Rotary Harvesting Unit 460plus

OPERATOR'S MANUAL

460plus Rotary Harvesting Unit

OMKM123547 ISSUE C9 (ENGLISH)

Maschinenfabrik Kemper GmbH & Co. KG

European Edition

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Introduction

Foreword

READ THIS OPERATOR'S MANUAL carefully to learn how to operate and service your machine correctly. Failure to do so could result in personal injury or equipment damage. This rotary harvesting unit may be installed and operated on a forage harvester only. The user must be entitled to drive a forage harvester on public roads. This manual and safety signs on your machine are available in other languages. To order, see your KEMPER dealer.

THIS MANUAL SHOULD BE CONSIDERED a permanent part of your machine and must remain with the machine when you sell it.

MEASUREMENTS IN THIS MANUAL are given in metric units. The customary U.S. unit equivalents are also quoted. Only use components and bolts that fit. Metric and inch fasteners may require a specific metric or inch wrench.

RIGHT-HAND AND LEFT-HAND sides are determined by facing in the direction the implement will travel when going forward.

THE TERM "TRANSPORT" refers to a rotary harvesting unit mounted on a forage harvester and transported from A to B on the forage harvester.

THE TERM "HAULAGE" refers to a rotary harvesting unit loaded on a flatbed carrier and transported from A to B on the flatbed carrier.

LOADING AND HAULAGE of this rotary harvesting unit must be performed only by persons familiar with how the load is secured, and who can provide evidence of this.

WRITE PRODUCT IDENTIFICATION NUMBERS (P.I.N.) in the Specification or Identification Numbers section. Record all numbers exactly. In the event of theft, these numbers may prove vital in tracing your property. Your KEMPER dealer needs these numbers when you order parts. File the identification numbers in a secure place away from machine.

BEFORE DELIVERING THIS MACHINE, your dealer performed a predelivery inspection.

INTENDED USE: THIS ROTARY HARVESTING UNIT may be used ONLY for harvesting:

- thick-stemmed, flexible types of plant such as corn, elephant grass or bamboo
- thin-stemmed types of plant such as grain crop, mustard

Use in any other way is considered as contrary to the intended use. The manufacturer accepts no liability for damage or injury resulting from this misuse, and these risks must be borne solely by the user.

THIS ROTARY HARVESTING UNIT MUST NOT be used to manually transfer materials of any sort and is not suitable for the transfer and chopping of:

- woody plants with a diameter greater than 1 mm
- wood intended for chipping
- animal feed such as beets
- metallic objects
- materials that include stones

Compliance with and strict adherence to the conditions of operation, service and repair as specified by the manufacturer also constitute essential elements for the INTENDED USE.

THIS ROTARY HARVESTING UNIT MUST be serviced and repaired ONLY by industrial mechanics, fitters or persons with comparable qualifications. The electrical system must be repaired only by electricians. The accident prevention regulations, all other generally recognized regulations on safety and occupational medicine and the road traffic regulations must be observed at all times. It is not permitted to alter the machine to accept materials other than those permitted in its intended use. Any arbitrary modifications carried out on this rotary harvesting unit will relieve the manufacturer of all liability for any resulting damage or injury.

THIS ROTARY HARVESTING UNIT MUST NOT be operated in the United States and Canada.

KM00321,00008F1 -19-13MAR19-1/1

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Continued on next page

Original Instructions. All information, illustrations and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.

Pre-delivery Inspection

Predelivery Checklist

After the rotary harvesting unit has been completely assembled, inspect it to be sure it is in good running order before delivering it to the customer. Check off each item when found satisfactory or after making the necessary adjustments.

□ All shields open and close freely.

□ Rotary harvesting unit has been properly assembled.

□ Parts delivered separately have been properly installed.

□ Nuts on all screws have been tightened.

□ All grease fittings have been lubricated.

□ Gear cases have been properly filled (see Lubrication and Maintenance).

□ Knife attaching screws are tightened correctly.

□ Shipping brackets removed.

□ Rotary harvesting unit can be folded correctly.

□ Rotary harvesting unit has been cleaned and touched up wherever paint is nicked or scratched.

□ All moving parts are working freely.

□ Check all friction clutches as shown in the Service section.

□ All decals are in place and in good condition.

□ Check that auxiliary lights are installed on basic harvester.

□ This rotary harvesting unit has been tested and, to the best of my knowledge, is ready for delivery to the customer.

(Date Tested) (Signature of Technician)

KM00321,00001F6 -19-13AUG09-1/1

Delivery Checklist

The following checklist is a reminder of very important information that should be conveyed directly to the customer upon delivery of the machine.

□ Advise the customer that the life expectancy of this or any other machine depends on regular lubrication as described in this operator's manual.

□ Discuss proper operation of the rotary harvesting unit as well as the procedures and methods required for the best harvest.

□ Give the Operator's Manual to the customer and explain all operating adjustments.

□ Advise the customer of the proper weights and fluids that must be used in the tires, depending upon the individual forage harvester.

□ Rotary harvesting units for type 498 Claas forage harvesters only: Program module A130FAM for the variable header drive (optional equipment).

□ Advise the customer of safety precautions that must be observed while using the rotary harvesting unit.

□ Invite the customer to stop by and discuss any problems that may be encountered while operating the rotary harvester unit.

□ Tell the customer to record the serial number of his rotary harvesting unit in the space provided at the end of this manual.

□ Remove this page and file it safely.

(Signature of Technician) (Signature of Customer)

KM00321,00008BA -19-26FEB19-1/1

After-Sale Checklist

The following items should be checked sometime during the first season of operation with the rotary harvesting unit.

□ Go over the entire machine for loose or missing nuts and bolts.

□ All safety shields are in place and fastened securely.

□ Check for broken or damaged parts.

□ If possible, run the rotary harvesting unit to see if it is functioning properly.

□ Check for worn rotary knives.

□ Check with the customer as to the performance of the rotary harvesting unit thus far.

□ Make sure the customer understands the best methods of rotary harvesting unit operation.

□ Review the entire operator's manual together with your customer and stress the importance of proper and regular lubrication, as well as safety precautions.

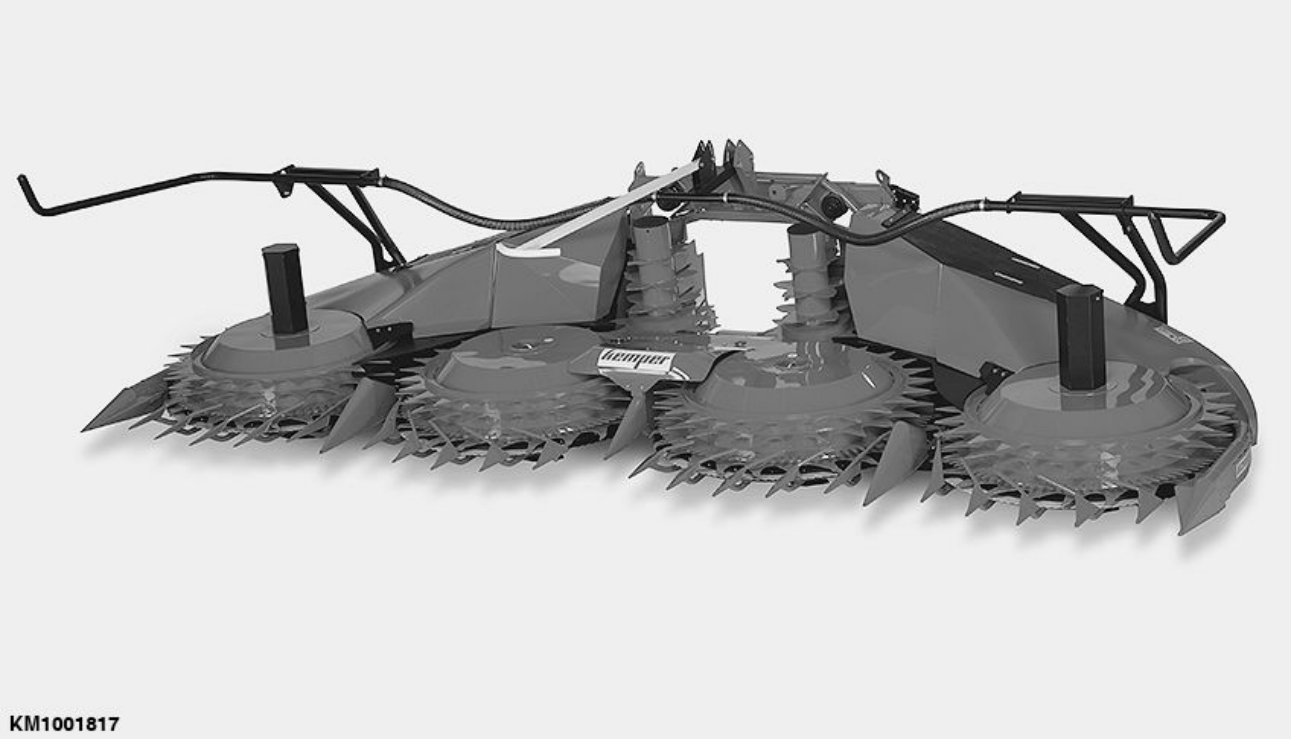
(Signature of Technician)

(Signature of Customer)

ZX,CHECK676,C -19-20JAN95-1/1

Identification View

Identification View



KM1001817 —UN—14MAR19

KM00321,00000C4 -19-14DEC11-1/1

Recognize Safety Information

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

Follow recommended precautions and safe operating practices.

T81389 —UN—28JUN13

DX,ALERT -19-29SEP98-1/1

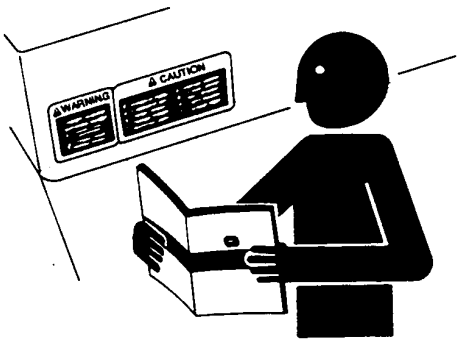
Follow Safety Instructions

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

Before you start working with the machine, learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.

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

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



TS201 —UN—15APR13

KM00321,000016B -19-14MAY09-1/1

Understand Signal Words

A signal word—DANGER, WARNING, or CAUTION—is used with the safety-alert symbol. DANGER identifies the most serious hazards.

DANGER or WARNING safety signs are located near specific hazards. General precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this manual.

TS187 —19—30SEP88

DX,SIGNAL -19-03MAR93-1/1

Observe Road Traffic Regulations

Always observe local road traffic regulations when using public roads.

H28930 —UN—30JUN89

FX,ROAD -19-01MAY91-1/1

Operator Ability

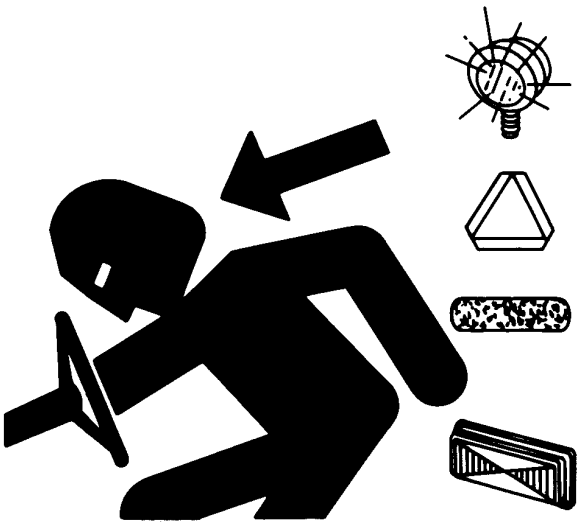
- Machine owners must make sure that operators are responsible, trained, have read the operating instructions and warnings, and know how to operate the machine properly and safely.
- Age, physical ability, and mental capacity can be factors in machine-related injuries. Operators must be mentally and physically capable of accessing the operator station and/or controls, and operating the machine properly and safely.
- Never allow a child or an untrained person to operate the machine. Instruct all operators not to give children a ride on the machine or an attachment.
- Never operate machine when distracted, fatigued, or impaired. Proper machine operation requires the operator's full attention and awareness.

DX,ABILITY -19-07DEC18-1/1

Use Safety Lights and Devices

Prevent collisions with other road users. Slow moving tractors with implements or drawn equipment, as well as self-propelled machines are especially dangerous on public roads. Always pay attention to traffic approaching from behind, particularly when changing direction. Provide for safe traffic conditions by using turn signals.

Use headlights, hazard warning lights, turn signals and other safety devices according to the local regulations. Keep safety devices in good condition. Replace missing or damaged items.



TS951 —UN—12APR90

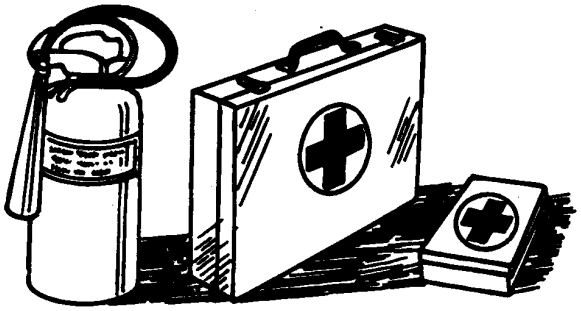
KM00321,000016C -19-14MAY09-1/1

Prepare for Emergencies

Be prepared if a fire starts.

Keep a first aid kit and fire extinguisher handy.

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



TS291 —UN—15APR13

DX,FIRE2 -19-03MAR93-1/1

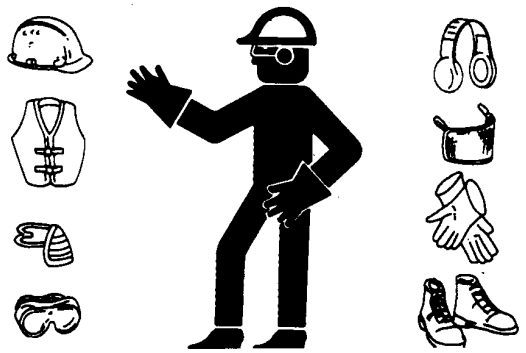
Wear Protective Clothing

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

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

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

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



TS206 —UN—15APR13

DX,WEAR -19-10SEP90-1/1

Check Machine Safety

Always check the road and general operating safety of the machine before using.

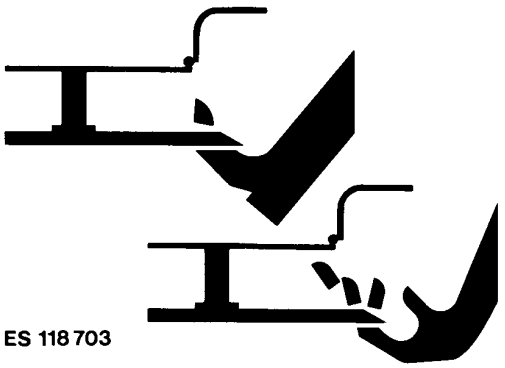
FX,READY -19-28FEB91-1/1

Guards and Shields

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

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

Keep hands, feet and clothing away from moving parts.



ES118703 —UN—21MAR95

FX,DEVICE -19-04DEC90-1/1

Stay Clear of Harvesting Unit

Due to their function, the cutting rotors as well as gathering, cross and feed drums cannot be completely shielded. Stay clear of these moving elements during operation. Always disengage main clutch, shut off engine and remove key before servicing or unclogging harvesting unit.

ES118704 —UN—21MAR95

ZX,CUT688 -19-10FEB98-1/1

Keep Hands Away From Knives

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

Everyone must be clear of the forage harvester before starting the engine.

TS254 —UN—23AUG88

FX,KNIFE -19-21DEC90-1/1

Store Attachments Safely

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

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

TS219 —UN—23AUG88

DX,STORE -19-03MAR93-1/1

Practice Safe Maintenance

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

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

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

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

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

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

TS218 —UN—23AUG88

DX,SERV -19-17FEB99-1/1

Stay Clear of Rotating Drivelines

Entanglement in rotating driveline can cause serious injury or death.

Keep all shields in place at all times. Make sure rotating shields turn freely.

Wear close-fitting clothing. Stop the engine and be sure that all rotating parts and drivelines are stopped before making adjustments, connections, or performing any type of service on engine or machine driven equipment.

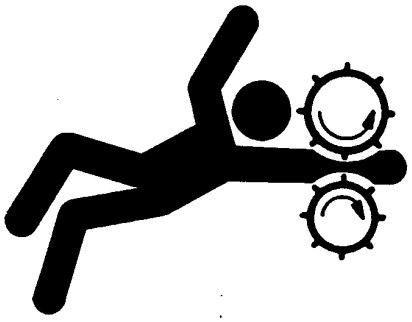
TS1644 —UN—22AUG95

DX,ROTATING -19-18AUG09-1/1

Service Machines Safely

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

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



TS228 —UN—23AUG88

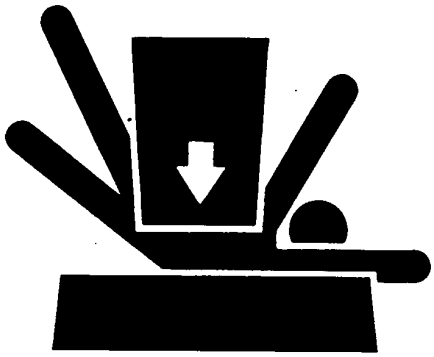
DX,LOOSE -19-04JUN90-1/1

Support Machine Properly

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

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

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



TS229 —UN—23AUG88

DX,LOWER -19-24FEB00-1/1

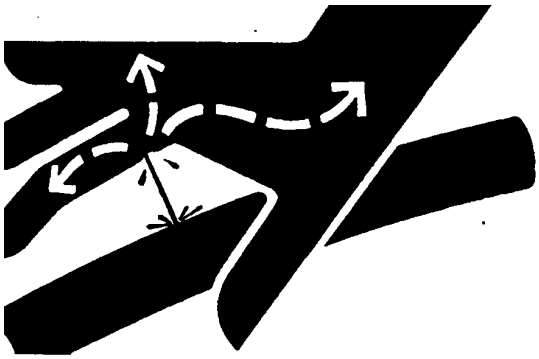
Avoid High-Pressure Fluids

Escaping oil under pressure can have sufficient pressure to penetrate the skin, causing serious personal injury.

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

Hydraulic oil escaping from pin-holes is difficult to detect, so use a piece of cardboard to search for leaks. Protect hands and body from high-pressure fluids.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source.

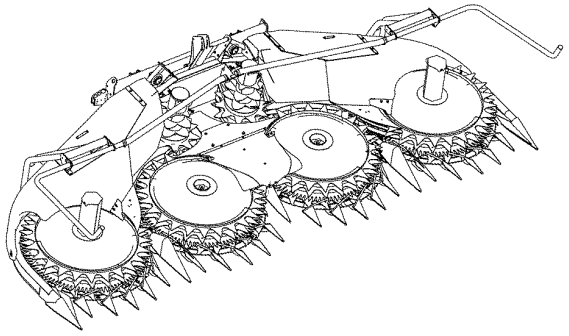


X9811 —UN—23AUG88

KM00321,000016D -19-14MAY09-1/1

Stay Clear of the Intake Area

To avoid entanglement, do not feed crop into the machine by hand or foot. Do not attempt to clear obstructions while the machine is running. The feed rolls can feed crop material in faster than you can release your grip on the material.



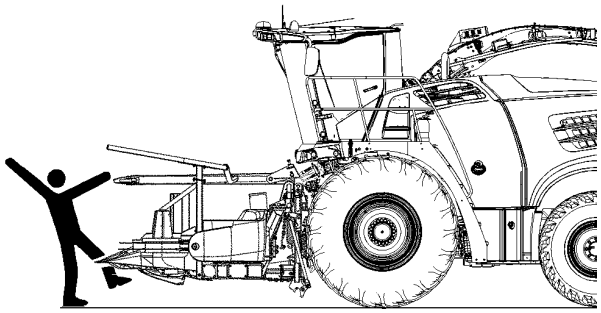
KM1001803

KM1001803 —UN—06DEC11

KM00321,00000E0 -19-03JAN12-1/1

Driving on Roads with Rotary Harvesting Unit Attached

Before driving the forage harvester on public roads, the rotary harvesting unit must be raised and secured in the raised position. The rotary harvesting unit must not, however, obstruct the operator's view of the road.



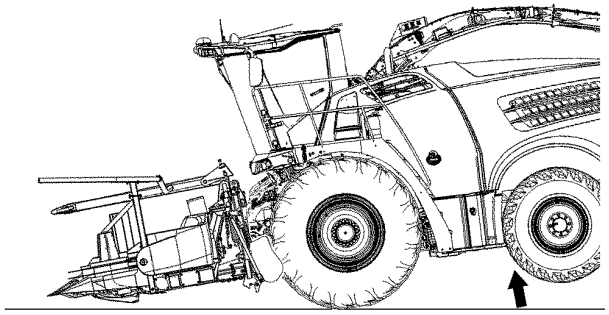
KM232861

KM232861 —UN—10FEB15

KM00321,00003CA -19-12MAR15-1/1

Ballasting for Safe Ground Contact

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



KM232862

KM232862 —UN—10FEB15

KM00321,00003CB -19-12MAR15-1/1

Remove Paint Before Welding or Heating

Avoid potentially toxic fumes and dust.

Hazardous fumes can be generated when paint is heated by welding, soldering, or using a torch.

Remove paint before heating:

- Remove paint a minimum of 100 mm (4 in.) from area to be affected by heating. If paint cannot be removed, wear an approved respirator before heating or welding.
- If you sand or grind paint, avoid breathing the dust. Wear an approved respirator.
- If you use solvent or paint stripper, remove stripper with soap and water before welding. Remove solvent or paint stripper containers and other flammable material from area. Allow fumes to disperse at least 15 minutes before welding or heating.

Do not use a chlorinated solvent in areas where welding will take place.

TS220 —UN—15APR13

Do all work in an area that is well ventilated to carry toxic fumes and dust away.

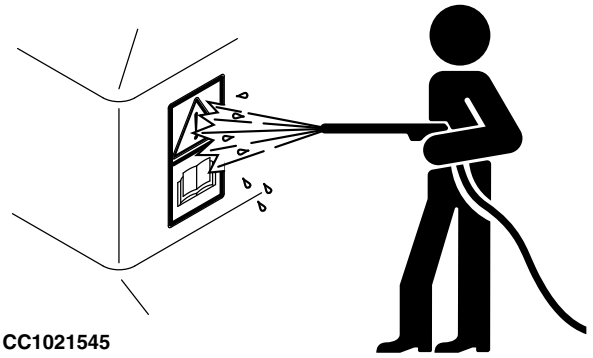
Dispose of paint and solvent properly.

DX,PAINT -19-24JUL02-1/1

Avoid High-Pressure Jet on Safety Decals

The water jet can remove or damage safety decals. Avoid to direct the water jet on safety decals.

Immediately replace missing or damaged safety decals. Replacement safety decals are available from your KEMPER dealer.



CC1021545

CC1021545 —UN—23APR02

KM00321,00002BB -19-31MAR10-1/1

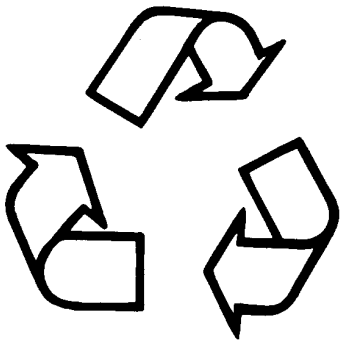
Dispose of Waste Properly

If waste disposal is carried out improperly, this may damage the environment and ecological systems. Potentially harmful waste used with KEMPER equipment include such items as oil, fuel, coolant, brake fluid, filters, and batteries.

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

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

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



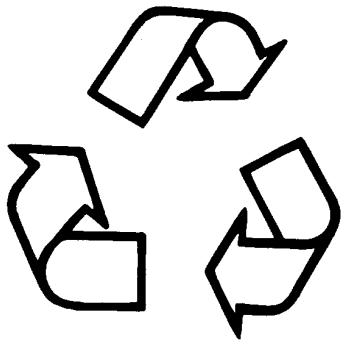
TS1133 —UN—15APR13

KM00321,000016E -19-14MAY09-1/1

Decommissioning: Proper Recycling and Disposal of Fluids and Components

Safety and environmental stewardship measures must be taken into account when decommissioning a machine and/or component. These measures include the following:

- Use appropriate tools and personal protective equipment such as clothing, gloves, face shields or glasses, during the removal or handling of objects and materials.
- Follow instructions for specialized components.
- Release stored energy by lowering suspended machine elements, relaxing springs, disconnecting the battery or other electrical power, and releasing pressure in hydraulic components, accumulators, and other similar systems.
- Minimize exposure to components which may have residue from agricultural chemicals, such as fertilizers and pesticides. Handle and dispose of these components appropriately.
- Carefully drain engines, fuel tanks, radiators, hydraulic cylinders, reservoirs, and lines before recycling components. Use leak-proof containers when draining fluids. Do not use food or beverage containers.
- Do not pour waste fluids onto the ground, down a drain, or into any water source.
- Observe all national, state, and local laws, regulations, or ordinances governing the handling or disposal of waste fluids (example: oil, fuel, coolant, brake fluid); filters; batteries; and, other substances or parts. Burning of flammable fluids or components in other than specially designed incinerators may be prohibited by law and could result in exposure to harmful fumes or ashes.
- Evaluate recycling options for tires, metal, plastic, glass, rubber, and electronic components which may be recyclable, in part or completely.
- Contact your local environmental or recycling center, or your KEMPER dealer for information on the proper way to recycle or dispose of waste.



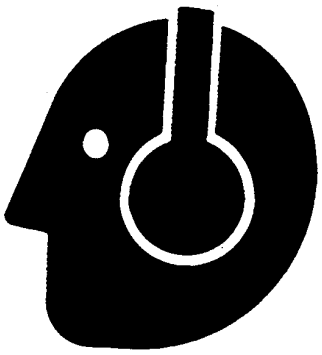
TS1133 —UN—15APR13

KM00321,00004C3 -19-27NOV15-1/1

Protect Against Noise

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

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



TS207 —UN—23AUG88

DX,NOISE -19-03MAR93-1/1

Safety Decals

Pictorial Safety Signs

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

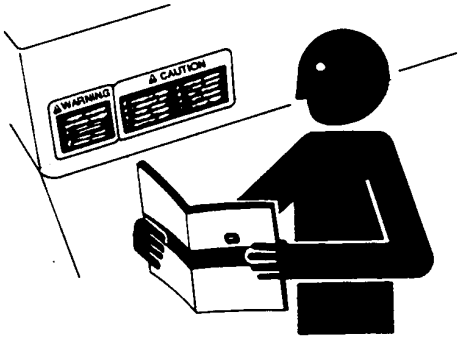
TS231 —19—07OCT88

FX,WBZ -19-19NOV91-1/1

Replace Safety Signs

Replace missing or damaged safety signs. Use this operator's manual for correct safety sign placement.

There can be additional safety information contained on parts and components sourced from suppliers that is not reproduced in this operator's manual.

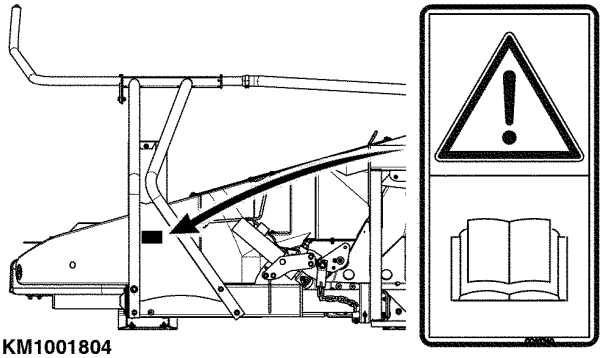


TS201 —UN—15APR13

DX,SIGNS -19-18AUG09-1/1

Operator's Manual

This operator's manual contains all important information necessary for safe machine operation. Carefully observe all safety rules to avoid accidents.



KM1001804

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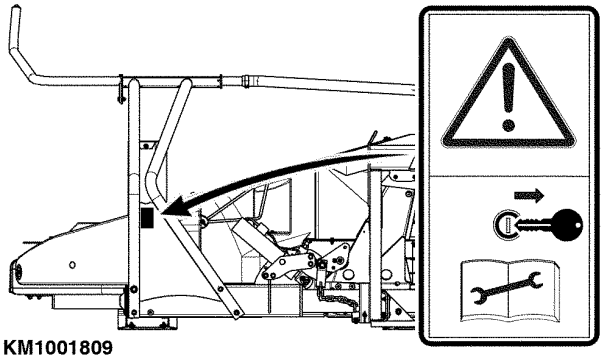
KM00321,00000C5 -19-14DEC11-1/1

Maintenance and Repair

Before carrying out maintenance and repair work, shut off engine and remove key.



KM1001809

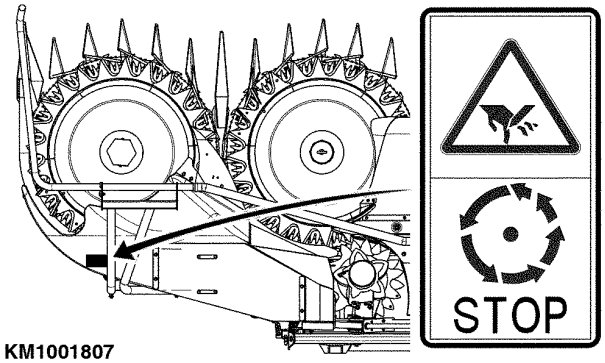
KM1001809 —UN—07DEC11

KM00321,00000C6 -19-14DEC11-1/1

Rotating Blades

Do not touch any moving machine parts. Wait until all moving parts have stopped.

The rotating blades are not immediately stopped when the machine is shut down.



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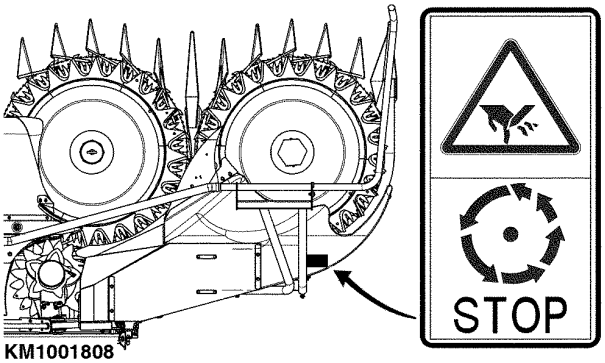
KM1001807 —UN—07DEC11



KM1001808

KM1001808 —UN—07DEC11

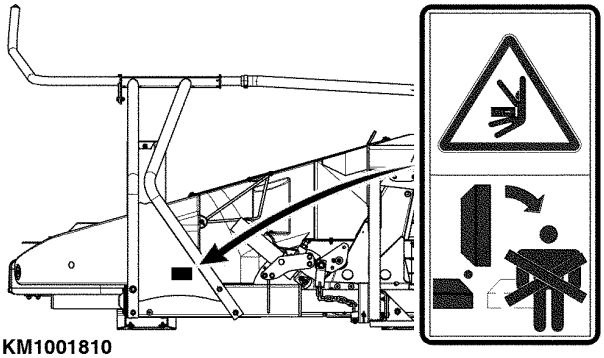
KM00321,00000C7 -19-14DEC11-1/1

Folding Area of the Rotary Harvesting Unit

Stay clear of the folding area of the rotary harvesting unit.

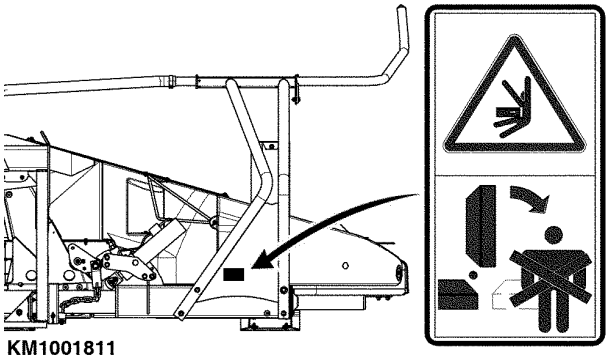
When folding or unfolding the rotary harvesting unit, ensure that no persons are standing within the folding area.

Before folding or unfolding, ensure that all persons keep the required safety distance from the rotary harvesting unit.



KM1001810

KM1001810 —UN—07DEC11



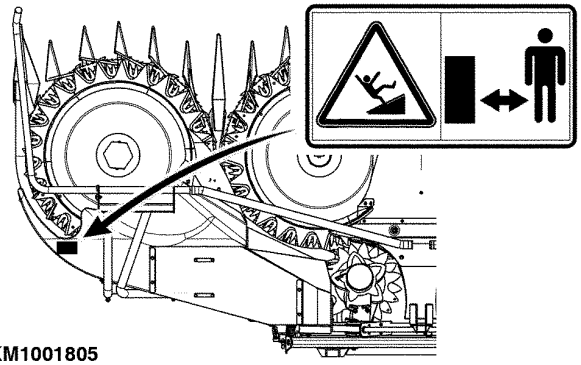
KM1001811

KM1001811 —UN—07DEC11

KM00321,00000C8 -19-14DEC11-1/1

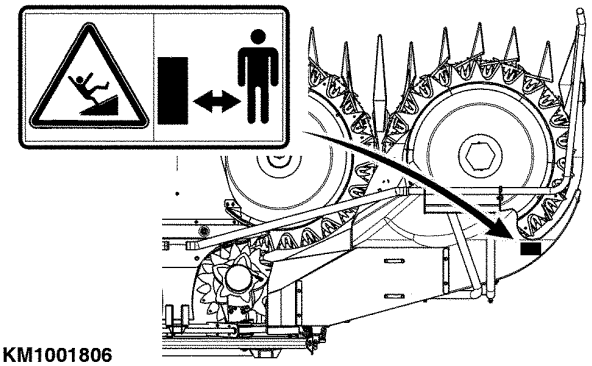
Rotary Harvesting Unit

DANGER - stay clear of rotary harvesting unit. Disengage rotary harvesting unit drive, shut off engine and remove key before servicing or unclogging machine.



KM1001805

KM1001805 —UN—07DEC11



KM1001806

KM1001806 —UN—07DEC11

KM00321,00000C9 -19-14DEC11-1/1

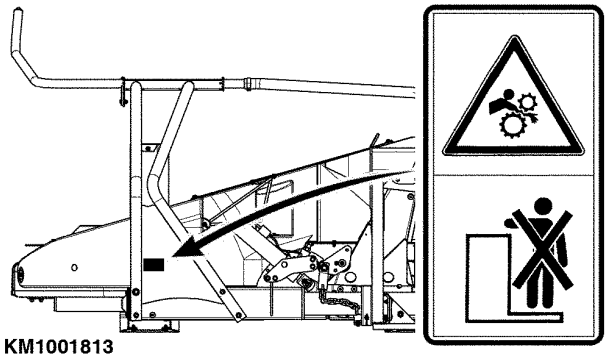
Rotating Drums

Stay clear of rotating drums. Risk of injury!

Arms, legs or loose clothing might become caught by the rotating drums when in operation.

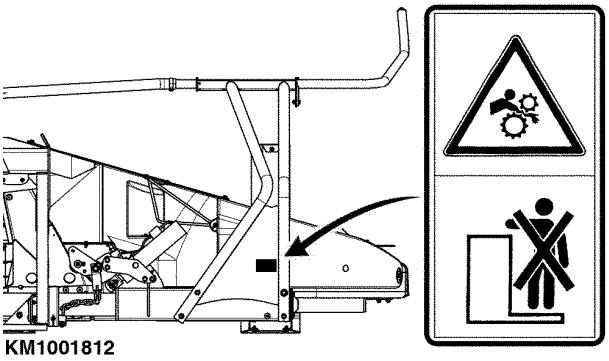
Always keep the required safety distance from the rotating drums.

Wait until all moving parts have stopped.



KM1001813

KM1001813 —UN—07DEC11



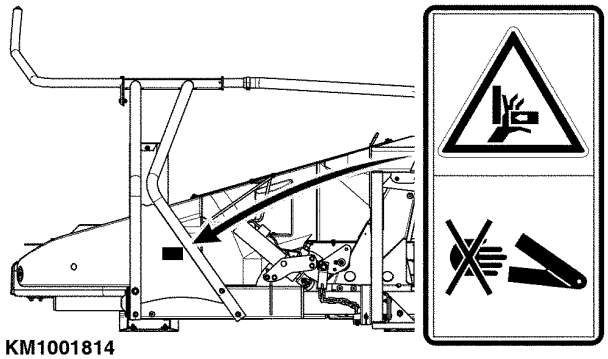
KM1001812

KM1001812 —UN—07DEC11

KM00321,00000CA -19-14DEC11-1/1

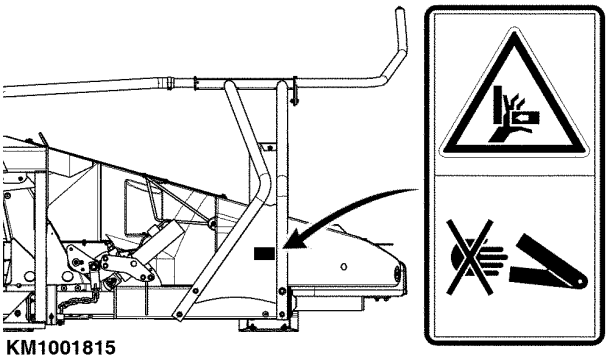
Foldable Frame

Never reach into the danger area as long as outer parts may still move.



KM1001814

KM1001814 —UN—07DEC11



KM1001815

KM1001815 —UN—07DEC11

KM00321,00000CB -19-14DEC11-1/1

Loading with a Crane

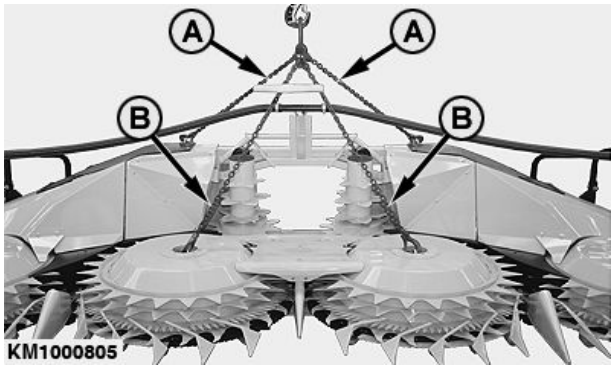
CAUTION: When loading the rotary harvesting unit with a crane, always use the suspension points. This will prevent the machine from toppling over.

Make sure to use chains or slings that meet the weight requirements of the harvesting unit (see "Specifications" section).

Particular care must be taken when loading in this way. Use additional securing chains, if necessary.

IMPORTANT: The eye bolts in the gathering drums should be screwed in completely.

When loading the rotary harvesting unit with a crane, chains or straps with the relevant length must be used as shown on illustration.

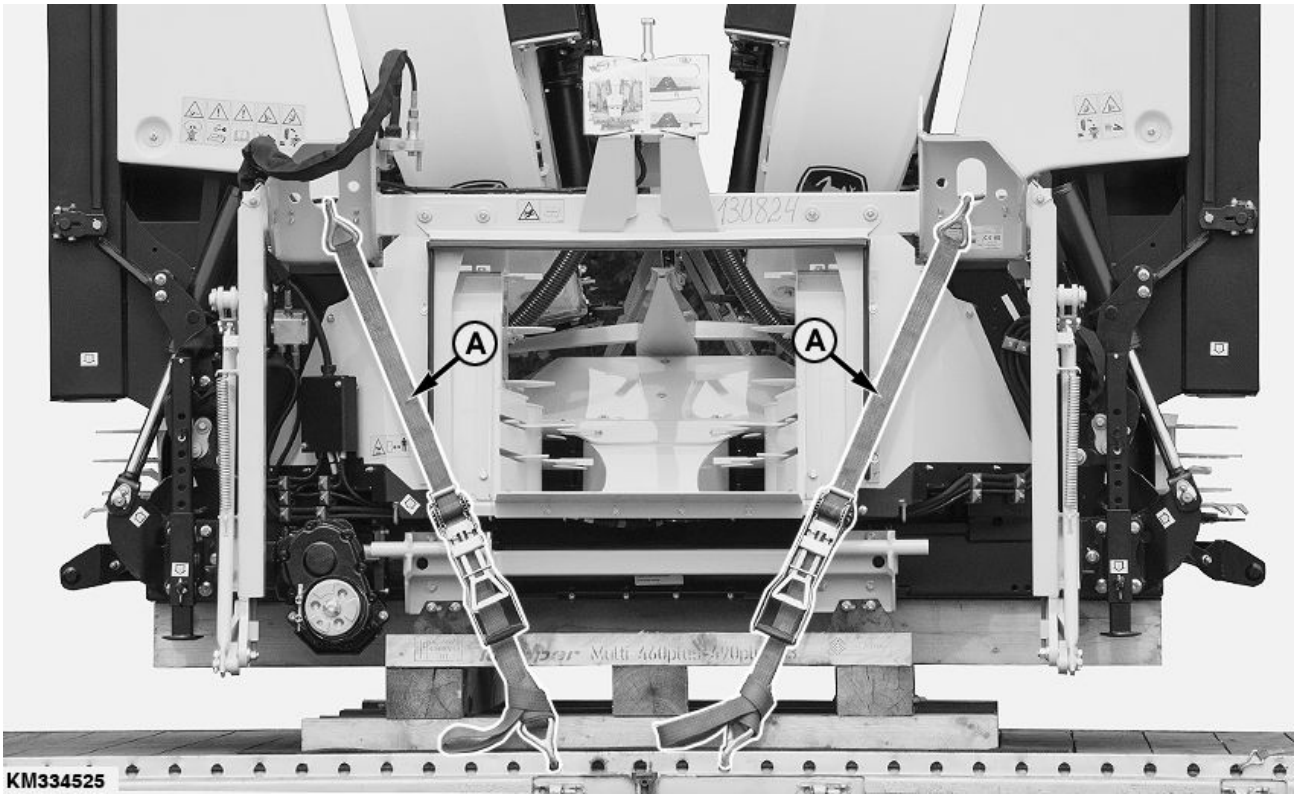


KM1000805 —UN—16MAR09

A—1600 mm (5 ft 2.99 in.) **B—1540 mm (5 ft 0.62 in.)**

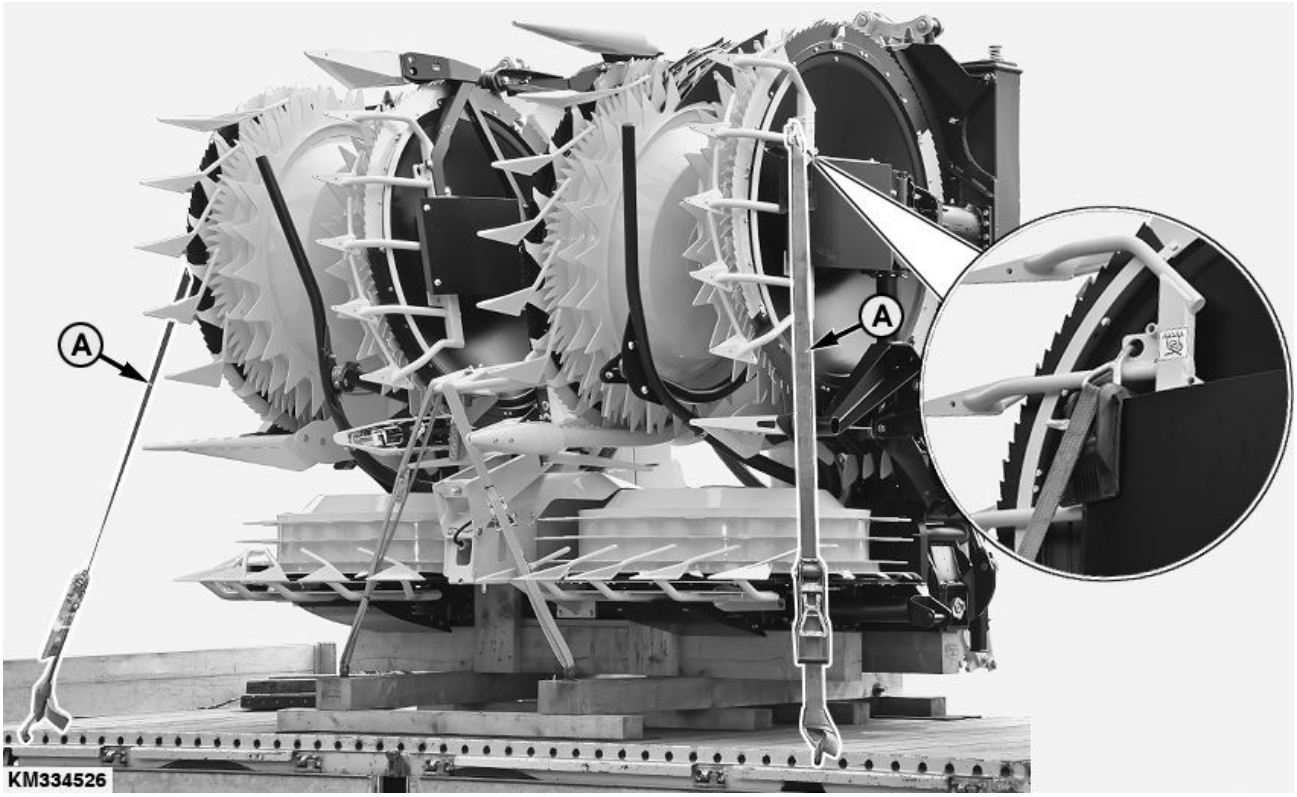
KM00321,00008F8 -19-15MAR19-1/1

Secure the Rotary Harvesting Unit for Transport (Lashing Points)



KM334525 —UN—24OCT17

Lashing points



KM334526 —UN—24OCT17

Lashing Points

A—Bugee cords

Continued on next page

KM00321,000071E -19-10JAN18-1/2

Secure the rotary harvesting unit with bungee cords (A) on both sides as shown. Secure accessories with an additional bungee cord (optional).

KM00321,000071E -19-10JAN18-2/2

Preparing the Rotary Harvesting Unit

Unpacking

As soon as packaging material is removed, check the unit for any damage that might have been incurred during transport.

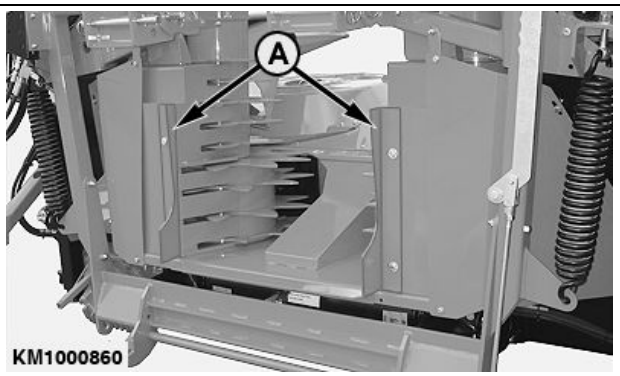
OUKM001,0000027 -19-01MAR05-1/1

Adapt the Scrapers to the Feed Passage

Before attaching the rotary harvesting unit to the forage harvester, ensure that the scrapers (A) match with the channel width of the forage harvester.

The scrapers (A) must be adjusted to the channel width of the relevant forage harvester.

A—Scraper



KM1000860 —UN—20MAY09

KM00321,0000174 -19-20MAY09-1/1

Attaching to a CLAAS Forage Harvester

Compatibility Chart

CAUTION: Before attaching the rotary harvesting unit to a forage harvester, carry out the steps included in Section Preparing the Rotary Harvesting Unit.

The rotary harvesting unit is prepared for installation on the following CLAAS forage harvester types:

Compatibility chart rotary harvesting unit/CLAAS forage harvester

Type 492/493	850 870 890 900
Type 496	840 850 860 870
Type 494/497/498	930 940 950 960 970 980

KM00321,00008F2 -19-13MAR19-1/1

Ballasting Harvester

Before attaching the rotary harvesting unit, make sure harvester is ballasted correctly.

IMPORTANT: Always refer to the information given in Wheels and Ballast Section of the forage harvester operator's manual.

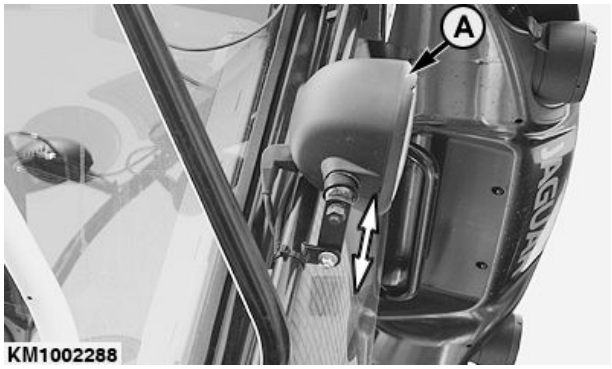
KM00321,0000204 -19-18AUG09-1/1

Adjust additional headlights on forage harvester

IMPORTANT: When folding the rotary harvesting unit, there is a risk of collision with the forage harvester's auxiliary headlights (A).

To avoid a collision when folding the mower attachment, adjust the forage harvester's auxiliary headlights (A) as far outward as possible.

A—Auxiliary headlights



KM1002288 —UN—07MAY12

KM00321,00008B5 -19-25FEB19-1/1

Attaching to a type 498 forage harvester with variable header drive

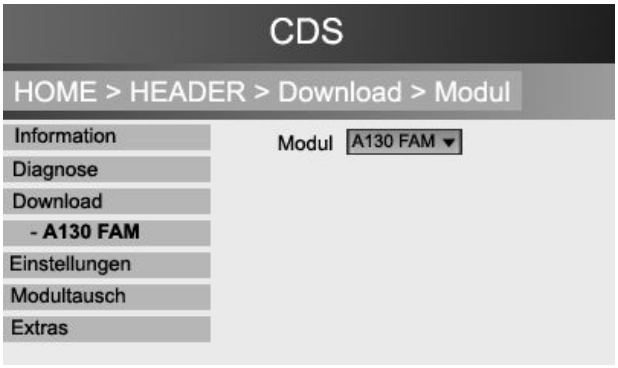
Rotary harvesting units for the Claas type 498 forage harvesters are technically partially prepared for the variable header drive.

In addition, programming steps are required in the forage harvester software, which must be matched with Claas. To do this, contact your Claas dealer.

IMPORTANT: In order to use the variable header drive, the A130FAM module must be programmed for it. Otherwise, the rotary harvesting unit can only be used with constant speed and the adjustment of the header speed is carried out via the Kemper multi-speed transmission.

Program the A130FAM module via the forage Harvester. To do so, proceed as follows:

1. Attach the rotary harvesting unit to the forage harvester.
2. Connect the forage harvester to a computer and start the Claas Diagnostics System (CDS).
3. Select the A130FAM module for programming the rotary harvesting unit.



KM359969 —UN—22FEB19

KM00321,00008F3 -19-14MAR19-1/5

4. When entering a serial number, enter **released by Claas.**

IMPORTANT: Enter a serial number of a rotary harvesting unit that corresponds to the working width of the Kemper rotary harvesting unit.

KM359968 —UN—22FEB19

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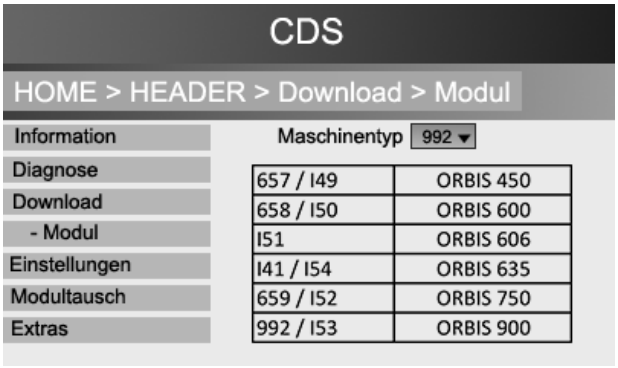
KM00321,00008F3 -19-14MAR19-2/5

IMPORTANT: The following entries must be released by Claas.

5. Use the old Orbis types when selecting the type of machine.

NOTE: For example, in the case of an Orbis 900, select type 992 and not type I53 (see illustration).

6. Depending on the model of the mower attachment, select following settings:



KM359967 —UN—22FEB19

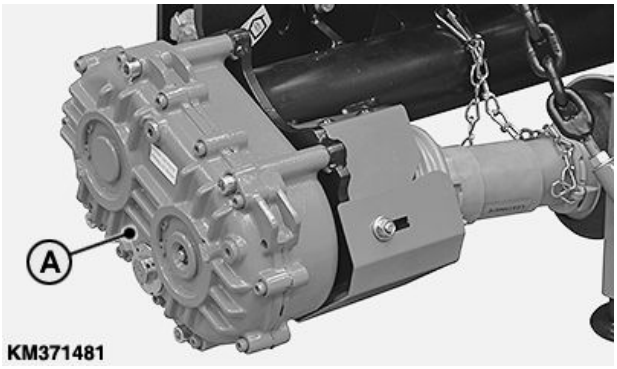
Rotary harvesting unit model	Machine type	Transmission	Transport system
345plus	Orbis 450	3 speed transmission	No transport system
360plus/460plus without chassis	Orbis 600	3 speed transmission	No transport system
360plus/460plus with chassis	Orbis 750	3 speed transmission	Transport wagon
375plus/475plus without chassis	Orbis 750	3 speed transmission	No transport system
375plus/475plus with chassis	Orbis 750	3 speed transmission	Transport wagon
390plus/490plus without chassis	Orbis 900	3 speed transmission	No transport system
390plus/490plus with chassis	Orbis 900	3 speed transmission	Transport wagon

IMPORTANT: Additionally, select the setting "variable drive" for each type.

KM00321,00008F3 -19-14MAR19-3/5

7. Shift the multi speed gearbox (A) on the cutting attachment in the 3. gear (see **Adjusting Gear Selection with Multi Speed Gearbox for CLAAS Forage Harvesters** in the section Operating the Rotary Harvesting Unit).

A—Multi-Speed Transmission



KM371481 —UN—14MAR19

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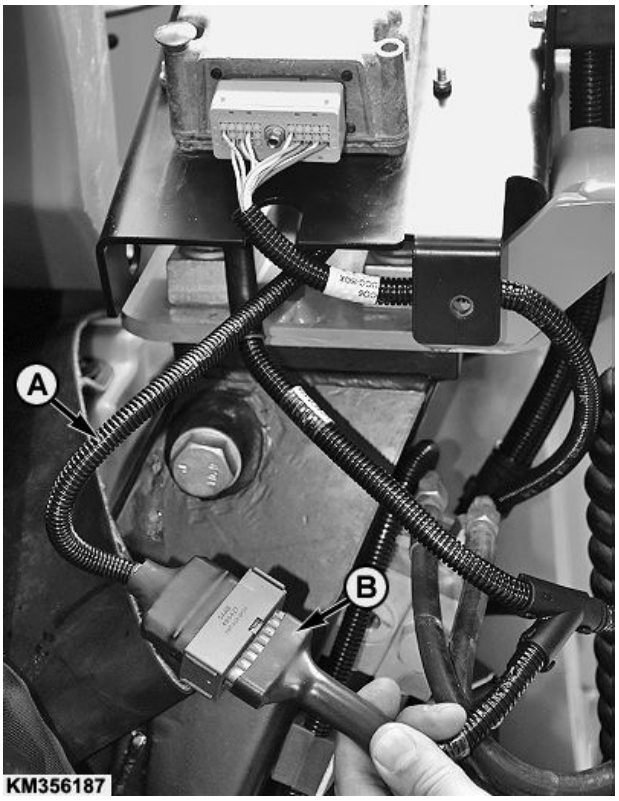
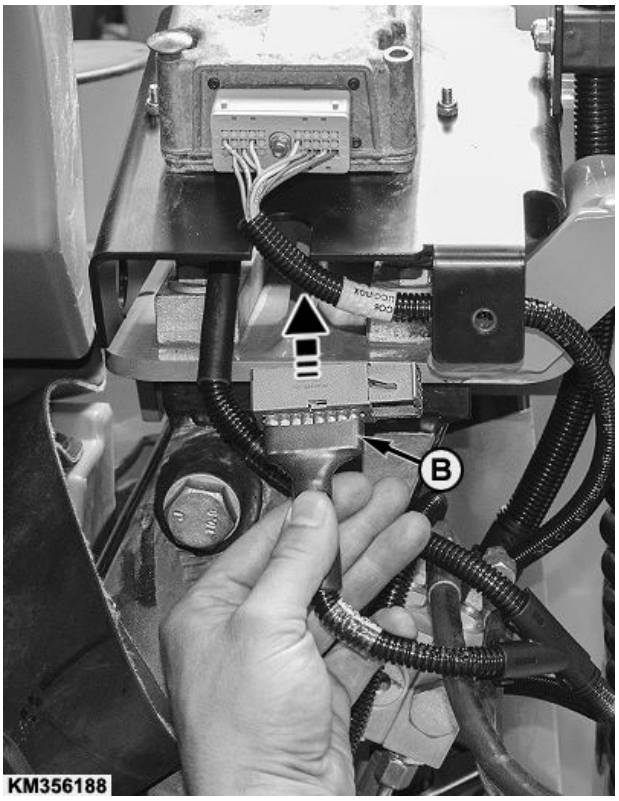
KM00321,00008F3 -19-14MAR19-4/5



KM356187 —UN—02JUL18



KM356188 —UN—02JUL18

A—Adapter cable **B—Main wire harness connector**

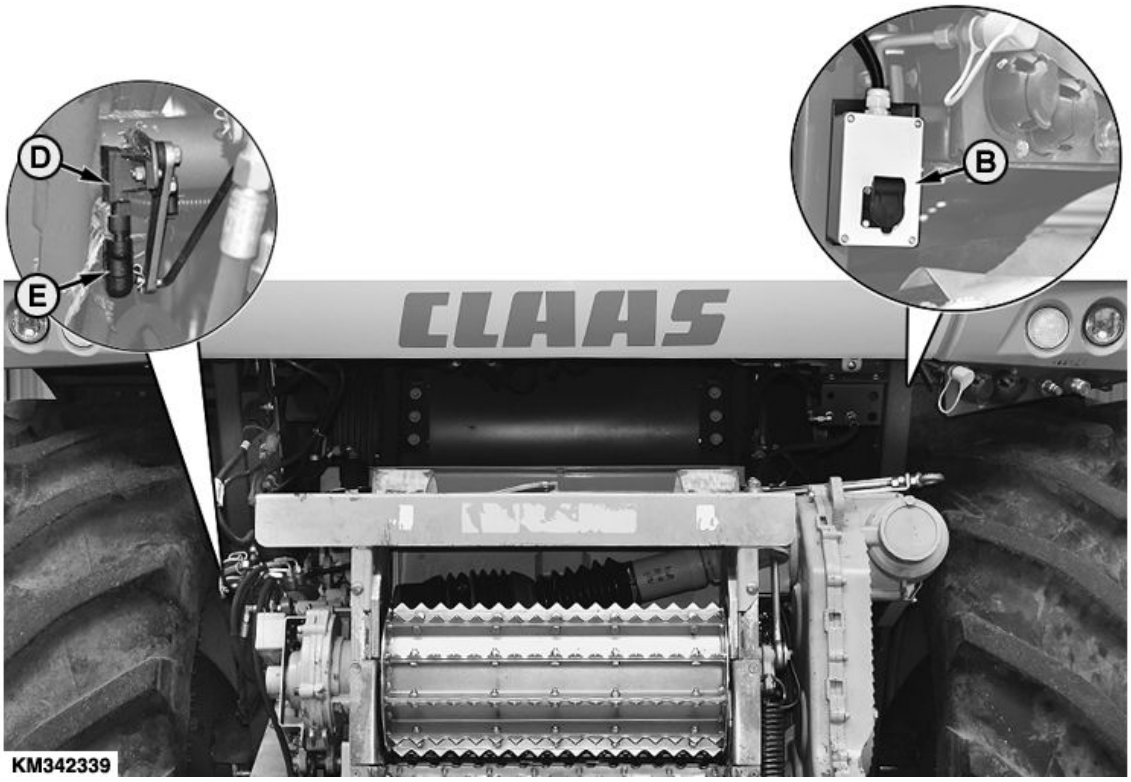
IMPORTANT: Perform this step only for rotary harvesting units that have been equipped for attachment of a support wheel at the factory.

NOTE: Rotary harvesting units that have not been equipped for attachment of a support wheel at the factory have no adapter cable (A).

8. The adapter cable (A) must be removed from the Claas control unit (C) when the programming is complete. To do so, proceed as follows:
   - Remove adapter cable (A).
   - Insert connector (B) of the main wiring harness directly to the Claas control unit.

KM00321,00008F3 -19-14MAR19-5/5

Install additional wiring harness (only forage harvesters of the types 498)



KM342339 —UN—03JUL18

IMPORTANT: The additional wiring harness is supplied with the following rotary harvesting units and must be mounted on the forage harvester:

- **All rotary harvesting units that are equipped for the attachment of the additional chassis**
- **All 10-row and 12-row rotary harvesting units**

NOTE: The additional wiring harness is required so that the rotary harvesting unit can be folded in the raised condition.

The wiring harness supplied must be installed on the Claas forage harvester before attaching the rotary harvesting unit for the first time.

To do so, proceed as follows:

1. Pull out the connector (E) from the angle sensor (D) of the forage harvester.
2. Connect the plug connections (A) of the supplied wiring harness between the angle sensor (D) and connector (E) on the forage harvester.

KM342337 —UN—02JUL18

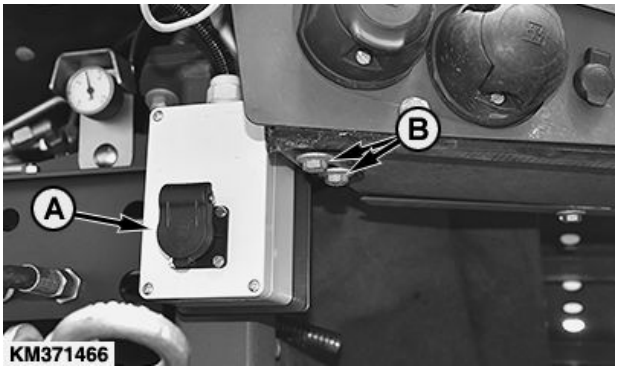
A—Plug connections
B—Socket outlet
C—Connecting cable
D—Angle sensor
E—Connector

Continued on next page

3. Install the socket outlet (A) on the Claas forage harvester with screws (B).

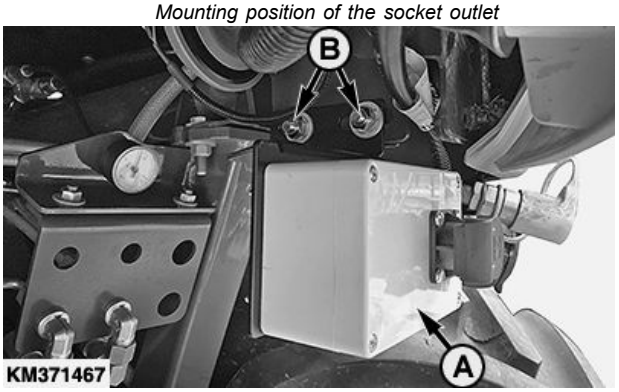
NOTE: The mounting position of the socket outlet varies and depends on the manufacture year of the forage harvester.

A—Socket outlet **B—Screws**



KM371466 —UN—08FEB19

Mounting position of the socket outlet



KM371467 —UN—08FEB19

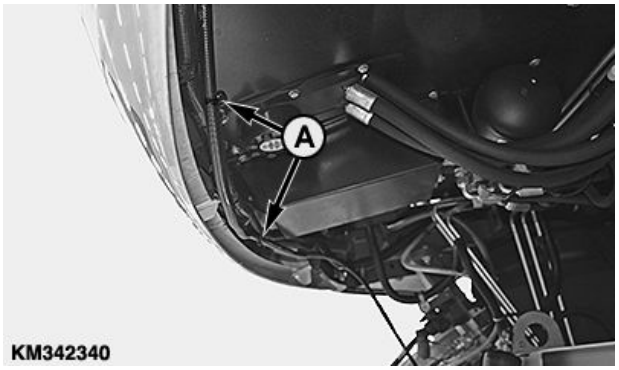
Mounting position of the socket outlet

KM00321,0000883 -19-26FEB19-2/3

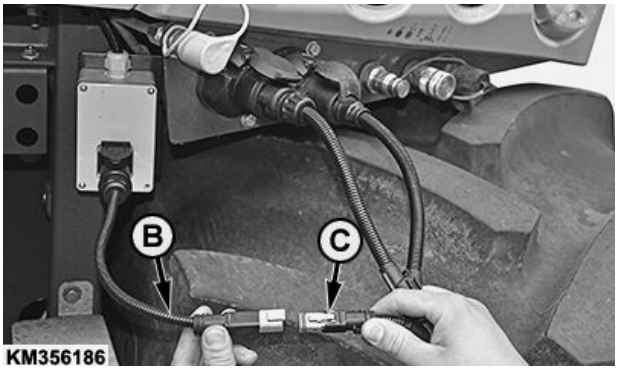
4. Fix the remaining cables with cable binders (A) behind the front cover.
5. Plug the connection cable (B) into the socket outlet and connect it to the main wiring harness (C).

NOTE: The socket outlet may be mounted on the forage harvester after the corn harvest. The socket outlet does not function as long as no plug is inserted.

A—Cable tie **C—Main wiring harness**
B—Connecting cable



KM342340 —UN—02JUL18



KM356186 —UN—03JUL18

KM00321,0000883 -19-26FEB19-3/3

Attaching to CLAAS Forage Harvesters

Rotary Harvesting Units with Standard Tilt Frame

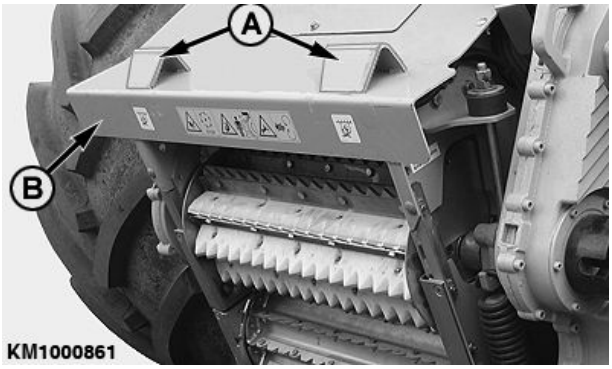
1. Drive the forage harvester close to the rotary harvesting unit's frame until latching hooks (A) protrude into brackets (D) of the attaching frame.

   NOTE: Brackets (D) may be installed in two different positions. Thus the rotary harvesting unit tilt in relation to the ground may be varied.

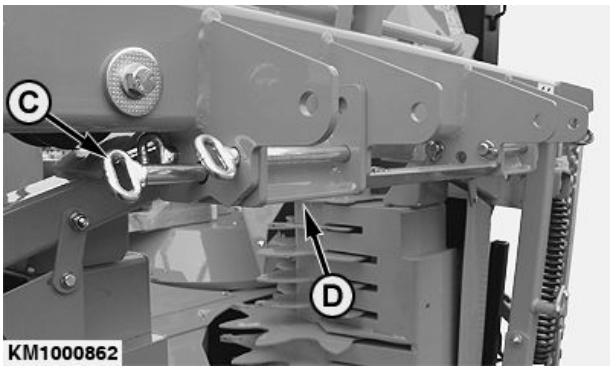
2. Remove pins (C) on both sides.
3. Lift front shield (B) up until latching hooks (A) of the rotary harvesting unit lie in brackets (D).
4. Lock the rotary harvesting unit:
   Secure upper bearing point by installing pin (C).
   Lock lower bearing point by engaging lever (E).

   IMPORTANT: Retain pin (C) and lever (E) with spring locking pin.

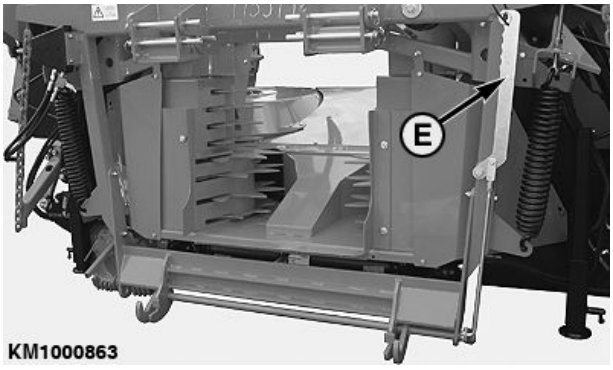
A—Latching Hooks
B—Front Shield
C—Pin
D—Bracket
E—Lever



KM1000861 —UN—25MAY09



KM1000862 —UN—25MAY09



KM1000863 —UN—25MAY09

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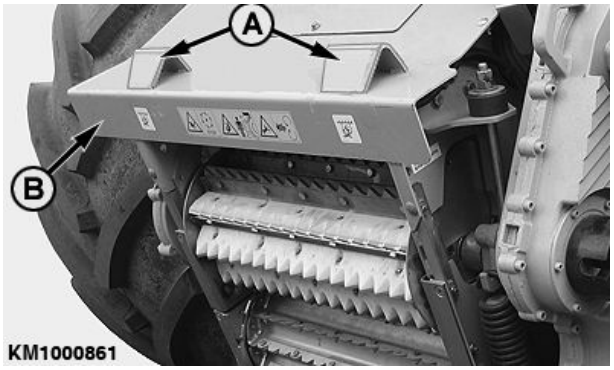
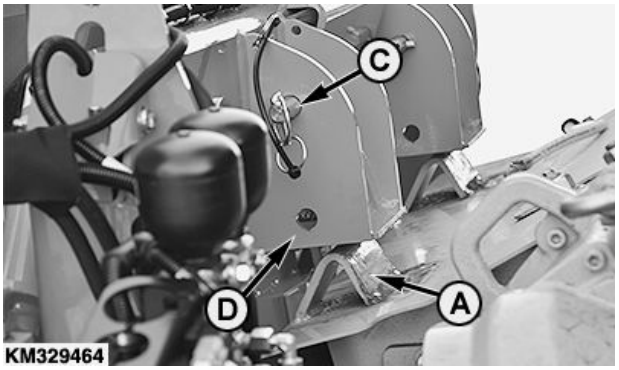
KM00321,00006CB -19-09OCT17-1/2

Rotary Harvesting Units with Attaching Frame for Support Wheel



KM1000861 —UN—25MAY09



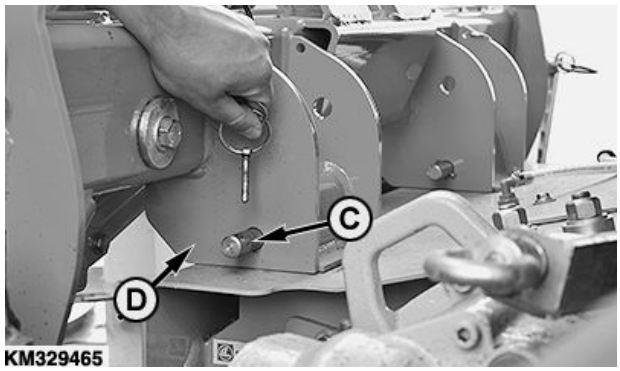
KM329464 —UN—29SEP17

1. Drive the forage harvester close to the rotary harvesting unit's frame until latching hooks (A) protrude into brackets (D) of the attaching frame.
2. Remove pins (C) on both sides.
3. Lift front shield (B) up until latching hooks (A) of the rotary harvesting unit lie in brackets (D).
4. Secure upper bearing point by installing pin (C). Lock lower bearing point by engaging lever (E).

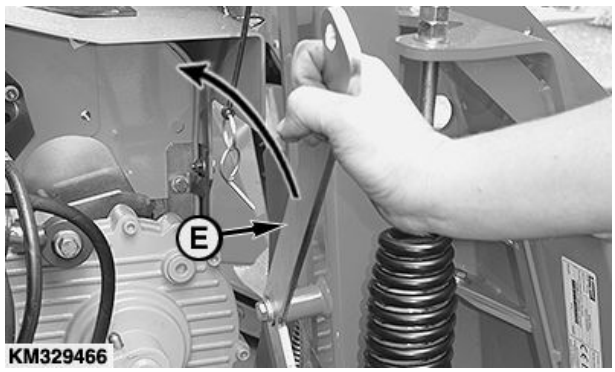
   IMPORTANT: Retain pin (C) and lever (E) with spring locking pin.

5. Lock jackstands (F) on the right and left side in the highest position. To do this, pull out spring-loaded pin (G) and let it re-engage when the jackstand is in its final position.

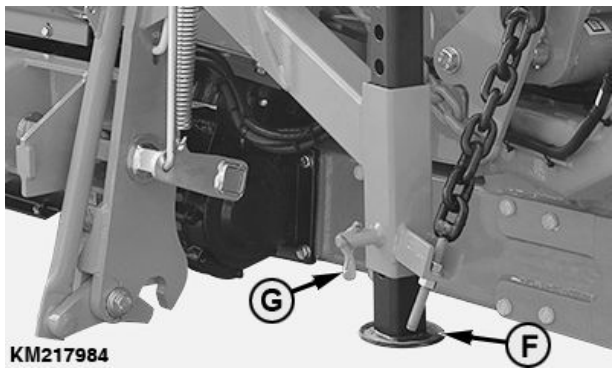
A—Latching Hooks
B—Front Shield
C—Pin
D—Bracket
E—Lever
F—Jackstand
G—Pin



KM329465 —UN—09OCT17



KM329466 —UN—29SEP17



KM217984 —UN—15SEP14

KM00321,00006CB -19-09OCT17-2/2

Rotary Harvesting Units with Multi-Speed Gearbox and Quick Coupler

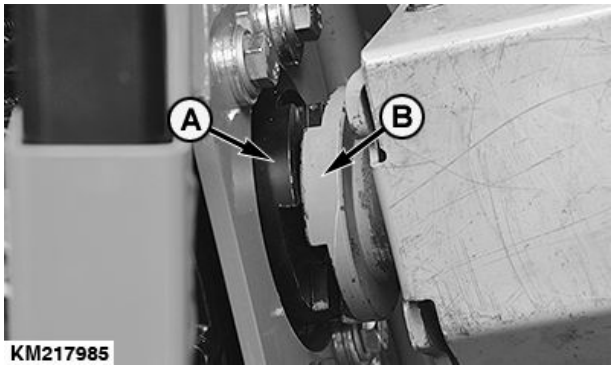
Adjust the quick coupler (only for initial use)

1. Make sure that attaching claw (A) on the rotary harvesting unit and attaching claw (B) on the forage harvester are in alignment.
2. If necessary, adjust the attaching claw (A) on the rotary harvesting unit.
   - Loosen screws (C).
   - Loosen lock nut (D) and adjust attaching claw (A) with set screw (E).
   - Tighten lock nut (D).
   - Tighten screws (C) to specified torque.

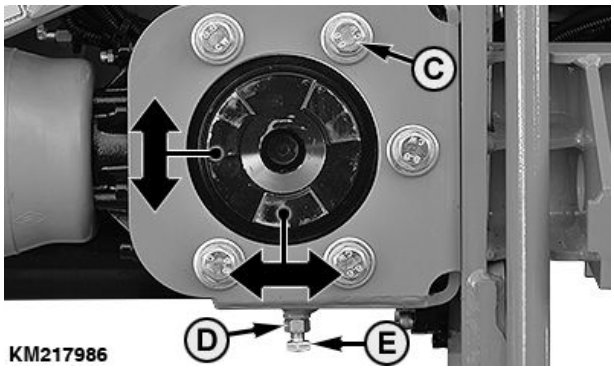
Specification

Screws (C) on Quick Coupler—Torque..... 240 N·m (177 lb.-ft.)

A—Attaching Claw on Rotary Harvesting Unit
B—Attaching Claw on Forage Harvester
C—Screw
D—Lock Nut
E—Set Screw



KM217985 —UN—15SEP14



KM217986 —UN—15SEP14

KM00321,00006CD -19-05OCT17-1/2

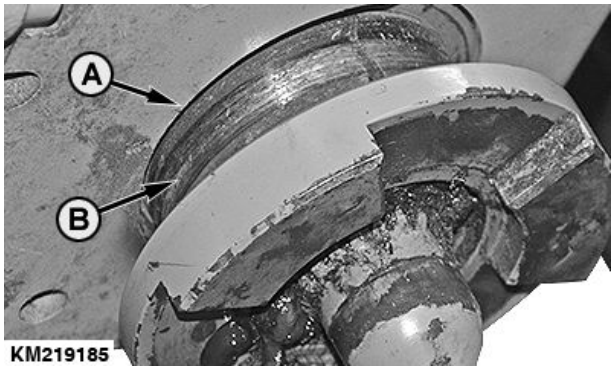
Adjust quick coupler in axial direction

IMPORTANT: Make sure that groove (B) on attaching claw of the forage harvester turns freely and does not touch housing (A).

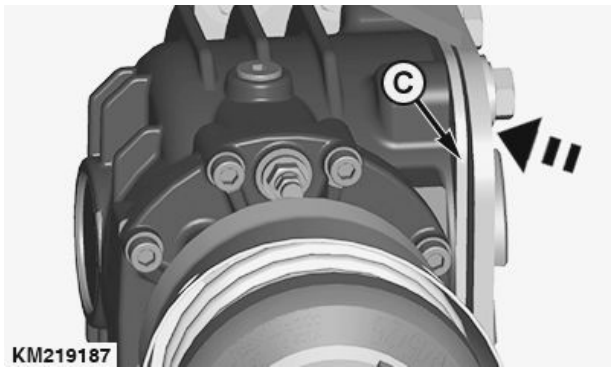
⚠ CAUTION: Risk of fire - Incorrect setting may result in airborne sparks!

If necessary, install spacer plate (C) **before** installing the bracket (see arrow).

A—Housing
B—Groove
C—Spacer Plate



KM219185 —UN—15SEP14



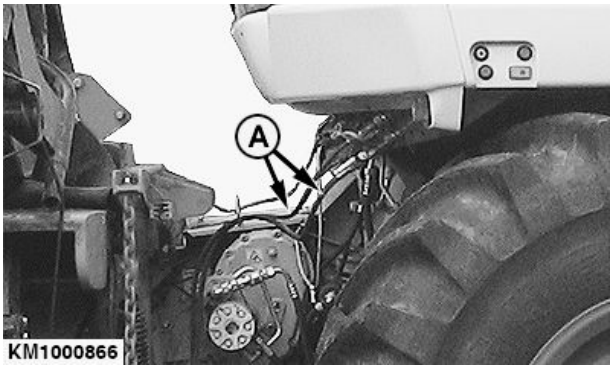
KM219187 —UN—15SEP14

KM00321,00006CD -19-05OCT17-2/2

Connect Hydraulic Hoses

Connect hydraulic hoses (A) to forage harvester using quick couplers.

A—Hydraulic hoses



KM1000866 —UN—26MAY09

KM00321,0000179 -19-27MAY09-1/1

Connect the Drive (Type 492)

NOTE: A step guard (A) for the u.j. shaft is installed on the input transmission.

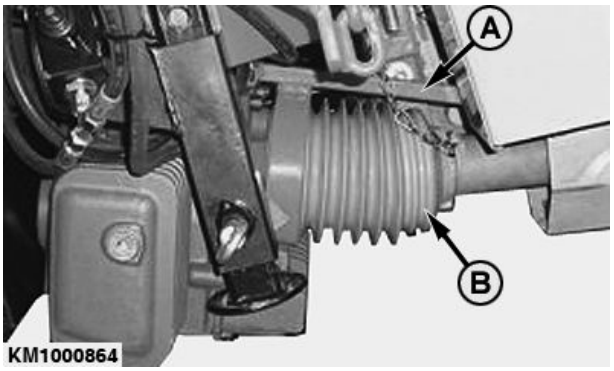
After the rotary harvesting unit has been attached to the forage harvester, the universal-jointed shaft for the drive must be installed.

1. Install u.j. shaft (B) as shown.

   IMPORTANT: Make sure the quick-lock pins on both sides of the u.j. shaft engage.

2. Secure guard for u.j. shaft with safety chain (C) to prevent it from turning.

A—Step guard
B—U.j. shaft
C—Safety chain



KM1000864 —UN—26MAY09

KM1000865 —UN—26MAY09

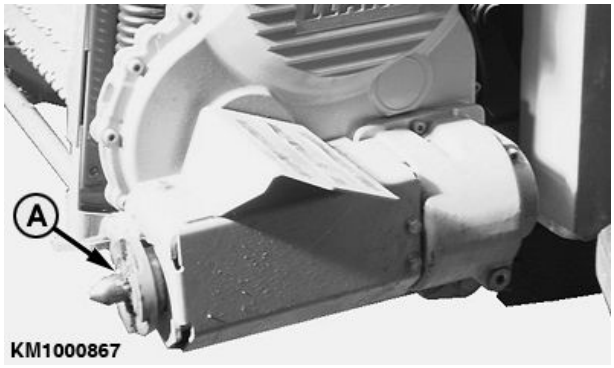
KM00321,0000177 -19-08JUN09-1/1

Connecting the Drive (Types 493, 494 and 497)

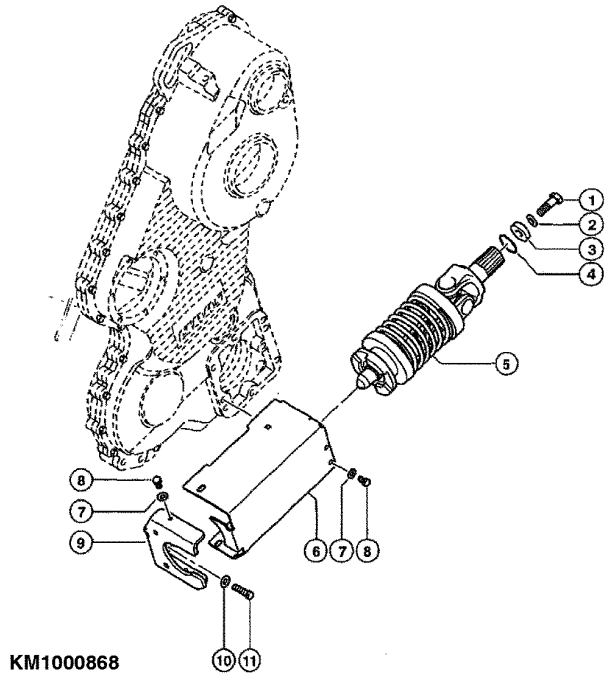
1. Completely remove claw clutch (A) from rotary harvesting unit drive.

   To do this, disassemble items 1 to 11.

A—Claw clutch



KM1000867 —UN—26MAY09

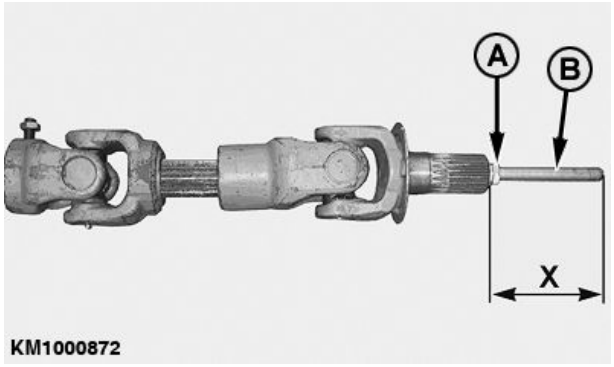


KM1000868 —UN—26MAY09

KM00321,00008F4 -19-13MAR19-1/7

2. Screw threaded rod (B) into u.j. shaft, adjust to 147 mm (X) and counterlock with hex. nut (A).

A—Hex Nut
B—Threaded Rod
X—167 mm



KM1000872 —UN—26MAY09

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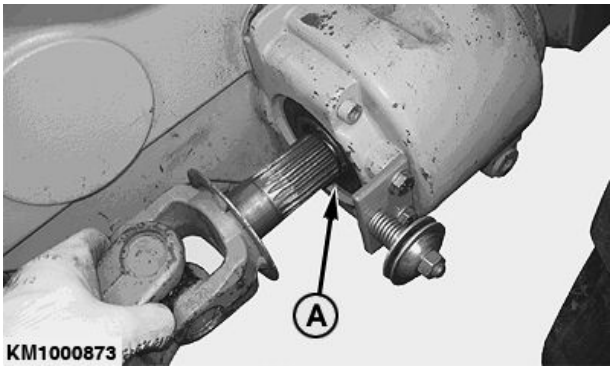
KM00321,00008F4 -19-13MAR19-2/7

3. First insert universal-jointed shaft into splined bushing (A) of rotary harvesting unit drive on the forage harvester.

A—Splined Bushing

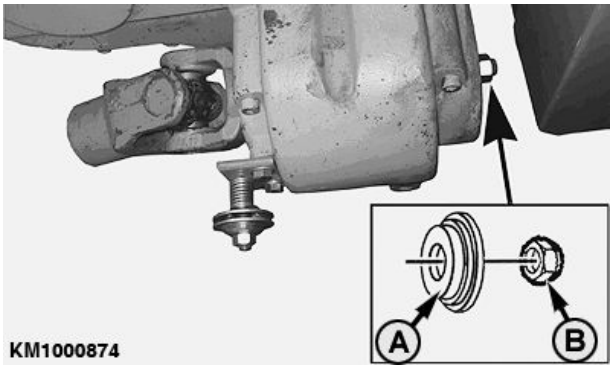


KM1000873 —UN—26MAY09

KM00321,00008F4 -19-13MAR19-3/7

4. Secure universal-jointed shaft with bushing (A) and retaining nut (B).

A—Bushing **B—Retaining Nut**

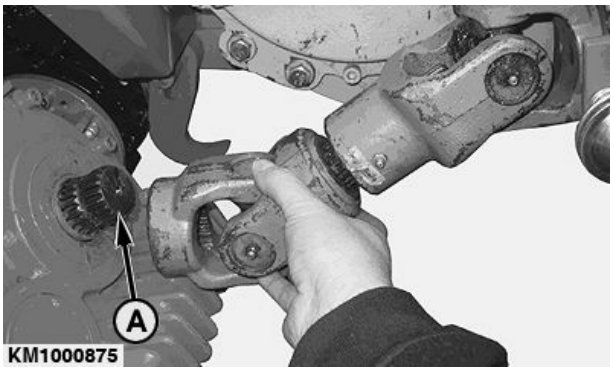


KM1000874 —UN—26MAY09

KM00321,00008F4 -19-13MAR19-4/7

5. Put the other end of the universal-jointed shaft on the rotary harvesting unit gearbox (A).

A—Transmission



KM1000875 —UN—26MAY09

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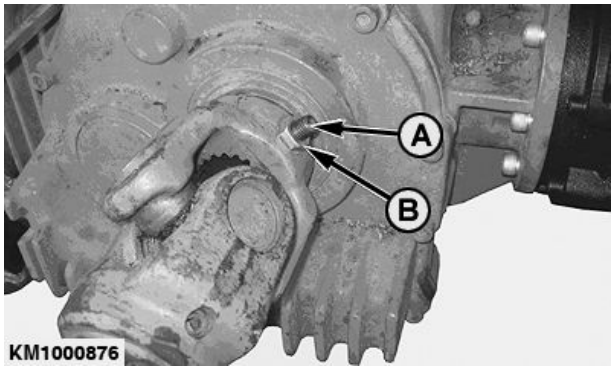
KM00321,00008F4 -19-13MAR19-5/7

6. Engage locking screw (A) into groove of splined shaft. Make sure that u.j. shaft can no longer move. Tighten lock nut (B).

A—Locking Screw **B—Lock Nut**

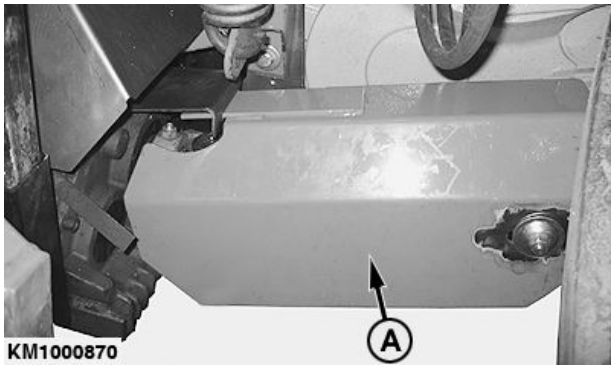


KM1000876 —UN—26MAY09

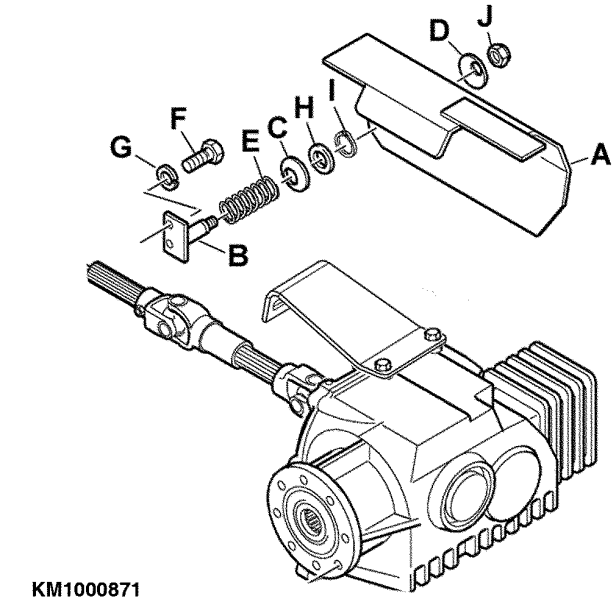
KM00321,00008F4 -19-13MAR19-6/7

7. Install universal-jointed shaft shaft shield (A) as shown.

A—Universal-Jointed shaft shield
B—Bracket
C—Cover (56x17x2.5 mm)
D—Cover (56x13x2.5 mm)
E—Compression spring
F— Bolt
G—Spring Washer
H—Back-Up Ring
I— Snap Ring
J— Retaining Nut



KM1000870 —UN—26MAY09



KM1000871 —UN—26MAY09

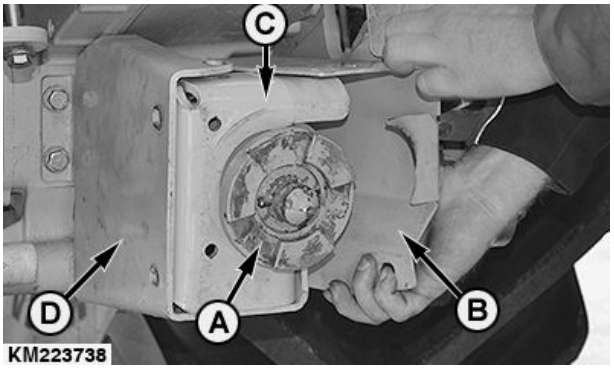
KM00321,00008F4 -19-13MAR19-7/7

Connecting the Drive (Type 496)

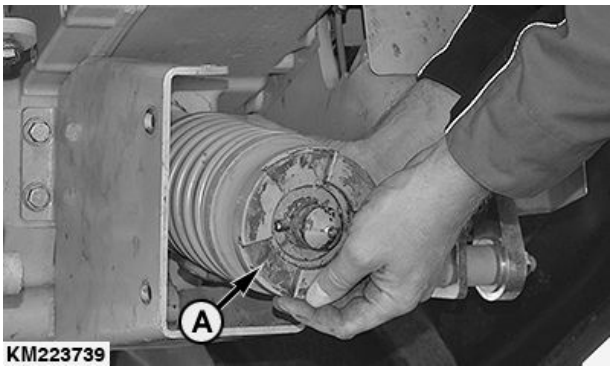
1. Completely remove claw clutch (A) from forage harvester header drive.

   To do this, remove plates (B), (C) and (D), and take off claw clutch (A).

A—Claw Clutch
B—Plate
C—Plate
D—Plate



KM223738 —UN—22OCT14



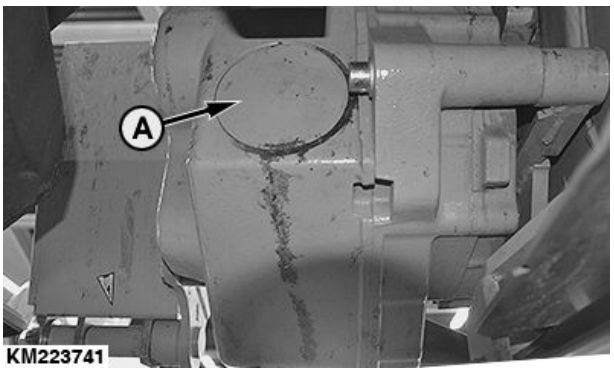
KM223739 —UN—22OCT14

KM00321,00003D8 -19-13MAR15-1/8

2. On the rear of the header drive, carefully force out the cap (A) using a 35 mm dia. shaft.

A—Cap

KM223740 —UN—22OCT14



KM223741 —UN—22OCT14

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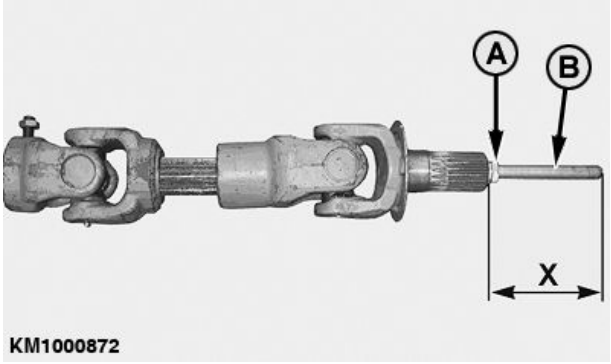
KM00321,00003D8 -19-13MAR15-2/8

3. Screw threaded rod (B) into u.j. shaft, adjust to 225 mm (8.86 in.) (X) and counterlock with hex. nut (A).

A—Hex. Nut
B—Threaded Rod
X—225 mm (8.86 in.)

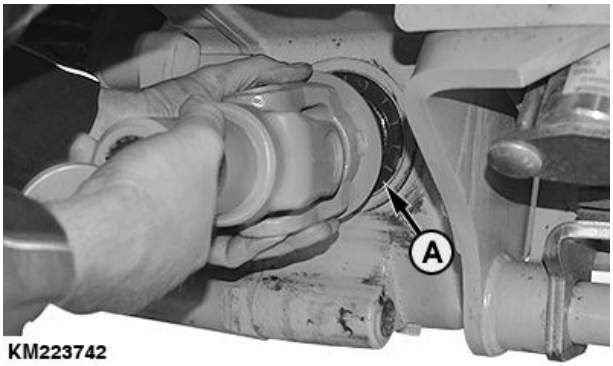


KM1000872 —UN—26MAY09

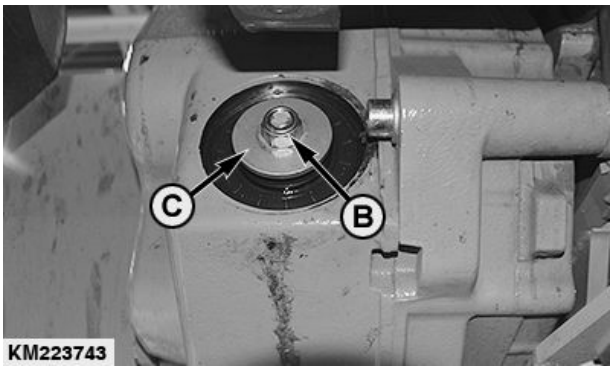
KM00321,00003D8 -19-13MAR15-3/8

4. Insert the u.j. shaft into header drive (A) on the forage harvester.
5. Secure the u.j. shaft to the rear of the header drive using washer (C) and lock nut (B).
6. Put the other end of the u.j. shaft on the rotary harvesting unit gear box (D).

A—Header Drive
B—Lock Nut
C—Washer
D—Gear Box



KM223742 —UN—22OCT14



KM223743 —UN—22OCT14

KM223744 —UN—22OCT14

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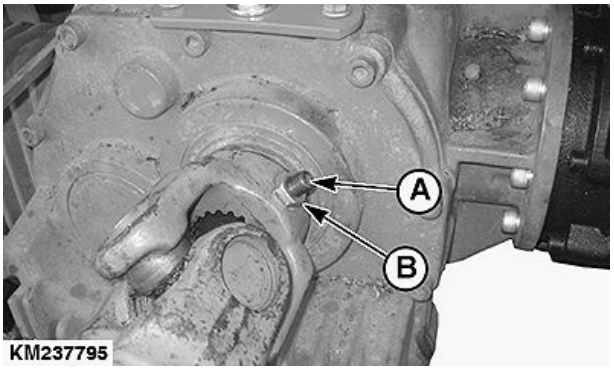
KM00321,00003D8 -19-13MAR15-4/8

7. Engage locking screw (A) into groove of splined shaft. Make sure that u.j. shaft can no longer move. Tighten lock nut (B).

A—Locking Screw **B—Lock Nut**

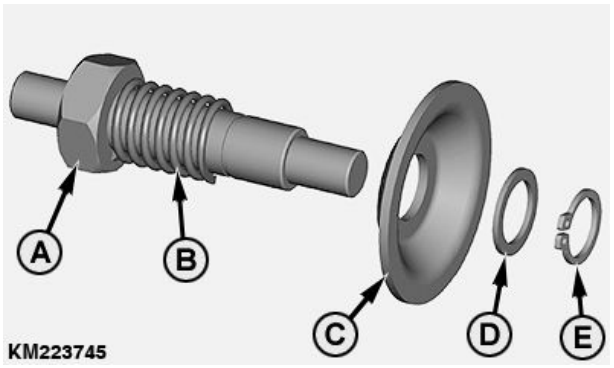


KM237795 —UN—13MAR15

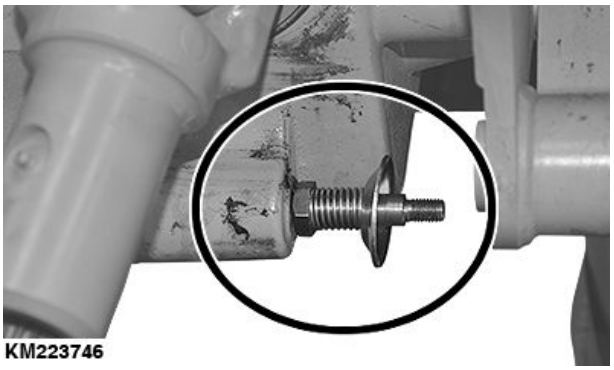
KM00321,00003D8 -19-13MAR15-5/8

8. Pre-assemble the bracket and install it on the header drive of the forage harvester.

A—Shaft **D—Washer**
B—Spring **E—Snap Ring**
C—Curved Spring Washer



KM223745 —UN—22OCT14



KM223746 —UN—22OCT14

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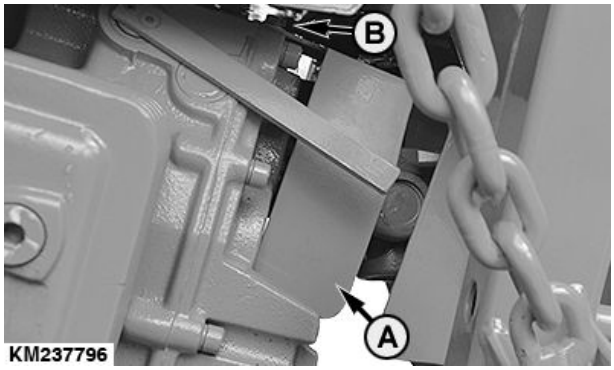
KM00321,00003D8 -19-13MAR15-6/8

NOTE: The u.j. shaft shield consists of 2 parts.

9. Install the u.j. shaft shield (A) on input gear box of the header drive, and secure with screw (B).

A—U.J. Shaft Shield **B—Screw**

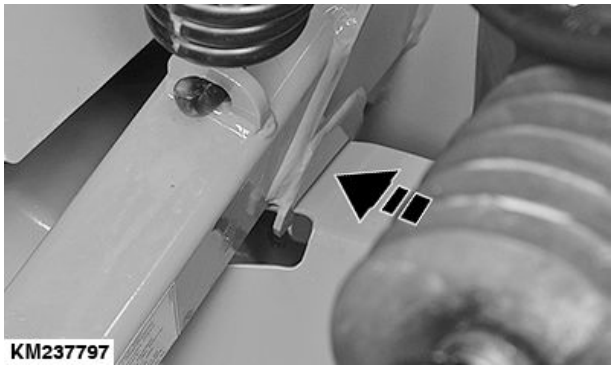


KM237796 —UN—13MAR15

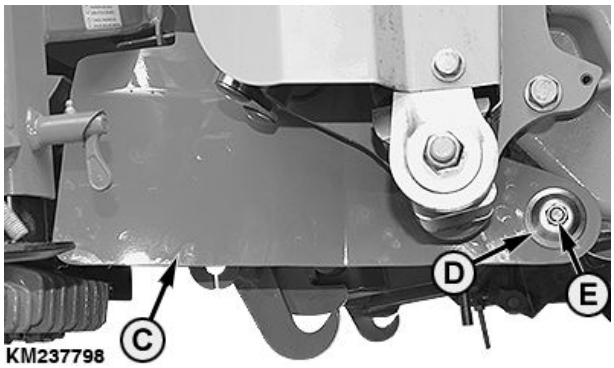
KM00321,00003D8 -19-13MAR15-7/8

10. Insert the top of u.j. shaft shield (C) into the attaching frame (see arrow).
11. Install u.j. shaft shield (C) and secure with washer (D) and lock nut (E).

C—U.J. Shaft Shield **E—Lock Nut**
D—Washer



KM237797 —UN—13MAR15



KM237798 —UN—13MAR15

KM00321,00003D8 -19-13MAR15-8/8

Replace CLAAS Tray with KEMPER Tray

The curved CLAAS tray may impair material flow below the feed rolls. This problem will be resolved by using the straight KEMPER tray (A).

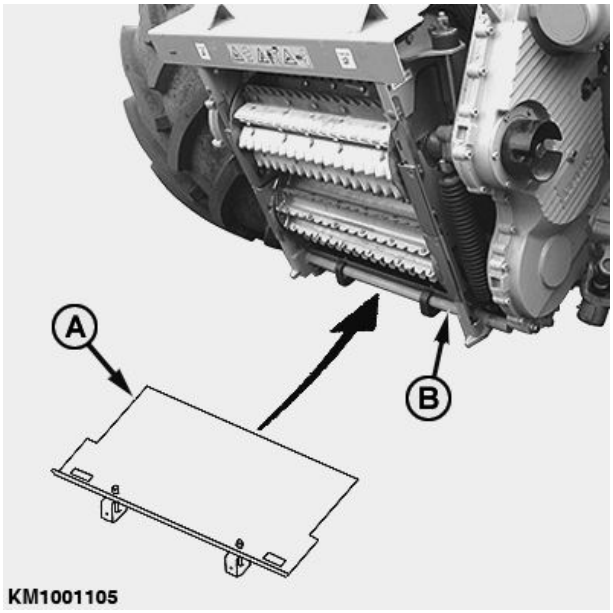
Installation:

Remove CLAAS tray, slide in straight KEMPER tray (A) and attach it to support shaft (B).

NOTE: When harvesting grass, remove the KEMPER tray.

A—KEMPER tray

B—Support shaft



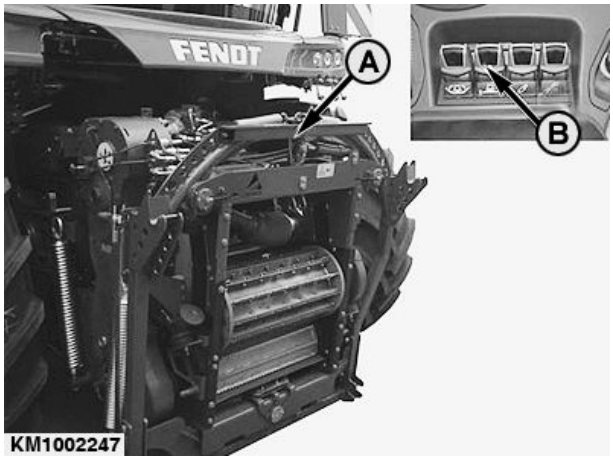
KM1001105 —UN—10FEB10

KM00321,000026B -19-25FEB10-1/1

Align the Oscillating Frame

Align oscillating frame (A) with linear module (B).

A—Oscillating Frame **B—Linear Module**



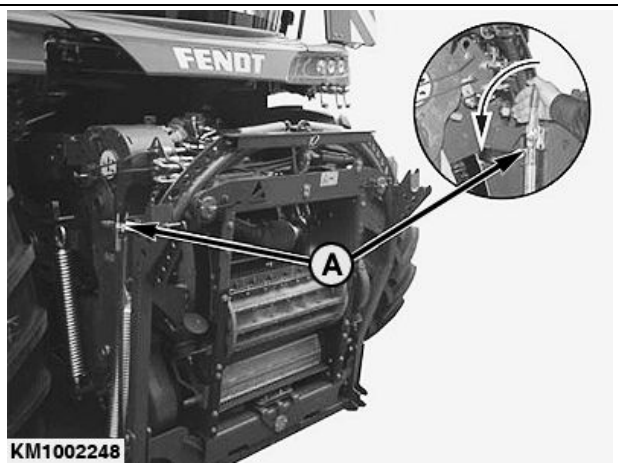
KM1002247 —UN—23MAR12

KM00321,0000126 -19-23MAR12-1/1

Attach the Rotary Harvesting Unit to FENDT Forage Harvesters

1. Use tensioning lever (A) to open the lock.

A—Tensioning Lever

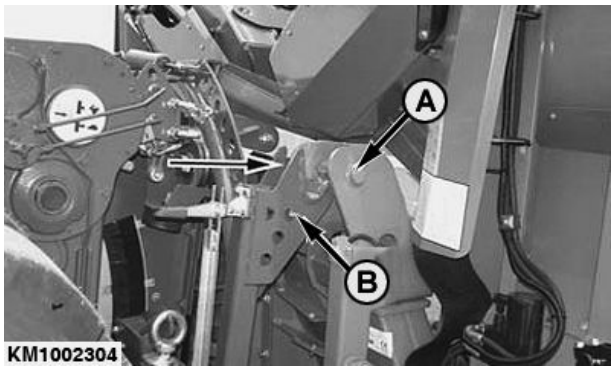


KM1002248 —UN—23MAR12

KM00321,0000184 -19-12JUN12-1/5

2. Drive the forage harvester slowly to the rotary harvesting unit until pins (A) on the right and left sides of the rotary harvesting unit are above the upper receiver jaws (B) on the tilt frame.

A—Pin **B—Receiver Jaws**



KM1002304 —UN—11JUN12

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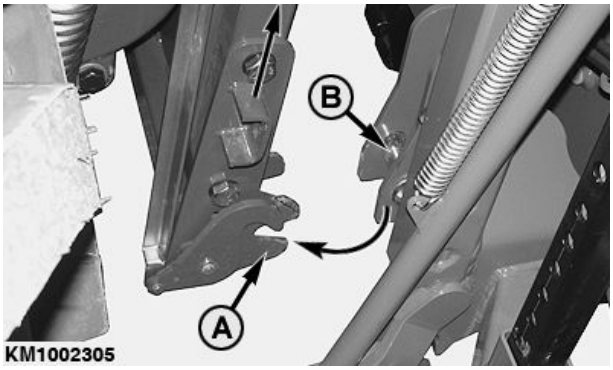
KM00321,0000184 -19-12JUN12-2/5

3. Raise the lifting gear until pins (B) engage in the lower latches (A) at left and right.
4. Stop the engine.
5. Apply the park brake.

A—Latches **B—Pin**

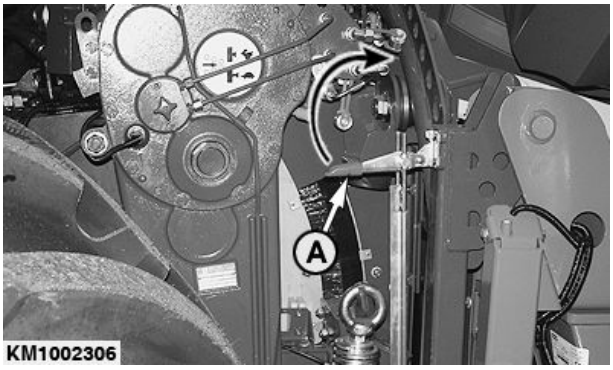


KM1002305 —UN—12JUN12

KM00321,0000184 -19-12JUN12-3/5

6. Use tensioning lever (A) to close the lock.

A—Tensioning Lever

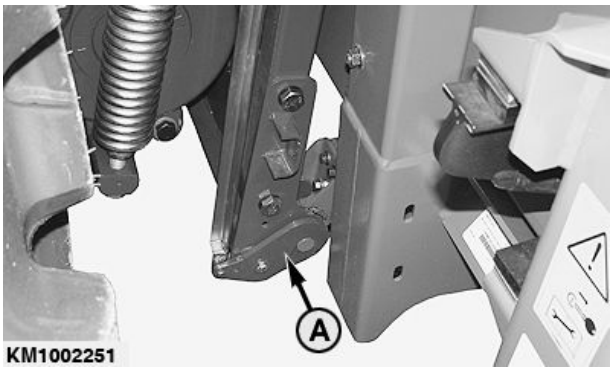


KM1002306 —UN—12JUN12

KM00321,0000184 -19-12JUN12-4/5

7. Check that locking hooks (A) are seated correctly.

A—Locking Hook



KM1002251 —UN—23MAR12

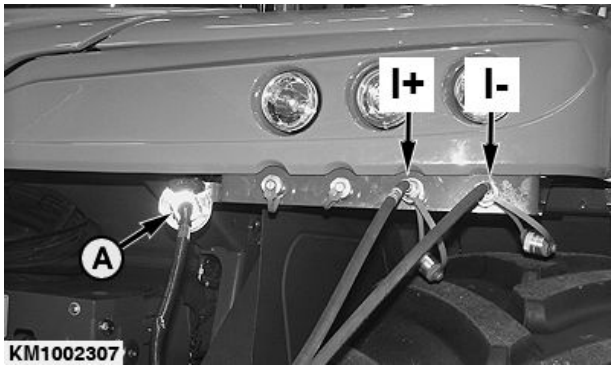
KM00321,0000184 -19-12JUN12-5/5

Connect Hydraulic Hoses and Wiring Harness

The hydraulic outlets on the forage harvester are numbered. Connect the numbered hydraulic hoses of the rotary harvesting unit to the relevant hydraulic outlets of the forage harvester.

Connect wiring harness (A) to the electrical socket on the forage harvester.

A—Wiring Harness

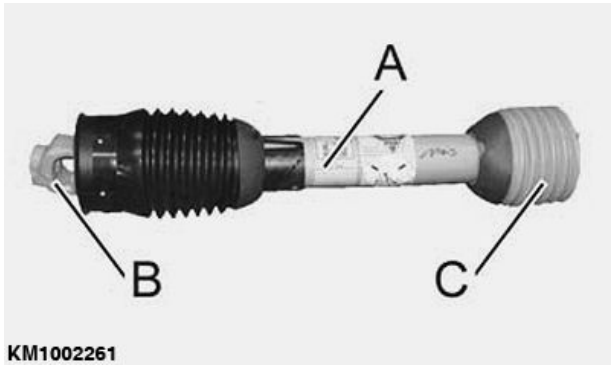


KM1002307 —UN—13JUN12

KM00321,0000185 -19-13JUN12-1/1

U.j. Shaft

A—U.j. Shaft
B—Header End
C—Forage Harvester Feeder End



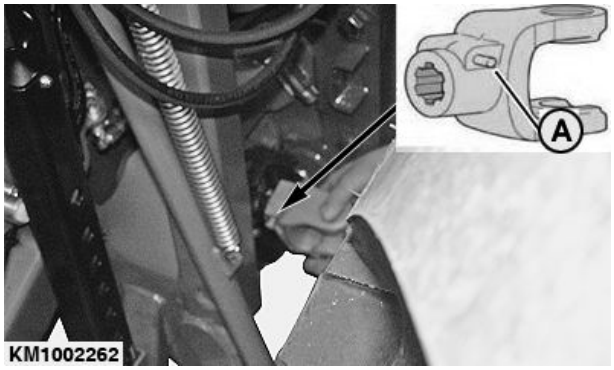
KM1002261 —UN—29MAR12

KM00321,000012C -19-29MAR12-1/1

Connect U.J. Shaft

1. Press sliding pin (A) and slide the joint onto the splined shaft on the rotary harvesting unit until sliding pin (A) engages in the ring-shaped groove.

A—Sliding Pin



KM1002262 —UN—29MAR12

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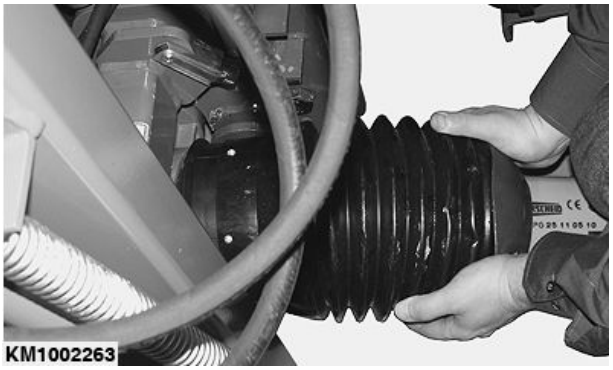
KM00321,00001DE -19-07MAY13-1/3

2. Slide the guard over the joint until it engages.

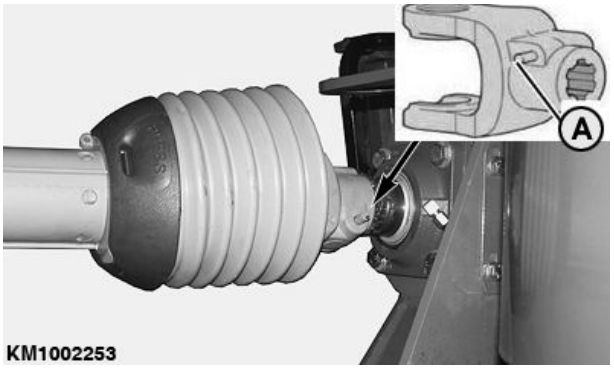


KM1002263 —UN—29MAR12

KM00321,00001DE -19-07MAY13-2/3

3. Press sliding pin (A) and slide the joint onto the splined shaft on the forage harvester until sliding pin (A) engages in the ring-shaped groove.

A—Sliding Pin



KM1002253 —UN—29MAR12

KM00321,00001DE -19-07MAY13-3/3

Change the Hydraulic System

Move ball cock (A) to position for the relevant header.

KM1002264 —UN—29MAR12

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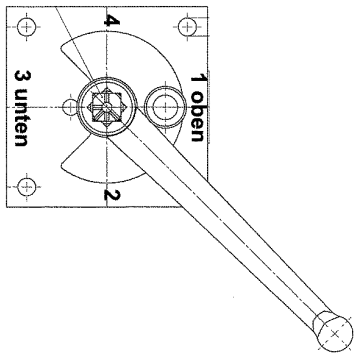
KM00321,000012D -19-29MAR12-1/2

Ball cock positions

1— Position for Maize **2— Position for Grass**

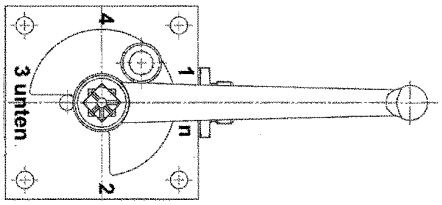
1



KM1002265

KM1002265 —UN—29MAR12

2



KM1002266

KM1002266 —UN—29MAR12

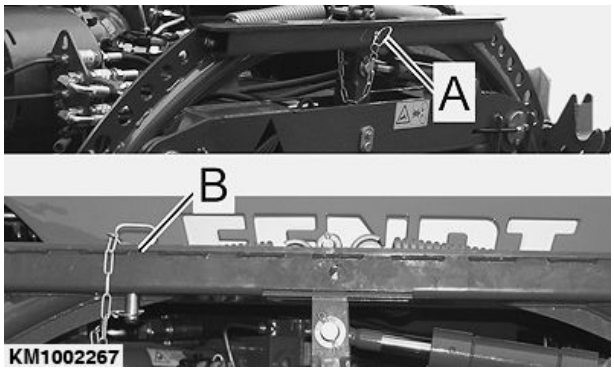
KM00321,000012D -19-29MAR12-2/2

Unlock the Oscillating Frame

Remove locking pin (A) and insert it in hole (B) in the oscillating frame.

NOTE: The oscillating frame is now unlocked.

A—Locking Pin **B—Hole**



KM1002267

KM1002267 —UN—29MAR12

KM00321,000012F -19-29MAR12-1/1

Detaching the Rotary Harvesting Unit

Detach the Rotary Harvesting Unit

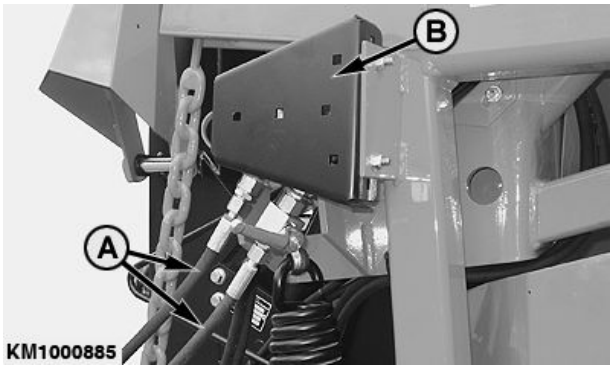
NOTE: Fold the rotary harvesting unit before setting it down.

1. Lower the rotary harvesting unit to the ground.
2. Shut off the forage harvester's engine, remove the key from the ignition and apply the parking brake.
3. Disconnect hydraulic hoses (A) from the forage harvester and store them in the bracket provided (B).
4. Pull off the drive shaft.

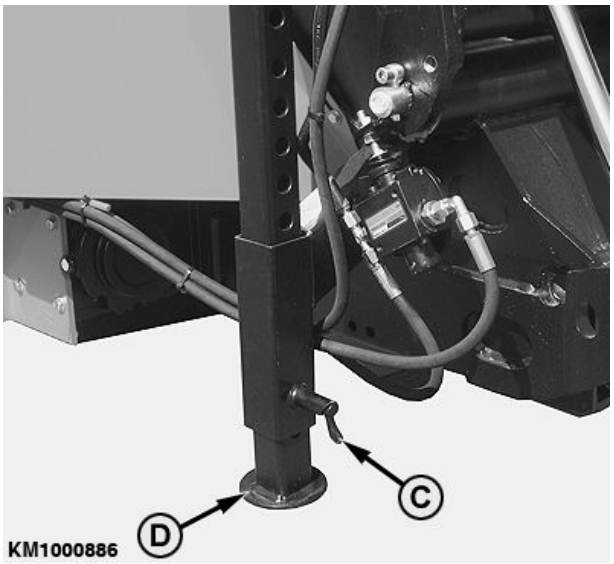
   NOTE: Leave the rotary harvesting unit standing at a height that allows the unit to be re-attached to a forage harvester at a later time. Never select a height that is too low.

5. Start the forage harvester and lower the rotary harvesting unit until the dividers touch the ground.
6. At left and right, lower jackstands (D) and lock them at a suitable height. To do this, pull out spring-loaded pin (C) and let it re-engage when the jackstand is at the correct height.
7. Open the retainer hooks on the attaching frame.
8. Lower the front shield further and drive out of the rotary harvesting unit's attaching frame.

A—Hydraulic hoses
B—Bracket
C—Pin
D—Jackstand



KM1000885 —UN—27MAY09



KM1000886 —UN—27MAY09

KM00321,0000182 -19-27MAY09-1/1

Driving on Public Roads

CAUTION: When driving on public roads or highways at night or during the day, observe local traffic regulations regarding warning devices, lighting and safety. See Section Safety.

IMPORTANT: Refer to the relevant forage harvester Operator's Manual to meet local government regulations when driving the forage harvester on public roads.

Fold the outer sections for transport according to the local regulations.

IMPORTANT: Risk of collision! To avoid damage, close the cab door of the forage harvester before folding the rotary harvesting unit.

KM00321,000027A -19-19FEB10-1/1

Folding the Rotary Harvesting Unit

CAUTION: Risk of serious injury! When unfolding or folding the rotary harvesting unit, make sure that everyone is clear of the machine.

When driving on public roads or highways at night or during the day, observe local traffic regulations regarding warning devices, lighting and safety.

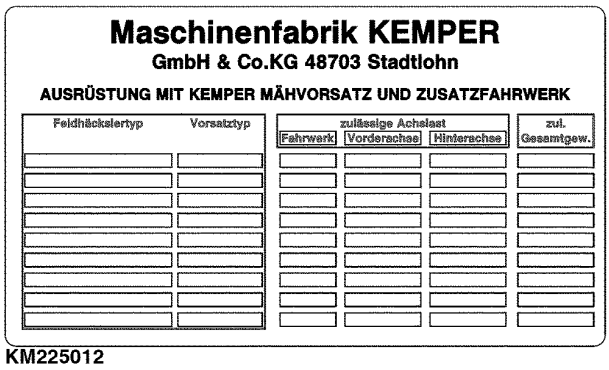
Fold the outer sections for transport according to the local regulations.

KM00321,00000CD -19-20DEC11-1/1

Apply Decal (Rotary Harvesting Units with Support Wheel)

On rotary harvesting units with a support wheel, a decal bearing the specifications is supplied (see illustration).

The decal must be applied to the forage harvester close to its type-plate.



KM225012

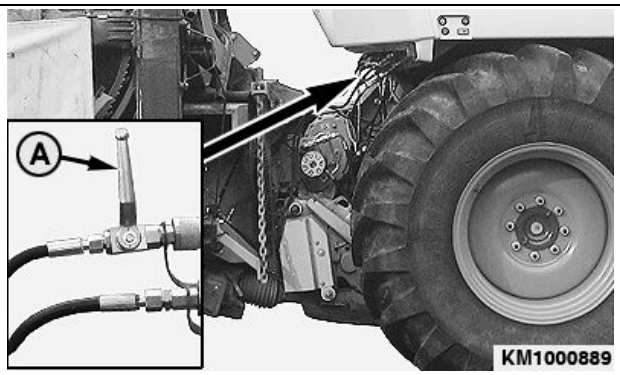
KM225012 —UN—02DEC14

KM00321,000035A -19-05JAN15-1/1

Close Safety Relief Valve (Rotary Harvesting Units for CLAAS Forage Harvesters Only)

Close safety relief valve (A) when driving on public roads to prevent unintended lowering of the outer sections.

A—Safety relief valve



KM1000889 —UN—28MAY09

KM00321,0000188 -19-28MAY09-1/1

Accident Prevention

When driving on public roads the entire area around the dividers must be covered with a protective guard (A).

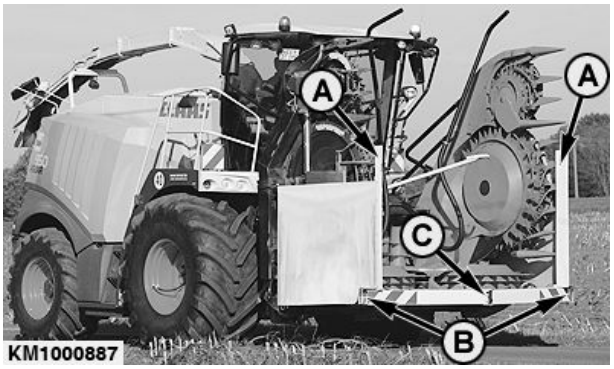
Protective guard (A), assembly sequence:

1. After the rotors have come to a complete stop, fold the side sections.
2. Position accident prevention device (C) on top of the middle divider and unfold it.
3. Install protective guards (A) on left-hand and right-hand side and fasten them with the rope provided with the accident prevention device.
4. The skid shoes, blades and other edges are covered with curtains.

Clearance lights and turn signals:

As the side lamps and indicator lamps on the forage harvester are usually covered by the raised gathering drums, the accident prevention device is equipped with two additional clearance lights/indicators (B). For the 12 V power supply use the 7-pole power outlet socket on the forage harvester.

Ground clearance:



KM1000887 —UN—27MAY09

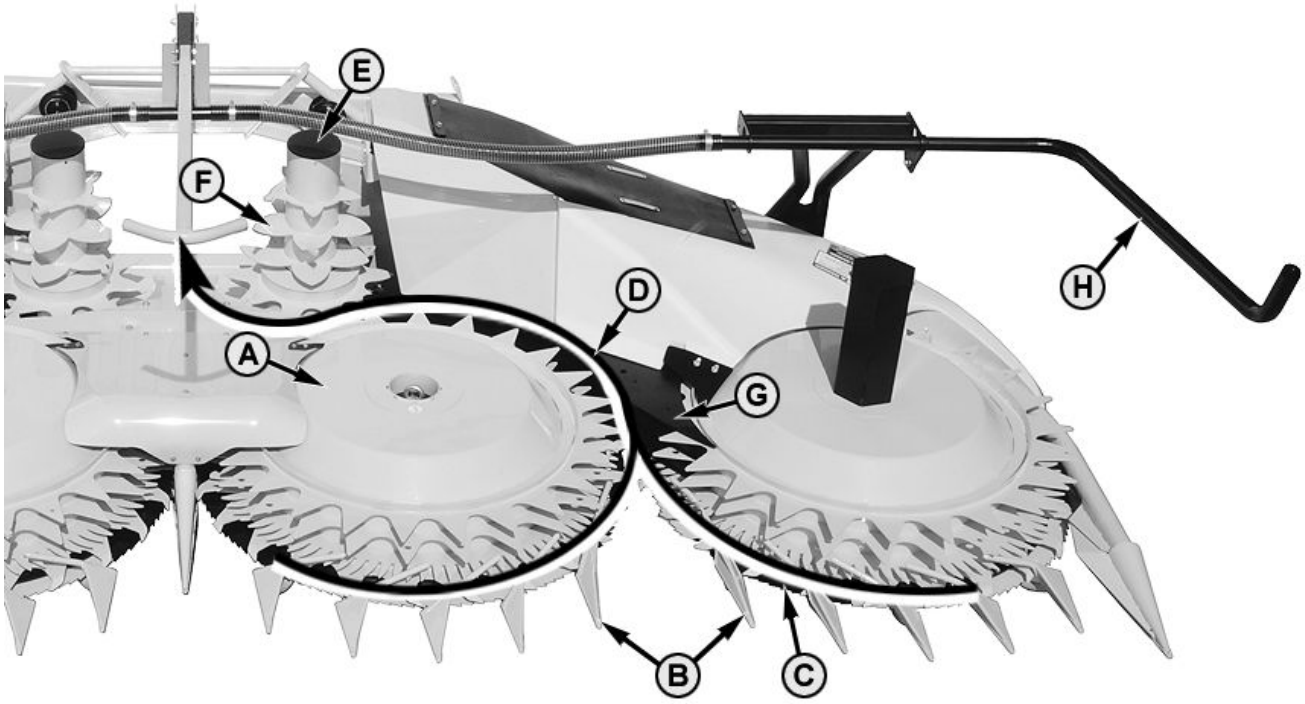
475 rotary harvesting unit shown

A—Protective guard
B—Clearance lights/indicators
C—Accident prevention device

When driving on public roads the rotary harvesting unit must be raised so that the accident prevention device (C) is approx. 300 mm (1 ft) above the ground at the front.

KM00321,0000185 -19-27MAY09-1/1

Rotary Harvesting Unit Method of Operation



KM1001796

KM1001796 —UN—10NOV11

A—Gathering Drum
B—Dividers
C—Rotating Blade
D—Lengthwise Direction of Crop
E—Feed Drum
F—Feed Teeth
G—Guides and Scrapers
H—Feed Bar

The rotary harvesting unit can approach the crop in different ways - it can operate along the rows, across the rows or at an angle to them (row-independent). Thus, the crop can be approached in the most suitable way. There are no gaps through which the stalks can escape. Although no counterknife is used, the fast rotating blades (C) cut all the stalks within the unit's operating width. The slowly rotating gathering drums (A) pass the stalks along the dividers (B). The stalk is seized by the row of feed teeth (F) as if by a gripper. The forward motion of the gathering drums (A) forces the crop against the feed teeth (F) and so the stalks are conveyed along the guides and scrapers (G) to the feed drums (E). Here, the cut crop lies against the feed teeth (F) of feed drums (E), which bundle the stalks neatly in the lengthwise direction (D) before conveying them to the feed rolls of the forage harvester.

IMPORTANT: Carefully follow all information given in the forage harvester's Operator's Manual for ballasting, choice of drive speed for the rotary harvesting unit, float adjustment and installing attaching frame on harvester.

KM00321,00000CE -19-20DEC11-1/1

Operating the Rotary Harvesting Unit - General Use

Starting the Forage Harvester

Starting up the forage harvester, switching on the cutterhead and rotary harvesting unit, and reversing the feed rolls should always take place with the engine running at idle speed (see forage harvester operator's manual for details). The rotary cutters do not move (due to overrun devices).

Engage forward gear at idle speed only. This avoids unnecessary wear on the clutches.

Operating the Rotary Harvesting Unit

Once the cutterhead is turning at the correct speed, and the rotary cutters are at the appropriate speed, drive into the standing crop.

Ground speed varies depending on the density of the crop, crop type and the performance of the forage harvester.

For headland turns, maintain the rate of rotation. This avoids unnecessary wear on the rotary harvesting unit drive.

When changing forage wagon, keep the rotary harvesting unit engaged. This avoids unnecessary wear on the rotary harvesting unit drive.

KM00321,000020F -19-24AUG09-1/1

Clear Blockages

CAUTION: Risk of serious injury! Never attempt to clear blockages in the rotary harvesting unit by hand while the unit is running. First shut off the forage harvester's engine, and wait until all moving parts have come to a stop.

During harvesting, most blockages can be cleared by briefly reversing the gathering drums.

KM00321,0000192 -19-09JUN09-1/1

Clear Blockages on CLAAS Forage Harvesters

When blockages occur, the gathering drums can be stopped and then reversed.

To clear blockages:

- Stop driving the machine.
- Drive the forage harvester backwards a short distance.
- Briefly press button (A) and wait until feeder and rotary harvesting unit have stopped.
- Press button (A) again and hold until the blockage is cleared.

NOTE: The reversing process takes place as long as button (A) is pressed.

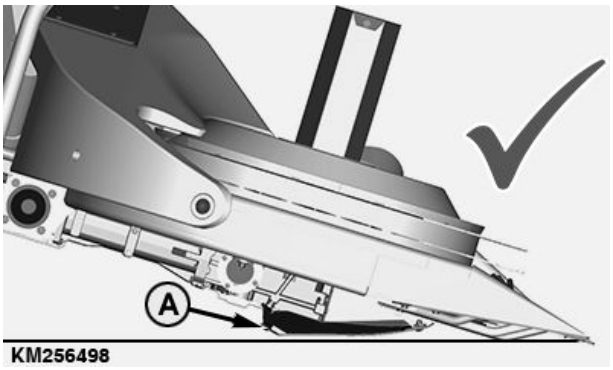
CAUTION: Risk of serious injury! Never attempt to clear blockages in the rotary harvesting unit by hand while the unit is running. First shut off the forage harvester's engine, and wait until all moving parts have come to a stop.

A—Button

KM1001192 —UN—28APR10

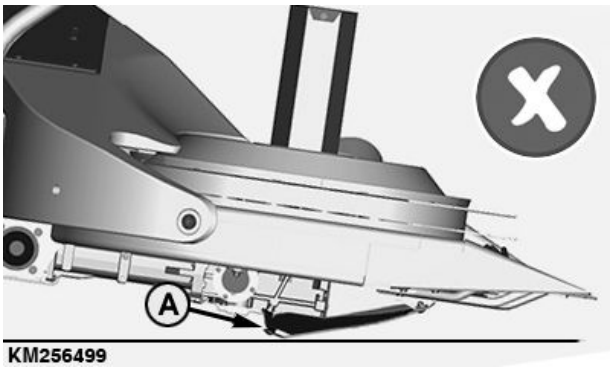
KM00321,0000198 -19-29JUN12-1/1

Adjust Skid Shoes Parallel to the Ground



KM256498

KM256498 —UN—25NOV15



KM256499

KM256499 —UN—25NOV15

As soon as rotary harvesting unit has reached its operating position:

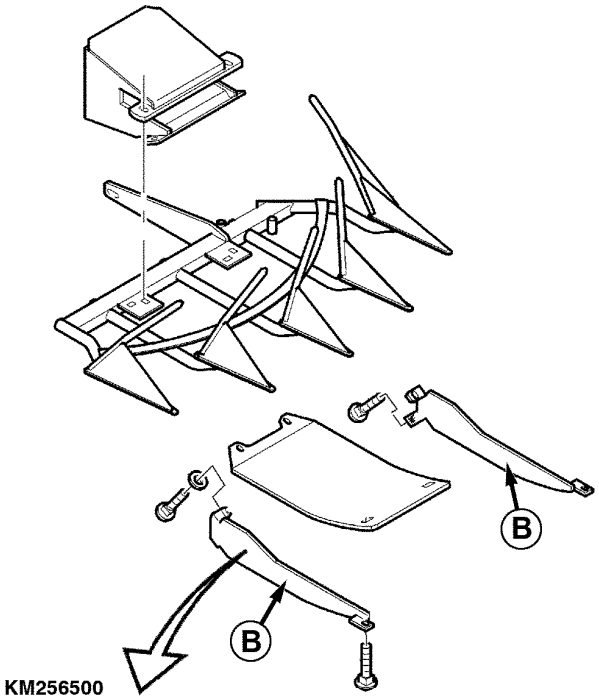
Make sure that skid shoes (A) are parallel to the ground.

Depending on the angle of the rotary harvesting unit to the ground, it may be necessary to remove spacers (B).

IMPORTANT: Incorrect adjustment may result in the skid shoes wearing out prematurely.

NOTE: Mower attachments starting from model year 2019 have more no spacers (B). Order spacers (B) through the spare parts distribution, if necessary.

A—Skid Shoes **B—Spacer**



KM256500

KM256500 —UN—25NOV15

KM00321,00008F5 -19-15MAR19-1/1

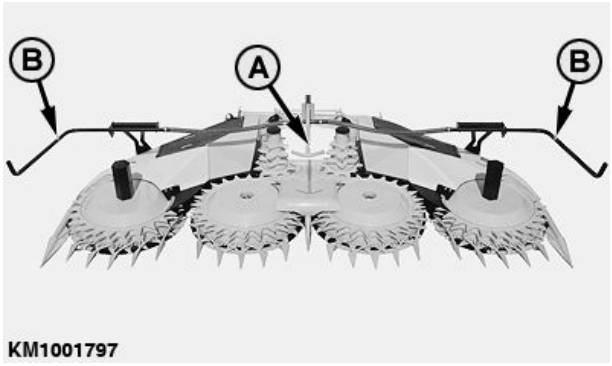
Adjusting the Central Feed Bar

NOTE: If the crop is short, set the central feed bar (A) low.

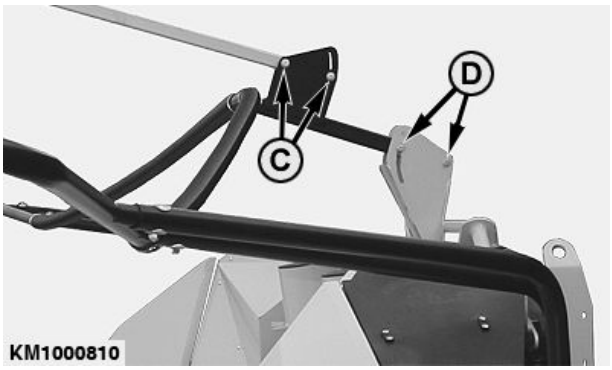
Feed bars (A) and (B) guide the cut crop inwards and ensure better feeding. The height of the central feed bar (C) can be altered in the field to suit the current crop conditions.

- Loosen screws (C) and (D) to adjust the height of the central feed bar. Then re-tighten the screws.

A—Central Feed Bar
B—Feed Bar
C—Screw
D—Screw



KM1001797 —UN—11NOV11



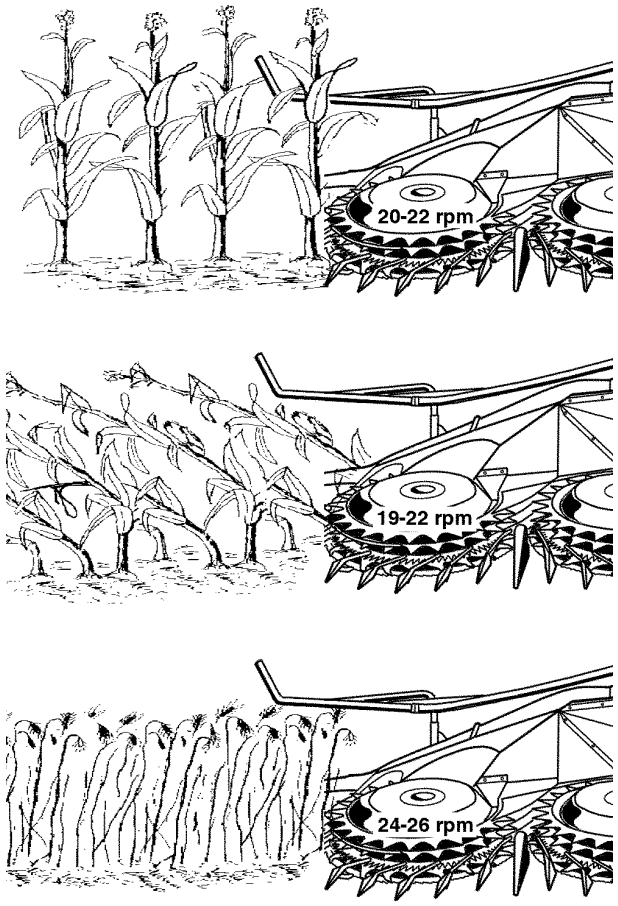
KM1000810 —UN—18MAR09

KM00321,00000CF -19-21DEC11-1/1

Gathering Drum Operating Speeds

NOTE: The speed at which the gathering drums operate depends on crop density, crop type and forage harvester version.

NOTE: The speed at which the gathering drums operate can be adjusted. The rotating blades operate at a fixed speed which cannot be altered.



KM1001798

KM1001798 —UN—11NOV11

KM00321,00000D0 -19-21DEC11-1/1

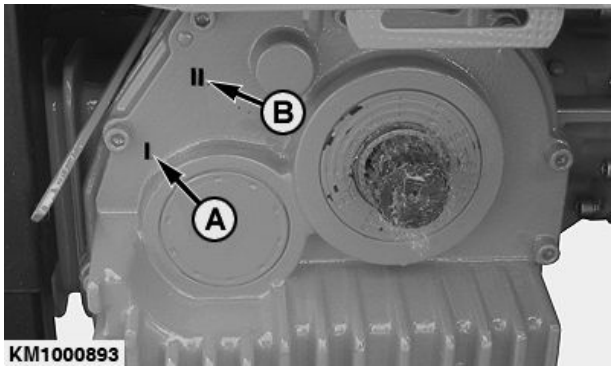
Length-of-Cut Adjustment with CLAAS Forage Harvester

On CLAAS forage harvesters the length-of-cut transmission and the drive speed of the rotary harvesting unit are shifted independently.

The CLAAS forage harvester and the KEMPER rotary harvesting unit each have 2 speeds.

See forage harvester Operator's Manual for adjustments to the forage harvester.

On the KEMPER rotary harvesting unit, 1st gear (A) and 2nd gear (B) are shifted directly at the drive case.



KM1000893

KM1000893 —UN—08JUN09

A—1. Gear **B—2. Gear**

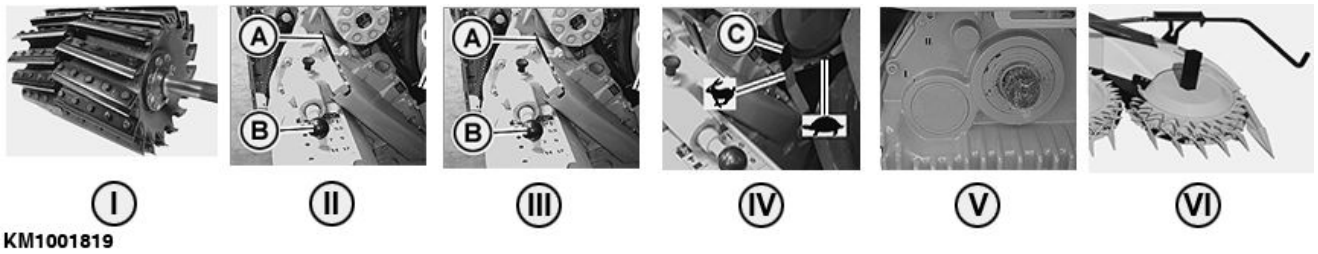
KM00321,000018B -19-08JUN09-1/1

Length of Cut and Drum Speeds with CLAAS Forage Harvester 830-900 (Types 492 and 496)

See tables below to determine length-of-cut adjustment.

KM00321,00004CC -19-01DEC15-1/1

Cutterhead with 24 Knives (Types 492 and 496)



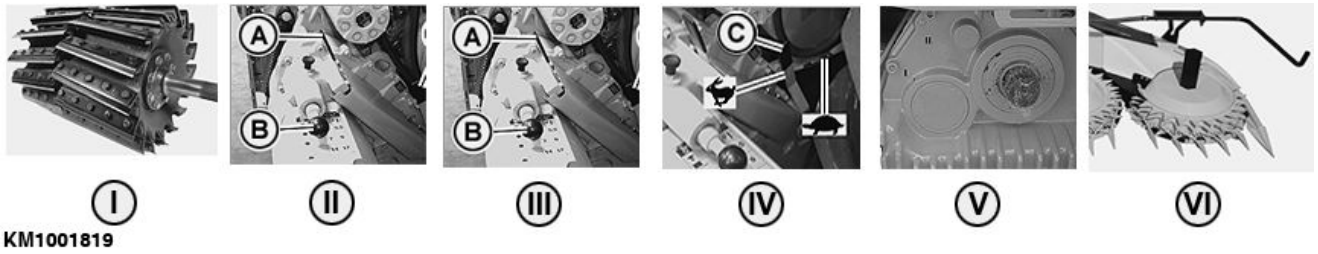
KM1001819

KM1001819 —UN—21DEC11

I—Length of cut, cutterhead with 2x12 knives	II—Lever (B) position	III—Lever (A) position	IV—Lever (C) position	V—Rotary harvesting unit, gear	V—Gathering drum speed
4 mm (0.16 in.)	1	Slow	Slow	1	22
5.5 mm (0.22 in.)	1	Fast	Fast	1	26
7 mm (0.28 in.)	2	Slow	Slow	2	27
9 mm (0.35 in.)	2	Fast	Fast	1	26
14 mm (0.55 in.)	3	Slow	Slow	2	27
17 mm (0.67 in.)	3	Fast	Fast	2	33

KM00321,00004CD -19-01DEC15-1/1

Cutterhead with 20 Knives (Types 492 and 496)



KM1001819

KM1001819 —UN—21DEC11

I—Length of cut, cutterhead with 2x10 knives	II—Lever (B) position	III—Lever (A) position	IV—Lever (C) position	V—Rotary harvesting unit, gear	V—Gathering drum speed
5 mm (0.20 in.)	1	Slow	Slow	1	22
6.5 mm (0.26 in.)	1	Fast	Fast	1	26
8.5 mm (0.33 in.)	2	Slow	Slow	2	27
11 mm (0.43 in.)	2	Fast	Fast	1	26
17 mm (0.67 in.)	3	Slow	Slow	2	27
21 mm (0.83 in.)	3	Fast	Fast	2	33

KM00321,00004CE -19-01DEC15-1/1

Length of Cut and Drum Speeds with CLAAS Forage Harvester 830-900 (Type 493)

2-Speed Gear Box

The two-speed gear box of the rotary harvesting unit is available in two versions:

- **Speed increase** for normal to long length of cut (standard)
- **Speed reduction** for short length of cut (option)

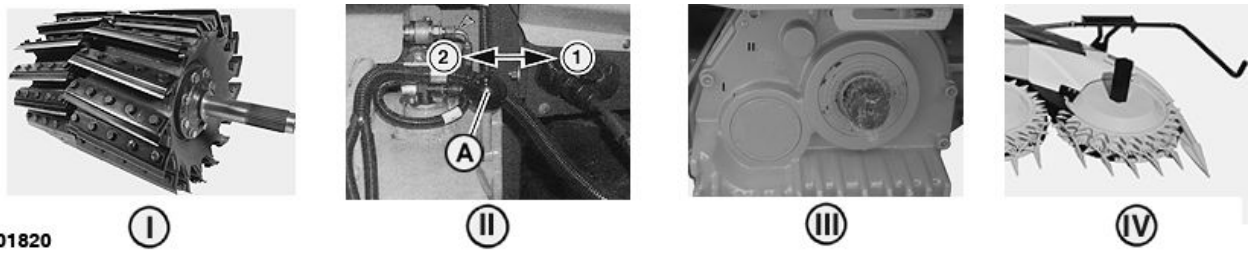
See tables below to determine length-of-cut adjustment.

KM1001823 —UN—23JAN12

KM00321,00000D3 -19-04JAN12-1/1

Cutterhead with 28 Knives (Type 493)

Two-speed gear box (III) for normal to long length of cut (standard)



KM1001820 —UN—21DEC11

I—Length of cut, number of knives		II—Length-of-cut transmission, forage harvester	III—Rotary harvesting unit drive	IV—Gathering drum speed
2x14 knives	2x7 knives	Gear	Gear	rpm
5.1 mm (0.20 in.)	10.2 mm (0.40 in.)	1	1	26
6.0 mm (0.24 in.)	12.0 mm (0.47 in.)		1	26
6.9 mm (0.27 in.)	13.8 mm (0.54 in.)		1	26
7.7 mm (0.30 in.)	15.4 mm (0.60 in.)		1	26
8.6 mm (0.34 in.)	17.2 mm (0.68 in.)		2	33
6.9 mm (0.27 in.)	13.8 mm (0.54 in.)	2	1	26
7.7 mm (0.30 in.)	15.4 mm (0.60 in.)		1	26
8.6 mm (0.34 in.)	17.2 mm (0.68 in.)		2	33
9.4 mm (0.37 in.)	18.8 mm (0.74 in.)		2	33
10.3 mm (0.20 in.)	20.6 mm (0.81 in.)		2	33
11.1 mm (0.44 in.)	22.2 mm (0.87 in.)		2	33
12.0 mm (0.47 in.)	24.0 mm (0.94 in.)		2	33

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KM00321,00000E3 -19-04JAN12-1/2

Two-speed gear box (III) for short length of cut (option)

KM1001820

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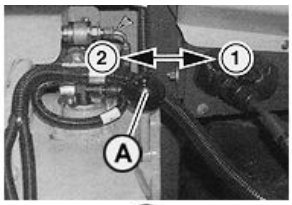

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KM1001820 —UN—21DEC11

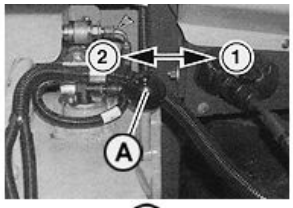
I—Length of cut, number of knives		II—Length-of-cut transmission, forage harvester	III—Rotary harvesting unit drive	IV—Gathering drum speed
2x14 knives	2x7 knives	Gear	Gear	rpm
3.4 mm (0.13 in.)	6.8 mm (0.27 in.)	1	2	20
4.3 mm (0.17 in.)	8.6 mm (0.34 in.)		2	20
5.1 mm (0.20 in.)	10.2 mm (0.40 in.)		2	20
6.0 mm (0.24 in.)	12.0 mm (0.47 in.)		2	20
6.9 mm (0.27 in.)	13.8 mm (0.54 in.)		1	26
7.7 mm (0.30 in.)	15.4 mm (0.61 in.)		1	26
8.6 mm (0.34 in.)	17.2 mm (0.68 in.)		1	26
6.9 mm (0.27 in.)	13.8 mm (0.54 in.)	2	1	26
7.7 mm (0.30 in.)	15.4 mm (0.61 in.)		1	26
8.6 mm (0.34 in.)	17.2 mm (0.68 in.)		1	26
9.4 mm (0.37 in.)	18.8 mm (0.74 in.)		1	26

KM00321,00000E3 -19-04JAN12-2/2

Cutterhead with 24 Knives (Type 493)

Two-speed gear box (III) for normal to long length of cut (standard)

KM1001820 (I)



(II)

(III)

(IV)

KM1001820 —UN—21DEC11

I—Length of cut, number of knives		II—Length-of-cut transmission, forage harvester	III—Rotary harvesting unit drive	IV—Gathering drum speed
2x12 knives	2x6 knives	Gear	Gear	rpm
6 mm (0.24 in.)	12 mm (0.47 in.)	1	1	26
7 mm (0.28 in.)	14 mm (0.55 in.)		1	26
8 mm (0.31 in.)	16 mm (0.63 in.)		1	26
9 mm (0.35 in.)	18 mm (0.71 in.)		1	26
10 mm (0.39 in.)	20 mm (0.79 in.)		2	33
8 mm (0.31 in.)	16 mm (0.63 in.)	2	1	26
9 mm (0.35 in.)	18 mm (0.71 in.)		1	26
10 mm (0.39 in.)	20 mm (0.79 in.)		2	33
11 mm (0.43 in.)	22 mm (0.87 in.)		2	33
12 mm (0.47 in.)	24 mm (0.94 in.)		2	33
13 mm (0.26 in.)	26 mm (1.02 in.)		2	33
14 mm (0.55 in.)	28 mm (1.10 in.)		2	33

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KM00321,00000E4 -19-04JAN12-1/2

Two-speed gear box (III) for short length of cut (option)

KM1001820

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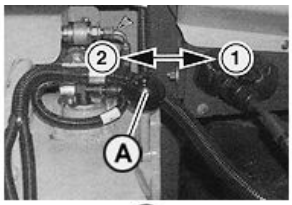

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KM1001820 —UN—21DEC11

I—Length of cut, number of knives		II—Length-of-cut transmission, forage harvester	III—Rotary harvesting unit drive	IV—Gathering drum speed
2x12 knives	2x6 knives	Gear	Gear	rpm
4 mm (0.16 in.)	8 mm (0.31 in.)	1	2	20
5 mm (0.20 in.)	10 mm (0.39 in.)		2	20
6 mm (0.24 in.)	12 mm (0.47 in.)		2	20
7 mm (0.28 in.)	14 mm (0.55 in.)		2	20
8 mm (0.31 in.)	16 mm (0.63 in.)		1	26
9 mm (0.35 in.)	18 mm (0.71 in.)		1	26
10 mm (0.39 in.)	20 mm (0.79 in.)		1	26
8 mm (0.31 in.)	16 mm (0.63 in.)	2	1	26
9 mm (0.35 in.)	18 mm (0.71 in.)		1	26
10 mm (0.39 in.)	20 mm (0.79 in.)		1	26
11 mm (0.43 in.)	22 mm (0.87 in.)		1	26

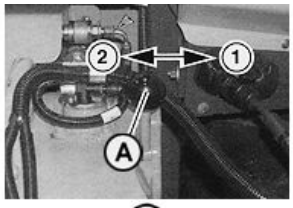
KM00321,00000E4 -19-04JAN12-2/2

Cutterhead with 20 Knives (Type 493)

Two-speed gear box (III) for normal to long length of cut (standard)

KM1001820

(I)



(II)

(III)

(IV)

KM1001820 —UN—21DEC11

I—Length of cut, number of knives		II—Length-of-cut transmission, forage harvester	III—Rotary harvesting unit drive	IV—Gathering drum speed
2x10 knives	2x5 knives	Gear	Gear	rpm
7.3 mm (0.29 in.)	14.7 mm (0.58 in.)	1	1	26
8.5 mm (0.33 in.)	17.0 mm (0.67 in.)		1	26
9.7 mm (0.38 in.)	19.3 mm (0.76 in.)		1	26
10.8 mm (0.43 in.)	21.7 mm (0.85 in.)		1	26
12 mm (0.47 in.)	24 mm (0.94 in.)		2	33
10 mm (0.39 in.)	20 mm (0.79 in.)	2	1	26
11.2 mm (0.44 in.)	22.4 mm (0.88 in.)		1	26
12.4 mm (0.49 in.)	24.8 mm (0.98 in.)		2	33
13.6 mm (0.54 in.)	27.2 mm (1.07 in.)		2	33
14.8 mm (0.58 in.)	29.6 mm (1.17 in.)		2	33
16 mm (0.63 in.)	32 mm (1.26 in.)		2	33
17.2 mm (0.68 in.)	34.4 mm (1.35 in.)		2	33

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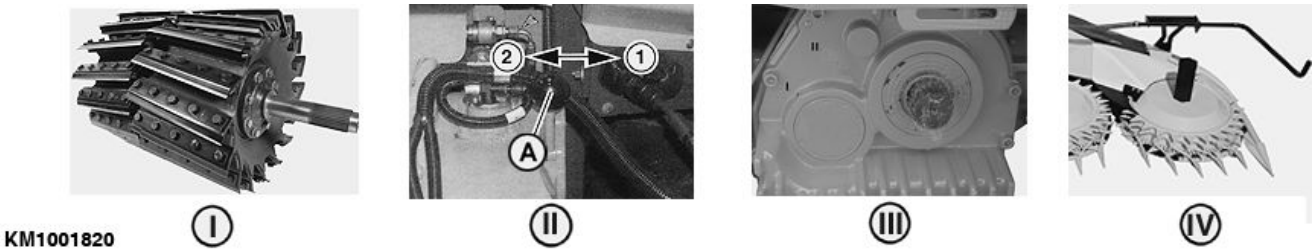
KM00321,00000E5 -19-04JAN12-1/2

Two-speed gear box (III) for short length of cut (option)



I—Length of cut, number of knives		II—Length-of-cut transmission, forage harvester	III—Rotary harvesting unit drive	IV—Gathering drum speed
2x10 knives	2x5 knives	Gear	Gear	rpm
5.0 mm (0.20 in.)	10.0 mm (0.39 in.)	1	2	20
6.2 mm (0.24 in.)	12.3 mm (0.48 in.)		2	20
7.3 mm (0.29 in.)	14.7 mm (0.58 in.)		2	20
8.5 mm (0.33 in.)	17.0 mm (0.67 in.)		2	20
9.7 mm (0.38 in.)	19.3 mm (0.76 in.)		1	26
10.8 mm (0.43 in.)	21.7 mm (0.85 in.)		1	26
12.0 mm (0.47 in.)	24.0 mm (0.94 in.)		1	26
10.0 mm (0.39 in.)	20.0 mm (0.79 in.)	2	1	26
11.2 mm (0.44 in.)	22.4 mm (0.88 in.)		1	26
12.4 mm (0.49 in.)	24.8 mm (0.98 in.)		1	26
13.6 mm (0.53 in.)	27.2 mm (1.07 in.)		1	26

KM00321,00000E5 -19-04JAN12-2/2

Length of Cut and Drum Speeds with CLAAS Forage Harvester 930-980 (Types 494, 497, and 498)

Preselection of length of cut on forage harvesters with standard header drive

The coarse setting for length of cut is preselected using switch (A) on the forage harvester. (See forage harvester Operator's Manual.)

2-speed gear box

The two-speed gear box of the rotary harvesting unit is available in two versions:

- **Speed increase** for normal to long length of cut (standard)
- **Speed reduction** for short length of cut (option)

See tables below to determine length-of-cut adjustment.

A—Switches

KM00321,00006CF -19-05OCT17-1/1

Cutterhead with 36 Knives (Types 494, 497, and 498)

Two-speed gearbox (II) for normal to long length of cut (standard)

KM237799

(I)

(II)

(III)

KM237799 —UN—13MAR15

I—Length of cut, number of knives		II—Rotary harvesting unit drive	III—Gathering drum speed
2x18 knives	2x9 knives	Speed	rpm
4 mm (0.16 in.)	8 mm (0.31 in.)	1	26
4,7 mm (0.18 in.)	9,4 mm (0.37 in.)	1	26
5,3 mm (0.21 in.)	10,6 mm (0.42 in.)	1	26
6,0 mm (0.24 in.)	12,0 mm (0.47 in.)	1	26
6,7 mm (0.26 in.)	13,4 mm (0.52 in.)	2	33
7,3 mm (0.29 in.)	14,6 mm (0.57 in.)	2	33
8 mm (0.31 in.)	16 mm (0.63 in.)	2	33
8,7 mm (0.34 in.)	17,4 mm (0.68 in.)	2	33
9,3 mm (0.37 in.)	18,6 mm (0.73 in.)	2	33

KM00321,00006D0 -19-05OCT17-1/2

Two-speed gearbox (II) for short length of cut (option)

KM237799

(I)

(II)

(III)

KM237799 —UN—13MAR15

I—Length of cut, number of knives		II—Rotary harvesting unit drive	III—Gathering drum speed
2x18 knives	2x9 knives	Speed	rpm
2,7 mm (0.11 in.)	5,4 mm (0.21 in.)	2	20
3,3 mm (0.13 in.)	6,6 mm (0.26 in.)	2	20
4,0 mm (0.16 in.)	8,0 mm (0.31 in.)	2	20
4,7 mm (0.18 in.)	9,4 mm (0.37 in.)	2	20
5,3 mm (0.21 in.)	10,6 mm (0.42 in.)	1	26
6,0 mm (0.24 in.)	12,0 mm (0.47 in.)	1	26
6,7 mm (0.26 in.)	13,4 mm (0.52 in.)	1	26
7,3 mm (0.29 in.)	14,6 mm (0.57 in.)	1	26

KM00321,00006D0 -19-05OCT17-2/2

Cutterhead with 24 Knives (Types 494, 497, and 498)

Two-speed gearbox (II) for normal to long length of cut (standard)

KM237799

(I)

(II)

(III)

KM237799 —UN—13MAR15

I—Length of cut, number of knives		II—Rotary harvesting unit drive	III—Gathering drum speed
2x12 knives	2x6 knives	Speed	rpm
6 mm (0.24 in.)	12 mm (0.47 in.)	1	26
7 mm (0.28 in.)	14 mm (0.55 in.)	1	26
8 mm (0.31 in.)	16 mm (0.63 in.)	1	26
9 mm (0.35 in.)	18 mm (0.71 in.)	1	26
10 mm (0.39 in.)	20 mm (0.79 in.)	2	33
11 mm (0.43 in.)	22 mm (0.87 in.)	2	33
12 mm (0.47 in.)	24 mm (0.94 in.)	2	33
13 mm (0.26 in.)	26 mm (1.02 in.)	2	33
14 mm (0.55 in.)	28 mm (1.10 in.)	2	33

KM00321,00006D1 -19-05OCT17-1/2

Two-speed gearbox (II) for short length of cut (option)

KM237799

(I)

(II)

(III)

KM237799 —UN—13MAR15

I—Length of cut, number of knives		II—Rotary harvesting unit drive	III—Gathering drum speed
2x12 knives	2x6 knives	Speed	rpm
4 mm (0.16 in.)	8 mm (0.31 in.)	2	20
5 mm (0.20 in.)	10 mm (0.39 in.)	2	20
6 mm (0.24 in.)	12 mm (0.47 in.)	2	20
7 mm (0.28 in.)	14 mm (0.55 in.)	2	20
8 mm (0.31 in.)	16 mm (0.62 in.)	1	26
9 mm (0.35 in.)	18 mm (0.71 in.)	1	26
10 mm (0.39 in.)	20 mm (0.79 in.)	1	26
11 mm (0.43 in.)	22 mm (0.87 in.)	1	26

KM00321,00006D1 -19-05OCT17-2/2

Adjusting Gear Selection with Multi-Speed Gearbox for CLAAS Forage Harvesters

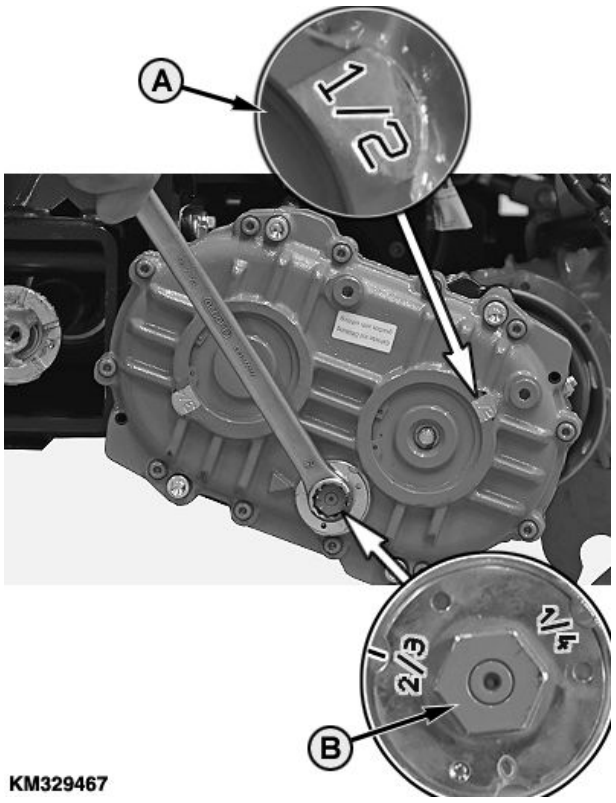
The multi-speed drive for CLAAS forage harvesters has 4 speeds.

The first 2 speeds are selected by turning nut (B) on the outside of the drive.

The entire multi-speed drive can be rotated so that 2 more speeds (A) can be selected.

With the drive in the position shown, the first and second speeds can be selected.

A—First and Second Speed Positions **B—Nut (Second Speed Engaged)**



KM329467 —UN—10OCT17

KM00321,00006D2 -19-05OCT17-1/3

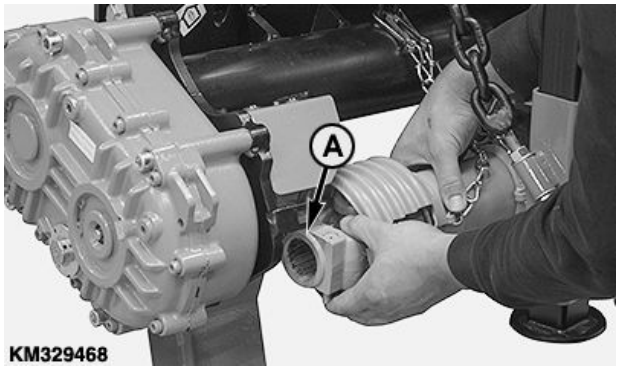
Rotate the multi-speed gearbox

To select the third and fourth speeds, the drive must be rotated around its central axis.

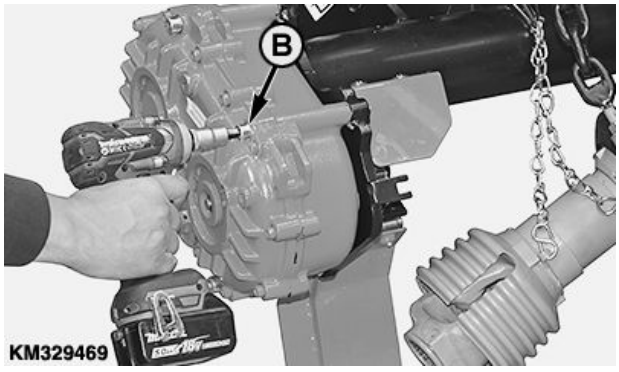
To do so, proceed as follows:

1. Remove universal-jointed shaft (A) from gearbox.
2. Unfasten hex socket screws (B).

A—Universal-Jointed Shaft **B—Hex Socket Screws**



KM329468 —UN—05OCT17



KM329469 —UN—05OCT17

Continued on next page

KM00321,00006D2 -19-05OCT17-2/3

3. Rotate drive (C) through 180°.

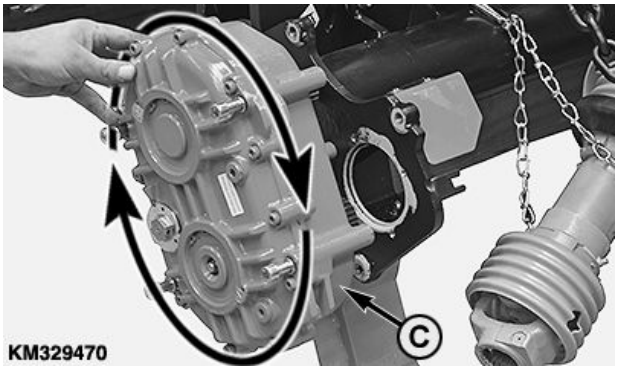
NOTE: The gearbox can be rotated without taking it off.

4. Tighten hex socket screws (D) to specification.

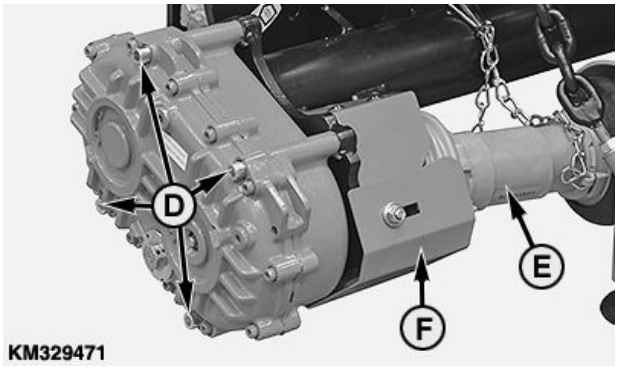
Specification	
Gearbox, Hex Socket Screws—Torque	95 N·m (70 lb.-ft.)

5. Re-install universal-jointed shaft (E) and shield (F).

C—Gearbox
D—Hex Socket Screws
E—Universal-Jointed Shaft
F—Shield



KM329470 —UN—05OCT17



KM329471 —UN—05OCT17

KM00321,00006D2 -19-05OCT17-3/3

Lengths of Cut and Gear Selection with Multi-Speed Drive for CLAAS Forage Harvesters

NOTE: The grayed out lengths of cut may under certain circumstances lead to problems in the material flow.

See table below to determine length-of-cut adjustment.

	Lengths of cut in mm														
	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	Gear selection (4 gears)														
20-knife cutterhead	-	-	1	1	1	2	2	3	3	3	4	4	4	4	4
24-knife cutterhead	-	1	1	1	2	2	3	3	4	4	4	4	4	4	4
28-knife cutterhead	1	1	1	2	2	3	3	4	4	4	4	4	4	-	-
36-knife cutterhead	1	2	2	3	3	4	4	4	4	4	-	-	-	-	-

IMPORTANT: Claas forage harvesters of the types 498, which are fitted with a variable header drive, can change the speed within the cutting length settings. In order to avoid very high drum speed, you cannot use the 4th gear of the multi-speed transmission.

NOTE: When the 3rd gear is operated with maximum variable speed, this corresponds with the 4th gear.

KM00321,0000815 -19-03JUL18-1/1

Harvest

Before the harvest, do the following:
- Unfold the rotary harvesting unit
- Adjust the feed bars
- Adjust the speed at which the gathering drums operate

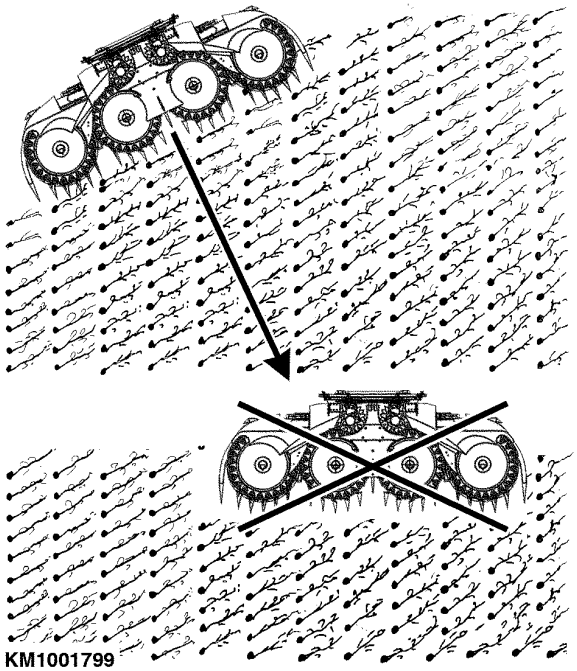
IMPORTANT: Avoid unnecessary wear at the clutches. From the idle setting, always select forward gear.

1. Run the engine of the forage harvester at idle speed.
2. Switch on the rotary harvesting unit.
3. Wait until the gathering drums and rotating blades have reached their operating speed.

   IMPORTANT: In most cases, it is best to approach the crop at right angles to the direction it is lying in. This usually results in the most even flow of crop.

   IMPORTANT: Observe the flow of crop at all times.

4. Drive into the crop at a relatively high speed in order to achieve a quick flow of crop.



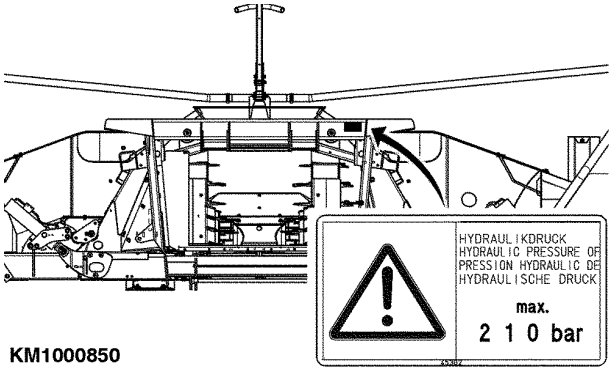
KM1001799

KM1001799 —UN—11NOV11

KM00321,00000D5 -19-22DEC11-1/1

Hydraulic System

The hydraulic pressure must not exceed 21000 kPa (210 bar; 3046 psi).



KM1000850

KM1000850 —UN—03APR09

KM00321,0000156 -19-03APR09-1/1

Additional Equipment

Special Kit for Row Guidance (Steering Assistance)

When driving a forage harvester 90% of the driver's attention is focused on steering. Use of the entire machine capacities is thus only possible with assisted steering.

A special kit is available as an attachment and is composed of:

- (1) sensor system with connecting cables
- (1) set of hardware for installation on rotary harvesting unit
- (1) assembly instructions

KM00321,0000272 -19-16FEB10-1/1

Automatic Height Control Kit

The automatic height control system consists of two sensors at both outer dividers that are touching the ground (following the ground contours) and keep the rotary harvesting unit parallel to the ground.

The electric impulses of the sensors are converted into hydraulic oil quantity by the SPFH main control unit.

See forage harvester Operator's Manual for operation of automatic height control.

A cylinder is retracted or extended depending on the oil quantity so that the rotary harvesting unit is always aligned parallel to the ground.

KM00321,0000289 -19-24FEB10-1/1

460plus Rotary Harvesting Unit

CAUTION: Before carrying out adjustment or service work, ALWAYS:

- shut off engine
- remove ignition key
- wait until all moving parts have come to a stop.

Symptom	Problem	Solution
High power requirement despite poor cut	Rotating blades are dull.	Replace the rotating blades.
	Defective cleaners	Install new cleaners.
Grinding noise at the blades	Rotor is dirty.	Clean the rotor. If possible, the cutting area should be cleaned out before the unit is used.
	Defective cleaners	Install new cleaners.
Rotary harvesting unit is vibrating.	Dirty rotating blades cause imbalance.	Clean the rotating blades.
	Asymmetrically rotating blades cause imbalance.	**Always** replace rotating blades in pairs.
	One of the cleaners has broken.	Replace **both** cleaners.
	Imbalance at rotating blade caused by excessive vertical play.	Straighten the blade or install new blades.
The stalks are pushed forward before they are cut (long, uneven stubble).	Leaves accumulated at the dividers	Clean the dividers.
	One of the cleaners has broken.	Replace **both** cleaners.
Gathering drums stopped rotating.	Blockage in the feeding area	Reverse the gathering drums briefly. Reverse them repeatedly if necessary.
	Worn skid shoes	Replace.
	Transmission defective	Contact your KEMPER dealer.
Transmission overheating	Transmission oil level too high or too low.	Check transmission oil level, and add or drain if necessary.
Gathering drums and rotating blades do not start.	Claw clutch defective	Contact your KEMPER dealer.
The entire left or right side of the unit stopped rotating.	Left or right friction clutch defective	Contact your KEMPER dealer.
The unit cannot be folded or unfolded.	A foreign body (e.g. grain of sand) is obstructing the restrictor.	Contact your KEMPER dealer.
Poor cut when the rows are far apart.	The machine is tackling 5 rows of plants. The middle row is hindering the cut.	Tackle only 4 rows of plants. Contact your KEMPER dealer if necessary.

KM00321,00000D6 -19-22DEC11-1/1

Service Intervals

CAUTION: Before making any adjustments or doing any service work, always:
- Switch the machine off
- Remove the key from the ignition
- Wait until all the moving parts have come to a standstill.

IMPORTANT: The intervals quoted here are for average conditions. Adverse operating conditions may make it necessary to apply lubrication or carry out an oil change more often.

IMPORTANT: Replace any damaged parts. Any screws that have worked loose must be retightened to the proper torque.

Clean grease fittings before lubrication. Replace lost or damaged grease fittings immediately. If a new fitting fails to take grease, remove it and check whether the grease passage is blocked.

Perform lubrication and maintenance work mentioned in this section before and after every harvesting season as well.

OUKM001,0000012 -19-15FEB05-1/1

Grease

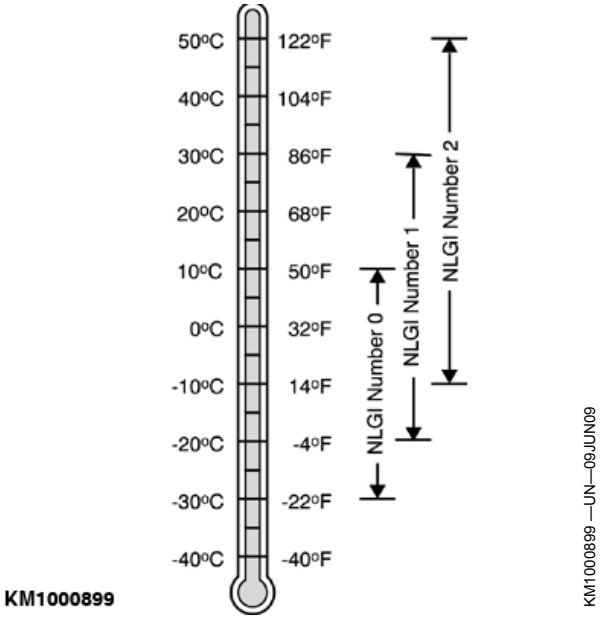
Use grease based on NLGI consistency numbers and the expected air temperature range during the service interval.

AVIA AVIALITH 2 EP grease is recommended.

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

NLGI Service Classification GC-LB

IMPORTANT: Some types of grease thickeners are not compatible with others. Contact your lubricant supplier before mixing various types of lubricants.



KM00321,00002CB -19-03MAY10-1/1

Fluid Grease for Drives

The spur gear angle drives of the feed drums are filled with fluid grease.

The following fluid greases are recommended:

Manufacturer	Designation
ARAL	ARALUB FDP 00
BP	ENERGREASE HT 00 EP
TEXACO	STARFAK E 900
WESTFALEN	GRESANAT X 00

Other fluid greases may be used if they meet the following specification:

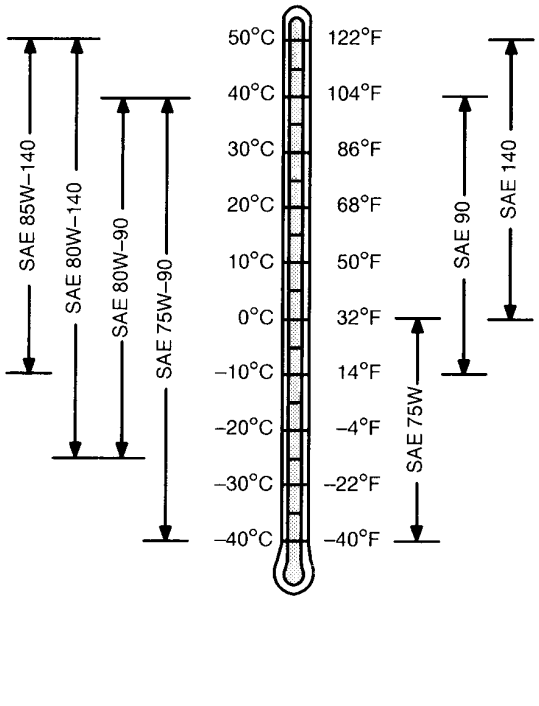
NLGI Service Classification NLGI 00

KM00321,00002CC -19-30APR10-1/1

Transmission Oil

Use oil with a viscosity based on the expected air temperature range during the period between oil changes.

Transmission oils must meet API Service Classification GL-5.



KM00321,0000195 -19-10JUN09-1/1

Coolant for Main Drive Friction Clutch

The cooling system of the main drive friction clutch is filled to provide protection against corrosion and freeze protection to -37 °C (-34 °F).

Use a low silicate ethylene glycol base coolant concentrate. The mixing ratio is 50% concentrate and 50% water.

The coolant concentrate must be of a quality that protects the cast iron in the cooling system from cavitation corrosion.

A 50% mixture of ethylene coolant in water provides freeze protection to -37°C (-34°F). If protection at lower temperatures is required, consult your KEMPER dealer for recommendations.

Water quality is important to the performance of the cooling system. Distilled, deionized, or demineralized water is recommended for mixing with ethylene glycol based coolant concentrate.

Coolant Change Intervals

Drain coolant from the main drive friction clutch, flush the cooling system and refill with new coolant after the first 3 years or 3000 hours of operation. At each interval, drain the coolant, flush the cooling system, and refill with new coolant.

KM00321,0000196 -19-10JUN09-1/1

Alternative and Synthetic Lubricants

Conditions in certain geographical areas may require lubricant recommendations different from those printed in this manual.

Some lubricants may not be available in your location.

Consult your KEMPER dealer to obtain information and recommendations.

Synthetic lubricants may be used if they meet the performance requirements as shown in this manual.

The temperature limits and service intervals shown in this manual apply to both conventional and synthetic lubricants.

Re-refined base stock products may be used if the finished lubricant meets the performance requirements.

KM00321,0000197 -19-10JUN09-1/1

Mixing Lubricants

In general, avoid mixing different brands or types of oil. Oil manufacturers blend additives in their oils to meet certain specifications and performance requirements.

Mixing different oils can interfere with the proper functioning of these additives and degrade lubricant performance.

Consult your KEMPER dealer to obtain information and recommendations.

KM00321,0000198 -19-10JUN09-1/1

Lubricant Storage

Your equipment can operate at top efficiency only when clean lubricants are used.

Use clean containers to handle all lubricants.

Store lubricants and containers in an area protected from dust, moisture, and other contamination. Store containers on their side to avoid water and dirt accumulation.

Make certain that all containers are properly marked to identify their contents.

Properly dispose of all old containers and any residual lubricant they may contain.

DX,LUBST -19-11APR11-1/1

At the Start of Every Harvesting Season

Before putting the harvester into operation, carry out a general check of the friction clutches in the main drive, and do a check on the gatherer drums. In the "Service" section, see "Relieving Pressure at the Slip Clutches on the Main Drive".

Run the rotary harvesting unit for a few minutes. Then check all the bearings. If overheating or excessive play is found, replace the relevant bearings before operating the rotary harvesting unit.

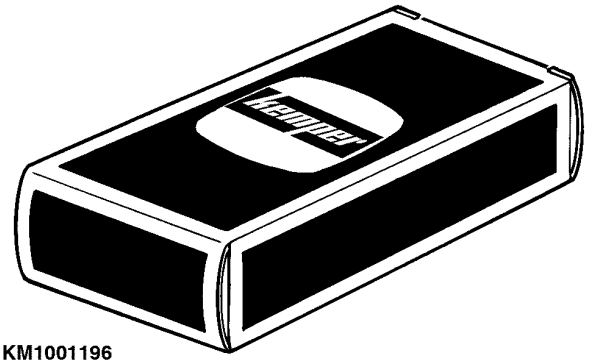
OUKM001,0000014 -19-15FEB05-1/1

Use Genuine KEMPER Parts

Genuine KEMPER parts have been specifically designed for KEMPER machines.

Other parts are neither examined nor released by KEMPER. Installation and use of such products could have negative effects upon the design characteristics of KEMPER machines and thereby affect their safety.

Avoid this risk by using only genuine KEMPER parts.



KM1001196

KM1001196 —UN—03MAY10

KM00321,00002CD -19-03MAY10-1/1

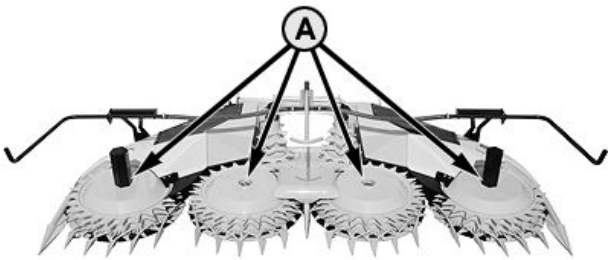
At the Start of Every Harvesting Season - Spherical Collar Bolts

The torques of the spherical collar bolts (A) must be checked prior to each harvesting season and adjusted where necessary.

Torque setting is:

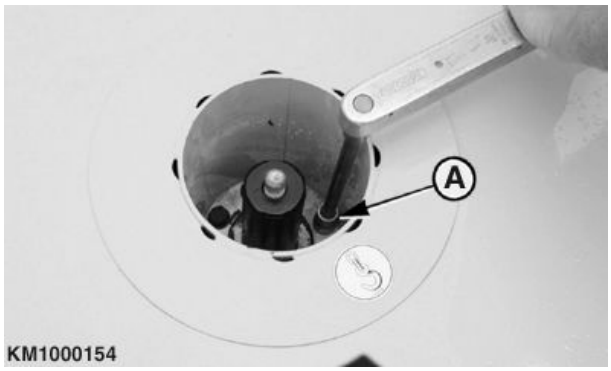
Specification	
Spherical Collar Bolts—Torque	200 Nm (148 lb-ft)

A—Bolts



KM1001800

KM1001800 —UN—02DEC11



KM1000154

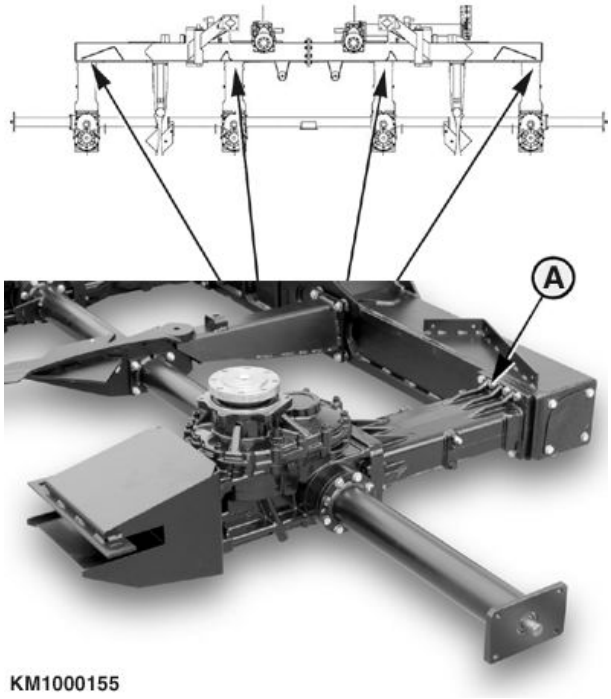
KM1000154 —UN—16OCT07

KM00321,00000D7 -19-05JAN12-1/1

At the Start of Every Harvesting Season—Gearbox Mounting Flange Attaching Screws

The torques of the flange screws (A) at gearbox mounting flanges of gathering drums must be retighten prior to each harvesting season and then retighten after 50 hours in service.

The torque setting is:



KM1000155

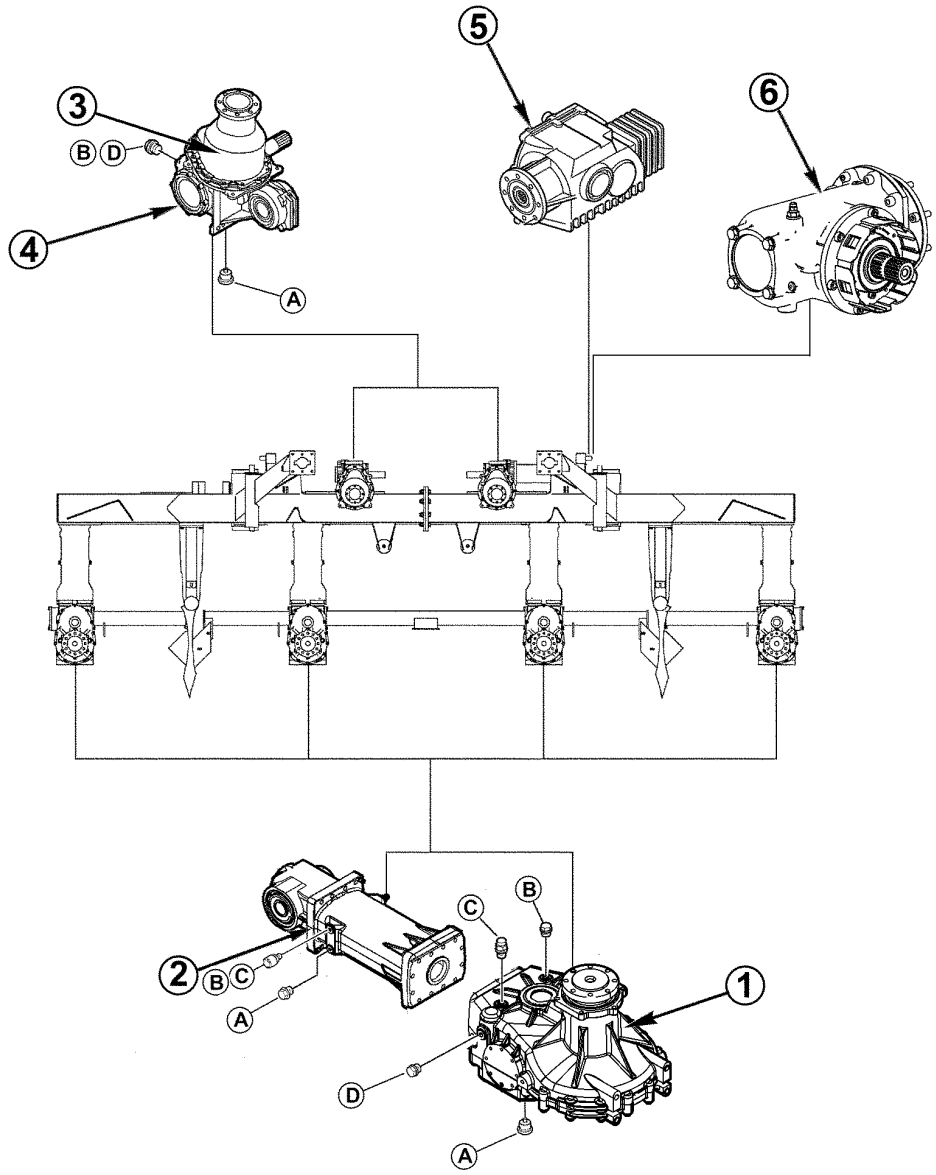
KM1000155 —UN—16OCT07

A—Screw

Item	Measurement	Specification
Gearbox Mounting Flange Attaching Screws	Torque	95 N·m (70 lb-ft)

OUCC002,0002829 -19-15OCT07-1/1

General View of Drives and Oil Levels in the Rotary Harvesting Unit



KM256504

KM256504 —UN—30NOV15

A—Oil Drain Screw
B—Oil Filler Plug
C—Vent
D—Oil Level Plug
1—Gathering Drum Spur Gear Angle Drive - 8.5 L (2.25 US. gal.)
2—Angle Drive - 1.5 L (0.4 US. gal.)
3—Feed Drum Spur Gear Angle Drive (with a Lifetime Filling of 1.1 kg (2.42 lb.) Low-Viscosity Grease for Gears)
4—Spur Gear Angle Drive - 1.1 L (0.29 US. gal.)
5—CLAAS Gear Box - 4.3 L (1.14 US. gal.)
6—FENDT Gear Box - 0.8 L (0.21 US. gal.)

IMPORTANT: Oil in the drives must be changed after the first 100 hours of operation and then every 500 hours.

1. Raise the rotary harvesting unit until it is in horizontal position.
2. Unfold the rotary harvesting unit.

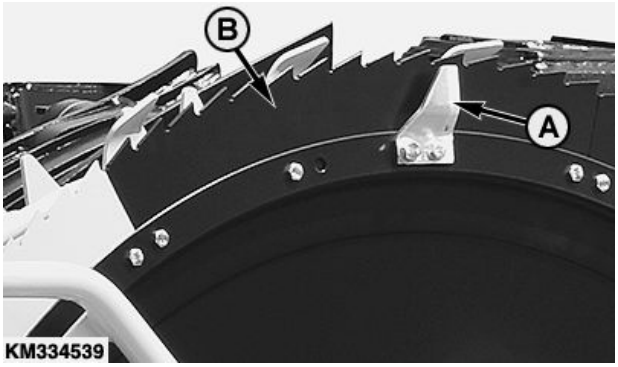
KM00321,00004C8 -19-30NOV15-1/1

Every 10 Hours of Operation—Cleaners and Blade Rotor Segments

Check all cleaners (A) and blade rotor segments (B) for signs of wear.

Replace worn parts (see "Maintenance" section).

A—Cleaner **B—Blade rotor segment**



KM334539 —UN—02NOV17

KM00321,0000732 -19-22JAN18-1/1

Every 10 Operating Hours—Balance Weights

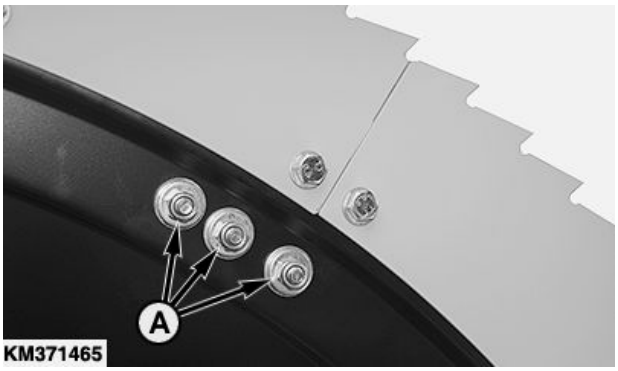
Check balance weights (A) beneath the outer blade rotors for wear.

Replace any damaged or worn balance weights and screws.

Install screws with Loctite® 270 and tighten to the specified torque.

Specification	
Balance weight mounting screws—Torque	25 N·m (18.5 lb-ft)

A—Balance weights



KM371465 —UN—05MAR19

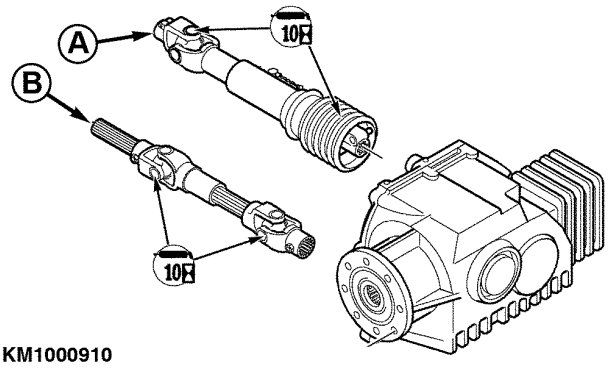
Loctite is a trademark of Henkel Corporation

KM00321,00008C0 -19-05MAR19-1/1

Every 10 Hours—U.J. Shaft

Lubricate with grease.

A—CLAAS U.J. Shaft, Type 492 **B—FENDT U.J. Shaft**
B—CLAAS U.J. Shaft, Types 493 and 494



KM1000910 —UN—17JUN09

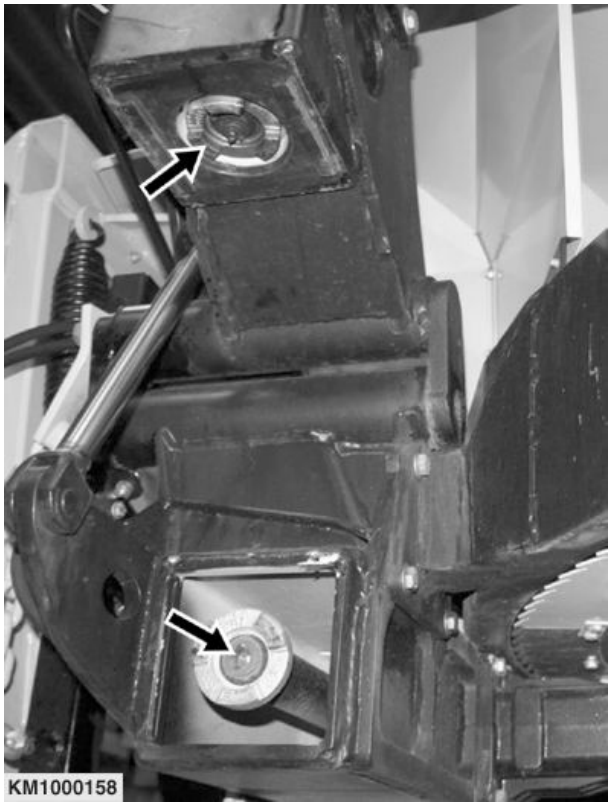
KM00321,00001E4 -19-16MAY13-1/1

Every 50 Hours—Claw Clutch

Clean all the claw clutches (see arrows).

Lubricate with grease.

Apply also a layer of grease to the grooved surface of the clutch claws using a brush.

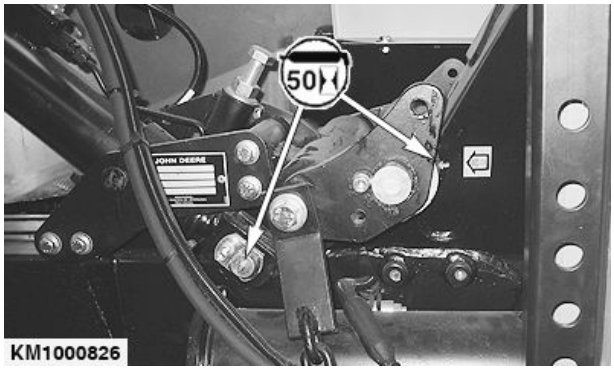


KM1000158 —UN—16OCT07

KM00321,00001B8 -19-17JUN09-1/1

Every 50 Hours—Lower Pin of Hydraulic Cylinder and Hinges of the Outer Units

Lubricate with grease.

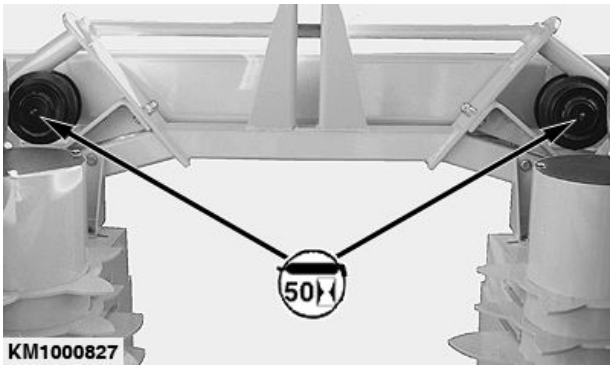


KM1000826 —UN—25MAR09

KM00321,00001B9 -19-17JUN09-1/1

Every 50 Hours—Upper Rolls of Oscillating Frame

Lubricate with grease.



KM1000827 —UN—25MAR09

KM00321,00001BA -19-17JUN09-1/1

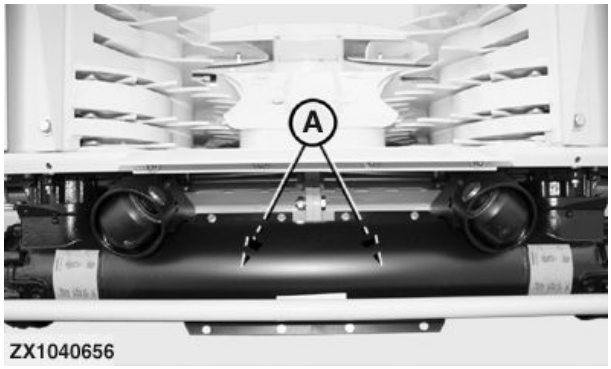
Every 3 Years—Change Coolant of Main Drive Friction Clutch

CAUTION: Never attempt to open drain or filler plug (B) when the friction clutch is hot! Wait until friction clutch has cooled down. First loosen plug (B) by one turn to relieve pressure.

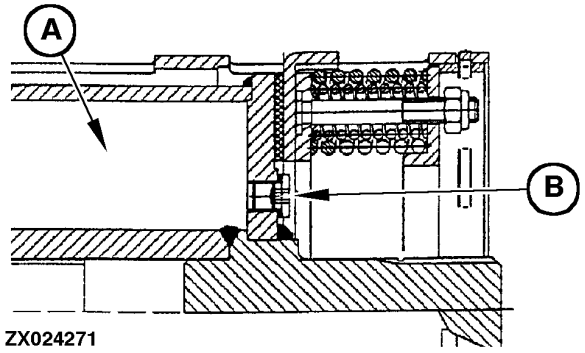
The cavity of the friction clutch (A) can be drained and refilled. This service work requires the friction clutch to be removed from the machine. Therefore it is advised to contact your KEMPER dealer to drain/refill the friction clutch.

Specification

Main drive friction clutch cavity—Capacity..... 1.3 L (0.26 US gal.)



ZX1040656 —UN—12APR07



ZX024271 —UN—07MAR01

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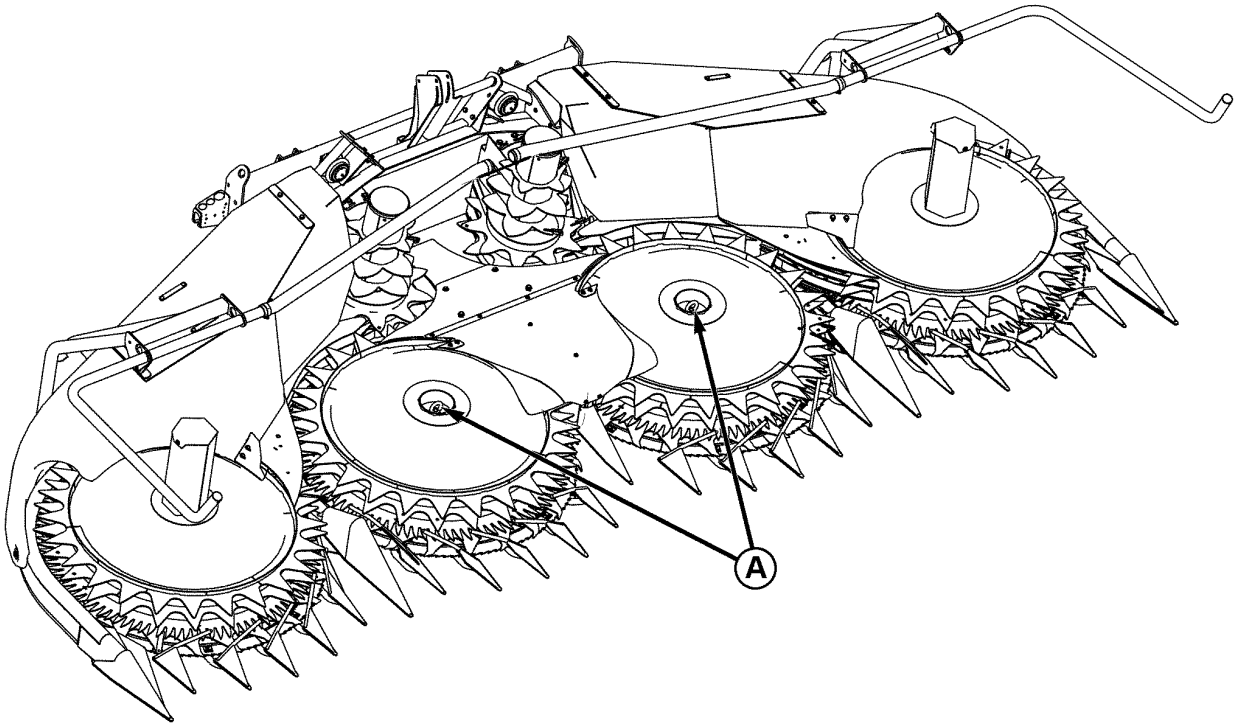
After Each Harvesting Season



KM1001802 —UN—05DEC11

KM1001802

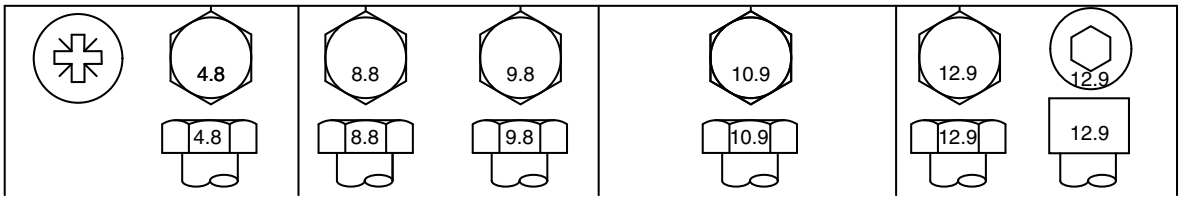
- Clean the entire rotary harvesting unit - pay particular attention to the depressions (A) in the gathering drums.
- Change the oil in all drives. See General View of Drives and Oil Levels in the Rotary Harvesting Unit.
- Lubricate all grease fittings.
- Check the entire rotary harvesting unit for defective or worn components. Order the relevant parts immediately from your KEMPER dealer, so that they can be installed in time for the next harvesting season.

IMPORTANT: Optimum performance can only be achieved with properly serviced implements.

KM00321,00000D9 -19-22DEC11-1/1

Metric Bolt and Screw Torque Values

TS1670 —UN—01MAY03



Bolt or Screw Size	Class 4.8				Class 8.8 or 9.8				Class 10.9				Class 12.9			
	Lubricated[a]		Dry[b]		Lubricated[a]		Dry[b]		Lubricated[a]		Dry[b]		Lubricated[a]		Dry[b]	
	Nm	lb.-in.	Nm	lb.-in.	Nm	lb.-in.	Nm	lb.-in.	Nm	lb.-in.	Nm	lb.-in.	Nm	lb.-in.	Nm	lb.-in.
M6	4.7	42	6	53	8.9	79	11.3	100	13	115	16.5	146	15.5	137	19.5	172
									Nm	lb.-ft.	Nm	lb.-ft.	Nm	lb.-ft.	Nm	lb.-ft.
M8	11.5	102	14.5	128	22	194	27.5	243	32	23.5	40	29.5	37	27.5	47	35
			Nm	lb.-ft.	Nm	lb.-ft.	Nm	lb.-ft.								
M10	23	204	29	21	43	32	55	40	63	46	80	59	75	55	95	70
	Nm	lb.-ft.														
M12	40	29.5	50	37	75	55	95	70	110	80	140	105	130	95	165	120
M14	63	46	80	59	120	88	150	110	175	130	220	165	205	150	260	190
M16	100	74	125	92	190	140	240	175	275	200	350	255	320	235	400	300
M18	135	100	170	125	265	195	330	245	375	275	475	350	440	325	560	410
M20	190	140	245	180	375	275	475	350	530	390	675	500	625	460	790	580
M22	265	195	330	245	510	375	650	480	725	535	920	680	850	625	1080	800
M24	330	245	425	315	650	480	820	600	920	680	1150	850	1080	800	1350	1000
M27	490	360	625	460	950	700	1200	885	1350	1000	1700	1250	1580	1160	2000	1475
M30	660	490	850	625	1290	950	1630	1200	1850	1350	2300	1700	2140	1580	2700	2000
M33	900	665	1150	850	1750	1300	2200	1625	2500	1850	3150	2325	2900	2150	3700	2730
M36	1150	850	1450	1075	2250	1650	2850	2100	3200	2350	4050	3000	3750	2770	4750	3500

Torque values listed are for general use only, based on the strength of the bolt or screw. DO NOT use these values if a different torque value or tightening procedure is given for a specific application. For stainless steel fasteners or for nuts on U-bolts, see the tightening instructions for the specific application. Tighten plastic insert or crimped steel type lock nuts by turning the nut to the dry torque shown in the chart, unless different instructions are given for the specific application.

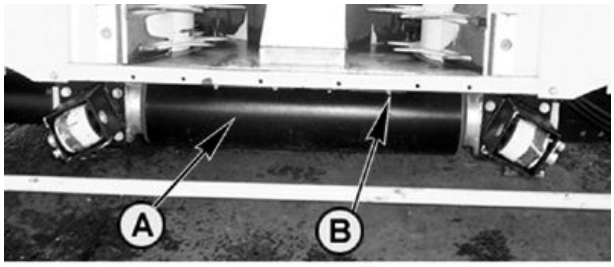
Shear bolts are designed to fail under predetermined loads. Always replace shear bolts with identical property class. Replace fasteners with the same or higher property class. If higher property class fasteners are used, tighten these to the strength of the original. Make sure fastener threads are clean and that you properly start thread engagement. When possible, lubricate plain or zinc plated fasteners other than lock nuts, wheel bolts or wheel nuts, unless different instructions are given for the specific application.

[a] "Lubricated" means coated with a lubricant such as engine oil, fasteners with phosphate and oil coatings, or M20 and larger fasteners with JDM F13C, F13F or F13J zinc flake coating.

[b] "Dry" means plain or zinc plated without any lubrication, or M6 to M18 fasteners with JDM F13B, F13E or F13H zinc flake coating.

DX,TORQ2 -19-12JAN11-1/1

Relieve Pressure on the Main Drive Slip Clutches

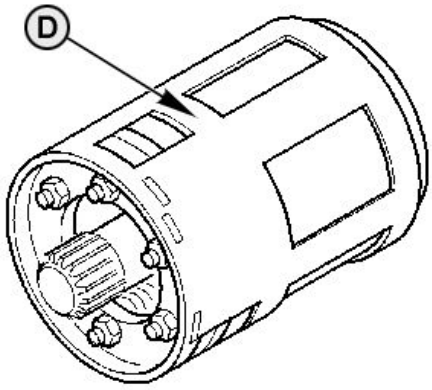


CAUTION: Before carrying out adjustment or service work, ALWAYS:
- **shut off engine**
- **remove ignition key**
- **wait until all moving parts have come to a stop.**

The two slip clutches (D) on the main drive protect the rotary harvesting unit from unnecessary loads. It is therefore important to keep these clutches properly serviced. The torque setting is 900 Nm (663.8 lb-ft).

IMPORTANT: The following steps must be carried out before operating the rotary harvesting unit for the first time and prior to every season.

1. Take off cover (A). Remove screws (B) first.



KM1000040 —UN—04APR05

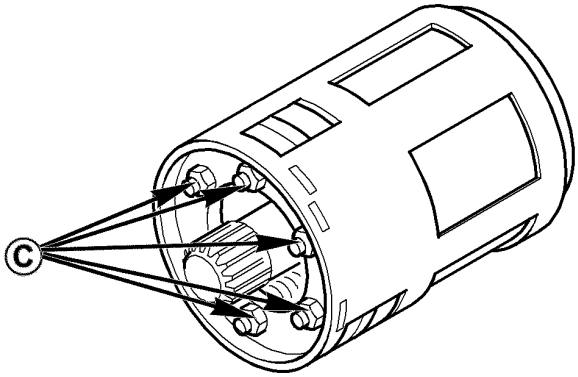
KM00321,000019C -19-12JUN09-1/2

2. Tighten screws (C). This will reduce pressure on the clutch disks.
3. Rotate the clutch by hand.

   IMPORTANT: If it is not possible to rotate the clutch by hand, it is necessary to disassemble and clean it for proper function. See Disassemble Slip Clutch in this Section.

4. Loosen screws (C) as far as the threads allow (without removing them completely).
5. Position cover (A) and install using screws (B).

IMPORTANT: It is recommended to have the slip clutches checked once a year by the KEMPER dealer.



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Disassemble Slip Clutch

If it is not possible to turn slip clutch by hand as explained under ”Relieving Pressure at the Slip Clutches on the Main Drive”, it has to be disassembled and cleaned for proper function. Proceed as follows:

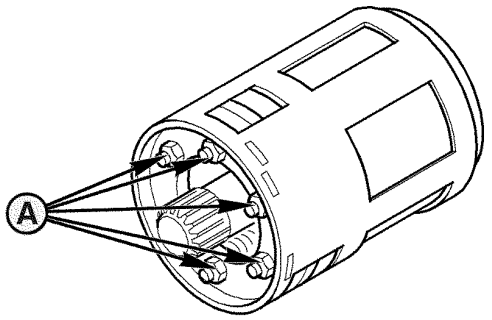
1. Remove clutches from harvesting unit.
2. Tighten the nuts (A). This relieves pressure on the friction plates.
3. First remove bushing (I) from housing (B).
4. Then remove all parts of friction clutch from housing (B).
5. Clean all parts, especially the friction disks (C, E). Replace worn parts.
6. Reassemble all parts.
7. Install bushing (I) as shown in "Torque Settings" below.
8. Slacken off nuts (A) to the end of its thread.
9. Reinstall clutches to harvesting unit.

Torque Setting:

IMPORTANT: The specified torque of 900 N·m should not be exceeded.

This torque is set by positioning the profile (F) towards the inside and engaged with inner recess (H) of housing (B).

A—Nut
B—Housing
C—Friction disk
D—Coolant fluid reservoir - 1.3 L (0.34 US. gal)
— 0.65 L (0.17 US gal.) Water
— 0.65 L (0.17 US gal.) Anti-freezing compound
E—Friction disk
F—Profile
G—Outer recess
H—Inner recess
I— Bushing



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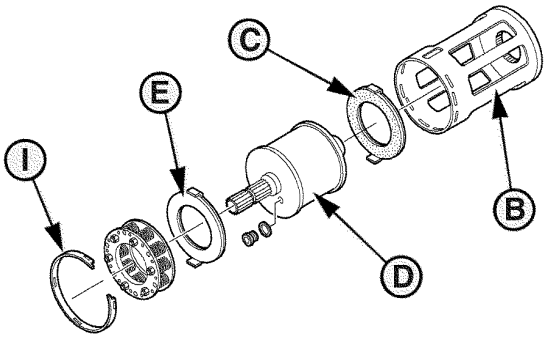

KM1000161

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KM1000162

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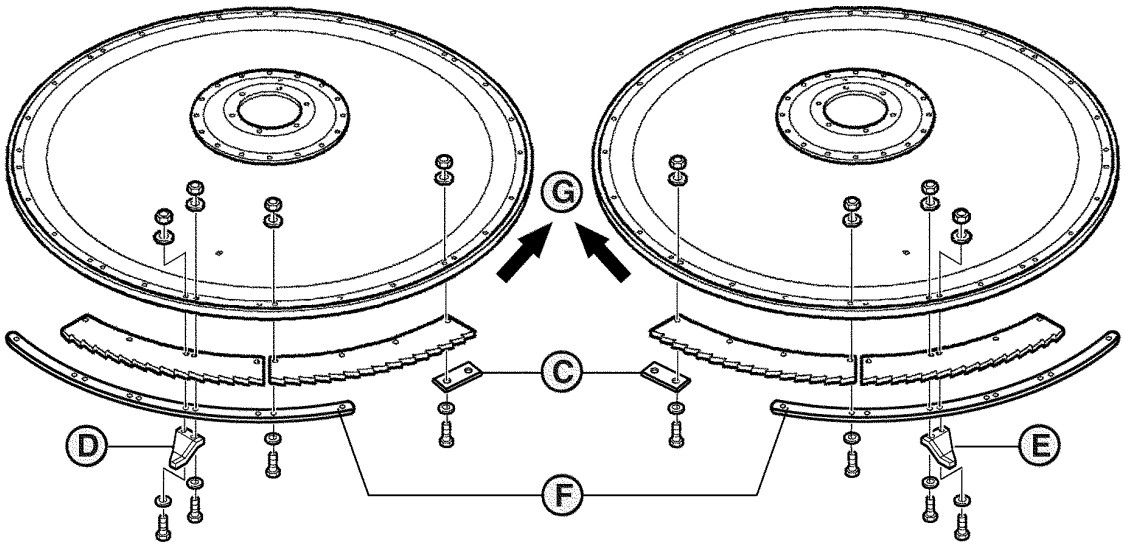
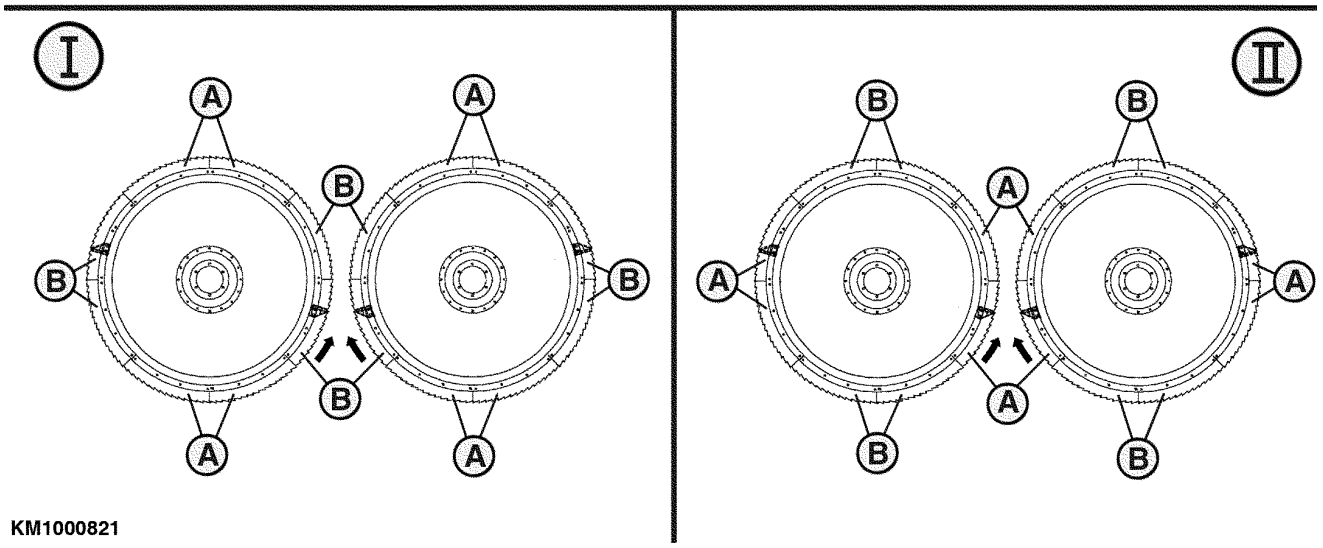
Installing New Rotating Blades





KM1000821

KM10000821 —UN—24MAR09

A—Yellow Blade
B—Black Blade
C—Strap
D—Cleaner (Counterclockwise)
E—Cleaner (Clockwise)
F—Reinforcement Strap

CAUTION: Before carrying out adjustment or service work, ALWAYS:
- **shut off engine**
- **remove ignition key**
- **wait until all moving parts have come to a stop.**

IMPORTANT: The rotating blades must be installed with their tips pointing in the direction of cut (G).

1. There are different blades.
   A total of 8 blades is installed on each rotating blade.
   - 4 yellow blades (A), and
   - 4 black blades (B)
2. The blades are installed in the following order: 2 yellow (A), then 2 black (B). Remember to tighten the straps (C).

   IMPORTANT: Install blades with the coated side uppermost.
3. Remember to install cleaners (D) or (E) and reinforcement straps (F) on the black or yellow blades, depending on the type of the blade (coated (I) or uncoated (II)), as shown in the relevant installation scheme (I) or (II). Cleaner (D) is for counterclockwise rotation, cleaner (E) is for clockwise rotation.

Continued on next page

KM00321,00000DA -19-22DEC11-1/3

NOTE: Install cleaners (D) and (E) with their cutting edges pointing in the direction of cut.

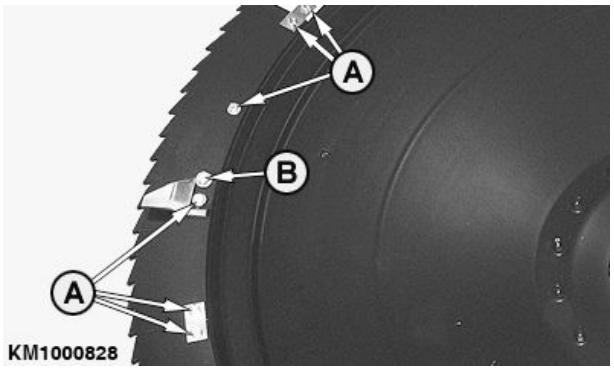
KM00321,00000DA -19-22DEC11-2/3

Tighten all attaching screws of blade segments and cleaners with the specified torque.

Specification

Screws (M8)—Torque	28 Nm 20.65 lb-ft
Screws (M10)—Torque	51 Nm 37.62 lb-ft

A—Screws (M8) **B—Screws (M10)**



KM1000828 —UN—26MAR09

KM00321,00000DA -19-22DEC11-3/3

Adjusting the Dividers

In order to prevent plugging and crop losses, the dividers (A) have to be properly adjusted.

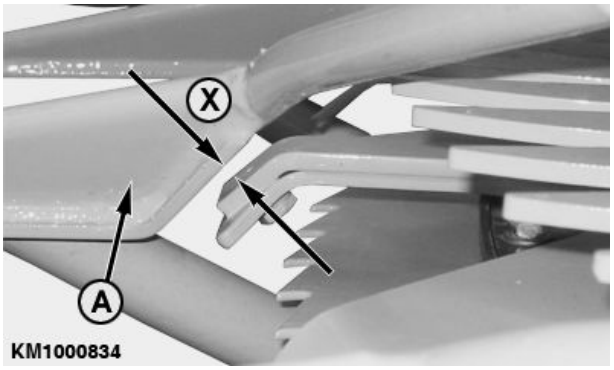
Always keep distance (X) between 3 and 7 mm (0.12 and 0.27 in.).

The specified distance (X) can be adjusted by means of two slot holes (see arrows).

Specification

Dividers and Large Drums—Distance from Each Other	3 to 7 mm 0.12 to 0.27 in.

A—Divider **X—3 to 7 mm (0.12 to 0.27 in.)**



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KM1000165 —UN—16OCT07

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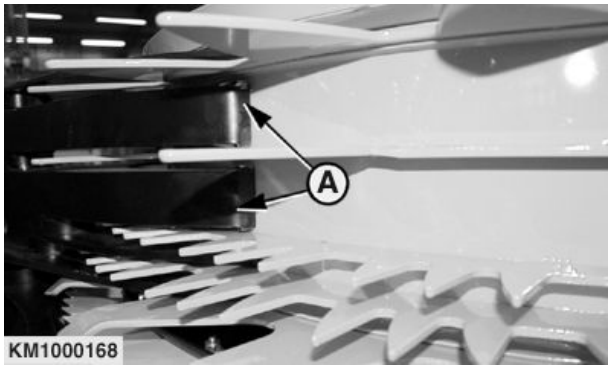
Checking Scrapers Adjustment

In order to prevent plugging in the feeding channel, the scrapers (A) have to be set as close as possible to the gathering drums. The scrapers might touch the drums slightly.

The scraper (A) can be adjusted thanks to slot holes (B).

A—Scraper **B—Slot hole**



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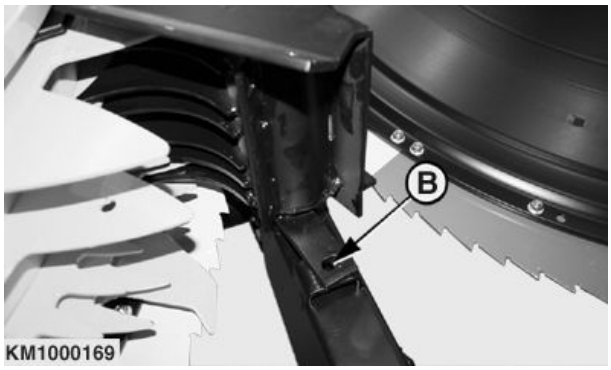

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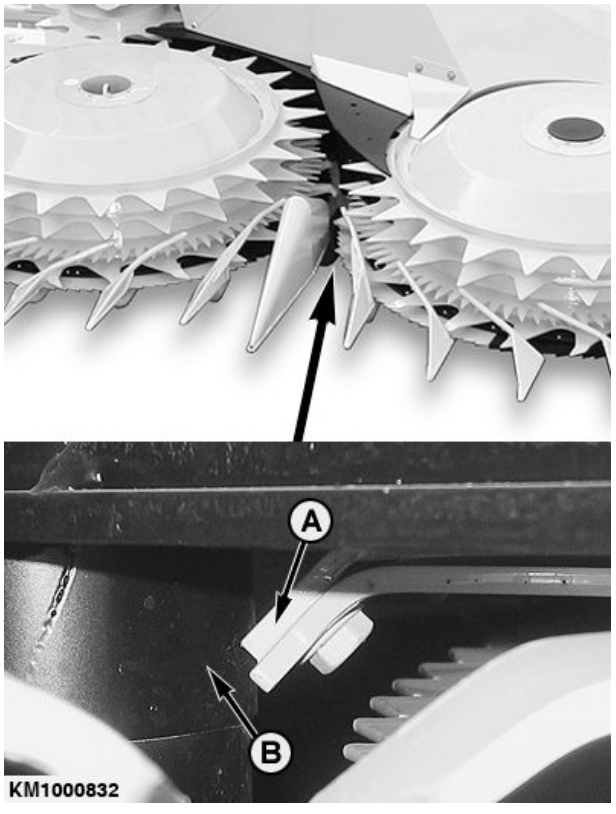
Checking and Adjusting Cleaners

Check adjustment and condition of the cleaners (A) frequently, replace if necessary.

Damaged or wrongly adjusted cleaners unnecessarily burden the drive and may cause malfunction of the rotary harvesting unit.

Set cleaner (A) as close as possible to the scraper (B) by bending up cleaner (A).

A—Cleaner **B—Scraper**



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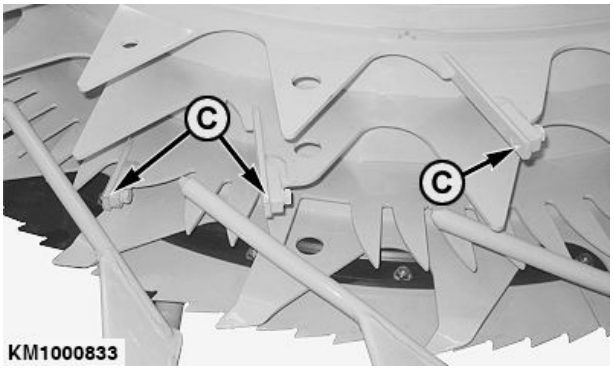
Check condition of the cleaners (C) frequently. Replace worn parts.

C—Cleaners



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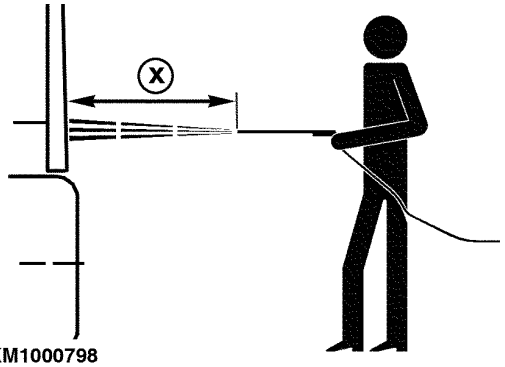
Cleaning Rotary Harvesting Unit

Remove loose crop by means of compressed air and/or a hand brush.

When using high pressure/steam cleaners, keep a minimum distance (X) of 250 mm (9.84 in.). Refer to specifications for the maximum temperature and maximum pressure.

Specification	
High pressure/steam cleaner—Max. temperature	50 °C (122 °F)
High pressure/steam cleaner—Max. pressure	8000 kPa (80 bar; 1160 psi)



KM1000798 —UN—09MAR09

X—250 mm (9.84 in.)

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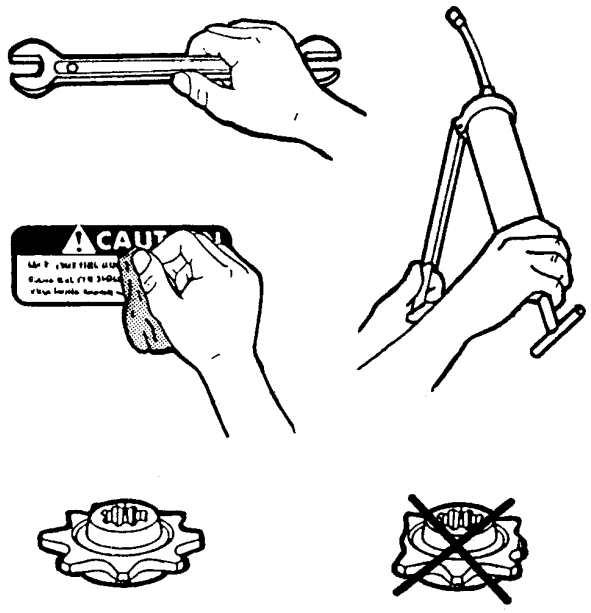
Storage

Storage at End of Harvesting Season

- Store the rotary harvesting unit in a dry place. If possible, store on level surface.
- Clean the rotary harvesting unit carefully and check all the slip clutches. Make any re-adjustments that may be necessary. In the Service Section, see Relieve Pressure on the Main Drive Slip Clutches.
- Lubricate the rotary harvesting unit or drain oil as indicated.
- Check the rotary harvesting unit for damaged or worn parts and replace them as necessary. For more detailed checks, see your KEMPER dealer.
- Touch up the paintwork if required, and clean the decals.



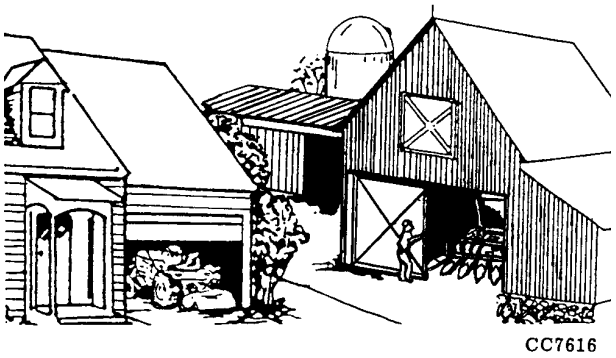
KM1000902

KM1000902 —UN—12JUN09

KM00321,000019E -19-12JUN09-1/1

Start of New Season

- If necessary, thoroughly clean the rotary harvesting unit.
- Lubricate the rotary harvesting unit and perform any service work that is due before the start of the harvesting season. See “Lubrication and Periodic Service”.
- Check tightness of all hardware.
- Check that the outer units of the rotary harvesting unit can be unfolded and folded correctly.
- Review your operator's manual.



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CC7616 —UN—21MAR95

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Technical specifications

Machine Design Life

This machine is designed and manufactured to provide a long life of productive operation. However, actual attainable life depends on a number of factors including the severity of working conditions and completion of recommended maintenance. (See the Service section of this manual.)

Periodically inspect and review the machine in conjunction with your KEMPER dealer. The review may result in recommendations for service, component repair, remanufacture or replacement, or, if at the end of life, that the machine be removed from operation. (See separate decommissioning section of this manual for information on disposal and recycling of machine components.)

No machine should be operated if safety-related components are missing or in need of service. All missing or damaged safety-related components, including safety signs, should be repaired or replaced before operating.

KM00321,00004C9 -19-30NOV15-1/1

Rotary Harvesting Unit 460^{plus}

Drive system	oil-bath gear box with safety clutch
Harvesting system	4 fast rotating blades
Crop conveyor	four slowly rotating gathering drums, two oblique feed drums
Weight	2750 kg (6062.7 lb.)
Width	
Transport width	3,00 m (9 ft. 10.1 in.)[a]
Working width	6,00 m (19 ft. 8.2 in.)[a]
Overall width	6,00 m (19 ft. 8.2 in.)[a]
Height	
Working Height	1.81 m (5 ft. 11.3 in.)[a]
Transport Height	2.90 m (9 ft. 6.2 in.)[a]
Length	2,60 m (8 ft. 6.4 in.)[a]
Maximum operating speed	15 km/h (9.32 mph)

[a] *All dimensions are nominal dimensions. Actual dimensions may be subject to fluctuations and may vary from case to case.*

KM00321,00008F6 -19-14MAR19-1/1

Sound Level

Max. sound level at operator's ear in accordance with DIN ISO 11204. Measurement method in accordance with ISO 5131 with rotary harvesting unit attached to the forage harvester and cab closed (average value):

460^{plus}	76.1 dB(A)

KM00321,00000DE -19-22DEC11-1/1

EU Declaration of Conformity

Kemper GmbH & Co.KG
Am Breul
D-48703 Stadtlohn, Germany

The person named below declares that

the product

Machine type: Rotary harvesting unit

Model: 460^{plus}

fulfills all relevant provisions and essential requirements of the following directives:

DIRECTIVE	NUMBER	CERTIFICATION METHOD
Machinery directive	2006/42/EC	Self-certification, per Article 5 of the Directive
Agricultural Machinery Safety—Part 1	DIN EN ISO 4254-1	Self-certification
Agricultural Machinery Safety—Part 7	DIN EN ISO 4254-7	Self certification
Safety of machinery	DIN EN ISO 12100	Self-certification
Universal-jointed shafts and their protection devices	DIN EN 12965	Self certification

Name and address of the person in the EU authorized to compile the technical construction file:

Brigitte Birk
Mannheim, Germany D-68008

Place of Declaration: 48703 Stadtlohn, Germany

Date of declaration: 02 February 2015

Manufacturing unit: Kemper Stadtlohn

Name: Hannes Fischer

Title: Manager Product Engineering

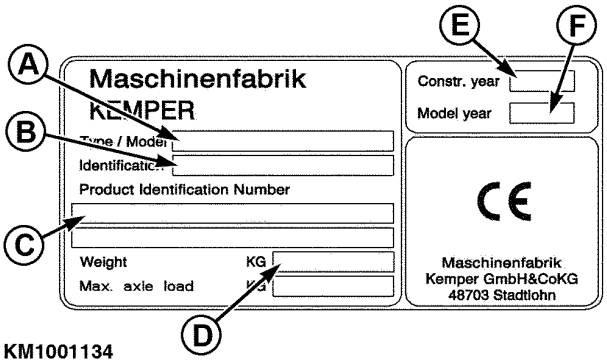
DXCE01 —UN—28APR09

CE

KM00321,00008F7 -19-14MAR19-1/1

Rotary Harvesting Unit Serial Number Plate

A—Type
B—Model Designation
C—Product Identification Number
D—Weight
E—Year of Construction
F—Model Year



KM1001134 —UN—24FEB10

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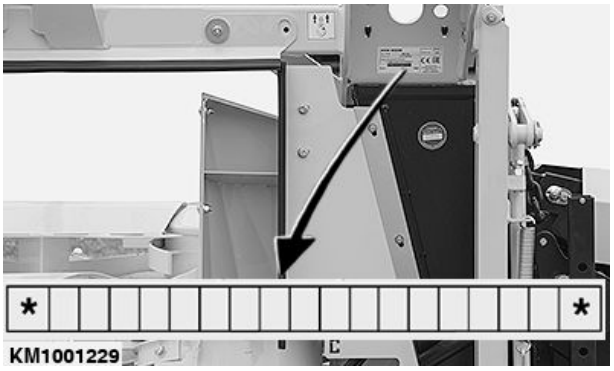
Serial Number

When ordering parts, always quote the rotary harvesting unit serial number. The serial number is on a plate located on the right side of the frame. Record serial number in the space provided opposite.



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