Rotary harvesting unit 475plus

OPERATOR'S MANUAL

475plus Rotary Harvesting Unit

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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.

KM00321,000070F -19-20DEC17-1/1

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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.

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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.

□ All screws and nuts have been tightened to specified torque. Pay particular attention to the screws that hold on the knives. Comply with the tightening torques quoted in the “Service” section.

□ All grease fittings have been lubricated.

□ All the gear cases have been filled with the correct quantity of the correct oil/grease/coolant (see Lubrication and Periodic Service section).

□ 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 can move freely.

□ Check all slip clutches as shown in the “Service” section.

□ All decals are in place and in good condition.

□ 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)

KM00321,00003C7 -19-12MAR15-1/1

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 on the new rotary harvesting unit at the start of the harvesting season.

□ All screws and nuts have been tightened to specified torque. Pay particular attention to the screws that hold on the knives. Comply with the tightening torques quoted in the “Service” section.

□ All safety shields are in place and fastened securely.

□ Check for broken or damaged parts. Replace any broken or damaged parts with genuine spare parts.

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

□ Check for worn rotary knives.

□ Once again discuss proper harvesting management practices; these are required for good silage.

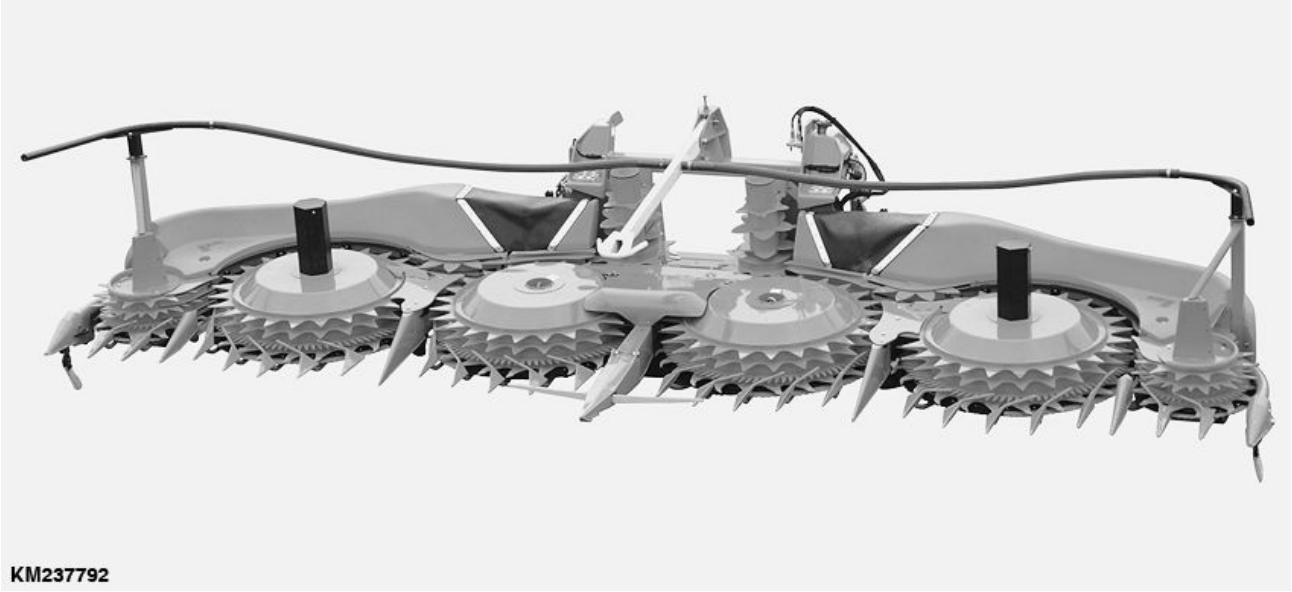
□ Review the entire operator's manual together with your customer and stress the importance of proper and regular lubrication, as well as safety precautions.

(Signature of Technician)

(Signature of Customer)

OUCC002,0002816 -19-14OCT07-1/1

Identification View



KM237792 —UN—12MAR15

KM00321,00003C8 -19-12MAR15-1/1

Safety Measures

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

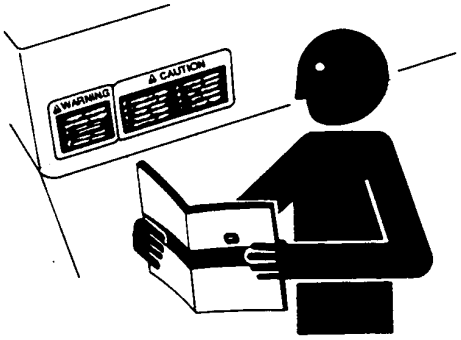
Follow Safety Instructions

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

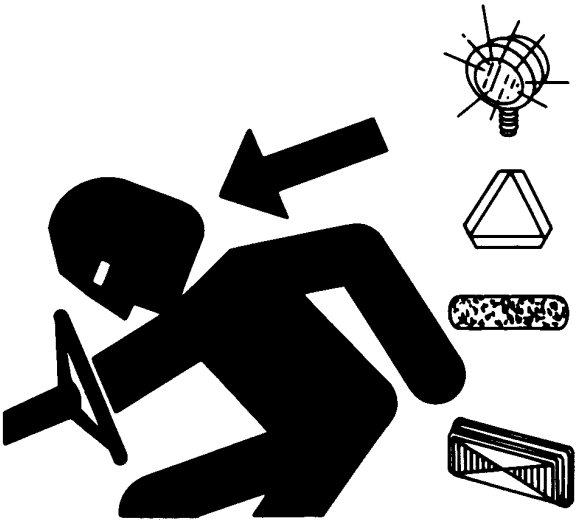
- Machine owners must make sure that operators are responsible, trained, have read the operating instructions and warnings, and know how to operate the machine properly and safely.
- Age, physical ability, and mental capacity can be factors in machine-related injuries. Operators must be mentally and 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

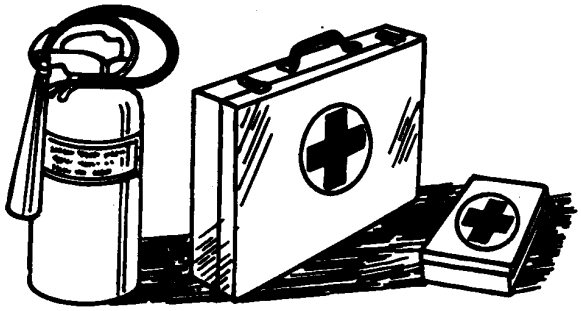
KM00321,000016C -19-14MAY09-1/1

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

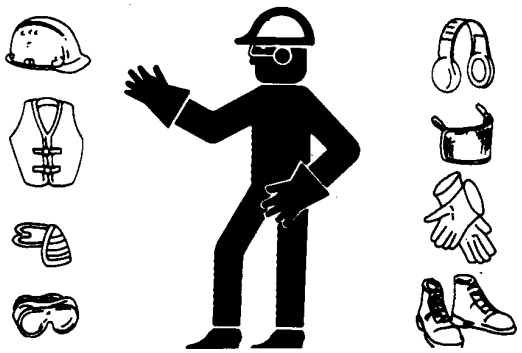
Wear Protective Clothing

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.

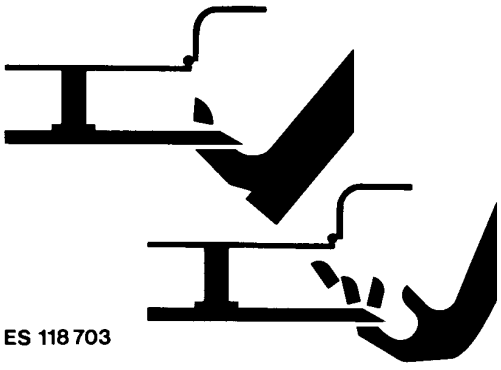
FX,READY -19-28FEB91-1/1

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.



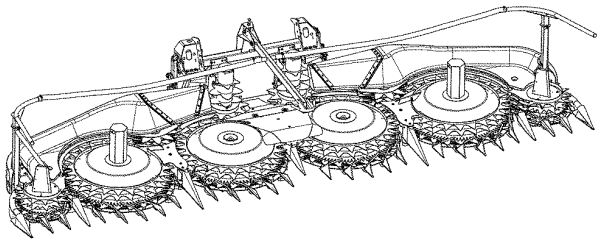
ES 118 703

ES118703 —UN—21MAR95

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

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.



KM237793

KM237793 —UN—12MAR15

KM00321,00003C9 -19-12MAR15-1/1

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.

ES 118 704

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.

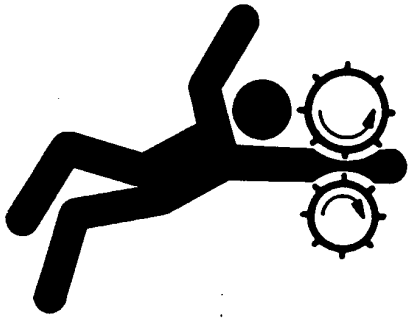
TS1644 —UN—22AUG95

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

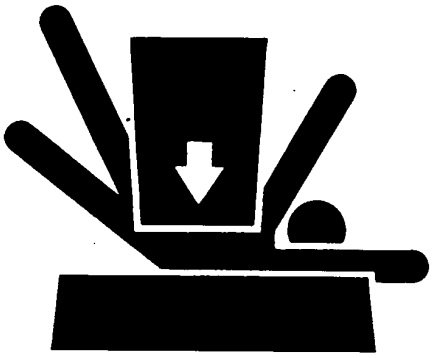
DX,LOOSE -19-04JUN90-1/1

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

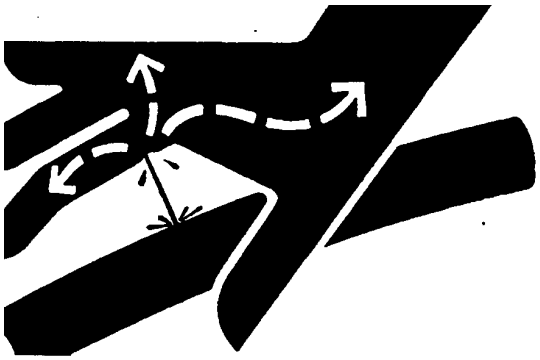
Avoid High-Pressure Fluids

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.

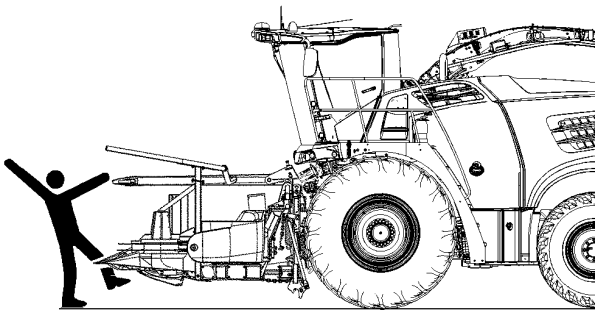


X9811 —UN—23AUG88

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

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.



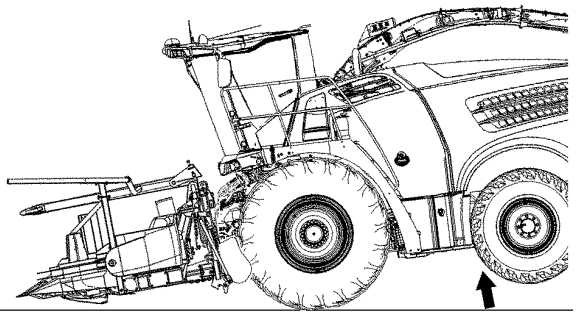
KM232861

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.

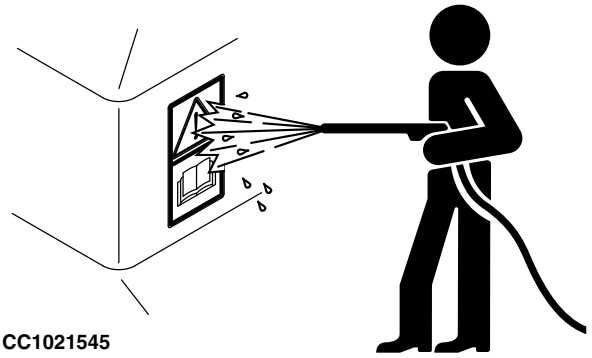
Dispose of paint and solvent properly.

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

Avoid High-Pressure Jet on Safety Decals

Pressurized water can remove or damage safety decals. Avoid to direct high-pressure jet on safety decals.

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



CC1021545

CC1021545 —UN—23APR02

KM00321,00001A5 -19-16JUN09-1/1

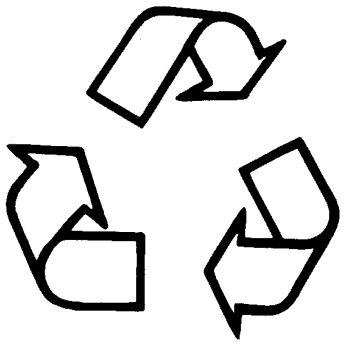
Dispose of Waste Properly

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.



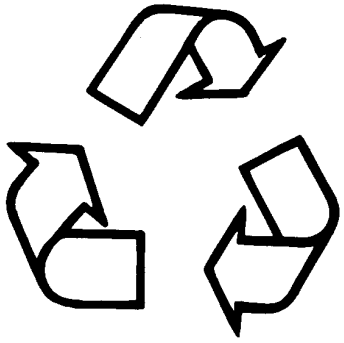
TS1133 —UN—15APR13

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.
- Service and dispose of air conditioning systems appropriately. Government regulations may require a certified service center to recover and recycle air conditioning refrigerants which could damage the atmosphere if allowed to escape.
- 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.



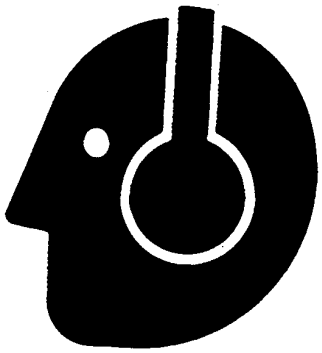
TS1133 —UN—15APR13

KM00321,00006C6 -19-28SEP17-1/1

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.



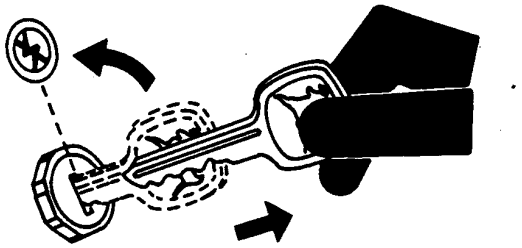
TS207 —UN—23AUG88

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

Park Machine Safely

Before working on the machine:

- Lower all equipment to the ground.
- Stop the engine and remove the key.
- Disconnect the battery ground strap.
- Hang a "DO NOT OPERATE" tag in operator station.



TS230 —UN—24MAY89

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

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.

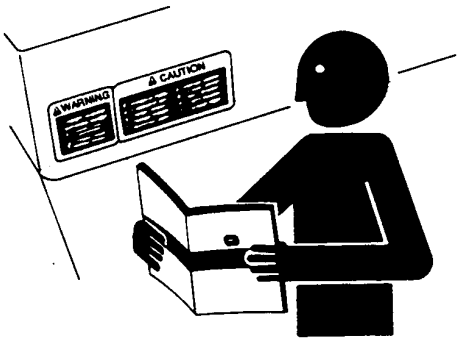
TS231 —19—07OCT88

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.

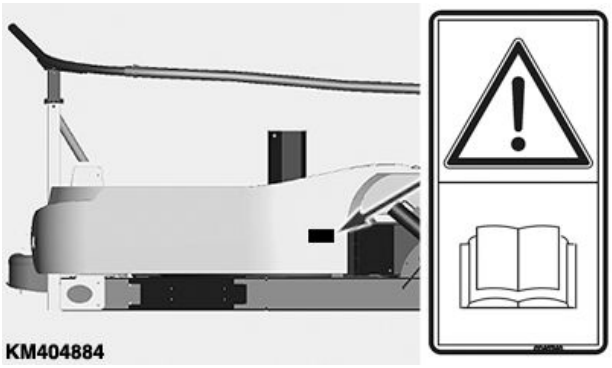


TS201 —UN—15APR13

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

Operator's Manual

This operator's manual contains all important information necessary for safe machine operation. It is necessary to carefully observe all safety instructions to avoid accidents.

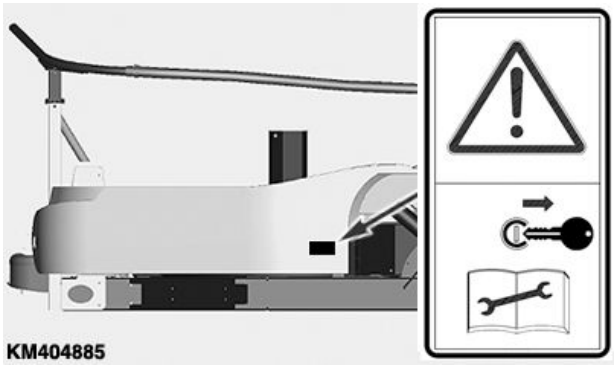


KM404884 —UN—13MAR20

KM00321,0000A36 -19-25MAR20-1/1

Repair and Maintenance

Before carrying out adjustment, repair and maintenance work, shut off forage harvester engine and remove ignition key.



KM404885 —UN—13MAR20

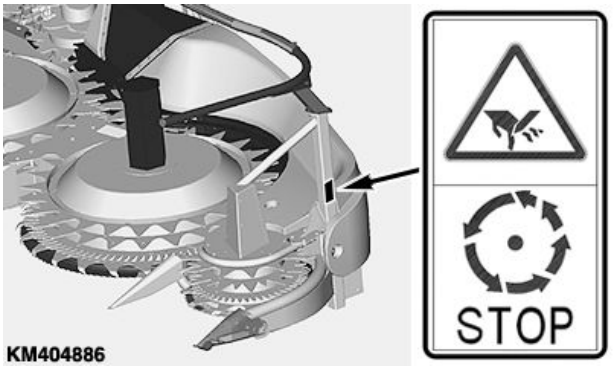
KM00321,0000A37 -19-25MAR20-1/1

Rotating Blades

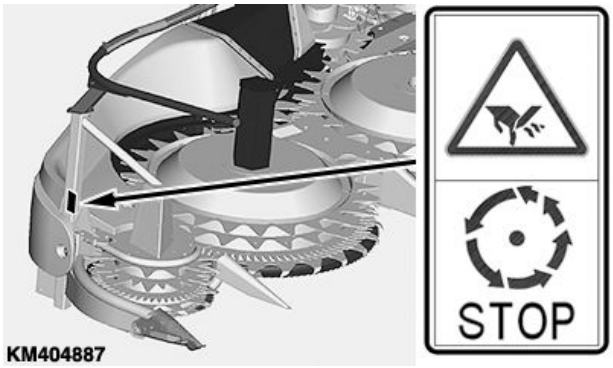
Do not touch any moving machine parts. Wait for all moving parts to come to a standstill.

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

Rotating blades can catch arms, legs or loose clothing as long as they are in motion and can cause serious injury.



KM404886 —UN—13MAR20



KM404887 —UN—13MAR20

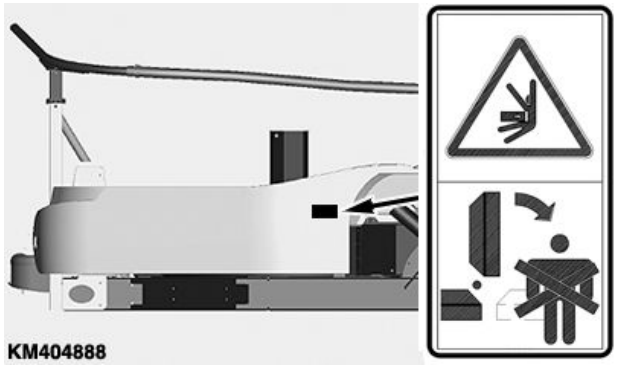
KM00321,0000A38 -19-25MAR20-1/1

Folding Area of the Rotary Harvesting Unit

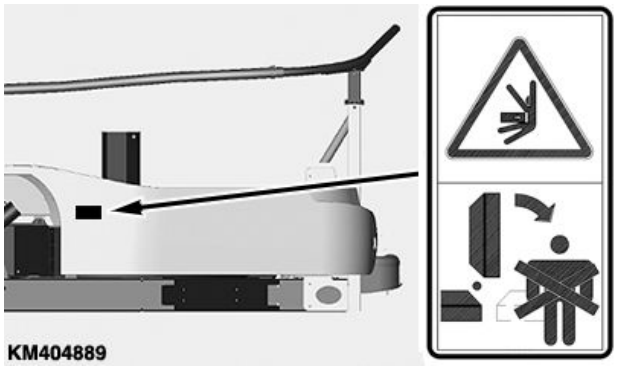
Stay clear of the folding area of the rotary harvesting unit.

When folding or unfolding the rotary harvesting unit, ensure that no persons are present in the danger zone.

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



KM404888 —UN—13MAR20



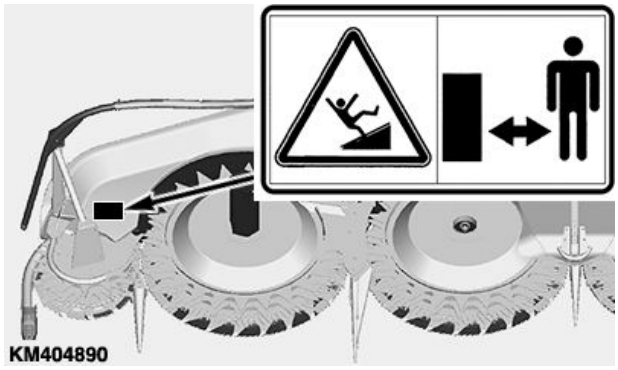
KM404889 —UN—13MAR20

KM00321,0000A39 -19-25MAR20-1/1

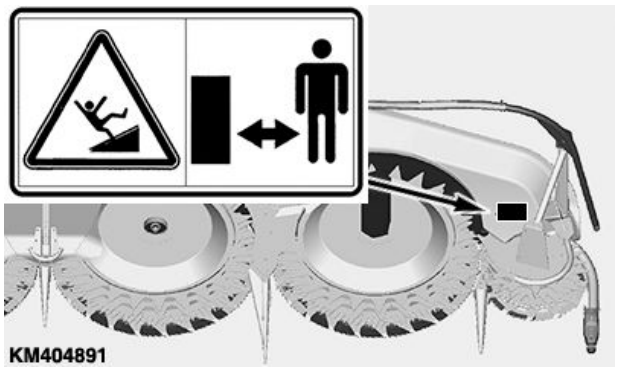
Stay Clear of Rotary Harvesting Unit

DANGER - stay clear of rotary harvesting unit. Before doing service work or clearing blockages:

- Switch off header drive
- Turn engine OFF
- Remove ignition key



KM404890 —UN—13MAR20



KM404891 —UN—13MAR20

KM00321,0000A3A -19-25MAR20-1/1

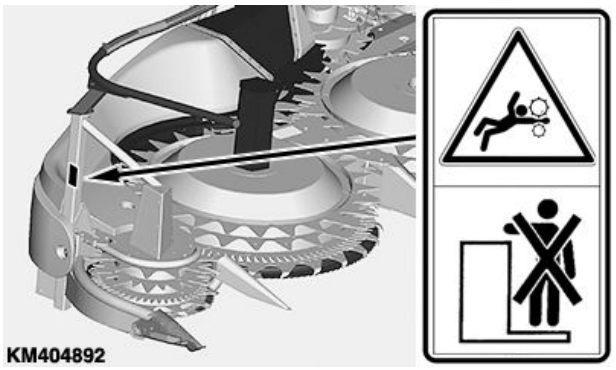
Rotating Drums

Stay clear of rotating drums. Risk of injury!

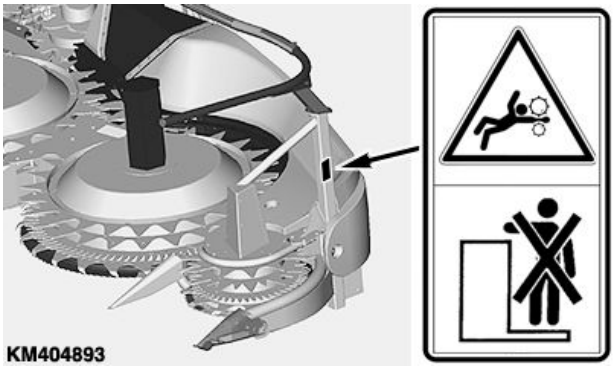
Arms, legs or loose clothing might become caught by the rotating drums when in operation.

Always keep the required safety distance from the rotating drums.

Wait for all moving parts to come to a standstill.



KM404892 —UN—13MAR20



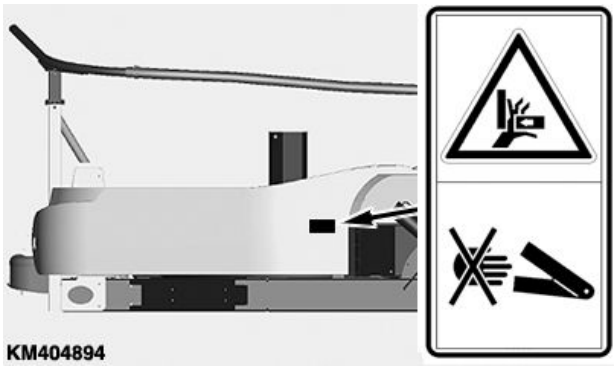
KM404893 —UN—13MAR20

KM00321,0000A3B -19-26MAR20-1/1

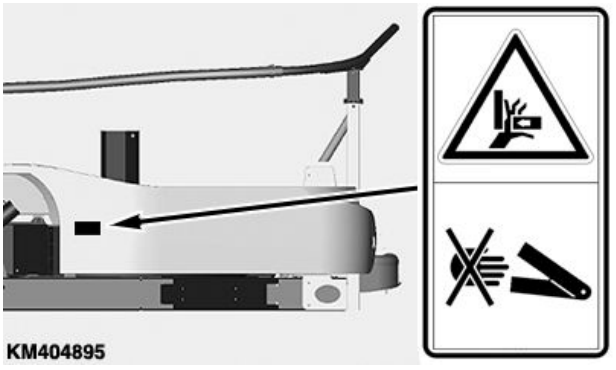
Foldable Frame

Never reach into danger area as long as side parts are still moving.

Serious personal injury may result when parts of your body enter an area where there is a risk if crushing.



KM404894 —UN—13MAR20



KM404895 —UN—13MAR20

KM00321,0000A3C -19-25MAR20-1/1

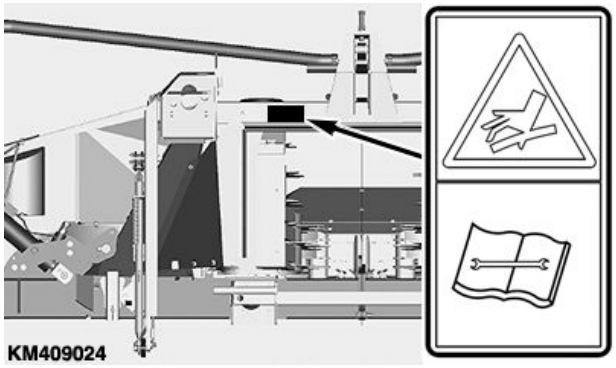
Hydraulic Lines

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

Avoid the hazard by relieving pressure before disconnecting hydraulic lines.

Search for leaks with a piece of cardboard.

Protect hands and body from -high-pressure fluids.



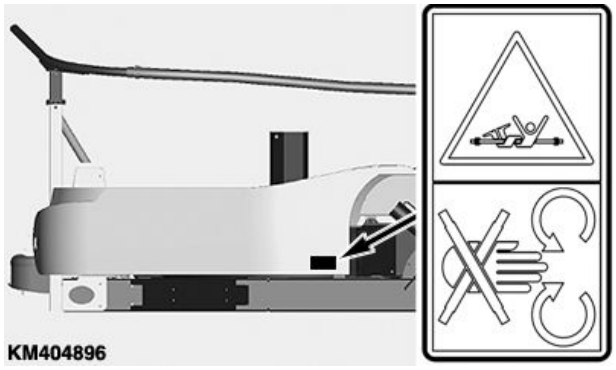
KM409024 —UN—25MAR20

KM00321,0000A3D -19-25MAR20-1/1

Driveshaft

Stay clear of rotating driveshaft.

Entanglement in the rotating driveshaft can cause serious injury or death. Always ensure that all shields of the driveline are attached correctly.

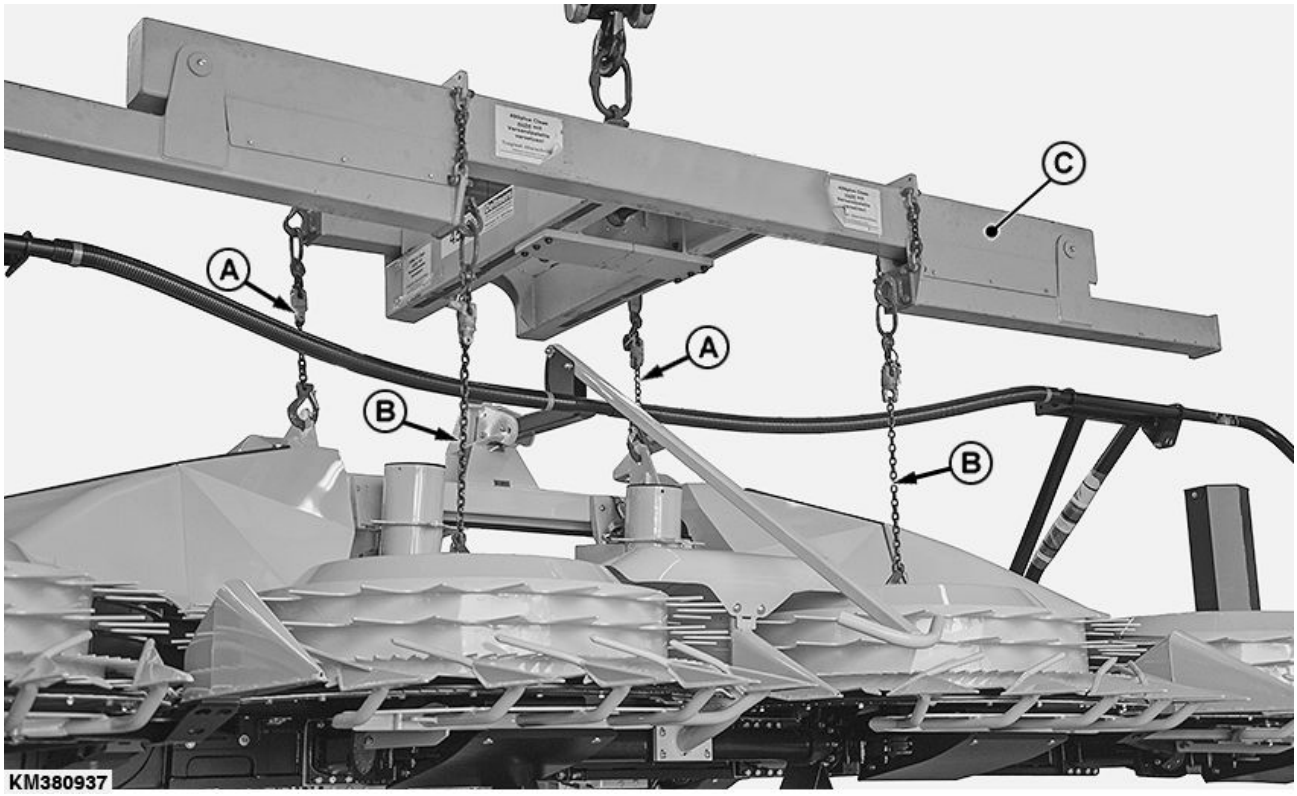


KM404896 —UN—13MAR20

KM00321,0000A3E -19-25MAR20-1/1

Loading with a Crane

Raise the rotary harvesting unit with a crossbar



KM380937 —UN—28JUN19

A—Chains **B—Chains** **C—Crossbar**

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

Make sure to use chains and hoisting devices that meet the weight requirements of the rotary harvesting unit (see "Specifications" section).

IMPORTANT: The lifting eye nuts in the gathering drums must be screwed in completely.

The chains (A) and (B) must be pulled upwards **vertically**. Therefore, use a traverse (C).

CAUTION: Lifting the rotary harvesting unit without a traverse will pull the chains at an angle and leads to an overload of the lifting eye nuts in the gathering drums.

Continued on next page

KM00321,0000A31 -19-20MAR20-1/2

Lifting the Rotary Harvesting Unit With Optional Lifting Eye Nut Kit

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

Make sure to use chains and hoisting devices that meet the weight requirements of the rotary harvesting unit (see "Specifications" section).

A special kit is required when raising the rotary harvesting unit without a crossbar. This parts kit is mandatory and consists of two heavy-duty lifting eye nuts (A).

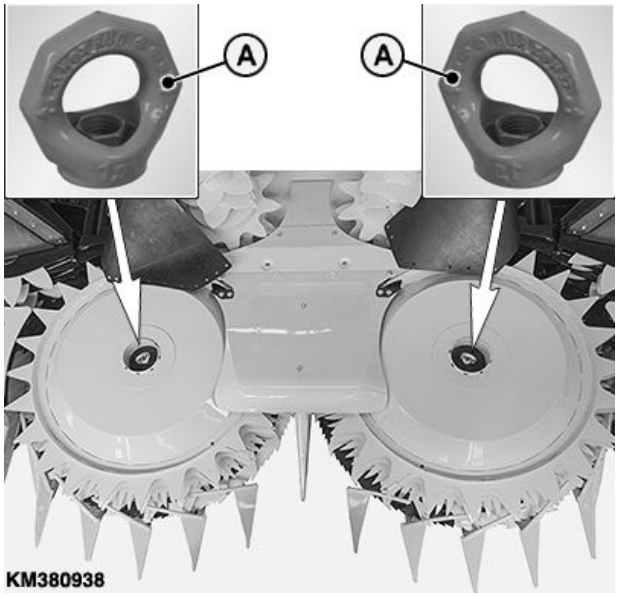
NOTE: The parts kit is available through spare parts channel. Contact Your Dealer.

1. Remove the existing lifting eye nuts in the two center gathering drums and install the heavy-duty lifting eye nuts (A).

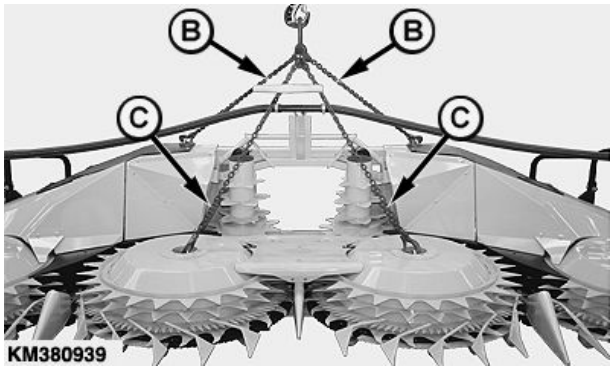
   IMPORTANT: The lifting eye nuts (A) must be screwed in completely. Only tighten the lifting eye nuts (A) by hand.

2. Lift the rotary harvesting unit by using chains (B) and (C) with the relevant length as shown on illustration.

A—Heavy-Duty Lifting Eye Nuts
B—Chain, 1540 mm (5 ft 0.62 in)
C—Chain, 1600 mm (5 ft 2.99 in)



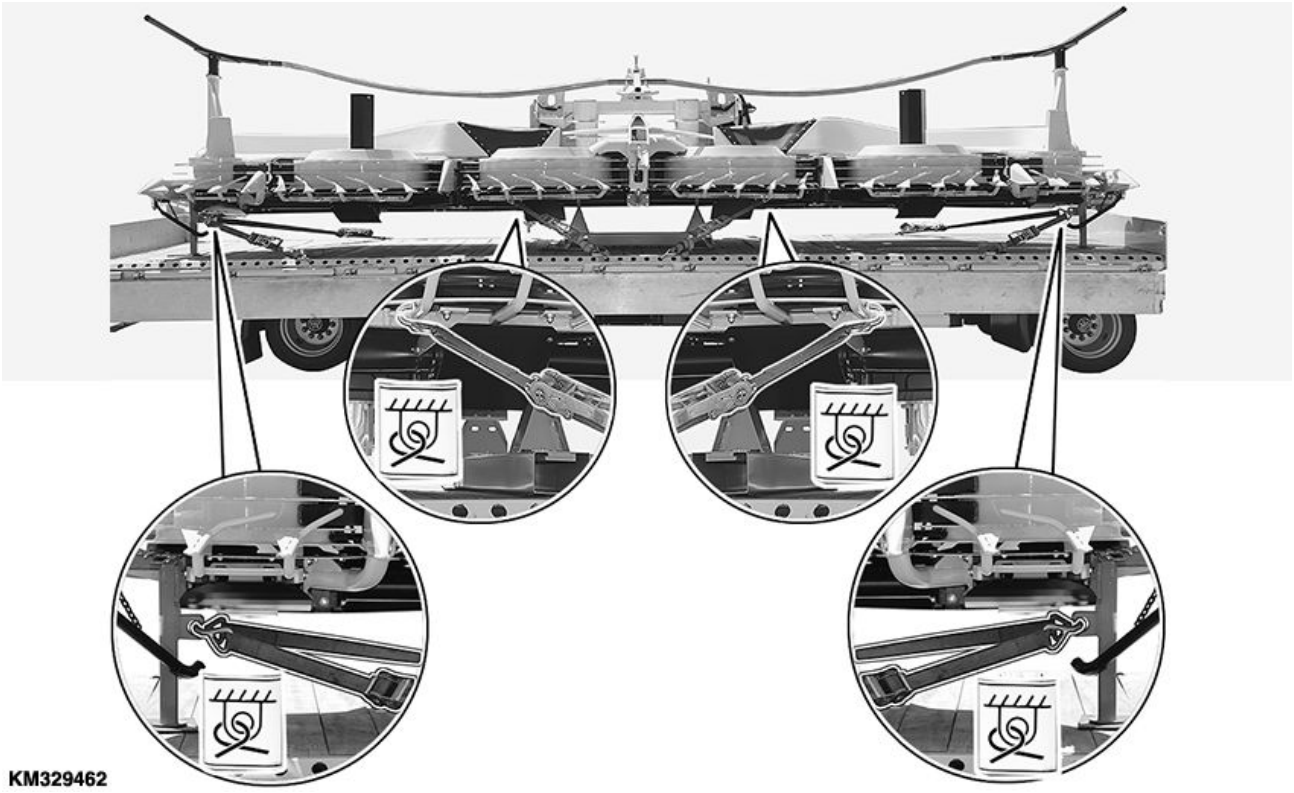
KM380938 —UN—28JUN19



KM380939 —UN—28JUN19

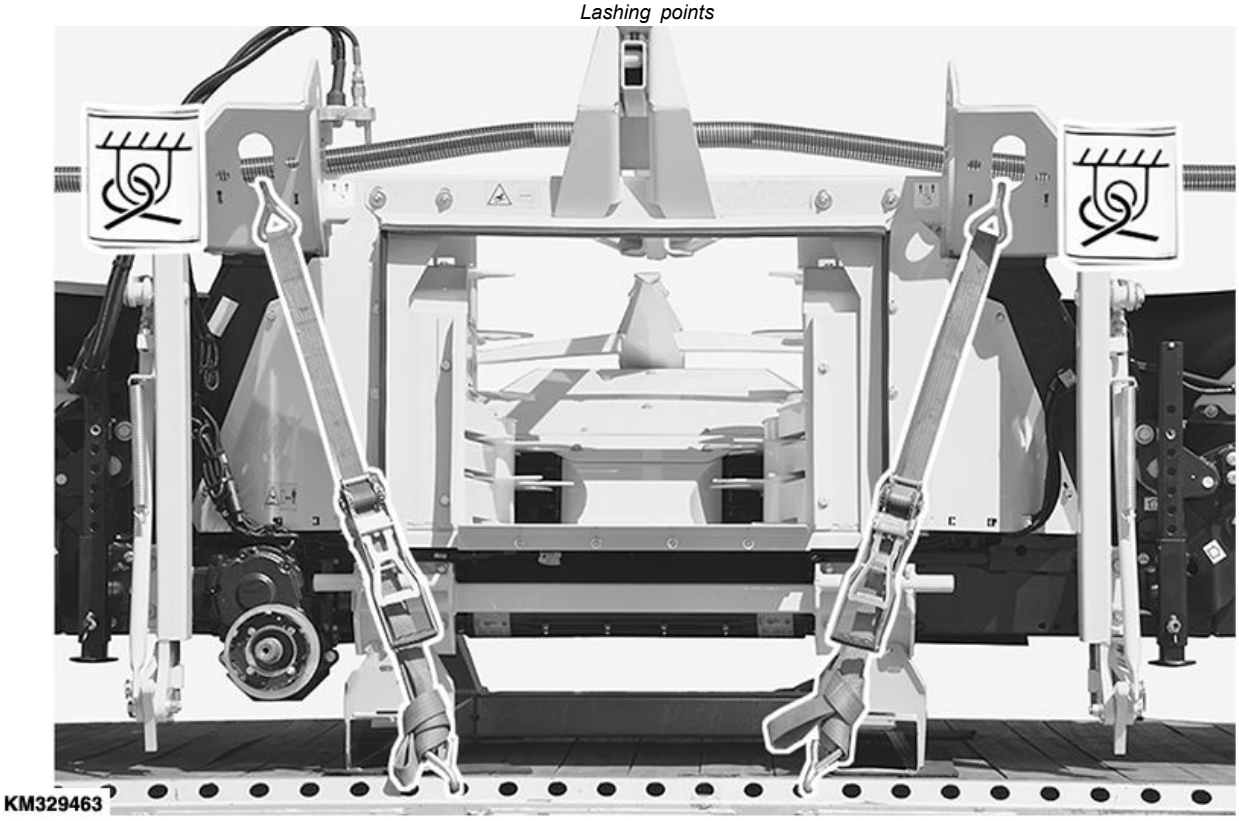
KM00321,0000A31 -19-20MAR20-2/2

Securing the Rotary Harvesting Unit (Lashing Points)



KM329462 —UN—29SEP17

Lashing points



KM329463 —UN—29SEP17

Lashing points

KM00321,00006C8 -19-29SEP17-1/1

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.

KM00321,0000038 -19-01SEP08-1/1

Remove Shipping Stands

Remove shipping stands on left side and right side.

KM232864 —UN—12FEB15

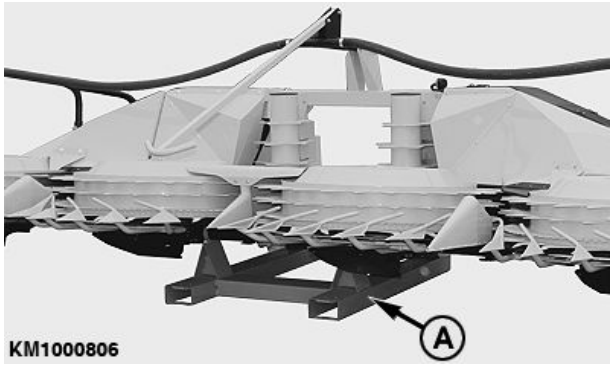
KM00321,00003D5 -19-13MAR15-1/1

Removing the Transport Pallet

Remove transport pallet (A).

IMPORTANT: Do not remove screws from the transport pallet unless there is no load on the screws.

A—Transport Pallet



KM1000806 —UN—17MAR09

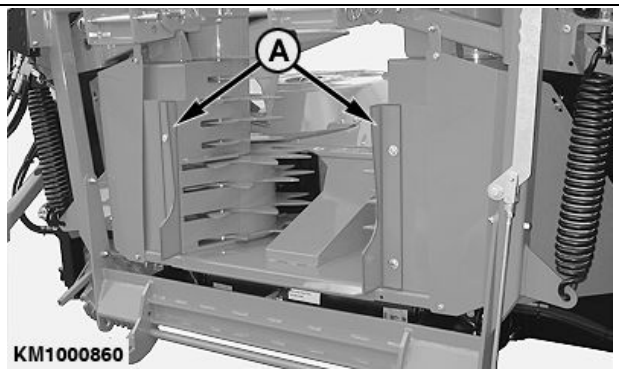
KM00321,00006C9 -19-29SEP17-1/1

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

475^{plus}	860 Type 496/500 870 Type 492/493/496/500 890 Type 492/493 900 Type 492/493 940 Type 494/497/498/502 950 Type 494/497/498/502 960 Type 494/497/498/499/502 970 Type 494/497/498/502 980 Type 494/497/498/502 990 Type 494/497/498/499/502

KM00321,0000B1C -19-27OCT20-1/1

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.

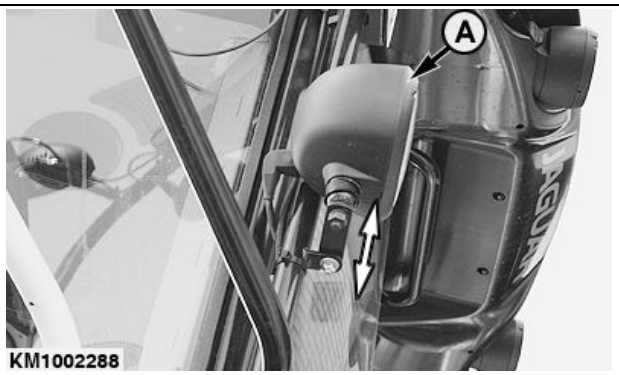
KM00321,0000204 -19-18AUG09-1/1

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 type 498, 499 and 502 forage harvesters with variable header drive

Rotary harvesting units for the Claas type 498, 499 and 502 forage harvesters are technically prepared for the variable header drive.

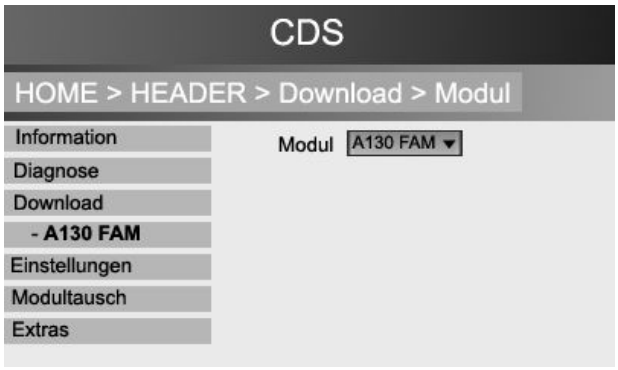
In addition, programming steps are required in the forage harvester software, which must be matched with Claas. Contact the Claas dealer concerning this.

IMPORTANT: To use the variable header drive, module A130FAM must be programmed for the header drive. 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 gearbox.

NOTE: For rotary harvesting units that are equipped for mounting a support wheel, first it is necessary to delete the existing software on the rotary harvesting unit module. Then the module name A130FAM is visible.

Programming of the A130FAM module takes place 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

KM00321,0000B1D -19-27OCT20-1/5

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

Continued on next page

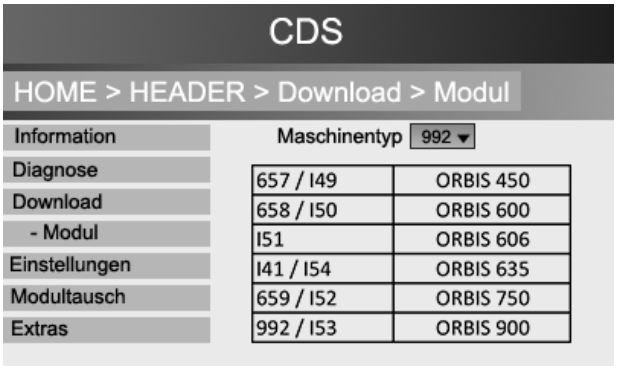
KM00321,0000B1D -19-27OCT20-2/5

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

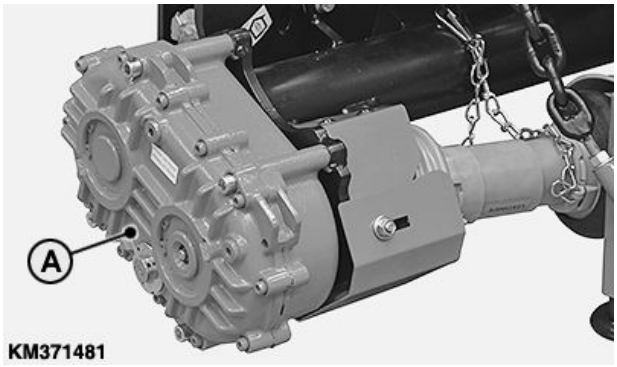
Rotary harvesting unit model	Machine type	Transmission	Transport system
345plus	Orbis 450	3 speed transmission	No transport system
360plus/460plus without chassis	Orbis 600	3 speed transmission	No transport system
360plus/460plus with chassis	Orbis 750	3 speed transmission	Transport wagon
375plus/475plus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

KM00321,0000B1D -19-27OCT20-3/5

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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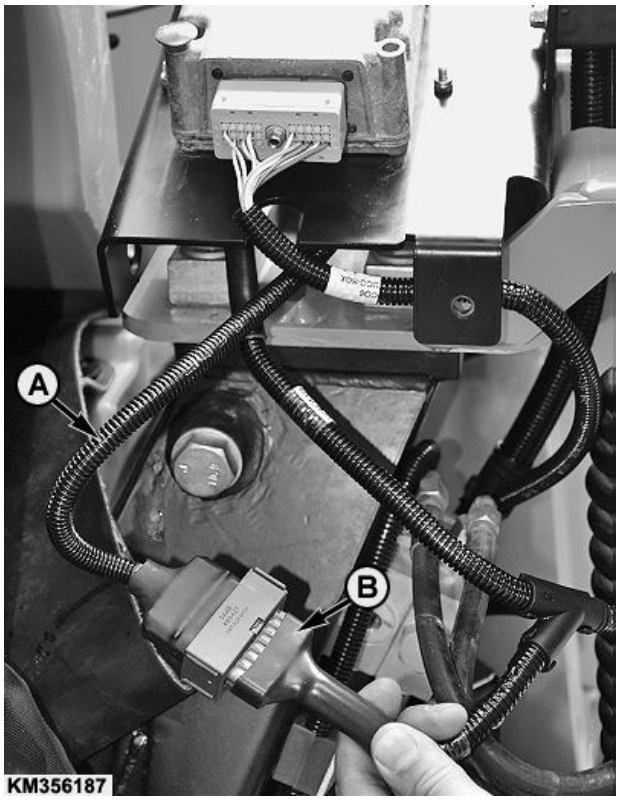
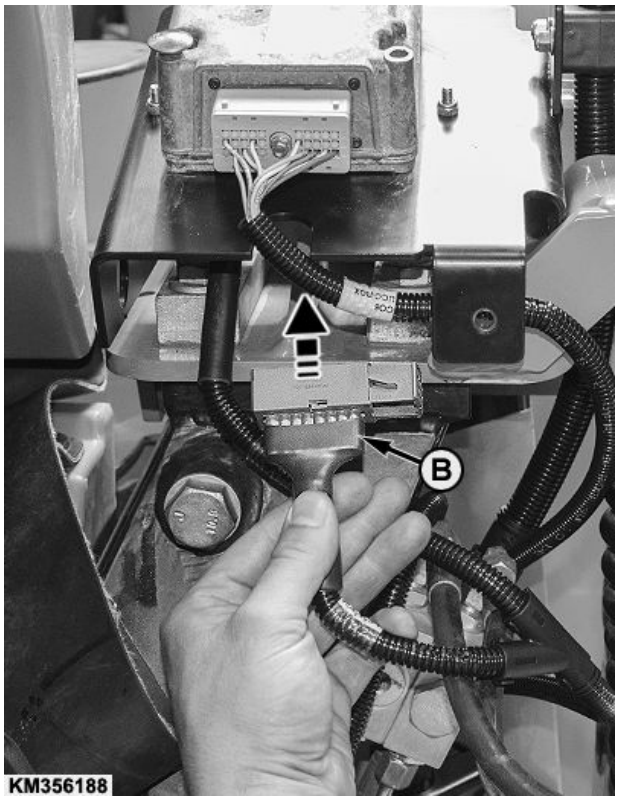
KM00321,0000B1D -19-27OCT20-4/5



KM356187 —UN—02JUL18



KM356188 —UN—02JUL18

A—Adapter cable

B—Main wiring harness connector

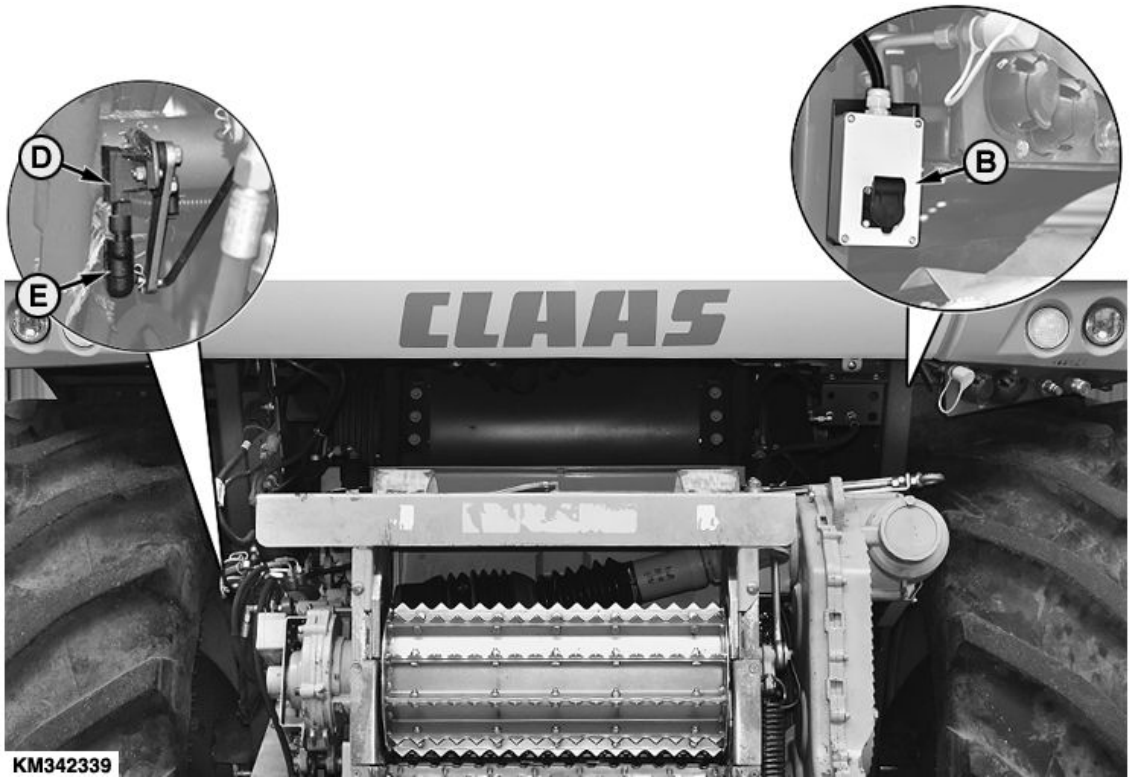
IMPORTANT: Perform this step only for rotary harvesting units that have been equipped for attachment of a support wheel at the factory.

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.

KM00321,0000B1D -19-27OCT20-5/5

Installing the additional wiring harness (only forage harvesters of types 498, 499 and 502)



KM342339 —UN—03JUL18

NOTE: A wiring harness with an additional socket and connecting cable is supplied along with this rotary harvesting unit. This wiring harness is needed in order to fold the rotary harvesting unit.

The supplied wiring harness 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—Connectors
B—Socket outlet
C—Connecting cable
D—Angle sensor
E—Connector

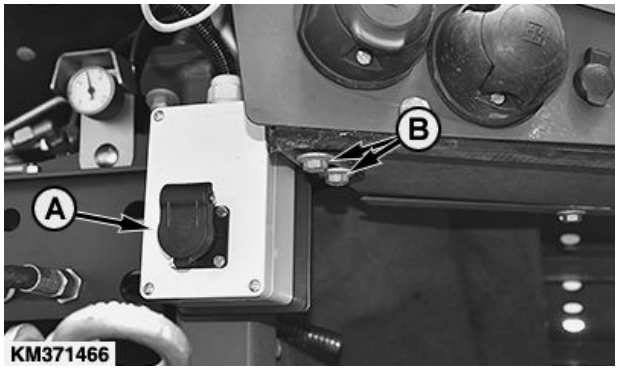
Continued on next page

KM00321,0000B18 -19-27OCT20-1/3

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

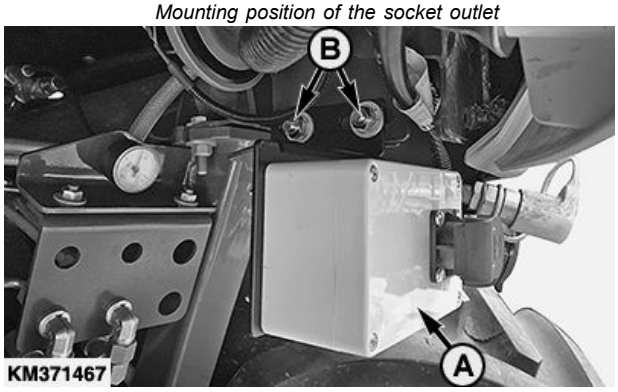
NOTE: The mounting position of the socket outlet varies and depends on the manufacture year of the forage harvester.

A—Socket outlet **B—Bolts**



KM371466 —UN—08FEB19

Mounting position of the socket outlet



KM371467 —UN—08FEB19

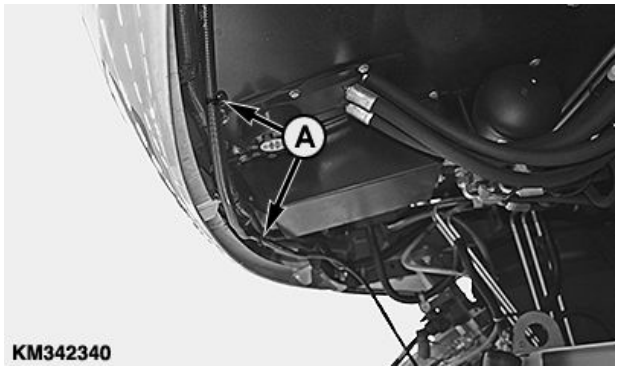
Mounting position of the socket outlet

KM00321,0000B18 -19-27OCT20-2/3

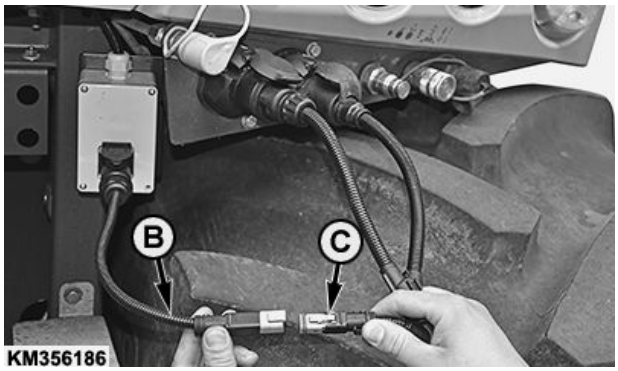
4. Fix the remaining cables with cable binders (A) behind the front cover.
5. Plug the connection cable (B) into the socket outlet and connect it to the main wiring harness (C).

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 binder **C—Main wiring harness**
B—Connecting cable



KM342340 —UN—02JUL18



KM356186 —UN—03JUL18

KM00321,0000B18 -19-27OCT20-3/3

Attaching to CLAAS Forage Harvesters

Rotary Harvesting Units with Standard Tilt Frame

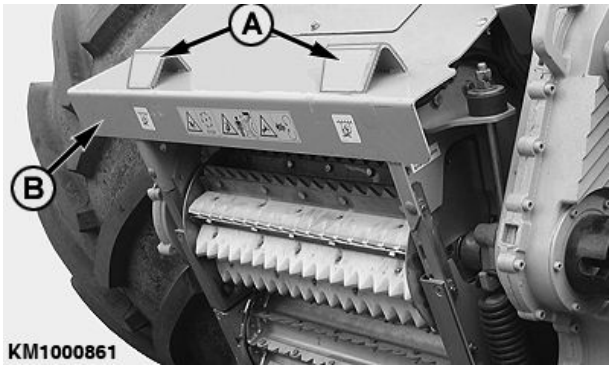
1. Drive the forage harvester close to the rotary harvesting unit's frame until latching hooks (A) protrude into brackets (D) of the attaching frame.

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

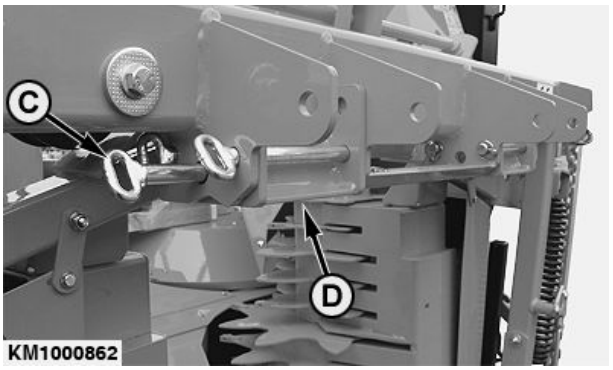
2. Remove pins (C) on both sides.
3. Lift front shield (B) up until latching hooks (A) of the rotary harvesting unit lie in brackets (D).
4. Lock the rotary harvesting unit:
   Secure upper bearing point by installing pin (C).
   Lock lower bearing point by engaging lever (E).

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

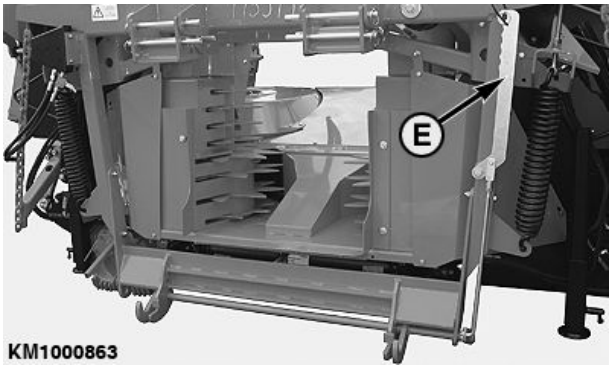
A—Latching Hooks
B—Front Shield
C—Pin
D—Bracket
E—Lever



KM1000861 —UN—25MAY09



KM1000862 —UN—25MAY09



KM1000863 —UN—25MAY09

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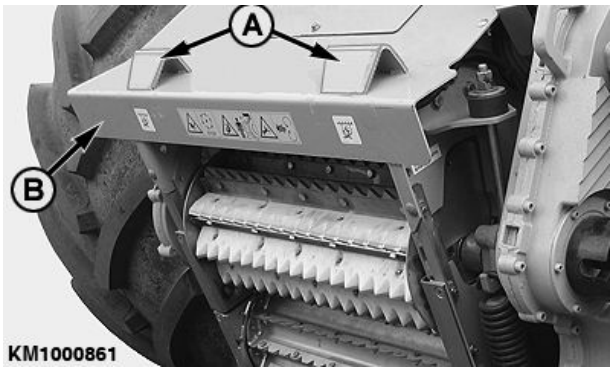
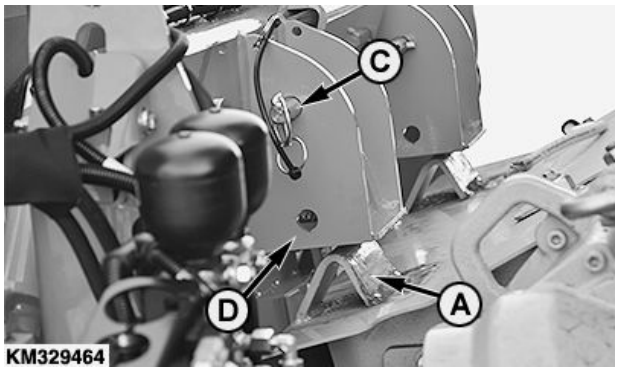
KM00321,00006CB -19-09OCT17-1/2

Rotary Harvesting Units with Attaching Frame for Support Wheel



KM1000861 —UN—25MAY09



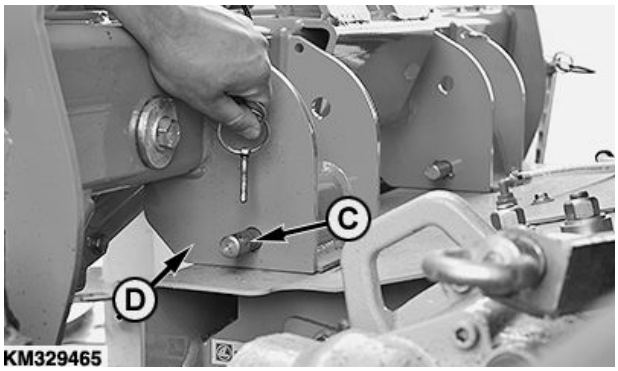
KM329464 —UN—29SEP17

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).

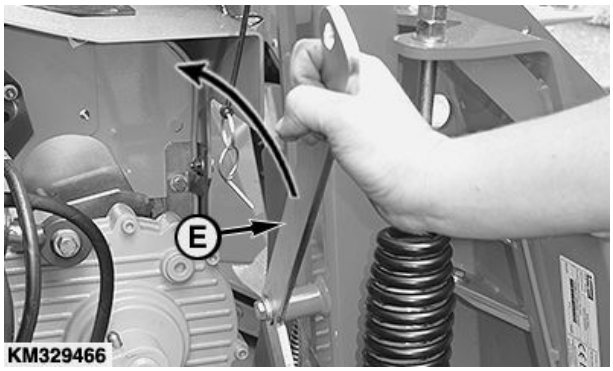
   IMPORTANT: Retain pin (C) and lever (E) with spring locking pin.

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.

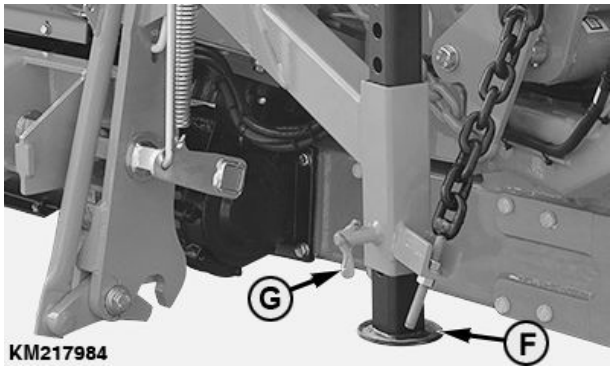
A—Latching Hooks
B—Front Shield
C—Pin
D—Bracket
E—Lever
F—Jackstand
G—Pin



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

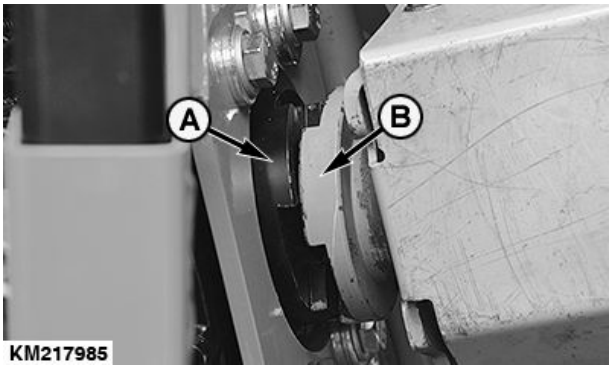
Adjust the quick coupler (only for initial use)

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.

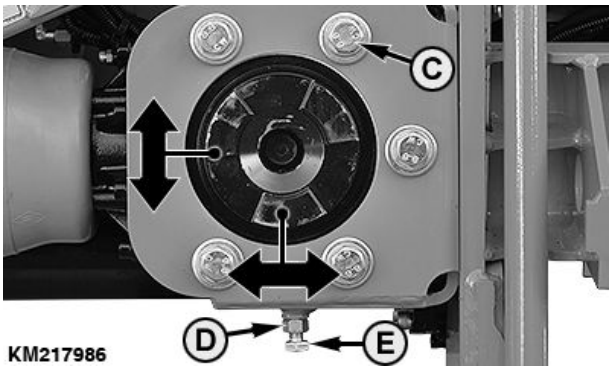
Specification

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

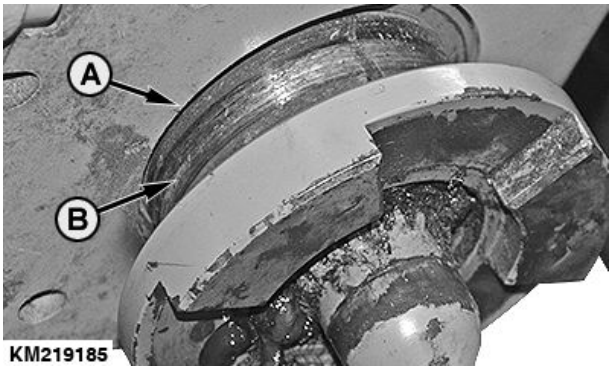
Adjust quick coupler in axial direction

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

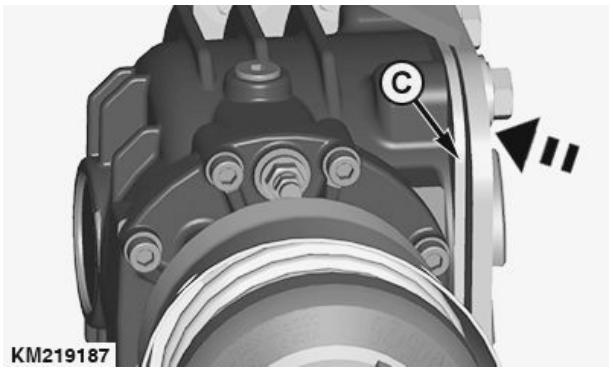
⚠ CAUTION: Risk of fire - Incorrect setting may result in airborne sparks!

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

A—Housing
B—Groove
C—Spacer Plate



KM219185 —UN—15SEP14



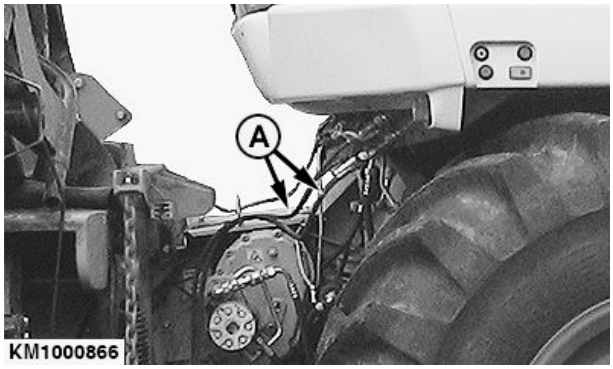
KM219187 —UN—15SEP14

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.

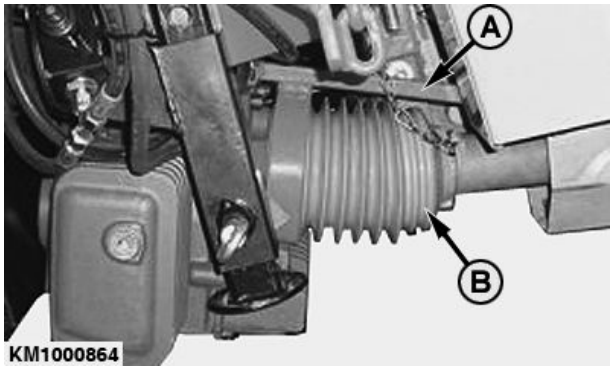
After the rotary harvesting unit has been attached to the forage harvester, the universal-jointed shaft for the drive must be installed.

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

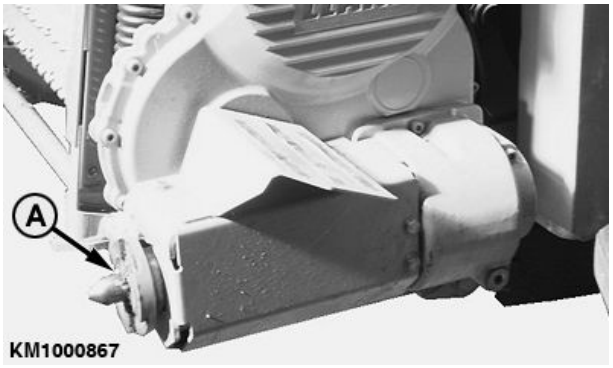
KM00321,0000177 -19-08JUN09-1/1

Connecting the Drive (Types 493, 494 and 497)

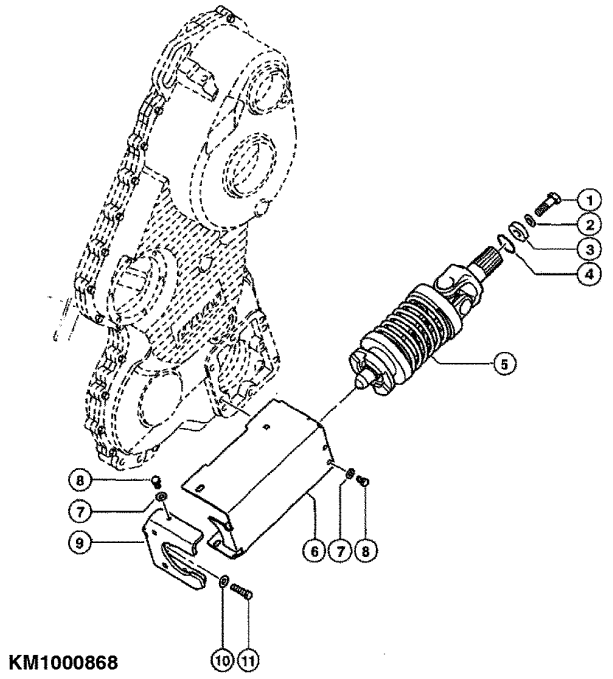
1. Completely remove claw clutch (A) from rotary harvesting unit drive.

   To do this, disassemble items 1 to 11.

A—Claw clutch



KM1000867 —UN—26MAY09

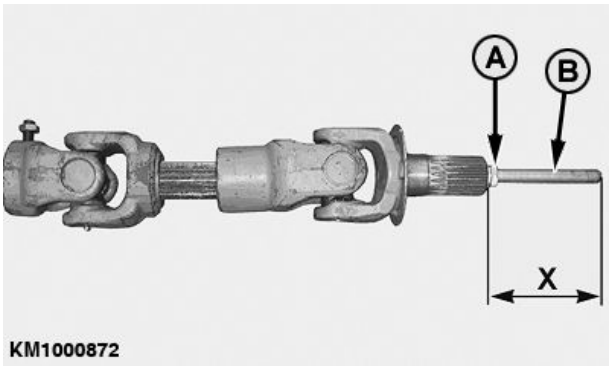


KM1000868 —UN—26MAY09

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



KM10000872 —UN—26MAY09

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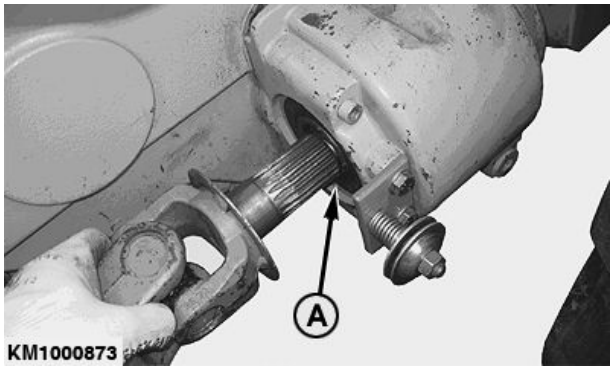
KM00321,00008F4 -19-13MAR19-2/7

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

A—Splined Bushing

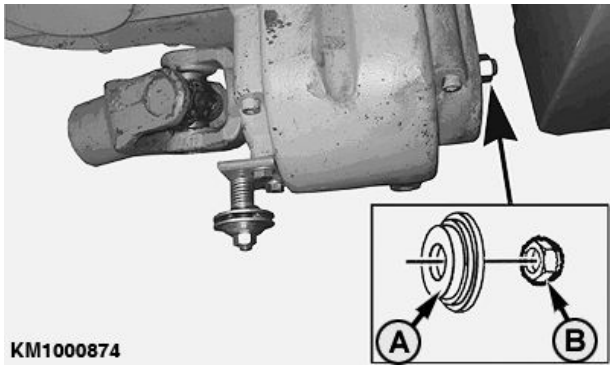


KM1000873 —UN—26MAY09

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

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

A—Bushing **B—Retaining Nut**

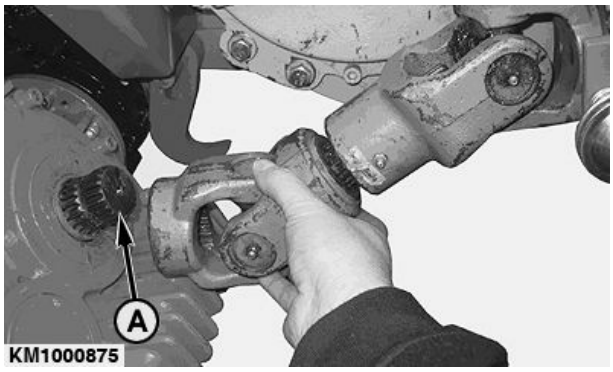


KM1000874 —UN—26MAY09

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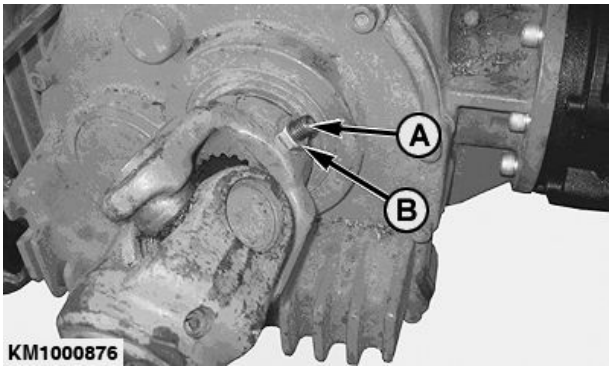
KM00321,00008F4 -19-13MAR19-5/7

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**

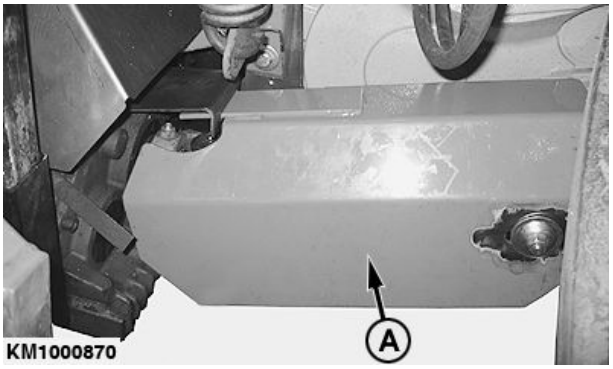


KM1000876 —UN—26MAY09

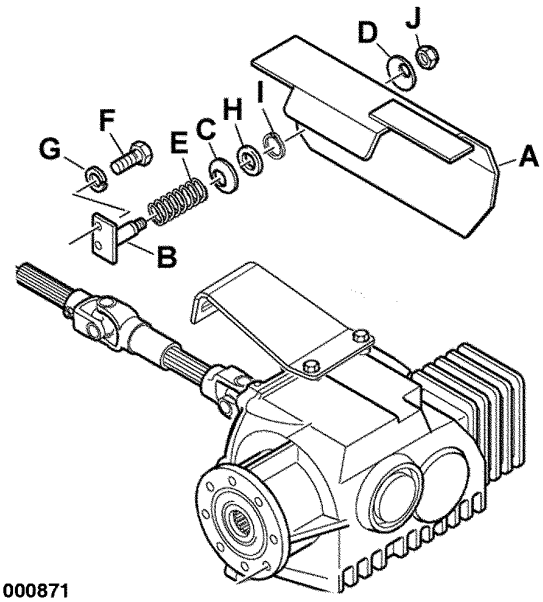
KM00321,00008F4 -19-13MAR19-6/7

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

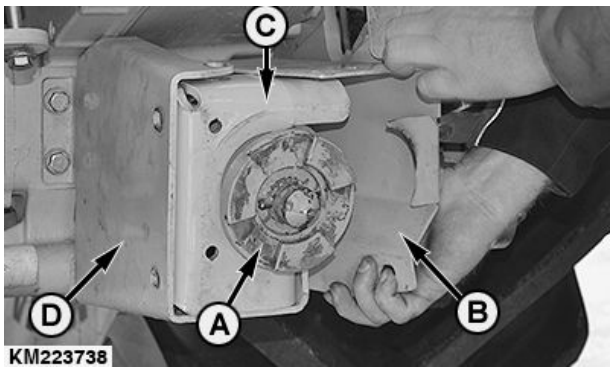
KM00321,00008F4 -19-13MAR19-7/7

Connecting the Drive (Types 496, 500)

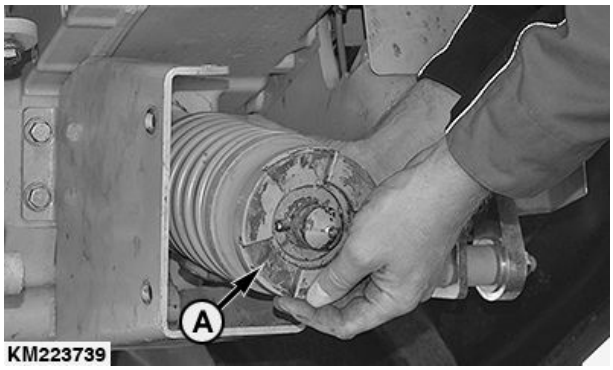
1. Completely remove claw clutch (A) from forage harvester header drive.

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

A—Claw clutch
B—Metal Sheet
C—Metal Sheet
D—Metal Sheet



KM223738 —UN—22OCT14



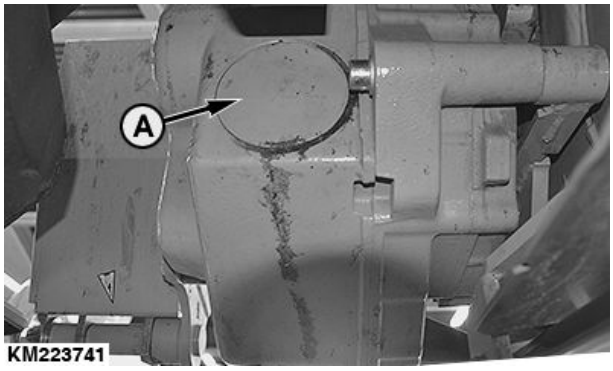
KM223739 —UN—22OCT14

KM00321,0000B1F -19-27OCT20-1/8

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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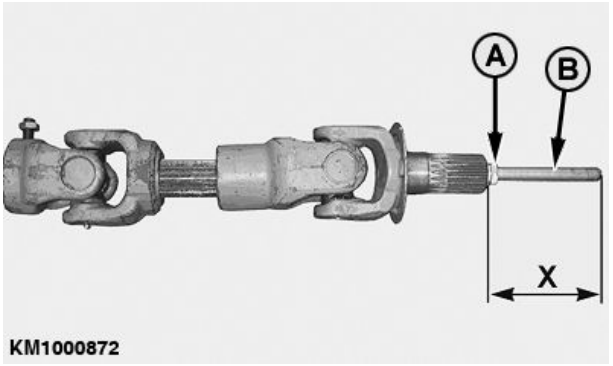
KM00321,0000B1F -19-27OCT20-2/8

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.)

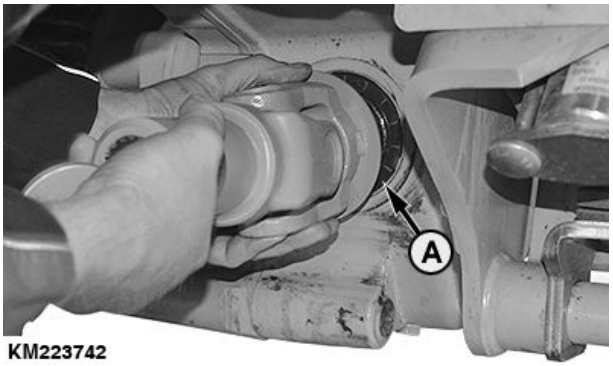


KM1000872 —UN—26MAY09

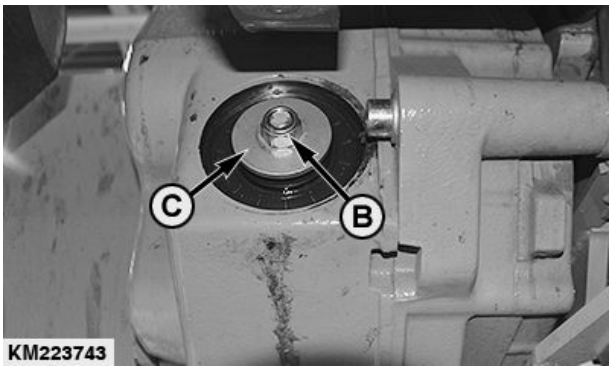
KM00321,0000B1F -19-27OCT20-3/8

4. Insert the universal-jointed shaft into header drive (A) on the forage harvester.
5. Secure the universal-jointed shaft to the rear of the header drive using washer (C) and retaining nut (B).
6. Put the other end of the Universal-jointed Shaft Shield on the rotary harvesting unit transmission (D).

A—Header Drive
B—Retaining Nut
C—Washer
D—Transmission



KM223742 —UN—22OCT14



KM223743 —UN—22OCT14

KM223744 —UN—22OCT14

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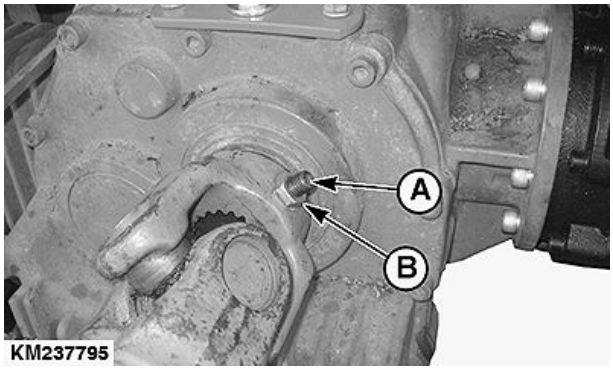
KM00321,0000B1F -19-27OCT20-4/8

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**

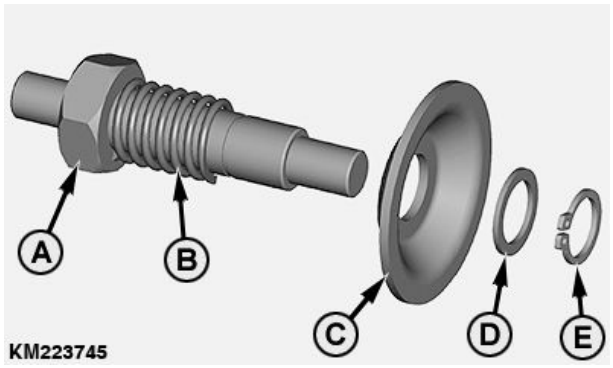


KM237795 —UN—13MAR15

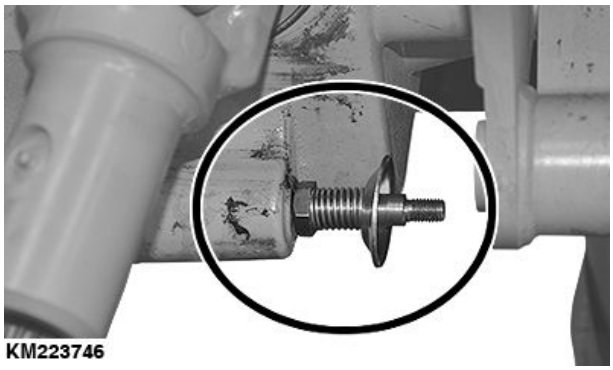
KM00321,0000B1F -19-27OCT20-5/8

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

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



KM223745 —UN—22OCT14



KM223746 —UN—22OCT14

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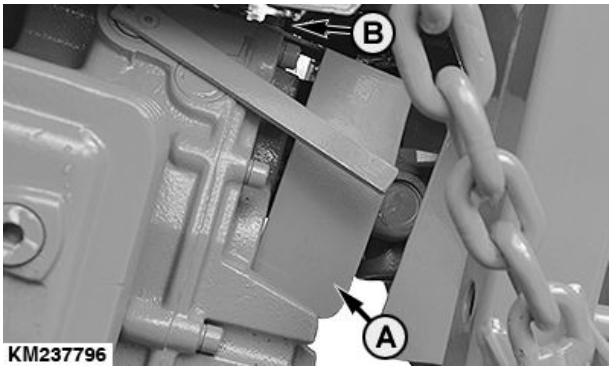
KM00321,0000B1F -19-27OCT20-6/8

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

9. Install the universal-jointed shaft shield (A) on input transmission of the header drive and secure with screw (B).

A—Universal-Jointed Shaft Shield
B—Screw

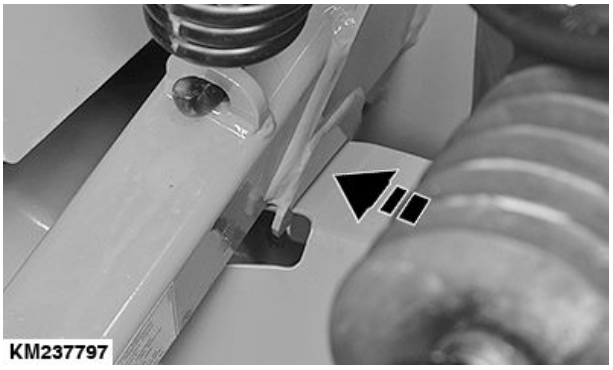


KM237796 —UN—13MAR15

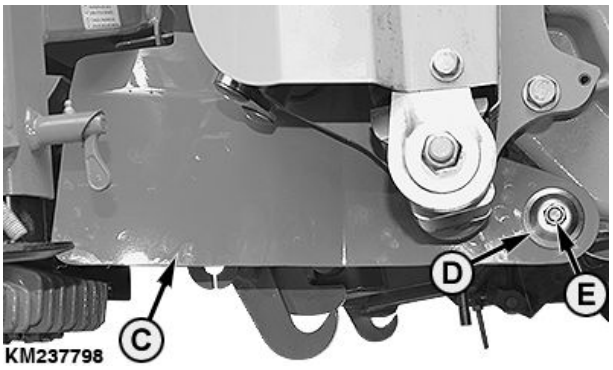
KM00321,0000B1F -19-27OCT20-7/8

10. Insert the top of universal-jointed shaft shield (C) into the attaching frame (see arrow).
11. Install universal-jointed shaft shield (C) and secure with washer (D) and retaining nut (E).

C—Universal-Jointed Shaft Shield
D—Washer
E—Retaining Nut



KM237797 —UN—13MAR15



KM237798 —UN—13MAR15

KM00321,0000B1F -19-27OCT20-8/8

Replace CLAAS Tray with KEMPER Tray

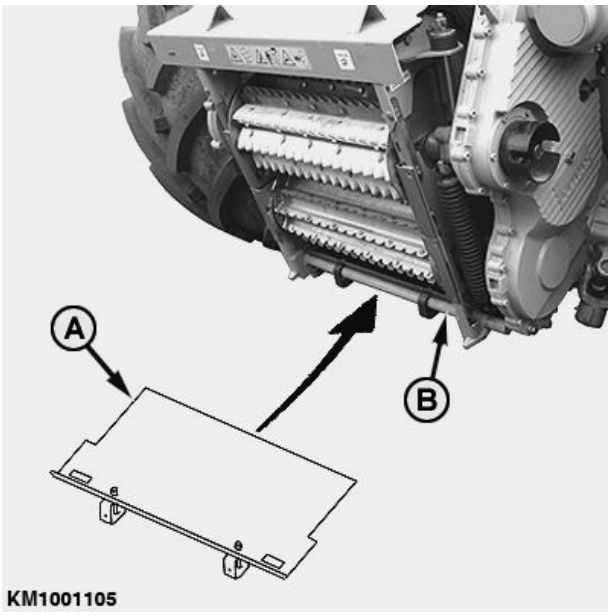
The curved CLAAS tray may impair material flow below the feed rolls. This problem will be resolved by using the straight KEMPER tray (A).

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**



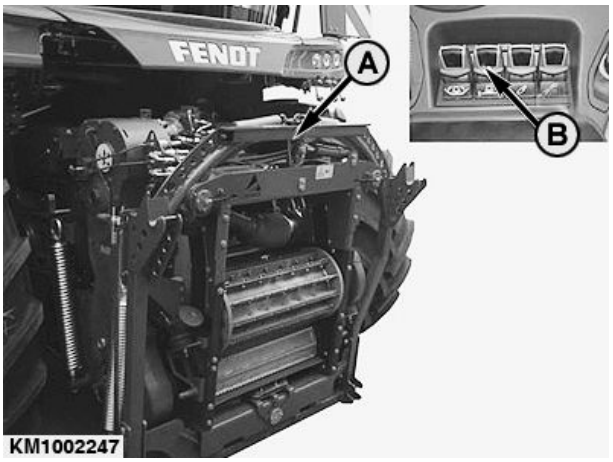
KM1001105 —UN—10FEB10

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

Align the Oscillating Frame

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

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



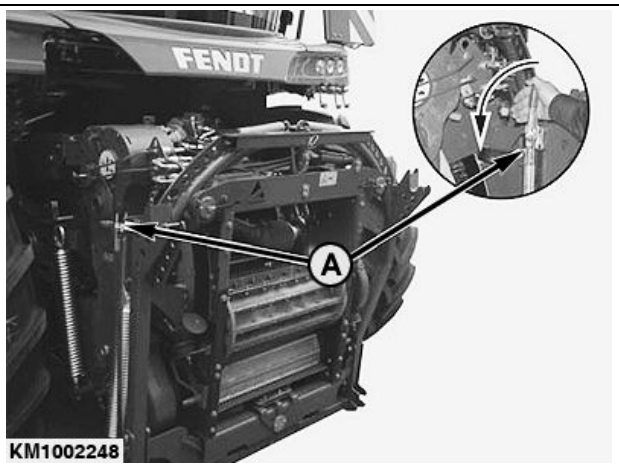
KM1002247 —UN—23MAR12

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

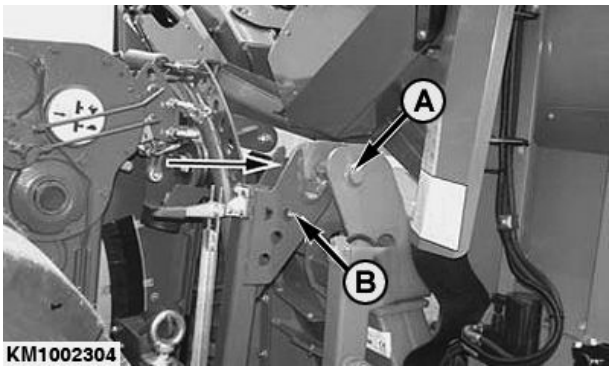


KM1002248 —UN—23MAR12

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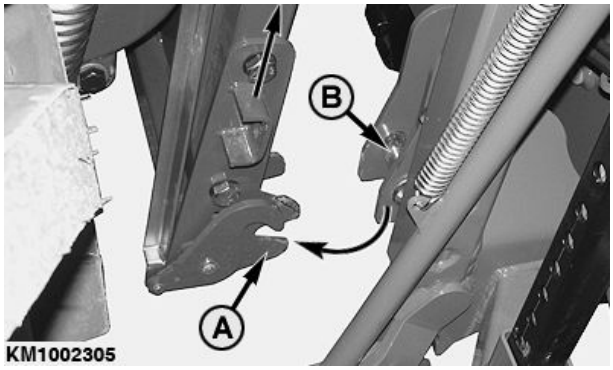
KM00321,0000184 -19-12JUN12-2/5

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**

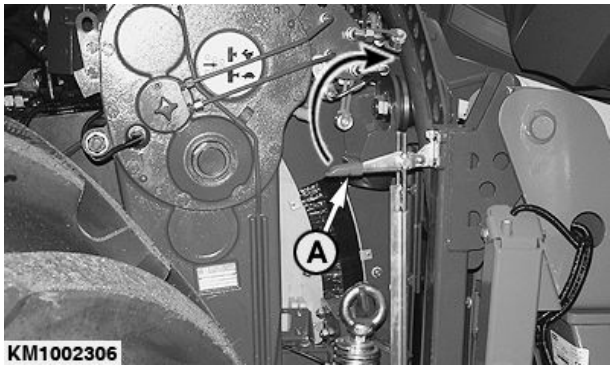


KM1002305 —UN—12JUN12

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

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

A—Tensioning Lever

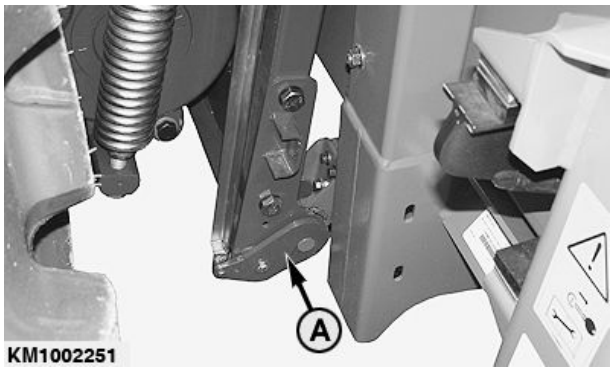


KM1002306 —UN—12JUN12

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

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

A—Locking Hook



KM1002251 —UN—23MAR12

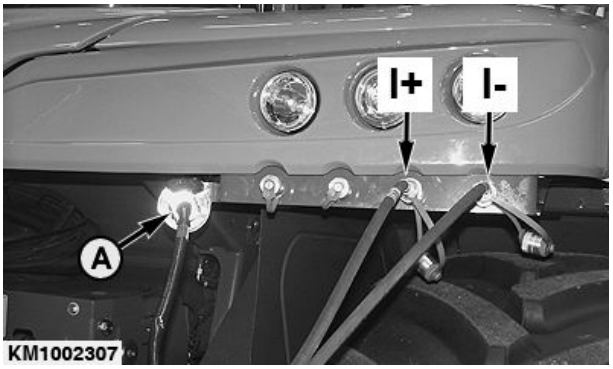
KM00321,0000184 -19-12JUN12-5/5

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

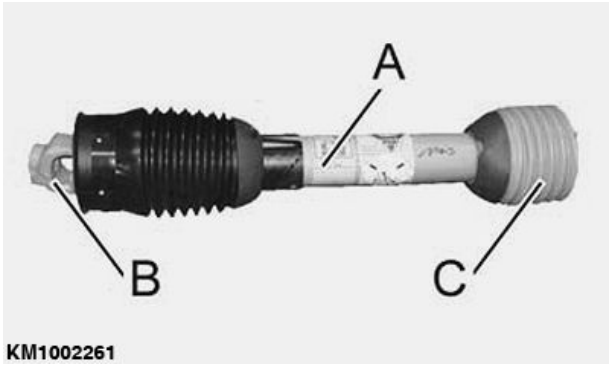


KM1002307 —UN—13JUN12

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

U.j. Shaft

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



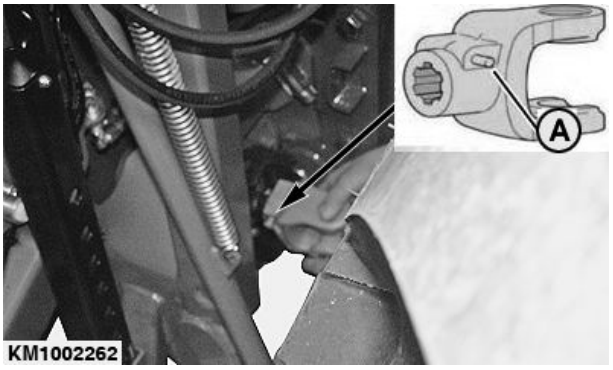
KM1002261 —UN—29MAR12

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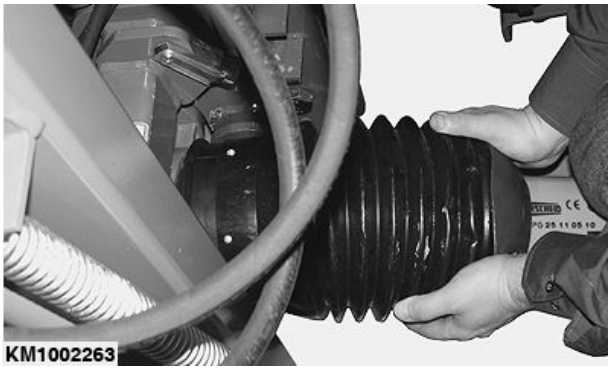
KM00321,00001DE -19-07MAY13-1/3

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

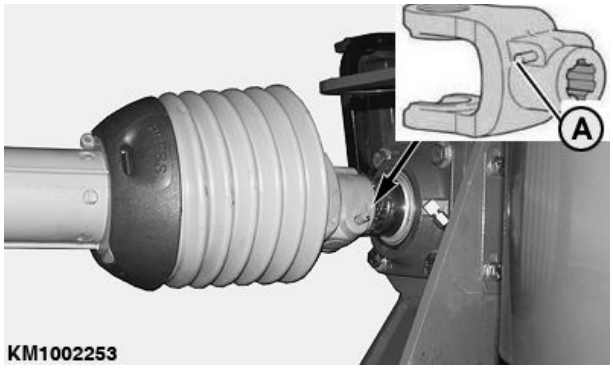


KM1002263 —UN—29MAR12

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

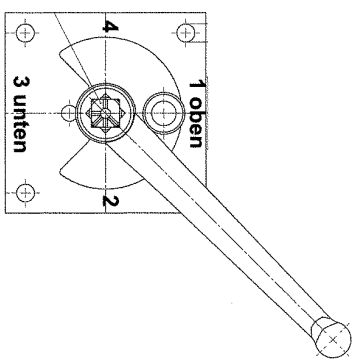
Continued on next page

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

Ball cock positions

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

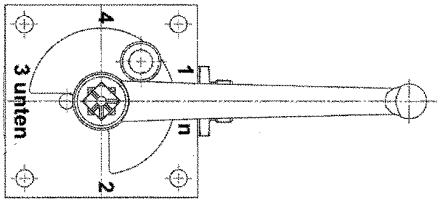
1



KM1002265

KM1002265 —UN—29MAR12

2



KM1002266

KM1002266 —UN—29MAR12

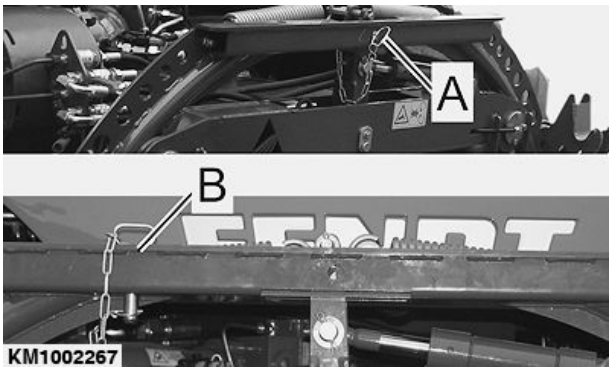
KM00321,000012D -19-29MAR12-2/2

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

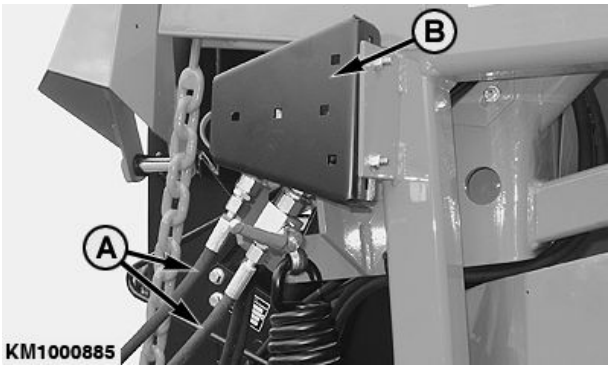
NOTE: Fold the rotary harvesting unit before setting it down.

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.

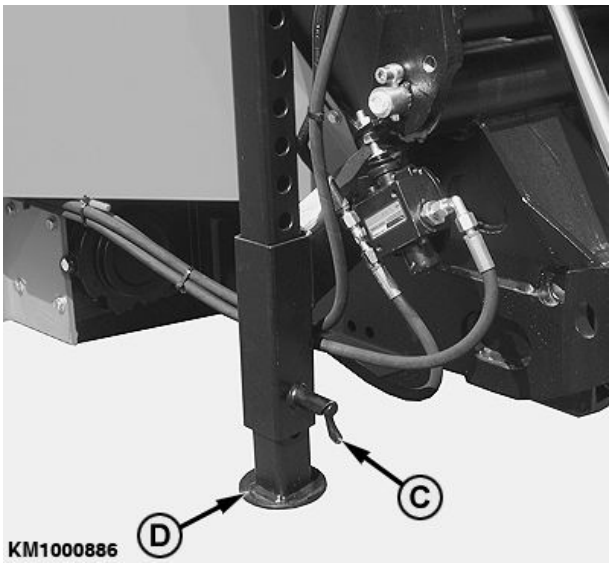
   NOTE: Leave the rotary harvesting unit standing at a height that allows the unit to be re-attached to a forage harvester at a later time. Never select a height that is too low.

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

Transport

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

Fold 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. See Section Safety.

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

KM00321,00001AE -19-16JUN09-1/1

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

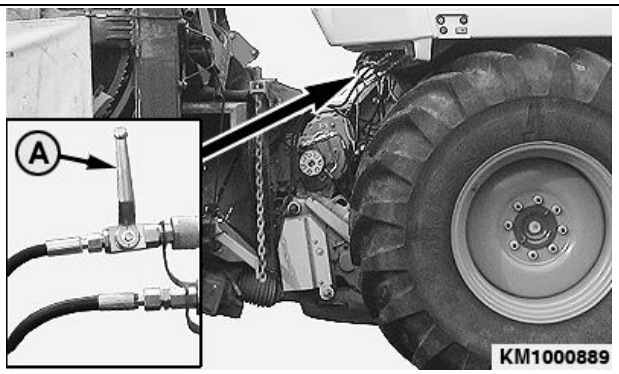
KM225012 —UN—02DEC14

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

Driving on Public Roads (Rotary Harvesting Units with Comfort Support Wheel)

KM409023 —UN—20MAR20

A—Protective curtains

B—Position Lamps/Turning Lights

C—Support wheel

IMPORTANT: Rotary harvesting units equipped for installation of the comfort support wheel (C) may be driven on public roads only if the comfort support wheel is actually attached. See also supplementary Operator's Manual for comfort support wheel 400F.

When driving on public roads with the comfort support wheel attached, the entire area around the dividers is covered with protective cloths (A).

Position Lamps and Turning Lights:

As the position lamps and turning lights on the forage harvester are covered by the gathering drums in raised position, the comfort support wheel features two duplicated position lamps/turning lights (B).

KM00321,0000A32 -19-20MAR20-1/1

Driving on Public Roads (Rotary Harvesting Units without Comfort Support Wheel)

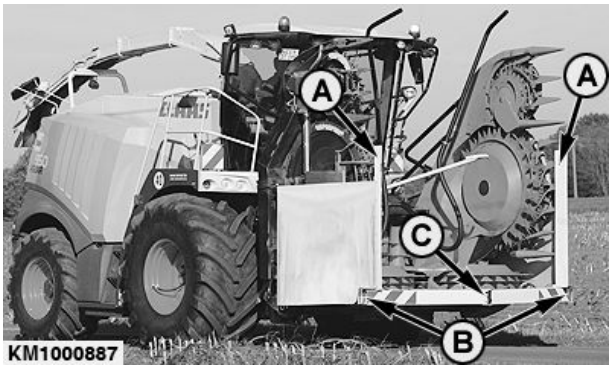
When driving on public roads, the entire area around the crop separators must be covered with a protective guard (A).

Protective guard (A) assembly sequence:

1. Wait until rotating blades have come to a complete stop. Then fold up the side cutting units.
2. Place and unfold accident prevention device (C) on the central divider point.
3. Install protective guards (A) on left and right side, and fasten them with the rope provided with accident prevention device.
4. The skid shoes, blades and other edges are covered with protective cloths.

Side lamps and indicators:

As the side lamps and indicators on the forage harvester are usually covered by the intake drums in raised position, the accident protection device features two duplicated position lamps/indicators (B). For the 12 V power supply, use the 7-pole plug located on the right-hand side of the harvester.



KM1000887 —UN—27MAY09

A—Shield
B—Position Lamps/Turning Lights
C—Accident Prevention Device

Ground clearance:

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

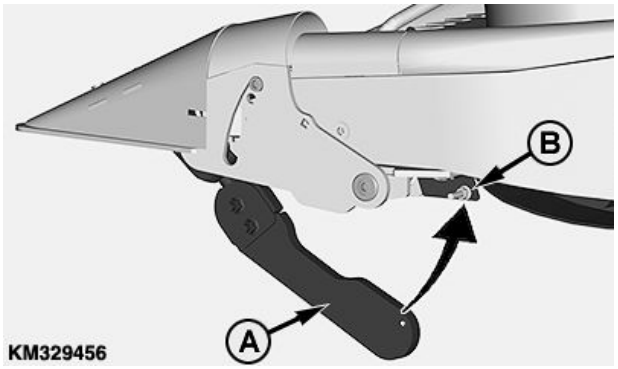
KM00321,0000A33 -19-20MAR20-1/1

Set AHC sensors in the transport position

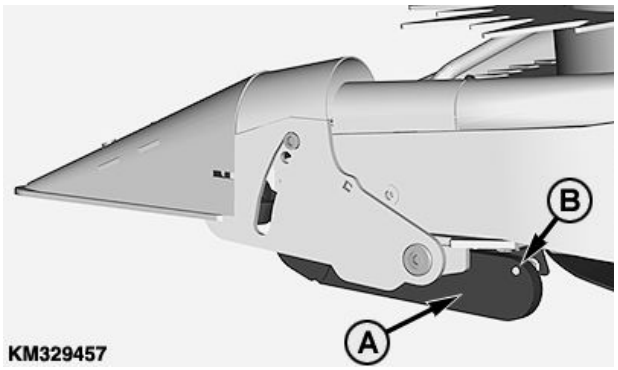
The AHC sensors (a) must be placed in the transport position to maintain the maximum permissible transport width:

- Swing AHC-Sensor (A) in direction of arrow.
- Install AHC sensor (a) on bolt (b).
- Repeat procedure on the other side.

A—AHC-Sensor
B—Screw



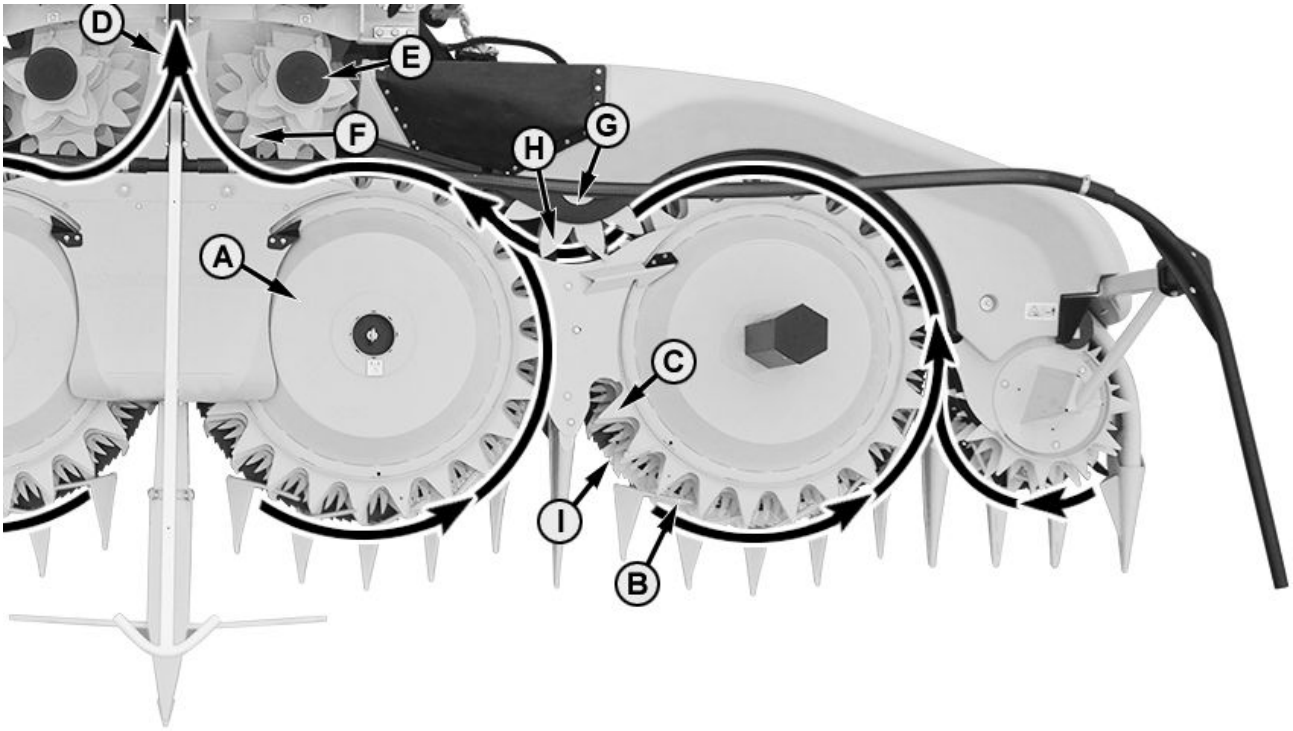
KM329456 —UN—28AUG17



KM329457 —UN—28AUG17

KM00321,0000A35 -19-20MAR20-1/1

Rotary Harvesting Unit Method of Operation



KM232867

KM232867 —UN—18FEB15

A—Gathering Drum
B—Intake Bars
C—Feed Teeth
D—Direction of Crop
E—Feed Drum
F—Feed Teeth
G—Cross Feed Drums
H—Feed Teeth
I— Rotating Blade

The rotary harvesting unit is designed to harvest maize. Due to its capabilities, the rotary harvesting unit can be used to harvest whole-crop silage, alfalfa, rape, field beans, millet, sunflowers and other stalk-type plants.

The cutting system allows the crop to be harvested from any direction. Rows can be approached end-on, at right angles or at an oblique angle if so desired.

Although no counterknife is used, the fast rotating blades (I) cut all the stalks within the unit's operating width. The slowly rotating gathering drums (A) pass the stalks along the intake bars (B). Stalks are seized by the row of teeth (C) as if by a gripper.

The forward motion of the gathering drums (A) forces the crop against the feed teeth (H) and so the stalks are conveyed along the guides and scrapers to the feed drums (E). The cross feed drums (G) force the stalks coming from left and right end sections to pass behind the gathering drums (A). Here the stalks come into contact with the feed teeth (F).

From there, the stalks are transported in a constant and compacted stream in direction (D) to the forage harvester's feed rolls.

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.

KM00321,00003D9 -19-13MAR15-1/1

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

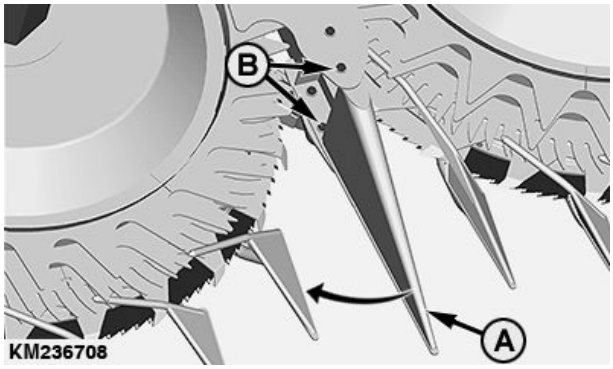
KM00321,0000198 -19-29JUN12-1/1

Adjusting Row Spacing

When harvesting maize with a row spacing of 38 in. (96.5 cm), dividers (A) must be set outwards on both sides.

- Loosen screws (B).
- Set dividers (A) outwards.
- Retighten screws (B).

A—Divider **B—Screws**



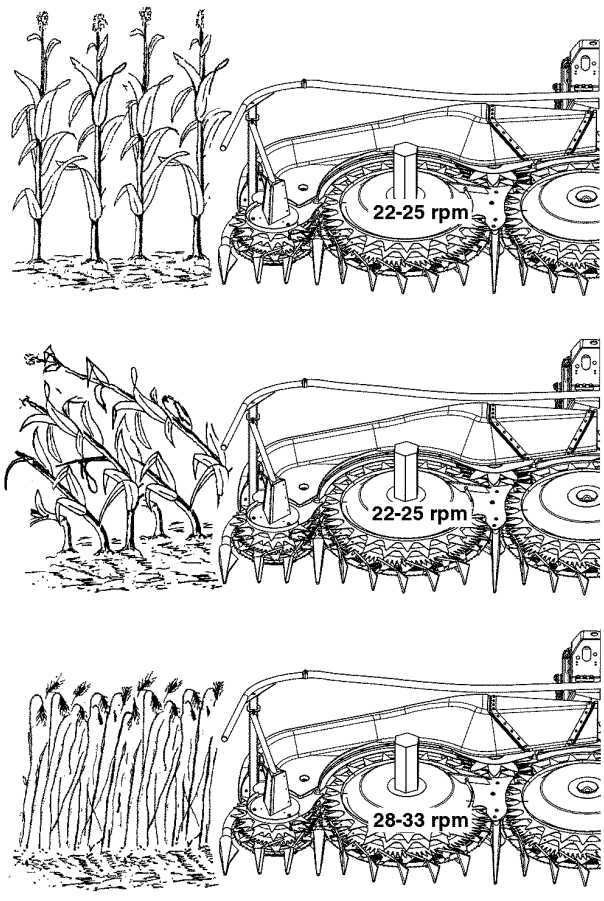
KM236708 —UN—27FEB15

KM00321,00003DB -19-13MAR15-1/1

Gathering Drum Operating Speeds

NOTE: The speed at which the gathering drums operate varies depending 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.



KM232870

KM232870 —UN—19FEB15

KM00321,00003DA -19-13MAR15-1/1

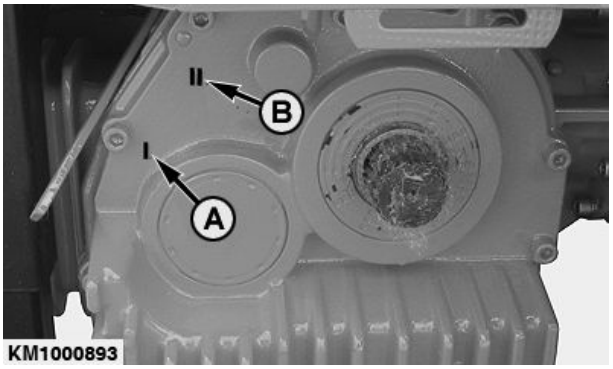
Length-of-Cut Adjustment with CLAAS Forage Harvester

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 —UN—08JUN09

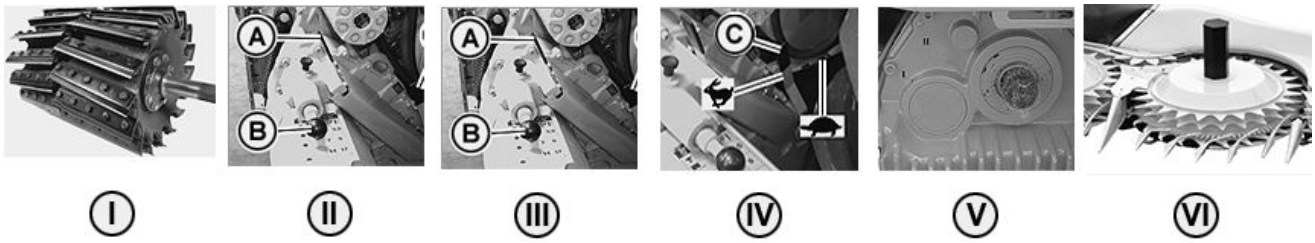
A—1. Gear **B—2. Gear**

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

Length of Cut and Drum Speeds with CLAAS Forage Harvester 830-900 (Types 492, 496, and 500)

Cutterhead with 24 Knives (Types 492, 496, and 500)

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



KM1000906 —UN—13MAR15

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	VI—Gathering drum speed
4 mm	1	Slow	Slow	1	22
5.5 mm	1	Fast	Fast	1	26
7 mm	2	Slow	Slow	2	27
9 mm	2	Fast	Fast	1	26
14 mm	3	Slow	Slow	2	27
17 mm	3	Fast	Fast	2	33

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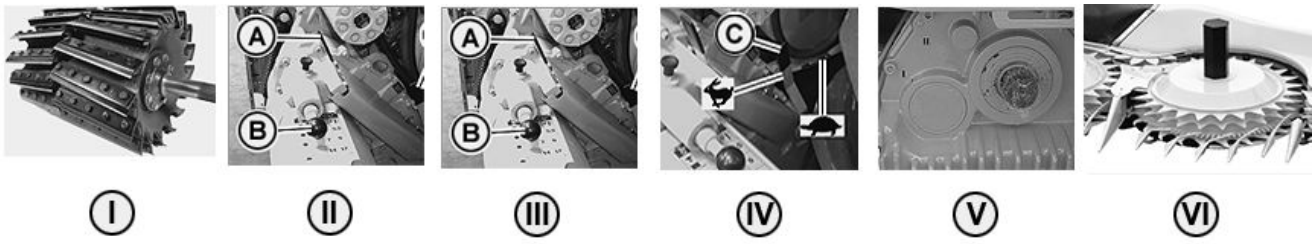
KM00321,0000B20 -19-27OCT20-1/2

Cutterhead with 20 Knives (Types 492, 496, and 500)



I II III IV V VI

KM1000906 —UN—13MAR15

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	VI—Gathering drum speed
5 mm	1	Slow	Slow	1	22
6.5 mm	1	Fast	Fast	1	26
8.5 mm	2	Slow	Slow	2	27
11 mm	2	Fast	Fast	1	26
17 mm	3	Slow	Slow	2	27
21 mm	3	Fast	Fast	2	33

KM00321,0000B20 -19-27OCT20-2/2

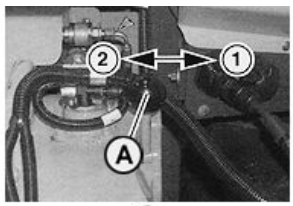
Length of Cut and Drum Speeds with CLAAS Forage Harvester 830-900 (Type 493)

Cutterhead with 24 knives (type 493)

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

KM1000907

Ⅰ



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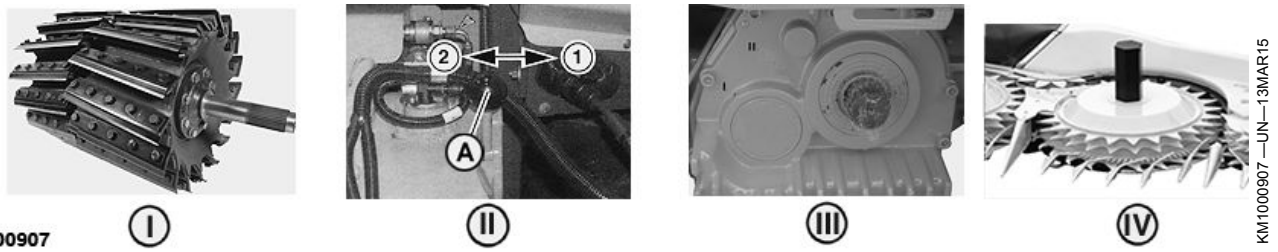
KM1000907 —UN—13MAR15

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	12 mm	1	1	26
7 mm	14 mm		1	26
8 mm	16 mm		1	26
9 mm	18 mm		1	26
10 mm	20 mm		2	33
8 mm	16 mm	2	1	26
9 mm	18 mm		1	26
10 mm	20 mm		2	33
11 mm	22 mm		2	33
12 mm	24 mm		2	33
13 mm	26 mm		2	33
14 mm	28 mm		2	33

Continued on next page

KM00321,00001B1 -19-16JUN09-1/2

Cutterhead with 20 knives (type 493)



KM1000907 —UN—13MAR15

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	14.7 mm	1	1	26
8.5 mm	17.0 mm		1	26
9.7 mm	19.3 mm		1	26
10.8 mm	21.7 mm		1	26
12 mm	24 mm		2	33
10 mm	20 mm	2	1	26
11.2 mm	22.4 mm		1	26
12.4 mm	24.8 mm		2	33
13.6 mm	27.2 mm		2	33
14.8 mm	29.6 mm		2	33
16 mm	32 mm		2	33
17.2 mm	34.4 mm		2	33

KM00321,00001B1 -19-16JUN09-2/2

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.

KM1002334 —UN—29JUN12

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

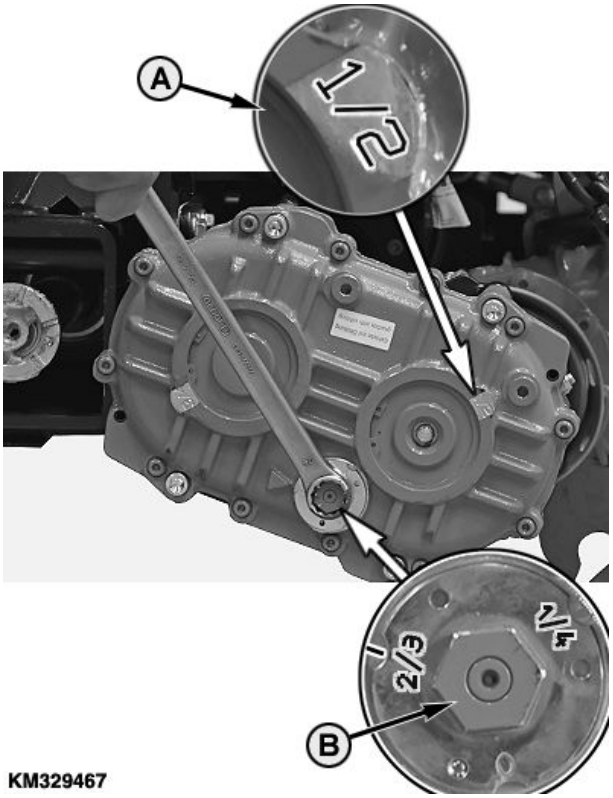
The multi-speed drive for CLAAS forage harvesters has 4 speeds.

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

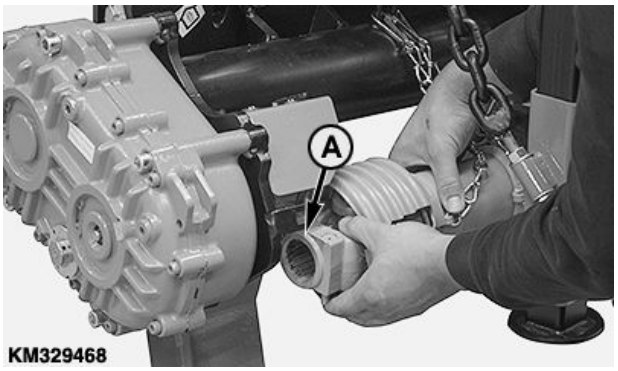
Rotate the multi-speed gearbox

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

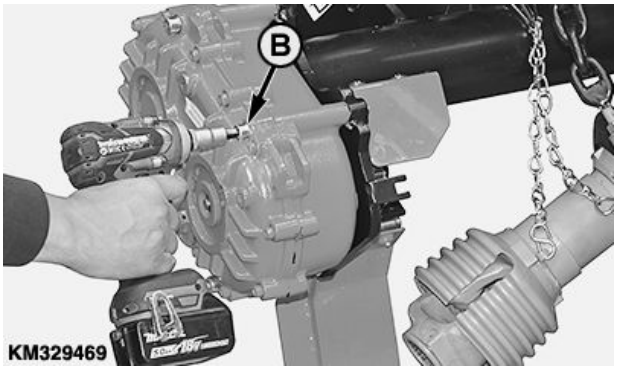
To do so, proceed as follows:

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

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

3. Rotate drive (C) through 180°.

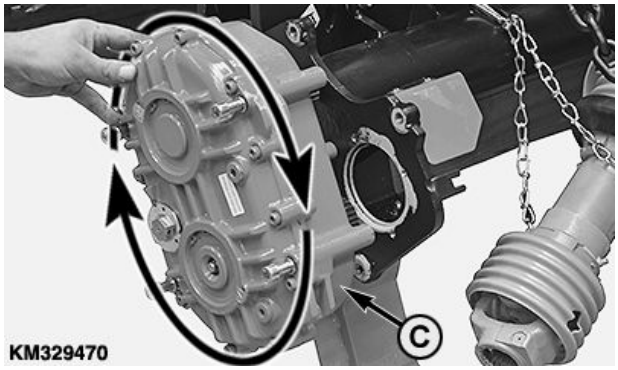
NOTE: The gearbox can be rotated without taking it off.

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

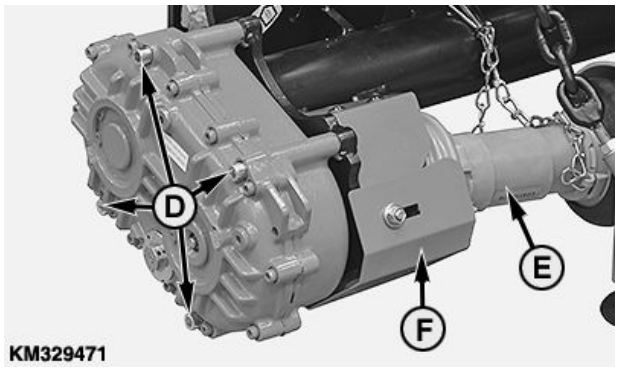
Specification	
Gearbox, Hex Socket Screws—Torque	95 N·m (70 lb.-ft.)

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 Gearbox 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: Class Forage Harvesters of types 498, 499 and 502 equipped with a variable attachment drive can change speed within the cutting length settings. In order to prevent very excessive drum speed, you cannot use the 4th gear of the multi-speed transmission here.

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

KM00321,0000B19 -19-27OCT20-1/1

Harvesting

Before the harvest, do the following:

- Unfold the rotary harvesting unit
- Adjust the feed bars
- Adjust the speed at which the gathering drums operate

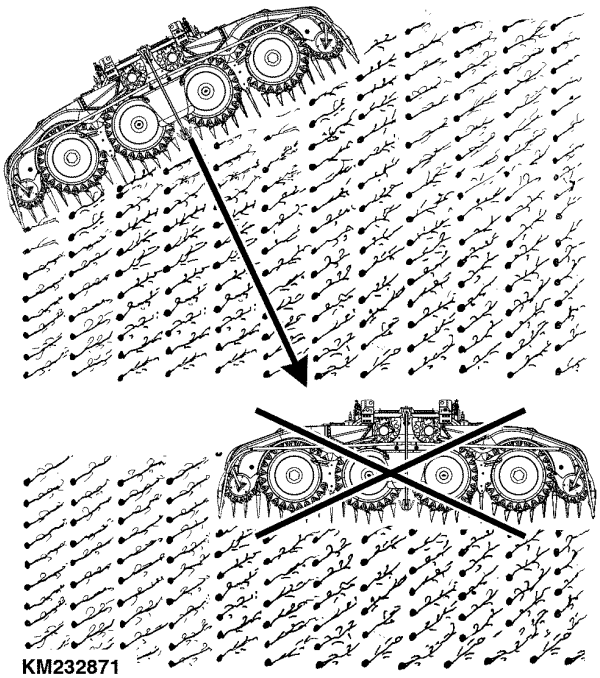
IMPORTANT: Avoid unnecessary wear at the clutches. Always select forward gear from the idle setting.

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.



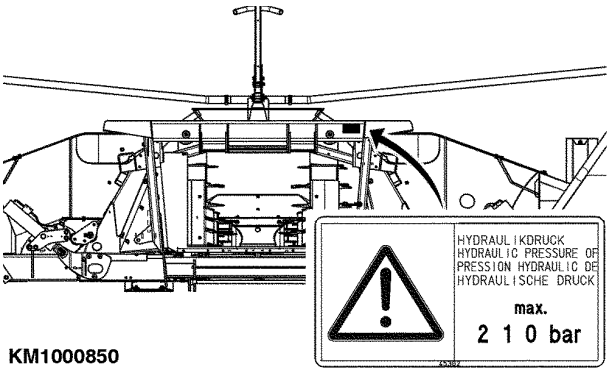
KM232871

KM232871 —UN—19FEB15

KM00321,00003DF -19-13MAR15-1/1

Hydraulic System

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



KM1000850

KM1000850 —UN—03APR09

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

475plus Rotary Harvesting Unit

CAUTION: Before making any adjustments or performing any service operations, ALWAYS:

- Shut off the engine
- Take out the ignition key
- Wait until all moving parts have stopped.

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 the rotating blades two at a time.
	One of the cleaners has broken	Replace **both** of the cleaners.
	Imbalance at rotating blade caused by excessive vertical play.	Straighten the blade or install new blades.
Stalks are pushed to the front before they are cut (long, uneven stubble)	Leaves accumulated at the dividers	Clean the dividers.
	One of the cleaners has broken	Replace **both** of the cleaners.
Gathering drums stop rotating	Blockage in the feeding area	Reverse the gathering drums briefly. Reverse them repeatedly if necessary.
	Worn skid shoes	Replace.
	Defective gear box	Contact your KEMPER dealer.
Gear box overheating	Too much oil or too little oil in the gear box	Check oil level in gear box, and add or drain oil as 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 stops rotating.	Left or right friction clutch defective	Contact your KEMPER dealer.

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Symptom	Problem	Solution
The unit cannot be unfolded or folded.	A foreign body (for example, grain of sand) is obstructing the restrictor	Contact your KEMPER dealer.
Poor cut when the rows are far apart	The unit is tackling seven rows of plants. The middle row is hindering the cut.	Tackle only six rows of plants. Contact your KEMPER dealer if necessary.

KM00321,00003E0 -19-13MAR15-2/2

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

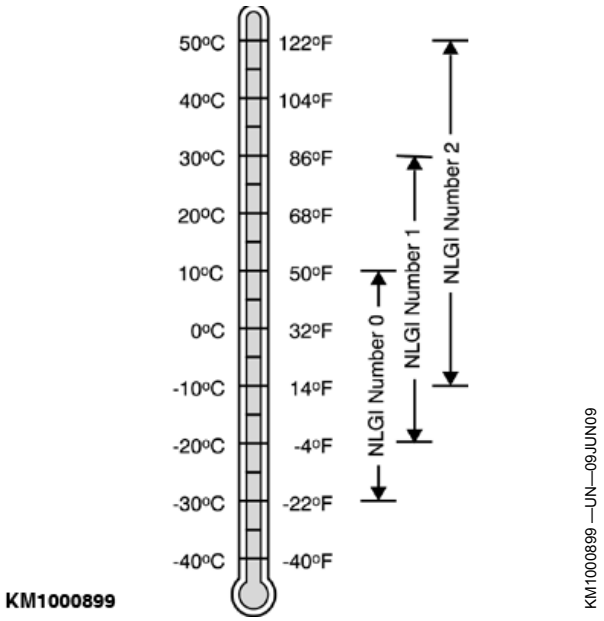
Use grease based on NLGI consistency numbers and the expected air temperature range during the service interval.

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:

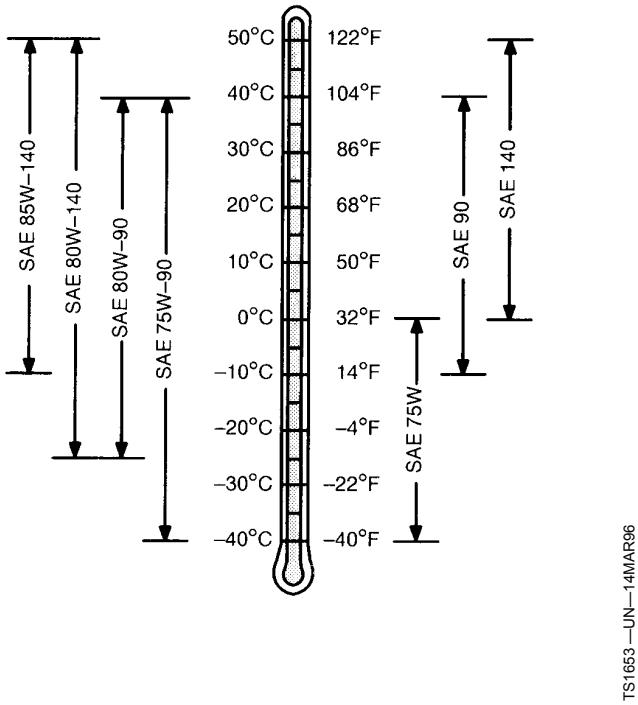
NLGI Service Classification NLGI 00

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.

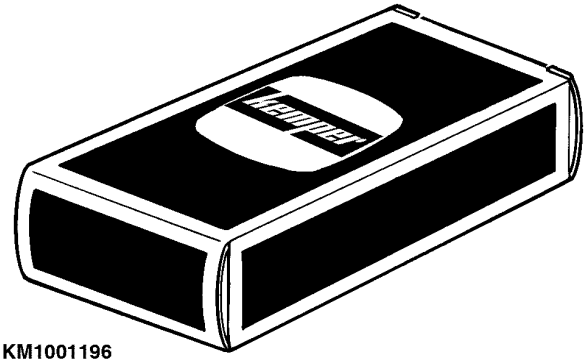
OUKM001,0000014 -19-15FEB05-1/1

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

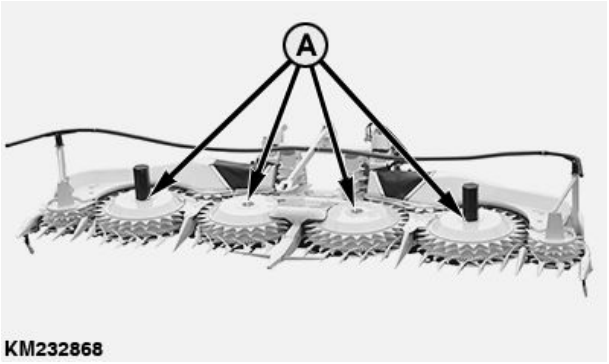
At the Start of Every Harvesting Season—Spherical Collar Bolts

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

Torque setting is:

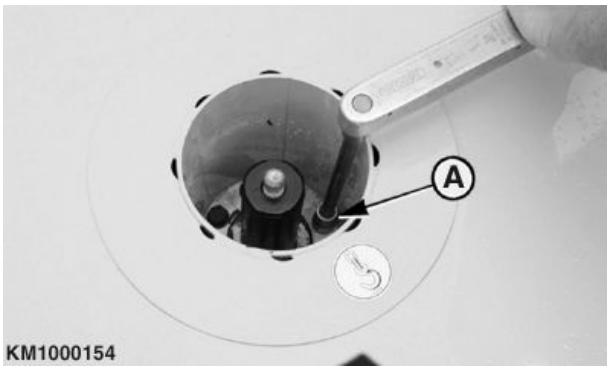
	Specification
Spherical Collar Bolts—Torque	200 N·m (148 lb.-ft.)

A—Spherical Collar Bolts



KM232868

KM232868 —UN—19FEB15



KM1000154

KM1000154 —UN—16OCT07

KM00321,00003E1 -19-13MAR15-1/1

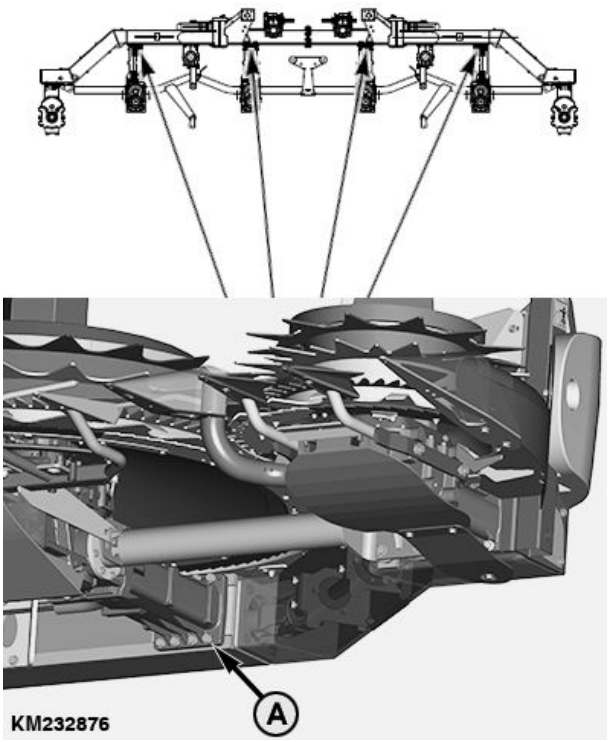
At the Start of Every Harvesting Season—Gearbox Mounting Flange Attaching Screws

Flange screws (A) at gearbox mounting flanges of gathering drums must be retightened to the specified torque prior to each harvesting season and then retightened after 50 hours in service.

Torque setting is:

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

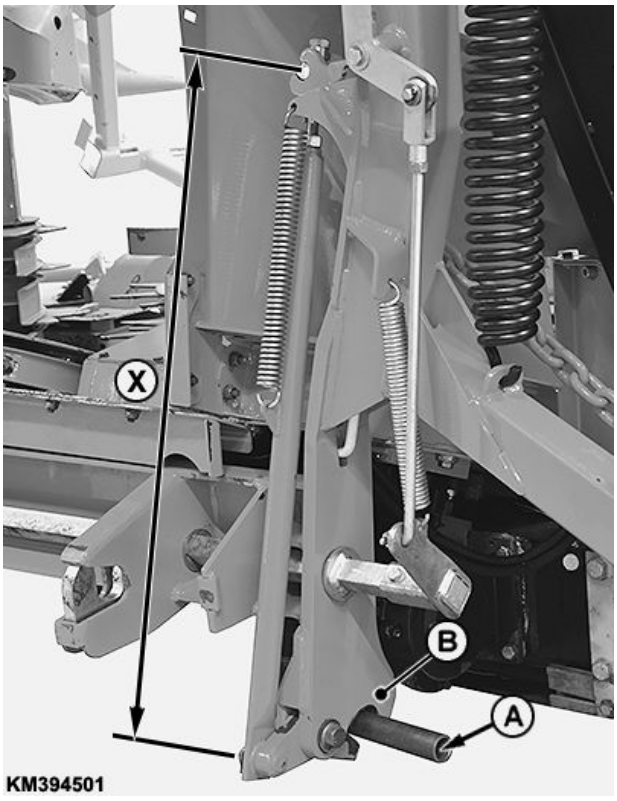
A—Screw



KM232876 —UN—23FEB15

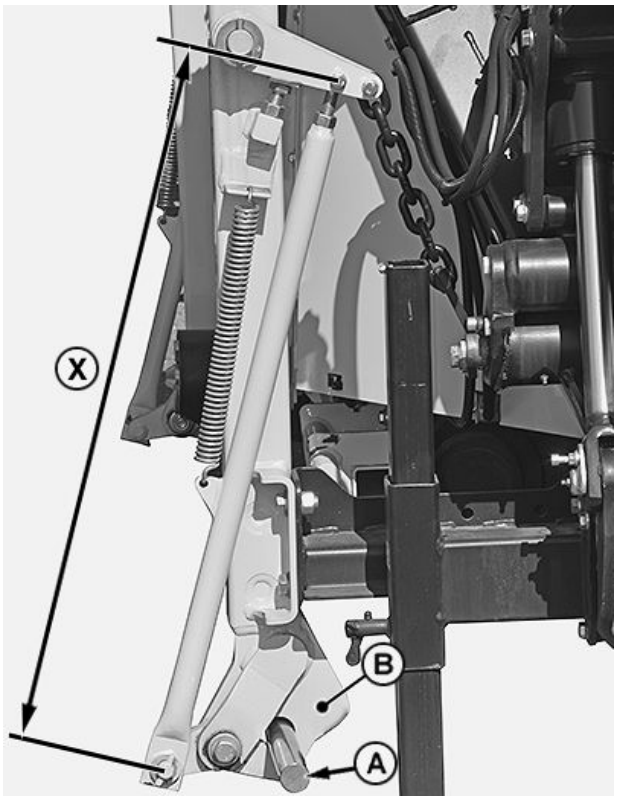
KM00321,00003E2 -19-13MAR15-1/1

At the beginning of each harvesting season — adjust latch of the chassis



KM394501 —UN—14NOV19

Rotary harvesting units for Claas forage harvesters



KM409037 —UN—17APR20

Rotary harvesting units for Fendt forage harvesters

A—Shaft
B—Claw
X—Setting Dimension

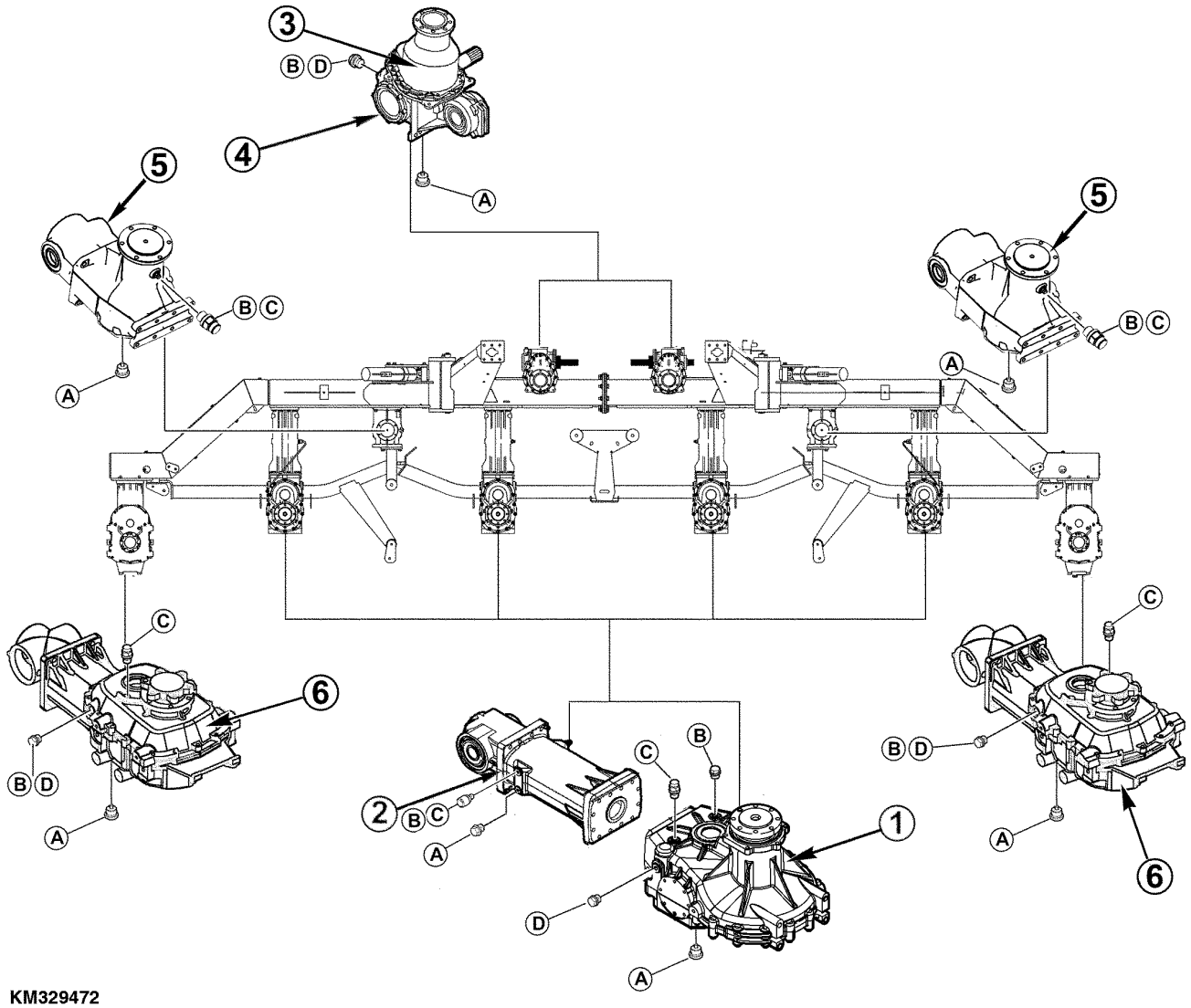
Insert a 35 mm (1.38 in.) diameter shaft (A) into jaw (B). Close Jaw (B) by folding the rotary harvesting unit up.

IMPORTANT: To avoid damaging jaws and braces, slowly raise the rotary harvesting unit.

Adjust dimension (X) of brace so that shaft (A) fits in jaw (B) without play.

KM00321,0000B1B -19-28OCT20-1/1

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



KM329472

KM329472 —UN—06OCT17

A—Oil Drain Screw
B—Oil Filler Plug
C—Vent
D—Oil Level Plug
1— Gathering Drums, Spur-Gear Angle Drive - 8.5 L (2.25 US. gal.)
2— Bevel Gear Drive - 1.5 L (0.4 US. gal.)
3— Feed Drums, 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— Cross Feed Drums, Spur-Gear Angle Drive - 2.5 L (0.66 US. gal.)
6— Gathering Drums, Spur-Gear Angle Drive - 8.5 L (2.25 US. gal.)

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

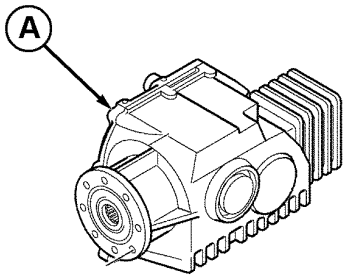
1. Raise the rotary harvesting unit until it is horizontal.
2. Unfold the rotary harvesting unit.

KM00321,00006D3 -19-06OCT17-1/1

Overview of Oil Levels in Input Transmission

Rotary harvesting units for CLAAS forage harvesters

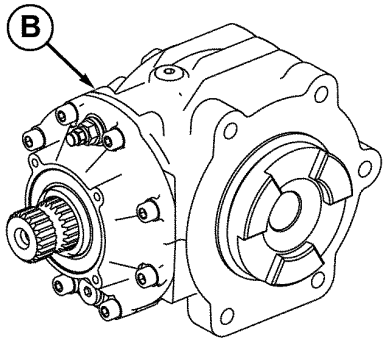
A—Gearbox - 4.3 L (1.14 U.S. gal.)
B—Bevel Gear Drive for Quick Coupler (Option) - 1.2 L (0.32 U.S. gal.)
C—4-Speed Multi-Speed Gearbox (Option) - 1.25 L (0.33 U.S. gal.)



KM1002338 —UN—05JUL12

KM1002338

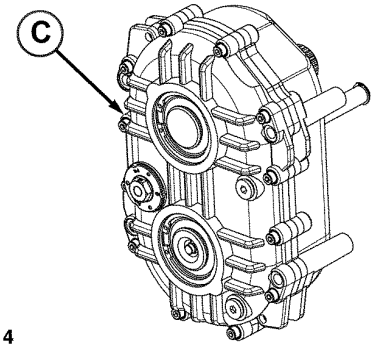
Manual Shift Transmission



KM219184 —UN—15SEP14

KM219184

Bevel Gear Drive for Quick Coupler (Option)



KM225014 —UN—08DEC14

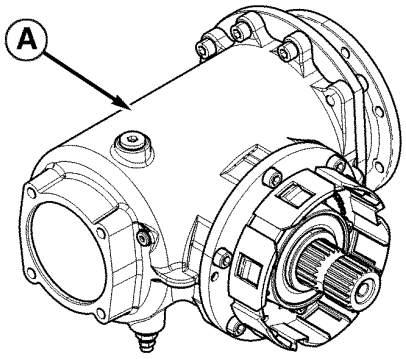
KM225014

4-Speed Multi-Speed Gearbox (Option)

KM00321,00006D4 -19-09OCT17-1/2

Rotary harvesting units for FENDT forage harvesters

A—Bevel Gear Drive - 0.8 L (0.21 U.S. gal.)



KM329473 —UN—06OCT17

KM329473

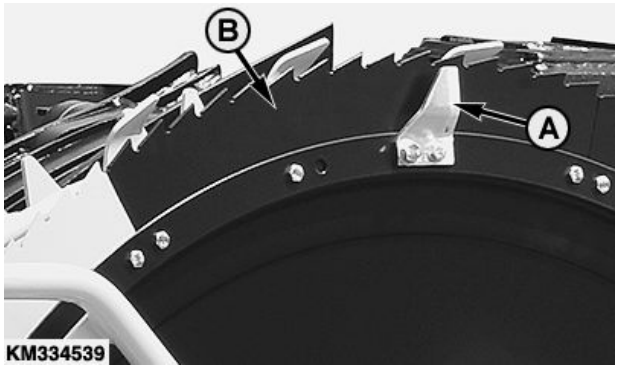
KM00321,00006D4 -19-09OCT17-2/2

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

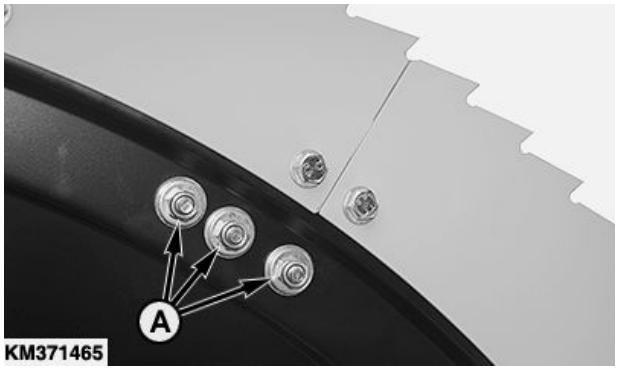
Check balance weights (A) beneath the outer blade rotors for wear.

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

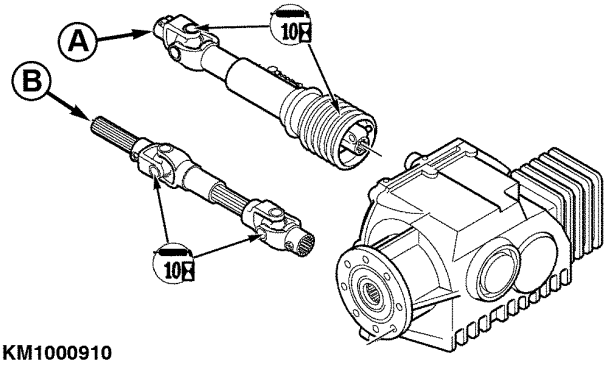
KM00321,00008C0 -19-05MAR19-1/1

Every 10 Operating Hours—Universal-Jointed Shaft

Lubricate with grease.

A—Universal-Jointed Shaft, CLAAS Type 492
A—Universal-Jointed Shaft, FENDT

B—Universal-Jointed Shaft, CLAAS Types 493, 494, 497, and 498

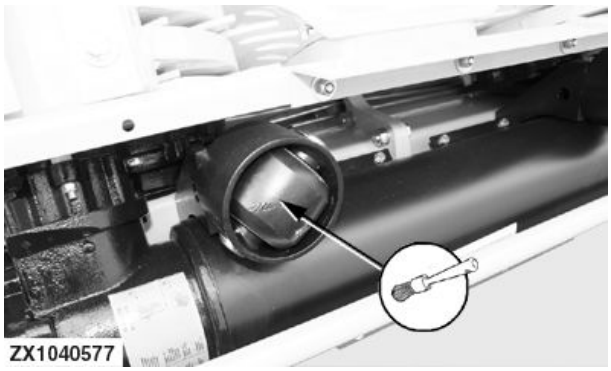


KM1000910 —UN—17JUN09

KM00321,00006D5 -19-09OCT17-1/1

Every 10 Hours—Lower Rolls of Oscillating Frame

Lubricate with grease.



ZX1040577 —UN—12APR07

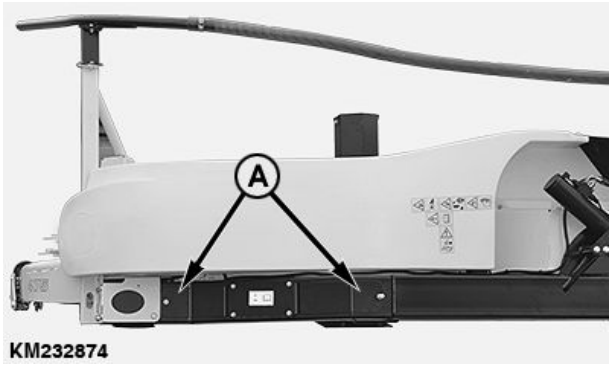
KM00321,00001B6 -19-17JUN09-1/1

Every 50 Hours—Outer Drives

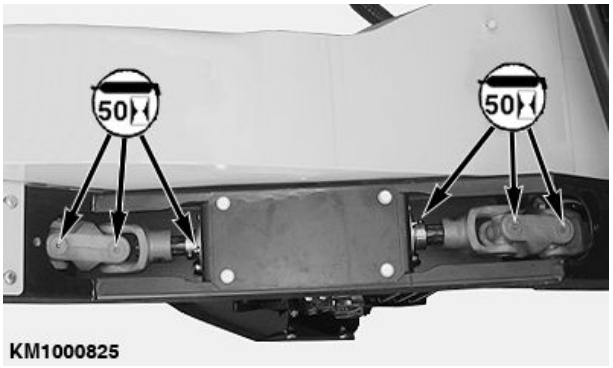
Remove covers (A) and lubricate the bearings and drive shafts.

Reinstall covers (A).

A—Covers



KM232874 —UN—13MAR15



KM1000825 —UN—25MAR09

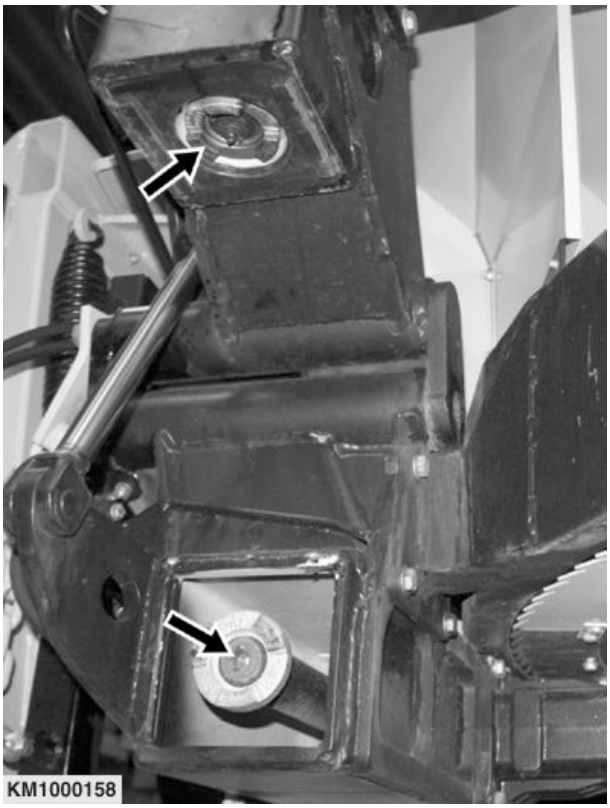
KM00321,00003E4 -19-13MAR15-1/1

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.

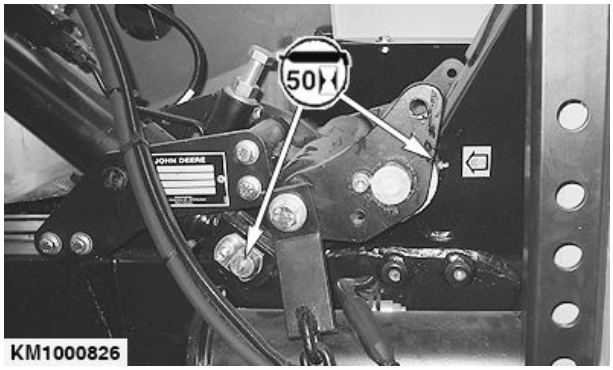


KM1000158 —UN—16OCT07

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

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

Lubricate with grease.

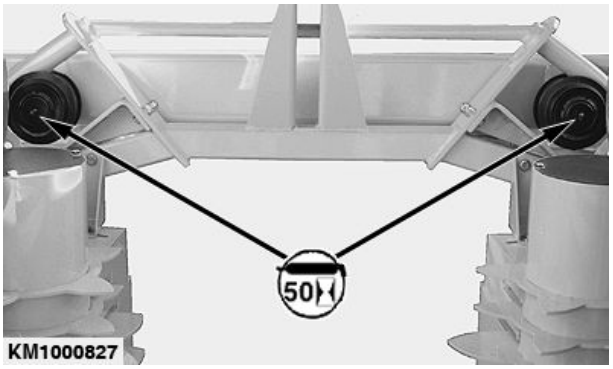


KM1000826 —UN—25MAR09

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

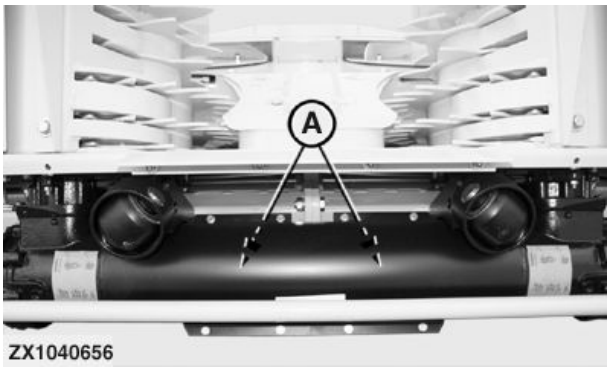
Every 3 Years—Change Coolant of Main Drive Friction Clutch

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.

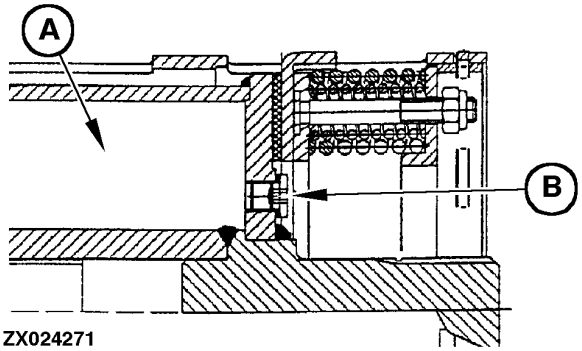
The cavity of the friction clutch (A) can be drained and refilled. This service work requires the friction clutch to be removed from the machine. Therefore it is advised to contact your KEMPER dealer to drain/refill the friction clutch.

Specification

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



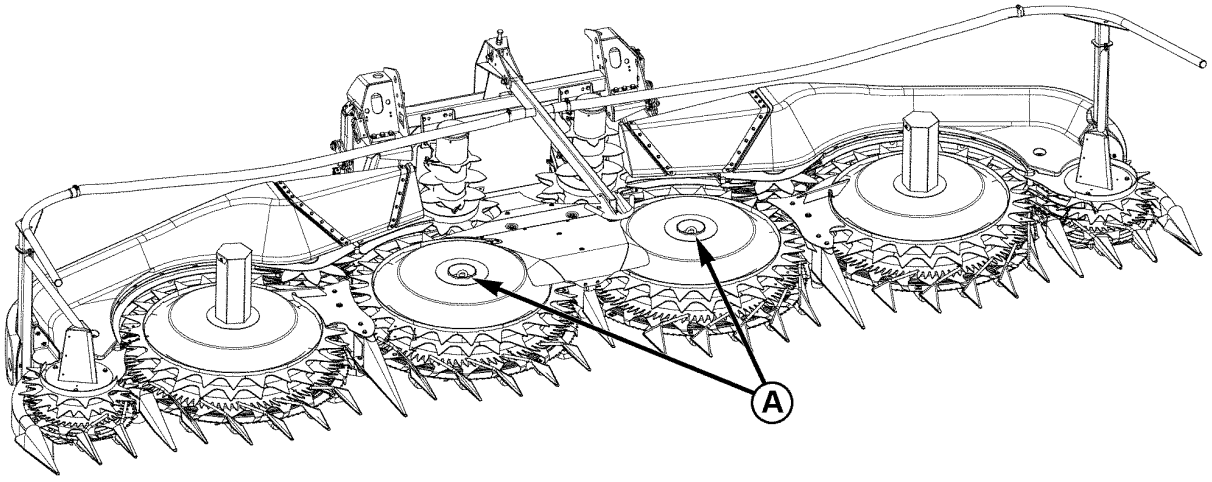
ZX1040656 —UN—12APR07



ZX024271 —UN—07MAR01

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

After Each Harvesting Season



KM232875 —UN—23FEB15

KM232875

A—Depressions

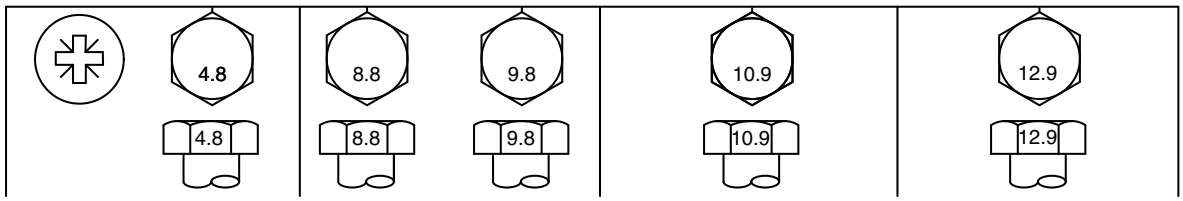
- Clean the entire rotary harvesting unit - pay particular attention to the depressions (A) in the gathering drums.
- Change the gear oil in all drives. See General View of Drives and Oil Levels on the Rotary Harvesting Unit.
- Lubricate all grease fittings.
- Check the entire rotary harvesting unit 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: Only properly serviced units give the best results.

KM00321,00003E5 -19-13MAR15-1/1

Metric Bolt and Screw Torque Values

TS1742 —UN—31MAY18



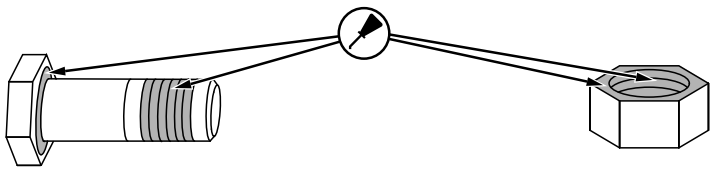
Bolt or Screw Size	Class 4.8				Class 8.8 or 9.8				Class 10.9				Class 12.9			
	Hex Head[a]		Flange Head[b]		Hex Head[a]		Flange Head[b]		Hex Head[a]		Flange Head[b]		Hex Head[a]		Flange Head[b]	
	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in
M6	3.6	31.9	3.9	34.5	6.7	59.3	7.3	64.6	9.8	86.7	10.8	95.6	11.5	102	12.6	112
									N·m	lb·ft	N·m	lb·ft	N·m	lb·ft	N·m	lb·ft
M8	8.6	76.1	9.4	83.2	16.2	143	17.6	156	23.8	17.6	25.9	19.1	27.8	20.5	30.3	22.3
			N·m	lb·ft	N·m	lb·ft	N·m	lb·ft								
M10	16.9	150	18.4	13.6	31.9	23.5	34.7	25.6	46.8	34.5	51	37.6	55	40.6	60	44.3
	N·m	lb·ft														
M12	—	—	—	—	55	40.6	61	45	81	59.7	89	65.6	95	70.1	105	77.4
M14	—	—	—	—	87	64.2	96	70.8	128	94.4	141	104	150	111	165	122
M16	—	—	—	—	135	99.6	149	110	198	146	219	162	232	171	257	190
M18	—	—	—	—	193	142	214	158	275	203	304	224	322	245	356	263
M20	—	—	—	—	272	201	301	222	387	285	428	316	453	334	501	370
M22	—	—	—	—	365	263	405	299	520	384	576	425	608	448	674	497
M24	—	—	—	—	468	345	518	382	666	491	738	544	780	575	864	637
M27	—	—	—	—	683	504	758	559	973	718	1080	797	1139	840	1263	932
M30	—	—	—	—	932	687	1029	759	1327	979	1466	1081	1553	1145	1715	1265
M33	—	—	—	—	1258	928	1398	1031	1788	1319	1986	1465	2092	1543	2324	1714
M36	—	—	—	—	1617	1193	1789	1319	2303	1699	2548	1879	2695	1988	2982	2199

The nominal torque values listed are for general use only with the assumed wrenching accuracy of 20%, such as a manual torque wrench.
DO NOT use these values if a different torque value or tightening procedure is given for a specific application.
For lock nuts, for stainless steel fasteners, or for nuts on U-bolts, see the tightening instructions for the specific application.

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 that fastener threads are clean.
- Apply a thin coat of Hy-Gard™ or equivalent oil under the head and on the threads of the fastener, as shown in the following image.
- Be conservative with the amount of oil to reduce the potential for hydraulic lockup in blind holes due to excessive oil.
- Properly start thread engagement.

TS1741 —UN—22MAY18



[a]Hex head column values are valid for ISO 4014 and ISO 4017 hex head, ISO 4162 hex socket head, and ISO 4032 hex nuts.
[b]Hex flange column values are valid for ASME B18.2.3.9M, ISO 4161, or EN 1665 hex flange products.

DX,TORQ2 -19-30MAY18-1/1

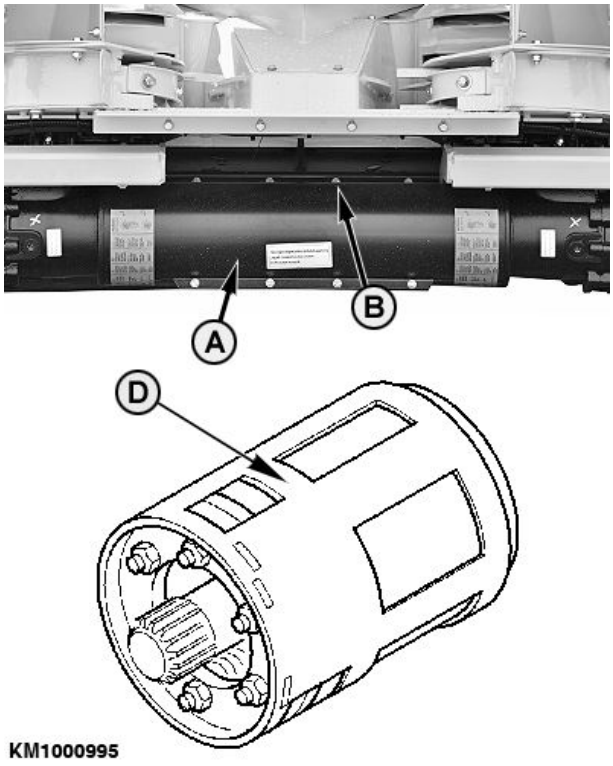
Relieving Pressure at the Slip Clutches on the Main Drive

CAUTION: Before making any adjustments or performing any service operations, ALWAYS:
- **Shut off the engine.**
- **Remove the ignition key.**
- **Wait for all moving parts to come to a standstill.**

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 1180 Nm (870.3 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. Remove cover (A). First take out the screws (B).



KM1000995 —UN—25JUL17

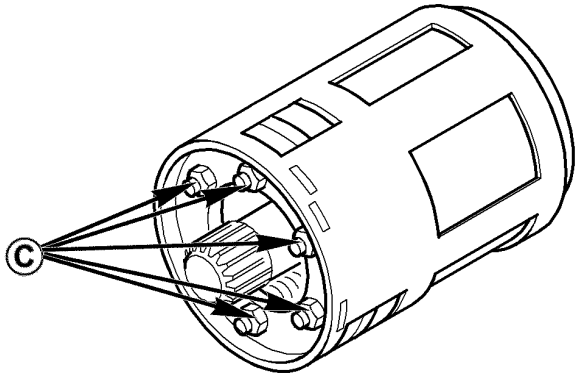
KM00321,0000A40 -19-26MAR20-1/2

2. Tighten screws (C). This reduces 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 it using screws (B).

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



KM1000041 —UN—04APR05

KM00321,0000A40 -19-26MAR20-2/2

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:

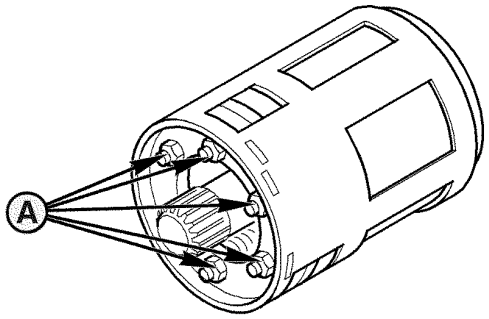
1. Remove clutches from harvesting unit.
2. Tighten the nuts (A). This relieves pressure on the friction plates.
3. First remove bushing (I) from housing (B).
4. Then remove all parts of friction clutch from housing (B).
5. Clean all parts, especially the friction disks (C, E). Replace worn parts.
6.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

Torque Setting:

IMPORTANT: The specified torque of 1180 N·m (870.3 lb-ft) should not be exceeded.

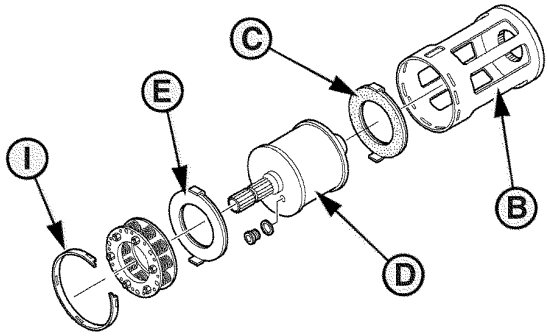
This torque is set by positioning the profile (F) towards the inside and engaged with inner recess (H) of housing (B).

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



KM1000160

KM1000160 —UN—16OCT07



KM1000161

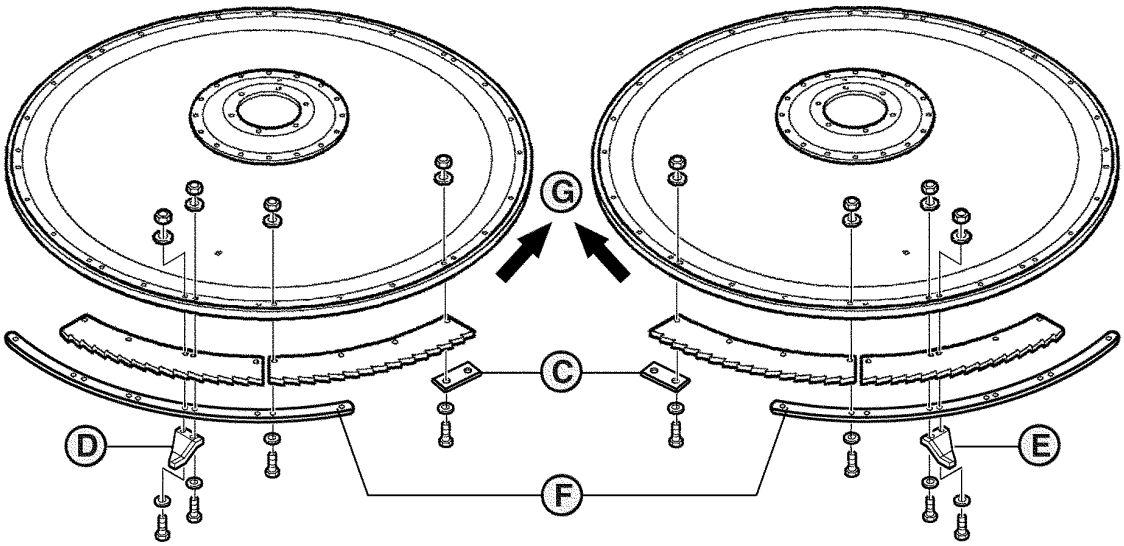
KM1000161 —UN—16OCT07

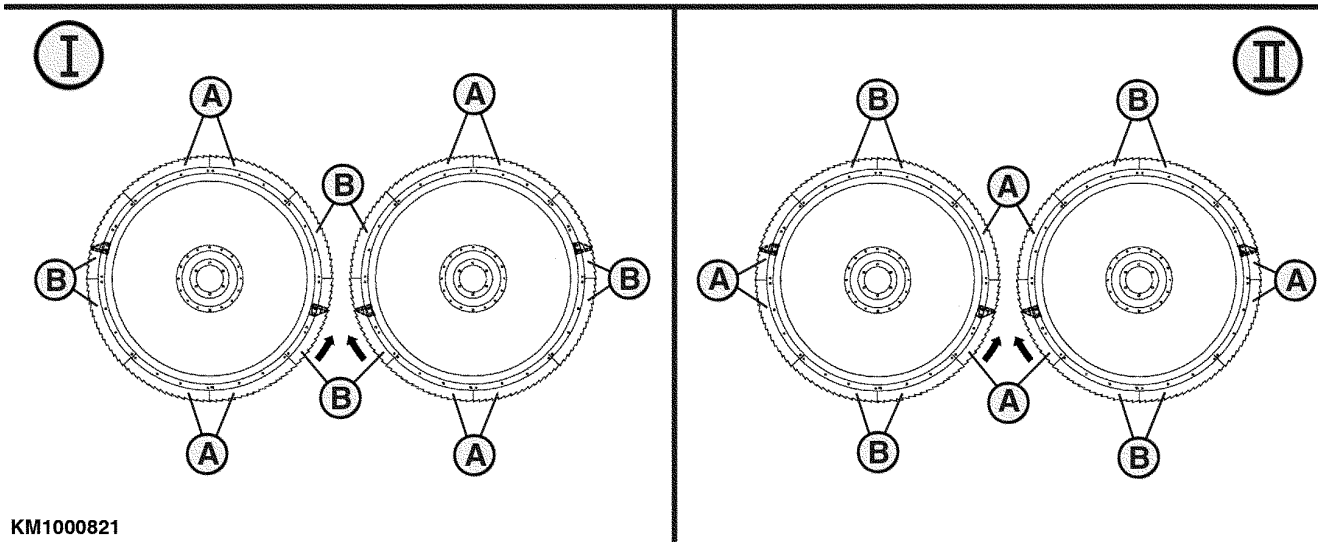
KM1000162

KM1000162 —UN—16OCT07

KM00321,0000148 -19-26MAR09-1/1

Installing New Rotating Blades (Big Drums)





KM1000821

A—Yellow blade
B—Black blade
C—Strap
D—Cleaner (counter-clockwise)
E—Cleaner (clockwise)
F—Reinforcement strap

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

1. There are different blades.
   In all, 8 blades are installed on each rotating cutter.
   - 4 yellow blades (A), and
   - 4 black blades (B)
2. The blades are installed in the order: 2 yellow (A), then 2 black (B). Remember to bolt on straps (C).

   IMPORTANT: Install blade with coated area up.

3. Remember to install cleaner (D) or (E) and reinforcing straps (F) as shown in the relevant installation scheme (I) or (II) on black or yellow blades, depending on installing coated (I) or uncoated (II) blades. Cleaner (D) is for counter-clockwise rotation and cleaner (E) is for clockwise rotation.

Continued on next page

KM00321,0000149 -19-26MAR09-1/3

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

KM00321,0000149 -19-26MAR09-2/3

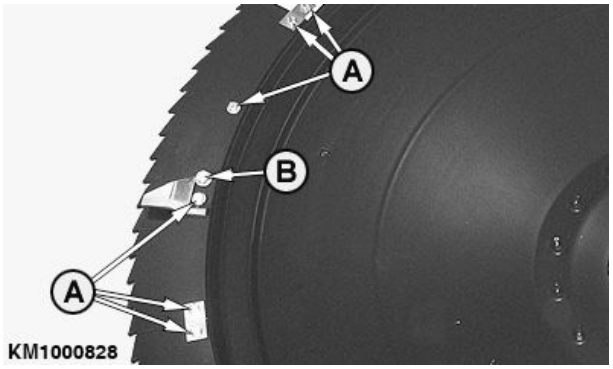
Tighten all attaching screws of blade segments and cleaners with the specified torque.

Specification

M8 screws—Torque.....28 Nm
20.65 lb-ft

M10 screws—Torque.....51 Nm
37.62 lb-ft

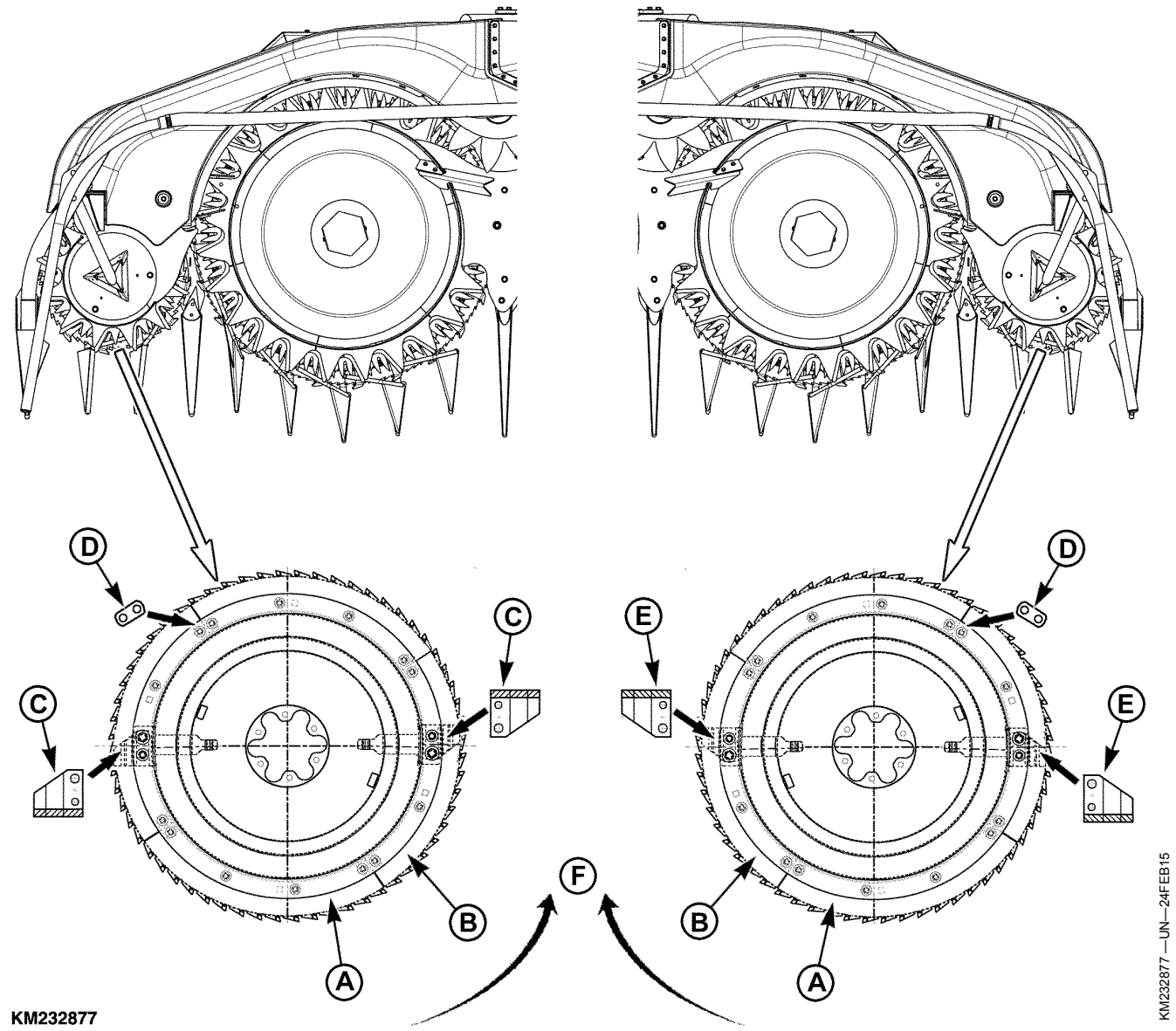
A—M8 screws **B—M10 screws**



KM1000828 —UN—26MAR09

KM00321,0000149 -19-26MAR09-3/3

Installing New Rotating Blades (Small Drums)



KM232877

KM232877 —UN—24FEB15

A—Yellow Blade
B—Black Blade
C—Cleaner (Counter-Clockwise)
D—Strap
E—Cleaner (Clockwise)
F—Direction of Cut

CAUTION: Before making any adjustments or performing any service operations, ALWAYS:
- **Shut off the engine**
- **Take out the ignition key**
- **Wait until all moving parts have stopped.**

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

1. There are different blades.
   In all, 4 blades are installed on each rotating blade.
   - 2 yellow blades (A) and
   - 2 black blades (B)
2. The blades are installed in the following order: 1 yellow, 1 black, 1 yellow and 1 black blade.

   IMPORTANT: Install blades with the coated side uppermost.

3. Remember to install cleaner (C) or (E) as shown in the installation scheme. Cleaner (C) is for counter-clockwise rotation and cleaner (E) is for clockwise rotation.

Continued on next page

KM00321,00003E6 -19-16MAR15-1/3

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

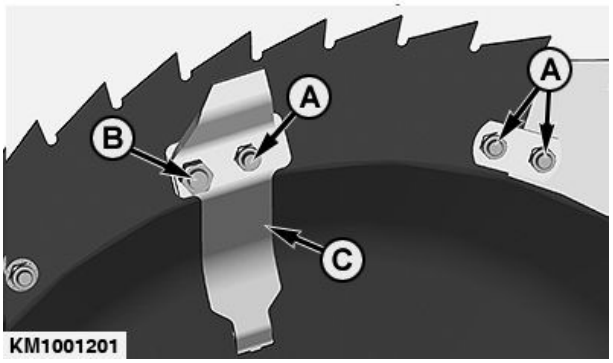
KM00321,00003E6 -19-16MAR15-2/3

IMPORTANT: Always use reinforcement plate (C) when installing the cleaners.

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

Specification	
Screws (M8)—Torque	28 N·m 20.65 lb.-ft.
Screws (M10)—Torque	51 N·m 37.62 lb.-ft.

A—Screws (M8)
B—Screws (M10)
C—Reinforcement Plate



KM1001201 —UN—07OCT14

KM00321,00003E6 -19-16MAR15-3/3

Adjusting Gatherer Points (Big Drums)

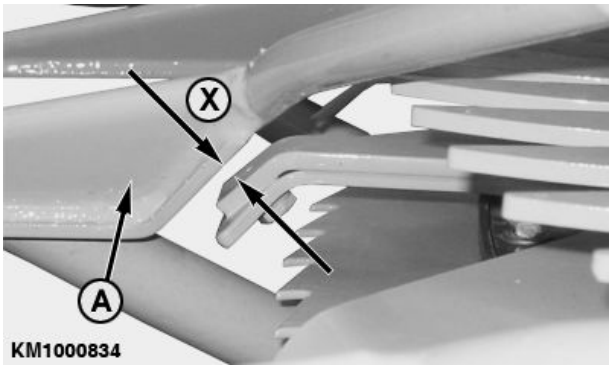
In order to prevent plugging and crop losses, the gatherer points (A) have to be properly adjusted.

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	
Gatherer points and big drums—Distance from each other	3 to 7 mm 0.12 to 0.27 in.

A—Gatherer point
X—3 to 7 mm (0.12 to 0.27 in.)



KM1000834 —UN—27MAR09

KM1000165 —UN—16OCT07

KM00321,000014C -19-27MAR09-1/1

Adjusting Dividers (Small Drums)

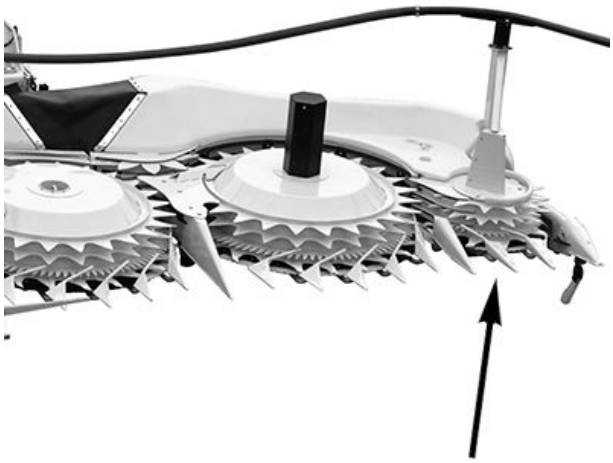
In order to prevent plugging and crop losses, the dividers (A) have to be properly adjusted.

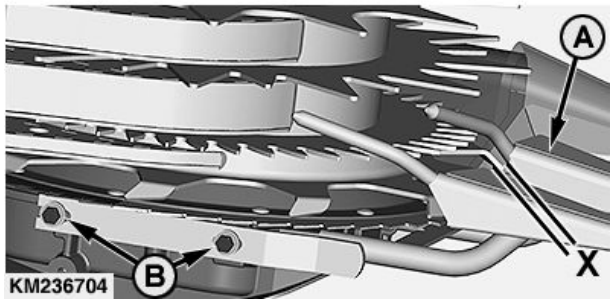
Always keep distance (X) between 3 and 7 mm (0.12 and 0.27 in.). Proceed as follows:

- Loosen screws (B), set divider (A) to the specified distance (X) and then retighten screws (B).

Specification	
Dividers and small drums—Distance from each other	3 to 7 mm 0.12 to 0.27 in.

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





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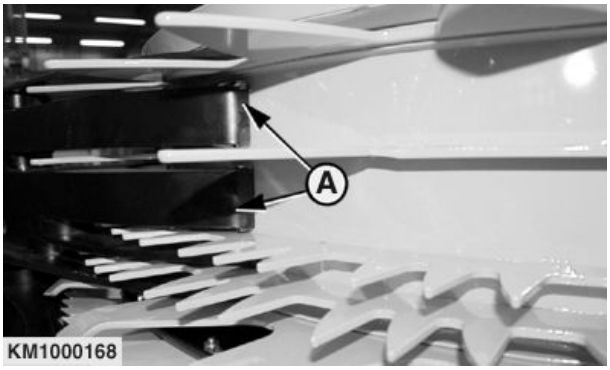
KM00321,00003E8 -19-13MAR15-1/1

Check Adjustment of Scrapers (Small Drums)

In order to prevent plugging in the feeding channel, set scrapers (A) as close as possible to the feed rolls. The scrapers might touch the rolls slightly.

Scraper (A) can be adjusted by means of slot holes (B).

A—Scraper
B—Slot Hole



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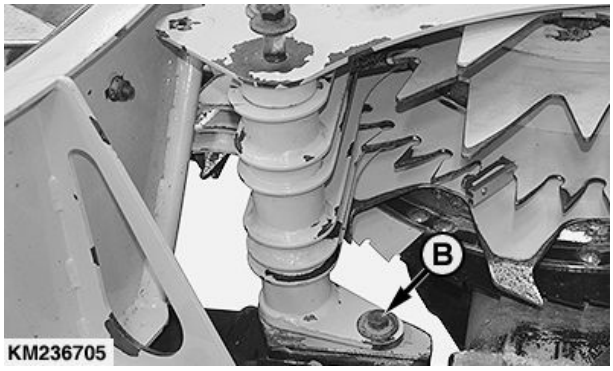

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KM00321,00003E9 -19-13MAR15-1/1

Check Adjustment of Scrapers (Large Drums)

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

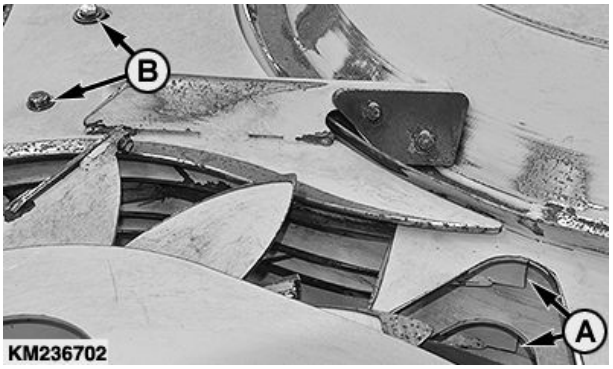
To adjust scraper (A), loosen screws (B) and (C).

NOTE: Screw (C) is located underneath the machine.

Set scraper (A) as close as possible to the gathering drum.

Retighten screws (B) and (C).

A—Scraper
B—Screws
C—Screw



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KM236703 —UN—24FEB15

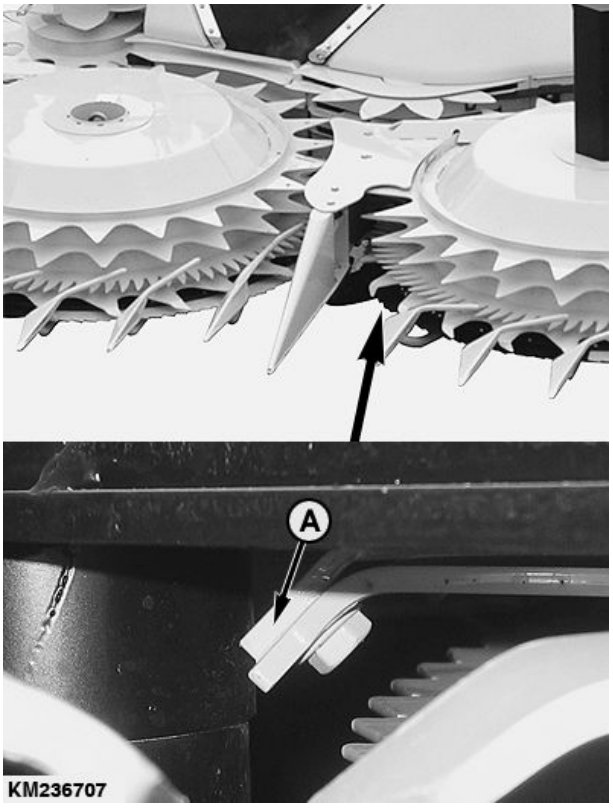
KM00321,00003EA -19-13MAR15-1/1

Check Condition of Cleaners

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

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

A—Cleaner



KM236707 —UN—24FEB15

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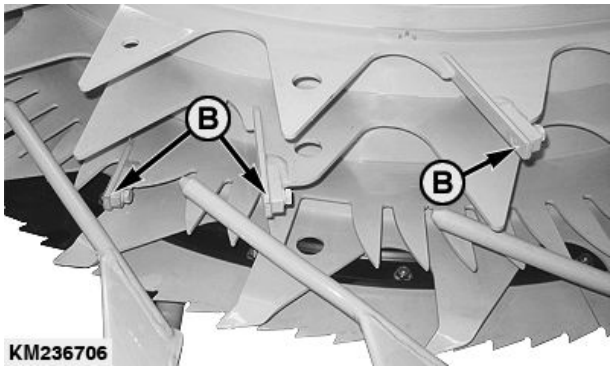
KM00321,00003EB -19-16MAR15-1/2

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

B—Cleaners



KM236706 —UN—24FEB15

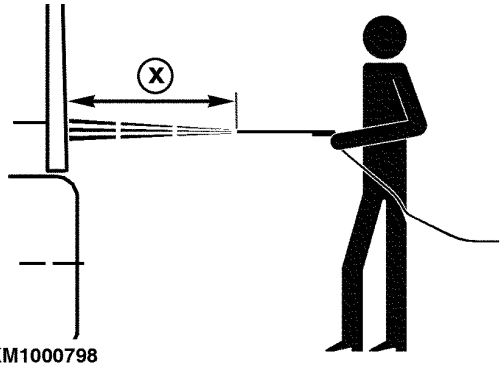
KM00321,00003EB -19-16MAR15-2/2

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

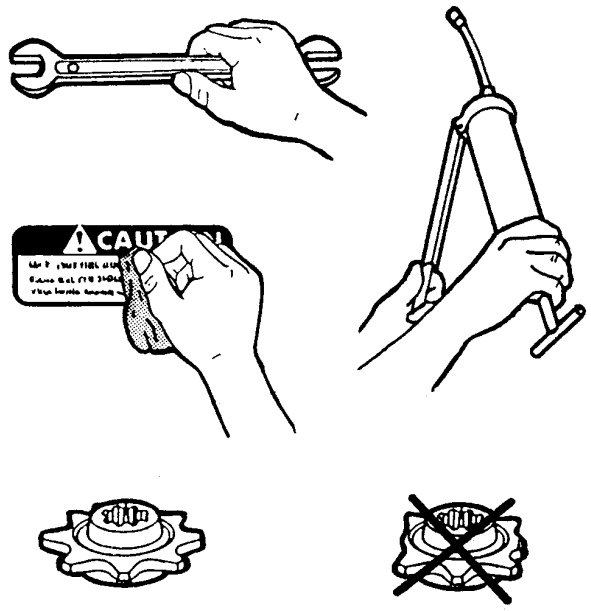
X—250 mm (9.84 in.)

KM00321,000014A -19-26MAR09-1/1

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

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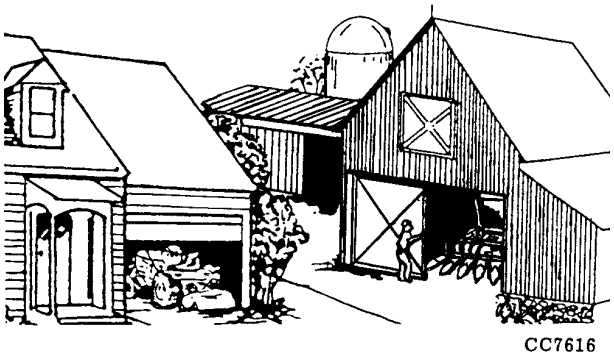
KM00321,000019E -19-12JUN09-1/1

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.



CC7616

CC7616 —UN—21MAR95

OUKM001,0000016 -19-15FEB05-1/1

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 John Deere 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.

DX,MACH,DESIGN,LIFE -19-14SEP15-1/1

Rotary Harvesting Unit 475plus

Drive system ..... oil-bath gear box with safety clutch

Harvesting system ..... 6 fast rotating blades
For 8 wide rows or 10 narrow rows

Crop conveyor ..... 4 slowly rotating big gathering drums, 2 slowly rotating small gathering drums, 2 cross-feed drums and 2 oblique feed drums

Weight ..... 3300 kg (7275.25 lb.)

Width

Transport width ..... 3,30 m (10 ft. 9.9 in.)[a]

Working width ..... 7,50 m (24 ft. 7.2 in.)[a]

Overall width ..... 7.55 m (24 ft. 9.2 in.)[a]

Height ..... 1.52 m (4 ft. 11.8 in.)[a]

Length ..... 2.78 m (9 ft. 1.4 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.*

KM00321,00007A8 -19-19MAR18-1/1

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):

475 ..... 76.1 dB(A)

KM00321,00003ED -19-13MAR15-1/1

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: 475^{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: 01. March 2020

Manufacturing unit: Kemper Stadtlohn

Name: Richard Wübbels

Title: Manager Product Engineering

DXCE01 —UN—28APR09

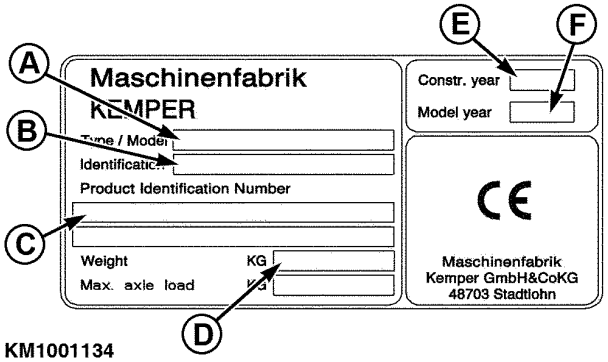
CE

KM00321,0000A3F -19-25MAR20-1/1

Serial Number

Rotary Harvesting Unit Serial Number Plate

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



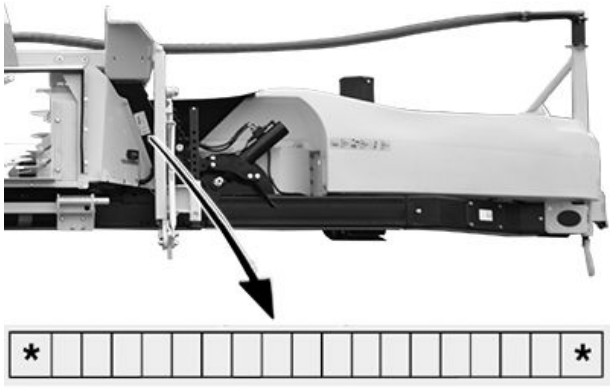
KM1001134

KM1001134 —UN—24FEB10

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

Serial Number

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



KM236715

KM236715 —UN—25FEB15

KM00321,00003EF -19-13MAR15-1/1

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