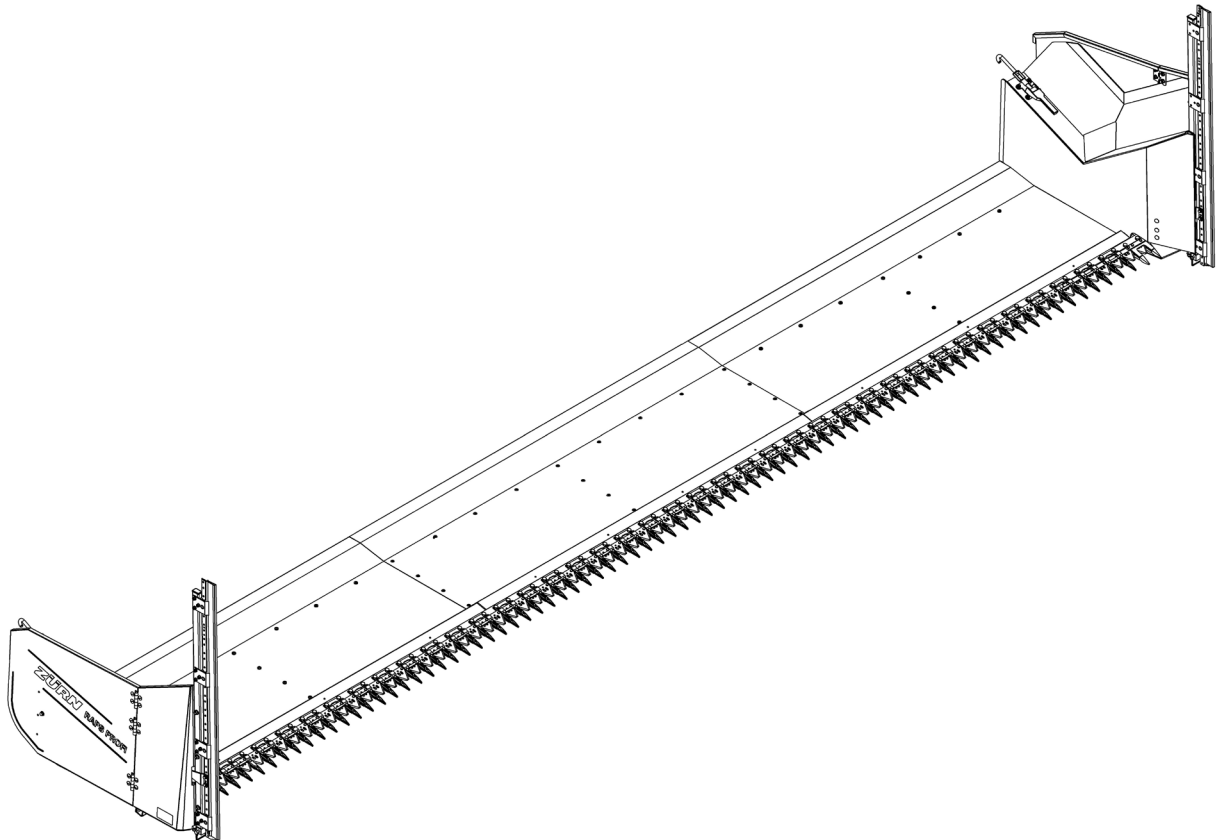




OPERATING MANUAL

Canola Extension



Raps Profi II
For John Deere 600 F Header

Impressum

Title: Translation of the original Operating Manual Canola Extension

Manufacturer: Zürn Harvesting GmbH & Co. KG
Schöntal

Applicable to: John Deere 600 F

Print number: 19895

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Author: Naiome Köllisch

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We reserve the right to make technical amendments.

Printed on paper made from chlorine-free and acid-free bleached pulp.

Foreword

This machine 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. The manufacturer accepts no liability whatsoever for damage resulting from improper use; the risk will be borne solely by the user. Proper use also includes complying with the operation, maintenance and service conditions specified by the manufacturer.

Read this operating manual thoroughly to familiarise yourself with the correct operation and maintenance of the machine and to prevent injuries or damage to the machine. Not doing so can result in injuries or machine damage. This operating manual and the safety labels on the machine may also be available in other languages: please enquire at your dealership.

This operating manual is part of the machine and should be handed over to the purchaser if the machine is re-sold.

Dimensions specified in this operating manual are metric. Use only appropriate parts and bolts. Different spanners are required for metric bolts and bolts with imperial (inch) dimensions.

The designations "left" and "right" are with reference to the forward direction of the machine.

Enter the serial number in the first section of the operating manual. Please record all numbers accurately. In case of theft, these numbers can be important for tracing the machine. Your dealer also 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 carried out an inspection of the machine prior to delivery. A further 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.

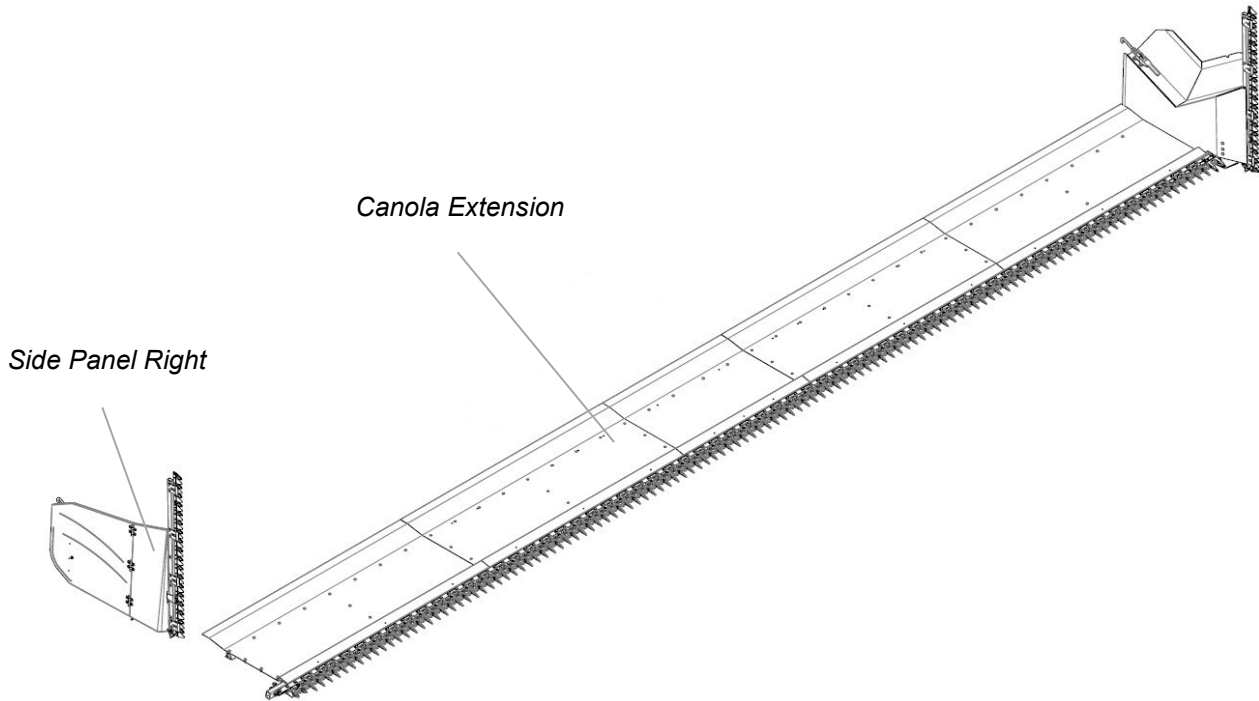
This machine must only be used, serviced and repaired by persons who are familiar with it and who have been briefed about its hazards. The relevant accident prevention regulations and other generally recognized rules and laws for safety, occupational health and road traffic must also be observed. Unauthorized changes to this trailer release the manufacturer from liability for any resulting damage.

Contents

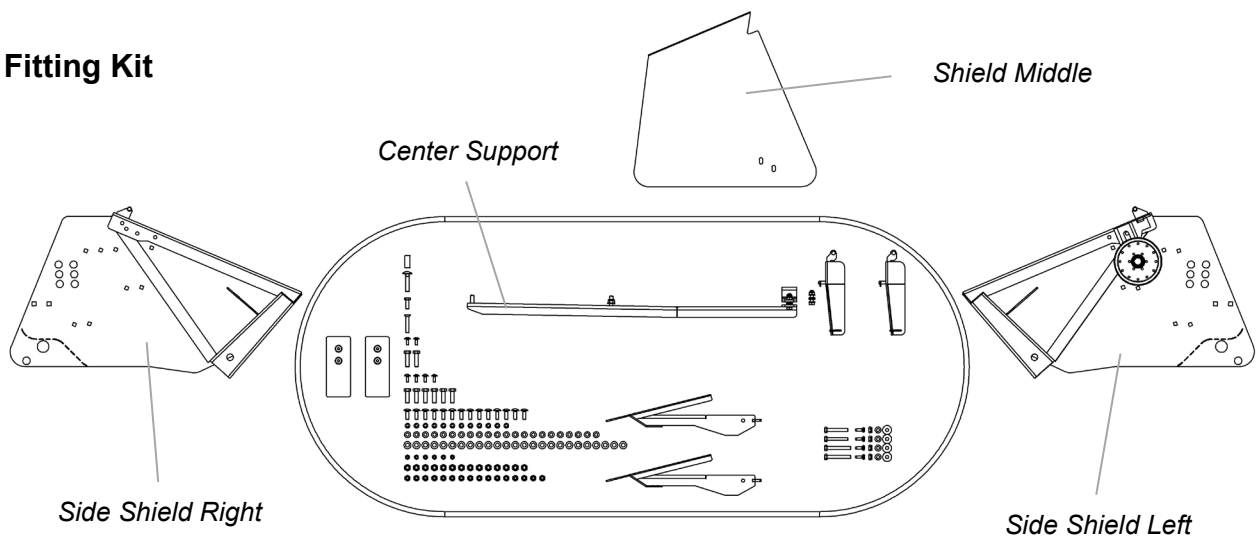
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Description



Fitting Kit



Fitting Kit	Center Support
Up to 20 ft	-
22-25 ft	1
30 ft	2
35 ft	3

Type Plates

Please make a note of the type designation and serial number of your machine here. This information must be given to the authorized dealer when ordering spare parts or making guarantee enquiries.

Type: _____

Serial number: _____



The image shows a black rectangular type plate template for a Zürn Harvesting machine. It features the following elements:

- CE Marking:** A white 'CE' symbol in the top left corner.
- Company Information:** Text in the top center: "Zürn Harvesting GmbH & Co. KG", "Kapellenstr. 1", "D-74214 Schöntal-Westernhausen", and "Tel. +49 7943/9105-0".
- Zürn Harvesting Logo:** The company name "ZÜRN" in a large, bold, white font, with "HARVESTING" in a smaller font below it, located in the top right.
- Input Fields:** Four white rectangular boxes for data entry:
 - "Typ | Variante": A single wide box.
 - "Bezeichnung": A single wide box.
 - "Serien-Nr.": A single wide box.
 - "Baujahr": Two side-by-side boxes.
- Additional Text:** "Made in Germany" and "www.zuern.de" in the bottom right corner.

Safety Instructions

Explaining the symbols used in this document

This symbol indicates a potentially hazardous situation which, if not avoided, may lead to personal injury.



This symbol indicates special rules or procedures that need to be observed to avoid machine damage.



This symbol indicates special technical instructions.



The illustrations in this manual are used as examples and may differ from the product. All information and data are subject to change by the manufacturer alone without prior notice.

Safety Instructions

Safety instructions for technical staff and operators

Before using the machine, carefully read and observe all safety rules listed in this manual and observe all decals on the machine.

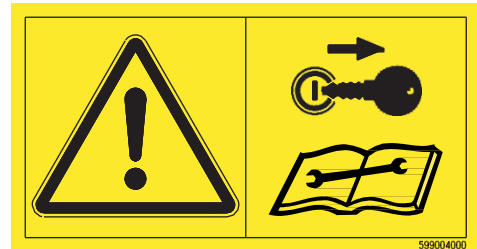
Before starting work, make sure that you are familiar with all mechanisms and controls and their functions. During operation is too late!

Never leave the machine to anyone who has not been trained in using and operating it properly.

Contact your Zürn sales partner if you have problems understanding certain parts of this manual.



Always apply the handbrake on the header transporter and shut off the engine of the towing vehicle before you work on the transporter. Remove the ignition key and wait until all moving parts have come to a complete stop.



Wear close-fitting clothes! Loose clothing can easily get caught in moving machine parts.

Wear protective gear that suits the work at hand (gloves, footwear, goggles, helmet, ear protectors, etc.).

Any ropes, cables, linkages, etc. of remote-controlled mechanisms must be routed and installed in such a way that they do not cause unintentional machine action leading to accidents and damage. This applies to all transport and working positions.

Before each use verify that nuts and bolts are tight - especially those that attach tools such as blades. Retighten if necessary.

Before you use the machine make sure all safety features and guards are in place, in protective position and operable. Immediately replace any inoperable safety features.



Safety Instructions

Hydraulic system

Attention! The hydraulic system is under high pressure. Maximum operating pressure: 200 bar (2900 psi).

Before connecting hydraulic hoses to the hydraulic system of the machine, make certain that it is not pressurised. Before disconnecting hydraulic hoses, depressurise the hydraulic system.

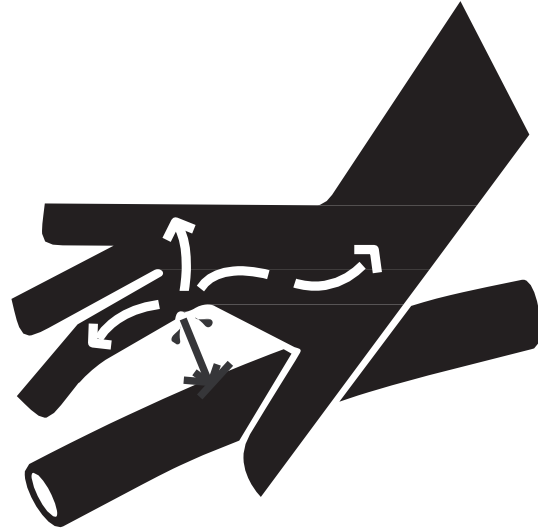
In order to prevent connecting the hydraulic hoses to the wrong connections, colour code the hoses and their respective connections without fail. Risk of injury through reverse function because of reversed connections (e.g. raising instead of lowering).

Inspect the hydraulic hoses at regular intervals. Hydraulic hoses must always be replaced after 5 years at the latest. If hydraulic hoses are found to be damaged or worn, they must be replaced immediately. The replacement hydraulic hoses must comply with the technical requirements specified by the manufacturer.

Only use the appropriate resources when looking for leakages. Protect body and hands against pressurised fluids.

Oil escaping under pressure can puncture the skin and cause severe injuries. In the event of injury, seek medical attention immediately. There is a risk of infection.

Before carrying out any work on the hydraulic system, lower the machine to the ground, depressurise the hydraulic system, switch the engine OFF, remove the ignition key and wait until all moving parts have come to a complete standstill.



Safety Instructions

Universal drive shafts

Only use universal drive shafts that have been provided by or prescribed by the manufacturer.

The protective tube and protective cone on the PTO shaft and all PTO shaft protective devices on the header must be in place and in good condition.

Worn or damaged protective parts must be renewed immediately. Defective protective parts or an unprotected universal drive shaft can cause severe or even fatal injuries.

Always wear close-fitting clothing to prevent being caught up in a rotating universal drive shaft.

Before connecting or disconnecting a universal drive shaft and before any intervention in the header, uncouple the main drive, switch the engine OFF, remove the ignition key and wait until all moving parts have come to a complete standstill.

When using universal drive shafts with an overload or free-wheel clutch, always connect the overload or free-wheel clutch to the machine.

Always make certain that the universal drive shaft is connected and latched in position correctly.

Before switching the PTO shaft ON, make certain that the speed and direction of rotation of the attachment conform with the speed and direction of rotation of the machine specified by the manufacturer.

Before switching the PTO shaft ON, make certain that there are no persons or animals within the machine's danger zone. Never switch the PTO shaft ON or engage it if the forage harvester's motor is switched ON.



Safety Instructions

Ejection of stones and foreign objects

To increase the safety of the driver, only use the header with an enclosed driver's cab. The area to be mown must be free of foreign objects. Stony or rocky ground should not be mowed. If this is unavoidable, additional safety measures must be taken, e.g.:

- Fit Macrolon panels to the floor, sides and rear of the driver's cab or fit finely meshed grilles to the outside.
- Adjust the cutting height such that any contact with stones or rocks is excluded.

Never switch the header ON when persons are standing in the vicinity of the machine.

Foreign objects can be ejected from the machine, even if the machine is in proper use. Stones and other foreign objects that are caught up by rotating parts can be thrown over great distances. Exclude all persons from the danger zone.

The guard plates and protective aprons lessen the risk of stones and foreign objects being ejected. It must therefore be ascertained that all protective devices are fitted and in perfect condition when the header is in use.

Check the state of the protective aprons at regular intervals. Worn, damaged or missing parts must be replaced immediately.



Safety Instructions

Precautions for use and shunting

Before changing over from transport to working position and vice versa, ensure that no persons are within the maneuvering zone of the machine.

Precautions for maintenance and repair work

Before carrying out any work or intervention, shut off the engine, remove the ignition key, wait until all moving parts have come to a complete standstill and apply the parking brake. Depressurize the hydraulic system.

Prop up and secure any machine parts that are raised for maintenance or repair.

Disconnect all electric lines from the towing vehicle before working on the electric system or before welding on the transporter.

Repairs on parts under strain or pressure (springs, accumulators, etc.) must be carried out solely by specialist staff who have the necessary qualification and special tools.

Wear protective gear that suits the work at hand (gloves, footwear, goggles, helmet, ear protectors, etc.).

Do not weld, solder or use flame cutters near pressurized liquids or highly flammable products.

Only use original spare parts to ensure your personal safety and correct functioning of the machine.

We strongly recommend to have the machine and its parts and fastening elements checked by your authorized Zürn Harvesting sales partner after each season.



Safety Instructions

When travelling on public roads, always comply with the relevant regulations.

Before travelling on public roads and before each use check the header transporter and the towing vehicle for road safety and operational safety!



Modifications to the machine

Any modifications to the machine and its optional features must be approved in writing by the manufacturer. The warranty and product liability will be voided, if such modifications are carried out without the written approval of the manufacturer.

The manufacturer's liability refers to the original condition in which the vehicle is delivered to the country of destination as contractually agreed by the manufacturer.

Any unauthorized modifications to this machine render any manufacturer liability for any consequential damage null and void.

Welding

Ensure that any type of welding is carried out by qualified and certified welders. Welding must not affect the warranted properties of the steel structure. In case of non-compliance, the manufacturer shall consider the weldment as an unauthorized modification to the transporter.

Safety Instructions

Bolted assemblies

Observe the property class when fastening and replacing bolts and nuts (see the table in this manual and the parts list).

After assembling the transporter, tighten all bolts to the proper torque.

For special torques read the assembly instructions or ask the manufacturer.

For any torques of regular bolts refer to the table.

Self-clinching bolts and nuts must be replaced by new ones after they have been removed during a repair.

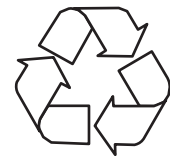
This is necessary as nuts with a self-clinching fastener lose their holding power with each reuse.

Using original parts

Only use original parts sourced from the manufacturer. This is mandatory. Using third-party parts voids the manufacturer warranty including for consequential damage resulting from this.

Waste prevention

Never pour environmentally hazardous products (oils, greases, filters, etc.) into a sink or empty them onto the ground or in other spaces. Never burn or throw away used tires. Have waste disposed of by specialized disposal companies.



Safety Instructions

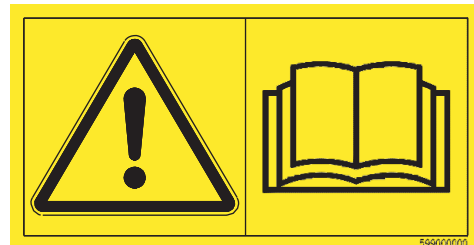
Safety decals

Safety decals are placed in various locations on the machine. Always follow these instructions! The decals alert operators to potential hazards and provide rules of practice to cut out any risk of an accident.

Keep the safety decals clean and legible and replace them immediately when damaged, worn or lost.

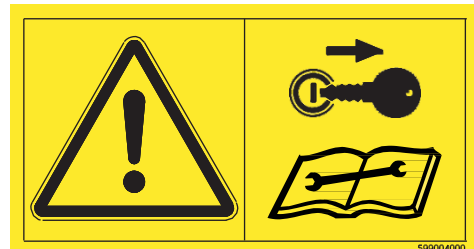
Operating instructions

The operating instructions contain all the necessary information for the safe use of the machine. To avoid the risk of accidents, read the operating instructions carefully and follow all instructions.



Working on and intervening in the header

Before carrying out any type of work on or intervention in the header, disengage the clutch in the driveline, shut off the engine, remove the ignition key, wait until all moving parts have come to a complete standstill and apply the parking brake.



Parking the transporter

Secure the transporter with a wheel chock before removing it from the towing vehicle or parking it.



Safety Instructions

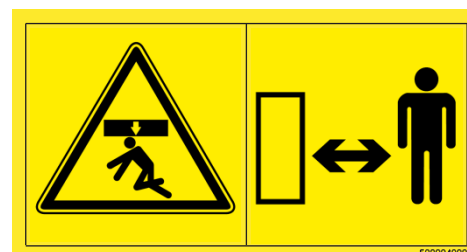
Placing the header on the transporter

When placing the header on the transporter, keep clear of the danger zone between the header and the transporter.



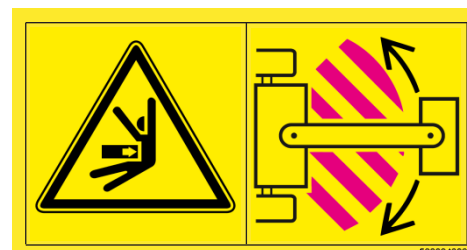
The header is lifted

Keep clear of the header swing area when placing it on the transporter.



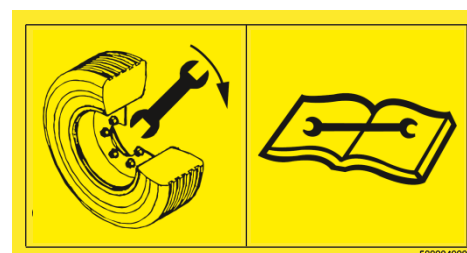
Risk of crushing

Keep clear of the drawbar unit and all steering elements (e.g. turntables, steering rods) while operating the machine. Risk of being crushed at a full lock turn.



Retighten the wheel bolts

Retighten the nuts after the first journey.



Safety Instructions

Ejection and foreign objects

Stones and other foreign objects can be thrown out over long distances. The protective devices must always be in place and in a perfect state. Always keep a safe distance from the machine.



Do not open guards

Do not open or remove protective devices during operation or while the engine is running.



Do not open guards

Do not open or remove protective devices during operation or while the engine is running.



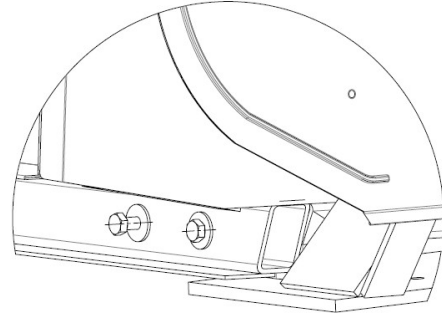
Rotating Auger

Never reach into the rotating auger.



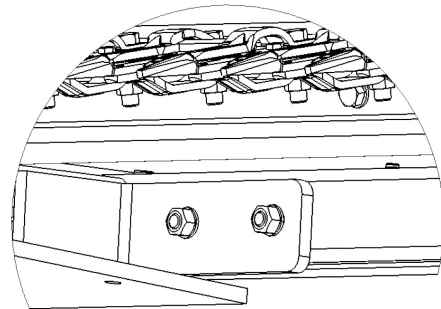
Right Side Component Assembly

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

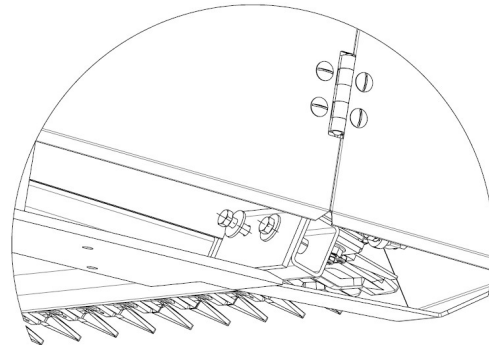


Insert two M10x70 bolts with flat washers in the front frame tube and screw on the nuts DIN 985-M10.

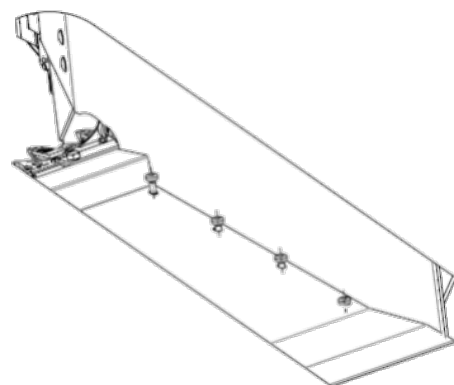
- 614-625: 2x DIN 931 – M10x70
- 630-635: 2x DIN 931 – M10x80



Tighten all 4 bolts (55 Nm)

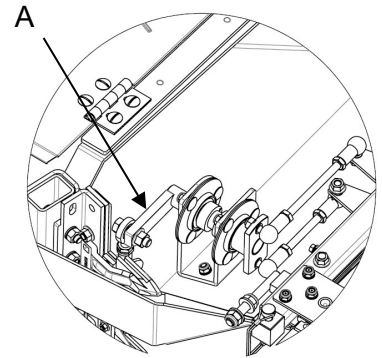


Screw on the 4 M8x25 self-tapping screws for attaching the bottom plate (27,5 Nm).



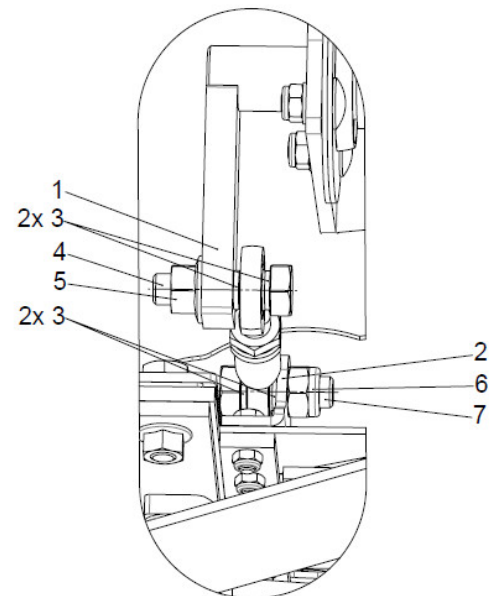
Right Side Component Assembly

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.

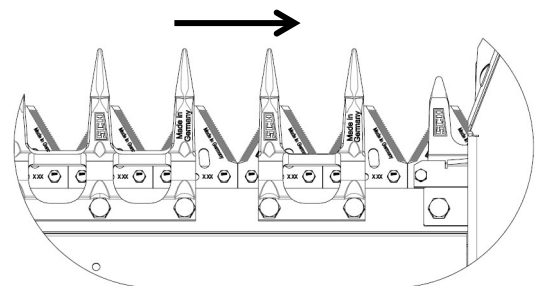


This figure shows in detail the installation sequence for

- the spacer rings (Pos.3)
- bolt DIN 933 – M12x45 (Pos.4)
- bolt DIN 933 – M12x35 (Pos.7)
- Nut DIN 6923 – M12 (Pos.5)
- Nut DIN 985 – M12 (Pos.6)
- ball joint and drive shaft (Pos.1).
- drive plate (Pos.2)



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.

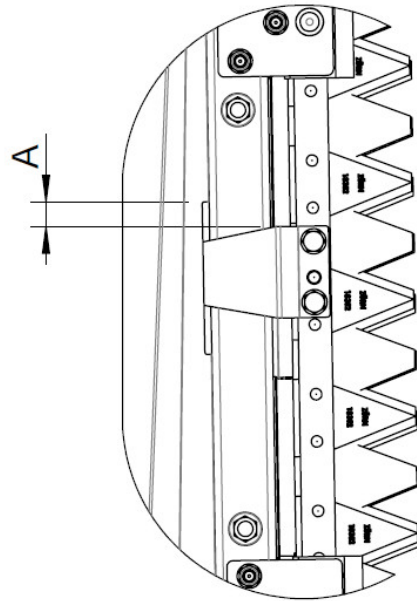


Exercise CAUTION when moving the knife.
There is a RISK OF INJURY.

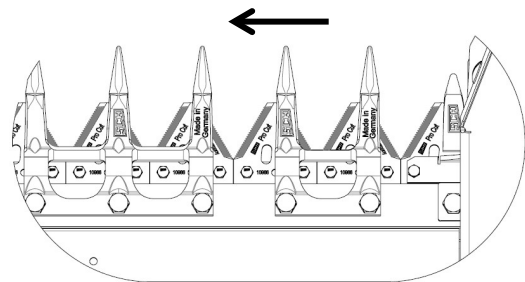


Right Side Component Assembly

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

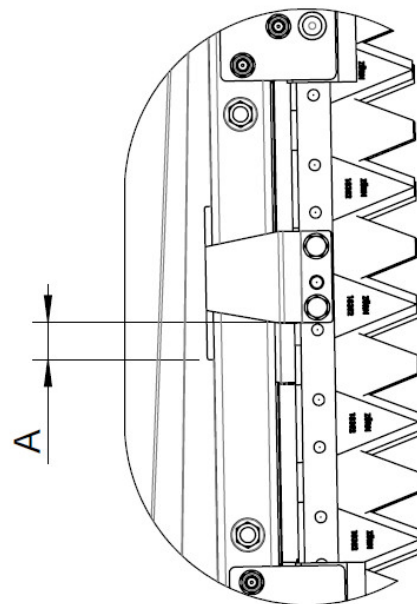


Move the knife drive all the way to the left.



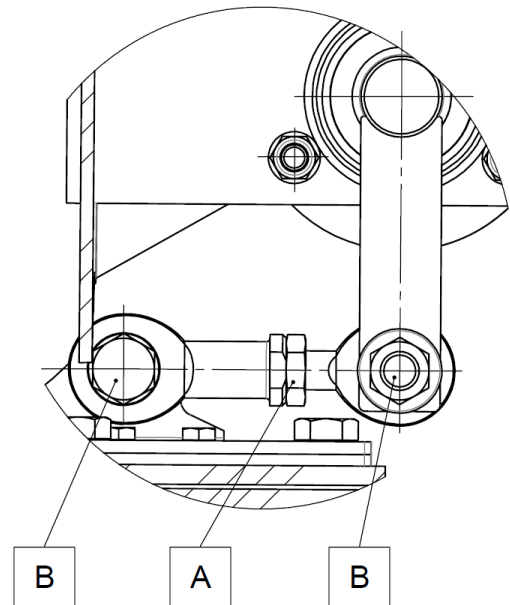
The gap (A) of the knife mount to the side wall must be measured. It should be approximately 10 mm on the other side as well.

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



Right Side Component Assembly

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.



Pay attention to the correct installation of the retaining screw (B) and the spacer rings.



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? | |

Initial Installation

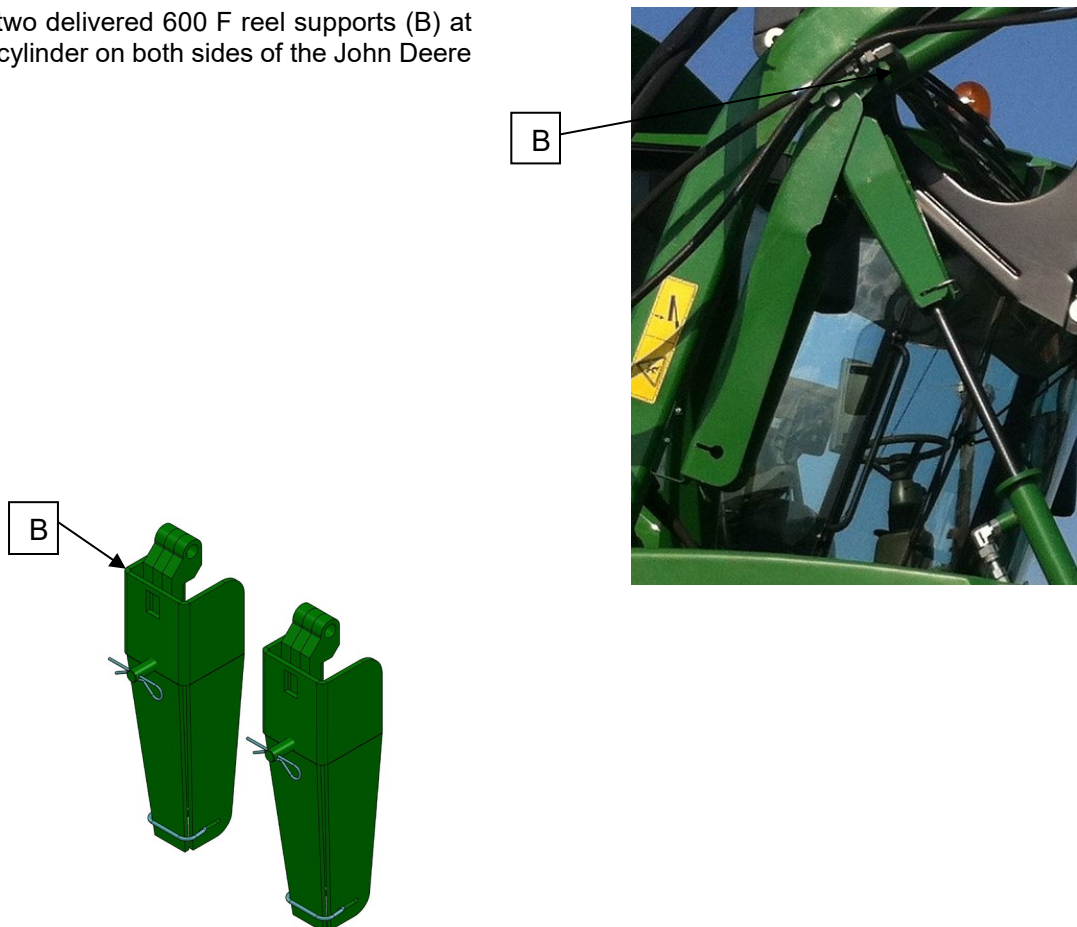
Retaining bolt of the reel lift cylinder

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



Reel supports 600F

Mount the two delivered 600 F reel supports (B) at the reel lift cylinder on both sides of the John Deere header.



Initial Installation

Attaching the Side Shields

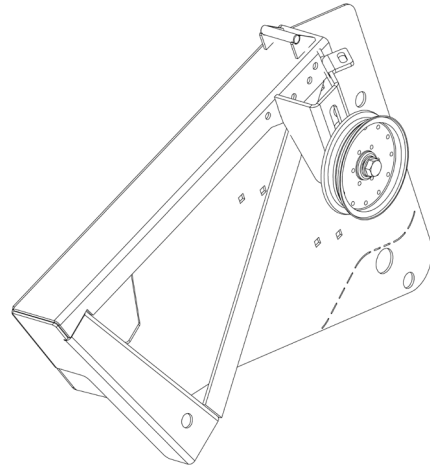
The original plastic divider must be dismantled
(see the original operating manual)



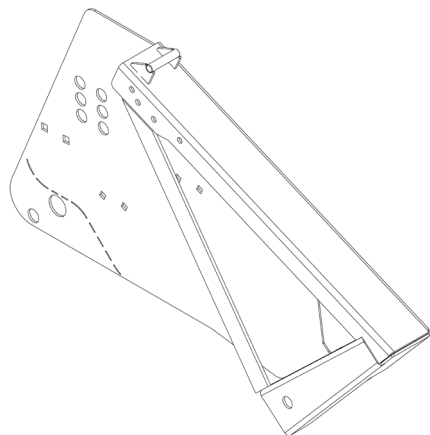
Side Shield Left

The side shield left is complete assembled with the pulley.

Place the left side shield on the left sidewall of the header. Fasten the side shield with the delivered bolts and nuts.



Side Shield Right



Initial Installation

Place the side shield on the right sidewall and fasten with the existing holes (bolts are included)

Side Shield Right



Side Shield Left



Initial Installation

Attaching the Middle Shield

Place the middle shield on the left side of the John Deere header and fasten it with the included bolts.



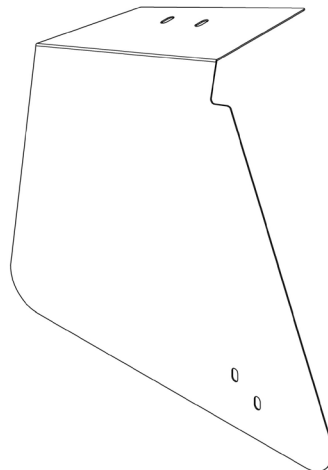
Fastening above



Fastening below



Middle Shield



Initial Installation

Reinforcement Tube

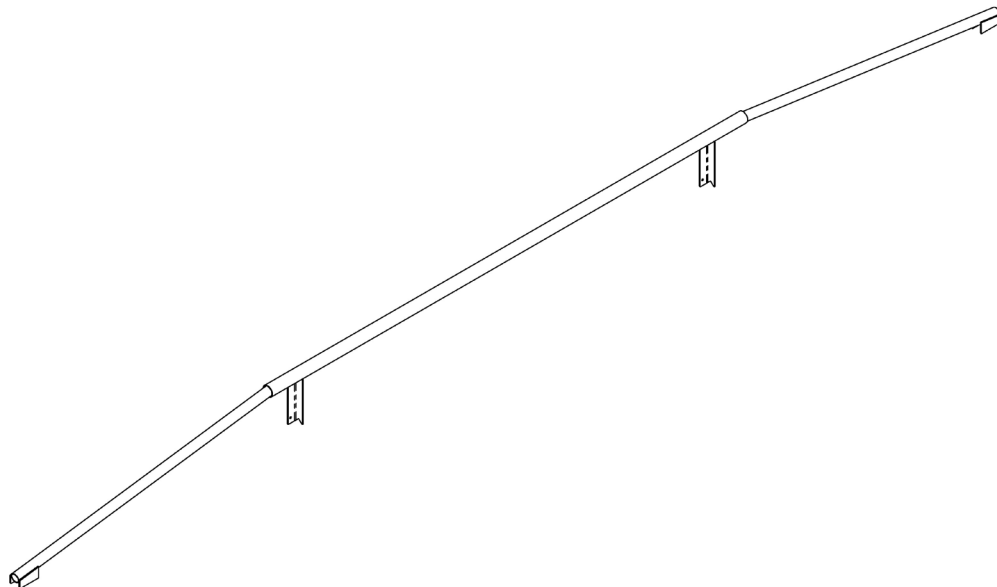
To gain stability, must be weld a reinforcement tube on the John Deere header top beam.

- 618: 50731
- 620: 50483
- 622: 16167
- 625: 16140
- 630: 16145
- 635: 16198



PLEASE NOTE:

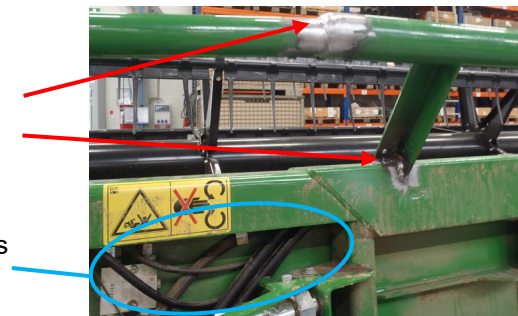
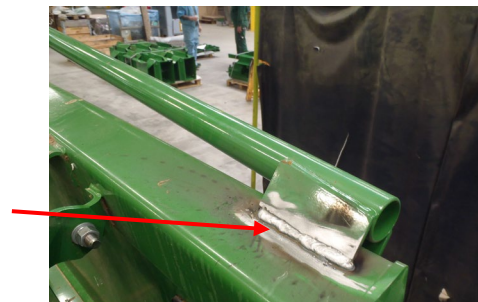
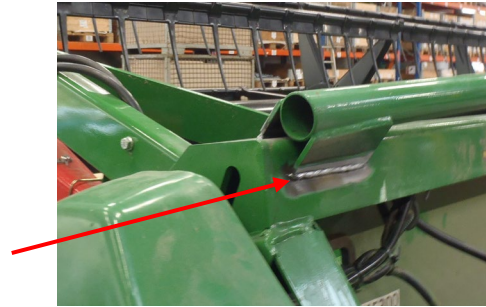
The bracket must be centered before welding.
The weld-on angle is approx. 45°



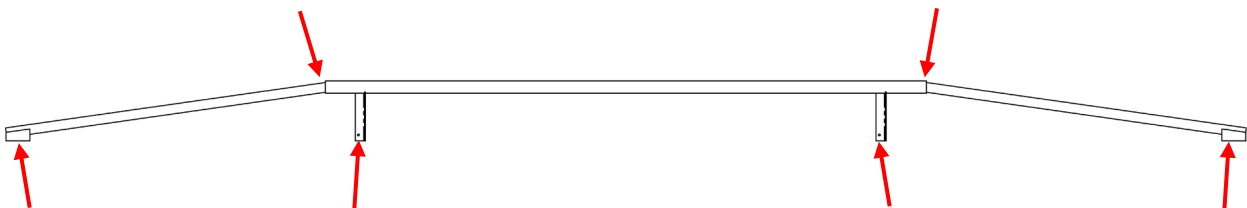
Initial Installation

The reinforcement tube will be delivered in three pieces and must be welded on the John Deere header as follows.

In the following figures you can see the welding positions.



Please note the warnings below.



CAUTION:

Cool down hydraulic hoses and electrics while welding the reinforcing tube



Initial Installation

Attaching the Canola Extension to the Cutterbar

Pick up the canola extension direct from the ground with the combine harvester.



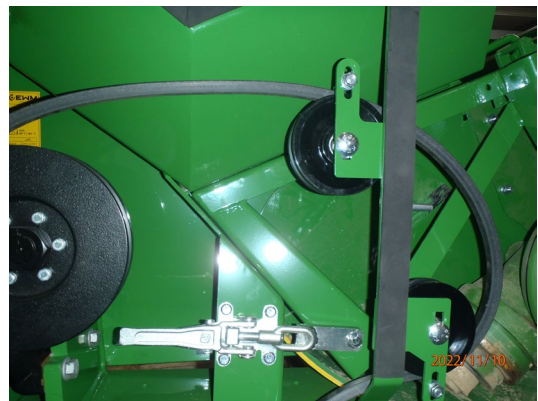
CAUTION:
sharp knives!



Latch

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

(Adjust manually as necessary.)



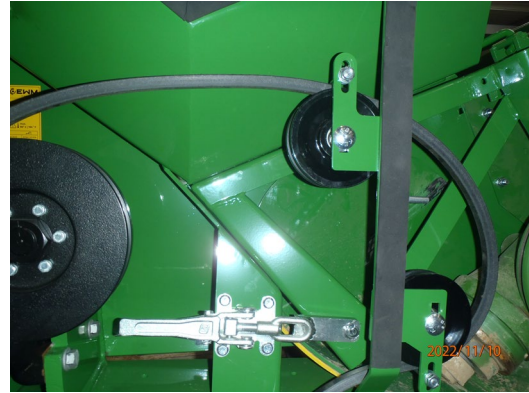
Initial Installation

Belt Guide

Put the belt on and tension as necessary.

New-V-Belt: RS 21060
(Brazil Horizontina)

Old-V-Belt: RS 18208
(Harvester Works)



This figure shows the belt guide.

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

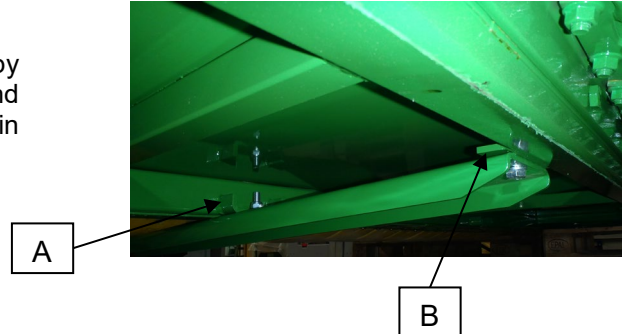
A



Initial Installation

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

The position of the center support is determined by the position of the u-shaped welding bracket (A) and the weld-on plate (B) at the canola extension, in combination with the float arm at the header.



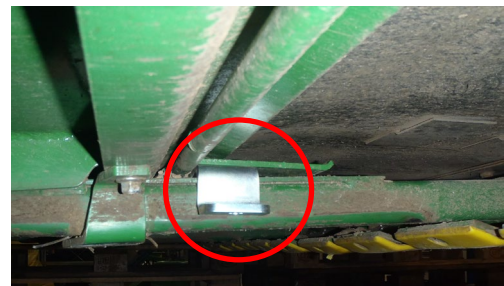
Remove the top part of the retaining clip from the central support and push it above the float arm of the header.

Mount the center support on the header. To do this, attach the welding bracket (A) and the weld-on plate (B) to the center support, use the included bolts.

Do not tighten the bolts yet!

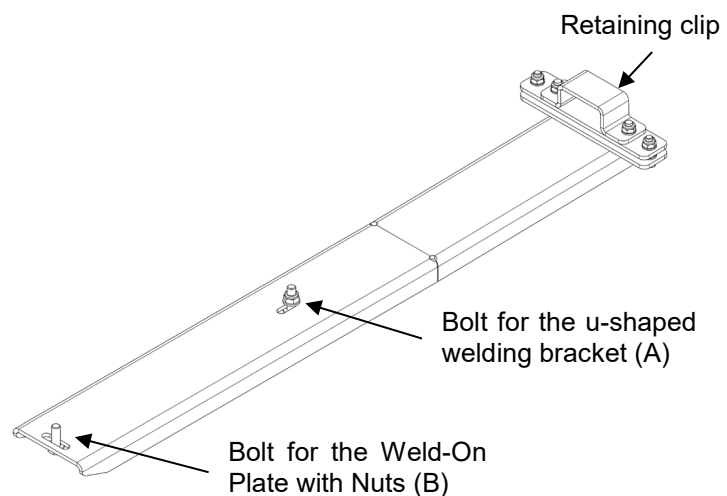
Bring the retaining clip into the correct position and mount it with the other parts of the clip from the center support.

Now tighten all bolts!



Scope of delivery:

Fitting Kit	Central Support
Up to 20 ft	-
22-25 ft	1
30 ft	2
35 ft	3



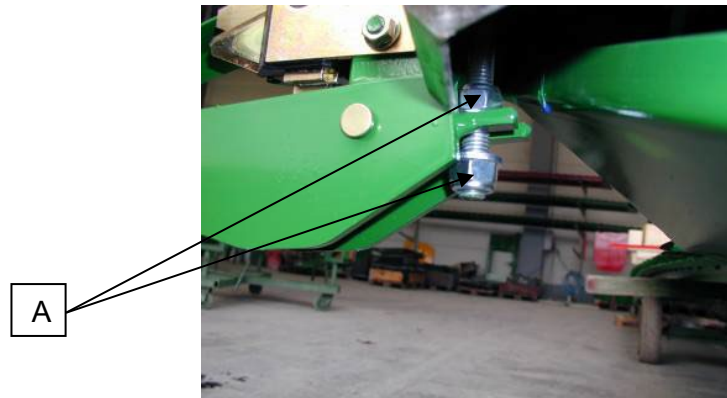
Initial Installation

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



Initial Installation

Spacer plates for the 30 ft – 35 ft

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

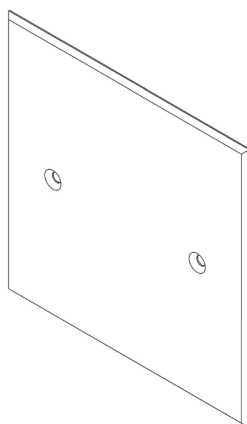


Install the spacer plates only in the right-side component. To do this, drill holes and screw in the spacers with countersunk bolts.

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).



A

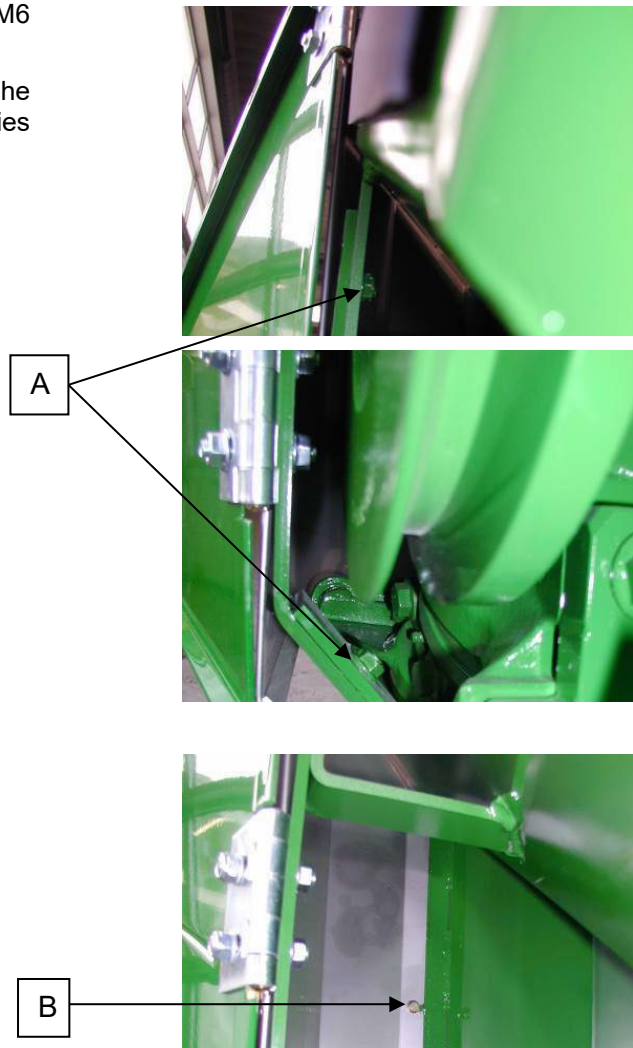
Dismantling Side Safety Panel

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).

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.



Maintenance

General service and maintenance instructions

Any service and maintenance work must be carried out by trained staff who are familiar with the mode of operation of the machine.

The engine of the towing vehicle must be shut off and all ancillaries must have come to stop before any service, maintenance or repair work can be carried out.

- Visually inspect the header transporter for damage, deformations and cracks in structural parts.
- Check the tires for wear.
The minimum tread depth is 1.6 mm and must not be undercut. Damaged tires must be replaced.
- Check the lights for proper function.
- Replace defective components.

The manufacturer accepts no liability if the instructions on service and maintenance are not observed. The manufacturer neither accepts liability for any damage caused by improper service and maintenance.



Cleaning the machine regularly helps to preserve its paint finish. Cleaning the contaminated parts fairly promptly helps to prevent fading and corrosion. It is best to repair any damage to the paint coat immediately.

CAUTION! Avoid using a pressure washer to clean those areas that contain bearings and hydraulic components. A pressure washer that is set to an excessive pressure is at risk of damaging the paint finish.



Maintenance

Wear suitable protective clothing!




Disconnect the driveline before working on the mechanical drive components.

Always disconnect the electric line before working on the electrical system.

Lubrication and Oils

The service intervals given below are based on an average utilization of the machine. Reduce these service intervals, if the machine is used at above-average levels.

The specific lubricant to be used is indicated by a symbol. These symbols are explained in the table below.

Type of service	Type of lubricant	Comment
Grease 	Multi-purpose grease	Grease nipples: Apply about two shots of grease from the grease gun. Remove any excessive grease from the nipple.
Lubricate 	Vegetable oils unless specified otherwise	Sliding surfaces: Apply a thin film of the oil with a brush or a spray can. Remove any excessive oil.
Oil 		Apply a uniform film of oil on the surface.

CAUTION!

Lubricants are a hazard to the environment if stored and disposed of incorrectly.

- Store the lubricants in suitable bins and in accordance with the legal requirements.
- Dispose of used lubricants in accordance with the legal regulations.



IMPORTANT!

Immediately replace missing grease nipples. Clean the grease nipples thoroughly before greasing them.



Lubrication and Oils

Grease

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

The following grease is recommended:

Shell Alvania Grease RL 2, Gadus S2 V100 2, John Deere Grease-Gard Premium, Petronas Grease CA 00

Other greases can be used if they meet the specifications.

Bowdenzüge mit Fettpressölen, nicht mit Fettschmierem.

Lubrication Schedule and Periodic Maintenance

CAUTION:

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

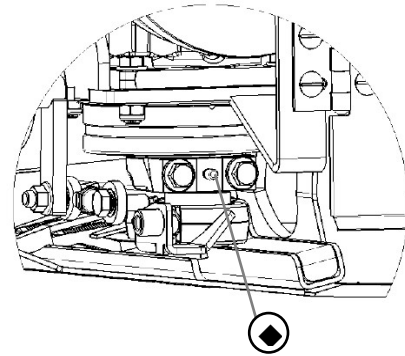


IMPORTANT:

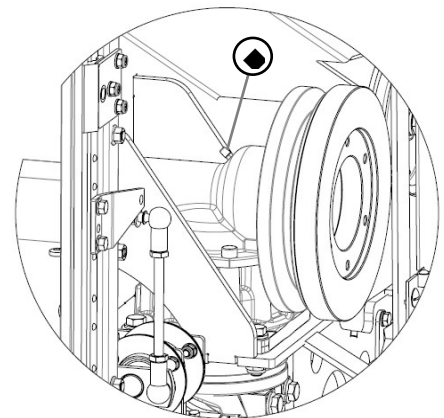
The recommended maintenance intervals are for normal working conditions. With more demanding operating conditions, maintenance should be performed more often as appropriate.



Lubricate the knife head bearing (grease gun every 50 operating hours)



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



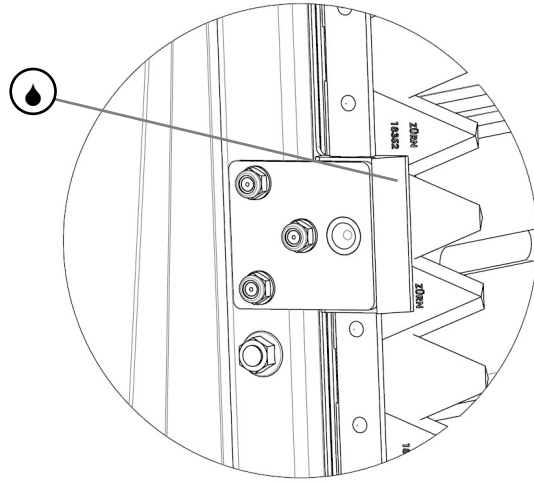
IMPORTANT:

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!



Lubrication Schedule and Periodic Maintenance

Lubricate the bearing of the side cutter as well



Torques for Metric Bolts

Bolts	Grade 4.8				Grade 8.8 oder 9.8				Grade 10.9				Grade 12.9			
	Oiled		Dry		Oiled		Dry		Oiled		Dry		Oiled		Dry	
Size	N•m	lb-in	N•m	lb-in	N•m	lb-in	N•m	lb-in	N•m	lb-in	N•m	lb-in	N•m	lb-in	N•m	lb-in
M6	4,7	42	6	53	8,9	79	11,3	100	13	115	16,5	146	15,5	137	19,5	172
M8	11,5	102	14,5	128	22	194	27,5	243	32	23,5	40	29,5	37	27,5	47	35
M10	23	204	29	21	43	32	55	40	63	46	80	59	75	55	95	70
M12	40	29,5	50	37	75	55	95	70	110	80	140	105	130	95	165	120
M14	63	46	80	59	120	88	150	110	175	130	220	165	205	150	260	190
M16	100	74	125	92	190	140	240	175	275	200	350	255	320	235	400	300
M18	135	100	170	125	265	195	330	245	375	275	475	350	440	325	560	410
M20	190	140	245	180	375	275	475	350	530	390	675	500	625	460	790	580
M22	265	195	330	245	510	375	650	480	725	535	920	680	850	625	1080	800
M24	330	245	425	315	650	80	820	600	920	680	1150	850	1080	800	1350	1000
M27	490	360	625	460	950	700	1200	885	1350	1000	1700	1250	1580	1160	2000	1475
M30	660	490	850	625	1290	950	1630	1200	1850	1350	2300	1700	2140	1580	2700	2000
M33	900	665	1150	850	1750	1300	2200	1625	2500	1850	3150	2325	2900	2150	3700	2730
M36	1150	850	1450	1075	2250	1650	2850	2100	3200	2350	4050	3000	3750	2770	4750	3500
<p>The tightening torques given are guideline values. Do NOT use these values if a different torque or another securing method is specified for a specific application. For stainless steel bolts and nuts for stirrup bolts, see specific instructions. Tighten locking nuts with plastic insert or edge-raised steel locking nuts to the corresponding torque for dry bolts and nuts given in the table unless otherwise instructed.</p>								<p>Shear pins are designed to break at a certain load. When replacing shear pins, use only pins of the same grade. When replacing bolts and nuts, make sure that equivalent parts of the same or a higher grade are used. Tighten higher-grade nuts and bolts to the same torque as the originally used parts. Make sure that the thread is clean and the bolts correctly fitted. If possible, oil normal and galvanised nuts and bolts (except for locking nuts and wheel studs or nuts) unless specified otherwise for the specific application.</p>								
<p>“Oiled” means that a lubricant, such as engine oil, is applied to the bolts or that phosphatized or oiled bolts with a size from M20 are used.</p>																
<p>“Dry” means the use of normal or galvanised bolts without lubrication or bolts with a size between M6 and M18 that are zinc-coated.</p>																

Disturbance and Troubleshooting

Problem	Cause	Corrective
Canola Extension without functions	Belt worn or damaged.	Replace belt and adjust it to sufficient tension.
	Belt not attached.	Put the belt on and adjust it to sufficient tension.
	Belt not tensioned.	Put the belt on and adjust it to sufficient tension.
Cutting problems main knife	Cutter bar blocked up.	Clean the cutter bar.
	Worn, damaged or broken cutter bar parts.	Check cutter bar and replace any worn or damaged parts.
	Cutting edge of knife fingers not parallel to knife sections or too much distance between fingers and knife sections.	Replace knife fingers.
	Bent cutter bar on side knife.	Replace the cutter bar and readjust the side knife (see chapter <i>Attaching the side panel on the right</i>).
Cutting problems side knife	Knife section gape.	Readjust knife guides at the adjusting bolt. Replace knife guides and adjust clearance on the knife sections.
	Bent side knife. No crop divider installed.	Install new knives and protect by installing crop divider.
	Loose quick lock.	Readjust all tensioning elements and check that they are firmly fitted.
	Knife guides worn, damaged or broken..	Replace knife guides.

Disturbance and Troubleshooting

Problem	Cause	Corrective
Vibration at the canola extension	Center Support not attached.	On models 22 ft and larger, install the included center support(s).
	Belt tension insufficient.	Adjust the belt to sufficient tension.
	Worn out links (vertical angle joints or horizontal joint bearing).	Check links and exchange any worn out elements.
	Knife head bearing worn out.	Check the knife head guide bearing and replace if necessary.
	Drive shaft of side knife(s) hits guard door or stainless-steel cover.	Check the stroke of the side knives and set them correctly (see chapter <i>Attaching the side panel on the right</i>).
The reel hits the canola extension	Reel support not in hinged position.	Fold in the reel support.
	Reel support not installed.	Install reel support.

Technical Specifications

Type	Overall length [mm]	Overall width [mm]	Max. height [mm]	Working width [mm]	Weight [kg]
614	1350	4550	1500	14ft or 4250	400
615	1350	4950	1500	15ft or 4550	410
616	1350	5300	1500	16ft or 4800	420
618	1350	5900	1500	18ft or 5500	440
620	1350	6500	1500	20ft or 6100	460
622	1350	7150	1500	22ft or 6700	500
625	1350	8050	1500	25ft or 7600	520
630	1350	9550	1500	30ft or 9150	660
635	1350	11100	1500	35ft or 10700	720

General terms of guarantee

Zürn Harvesting GmbH & Co. KG, Kapellenstraße 1, D-74214 Schöntal-Westernhausen (hereinafter “Zürn Harvesting”) hereby certifies for each customer who has purchased a new Zürn Harvesting machine from an authorised dealer that the materials and workmanship of this machine are guaranteed under the conditions specified below, providing that the machine is put into operation and maintained in accordance with the specifications in the operating instructions.

I. Duration of the guarantee

The guarantee period is one year from delivery of the machine by Zürn Harvesting and is valid for up to 500 operating hours within this period. The replacement of individual parts or repair will not prolong the above guarantee period for the machine.

II. Scope of the guarantee

The guarantee embraces only the reimbursement or repair of the parts and reimbursement of work time required in order to effect the repair, based on the repair times allowed by Zürn Harvesting, under the prerequisite that the fault was determined by our technical customer service department and was acknowledged by Zürn Harvesting to be attributable to faulty materials or workmanship. Replaced parts will become the property of Zürn Harvesting. The customer must allow services received from the vendor/dealer under warranty to be credited to the guarantee.

The guarantee does not cover any further claims against Zürn Harvesting. This means in particular that travel and transport costs will not be reimbursed, nor will Zürn Harvesting be liable for consequential damage, such as loss of harvest or losses of income.

III. Limitations of the guarantee

The guarantee does not apply to defects or faults that are attributable to:

- usual wear and tear;
- failure to heed operating, storage or transport instructions contained in the operating manual;
- use other than as intended, inadequate maintenance, inexpert operation or excessive use;
- damage caused to the machine or its equipment caused during transportation or loading; machines, equipment and parts are shipped at the risk of the recipient;
- external influences on the machine, e.g. third-party damage, weathering or other natural occurrences;
- circumstances that were known to the buyer at the time of purchase.

The guarantee will be rendered null and void if technical modifications are made to the machine without the written consent of Zürn Harvesting or if spare parts other than original Zürn Harvesting spare parts are installed and/or if repairs were not carried out by an authorised dealer. The guarantee is likewise voided if the machine was not put into service for the first time by the dealer in accordance with the instructions of Zürn Harvesting.

General terms of guarantee

IV. Assertion of the guarantee

The terms of the guarantee are dependent upon precise observance of the following regulations by both the dealer and the purchaser:

- The guarantee card (machine card) completed by the dealer and customer must be returned to Zürn Harvesting by post or e-mail as soon as the machine has been delivered to the customer.
- Applications for guarantee claims must be formulated on the corresponding Zürn Harvesting form and presented to Zürn Harvesting by the dealer within one calendar month of discovery of the defect/fault.
- The application must be completed legibly and must contain the following information:
 - Name, address and dealer customer number
 - Name and address of the purchaser
 - Exact machine type and designation
 - Complete serial number of the machine
 - Date of delivery to the dealer and to the purchaser
 - Date of the claim
 - Number of operating hours or acreage harvested by the machine
 - Exact description of the damage and information regarding the probable cause
 - Quantity, item numbers and description of damaged parts

The parts reported as damaged must be returned to Zürn Harvesting free of charge for appraisal, complete with a copy of the guarantee claim application. Any costs incurred for returning the parts replaced or repaired will be borne by the sender.

If the guarantee claim application is refused, the dealer or the customer has a period of 15 days, starting from the day the Zürn Harvesting decision was received, to demand return of the damaged parts. Once this period has elapsed, the parts will be disposed of.

V. Additional clauses

Claims under the guarantee may not be transferred to third parties without the prior, written consent of Zürn Harvesting.

The dealer has neither the right nor the authority to make declarations or to enter into a commitment etc., whether express or implied, in the name of Zürn Harvesting.

The technical support for repair of the machine given by Zürn Harvesting or their representatives excludes any further liability whatsoever by Zürn Harvesting and has no influence whatsoever on the existing terms of guarantee.

Zürn Harvesting reserves the right to modify the design of the machine without prior notice. It is not obliged to transfer such modifications to machines which have already been sold or are in use.

Furthermore, due to the rapid development of the state of the art, no guarantee can be given for the machine descriptions contained in these operating instructions or other technical leaflets and data sheets.

EU CERTIFICATE OF CONFORMITY

EG- Konformitätserklärung nach Maschinenrichtlinie 2006/42/EG

Bitte sorgfältig aufbewahren, jedoch nicht im Fahrzeug

EU CERTIFICATE OF CONFORMITY According to Machinery Directive 2006/42/EG

Please keep safely, not inside the vehicle

Hiermit bestätigt die <i>Hereby declares</i>	Zürn Harvesting GmbH & Co. KG	
in alleiniger Verantwortung dass das landwirtschaftliche Anbaugerät <i>the full responsibility for the agricultural implement</i>	Fabrikmarke <i>Brand</i>	Zürn Harvesting
	Typ <i>Type</i>	Raps Profi
genehmigt in <i>approved in</i>	Schoental	
am <i>on</i>	03.03.2023	
durch den <i>by the</i>	Hersteller / manufacturer	
den grundlegenden Sicherheits- und Gesundheitsanforderungen der Richtlinie 2006/42/EG entspricht. <i>to full fill the complete safety- and health requirements according to machinery directive 2006/42/EG.</i>		
Zur sachgerechten Umsetzung der in den EU- Richtlinien genannten Sicherheits- und Gesundheitsanforderungen wurden folgende Normen herangezogen: <i>For proper implementation according to the EU- Directives for health and safety requirements, the following standards were used:</i>	DIN EN ISO 4254-1 (09/16) DIN EN ISO 4254-7 (12/19)	
Geschehen zu <i>Done at</i>	Schoental	
am <i>on</i>	03/03/2023	
	 Rolf Zürn Geschäftsführer, CEO	

Notes

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