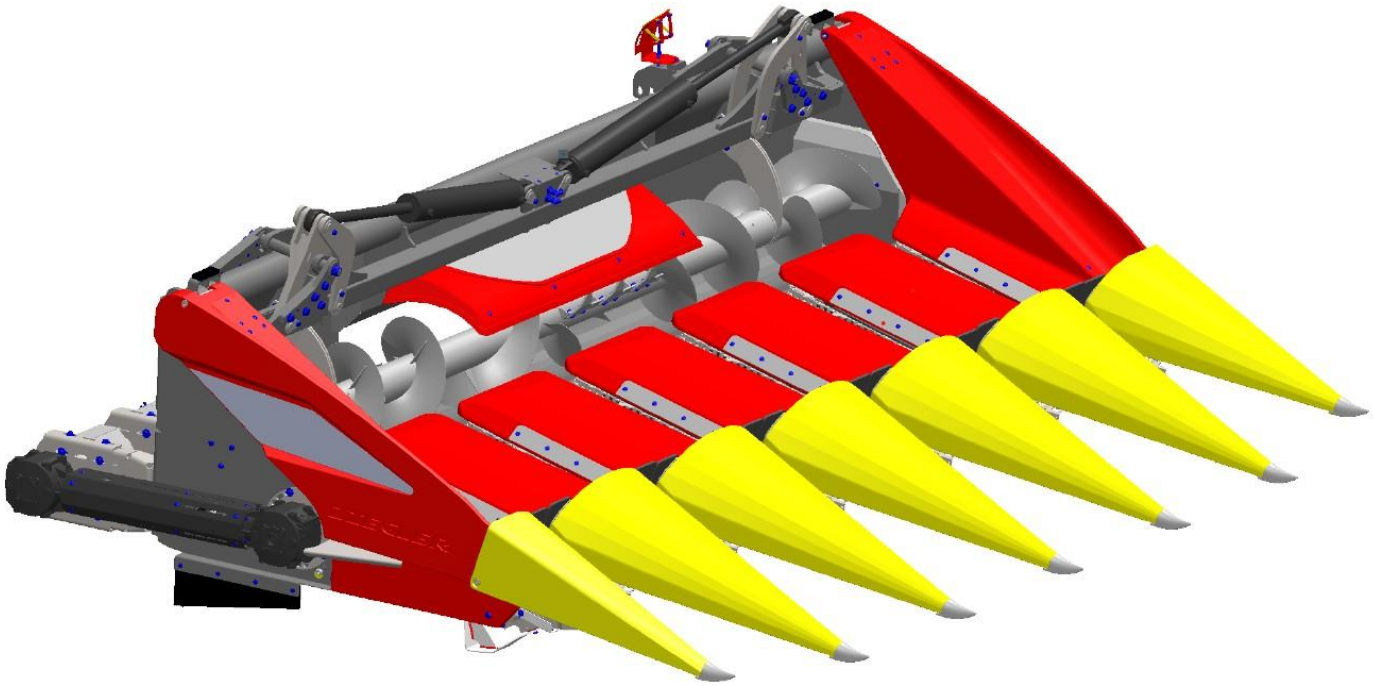
OPERATING MANUAL

ZIEGLER
Harvesting | Transport | Cultivation

CORN MASTER X



Corn header foldable

Date: 27.10.2026
Ziegler-Nr.: 12-710494_EN_Vers.01_BTA

Ziegler GmbH • Schrobenhausener Str. 56 • 86554 Pöttmes (Germany)
Tel: +49 (0) 8253 / 9997-0 • Fax: +49 (0) 8253 / 9997-47
vertrieb@ziegler-harvesting.com • www.ziegler-harvesting.com

Keine Haftung für Druckfehler. Abbildungen können Zusatzausstattungen enthalten. // No liability for literals. Illustrations may contain additional equipment.

Zertifikat

DIN EN ISO 9001:2015

PÜG Prüf- und Überwachungsgesellschaft mbH
bescheinigt hiermit, dass das Unternehmen

Zertifikatsinhaber:	Ziegler GmbH Schrobenhausener Straße 56, DE-86554 Pöttmes
Geltungsbereich:	Strategische Geschäftseinheit, Harvesting, Transport, Cultivation mit Entwicklung/Konstruktion, Disposition, Logistik, Kundendienst und Vertrieb, Maschinenbau und elektromechanische Komponenten mit Einkauf, Disposition, Herstellung und Logistik
Zertifizierte Standorte:	Ziegler GmbH + Firmenstandorte (siehe Anlage) *)

ein Qualitätsmanagementsystem entsprechend der DIN EN ISO 9001:2015 eingeführt hat und dieses wirksam anwendet.

Der Nachweis wurde im Rahmen des Zertifizierungs-Audits erbracht.

*) Die Anlage ist Bestandteil der Urkunde und umfasst 1 Seite(n).

Dieses Zertifikat ist gültig vom:	**10.09.2025**
bis:	**03.08.2027**
AuditberichtNr	**V-022164**
Zertifikat-Registrier-Nr.:	**K24066-20250910-Q-de**

Deutsche Akkreditierungsstelle D-ZM-16007-01-00

Gäufelden, 10.09.2025

Leitung der Zertifizierungsstelle

PÜG Prüf- und Überwachungsgesellschaft mbH | Hämmerlestraße 14 + 16 | 71126 Gäufelden
Telefon (0 70 32) 28 91-0 | Fax (0 70 32) 28 91-111 | info@pueg.de | www.pueg.de

Anlage zur Urkunde 2 von 2

vom: 10.09.2025

Zertifikat-Registrier-Nr.: K24066-20250910-Q-de

PÜG Prüf- und Überwachungsgesellschaft mbH
Hämmerlestraße 14 + 16, 71126 Gäufelden
Tel. 07032 2891-0, Fax. 07032 2891-11

Das Zertifikat ist gültig für die nachstehend genannten Standorte:

Firmenbezeichnung	Straße, PLZ und Ort	Geltungsbereich
Ziegler GmbH	Schrobenhausener Straße 56 DE-86554 Pöttmes	Strategische Geschäftseinheit Harvesting, Transport, Cultivation, mit Entwicklung/Konstruktion, Disposition, Logistik, Kundendienst und Vertrieb
SIA Ziegler	Spalu iela 3 LV-5404 Daugavpils	Strategische Geschäftseinheit Harvesting, Transport, Cultivation, Maschinenbau und elektromechanische Komponenten mit Einkauf, Disposition, Herstellung und Logistik

Gäufelden, 10.09.2025, Leitung der Zertifizierungsstelle

EG-Konformitätserklärung

Entspricht der EG-Richtlinie 2006/42/EG

EC Declaration of Conformity

In accordance with the EC directive 2006/42/EC

Wir, **ZIEGLER GmbH**
We, **Schrobenhausener Straße 56**
D-86554 Pöttmes

Erklären in alleiniger Verantwortung, dass das Produkt
declare, and takes sole responsibility for declaring, that the product

Maschine:	**MAISPFLUECKER KLAPPBAR**
machine:	**CORN HEADER FOLDABLE**
Modell / model:	**CORN MASTER X**
ab Seriennummer / from serial number:	**4300000**

auf das sich diese Erklärung bezieht, den einschlägigen grundlegenden Sicherheits- und Gesundheitsanforderungen der EG-Richtlinie 2006/42/EG entspricht. Zur sachgemäßen Umsetzung der in den EG-Richtlinien genannten Sicherheits- und Gesundheitsanforderungen wurden insbesondere folgende Normen und technische Spezifikationen herangezogen:

To which this declaration refers conforms with the applicable basic health and safety requirements of the EC directive 2006/42/EC. The following standards and technical specifications were applied in order to fulfil the health and safety requirements of the relevant EC directives:

EN ISO 12100	Safety of machines
EN ISO 4254-1	Agricultural machinery - Safety - Part 1
EN ISO 4254-5	Agricultural machinery - Safety - Part 5
EN ISO 4254-7	Agricultural machinery - Safety - Part 7
EN ISO 4254-12	Agricultural machinery - Safety - Part 7
EN 12965	Tractors and machinery for agriculture and forestry
EN 60204-1	Safety of machinery - Electrical equipment of machine Part 1

Bevollmächtigt zur Zusammenstellung der technischen Unterlagen ist der unterzeichnende Geschäftsführer.
The company officer authorized to compile the technical documentation is the Managing Director (signatory).

Dieses Zertifikat belegt, dass auch einzelne Anbauteile mit den grundlegenden Sicherheitsvorgaben (gemäß der EU-Richtlinie 2006/42/EG) rechtskonform sind und bei der Montage an Mähdreschern und an anderen Geräten mit dem CE-Zeichen gekennzeichnet werden dürfen.

This certificate furnishes proof of the conformity of individual attachment parts with the fundamental safety specifications (in accordance with EU Directive 2006/42/EC) and may be assigned a CE mark when fitted to combine harvesters and other devices.

ZIEGLER
Ziegler GmbH
86554 Pöttmes • Schrobenhausener Straße 74
Tel. 08253/9997-0 • Fax 08253/9997-47

Pöttmes, 01.01.2021
Ort und Datum; Place and date

Dipl. BW (FH) M. Ziegler
(Managing Director)

To guarantee the handover of the operating instructions to the end customer and the reseller.

Date of delivery _____

Please a completed copy of this form to
ZIEGLER GmbH, Schrobenhausener Straße 56, D-86554 Pöttmes (Germany)

Address authorized stockist / importer

_____
Company

_____
Address

_____
Town / postcode Company stamp / date

Customer address

_____
Name

_____
Address

_____
Post code

I hereby declare that I have purchased the machine / set specified below. I also confirm that I was presented with the operating instructions upon delivery of the machine / set. I undertake to read these operating and installation instructions comprehensively and carefully before use of the machine / set. Moreover, I undertake to commission and operate the machine / set in accordance with their contents. I will also include these documents with the machine / set in the event of its resale and inform the buyer of the obligation to pass on the instructions with the machine. I am aware that a guarantee claim can be made against ZIEGLER GmbH only after ZIEGLER GmbH have received a completed and signed version of this declaration. Furthermore, I am aware that the guarantee period begins with the date on which I took receipt of the machine / set, regardless of the date on which this declaration was returned.

_____ _____
Machine / set type Machine / set no.

_____
Place / date Customer signature

Guarantee payments can only be made upon provision of a <u>completed and signed</u> handover declaration.

Warranty Obligations

Save where otherwise provided for in the Sales Agreement, the duration of the warranty period is 1 year or 500 ha operation time, whichever is earlier. The duration of the period is counted from the moment the machine/set is delivered to the client.

The Ziegler **CORN MASTER X** corn header is a harvest front attachment for mounting to a forage harvester / combine harvester and serves the harvesting of corn and other bulky forage crops. Any other form of use is acknowledged as non-intended use. The manufacturer is not liable for any damage resulting from this type of use.

This Warranty does not apply to:

- damage resulting from a malicious act,
- damage resulting from the Event of Force Majeure (e.g. floods, fires, effects of hostilities etc.),
- damage resulting from the use of non-original components, spare parts and auxiliary equipment,
- damage resulting from the unauthorized changes made by the end user in the machine structure or its components,
- adjustments,
- consumables (lubricants),
- parts out of order due to natural wear and tear (rubber plates, bearings, chains, sprockets, gearwheels, blades),
- damage resulting from accidental or intentional intrusion of foreign matter (rocks, branches, wires etc.) into the moving parts of a corn header (blades, chains, sprockets).

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FOREWORD

Dear customer,

In purchasing our corn header, you have decided for a high-quality ZIEGLER product.

As such, we should like to thank you for your expression of trust.

Please read these operating instructions carefully and before use so as to ensure the best possible use of the corn header.

This manual has been structured in such a way as to provide comprehensive information about the required activities following the technical sequence. They provide comprehensive information pertaining to the maintenance, the safe operation of the machine, safe working methods, special precautionary measures and the additional accessories available. Compliance with the specifications contained in this manual is vital so as to ensure operational safety, reliability and value-conservation of the corn header.

Please note:
This manual also refers to the corn header as the “machine” or “front attachment device”.

Please note:

These operating instructions represent a constituent part of the machine and must be stored in immediate proximity to it.
Only ever operate the machine after full training and in compliance with the specifications of this manual.
It is imperative that you follow the safety information.
Comply will all the applicable accident prevention regulations and all generally recognized safety and medical-safety regulations and the applicable highway code.
All the information, diagrams and technical specifications made in these operating instructions correspond to the latest state of technology at the point of publication.
We reserve the right to make alterations to the design at any time and without the need to specify reasons. Should these operating instructions become completely or partially unusable, we will provide you with a replacement. Please state the number on the next page.

We wish the best of success with your corn header.

Ziegler GmbH

1. INTRODUCTION

These operating instructions contain the basic information which must be followed during the operation and maintenance of your machine. All personnel must read these operating instructions before commissioning the machine. They are to be always held accessible to personnel.

Follow all the safety information provided in these operating instructions and not just those listed under the special safety headings.

1.1 Intended use:

The Ziegler CORN MASTER X corn header is a harvest front attachment for mounting to a forage harvester / combine harvester and serves the harvesting of corn and other bulky forage crops.

Modifications to the corn stalk chopper / combine harvester are required to harvest other plants such as sunflowers. Please consult your stockist regarding such modifications.

1.2 Validity:

These operating instructions are valid for the CORN MASTER X.

1.3 Contact partner:

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Internet: www.ziegler-harvesting.com

2. SAFETY

2.1 Marking of information in the operating instructions

The safety information provided in these operating instructions (failure to follow them can result in the endangerment of persons) is marked with general danger symbols:

2.2 Marking of the danger warnings

Danger!

	**DANGER! – Nature and source of the danger!** Impact: Danger to life or of serious injuries. ➢ Measures for danger prevention

Warning!

	**WARNING! – Nature and source of the danger!** Impact: Injury, serious damage to material. ➢ Measure for damage limitation

Caution!

	**WARNING – Nature and source of the danger!** Impact: Material damage ➢ Measure for damage limitation

Please note

	**PLEASE NOTE – Nature and source of the danger!** Impact: Economic use of the machine ➢ Measures to be performed

Environment

	**PLEASE NOTE – Nature and source of the danger!** Impact: Pollution ➢ Measures to be performed

Warnings placed directly on the machine always require compliance and are to be maintained in a completely legible manner.

2.3 Personnel qualification and training

The machine may only be used, serviced and repaired by those persons who are familiar with it and have been informed of the dangers which it presents. The owner is to establish clearly the areas of responsibility and monitoring of personnel. Personnel lacking any requisite knowledge must be trained and instructed. The owner is to ensure that the personnel have read and understood entirely the specifications of the operating instructions.
Repair work not described in these operating instructions may only be performed by an authorized specialist workshop.

2.4 Dangers for failure to follow the safety information

Failure to follow with the safety information can result in hazards for persons, the environment and the machine itself. Failure to follow the safety information can result in loss of all liability cover.
Non-compliance can result in the following hazards:

- ➢ Hazards to persons through unsecured working areas
- ➢ The failure of important machine functions
- ➢ The failure of the prescribed methods of maintenance and repair
- ➢ The endangerment of persons from mechanical and chemical influences
- ➢ Environmental hazards resulting from the leakage of hydraulic oil.

2.5 Safety-conscious working

Follow the safety information provided in these operating instructions; any valid accident-prevention regulations; and any internal working, operating and safety regulations.
The health and safety and accident-prevention regulations of the appropriate professional associations are binding.
Follow the safety information of the vehicle manufacturer.
Comply with the relevant highway code when driving on public highways. (in Germany StVZO and StVO)
Be prepared for any emergencies. Maintain fire extinguishers and First-Aid kits in the immediate vicinity.
Display the emergency numbers for medical and fire services.

2.6 Safety and accident-protection regulations

- In addition to the information contained in these operating instructions, comply with all the generally valid safety and accident-protection regulations.
- Warning signs provide important information required for danger-free operation. Compliance with them serves your safety.
- Comply with all traffic regulations when using public highways.
- Please ensure that you familiarize yourself with all the features and operating elements as well as their function before commencing work. It is too late to do so whilst working!
- Operating personnel should wear tightly-fitting clothing. Avoid wearing any loose clothing.
- Keep the machine clean so as to minimize the danger of fire.
- Check the immediate surroundings before activating and commissioning. (Children!) Ensure sufficient visibility.
- Travelling on the equipment is forbidden during work.
- Couple the devices as prescribed and only fix and secure to the prescribed equipment.
- Bring the support equipment into the respective position during fitting and removal.
- Exercise especial caution when coupling and uncoupling the corn header to or from the forage harvester / combine harvester.
- Always couple the ballast weights to the foreseen anchorage points in accordance with the specifications.
- Comply with the permissible axle loads, total weight and transport dimensions.
- Check and install the transport equipment such as illumination, warning equipment and if necessary, the safety equipment.
- The actuation equipment (rope, chains, rod etc.) of remotely actuated units must be installed in such a way that they do not trigger unintended movements in all transport and working positions.
- Bring the corn header into the prescribed state for road travel and lock in accordance with the relevant specifications.
- Never leave the driver's cab during travel.
- The travel speed must always be adapted to the surrounding conditions. Avoid sudden approaches to a curve during hill and valley travel and transverses to the slope.
- Handling, steering and braking is influenced by the installation of the devices and the addition of ballast weight. Ensure sufficient steerability and brake capacity.
- Pay attention to the wide projection and / or the oscillating weight of the device when travelling on curves.
- Only ever commission the corn header once all safety equipment has been installed and are in the protection position.
- Maintain the safety equipment in a good state. Replace missing or damaged parts.
- Persons are forbidden from remaining in the work area.
- Do not remain in the turning and pivoting area.
- The hydraulic folding frame may only be actuated once there is no-one in the pivoting area.
- Danger of crushing and shearing at remote-actuated parts (e.g. hydraulics).
- Before leaving the forage harvester / combine harvester, set down the corn header on the ground, engage the parking brake, switch off the motor and remove the ignition key.
- People are prohibited from standing between the forage harvester / combine harvester and corn header without the parking brake and stop block being activated to stop the vehicle from rolling away.
- Follow all the further safety information in the forage harvester / combine harvester operating instructions.

2.7 Attached device

- Exercise especial caution when coupling and uncoupling the corn header to or from the forage harvester / combine harvester.
- The corn header may only be attached to the type of forage harvester / combine harvester intended for the purpose.
- Work on the corn header may only be performed with the motor switched off and the ignition key removed. All control levers should be in the neutral position and none of the hydraulic lines should be pressurized.
- Never work under an raised corn header.
- The corn header may only be driven on public highways and paths with the transport trailer intended for the purpose.
- The corn header must always be placed into the transport position for transport on public highways and paths. Apply protective sheets with flashing lights and front guards onto the corn header, connect the illumination. Repairs, maintenance and cleaning work and troubleshooting may only be performed after the drive and motor have been switched off and the ignition key has been removed.
- Liquids emerging under pressure (hydraulic oil) can penetrate the skin and cause serious injuries which are not visible from outside. Consult a hospital immediately after injuries. Danger of infection
- Dispose of used operating resources such as old oil in the correct fashion.
- The repairs of the hydraulic installation can only be performed by specialist workshops.

2.8 Drive shaft

- Only the drive shaft prescribed by the manufacturer may be used.
- The protective piping, guard cone and power take-off guard - also on the device side - must be fitted and in good condition.
- Ensure the prescribed pipe coverings for the drive shaft are used in the transport and Work position.
- Only install and dismantle the drive shaft with the power take-off shaft and with the motor switched off and the ignition key removed.
- When using a drive shaft with an overload or freewheel coupling which is not covered by the safety equipment on the tractor, the overload or freewheel couplings are to be installed on the device side.
- Always ensure the correct installation and securing of the drive shaft.
- Secure the drive shaft guard by securing the chain against running.
- Before activating the power take-off shaft, ensure that the rotation speed of the power take-off shaft of the forage harvester / combine harvester matches the rotation speed of the device.
- Before activating the power take-off shaft, ensure that no-one is in the danger area of the
- device.
- Never activate the power take-off shaft when the motor is deactivated.
- No-one may be permitted to remain in the area of the turning power take-off shaft or drive shaft when working on the power take-off shaft.
- Always deactivate the power take-off shaft when too great a level of angular offset means that it is not required.
- Caution! Danger from running flywheel mass once the power take-off shaft has been switched off. Do not enter the device during this time. Work may only be performed on the machine once it is at a complete standstill.
- Cleaning, lubrication or setting power take-off shaft driven devices or the drive shaft may only be performed with the power take-off shaft and motor deactivated and the ignition key removed.
- Place uncoupled drive shafts in the bracket intended for this task.
- After removing the drive shaft, place on the protection cover on the power take-off stub.
- Rectify any damage immediately before continuing work with the device.

Please note

Follow the information of the manufacturer of the drive shaft.

(Separate operating instructions).

2.9 Hydraulic system

- The hydraulic system is pressurized.
- When connecting hydraulic cylinders and motors, ensure that you connect the hydraulic hoses in the correct fashion.
- When connecting the hydraulic hoses to the hydraulic connections of the forage harvester / combine harvester, ensure that the hydraulics are depressurized on both sides.
- Given hydraulic function connections between the forage harvester / combine harvester and the front attachment, ensure that the coupling sleeves and plugs are marked so as to prevent incorrect operation. Swapping the connections of the opposite functions (e.g. raising and sinking) brings the DANGER OF ACCIDENT.
- Subject the hydraulic hose lines to regular checks and replace if damaged or worn. All replacement hose lines must satisfy the technical requirements of the device manufacturer.
- Use suitable resources when searching for leaks due to the danger of injury.
- Liquids emerging under pressure (hydraulic oil) can penetrate the skin and cause serious injuries. Consult a doctor immediately after injuries. Danger of infection.
- Ensure that the hydraulic system has been depressurized and switch off the motor before performing any work on the hydraulic system.

2.10 Maintenance

- Repair, maintenance and cleaning work and the elimination of malfunctions should only ever be performed once the drive has been switched off and the motor is at a standstill. - Remove the ignition key.
- Test all nuts and screws for their security and tighten if necessary.
- When performing maintenance work on the raised machine, ensure that it is secured with appropriate support elements.
- Dispose of oils, grease and filters correctly.
- Always disconnect the electrical system from the power supply before commencing work.
- Should safety equipment be subject to wear, it is to be subject to regular checks and replacement.
- When performing electrical welding work on the vehicle and connected devices, disconnect the power supply via the battery main switch or the cable on the generator and pinch off the battery.
- The spare parts must correspond with the manufacturer’s technical specifications as a minimum. This is guaranteed by original ZIEGLER spare parts.
- When replacing the cutting tools, use tools appropriate to cutting tools and wear suitable gloves.

2.11 Unauthorized conversions and production of spare parts

Conversions or changes to the machine are only permitted following consultation with the manufacturer. ZIEGLER original spare parts and manufacturer-authorized accessories serve the security of the machine. Using other parts can invalidate the liability for the resulting consequences.

2.12 Impermissible operation

The operating safety of the machine is only guaranteed given its intended use in accordance with the chapter “Introduction Intended use” of the operating instructions. The threshold values specified in the data sheets must never be exceeded.

2.13 Safety information on the machine

The ZIEGLER front attachment device is fitted with all the necessary safety equipment. Not all danger points on this machine can be secured entirely against function-loss. The corresponding safety warnings are located on the machine which point to the remaining residual dangers. The danger information has been presented in the form of so-called warning symbols. The following section provides information about the position of these warnings.

The safety information on the machine warns against residual dangers. They consist of warning symbols and work safety symbols. Follow all the safety information Safety information must always be maintained in a clean and easily legible state. Should the safety information suffer damage or be lost, order replacements from the supplier and install on the intended locations. The position and meaning are described in the following section:



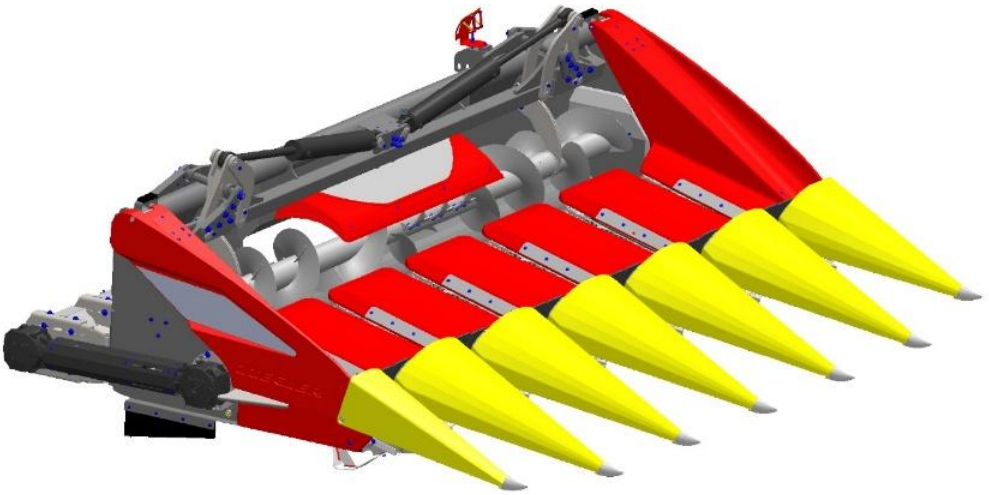
DANGER! – Danger area of the machine

Impact. Danger to life or of serious injuries.

- Replace damaged or illegible labels immediately.
- Affix the corresponding safety labels to all repaired, replaced or otherwise altered components.
- Never use a high-pressure jet to clean areas to which a safety label has been affixed.
- Familiarize yourself with the meaning of the warning symbols. The adjacent text and the area on the machine selected for the labels provide information for the special danger areas on the machine.

2.14 The meaning of the safety labels

Fig. 1



			
Read and comply with the operating instructions and the safety information before commissioning.	Do not remain in the area of the drive shaft. Danger of injury!	Never stand in the danger area between the front attachment device and the machine.	Persons are only permitted to be in the danger area if the safety supports are engaged.

			
Maintain sufficient safety clearance to the harvest front attachment. Before performing maintenance, work or removing blockages, switch off the harvest front attachment and the motor and remove the ignition key.	Never reach into the rotating auger.	Maintain sufficient distance from the rotating auger.	Do not open or remove the safety equipment when the motor is running

3. TECHNICAL DATA AND DESIGNATION

3.1 Type plate



Fig. 2

3.2 Information for inquiries and orders

Year of construction:	
SN:	
Type	

The entire marking is equivalent to an official document and may not be altered or changed beyond recognition.

Should you have questions about the machine or when ordering spare parts, state the type designation, serial number and the year of construction of the corresponding machine. We recommend that you enter this information in the fields above so as to ensure their availability.

Please note:

ZIEGLER original spare parts and manufacturer-authorized accessories serve the security of the machine. The use of spare parts, accessories and other devices not produced, tested or authorized by ZIEGLER will result in the loss of liability for the resulting damage.
Take the corresponding article numbers for the spare parts list.

3.3 Intended use:

The CORN MASTER corn header may only be fitted to transport vehicles for which the respective adapter frame has been authorized (comply with the operating permission of the bearer vehicle). It is exclusively to be used for conventional agricultural operations (intended use): please consult the chapter introduction “Intended use”.

Any other form of use exceeding these specifications is classed as non-intended use. The manufacturer is not liable for any damage resulting from this form of use. The risk is carried by the operator alone.

Intended use includes the maintenance of the operating, maintenance and servicing conditions specified by the manufacturer.

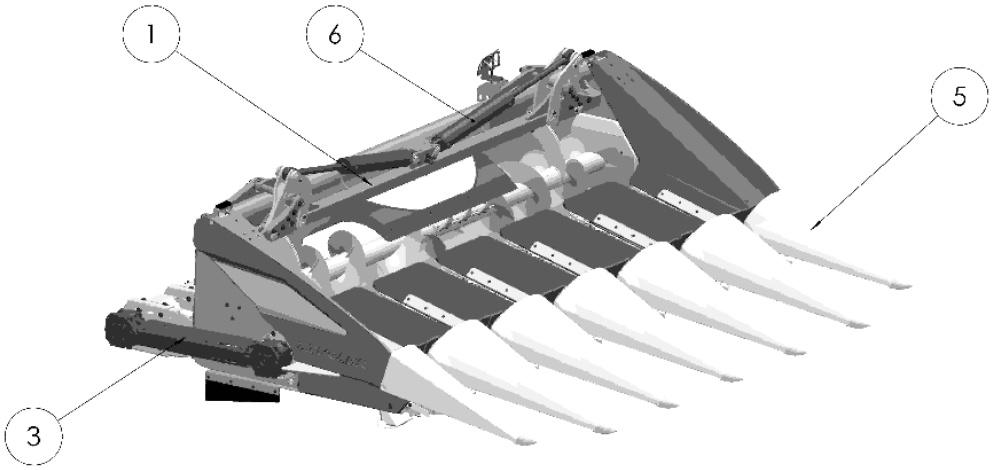
Unauthorized alterations made to the machine can exert a negative influence on the machine and impair the orderly function. Unauthorized alterations release the manufacturer from any resulting liability claims.

3.4 Technical data

All the information, diagrams and technical specifications made in these operating instructions correspond to the latest state of technology at the point of publication.
We reserve the right to make alterations to the design at any time and without the need to specify reasons.

Model	Rows	Row distance	Length (mm)	Weight (kg)
Corn Master X	6	70 cm	4530 x 2750 mm	2.500 kg
Corn Master X	6	75 cm	47700 x 2750 mm	2.600 kg
Corn Master X	8	70 cm	5940 x 2750 mm	2.950 kg
Corn Master X	8	75 cm	6280 x 2750 mm	3.050 kg

3.5 Overview of the machine



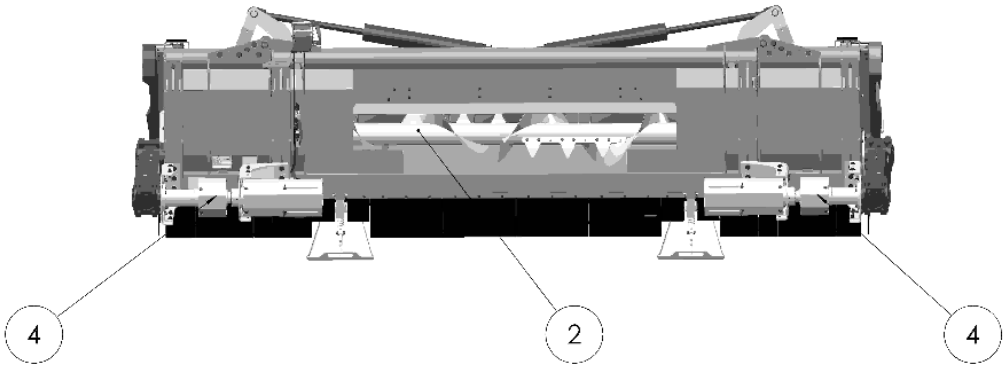


Fig. 3

1. Frame
2. Auger
3. Gear
4. Cardan drive
5. Conical tip
6. Hydraulic cylinder

Multikuppler / option
Sunflower kit / option
Autocontour / option
Lagermaisschnecke / option

4. INSTALLATION

DANGER! – The machine can tip!

- Impact: Danger to life or of serious injuries.
- Apply the transport lock.
- Secure the machine correctly with tension belts.
- Ensure that the machine has a steady position and let it down slowly.
- Ensure sufficient chain tension.
- Switch off the motor and activate the lowering lock before commencing any work on the machine.
- Persons must not be in the danger area.
- Use sufficient lifting gear.
- Comply with the regulations for lifting gear.

PLEASE NOTE – Fit seals

Impact: Seals not tight!

- Comply with the correct sequence before fitting any form of seal.

4.1 General transport

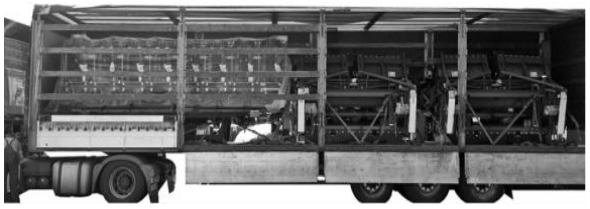


Fig. 4

Transport on HGV

When transporting the corn header on HGV, use the ZIEGLER transport frame (Exception: transport of folding corn headers).

Secure the corn header against falling using tensioning belts in accordance with the locally valid regulations.

Ensure that the machine has a steady position.



Fig. 5

Transporting the machine on the company premises with a crane

The corn header can only be transported from above with a crane. Use the suspension points intended for suspending the load. Ensure that the picker is always in balance and that the load is distributed evenly.

Use only suitable lifting gear to perform the transport.

Switch off the motor and activate the lowering lock before commencing any work on the machine.

Persons must not be in the danger area.

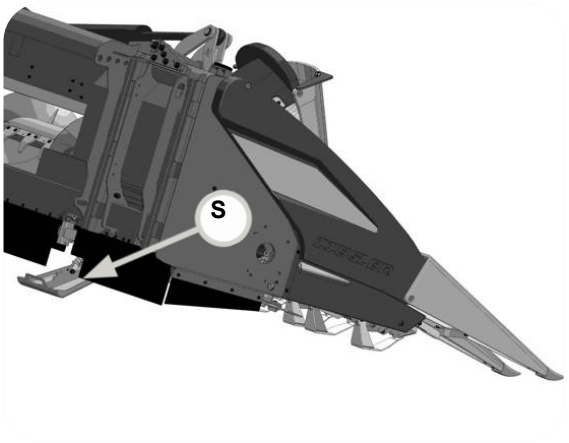


Fig. 6

Removing the transport frame

Extend the parking supports (S). See graphic.
Advance the lifting gear to the underside of the picker.
Affix suitable rods and chains or belts to the corn header, lift slightly and then move the lifting gear slowly away from the picker.
Place down the picker by careful let out depending on the angle of tipping. Ensure sufficient chain tension.

Use sufficiently strong lifting gear. Avoid the danger area. Comply with the regulations for lifting gear.

Remove the screws and the transport frame

4.2 Attaching the corn header

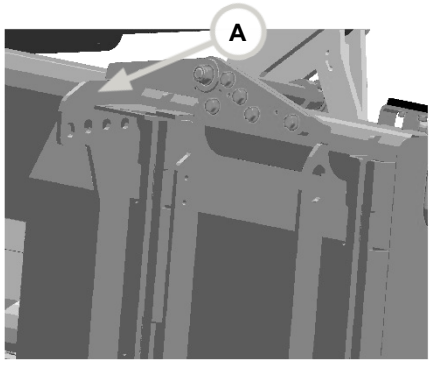


Fig.7

Adaption to the harvester

Place the corn header on the parking supports (A).
Check the correctness of the adaption parts.

Move the harvester to the picker.

Lift the picker with the feeder channel.
Check the correct position of the adaption.

The presence of persons between the harvester and the corn header is impermissible during the connection.

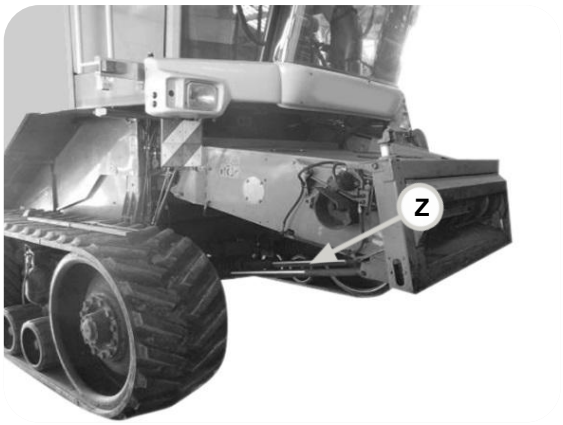


Fig. 8

Additional lift cylinder

Depending on the size and weight of the corn header, one or two additional hydraulic cylinders (Z) could be required.

Corresponding sets are held ready by the manufacturer of the combine harvester.

Depending on the design of the corn header and the bearing capacity of the individual harvesters, additional weights may be required on the steering axle, or water must be filled in the tyres.

Comply with the regulations of the manufacturer of the combine harvester and the TÜV certification.



Fig. 9

Additional weights

Depending on the weight of the installed corn header, additional weights may be required on the steering shaft of the harvester.

The dimensions of these additional weights are specified in the motor vehicle certification of the combine harvester handbook.

Comply with the certification conditions for public traffic.

4.3 Corn head drive

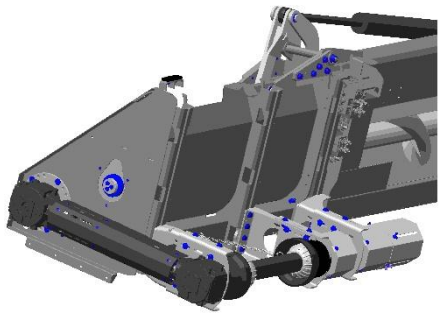


Fig. 10

Cardan shaft drives

The machine is driven by a combine harvester using a cardan shaft.

Switch off the diesel motor when performing all work on the machine.
Secure the drive shaft guard against revolution.
Replace the damaged protection immediately.

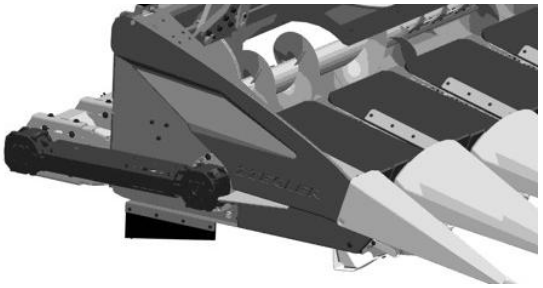


Fig. 11

Gear drive

The drive consists of two different gears on each side. The bevel gears have different transmission ratios, with which the corn picker can be adapted to any type of combine harvester.

The boxes are connected via a cardan shaft.

Before starting up, check the pivoting range and power take-off length. Ensure sufficient overlap.

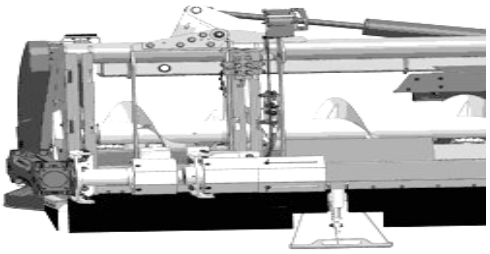


Fig.12

Internal drive

It reduces the use of the combine's self-levelling system but allows the operator to fold the corn head without stepping off the combine to disconnect the prop shaft.

4.4 Hydraulic connections

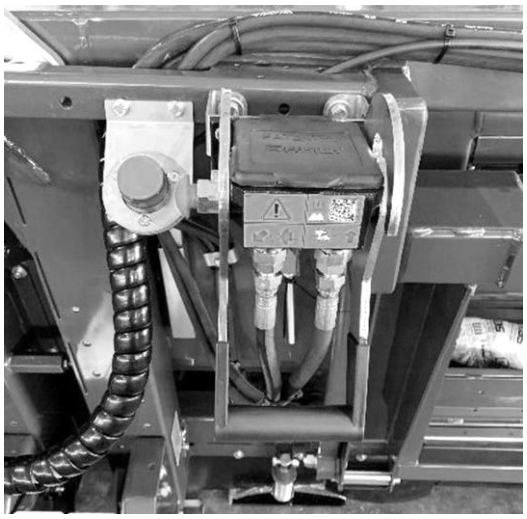


Fig. 13

Multicoupling

If the combine harvester is fitter with a multicoupling, the picker should also be fitted with a multicoupling.

The correct coupling is included in the scope of delivery.
Operation is performed in accordance with the regulations and instructions of the manufacturer of the combine harvester.

Connection via the control valve coupling

Some brands of combine harvesters require a control valve coupling to connect a header.
The corresponding pickers are fitted with the requisite technology on a serial basis.

Operation is performed in accordance with the regulations and instructions of the manufacturer of the combine harvester.

Avoid the danger area when performing a functional check. Check for leaks. Should you find a leak, comply with all the requirements of environmental protection. Wear the corresponding protective clothing.

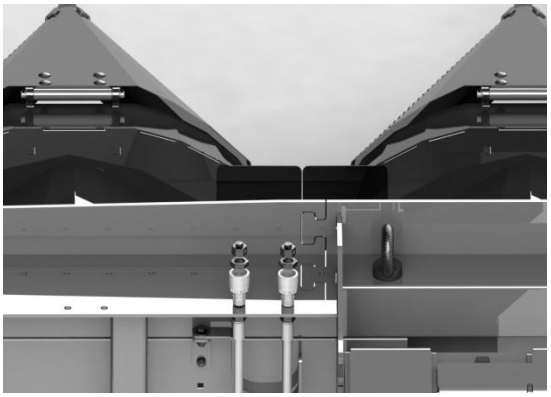


Fig. 14

Connection via a screw / plug connection

If only simple screw / plug connections are present, mark double and single-acting lines.

Establish a secure connection so that oil can flow.

Mark the lines and always make identical connections so that the working sense remains unchanged.



Fig. 15

Avoid the danger area when performing a functional check.
Check for leaks. Should you find a leak, comply with all the requirements of environmental protection.

Hydraulic actuation

Reel
"Lifting and lowering" = Open and close snapping plates

Caution!
Some brands of combine harvester are fitted with a separate electrical operating system in the operator's platform.

Read the operating instructions of the combine harvester.

Check the quantity of hydraulic oil in the harvester store

4.5 Fitting the divider tips

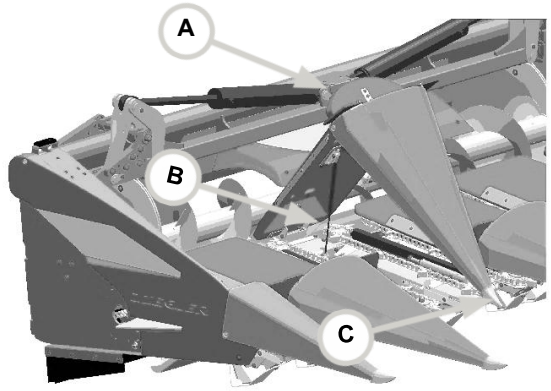


Fig. 16

Putting up the hood flap

Centre and side covers are deflected at the rear. To raise the cover, open latch (A); using damper (B), lift and secure the cover end into the designated hole (C). Once the bonnet is raised, ensure it is securely locked to prevent it from closing accidentally whilst inspecting the vehicle. See the illustration below.

Switch off the corn header before opening the housing flap.

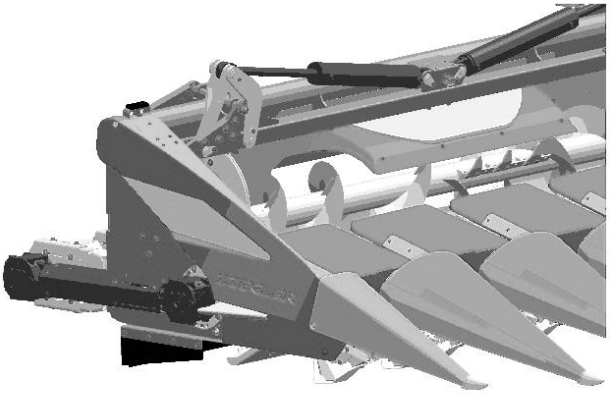


Fig.17

Setting the divider tips

Remove the anti-lowering clamp.

Place the picker on a level surface and lower to a clearance of 15 cm from the ground.

Set the divider tips with screws so that they have a 2 cm clearance to the floor (normal setting).

If the harvester falls strongly into the field, adjust the settings.

4.6 Adjusting the snapping plates

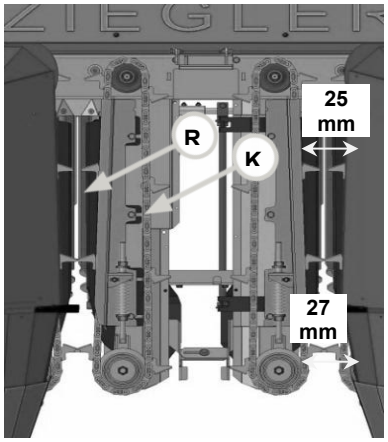


Fig. 18

Basic settings of the snapping plates

The factory default setting is 25 mm at the front and 27 mm at the rear in the ‘narrow’ position. This means that the picking plates are pushed together as far as possible.

These settings are adjusted using the bolted picking plate (R) and the bolts (K).
The wedge-shaped adjustment is of great importance for the operation of the picker.
Operation is carried out via the combine harvester’s hydraulic system. Depending on the combine harvester model, this can be done using the reel lift/lower function or via an auxiliary valve.

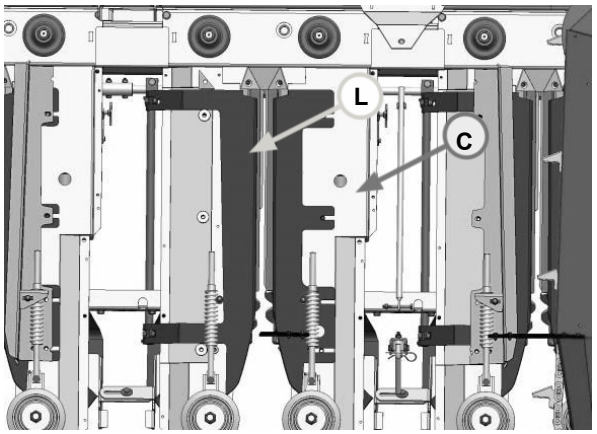


Fig. 19

Snapping plates

It is not possible to rule out soiling resulting from the operation. Open and close the snapping plates (L) a minimum of once a day to ensure that they are free and to remove all soiling.

Oil the joints every 100 h.

After concluding the harvest, clean the support plate (C) and the adjustable snapping plate (L) an protect against corrosion.

Ensure that the picking aperture is centred in the middle working position.

The form and design of the snapping plates can deviate from the picture on a country-by-country basis.

4.7 Feeder chains

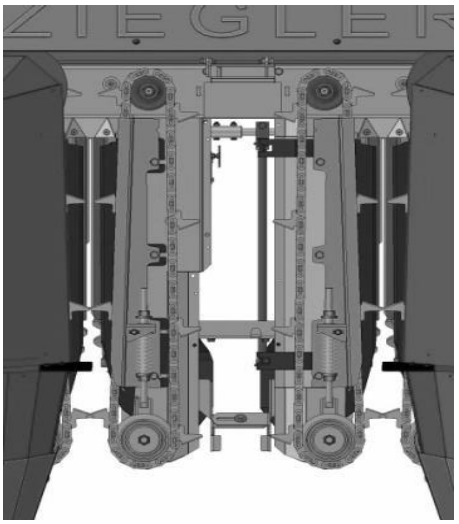


Fig. 20

Feeder chains

Chain tensioning device

The feeder chains are tensioned automatically and maintenance-free through even spring pressure.

When is it necessary to replace the feeder chains?

Renew the chain if the maximum of the tensioner has been reached.
The feeder chain is to be replaced if it is damaged by foreign bodies.

Caution!

Take into account the degree of wear on the fore guide wheel.

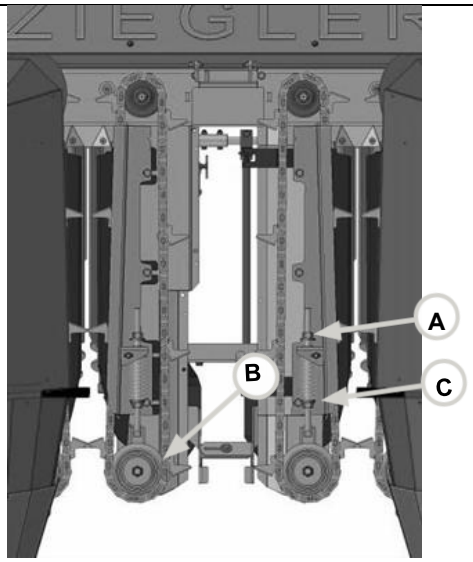


Fig. 21

Removing the draw-in chains

Loosen screw (A) and slide the idler sprocket (B) backwards.

Now dismantle the chain.
Clearance 1m
Worn +3.5cm.

Unscrew (A)
Unscrew (C)
Slide (B) the rear

4.8 Settings and reference dimensions

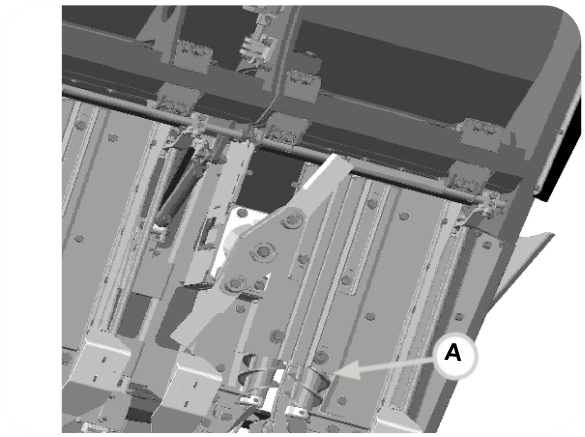


Fig. 22

Scraper on the picker cylinders

Highly effective scrapers are located at specific positions on the picker cylinders (A) to provide protection against winding plants, grass or similar.

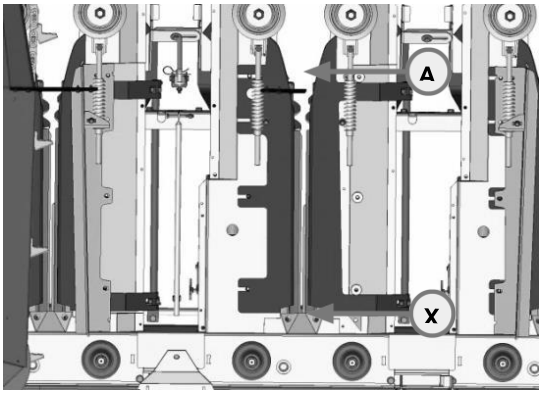


Fig. 23

Reference dimensions of the picking row frames

The correct clearance of the frame support (X) in the fore section (A) is of especial importance for the function of the corn header.

A collision can alter this clearance. The support arm can bend at the far right and left-hand sides, as this is no longer supported by a connection series.

If a collision has taken place, or if a fault has detected on a picking row, check the clearance (A).

Contact your contact partner following larger collisions

4.9 Snapping roller

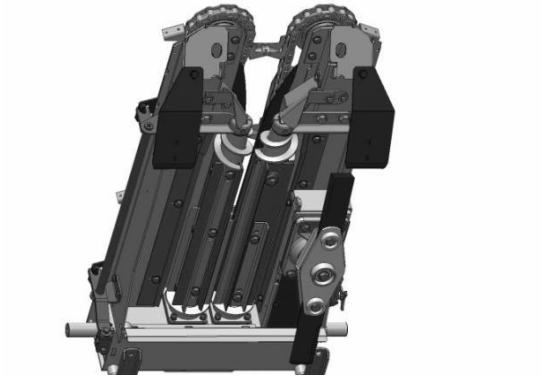


Fig. 24

Dismantling the snapping roller

1. Undo the screws and remove the support runner
2. Undo the screws and remove the guard plate
3. Remove the bracket by loosening the screws

When refitting: Grease the profile shaft and ensure the equal toothing of the snapping roller.

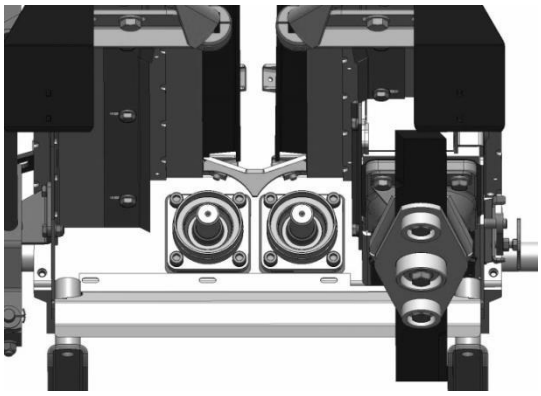


Fig. 25

Picking row drives

Snapping roller drive unit (view without snapping roller).

Undoing the screws gives access to the transmission.

4.10 **Chopper**

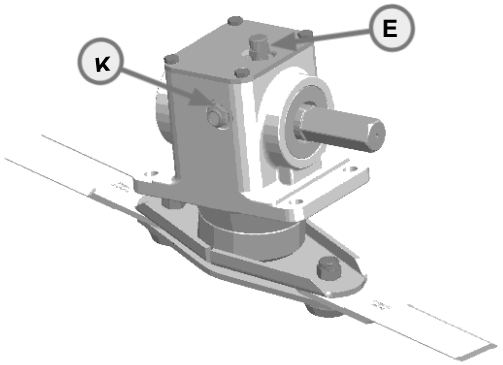


Fig. 26

Drive

(E) Ventilator
(K) Inspection glass

Check the oil level regularly.

The chopper bearing is fitted with a lifetime lubrication system and is maintenance-free.

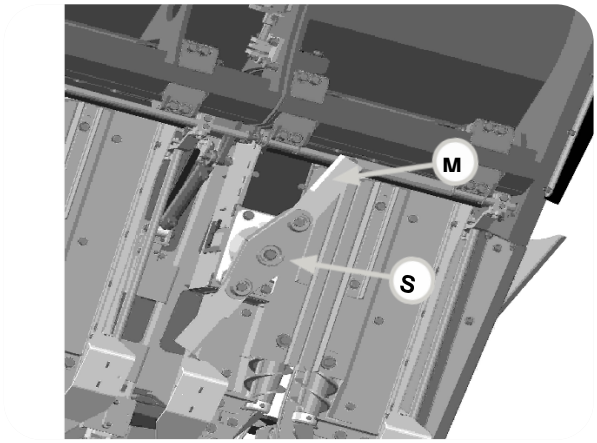


Fig. 27

Arrangement of the chopper blades

The chopper blade (M) is to be fitted above the blade carrier using the original bushing.

The screw (S) must be tightened in accordance with the prescriptions of the operating instructions on page 55.

Switch off the motor and activate the lowering lock before commencing any work on the machine.
Caution: Blades over-travel for two minutes.

Wear the corresponding protective clothing.

4.11 **Chopper body**

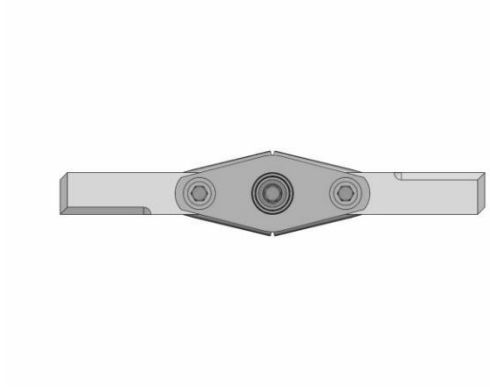


Fig. 28

Blade carrier

Safe operation of the chopper requires that worn, bent or damaged parts are replaced immediately.

Caution: Blade over-travel for two minutes.
Switch off the motor and activate the lowering lock before commencing any work on the machine.

Wear the corresponding protective clothing.

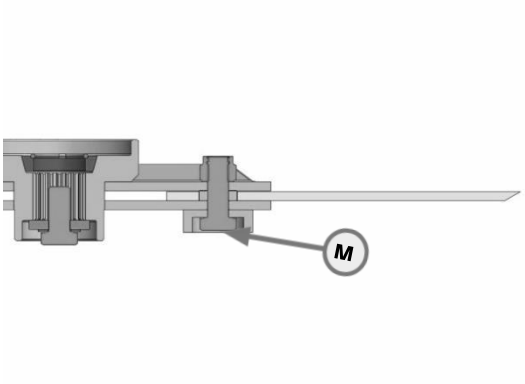


Fig. 29

Blade replacement

When fitting a new blade, check the blade bushing (M) for wear and renew if necessary.

Important: The blades must only be replaced in pairs.

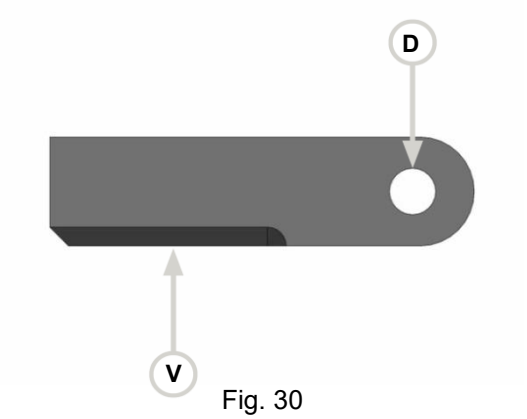


Fig. 30

Chopper blade

Change the chopper blade immediately, if:

- If the drillhole (D) has an (even slightly) oval form
- If strong wear is found in the area (V) - (force requirement / chopper quality)
- If the blade is bent or has fissures

Only fit an equal blade with the same weight per blade head (perform a weight control).

Never operate the chopper with a single or a damaged blade.

4.12 Connection coupling between the picking rows

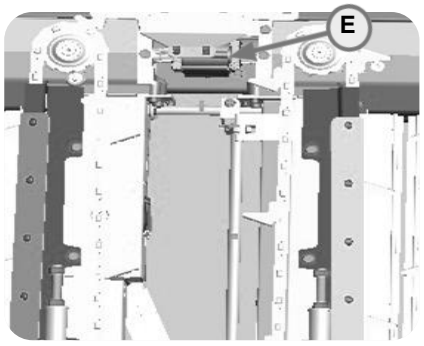


Fig. 31

Connection coupling

Regularly check the condition of the coupling (E), ensure the screw are tightened securely, and be sure to check the lubricant level.

Replace worn parts in good time.

4.13 Bevel gear

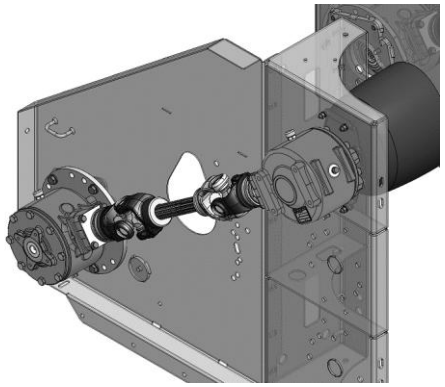


Fig. 32

Bevel gear

Check the oil level regularly.

Oil change:
- First oil change after 50 working hours
- Subsequent oil changes after every 600 working hours.
- Oil type: SAE 90EP (ISO VG 320)
- Oil quantity: 0.9 l

5. DISASSEMBLY

DANGER! – The corn header could start up unexpectedly during setting work

Impact: Danger to life or of serious injuries.

- Lower the corn header completely.
- Switch off the combine harvester completely, remove the ignition key and secure the machine against reactivation (operating Instructions of the combine harvester).
- Wear cut-proof protective gloves.
- Raise the protective hood of the corn header and secure against it shutting.
- Persons must not be in the danger area.
- Never operate the corn header without all the safety equipment fitted and closed.

The removal of the corn head from the combine harvester should be carried out in the reverse order of attachment.

Proceed as follows: To park the corn head on the ground, loosen the bolt in the lower part of the feed chute, pull down the support legs, support the rear part of the corn head on the ground and drive the feed chute out of the upper pick-up point of the corn pickers.

NB: the movement of the chute is controlled by the commands of the combine.

5.1 Connection process

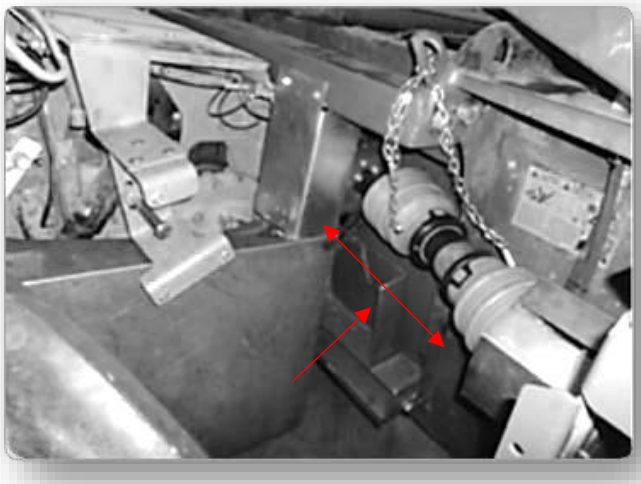


Fig. 33

Check that the length of the cardan shafts is correct; the telescopic tubes must overlap at least 1/3 of their length:

- If the cardan shaft is too long, the telescopic tubes must be adjusted by shortening them so that the previous condition is maintained.

- Attach the cardan shaft to both the corn head and the combine harvester.

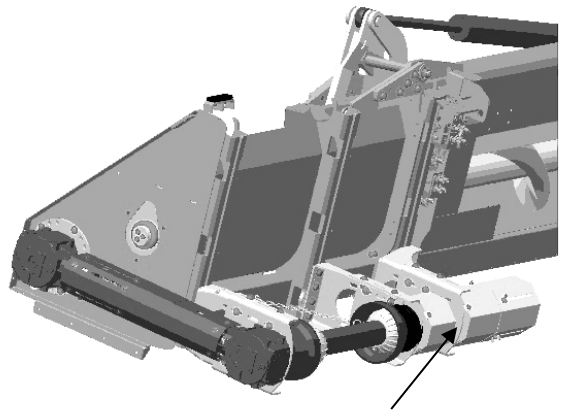
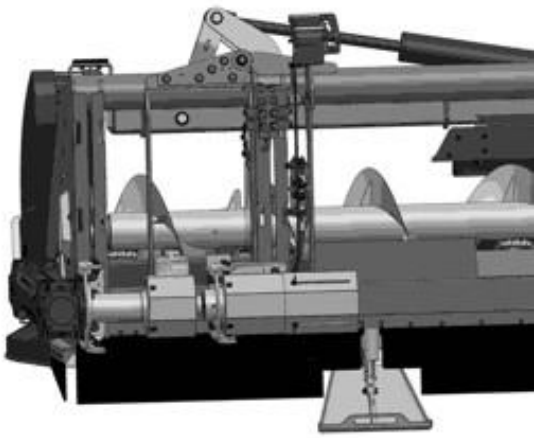
- Connect the cardan shaft protection chains to a solid part.

PLEASE NOTE !

- **The corn head is driven for harvesting by the drive of the combine harvester.**

It is imperative to always mount the protection of the joints.

5.2 Foldable version

 Fig. 34	On machines with internal drive, align the length and height of the corn header drive with that of the combine harvester using the side plates. If necessary, shorten the corn head drive shaft to be able to mount the joint. - In some cases, it will be likely to use an adapted cardan shaft.
 Fig. 35	Reinstall the protective housing and universal joint guards.

6. OPERATION

DANGER! – The corn header could start up unexpectedly during setting work

Impact: Danger to life or of serious injuries.

- ➢ Lower the corn header completely.
- ➢ Switch off the combine harvester completely, remove the ignition key and secure the machine against reactivation (operating Instructions of the combine harvester).
- ➢ Wear cut-proof protective gloves.
- ➢ Raise the protective hood of the corn header and secure against it shutting.
- ➢ Persons must not be in the danger area.
- ➢ Never operate the corn header without all the safety equipment fitted and closed.

DANGER! – Persons could be in the corn field

Impact: Danger to life or of serious injuries.

- ➢ Ensure that the field is empty of persons before starting operation; no-one may per permitted to be in the proximity of the corn header.

DANGER! – Ejected parts

Impact: Danger to life or of serious injuries.

- ➢ When the motor is running and the drive is activated, maintain sufficient clearance to the chopper blade.

6.1 Test run



Fig. 36

Reducing the starting torque

Reduce the startup force by starting the corn header with a reduced motor rotation speed in the stand gas position. This will considerably prolong the life-expectancy of the drive couplings and straps.

Ensure that the horizontal chopper does not encounter foreign bodies.



Maintain a safe distance from the machine.
Protect yourselves and others against injury and accidents.
Control the operating rotation speed.

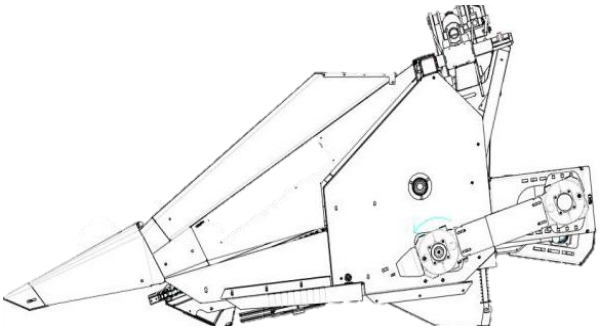


Fig. 37

Test run only when lowered

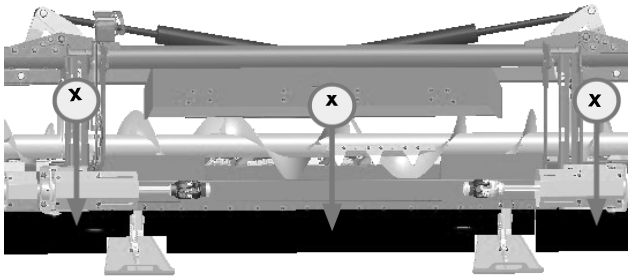
Considerations of safety require that the picker and chopper are only started up when lowered or subject to a test run.

Take steps to prevent objects from entering the picker or the chopper during the test run.

Switch off the motor and activate the lowering lock before commencing any work on the machine.
Persons must not be in the danger area.

<u>Danger of accident from parts flying.</u>

Fig. 38



Safety cover for stubble chopper

Check the rubber safety cover (X) for completeness and integrity before every commissioning.

Should you locate any damage, replace the safety cover immediately and locate and rectify the cause of the damage.

Check:

- The completeness and integrity of the blade of the rotary-type stalk chopper
- The balancing / concentric run of the chopper
- Sufficient clearance from the ground

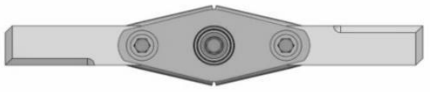


Fig. 39

Safety information “Rapidly rotating blade”



Danger for ejected parts with activated drive.
Maintain the safety clearance.

When the motor is running and the drive is activated, maintain sufficient clearance to the chopper blade.

Caution: Blade over-travel for two minutes.
Switch off the motor and activate the lowering lock before commencing any work on the machine.

6.2 Commissioning

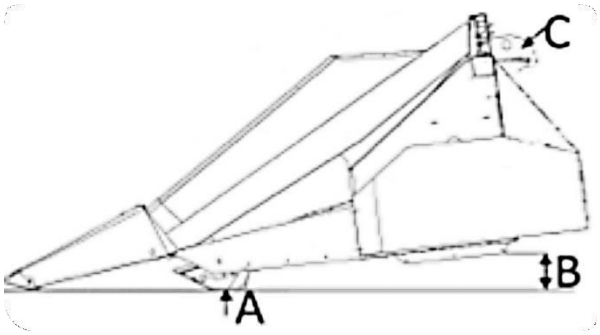


Fig. 40

Working angle (basic setting)

If larger or smaller tires than the standard equipment are mounted on the harvester, it is advisable to check the working angle. The same also applies when using caterpillar tracks.

The check should preferably be carried out under real operating conditions in the field with the usual ground clearance.

For a correct working angle, ensure that B must be around 18-20 cm when the corn head is attached to the combine and the front slides A are placed on the ground. Otherwise, you will have to move the attachment position C of the attack. See below.

The corn head equipped with a stubble chopper is designed to cut at a height of between 10 and 12 cm from the ground.



Fig. 41

Rotation speed

The standard rotation speed is set at n= 580-630 U/1 min.

Safety dictates that a rotation speed of 700 U/1 min. may not be exceeded.

To ensure a sufficiently favourable rotation speed ratio, the rotation speed of 550 U/1 min. may not be exceeded with the harvesting of corn.

Subsequent damage resulting from failure to comply with the rotation speed range is not covered by the guarantee.



Fig. 42

Testing the lateral inclination compensation

Check the function of the angling blade in the harvester in connection with the corn header before commissioning.

- Check the drive shaft for sufficient cover.
- Check the sidehill control (optional)

No persons are permitted to be present in the danger area when the machine is running.



Fig. 43

Securing the corn field

Ensure that no-one may is the proximity of the corn header before commissioning the commissioning.

Danger of death for all persons in the corn field! Persons could be drawn in by the corn header and suffer severe injuries.



Fig. 44

Clean the air filter and other sensitive parts on a daily basis

Development of dust

It is impossible to prevent the development of a certain layer of dust with horizontal action choppers working near the ground.

Depending on its quality, cut material thrown about in the air can hinder some of the functions of the harvester.

It is therefore important to subject air filters and other sensitive parts (hydraulic cylinder pistons etc.) to regular cleaning.



Fig. 45

Drive speed 6-8km/h



Fig. 46

The clearance between the cutter bar skid and the floor **must amount to min. 15cm**.

6.3 Cross auger / feed

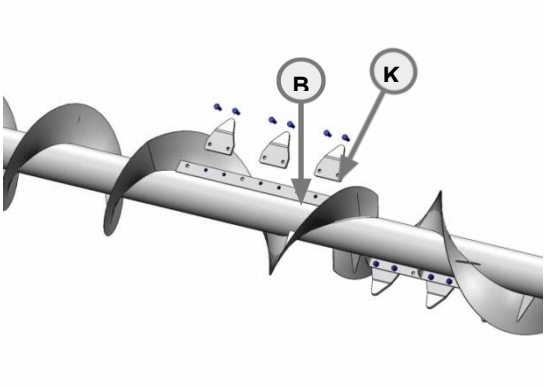


Fig. 47

Cross auger

The cross augers are fitted with fitting irons (B) around the channel opening. Optionally available transport claws (K) for the transport of the harvest can be fitted here.

The number of the claws (K) or their width can differ according to the model of picker and depend on the feeder channel width of the respective harvester.

It is important that the transport claws are only fitted in front of the channel opening.

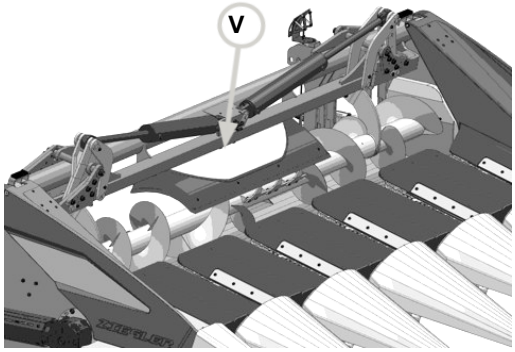


Fig.48

Baffle plate of the cross auger

The height of the baffle plate is adjusted via the screw connection.

The clearance between the auger and the hood should be as large as possible to allow sufficient passage for corn leaf, leaf and even stalks.

Switch off the diesel motor when performing all work on the corn header.

6.4 Cross auger

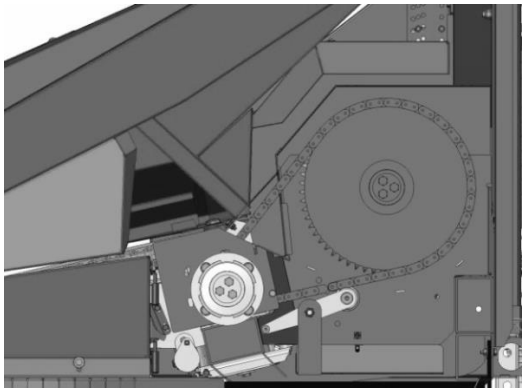


Fig. 49

Cross auger friction coupling

If the friction coupling activates, stop the machine immediately and determine the reason.

An insufficient torque on the coupling cannot be decisive for the activation.

Regularly lubricate and tighten the chain drive.

7. MAINTENANCE AND CARE

7.1 Accident protection / operating safety

⚠	**DANGER! – The corn header could start up unexpectedly during maintenance work**
	Impact: Danger to life or of serious injuries. ➢ Lower the corn header completely. ➢ Switch off the combine harvester completely, remove the ignition key and secure the machine against reactivation (operating Instructions of the combine harvester) ➢ Wear cut-proof protective gloves. ➢ Raise the protective hood of the corn header and secure against it shutting. ➢ Persons must not be in the danger area. ➢ Never operate the corn header without all the safety equipment fitted and closed.

⚠	**DANGER! – Over-travel of the corn header for 2 min.**
	Impact: Danger to life or of serious injuries. ➢ Start with maintenance work 2 minutes after shutdown at the earliest.

⚠	**Caution – contact with oils and grease**
	Impact: Injuries ➢ Avoid skin contact with oil, grease and solvents. ➢ Consult a doctor immediately after injuries or burns from oils, cleaning agents and solvents. Follow all further safety information to prevent injury and accident.



Fig. 50

Lateral straw chopper – safety equipment

With certain models of picker and series clearances, it is possible that the chopper blade runs to the right or left (even to the right and left) of the outside enclosure of the picker.

A special protection protects contact with the fast-rotating chopper blade.

Ensure that the safety equipment is complete and undamaged.

When the drive is activated and the motor is running, maintain sufficient clearance to the chopper blades.
Caution: Blade over-travel for two minutes.

Clean the air filter and other sensitive parts on a daily basis	**Development of dust** It is impossible to prevent the development of a certain layer of dust with horizontal action choppers working near the ground. Depending on its quality, cut material thrown about in the air can hinder some of the functions of the harvester. It is therefore important to subject air filters and other sensitive parts (hydraulic cylinder pistons etc.) to regular cleaning.

7.2 Lubricants / general information / disposal

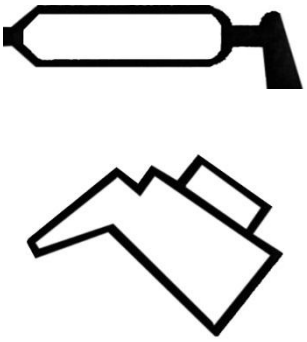


Fig. 51

Recommended lubrication

Drive:
Lubricant **Oil EP 100 Total**

Angular gear:
Lubricant **90 EP**

Gears (for choppers)
Lubricant **ISO VG 150 EP**

Hydraulics:
Following the manufacturer's specifications

General lubrication nipple:
Lubricant **Semi-fluid grease EP2**

Wear the correct protective clothing Perform an end control of the lubrication points before commissioning of the corn header.

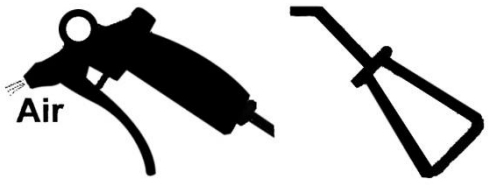


Fig. 52

General instructions

All moving parts should be lubricated and cared for to a degree usual for a machine construction context.

Regular cleaning and the removal of deposits serves the value-retention and operating safety.

Components subject to regular or irregular movement also require periodic oiling or greasing.

All bare machine parts require reliable rust-protection after the conclusion of the harvest.

Lubricant Oil (conventional)



Fig. 53

Storage

Recommendation:

Clean the machine thoroughly after the conclusion of the harvest and remove all harvest material and other residue.

The cleaning hatches and service apertures are to be kept open during the storage period, to prevent damage to the cables by rodents.

7.3 Maintenance / care / inspection

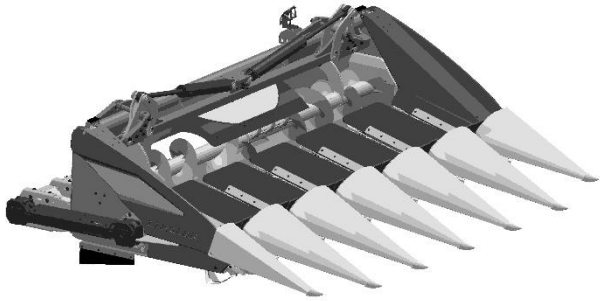


Fig.54

Cleaning after the harvest season

After the end of a predominantly dry harvest season, we recommend dry cleaning, i.e. with compressed air and no liquid.

If the machine has been subject to damp conditions and suffered the corresponding soiling, it is necessary to perform the cleaning with a high-pressure cleaner.

The hood and the feeder chains must be removed first. All bearings must be greased.



Fig. 55

Inspection after the harvest season

When performing repeated inspections (after the harvest season) the following components must be checked and replaced if necessary:

- Rubber strip
- Cutting tool
- Safety equipment of the power take-off shaft
- Hydraulic hoses and hydraulic fittings.

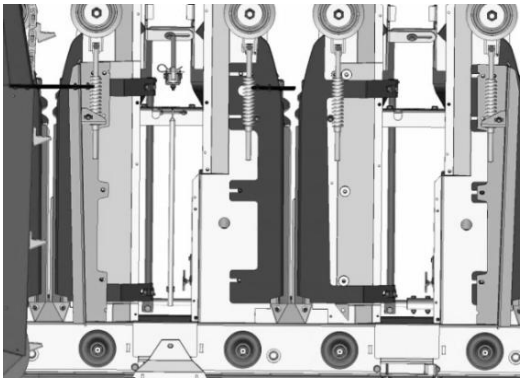


Fig.56

Snapping plates

When cleaning the machine, move the snapping plates regularly to remove dust and harvest residue from the slide channels.

If the machine is treated with water, remove the chain guides, clean the slide area of the snapping plates and protect against rust.

The swivel points should be oiled or greased.

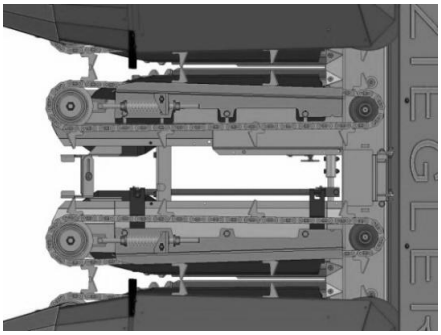


Fig. 57

Feeder chains

We recommend protecting the feeder chains against rust when storing the machine.

Either choose the correct storage or protect the chains against rust with suitable oil.

In the following season, the chain should be fitted right / left swapped, to achieve equal wear. See page 27.

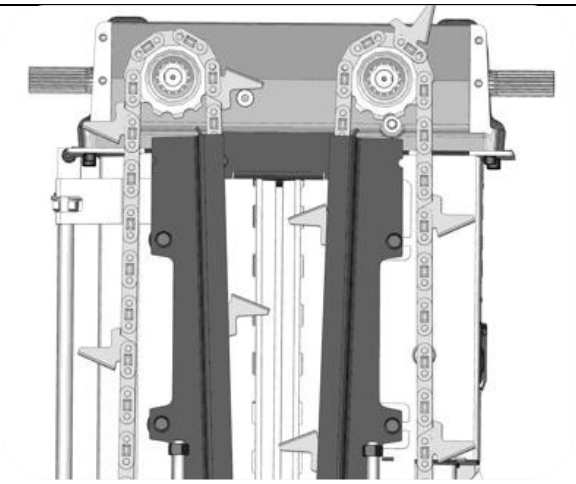


Fig. 58

Picking row drives

Lift the corn header into its work position and switch off the diesel motor.

Check the oil volume every 500 ha:

- First allow to run warm.
- Then bring into the working position.
- Switch off the machine, secure the motor against reactivation.
- Release the filler and control screw.
- Check whether the shaft is in semi-fluid grease.

Refill or renew with semi-fluid grease Autol TOP 2000 temperature range of -30 to +100°.

Inspection intervals: Check 2x in the season (see lubrication plan).

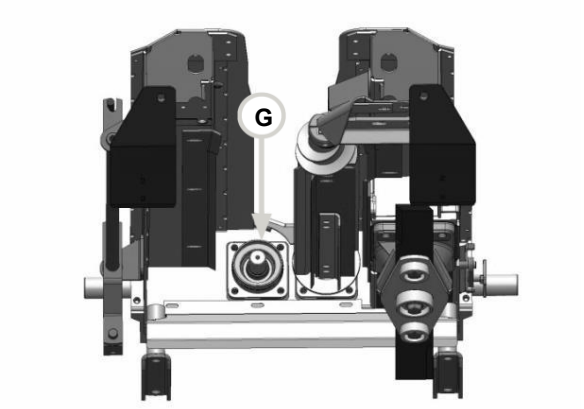


Fig. 59

Picking row drives

Should the picking cylinder shafts (G) be dismantled, these are to be greased with conventional graphite grease when refitted.

Clean the gear ventilator from time to time. Should any oil be lost from the drive bearings, check the function of the vent.

Drive connections

The well-protected drive connections between the picking rows should be checked for their condition at regular intervals.

7.4 Residual risks

The residual risks are dangers that cannot be eliminated by design and/or the use of special safety measures. These risks can also be traced back to non-obvious risk potentials.

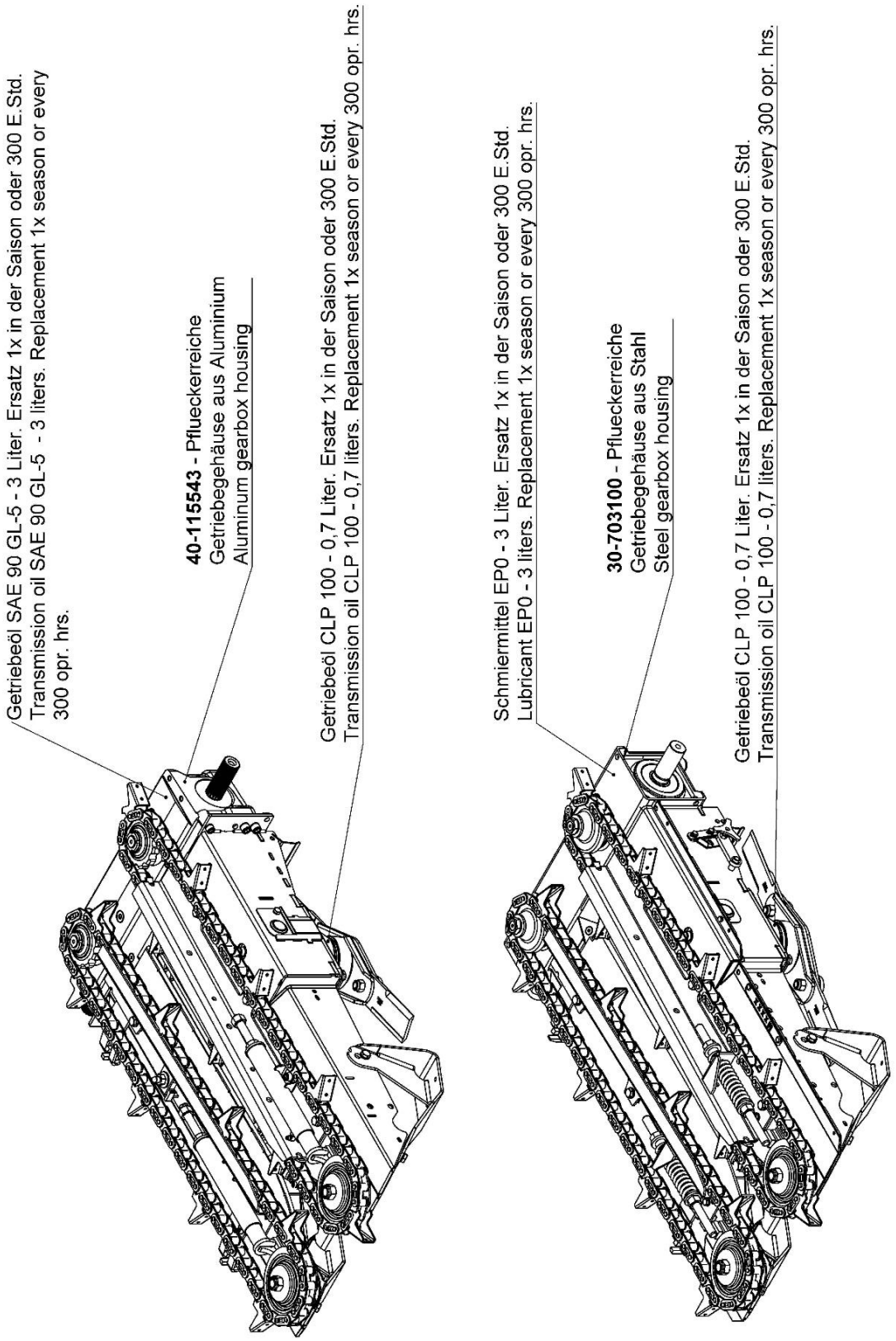
Examples of residual risks are:

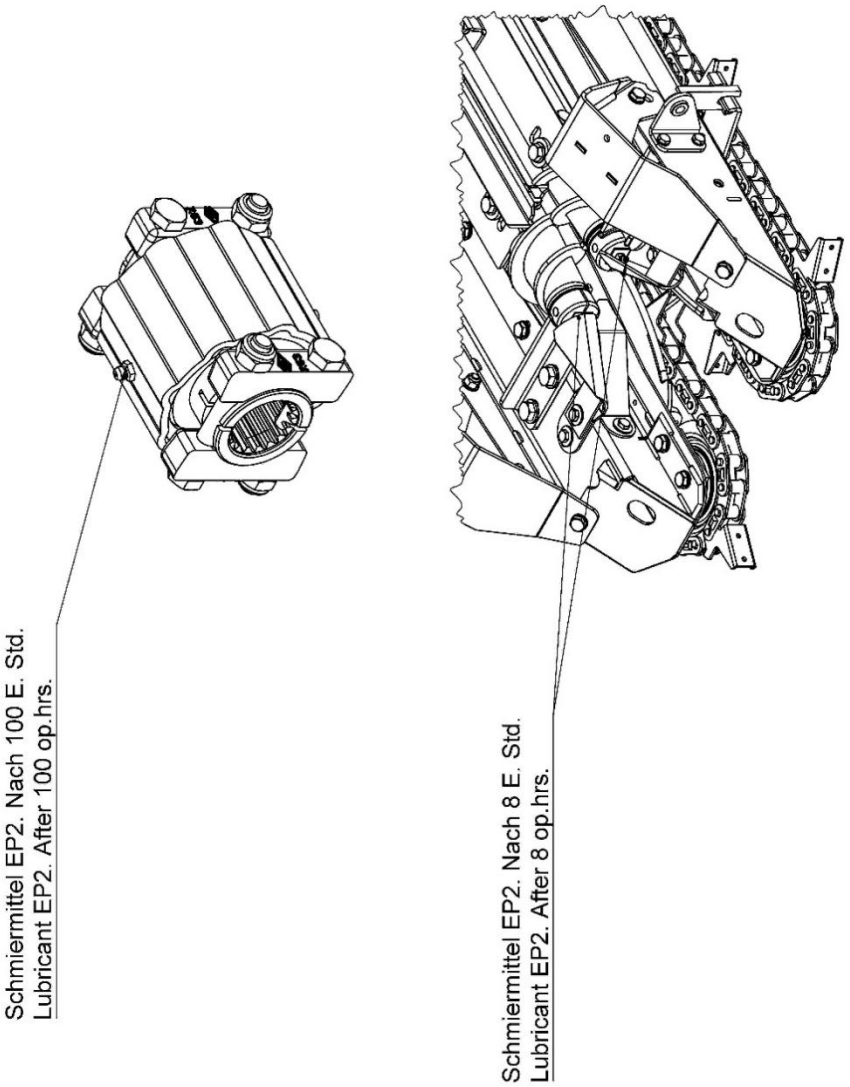
- **The tips are very dangerous sharp objects and are lifted off the ground in the lowered position.**
- **The feeder chains, as they can pull foreign bodies and body parts (arms, legs, etc.) into the machine and crush them with devastating force.**
- **The snapping rollers rotate in the opposing directions and can carry away and crush foreign bodies and body parts (arms, legs, etc.) with devastating force.**
- **As they are sharp and rotate at high speed, the cutting blades of the choppers present a high risk of injury with violent effects on anybody that approaches them.**
- **The force of the auger, as it can also pull in and crush large bodies such as people or animals. Do not touch it or walk on it until you have made sure that the header extension has been stopped and disconnected from the combine harvester.**
- **The whole cornheader and the folding side parts as they can move and crush nearby objects or persons. The area of the hinge system (capping) for closing/opening the frame is also extremely vulnerable.**
- **The protective hoods and tips. Although they are resistant, and can withstand weights over 150 kg, they can also be wet and slippery during the working phase and should therefore not be walked on.**

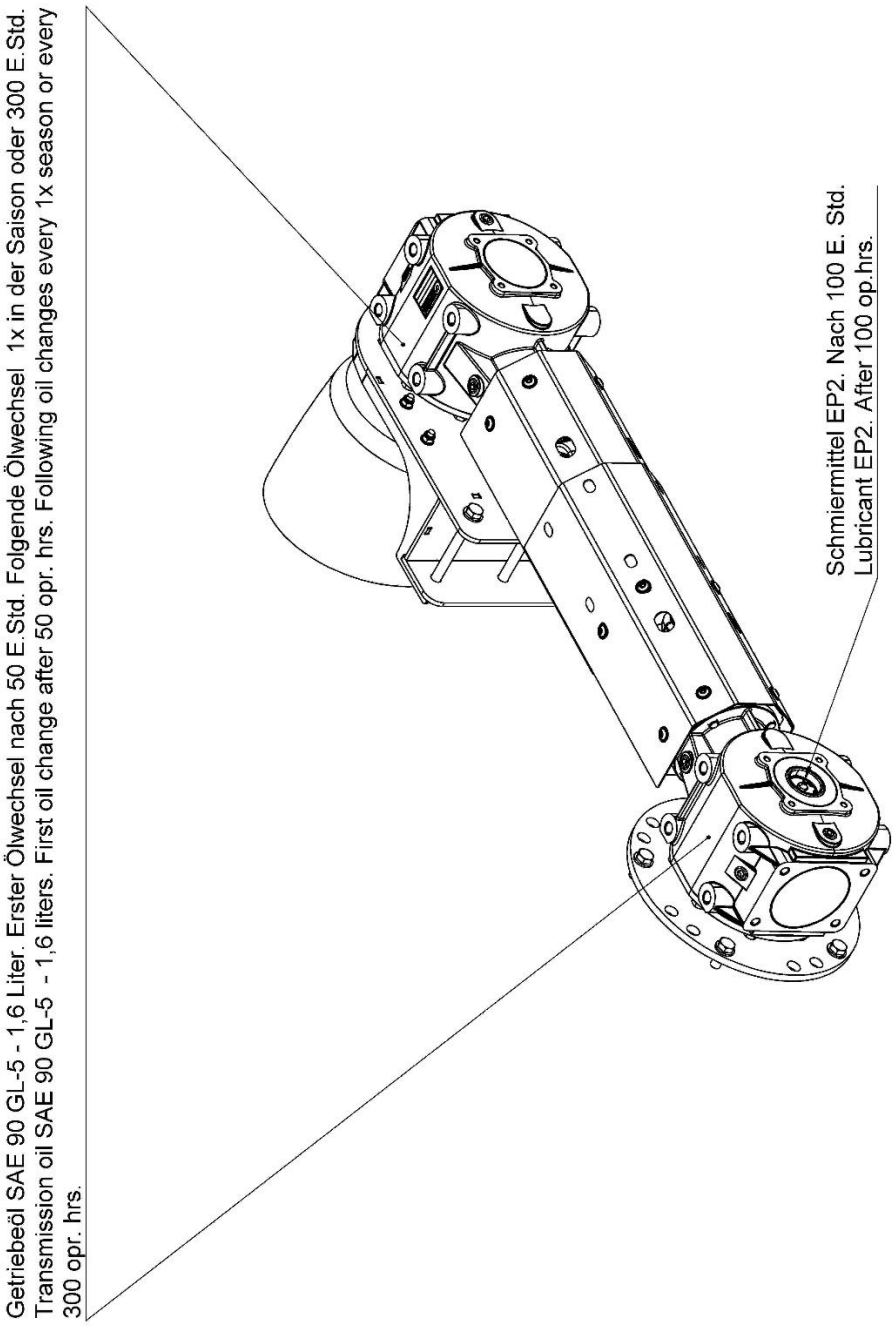
7.5 Lubrication plan

Perform the first check before commissioning the corn header.

Maintenance	Hours
Lubricate the couplings of the picker row.	8
Check the tension of the drive chains.	24
Lubricate the drive shafts or the knuckle joints. Lubricate the coupling units for the corn header with internal drive.	8
Make sure there are no oil leaks that could cause damage on roads or pollute the ground.	8
The hydraulic oil must be checked at the beginning of each harvest and may not show the effects of water or foam.	24
The harvesting chains require a tension check approximately every 24 hours. If the following problems occur, replace the chains: • High play between roll and pin • Excessively rusted chains • Excessively worn gear wheels or chains The assembly of new chains must be performed in a practical manner. Check the direction of the teeth and mount them offset from each other so that the teeth of the chain are exactly in the middle of the teeth of the left -hand chain.	24
The feeder chains do not normally require lubrication, but for durability and ease of cleaning we recommend lubricating with a chain spray every 24 working hours.	24
Clean the signs, instruments and augers daily.	24
Lubrication of the components fitted with grease nipples, joints, plug connections and the couplings is required every 24 working hours. If necessary, consult the tables in the spare parts catalogues, we recommend using multi-purpose grease	24
Check the setting of the snapping rollers at the beginning of the working season or following faults.	The start of the harvest Every 250
The sides of the auger are driven by a special gearing equipped with sliding joints; daily to supply it with lubricating oil. Operation is performed manually by pushing the coupling back and forth several times.	24
The cylinders of the folding mechanism must be checked at least every two years. All seals are replaced during the overhaul.	Min. every 2 years


Getriebeöl SAE 90 GL-5 - 3 Liter. Ersatz 1x in der Saison oder 300 E.Std.
Transmission oil SAE 90 GL-5 - 3 liters. Replacement 1x season or every 300 opr. hrs.
40-115543 - Pflueckerreiche
Getriebegehäuse aus Aluminium
Aluminum gearbox housing
Getriebeöl CLP 100 - 0,7 Liter. Ersatz 1x in der Saison oder 300 E.Std.
Transmission oil CLP 100 - 0,7 liters. Replacement 1x season or every 300 opr. hrs.
Schmiermittel EP0 - 3 Liter. Ersatz 1x in der Saison oder 300 E.Std.
Lubricant EP0 - 3 liters. Replacement 1x season or every 300 opr. hrs.
30-703100 - Pflueckerreiche
Getriebegehäuse aus Stahl
Steel gearbox housing
Getriebeöl CLP 100 - 0,7 Liter. Ersatz 1x in der Saison oder 300 E.Std.
Transmission oil CLP 100 - 0,7 liters. Replacement 1x season or every 300 opr. hrs.


Schmiermittel EP2. Nach 100 E. Std.
Lubricant EP2. After 100 op.hrs.
Schmiermittel EP2. Nach 8 E. Std.
Lubricant EP2. After 8 op.hrs.


Getriebeöl SAE 90 GL-5 - 1,6 Liter. Erster Ölwechsel nach 50 E.Std. Folgende Ölwechsel 1x in der Saison oder 300 E.Std.
Transmission oil SAE 90 GL-5 - 1,6 liters. First oil change after 50 opr. hrs. Following oil changes every 1x season or every 300 opr. hrs.
Schmiermittel EP2. Nach 100 E. Std.
Lubricant EP2. After 100 op.hrs.

8. DECOMMISSIONING AND DISMANTLING

DANGER! – The machine can tip!

- Impact: Danger to life or of serious injuries.
- Apply the transport lock.
- Secure the machine correctly with tension belts.
- Ensure that the machine has a steady position.
- Lower slowly.
- Ensure sufficient chain tension.
- Switch off the motor and activate the lowering lock before commencing any work on the machine.
- Persons must not be in the danger area.
- Use sufficient lifting gear.
- Comply with the regulations for lifting gear.

Caution – contact with oils and grease!

Impact: serious injury or damage to the machine

- **Avoid skin contact with oil, grease and solvents.**
- **Consult a doctor immediately after injuries or burns from oils, cleaning agents and solvents.**

Follow all further safety information to prevent injury and accident.

Environment

PLEASE NOTE – Oil or grease enters the environment.

Impact: Pollution

- Dispose of oils and grease in an environmentally friendly fashion and in accordance with the applicable regulations.



Fig. 60

Decommissioning

If the corn header or its components reach the end of useful life and require scrapping, the components must be separated according to material and disposed of in an environmentally safe manner. Comply with the applicable regulations.



Fig. 61

Disposal

Ensure the correct and environmentally friendly disposal of the operating and auxiliary materials.

Ensure that no operating materials (oil, grease or other operating materials which endanger the groundwater) can sink into the groundwater or the soil.

Please address any questions to the local disposal specialists.

Always wear personal protective equipment when performing the disposal.

9. FAULTS AND TROUBLESHOOTING

HYDRAULICS

Fault	Cause	Remedy	Page
Corn header front attachment	Insufficient quantities of hydraulic oil	Refill oil	40
	Insufficient lift force	Additional lift cylinder required	23
Hydraulic function of the picker does not function	Hydraulic connections have no throughflow	Check the connections / couplings / screw connections	27
	Insufficient pressure of the hydraulic system	Check the pressure, increase if permissible	CH handbook
	Insufficient quantities of hydraulic oil	Refill oil	40

DRIVE

Fault	Cause	Remedy	Page
Drive is activated but the picker does not rotate	Drive shaft	Check the drive shaft	32
	The drive shaft coupler does not engage	Locking impossible, check the coupling halves for full engagement	32
	The coupling does not engage	Check the alignment, make the shifter piece passable	31
The picker remains stationary during operation	The V-belt is not tightened	Check the drive	CH handbook
	Overload	Adapt the working speed	

CROSS AUGER

Fault	Cause	Remedy	Page
Cross auger remains stationary	Overload	Reduce the material quantity straw content too high	
	Friction coupling engages	Remove foreign objects, check the scraper	28
	Drive	Check the chain and coupling	27
	Original combine harvester, splash guard fitted in front of the feeder channel	Remove the splash guard	
Auger ejects corn cob from the machine	Position and number of conveyor plates	Alter to fit the conditions	
	Insufficient feed rate	Increase the feed	

HARVESTING UNIT

Fault	Cause	Remedy	Page
The picker remains stationary during harvesting	Drive belts not tightened	Perform a service	CH handbook
	Working speed too high	Adapt	
Straw content too high	Snapping plates	Open the snapping plate as far apart as possible	27
	Working speed	Adapt the working speed to the conditions	
Blockage within the picking row	Snapping plates not parallel	Set the snapping plates	27
	Foreign bodies in or underneath the picking row	Remove and dispose of sluggish corn stover	42
	Picking gap closure	Missing or set incorrectly	28
Loss of corn cobs	Working speed	Adjust speed	
	Row clearance	Adapt the machine to the conditions	
Grain loss	Snapping plates	Adjust closer together	27
	Recirculation of feeder channel chain	Set the covering above the cross auger lower	27
	Working speed	Increase until the picker is better filled with material	
Corn stubble too long	Horizontal cutting blade worn	Replace blade if necessary	30
	Divider tips	Set flatter, bring the picker closer to the ground	26
	Row clearance	Improper	
	Working speed	Reduce speed	
Snapping plate block	Soiling	Clean the mechanism, open and close the plates multiple times per day	28
	Hydraulic feed line	Check	25
	Basic setting	Check	25
Machine is agitated or vibrates	Horizontal cutting blade	Locate the cause immediately and replace the blade if necessary	30

10. OPTIONS

10.1 Sunflower-Kit

Caution - Danger of injury from sharp blade.

Impact: Injuries
When replacing the cutting tools, use tools appropriate to cutting tools and wear suitable gloves.

Note: Set the picking plate to the greatest distance!

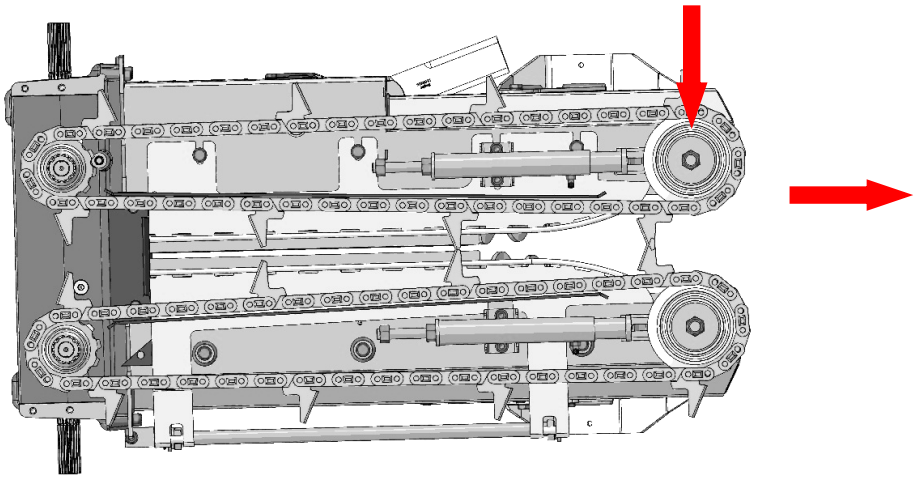


Fig.62 Push in the counter blade from the front as far as it will go.

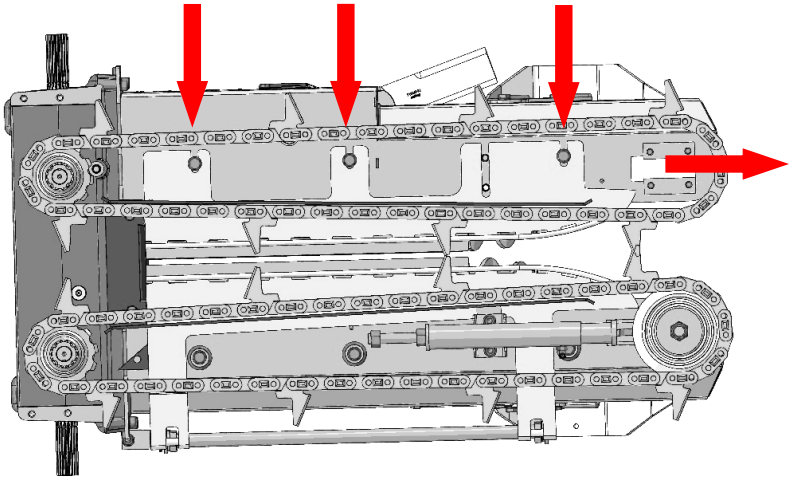


Fig.63 Install the sunflower kit, tighten the screws. Tighten the counter blade screws!

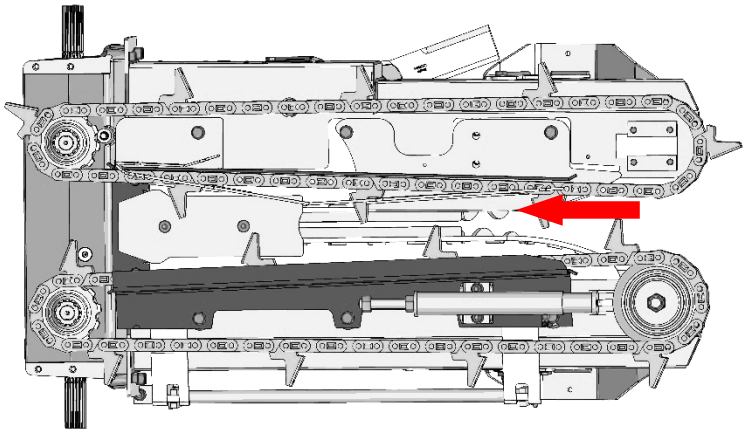


Fig.64 Push in the counter blade from the front as far as it will go.

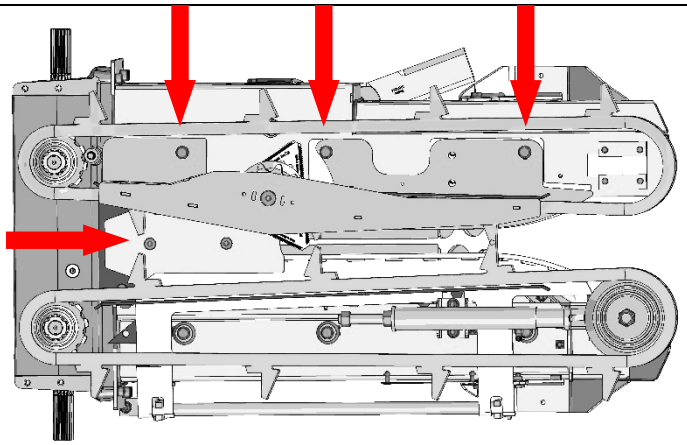


Fig.65 Install the sunflower kit, tighten the screws. Tighten the counter blade screws!

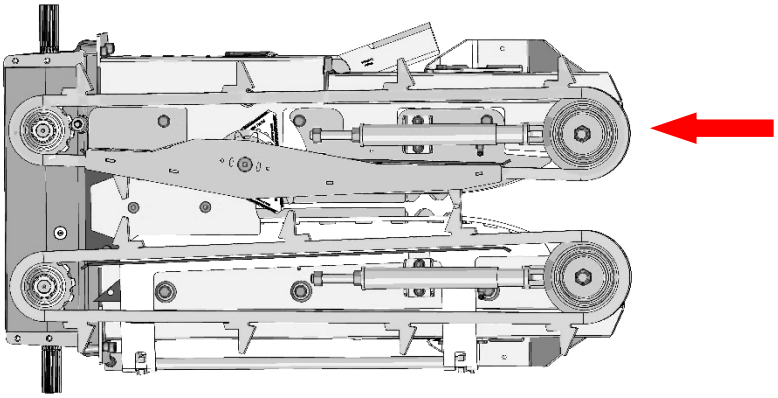


Fig.66 Install the tensioner and the chain in reverse order and tense the chain.

Note: To ensure a gentle picking of the sunflowers stalk roller must be removed!

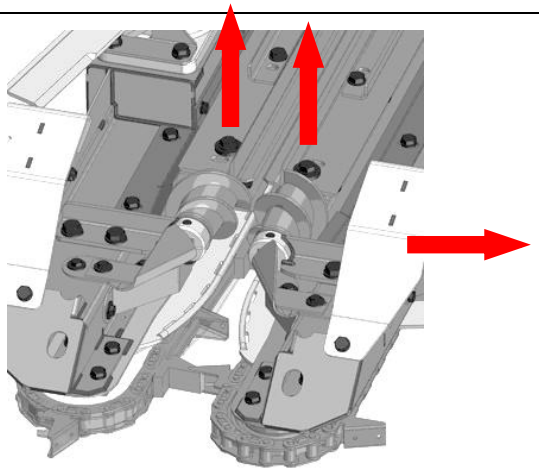


Fig.67 Dismantle the knife guard, remove the screws of the stalk roller holder.

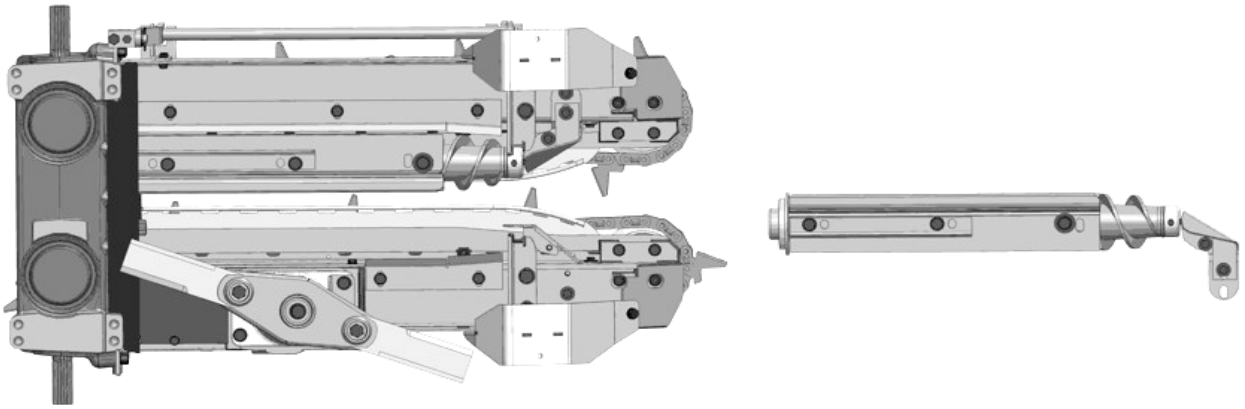


Fig.68 Pull out the stalk roller and holder towards the front.

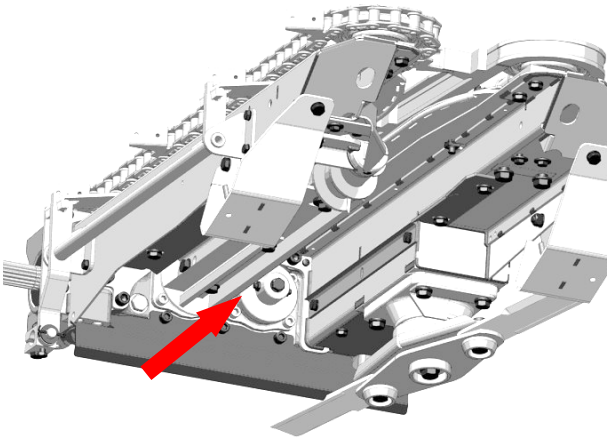


Fig.69 Put on the stalk roller cover and tighten it.

Note: The picking plates can no longer be adjusted!

When retrofitting, carry out the points in reverse order.

Note: Set the picking plate to the greatest distance!

10.2 Corn Auger

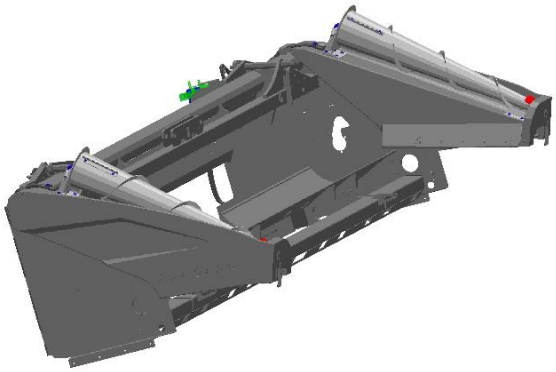


Fig. 70

Flat corn auger assembly

By using the lateral augers, the corn harvest is easier. The hydraulic power transmission of these augers is equipped with a safety valve calibrated by the manufacturer at 80bar. It is NOT recommended to vary this calibration, which allows the immediate stop in case of significant load on the auger and in case of accidental touch with a hand.
The augers are equipped with rear and front protection.

11. EXTRACTION TORQUE FOR SCREWS

11.1 Tightening torque for galvanized screws

Strength class	Tightening torque Nm	NOMINAL DIAMETER - NORMAL THREAD																	
		M3	M4	M5	M6	M7	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M33	M36	M39
5.6	Nm	0.56	1.28	2.50	4.3	7.1	10.5	21	36	58	88	121	171	230	295	435	590	800	1030	1340
	ft/lb	0.41	0.94	1.84	3.1	5.2	7.7	15	26	42	64	89	126	169	217	320	435	590	759	988
8.8	Nm	1.28	2.90	5.75	9.9	16.5	24	48	83	132	200	275	390	530	675	995	1350	1830	2360	3050
	ft/lb	0.94	2.14	4.24	7.3	12.1	17.7	35	61	97	147	202	287	390	497	733	995	1349	1740	2249
10.9	Nm	1.80	4.10	8.1	14	23	34	67	117	185	285	390	550	745	960	1400	1900	2580	3310	4290
	ft/lb	1.33	3.02	5.97	10.3	16.9	25	49	86.2	136	210	287	405	549	708	1032	1401	1902	2441	3163
12.9	Nm	2.15	4.95	9.70	16.5	27	40	81	140	220	340	470	660	890	1140	1680	2280	3090	3980	5150
	ft/lb	1.59	3.65	7.15	12.1	19.9	29	59	103	162	250	346	486	656	840	1239	1681	2278	2935	3798

12.

Strength class	Tightening torque Nm	NOMINAL DIAMETER - FINE THREAD								
		M8 x 1	M10 x 1.25	M12 x 1.25	M14 x 1.5	M16 x 1.5	M18 x 1.5	M20 x 1.5	M22 x 1.5	M24 x 2
8.8	Nm	25	49	88	140	210	305	425	570	720
	ft/lb	18	36	64	103	154	224	313	420	531
10.9	Nm	35	68	125	195	295	425	600	800	1000
	ft/lb	25	50	92	143	217	313	442	590	737
12.9	Nm	42	82	150	235	350	510	720	960	1200
	ft/lb	30	60	110	173	258	376	531	708	885



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Steuer-Nr. 102/168/10401
Geschäftsführer: M. Ziegler, Dipl. BW (FH)

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