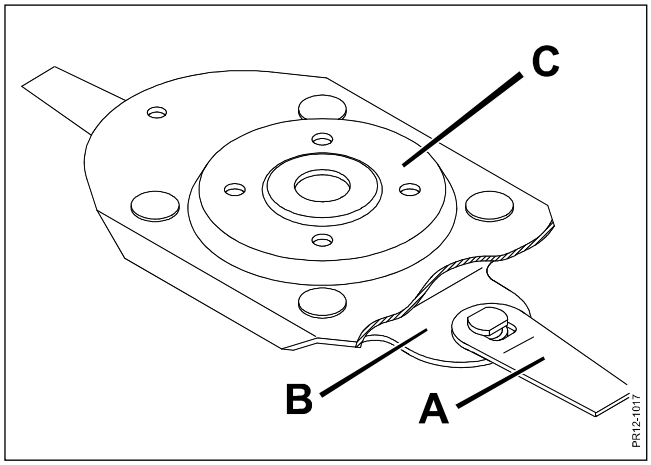


Fig. 5-5

Fig. 5-5 The system is called QS, (Quick and Safe), which indicates the quick mounting/change of blades and the high safety as blades **A** cannot unintentionally be released from the blade holder **B**, which is bolted on the disc **C**.

Discs, blade holders and blades are made from high-alloyed hardened materials. A special heat treatment results in an especially hard and ductile material which can handle extreme stress. If a blade or disc is damaged, do not attempt to weld the parts together again as the generation of heat will destroy the material properties and expose you and others to increased risk.

IMPORTANT: Damaged blades, discs and blade holders must be replaced by original JF-STOLL spare parts to obtain a safe operation.

WARNING: When replacing blades, both blades on the disc in question must be replaced in order not to create an unbalance.

CAUTION: Always lower the cutting unit to the ground before replacing blades, blade holders, discs and the like.

BLADES

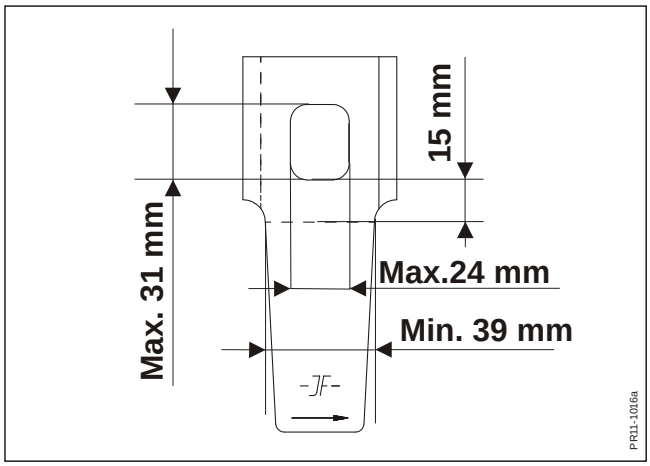


Fig. 5-6

Fig. 5-6 Replace blades immediately if:

1) The blade is bent or cracked,
2) The width of the blade is less than 39 mm measured 15 mm from the edge,
3) The blade hole is larger than stated.

BLADE HOLDER

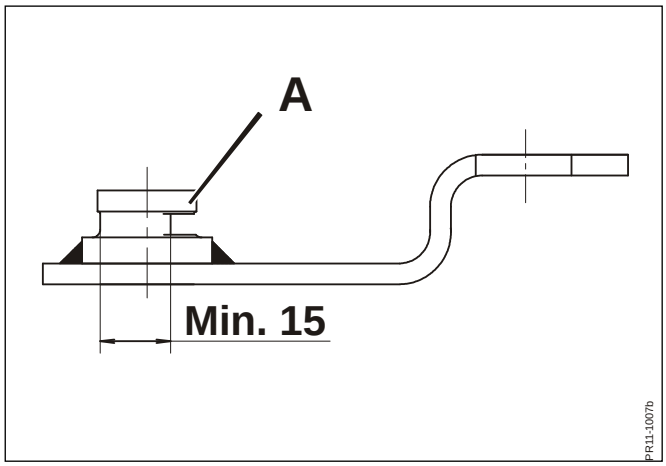


Fig. 5-7

Fig. 5-7 The blade holder must be replaced if:

1) The blade pin **A** is not in contact with the disc,
2) The blade pin **A** is strongly worn on one side,
3) The diameter of the blade pin **A** is less than 15 mm.

IMPORTANT: This must especially be checked after collision with foreign matter, after replacement of blades and the first time you use the machine.

REPLACEMENT OF BLADES

DANGER: **It is very important to check the disc assemblies after:**

- **Collision with foreign matter, or**
- **If a blade, as an exception, is missing on the cutter bar.**

Parts can be damaged and you MUST replace parts if you have the slightest doubt whether they have been damaged to secure against loss of rotating parts.

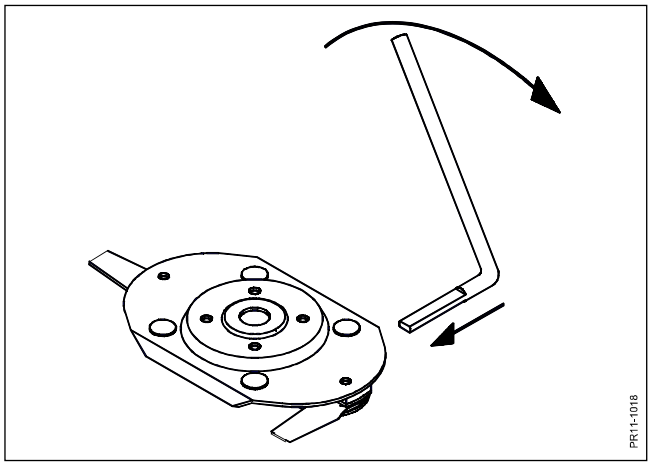


Fig. 5-8

Fig. 5-8 Turn the blade 90 degrees from working position and release the blade from the blade pin **D**.

The supplied tool for replacement of blades **A** is placed as shown with the short end **B** behind the blade.

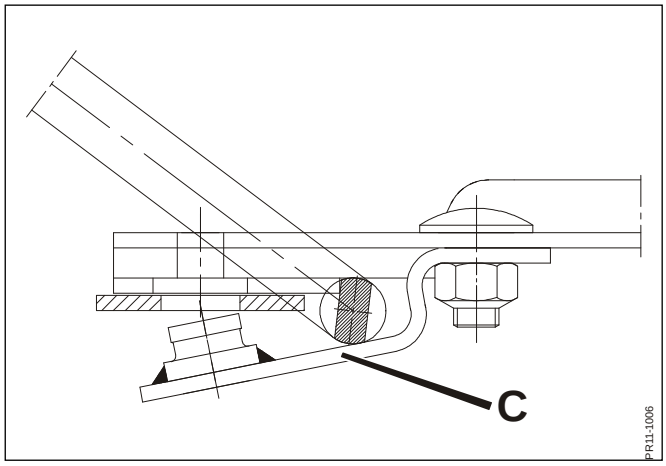


Fig. 5-9

Fig. 5-9 With a regular pull forward at the long end of the tool the blade holder **C** is pressed down.

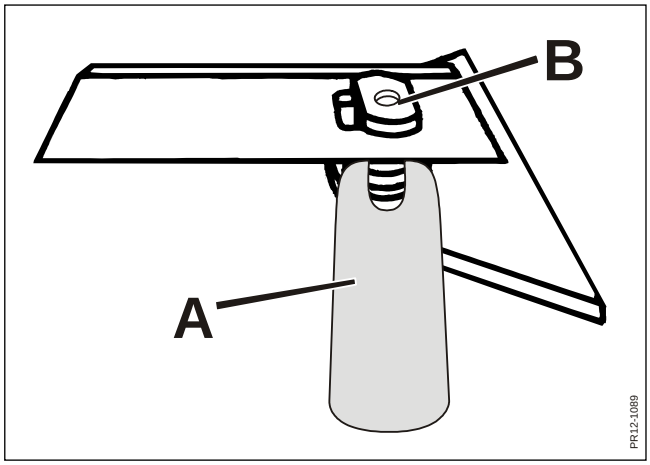


Fig. 5-10

Fig. 5-10 In connection with replacement of blades check all blade pins **B** on the discs regularly with the gauge **A** (in the spare parts package).

IMPORTANT: When the gauge A can get over the blade pin B it MUST be replaced immediately.

When mounting blades this is done in reverse order.

After this always make sure that:

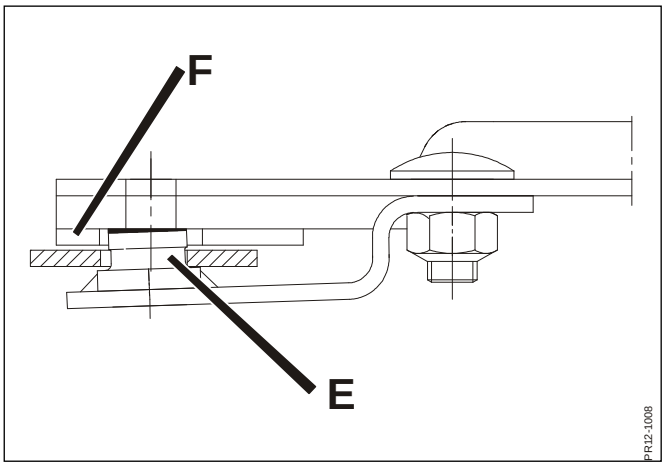


Fig. 5-11

Fig. 5-11

- There are no impurities between the contact faces of the blade pin and the disc, and it is ensured that the blade pin **E** of the blade holder has correct contact with the bottom of the disc **F**.

- The blades can turn freely from side to side. NB: The blades will in both sides stop against the blade holder.

- If the blade pin is not in contact with the disc, the blade holder should be replaced.

- All discs have the required number of blades.

- Worn blades and the replacement tool have been removed from the machine.

- The guard has been placed correctly.

To obtain a satisfactory harvesting it is important that blades and shearbars are intact and sharp.

REMEMBER: By turning the blades they can be used on both sides.

DISCS - QS

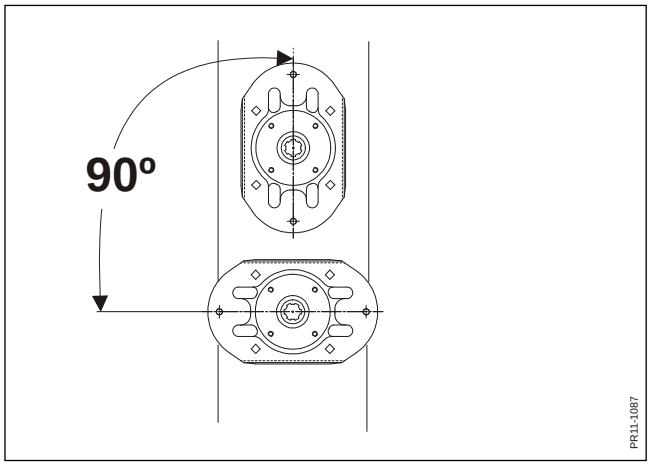


Fig. 5-12

Fig. 5-12 If discs have been dismounted they must be mounted again staggered 90° in relation to each other.

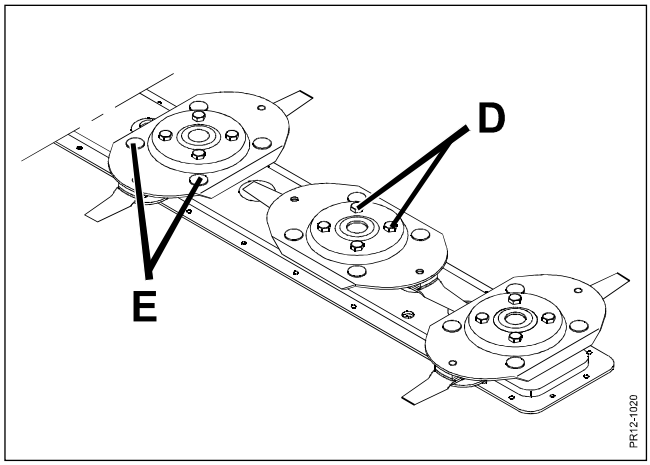


Fig. 5-13

Fig. 5-13 Make sure that the 4 bolts **D** which are used to fasten the disc to the hub of the cutter bar have been tightened to **120 Nm** (12 Kpm), and the bolts **E** which hold the blade holders are tightened to **80 Nm** (8 Kpm).
The height of the disc can be adjusted by mounting spacers under the disc at **B**. This may be necessary when replacing the discs if the blades are not at the same height.

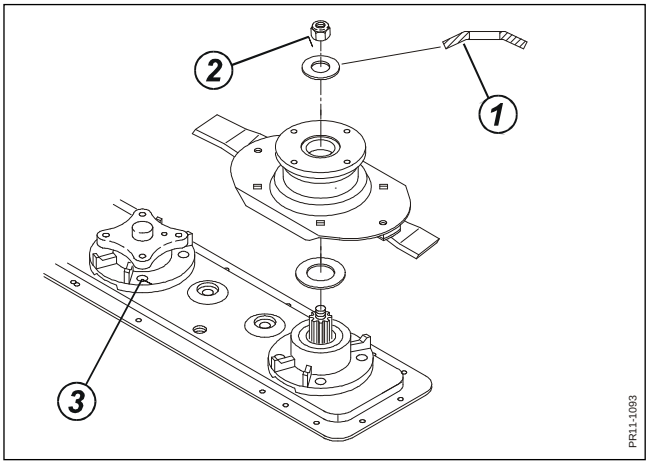


Fig. 5-14

Fig. 5-14 The spring washer **(1)** above the input disc is placed as shown with the curved side upwards.
The nut **(2)** is tightened to **190 Nm** (19 Kpm).
The bolts **(3)** which hold the disc bearing housing to the bar are tightened to **85 Nm** (8.5 Kpm).

WARNING: After replacement of blades, blade bolts, nuts or discs you must check that no tools have been left on the machine.

CUTTER BAR

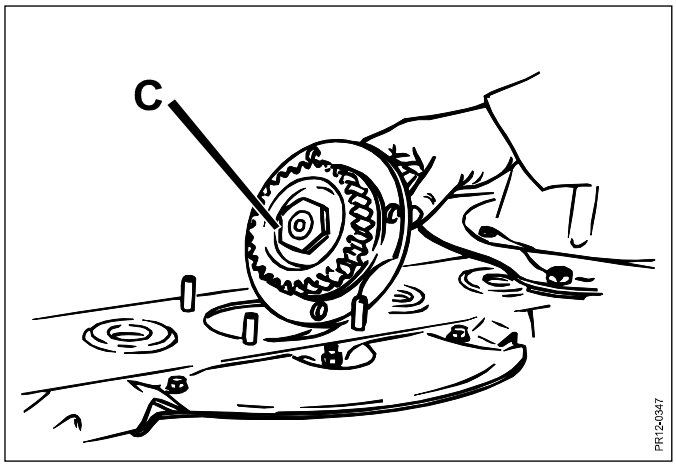


Fig. 5-15

Fig. 5-15 Cutter bars are used on which each hub **C** below the discs is easily replaced from above (Top Service cutter bar).

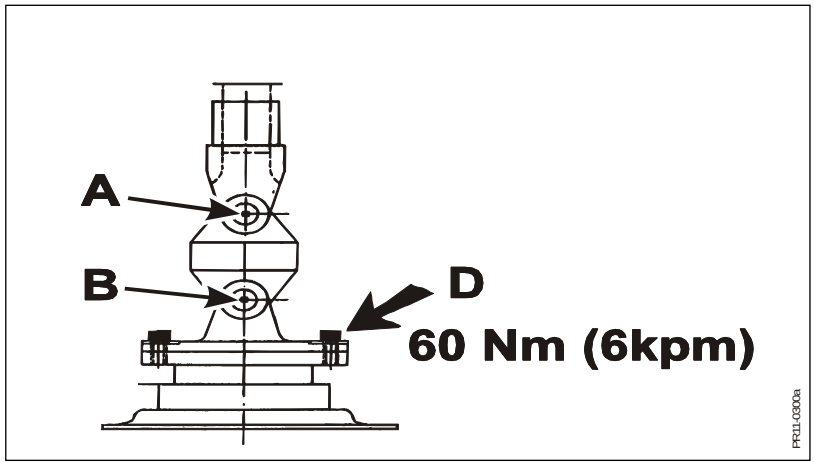


Fig. 5-16

Fig. 5-16 The PTO drive shaft for the cutter bar has been greased for life. The PTO should run with minimum angle deviation, i.e. the measure difference at **A** and **B** should maximum be 6 mm (+/- 3).
The bolts **D** are tightened to **60 Nm** (6 Kpm) and must be locked with LocTite.

WINTER STORAGE

When the season is over, the preparation for winter storage should be made immediately after. First, clean the machine thoroughly. Dust and dirt absorb moisture and moisture increases the formation of rust. Be careful when cleaning with a high pressure cleaner. Never spray directly on the bearings and grease all nipples carefully before and after cleaning so that possible water is pressed out of the bearings.

The following points are instructions how to prepare for winter storage.

- Check the machine for wear and other defects – note down the necessary parts you will need before the next season and order the spare parts.

- Dismount the PTO drive shafts, lubricate the profile tubes and keep them in a dry place.

- Spray the machine with a coat of rust-preventing oil. This is especially important on the parts polished with use and the hydraulic cylinder piston rods.

- Change the oil in the cutter bar and the gearboxes.

- Store the machine in a ventilated engine house.

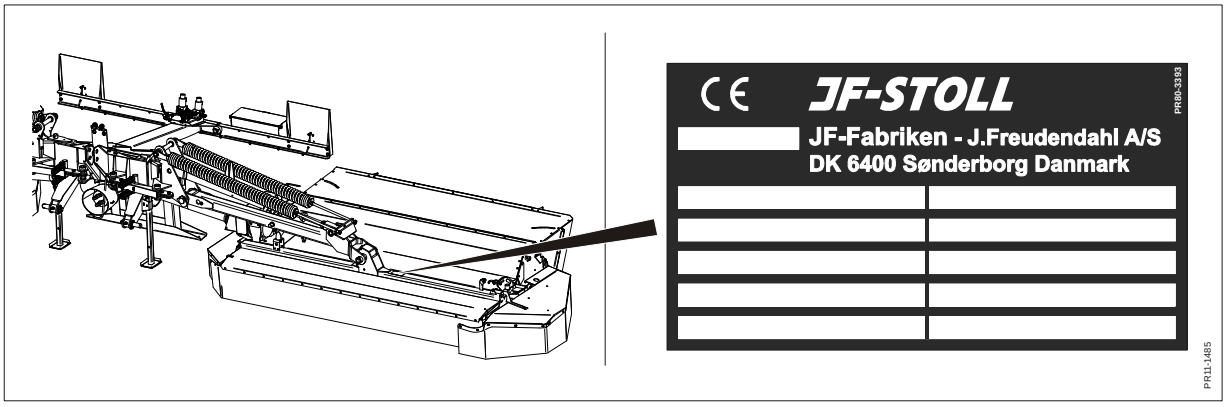
6. MISCELLANEOUS

DRIVING TIPS AND FAULT-FINDING

Problem	Possible cause	Remedy
Uneven stubble or bad cut	The number of rpm of the tractor is too low.	Check that the number of rotations of the tractor PTO is correct. Keep a constant number of RPM
	The blades are worn	Turn/move the blades to another disc or replace the blades
	Discs, stone protectors or flow caps are deformed.	Replace deformed parts.
Stripes in stubble	The cutting angle is too large, the grass is not transported across the cutter bar	Adjust the cutter bar more horizontal by lengthening the top link
	Accumulation of material in front of the cutter bar	Increase the driving speed, if possible
	Earth and grass around the cutter bar between the discs	Replace worn shearbars.
	You are working early in the morning when the grass is still very wet	Increase the driving speed, if possible
Irregular flow through the machine	Conditioner fingers may be worn or missing	Replace worn fingers and mount new ones where these are missing
	The distance between the conditioner plate and the conditioner rotor is too long	Adjust the conditioner plate to shorter distance to the rotor Increase the driving speed
The machine vibrates/ uneven operation	Blades may be deformed, damaged or missing	Replace or move damaged blades and/or mount new blades
	Defective PTO drive shafts	Check if the shafts are intact. Repair, if necessary
	Defective bearings in cutter bar or conditioner rotor	Check if bearings are loose or damaged. Replace if necessary
Gear or cutter bar overheated	Oil level not correct	Check the oil level and refill/drain out oil, if necessary NB: Maximum temperature in gearbox 80 °C, Cutter bar temperature maximum 90-100 °C
Power consumption unusually high	Crop and dust under the discs	Stop the tractor engine. Dismount the discs and clean cutter bar and discs. Check if the friction clutch is intact.
	String or wire is wrapped around a disc.	Remove the foreign matter.

SPARE PARTS ORDER

When ordering spare parts, please state machine type and serial number. This information is printed on the machine plate. We request you to write this information on the first page in the spare parts book supplied with the machine as soon as possible so that you have the information at hand when ordering spare parts.



MACHINE DISPOSAL

When the machine is worn-out it must be disposed of in a proper way. Observe the following:

- The machine must not be placed somewhere outside, - it must be emptied of oil (gearboxes and hydraulic system). These oils must be handed over to a destruction company.

- Disassemble the machine and separate the individual recycling parts, e.g. tyres, hydraulic hoses, hydraulic valves etc.

- Hand over the usable parts to an authorised recycling centre. The large scrapping parts are handed over to an authorised breaker's yard.

OPTIONAL EQUIPMENT

Electro-hydraulic control

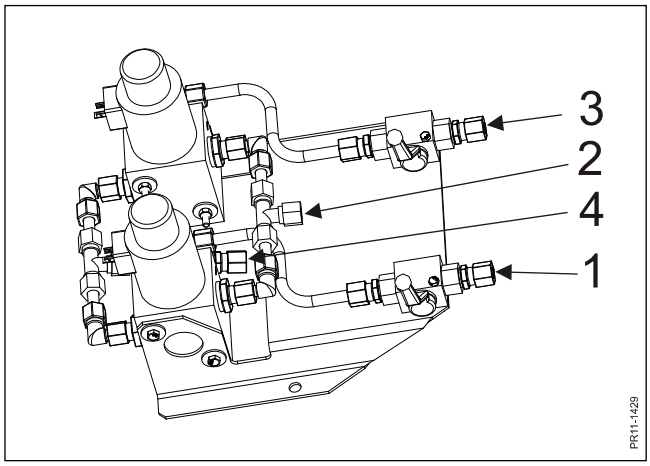


Fig. 6-1

Fig. 6-1 This equipment simplifies the operation of the hydraulic system of the machine, and the need for hydraulic outlets is reduced to one single-acting outlet with open return device. It is important that the outlet is open for return because resistance at this point would reduce the lowering speed. Connection: Connect the 4 hydraulic hoses as shown:

1. Right cylinder
2. Single-acting outlet
3. Left cylinder
4. Open return

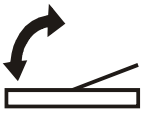
Fig. 6-2

Fig. 6-2 Connect the control box to 12V from the tractor.

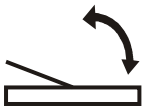
IMPORTANT: To avoid flattening the tractor battery the power supply should be connected so that the supply is interrupted when the tractor ignition is turned off.

Operation:

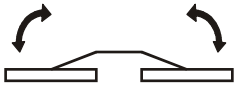
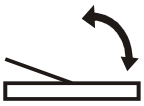
In this position both cutting units are controlled at the same time with the single-acting outlet of the tractor.
Note that it must be in floating position during work.



In this position the left cutting unit is controlled by the single-acting outlet of the tractor.
The right cutting unit is in floating position via the return.



In this position the right cutting unit is controlled by the single-acting outlet of the tractor.
The left cutting unit is in floating position via the return.

WARNING: If converting from  to  or  with lifted cutting units, one of the cutting units is connected to the open return and is lowered.

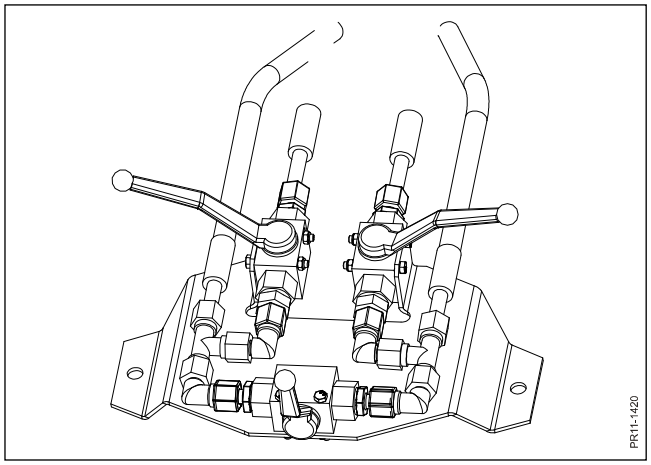


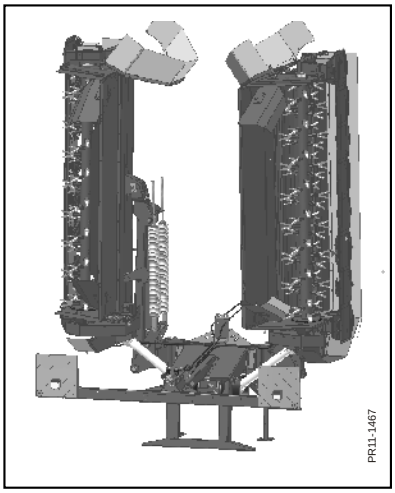
Fig. 6-3

Fig. 6-3 **PRIOR TO TRANSPORT CLOSE THE BALL VALVES**. The ball valves are closed when they are placed in the position transverse to the flow direction. This must be done in case of unintended use of the remote control or the hydraulic outlets during transport.

HIGH GUIDE SHOES

For topping of fallow fields, special high guide shoes can be mounted to give a higher stubble.

EQUIPMENT FOR PARKING IN TRANSPORT POSITION



This equipment allows you to park the machine both in working position (with lowered cutter bars) and in transport position (with lifted cutter bars).

The easiest way to park the machine is in working position.

Parking in transport position is used for space-saving long-term parking and **is only intended for even, horizontal and fixed ground**.

Lower the two front parking stands and secure them with spring pins.
Lower the two rear parking stands and secure them with the two spring-operated pins.

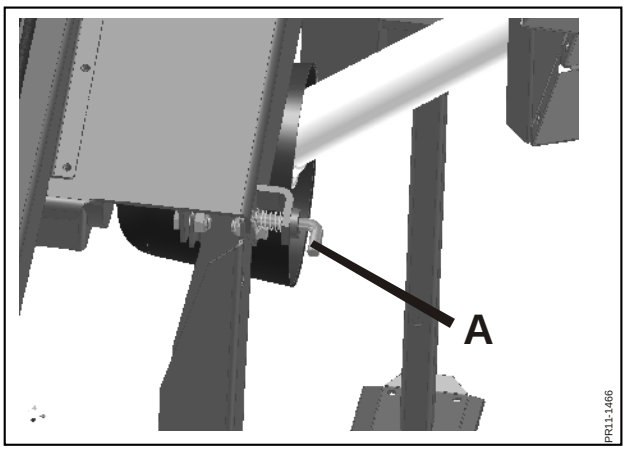


Fig. 6-4

Fig. 6-4 Check that both pins (A) are in mesh.

Lower the machine. Hoses, electric plugs and PTO are disconnected from the tractor and placed in their respective holders.

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. Nor is JF 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, blades, blade suspensions, shearbars, guide shoes, stone protections, discs, rotor skirts, crimper parts, tyres, tubes, brake shoes, chain tightener parts, guards, hydraulic hoses, conveyors, wheel-fixing bolts and nuts, snap rings, sockets, PTO-shafts, clutches, gaskets and seals, tooth belts, V-belts, chains, sprocket wheels, carriers, conveyor chain slats, rake- and pick-up tines, rubber seals, rubber paddles, cutter blades, chute liner and lining for spreading platform, shredding blades incl. bolts and nuts, spreading rotors and vanes for farmyard manure spreaders.

In addition, the user must note the following:

1. **The warranty is only valid if the dealer has undertaken a pre-delivery 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.**
3. **The warranty can be nullified if repair is not undertaken immediately.**

Specialist in grassland machinery and complete diet mixers

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

JF-Fabriken · J. Freudendahl A/S
Linde Allé 7 · Postbox 180
DK-6400 Sønderborg · Denmark
Phone. +45 74 12 51 51 · Fax +45 74 42 52 51
www.jf-stoll.com

PIGB-121X-04 GX 7005/GX 9005/GX 9005 SM - 04.10 Printed in Denmark