



Disc Mower

EasyCut F 280

EasyCut F 320

EasyCut F 360

EasyCut F 280 M

EasyCut F 320 M

EasyCut F 360 M

(from serial no.: 930 985)

Order no.: 150 000 112 02 en





Table of Contents

	EC Declaration of Conformity	
We,	Maschinenfabrik Bernard Krone GmbH Heinrich-Krone-Str. 10, D-48480 Spelle	
hereby declare as manufacturer of the product named below, on our sole responsibility, that the		
Machine:	Krone Front disc mower	
Type / Types:	EasyCut F 280; EasyCut F 320, EasyCut F 360 EasyCut F 280 M ; EasyCut F 320 M, EasyCut F 360 M	
to which this declaration refers is in compliance with the relevant provisions of		
EC Directive 2006/42/EC (Machinery)		
The signing Managing Director is authorised to compile the technical documents.		
Spelle, 26.03.2012		
 _____ Dr.-Ing. Josef Horstmann (Managing Director, Design and Development)		
Year of manufacture:	Machine No.:	

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To this Document

2 To this Document

2.1 Validity

These operating instructions apply to disc mowers of the series:
EasyCut F 280; EasyCut F 320; EasyCut F 360,
EasyCut F 280 M; EasyCut F 320 M, EasyCut F 360 M

2.2 Re-Ordering

If this document should become wholly or partially unusable, you can request a replacement document by stating the order number mentioned on the cover sheet.

2.3 Further applicable documents

To ensure that the machine is used safely and as intended, observe the following further applicable documents:

- Operating instructions of universal shaft

2.4 Target group of this document

This document aims at the operators of the machine fulfilling the minimum requirements of personnel qualification; refer to chapter entitled Safety "Personnel Qualification".

2.5 How to use this document

2.5.1 Directories and References

Table of contents/headers:

The table of contents as well as the headers in this instruction are used for quick navigation in the chapters.

Index directory:

In the index directory, you can find information on the desired subject via catchwords which are in alphabetical order. The index directory can be found on the last page of this instruction.

Cross references:

Cross references to another place in the operating instructions or to another document are in the text and specify the chapter and subchapter or section. The designation of subchapters or sections is presented in quotation marks.

Example:

Check that all screws on the machine are tight, refer to chapter Maintenance, "Tightening Torques".

The subchapter or the section can be found via an entry in the table of contents and in the index directory.

2.5.2 Direction Information

Direction information in this document such as front, rear, right and left always applies in the direction of travel.

2.5.3 Term “Machine”

Throughout the rest of this document, the mower will also be referred to as the “machine”.

2.5.4 Figures

The figures in this document do not always represent the exact machine type. The information which refers to the figure always corresponds to the machine type of this document.

2.5.5 Scope of Document

In addition to standard equipment, accessories kits and versions of the machine are described in this document. Your machine may deviate from this document.

2.5.6 Means of representation**Icons in the text**

In this document, the following means of representation are used:

Action step

A bullet point (•) designates an action step you have to perform, as for example:

- Set the left outside mirror.

Sequence of actions

Several bullet points (•) located in front of a sequence of action steps identify a sequence of actions to be performed step by step, as for example:

- Loosen counter nut.
- Set the screw.
- Tighten counter nut.

List

Dashes (-) identify lists such as, for example:

- Brakes
- Steering
- Lighting

To this Document

Symbols in figures

To visualize parts and actions steps, the following icons are used:

Icon	Explanation
	Reference sign for part
	Position of a part (e.g. move from pos. I to pos. II)
	Dimensions (e.g. B = width, H = height, L = length)
	Action step: Tighten screws with torque key with specified tightening torque
	Direction of motion
	Direction of travel
	opened
	closed
	enlargement of display detail
	Framings, dimension line, dimension line limitation, reference line for visible parts or visible mounting material
	Framings, dimension line, dimension line limitation, reference line for covered parts or covered mounting material
	Laying routes
	Left-hand machine side
	Right-hand machine side



Warning signs

Warning



WARNING! - Type and source of hazard!

Effect: Injuries, serious material damage.

- Measures for hazard prevention.

Caution



CAUTION! - Type and source of hazard!

Effect: Damage to property.

- Measures for risk prevention.

Notes with information and recommendations

Note



Note

Effect: Economic benefit of the machine.

- Measures to be performed.
-



Safety

3 Safety

3.1 Purpose of Use

The EasyCut disc mower is used for cutting crops growing on the ground (except maize).

3.2 Intended Use

The disc mower is built exclusively for customary use in agricultural work (intended use).

Any use of the machine for other purposes is deemed not to be in accordance with intended use. The manufacturer shall not be liable for any resulting damage; the user alone shall bear the risk.

Operation in accordance with intended use also includes observing the operating, maintenance and service instructions specified by the manufacturer.

Unauthorised modifications to the machine may affect the properties of the machine or disrupt proper operation. For this reason, unauthorised modifications shall exclude any liability of the manufacturer for consequential damage.

3.3 Service life of the machine

- The service life of this machine strongly depends on proper use and maintenance as well as the operating conditions.
- Permanent operational readiness as well as long service life of the machine can be achieved by observing the instructions and notes of these operating instructions.
- After each season of use, the machine must be checked thoroughly for wear and other damage.
- Damaged and worn parts must be replaced before placing the machine into service again.
- After the machine has been used for five years, carry out full technical inspection of the machine. According to the results of this inspection, a decision concerning the possibility of reuse of the machine should be taken.
- Theoretically, the service life of this machine is unlimited as all worn or damaged parts can be replaced.



3.3.1 Personnel Qualification and Training

The machine may be used, maintained and repaired only by persons who are familiar with it and have been instructed about the dangers connected with it. The operator must define areas of responsibility and monitoring of personnel. Should personnel lack the required knowledge, they must receive the required training and instruction. The operator must ensure that the contents of these operating instructions have been fully understood by personnel.

Repair work not described in these operating instructions should only be performed by authorised service centres.

3.3.2 Dangers in Case of Non-compliance with the Safety Instructions

Failure to follow the safety instructions could result in personal injury and environmental hazards as well as damage to the machine. If the safety instructions are not respected, this could result in the forfeiture of any claims for damages.

Failure to follow the safety instructions could result, **for example**, in the following hazards:

- Endangering of persons due to not protected working areas.
- Breakdown of important machine functions
- Failure of prescribed methods for repair and maintenance
- Endangering of persons due to mechanical and chemical effects
- Damage to the environment due to leaking hydraulic oil

3.3.3 Safety-conscious work practices

Always observe the safety instructions set out in these operating instructions, all existing accident prevention rules and any internal work, operating and safety rules issued by the operator.

The safety and accident prevention regulations of the responsible professional associations are binding.

The safety instructions provided by the vehicle manufacturer should also be observed.

Observe the applicable traffic laws when using public roads.

Be prepared for emergencies. Keep the fire extinguisher and first aid box within reach. Keep emergency numbers for doctors and fire brigade close to the telephone.



Safety

3.4 Safety Instructions and Accident Prevention Regulations

- 1 Please follow all generally applicable safety and accident prevention regulations in addition to the safety instructions contained in these operating instructions!
- 2 The attached warning and safety signs provide important information for safe operation. Pay attention to these for your own safety!
- 3 When using public roads, make sure to observe the applicable traffic regulations!
- 4 Make sure that you are familiar with all equipment and controls as well as with their functions before you begin working with the machine. It is too late to learn this when you are using the machine for work!
- 5 The user should wear close fitting clothes. Avoid wearing loose or baggy clothing.
- 6 Keep the machine clean to prevent the danger of fire!
- 7 Before starting or moving the machine, make certain that nobody is in the vicinity of the machine! (Watch for children!) Make sure that you have a clear view!
- 8 Carrying passengers during operation and transport on the working implement is not permitted.
- 9 Couple implements correctly! Attach and secure implements to specified devices only!
- 10 When attaching or detaching implements, place the supporting devices in the correct positions!
- 11 Use extreme caution when attaching or detaching implements onto or from the tractor!
- 12 Always attach ballast weights properly to the fixing points provided!
- 13 Observe permitted axle loads, gross weight and transport dimensions!
- 14 Check and attach transport equipment, such as lighting, warning devices and protective equipment!
- 15 Actuating mechanisms (cables, chains, linkages etc.) for remote controlled devices must be positioned in such a way that no movements are unintentionally triggered in any transport or working positions.
- 16 Ensure that implements are in the prescribed condition for on-road travel and lock them in place in accordance with the manufacturer's instructions!
- 17 Never leave the driver's seat when the vehicle is moving!
- 18 Always drive at the correct speed for the prevailing driving conditions! Avoid sudden changes in direction when travelling uphill or downhill or across a gradient!
- 19 Hitched implements and ballast weights affect the driving, steering and braking response of the machine. Make sure that you are able to brake and steer the machine as required!
- 20 Take into account the extension radius and/or inertia of an implement when turning corners!
- 21 Start up implements only when all safety devices have been attached and set in the required position!
- 22 Keep safety equipment in good condition. Replace missing or damaged parts.
- 23 Keep clear of the working range of the machine at all times!
- 24 Do not stand within the turning and swivel range of the implement!
- 25 Never operate the hydraulic folding frames if anyone is inside the swivel range!
- 26 Parts operated by external power (e.g. hydraulically) can cause crushing and shearing injuries!
- 27 Before leaving the tractor, lower the implement onto the ground, apply the parking brake, switch off the engine and remove the ignition key!



3.5

Attached devices

- 1 Use extreme caution when attaching or detaching implements onto or from the tractor!
- 2 Couple the respective application devices to the appropriate couplings (e.g. three-point suspension) only and secure them in a way (transport, use) that excludes inadvertent lifting or lowering of the device.
- 3 When using three-point linkage, the attachment categories of the tractor and the device (e.g. PTO speed, hydraulic system) must be coordinated!
- 4 When using the outside controls for the three-point linkage, do not step between the tractor and the device (risk of injury)!

Safety

3.6 PTO operation

- 1 Use only PTO shafts specified by the manufacturer!
- 2 The guard tube and guard cone of the PTO shaft and the PTO guard must be attached and in good working condition (on the implement side, too)!
- 3 Make sure that the required tube covers are in place for PTO shafts in transport and working position!
- 4 Before installing or detaching PTO shafts, disengage the PTO, switch off the engine and remove the ignition key!
- 5 When using PTO shafts with an overload safety or free-running coupling which are not shielded by the guard on the tractor, mount the overload safety or free-running coupling on the implement side!
- 6 Always make sure that the PTO shaft is properly installed and secured!
- 7 Attach chains to prevent the PTO shaft guard from rotating with the shaft!
- 8 Before switching on the PTO, make sure that the selected PTO speed of the tractor matches the permissible implement speed!
- 9 Before switching on the PTO shaft make sure that no person is in the danger zone of the device!
- 10 Never switch on the PTO if the engine is switched off!
- 11 No one should be in the vicinity of the rotating PTO or PTO shaft when the PTO is in use.
- 12 Always switch off the PTO shaft when the angle is too large or the PTO shaft is not required!
- 13 Caution! After disengaging the PTO danger due to the flywheel running on! Keep away from the implement during this time. The machine may be worked on only if it is completely at standstill and if the flywheel is secured by the parking brake.
- 14 Cleaning, lubricating or adjusting PTO driven implements or the PTO shaft only with PTO disengaged, engine switched off and ignition key withdrawn! Secure the fly-wheel with the parking brake.
- 15 Place the disconnected PTO shaft onto the support provided!
- 16 After detaching the PTO shaft, attach the protective cover to the PTO end!
- 17 If damage occurs, correct this immediately before using the implement!



Note

The instructions of the manufacturer must be observed with regard to the PTO shaft. (separate operating instructions)



3.7 Hydraulic system

- 1 The hydraulic system is pressurised!
- 2 When connecting hydraulic cylinders and motors, make sure the hydraulic hoses are connected as specified!
- 3 When connecting the hydraulic hoses to the tractor hydraulics, make sure that the hydraulics of both the tractor and the implement have been depressurized!
- 4 In the case of hydraulic connections between tractor and machine, the coupling sleeves and plugs should be marked to ensure a proper connection! If the connectors are interchanged, the function will be reversed (e. g. raising/lowering) - Risk of accident!
- 5 When searching for leaks, use suitable aids to avoid the risk of injury!
- 6 Liquids escaping under high pressure (hydraulic oil) can penetrate the skin and cause serious injury! Seek medical help immediately should injuries occur! Danger of infection!
- 7 Before working on the hydraulic system, depressurise the system and switch off the engine!
- 8 Check the hydraulic hose lines at regular intervals and replace them if damaged or worn! The new hoses must fulfill the technical requirements set by the manufacturer of the implement!

3.8 Maintenance

- 1 Always make certain that the drive and the engine are switched off before doing any repairs, maintenance or cleaning! - Remove the ignition key!
- 2 Regularly check that nuts and bolts are properly seated and tighten if necessary!
- 3 When performing maintenance work with the machine raised, always secure it with suitable supporting elements!
- 4 Oils, greases and filters must be disposed of correctly!
- 5 If protective devices and guards are subject to wear, check them regularly and replace them in good time!
- 6 Replacement parts must at least comply with the technical requirements set by the manufacturer of the implements! This is guaranteed by original KRONE spare parts!
- 7 When replacing working tools with cutting edges, use suitable tools and gloves!

3.9 Unauthorised Conversion/Modification and Spare Parts Production

Conversions or modifications of the machine are permitted only with prior consultation with the manufacturer. Original spare parts and accessories authorised by the manufacturer help to ensure safety. Use of other parts may void liability for resulting damage.

3.10 Inadmissible Modes of Operation

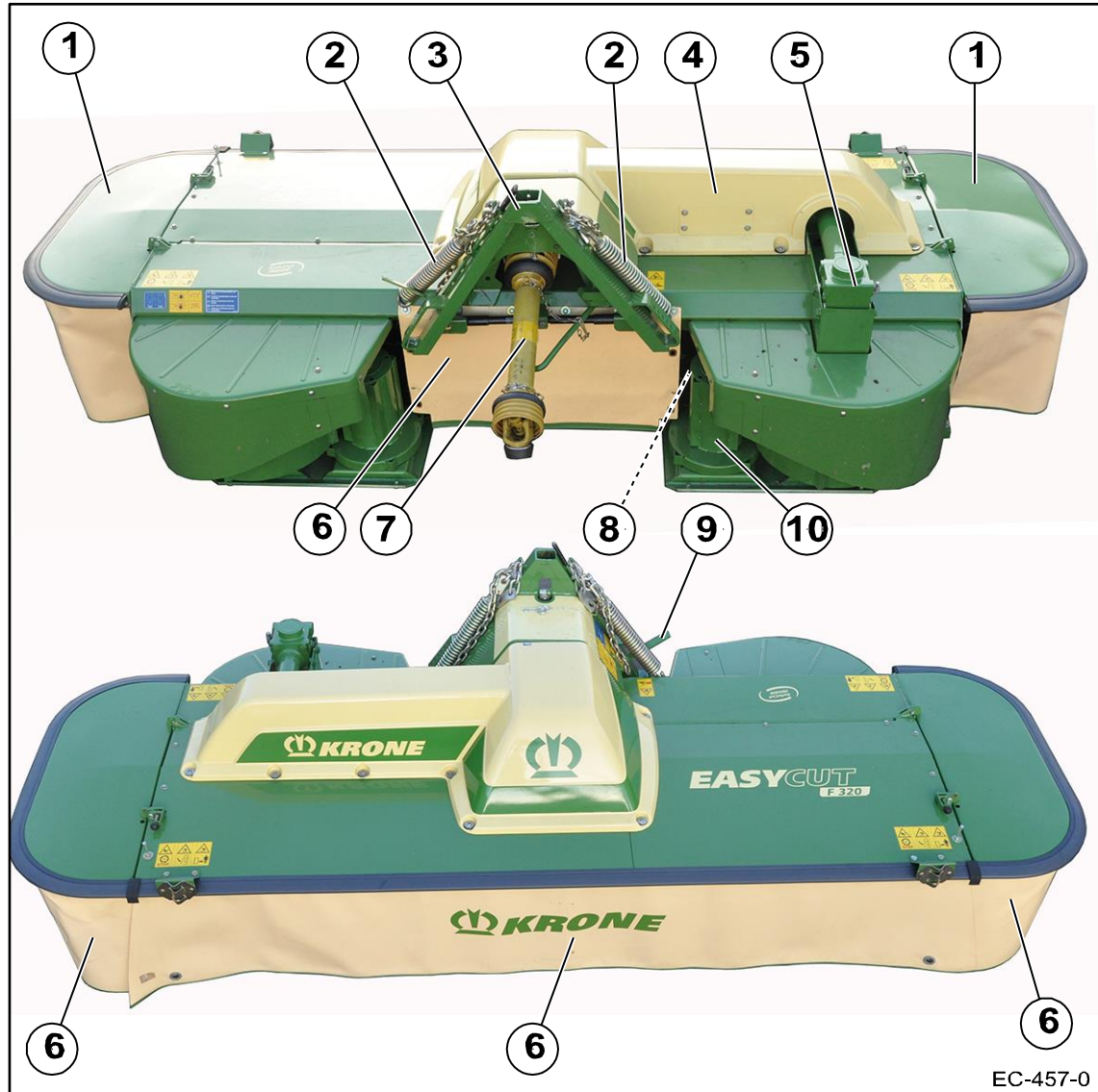
The operating safety of the delivered machine is guaranteed only when it is used as intended in compliance with the introductory section "Intended use" of the operating instructions. The limit values listed in the data charts should not be exceeded under any circumstances.

Machine Description

4 Machine Description

4.1 Machine overview

EasyCut F 280 / EasyCut F 320 / EasyCut F 360



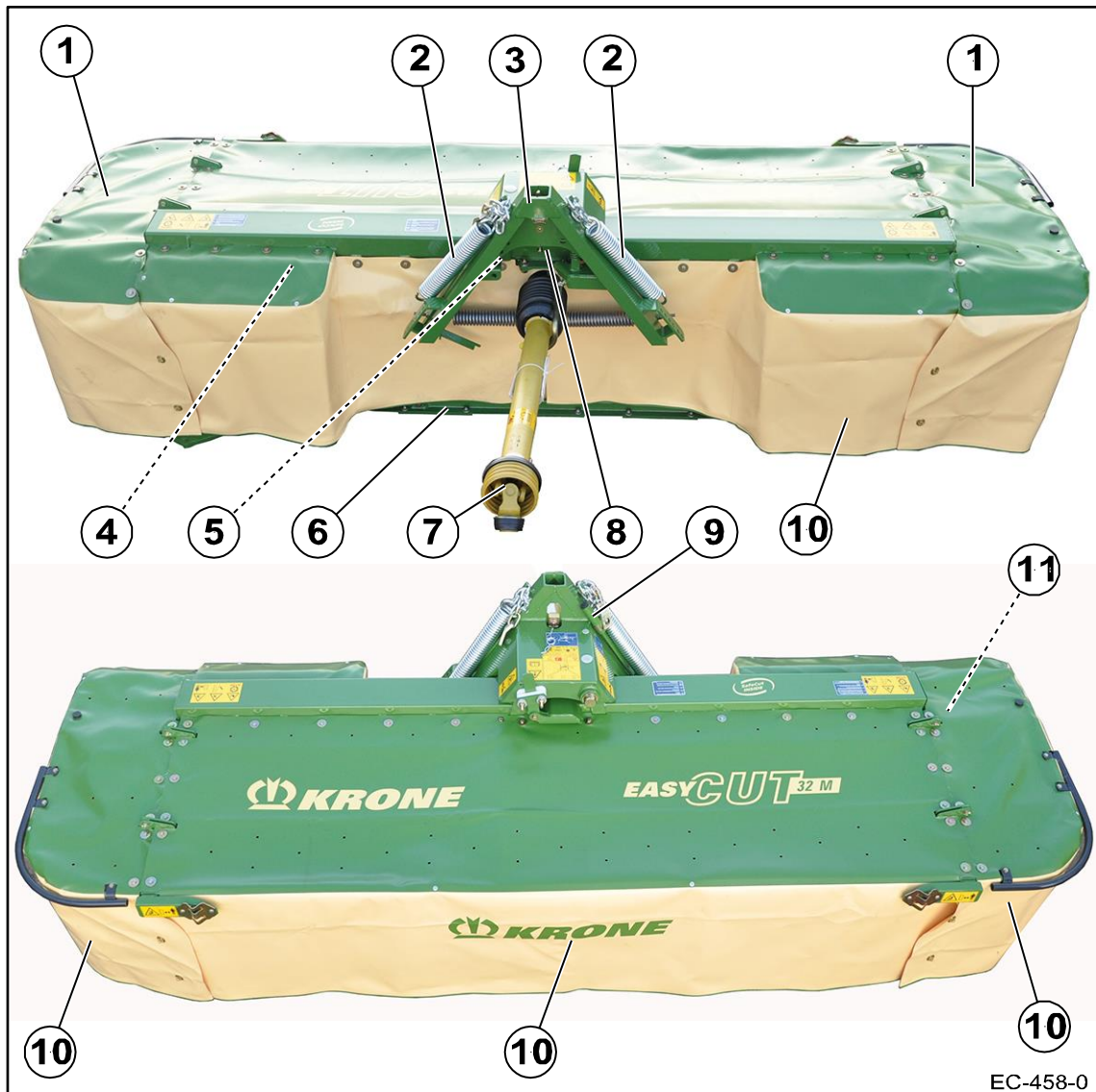
EC-457-0

Fig. 1

Pos.	Description	Pos.	Description
1)	Side guards	2)	Relief springs
3)	Holder for triangle linkage	4)	Drive belt
5)	Angular gearbox	6)	Guard cloth
7)	Drive universal shaft	8)	Cutter bar
9)	Blade key*)	10)	Swath drum

*) optional

EasyCut F 280 M / EasyCut F 320 M/ EasyCut F 360 M



EC-458-0

Fig. 2

Pos.	Description	Pos.	Description
1)	Outer guards	2)	Relief springs
3)	Holder for triangle linkage	4)	Intermediate universal shaft
5)	Friction clutch	6)	Cutter bar
7)	Drive universal shaft	8)	Angular gearbox
9)	Blade key*)	10)	Guard cloths
11)	Mower drive gearbox		

*) optional

Machine Description

4.2 Identification Plate

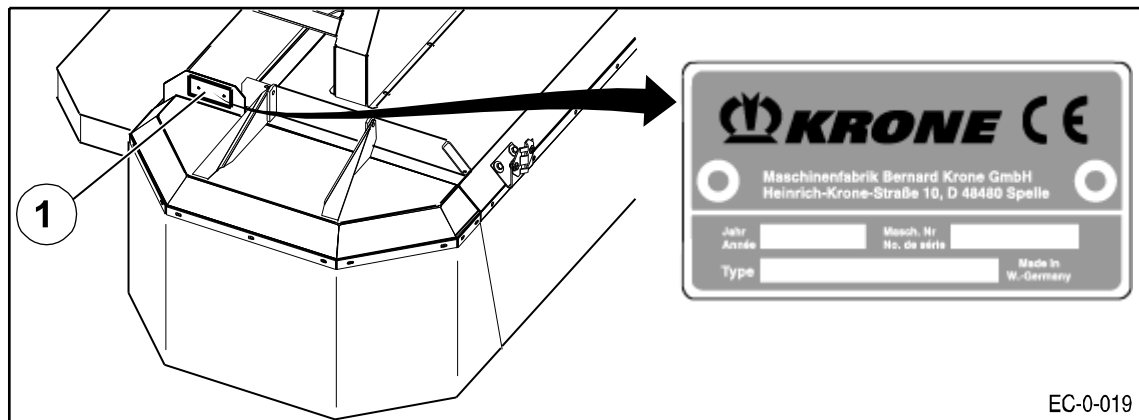


Fig. 3

The machine data are specified on the type plate (1). It is attached to the carrying bar.

4.3 Information Required for Questions and Orders

Year	
Mach. No.	
Type	



Note

The entire identification plate represents a legal document and should not be altered or rendered illegible!

When asking questions concerning the machine or ordering spare parts, be sure to provide type designation, machine number and the year of manufacture of the relevant machine: To ensure that these data are always available, we recommend that you enter them in the fields above.



Note

Authentic KRONE spare parts and accessories authorised by the manufacturer help to ensure safety. The use of spare parts, accessories or additional equipment not manufactured, tested or approved by KRONE will exclude any liability for consequential damage.

4.3.1 Contact

Maschinenfabrik Bernard Krone GmbH
Heinrich-Krone-Strasse 10
D-48480 Spelle (Germany)

Telephone: + 49 (0) 59 77/935-0 (Head Office)
Fax.: + 49 (0) 59 77/935-339 (Head Office)
Fax.: + 49 (0) 59 77/935-239 (Spare parts - domestic)
Fax.: + 49 (0) 59 77/935-359 (Spare parts - export)
Email: info.idm@krone.de



4.4 Introduction

The disc mower is equipped with all safety devices (protective devices). However, it is not possible to eliminate all potential hazards on this machine as this would impair its full functional capability. Hazard warnings are attached to the machine in the relevant areas to warn against any dangers. The safety instructions are provided in the form of so-called warning pictograms. Important information on the position of these safety signs and what they mean is given below!



WARNING!

Danger of injury on machine parts if danger zones have not been marked when warning pictograms are missing, damaged or illegible.

Danger of injury due to dangerous parts and other residual risks as users or third parties enter the danger area or reach into it as they are not aware of the danger.

- Immediately replace damaged or illegible labels.
- Following repair work, always attach appropriate adhesive safety labels to all the replaced, modified or repaired components.
- Never clean areas carrying an adhesive safety label using a high-pressure cleaner.

Familiarise yourself with the statement of the warning pictograms. The adjacent text and the selected location on the machine provide information on the special danger spots on the machine.

4.4.1 Re-Ordering the Adhesive Safety and Information Labels



Note

Every adhesive safety and information label is assigned an order number and can be ordered directly from the manufacturer or from an authorized dealer (see Section "Contact").

4.4.2 Affixing the Adhesive Safety and Information Labels



Note - Affixing an adhesive label

Effect: Adhesion of the label

- The surface for affixing the adhesive label must be clean and free of dirt, oil and grease.

Machine Description

4.5 Position of the Adhesive Safety Stickers on the Machine

EasyCut F 280 / EasyCut F 320 / EasyCut F 360



Fig. 4 EasyCut F 280, EasyCut F 320, EasyCut F 360

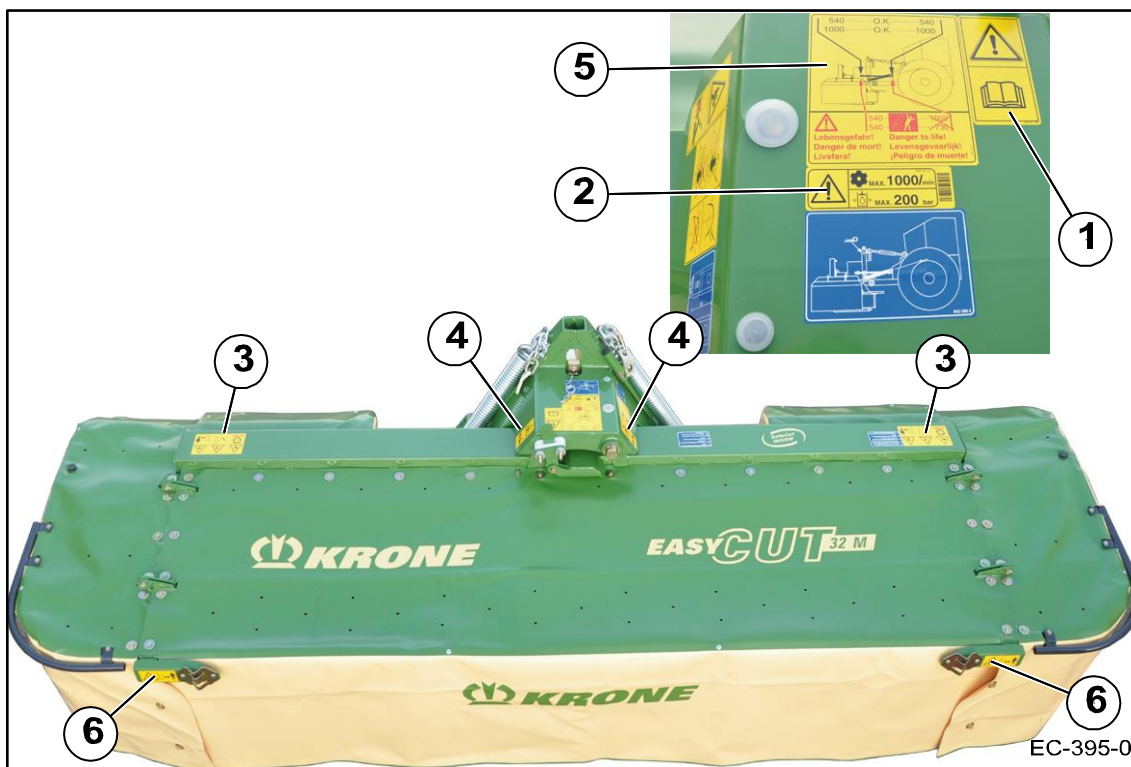
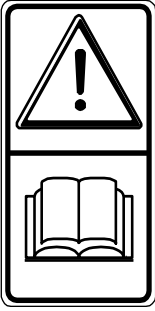
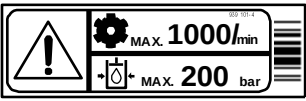


Abb. 5 EasyCut F 280 M; EasyCut F 320 M, EasyCut F 360 M

1) Order no. 939 471 1 (1x)

	Danger due to incorrect operation and lack of knowledge Incorrect operation and lack of knowledge of the machine as well as incorrect behaviour in hazardous situations is risking the life of the operator and third parties. Before starting up the machine, read and follow the operating instructions and safety instructions.
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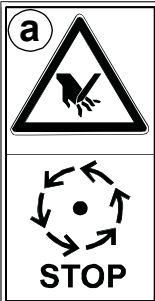
2) Order no. 939 101 4 (1x)

	Danger due to exceeding the maximum permissible PTO speed or the maximum permissible operating pressure. If the permissible PTO speed is exceeded, machine parts may be destroyed or flung out. If the maximum permissible operating pressure is exceeded, hydraulic components may be damaged. As a result, people may be seriously or fatally injured. - Observe the permissible PTO speed. - Observe the permissible operating pressure.
---	---

3) Order no. 939 576 0

EasyCut F 280 M / EasyCut F 320 M/ EasyCut F 360 M (2x)

EasyCut F 280 / EasyCut F 320 / EasyCut F 360 (4x)

a)  b)  c) 	a) Danger from turning machine parts There is a risk of injury as machine parts may still continue to run for a certain time after being switched off - Do not touch any moving parts of the machine. - Wait until the machine parts have come to a complete stop. b) Danger from objects being flung out When the machine is running, there is a risk of injury as objects may be flung out uncontrollably. - Before start-up, move guards into protective position. c) Danger from objects being flung out When the machine is running, there is a risk of injury as objects may be flung out uncontrollably. - Keep your distance when the machine is running.
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Machine Description



Fig. 6 EasyCut F 280, EasyCut F 320, EasyCut F 360

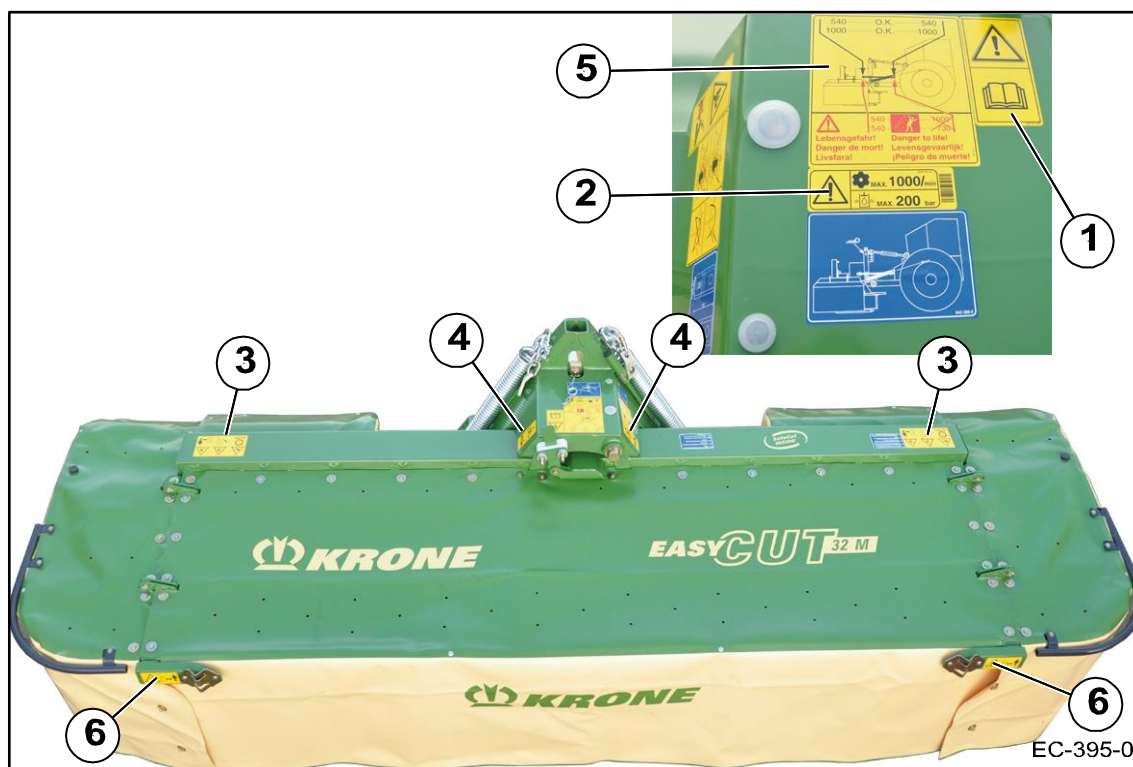
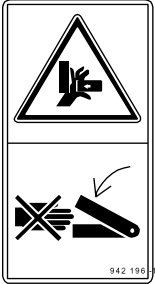
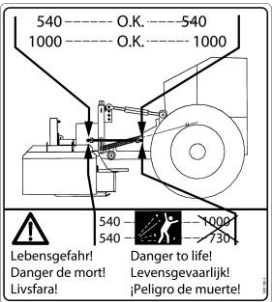


Abb. 7 EasyCut F 280 M; EasyCut F 320 M, EasyCut F 360 M

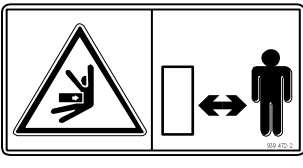
4) Order no. 942 196 1 (2x)

	Danger due to crushing or shearing Risk of injury due to crushing or shearing points on moving machine parts. While parts are moving, never reach into areas where there is a risk of being crushed.
---	---

5) Order no. 939 106-3 (1x)

	Lebensgefahr durch Überschreiten der maximal zulässigen Zapfwellendrehzahl. Bei Überschreitung der zulässigen Zapfwellendrehzahl können Maschinenteile zerstört oder weggeschleudert werden. Dadurch können Personen schwer oder lebensgefährlich verletzt werden. Die zulässige Zapfwellendrehzahl beachten.
---	--

6) Order No. 939 472 2 (2x)

	Danger due to impact Risk of death due to swivelling movements of the machine. - Ensure that there is nobody in the swivel range of the machine. - Maintain distance from moving machine parts.
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Technical Data of the Machine

5 Technical Data of the Machine

5.1 Technical data

All information, illustrations and technical data in these operating instructions correspond to the latest state at the time of publication. We reserve the right to make design changes at any time and without notification of reasons.

EasyCut F 280 M

Dimensions	
Working width	2730 mm
Transport width	2565 mm
Acreage	3.0 – 3.5 ha/h
Dead weight	approx. 740 kg

Minimum tractor requirements	
Power consumption	40 kW (55 HP)
PTO speed	max. 1000 rpm

Machine equipment (series)	
Pendulum trestle	series
SafeCut	series
Blade quick fastener or blade screw connection	series
Mechanical spring relief	series
Number of cutting discs	4 units / (2 units)*
Number of mower drums	2 units / (4 units)*

*) optional

Technical Data of the Machine

EasyCut F 280

Dimensions	
Working width	2710 mm
Transport width	2565 mm
Acreage	3.0 – 3.5 ha/h
Dead weight	approx. 740 kg

Minimum tractor requirements	
Power consumption	44 kW (60 HP)
PTO speed	max. 1000 rpm
Hydraulic connections *)	1x double-action control unit

*) for the hydraulically folding outer guards version

Machine equipment (series)	
Pendulum trestle	series
SafeCut	series
Blade quick fastener or blade screw connection	series
Mechanical spring relief	series
Number of cutting discs	4 units
Number of mower drums	2 units



Technical Data of the Machine

EasyCut F 320 M

Dimensions	
Working width	3165 mm
Transport width	3000 mm
Acreage	3.5 – 4.0 ha/h
Dead weight	approx. 620 kg

Minimum tractor requirements	
Power consumption	48 kW (65 HP)
PTO speed	max. 1000 rpm
Hydraulic connections *)	1x double-action control unit

*) for the hydraulically folding outer guards version

Machine equipment (series)	
Pendulum trestle	series
SafeCut	series
Blade quick fastener or blade screw connection	series
Mechanical spring relief	series
Number of cutting discs	5 units / (3 units)*
Number of mower drums	2 units / (4 units)*

*) optional

Technical Data of the Machine

EasyCut F 320

Dimensions	
Working width	3140 mm
Transport width	3000 mm
Acreage	3.5 – 4.0 ha/h
Dead weight	approx. 860 kg

Minimum tractor requirements	
Power consumption	51 kW (70 HP)
PTO speed	max. 1000 rpm
Hydraulic connections *)	1x double-action control unit

*) for the hydraulically folding outer guards version

Machine equipment (series)	
Pendulum trestle	series
SafeCut	series
Blade quick fastener or blade screw connection	series
Mechanical spring relief	series
Number of cutting discs	5 units
Number of mower drums	2 units



Technical Data of the Machine

EasyCut F 360 M

Dimensions	
Working width	3600 mm
Transport width	3435 mm
Acreage	4.0 – 4.5 ha/h
Dead weight	approx. 690 kg

Minimum tractor requirements	
Power consumption	54 kW (75 HP)
PTO speed	max. 1000 rpm
Hydraulic connections *)	1x double-action control unit

*) for the hydraulically folding outer guards version

Machine equipment (series)	
Pendulum trestle	series
SafeCut	series
Blade quick fastener or blade screw connection	series
Mechanical spring relief	series
Lighting	series
Number of cutting discs	5 units / (4 units)*
Number of mower drums	2 units / (4 units)*

*) optional

Technical Data of the Machine

EasyCut F 360

Dimensions	
Working width	3570 mm
Transport width	3435 mm
Acreage	4.0 – 4.5 ha/h
Dead weight	approx. 990 kg

Minimum tractor requirements	
Power consumption	55 kW (80 HP)
PTO speed	max. 1000 rpm
Hydraulic connections *)	1x double-action control unit

*) for the hydraulically folding outer guards version

Machine equipment (series)	
Pendulum trestle	series
SafeCut	series
Blade quick fastener or blade screw connection	series
Mechanical spring relief	series
Lighting	series
Number of cutting discs	6 units
Number of mower drums	2 units

Technical Data of the Machine

5.2 Consumables

5.2.1 Filling Quantities and Lubrication Designations for Gearboxes



Environment! - Disposing of consumables and storage

Effect: Environmental damage

- Keep consumables in suitable containers according to statutory provisions.
- Dispose of used consumables according to statutory provisions.

EasyCut F 280 / EasyCut F 320

Designation	Filling quantity	Specification
Angular gearbox	1.0 l	SAE 90
Cutterbar EasyCut F 280	6.0 l	
Cutterbar EasyCut F 320	7.0 l	

Biodegradable consumables on request.

EasyCut F 360

Designation	Filling quantity	Specification
Angular gearbox	1.0 l	SAE 90
Cutterbar EasyCut F 360	8.0 l	

Biodegradable consumables on request.

EasyCut F 280 M / EasyCut F 320 M

Designation	Filling quantity	Specification
Angular gearbox	0.5 l	SAE 90
Mower drive gearbox	0.4 l	
Cutterbar EasyCut F 280 M	6.0 l	
Cutterbar EasyCut F 320 M	7.0 l	

Biodegradable consumables on request.

EasyCut F 360 M

Designation	Filling quantity	Specification
Angular gearbox	0.5 l	SAE 90
Mower drive gearbox	0.9 l	
Cutterbar EasyCut F 360 M	8.0 l	

Biodegradable consumables on request.

5.3 Ambient Temperature

Ambient temperature	
Temperature range for machine operation	-5 to +45°C

6 Commissioning

6.1 Special Safety Instructions



WARNING!

When performing repair, maintenance or cleaning work on the machine, or in case of technical intervention, drive elements may start moving. Thus there is a risk of serious injuries or death.

- Switch off tractor engine, remove the ignition key and carry it with you.
- Secure the tractor against accidental start-up and against rolling.
- Wait until all machine parts have come to a complete stop and have been cooled down completely.

6.2 First installation



Danger! - Incorrect assembly

Effect: Danger to life, serious injuries or serious damage to the machine.

- Only authorised service centres may assemble the machine.
- The machine must be assembled with special care.
- Always heed the applicable accident prevention regulations.
- Use only safe and sufficiently dimensioned lifting equipment and load-securing equipment.
- The machine may be taken into operation only after all the safety devices have been installed.
- If unauthorised modifications are made to the machine, the manufacturer is released from liability for any resulting damage.



Danger! - Missing guard cloths

Effect: Lebensgefahr, schwere Verletzungen oder schwere Schäden an der Maschine.

- Before starting up the machine for the first time, install all supplied guard cloths on the machine.

The document "Assembly Instructions" describes how to install the device for the first time.

Commissioning

EasyCut F 280 / EasyCut F 320 / EasyCut F 360

6.3 Fitting the guard cloths

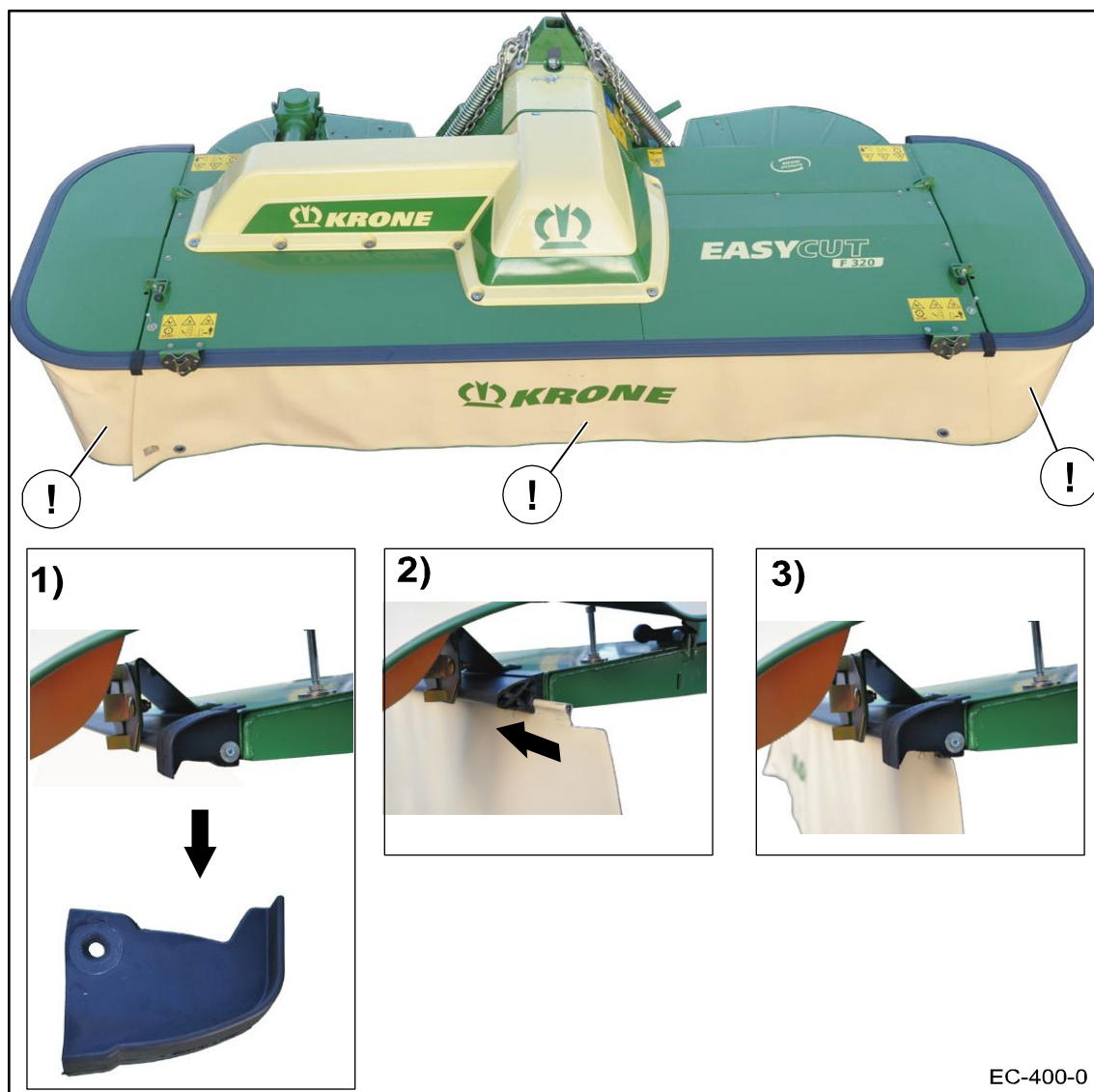


Fig. 8

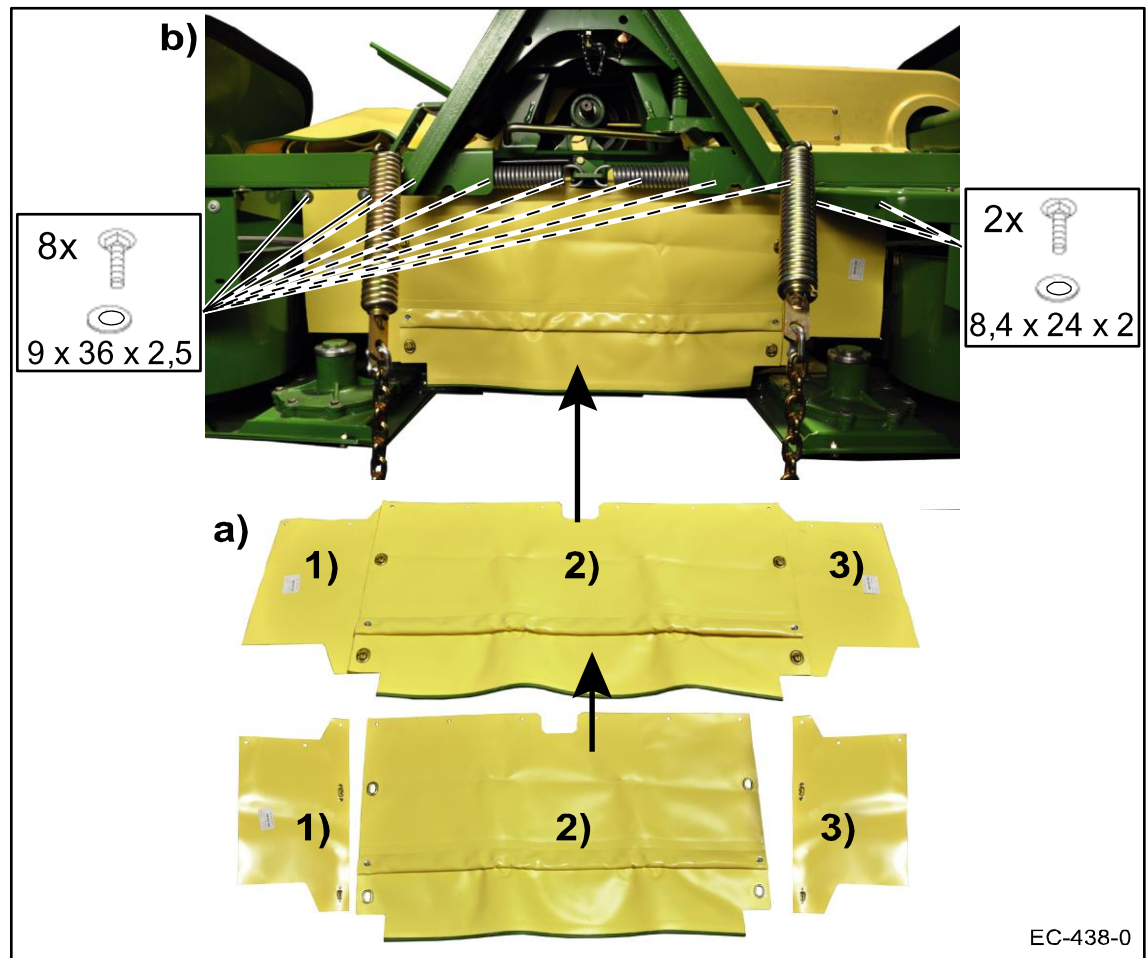


Fig. 9

Commissioning

6.4 Installation of Weiste triangle

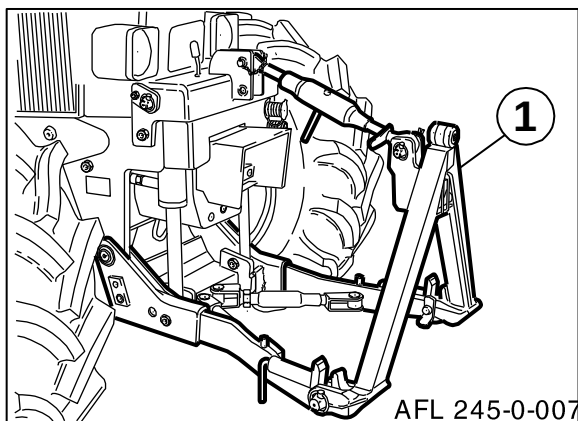


Fig. 10



Warning - Installation of the triangle linkage (Weiste triangle)

Effect: Danger to life or serious injuries. Considerable damage to the machine
Observe manufacturer's operating instructions for the triangle linkage!

For the installation of the front-mounted disc mower, a Weiste triangle (1) is attached to the front hydraulics. Adjust the top suspension arm in such a way that the triangle is inclined slightly forward.

6.5 Preparation on the front-mounted disc mower

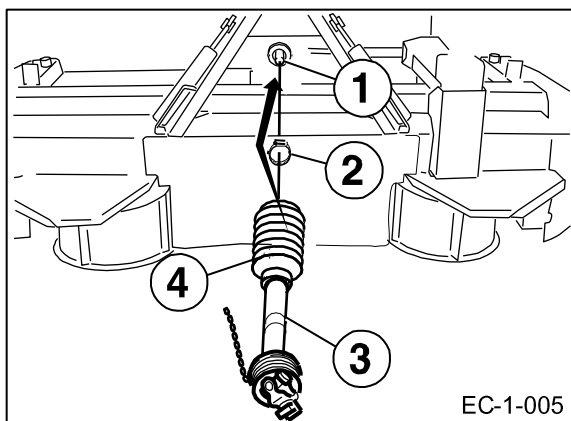


Fig. 11:

- Push the PTO shaft (3) with full protection (4) onto the PTO shaft end of the machine.
- The safety mechanism must engage
- Secure the PTO shaft guard (2) against turning with pipe clamp (2).

6.6 Installation of the lighting system

optional

Ensure road safety. Observe country regulations and provisions concerning lighting and warning panels. Mount lighting and warning panels, if necessary.

EasyCut F 280 / EasyCut F 320



Fig. 12

- Mount lighting system (2) and warning panels (1) according to instructions of accessories kit 150 000 583.

EasyCut F 280 M / EasyCut F 320 M



Fig. 13

- Mount lighting system (2) and warning panels (1) according to instructions of accessories kit 150 000 590.

Start-up

7 Start-up

7.1 Preparations on tractor



Danger! - Inadvertent uncoupling of the machine during road travel or work.

Effect: Danger to life, serious injuries or serious damage to the machine.

- Use extreme caution when attaching implements to or detaching them from the tractor! The accident prevention regulations must be complied with absolutely.
- When attaching or detaching the machine, do not walk between the tractor and the machine!
- The lower suspension arms of the front hydraulics on the tractor must be adjusted to swing freely. (see operating instructions for the front hydraulics)
- If the lower suspension arms on the tractor cannot be adjusted to swing freely, free-swinging lower suspension arm adapters must be installed.
- Lower suspension arm adapter order no. 140 190 (1x)

- Change the front lifting gear over to single-action
- Disconnect the lower suspension arm from the swing position
- Move the front axle suspension to the central position and deactivate it

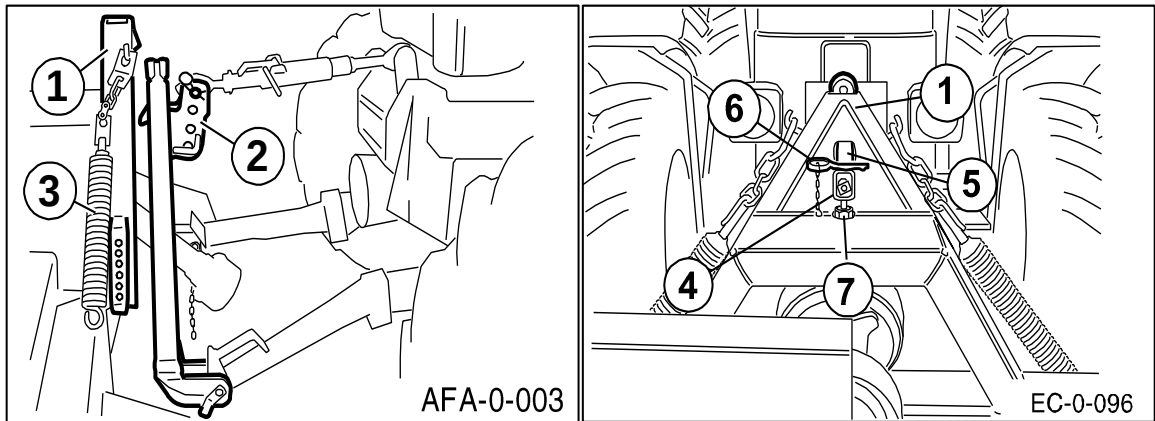
7.2
Mounting onto the Tractor


Fig. 14


WARNING!

When using a spring clip which is not suitable, the triangle linkage (Weiste triangle) can uncouple unintentionally. This can cause serious accidents.

Only use suitable spring clips for securing the triangle linkage.

- Carefully position the tractor with Weiste triangle (2) in front of the holder (1) of the front-mounted disc mower.
- The tension spring (3) must not be inside the holder
- Connect the Weiste triangle (2) to the holder (1)
- Set the distance between the ratchet mechanism (4) and latch (5) by adjusting the ratchet mechanism (4) to 1 mm (using the adjusting screw (7))
- Secure Weiste triangle (2) with spring cotter pin (6).


Caution! - The distance between the machine and the tractor is too small

Effect: damage to the tractor or the machine

Check free space for the front wheels at all steering angles. If the guards or swath flaps come into contact with the front wheels of the tractor, lower suspension arm adapters must be installed between the lower suspension arm and the Weiste triangle.

Start-up

7.2.1 Lower suspension arm

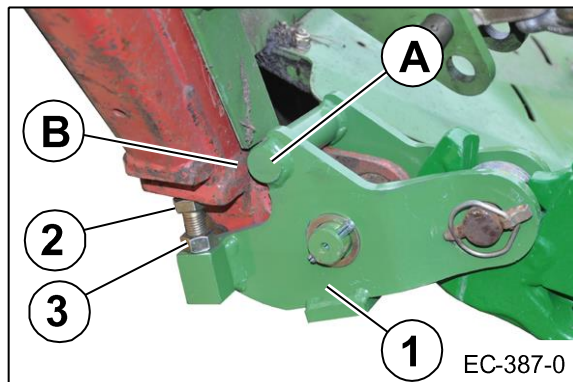


Fig. 15

The lower suspension arm adapters (1) serve as extension to increase the distance of the machine to the front wheels of the tractor.

On tractors with floating (height movable) lower links, the lower suspension arm adapters must be fastened.

On tractors with rigid lower links, the lower suspension arm adapters must be set floating.

Fastening the Lower Suspension Arm Adapters

To do this:

- Connect the machine to the Weiste triangle.
- Lower the machine into working position.
- Move the front power lift into float position.
- Turn off the engine, remove the ignition key and secure the tractor and the machine against accidental start-up and against rolling.
- Turn out screw (2) until the bolt (A) of the lower suspension arm adapter (1) touches the stop (B) of the Weiste triangle (right and left machine side).
- Lock the screw (2) with nut (3).

Setting the Lower Suspension Arm Adapters Floating

To do this:

- Connect the machine to the Weiste triangle.
- Lower the machine into working position.
- Move the front power lift into float position.
- Turn off the engine, remove the ignition key and secure the tractor and the machine against accidental start-up and against rolling.
- Screw in screw (2) completely.
- Lock the screw (2) with nut (3).

7.3
Checking the First fitting

CAUTION!

Machine or tractor may be damaged if the machine is connected incorrectly.

If the universal shaft is bent unfavourably, the machine runs irregularly and machine or tractor may be damaged seriously.

- To prevent damages, the machine must be aligned in parallel to the ground in the raised condition.

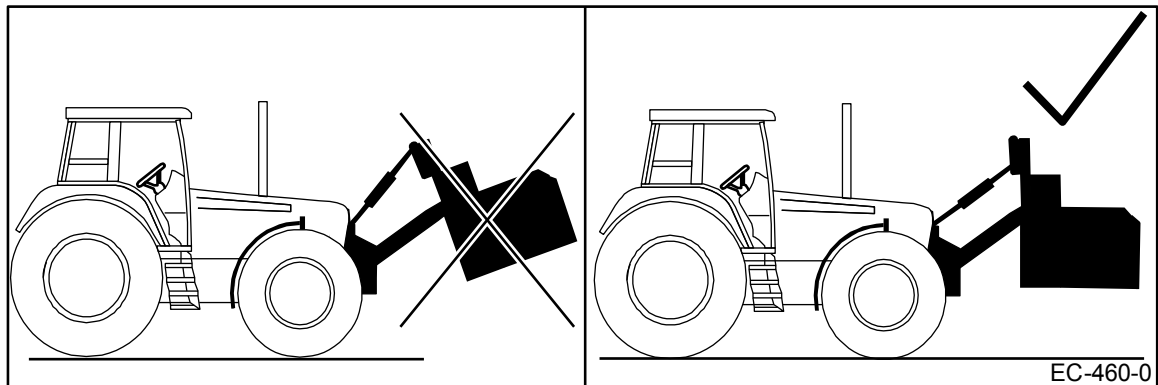


Fig. 16

Mount top link on the A-frame (Weiste triangle) or on the upper coupling point of the machine so that the machine is aligned as parallel as possible to the ground in the raised condition.

To do this:

- Raise the machine.
- Switch off tractor, secure the tractor from rolling away and remove the ignition key.
- Check the parallelism of the machine to the ground.

If the parallelism is OK, connecting can be continued.

If the parallelism deviates too strong:

- Lower machine to the ground.
- Switch off tractor, secure the tractor from rolling away and remove the ignition key.
- Move top link in the hole pattern on the A-frame (Weiste triangle).
- Raise the machine and check parallelism.

Repeat this process until the machine raises in parallel to the ground.

Start-up

7.4 PTO shaft



Danger! - Rotating PTO shaft

Effect: Danger to life or serious injuries

- Install or detach the PTO shaft only with the engine switched off and the ignition key removed.
- Secure the tractor against rolling.
- Make sure that the PTO shaft is coupled properly (the lock of the PTO shaft must have snapped in).
- Make sure that the protective devices are attached properly.
- Never use a PTO shaft, the protective devices of which have not been attached.
- Replace damaged protective devices immediately
- Attach the safety chain of the PTO shaft so that the guard tube does not rotate simultaneously with the PTO shaft.



Danger! - Observe drive speed

Effect: Danger to life or serious injuries

- This machine is driven at a maximum PTO speed of 1000 rpm.

7.4.1 Length adjustment

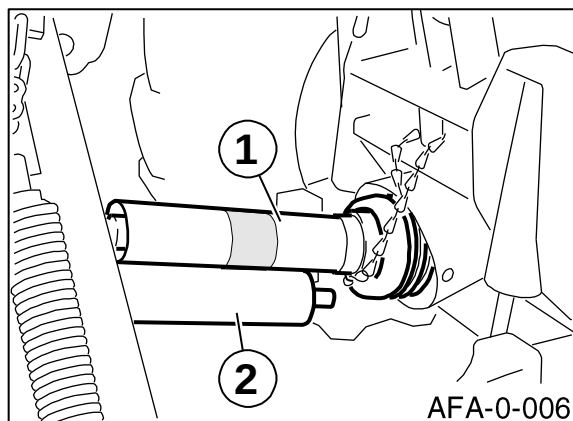


Fig. 17

- Hold the two PTO shaft halves (1) and (2) next to each other
- Check the cover of the special section tubes and guard tubes
- Shorten special section tubes and guard tubes until they can move freely in any operating position
- For detailed information on adjusting the length, please refer to the operating instructions of the PTO shaft manufacturer

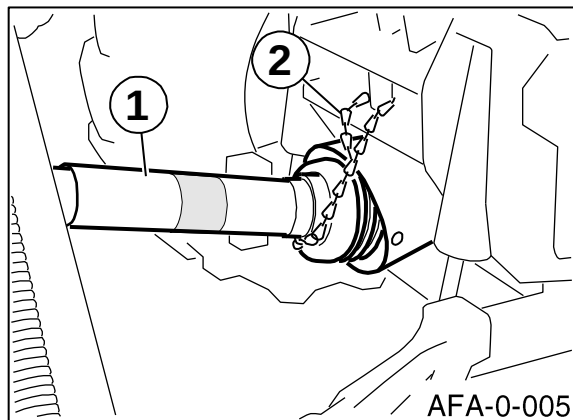
7.5**Install the PTO shaft**

Fig. 18

- Swivel the PTO shaft bracket under the Weiste triangle
- Push the PTO shaft (1) onto the front PTO shaft of the tractor and secure
- Secure the PTO shaft guard against turning with the retaining chain (2).

Start-up

7.6 Mounting and Adjusting the Relief Springs



Danger! - Setting on the compensation springs

Effect: Danger to life or serious injuries

- The compensation springs must only be removed in transport position. In the working position the compensation springs are subject to high tensile stress.
- Severe injury can be caused if the compensation springs are removed while in the working position.
- The lower threaded blocks on the compensation springs must be fully screwed in.

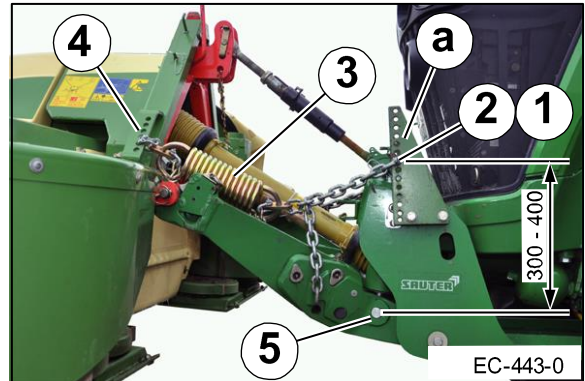
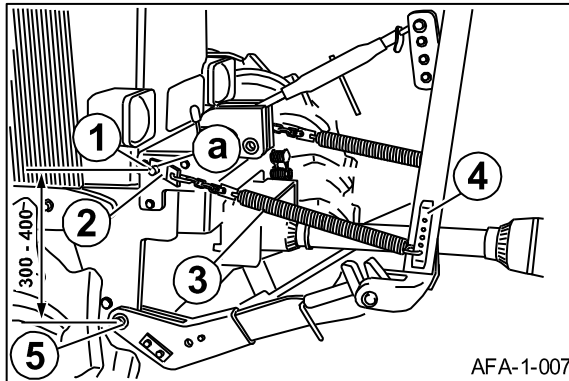


Fig. 19

- Bring the front mowing unit into the transport position
- Hook compensation spring (3) onto perforated bar (4).
- Attach with holder (2) on support point "a" and secure with hinged cotter pin (1)



Note

Setting dimension of the compensation springs

Effect: Proper use of the machine.

The distance between support point "a" of the compensation spring (3) and the pivot point of the tractor's lower suspension arms (5) should be between 300 – 400 mm.

7.7 Trial run after first installation



Caution!

After the first connection to the tractor, the machine must undergo a trial run.

- The machine must be in working position
 - Do not switch on the PTO until the machine is resting on the ground and you are absolutely sure that there are no persons, animals or objects in the danger zone.
 - Start a trial run of the machine from the driver's seat of the tractor only.
-
- Lower the machine into working position.
 - Carefully switch in the PTO of the tractor.
 - Slowly increase the PTO speed to 1000 rpm.
 - Check that the machine is running smoothly and without vibrations.
 - Reduce the PTO speed to idling and wait for the cutting discs / mower drums to come to a standstill.
 - Raise or lower the machine via the tractor hydraulics.

7.8 Lighting connection

optional

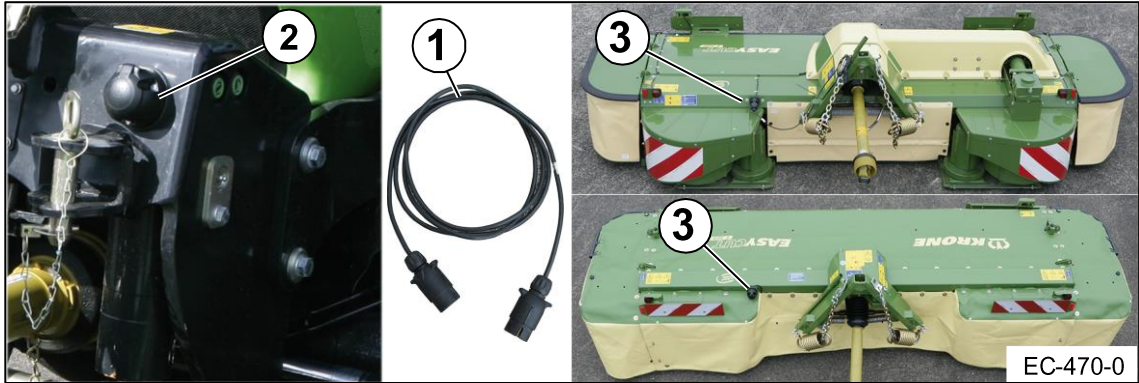


Fig. 20



Note

Before inserting the plugs, make certain the plugs and sockets are clean and dry. Dirt and moisture may result in short circuits!

The lighting system is connected via the 7-pin connection cable (1).

To do this:

- Insert the 7-pin plug of the connection cable (1) into the relevant socket (2) of the tractor.
- Insert the 7-pin connection cable plug (1) into the appropriate socket (3) of the machine.
- Position the cable so that it will not come in contact with the wheels.

Start-up

7.9 Hydraulics optional

7.9.1 Special Safety Instructions



Warning ! - Connection of the hydraulic line

Effect: severe injuries due to penetration of hydraulic oil under the skin.

- When connecting the hydraulic hoses to the hydraulic system of the tractor, the system must be relieved of the pressure on either side.
- Due to the risk of injury when searching for leaks, always use suitable tools and wear protective goggles.
- Seek medical help immediately should injuries occur! Danger of infection.
- Depressurise prior to uncoupling the hydraulic hoses and working on the hydraulic system!
- Check the hydraulic hose lines at regular intervals and replace them if damaged or worn! The replacement hoses must fulfil the technical requirements set by the equipment manufacturer.

7.9.2 Connecting the hydraulic lines



Warning - If the hydraulic hoses are interchanged when connecting them to the hydraulic system of the tractor, the functions will be interchanged as well.

Effect: Injuries, serious damage to the machine

- Identify the hydraulic connections.
- Always ensure correct connection between the machine and the tractor.
- When engaging the hydraulic hose, the hydraulic control unit must be in float position or in "lowering" position.



Caution! - Soiling of the hydraulic system

Effect: Damages to the machine

- When connecting the quick couplings, ensure that these are clean and dry.
- Note chafing areas or points of contact.



Note

For further information about connecting the hydraulic lines, refer to the tractor operating instructions.



Note

Connect hydraulic hoses correctly.

- The hydraulic hoses are marked with numbers and coloured dust caps.

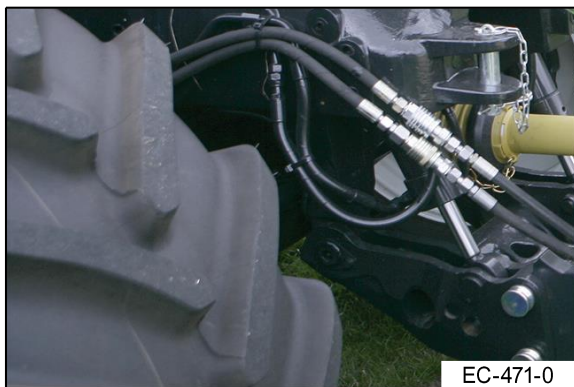


Fig. 21

- Set the single-action control units of the tractor to float position.
- Turn off the tractor and secure it against the possibility of rolling back.

With hydraulic side guards design



WARNING!

Crushing hazard when lowering the side guards

While lowering the hydraulic side guards, there is a danger of being crushed between side guard and upper protective cover.

- While lowering the side guards, make sure that there is no one in the danger zone.
- Fold down the side guards by means of double-action control unit (red1/blue1) of the tractor.

Driving and Transport

8 Driving and Transport



Danger! - Transport / road travel

Effect: Danger to life, serious injuries or serious damage to the machine.

- Before swivelling the machine up into transport position, switch off the PTO.
- Wait until machine stops
- When travelling on public roads, observe the applicable current regulations (lighting, identification, axle loads, permitted front end dimension, etc.)!
- When being transported on public roads, the mowing unit must be lifted.
- It is forbidden to carry passengers on the machine.
- Before starting, ensure that you have perfect visibility on and around the tractor and the machine.



DANGER! - Transport / road travel

Effect: Danger to life, serious injuries or serious damage to the machine.

- A shut-off valve must be existent in the hydraulic line for the front hydraulic of the tractor.
- The shut-off valve must always be locked during transport / road travel.

8.1 Lighting



Danger! - Lighting system

Effect: Danger to life, serious injuries or serious damage to the machine.

- Before transporting on public roads, always connect the lighting system and perform a function check.
- Keep the lighting system clean. Soiled lights and spotlights impair road safety.
- Replace defective light bulbs or broken spotlights.
- When transporting on public highways, the machine must be in the transport position.

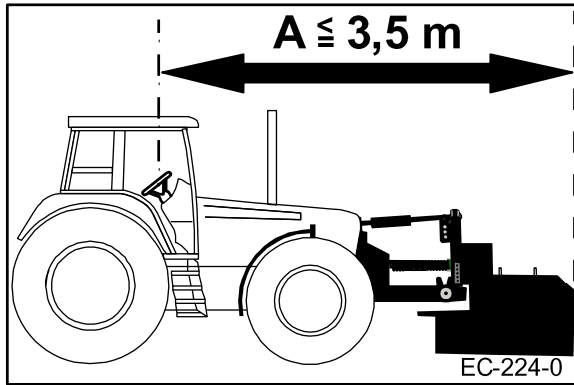


Fig. 22



Note - Depending on the country

If the front end dimension "A" exceeds 3.5 m, provide suitable means (e.g. assistant giving instructions or mirror at road junctions) to ensure road safety (data sheet for attached implements supplied by the Federal Minister for Transport).

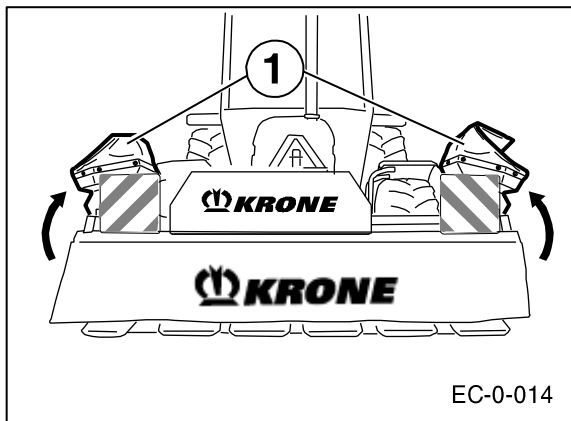


Fig. 23

Always move the guard (1) from the right and left-hand sides to the transport position before road travel.

Operation

9 Operation

9.1 Before mowing



DANGER! - Using the machine for work

Effect: Danger to life, injuries or damage to the machine.

- The glide skids must rest on the ground before start-up and during work
- Maintain an adequate safety distance from the cutting tools during operation
- There is danger of foreign objects being forcibly ejected even when the machine is operated properly. Persons must therefore be directed out of the danger zone of the machine.
- Special care should be taken when working near roads and buildings)



WARNING!

Foreign bodies may be hurled up during the operation. Thus there is a risk for persons staying in the danger zone to be seriously hurt or killed.

Therefore the following points must be observed before the machine is used:

- The mower must be in working position.
- Move protective equipment into protective position and make sure that it is not damaged.
- Replace damaged protective equipment immediately.
- Instruct persons to leave the danger zone.
- Special care should be taken when working near roads and buildings.
- Make sure each time before the mower is used that blades, retaining bolts, leaf springs and cutting discs or mower drums are not damaged, worn or missing; replace them, if necessary!



Note while mowing

Effect: Proper use of the machine

- Change the front power lift to single-acting (only lifting, no pressing). The lowering of the mowing unit results from the dead weight of the mowing unit. The mowing unit must not be additionally loaded over the front power lift.
 - During work the hydraulic control lever for the front power lift must be set to "Float position".
-
- Open the shut-off valve for the front hydraulic of the tractor.

9.2 Moving the guards into the working position

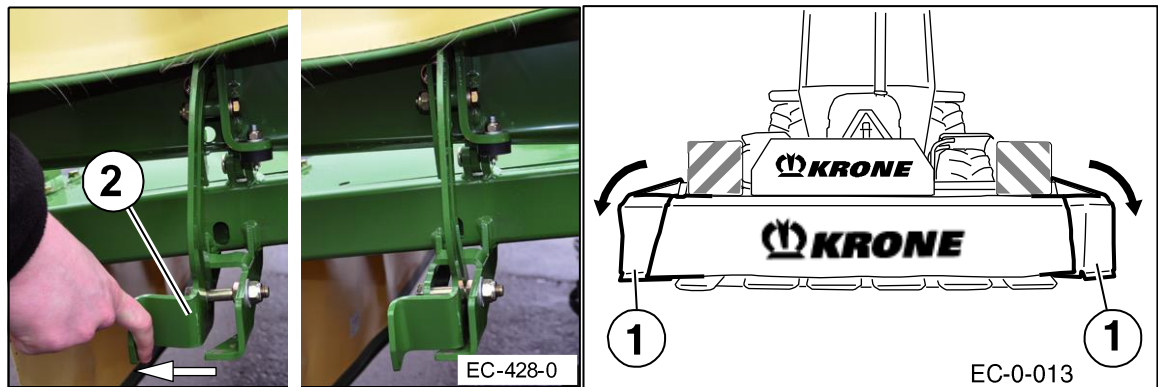


Fig. 24

Move the guards (1) from the right and left-hand sides to working position each time before using the machine.

- Remove the lock (2)
- Fold down guard

With hydraulic outer guards design

- Fold down outer guards by using the double-action control unit (red1/blue1) of the tractor.

Operation

9.3 Detaching the machine



Danger! - Unexpected movements of the machine

Effect: Danger to life, serious injuries

- No one is permitted inside the danger zone.
- Park the machine on a solid and even surface.
- You should not unhitch the machine until the engine has been switched off and the ignition key has been removed.
- Secure the tractor against rolling.
- Use extreme caution when attaching implements to or detaching them from the tractor! The accident prevention regulations must be complied with absolutely.
- When detaching the machine, do not walk between the tractor and the machine!

9.4 Removing the compensation spring(s)



Danger! - Setting on the compensation springs

Effect: Danger to life or serious injuries

- The compensation springs must only be removed in transport position. In the working position the compensation springs are subject to high tensile stress.
- Severe injury can be caused if the compensation springs are removed while in the working position.
- The lower threaded blocks on the compensation springs must be fully screwed in.

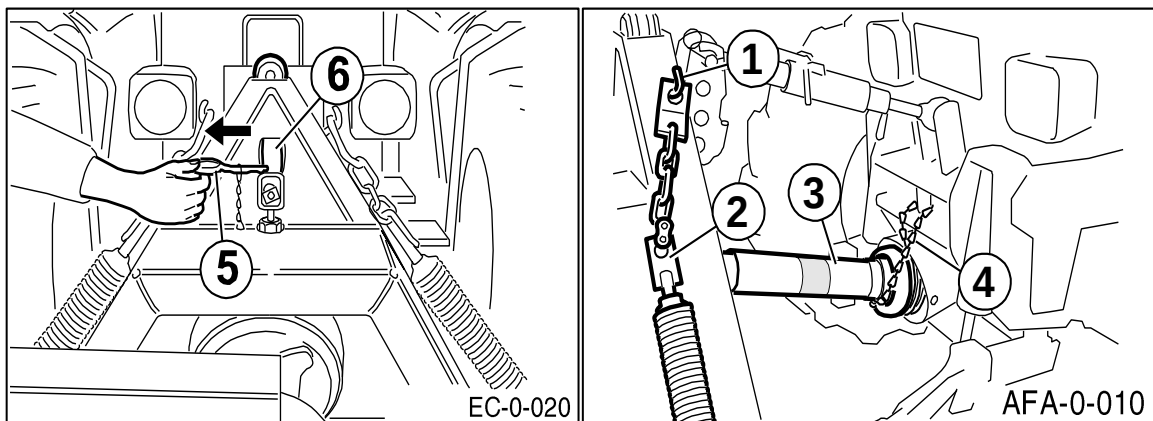


Fig. 25

- Bring the front mowing unit into the transport position.
- Remove compensation spring (2) and hang it on hook (1).
- Lower front-mounted disc mower.
- Pull spring cotter pin (5) out of the Weiste triangle.
- Release the interlock of the holding triangle.
- Loosen the guard cloth.
- Remove the retaining chain (4) of the PTO shaft (3).
- Remove the PTO shaft (3) from the tractor side and place on the PTO shaft bracket
- Carefully lower the front hydraulics.
- Drive carefully out of the holder of the front-mounted disc mower.

10

Settings



Danger! - When performing repair, maintenance or cleaning work on the machine , or in the case of technical intervention, drive elements may start moving.

Effect: Danger to life, injuries or damage to the machine.

- Switch off the engine and remove the ignition key.
- Secure the machine against accidental start-up and against rolling!
- The cutter blades can continue to rotate after the drive has been switched off. Only approach the machine once the work tools have come to a complete standstill!
- After completing maintenance work reattach all safety devices properly.
- Avoid skin contact with oil and grease.
- Seek medical help immediately should injuries caused by oil escaping under pressure occur.

10.1

Adjusting the cutting height

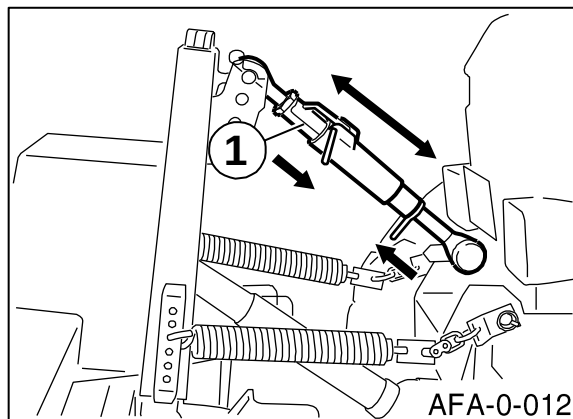


Fig. 26

The cutting height is adjusted via the top link (1).

To do this:

- Lower the front mowing unit into working position
- Rotate the top suspension arm (1)

Top suspension arm longer = smaller cutting height

Top suspension arm shorter = bigger cutting height

Settings

10.1.1 Telescopic upper suspension arm

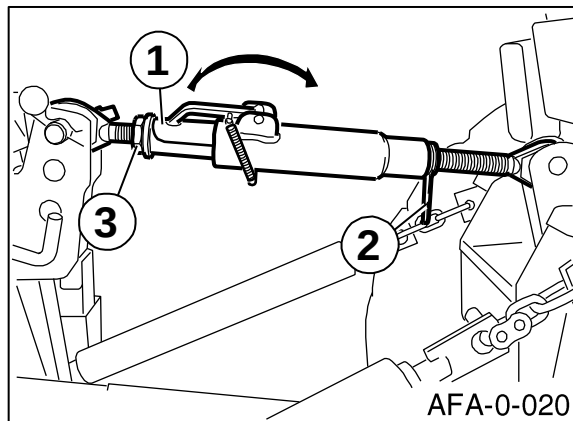


Fig. 27:

In order to allow the front-mounted disc mower to adapt to the ground in the direction of travel, a telescopic upper suspension arm can be purchased as optional additional equipment. Via the telescopic upper suspension arm, the cutting height is set by loosening the counter nut (2) and (3). By moving the lockclip (1), the compression spring of the telescopic upper suspension arm is released. This guarantees optimum adaptation of the front mowing unit in the direction of travel.

10.2

Adjusting the Compensation Springs



Danger! - Setting on the compensation springs

Effect: Danger to life or serious injuries

- The compensation springs must only be removed in transport position. In the working position the compensation springs are subject to high tensile stress.
- Severe injury can be caused if the compensation springs are removed while in the working position.
- The lower threaded blocks on the compensation springs must be fully screwed in.

The ground pressure for the cutter bar is adjusted to local conditions by means of the compensation springs. In order to protect the sward the load on the mowing spar must be relieved so that it does not jump when mowing, yet does not leave any skid marks on the ground.

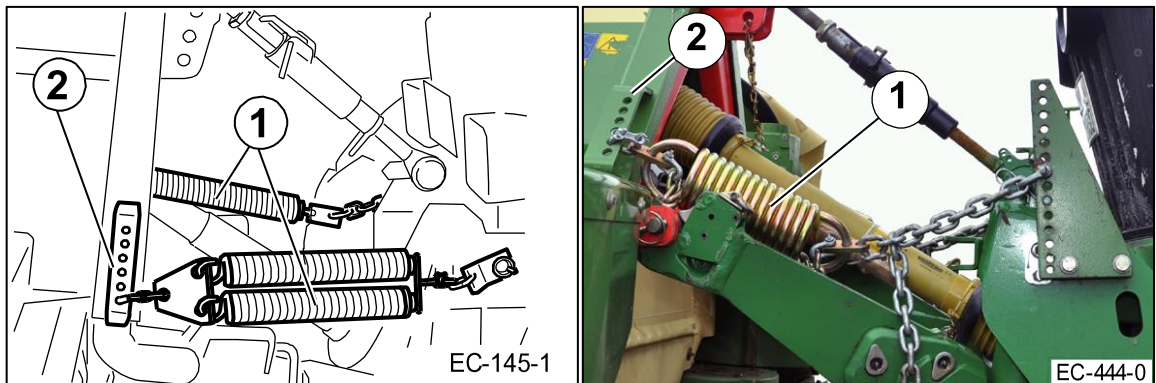


Fig. 28



Note

Retaining chain shorter= reduced ground pressure
Retaining chain longer= increased ground pressure

If a telescope upper suspension arm is being used (optional)

The higher the compensation springs (1) are hooked into the perforated bar (2), the lower the pressure on the ground in the front part of the cutter bar.

If the compensation springs are hooked in too high, the mowing unit will tip towards the rear.

or:

The lower the compensation springs (1) are hooked into the perforated bar (2), the greater the pressure on the ground in the front part of the cutter bar.

If the compensation springs are hooked in too low, the mowing unit will have too much weight on the ground in front.

Maintenance

11 Maintenance

11.1 Special Safety Instructions



Danger! - Unexpected actions on the machine

Effect: Danger to life, injuries or damage to the machine.

- Always make certain that the drive and the engine are switched off before doing any repairs, maintenance or cleaning.
- The cutting discs continue to run!
- Switch off the engine and remove the ignition key.
- Secure the machine against accidental start-up and against rolling!



Danger! - When checking the cutter blades and retaining bolts only sporadically

Effect: Danger to life, injuries or damage to the machine.

- Always check the mowing units for damaged, missing or worn blades, retaining bolts, leaf springs and cutting discs/blade drum before starting operation; replace any parts that are damaged, missing or worn!
- Always replace missing and damaged blades in sets to prevent unbalanced rotation!
- Never mount unevenly worn blades on a drum/disc!
- Whenever a blade is changed, also inspect the fasteners and replace them, if necessary!

11.1.1 Test run



Danger! - Testing the machine after repair, maintenance or cleaning work and after technical intervention.

Effect: Danger to life or serious injuries

- The mowing unit must be in working position
- Do not switch on the drives until the mowing unit is resting on the ground and you are absolutely sure that neither persons, animals nor objects are in the danger zone.
- Start a trial run of the machine only from the driver's seat.

11.2 Spare Parts



Warning! - Using non-approved spare parts.

Effect: Danger to life, serious injuries or loss of warranty claims as well as exclusion of liability

- Use only authentic KRONE spare parts and accessories authorised by the manufacturer. The use of spare parts, accessories or additional equipment not manufactured, tested or approved by KRONE will exclude any liability for consequential damage.

11.3 Maintenance table

Maintenance work	Maintenance interval					
	Once after 10 hours	Before the beginning of the season	Every 10 hours but at least 1x daily	Once after 50 hours	Every 50 hours	Every 200 hours
Cutter bar						
Oil level check		X	X			
Oil change	not required					
All gearboxes						
Oil level check		X	X			
Oil change				X		X
Checking cutter blades		X	X			
Check retaining bolts for cutter blades		X	X			
Check material thickness of leaf spring, for blade quick fastener design		X	X			
Cutting disc / blade drum		X	X			
Linings on the cutter bar		X				
Tightening screws / nuts						
All screws		X			X	
Friction clutch						
Vent		X				
Guard cloths						
Check guard cloths for wear and damage			X			
Drive belt						
Check		X				

Maintenance

11.4 Tightening torques

11.4.1 Metric Thread Screws with Control Thread



NOTICE

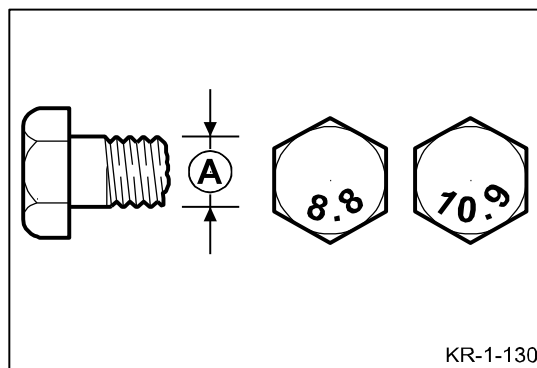
The table does not apply to countersunk screws with hexagonal socket in case the countersunk screw is tightened via hexagonal socket.

Tightening torque in Nm (unless otherwise stated)

A	Stability class			
	5.6	8.8	10.9	12.9
	Tightening torque (Nm)			
M4		3.0	4.4	5.1
M5		5.9	8.7	10
M6		10	15	18
M8		25	36	43
M10	29	49	72	84
M12	42	85	125	145
M14		135	200	235
M16		210	310	365
M20		425	610	710
M22		571	832	972
M24		730	1050	1220
M27		1100	1550	1800
M30		1450	2100	2450

A = thread size

(stability class can be seen on screw head)



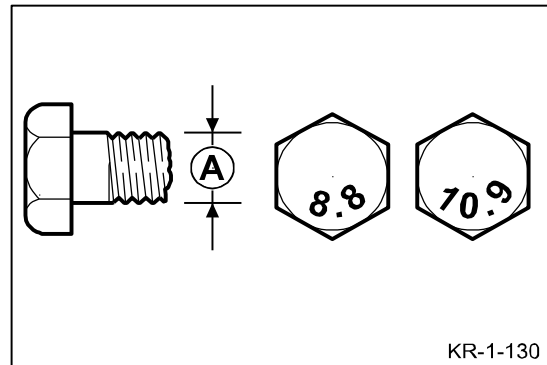
11.4.2 Metric Thread Screws with Fine Thread

Tightening torque in Nm (unless otherwise stated)

A	Stability class			
	5.6	8.8	10.9	12.9
	Tightening torque (Nm)			
M12 x 1.5:		88	130	152
M14 x 1.5		145	213	249
M16 x 1.5		222	327	382
M18 x 1.5		368	525	614
M20 x 1.5		465	662	775
M24 x 2		787	1121	1312
M27 x 2		1148	1635	1914
M30 x 1.5		800	2100	2650

A = thread size

(stability class can be seen on screw head)



11.4.3 Metric Thread Screws with Countersunk Head and Hexagonal Socket



NOTICE

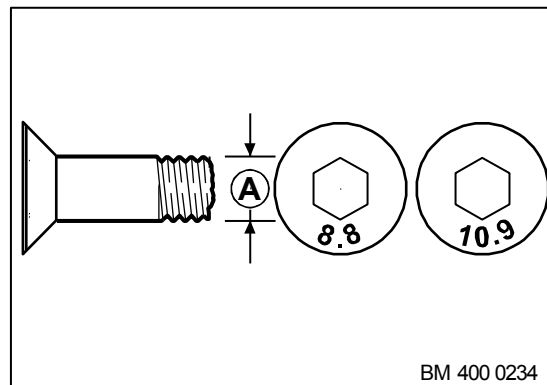
The table applies only to countersunk screws with hexagonal socket and metric thread which are tightened via hexagonal socket.

Tightening torque in Nm (unless otherwise stated)

A	Stability class			
	5.6	8.8	10.9	12.9
	Tightening torque (Nm)			
M4		2.5	3.5	4.1
M5		4.7	7	8
M6		8	12	15
M8		20	29	35
M10	23	39	58	67
M12	34	68	100	116
M14		108	160	188
M16		168	248	292
M20		340	488	568

A = thread size

(stability class can be seen on screw head)



11.4.4 Deviating torques

Screws / nuts	MA [Nm]
Nut for cutting disc flange	850
Nut for shear protection (rotary hub)	300
Bearing housing for cutting disc	50
Bearing housing for blade drum	50



Maintenance

11.5 Rotary hub with shear fuse (optional)

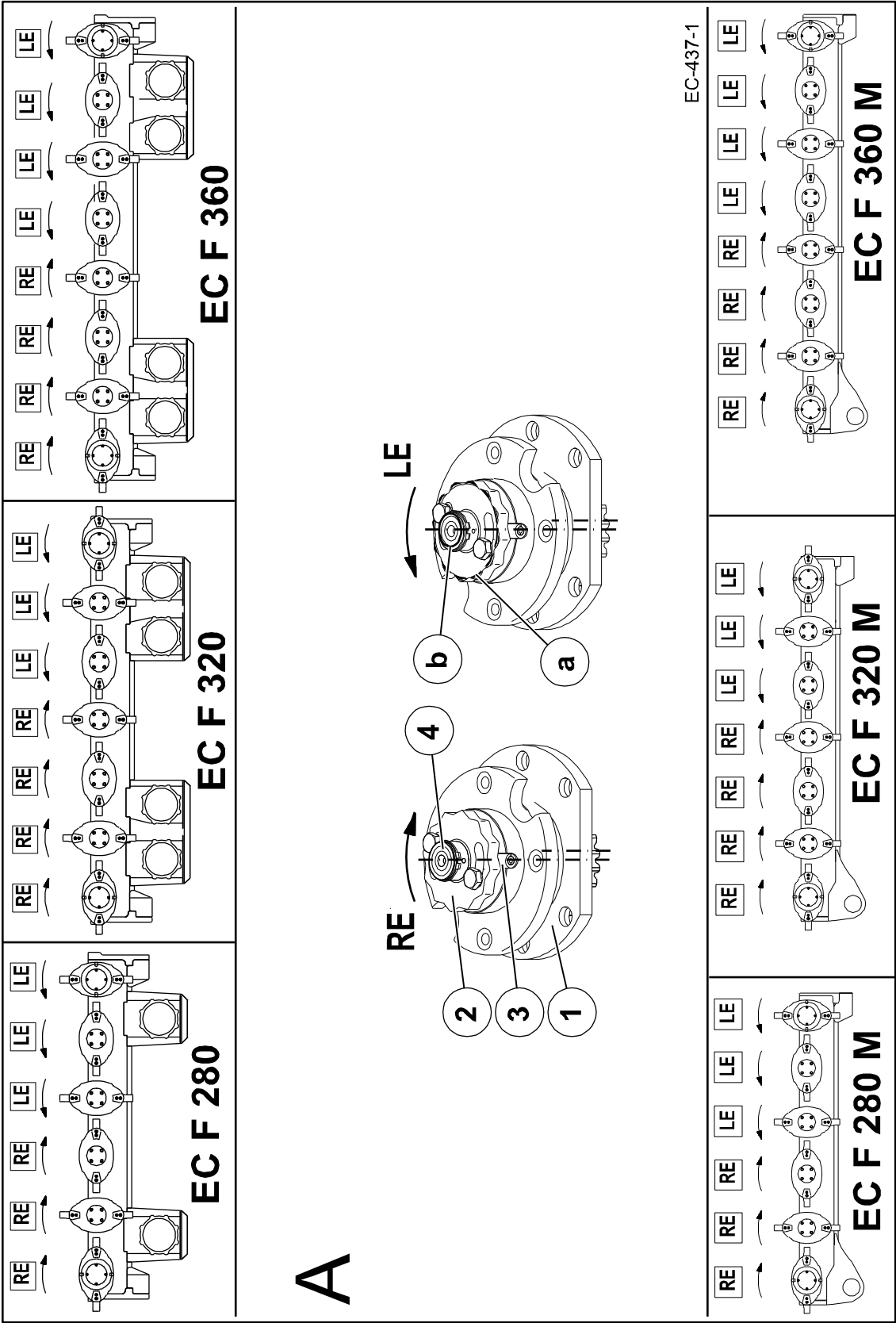


Fig. 29



Danger! - Rapidly rotating cutting discs/blade drums.

Effect: Danger to life or serious injuries.

- Switch off the engine and remove the ignition key.
- The cutting discs/blade drums continue to run!
- Do not leave the driver's cab until the cutting discs/blade drums have come to a complete stop.

Explanation of abbreviations:

A= Direction of rotation "A" to the middle

B= Direction of rotation "B" in pairs

RE= Eccentric bearing housing (clockwise threading, without identifying groove).

LE= Eccentric bearing housing (anticlockwise threading), with identifying groove.

For protection against overload on the mowing units, the rotary hubs (1) are secured with nuts (2) and shear pins (3).

If the machine strikes obstacles (for example stones), the 2 shear pins in the rotary hub will be sheared off. The rotary hub and nut turn upward on the pinion shaft.

- The cutting discs or drums which move crop to the left (as seen in the direction of travel) (LE) have left-handed threading.
- The cutting discs or drums which move crop to the right (in the direction of travel) (RE) have right-handed threading.

To distinguish between right-hand (clockwise) threading (RE) and left-hand (anti-clockwise) threading (LE), the nuts (2) and pinion shaft (4) for left-hand threading (LE) have a distinctive groove (a, b).

- Left-handed (LE) nuts (2) have distinctive grooves (a) on the bevel.
- Left-handed (LE) pinion shafts (4) have a distinctive groove (b) on the face.

Maintenance

11.5.1 After Shearing Off



Caution! - Correct installation position of the bearing housing not observed.

Effect: Damage to the machine

- Right rotating (RE/RZ) cutting discs and drums always have right-handed pinion shafts and nuts (no groove mark on the pinion shaft and nut).
- Left rotating (LE/LZ) cutting discs and drums always have left-handed pinion shafts and nuts (with groove mark on the pinion shaft and nut).

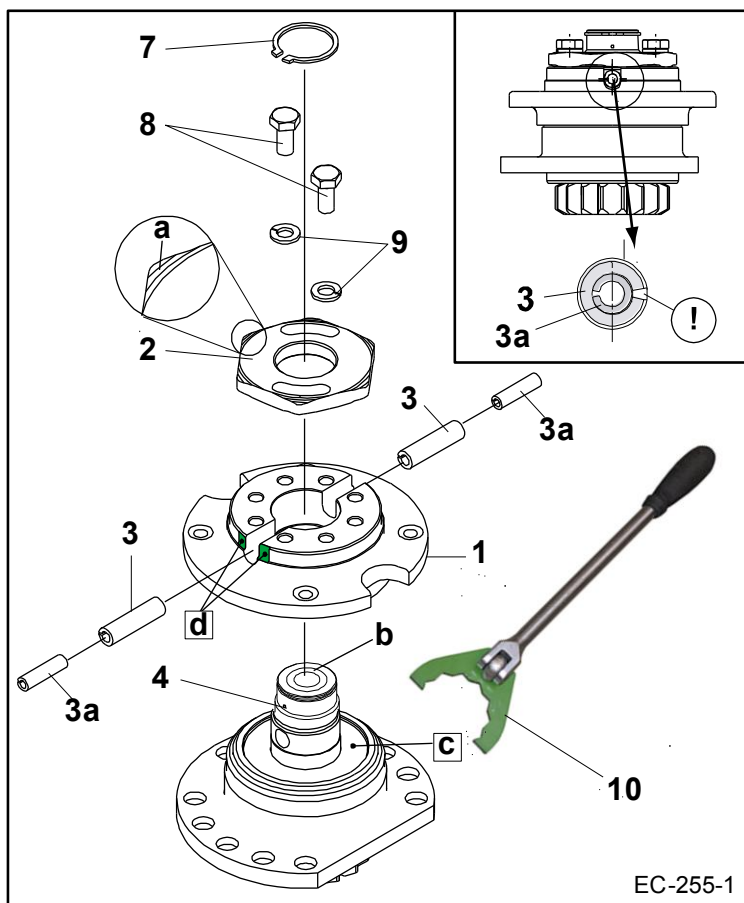


Fig. 30



- Remove the cutting disc or drum.
- Remove retaining ring (7).
- Unscrew the hexagon head bolts (8).
- Use the special key (10) included with delivery to remove the nut (2).
- Remove the hub (1).
- Remove the damaged shear pins (3).
- Check the nut and hub for damage. Replace damaged parts with KRONE original replacement parts.
- Fill the space above the bearing with grease (c).
- Place the hub on the pinion shaft.
- Drive the new shear pins (3) through the hub (1) and shaft (4).



Note - Note the position of the shear pins!

- Drive the shear pins (3) into the hole from outside until the end of the pin reaches the surface of the hub (d).
 - The slots of the shear pins (3) must be mounted facing each other horizontally (see detail (I)).
-
- Install the nut (2) using the special key (10) included with delivery (tighten to a tightening torque of 300 Nm).
 - Install and tighten the hexagon head bolts (8) with detent edged washers.
 - Install the retaining ring (7).
 - Install the cutting disc (5) or blade drum (6).

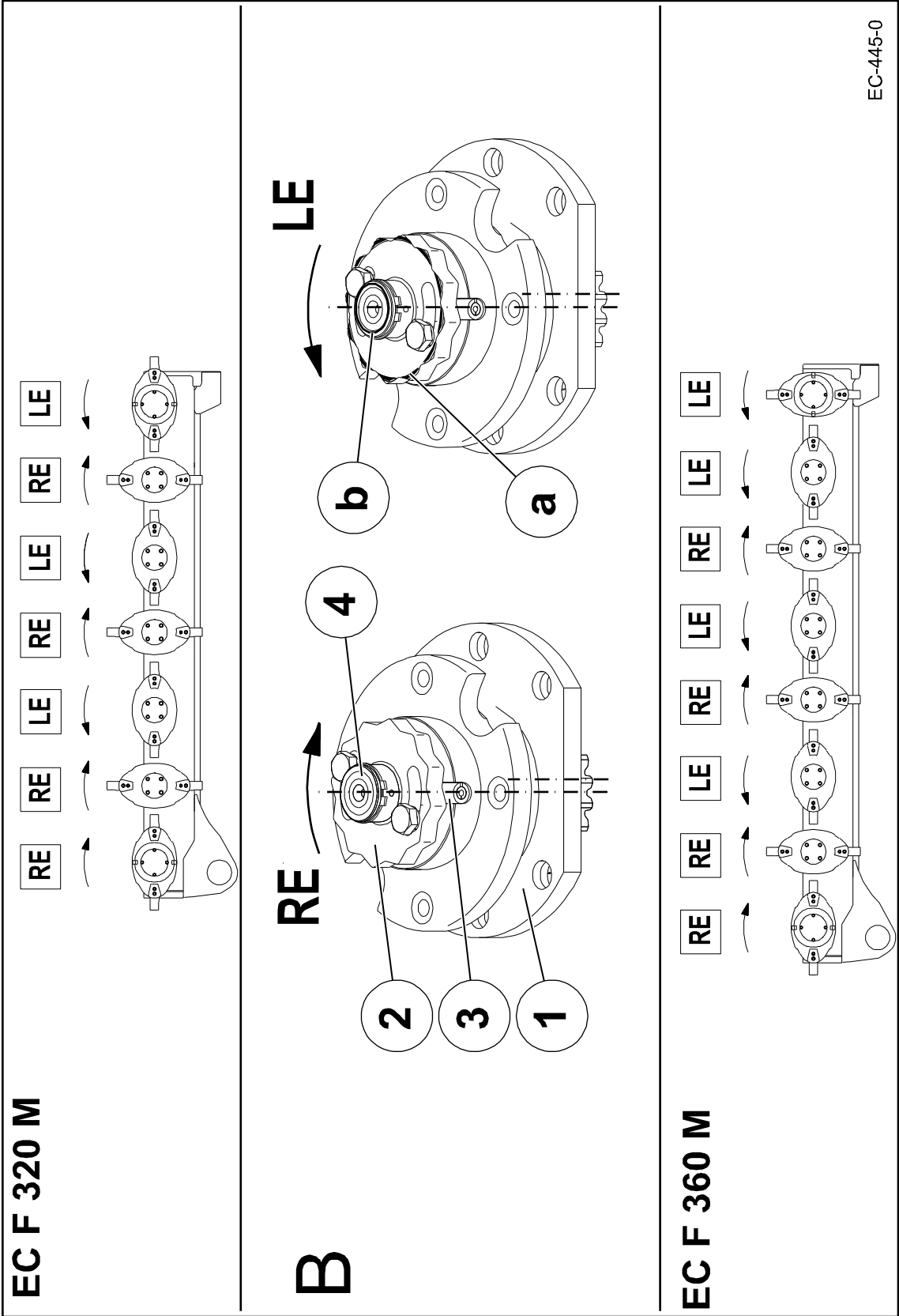


Fig. 31



Danger! - Rapidly rotating cutting discs/blade drums.

Effect: Danger to life or serious injuries.

- Switch off the engine and remove the ignition key.
- The cutting discs/blade drums continue to run!
- Do not leave the driver's cab until the cutting discs/blade drums have come to a complete stop.

Explanation of abbreviations:

A= Direction of rotation "A" to the middle

B= Direction of rotation "B" in pairs

RE= Eccentric bearing housing (clockwise threading, without identifying groove).

LE= Eccentric bearing housing (anticlockwise threading), with identifying groove.

For protection against overload on the mowing units, the rotary hubs (1) are secured with nuts (2) and shear pins (3).

If the machine strikes obstacles (for example stones), the 2 shear pins in the rotary hub will be sheared off. The rotary hub and nut turn upward on the pinion shaft.

- The cutting discs or drums which move crop to the left (as seen in the direction of travel) (LE) have left-handed threading.
- The cutting discs or drums which move crop to the right (in the direction of travel) (RE) have right-handed threading.

To distinguish between right-hand (clockwise) threading (RE) and left-hand (anti-clockwise) threading (LE), the nuts (2) and pinion shaft (4) for left-hand threading (LE) have a distinctive groove (a, b).

- Left-handed (LE) nuts (2) have distinctive grooves (a) on the bevel.
- Left-handed (LE) pinion shafts (4) have a distinctive groove (b) on the face.

Maintenance

11.5.2 After Shearing Off



Caution! - Correct installation position of the bearing housing not observed.

Effect: Damage to the machine

- Right rotating (RE/RZ) cutting discs and drums always have right-handed pinion shafts and nuts (no groove mark on the pinion shaft and nut).
- Left rotating (LE/LZ) cutting discs and drums always have left-handed pinion shafts and nuts (with groove mark on the pinion shaft and nut).

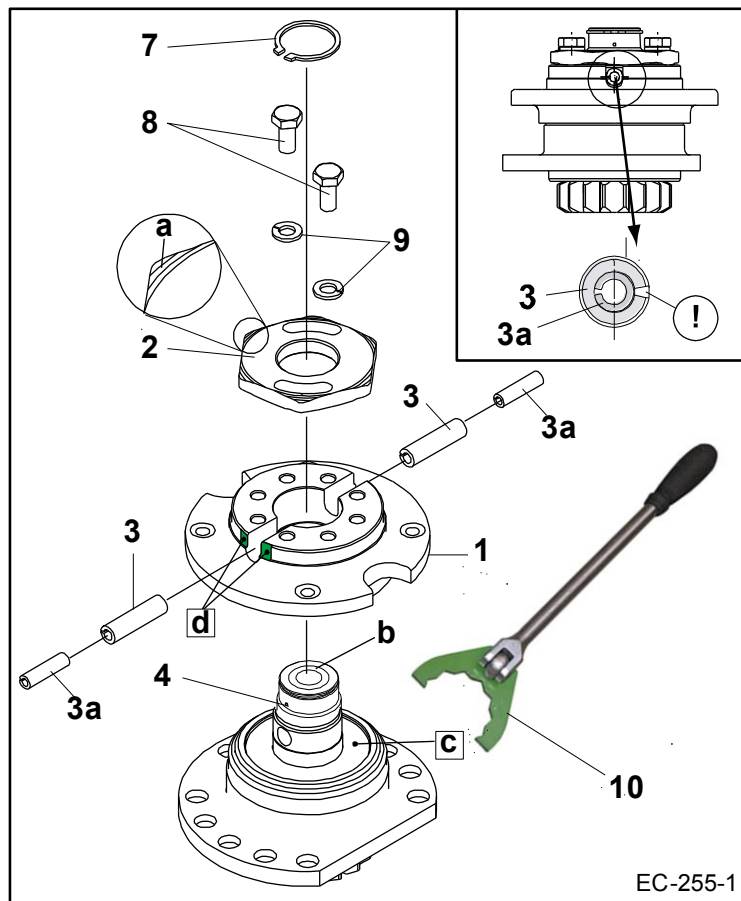


Fig. 32

- Remove the cutting disc or drum.
- Remove retaining ring (7).
- Unscrew the hexagon head bolts (8).
- Use the special key (10) included with delivery to remove the nut (2).
- Remove the hub (1).
- Remove the damaged shear pins (3).
- Check the nut and hub for damage. Replace damaged parts with KRONE original replacement parts.
- Fill the space above the bearing with grease (c).
- Place the hub on the pinion shaft.
- Drive the new shear pins (3) through the hub (1) and shaft (4).


Note - Note the position of the shear pins!

- Drive the shear pins (3) into the hole from outside until the end of the pin reaches the surface of the hub (d).
- The slots of the shear pins (3) must be mounted facing each other horizontally (see detail (I)).
- Install the nut (2) using the special key (10) included with delivery (tighten to a tightening torque of 300 Nm).
- Install and tighten the hexagon head bolts (8) with detent edged washers.
- Install the retaining ring (7).
- Install the cutting disc (5) or blade drum (6).

11.6
Setting of the V-belt Tension

(except EasyCut F 280 M / EasyCut F 320 M / EasyCut F 360 M)

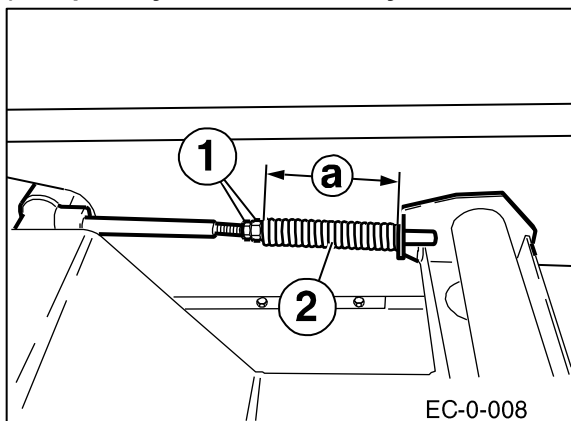


Fig. 33

The drive V-belts maintain their tension by means of a compression spring (2). To adjust dimension "a", unscrew the nut (1). Turn the nuts until dimension "a" = 205 mm is reached. Lock nuts again.

Maintenance - Gearbox

12 Maintenance - Gearbox

12.1 Angular gearbox

EasyCut F 280 / EasyCut F 320 / EasyCut F 360



Note

Perform oil level check and oil change while the machine is in a horizontal position!

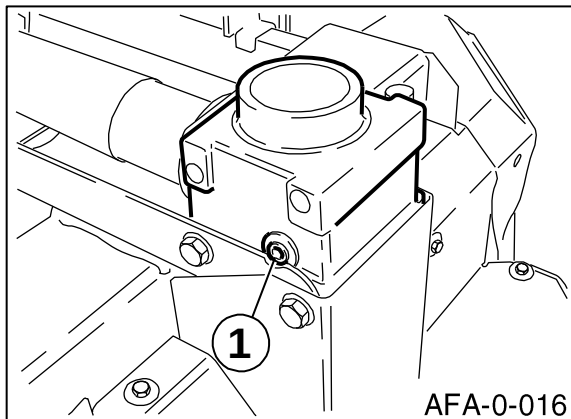


Fig. 34

- 1) Inspection screw / control hole

Oil Quality / Amount of Oil: Refer to Chapter Technical Data "Lubricants"

Interval for oil level check and oil change: refer to chapter Maintenance "Maintenance Table"

Oil level check:

- Screw out inspection screw.
- Oil level up to control hole.

If the oil reaches the control hole:

- Screw in the inspection screw and tighten it securely.

If the oil does not reach the control hole:

- Top up oil via control hole until the control hole is reached.
- Screw in the inspection screw and tighten it securely.

Oil change:

Collect escaping oil in a suitable container.

- Screw out inspection screw.
- Draw off oil.
- Top up new oil via control hole up to the control hole.
- Screw in inspection screw and tighten it securely.



Note

The used oil must be disposed of correctly

12.2

Angular gearbox

EasyCut F 280 M / EasyCut F 320 M/ EasyCut F 360 M



Note

Perform oil level check and oil change while the machine is in a horizontal position!

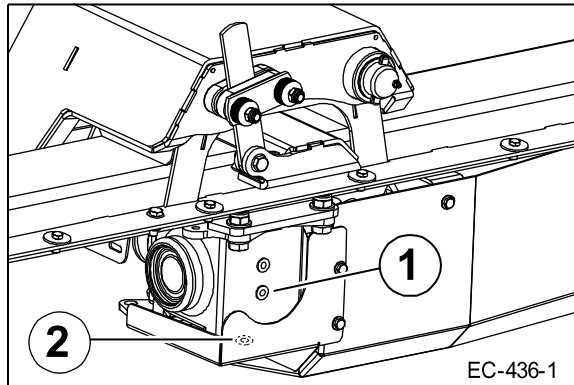


Fig. 35

1) Inspection screw / control hole

2) Drain plug

Oil Quality / Amount of Oil: Refer to Chapter Technical Data "Lubricants"

Interval for oil level check and oil change: refer to chapter Maintenance "Maintenance Table"

Oil level check:

- Screw out inspection screw.
- Oil level up to control hole.

If the oil reaches the control hole:

- Screw in the inspection screw and tighten it securely.

If the oil does not reach the control hole:

- Top up oil via control hole until the control hole is reached.
- Screw in the inspection screw and tighten it securely.

Oil change:

Collect escaping oil in a suitable container.

- Screw out oil drain plug and drain the oil.
- Screw out inspection screw.
- Screw in oil drain plug and tighten it securely.
- Top up new oil via control hole until the control hole is reached.
- Screw in the inspection screw and tighten it securely.

Maintenance - Gearbox

12.3 Mower Drive Gearbox

EasyCut F 280 M



Note

Perform oil level check and oil change while the machine is in a horizontal position!

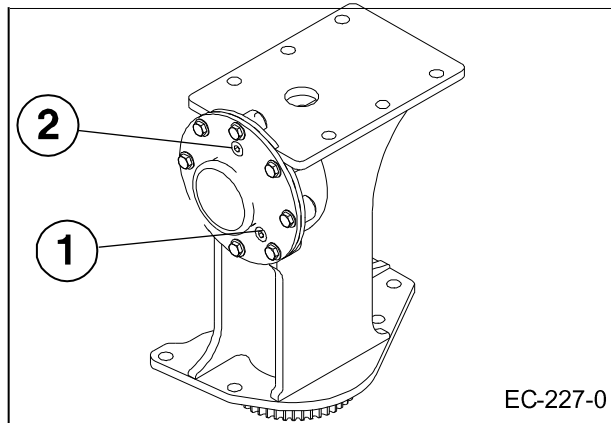


Fig. 36

1) Inspection screw / control hole

2) Filler plug / oil filling hole

Oil Quality / Amount of Oil: Refer to Chapter Technical Data "Lubricants"

Interval for oil level check and oil change: refer to chapter Maintenance "Maintenance Table"

Oil level check:

- Screw out inspection screw.
- Oil level up to control hole.

If the oil reaches the control hole:

- Screw in the inspection screw and tighten it securely.

If the oil does not reach the control hole:

- Screw out filler plug.
- Top up oil via oil filling hole until the control hole is reached.
- Screw in the inspection screw and the filler plug and tighten them securely.

Oil change:

Collect escaping oil in a suitable container.

- Screw out inspection screw and filler plug and drain the oil.
- Top up new oil via oil filling hole until the control hole is reached.
- Screw in the inspection screw and the filler plug and tighten them securely.



Note

The used oil must be disposed of correctly

12.4

Mower Drive Gearbox

(EasyCut F 320 M / EasyCut F 360 M)



Note

Perform oil level check and oil change while the machine is in a horizontal position!

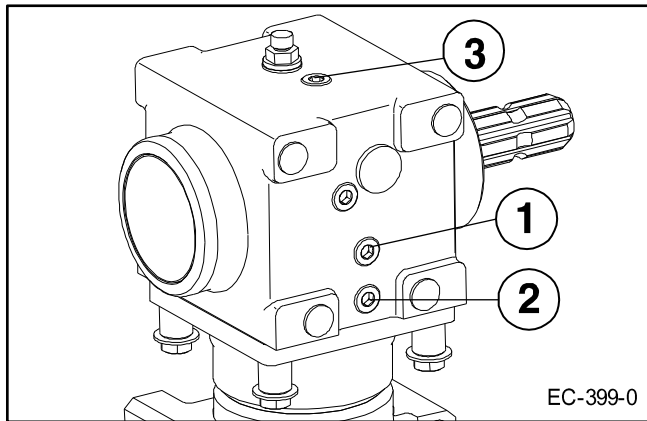


Fig. 37

- | | | | |
|----|---------------------------------|----|------------|
| 1) | Inspection screw / control hole | 2) | Drain plug |
| 3) | Filler plug / oil filling hole | | |

Oil level check:

- Screw out inspection screw.
- Oil level up to control hole.

If the oil reaches the control hole:

- Screw in the inspection screw and tighten it securely.

If the oil does not reach the control hole:

- Screw out filler plug.
- Top up oil via oil filling hole until the control hole is reached.
- Screw in the inspection screw and the filler plug and tighten them securely.

Oil change:

Collect escaping oil in a suitable container.

- Screw out oil drain plug and drain the oil.
- Screw out inspection screw and filler plug.
- Screw in oil drain plug and tighten it securely.
- Top up new oil via oil filling hole until the control hole is reached.
- Screw in the inspection screw and the filler plug and tighten them securely.



Note

The used oil must be disposed of correctly

Maintenance - Gearbox

12.5 Oil level check and oil change on the cutter bar

12.5.1 Oil change



Note

No oil change is required on the cutter bar.

12.5.2 Checking the oil level



Danger! - Rapidly rotating cutting discs/blade drums.

Effect: Danger to life or serious injuries.

Lower guards. Nobody should be in the danger zone around the machine.



Danger! - Rapidly rotating cutting discs/blade drums.

Effect: Danger to life or serious injuries.

- Switch off the engine and remove the ignition key.
- The cutting discs/blade drums continue to run!
- Do not leave the driver's cab until the cutting discs/blade drums have come to a complete stop.

12.5.3 Aligning the Cutter Bar

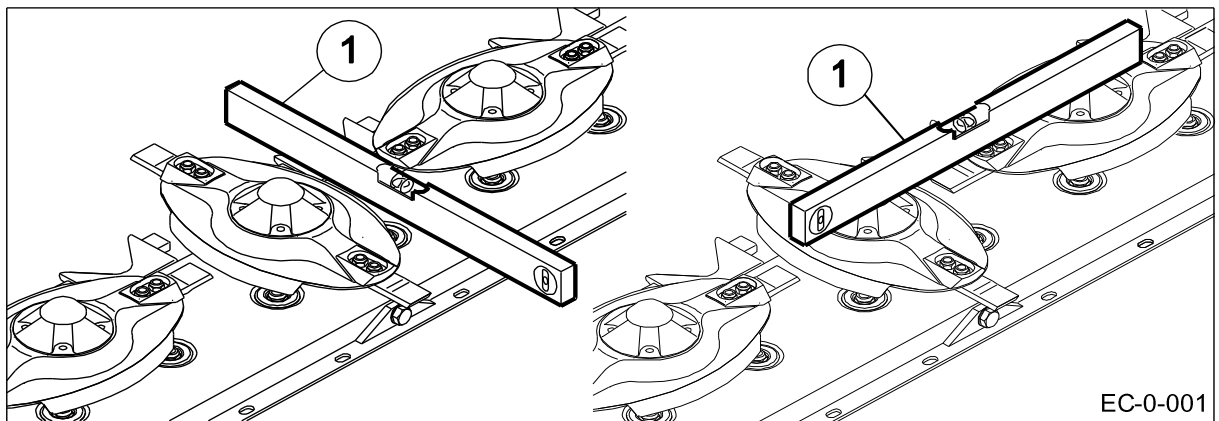


Fig. 38

Oil level check

- Align the cutter bar using a spirit level (1).

Crosswise

- Lay the spirit level on top of the cutting disc hub parallel to the direction of travel.

Lengthwise

- Lay the spirit level (1) on top of two mower discs.

- Allow the machine to run briefly. Do not leave the driver's cab until the cutting discs/blade drums have come to a complete stop

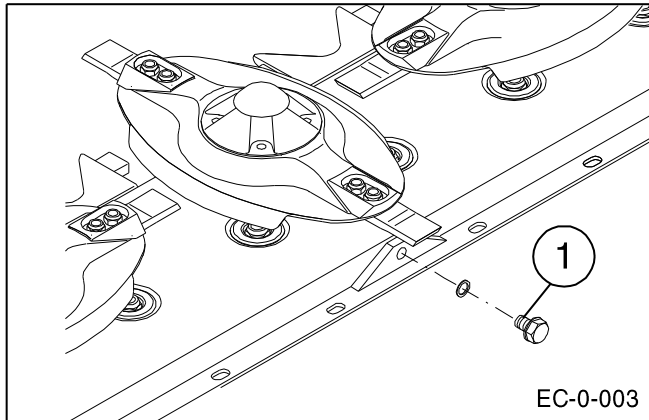


Fig. 39:

Check the oil level before every use

- Remove the oil level inspection screw (1) from the cutting disc hub
- The oil level must be up to the bore hole. If required, top up the oil (SAE 90)
- Screw in the oil level inspection screw (1) again and tighten securely

Maintenance - Blade Changing

13 Maintenance - Blade Changing

13.1 Checking the Cutter Blades and Blade Holder



Warning! - Missing and damaged cutter blades and cutter blade retainers.

Effect: Danger to life, serious injuries or damage to the machine

- Check cutter blades at least once per day and check retaining bolts every time you change the blades or after contact with foreign objects.
- Immediately replace missing or damaged cutter blades and cutter blade retainers

13.1.1 Cutter Blades

The borehole on the cutter blades may spread due to wear.



Danger! - Insufficient thickness of material on the cutter blades.

Effect: Danger to life or serious injuries.

- The cutter blades must be replaced at the latest when the wear limit is reached (see mark (1) on the cutter blade; dimension a less than or equal to 13 mm).

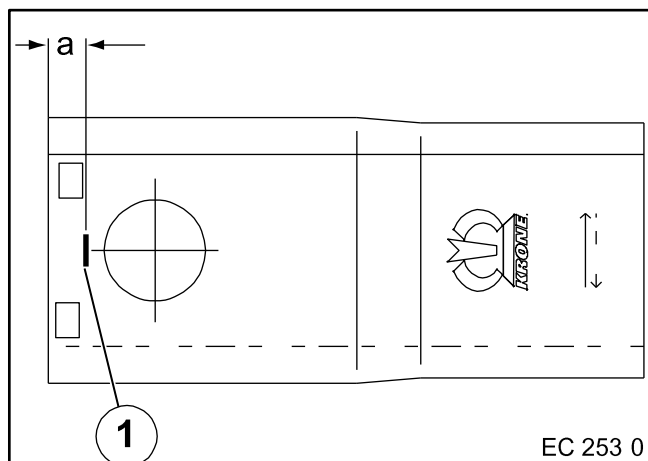


Fig. 40



Note - The cutter blades can be turned around and used on both sides.

- When cutter blades are missing or damaged, they must be replaced as a complete set. This prevents dangerous unbalanced rotation

13.1.2**Blade screw connection****Danger! - Insufficient thickness of material on the retaining bolts.**

Effect: Danger to life or serious injuries.

- At every blade changing check the thickness of the holding bolts material.
- Damage or worn retaining bolts must always be replaced by sets on each cutting disc/blade drum!
- The material thickness of the retaining bolts must not be less than 14 mm at the weakest point.

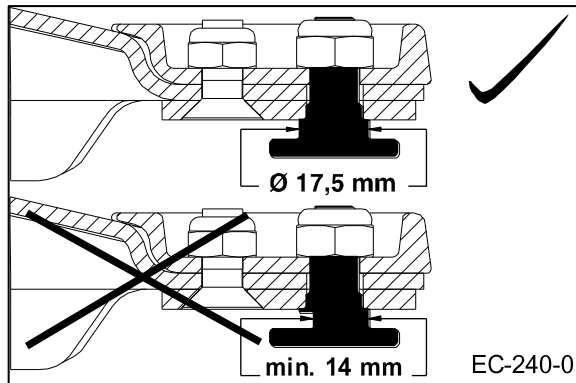


Fig. 41

Maintenance - Blade Changing

13.1.3 Blade Quick-Fit Device



Danger! - Insufficient thickness of material on the retaining bolts.

Effect: Danger to life or serious injuries.

- At every blade changing check the thickness of the holding bolts material.
- Damage or worn retaining bolts must always be replaced by sets on each cutting disc/blade drum!
- The material thickness of the retaining bolts must not be less than 14 mm at the weakest point.
- The material thickness of the leaf spring must not be less than 3 mm at the weakest point.

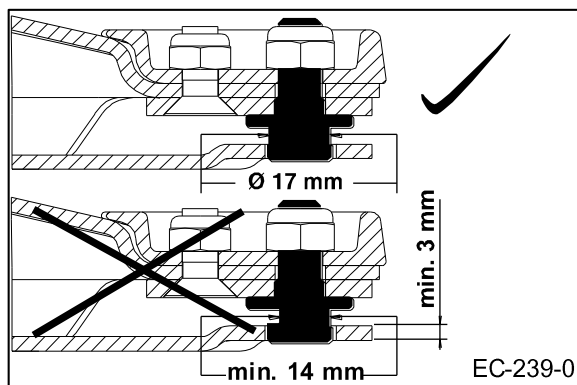


Fig. 42

13.1.4 Periodical Inspection of the Leaf Springs



Danger! - Worn application seam on the leaf springs.

Effect: Danger to life or serious injuries.

- Check the leaf springs for damages at least once a day or after contact with foreign objects.
- The abrasion limit of the leaf springs will be achieved if the application seam (1) is worn on one point.

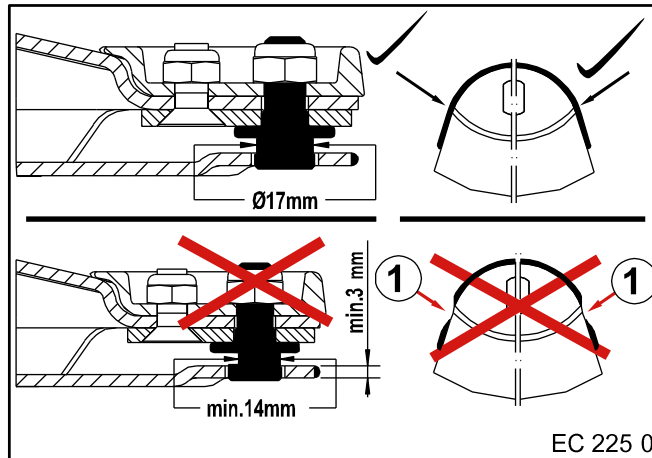


Fig. 43



Note

Use only original Krone spare parts to replace the leaf springs.

Maintenance - Blade Changing

13.1.5 Periodical Inspection of the Cutting Discs / Blade Drums



Danger! - Deformed Cutting Discs / Blade Drums

Effect: Danger to life or serious injuries.

- Check the cutting discs or blade drums for damages at least once per day or after contact with foreign objects.
- In case of deformed cuttings discs or drums, the dimension of A = 48 mm must never be exceeded.

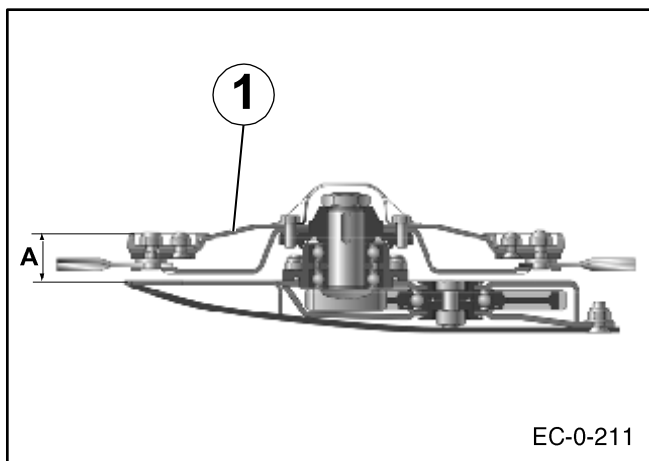


Fig. 44



Note

The cutting discs or drums must be replaced by Original Krone spare parts only.

13.1.6**Abrasion Limit****Danger! - Abrasion on the cutting discs / blade drums**

Effect: Danger to life or serious injuries.

- The abrasion limit (2) will be achieved if the min. material thickness of 3 mm is no longer given.

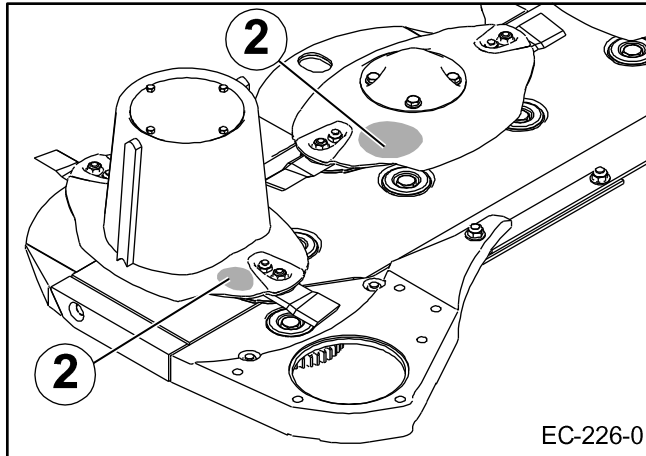


Fig. 45

**Note**

If cutting discs or blade drums show deformations or wear in form of abrasions (2) or similar, these components have to be replaced by Original Krone spare parts .

Maintenance - Blade Changing

13.2 Blade Changing on Cutting Discs



Danger! - Rapidly rotating cutting discs/blade drums.

Effect: Danger to life or serious injuries.

- Switch off the engine and remove the ignition key.
- The cutting discs/blade drums continue to run!
- Do not leave the driver's cab until the cutting discs/blade drums have come to a complete stop.

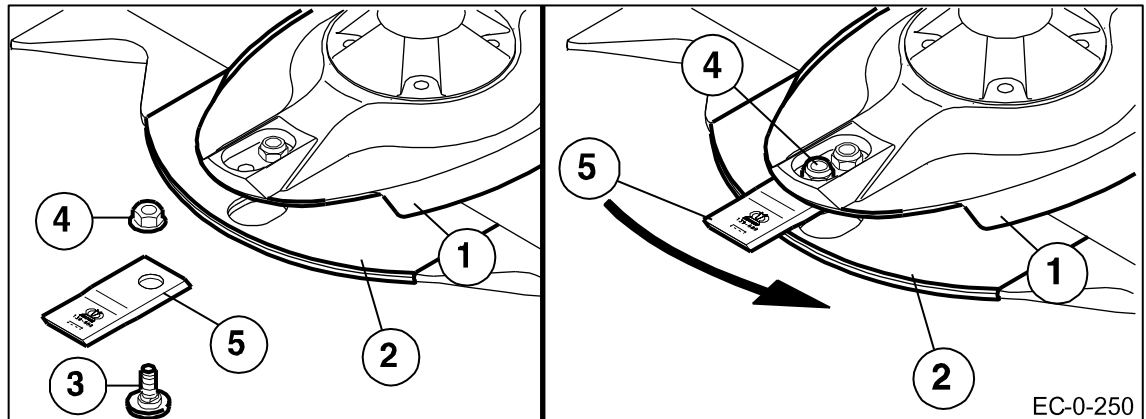


Danger! - Cutter blades coming loose

Effect: Danger to life or serious injuries.

- After changing the blades check that they fit perfectly and that they can move freely.
- Whenever a blade is changed, also inspect the fasteners and replace them, if necessary!
- Always replace missing and damaged blades in sets to prevent unbalanced rotation!
- Never mount unevenly worn blades on a drum/disc!

13.2.1 Blade Screw Connection



Pic. 46

- Fold up safety device
- Clean the area
- Remove damaged or worn blades
- To fit the blades, insert the blade (5) between the wear skid (2) and the cutting disc (1)
- Insert the retaining bolt (3) from below through the wear skid, the blade and the cutting disc
- Place the locknut (4) on the retaining bolt from above and tighten it firmly (tightening torque refer to chapter "Torques")
- Repeat the process for all blades
- After fitting the blades, fold the safety device down again



Note

- The cutter blades of anticlockwise rotating cutting discs / blade drums are different to those of clockwise rotating ones. Make certain the direction of rotation is correct when installing!
- The arrow on the cutter blades must match the direction of rotation of the corresponding cutting discs / blade drums
- The locknut (4) used to secure the retaining bolts must not be used more than once

Order No. for clockwise rotating blade: 139-889

Order No. for anticlockwise rotating blade: 139-888

Maintenance - Blade Changing

13.2.2 Blade Quick-Fit Device

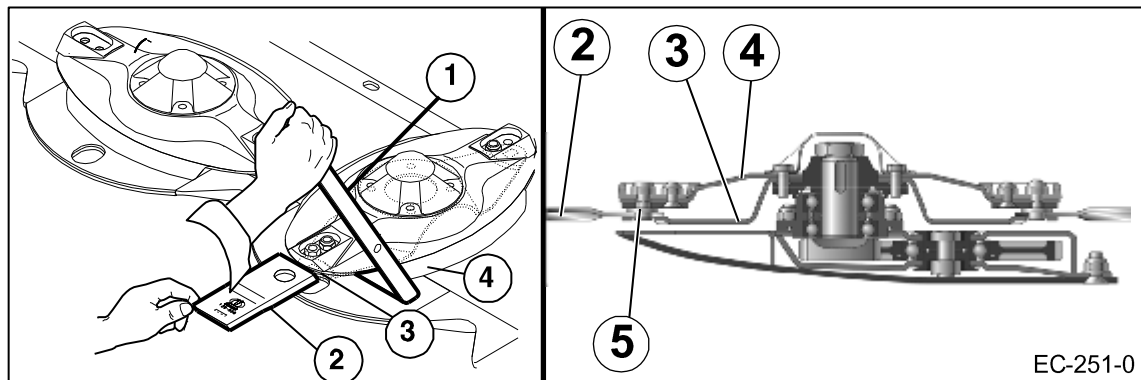


Fig. 47

- Clean the area.
- Remove damaged or worn blades.
- Push the special tool (1) {blade key} between the cutter disc (4) and leaf spring (3) and press down with one hand.
- Guide a new blade (2) onto the retaining bolt and allow the blade key to return upwards.
- After fitting the blades, fold the protective device down again.



Note

- The cutter blades of anticlockwise rotating cutting discs / blade drums are different than those of clockwise rotating ones. Make certain the direction of rotation is correct when installing!
- The arrow on the cutter blades must match the direction of rotation of the corresponding cutting discs / blade drums.
- The hex nut (4) used to secure the retaining bolts must not be used more than once.

Order No. for clockwise rotating blade: 139-889

Order No. for anticlockwise rotating blade: 139-888

13.3

Replacing the linings



Caution! - If the linings are checked irregularly.

Effect: Damage to the machine

- Always check the mowing unit for damaged linings prior to start-up and replace linings, if necessary!
- Adjust the welding current and the welding material to the cutter bar material and to the lining or carry out a trial welding if necessary. •

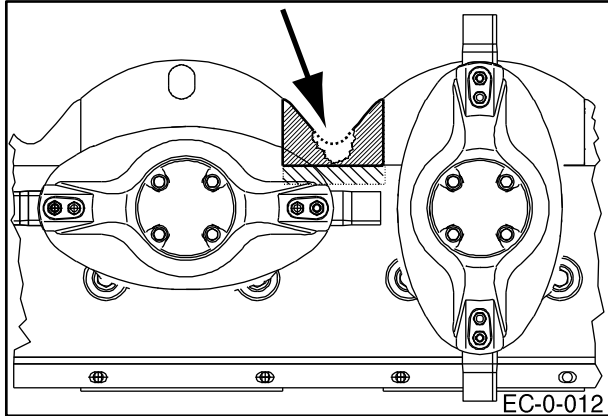


Fig. 48

- Open the welding seams of the old lining.
- Remove the lining
- Deburr the contact surface.

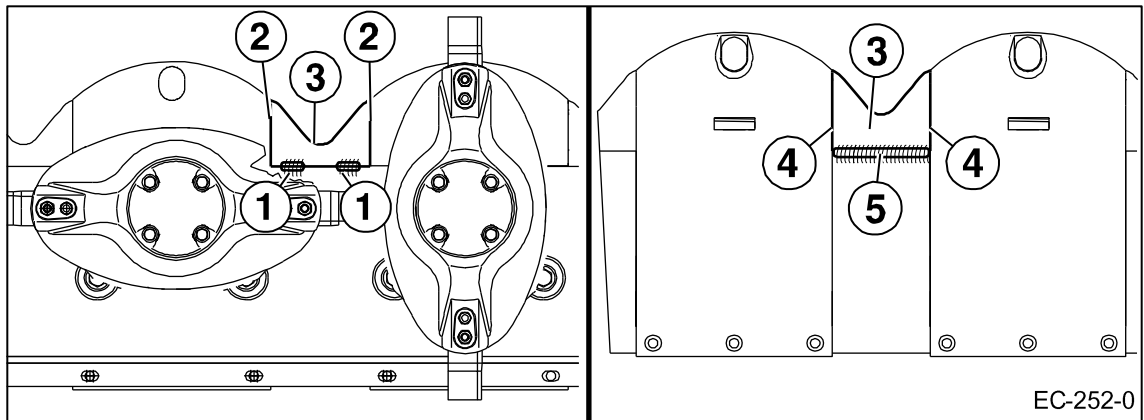


Fig. 49

- Adapt the new lining (3).
- Weld short I seams on the **upper surface** of the cutter bar in the areas marked (1) (each should be approx. 30 mm).
- Do not weld the edges (2).
- On the **lower surface** of the cutter bar, weld the lining (3) to the cutter bar along the whole length in area (5).
- Do not weld the edges (4).

Maintenance – lubrication chart

14 Maintenance – lubrication chart

14.1 Special Safety Instructions



WARNING!

When performing repair, maintenance or cleaning work or in case of technical intervention, drive elements may start moving (caution: cutting discs continue to run).

Effect: Danger to life, injuries or damage to the machine.

- Turn off the PTO shaft.
- Move the machine to the working position and lower it to the ground.
- Switch off the engine of the tractor, remove the ignition key and carry it with you.
- Secure the tractor against accidental start-up and against rolling.
- After the repair, maintenance, cleaning work or technical modifications are completed, mount all protective covers and safety devices properly again.
- Avoid skin contact with oils, greases, cleaning agents and solvents.
- In the event of injuries or burns due to oils, cleaning agents or solvents, contact a physician immediately.
- All other safety instructions must also be followed to avoid injuries and accidents.

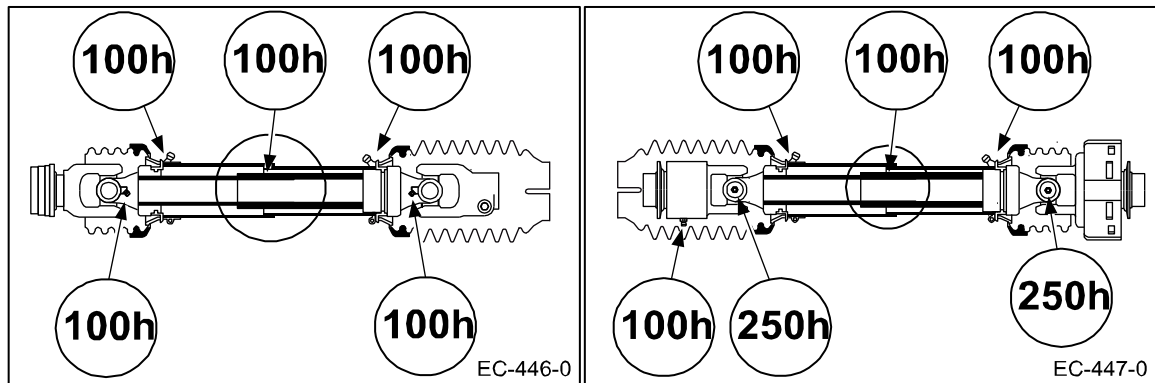


Fig. 50

Lubricate the PTO shafts at the intervals indicated in the drawing with a multi-purpose grease. Follow the operating instructions of the PTO shaft manufacturer.

14.2

Lubrication Chart

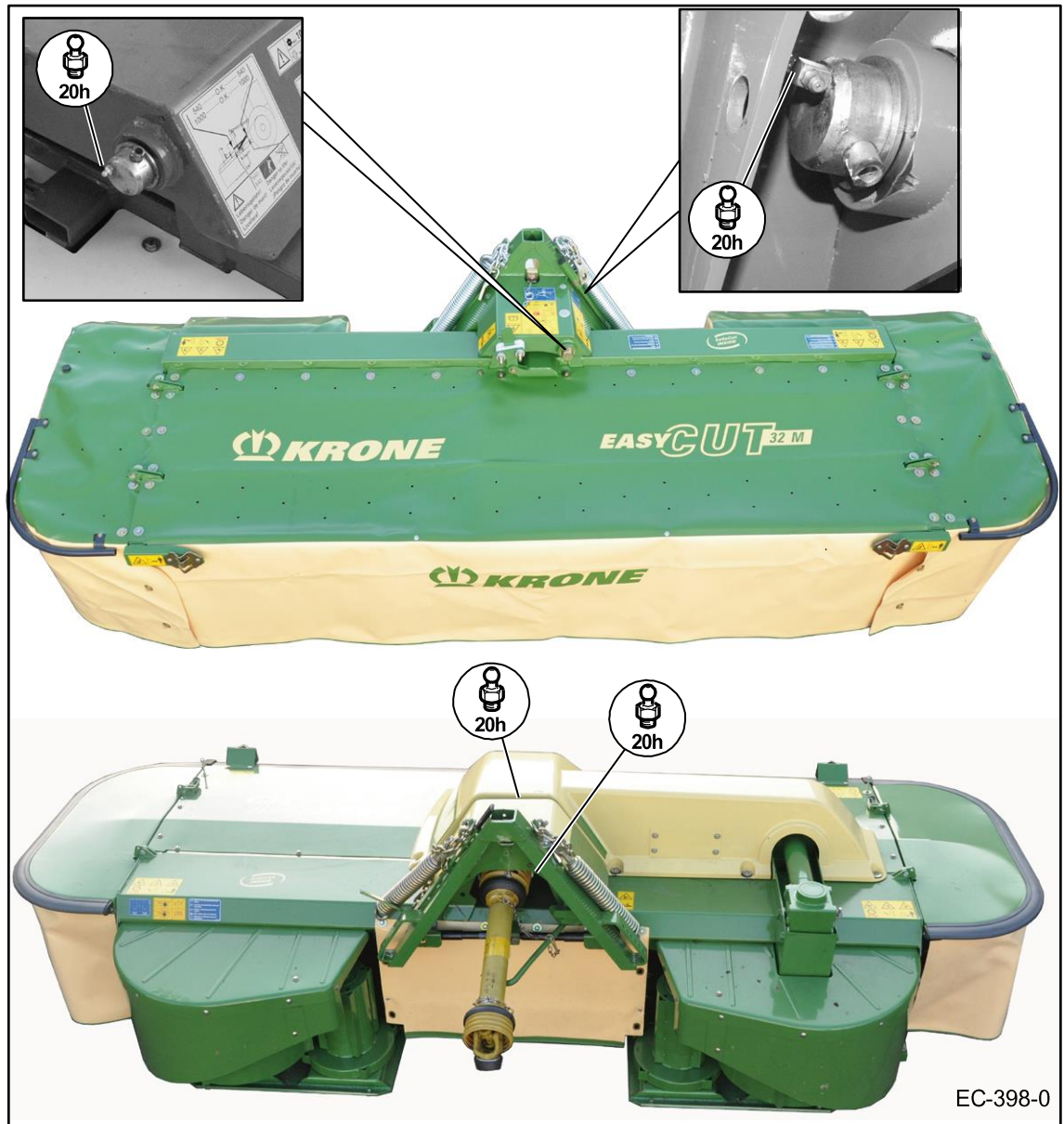


Fig. 51



Placing in Storage

15 Placing in Storage

- Park the machine in a dry location, but not in the vicinity of artificial fertilisers or livestock buildings.
- Before placing the machine in winter storage, clean inside and outside thoroughly. If you use a high-pressure cleaner to do this, do not keep a stream of water directed at bearing points. After cleaning is completed, lubricate all lubrication points. Do not wipe off any grease that comes out of bearing points. The hardened grease will provide additional protection against moisture.
- Disassemble the PTO shaft. Lubricate the inner tubes and the guard tube with grease. Grease the lubrication points on the cross joint and on the bearing rings of the guard tubes.
- Oil all joint points!
- Touch up damaged paint and preserve all uncoated areas thoroughly with rust protection agent.
- Check all movable components such as deflector rollers, joints, tension rollers, etc. to make certain they move easily. If necessary remove, clean, grease and remount. If necessary, replace with new parts.
- **Use only original KRONE replacement parts.**

Perform the necessary repair tasks during the time immediately after the harvest season. Draw up a list of all replacement parts you will need. This will make it easier for your KRONE dealer to process your orders and you will be certain that your machine will be ready for use at the beginning of the next season.

16 Before the Start of the New Season

16.1 Special Safety Instructions

**WARNING!**

When performing repair, maintenance or cleaning work or in case of technical intervention, drive elements may start moving (caution: cutting discs continue to run).

Effect: Danger to life, injuries or damage to the machine.

- Turn off the PTO shaft.
- Move the machine to the working position and lower it to the ground.
- Switch off the engine of the tractor, remove the ignition key and carry it with you.
- Secure the tractor against accidental start-up and against rolling.
- After the repair, maintenance, cleaning work or technical modifications are completed, mount all protective covers and safety devices properly again.
- Avoid skin contact with oils, greases, cleaning agents and solvents.
- In the event of injuries or burns due to oils, cleaning agents or solvents, contact a physician immediately.
- All other safety instructions must also be followed to avoid injuries and accidents.

16.2 Test run.

**Danger! - Testing the machine after repair, maintenance or cleaning work and after technical intervention.**

Effect: Danger to life or serious injuries

- The mowing unit must be in working position
 - Do not switch on the drives until the mowing unit is resting on the ground and you are absolutely sure that neither persons, animals nor objects are in the danger zone.
 - Start a trial run of the machine only from the driver's seat.
-
- Lubricate the machine thoroughly. Remove any condensation water which may have collected in the bearings.
 - Check oil level in the gearbox(es) and top up if necessary.
 - Check all screws to make certain they are tight or retighten them if necessary.
 - Check all electrical connection cables and the lighting. Repair or replace if necessary.
 - Check the entire setting of the machine and correct if necessary.
 - Re-read the operating instructions thoroughly.

**Note**

Use vegetable oils and greases.

- Vent the friction clutch to release the adhesion of the friction lining.

Before the Start of the New Season

16.3 Friction Clutch



Caution! - Manipulation of the friction clutch

Effect: Serious damage to the machine

- Manipulation of the overload protection changes the slip torque. This will lead to a loss of warranty claims! Original KRONE spare parts only may be used.

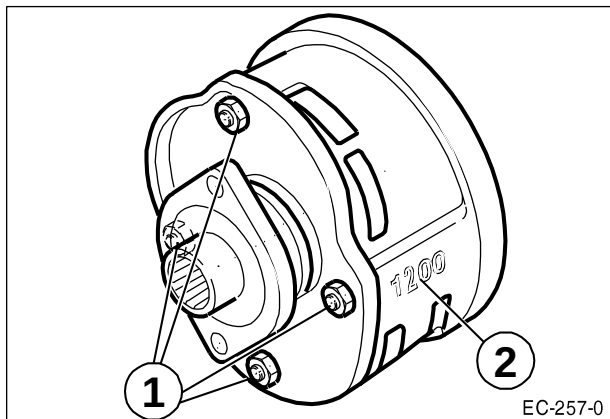


Fig. 52

The friction clutch protects the tractor and the machine against damage. It is designed with a permanently adjusted turning torque M_R . The torque is applied on the housing of the friction clutch (2).

Venting the friction clutch

Tighten the four nuts (1). Block the machine and move the friction clutch manually to the point where it slips through. Loosen the nuts again.



Note - Friction Clutch

Effect: Conserve functionality and increased service life

- The friction clutch (2) must be vented prior to commissioning and once a year prior to harvesting. (See section Before the Start of the New Season "Friction clutch")

17 Special equipment

17.1 Special Safety Instructions



WARNING!

When performing repair, maintenance or cleaning work or in case of technical intervention, drive elements may start moving (caution: cutting discs continue to run).

Effect: Danger to life, injuries or damage to the machine.

- Turn off the PTO shaft.
- Move the machine to the working position and lower it to the ground.
- Switch off the engine of the tractor, remove the ignition key and carry it with you.
- Secure the tractor against accidental start-up and against rolling.
- After the repair, maintenance, cleaning work or technical modifications are completed, mount all protective covers and safety devices properly again.
- Avoid skin contact with oils, greases, cleaning agents and solvents.
- In the event of injuries or burns due to oils, cleaning agents or solvents, contact a physician immediately.
- All other safety instructions must also be followed to avoid injuries and accidents.

17.2 Adjusting Skids

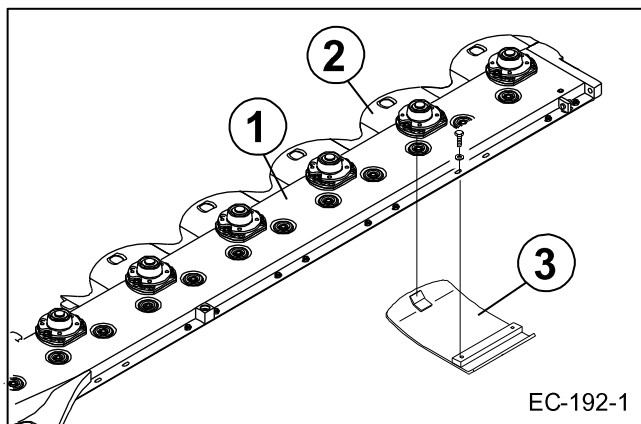


Fig. 53

Adjusting skids can be used to increase the cutting height (see chapter entitled "Adjusting the cutting height")

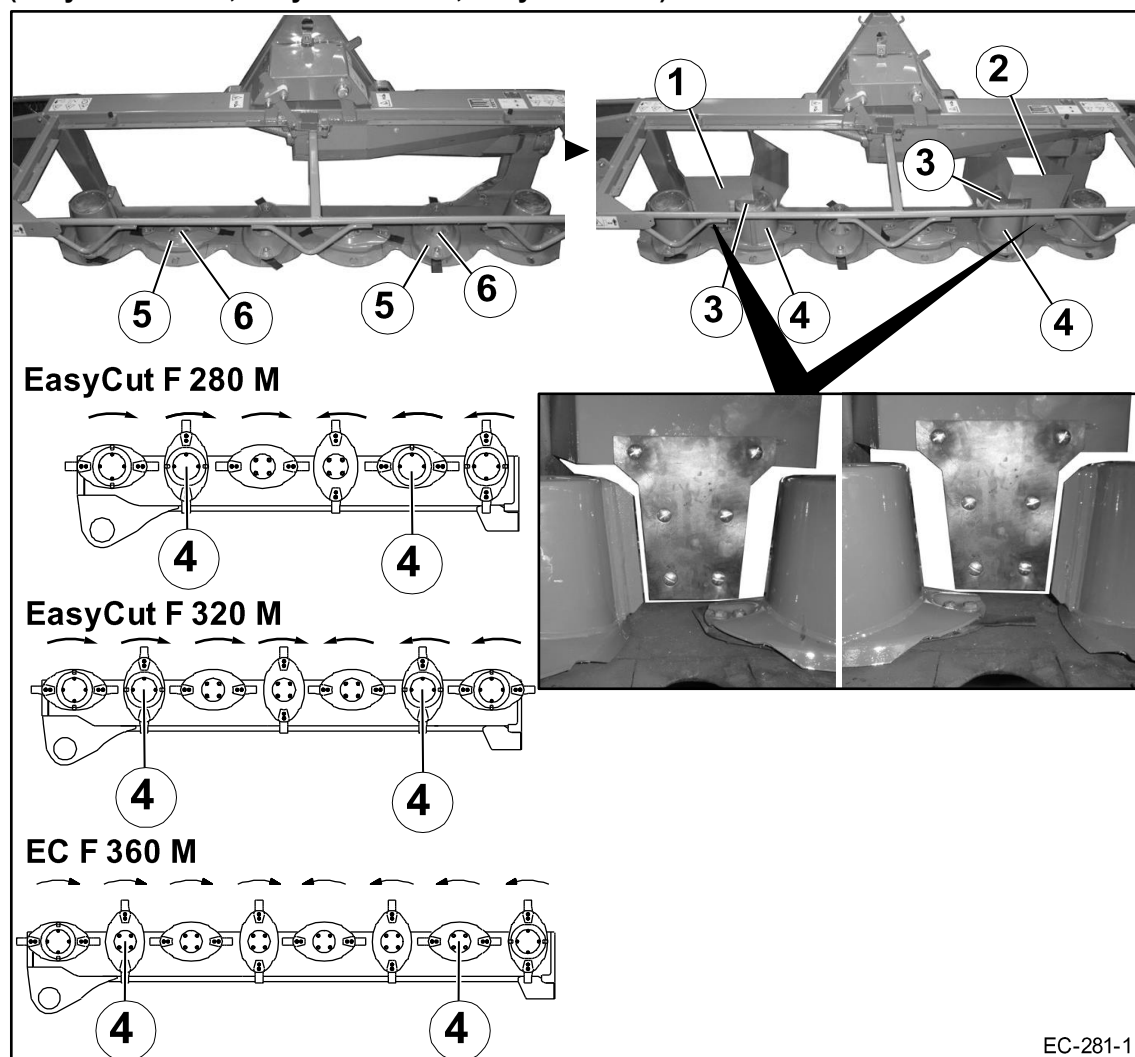
To do this, insert the adjusting skids (3) into the glide skids (2) and screw them in place. The adjusting skids must always be mounted underneath the mowing discs that run next to the mower drum.

Special equipment

17.3

Conversion to narrower swathing

(EasyCut F 280 M, EasyCut F 320 M, EasyCut 360 M)



EC-281-1

Fig. 54

- Remove the cutting discs (5) and covers (6).
- Remove cover (3) of mower drum (4). Mount the mower drum with fastening bolts and the detent edged washers of the disassembled cutting discs (6).
- Mount the cover (3) on the mower drum (4).



Note

Keep the cover (5) and cutting disc (6) in a suitable place for later reinstallation.



Warning - Mower drum incorrectly installed

Effect: Damage to the machine

Make certain the mower drums are installed correctly! The installed mower drums (4) must be installed at a 90-degree offset to the adjacent mower drums / cutting discs.



Special equipment

- Install the plates (1,2). Make certain when attaching the plates that the distance from the rubber pads (7) to the mower drums is at least 3 mm.



Note - Reinstallation is in the reverse order

Before starting up the machine again, make certain to check the cutter blades, retaining bolts, cutting discs, and drums as well as the linings

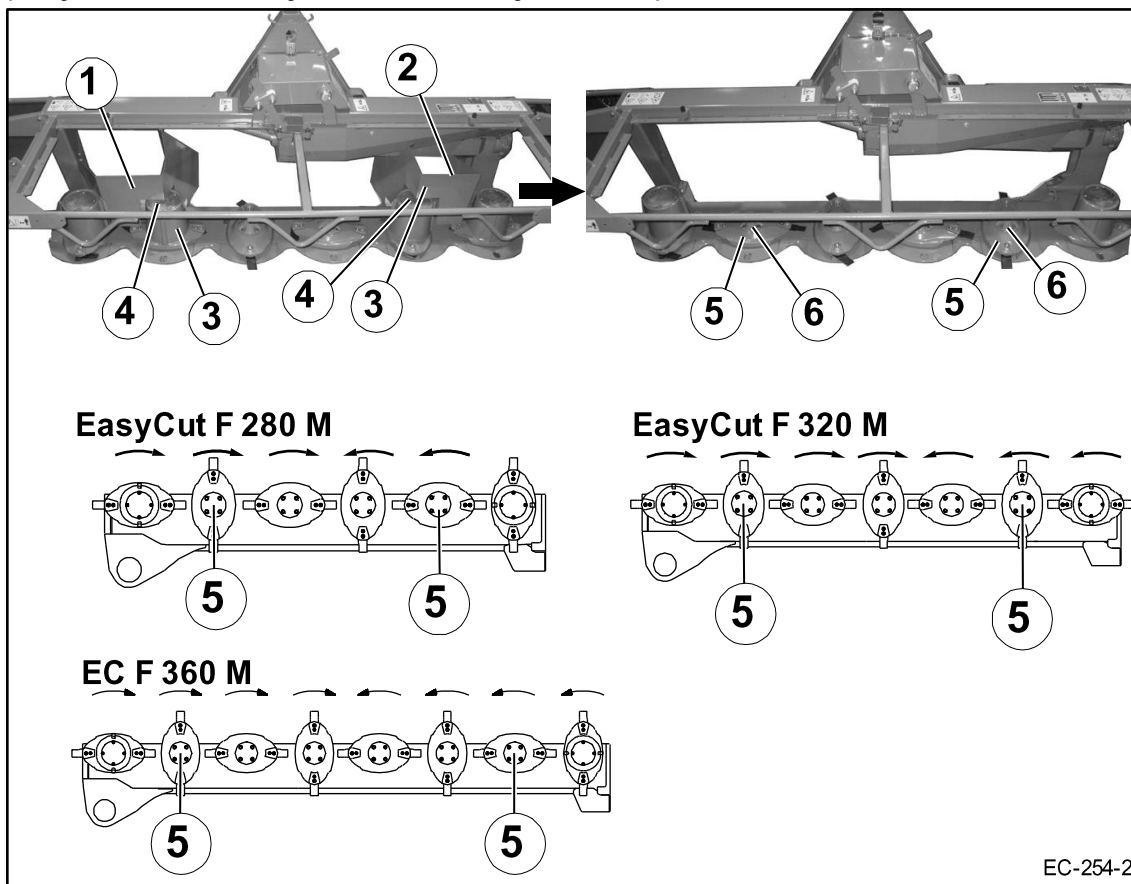
- See Maintenance section "Checking the Cutter Blades and Retaining Bolts".
 - See Maintenance section "Periodical Inspection of Cutting Discs and Drums."
 - See Maintenance section "Replacing the Linings".
-

Special equipment

17.4

Conversion for mowing steep slopes

(EasyCut F 280 M, EasyCut F 320 M, EasyCut 360 M)



EC-254-2

Fig. 55

- Remove plates (1,2)
- Remove cover (3) of mower drum (4).
- Remove mower drum (4).



Note

Keep the plates (1,2), cover (3) and mower drums (4) in a protected place for later reinstallation.



Warning - Cutting disc installed incorrectly

Effect: Damage to the machine

Make certain the cutter discs are installed correctly! The installed cutting discs (5) must be installed at a 90-degree offset to the adjacent mower drums / cutting discs.



- Mount the cutting discs (5) and covers (6). To do this, reuse the fastening bolts and detent edged washers of the mower drums that were removed.



Note

Follow the steps in the reverse order for reinstallation (see also Chapter "Conversion to Narrower Swathing").

Before starting up the machine again, make certain to check the cutter blades, retaining bolts, cutting discs, and drums as well as the linings

- See Maintenance section "Checking the Cutter Blades and Retaining Bolts".
 - See Maintenance section "Periodical Inspection of Cutting Discs and Drums."
 - See Maintenance section "Replacing the Linings".
-



Disposal of the machine

18 Disposal of the machine

18.1 Disposal of the machine

After the service life of the machine has expired, the individual components of the machine must be disposed of properly. The applicable country-specific, current waste disposal guidelines and the legal laws must be observed.

Metal parts

All metal parts must be brought to a metal recycling centre.

The components must be freed from operating fluids and lubricants (gear oil, oil from hydraulic system, ...) before being scrapped.

The operating fluids and lubricants must be brought separately to an environmentally friendly disposal point or recycling centre.

Operating fluids and lubricants

Operating fluids and lubricants (diesel fuel, coolant, gear oil, oil from hydraulic system, ...) must be brought to a disposal point for waste oil.

Synthetic materials

All synthetic materials must be brought to a recycling centre for synthetic materials.

Rubber

Rubber parts (hoses, tyres, ...) must be brought to a rubber recycling centre.

Electronic scrap

Electronic parts must be brought to a disposal point for electronic scrap.



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THE POWER OF GREEN

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