

ORIGINAL INSTRUCTIONS - according to Directive 2006/42/EC, Annex I 1.7.4.1

OPERATOR'S MANUAL

FCT 1360

Harvester

FOREWORD

DEAR CUSTOMER!

We appreciate the confidence you have shown to our company by investing in a KONGSKILDE product and congratulate you with your new purchase. 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 at the time of publication.

Kongsilde Industries 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.

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INTRODUCTION

INTENDED USE

The precision chop forage harvester **FCT 1360** is **solely constructed and manufactured for the usual work in agriculture, i.e.:** Usual work in fields where you want to cut/gather and chop green crops such as maize, grass or whole crop which are to be used for silage production intended for coarse fodder for cattle.

The machine should only be connected to a tractor which corresponds with the specifications of the product and is legal to use.

Any use beyond this is outside the intended use. Kongskilde Industries 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 foreign matter and the like.

Intended use also means that the instructions given by Kongskilde Industries A/S in the instruction manual and the spare parts book are observed and that thorough agricultural knowledge and technically correct use is a matter of course.

The precision chop forage harvester FCT 1360 should only be used, maintained and repaired by persons who, through relevant instructions and after reading the instruction manual, are familiar with the machine and, in particular, are informed of possible dangers.

In the following there are a number of general and special safety instructions which **must** be observed altogether.

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

PERFORMANCE

The precision chop forage harvester FCT 1360 has a very versatile use which, with the right equipment, makes it possible to chop grass, maize and whole crops. At the same time FCT 1360 is capable of working alone or parallel with other machines.

FCT 1360 has a high capacity compared with other corresponding products as it uses the “DIRECT CUT” system. “DIRECT CUT” gives a minimum loss of power when cutting the material and thus ensures maximum utilisation of the accessible tractor power.

Capacity, however, is difficult to define and compare as, for a forage harvester, it will depend not just on which crop is being cut but also how the crop has been treated before it is picked up or cut by the machine and finally which cutting length adjustment the machine is working with.

If we take a forage harvester which, in fresh, not pre-dried grass, can work 100 tons per hour, it is possible to calculate the capacity at different per cents of dry matter depending on the pre-treatment before cutting, as shown in the following table.

	Dry matter	Capacity
Dry matter	100%	18 ton/h
Wet new grass	15%	120 ton/h
Not pre-dried grass	18%	100 ton/h
Pre-dried grass – no outflow of sap from clamp silo	25%	72 ton/h
Pre-dried grass – no outflow of sap from high tower silo	33%	55 ton/h
Very pre-dried grass	50%	36 ton/h
Straw, very dry	90%	20 ton/h

It will probably surprise most people that the capacity can vary between 20 and 120 ton/h, as a result of varying water content.

In practice you want to drive the forage harvester in the highest possible tractor gear without causing frequent blockage. However, the amount of grass in the field will always vary, for instance where the mower conditioner has had to turn, change forward speed or change direction of travel. Therefore it is often appropriate either to drive with a power reserve so that the machine will not block, or to continuously adapt the driving of the forage harvester to the conditions.

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The pick-up unit and the feed rollers are both secured against overloading. The pick-up unit is secured by a friction clutch, the feed rollers by a shear bolt clutch. The forage harvester also has a reverse function which makes it possible to remove a blockage without having to leave the tractor seat.

The intention is that the inexperienced user increases the forward speed gradually in the beginning until the pick-up is blocked; releases the blockage again by reversing and chooses a tractor gear at a suitable lower level to remove the risk of blockage.

However, it is not the intention that the clutch function of the feed rollers releases. If this happens, the clutch adjustment of the pick-up must be reduced. The same will apply if the main friction clutch between the tractor and the machine releases during normal working. If it is not the pick-up unit which is blocked, the adjustment of the machine is incorrect.

Unfortunately it has been seen that the torque adjustment of the friction clutch of the pick-up unit has been increased to the point where it is the friction clutch between the machine and the tractor which releases frequently. The main friction clutch is not intended to release frequently but only for starting shock or when foreign matter gets into the machine. The same applies to the shear bolt clutch for the feed intake rollers. The main clutch simply cannot absorb the heat which is generated during these long releases. The power transmitted at the main clutch will be at least 10 times higher than the power needed to drive the pick-up unit.

Only the pick-up unit can be seen from the tractor and therefore it should be released first when there is a blockage. The experienced user will be able to adapt the driving of the tractor to the amount of grass and thus work with less capacity reserve and, all other things being equal, have a greater output.

The cutting length of the forage harvester can be adjusted and adapted to the crop in question. The cutting length is usually reduced when cutting maize and whole crops to ensure greater damage of the grains. The shorter cutting length will of course require more power for which reason there will be a lower output when cutting maize and whole crop than when cutting grass, though it is difficult to compare.

The power requirements are also increased when the blades are worn and the shearbar adjustment thereby changes. It is necessary to sharpen the blades and adjust the shearbar during the season.

SAFETY

The safety of persons and machines is an integral part of Kongskilde's development work. **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. However, damage can occur as a consequence of misuse and insufficient instruction.

A forage harvester 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.

As already mentioned the machine is only intended for one purpose, namely:

Chopping of grass and similar green crops, for feeding purposes.

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 foreign matter and the like.

The machine demands 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 manuals - 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.

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 oneself and others against serious injuries.

1. INTRODUCTION

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 of the tractor, stop the tractor engine and remove the ignition key 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. Never 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 never wear loose clothes or have your hair hang down as it may be pulled in by the moving parts of the machine.
7. Always wear suitable shoes to avoid falling.
8. Do not change the guards or work with the machine when a guard is missing or defective.
9. Always drive with the statutory lights and safety marking during transport on public road and at night.
10. Limit the transport speed to maximum 30 km/h if the machine has not been marked with another maximum speed limit.
11. Do not stand near the machine while it is working.
12. When mounting the PTO drive shaft check that the number and direction of RPM of the tractor matches those of the machine.
13. 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.
14. Never allow anybody to be on the machine during work or transport.

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15. Never 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.
17. Never stand between the tractor and the machine during connection and disconnection.
18. Do not feed material into the cutting unit, using hands or feet, while it is working.
19. Do not try to remove material from the cutting unit while it is working.
20. If material must be removed from the forage harvester, the PTO shaft must be disconnected completely. Stop the engine and remove the ignition key.

LOCKING OF GUARDS

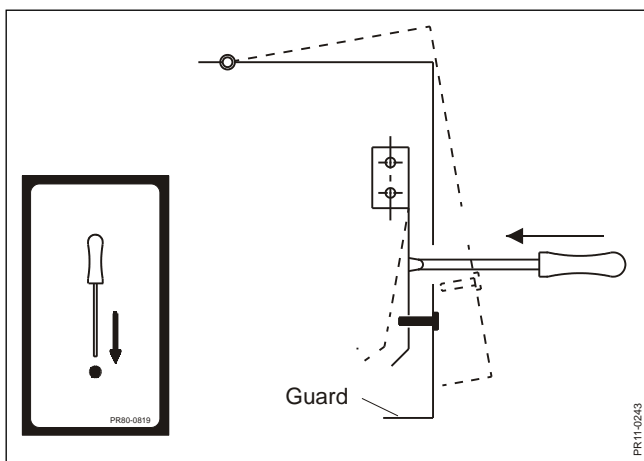


Fig. 1-1

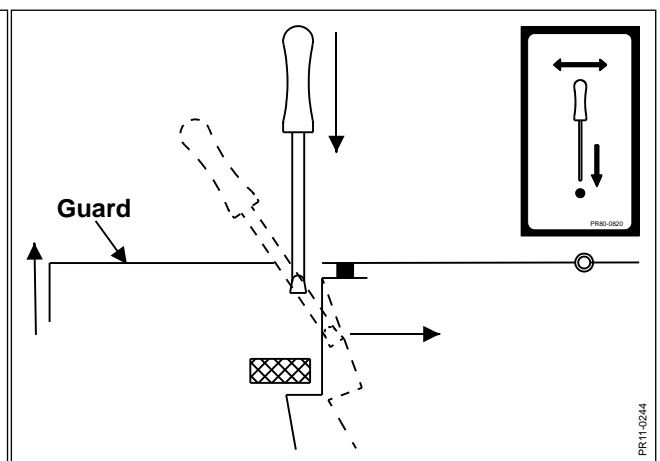


Fig. 1-2

All hinged guards on the machine are equipped with a lock. The lock ensures that the guard cannot be opened without tools. There are two different types of lock. Fig. 1-1 and 1-2 show the two locking principles and the corresponding transfers which indicate and illustrate the locks on the machine.

1. INTRODUCTION

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.

Legal transport of the machine on public road requires a tractor with sufficient mass and braking capacity.

Choose a tractor which has minimum 103 KW/140 HP at the power take-off but cannot deliver more than 165 KW/225 HP.

The machine is as standard constructed for 1000 RPM, and is delivered from the factory with 1 3/4" PTO drive shaft with 20 splines yoke. As an alternative 1 3/4" yokes with 6 splines, 1 3/8" yokes with 6 splines and finally 1 3/8" yokes with 21 splines can be supplied for the PTO drive shaft of the machine

A suitable tractor will have a broad range of gears for driving speeds between 5 and 8 km/h.

The tractor hydraulic system should deliver at least 170 bar and the tractor's pressure relief valve should not allow more than 210 bar.

The drawbar of the forage harvester is delivered with a drawing eye, for which reason the tractor should preferably have a clevis drawbar. The drawbar pin should be 30 mm diameter.

Always choose a tractor with a closed cabin when working with a precision chopper.

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 Fig. 1-3). When disconnecting it is important that the ground is even and stable so that the machine does not move and injure persons or cause damage to other equipment.

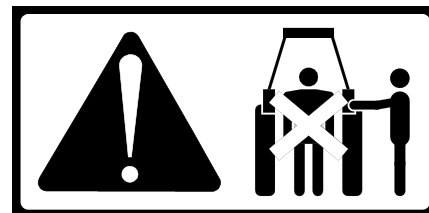


Fig. 1-3

The same precautions must be taken when connecting/disconnecting trailers by means of the hydraulic hitch at the rear of the forage harvester.

Check that the machine is intended for the number and the direction of rotation of the tractor PTO. A wrong number of rotations over a long period may damage the machine and at worst result in ejection of parts through the delivery chute.

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Make sure that the PTO drive shaft has been mounted correctly, i.e. that the lock pin is in mesh and that the support chain has been fastened at both ends.

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



IMPORTANT:

Before connecting the trailer with the hydraulic hitch, always:

- Disengage the PTO from the tractor.
- Wait until all moving parts have stopped.

Check that all hydraulic couplings are tight and that all hoses and fittings are undamaged before activating the hydraulic system.

Make sure that there is no pressure in the hydraulic hoses when these are disconnected from the tractor.

Hydraulic oil under pressure can penetrate the skin and cause serious infections. You should always protect the skin and the eyes against oil splashes. (see figure 1-4). If, by accident, hydraulic oil under pressure hits you, consult a doctor immediately.

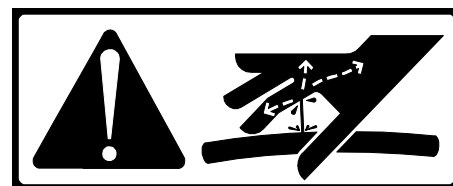


Fig. 1-4

ADJUSTMENT



IMPORTANT:

Before adjusting the machine, always:

- Disengage the PTO from the tractor.
- Stop the tractor engine
- Wait until all moving parts have stopped.

It is important not to remove the guards until all revolving parts have stopped. This especially applies to the delivery chute above the blade cylinder.

If the cutting parts in the blade cylinder must be adjusted or replaced, it is important to block the blade cylinder as the sharp blades can easily cause injury.

Before working, check that the feed rollers and the blade cylinder can move freely. Also check that the blades are intact and without cracks. Damaged blades must be replaced to prevent them from blocking or damaging the machine and to avoid metal parts being thrown out from the delivery chute.

Check periodically if blades and blade bolts are worn according to the rules in the instruction manual.

The first time you use the machine the blades and blade bolts may "bed in". For this reason you must check and tighten the blade bolts after the first working hour.

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TRANSPORT

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

When the machine has been prepared for transport, the control unit must be turned off on the button at the side of the control box and the oil flow to the machine must be interrupted. This prevents faulty operation during transport.



DANGER: Never let anyone stand or sit on the machine, especially not when you are driving.

The machine has equipment for hydraulic conversion to transport position and the cylinder for this is fitted with a hose breach valve. If there is air in the cylinder during transport there is a risk that the machine moves to the opposite lane, the bicycle track or the sidewalk.



IMPORTANT: If the machine is equipped with auto hitch, the mechanical lock on the auto hitch must be activated when driving with a trailed wagon on public road. This also applies if a hose breach valve is fitted on the lifting cylinder of the auto hitch.

IMPORTANT: 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 you enter or drive on public roads.

The attachments of the forage harvester (pick-up etc.) must be secured mechanically before transport.

The statutory lighting and traffic markings must be placed correctly, on the forage harvester as well as the trailer.

Reflectors and lighting must be cleaned regularly.

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WORKING

Before you start working make sure that no persons are behind the forage harvester due to the danger of being hit by metal parts from damaged blades.

Also make sure that there are no persons in the trailer used for picking up. There is danger of suffocating in the flow of material or getting hit by metal parts.

If the feed rollers or the blade cylinder are blocked, disengage the clutches and stop the tractor engine immediately. Activate the parking brake and wait until the revolving parts have stopped before removing the material or the foreign matter.



WARNING: This cannot be said often enough: Never remove material blocked in the machine while the machine is running and never feed material into the pick-up with your hands or feet as there is a serious danger of getting caught and pulled into the harvester which would cause dismemberment or death.

Never allow anyone to stand near the forage harvester while it is working, especially not children who do not know the danger and do unforeseen things.

The chute is over 4 m high. Be aware of high-voltage lines and keep a safe distance to these.

PARKING

Before parking the machine always lock the jack with the locking pin, otherwise the machine may tip over during parking. Also remember to block the wheels if there is a risk that the machine will move after parking

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

GREASING

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

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. Remove the ignition key!

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GRINDING

When grinding always follow this procedure:

- Stop the tractor engine and remove the ignition key.
- Activate the parking brake.
- Wait until all moving parts have stopped.

Unfortunately it is necessary to remove some of the guards to change the direction of rotation of the rotor when grinding the blades. As there are chain and belt transmissions your hands may be injured if the revolving parts have not stopped before the guards are removed.

Grinding is performed according to the following procedure:

1. Check if the grindstone is undamaged and if the device is able to move back and forth easily.
2. Lower the guard behind the grinding device to give access to the blade cylinder.
3. Adjust the stone and guard the grinding device again.
4. Remove the guard above the blade cylinder transmission and change the direction of rotation of the rotor.
5. Close the guard again and check that there are no persons near the machine.
6. Start the tractor again and keep the rpm at idle speed or a little above.
7. Perform the grinding carefully.

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

When grinding has finished, stop the tractor engine, remove the ignition key, change the direction of rotation and fasten all guards.

REMEMBER: Always grind with all guards closed.

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MAINTENANCE

After approx. 2 days of operation, all bolts should be re-tightened. Always make sure that the used spare parts are tightened to the correct torque.

When replacing parts in the hydraulic system always make sure that the pick-up rests on the ground and/or the lifting cylinders are blocked.

Hydraulic hoses must be checked by an expert before use, and after that minimum once a year. If necessary, they must be replaced. The working life of hydraulic hoses should not exceed 6 years, including maximum 2 years of storage.

When replacing, always use hoses which comply with the requirements stated by the manufacturer. All hoses are marked with date of production.

REPLACEMENT OF WEARING PARTS

Blades, blade bolts and shearbar are made of high-alloyed, heat-treated materials. This heat treatment provides especially hard and ductile material which is able to withstand extreme stress. Damaged blades, blade bolts or shearbars must be replaced by original KONGSKILDE spare parts to ensure safe operation.

Blades and blade bolts must be checked every day during the season.

The special blade bolts must be tightened with a torque wrench to 40 kgm.

When the blades have been worn max. 8 mm or approx. 12 mm above the straight piece, they must be replaced (see fig. 1-5).

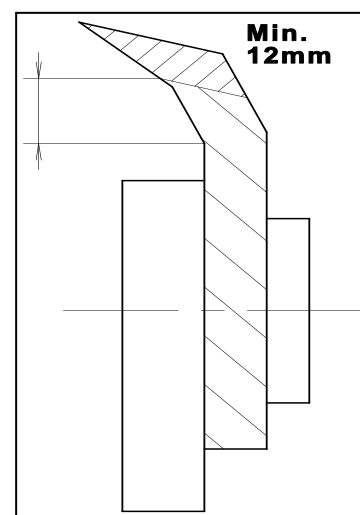
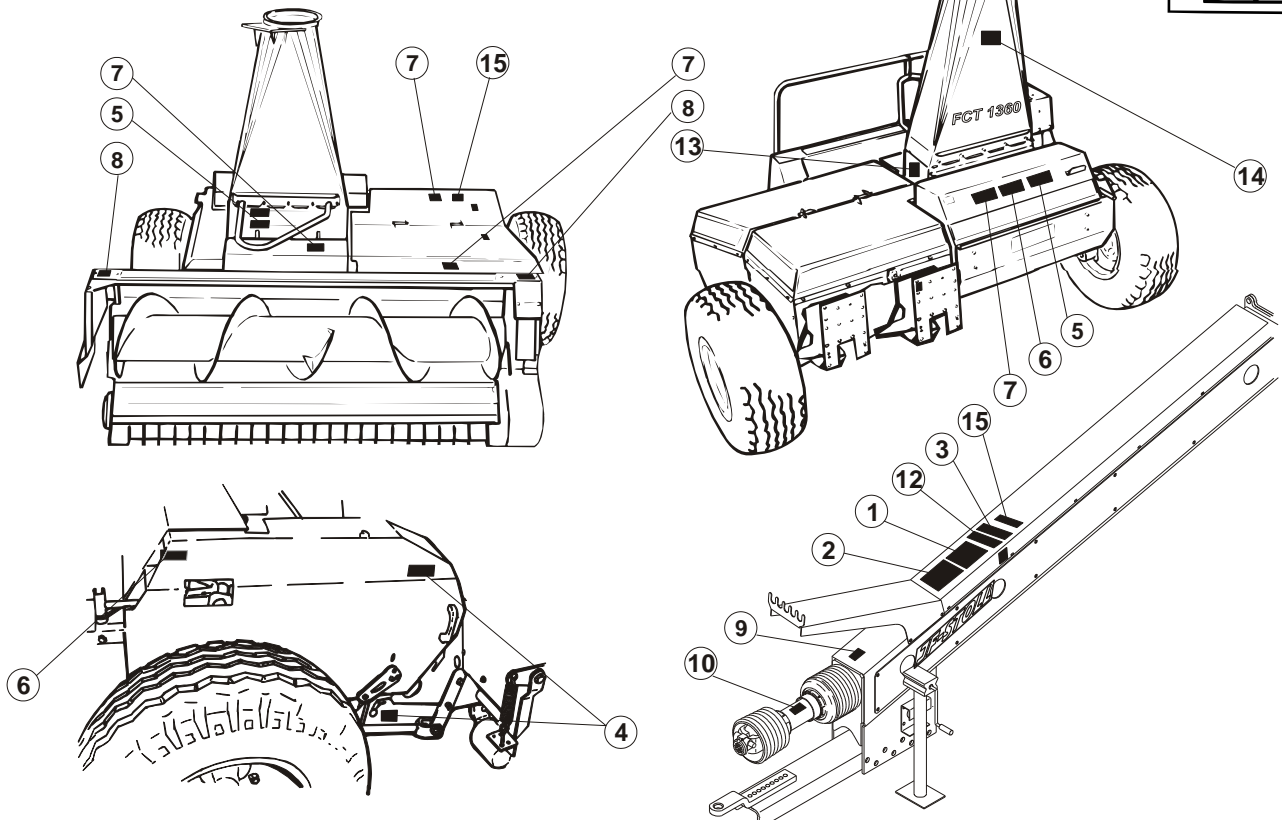
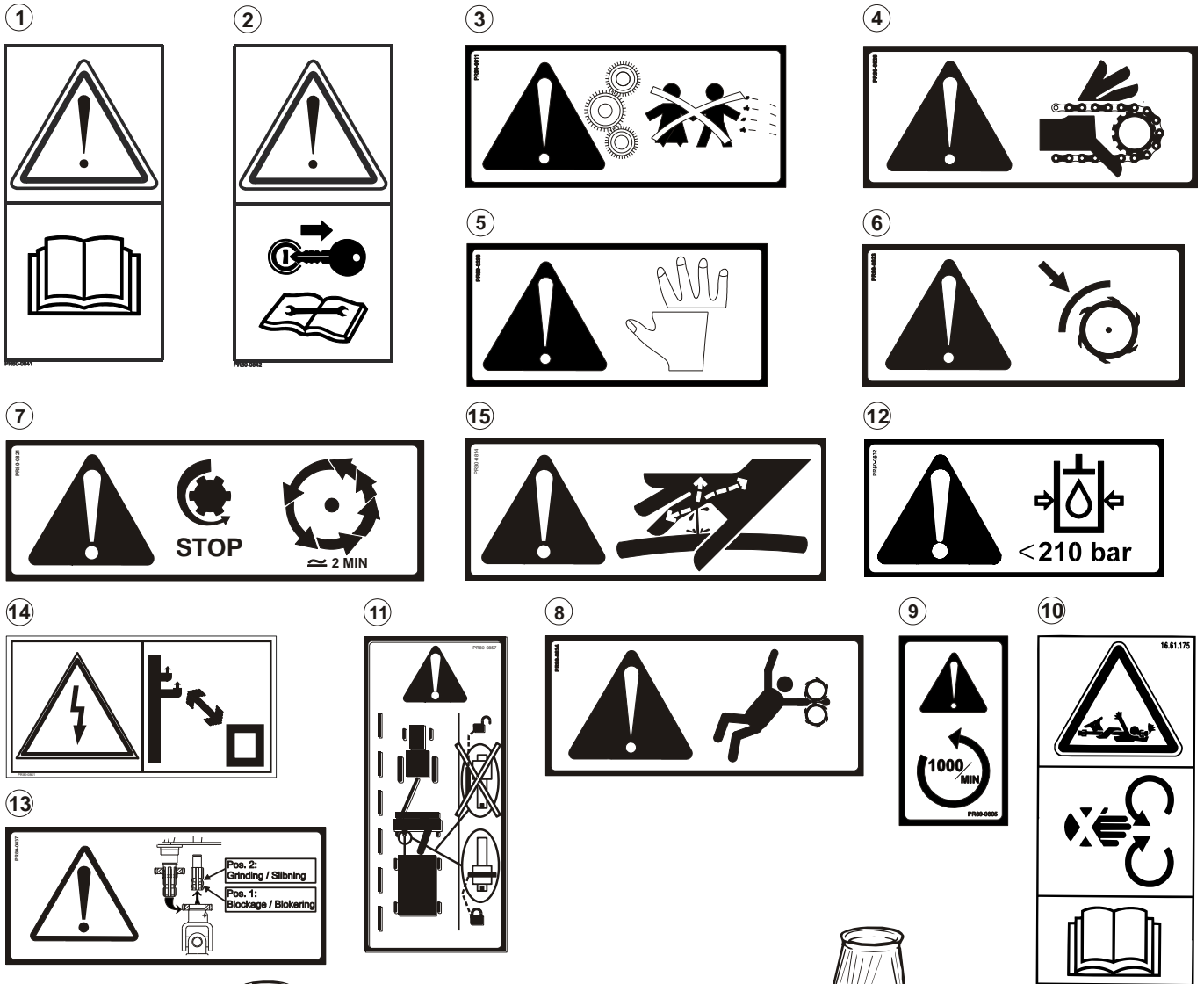


Fig. 1-5

After replacement of blades, blade bolts and the like, check that no tools have been left in the machine.

1. INTRODUCTION



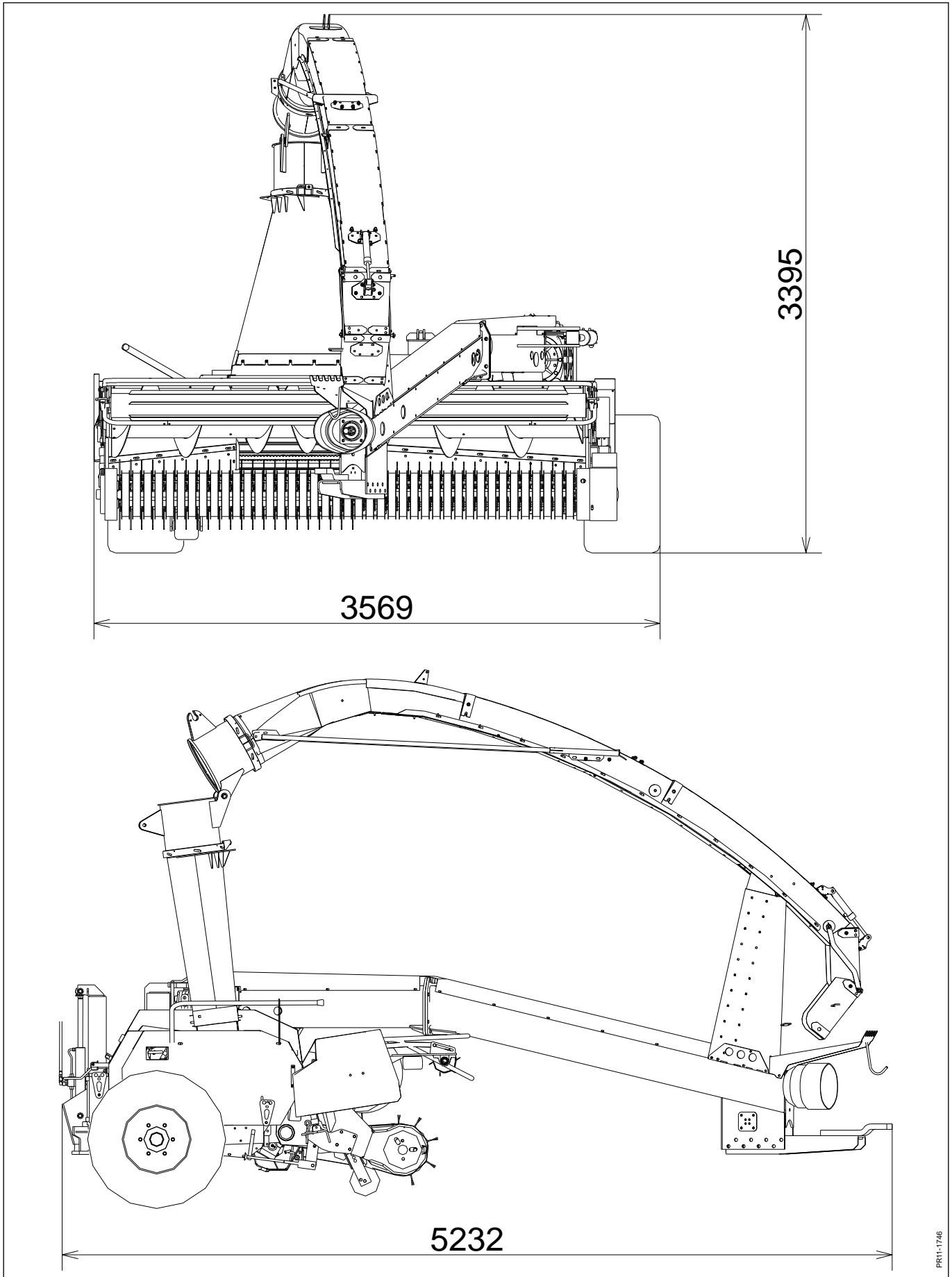
1. INTRODUCTION

SAFETY DECALS

The safety decals shown on the previous page are positioned as shown on the drawings. Before using the machine, check that all decals are present: if not, require those missing. The decals have the following meaning:

1. **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.
2. **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.
3. **Children.**
Never let children stand near the machine during operation. Especially not small children as they have a tendency to do unforeseen things.
4. **Chain drive**
One or more chain drives are placed under this guard. 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 grinding.
7. **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 removing guards for inspection or maintenance.
8. **Risk of getting pulled into the machine.**
Do not stand near the attachments or the feed rollers while the machine is running. Make sure that the tractor engine has stopped first.
9. **The number and the 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 can damage the machine with the risk of personal injury as a result.
10. **The PTO drive shaft.**
This decal has the purpose to remind you how dangerous the PTO drive shaft can be if it is not correctly mounted or protected.
11. **Auto hitch.**
Always block the hydraulic hitch with the supplied pin before driving with a trailed wagon on public road.
12. **Maximum 210 bar.**
Make sure that the hydraulic components are not exposed to more pressure than maximum 210 bar as there could be a risk of explosive damage of parts. Hereby you expose yourself and others to serious danger of getting hit by metal parts with high speed or oil under high pressure.
13. **PTO drive shaft for rotor.**
There is an alternative pin for the PTO drive shaft for the rotor. It is used when the rotor is disconnected during reverse and when the rotor rotates in the opposite direction during grinding. Make sure that you place the PTO drive shaft correctly on the pin when performing these operations.
14. **High-voltage lines.**
This decal has the purpose to remind you of the danger of getting too close to high-voltage lines.
15. **Hydraulic oil under pressure.**
Warning against hydraulic oil under pressure.

1. INTRODUCTION



TECHNICAL DATA

TECHNICAL DATA	FCT 1360
Pick-up width	3.1 m
Power requirement	103–165 kW/140-225 HP
Capacity (*)	35 - 100 t/hour
Blade rotor width	0.9 m
Rpm for rotor	1600 rpm
Number of blades, standard	40
HD blades	Standard
Grinding device	Grindstone with quick adjustment
Reverse grinding	Standard
Theoretical cutting length, standard	7 and 15mm
Reversible shearbar, tungsten-coated	Standard
Number of feed rollers	4
Reverse of feed intake	Standard, hydraulic
Hydraulic functions	Pick-up lifting, drawbar, chute swivelling, deflector and reverse function
Turning angle for chute	260 degrees
Pick-up, pre-lubricated	Standard
Weight with pick-up	2995kg
Maximum length	5.2 m
Maximum width with pick-up	3.57 m
Transport height	3.4 m
Tyre dimension standard	19/45 x 17
Freewheeling clutch in PTO shaft	Standard
Friction clutch in PTO shaft	Standard, 3000 Nm
Steel wheels on pick-up	Standard
Rubber wheels on pick-up	Option (width 3.63 m)
Hydraulic Auto-Hitch	Option
Hitch for trailer: drawbar load/ total weight	2000kg/ 15000kg

(*) Depends on dry matter content, cutting length, the condition and the amount of crop.
We reserve the right to change the construction and specification details without notice.

2. CONNECTION TO TRACTOR

THE HYDRAULIC SYSTEM

HYDRAULIC CONNECTION



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



CAUTION: It is important that the quick-release couplings are always carefully cleaned before mounting to avoid that impurities get into the hydraulic system and damage important valve functions. When the hydraulic hoses are not connected to the tractor they should be parked in the holder at the end of the drawbar.

The machine is equipped with its own hydraulic system, which must be supplied with oil from the tractor.

The system is used for pick-up lifting, drawbar, chute swivelling, deflector and reverse function. None of these functions use very much oil and are controlled in the best way when the oil flow is low. Adjust the oil flow from the tractor to 15-20l/min., or as low as possible.

Connect the hoses to a double-acting outlet on the tractor, or better: connect the pressure hose to the A-port on the hydraulic outlet and the return hose to a free return-port directly to tank or rear-axle assembly. Hereby you ensure that the return pressure is sufficiently low. This is especially important if the oil flow from the tractor cannot be adjusted to a sufficiently low level.



IMPORTANT: The hydraulic outlet of the chosen A-port must be locked in pressure position to ensure continuous oil flow to the machine's hydraulic system.

2. CONNECTION TO TRACTOR

BYPASS VALVE

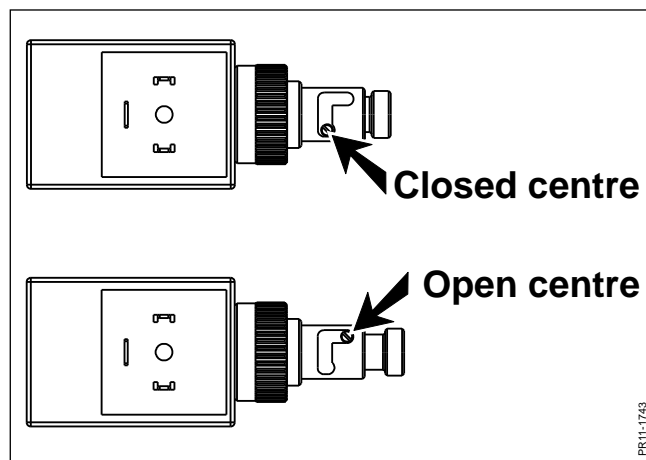


Fig. 2-1

Fig. 2-1 We distinguish between two types of tractor hydraulic systems: “open centre hydraulic” (also called “fixed pump”) and “closed centre hydraulic” (also called “variable pump”).

If the tractor is of the “**open centre**” type, the bypass valve must be **open** in order to allow passage of oil back to the tractor and should only be activated when a function on the machine is activated. If the valve is not open, this can be changed at the thumbscrew.

If the tractor is of the “**closed centre**” type, the bypass valve must be **closed** in order to allow the tractor to close the oil flow automatically when no functions are active. If the valve is not closed, this can be changed at the thumbscrew.

The bypass valve is placed at the bottom of the valve block.

None of the hydraulic functions use more than about 15 litres of oil per minute. Therefore the oil flow from the tractor should be set to 15 litres of oil per minute, if possible. The bypass valve is preset to maximum 40 l/min. If this limit is exceeded, there will be a loss of pressure which may heat the oil and the valves.

2. CONNECTION TO TRACTOR

CONNECTION OF ELECTRIC SYSTEM



Fig. 2-2

Fig. 2-2 The machine is equipped with full electronic operation of all the machine's hydraulic functions. The electronic operation consists of 2 units:

- A control unit mounted on the machine together with the hydraulic system. This unit activates the hydraulic valves.
- A control box for operation of the hydraulic functions. This can be placed on the right arm rest in the tractor cabin, allowing the driver easy access to it while driving in the field, see figure 2-2.

The control box is equipped with detachable fittings which can be fastened in the tractor cabin with screws, and it can subsequently be dismantled without tools.

The plug for the power supply is connected to a socket in the tractor cabin. This should supply 12 V and allow minimum 15 A. If the tractor does not have the same plug you should contact your dealer and get an adaptor.



IMPORTANT: When the machine is parked the control box should be placed in the chute support on the drawbar.

ELECTRO-HYDRAULIC CONTROL

The machine is operated from the control box which controls the electro-hydraulic functions.

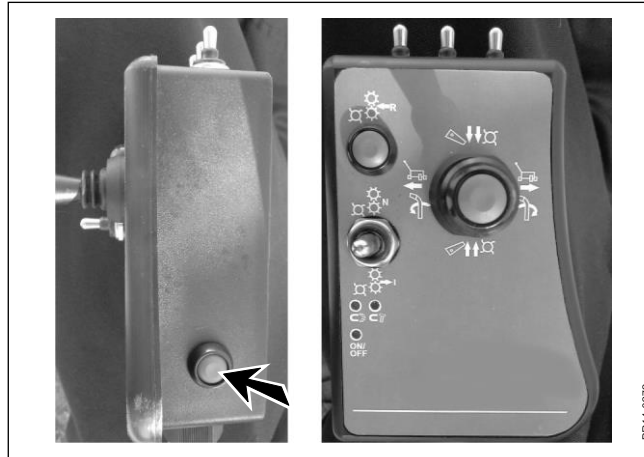


Fig. 2-3

Fig. 2-3 The control is turned on and off on the side of the control box.



IMPORTANT: Remember to turn off the control box if the tractor is stopped for some time. Although the machine is not in operation, several electric coils may be activated. These will drain the tractor's battery.

2. CONNECTION TO TRACTOR

FUNCTIONS

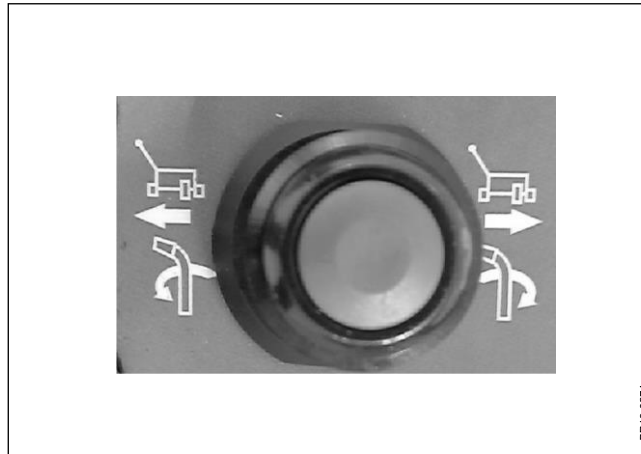


Fig. 2-4

Fig. 2-4 On the joystick:

Chute: Push to the left: The chute turns anti-clockwise. Push to the right: The chute turns clockwise.

Drawbar: While pushing the button: Push to the left: The machine moves behind the tractor. Push to the right: The machine moves out to the swath.



Fig. 2-5

Fig. 2-5 On the joystick:

Chute: Push forward: The deflector points downward. Push to the rear: The deflector points upward.

Pick-up: While pushing the button: Push forward: The pick-up is lowered. Push to the rear: The pick-up is raised.

It takes about 2 seconds to lower the pick-up completely so that the support wheels can follow the ground.

2. CONNECTION TO TRACTOR

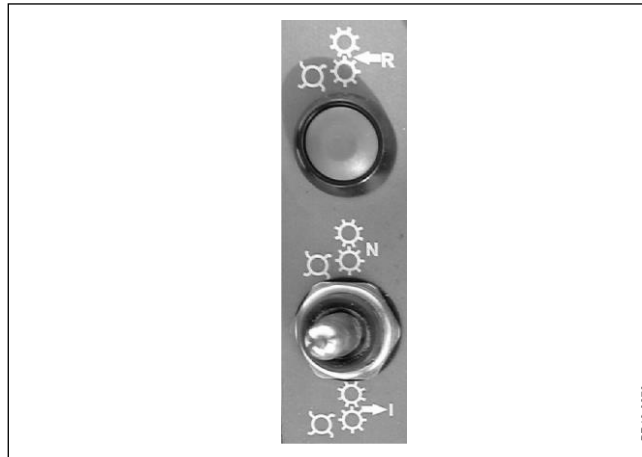


Fig. 2-6

Fig. 2-6 Reverse function. Applies to feed rollers and pick-up.

Feed in: Move the toggle switch to the rear.

Neutral: Move the toggle switch forward for about 2 seconds and then back to the middle position. Feed rollers and pick-up stay in neutral position.

Reverse: With the toggle switch in the middle position you reverse by holding down the push-button. Reversing will stop when letting go of the button.

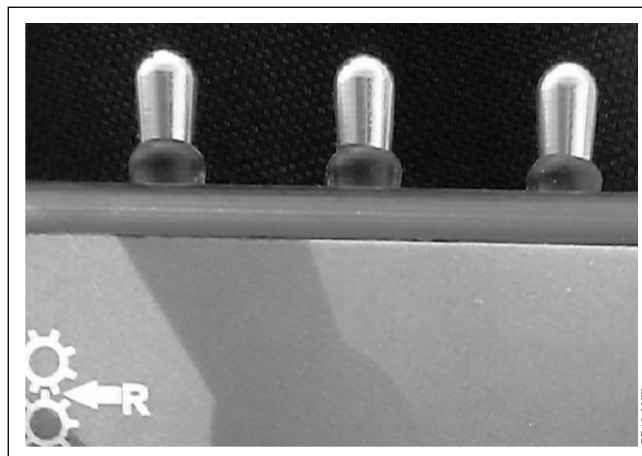


Fig. 2-7

Fig. 2-7 There are 3 toggle switches at the front of the control box. One of them is used for folding of the chute; the other two are intended for optional equipment. The toggle switches automatically return to the neutral middle position after being activated.

2. CONNECTION TO TRACTOR

Control light



Fig. 2-8

Fig. 2-8 This light is on when the control unit is switched on.

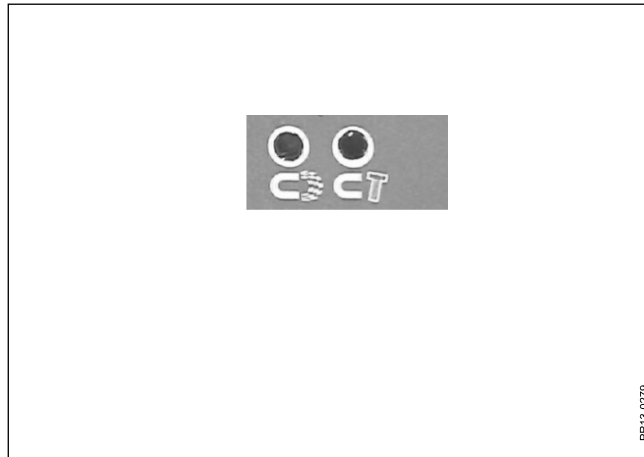


Fig. 2-9

Fig. 2-9 Not used.

DRAWBAR AND PTO DRIVE SHAFT

The hitch eye of the drawbar is intended for a 30 mm hitch pin. The hitch pin must be secured.

The drawbar load is 660kg.

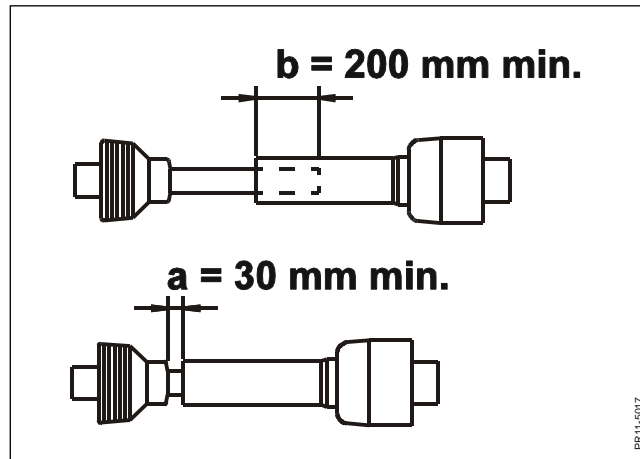


Fig. 2-10

Fig. 2-10 Adjust the length of the PTO shaft so that it:

- in working position has minimum 200 mm overlap, see measure **b**.
- is not compressed more than the prescribed 30 mm in order not to bottom the shaft, see measure **a**.

Adjustment of the length can take place by pulling out or pushing in the drawbar of the tractor.

2. CONNECTION TO TRACTOR

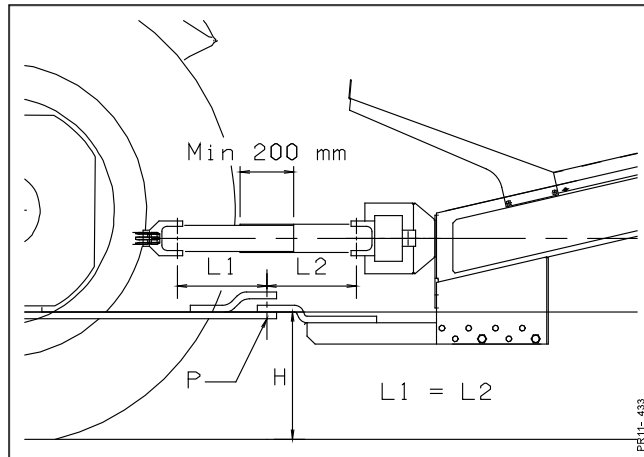


Fig. 2-11

Fig. 2-11 The height **H** of the hitch eye must be adjusted so that the PTO shaft is horizontal. The height can be changed by moving or turning the drawbar bracket. To ensure longest possible life of the PTO shaft the following applies to standard PTO shaft without wide angle: The length **L1** must be equal to the length **L2**, i.e. the centre of rotation **P** for the drawbar must be as close as possible under the centre between the joints. The drawbar bracket on the chopper can be moved back and forth in steps of 25 mm.



IMPORTANT: The drawbar must always be mounted and fastened with 2 bolts.

2. CONNECTION TO TRACTOR

SHORTENING OF THE PTO DRIVE SHAFT

It is necessary to be very careful when shortening the PTO drive shaft. If the PTO drive shaft is shortened too much, there is a risk that the profile tubes are drawn apart which may cause serious damage.

Especially on hilly ground when the machine and the tractor have variable angles in relation to each other. On the other hand, if the PTO drive shaft is not shortened enough there is a risk of squeezing during sharp turns, which may cause high frictional forces in the PTO drive shaft, which again will damage the axle joints.

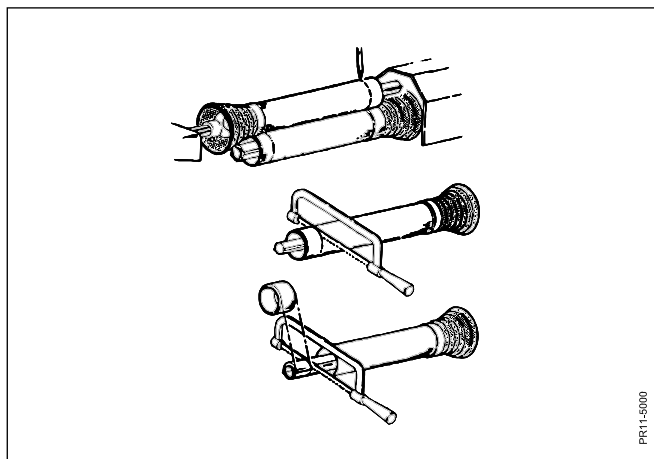


Fig. 2-12

Fig. 2-12 Fasten the halves of the shaft to PTO and PIC (fig. 2.10), respectively, when these are right opposite each other with the machine in working position. (The longest distance on this machine). Hold the shaft ends parallel to each other and mark the wanted shortening, minimum 200 mm overlapping. Shorten all 4 tubes equally. The ends of the profile tubes must be rounded off and burrs must be removed carefully. It is very important that the tubes are smooth and clean before greasing. Grease the tubes carefully before reassembling.



WARNING: Never turn so sharply that there are less than the prescribed 30 mm distance in order not to bottom the shaft. See measurement a in fig. 2-10.

If the PTO drive shaft bottoms when turning sharply, there is a risk that the shaft and/or other transmission parts are damaged.

FRICITION CLUTCH

On the PTO drive shaft between the drawbar and the gearbox there is a friction clutch which ensures that the machine is not overloaded during operation.

Before starting a new machine, the clutch must be "aired". See section concerning the friction clutch in chapter 7 "MAINTENANCE".

3. MOUNTING OF EQUIPMENT

Mounting should take place in a workshop on even ground. The basic machine must always be mounted correctly to the tractor according to section 2 "CONNECTION TO TRACTOR" before equipment and accessories are mounted.

HITCH FOR TRAILER

The machine can be supplied with combi-hitch or hydraulic hitch for connection of trailer. The maximum drawbar load is 2000 kg. Maximum total weight of trailed wagon: 15000kg.

COMBI-HITCH

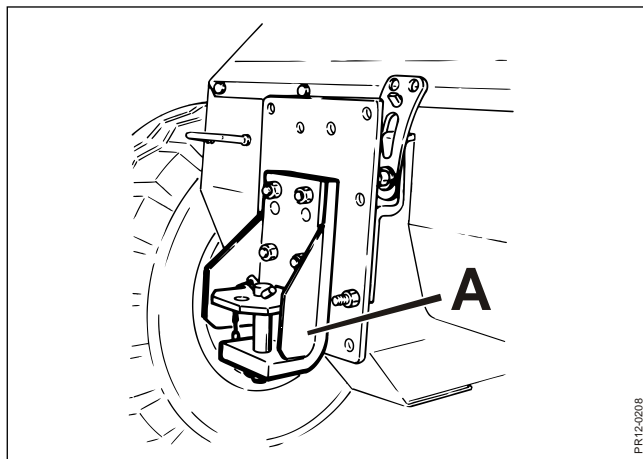


Fig. 3-1

Fig. 3-1 Combi-hitch **A** mounted in lowest position.

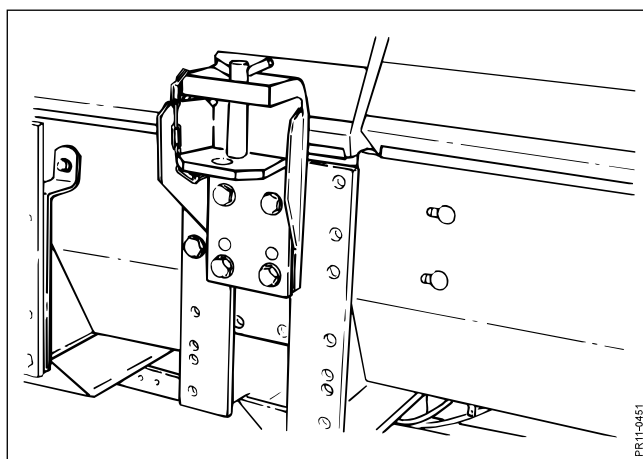


Fig. 3-2

Fig. 3-2 Combi-hitch mounted in uppermost position. This position is used for trailers with overrun brake, e.g. in Germany.

3. MOUNTING OF EQUIPMENT

HYDRAULIC HITCH HOOK (AUTO-HITCH)

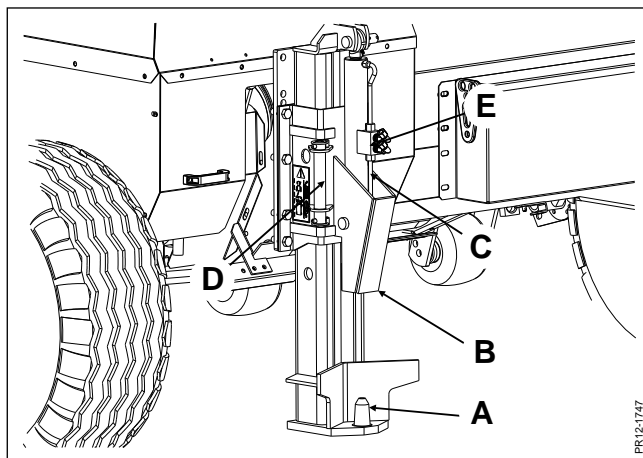


Fig. 3-3

Fig. 3-3 The hydraulic hitch **B** is equipped with a hitch hook **A** which is raised and lowered hydraulically by a double-acting cylinder **C**. The hoses from the cylinder **C** are connected to a free valve on the valve block. Now the hydraulic hitch **B** can be operated with one of the 3 toggle switches at the front of the control box.

Fig. 3-3 For connection of the trailer the machine must be reversed to the drawbar of the trailer. The hitch hook **A** must be lowered and the hitch eye of the trailer is caught by the hitch hook. Lift the trailer with the hydraulic cylinder **C** until it reaches its bottom position. A hydraulic locking valve **E** which is mounted on the cylinder **C** ensures that the hitch hook **A** stays in the raised position. If the trailer is equipped with plugs for lighting and hoses for tipping and brakes these should be mounted subsequently.



IMPORTANT: When driving on public road with a trailer connected to the hydraulic hitch **B**, the locking pin **D** **MUST** be removed from its holder and lead through the frame on the hydraulic hitch **B** so that the hitch hook **A** is locked mechanically, see fig. 3-4. This must be done in order to observe the current traffic rules.

3. MOUNTING OF EQUIPMENT

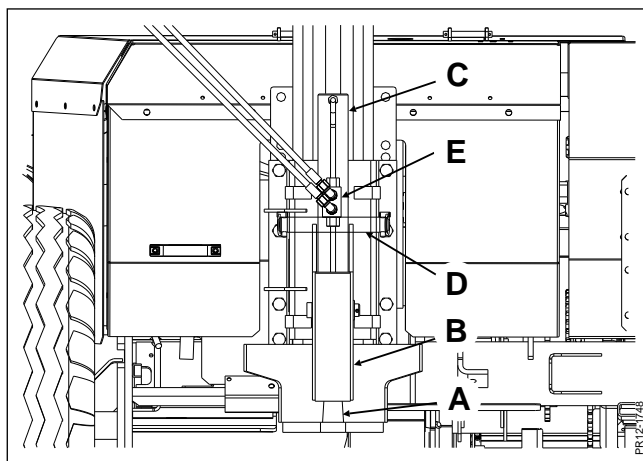


Fig. 3-4

Fig. 3-4 The trailer is disconnected as follows: If the locking pin **D** is placed so that it locks the hitch hook **A**, see figure 3-4, the locking pin **D** is removed and placed in the holder on the hydraulic hitch **B**. Then the hitch hook **A** is lowered by activating the cylinder **C**. When the hitch hook **A** has been lowered completely, the trailer is disconnected. Also remember to disconnect plugs for lighting and hoses for tipping and brakes, if these were mounted.

PICK-UP

Connection is preferably carried out on firm and even ground.

The basic machine is connected to the tractor according to section 2 "CONNECTION TO TRACTOR".

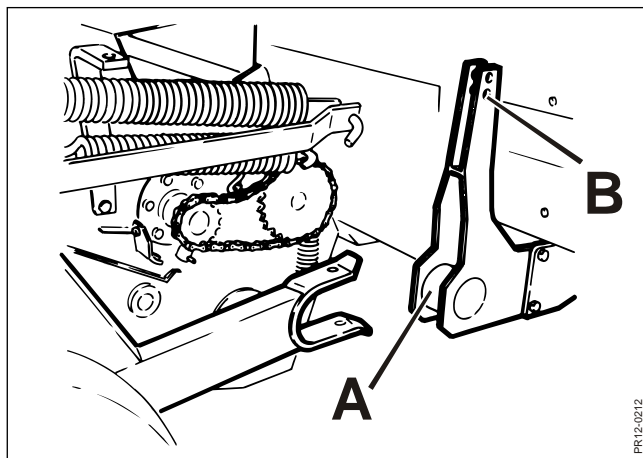


Fig. 3-5

Fig. 3-5 Wheel the pick-up on the rollers to the machine so that the catch **A** is engaged. Mount the 2 pins in order to fix the pick-up to the basic machine. Attach the relief device to the pick-up at **B**.

3. MOUNTING OF EQUIPMENT

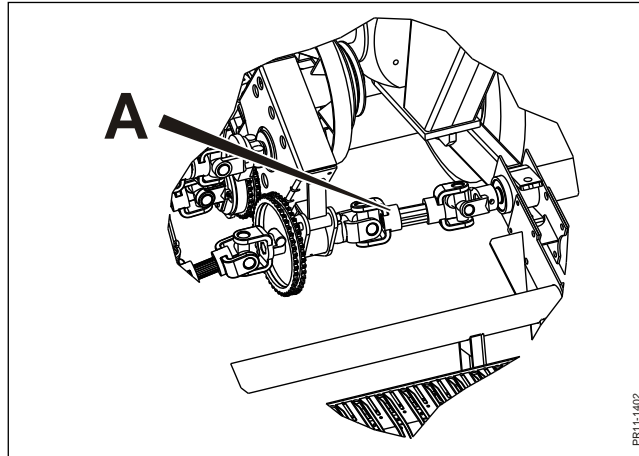


Fig. 3-6

Fig. 3-6 Mount the PTO drive shaft **A** for the pick-up.

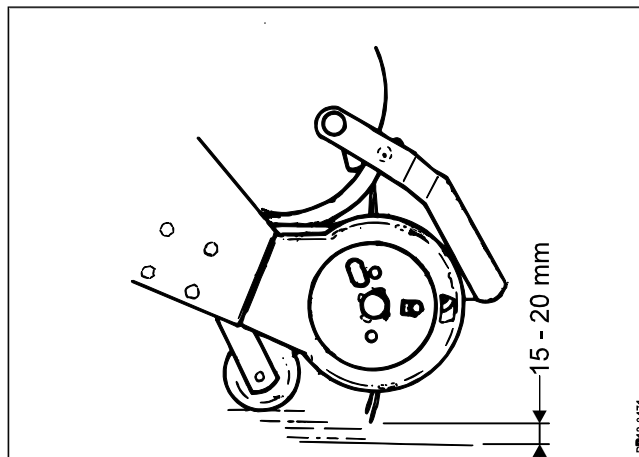


Fig. 3-7

Fig. 3-7 The height of the rollers under the pick-up can be adjusted. Adjust the height so that there is 15 – 20 mm distance between the point of the pick-up tines and the ground.

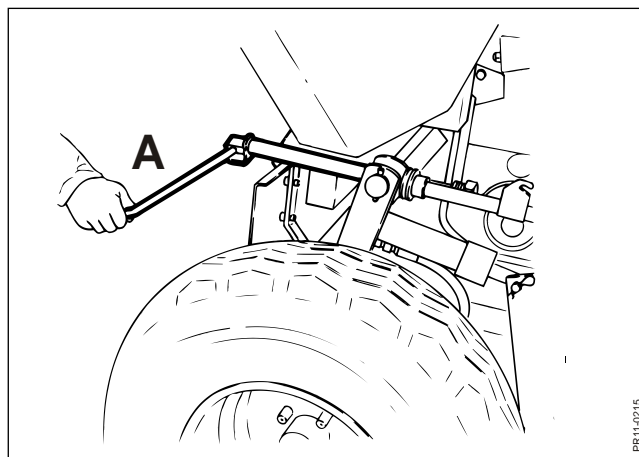


Fig. 3-8

Fig. 3-8 Tighten the relief springs with the spindle **A** until the ground pressure for the pick-up is maximum 30 kg.

3. MOUNTING OF EQUIPMENT

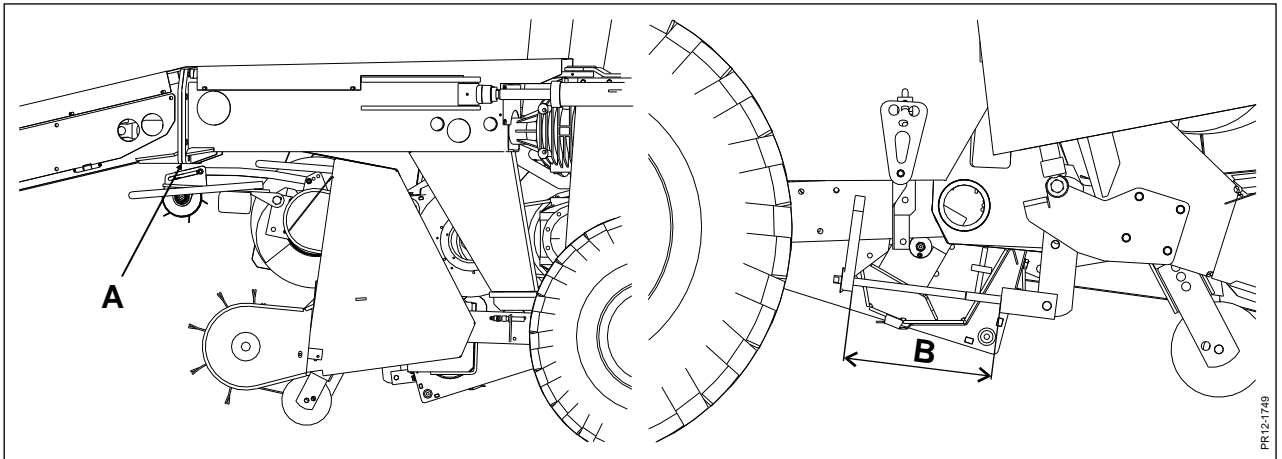


Fig. 3-9

Fig. 3-9 Adjust the stop, B, for lift of the pick-up so that you obtain maximum lifting height but also avoid that the pick-up collides with the drawbar at A.

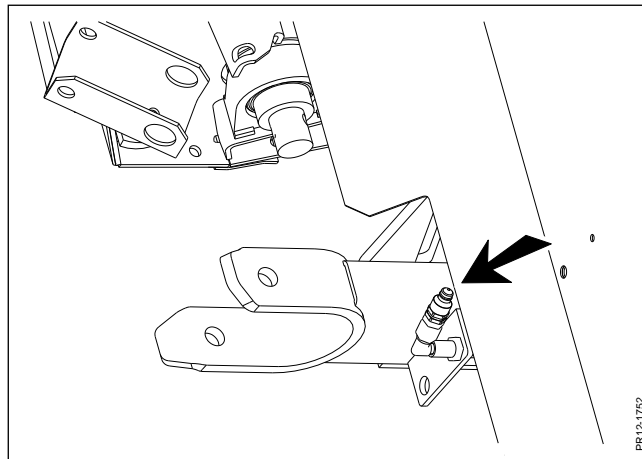


Fig. 3-10

Fig. 3-10 Connect the hydraulic hose for lift of auger and front roller to the quick-release coupling at the left-hand catch.

TRANSPORT CONVERSION

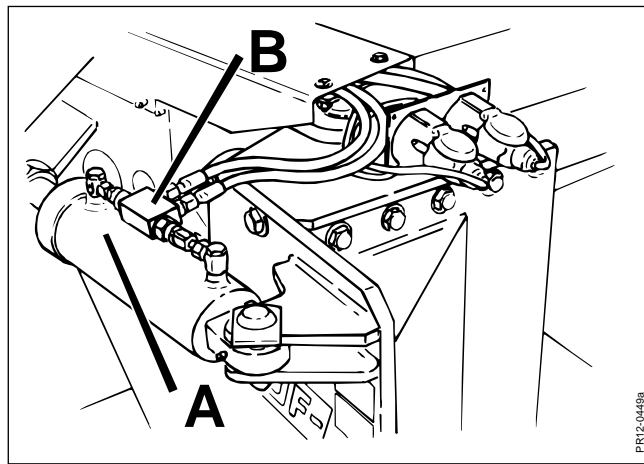


Fig. 3-11

Fig. 3-11 The drawbar is converted electro-hydraulically with the joystick on the control box. The hydraulic cylinder **A** is equipped with a safety valve **B** which ensures that the machine does not make any unintentional movements in case of leaking hoses.

FITTING CHUTES

There are 3 different chute options and 3 different positions of the bracket for chute turning, in order to accommodate most needs.

NB! Not all machines offer the option for 3 positions of the bracket for chute turning.

CHUTE TURNING

There are the following 3 positions for fitting the chute turning bracket, in order to optimise unloading to a selected side.

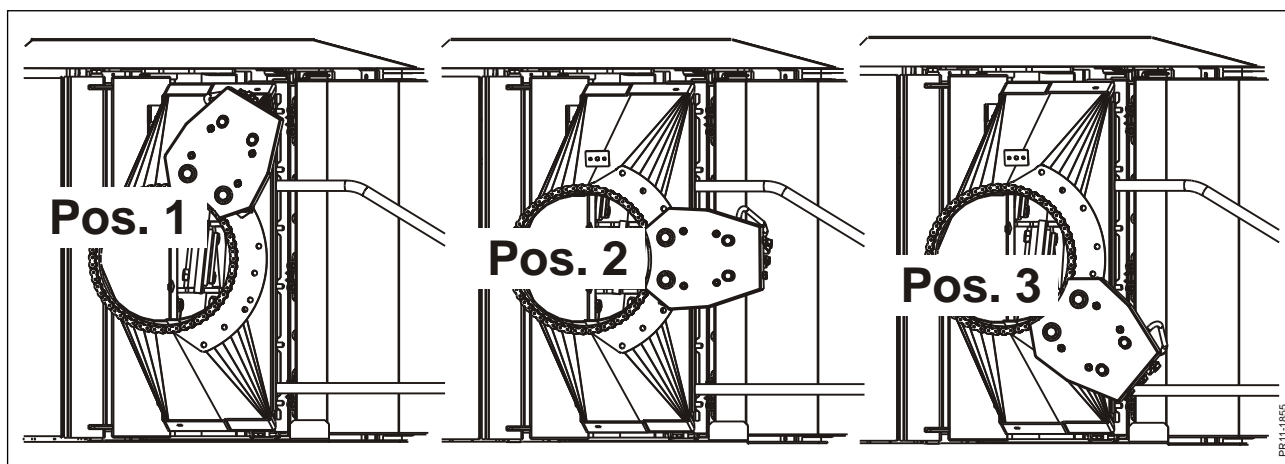


Fig. 3-12

Fig. 3-12 Pos. 1 for unloading to the right
Pos. 2 for unloading both sides. Cannot be used with the collapsible chute.
Pos. 3 for unloading to the left

When the chute is fitted, you must turn carefully from outer position to outer position in order to ensure that the hydraulic hoses are fitted correctly and are long enough.

3. MOUNTING OF EQUIPMENT

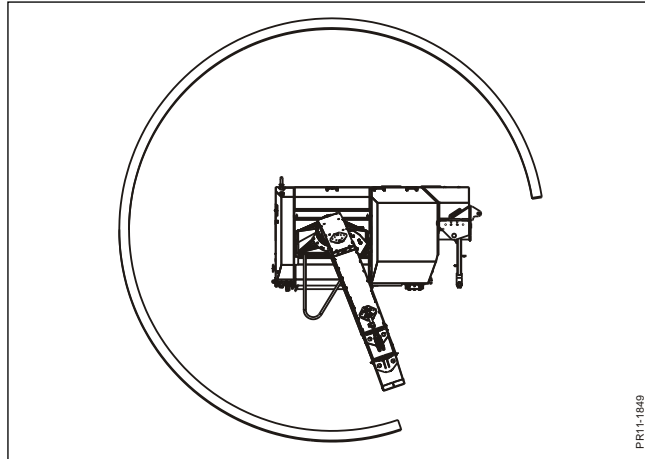


Fig. 3-13

Fig. 3-13 Position 1

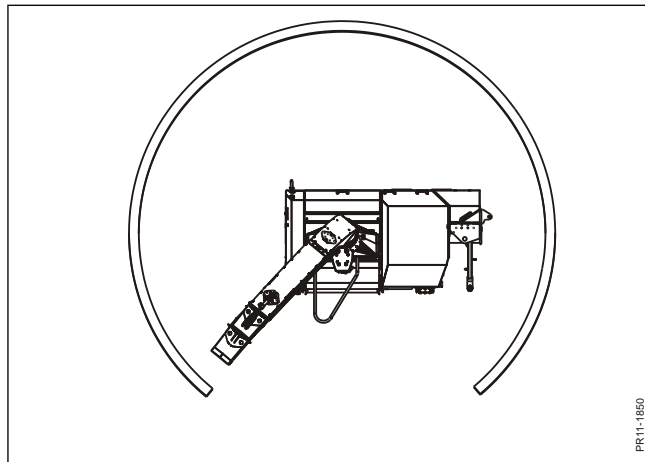


Fig. 3-14

Fig. 3-14 Position 2

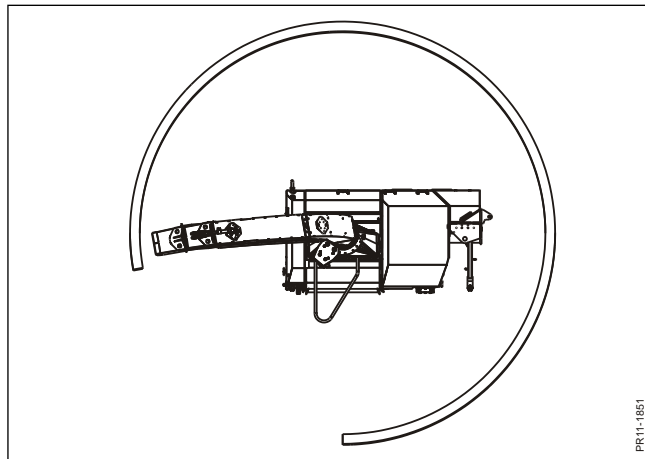


Fig. 3-15

Fig. 3-15 Position 3

NB!

Not all machines offer the option for 3 positions of the bracket for chute turning. Only position 3 is offered for these machines.

3. MOUNTING OF EQUIPMENT

STANDARD CHUTE

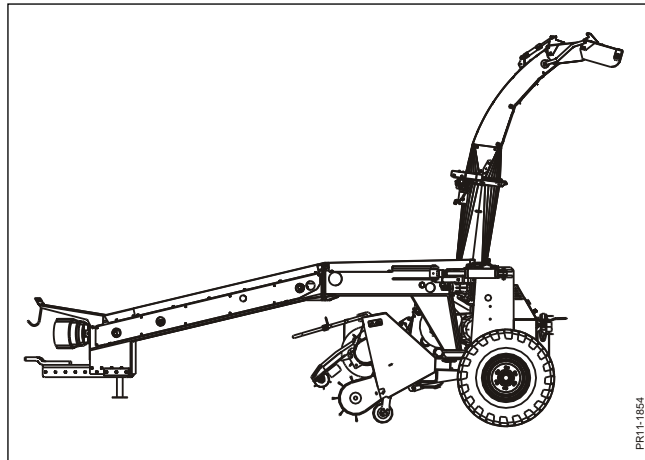


Fig. 3-16

Fig. 3-16 This is the standard chute that is supplied with the machine. It is approx. 3.8 metres high in the transport position.

FOLDABLE CHUTE

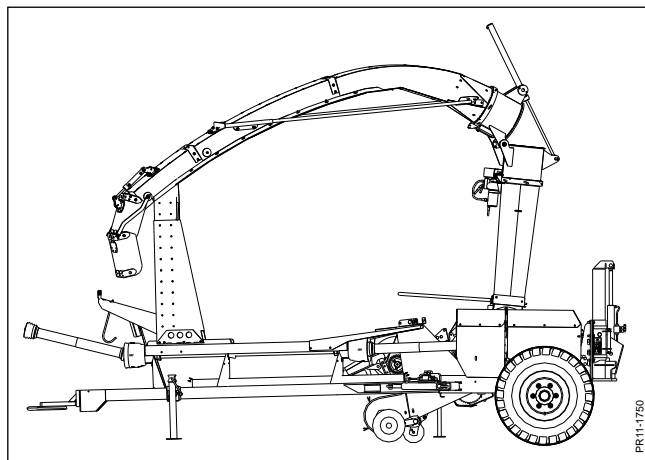


Fig. 3-17

Fig. 3-17 The machine can be fitted with a chute that permits loading of very high trailers. This chute is over 4 m high. Therefore, and also because the chute/delivery chute will otherwise be overloaded, it must be folded down during transport so that it rests on a "chair" on the drawbar.

The chute is folded by a hydraulic cylinder which is operated by one of the toggle switches at the front of the control box.

The chute is operated electro-hydraulically with the joystick and toggle switch on the control box. Move the drawbar into transport position, turn the chute into a position above the chair and fold it down until it rests on the chair.

3. MOUNTING OF EQUIPMENT



DANGER: The chute is over 4 m high. Be aware of high-voltage lines and keep a safe distance to these.



WARNING: When you operate the chute make sure that persons keep a safe distance from the machine. The hydraulic functions must be operated from the tractor seat.

IMPORTANT: Be careful not to hit the tractor cabin.

IMPORTANT: Do not move the drawbar while the chute is resting on the chair.

IMPORTANT: Do not turn the chute while it is resting on the chair.

IMPORTANT: The chute must always rest on the chair during transport. This is due to the Road Traffic Act and also because the chute/delivery chute may get damaged, for instance if you drive fast on uneven ground.

CHUTE FOR PARALLEL OPERATION

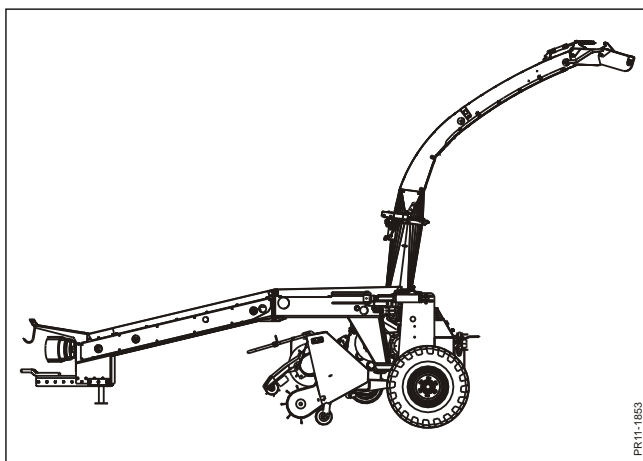


Fig. 3-18

Fig. 3-18 The machine can be fitted with a chute that has a transport height of 4.4 metres. This chute cannot be folded for transport.

3. MOUNTING OF EQUIPMENT

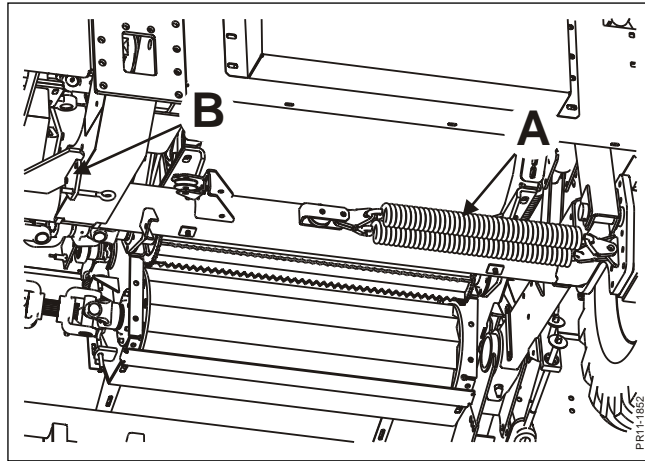


Fig. 3-19

Fig. 3-19 When this equipment is fitted, it is important that an extra spring **A** is fitted for chute relief, in order to compensate for the added weight of the chute. Bracket **B** must be moved to the indicated position so that the wire is not too short.

3. MOUNTING OF EQUIPMENT

LIGHTING KIT

The machine can be equipped with universal lighting kit consisting of two light units with tail light and flasher, fittings for assembling plugs and cables and wiring system with plugs to the tractor. The equipment is easy to retro-fit on your machine.

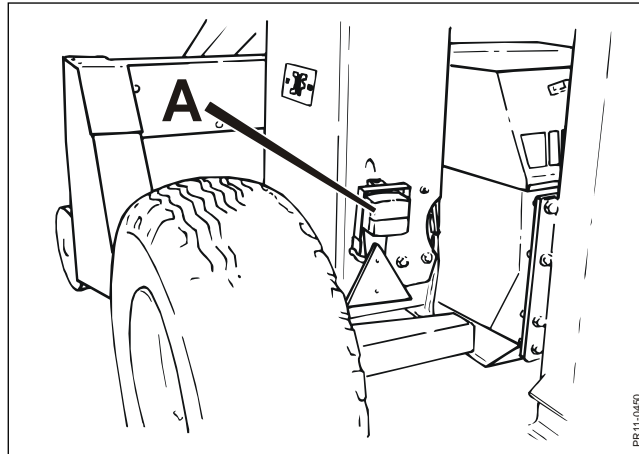


Fig. 3-20

Fig. 3-20 In the left-hand side the light **A** is mounted on the main frame right beside the left wheel.

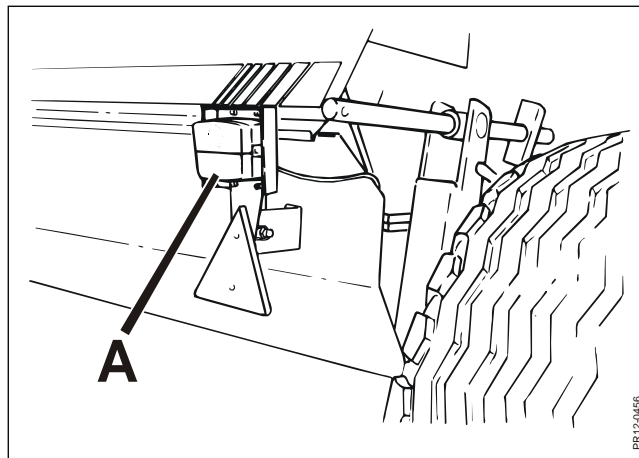


Fig. 3-21

Fig. 3-21 In the right-hand side the light **A** is mounted on rear lower guard right beside the right wheel.

3. MOUNTING OF EQUIPMENT

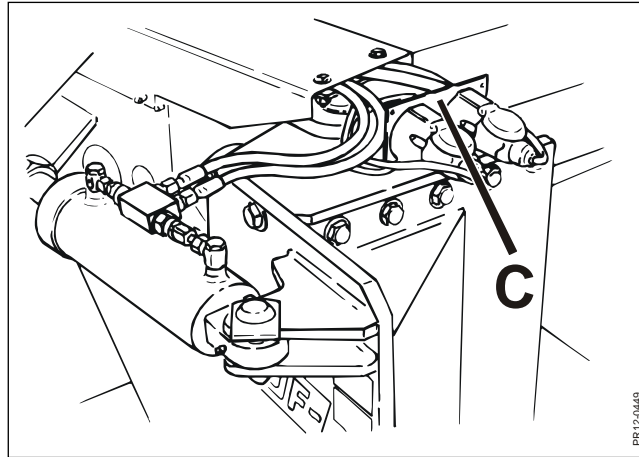


Fig. 3-22

Fig. 3-22 The fitting **C** with plugs for the 2 light units is placed rearmost at the top of the bracket for the drawbar.
The cable with the plug for the tractor is placed along the drawbar together with the hydraulic hoses.

4. ADJUSTMENTS

PICK-UP

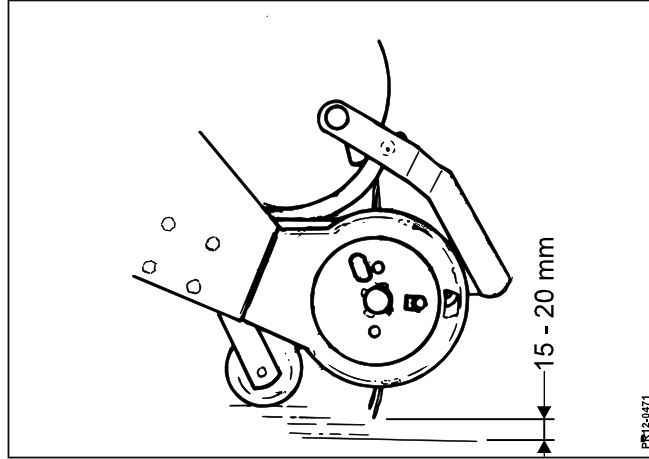


Fig. 4-1

Fig. 4-1 The pick-up is equipped with support rollers made of steel which are adjustable in height. You should keep the pick-up at such a height that the tines do not hit the ground and leave earth in the crop and can also pick up the grass without waste.

KONGSKILDE recommends a distance between the pick-up tines and the ground of 15 to 20 mm.

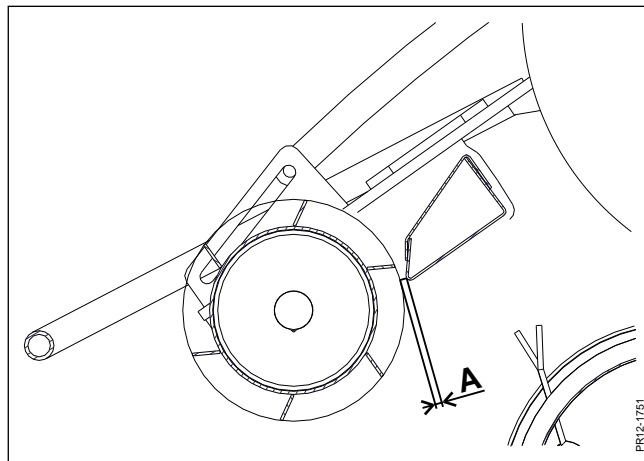


Fig. 4-2

Fig. 4-2 The distance A between the pick-up roller and the crossbar is adjusted so that they are as close as possible without colliding.

4. ADJUSTMENTS

The auger on the pick-up is equipped with a slip clutch. The slip clutch of the auger is adjusted so that it releases before the other friction clutches in the machine.

The highest capacity is obtained by working at a forward speed where you drive without blockage in the auger. If there is a blockage around the auger you stop and force the crop out of the machine by using the reverse function. See also chapter 6 "WORKING IN THE FIELD".

A continuous and even flow through pick-up and auger is the best way to avoid blockages inside the machine, and thus avoid long operational stoppages.

The operator should always ensure spare friction discs for the slip clutch on the auger are in the tool box. If this clutch has often been in operation, the coating of the friction discs is worn and it cannot transfer sufficient transmission. It may therefore be necessary to replace the friction discs, but remember they have to be of the same number and quality.

OPENING OF ROTOR HOUSING



Fig. 4-3

Fig. 4-3 The chute must be lowered in order to open the rotor housing. In order to make this easier, the chute is relieved by strong springs.



DANGER: First ensure that no other persons than the operator are in the vicinity.

WARNING: **The hydraulically collapsible chute** (accessory) is so heavy that the rotor housing cannot be opened manually for access to the chopping rotor. Instead, please use the procedure described in Fig. 4-9 – Fig. 4-13.

WARNING: **The chute for parallel operation** (accessory) requires two people to open and close the rotor housing, as the weight of this exceeds the permitted amount.

4. ADJUSTMENTS

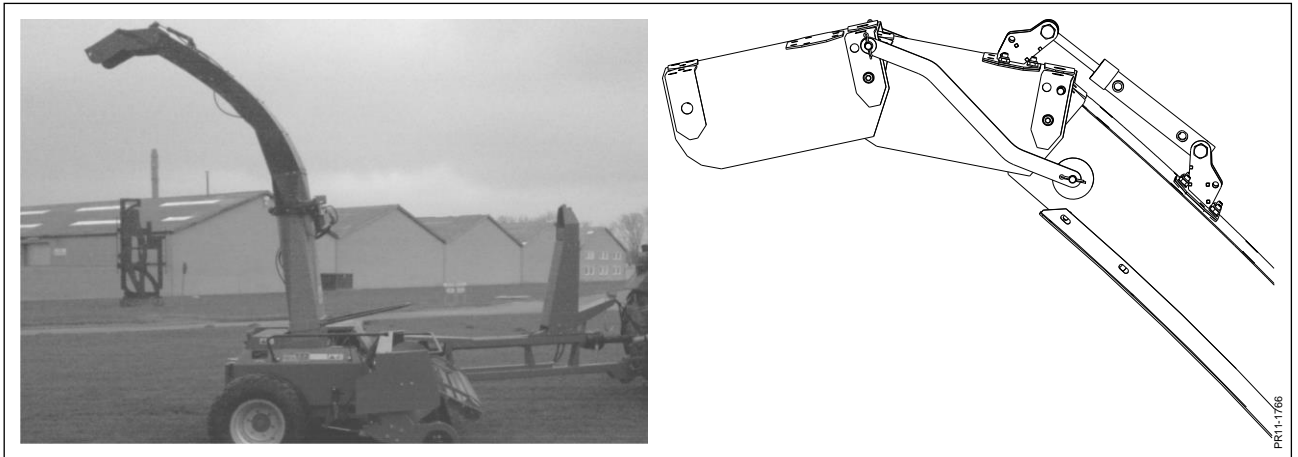


Fig. 4-4

Fig. 4-4 1) Turn the chute to the rear. Turn the deflectors to the middle of the working area.



Fig. 4-5

Fig. 4-5 2) Open the cover of the rotor housing and the left cover.

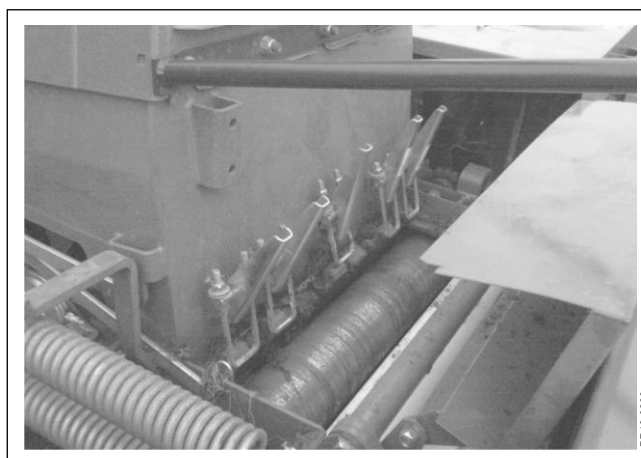


Fig. 4-6

Fig. 4-6 3) Open the clips on the front of the rotor housing.

4. ADJUSTMENTS



Fig. 4-7

Fig. 4-7 4) Using the handle, turn the chute backwards and down, which will open the rotor housing.

5) The rotor housing is closed in the same way, although in the reverse order.



Fig. 4-8

Fig. 4-8 When the rotor housing is closed, it is a good idea to lift the chute the first part of the way.

4. ADJUSTMENTS

COLLAPSIBLE CHUTE



WARNING: The chute is so heavy that the rotor housing cannot be opened manually when you want to get access to the chopping rotor. Use this procedure instead:

DANGER: First, make sure that no persons are near. The hydraulic functions must be operated from the tractor seat.

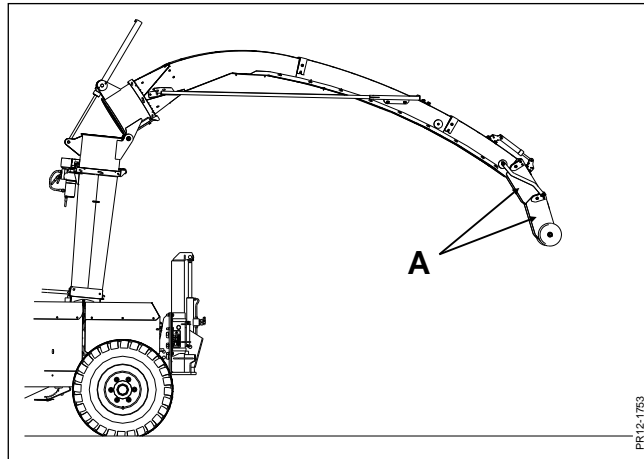


Fig. 4-9

Fig. 4-9 Turn the chute to the rear. Adjust the deflectors **A** to the middle of the working area.

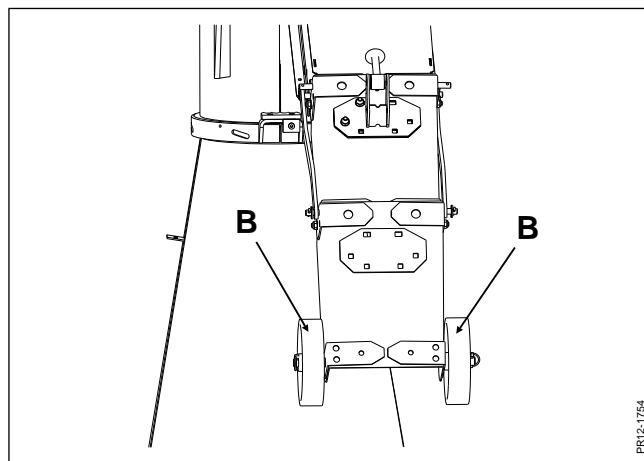


Fig. 4-10

Fig. 4-10 Fold down the chute to about 1.5 m above the ground and mount the wheels **B** with the pin and split pins.

4. ADJUSTMENTS

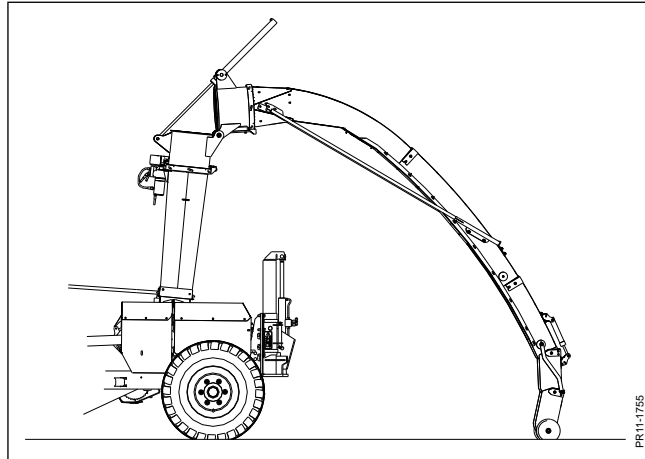


Fig. 4-11

Fig. 4-11 Fold down the chute until the wheels rest on the ground.

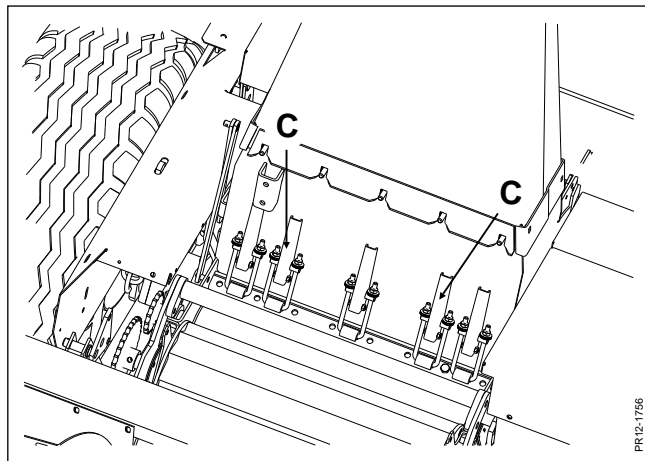


Fig. 4-12

Fig. 4-12 Now the lock clamps **C** at the front of the rotor housing can be opened safely.

4. ADJUSTMENTS

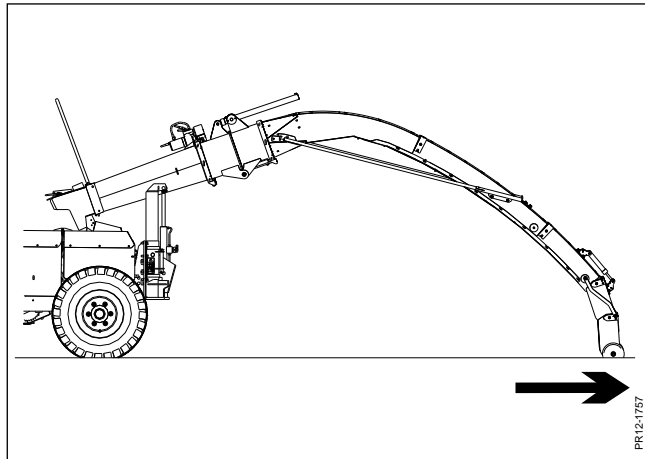


Fig. 4-13

Fig. 4-13 Move the chute cylinder in direction “Chute closed”, whereby the rotor housing is opened.

When closing the rotor housing, follow the same procedure in reverse order.

ROTOR AND ROLLER SECTION

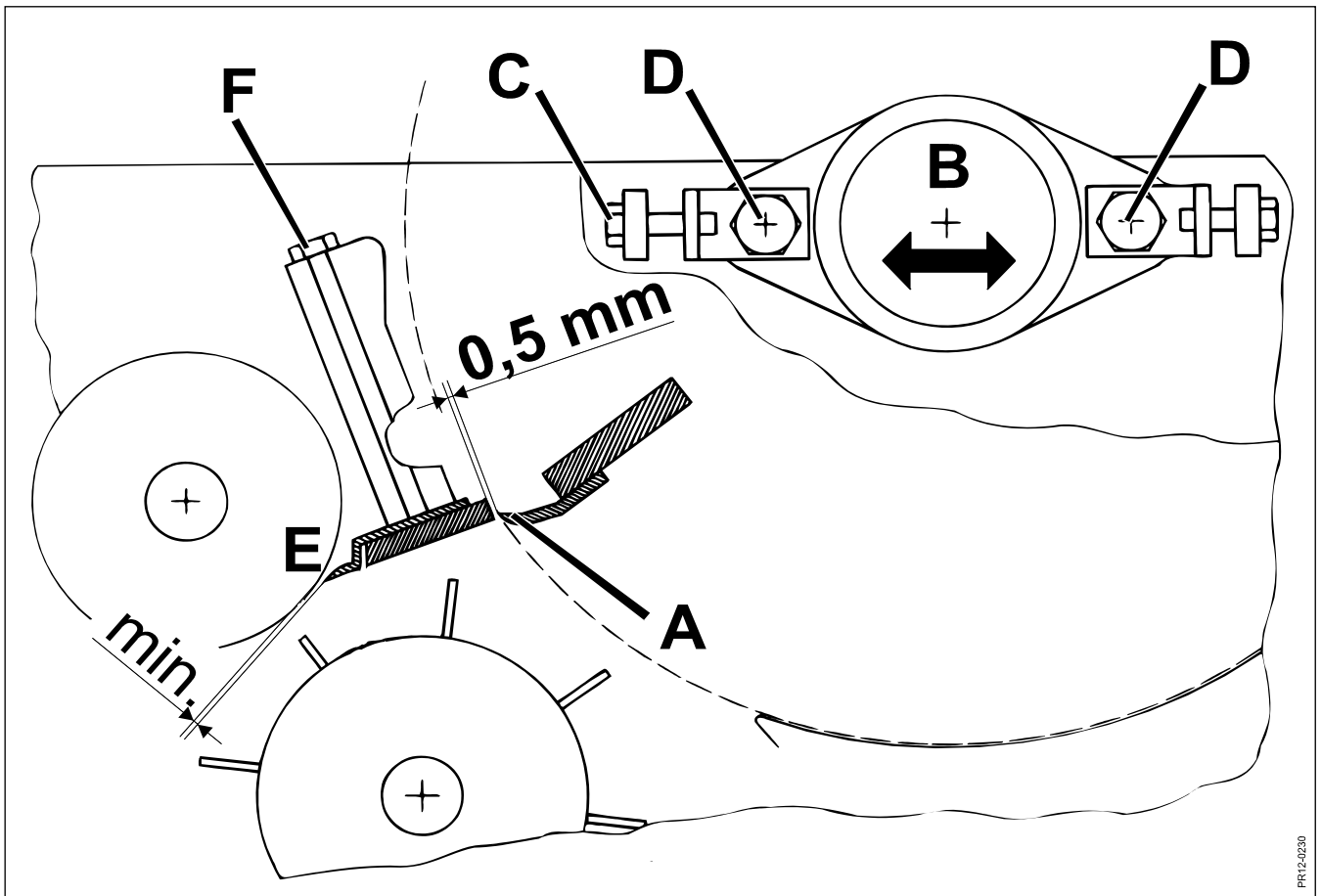


Fig. 4-14

Fig. 4-14 The distance **A** between the blades of the rotor and the shearbar must be checked regularly with the delivered gauge (distance measuring device). You should aim at a distance of 0.5 mm. If it is necessary to adjust the distance, loosen the 2 bearing housings **B** and adjust with the screws **C**. When the distance has been checked, the bolts **D** of the bearing housings are tightened with a torque wrench to 40 kgm (400 Nm).

The machine is equipped with a scraper for the smooth roller **E**. The scraper is mounted together with the reversible shearbar just mentioned.

The scraper is placed as close to the smooth roller **E** as possible without touching it. The distance between the scraper and the smooth roller should be maximum 0.5 mm. Tighten the bolts **F** with a torque wrench to 10-12 kgm (100-120 Nm). **Wrong adjustment of the scraper may result in overheating of the smooth roller and operational stoppage.**

4. ADJUSTMENTS

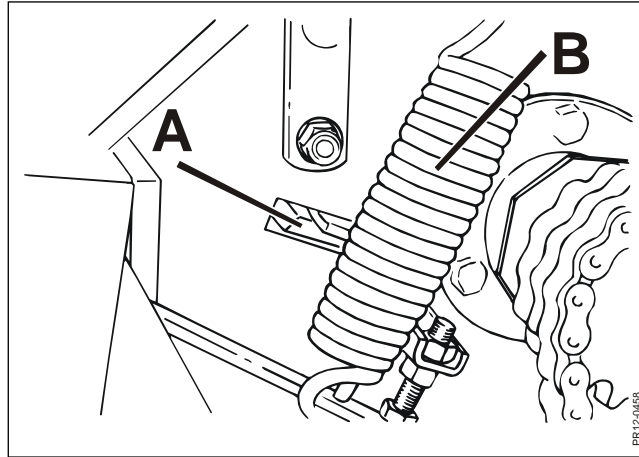


Fig. 4-15

Fig. 4-15 The scraper is dismantled by removing the screws **F** (on fig. 4-14), which also secure the shearbar, after which scraper and shearbar can be pulled out of the opening **A** in the rotor housing. The spring **B** for the serrated roller must be loosened or dismantled to get enough space.

If the shearbar has been worn, it can be reversed for a new sharp edge.

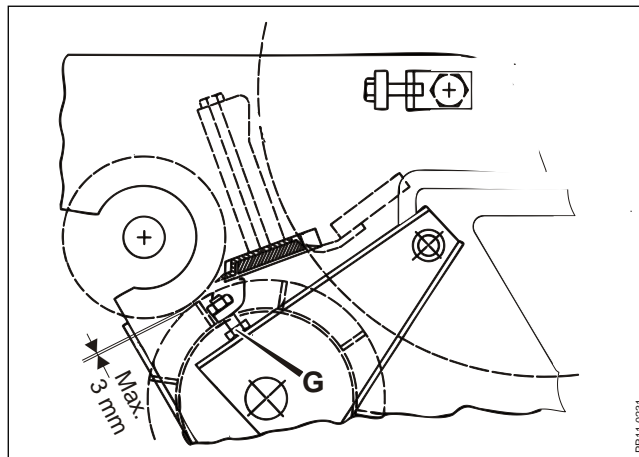


Fig. 4-16

Fig. 4-16 The distance between the smooth roller and the serrated roller should be maximum 3 mm. Adjustment is made with the bolts **G** at both sides of the rotor housing.

4. ADJUSTMENTS

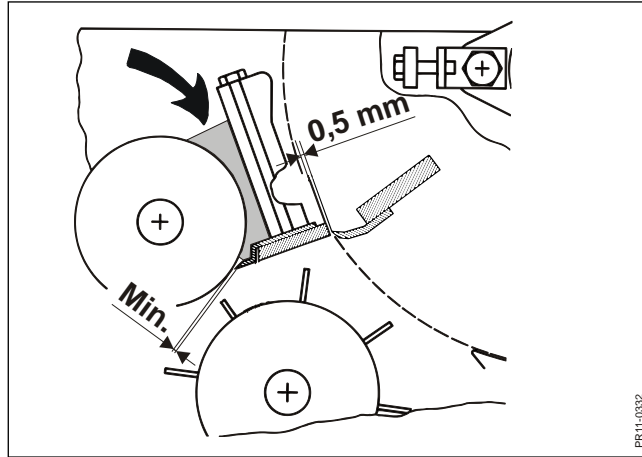


Fig. 4-17

Fig. 4-17 Under some conditions, crop substance (small particles) can accumulate in the shaded area and get so compact that this may result in an overloading of the transmission driving the rollers.

Check the area after every 8 hours of operation and remove possible crop residue. Check, and if necessary adjust, the distance between scraper and smooth roller. The checking frequency can be reduced when the operator knows the machine under all conditions.

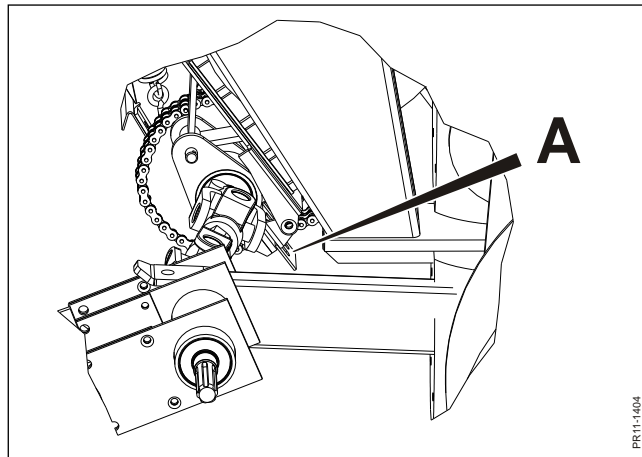


Fig. 4-18

Fig. 4-18 The roller chain for feed intake and pick-up, front left-hand side, should be kept sufficiently tight. Chain adjustment takes place by means of spacers **A**.

4. ADJUSTMENTS

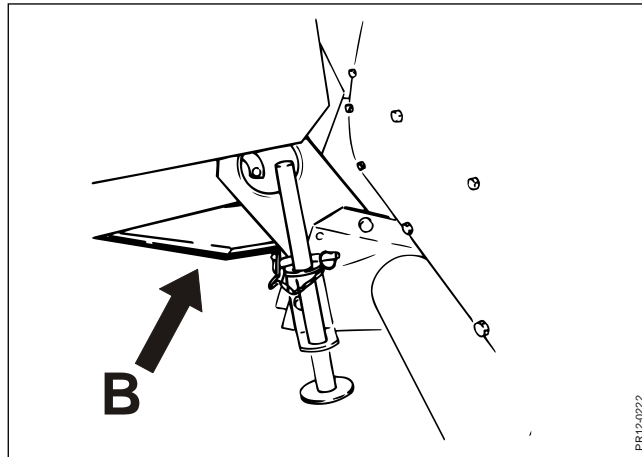


Fig. 4-19

Fig. 4-19 Under the roller section a bottom plate **B** can be mounted as option. This plate can be mounted when working in very dry and/or short crops to avoid waste under the rollers.



IMPORTANT: When working under normal conditions we recommend you to drive without this bottom plate as, otherwise, material can accumulate under the rollers causing reduced capacity and unnecessary overload of the transmission.

However, when driving in a crop where there is an excessive waste under the rollers, the bottom plate should be mounted. Waste material should be removed on a regular basis.

CUTTING LENGTHS

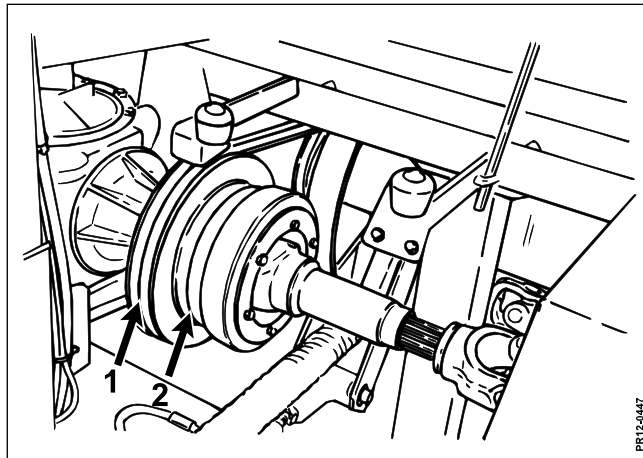


Fig. 4-20

Fig. 4-20 The cutting length is changed by shifting between 2 placements of the V-belts driving the gearbox for the feed rollers.

The figures in the table indicate the theoretical cutting length in mm.

Adjustment	Theoretical cutting length
1	15 mm
2	9 mm

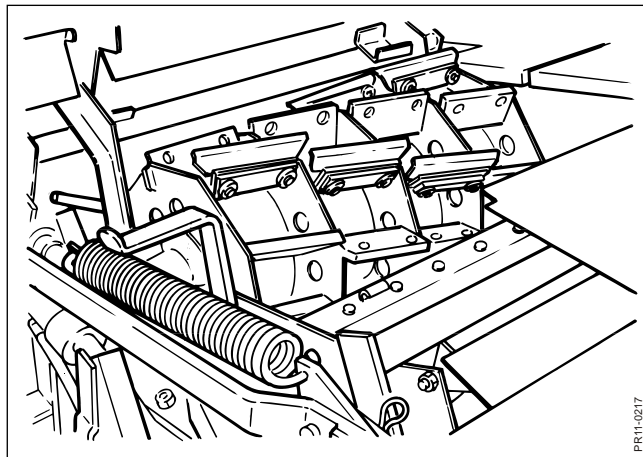


Fig. 4-21

Fig. 4-21 The cutting lengths can be doubled by removing every second row of blades in the rotor.

REPLACEMENT AND ADJUSTMENT OF BLADES

When replacing a single blade the blade must be placed at the same distance to the shearbar as the existing blades. To ensure that the rotor is in balance it may be necessary also to replace the opposite blade as a used blade has a different weight compared to a new blade.

Even if there is no visible damage to the blade bolts, they should always be replaced together with the blades as they might have been overloaded.



CAUTION: Check the distance between the blade and the shearbar (0.5 mm) with the supplied gauge before the bolts are tightened.



WARNING: Only use original blade bolts when replacing. Tighten the blade bolts with a torque wrench to 40 kgm or with the supplied spanner using approx. 40 kg leverage.

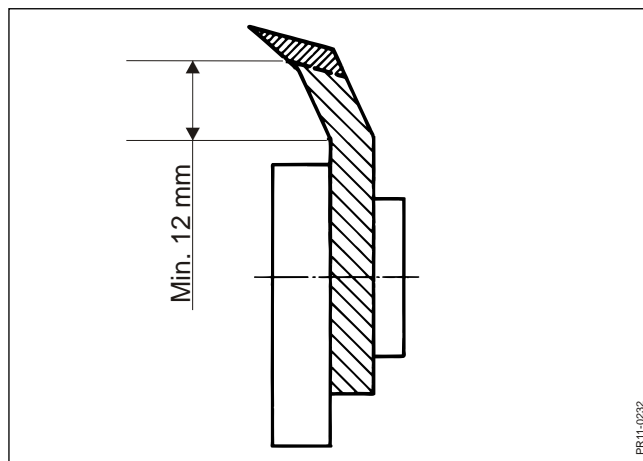


Fig. 4-22

Fig. 4-22 When the blades have been worn max. 8 mm or to the first bend, i.e. approx. 12 mm above the straight piece they must be replaced.



DANGER: When all blades on the rotor have been worn and the rotor adjusted towards the shearbar, it **MUST** be adjusted back again before new blades are mounted. Otherwise there is a risk that the new blades collide with the shearbar when the rotor is turned.

4. ADJUSTMENTS

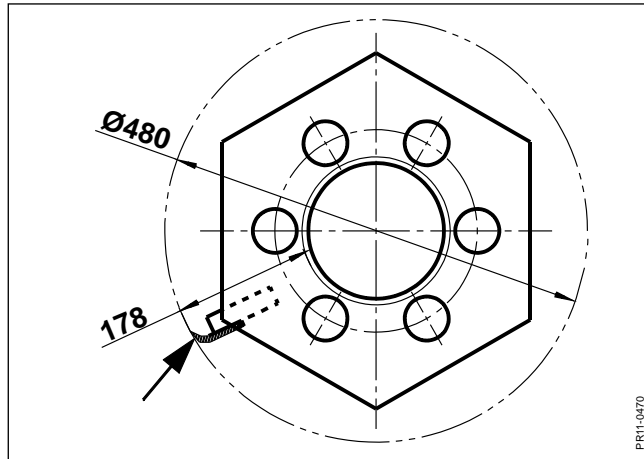


Fig. 4-23

Fig. 4-23 When mounting new blades they must be pulled out so that the outer diameter on the rotor is 480 mm (from rotor tube to blade point = 178mm).

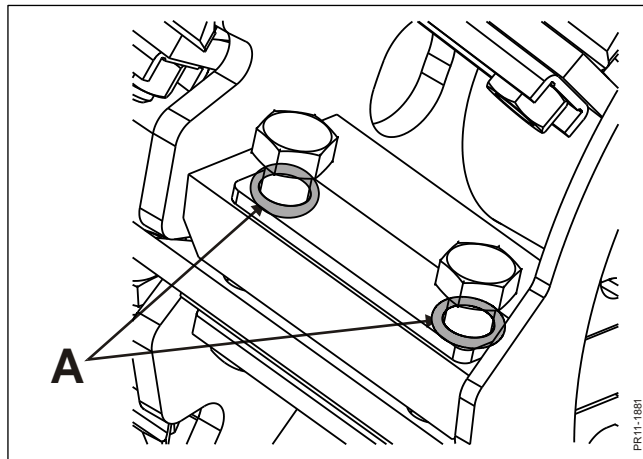


Fig. 4-24

Fig. 4-24 When replacing blade bolts, it is important to ensure that the area **A** under the bolt heads is greased.

GRINDING

Adjustment of the PTO drive shaft for the rotor to or from grinding position, respectively, may only take place **when the tractor and the machine have been stopped and the rotor has come to a complete standstill**. The rotor may only rotate when the grinding device is in grinding position.

Check before grinding:

- that the grindstone is undamaged.
- that the device is easily sliding back and forth.
- that the device is parallel with the rotor.

The grinding device is correctly adjusted from the factory and therefore there is normally no need for adjustment, but if it has been dismantled adjustment can be made at the oblong holes of the lateral guides. The bolts must be tightened firmly after the adjustment.

The stone is fed by turning the handle.

Normally you should grind the blades once a day – but avoid too much grinding since it will reduce the life of the blades.



CAUTION:

Protect your eyes – always use safety glasses when grinding.
The guard above the grinding device must be closed while grinding.

4. ADJUSTMENTS

GRINDING OPERATION

1. Lift the guard above the grinding device.

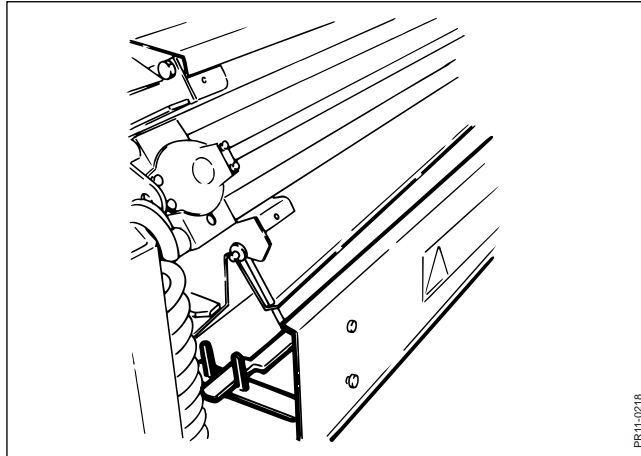


Fig. 4-25

- Fig. 4-25** 2. Lower the guard between the grinding device and the rotor so that there is free space between the device and the rotor.

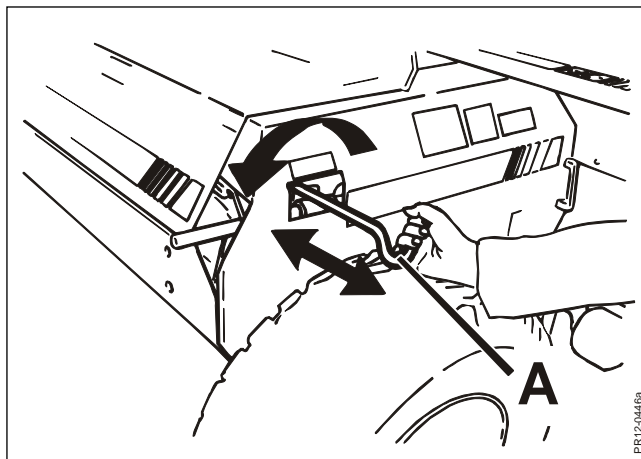


Fig. 4-26

- Fig. 4-26** 3. Adjust the grindstone so that there is 2-3 mm clearance between the stone and the blades by turning the handle **A**.

4. ADJUSTMENTS

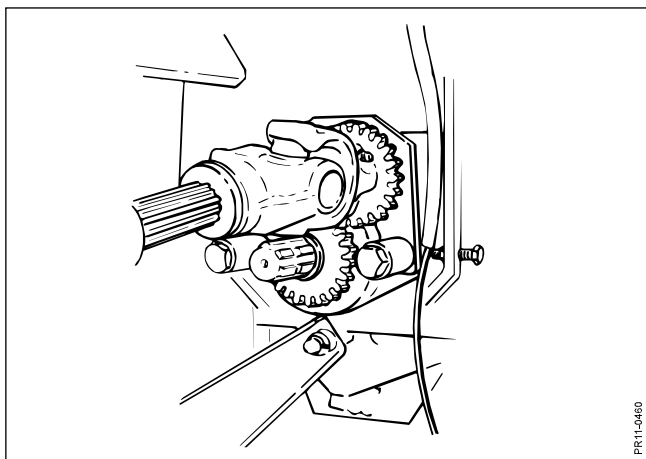


Fig. 4-27

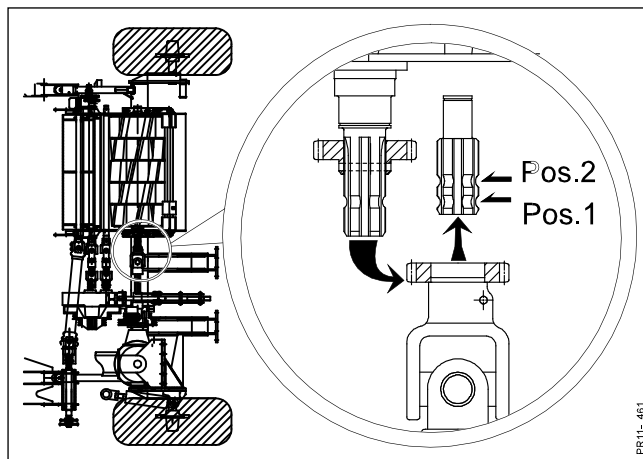


Fig. 4-28

- Fig. 4-27** 4. Mount the PTO drive shaft for the rotor on the free pin on the rotor housing.
- Fig. 4-28** The PTO drive shaft must be fixed at pos. 2 whereby the gear wheels are engaged and the rotor will rotate in the opposite direction.
5. Close all guards.
 6. Start the tractor and keep the rpm at a little above idle speed.
- Fig. 4-26** 7. Feed carefully by turning the handle **A** until the stone touches the blades. Move the stone in a sliding movement across the whole rotor and back again. Feed some more and repeat the movement across the whole width of the rotor so that the blades in the whole width of the rotor are sharpened.
8. Push the handle in after grinding. Stop the tractor and when the rotor has come to a complete stop, the guard between the device and the rotor must be lifted back into its right position. The PTO drive shaft for the rotor must be moved back to the pin for normal direction of rotation of the rotor.



WARNING: REMEMBER, only grind with CLOSED guards.

For safety's sake check the distance between blades and shearbars again with the gauge.

Check wear of the grindstone regularly. If the stone has been worn down to a thickness of 10 mm it must be replaced.

4. ADJUSTMENTS

ROUGH GRINDING

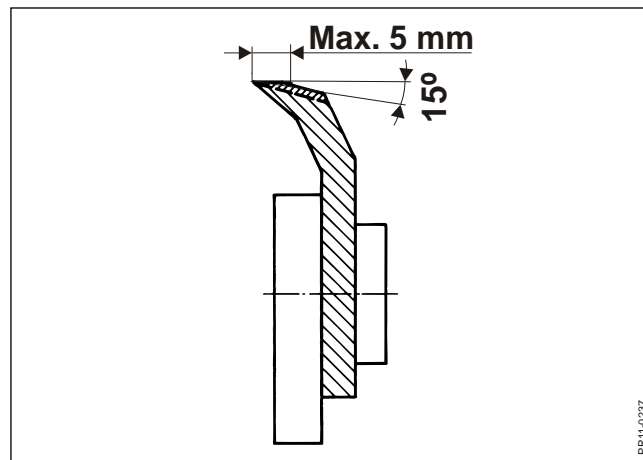


Fig. 4-29

Fig. 4-29 To avoid unnecessary power consumption and excessive wear of the grindstone when working with the harvester, it is necessary to make a rough grinding or adjustment of the blades when the cutting edge is 5 mm wide or more. Grind the rear edge to an angle of approx. 15°.

Rough grinding can be made by means of an angle grinder with the rotor and blades positioned in the machine.



CAUTION: Be careful not to grind down the cutting edge (front edge) of the blades.
Block the rotor with a firm object (a piece of wood or the like) during rough grinding to make sure that the rotor does not move during this operation.

REVERSE

The reverse function **can** be used at full rpm (1000 rpm on the PTO), but **we recommend you to reduce the rpm** to relieve the machine as much as possible and reduce the wear of the rubber disc.

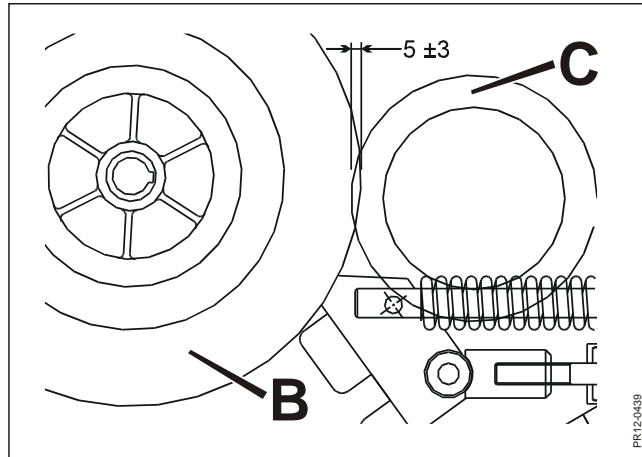


Fig. 4-30

Fig. 4-30 During reverse, the overlap between the steel friction disc and the rubber disc is 5 ± 3 mm. It is not necessary to make any adjustment in case of wear because the cylinder always has the constant pressure which is determined by the pressure relief valve.



CAUTION: Only use the reverse function shortly each time to ensure correct functioning and long life of the rubber disc.

4. ADJUSTMENTS

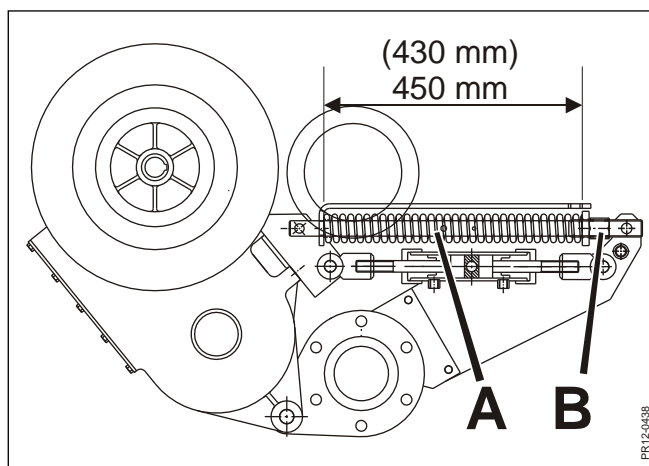


Fig. 4-31

Fig. 4-31 The tightening of the V-belt drive is also adjusted automatically. It is determined by the pressure relief spring **A**. The tightening of the V-belt drive can be changed by turning the nut **B** on the spindle in the pressure relief spring until the spring has the correct length:

- In case of long chopping length, 15 mm, the length must be 450 mm.
- In case of short chopping length, 9 mm, the length must be 430 mm.

The lengths apply to reserve function in “feed in”.



WARNING:

The tightening of the spring should **NOT** be increased, in relation to the indicated lengths, as this may overload the transmission. The V-belt drive works as a belt clutch and slips if the feed intake is overloaded.

With this clutch function the attentive operator can change into a lower gear when the belts slip and thereby avoid blockage in the feed intake section.

NEUTRAL POSITION

The neutral position is between the reverse function where the rubber disc and the friction disc are in mesh and normal working position where the belt drive is tightened by the spring and drives the feed intake.

In neutral position the belt drive for the feed intake section is slackened and it stands still. **This is not a position which should be considered as standstill of the machine, for instance because the blade rotor still rotates.** Moreover, an empty, smooth-running feed intake can still be driven by the slight friction from the slackened belts.



WARNING: Do not approach the machine when the feed intake is in neutral position and the rotor is rotating. Neutral position does not guarantee that the feed intake will not start.

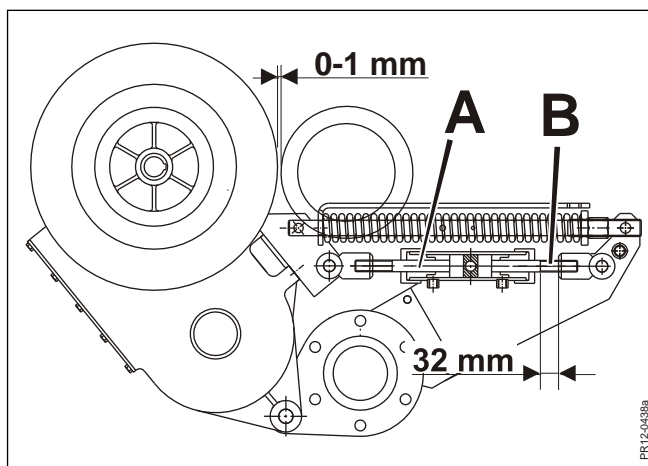


Fig. 4-32

Fig. 4-32 In neutral position, with a new rubber disc, the distance between the rubber disc and the steel friction disc should be approx. 0-1 mm. Adjustment of neutral position takes place by turning the piston rod at **A**. It is not necessary to adjust in case of wear of the rubber disc.

After any dismounting of the cylinder it is important that the factory setting of the free thread length at **B** is 32 mm. The cylinder is without pressure when the reserve is in "feed in".

5. WORKING IN THE FIELD

GENERAL CONDITIONS

Adjust the machine to the maximum cutting length acceptable for the crop in question. This will reduce the stress in the feed intake section and the transmission and increase the possibility of working with the machine continuously without blockages. Be aware that if the cutting length adjustment is too short, it increases the power consumption and also the wear of blades.

Always work with sharp blades and correctly adjusted shearbar.

Under difficult conditions we recommend you to bring spare friction discs for the slip clutch on the auger since these are worn each time the clutch is activated. After some time the power which can be transmitted is reduced so much that the capacity of the machine is lowered and the friction discs must be replaced. When replacing discs remember that they must be of the same number and quality so that the wanted torque can be transmitted and to secure maximum life.

SWATHING BEFORE CHOPPING

If it is possible to influence the swathing made before chopping it is important to emphasise that regular and even swaths are optimal for the subsequent chopping and will spare the tractor driver a lot of trouble.

The machine is equipped with a wide pick-up and if you want to use the capacity of the machine through double swathing, it is desirable to place 2 swaths beside each other within the width of the pick-up instead of raking. Raked swaths are often irregular and the crop tangled which may cause blockages in the auger and/or feed intake section.

Therefore, double swaths are optimal for a regular flow of crop through the machine.

TRANSPORT POSITION

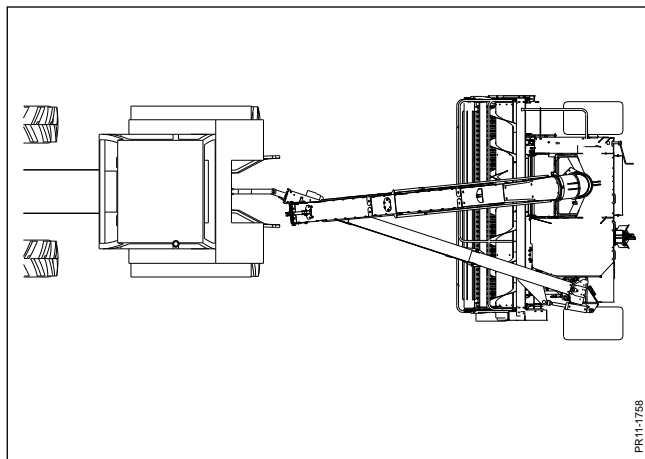


Fig. 5-1

Fig. 5-1 In transport position the machine must be placed straight behind the tractor. The chute must be folded down to rest on the chair on the drawbar.

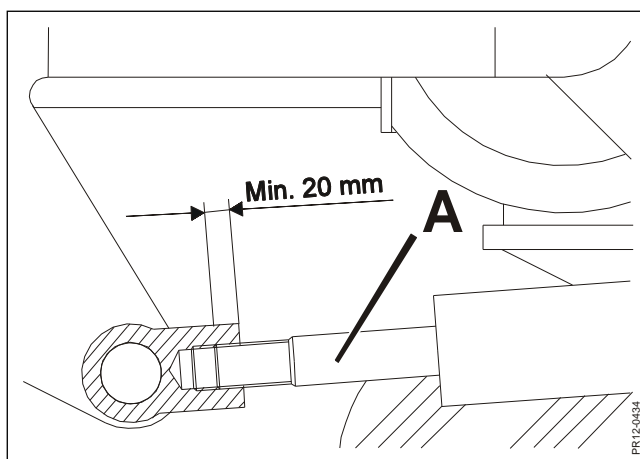


Fig. 5-2

Fig. 5-2 The cylinder **A** for the drawbar can be adjusted in length in order to change the position of the machine behind the tractor.



CAUTION:

There must be minimum 20 mm thread in mesh between the piston rod and the threaded piece.

STARTING IN THE FIELD

Gradually increase to the correct number of rpm. This is 1000 rpm on the PTO during working, therefore start with approx. 1050-1100 rpm unloaded.

Drive slowly into the crop and increase the forward speed as long as the tractor can keep the required number of revolutions of approx. 1000 rpm.

An inexperienced operator should always work with a capacity reserve in the machine to avoid problems with the flow through the machine.



IMPORTANT: Always make sure that the tractor can keep the correct number of revolutions of 1000 rpm on the PTO. This ensures a regular load of the machine and you avoid torque increases (in case of reduced rpm) which wears the safety clutches and the transmission.

To obtain optimal pick-up function it is important that:

- The crop enters the machine regularly and that you, if possible, drive in the opposite direction of the mower conditioner.
- The forward speed is adjusted to the amount of crop and is not so high that blockage is frequent.
- You drive as straight as possible into the crop and are aware of this when turning in the field.

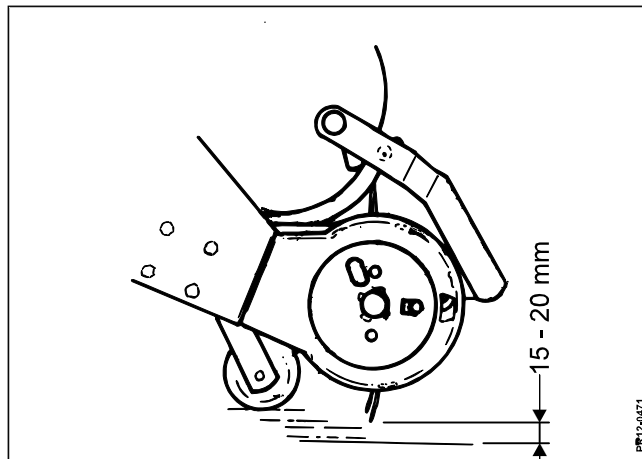


Fig. 5-3

Fig. 5-3 The pick-up is fitted with support rollers of steel which are adjustable in height. From the factory the wheels have been adjusted so that there is 15-20 mm space between the tines and an even and firm ground.

Check regularly that the pick-up tines do not reach further down than necessary to be able to pick up the swath efficiently. If the tines hit the ground too hard they are quickly worn and the drive of the pick-up may be overloaded.

5. WORKING IN THE FIELD

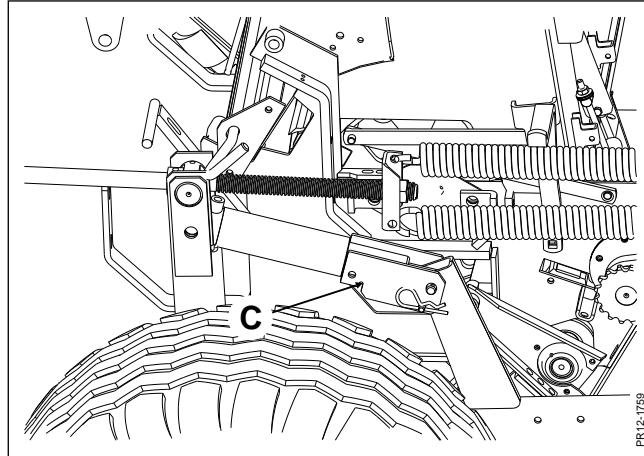


Fig. 5-4

Fig. 5-4 Before making any adjustment, the cylinder stop C must be engaged and secured with pin.

Lift the pick-up completely during transport and when turning. When driving through soft areas in the field, the pick-up can be lifted partly to avoid picking up earth etc. The position of the pick-up is locked, both in the lifted and in the partly lifted position. Only when the pick-up is completely lowered, can the support rollers follow the ground. It takes about 2 seconds to lower the pick-up completely with the joystick activated.

BLOCKAGE IN THE MACHINE

Auger and feed intake section:

In case of blockage in the auger or feed intake section, immediately move the feed intake to neutral position and reduce the number of revolutions.

Hereby the auger and the feed intake stop immediately, and you can obtain an overview of the situation.



DANGER: Do not approach the machine when the feed intake is in neutral position and the rotor is rotating. Neutral position does NOT guarantee that the feed intake will not start.

Now move the reverse system to reverse position at a low number of rpm (the push-button on the control box). Hereby the auger is lifted and the feed intake runs “backwards” whereby the material in the machine is reversed out. We recommend reversing slowly with the machine while the material is pushed out. This creates room for the grass which is reversed out and leaves it as a regular “swath”.

After reversing, increase to normal number of rpm. Set the auger and feed intake section to normal feed in (toggle switch on the control box). It is important to have a normal number of rpm, otherwise the chute or the rotor might be clogged up.

5. WORKING IN THE FIELD

The rotor

In case of blockage in the rotor, immediately change to neutral position and turn off the power transmission. Hereby the auger and the feed intake stop immediately, and you can obtain an overview of the situation.

To enable the feed rollers to pull the material out of the rotor, it must be disconnected during reverse. The procedure is as follows:

- 1) Go to the machine when the power take-off has been disconnected and the engine has stopped.



DANGER: Do not approach the machine until the rotating parts have come to a complete stop and be aware that neutral position does not guarantee that the feed intake will not start.

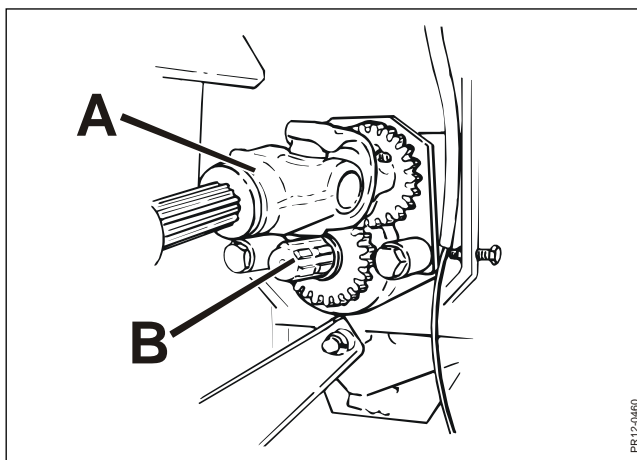


Fig. 5-5

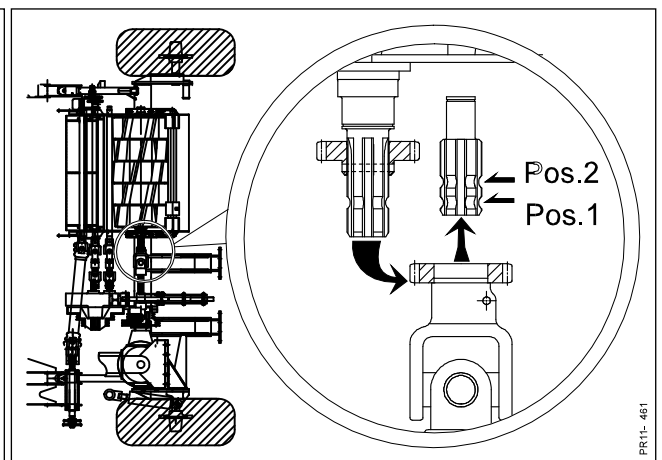


Fig. 5-6

- Fig. 5-5** 2) Move the PTO shaft **A** for the rotor to the alternative pin in **pos. 1** where the gear wheels are not in mesh. Thereby the rotor is not driven.
- Fig. 5-6**



WARNING: It is important that the PTO shaft is **NOT** moved to **pos. 2**, where the rotor rotates in the opposite direction. This position is only used for grinding.

- 3) Connect the power take-off again at low number of rpm, move the reverse function to reverse position and reverse the material out of the machine.

- Fig. 5-5** 4) After reversing disconnect the power take-off again, and when the rotor has come to a complete stop, move the PTO shaft **A** for the rotor back to the pin **B** for driving the rotor.

- 5) With the reverse function in neutral **it is now normally possible** to "blow" the chopped grass, which is in the rotor housing, out of the chute, unless this is also blocked. In order to "blow the rotor housing empty" it is necessary to increase the number of revolutions to maximum.

- 6) Move the reverse function back to normal feed intake, and the work can be resumed.

AFTER WORK

When you have finished working with the machine, always place the reverse system in neutral position. Hereby the belts on the V-belt drive are slackened.

MISCELLANEOUS

If you use ensiling agents, the safety instructions of these must be observed. It is very important to protect the eyes.

WORKING POSITIONS

The position of the drawbar is adjusted continuously with the hydraulic cylinder. To avoid an obstacle etc. in the field you can easily adjust the position of the drawbar during working since the drawbar is above the pick-up.

With the wide pick-up on the machine it is possible to work with the chopper in several positions in relation to the tractor:

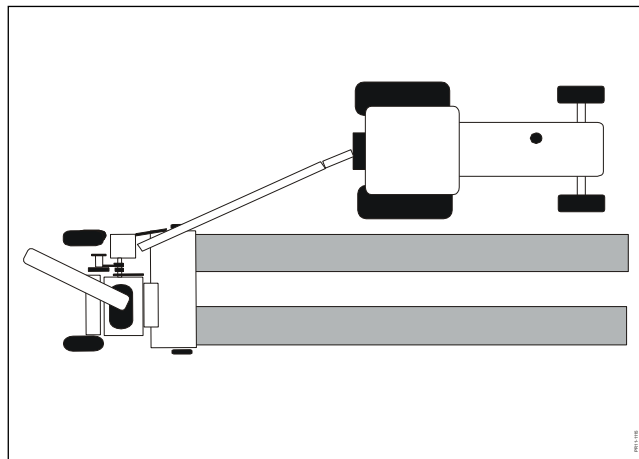


Fig. 5-7

- Fig. 5-7** 1) The chopper picks up grass beside the tractor, working offset. The machine can pick up wide single swaths and double swaths, which are very suitable for the chopper. A good driving technique when loading into a trailer at the right-hand side of the chopper.

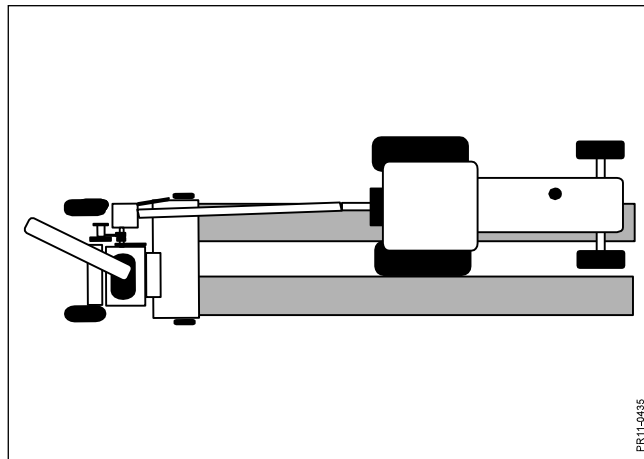


Fig. 5-8

- Fig. 5-8** 2) The chopper now works semi-offset as the tractor drives with one set of wheels between the swaths. This technique results in a straight drive line and is suitable for unloading to both sides. The parallel driving tractor can get closer to the chopper and it is easier to control the loading of the trailer.

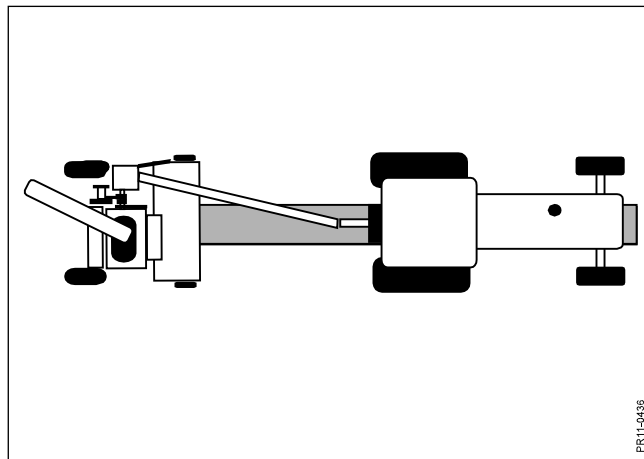


Fig. 5-9

- Fig. 5-9** 3) Here the chopper works in-line as the tractor drives over the swath. This technique is of course very suitable for picking up single swaths as you avoid that the tractor drives on the crop. The technique is still suitable for unloading to both sides and brings the tractors close to each other.



CAUTION:

The PTO shaft should work with a deviation of maximum 20°. For sharp turns to the right it is therefore recommended that the drawbar is moved to transport position or a position corresponding to working in-line (see Fig. 5-9.)

6. MAINTENANCE

IN GENERAL



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.
Especially the bolts for the blades on the rotor must be retightened carefully.

Torque measurement **M_A** for bolts on the machine (if nothing else stated in this instruction manual).

A 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 24	640	900	1100
M 24x1,5	690	960	1175
M 30	1300	1800	2300

GUARDS

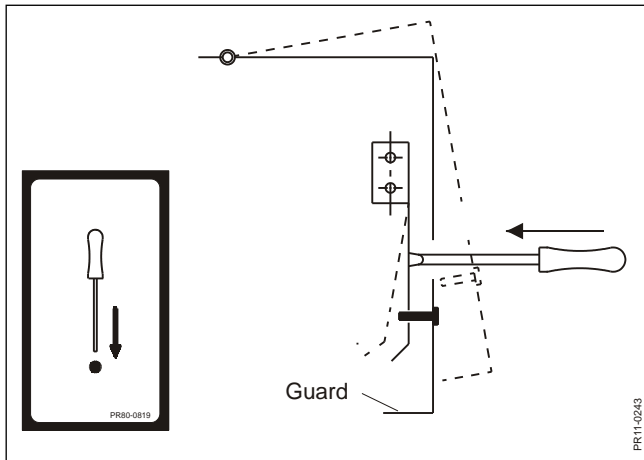


Fig. 6-1

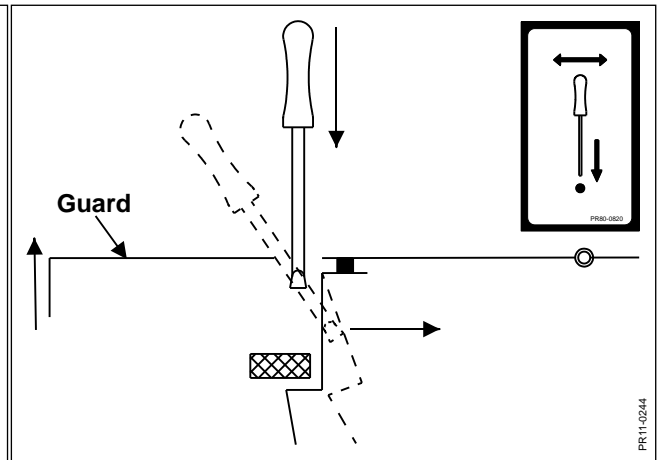


Fig. 6-2

Fig. 6-1 When maintaining the machine you often need to open or remove guards.

Fig. 6-2 For safety reasons all guards have been equipped with a lock. The lock ensures that the guard cannot be opened without tools. There are two different types of lock. Fig. 6-1 and 6-2 show the two locking principles and the corresponding transfers which indicate and illustrate the locks on the machine.

REPLACEMENT OF BLADES

See description for replacement of blades in the rotor and the subsequent adjustment in the section REPLACEMENT AND ADJUSTMENT OF BLADES in chapter 4 "ADJUSTMENTS".

TYRE PRESSURE

FCT 1360 is as standard equipped with wide low profile tyres which provide a good carrying capacity and thus a low ground pressure.

The below table indicates the recommended tyre pressure. The machine is delivered from the factory with these pressures.

FCT 1360	Tyre dimension	Tyre pressure [bar]
Machine, standard	19.0/45-17/10	2.25
Machine, option	14.0/65-16/10	2.80
Rubber wheels for pick-up, optional equipment	3.50-6/4	3.00

A reduced tyre pressure for the machine can be used in extreme cases when driving in areas where extra large carrying capacity is required (meadows, sandy areas or the like)



CAUTION: Check the tyre pressure regularly and make sure that the wheel-fixing bolts are tightened correctly.

FRICTION CLUTCH

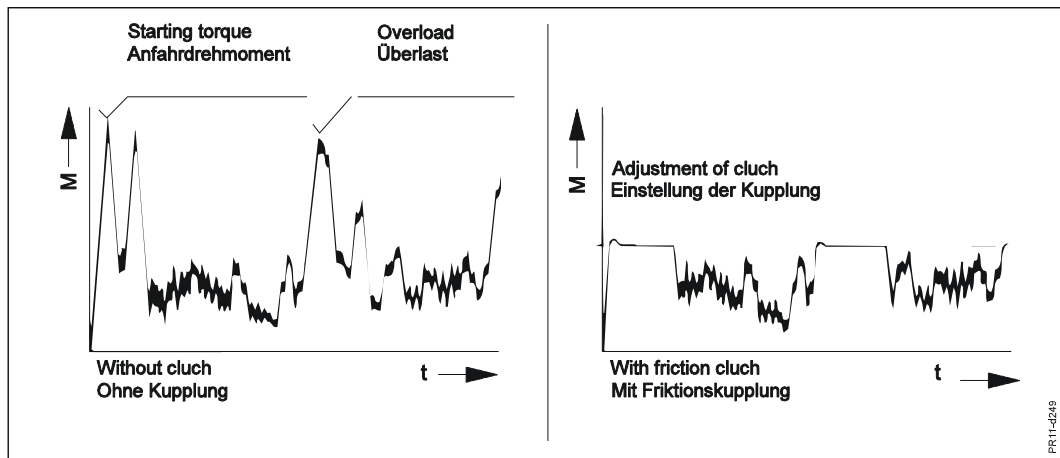


Fig. 6-3

Fig. 6-3 In order to ensure a long life for your tractor and machine, the machine is delivered with a **friction clutch** on the front PTO drive shaft. 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 briefly in function (slips).

In order to ensure that the clutch works as intended it must be “aired” at regular intervals **as dirt and moisture may cause the clutch to get “stuck”**.

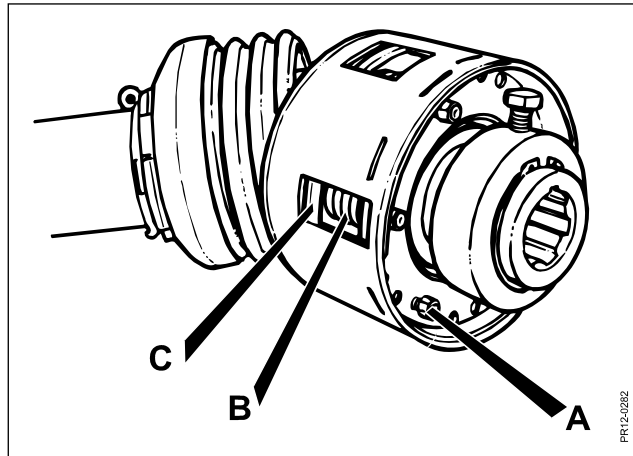


Fig. 6-4

Fig. 6-4 Before the start of a new machine and after a long period of standstill, e.g. winter storage, **the clutch is "aired" in the following way:**

- 1) The six nuts **A** on the flange are tightened. Hereby the springs **B** are compressed so that they do not press on the clutch plates **C** and the clutch can rotate freely.
- 2) **Let the clutch rotate for 30 seconds.** This removes dirt and possible rust on the plates.
- 3) **The nuts A are loosened again** until they are at level with the threads of the bolts, and the springs **B** can press on the clutch plates **C**.

6. MAINTENANCE

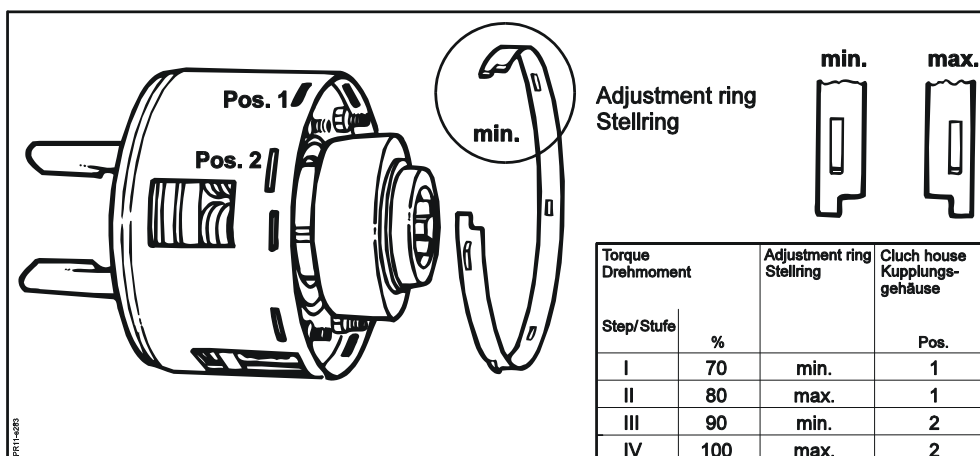


Fig. 6-5

Fig. 6-5 The torque in the friction clutch is adjustable. However, you should not change the factory-set adjustment until you have contacted the dealer or the factory's Service Department.

The friction clutch has 4 different torque adjustments. The adjustment can be changed by turning the adjustment ring **D** and by choosing between 2 different positions in the clutch housing.

1. The adjustment ring has a **minimum** and a **maximum** position.
2. The clutch housing has two different sets of slots **E** in the height into which the adjustment ring **D** can be mounted, **pos. 1** and **pos. 2**.

TORQUE ADJUSTMENT GUIDE

PTO	Torque	Adjustment
1000	2700 Nm	Step I
1000	3000 Nm	Step II
1000	3300 Nm	Step III
1000	3600 Nm	Step IV

From the factory the clutch is delivered with adjustment II, corresponding to 3000 Nm and should not be adjusted higher!

Adjustment of the torque can **only** be made when the nuts **A** (on Fig. 6-4) are tightened. After the adjustment the nuts are loosened again to the end of the bolt.



WARNING: If the clutch is overloaded by slipping for some time, it will get heated and thus 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.

FUSES

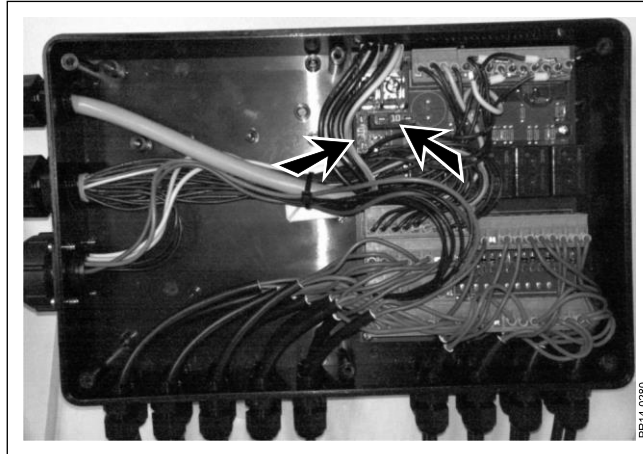


Fig. 6-8

Fig. 6-8 There are two 10A fuses in the control system on the machine. Only replace the fuses by fuses with the same power value. Servicing, except replacement of fuses, must always be performed by an authorised KONGSKILDE dealer / service technician.



WARNING: Never mount fuses with a higher power value. The control system may be damaged. If fuses blow there is an error in the electric system.

MISCELLANEOUS

ROLLERS

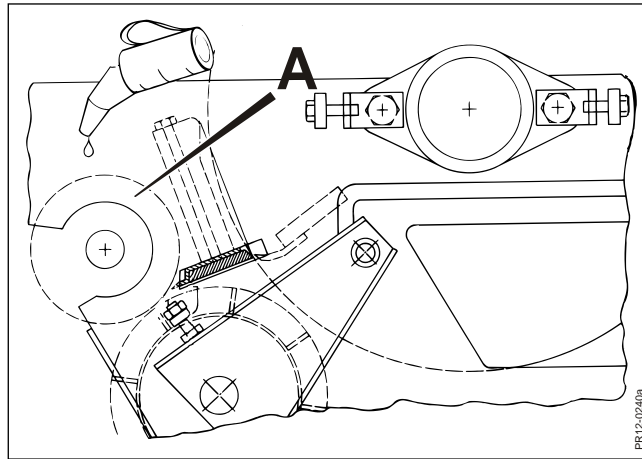


Fig. 6-9

Fig. 6-9 The upper rear feed roller, the smooth roller **A**, should be secured against formation of rust on the surface. If the machine is not in use in a period of more than one day, the whole surface should be lubricated with a thin coat of oil.

CHAIN TIGHTENER FOR PICK-UP AUGER

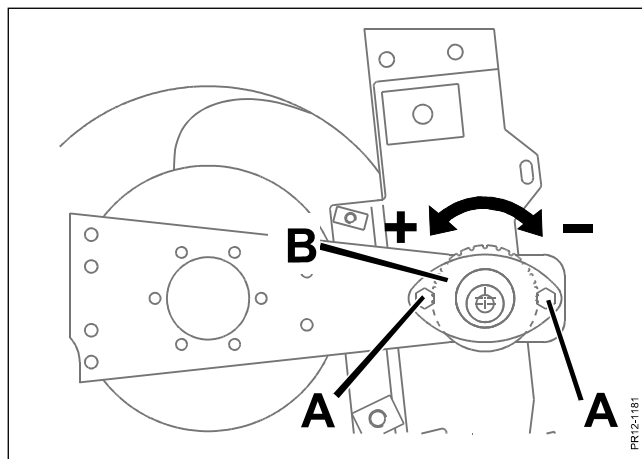


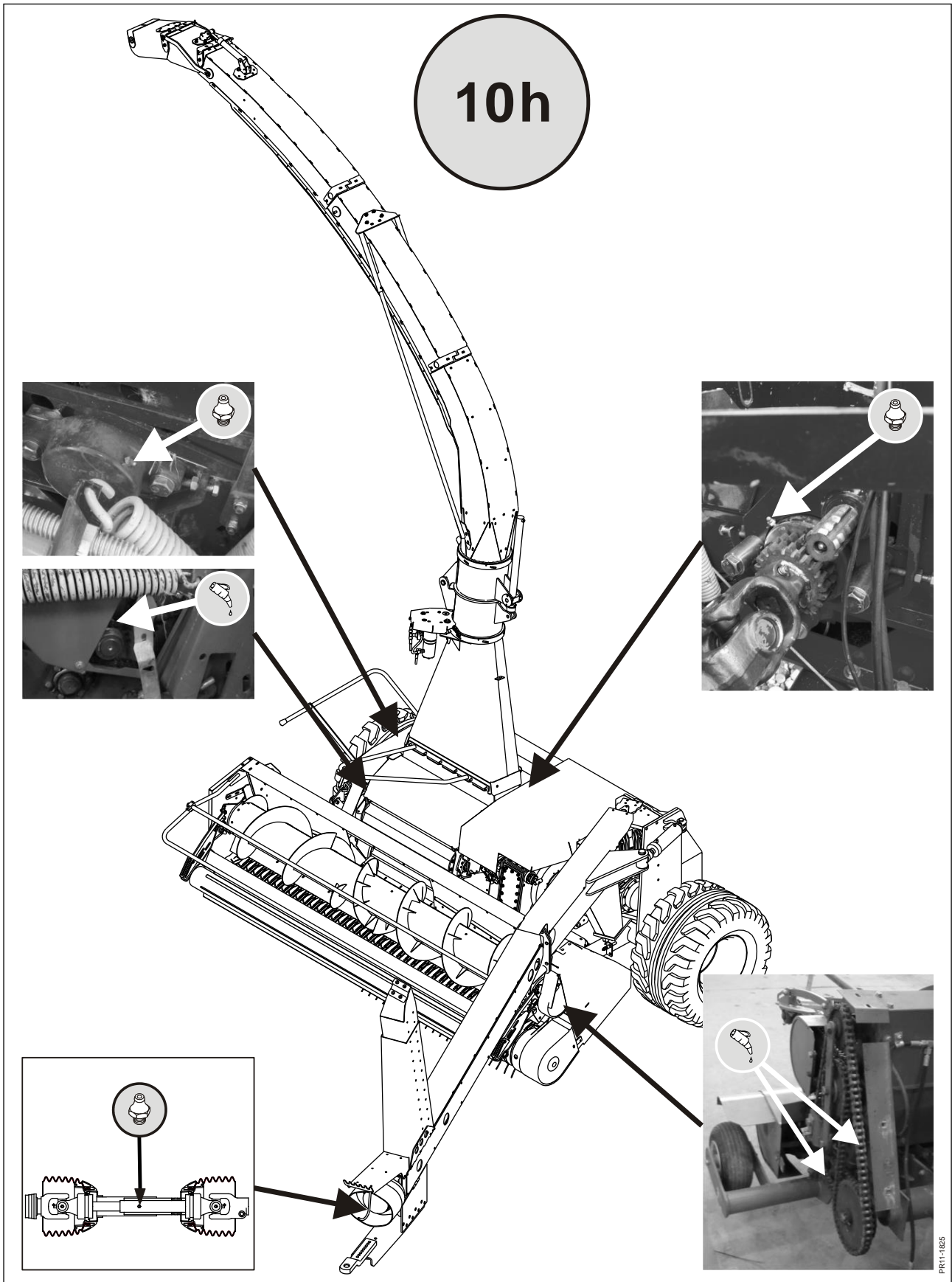
Fig. 6-10

Fig. 6-10 Two bolts **A** are loosened after which the eccentric **B** can be turned with a screwdriver or the like. It is turned in **+** direction for tightening and in **-** direction for loosening.

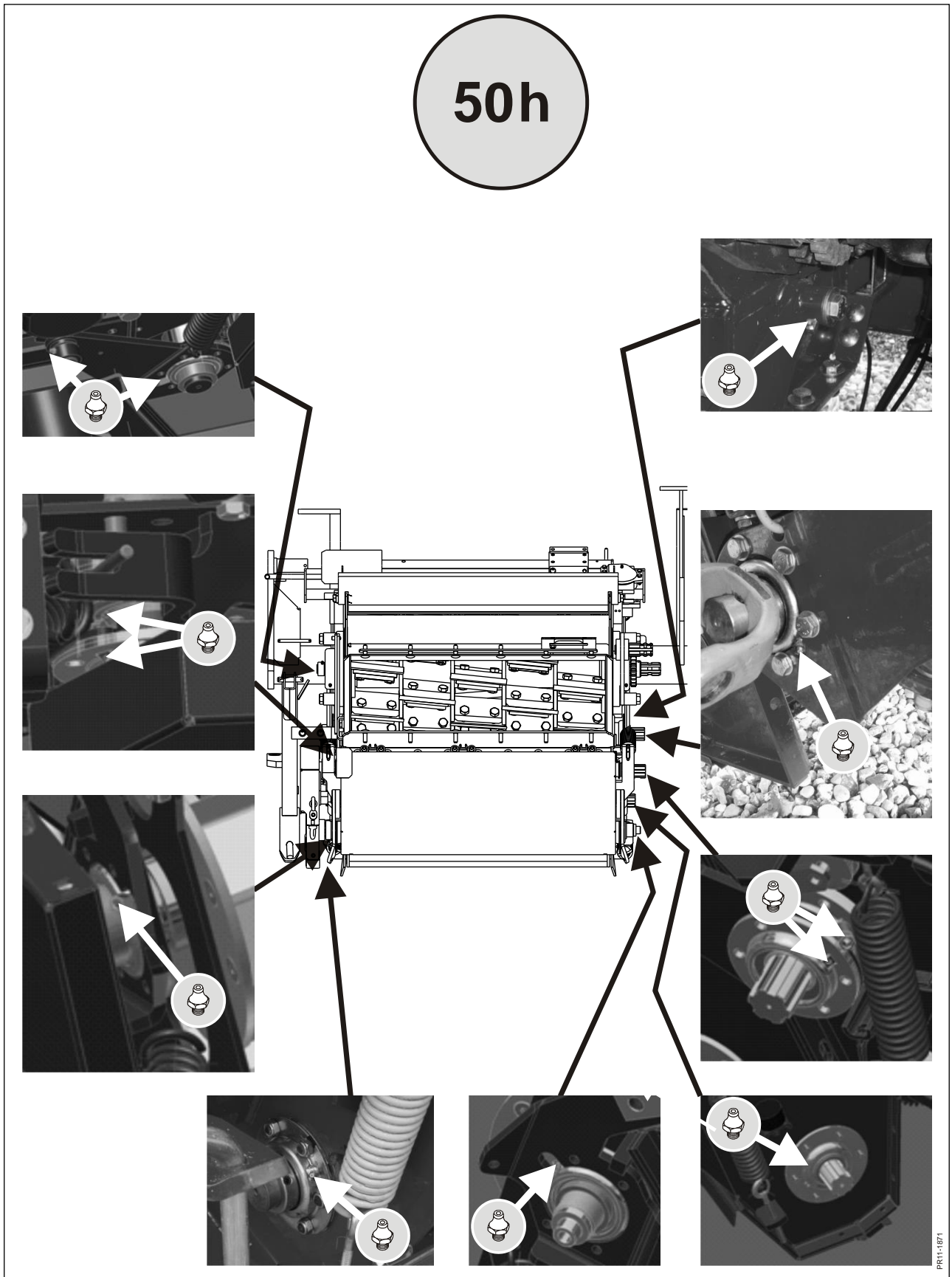


CAUTION: It should always be possible to move the chain at least 20 mm up and down in the middle to make sure that it is not too tight.

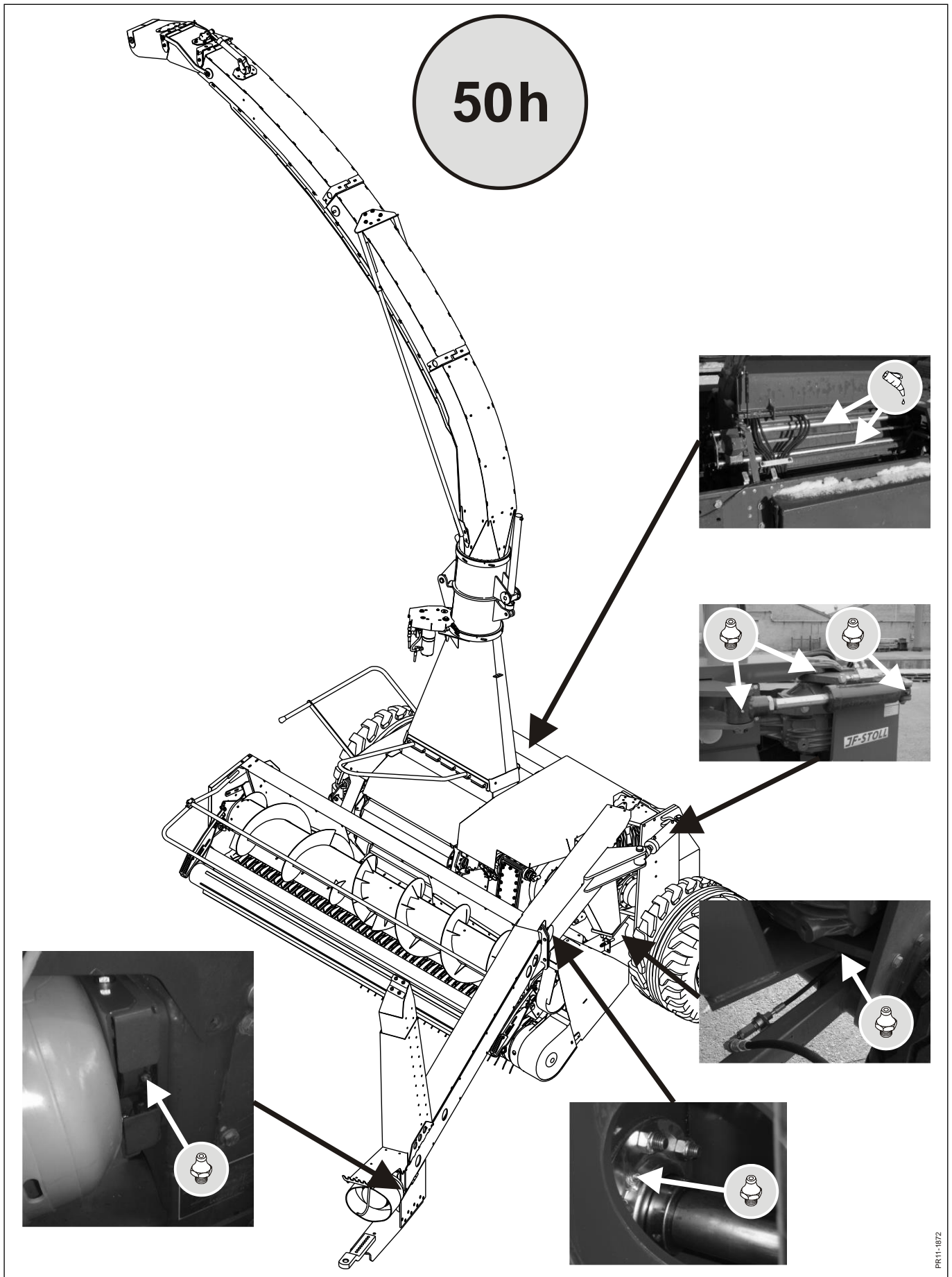
7. GREASING



7. GREASING

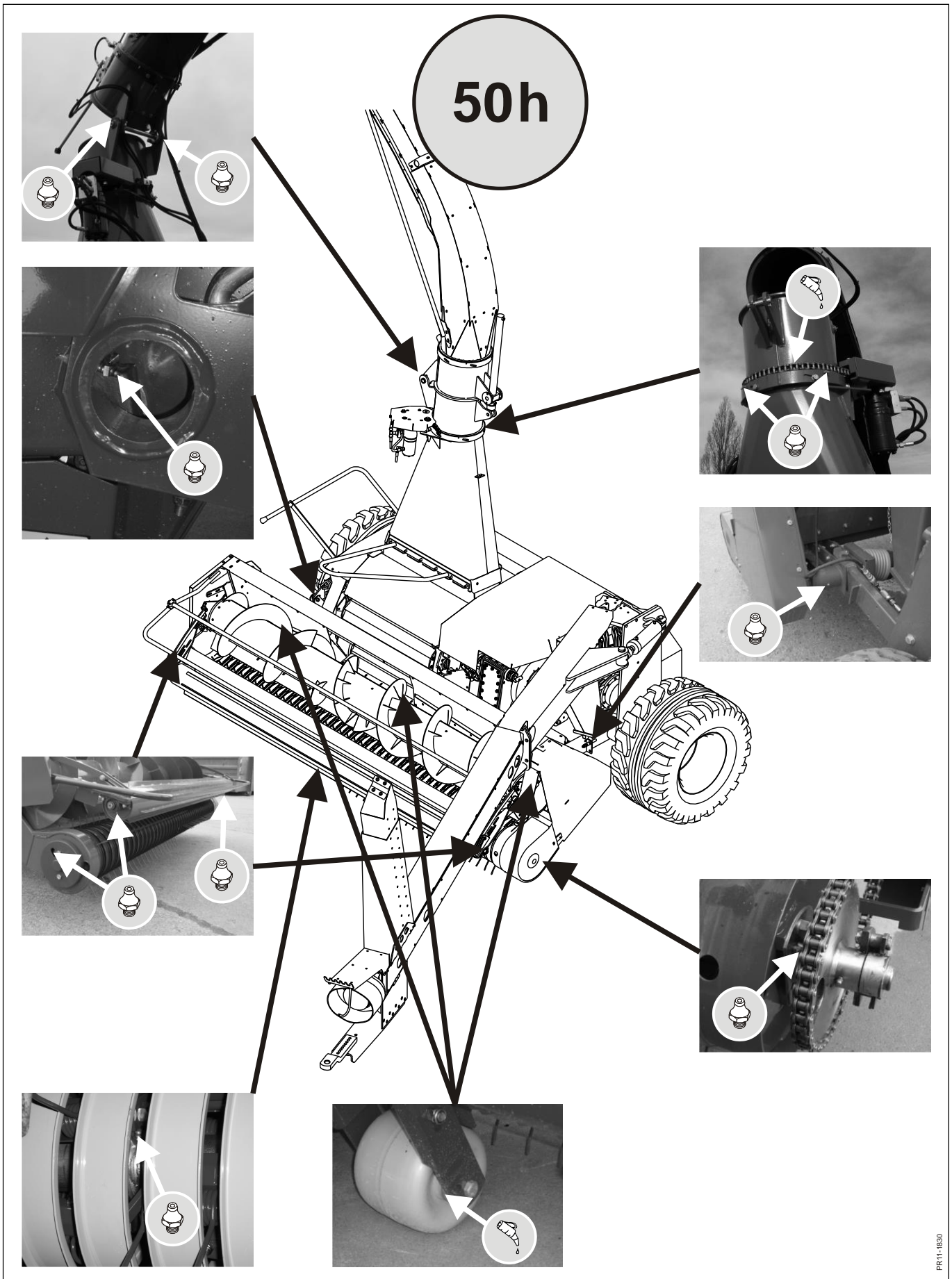


7. GREASING



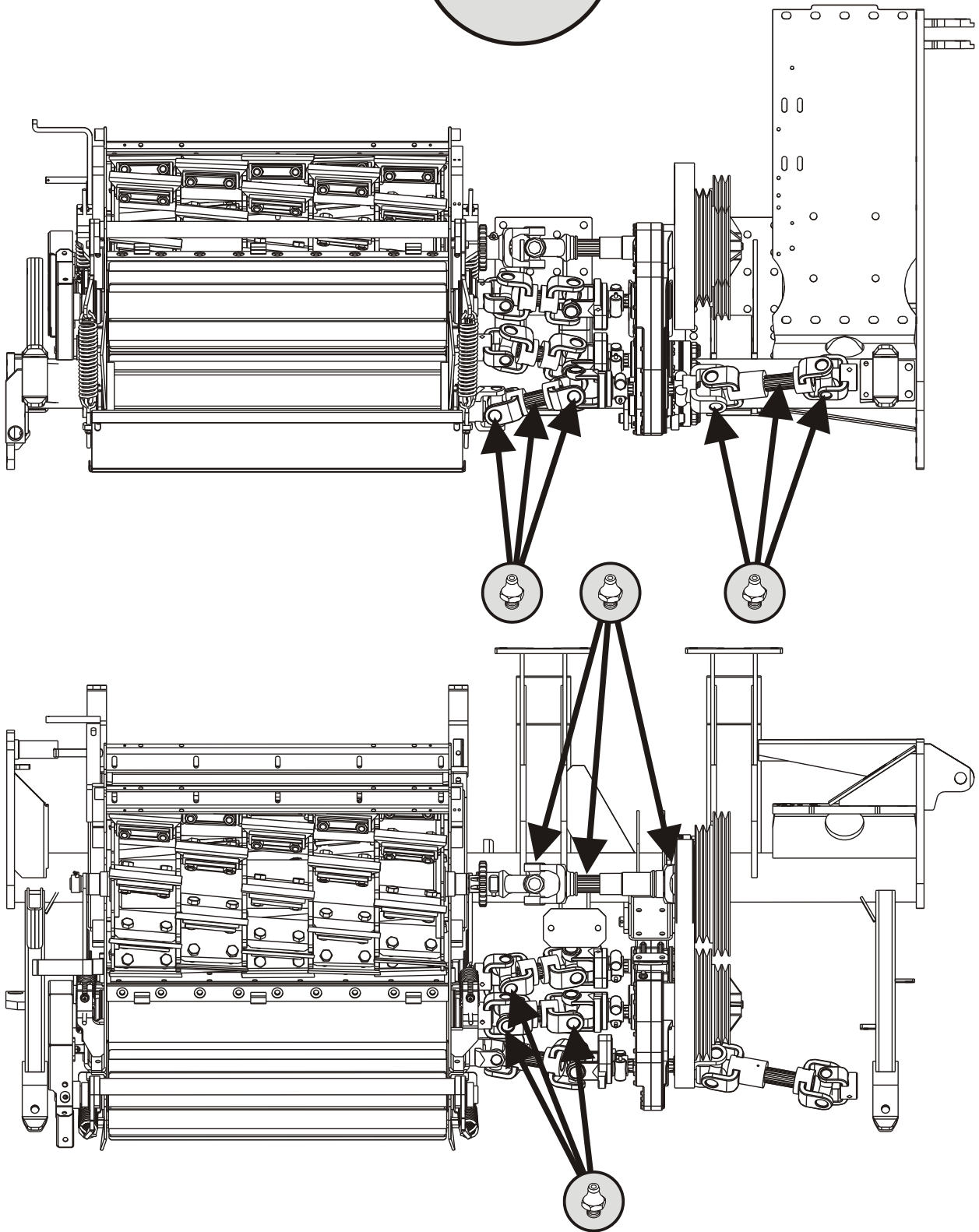
PR11-1872

7. GREASING



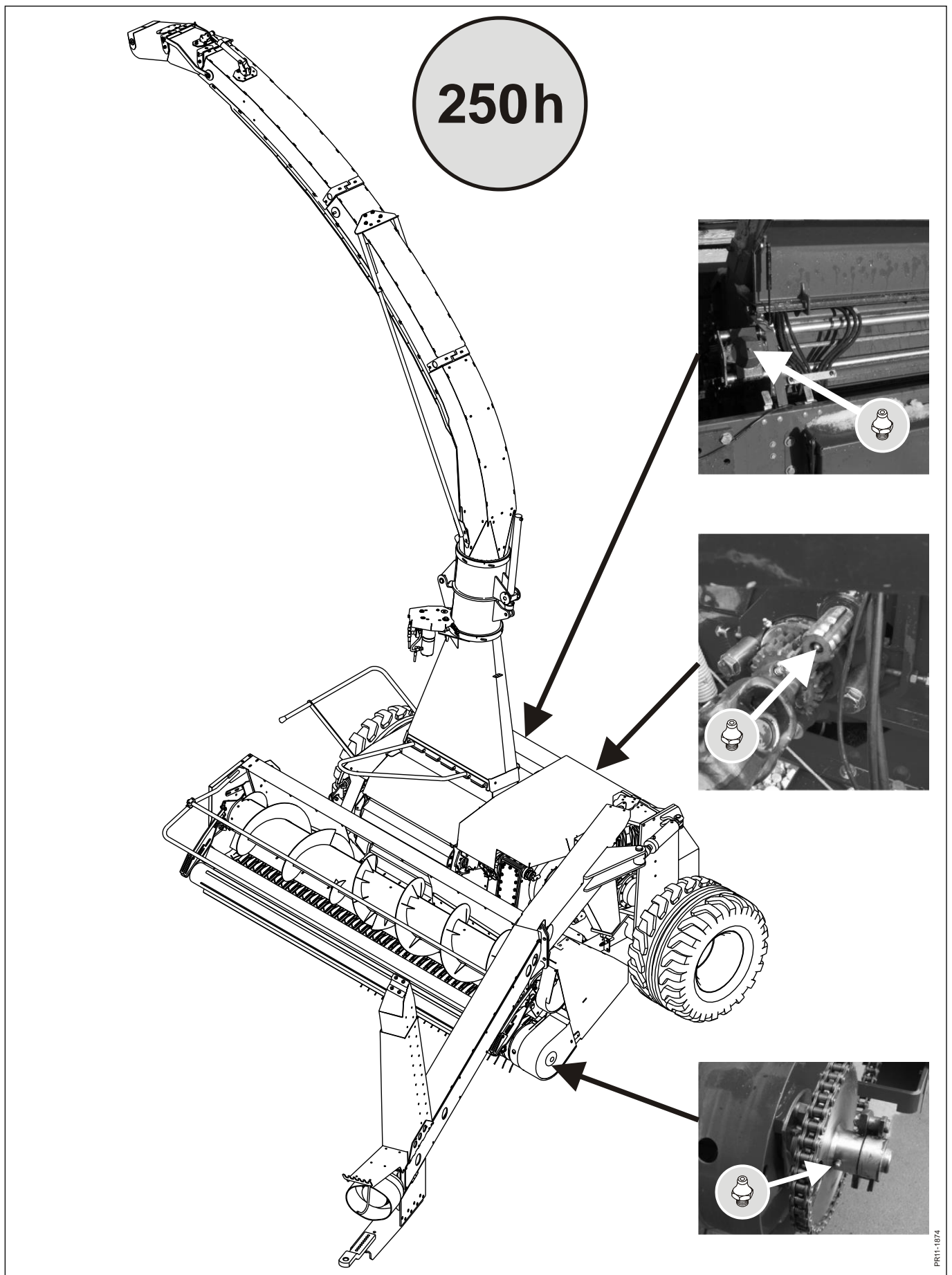
7. GREASING

50h

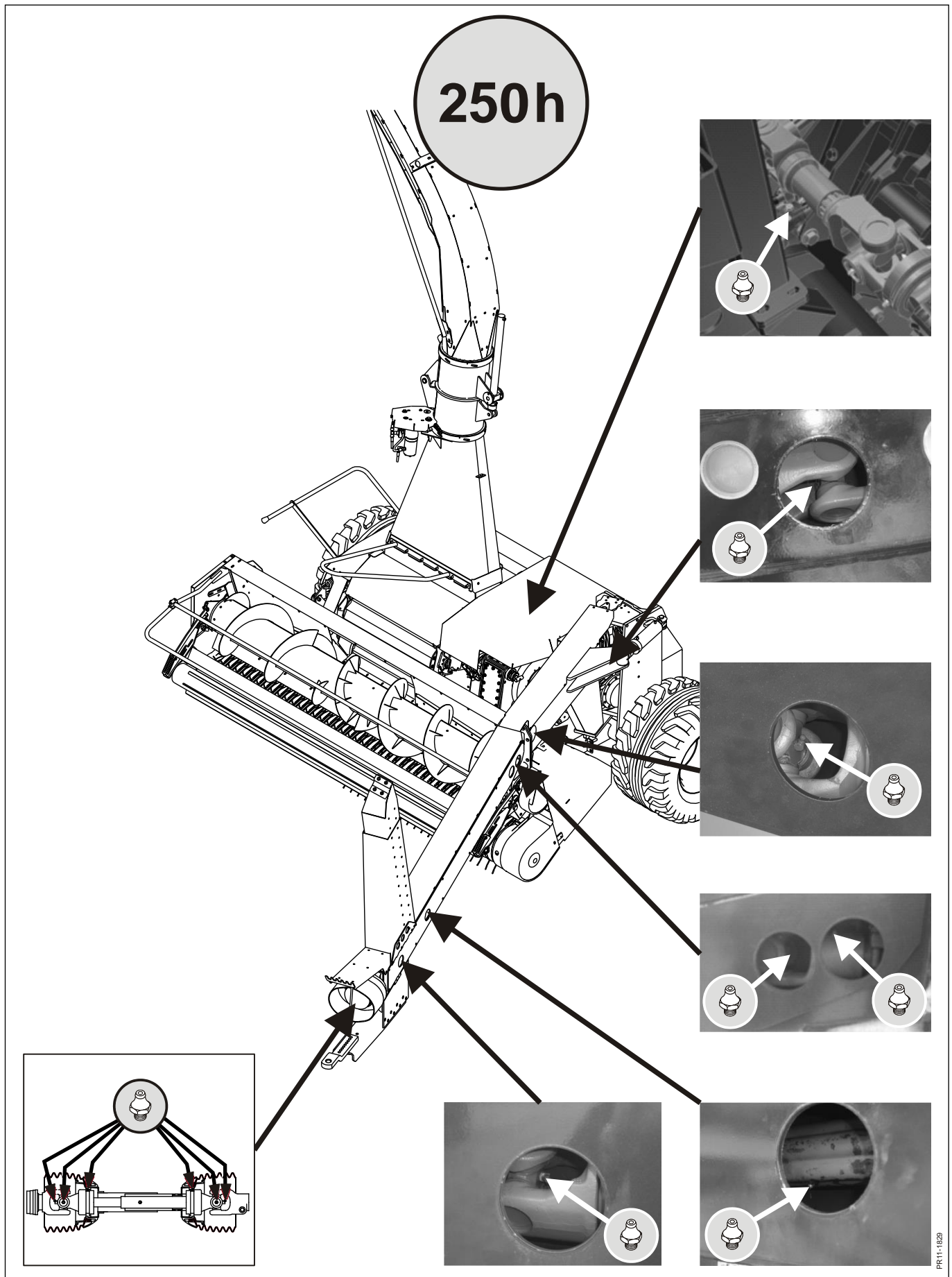


PR11-1873

7. GREASING

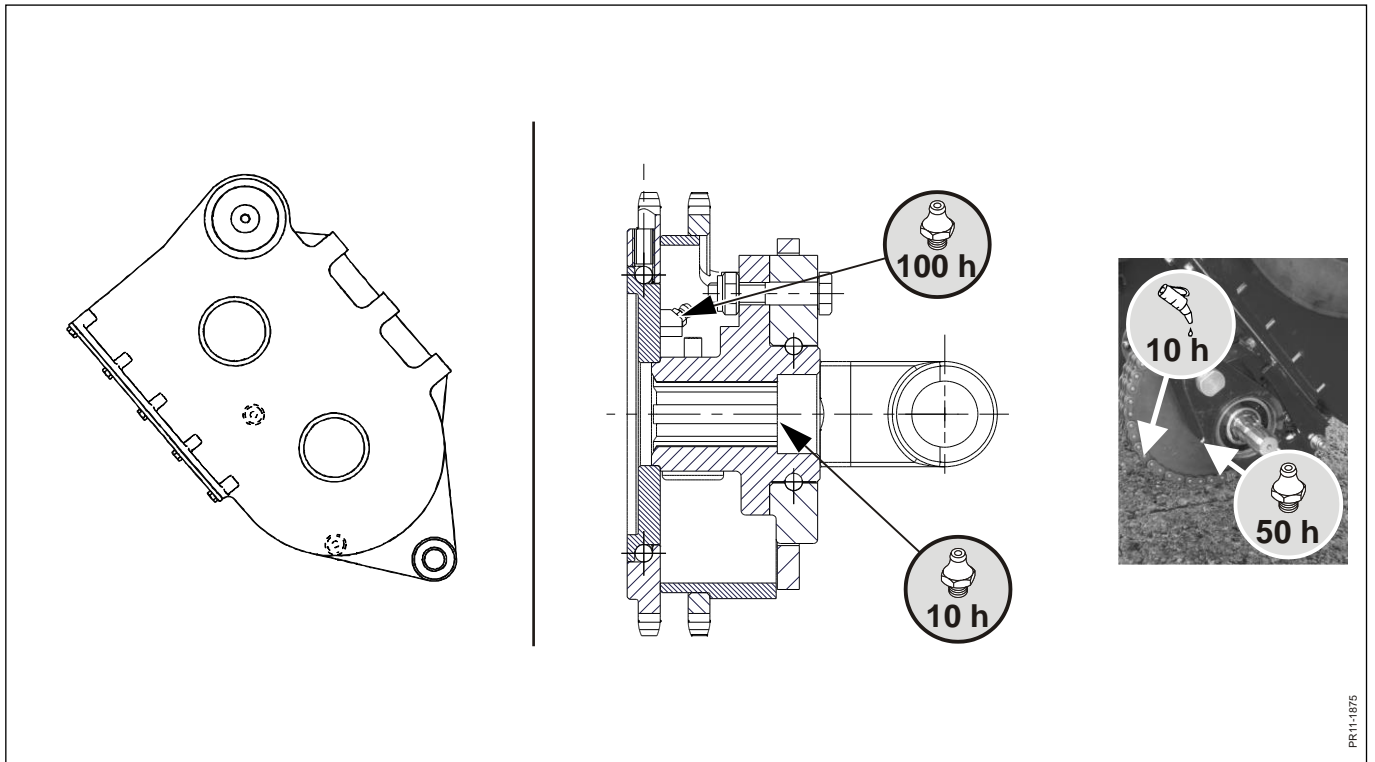


7. GREASING



PR11-1829

7. GREASING



OIL IN GEARBOXES

Swivel gearbox

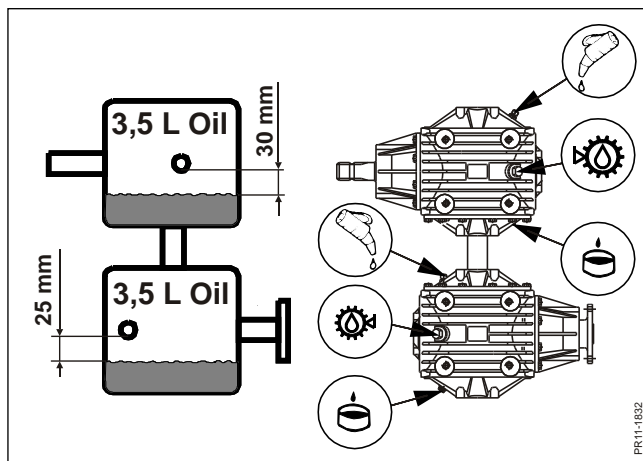


Fig. 7-1

Fig. 7-1

	Oil content	Quality
Swivel gearbox, upper part	3.5 l	85W-140
Swivel gearbox, lower part	3.5 l	85W-140



IMPORTANT: The oil level must in the upper and lower part be 30 and 25 mm lower than the check plugs at the side of the swivel gearbox, as shown on the figure.

- **Oil change:** After the first 10 working hours and then once a year.

7. GREASING

Harvest gear

There are two different types of the harvestgear. Gear 1 has a chaindrive on the exterior

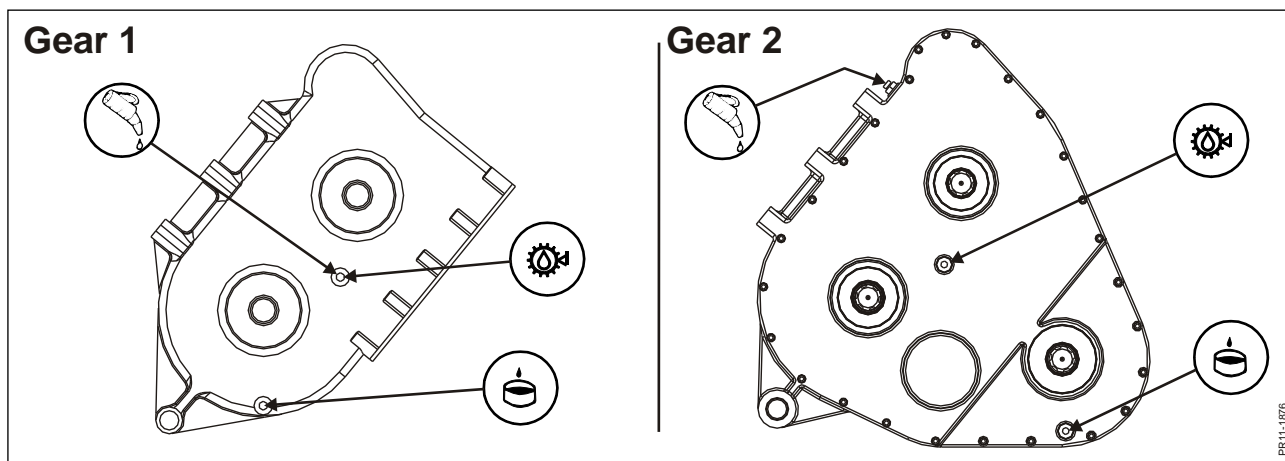


Fig. 7-2

Fig. 7-2

	Oil content	Quality
Harvest gear 1	2,4 l	80W-90
Harvest gear 2	3,5 l	80W-90

The oil level is checked through an inspection glass. The correct position of the gearbox during inspection and filling of oil is neutral position.

- **Oil change:** After the first 10 working hours and then once a year.

8. STORAGE (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.



CAUTION: Be careful when cleaning with a high pressure cleaner. Never spray directly on the bearings and grease all grease points carefully after cleaning so that possible water is pressed out of the bearings.



IMPORTANT: Grease all grease points after cleaning the machine.

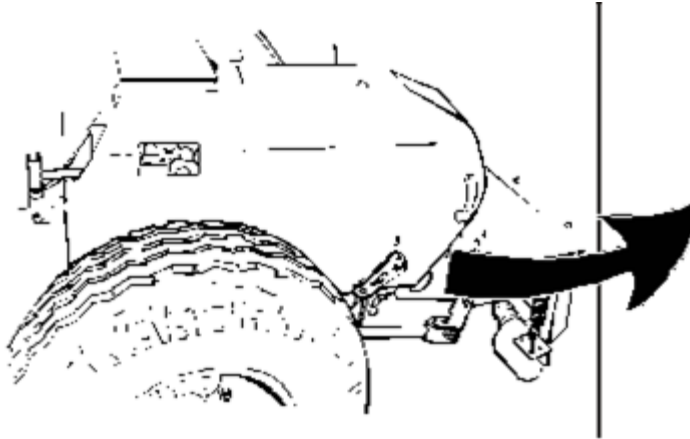
The following points are instructions how to prepare for winter storage.

- 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 thin coat of rust-preventing oil. This is especially important on the parts polished with use.
- Change the oil in the gearboxes.
- Store the machine in a ventilated engine house.
- Lay up the machine to unload the tyres.

9. 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.



CNH INDUSTRIAL		KONGSKILDE	
CNH Industrial Belgium N.V. B8210 Zedelgem Belgium			
Designation			
T/V/V			
Model			
Product			
Identification Number			
Réceptionné le		par la DRIEE Ile de France	
Permissible load :			
Max. total weight	kg	Model year	
Axe 1	kg	Year of construction	
Axe 2	kg		
Axe 3	kg		
Drawbar	kg		
		330090044(01)	
		Made in Poland	
		CE	

PIGB-186X-05

10. MACHINE DISPOSAL

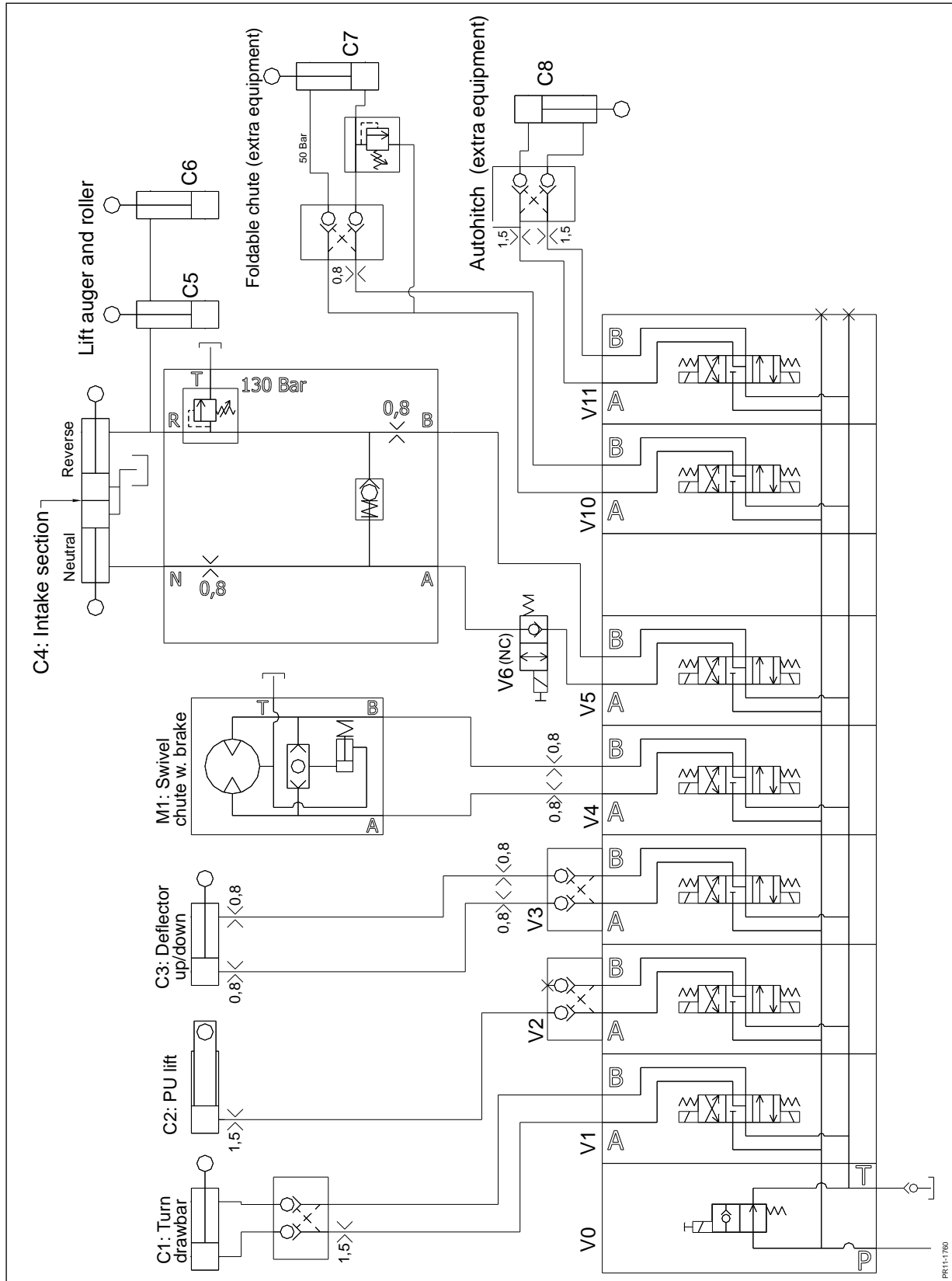
When the machine is worn-out it must be disposed of in a proper way.

Observe the following:

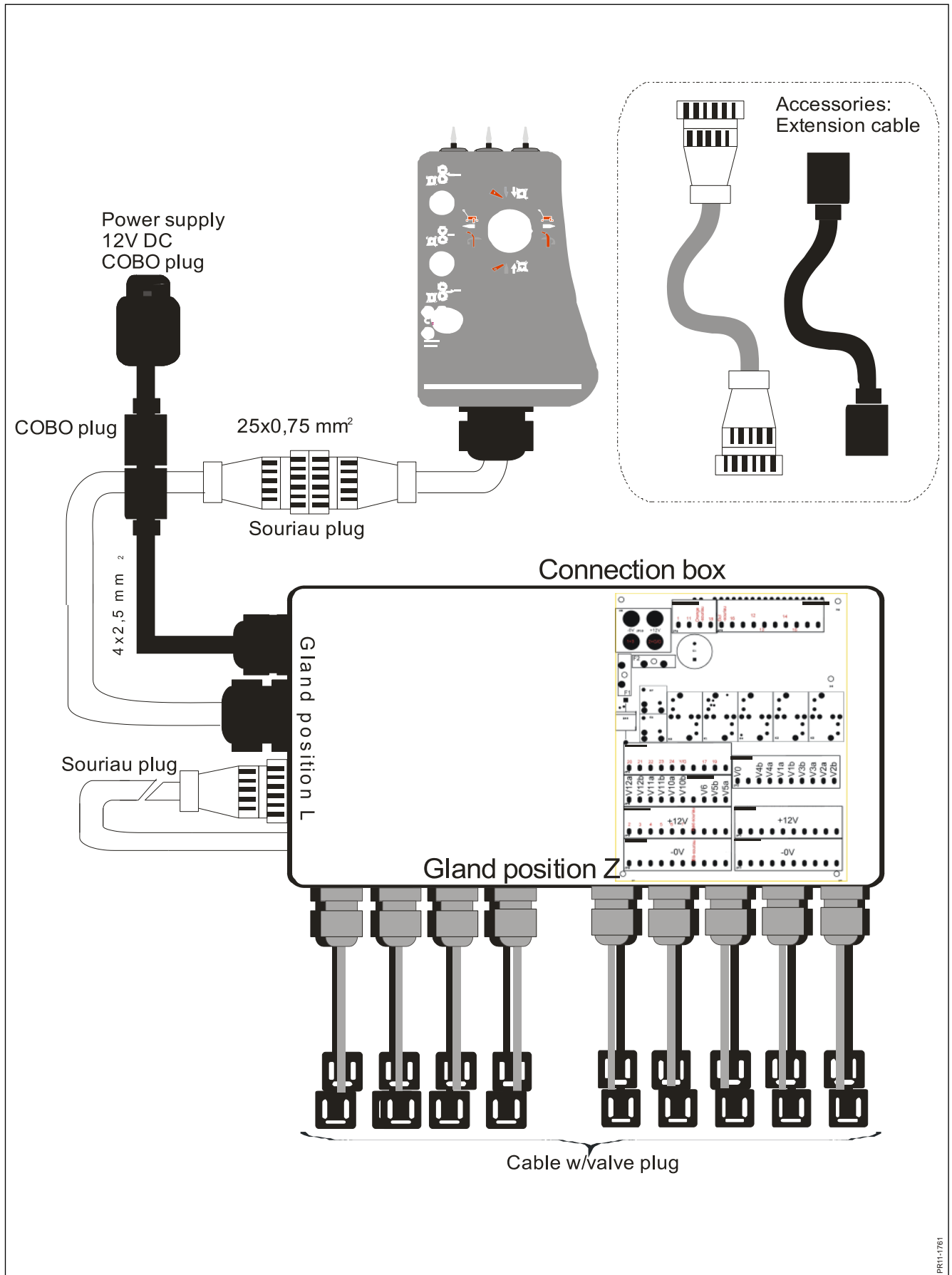
- The machine must **not** be placed somewhere outside.
- Gearboxes, cylinders, and hoses must be emptied of oil. These oils must be handed over to a destruction company.
- Disassemble the machine and separate the individual parts, e.g. PTO drive shafts, tyres, hydraulic components etc.
- Hand over the usable parts to an authorised recycling centre. The large scrapping parts are handed over to an authorised breaker's yard.

11. MISCELLANEOUS

HYDRAULIC DIAGRAM FOR FCT 1360

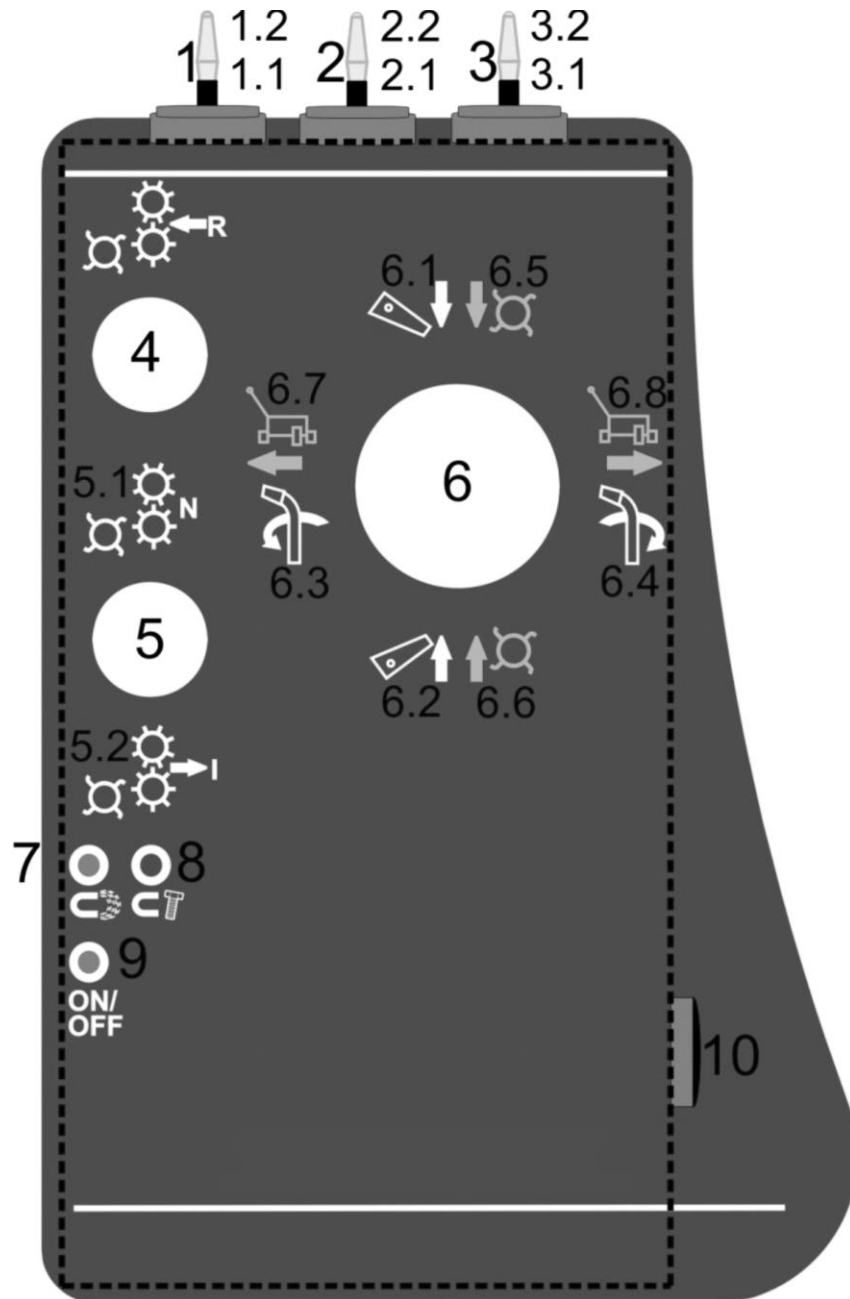


CONTROL SYSTEM



PR11-1761

CONTROL BOX



CONTROL UNIT ON THE MACHINE

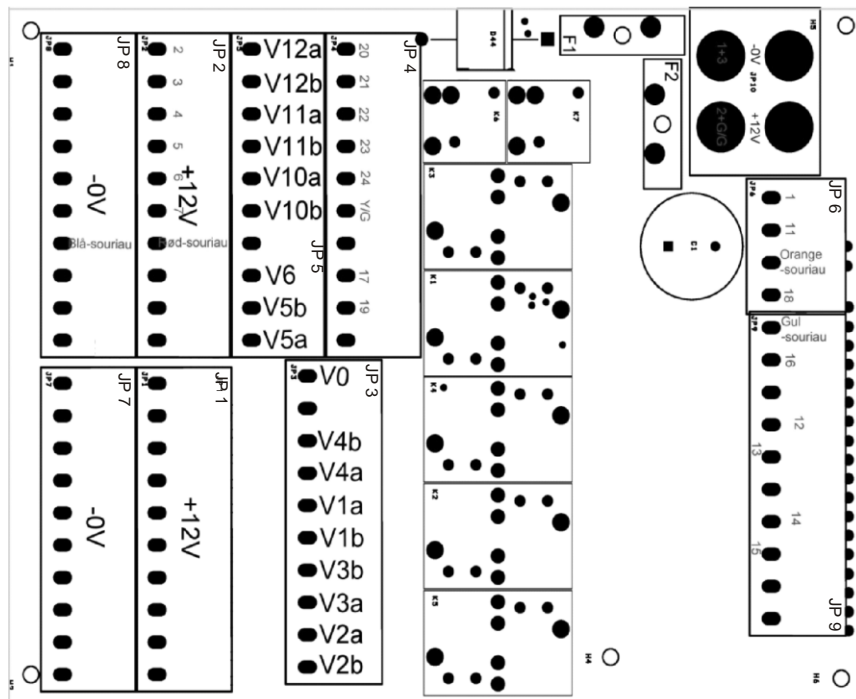


Gland positions - L (left)

2 4 6
Power Multicable Cable MD

Gland positions - Z (bottom)

2 4 6 8 10 12 14 16 18
1 3 5 7 9 11 13 15 17



PR11-1763

CONTROL UNIT ON MACHINE, WIRING SYSTEM

Function category	Functional description	Multi-cable wire n°	Souriau connection	Connection print PCB n°	Signal type			Wire connections			Length (m)	Gland Position	Label	Comment	Prewired (Y/N)
Joystick LED 9	LED Power ON - System Power indicator				In-Dig	In-Ana	Out-D	Out-A	Connection print PCB n°	Signal terminal wire colour	Positive terminal wire colour	Negative terminal wire colour			
Internal power	0 volt power supply for Metal detector (ON/OFF switch via main relay)								JP8_7			Blue		Mounted on joystick PCB	
Internal power	+12 volt power supply Metal detector (ON/OFF switch via main relay)								JP2_7			Red		Souriau plug - pin A	
MD input	V5a input from MD			JP6_3 Orange										Souriau plug - pin B	
MD input	V0 input from MD			JP9_1 Yellow										Double function MD/Onboard - Souriau plug - pin C	
Joystick power	0 volt power supply	1	A						JP6_1					Double function MD/Onboard - Souriau plug - pin D	
Joystick power	+12 volt power supply (main relay)	2	B						JP2_1					Multiple cores to ensure power supply	
Joystick power	+12 volt power supply (main relay)	3	C						JP2_2						
Joystick power	+12 volt power supply (main relay)	4	D						JP2_3						
Joystick power	+12 volt power supply (main relay)	5	E						JP2_4						
Joystick power	+12 volt power supply (main relay)	6	F						JP2_5						
Joystick power	+12 volt power supply (main relay)	7	G						JP2_6						
Joystick Led 7	MD ON Green LED placed in Joystick Cabinet	8	H											Status LED from MD - Souriau plug - pin E	
Joystick Led 8	MD STOP Red LED placed in Joystick Cabinet	9	J											Coverage for LED when delivered w/o MD	
Joystick sw 10	Clutch Guard - Yellow LED placed in Joystick	10	K											Status LED from MD - Souriau plug - pin E	
Joystick sw 10	FGT Onboard ON/OFF (main relay)	11	L											Coverage for LED when delivered w/o MD	
Joystick 6.3 / (6.7)	Joystick Left V4B / (V1A)	12	M	JP6_2			2		JP3_3(6)	Brown		Blue	Z11 / (Z13)	V4B / (V1A)	Supply for JP1 & JP2
Joystick 6.4 / (6.8)	Joystick Right V4A / (V1B)	13	N	JP9_5			2		JP3_4(6)	Brown		Blue	Z12 / (Z17)	V4A / (V1B)	2x0.75mm² with valve connector
Joystick 6.2 / (6.6)	Joystick Down V3B / (V2A)	14	P	JP9_7			2		JP3_7(9)	Brown		Blue	Z13 / (Z16)	V3B / (V2A)	2x0.75mm² with valve connector
Joystick 6.1 / (6.5)	Joystick Up V3A / (V2B)	15	R	JP9_8			2		JP3_8(10)	Brown		Blue	Z14 / (Z15)	V3A / (V2B)	2x0.75mm² with valve connector
Joystick top button	Joystick top button primary (secondary) function	16	S	JP9_2											
Joystick sw 5.2	V6 Valve	17	T	JP4_8			1		JP5_8	Brown		Blue	Z9	V6	2x0.75mm² with valve connector
Joystick sw 5.1	V5a Valve	18	U	JP4_4			1		JP5_10	Brown		Blue	Z8	V5a	2x0.75mm² with valve connector
Joystick sw 4	V5b Valve	19	V	JP4_9			1		JP5_9	Brown		Blue	Z7	V5b	2x0.75mm² with valve connector
Joystick sw 3.1	V12a Valve	20	W	JP4_1			1		JP5_1	Brown		Blue	Z2	V12a	2x0.75mm² with valve connector
Joystick sw 3.2	V12b Valve	21	X	JP4_2			1		JP5_2	Brown		Blue	Z1	V12b	2x0.75mm² with valve connector
Joystick sw 2.1	V11a Valve	22	Y	JP4_3			1		JP5_3	Brown		Blue	Z4	V11a	2x0.75mm² with valve connector
Joystick sw 2.2	V11b Valve	23	Z	JP4_4			1		JP5_4	Brown		Blue	Z3	V11b	2x0.75mm² with valve connector
Joystick sw 1.1	V10a Valve	24	a	JP4_5			1		JP5_5	Brown		Blue	Z6	V10a	2x0.75mm² with valve connector
Joystick sw 1.2	V10b Valve	25	b	JP4_6			1		JP5_6	Brown		Blue	Z5	V10b	2x0.75mm² with valve connector
Internal	V0 Valve - Master valve (ex. V6)						1		JP5_1	Brown		Blue	Z10	V0	2x0.75mm² with valve connector
Power	Power cable													4x2.5mm² with Cabo plug	
Connection	Multicable													2x0.75mm² w/Souriau connection	
Fuse	Fuse 10 Amp for +12V			F1											
Fuse	Fuse 10 Amp for -0V			F2											

12. WARRANTY

Your machine is warranted according to legal rights in your country and the contractual agreement with the selling dealer. No warranty shall, however, apply if the machine has not been used, adjusted and maintained according to the instructions given in this operator's manual.

It is prohibited to carry out any modifications to the machine unless specifically authorized, in writing, by a NEW HOLLAND representative.

EF-overensstemmelseserklæring/ EG-Konformitätserklärung/ EC Declaration of Conformity/ Déclaration CE de conformité/ Dichiarazione CE di conformità/ EG Verklaring van Overeenstemming/ EG-försäkran om överensstämmelse/ EY-vaatimustenmukaisuusvakuutus/ Declaración de conformidad CE/ Deklaracja Zgodności WE./ Декларация за съответствие EO/ EK Megfelelősegi Nyilatkozat /ES Prohlášení o shodě/ EB Atitikties deklaracija/ ES prehlásenie o zhode/ Declarația de conformitate CE/ Vastavuse Deklaratsioon EÜ /ES Izjava o skladnosti/ Δήλωση πιστότητας EK/ Declaração de fidelidade CE/ Dikjarazzjoni ta' Konformità tal-KE/ EK Atbilstības deklarācija/

Fabrikant/ Hersteller/ Manufacturer/ Fabricant/ Produttore/ Fabrikant/ Fabrikant/ Valmistaja/ Fabricante/ Producent/ Производител/ Gyártó/ Výrobce/ Gamintojas/ Výrobca/ Producător/ Tootja/ Proizvajalec/ Κατασκευαστής/ Fabricante/ Fabbrikant/ Ražotājs

CNH INDUSTRIAL BELGIUM N.V.

Leon Claeyssstraat 3a, 8210 Zedelgem, BELGIUM

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Maskine:	La máquina:	Masin:
Maschine:	Maszyna:	Stroj:
Machine:	Машината:	Η μηχανή:
Machine:	Gép:	Máquina:
La macchina:	Stroj:	Il-magna:
Machine:	Mašina:	Mašina:
Maskin:		Stroj:
Laite:		Mašina:



Model/Type: **FCT 1360**
Designation: Harvester
Serial:

- er i overensstemmelse med Maskindirektivets bestemmelser (Direktiv 2006/42/EF) og hvis relevant også bestemmelserne i EMC-direktivet 2014/30/EU.

- In übereinstimmung mit den Bestimmungen der Maschinen-Richtlinie 2006/42/EG und wenn erforderlich auch mit der EMC-Richtlinie 2014/30/EU hergestellt wurde.

- is in conformity with the provisions of the Machinery Directive 2006/42/EC and if relevant also the provisions of the EMC Directive 2014/30/EU.

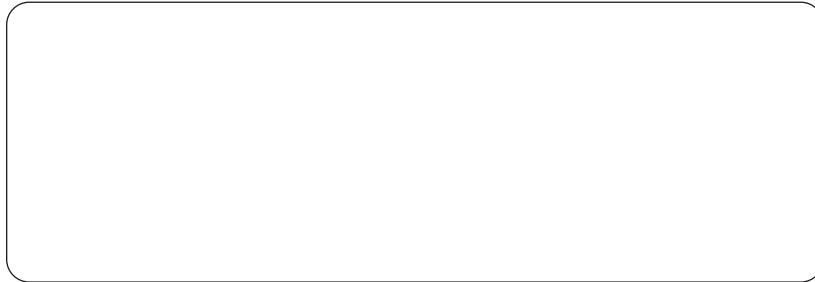
- est conforme aux dispositions de la Directive relatives aux machines 2006/42/CE et également aux dispositions de la Directive sur la Directive EMC 2014/30/UE.
- é in conformita' con la Direttiva Macchine 2006/42/CE e, se pertinente, anche alla Direttiva alla Direttiva EMC 2014/30/UE.
- in overeenstemming is met de bepalingen van de Machine richtlijn 2006/42/EG en wanneer relevant ook met de bepalingen van de EMC richtlijn 2014/30/EU.
- är i överensstämmelse med Maskindirektivets bestämmelser (Direktiv 2006/42/EG) ock om relevant också bestämmelserna EMC-direktivet 2014/30/EU.
- täyttää Konedirektiivin (Direktiivi 2006/42/EY) määräykset ja oleellisilta osin myös EMC-direktiivin 2014/30/EU.
- es conforme a la Directiva de Maquinaria 2006/42/CE y, si aplica, es conforme también a la Directiva EMC 2014/30/EU.
- pozostaje w zgodzie z warunkami Dyrektywy Maszynowej 2006/42/WE i jeżeli ma to zastosowanie również z warunkami Dyrektywy dot. kompatybilności elektro magnetycznej EMC 2014/30/UE.
- отговаря на изискванията на Директивата за Машините 2006/42/ЕО и ако има приложение на изискванията на Директивата за електромагнитна съвместимост 2014/30/ЕС.
- Megfelel a 2006/42/EK Gépi Eszközökre vonatkozó előírásoknak és amennyiben felhasználásra kerül, a 2014/30/EU Elektromágneses kompatibilitás Irányelv feltételeinek.
- odpovídá základním požadavkům Strojní směrnice 2006/42/ES a jestliže to její uplatnění vyžaduje i s podmínkami Směrnice 2014/30/EU týkající se elektromagnetické kompatibility.
- atitinka Mašinų direktyvos Nr. 2006/42/EB ir, jeigu taikoma, Elektromagnetinio suderinamumo direktyvos Nr. 2014/30/ES reikalavimus.
- je v súlade s podmienkami Smernice 2006/42/ES o strojných zariadeniach a pokiaľ si to jeho uplatnenie vyžaduje aj s podmienkami Smernice 2014/30/EÚ o elektromagnetickej kompatibilite.
- îndeplineşte prevederilor Directivei de Maşini 2006/42/CE şi dacă este utilizată de asemenea cu prevederile Directivei referitoare la compatibilitatea electro-magnetică EMC 2014/30/UE.
- on vastavuses Masinate Direktiivi tingimustega 2006/42/EÜ ning sammuti juhul, kui on tegemist sammuti on vastavuses Elektromagnetilise kokkusobivuse Direktiivitingimustega EMC 2014/30/EL.
- z določili Direktive o strojih 2006/42/ES ter, če je to relevantno, tudi z določili EMC Direktive 2014/30/EU.
- παραμένει σύμφωνη με τους όρους της Οδηγίας περί Μηχανών 2006/42/EK και σε περίπτωση που αυτό εφαρμόζεται και με τους όρους της Οδηγίας περί ηλεκτρομαγνητικής συμβατότητας (ΗΜΣ) 2014/30/ΕΕ.
- Está de acordo com exigências das Directivas das Maquinarias 2006/42/CE e no caso em que tiver igualmente aplicação com as exigências das Directivas referentes a compatibilidade electromagnética EMC 2014/30/UE.
- tikkonforma mad-dispozzjonijiet tad-Direttiva dwar il-Makkinarju 2006/42/KE u jekk rilevanti wkoll mad-dispozzjonijiet tad d-Direttiva EMC 2014/30/EU.
- atbilst mašīnu direktīvai 2006/42/EK, kā arī nepieciešamības gadījumā elektromagnētiskās saderības direktīvai EMC 2014/30/ES.

Zedelgem, date:



Antoon Vermeulen

Dealer's stamp



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