



OPERATING MANUAL

Rapeseed Headers, Series JD 600



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Introduction

Intended use: This header is designed only for the usual application in agricultural work or similar activities. Any other use beyond this is deemed improper use of the machine for which the manufacturer is not liable for resultant damages; any risks in this regard are borne by the user alone. Proper use also includes complying with the operation, maintenance and service conditions specified by the manufacturer.

READ THIS OPERATING MANUAL CAREFULLY to familiarize yourself with the correct operation and maintenance of the equipment and avoid injuries or damage to the machine. Not doing so can result in injuries or machine damage.

THIS OPERATING MANUAL IS PART OF THE MACHINE and should be given to the purchaser upon resale.

DIMENSIONS specified in this operating manual are metric. The corresponding dimensions for the USA are also indicated. Use only appropriate parts and bolts. Different wrenches are required for metric bolts and bolts with English unit dimensions.

THE DESIGNATIONS "RIGHT" AND "LEFT" refer to the forward direction of the machine.

ENTER THE PRODUCT IDENTIFICATION NUMBERS in the corresponding place in the Inspection section prior to delivery. Please record all numbers accurately. In case of theft, these numbers can be important for tracing the equipment. Moreover, your John Deere dealer needs these numbers when you order spare parts. It is a good idea to keep a second record of these numbers in another location.

Your dealer has performed an INSPECTION OF THE MACHINE BEFORE DELIVERY. Another inspection should be carried out by your dealer after the first 20 to 50 hours of operation in order to ensure the best possible performance for the machine.

THIS HEADER MUST ONLY be used, serviced and repaired by persons who are familiar with it and who have been instructed on its hazards.

The relevant accident prevention regulations and other generally recognized rules and laws for safety, occupational health and road traffic must also be followed.

Unauthorized changes to this combine harvester release the manufacturer from any liability for resultant damages

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Pre-delivery Inspection

The following tests, setting adjustments and maintenance were performed prior to delivery:

Predelivery Inspection	
<input type="checkbox"/> 1. Is cutterbar drive gear case oil level correct?	<input type="checkbox"/> 7. Is the cutting platform lubricated?
<input type="checkbox"/> 2. Are all belts properly tensioned and running correctly?	<input type="checkbox"/> 8. Are all hydraulic lines free from leaks and tight?
<input type="checkbox"/> 3. Can reel tines be adjusted properly?	<input type="checkbox"/> 9. Are all guards, shields etc. installed?
<input type="checkbox"/> 4. Are knives centered in cutterbar?	<input type="checkbox"/> 10. Paint and decals smooth and neat?
<input type="checkbox"/> 5. Is reel lift device working correctly?	<input type="checkbox"/> 11. Have cutting platform operation and safety rules been explained to the operator?
<input type="checkbox"/> 6. Is reel fore-and-aft adjusting device working properly?	
Signature Dealer/Service Technician:	Date:

Product Identification

Header type:	
Serial number:	
Year of manufacture:	

To be entered by the dealer

Typical Appearance



Rapeseed Header, Series JD 600

Safety

Recognize Safety Information

This is a safety-alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating practices.



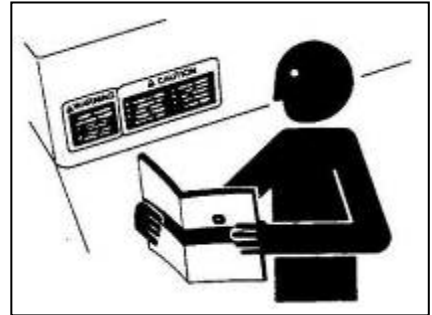
Follow Safety Instructions

Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available from your John Deere dealer.

Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.

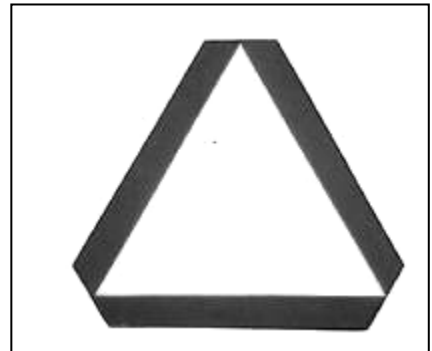
Keep your machine in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

If you do not understand any part of this manual and need assistance, contact your John Deere dealer.



Observe Road Traffic Regulations

Always observe local road traffic regulations when using public roads.



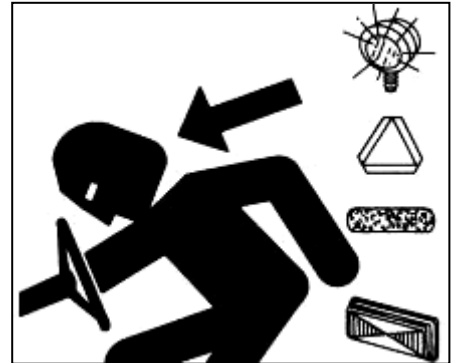
Safety

Use Safety Lights and Devices

Slow moving tractors, self-propelled equipment and towed implements or attachments can create a hazard when driving on public roads. They are difficult to see, especially at night. Avoid personal injury or death resulting from collision with a vehicle.

If legally permitted, use flashing warning lights or rotary beacons whenever driving on public roads. To increase visibility, use the lights and devices provided with your machine. For some equipment, install additional flashing warning lights.

Keep safety items in good condition. Replace missing or damaged items. An implement safety lighting kit is available from your John Deere dealer.

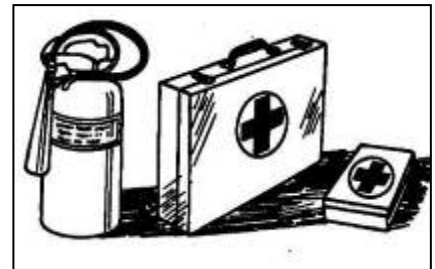


Prepare for Emergencies

Be prepared if a fire starts.

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.



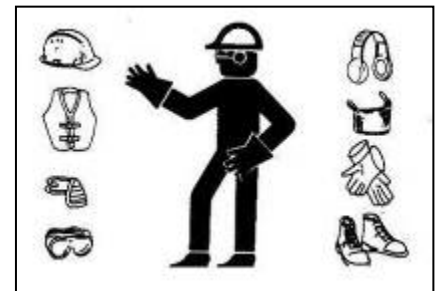
Wear Protective Clothing

Wear close fitting clothing and safety equipment appropriate to the job.

Prolonged exposure to loud noise can cause impairment or loss of hearing.

Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises.

Operating equipment safely requires the full attention of the operator. Do not wear radio or music headphones while operating machine.



Safety

Store Attachments Safely

Stored attachments such as dual wheels, cage wheels, and loaders can fall and cause serious injury or death.

Securely store attachments and implements to prevent falling. Keep playing children and bystanders away from storage area.

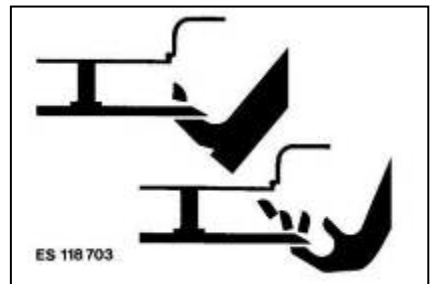


Guards and Shields

Keep guards and shields in place at all times. Ensure that they are serviceable and installed correctly.

Always disengage main clutch, shut off engine and remove key before removing any guards or shields.

Keep hands, feet and clothing away from moving parts.



Stay Clear of Harvesting Units

Cutterbar, auger, reel and feed rolls cannot be completely shielded due to their function. Stay clear of these moving elements during operation. Always disengage main clutch, shut off engine and remove key before servicing or unclogging machine.



Keep Hands Away From Knives

Never attempt to clear obstructions in front of or on harvesting unit unless main clutch is disengaged, engine shut off and key removed.

Everyone must be clear of the machine before starting the engine.



Safety

Stay Clear of Rotating Drivelines

Entanglement in backshaft rotating driveline can cause serious injury or death.

Keep driveline shields in place at all times.

Wear close-fitting clothing. Stop the combine engine and be sure driveline is stopped before making adjustments, connections, or cleaning out header or its drive components.



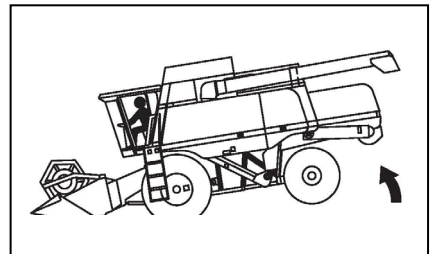
Stay Clear of Cutterbar When Rotating Auger

The cutterbar knife and cross auger use a common belt drive. Whenever the auger is rotated by hand the cutterbar will move. Use extreme caution to keep hands, feet and clothing clear of the cutterbar and its knives when attempting to rotate cross auger for service, adjustment, inspection or unplugging.



Ballasting for Safe Ground Contact

Operating, steering and braking performance of combine can be considerably affected by heavy front end attachments which alter the center of gravity of the combine. To maintain the necessary ground contact, ballast the combine at the rear end as necessary. Observe the maximum permissible axle loads and total weights.



Safety

Practice Safe Maintenance

Understand service procedure before doing work. Keep area clean and dry.

Never lubricate, service, or adjust machine while it is moving. Keep hands, feet, and clothing from power-driven parts. Disengage all power and operate controls to relieve pressure. Lower equipment to the ground. Stop the engine. Remove the key. Allow machine to cool.

Securely support any machine elements that must be raised for service work.

Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any build-up of grease, oil, or debris.

On self-propelled equipment, disconnect battery ground cable (-) before making adjustments on electrical systems or welding on machine.

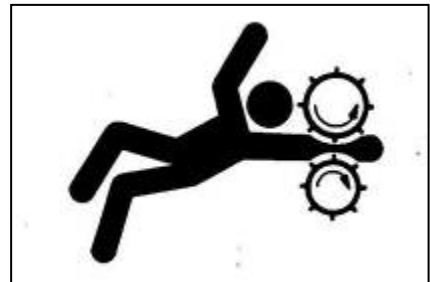
On towed implements, disconnect wiring harnesses from tractor before servicing electrical system components or welding on machine.



Service Machines Safely

Tie long hair behind your head. Do not wear a necktie, scarf, loose clothing, or necklace when you work near machine tools or moving parts. If these items were to get caught, severe injury could result.

Remove rings and other jewellery to prevent electrical shorts and entanglement in moving parts.



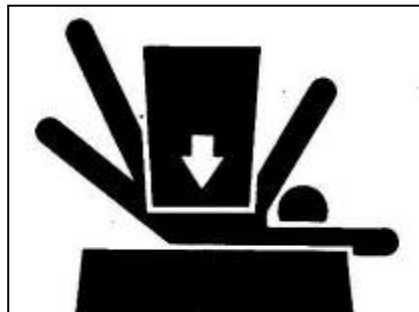
Safety

Support Machine Properly

Always lower the attachment or implement to the ground before you work on the machine. If the work requires that the machine or attachment be lifted, provide secure support for them. If left in a raised position, hydraulically supported devices can settle or leak down.

Do not support the machine on cinder blocks, hollow tiles, or props that may crumble under continuous load. Do not work under a machine that is supported solely by a jack. Follow recommended procedures in this manual.

When implements or attachments are used with a machine, always follow safety precautions listed in the implement or attachment operator's manual.



Protect Against Noise

Prolonged exposure to loud noise can cause impairment or loss of hearing.

Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises.



Avoid Heating near Pressurized Fluid Lines

Flammable spray can be generated by heating near pressurized fluid lines, resulting in severe burns to yourself and bystanders. Do not heat by welding, soldering, or using a torch near pressurized fluid lines or other flammable materials. Pressurized lines can accidentally burst when heat goes beyond the immediate flame area.



Safety

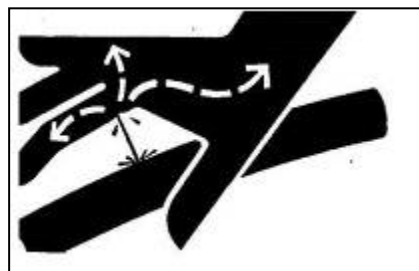
Avoid High-Pressure Fluids

Escaping fluid under pressure can penetrate the skin causing serious injury.

Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.

Search for leaks with a piece of cardboard. Protect hands and body from high pressure fluids.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source. Such information is available from Deere & Company Medical Department in Moline, Illinois, U.S.A.



Dispose of Waste Properly

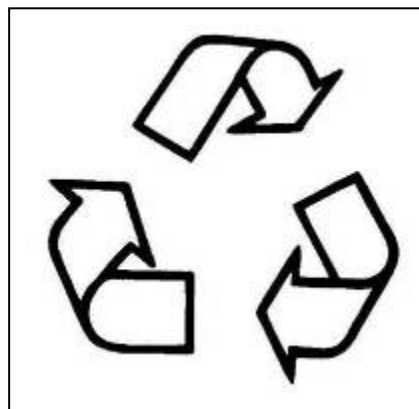
Improperly disposing of waste can threaten the environment and ecology. Potentially harmful waste used with John Deere equipment includes such items as oil, fuel, coolant, brake fluid, filters, and batteries.

Use leakproof containers when draining fluids. Do not use food or beverage containers that may mislead someone into drinking from them.

Do not pour waste onto the ground, down a drain, or into any water source.

Air conditioning refrigerants escaping into the air can damage the Earth's atmosphere. Government regulations may require a certified air conditioning service center to recover and recycle used air conditioning refrigerants.

Inquire on the proper way to recycle or dispose of waste from your local environmental or recycling center, or from your John Deere dealer.



Safety Decals

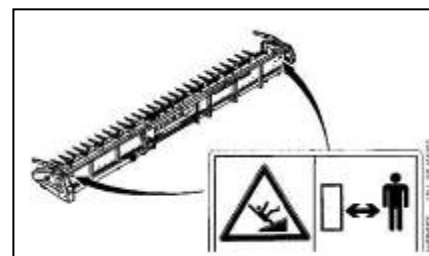
Pictorial Safety Signs

At several important places of this machine safety signs are affixed intended to signify potential danger. The hazard is identified by a pictorial in a warning triangle. An adjacent pictorial provides information how to avoid personal injury. These safety signs, their placement on the machine and a brief explanatory text are shown below.



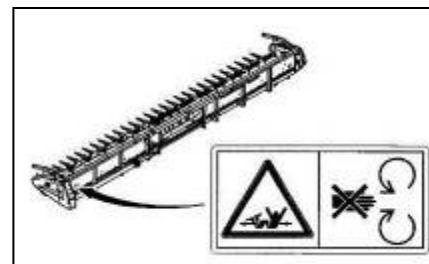
Cutting Platform

DANGER- Stay clear of header. Disengage header drive, shut off engine and remove key before servicing or unclogging header.



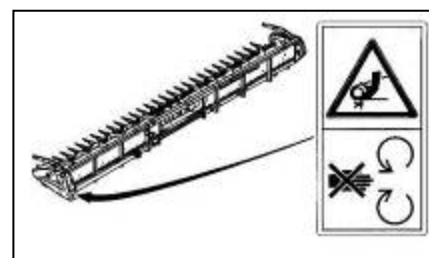
Cutting Platform Drive Shaft

Stay clear of rotating drive shaft to avoid personal injury!



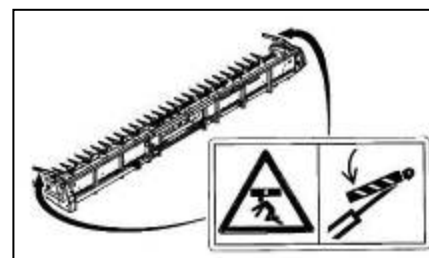
Shields on Cutting Platform Drives

Do not open or remove safety shields while the engine is running.



Reel Lifting Cylinder

Secure lifting cylinder with locking device before entering hazardous area.



Right Side Component Assembly

The right side part of the rapeseed header is not assembled upon delivery.



The bolts for assembly are included in the parts box.



Place the side component on the rapeseed header. Take care to ensure that the bottom plate is over the flat bar.



Insert two M10x70 bolts with flat washers in the rear frame tube. Screw on the self-locking nuts from the front.



Insert two M10x70 bolts with flat washers in the front frame tube and screw on the nuts.



Tighten all 4 bolts.



Screw on the 4 M8x25 self-tapping screws for attaching the bottom plate.



Now the knife drive must be connected. Ensure that the spacer rings are correctly seated. There should be one each side of the ball joint.



This figure shows in detail the installation sequence for the spacer rings, bolts, ball joint and drive shaft.



The stroke adjustment of the side cutter is very important. To do this, first the knife drive on the pulley is moved all the way to the right.

Exercise CAUTION when moving the knife.
There is a RISK OF INJURY.



The gap (A) of the knife mount to the side wall must be measured. It should be approximately 10 mm.

A



Move the knife drive all the way to the left.



The gap (A) of the knife mount to the side wall must be measured. It should be approximately 10 mm on the other side as well.

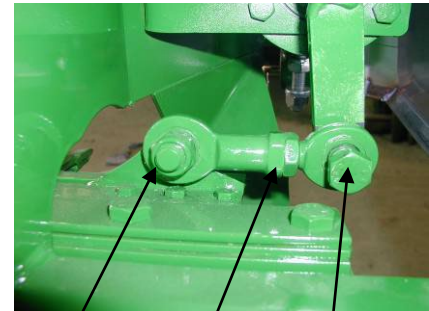
A



A uniform overlap of the side cutter must be ensured in the middle position.



If the overlap is incorrect, the length of the ball joint link bearing must be changed. To do this, loosen the lock nut (A) and take out one of the retaining bolts (B). Set the new length, re-insert the retaining bolt and tighten the lock nut again.



B

A

B

Initial Installation on the John Deere Header

Before installation for the first time on a John Deere header, you must check which version of the belt guide is installed. The version of the retaining bolt on the reel lift cylinder must also be checked. Moreover, it must also be ensured that the header is in an extended position (see the John Deere operating manual).

This figure shows the old belt guide.



This figure shows the new belt guide.



This figure shows the old layout of the retaining bolt (A) on the reel lift cylinder.

A



This figure shows the new layout of the retaining bolt (A) on the reel lift cylinder.

A



Various Versions of Attachment Parts



Old belt tensoning device



New belt tensoning device



Old reel supports



New reel supports

Install the correct version of the tensioning device on the header (the figure shows the new version).



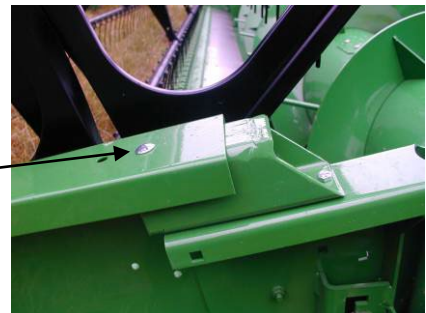
Install the correct version of the reel support on both sides of the header (the figure shows the new version)



Install the retaining brackets on the side wall on both sides.
Ensure that the countersunk bolt (A) is on top.

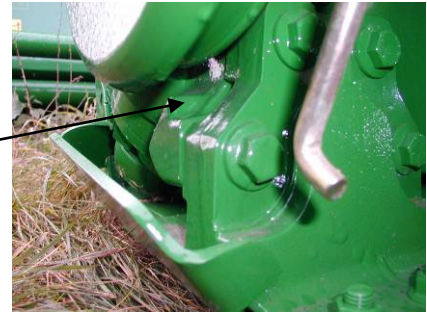
Bolts for attachment:
M8x 20 hexagonal bolt
M8x 20 countersunk bolt

A



Grind down the edge (A) of the knife drive housing completely to the height of the retaining foot.

A



Grind the knife head guard so the drive belt has more room.



There is also an option to weld a reinforcing tube onto the John Deere header.

It is included with delivery for 25 ft and 22 ft.

PLEASE NOTE:

The bracket must be centered before welding. The weld-on angle is approx. 45°.



Attaching the Rapeseed Header to the Cutterbar

Pick up the rapeseed header direct from the ground with the combine harvester.



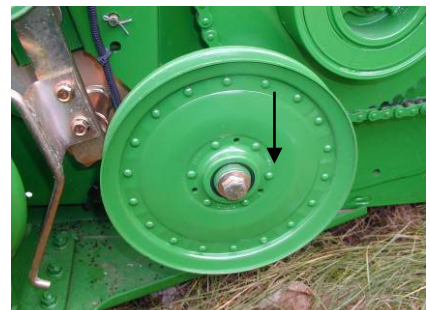
Connect the quick releases on both sides in the retainers provided and lock them.

(Adjust manually as necessary.)

CAUTION: sharp knives!



With the new belt drive, the large v-belt pulley must be relocated in the John Deere header. A second hole in the bracket is provided for this purpose; it is about 25 mm lower.



Pull out the tensioning device and secure it with a tube clip.



Put the belt on and tension as necessary.

The figure shows the new belt arrangement.

New v-belt: RS 21060
Old v-belt: RS 18208

Large v-belt pulley from John Deere
V-belt RS 21075



With the new belt drive, the tensioning pulley may need to be adjusted. This is done via a slot (A) in the tensioning device.

A



Attaching the Center Support(s) (only from 22FT)

The position of the center support is determined by the position of the welding bracket (A) on the rapeseed header.

Attach the retaining bracket (B) for center support to the position shown using tee-head bolts. To do this, mount the tee-head bolts in the available slots of the header adjustment.

A

B



Mount the center support on the header (see the figure). To do this, attach the U-shaped piece (A) to the center support (B) using M12x 35 bolts.

B

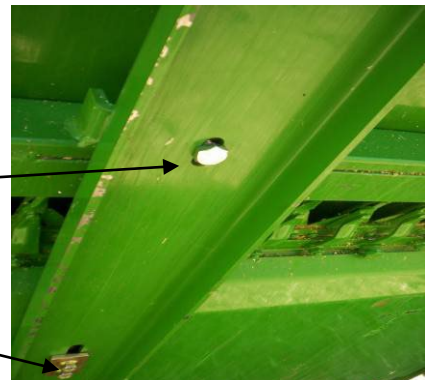
A



Attach the retaining plate (A) with M12x 45 bolts. Screw in the M12x 25 bolt (B).

B

A



Tighten all the bolts

Two center supports are included in the delivery for 30ft headers.



Attaching the Dividers

Divider points are included with delivery to improve crop uptake. They are attached to the right and left of the rapeseed header as shown in the figure.



The divider height can be adjusted. The nuts (A) must be turned to do this.

IMPORTANT:
The divider must always be able to move

A



Spacer plates for the 9.15 m Rapeseed Header

Note:

The spacer plates need only be installed when required.

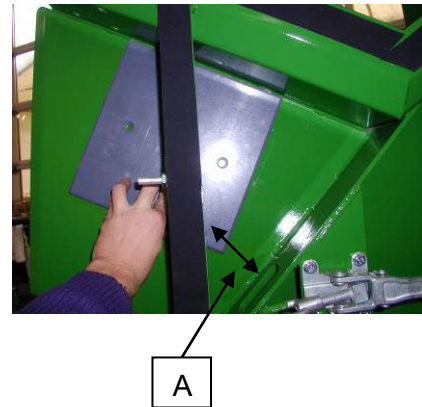
They are necessary to compensate for production tolerances which only occur with the 30ft header

Install the spacer plates only in the right side component. To do this, drill holes and screw in the spacers with countersunk bolts.

Two different spacer thicknesses (5 mm and 10 mm) are included with delivery.

The figure shows where they are installed.

During installation, ensure that there is sufficient space in the gap (A) (approx. 50 mm).

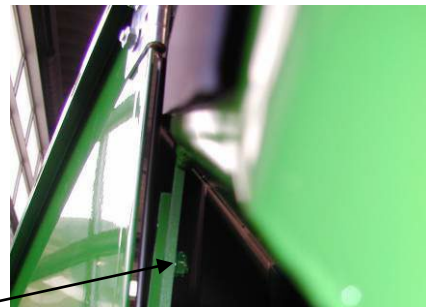


Removing the Side Safety Panel

The entire side safety panel (guard door and stainless steel cover) can be removed for maintenance and repair.



To do so remove the two M8 nuts (A) and the M6 bolts (B).



A



The entire guard unit can be removed after that. The deflection unit is now freely accessible. This applies to both the right and left sides.

B



Lubricants and Fill Quantities

Oil for knife drive

Select an oil viscosity which is appropriate for the outdoor temperatures to be expected until the next oil change.

The following oils should be preferred for use:

- John Deere GL-5 gear oil
- John Deere EXTREME GUARD™

Other oil types used must conform to the API specification GL-5.

Grease

Select grease according to NLGI consistency and the outdoor temperatures expected until the next servicing.

The following greases are recommended:

- John Deere SD POLYUREA GREASE (TY6341)

Other greases can be used if they meet the following specification:

- NLGI specification GC-LB

IMPORTANT:

Replace missing grease nipples immediately. Clean grease nipples thoroughly before lubricating.

Product Number	Description
TY6341	Multi-purpose, high temperature, extreme pressure lubricant which is particularly effective with rolling contact.

Lubrication Schedule and Periodic Maintenance

CAUTION:

Never lubricate or service the header when the motor is running.

IMPORTANT:

The recommended maintenance intervals are for normal working conditions. With more demanding operating conditions, maintenance should be performed more often as appropriate.

Lubricate with the John Deere multi-purpose, high temperature, EP lubricant SD POLYUREA GREASE or an equivalent SAE EP multi-purpose lubricant according to the operating hours specified on the lubrication symbol.



Lubricate the knife head bearing



Lubricate the knife bar drive (5 squirts of the grease gun every 50 operating hours)

IMPORTANT:

It is normal for the housing of the knife drive to become very hot during operation. Never lubricate excessively to lower the temperature. This could result in damage to the seals!

Lubricate the bearing (A) of the side cutter as well.

